



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

MEETING MINUTES

**Tuesday, September 9, 2025
5:30 p.m. – 7:00 p.m.
525 Golden Gate Ave., 3rd Floor Tuolumne Conference Room**

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Meeting Recording Link

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Mission: The Wastewater Subcommittee shall review sewage and stormwater collection, treatment, and disposal system replacement, recycling, and other relevant plans, programs, and policies ([Admin. Code Article XV, Sections 5.140 - 5.142](#)).

Members

Amy Nagengast, Chair (D8)	Erin Roach (D2)	Andrea Baker (B-Small
Douglas Jacuzzi (D4)	Maika Pinkston (M-Enviro.	Business)
	Org)	

D = District Supervisor appointed, M = Mayoral appointed, B = Board President appointed

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

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ORDER OF BUSINESS

1. Call to order and roll call at 5:31PM

Members present at roll call (3): Nagengast, Jacuzzi, Roach

Members absent (2): Pinkston, Baker

Staff/Presenters: Sarah Bloom, Michael Tran

Members of the Public: None

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.



2. Approve [July 15, 2025 Minutes](#)

Approval for July 8 meeting minutes postponed to October 28 special meeting.

Public Comment: None

3. Report from the Chair

- Welcome members, staff, and the public
- [San Francisco files final brief in SCOTUS case](#)
- [Public Memo re CCSF v. U.S.E.P.A.](#)
- [CCSF v. U.S.E.P.A. Oral Argument Audio](#)
- [U.S. and California take Enforcement action against S.F. for Clean Water Violations](#)

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: [Collection System Asset Management](#)

Presentation:

- Collection System Asset Management
- Agenda
- Wastewater Enterprise Organization Structure
- SF's Combined Sewer System Treatment Facilities
- SF's Combined Sewer System Collection System
- Collection System Asset Management Model Since 2011
- 2025 Condition Score Summary
- Collection System Asset Management Model Continuous Improvements & Evaluations
- Collection System Asset Management Model GIS Asset Inventory Database
- Collection System Asset Management Prioritization Approach
- Collection System Asset Management Model Frequency of Inspections
- Collection System Asset Management Model Condition Assessment Strategy
- Capital Reinvestment Efforts
- Where we're headed
- Existing Open Cut Construction
- Innovative Solutions – Cured-in-Place Pipe (CIPP) or Liner (CIPL)
- Innovative Solutions – Slip lining
- Innovative Solutions – Pipe Bursting

Discussion:

- **Chair Nagengast** asked how asset management activities are organized across Wastewater divisions to synchronize across different collection systems.

Staff Tran responded that the dedicated asset management team is centralized under Wastewater Engineering, with collection systems and treatment facilities being the two primary categories.

- **Chair Nagengast** asked whether Wastewater has a GIS team that serves as a shared resource for the entire Wastewater enterprise, or whether there are GIS teams under specific asset classes or divisions - for instance whether the treatment plant has its own GIS team. Chair Nagengast commented that she works at the airport, which has one GIS team that supports different teams, and asked whether the SFPUC has a similar setup.

Staff Tran responded that there is a GIS team under the Collection System Division but is not familiar with whether there is a GIS team for the treatment plant. The GIS is reflective of linear assets, so most of the GIS information is under the collecting systems division. This differs for fixed assets, which entail a heavy utilization of the maintenance management program Maximo. The SFPUC's GIS team functions slightly differently from the airport.

- **Member Jacuzzi** asked what the extraction pits for the liner pipes in large diameter sewers are fiberglass, and whether they include polyurethane resin.

Staff Tran responded that there are different materials such as fiberglass and felt, which depends on the application and that there is polyurethane resin as well.

- **Member Jacuzzi** asked about the lifecycle plan for the fiberglass and whether they will be refilling or thickening the layers, given that fiberglass has a brittle nature and has an end of life, but also has a long lifespan.

Staff Tran responded that the general anticipated service life of the CIPP is more than 50 years, so the design life they put on paper is roughly 50 years and the manufacturers have told them it can last up to 100 years. Cure-in-place liner is unique and is not adhered to the host pipe, meaning that it is intended to be fully structural. To deal with these in the long term, they have seen in other municipalities cut it out and reline it with another liner. The technology was installed in the 80s.

- **Member Jacuzzi** asked about how SFPUC coordinates with other departments to sequence their projects underground to avoid having to dig up the same location multiple times, and why this process was not included in the presentation.

Staff Tran responded that this is a high-level view of the process, and what Member Jacuzzi is referencing would fall under Renewal and Replacement Activities. After they complete the condition assessment, they find out which sewers are at the end of their useful life that need to be fixed. The current methodology is open-cut construction and there is a one-dig policy coordinated by SF Public Works. They send out the Notice of Intent (NOI) and brings all the utility owners together to determine who else wants to join the dig. There is a process and committee. Generally, the sewers are installed first.

Member Jacuzzi commented that it would be great to include information on this in the presentation even at high level, since they receive a lot of questions about this.

- **Chair Nagengast** asked how the new team might support the collection system, how integrated or different their roles will be from Staff Tran's team.

Staff Tran responded that the new team would oversee the asset management protocols and reporting. His team would be very integrated with that new team to align with new enterprise policy, and a lot of his team's activities will be moving towards that team as well.

Chair Nagengast asked when the new asset management team will be created.

Staff Tran responded that creating the new asset management team is a priority to obtain some consistency in overall asset management activities. The collection system has been more of a forefront since 2011 and they have been finding continuous improvements.

- **Chair Nagengast** asked for information on new innovations in asset management digitization, including digital twin, artificial intelligence, and other ways which are less numbers and analytics and more so the collection system and how they monitor and manage the assets.

Staff Tran responded that most of what they do on condition assessment and identifying assets is tied to the GIS information. The prior risk model is more complex, and they are trying to make it simpler and more straightforward, because it makes it easier for construction as well. I'm explaining how its tied to GIS and integrate processes. For example, they set boundaries in GIS and each of those boundaries are sewer sheds and they're trying to make sure the pipes within those sewer sheds are part of that, and GIS helps extract those assets. Those are populated between the inspection contractor and city staff inspections.

- **Chair Nagengast** asked whether there are multiple utilities within GIS or whether there are different GIS systems for each utility that must be overlaid.

Staff Tran responded that they have different layers in GIS, for example one for power and one for water. As part of one dig policy, they reach out to water and power to find synergies in construction. For example, if there is a pipe that is at the end of its service life, they check with the other enterprise on their projections for replacing it. They also pull in a layer from the water main replacement priorities.

- **Member Jacuzzi** asked if the GIS information is publicly accessible.

Staff Tran responded that in general he didn't think so.

- **Member Roach** asked how the level of satisfaction with the technology allowing them to see everything at once and manage things, and asked what Staff Tran believes should happen next.

Staff Tran responded that he has been generally satisfied because he has worked on this for a while and is familiar and has seen progress since he was a student intern. The SFPUC generally is very forward looking and is adapting to technology.

Public Comment: None

6. Presentation and Discussion: [Green Infrastructure Update](#)

Presentation:

- SFPUC Green Infrastructure Update
- Today's Agenda
- What is Green Infrastructure?
- How Does Green Infrastructure Work?
- Why Build Green Infrastructure?
- How do we make this... work like this?
- Every Year, Over 10 Billion Gallons of Rain Falls on Our City
- Green Infrastructure Citywide Strategy
- Green Infrastructure Long Term Vision
- Green Infrastructure Citywide Strategy
- Green Infrastructure in Your Watershed
- Green Infrastructure Maintenance
- Planning for Next Phase of Capital Projects
- AP Giannini Middle School
- Buchanan Street Mall
- MTA Livable Streets + Transform the Storm Partnership
- Green Infrastructure City-wide Strategy
- Stormwater Management Ordinance
- Southeast Community Facility
- Green Infrastructure City-wide Strategy
- Green Infrastructure Programs
- Watershed Stewardship Grant Program
- Green Infrastructure Grant Program
- Residential Green Infrastructure Program
- Green Infrastructure City-wide Strategy
- Appendix B: Green Infrastructure Typical Details
- Green Infrastructure City-wide Strategy
- Watershed Education & Community Engagement
- Rain Guardians
- Youth Watershed Stewards Program
- City-Wide Green Infrastructure Strategy
- Thank you!

Discussion:

- **Chair Nagengast** asked if these capital projects are dedicated to green infrastructure or whether the green infrastructure projects are part of larger Wastewater capital projects, or both.

Staff Bloom responded that most have been dedicated capital PUC projects. In some cases, they have been a smaller part of another agency's project, for example in Cesar Chavez there was a huge streetscape renovation project that had sewer water, streetscapes, and GI. But the majority like EIPs were PUC capital green infrastructure projects.

Chair Nagengast asked whether there is generally a goal, interest, or way to help infuse green infrastructure as something that is thought about first instead of as a secondary thought to other capital projects.

Staff Bloom responded that one won't substitute the other. They are doing as much green infrastructure as they can with their staff and budget, and other projects and priorities that are not green infrastructure still need to happen. They look for ways they overlap and do both. Sometimes those can be a good fit and sometimes they haven't.

Chair Nagengast asked about the Islais Creek area-wide approach, and how green infrastructure is being soaked up into the culture of the SFPUC.

Staff Bloom responded that it's established that the SFPUC has been doing projects for a long time now but is a small piece of the overall portfolio. SFPUC has 15 capital projects as opposed to operating the entire sewer system. In the 10-year capital program, they've adjusted how they have presented that. They have a city-wide bucket of funding of \$100 million for green infrastructure and through the capital planning process, the SFPUC will be drawing down from those \$100 million as opportunities become available. The SFPUC knows how to deliver these projects we want to or need to do it. There is also a lot of opportunity if we strategize and work with others work with other people's projects and initiatives. So SFPUC is doing both now. A great example of that is the Buchanan street mall project.

- **Chair Nagengast** commented that she noticed little kids too in the Youth Watershed Stewards Program photos.

Staff Bloom responded that the program is in partnership with the construction pathways for John O'Connell High School students to do renovations and reactivation of green infrastructure on SFUSD school sites which have all been elementary schools to date. The high school students learn about it and repair the cistern or replant the rain garden. The high school students also do a rainwater action day with the elementary school students to activate the space, which involves watering plants from the new cistern or planting a few plants in the renovated rain garden.

- **Member Roach** asked whether SFPUC created the trenches near Fort Mason parking lot and the new playground near Crissy Field

Staff Bloom responded that SFPUC did not do that work.

- **Member Roach** asked whether the residential grant program is different from the flood water program.

Staff Bloom responded that those programs are different.

Member Roach asked whether it seem like there is more opportunity in the Marina District to do the residential scale work because flooding is a problem and it doesn't seem like there is a big infrastructure project on the horizon, for example turning a parking lot space into a trench.

Staff Bloom responded that green infrastructure is one piece of larger flooding problem that one green infrastructure problem cannot solve, but there is more SFPUC can do in the programmatic space. SFPUC's residential pilot in a variety of zip codes in the southeast and west side. Once the program is opened city wide, it would be great to see stock in Marina and see what types of facilities could be installed. That would help with drainage on that site too. Staff Bloom mentioned SFPUC work with San Francisco Recreation and Parks on Marina Green improvements in the East Green.

- **Member Jacuzzi** commented that during the most intense portion of the atmospheric river, he noticed there had never been a drop from backup indicating the percolation field has worked well.
- **Member Jacuzzi** commented that because of residential work performed by a contractor there have been over 150 emails about 200 square feet of pavers, and asked whether Staff Bloom knows anything about that.

Staff Bloom responded that she is not directly working on that program but can take questions on it.

Member Jacuzzi commented that the feedback received was regarding a Chicago-based management entity that was hands-off and apparently never came to San Francisco, calling into question why an entity in Chicago was selected to manage 10 houses in San Francisco.

Staff Bloom responded that she thinks this was part of the competitive process.

Member Jacuzzi asked what the residential program consist of now, since he has been pushing for this.

Staff Bloom responded that the pilot year was 600,000. SFPUC still has the same contract and they we were able to extend for second set of pilot homes, still bounded by the initial metrics and zip codes. Once they are done with collecting data from that second set of pilot homes, the contract will end, and they will develop recommendations for a full program.

Member Jacuzzi commented that he had been pushing residential rooftops. His organization has approximately 60 homes with very little outreach, and people are waiting and asking when they can be involved. They have a few case study homes out there already, with one that is indicative of the typical rooftop of the west side, which have generated meaningful data. Member Jacuzzi commented that he would

like to offer Staff Bloom data on half an acre of the same rooftops 22 times over and will reach out to her separately.

- **Member Jacuzzi** asked what is left of the \$100 million and asked to confirm whether \$7 million went to Giannini.

Staff Bloom responded that Giannini was its own line item, so it did not pull from the \$100 million bucket. The Cayuga Alemany project that SFPUC just started with MTA will be the first sub-project that pulls out of that \$100 million. They are right at the beginning of a 10-year spread and hope to extend it further in the next iteration.

Member Jacuzzi asked where the funds for the 2018 have been coming from.

Staff Bloom responded they came from the capital plan as well. They were just individual projects from Phase 1 of the sewer system. They have not drawn down from the \$100 million.

Member Jacuzzi asked for how many years will that \$100 million be used for.

Staff Bloom responded that she thinks as it is shown in the capital plan years, it is 10 years, but the proposal right now is to extend it for another five years for a total of 15 years.

Member Jacuzzi asked whether the \$100 million would be divided over the 15 years.

Staff Bloom responded that they would extend the schedule, budget, and performance. The \$100 million dollars is an approximate for 65 acres of drainage management area, which is what the project will deliver at its completion. They could keep it at \$100 million and in ten years bring a new project.

Member Jacuzzi asked whether Staff Bloom would listen if he could bring twice the acreage for half the money.

Staff Bloom responded that they would love to get an update especially if they can also share what they have been learning too.

Member Jacuzzi asked whether in this current fall cycle and the spring cycle for the GI infrastructure grant program pull from \$100 million, or whether they will still be separate.

Staff Bloom responded that they are still separate. The grant program has its own budget of \$61 million, and about \$26 million has been drawn down already. The \$100 million is for future capital projects.

- **Member Jacuzzi** asked why they still have a deed restriction if it kills every single deal. Commercial property owners can't reconnect without a permit and can't reconnect a large property because of the ordinance.

Staff Bloom responded that they update the GI grant program every two years. They did an update in 2024 and will do another one in 2026. The topic of the deed restriction is on their update list to discuss with the City Attorney. They haven't started yet, but the intent of the deed restriction is to protect SFPUC capital asset. The grant program is funded by capital dollars, and they need to ensure the life cycle and performance of the multi-million dollars being provided to private property owners. The deed restriction was the way they did that at the start of the program but is not the only way, and they will explore other ways with the City Attorney. They have done well with institutional partners but don't have a lot, if any, commercial partners. It is challenging for people who aggregate smaller properties together to reach the half acre requirement. Seeking out alternatives is a priority for the next program update.

Member Jacuzzi asked whether the Stormwater Management Ordinance by itself supersedes deed restrictions, because it is illegal to connect a large property to the source and if you have the soil, you must manage the stormwater on site if you can handle it.

Staff Bloom responded that that applies to new and redevelopment projects, and the grant program is just for retrofits.

Member Jacuzzi responded that once a large property is retrofitted, it takes a building permit to reconnect, so the deed restriction and ordinance would be applied in parallel. Deed restrictions are a big problem for commercial property owners because they refinance their property every five to seven years. The easements get heavily scrutinized, and banks do not want to lend to them, so commercial property owners say they don't want to do that.

Staff Bloom responded that as part of the process, they will discuss their options with the City Attorney, and with other stakeholders.

Member Jacuzzi commented on the Outer Lands event which included a presentation. Forty property owners showed up and so many members of the public and the Department of the Environment gave a talk.

- **Chair Nagengast** if Staff Bloom had looked at a comparison of total cost of ownership of green infrastructure versus gray infrastructure.

Staff Bloom responded that when they conducted the early implementation projects, they looked at life cycle costs and cost per gallon managed comparison between green and grey infrastructure projects. They moved away from that in recent years because they have found They have found with the EIPs and later projects is that green infrastructure is more expensive, but they are asking the infrastructure to doing a lot more. They have not gone back to set a new baseline and account for all the benefits that the infrastructure is delivering, which is a critical lens to take when looking at lifecycle cost of an asset. That has been hard to do, and they have tried through triple bottom line and other methods to quantify the less tangible benefits. This has been a focus nationwide of green infrastructure, especially in GI Leadership Exchange where SFPUC is a member.

Member Jacuzzi commented that through the Surfrider foundation project, he helped with a project in Argon Pre-kindergarten. Directly downhill on that property of approximately 4000 or 5000 square feet, there is a huge community garden apparently on school district land. The representatives of the community garden went to the Far-Out West Garden and wanted to do the same thing. However, the school district said they only work directly with the SFPUC.

- **Member Jacuzzi** asked whether Staff Bloom had any insight into how to address that relationship so that he can work with them.

Staff Bloom asked whether they could have a separate follow up, since she wants to know who Member Jacuzzi talked to and get more information. There are a lot of different avenues that might work for this.

Member Jacuzzi asked who is doing the work for the separate partnership with the schools and whether they take public bids.

Staff Bloom responded that it all goes out to bid. The grant projects delivered by the district go out to bid, as it is a requirement.

Public comment: None

7. Staff report

- Prop E task force is meeting on Wednesday, September 17 at 1pm. You can submit public comment via email by Thursday, September 11 at 5pm.
- October 28 is a special meeting because of the November 11 holiday.

Public Comment: None

8. Future Agenda Items and Resolutions

- Adopted Resolutions for Follow Up
 - Resolution in Support of SFPUC Class A Biosolids Local Distribution Program [adopted August 21, 2018](#)
 - Resolution in Support of Cityworks Interns Recommendations [adopted on November 21, 2017](#)
 - Resolution in Support of Equitable Green Infrastructure Implementation throughout the Southeast Sector of San Francisco and throughout the City [adopted on June 20, 2017](#)
 - Resolution Urging SFPUC Commission to Initiate Planning and Environmental Review for Building a New Community Center at Third and Evans and to Direct Staff to Develop an Interim Greenhouse Environmental and Workforce Development Program [adopted on October 18, 2016](#)
 - Resolution Supporting the SFPUC to Conduct Robust Community Engagement to Determine the Community's Preference for Remodeling Southeast Community Facility at 1800 Oakdale or Building a New Community Center at 1550 Evans [adopted on January 19, 2016](#)

Public Comment: None

9. **Announcements/Comments** Visit www.sfpuc.org/cac for final confirmation of the next meeting date.

Public Comment: None

10. Adjournment at 6:53 pm

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