



## **SAN FRANCISCO PUBLIC UTILITIES COMMISSION**

City and County of San Francisco

**London N. Breed**

Mayor

### **SPECIAL MEETING MINUTES**

**Friday, April 16, 2021**

**2:00 P.M.**

**(Approved May 11, 2021)**

This meeting was held by Teleconference Pursuant to the Governor's Executive Order N- 29-20 and the Twelfth Supplement to Mayoral Proclamation Declaring the Existence of a Local Emergency Dated February 25, 2020

During the Coronavirus Disease (COVID-19) emergency, the San Francisco Public Utilities Commission's (SFPUC) regular meeting room, City Hall, Room 400, is closed. Commissioners and SFPUC staff will convene Commission meetings remotely by teleconference.

### **Commissioners**

Sophie Maxwell, President  
Anson Moran, Vice President  
Tim Paulson  
Ed Harrington  
Newsha Ajami

**Michael Carlin**  
Acting General Manager

**Donna Hood**  
Secretary



1. Call to Order

*Chair Harrington called the meeting to order at 2:03 PM.*

2. Roll Call

*Present: Maxwell, Moran, Harrington and Ajami*

*Chair Harrington thanked staff and guest presenters for their attendance. He noted the need for a mix of green and gray infrastructure for total system needs. He indicated the focus of the workshop would be on the green infrastructure parts of the collection system within the Sewer System Improvement Project and that most of the conversation would be on stormwater management and flooding issues.*

*Chair Harrington told a “River Parable” and said that good people can often be focused on one solution. He stated at times it takes a new perspective to open-up solutions and that the cause and effect needs to be looked at when exploring solutions.*

*Commissioner Paulson arrived at 2:07 PM.*

*Chair Harrington posed and briefly reviewed these four questions: (1) Have we learned from the past? (2) Are we planning for the future? (3) Are we thinking big enough and working with enough partners? and (4) Have we gone too far to change course?*

*Commissioner Paulson thanked Commissioner Harrington for organizing the workshop. He discussed the difficulty of “green” infrastructure and applauds efforts being taken.*

*Commissioner Ajami expressed appreciation for the focus on stormwater and floodwater management but stated she wants to see additional water supply from stormwater management and that the opportunity should not be overlooked. She indicated the Water and Wastewater Enterprises need to work collaboratively on the issue.*

3. Presentations on Green and Grey Infrastructure for Stormwater Management and Flood Resilience: SFPUC Staff Presentations on (i) Overview of San Francisco’s historic watersheds, combined stormwater/sewer system, and development of the five-year storm Level of Service and (ii) SFPUC’s capital improvement projects, policies and programs for stormwater management and flood resilience

*Stephen Robinson, Director of Wastewater Capital Programs, thanked everyone for their attendance and reviewed the workshop agenda (1) overview of San Francisco’s historic watersheds, combined stormwater/sewer system, and development of the five-year storm Level-of-Service (LOS), (2) SFPUC’s capital improvement projects, policies, and programs for stormwater management and flood resilience, and (3) Perspectives from other municipalities on green and grey infrastructure (Philadelphia Water Department, DC Water, City of New York, Department of Environmental Protection, and City of Portland, Oregon).*

*He reviewed San Francisco’s historic watersheds, which were once full of creeks and*

marshes. He noted San Francisco's combined sewer system is 100 years old, has 1,000 miles of pipes, three treatment plants, and 27 pump stations. He discussed flooding challenges and stated that flooding can occur with a large storm event that exceeds capacity of a drainage system and that SFPUC's approach is to identify neighborhoods with the highest flood risk to prioritize its investments. He noted how flooding occurs and reviewed the Wastewater Enterprise LOS for stormwater (control and manage flows from a storm of a three-hour duration that delivers 1.3 inches of rain "5-Year storm").

Director Robinson (1) displayed a history of collection system design, (2) Reviewed SFPUC's risk-based approach to address flooding, (3) Discussed risk of flooding during LOS storm, (4) discussed flooding in LOS and larger storms, (5) Discussed SFPUC's recent efforts and investment toward flood resilience (2000-2020) planning/programs/policies and flooding capital projects.

Saed Toloui, Project Manager, Lower Alemany Stormwater Improvement Project, discussed the Islas Creek Watershed, which is the largest watershed in the City. He indicated the Lower Alemany area does not meet LOS and that a 5-year storm, with the intensity of 1.3" in three hours, will flood the area as deep as four feet and can spread to 11 acres. He noted multi-city agency efforts to improve that area and he reviewed project concepts (1) Storage (distributed detention options), (2) Creek Daylighting (with stormwater separation), and (3) Conveyance (with planned green infrastructure projects). He offered a comparison of project concepts and stated indicated the recommendation was Cortland and Alternative C1 (conveyance system to reduce flood volume).

Sarah Minick, Utility Planning Division Manager, presented an overview on SFPUC's Citywide Green Infrastructure and flood resilience strategy and activities. She provided a definition of Green Infrastructure "set of engineered, sustainable stormwater management tools that slow down, clean and reroute stormwater to keep it from overwhelming the City's sewer system". She indicated that each year over 10 billion gallons of rain falls on San Francisco and discussed the long-term vision to manage stormwater using green infrastructure (by 2050). She reviewed Green Infrastructure Citywide Strategy (1) Projects: why Green Infrastructure should be monitored, which projects have been monitored, monitoring results, and adapting capital project strategy; (2) Policies: Stormwater Management Ordinance, and redevelopment areas (Hunters Point – Alice Griffith & Treasure Island); (3) Programs: Watershed Stewardship Grant Program, Green Infrastructure Grant Program, Residential Green Infrastructure Program Development, and Citywide Green Infrastructure Strategy; (4) Technical Assistance: Center for Stormwater Solutions and other guidelines, curriculum, manuals and guidance; (5) Strategic Partnerships: Buchanan Street Mall Capital Assessment, Page Street Neighborway.

Ms. Minick then reviewed Flood Resilience Citywide Strategy (1) Projects: three key projects – Folsom, Wawona and Lower Alemany. Programmatic strategies for flood resilience, along with capital investment, is key to resilience; (2) Policies: policies to advance flood resilience (100-year storm flood risk map, Flood Risk Disclosure

Ordinance, and Flood Resilience Building Code); (3) Programs: RainReadySF Programs.

Ms. Minick concluded with a review of future opportunities, including Green Infrastructure for volume and peak flow reduction and water quality protection (creeks, green schools, and green parks), Green Infrastructure for Flood Resilience, and Islais Creek Southeast Mobility and Adaption Study.

Vice President (VP) Moran thanked Ms. Minick for her presentation.

Commissioner Ajami highlighted the projects that cross-collaborate with other departments and expressed pleasure with the coordination. She indicated it would be useful to track money spent to see the if there is any cost-benefit to the projects.

Commissioner Paulson thanked Ms. Minick for her presentation.

Director Robinson introduced Jessica Brooks, Director of Green Stormwater Infrastructure Implementation, Philadelphia.

Commissioner Paulson departed the meeting at 3:35 PM.

Director Brooks introduced the work being done in Philadelphia on their “Green City, Clean Waters” (GCCW) 25-year program for Combined Sewer Overflow (CSO) mitigation, which seeks to protect and enhance Philadelphia’s watersheds by managing stormwater with green stormwater infrastructure. She presented the (1) GCCW timeline (2009-2021), (2) CSO Long-Term Control Plan Update of 2021, (3) Greened Acre requirements, (4) GSI Pipelines (public retrofits, incentivized retrofits, stormwater regulations), and (5) Future concerns (climate change adaption and mitigation/flooding), including a climate change/resiliency overlay in all planning processes, design guidance, decision-making tools and operating framework.

In response to a question from Commissioner Harrington, Director Brooks stated that Philadelphia’s early Green Roof Program is included in their GCCW Program.

Director Brooks responded to Commissioner Ajami’s question as to whether they would have done any part of their program differently or invested differently.

Carlton Ray, Vice President, DC Clean Rivers, provided a brief introduction and noted that DC has both separate and combined sewer systems, with one-third of the District served by the combined system. He turned the presentation over to Seth Charde, Senior Advisor, Green Infrastructure, DC Water.

Mr. Charade indicated they are part of the DC Clean River Project, reviewed aspects of the Project, and noted which functions various agencies are responsible for operating. He discussed the magnitude of their challenge of Combined Sewer Outfall (CSO) and surface flooding located in certain neighborhoods. He stated the Clean Rivers Project

*will help address flooding and he presented project progress to-date, noting over 10 billion gallons and over 5,417 tons of trash and debris has been captured.*

*Mr. Charade reviewed Anacostia River controls (primarily a gray solution), Potomac River controls, and Rock Creek controls (hybrid green and gray solution), and concluded with lessons learned. VP Ray provided additional comments and discussed efforts to implement customer assistance programs.*

*Melissa Enoch, Managing Director, Green Infrastructure Planning and Partnerships, City of New York (NYC) Department of Environmental Protection, began with a summary of their green/gray approach to long-term control planning (LTCP). She indicated they have 14 distinct water bodies, 520 miles of shoreline, 60% combined sewer, and 11 LTCP's developed. The total cost of their LTCP recommended projects is \$6.4B.*

*Director Enoch reviewed the NYC Green Infrastructure Program, which began in the public right-of-way (sidewalks and roadways) and has moved to public property retrofits and private properties (via incentives), with 1,230 greened acres. She discussed Right-of-Way implementation watershed-based areawide planning, with a focus on priority CSO tributary areas and east River/Open Water confined tributaries. She reviewed Green Infrastructure performance metrics and discussed where they are heading with their program.*

*Kerry Rubin, Chief Engineer, Bureau of Environmental Services, City of Portland, Oregon, indicated they have a combined sewer system which started with a regulatory order in 1991 and was met by 2011. She noted the program's evolution over the last 30 years. She stated their stormwater management includes capital and programmatic solutions and that they are working to adopt an 'at scale' approach to address system risks.*

*She reviewed Green Infrastructure drivers (reduce basement sewer backup and localized flooding, improve watershed health, and reduce flow to combined sewer tunnel system). She stated that "going to scale" is not just green streets but also includes many Green Infrastructure elements that contribute to their program and as to how they do business, with a highlight on public green streets, private green infrastructure (>6,000 systems installed across the City), downspout disconnection to private property retrofits, protect and enhance natural areas (800 acres preserved or restored through willing-seller land acquisition).*

*Chair Harrington thanked everyone for their presentations noting similarities between everyone's efforts.*

*Ms. Rubin, and Mr. Ray responded to a question from Commissioner Ajami as to whether they had to change the way they measure performance of systems or “business as usual” to be able to finance or find funding?*

*Acting General Manager thanked everyone for their presentations. He indicated that follow-up will be needed and he asked for Commission direction.*

*VP Moran stated he was impressed by the commonality of the presentations and the useful information. He suggested a “trial fit” of tools that the SFPUC currently has to see how they might work to address issues in the City and to get a sense of scalability.*

*President Maxwell agreed with VP Moran and stated that nothing should be off the table for review, including property acquisition, and that all goals should be considered.*

Public Comment:

- Bonnie Ora Sherk complemented everyone for their presentations. She discussed her work on the Islais Creek Watershed and stated that the entire watershed needs to be looked at.*
- Peter Drekmeier, Tuolumne River Trust, thanked the Commission for the workshop and the presenters for the information, and indicated he looks forward to seeing progression.*
- David Pilpel noted his past service on the SFUC Citizens’ Advisory Committee and his work with Arlene Navarrete. He indicated he liked how the presentation began with a history of the watershed. He stated it is not green versus gray and that they both have a place. He discussed the Alemany and Cayuga diversion and as Commissioner Harrington indicated, upstream should be considered.*

*Commissioner Ajami noted alternative ways of looking at green and gray infrastructure and how it relates to economics. She stated the need to look at issues via a philosophical spectrum. She discussed her work with Napa River flood protection and indicated it was a multi-benefit project with public space. She stated that opportunities can be easily overlooked, that alternative solutions should be considered, and cross-collaboration should be utilized.*

*Chair Harrington discussed the City’s decision to construct big box sewers and that a new way of thinking will be a challenge. He expressed appreciation for staff looking at new ways of doing things. He informed Acting GM Carlin that the Commission is open to anything and asked him to bring back what the steps might be.*

*Chair Harrington and President Maxwell thanked the Commission and guest speakers for their time and their presentations.*

*Chair Harrington adjourned the meeting at 4:57 PM.*