#### **BOARD of SUPERVISORS**



City Hall
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco 94102-4689
Tel. No. 554-5184
Fax No. 554-5163
TDD/TTY No. 554-5227

October 15, 2019

The Honorable Garrett L. Wong Presiding Judge Superior Court of California, County of San Francisco 400 McAllister Street, Department 206 San Francisco, CA 94102

RE: Civil Grand Jury Report - Act Now Before it is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System

# Dear Judge Wong:

The Board of Supervisors' Government Audit and Oversight Committee conducted a public hearing on September 19, 2019, to review the findings and recommendations of the 2018-2019 Civil Grand Jury report, entitled "Act Now Before it is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System."

Prior to the Committee meeting, the following City Departments submitted required responses to the Civil Grand Jury:

- Office of the Mayor: Received September 16, 2019;
- General Manager of the San Francisco Public Utilities Commission: Received September 16, 2019;
- Public Utilities Commission: Received September 11, 2019
- Fire Commission: Received September 12, 2019;
- Fire Department: Received September 16, 2019;
- City Administrator: Received September 16, 2019; and
- Department of the Environment Received September 16, 2019.

2018-2019 Civil Grand Jury Board Response Transmittal October 15, 2019 Page 2

During the September 19, 2019 meeting, the Government Audit and Oversight Committee prepared a resolution responding to the requested findings and recommendations identified in the report. The response was prepared by Resolution No. 422-19, enacted on October 11, 2019.

By this message, the Office of the Clerk of the Board of Supervisors is transmitting Resolution No. 422-19 to your attention.

If you have any questions, please contact John Carroll, Government Audit and Oversight Committee Clerk at (415) 554-4445, or via email to john.carroll@sfgov.org.

Sincerely,

Angela Calvillo

Clerk of the Board

Sophia Kittler, Mayor's Office Kanishka Karunaratne Cheng, Mayor's Office Andres Power, Mayor's Office Sally Ma, Mayor's Office Rebecca Peacock, Mayor's Office Jon Givner, Office of the City Attorney Ben Rosenfield, City Controller Todd Rydstrom, Office of the Controller Peg Stevenson, Office of the Controller Tonia Lediju, Office of the Controller Mark de la Rosa, Office of the Controller Alisa Somera, Office of the Clerk of the Board Debra Newman, Office of the Budget and Legislative

Severin Campbell, Office of the Budget and Legislative Analyst

Reuben Holober, Office of the Budget and Legislative

Jennifer Millman Tell, Office of the Budget and Legislative Analyst

Rasha Harvey, 2018-2019 Foreperson, San Francisco Civil Grand Jury

Ettore Leale, 2019-2020 Foreperson, San Francisco Civil Grand Jury

Naomi M. Kelly, City Administrator, Office of the City Administrator

Lynn Khaw, Office of the City Administrator Brian Strong, Office of the City Administrator Debbie Raphael, Director, Department of the Environment

Peter Gallotta, Department of the Environment Charles Sheehan, Department of the Environment Jeanine Nicholson, Chief, Fire Department

Theresa Ludwig, Fire Department

Stephen Nakajo, President, Fire Commission

Maureen Conefrey, Fire Commission

Harlan L. Kelly, Jr., General Manager, San Francisco **Public Utilities Commission** 

Juliet Ellis, San Francisco Public Utilities Commission John Scarpulla, San Francisco Public Utilities Commission

Christopher Whitmore, San Francisco Public Utilities Commission

Ann Moller Caen, President, San Francisco Public Utilities Commission

Donna Hood, San Francisco Public Utilities Commission



# City and County of San Francisco Certified Copy

City Hall
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102-4689

### Resolution

190786

[ Board Response - Civil Grand Jury Report - Act Now Before it is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System ]

Sponsor: Mar

Resolution responding to the Presiding Judge of the Superior Court on the findings and recommendations contained in the 2018-2019 Civil Grand Jury Report, entitled "Act Now Before it is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System;" and urging the Mayor to cause the implementation of accepted findings and recommendations through his/her department heads and through the development of the annual budget. (Clerk of the Board)

10/1/2019 Board of Supervisors - ADOPTED

Ayes: 11 - Brown, Fewer, Haney, Mandelman, Mar, Peskin, Ronen, Safai, Stefani, Walton and Yee

10/11/2019 Mayor - RETURNED UNSIGNED

STATE OF CALIFORNIA CITY AND COUNTY OF SAN FRANCISCO CLERK'S CERTIFICATE

I do hereby certify that the foregoing Resolution is a full, true, and correct copy of the original thereof on file in this office.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the offical seal of the City and County of San Francisco.

October 15, 2019

Date

Angela Calvillo

# AMENDED IN COMMITTEE 9/19/19

FILE NO. 190786

RESOLUTION NO. 422-19

[Board Response - Civil Grand Jury Report - Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System]

Resolution responding to the Presiding Judge of the Superior Court on the findings and recommendations contained in the 2018-2019 Civil Grand Jury Report, entitled "Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System;" and urging the Mayor to cause the implementation of accepted findings and recommendations through his/her department heads and through the development of the annual budget.

WHEREAS, Under California Penal Code, Section 933 et seq., the Board of Supervisors must respond, within 90 days of receipt, to the Presiding Judge of the Superior Court on the findings and recommendations contained in Civil Grand Jury Reports; and

WHEREAS, In accordance with California Penal Code, Section 933.05(c), if a finding or recommendation of the Civil Grand Jury addresses budgetary or personnel matters of a county agency or a department headed by an elected officer, the agency or department head and the Board of Supervisors shall respond if requested by the Civil Grand Jury, but the response of the Board of Supervisors shall address only budgetary or personnel matters over which it has some decision making authority; and

WHEREAS, Under San Francisco Administrative Code, Section 2.10(a), the Board of Supervisors must conduct a public hearing by a committee to consider a final report of the findings and recommendations submitted, and notify the current foreperson and immediate past foreperson of the civil grand jury when such hearing is scheduled; and

WHEREAS, In accordance with San Francisco Administrative Code, Section 2.10(b), the Controller must report to the Board of Supervisors on the implementation of

recommendations that pertain to fiscal matters that were considered at a public hearing held by a Board of Supervisors Committee; and

WHEREAS, The 2018-2019 Civil Grand Jury Report, entitled "Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System" ("Report") is on file with the Clerk of the Board of Supervisors in File No. 190785, which is hereby declared to be a part of this Resolution as if set forth fully herein; and

WHEREAS, The Civil Grand Jury has requested that the Board of Supervisors and the Budget and Legislative Analyst respond to Finding Nos. F6, and F11, as well as Recommendation No. R3, contained in the subject Report; and

WHEREAS, Finding No. F6 states: "Unless the City increases funding levels, it will be several decades (i.e., after the USGS predicts one or more major earthquakes will occur) before the southern parts of the City have a high-pressure, multi-sourced, seismically safe emergency firefighting water supply;" and

WHEREAS, Finding No. F11 states: "The City does not have a timeline to fund and complete development of a high-pressure, multi-sourced, seismically safe emergency water supply for all parts of the City, including poor neighborhoods that historically have not been as well protected as the downtown business district and many richer neighborhoods;" and

WHEREAS, Recommendation No. R3 states: "The Board of Supervisors should direct the Budget and Legislative Analyst to study through an equity lens and issue a report to the Board regarding (a) which areas of the City do not have sufficient water supplies for the anticipated demand for water to fight fires following a major earthquake similar in magnitude to the 1906 earthquake, and (b) options to address the issue in both the short term and the long term. The Board should issue its request by no later than December 31, 2019, and the Budget and Legislative Analyst should complete its report by no later than December 31, 2020;" and

WHEREAS, The Civil Grand Jury has requested that the Board of Supervisors respond to Finding Nos. F4, and F5, as well as Recommendation Nos. R1, R2, R4, R6, R7, and R8, contained in the subject Report; and

WHEREAS, Finding No. F4 states: "The City's high-pressure emergency water supply system, known as the Auxiliary Water Supply System (AWSS), does not cover large parts of Supervisorial Districts 1, 4, 7 and 11, roughly one-third of the City's developed area. As a result, these districts are not adequately protected from fires after a major earthquake;" and

WHEREAS, Finding No. F5 states: "A high-pressure, multi-sourced, seismically safe emergency firefighting water supply will be costly but is essential to protect the City;" and

WHEREAS, Recommendation No. R1 states: "By no later than December 31, 2020, the Mayor, the SFPUC, the SFFD, and Office of Resilience and Capital Planning should jointly present to the Board of Supervisors a detailed plan to ensure the City is well prepared to fight fires in all parts of San Francisco in the event of a 1906-magnitude (7.8) earthquake;" and

WHEREAS, Recommendation No. R2 states: "The plan discussed in Recommendation R1 should include a detailed proposal, including financing sources, for the installation within 15 years of a high-pressure, multi-sourced, seismically safe emergency water system for those parts of the City that don't currently have one, i.e., by no later than June 30, 2034;" and

WHEREAS, Recommendation No. R4 states: "As an interim measure, by no later than June 30, 2021, the City should purchase the 20 new PWSS hose tenders being requested by the SFFD, to replace and expand its currently inadequate inventory;" and

WHEREAS, Recommendation No. R6 states: "The SFPUC, the SFFD, and the SF Department of the Environment should study adding salt-water pump stations to improve the redundancy of water sources, especially on the west side. Findings and recommendations

from this study should be presented to the Board of Supervisors by no later than June 30, 2021;" and

WHEREAS, Recommendation No. R7 states: "The SFPUC should (a) continue its efforts to complete a more detailed analysis of emergency firefighting water needs (including above-the-median needs) by neighborhood, and not just by FRA, and (b) present a completed analysis to the Board of Supervisors by no later than June 30, 2021;" and

WHEREAS, Recommendation No. R8 states: "By no later than June 30, 2022, the Mayor and Board of Supervisors should analyze whether to propose a separate bond for the development of a high-pressure, multi-sourced, seismically safe emergency water system for those parts of the City that don't currently have one, with a target date of completing construction by no later than June 30, 2034;" and

WHEREAS, In accordance with California Penal Code, Section 933.05(c), the Board of Supervisors must respond, within 90 days of receipt, to the Presiding Judge of the Superior Court on Finding Nos. F4, F5, F6, and F11, as well as Recommendation Nos. R1, R2, R3, R4, R6, R7, and R8 contained in the subject Report; now, therefore, be it

RESOLVED, That the Board of Supervisors reports to the Presiding Judge of the Superior Court that they agree with Finding No. F4; and, be it

FURTHER RESOLVED, That the Board of Supervisors reports to the Presiding Judge of the Superior Court that they agree with Finding No. F5; and, be it

FURTHER RESOLVED, That the Board of Supervisors reports to the Presiding Judge of the Superior Court that they agree with Finding No. F6; and, be it

FURTHER RESOLVED, That the Board of Supervisors reports to the Presiding Judge of the Superior Court that they agree with Finding No. F11; and, be it

FURTHER RESOLVED, That the Board of Supervisors reports that Recommendation No. R1 has not been implemented but will be implemented no later than December 31, 2021,

and urges the Mayor, the SFPUC, the SFFD, and Office of Resilience and Capital Planning to jointly present a detailed plan to the Board of Supervisors by no later than December 31, 2021; and, be it

FURTHER RESOLVED, That the Board of Supervisors reports that Recommendation No. R2 has not been implemented but will be implemented by December 31, 2021, and urges the Departments to include in its detailed plan a detailed proposal, including financing sources, for the installation within 15 years of a high-pressure, multi-sourced, seismically safe emergency water system for those parts of the City that don't currently have one by no later than June 30, 2034; and, be it

FURTHER RESOLVED, That the Board of Supervisors reports that Recommendation No. R3 has not been implemented but will be implemented in the future, and Supervisor Gordon Mar will issue a request for a Budget and Legislative Analyst report no later than December 31, 2019, and will direct the Budget and Legislative Analyst to issue the completed report no later than December 31, 2020; and, be it

FURTHER RESOLVED, That the Board of Supervisors reports that Recommendation No. R4 will not be implemented because while funding for five hose tenders was allocated for FY2019-2020 though both local and state-level actions, implementation of the recommendation in its entirety will depend on the appropriation actions of a future Mayor and Board of Supervisors; and, be it

FURTHER RESOLVED, That the Board of Supervisors reports that Recommendation No. R6 has not been implemented but will be implemented in the future, and urges the completion of a study for adding a salt-water pump stations to be presented to the Board of Supervisors by no later than June 30, 2021, be it

FURTHER RESOLVED, That the Board of Supervisors reports that Recommendation No. R7 has not been implemented but will be implemented in the future, and urges that a

completed analysis be presented to the Board of Supervisors by no later than June 30, 2021; and, be it

FURTHER RESOLVED, That the Board of Supervisors reports that Recommendation No. R8 has not been implemented but will be implemented in the future, and will analyze by June 30, 2022, in coordination with the Mayor, whether to propose a separate bond for the development of a high-pressure, multi-sourced, seismically safe emergency water system for those parts of the City that don't currently have one, with a target date of completing construction by no later than June 30, 2034; and, be it

FURTHER RESOLVED, That the Board of Supervisors urges the Mayor to cause the implementation of the accepted findings and recommendations through his/her department heads and through the development of the annual budget.



# City and County of San Francisco Tails

City Hall 1 Dr. Carlton B. Goodlett Place San Francisco, CA 94102-4689

# Resolution

File Number:

190786

Date Passed: October 01, 2019

Resolution responding to the Presiding Judge of the Superior Court on the findings and recommendations contained in the 2018-2019 Civil Grand Jury Report, entitled "Act Now Before it is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System;" and urging the Mayor to cause the implementation of accepted findings and recommendations through his/her department heads and through the development of the annual budget.

September 19, 2019 Government Audit and Oversight Committee - AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE

September 19, 2019 Government Audit and Oversight Committee - RECOMMENDED AS **AMENDED** 

October 01, 2019 Board of Supervisors - ADOPTED

Ayes: 11 - Brown, Fewer, Haney, Mandelman, Mar, Peskin, Ronen, Safai, Stefani, Walton and Yee

File No. 190786

I hereby certify that the foregoing Resolution was ADOPTED on 10/1/2019 by the Board of Supervisors of the City and County of San Francisco.

> ←Angela Calvillo Clerk of the Board

Unsigned

London N. Breed Mayor

10/11/2019

Date Approved

File No. 190786

I hereby certify that the foregoing resolution, not being signed by the Mayor within the time limit as set forth in Section 3.103 of the Charter, or time waived pursuant to Board Rule 2.14.2, became effective without her approval in accordance with the provision of said Section 3.103 of the Charter or Board Rule 2.14.2.

Angela Calvillo Clerk of the Board



525 Golden Gate Avenue, 13th Floor San Francisco, CA 94102 T 415.554.3155 F 415.554.3161 TTY 415.554.3488

September 11, 2019

Sent via U.S. Mail and email to CGrandJury@sftc.org

The Honorable Garrett L. Wong Presiding Judge Superior Court of California, County of San Francisco 400 McAllister Street, Room 008 San Francisco, CA 94102-4512

Dear Judge Wong:

In accordance with Penal Code Sections 933 and 933.05, and pursuant to the request of Mr. Rasha Harvey, Foreperson of the City and County of San Francisco 2018-19 Civil Grand Jury, attached please find the response of the San Francisco Public Utilities Commission to the 2018-2019 Civil Grand Jury Report, *Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System.* At its regularly scheduled public meeting of September 10, 2019, the Commission voted to approve the attached responses by Resolution No. 19-0178.

The response of the General Manager of the San Francisco Public Utilities Commission is being sent under separate cover.

The Commission would like to thank the members of the 2018-2019 Civil Grand Jury for their service and their interest in our vital water infrastructure that supports firefighting in all communities in San Francisco.

Sincerely,

Ann Moller Caen

President

San Francisco Public Utilities Commission

CC:

Harlan Kelly, SFPUC General Manager

Mayor London Breed

London N. Breed Mayor

Ann Moller Caen

President

Francesca Vietor

Vice President

Anson Moran

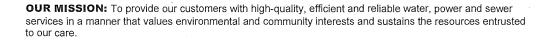
Commissioner

Sophie Maxwell Commissioner

Tim Paulson

Commissioner

Harlan L. Kelly, Jr. General Manager





### PUBLIC UTILITIES COMMISSION

City and County of San Francisco

RESOLUTION NO.

						*							
	WH	EREAS.	O	n Ju	ily 17	, 2019.	the 2018-201	9 Civil G	rand	Jury relea	sed a	report (	entitled.
"Act							Aggressively			•			
			_										

"Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System," a copy of which is on file with the Commission Secretary and has been provided to this Commission for review; and

WHEREAS, The Civil Grand Jury requires written responses from this Commission to the Report's Findings Nos. 1, 2, 4, 5, 6, 8, 9, 10, 11, 12, and 13, and Recommendations Nos. 1, 2, 6, 7, 9, and 10; and

WHEREAS, California Penal Code §933(c) requires such written responses be submitted to the Presiding Judge no later than September 15, 2019; and

WHEREAS, Attached hereto are the Commission's responses to the above stated Findings and Recommendations in the 2018-19 Civil Grand Jury Report; now, therefore be it

RESOLVED, That this Commission hereby approves the Commission's responses, attached hereto, to the relevant findings and recommendations of the July 17, 2019 Civil Grand Jury Report entitled, "Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System" and authorizes and directs the Commission President to submit the response to the Presiding Judge of the Civil Grand Jury by September 15, 2019, as required by California Penal Code §933(c).

I hereby certify that the foregoing resolution was adopted by the Public Utilities Commission at its meeting of September 10, 2019.

Secretary, Public Utilities Commission

Report Title [Publication Date]	F#	Finding (text may be duplicated due to spanning and multiple respondent effects)	Respondent Assigned by CGJ [Response Due Date]	Finding Response (Agree/Disagree)	Finding Response Text	R# [for F#]	Recommendation (text may be duplicated due to spanning and multiple respondent effects)	Respondent Assigned by CGJ [Response Due Date]	Recommendation Response (implementation)	Recommendation Response Text
Act Now Before it is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]	F1 .	Fires resulting from an earthquake represent a significant risk of widespread damage and potential loss of life in San Francisco.	President, San Francisco Public Utilities Commission (September 15, 2019)	Agree with the finding		(for F1-F6)	By no later than December 31, 2020, the Mayor, the SFPLC, the SFPLC, the SFPC and the Office of Resilience and Capital Planning should jointly present to the Board of Supervisors a detailed plan to ensure the City is well prepared to fight first in all parts of San Francisco in the event of a 1906-magnitude (7.8) earthquake.	President, San Francisco Public Utilities Commission (September 15, 2019)		Ensuring that San Francisco has the Infrastructure and resources to be well prepared to fight fires in all parts of San Francisco is something that will be a focus of the next 10-Year Capital Plan, Per Administrative Code 3.20, that Plan must be submitted to the Mayor and Board no later than March 1 of each odd-numbered year for approval no later than May 1. The requested presentation would be delivered as part of that Plan's submission to enable holistic planning across San Francisco's resilience challenges. Updates available on this timeline would be included. The City cannot discuss the project and timeline will be included. The City cannot discuss the project and timeline will specify the property of the
Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]	F1	Fires resulting from an earthquake represent a significant risk of widespread damage and potential loss of life in San Francisco.	President, San Francisco Public Utilities Commission [September 15, 2019]	Agree with the finding		[for F1-F6]	The plan discussed in Recommendation R1 should include a detailed proposal, including financing sources, for the installation within 15 years of a high-pressure, multi-sourced, seismically safe emergency water system for those parts of the City that don't currently have one, i.e., by no later than June 30, 2034.	President, San Francisco Poblic Utilities Commission (September 15, 2019)	,	The commitment of sources for specific uses on specific timelines for San Francisco's public Infrastructure is the work of the 10-Year Capital Plan. The plan discussed in Recommendation 1 will be acknowledged in the Capital Plan, and based on analysis, will be done on the capital plan timeline. The capital planning to consider the most of the capital plan timeline. The capital planning process gathers, documents, and balances planned funding for needs across the public infrastructure postport planning to the capital plan plan process pathers, documents, and balances planned funding for first planting the principles to guide the prioritization of public infrastructure investments. These investments are tiered; (1) address legal and/or regulatory mandates; (2) ensure public safety and enhance resilience; (3) preserve assets and promote sustainability; (4) advance planned and programmatic enests; and (3) promote economic development. In the next 10-Year Capital Plan and those that follow, the City will continue to a naive periority projects and programs and identify sources to advance those priorities. Committing to entrely funding a single program out of context and without regard for the trade-offs of that commitment would be out of step with the City's longstanding and highly regarded capital planning process and likely create significant vulnerabilities elsewhere in the portfolio.
Act Now Before It is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]	F2 .	The municipal water supply system (MWSS) is highly vulnerable to damage from a major earthquake and is not a reliable source for water supply for firefighting after a major earthquake.	President, San Francisco Public Utilities Commission (September 15, 2019)	Disagree, partially	The MWSS has been significantly upgraded in the last 15 years through the Water Supply Improvement Program (WSIP) inlitated by the SFPUC. The goals of WSIP included to reduce vulnerability of the water system to damage from earthquakes and increase overall water system reliability. There were 35 in-city projects within the \$5.48. billion-dollar program. The WSIP was the largest capital program ever undertaken by San Francisco, and one of the largest water infrastructure programs in the nation. Additionally, it so one of the only comprehensive and strategic infrastructure programs targeted specifically at improving a water system's seismic reliability and resiliency. Additionally, it is unique because the WSIP utilized a 7.8 magnitude earthquake as its seismic Level of Service.		By no later than December 31, 2020, the Mayor, the SFPUC, the SFPD, and the Office of Resilience and Capital Planning should jointly present to the Board of Supervisors a detailed plan to ensure the City is well prepared to flight fires in all parts of San Francisco in the event of a 1906-magnitude (7.8) earthquake.	Public Utilities Commission [September 15, 2019]	Will be Implemented	Ensuring that San Francisco has the Infrastructure and resources to be well prepared to fight fires in all parts of San Francisco is something that will be a focus of the next 10-Year Capital Plan. Per Administrative Code 3.20, that Plan must be submitted to the Mayor and Board no later than March 1.4 of each odd-numbered year for approval no later than May 1. The requested presentation would be delivered than May 1. The requested presentation would be delivered as part of that Plan's submission to enable holistic planning across San Francisco's resillence challenges. Updates available on this timeline would be included. The City cannot discuss the project and timeline until the ESER 2020 plan passes. For this reason, the City will sync this recommendation with the Capital Plan, and push back the timeline to December 31, 2021.

Act Now Before it is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System (July 17, 2019)	F2	The municipal water supply system (MWSS) is highly vulnerable to damage from a major earthquake and is not a reliable source for water supply for firefighting after a major earthquake.	President, San Francisco Di Didic Utilities Commission (September 15, 2019)	isagree, partially	The MWSS has been significantly upgraded in the last 15 years through the Water Supply Improvement Program (WSIP) initiated by the SPPUC. The goals of WSIP included to reduce vulnerability of the water system to damage from earthquakes and increase overall water system reliability. There were 55 incluty projects within the 54.8 Billion-dollar program. The WSIP was the largest capital program ever undertaken by San Francisco, and one of the largest water infrastructure programs in the nation. Additionally, it is one of the only comprehensive and strategic infrastructure programs targeted specifically at improving a water system's sessinic reliability and resiliency. Additionally, it is unique because the WSIP utilized a 7.8 magnitude earthquake as its seismic Level of Service.	[for F1-F6]	The plan discussed in Recommendation R1 should include a detailed proposal, including financing sources, for the installation within 15 years of a high-pressure, multi-sourced, sessinically safe emergency water system for those parts of the City that don't currently have one, i.e., by no later than June 30, 2034.	President, San Francisco Public Utilities Commission (September 15, 2029)	,	The commitment of sources for specific uses on specific timelines for San Francisco's public infrastructure is the work of the 10-Year Capital Plan. The plan discussed in Recommendation 1 will be acknowledged in the Capital Plan, and based on analysis, will be done on the capital plan timeline. The capital planning process gathers, documents, and balances planned funding for needs across the public infrastructure portfolio and across San Francisco's resilience challenges. The Capital Plan has longstanding funding principies to guide the prioritization of public infrastructure lowestments. These investments are tiered: (1) address legal and/or regulatory mandates; (2) ensure public safety and enhance resilience; (3) preserve assets and promote sustainability; (4) advance planned and programmatic needs; and (5) promote economic development. In the next 10-Year Capital Plan and those that follow, the City will continue to analyze priority projects and programs and identify sources to advance those priorities. Committing to entirely funding a single program out of context and without regard for the trade-offs of that commitment would be out of step with the City's longstanding and highly regarded capital planning process and likely create significant vulnerabilities elsewhere in the portfolio.
Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]	F4	The City's high-pressure emergency water supply system, known as the Auxillary Water Supply System (AWSS), does not cover large parts of Supervisional Districts 1, 4, 7 and 11, roughly one-third of the City's developed area. As a result, these districts are not adequately protected from fires after a major earthquake.	President, San Francisco A Public Utilities Commission fi [September 15, 2019]	.grae with the	The SFPUC, SFFD, and San Francisco Public Works (SFFW) are committed to Increasing fire protection throughout San Francisco. Since the passage of the first Earthquake Safety and Emergency Response Bond in 2010, the three agencies have been implementing projects to improve the AWSS system's seismic reliability and range of coverage. Enhancing the AWSS range of coverage to all areas of the city would require the allocation of funds to do so. The three agencies will continue to develop and implement projects utilizing new and proven technologies that improve upon the original system design. There have been many advancements in earthquake resistant pipeline design and materials, hydrants, and seismic valves since the early 1900, and the City Intends to use the best possible technology available to meet the performance standards of the SFFD.	[for F1-F6]	By no later than December 31, 2020, the Mayor, the SFPUC, the SFFD, and the Office of Resilience and Capital Planning should jointly present to the Board of Supervisors a detailed plan to ensure the City is well prepared to fight fires in all parts of San Francisco in the event of a 1906-magnitude (7.8) earthquake.	President, San Francisco Public Utilities Commission (September 15, 2019)	Will be Implemented	Ensuring that San Francisco has the infrastructure and resources to be well prepared to fight fires in all parts of San Francisco is something that will be a focus of the next 10-Year Capital Plan. Per Administrative Code 3.20, that Plan must be submitted to the Mayor and Board no later than March 1 of each odd-numbered year for approval no later than May 1. The requested presentation would be delivered as part of that Plan's submission to enable holistic planning across San Francisco's resilience challenges. Updates available on this timeline would be included. The City cannot discuss the project and timeline until the ESER 2020 plan passes, For this reason, the City will sync this recommendation with the Capital Plan, and push back the timeline to December 31, 2021.
Act Now Before it is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]	F4	The City's high-pressure emergency water supply system, known as the Auxillary Water Supply System (AWS), does not cover large parts of Supervisorial Districts 1, 4, 7 and 11, roughly one-third of the City's developed area. As a result, these districts are not adequately protected from fires after a major earthquake.	President, San Francisco Public Utilities Commission fi [September 15, 2019]	Agree with the Inding	The SFPUC, SFFD, and San Francisco Public Works (SFFW) are committed to increasing fire protection throughout San Francisco. Since the passage of the first Earthquake Safety and Emergency Response Bend in 2010, the three agencies have been implementing projects to improve the AWSs system's selsmic reliability and range of coverage. Enhancing the AWSs range of coverage to all areas of the City would require the allocation of funds to do so. The three agencies will continue to develop and implement projects utilizing new and proven technologies that improve upon the original system design. There have been many advancements in earthquake existant pipeline design and materials, hydrant, and esterior adversal school the early 1900s, and the City intends to use the best possible technology available to meet the performance standards of the SFFD.		The plan discussed in Recommendation R1 should include a detailed proposal, including financing sources, for the installation within 15 years of a high-pressure, multi-sourced, sestimically as emergency water system for those parts of the City that don't currently have one, i.e., by no later than June 30, 2034.	President, San Francisco Public Utilities Commission (September 15, 2019)	Requires further analysis	The commitment of sources for specific uses on specific timelines for San Francisco's public infrastructure is the work of the 10-Year Capital Plan. The plan discussed in Recommendation 1 will be acknowledged in the Capital Plan, and based on analysis, will be done on the capital plan timeline. The capital planning process gathers, documents, and balances planned funding for needs across the public infrastructure portfolio and across San Francisco's resilience challenges. The Capital Plan has longstanding funding principles to guide the prioritization of public infrastructure investments. These investments are litered: (1) address legal and/or regulatory mandates; (2) ensure public asfety and enhance resilience; (3) preserve assets and promote sustainability; (4) advance planned and programmatic needs; and (5) promote economic development. In the next 100-lear Capital Plan and those that follow, the City will continue to analyze priority projects and programs and identify sources to advance those priorities. Committing to entirely funding a single program out of context and without regard for the trade-offs of that commitment would be out of step with the City's longstrading and highly regarded capital planning process and likely create significant vulnerabilities elsewhere in the portfolio.

							*			
		<u> </u>								
Act Now Before it is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]	F5	A high-pressure, multi-loured, seismically safe emergency firelighting water supply will be costly but is essential to protect the City.	President, San Francisco Dublic Utillites Commission (September 15, 2019)	Agree with the finding	As the City considers what is essential to protect San Francisco, it is Important to acknowledge our multiple, complex resilience challenges. These challenges are documented in the Resilient 5 strategy (2016) and underlie the strategic efforts of our capital investments as represented in the 10-Year Capital Plan (last updated 2019). These challenges are: Earthquakes, Sea Level Rise/Climate Change, Aging Infrastructure, Unaffordability, and Social Inequity. All of these challenges represent meaningful threats to San Franciscans, their proparty, and their ability to make a life in the city, in making decisions about priority investments, San Francisco must keep an eye on all of these challenges, Identify the areas of graetest need across them, and make progress on all fronts simultaneously. The City has taken significant steps since 2010 to ensure that the City has a high-pressure multi-sourced, seismically safe EFWS. Since the passage of the first Earthquake Safety and Emergency Response Bond in 2010, SFPUC, SFFD, SF Public Works have been implementing projects to Improve the system's seismic reliability and range of coverage. The three agencies will continue to implement projects utilizing new and proven technologies that Improve upon the original system design.	[for F1-F6]	By no later than December 31, 2020, the Mayor, the SFPUC, the SFPL, and the Office of Resillence and Capital Planning should Jointly, present to the Board of Supervisors a detailed plan to ensure the City is well prepared to fight first of San Francisco in the event of a 1906-magnitude (7.8) earthquake.	President, San Francisco Public Utilities Commission [September 15, 2019]		Ensuring that San Francisco has the Infrastructure and resources to be well prepared to Fight free in all jurats of San Francisco is something that will be a focus of the next 10-Year Capital Plan. Per Administrative Code 3.20, that Plan must be submitted to the Mayor and Board no later than March 1 of each odd-numbered year for approval no later than May 1. The requested presentation would be delivered as part of that Plan's submission to enable holistic planning across San Francisco's resilience challenges. Undetes available on this timeline would be included. The City cannot discuss the project and timeline until the SESR 2020 plan passes. For this reason, the City will sync this recommendation with the Capital Plan, and push back the timeline to December 31, 2021.
Act Now Before it is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]	F5	A high-pressure, multi-sourced, seismically safe emergency fireflighting water supply will be costly but is essential to protect the City.	President, San Francisco Public Utilities Commission (September 15, 2019)	Agree with the finding	As the City considers what is essential to protect San Francisco, it is important to acknowledge our multiple, complex resilience challenges. These challenges are documented in the Resilient SF strategy (2016) and underlie the strategic efforts of our capital investments as represented in the 10-Year Capital Plan (last updated 2019). These challenges are: Earthquakes, Sea Level Rise/Cimate Change, Aging Infrastructure, Unaffordability, and Social Inequity. All of these challenges represent meaningful threats to San Franciscans, their property, and their ability to make a life in the city. In making decisions about priority investments, San Francisco must keep an eye on all of these challenges, identify the areas of greatest need across them, and make progress on all fronts simultaneously. The City has taken significant steps since 2010 to ensure that the City has a high-pressure multi-sourced, sessimically safe EVMS. Since the passage of the first Earthquake Safety and Emergency Response Bond in 2010, SFPUC, SFFD, SFP ublic Works have been implementing projects to improve the system's seismic rollability and range of coverage. The three agencies will continue to implement projects utilizing new and proven technologies that improve upon the original system design.	[for F1-F6]	The plan discussed in Recommendation R1 should include a detailed proposal, including financing sources, for the installation within 15 years of a high-pressure, multi-sourced, seismically safe emergency water system for those parts of the City that don't currently have one, i.e., by no later than June 30, 2034.	Public Utilities Commission		The commitment of sources for specific uses on specific timelines for San Francisco's public infrastructure is the work of the 10-Year Capital Plan. The plan discussed in Recommendation 1 will be acknowledged in the Capital Plan, and based on analysis, will be done on the capital plan immeline. The capital planning process gathers, documents, and balances planned funding for needs across the public infrastructure portfolio and across San Francisco's resilience challenges. The Capital Plan has longstanding funding principles to guide the prioritization of public infrastructure investments. These investments are tiredic: (1) address legal and/or regulatory mandates; (2) ensure public safety and enhance resilience; (3) preserve assets and promote sustainability; (4) advance planned and programmatic needs; and (5) promote economic development. In the next 10-Year Capital Plan and those that follow, the City will continue to analyze priority projects and programs and identify sources to advance those priorities. Committing to entirely funding a single program out of context and without regard for the trade-offs of that commitment would be out of step with the City's longstanding and highly regarded capital planning process and likely create significant vulnerabilities elsewhere in the portfolio.
Act Now Before it Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]	F6	Unless the City increases funding levels, it will be several decades [i.e., after the USGS predicts one or more major earthquakes will occur) before the southern parts of the City have a high-pressure, multi-sourced, seismically safe emergency firefighting water supply.	President, San Francisco Public Utilities Commission (September 15, 2019)	Disagree, wholly	Decisions about programming and funding levels of future ESER bonds and other complementary sources that could support the expansion of the AWSS have yet to be made.		By no later than December 31, 2020, the Mayor, the SFPUC, the SFFD, and the Office of Resilience and Capital Planning should jointly present to the Board of Supervisors a detailed plan to ensure the City is well prepared to fight fires in all parts of San Francisco in the event of a 1906-magnitude (7.8) earthquake.	President, San Francisco Public Utilities Commission [September 15, 2019]	Will be Implemented	Ensuring that San Francisco has the Infrastructure and resources to be well prepared to fight fires In all parts of San Francisco is something that will be a focus of the next 10-Year Capital Plan. Per Administrative Code 3.20, that Plan must be submitted to the Mayor and Board no later than March 1 of each odd-numbered year for approval no later than May 1. The requested presentation would be delivered a part of that Plan's submission to enable holistic planning across San Francisco's resilience challenges. Updates available on this timedine would be included. The City cannot discouss the project and timeline until the ESER 2020 plan passes. For this reason, the City will sync this recommendation with the Capital Plan, and push back the timeline to December 31, 2021.

Act Now Before It is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Fireflighting Water System [July 17, 2019]		be several decades (i.e., after the USGS predicts	President, San Francisco Public Utilities Commission (September 15, 2019)	Disagree, wholly	Decisions about programming and funding levels of future ESER bonds and other complementary sources that could support the expansion of the AWSS have yet to be made.	(for F1-F6)		President, San Francisco Public Utilities Commission (September 15, 2019)		The commitment of sources for specific uses on specific timelines for San Francisco's public infrastructure is the work of the 10-Year Capital Plan. The plan discussed in Recommendation 1 will be acknowledged in the Capital Plan, and based on analysis, will be done on the capital plan timeline. The capital plan infinite many strength of the capital plan timeline. The capital plan pitmeline. The capital plan pitmeline, reduce the public infrastructure portfolio and across San Francisco's resilience challenges. The Capital Plan has longstanding funding principles to guide the prioritization of public infrastructure investments. These investments are tiered: (1) address legal and/or reguldatory mandates; (2) pursure publics afety and enhance resilience; (3) preserve assets and promote sustainability; (4) advance planned and programmatic needs; and (5) promote economic development. In the next 10-Year Capital Plan and those that follow, the City will continue to analyze priority projects and programs and identify sources to advance those priorities. Committing to entirely funding a single program out of context and without regard for the trade-offs of that commitment would be out of step with the City's longstanding and highly regarded capital planning process and likely create significant vulnerabilities elsewhere in the portfolio.
Act Now Before It is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Fleefighting Water System [July 17, 2019]	FB .	Redundancy is an important feature of an emergency firefighting water system.	President, San Francisco Public Utilities Commission [September 15, 2019]	Agree with the finding		[for F8-F9]	The SFPUC, the SFFD and the SF Department of the Environment should study adding salt-water pump stations to improve the redundancy of water sources, especially on the west side. Findings and recommendations from this study should be presented to the Board of Supervisors by no later than June 30, 2021.		Will be implemented	SFPUC and SFFD will complete this study by June 30, 2021.  .
Act Now Before it is Too Late: Aggress/wely Expand and Enhance Our High-Pressure Emergency Firefighting Water System (July 17, 2019)	F9	Current plans to extend protections to the western part of the City do not include any high-pressure water sources north of Golden Gate Park.	President, San Francisco Public Utilities Commission (September 15, 2019)	Disagree, partially	While it is true that the SFPUC and SFFD are studying four potential water sources proposed to supply a potable EFWS on the west side of the City which are not located north of Golden Gate Park, which by no means would reduce the proposed system's resillency, reliability, performance, or ability to provide abundant high-pressive water for fire suppression to the Richmond District after a selsmic event. San Francisco is unique in that there are 11 in-city reservoirs, with a total water capacity of approximately 413,000,000 gallons. Additionally, Lake Merced, also located within City (Limits, has an additional approximately 1,000,000,000 gallons. The potable EFWS system for the Westside of San Francisco that is being developed and analyzed would provide that the new EFWS pipeline in the Sunset and Richmond Districts could be supplied from four sources of water at two locations. The first two water sources could be supplied to the EFWS pipeline in the twinsity of Lake Merced, which has a water supply of approximately one billion gallons, and 60° seismically resilient SFPUC Hetch Hetch Regional Water System pipeline. The proposed potable EFWS also is analyzing the inclusion of a second 30,000 gallons per minute pump station in the vicinity of the SFPUC'S Sunset Reservoir that could be supplied water by two sources: (1) the 90 million gallon north basin of the Sunset Reservoir, which recently the SFPUC Hetch Hetch Regional Water System pipeline.	A POPULATION AND A POPU	the Environment should study adding sait-water	[September 15, 2019]	Will be implemented	SFPUC and SFFD will complete this study by June 30, 2022.

					In the second se		In 1 1111	I	Laurer a	A
Act Now Before It is	F10	The "reliability scores" being used by the SFPUC		Disagree, partially	Fire Response Areas (FRAs) were utilized by SFPUC and SFFD in the planning	R7	The SFPUC should (a) continue its efforts to	President, San Francisco	Will be implemented	SFPUC and SFFD will complete this analysis by June 30, 2021.
Too Late:		impart an overly optimistic impression of the	Public Utilities Commission			[for F10]	complete a more detailed analysis of emergency	Public Utilities Commission		!
Aggressively Expand		protection provided.	[September 15, 2019]		by the SFFD for initial alarm response and were called Fire Response Areas		firefighting water needs (including above the-	[September 15, 2019]		]
and Enhance Our					(FRAs). Probable fire demands were developed for each FRA using 1000 sets		median needs) by neighborhood, and not just			1
High-Pressure					of fire demands generated by Charles Scawthorn, PhD using a Monte Carlo		by FRA, and (b) present a completed analysis to			1
Emergency			ĺ		analysis of fire ignitions and fire growth using the ground motions from the		the Board of Supervisors by no later than	l		
Firefighting Water				}	design earthquake (7.8 magnitude). The fire Ignitions were generated using		June 30, 2021.			· '
System					methods similar to those used for the Community Action Plan for Seismic					· '
[July 17, 2019]				1	Safety (CAPSS) study (ATC 2010). The fire Ignitions subsequently were used					!
}					to develop water demands that were aggregated into the likely fire					1
1					demands for each FRA. The water supplies for each FRA were developed		į			!
					using the reliability modeling tool GIRAFFE, developed at Cornell University					
					by Professor Thomas D. O'Rourke. GIRAFFE performs internal Monte Carlo			1		'
					analysis to damage pipes in the system for multiple scenarios. The water					'
				}	supplies developed by GIRAFFE were aggregated into the likely water					'
			1		supplies for each FRA. It should be noted that the likely water supplies for			1		'
			1		each FRA assumed no water from the City's municipal water system					'
					(MWSS), which is quite conservative and highly unlikely even after a seismic					
					event. The reliability score for each FRA is calculated using the sum of all					
					water supplies for each FRA and dividing it by the FRA water demand. The					
					reliability scores do exactly that - estimate how much EFWS water will be					
					available for firefighting demands in a given FRA. The reliability scores are					
					not meant to represent an estimate of the fire protection for a given house,				i	
			1		block, or blocks. Rather it is a measure of the EFWS capacity and demand.					'
					The SFPUC recognizes the need to analyze potential EFWS demands on a					'
1			1		more detailed level, and the agency began the process of doing so.					'
										<del> </del>
Act Now Before It Is	F11	The City does not have a timeline to fund and	President, San Francisco	Disagree, partially	The EFWS was built after the 1906 earthquake, and its location, primarily in					
Too Late:		complete development of a high-pressure, mult			the northeast portion of San Francisco, corresponds to the location of the					
Aggressively Expand	İ	sourced, seismically safe emergency water	[September 15, 2019]		majority of the city's population at that time. Since 2010, the SFPUC, SFFD,		1			
and Enhance Our		supply for all parts of the City, including poor			and Public Works have made critical improvements to the existing EFWS					
High-Pressure		neighborhoods that historically have not been			system. Expanding the EFWS prior to ensuring that the existing EFWS is					
Emergency	İ	as well protected as the downtown business			resilient and reliable would have contradicted best engineering practices.					
Firefighting Water		district and many richer neighborhoods.			The SFPUC and SFFD are developing plans that would implement a resilient,					
System					robust, and redundant potable EFWS for the Westside of San Francisco. The		1			
[July 17, 2019]					potable EFWS that is being developed and analyzed would propose the					
					best method for bringing a robust and resilient high-pressure firefighting			1		
ŧ					water system to the Western neighborhoods in San Francisco that is					
					capable of providing water to the SFFD firefighters at the high-pressure					
					needed for firefighters to combat large fires after a seismic event, and is					
					likely to include over 14 miles of new EFWS pipelines and potentially two					
					new pump stations likely to be supplied by four water sources. The SFPUC					
					and SFFD's potable EFWS is being designed in a manner that allows for					
					agility and the flexibility to add new technologies and water sources, and in					
		1			a manner that allows the piping network to be extended in the future to	1			ľ	•
					serve additional areas.	l				
		1						1		
	1	1		1						
	1									
1	1	I .	1	1		l		1	1	1

Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]	F12	The SFPUC has not developed a number of the routine maintenance plans recommended in a 2014 report (5:199), and has not adequately defined which AWSS valves are "critical" and therefore require increased attention.	President, San Francisco Public Utilities Commission (September 15, 2019)	Disagree, wholly	Since taking over maintenance responsibilities, SFPUC has completed significant maintenance activities. For example, on a monthly basis, staff from the SFPUC test both Pump Station #1 and Pump Station #2. There are 6 maintenance recommendations provided in the C5-199 study as shown below in Table 7-1 from C5-199. The SFPUC has developed several of the routine maintenance plans recommended in the report or has determined the recommended maintenance practice is not necessary (i.e. flushing of a non-potable water system).	[for F12]	By no later than December 31, 2020 the SFPUC with the advice and subject to the approval of the SFFD, should (a) implement "best practices for the malntenance of AWSS assets, and (b) radefine which AWSS valves in the system are "critical," and, therefore, require more attention and priority in the SFPUC's maintenance plans.	Public Utilities Commission	Has been Implemented	(a) SFPUC Implements "best practices" for the maintenance of AWSS assets in collaboration with SFFO, and consistent with the terms of the Memorandium of Understanding Regarding Operation and Maintenance of San Francisco Water Supply Systems Related to Fire Suppression (MOU), SFPUC will seek SFFD's written approval for "any modifications that could compromise" the system's function as a high pressure firefighting system (MOU, page	
					Maintenance Recommendations, CS. 199 Task 11 TM: Maintenance Recommendation 1: Confirm that all AWSS assets are entered into CDD's asset management system and PM's are established SFFUC Response: All AWSS asset locations are entered into CDD's Maximo and GIS databases. PM's are established for regular maintenance.					(b) The AWSS critical valves have been identified and will be exercised every year through the AWSS Critical Valve Exercise Program.	
Pa depris					Maintenance Recommendation 2; Perform Regular maintenance and testing SFPUC Response: According to SFPUC Maximo maintenance/testing records, regular maintenance and testing is performed in accordance with maintenance plans.						
					Maintenance Recommendation 3: Check, flush and repair all suction connections regularly SFPUC Response: All suction connections were assessed 4-5 years ago. Some were cleaned as needed at that time. A high-pressure Jetting machine was recently purchased, and personnel is being trained on its use.						
The state of the s					Maintenance Recommendation 4: Establish pipeline flushing program for AWSS SEPUC Response: Non-potable fire-fighting water systems are not typically flushed as part of regular flushing maintenance program. However, flushing naturally occurs when the AWSS is utilized approximately 20 times per year.						
					Maintenance Recommendation 5: Establish leak detection program and a pipeline leak database to monitor potential hot spots SFPUC Responser. SFPUC malnomance activities have helped reduced EFWS leakage by over 500,000 gallons per day, improving system performance while reducing water waste. A condition assessment performance while reducing water waste. A condition assessment performance implemented wings Smart Ball sethenology. In addition, the system water supply sources are regularly monitored for water levels/filling requirements which will indicate potential leaks in the pipeline system.						
					Maintenance Recommendation 6: Establish a cistern inspection, filling and testing program SFPUC Response: A cistern inspection and testing program has been developed for implementation in 2019. In addition, a filling procedure has been established with SFFD.						
					As part of the AWSS Critical Valve Exercise Program, CDD has identified 66 AWSS valves as "critical" (66 of 1,685 valves, or approximately 4 percent (source: CDD Gis), Critical valves for AWSS were defined based on the following criteria for operational importance:  - Tank bypass valves  - Tank supply valve from higher pressure to lower pressure tank supply source  - Closed control valves to isolate piping within an Infirm area  - Distribution system divide gate valve, manual operation (allows higher						
				'	locaccure your to feed into lower exercise your within the distribution				Į	1	

						System)  **Obstribution system divide gate valve, motorized operation (allows higher pressure zone to feed into lower pressure zone within the distribution system)  **Open control valves to allow a single supply source to feed an infirm area a Balancing valve, TP reservoir only (allows the two TP reservoir basins to equalize in level)  **Critical Valves:**  **Critical Valves:**  **These EFWS critical valves are broken down by type below. All 66 of the AW35 critical valves were exercised in 2018-2019 and will be exercised every year.  **Valve Type (# of Critical Valves per type):  **Ashbury Tank By-Pass Valves (10)  **Ashbury Tank By-Pass Valves (10)  **Ashbury Tank Supply Valve #1 (Ashbury to Jones) (1)  **Close Control Gate Valve (13)  **Division Gate Valve (13)  **Division Gate Valve (14)  **Jones Street Tank By-Pass Valves (10)  **Motorized Division Gate Valve or Motorized Line Gate Valve (6)  **Open Control Gate Valve (14)  **Divin Peaks Reservoir Ealancing Valve (13)  **Twin Peaks Reservoir Balancing Valve (13)  **Twin Peaks Reservoir Balancing Valve (14)  **Twin Peaks Reservoir Balancing Valve (15)  **Total AWSS Critical Valves (66)					·		
A	ct Now Before It is	F13	In the 2015 MOU between the SFFD and the	President, San Francisco	Dicagron partially	There are no formal protocol outlining appoints labet AMCS oversions as delike	210	Duran laboration de 2020 de 2017 MONT	B				
	on Late:	LTD	SFPUC, the two agencies agreed to conduct	President, San Francisco Public Utilities Commission	Disagree, partially	There are no formal protocol outlining specific joint AWSS exercises or drills in the MOU; however, there are multiple opportunities to train together	R10 (for F13)	By no later than June 30, 2020, the 2015 MOU between the SFPUC and the SFFD should be	President, San Francisco Public Utilities Commission	Will be implemented	SFFD and SFPUC will work	together to amend the M	NOU by
	ggressively Expand		joint AWSS trainings annually, but there is no	[September 15, 2019]		during operation, maintenance, and construction of improvement projects	(in LT2)	amended to include a detailed roadmap for	[September 15, 2019]		June 30, 2020.		1
a	nd Enhance Our		formal protocol outlining specific joint AWSS	,		for the AWSS facilities as previously described in the response to the Grand		annual emergency response exercises, including	[ockerimer 13, 2015]				
	ligh-Pressure		exercises or drills using hypothetical disaster			Jury questions sent in May 2019.		simulated disaster and earthquake drills					
	mergency irefighting Water		scenarios, such as a major earthquake.					involving the AWSS and the PWSS.					
	rengnting water ystem					The SFFD and SFPUC have had multiple field training opportunities during the maintenance and start-up testing of AWSS facilities in the last 5 years.							
	uly 17, 2019]		1	1		For example, on December 20, 2018, SFFD and SFPUC personnel conducted		1		1			-
l"	,					emergency generator start-up procedures for Pump Station No. 2 (PS2). On							
				1		April 5, 2018 SFPUC and SFFD performed joint-department full-scale test of					•		
	Į					AWSS Pump Station No. 1 (PS1) including pumping seawater into an							
			1										1
- 1						isolated section of the AWSS distribution through system hydrants. On							I
- 1						August 29, 2018, SFPUC, SFFD and DPW personnel conducted a seawater							
-						August 29, 2018, SFPUC, SFFD and DPW personnel conducted a seawater drafting drill and confirmation test from the new suction connection at Pier							
						August 29, 2018, SFPUC, SFFD and DPW personnel conducted a seawater drafting drill and confirmation test from the new suction connection at Pier 50. In addition, SFFD and SFPUC periodically test different facilities to							
***************************************						August 29, 2018, SFPUC, SFFD and DPW personnel conducted a seawater drafting drill and confirmation test from the new suction connection at Pier							
***************************************						August 29, 2018, SFPUc, SFFD and DPW personnel conducted a seawater drafting drill and confirmation test from the new suction connection at Pier 50. In addition, SFFD and SFPUC periodically test different facilities to assure systems are in good working order, and to train personnel on operations and joint-agency communications. For example, a full-scale emergency exercise was performed between SFFD and SFPUC staff in							
THE PARTY OF THE P						August 29, 2018, SFPUc, SFFD and DPW personnel conducted a seawater drafting drill and confirmation test from the new suction connection at Pier 50. In addition, SFFD and SFPUC periodically test different facilities to assure systems are in good working order, and to train personnel on operations and joint-agency communications. For example, a full-scale emergency exercise was performed between SFFD and SFPUC staff in January 2018 at Islais Creek, which involved the Phoenix Fireboat pumping							
						August 29, 2018, SFPUc, SFFD and DPW personnel conducted a seawater drafting drill and confirmation test from the new suction connection at Pier 50. In addition, SFFD and SFPUC periodically test different facilities to assure systems are in good working order, and to train personnel on operations and ploin-tagency communications. For example, a full-scale emergency exercise was performed between SFFD and SFPUC staff in January 2016 at Islast Corek, which involved the Phoenix Fireboat pumping sea water directly into an isolated section of the Jones pressure system via			·				The state of the s
and a partie of the same of th						August 29, 2018, SFPUc, SFFD and DPW personnel conducted a seawater drafting drill and confirmation test from the new suction connection at Pier 50. In addition, SFFD and SFPUC periodically test different facilities to assure systems are in good working order, and to train personnel on operations and joint-agency communications. For example, a full-scale emergency exercise was performed between SFFD and SFPUC staff in January 2016 at Islais Creek, which involved the Phoenix Freboat pumping sea water directly into an isolated section of the Jones pressure system via AWS5 manifold connection. Sea water discharged from select hydrants							The second section is a second
The state of the s						August 29, 2018, SFPUc, SFFD and DPW personnel conducted a seawater drafting drill and confirmation test from the new suction connection at Pier 50. In addition, SFFD and SFPUC periodically test different facilities to assure systems are in good working order, and to train personnel on operations and plont-agency communications. For example, a full-scale emergency exercise was performed between SFFD and SFPUC staff in January 2016 at Islais Creek, which involved the Phoenix Fireboat pumping sea water directly into an isolated section of the hones pressure system via AWSS manifold connection. Sea water discharged from select hydrants within the isolated section of the system where pressure and flow were							The state of the s
						August 29, 2018, SFPUc, SFFD and DPW personnel conducted a seawater drafting drill and confirmation test from the new suction connection at Pier 50. In addition, SFFD and SFPUC periodically test different facilities to assure systems are in good working order, and to train personnel on operations and joint-agency communications. For example, a full-scale emergency exercise was performed between SFFD and SFPUC staff in January 2018 at Islais Creek, which involved the Phoenix Fireboat pumping sea water directly into an isolated section of the Jones pressure system via AWSS manifold connection. Sea water discharged from select hydrants within the isolated section of the system where pressure and flow were monitored at each discharge point.							industry of a 1 miles installed
						August 29, 2018, SFPUc, SFFD and DPW personnel conducted a seawater drafting drill and confirmation test from the new suction connection at Pier 50. In addition, SFFD and SFPUC periodically test different facilities to assure systems are in good working order, and to train personnel on operations and ploin-tagency communications. For example, a full-scale emergency exercise was performed between SFFD and SFPUC staff in January 2016 at Islais Creek, which involved the Phoenix Fireboat pumping sea water directly into an isolated section of the Jones pressure system via AWS5 manifold connection. Sea water discharged from select hydrants within the isolated section of the system where pressure and flow were monitored at each discharge point.  The SFFD uses their Disaster Response Manual and Water Supply Manual to							industry or a to a distribution of
						August 29, 2018, SFPUc, SFFD and DPW personnel conducted a seawater drafting drill and confirmation test from the new suction connection at Pier 50. In addition, SFFD and SFPUC periodically test different facilities to assure systems are in good working order, and to train personnel on operations and joint-agency communications. For example, a full-scale emergency exercise was performed between SFFD and SFPUC staff in January 2018 at Islais Creek, which involved the Phoenix Fireboat pumping sea water directly into an isolated section of the Jones pressure system via AMSS manifold connection. Sea water discharged from select hydrants within the isolated section of the system where pressure and flow were monitored at each discharge point.  The SFFD uses their Dissater Response Manual and Water Supply Manual to provide guidelines for training. Training occurs throughout the year and is							e 'Support's à la "Application de
Apple to the second sec						August 29, 2018, SFPUc, SFFD and DPW personnel conducted a seawater drafting drill and confirmation test from the new suction connection at Pier 50. In addition, SFFD and SFPUC periodically test different facilities to assure systems are in good working order, and to train personnel on operations and ploin-tagency communications. For example, a full-scale emergency exercise was performed between SFFD and SFPUC staff in January 2016 at Islais Creek, which involved the Pheomic Fireboat pumping sea water directly into an isolated section of the Jones pressure system via AWS5 manifold connection. Sea water discharged from select hydrants within the isolated section of the system where pressure and flow were monitored at each discharge point.  The SFFD uses their Disaster Response Manual and Water Supply Manual to provide guidelines for training. Training occurs throughout the year and is ongoing, in March 2018, the SFPUC sponsored at abbelot pdrill Coversed on	,						e de l'agrande de
A A A A A A A A A A A A A A A A A A A						August 29, 2018, SFPUc, SFFD and DPW personnel conducted a seawater drafting drill and confirmation test from the new suction connection at Pier 50. In addition, SFFD and SFPUC periodically test different facilities to assure systems are in good working order, and to train personnel on operations and joint-agency communications. For example, a full-scale emergency exercise was performed between SFFD and SFPUC staff in January 2018 at Islais Creek, which involved the Phoenix Fireboat pumping sea water directly into an isolated section of the Jones pressure system via AMSS manifold connection. Sea water discharged from select hydrants within the isolated section of the system where pressure and flow were monitored at each discharge point.  The SFFD uses their Dissater Response Manual and Water Supply Manual to provide guidelines for training. Training occurs throughout the year and is							

		respond to a hypothetical earthquake event (determine ICS, formulate specific objectives, and document findings). It is anticipated that this tabletop exercise will be repeated at least every other year, and that a larger scale simulation of post-earthquake response will be conducted within the next two years for SFFD and SFPUC joint-exercise.			
		In February 2018 the SFPUC and SFFO staff convened to review the SFPUC's Division Emergency Operations Plan (DEOP), the CDD's Emergency Action Plan (EAP), and the CDD's Emergency Response Plan (ERP). The ERP overview focused on the incident Command structure specific to CDD staff responsibilities, communication methods, critical facilities and assets, first responders for each facility (PWS and AWSS) and updated "critical facilities map" for all major pressure zones.			
					Accessed to the second

Report Title [Publication Date] Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]		Finding (text may be duplicated due to spanning and multiple respondent effects)  Files resulting from an earthquake represent a significant risk of widespread damage and potential loss of life in San Francisco.	Respondent Assigned by CGJ [Response Due Date] President, San Francisco Fire Commission [September 15, 2019]	Finding Response (Agree/Olsagree) Agree with the finding	Finding Response Text	(for F1-F6)	Recommendation (text may be duplicated due to spanning and multiple respondent effects).  By no later than December 31, 2020, the Mayor, the SFPUC, the SFFD, and the Office of Resilience and Capital Planning should jointly present to the Board of Supervisors a detailed plan to ensure the City is well prepared to fight fires in all parts of San Francisco in the event of a 1906-magnitude (7.8) earthquake.	Respondent Assigned by GGI [Response Due Date] President, San Francisco Fire Commission (September 15, 2019)	Recommendation Response (Implamentation) Will be implemented	Recommendation Response Text  Ensuring that San Francisco has the infrastructure and resources to be well prepared to fight fires in all parts of San Francisco is something that will be a focus of the next 10-Year Capital Plan. Per Administrative Code 3.20, that Plan must be submitted to the Mayor and Board no later than Mayor 1 deach odd-numbered year for approval no later than May 1. The requested presentation would be delivered as part of that Plan's submission to enable holistic planning across San Francisco's resilience challenges. Updates available on this timeline would be included. The City cannot discuss the project and timeline until the ESER 2020 plan passes. For this reason, the City will sync this recommendation with the Capital Plan, and push back the timeline to December 31, 2021.
Act Now Before it is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System (July 17, 2019)		Fires resulting from an earthquake represent a significant risk of widespread damage and potential loss of life in San Francisco.	President, San Francisco Fire Commission [September 15, 2019]	Agree with the finding		(for F1-F6)	The plan discussed in Recommendation R1 should include a detailed proposal, including financing sources, for the installation within 15 years of a high-pressure, multi-sourced, sestinically sade emergency water system for those parts of the City that don't currently have one, i.e., by no later than June 30, 2034.	President, San Francisco Fire Commission (September 15, 2019)	Requires further analysis	The commitment of sources for specific uses on specific timelines for San Francisco's public infrastructure is the work of the 10-Year Capital Plan. The plan discussed in Recommendation 1 will be acknowledged in the Capital Plan, and based on analysis, will be done on the capital plan milenier. The capital planning process gathers, documents, and balances planned funding for needs across the public infrastructure portfolio and across San Francisco's resillence challenges. The Capital Plan has longstanding funding principles to guide the prioritization of public infrastructure investments. These investments are tiered: (1) address legal and/or regulatory mandates; (2) ensure public safety and enhance resillence; 3) preserve assets and promote sustainability; (4) advance planned and programmatic needs; and (5) promote economic development. In the next 10-Year Capital Plan and those that follow, the City will continue to analyze priority projects and programs and identify sources to advance those profrites. Committing to entirely funding a single program out of context and without regard for the trade-offs of that commitment vould be out of step with the City's longstanding and highly regarded capital planning process and likely create significant vulnerabilities elsewhere in the portfolio.
Act Now Before It Is Too late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]	F2	The municipal water supply system (MWSS) is highly vulnerable to damage from a major earthquake and is not a reliable source for water supply for firefighting after a major earthquake.	President, San Francisco Fire Commission [September 15, 2019]	Oisagree, partially	The MWSS has been significantly upgraded in the last 15 years through the Water Supply improvement Program (WSIP) initiated by the SFPUC. The goals of WSIP included to reduce vulnerability of the water system to damage from earthquakes and increase overall water system reliability. There were 35 in-city projects within the 64.6 billion-dollar program. The WSIP was the largest capital program ever undertaken by San Francisco, and one of the largest water infrastructure programs in the nation. Additionally, it is one of the only comprehensive and strategic infrastructure programs targeted specifically at improving a water system's selsmic reliability, and resiliency. Additionally, it is unique because the WSIP utilized a 7.8 magnitude earthquake as its seismic Level of Service.	[for F1-F6]	By no later than December 31, 2020, the Mayor, the SFPUC, the SFFD, and the Office of Resilience and Capital Planning should jointly present to the Board of Supervisors a detailed plan to ensure the City is well prepared to fight fires in all parts of San Francisco in the event of a 1906-magnitude (7.8) earthquake.		Will be implemented	Ensuring that San Francisco has the Infrastructure and resources to be well prepared to fight fires in all parts of San Francisco is something that will be a focus of the next 10-Year Capital Plan. Per Administrative Code 3.20, that Plan must be submitted to the Mayor and Board no later than March 1 of each odd numbered year for approval no later than May 1. The requested presentation would be delivered as part of that Plan's submission to enable holistic planning across San Francisco's resilience challenges. Updates available on this timeline would be included. The City cannot discuss the project and timeline until the ESER 2020 plan passes. For this reson, the City will sync this recommendation with the Capital Plan, and push back the timeline to December 31, 2021.

Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]	F2	The municipal water supply system (MWSS) is highly vulnerable to damage from a major earthquake and is not a reliable source for water supply for firefighting after a major earthquake.	Fire Commission	Disagree, partially	The MWSS has been significantly upgraded in the last 15 years through the Water Supply Improvement Program (WSIP) initiated by the SFPUC. The goals of WSIP included to reduce vulnerability of the water system to damage from earthquakes and Increase overall water system reliability. There were 35 in-city projects within the \$4.8 billion-dollar program. The WSIP was the largest capital program ever undertaken by San Francisco, and one of the largest water infrastructure programs in the nation. Additionally, it is one of the only comprehensive and strategic infrastructure programs targeted specifically at improving a water system's selsmic reliability and resiliency. Additionally, it is unique because the WSIP utilized a 7.8 magnitude earthquake as its seismic Level of Service.		The plan discussed in Recommendation R1 should include a detailed proposal, including financing sources, for the installation within 15 years of a high-pressure, multi-sourced, sets microscopic sets and set of the control of the control of the control of the city that don't currently have one, i.e., by no later than June 30, 2034.			The commitment of sources for specific uses on specific timelines for San Francisco's public Infrastructure is the work of the 10-Year Capital Plan. The plan discussed in Recommendation 1 will be acknowledged in the Capital Plan, and based on analysis, will be done on the capital plan threline. The capital planning process gathers, documents, and balances planned funding for needs across the public Infrastructure portfolio and across San Francisco's resillence challenges. The Capital Plan has longstanding funding principles to guide the prioritization of public Infrastructure investments. These investments are tiered (1) address legal and/or regulatory mandates; (2) ensure public safety and enhance resilience; (3) preserve assets and promote sustainability; (4) advance planned and programmatic needs; and (5) promote economic development. In the next 10-Year Capital Plan and those that folious, the City will continue to analyze priority projects and programs and identify sources to advance those prioritles. Committing to entirely funding a single program out of context and without regard for the trade-offs of that commitment would be out of step with the City's longstanding and highly regarded capital planning process and likely create significant vulnerabilities elsewhere in the portfolio.
Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]	F3	Approximately 30 disterns have recently been added with funds from ESER bonds, but cisterns only have up to about an hour of water supply and thus do not provide sufficient water for fighting fires following a major earthquake.	President, San Francisco Fire Commission [September 15, 2019]	Agree with the finding	Cisterns serve as one of many important tools for use by the SFFD in response to a disaster. Cistern locations are strategically located in the City in the event of a major configaration to assist as a "Demarcation line" on some of the City's major thoroughfares. This was realized after the 1906 earthquake. With work accomplished through the ESER bond program, disterns have been seismically improved throughout the City and the overall number of cisterns has increased to approximately 230, providing the Fire Department access to millions of gallons of water in an emergency.	(for F1-F6)	By no later than December 31, 2020, the Mayor, the SFPUC, the SFFD, and the Office of Resillence and Capital Planning should jointly present to the Board of Supervisors a detailed plan to ensure the City is well prepared to fight fires in all parts of San Francisco in the event of a 1906- magnitude (7.8) earthquake.		Will be Implemented	Ensuring that San Francisco has the Infrastructure and resources to be well prepared to light fires in all parts of San Francisco is something that will be a focus of the next 10-Vear Capital Plan. Per Administrative Code 3.20, that Plan must be submitted to the Mayor and Board no later than March 1 of each odd-unmbered year for approval no later than May 1. The requested presentation would be delivered as part of that Plan's submission to enable holistic planning across San Francisco's resilience challenges. Updates available on this timeline would be included. The City cannot discuss the project and timeline until the SERS 2002 plan passes, for this reason, the City will sync this recommendation with the Capital Plan, and push back the timeline to December 31, 2021.
Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System (July 17, 2019)	F3	Approximately 30 cisterns have recently been added with funds from ESRR bonds, but cisterns only have up to about an hour of water supply and thus do not provide sufficient water for fighting fires following a major earthquake.	President, San Francisco Fire Commission [September 15, 2019]	Agree with the finding	Cisterns serve as one of many important tools for use by the SFFD in response to a disaster. Cistern locations are strategically located in the City in the event of a major configoration to assist as a "Demarcation line" on some of the City's major thoroughfares. This was realized after the 1906 earthquake. With work accomplished through the ESFR hoad program, cisterns have been selsmically improved throughout the City and the overall number of cisterns has increased to approximately 230, providing the Fire Department access to millions of gallons of water in an emergency.	R2  for F1-F6	The plan discussed in Recommendation R1 should include a detailed proposal, including financing sources, for the installation within 15 years of a high-pressure, multi-sourced, seasonically safe emergency water system for those parts of the City that don't currently have one, i.e., by no later than June 30, 2034.	President, San Francisco Fire Commission (September 15, 2019)	Requires further analysis	The commitment of sources for specific uses on specific timelines for San Francisco's public Infrastructure is the work of the 10-Year Capital Plan. The plan discussed in Recommendation 1 will be acknowledged in the Capital Plan, and based on analysis, will be done on the capital plan timeline. The capital planning process gathers, documents, and balances planned funding process gathers, documents, and balances planned funding for needs across the public infrastructure portfolio and across San Francisco's resilience challenges. The Capital Plan has longstanding funding principles to guide the prioritization of public infrastructure investments. These investments are tilered; (1) address legal and/or regulatory mandates; (2) ensure public safety and enhance resilience; (3) preserve assets and promote susteinability; (4) advance planned and programmatic needs; and (5) promote economic development. In the next 10-Year Capital Plan and those that folion, the City will continue to analyze priority projects and programs and identify sources to advance those priorities. Committing to entirely funding a single program out of context and without regard for the trade-offs of that commitment would be out of step with the City's constrained and highly regarded capital planning process and likely create significant vulnerabilities elsewhere in the portfolio.

AWSS Page 2 of 7

Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Fireflighting Water System (July 17, 2019)	F4	The City's high-pressure emergency water supply system, known as the Auxillary Water Supply System (AWSS), does not over large parts of Supervisorial Districts 1, 4, 7 and 11, roughly one-third of the City's developed area. As a result, these districts are not adequately protected from fires after a major earthquake.	President, San Francisco Fire Commission [September 15, 2019]	Agree with the finding	The SFPUC, SFFD, and San Francisco Public Works (SFPW) are committed to increasing fire protection throughout San Francisco. Since the passage of the first Earthquiste Safety and Emergency Response Bond in 2010, the three agencies have been implementing projects to improve the AWSS system's seismic reliability and range of coverage. Enhancing the AWSS range of coverage to all areas of the City would require the allocation of funds to do so. The three agencies will continue to develop and implement projects utilizing new and proven technologies that improve upon the original system design. There have been many advancements in earthquake resistant pipeline design and materials, hydrants, and seismic valves since the early 1900s, and the City intends to use the best possible technology available to meet the performance standards of the SFFD.		By no later than December 31, 2020, the Mayor, the SFPUC, the SFPD, and the Office of Resilience and Capital Planning should Jointly present to the Board of Supervisors a detailed plan to ensure the City is well prepared to fight fires in all parts of San Francisco in the event of a 1906-magnitude (7.8) earthquake.		Will be implemented	Ensuring that San Francisco has the infrastructure and resources to be well prepared to fight fires in all parts of San Francisco is something that will be a focus of the next 10-Year Capital Plan. Per Administrative Code 3.20, that Plan must be submitted to the Mayor and Board no later than March 1 of each odd-numbered year for approval no later than May 1. The requested presentation would be delivered as part of that Plan's submission to enable holistic planning across San Francisco's submission to enable holistic planning across San Francisco's resilience challenges. Updates available on this timeline would be included. The City cannot discuss the project and timeline until the SER 2020 plan passes, for this reason, the City will sync this recommendation with the Capital Plan, and push back the timeline to December 31, 2021.
Act Now Before it is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]	F4	The City's high-pressure emergency water supply system, known as the Auxillary Water Supply system (AWSs), does not cover large parts of Supervisorial Districts 1, 4, 7 and 11, roughly one-third of the City's developed area. As a result, these districts are not adequately protected from fires after a major earthquake.	President, San Francisco Fire Commission [September 15, 2019]	Agree with the finding	The SFPUC, SFFD, and San Francisco Public Works (SFPW) are committed to increasing fire protection throughout San Francisco. Since the passage of the first Earthquake Safety and Emergency Response Bond in 2010, the three agencies have been implementing projects to improve the AWSS system's selsmic reliability and range of coverage. Enhancing the AWSS range of coverage to all areas of the City would require the allocation of funds to do so. The three agencies will continue to develop and implement projects utilizing new and proven technologies that Improve upon the original system design. There have been many advancements in earthquake resistant pipeline design and materials, hydrants, and seismic valves since the early 1000s, and the City intends to use the best possible technology available to meet the performance standards of the SFFD.	R2 [for F1-F6]	The plan discussed in Recommendation R1 should include a detailed proposal, including financing sources, for the installation within 15 years of a high-pressure, multi-sourced, sessimically safe emergency water system for those parts of the City that don't currently have one, i.e., by no later than June 30, 2034.	President, San Francisco Fire Commission (September 15, 2019)	Requires further analysis	The commitment of sources for specific uses on specific timelines for San Francisco's public infrastructure is the work of the 10-Year Capital Plan. The plan discussed in Recommendation 1 will be acknowledged in the Capital Plan, and based on 1 will be acknowledged in the Capital Plan, and based on 1 analysts, will be done on the capital plan timeline. The capital planning process gathers, documents, and balances planned funding for needs across the public infrastructure portfolio and across San Francisco's resilience challenges. The Capital Plan has longstanding funding principles to guide the prioritization of public infrastructure investments. These Investments are tiered: (1) address legal and/or regulatory mandates; (2) ensure public safety and enhance resilience; (3) preserve assets and promote sustainability; (4) advance planned and programmatic needs; and (5) promote economic development. In the next 10-Year Capital Plan and those that folion, the City will continue to analyze priority projects and programs and identify sources to advance those priorities. Committing to entirely funding a single program out of context and without regard for the trade-offs of that commitment would be out of step with the City's longstanding and highly regarded capital planning process and likely create significant vulnerabilities elsewhere in the portfolio.
Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System (July 17, 2019)	F4	The City's high-pressure emergency water supply system, known as the Auxiliary Water Supply System (AWSS), does not cover large parts of Supervisorial Districts 1, 4, 7 and 11, roughly one-third of the City's developed area. As a result, these districts are not adequately protected from fires after a major earthquake.	President, San Francisco Fire Commission [September 15, 2019]	Agree with the finding	The SFPUC, SFFD, and San Francisco Public Works (SFPW) are committed to increasing fire protection throughout San Francisco. Since the passage of the first Earthquake Safety and Emergency Response Bond in 2010, the three agencies have been implementing projects to improve the AWSS system's seismic reliability and range of coverage. Enhancing the AWSS range of coverage to all areas of the City would require the allocation of funds to do so. The three agencies will continue to develop and implement projects utilizing new and proven technologies that improve upon the original system design. There have been many advancements in earthquake resistant pipeline design and materials, hydrants, and seismic valves since the early 1900s, and the City intends to use the best possible technology available to meet the performance standards of the SFFD.	R5 (for F4)	The SFPB should strategically locate the majority of the PWSS hose tenders in areas that at present only have low-pressure hydrants and/or cisterns.	Fire Commission	Will be implemented	The Department is currently finalizing specifications for these units, after which they will go out to hid through the City's procurement processes before construction. It is anticipated the Department will take receipt of these units in the second half of 2020/early 2021. These hose tenders are a heavy-duty apparatus designed to be able to be deployed and moved throughout the City depending on need, giving the Department needed operational flexibility in its response.

AWSS Page 3 of 7

Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Fireflighting Water System (July 17, 2019)		A high-pressure, multi-sourced, selsmically safe emergency firefighting water supply will be costly but is essential to protect the City.	President, San Francisco Fire Commission [September 15, 2019]	Agree with the finding	As the City considers what is essential to protect San Francisco, it is important to acknowledge our multiple, complex resilience challenges. These challenges are documented in the Resilient S frattagy [2016] and underlie the strategic efforts of our capital investments as represented in the 10-Year Capital Plan (last updated 2019). These challenges are: Earthquakes, Sea Level Rise/Climate Change, Aging Infrastructure, Unaffordability, and Social Inequity. All of these challenges represent meaningful threats to San Franciscans, their property, and their ability to make a life in the city, in making decisions about priority investments, San Francisco must keep an eye on all of these challenges, identify the areas of greatest need across them, and make progress on all fronts simultaneously. The City has taken significant steps since 2010 to ensure that the City has a high-pressure multi-sourced, seismically safe EFWS. Since the passage of the first Earthquake Safety and Emergency Response Bond in 2010, SPPLC, SFPD, SP Public Works have been implementing projects to improve the system's seismic reliability and range of coverage. The three agencies will continue to implement projects utilizing new and proven technologies that improve upon the original system design.	By no later than December 31, 2020, the Mayor, the SFPUC, the SFFD, and the Office of Resillence and Capital Planning should Jointly present to the Board of Supervisors a detailed plan to ensure the City is well prepared to fight fires in all parts of San Francisco in the event of a 1906-magnitude (7.8) earthquake.			Ensuring that San Francisco has the infrastructure and resources to be well prepared to fight fires in all parts of San Francisco is something that will be a focus of the next 10 Fyear Capital Plan. Per Administrative Code 3.20, that Plan must be submitted to the Mayor and Board no later than March 1 of each odd-numbered year for approval no later than May 1. The requested presentation would be delivered as part of that Plan's submission to enable holistic planning across San Francisco's resilience challenges. Updates available on this timeline would be included. The City cannot discuss the project and timeline until the ESER 2020 plan passes. For this reason, the City will sync this recommendation with the Capital Plan, and push back the timeline to December 31, 2021.
Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]	FS	A high-pressure, multi-sourced, seismically safe emergency fireflighting water supply will be costly but is essential to protect the City.	President, San Francisco Fire Commission [September 15, 2019]	Agree with the finding	As the City considers what is essential to protect San Francisco, it is important to acknowledge our multiple, complex resilience challenges. These challenges are documented in the Resilient SF strategy (2016) and underlie the strategic efforts of our capital investments as represented in the 10-Year Capital Plan ((ast updated 2019). These challenges are: Earthquakes, Sea Level Rise/Climate Change, Aging Infrastructure, Unalfordability, and Social Inequity. All of these challenges represent meaningful threats to San Franciscans, their property, and their ability to make a life in the city. In making decisions about priority investments, San Franciscons that keep an eye on all of these challenges, identify the areas of greatest need across them, and make progress on all fronts simultaneously. The City has taken significant steps since 2010 to ensure that the City has a high-pressure multi-sourced, seismically safe EFWS. Since the passage of the first Earthquake Safety and Emergency Response Bond in 2010, SPPUC, SFP, SF Public Works have been implementing projects to improve the system's seismic reliability and range of coverage. The three agencies will continue to implement projects utilizing new and proven technologies that improve upon the original system design.	The plan discussed in Recommendation R1 should include a detailed proposal, including financing sources, for the installation within 15 years of a high-pressure, multi-sourced, sesimically safe emergency water system for those parts of the City that don't currently have one, i.e., by no later than June 30, 2034.	President, San Francisco Fire Commission [September 15, 2019]	Requires further analysis	The commitment of sources for specific uses on specific timelines for San Francisco's public infrastructure is the work of the 10-Year Capital Plan. The plan discussed in Recommendation 1 will be acknowledged in the Capital Plan, and based on 1 analysis, will be done on the capital Plan, and based an analysis, will be done on the capital plannine. The capital planning process gathers, documents, and balances planned funding for needs across the public infrastructure portfolio and across San Francisco's resilience challenges. The Capital Plan has longstanding funding principles to guide the prioritization of public infrastructure investments. These investments are tiered: (1) address legal and/or regulatory mandates; (2) ensure public safety and enhance resilience; (3) preserve assets and promote sustainability; (4) advance planned and programmatic needs; and (5) promote economic development, in the next 10-Year Capital Plan and those that follow, the City will continue to analyze priority projects and programs and identify sources to advance those prioritles. Committing to entirely funding a single program out of context and without regard for the trade-offs of that commitment would be out of step with the City's longstanding and highly regarded capital planning process and likely create significant vulnerabilities elsewhere in the portfolio.
Act Now Before It is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System (July 17, 2019)	F6	Unless the City increases funding levels, it will be several decades (i.e., after the USGS predicts one or more major earthquakes will occur) before the southern parts of the City have a high pressure, multi-sourced, selimically safe emergency fireflighting water supply.	Fire Commission [September 15, 2019]	Disagree, wholly	Decisions about programming and funding levels of future ESER bonds and other complementary sources that could support the expansion of the AWSS have yet to be made.	By no later than December 31, 2020, the Mayor, the SFPD, and the Office of Resilience and Capital Planning should Jointly present to the Board of Supervisors a detailed plan to ensure the City, swell prepared to fight fires in all parts of San Francisco in the event of a 1905-magnitude (7.8) earthquake.		W⊪ be implemented	Ensuring that San Francisco has the infrastructure and resources to be well prepared to fight fires in all parts of San Francisco is something that will be a focus of the next 10-Year Capital Plan. Per Administrative Code 3.20, that Plan must be submitted to the Mayor and Board no later than March 1 of each odd-numbered year for approval no later than May 1. The requested presentation would be delivered as part of that Plan's submission to enable holistic planning across San Francisco's resilience challenges, Updates available on this timeline would be included. The City cannot discuss the project and timeline until the ESER 2020 plan passes. For this reason, the City will sync this recommendation with the Capital Plan, and push back the timeline to December 31, 2021.

AWSS Page 4 of 7

Act Now Before it is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]			President, San Francisco Fire Commission (September 15, 2019)	Disagree, wholly	Decisions about programming and funding levels of future ESER bonds and other complementary sources that could support the expansion of the AWSS have yet to be made.	R2 {for F1-F6}	The plan discussed in Recommendation R1 should include a detailed proposal, including financing sources, for the installation within 15 years of a high-pressure, multi-sourced, sessincially safe emergency water system for those parts of the City that don't currently have one, i.e., by no later than June 30, 2034.	President, San Francisco Fire Commission [September 15, 2019]		The commitment of sources for specific uses on specific timelines for San Francisco's public infrastructure is the work of the 10-Year Capital Plan. The plan discussed in Recommendation 1 will be acknowledged in the Capital Plan, and based on analysis, will be done on the capital plan, and based on analysis, will be done on the capital plan mineline. The capital planning process gathers, documents, and balances planned funding for needs across the public infrastructure portfolio and across San Francisco's resilience challenges. The Capital Plan has longstanding funding principles to guide the prioritization of public infrastructure investments. These investments are tiered: (1) address legal and/or regulatory mandates; (2) ensure public safety and enhance resillence; (3) preserve assets and promote sustainability; (4) advance planned and programmatic needs; and (5) promote economic development. In the next 10-Year Capital Plan and those that follow, the City will continue to analyze priority projects and programs and identify sources to advance those priorities. Committing to entirely funding a single program out of context and without regard for the trade-offs of that commitment would be out of step with the City's longstanding and highly regarded capital planning process and likely create significant vulnerabilities elsewhere in the portfolio.
Act Now Before It is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]	F6	Unless the City increases funding levels, it will be several decades (i.e., after the USGS predicts one or more major earthquakes will occur) before the southern parts of the City have a high-pressure, multi-sourced, selsmirally safe emergency firefighting water supply.	Fire Commission [September 15, 2019]	Disagree, wholly	Decisions about programming and funding levels of future ESER bonds and other complementary sources that could support the expansion of the AWSS have yet to be made.	R4 [for F6-F7]	As interim measure, by no later than June 30, 2021, the City should purchase the 20 new PWS hose tenders being requested by the SFFD, to replace and expand its currently inadequate inventory.	President, San Francisco Fire Commission [September 15, 2019]	Requires further analysis	The Fire Department has been allocated funding to purchase five units through funds from the FY19-20 City budget and an allocation from the State. The Department is currently working with the Office of Contract Administration to develop a multi-year term contract for hose tenders so in the case that additional funding is secured in future years, the Department will be able to reduce the amount of time for procurement of the apparatus. Each hose tender cost \$1 million each, and we need to weigh purchase of additional hose tenders to other budget request and priority.
Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressive Emergency Firefighting Water System (July 17, 2019)	F7	The existing Portable Water Supply System (PWSS) inventory is inadequate. Investing in more PWSS hose tenders would provide a relatively guick, cost-effective interim means to improve praction of the southern and western parts of the City until a high-pressure, multi-sourced, seismirally safe emergency water supply can be developed in those areas.	President, San Francisco Fire Commission (September 15, 2019)	Agree with the finding	The Fire Department has been allocated funding to purchase five units through funds from the FY19-20 City budget and an allocation from the State. While the Department currently has five older hose tenders spread-out throughout the City, these new units are much more modern and provide the Department with a number of operational benefits, including the following; the capability of pumping and drafting water from any water source; extending the current AWSS system infrastructure; carrying 5,000 feet of hose for deployment; a S,500 gallon per minute (GPM) on-board water pump and a 3,000 GPM portable submersible water pump; on-board monitor with a \$25 foot reach; and four wheel drive. In addition, the Department has been successful in advocating and receiving Federal grant funds to assist with purchasing various PWSS equipment (valves, hose, ramps, etc.), and will continue to advocate for alternative sources of funding to increase the inventory of PWSS equipment.		As interim measure, by no later than June 30, 2021, the City should purchase the 20 new PWS hose tenders being requested by the SFFD, to replace and expand its currently inadequate inventory.	President, San Francisco Fire Commission (September 15, 2019)	Requires further analysis	The Fire Department has been allocated funding to purchase five units through funds from the FY19-20 City budget and an allocation from the State. The Department is currently working with the Office of Contract Administration to develop a multivear term contract for hose tenders so in the case that additional funding is secured in future years, the Department will be able to reduce the amount of time for procurement of the apparatus. Each hose tender cost \$1 million each, and we need to weigh purchase of additional hose tenders to other budget request and priority.
Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]	F8	Redundancy is an important feature of an emergency firelighting water system.	President, San Francisco Fire Commission [September 15, 2019]	Agree with the finding		R6 (for F8-F9	The SFPUC, the SFFD and the SF Department of the Environment should study adding salt-wate pump stations to improve the redundancy of water sources, especially on the west side. Findings and recommendations from this study should be presented to the Board of Supervisor by no later than June 30, 2021.	Fire Commission [September 15, 2019]	W⊪ be Implemented	SFPUC and SFFD will complete this study by June 30, 2021.

Page 5 of 7

Act Now Before It Is	F9	Current plans to extend protections to the	President, San Francisco	Disagree, partially	While it is true that the SFPUC and SFFD are studying four potential water	R6	The SFPUC, the SFFD and the SF Department of	President, San Francisco	Will be Implemented	SFPUC and SFFD will complete this study by June 30, 2021.
Too Late:	1.5	western part of the City do not include any high-	Fire Commission	Disagree, partially	sources proposed to supply a potable EFWS on the west side of the City, which			Fire Commission	will be implemented	SPFOC BIRD SFFD WIII COMPLETE MIS STORY BY JUNE 50, 2021.
Aggressively Expand		pressure water sources north of Golden Gate	[September 15, 2019]		are not located north of Golden Gate Park, which by no means would reduce	fint to (a)		[September 15, 2019]		
and Enhance Our		Park.	[September 15, 2015]		the proposed system's resiliency, reliability, performance, or ability to provide		water sources, especially on the west side.	(September 15, 2015)		
High-Pressure		F DI K.			abundant high-pressure water for fire suppression to the Richmond District	ļ	Findings and recommendations from this study			
Emergency					after a seismic event. San Francisco is unique in that there are 11 in-city		should be presented to the Board of Supervisors			i
Firefighting Water					reservoirs, with a total water capacity of approximately 413,000,000 gallons.		by no later than June 30, 2021.			
System					Additionally, Lake Merced, also located within City Limits, has an additional		by 110 later than Julie 30, 2021.			
					approximately 1,000,000,000 gailons. The potable EFWS system for the					1
[July 17, 2019]					Westside of San Francisco that is being developed and analyzed would provide					
1										
1					that the new EFWS pipeline in the Sunset and Richmond Districts could be	1				
					supplied from four sources of water at two locations. The first two water					
1					sources could be supplied to the EFWS pipeline via a 30,000 gallon per minute					
			1		pump station in the vicinity of Lake Merced, The two sources being studied for	ł				
					this pump station are Lake Merced, which has a water supply of approximately					
					one billion gallons, and a 60" seismically resilient SFPUC Hetch Hetchy Regional					
1					Water System pipeline. The proposed potable EFWS also is analyzing the					
					Inclusion of a second 30,000 gallons per minute pump station in the vicinity of					
1 ' 1					the SFPUC's Sunset Reservoir that could be supplied water by two sources: (1)	i				
					the 90 million gallon north basin of the Sunset Reservoir, which recently					
					underwent a \$64 million seismic retrofit, and (2) a 54" seismically resilient					
				i	SFPUC Hetch Hetchy Regional Water system pipeline.				1	
		1								
Act Now Before It Is	F10	The "reliability scores" being used by the SFPUC	President, San Francisco	Disagree, partially	Fire Response Areas (FRAs) were utilized by SFPUC and SFFD in the planning				<del> </del>	
Too Late:	120	Impart an overly optimistic impression of the	Fire Commission	Disagree, partially	study CS-199. This study divided the City into areas based on those defined by					
Aggressively Expand		protection provided.	[September 15, 2019]		the SFFD for initial alarm response and were called Fire Response Areas (FRAs).					
and Enhance Our		protection provided,	[Jepternoe: 13, 2019]		Probable fire demands were developed for each FRA using 1000 sets of fire	1				
High-Pressure				1	demands generated by Charles Scawthorn, PhD using a Monte Carlo analysis of					
Emergency					fire Ignitions and fire growth using the ground motions from the design					
Firefighting Water					earthquake (7.8 magnitude). The fire ignitions were generated using methods					
System		<b>.</b>			similar to those used for the Community Action Plan for Seismic Safety (CAPSS)					
[July 17, 2019]					study (ATC 2010), The fire ignitions subsequently were used to develop water					
[july 17, 2019]					demands that were aggregated into the likely fire demands for each FRA. The					
1 1				İ						
					water supplies for each FRA were developed using the reliability modeling tool					
					GIRAFFE, developed at Cornell University by Professor Thomas D. O'Rourke.					
					GIRAFFE performs internal Monte Carlo analysis to damage pipes in the system					
					for multiple scenarios. The water supplies developed by GIRAFFE were					
					aggregated into the likely water supplies for each FRA. It should be noted that					
			1		the likely water supplies for each FRA assumed no water from the City's	1				
			1		municipal water system (MWSS), which is quite conservative and highly					
1				1	unlikely even after a seismic event. The reliability score for each FRA is	1				'
					calculated using the sum of all water supplies for each FRA and dividing it by				1.	
					the FRA water demand. The reliability scores do exactly that - estimate how	1			1	
				1	much EFWS water will be available for firefighting demands in a given FRA. The	1				
					reliability scores are not meant to represent an estimate of the fire protection					
				1	for a given house, block, or blocks. Rather it is a measure of the EFWS capacity				i	
				1	and demand. The SFPUC recognizes the need to analyze potential EFWS					
			1	1	demands on a more detailed level, and the agency began the process of doing	1				
			1	1	so.	1				
1				1		1				
1 1			1			1				
1 1				1						

AWSS

Page 6 of 7

Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System (July 17, 2019)	F11	complete development of a high-pressure, multi-	President, San Francisco Fire Commission (September 15, 2019)	Disagree, partially	The EFWS was built after the 1906 earthquake, and its location, primarily in the northeast portion of San Francisco, corresponds to the location of the majority of the city's population at that time. Since 2010, the SFPUC, SFPD, and Public Works have made critical improvements to the existing EFWS system. Expanding the EFWS prior to ensuring that the existing EFWS is resilient and reliable would have contradicted best engineering practices. The SFPUC and SFFO are developing plans that would implement a resilient, robust, and redundant potable EFWS for the Westside of San Francisco. The Epotable EFWS that is being developed and analyzed would propose the best method for bringing a robust and resilient high-pressure firefighting water system to the Western neighborhoods in San Francisco that is capable of providing water to the SFFO fireflighters at the high-pressure needed for firefighters to combat large fires after a selsmic event, and is likely to include over 14 miles of new EFWS pipelines and potentially two new pump stations likely to be supplied by four water sources. The SFPUC and SFFD's potable EFWS is being designed in a manner that allows for agility and the flexibility to add new technologies and water sources, and in a manner that allows the piping network to be extended in the future to serve additional areas.				
Act Now Before it is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Fierlighting Water System [July 17, 2019]						By no later than December 31, 2020 the SFPUC, with the advice and subject to the approval of the SFPD, should (a) implement "hest practices" for the maintenance of AWSS assets, and (b) redefine which AWSS valves in the system are "critical," and, therefore, require more attention and priority in the SFPUC's maintenance plans.	President, San Francisco Fire Commission (September 15, 2019)	implemented	(a) SFPUC Implements "best practices" for the maintenance of AWS5 assets in collaboration with SFED, and consistent with the terms of the Memorandum of Understanding Regarding Operation and Maintenance of San Francisco Water Supply Systems Related to Fire Suppression (MOU), SFPUC will seek SFPIS written approval for "any modifications that could compromise" the system's function as a high pressure lifterlighting system (MOU), page 2). (b) The AWSS critical Valve San Valve Exercised every year through the AWSS Critical Valve Exercise Program.
Act Now Before it is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System (July 17, 2019)						By no later than June 30, 2020, the 2015 MOU between the SFPUC and the SFFD should be amended to include a detailed roadmap for annual emergency response exercises, including simulated disaster and earthquake drills involving the AWSS and the PWSS.	President, San Francisco Fire Commission [September 15, 2019]	·	The Fire Department conducts weekly hose/hose tender drills that it rotates through companies throughout the City. The Fire Department will work with the SFPUC to have them in attendance and participate in these drills. SFPD will also commit to working with the PUC to enhance the scope and frequency of trainings in the future for improved collaboration. SFPD and SFPUC will work together to amend the MOU by June 30, 2020.

AWSS Page 1

# Office of the Mayor San Francisco



LONDON N. BREED Mayor

September 16, 2019

The Honorable Garrett L. Wong Presiding Judge, Superior Court of California, County of San Francisco 400 McAllister Street, Room 008 San Francisco, CA 94102-4512

Dear Judge Wong,

In accordance with Penal Code 933 and 933.05, the following is in response to the 2018-2019 Civil Grand Jury Report, Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System. We would like to thank the members of the 2018-2019 Civil Grand Jury for their interest in disaster preparedness and in improving the resiliency of our critical public safety infrastructure to provide robust emergency firefighting to all communities in San Francisco.

San Francisco continues to improve our City's resiliency each day through our ongoing investments in public infrastructure and equipment. Our Capital Planning Program coordinates much of these investments by conducting strategic long-term planning across major programs and projects, including the Emergency Firefighting Water System and Earthquake Safety and Emergency Response (ESER). The ESER bonds approved by voters in 2010 and 2014 have funded improvements to cisterns, pipelines, and critical public facilities that improve the City's ability to respond in emergencies and to fight fires. In addition, through the City's annual budgeting process, we will continue weighing resources to improve public safety and the operational readiness and emergency response capabilities of our departments. For example, our most recently adopted FY 2019-20 budget includes funding for five new hose tenders to replace and enhance the Fire Department's aging equipment.

In March 2020, the voters of San Francisco will once again vote on a new \$628.5 million ESER bond measure. Included in the proposal is an investment of an additional \$153.5 million for the Emergency Firefighting Water System.

We appreciate the opportunity to comment on the Civil Grand Jury report findings and recommendations. Moving forward, and as appropriate, the City plans to analyze many of the recommendations as part of our next 10-Year Capital Plan.

A detailed response from the Mayor's Office, City Administrator's Office, Fire Department, Public Utilities Commission, and the Department of the Environment is attached.

Each signatory prepared its own responses and is able to respond to questions related to its respective part of the report.

Andre Brown

London N. Breed Mayor

Harla 2 Talloff

Harlan L. Kelly Jr. General Manager, Public Utilities Commission Jeanine Nicholson Chief, Fire Department

Naomi Kelly City Administrator

Deborah Raphael Director, Department of the Environment

					1	ı ——		T	- 1:	
Report Title [Publication Date]	Fif	Finding (text may be duplicated due to spanning and multiple respondent effects)	Respondent Assigned by CGJ [Response Due Date]	Finding Response (Agree/Disagree)	Finding Response Text	R# (for F#)	Recommendation  (text may be duplicated due to spanning and multiple respondent effects)  By no later than December 31, 2020, the Mayor,	Respondent Assigned by CGJ [Response Due Date] Mayor	Recommendation Response (Implementation)	Recommendation Response Text Ensuring that San Francisco has the
Act Now Before it is Too Late: Aggressively Expand and Enhance Our High-Pressure Enregency Fire flighting Water System [July 17, 2019]	F4	The City's high-pressure emergrancy water supply system, forms at the Auxillary Water Supply system (MWSS), does not cover large super all Supple system (MWSS), does not cover large super all Supple system (MWSS), does not cover large super all supple systems (MWSS), does not supple suppl	Mayor (September 15, 2019)	Agree with the finding	The SFPLA, SFPL, and San Francisco Public Works (SFPV) are committed to increasing the protection throughout San Francisco. Since the protection throughout San Francisco. Since the property of the first Capacity of Sept. (Sept. Sept.	R1 (for F1-F6)	the SFPLC, the SFSD, and the Office of Installines and of Capit Divaning should jointly present to the Board of Supervisors a detailed joint to ensure the City will prepared to all plan to ensure the City will prepared to the City will prepared to the City of the City of 1 3500 magnitude (7.8) earthquake.	[September 15, 2019]	Wal So Employmented Implemented	returning that safe reflection has been will informationar and reconstruct to be well informationar and reconstruct to be well informationar to the safe of the sa
Act Now Before It is Too Late: Too Late: Aggressively Expand and Enhance Our High-Pensure FireIlghafing Water System [July 17, 2019]	F-4	The City's high-resoure emergency water supply system, forms at the Auditary Water Supply system (MWSS), does not cover large super of Supply system (SWSS), does not cover large super of Supple system (SWSS), does not cover large super of Supple system (SWSS), does not cover large super of Supple system (SWSS), does not super of SWSS), as a result, these districts are not adequately protected from fires after a major earthquake.	Mayor (Beptember 15, 2019)	Agree with the	The SFPLC, SFPL, and San Francisco Public Versic SFPV) are committed to increasing fire protection throughout 3 in Francisco. Since the protection throughout 3 in Francisco. Since the sassage of the first Entimelulae Seld yet and assaged that the same same self-self-self-self-self-self-self-self-	R2 [for F1-F6]	The plan discussed in Recommendation R1 in- broad include a dealed proposal, including  flanning pourses, for the installation within 15  greated a high-pressure, mail-to succeed,  success of a high-pressure, mail-to succeed,  for  the success of the flanning to the  flanning to  flan	Mayor (Baptember 15, 2019)	rodgetta urbs analysis	specific browless for San Francisco's public infestivatives its be wolf of the 10-Year Capital Plan. The plant discussed in Network of the 10-Year Capital Plan. The plant discussed in Network Plant San Barbard San San San San San San San San San San
Act Now Before It Is Too Later Aggressively Expand and Einhane Our High-Pressure Emergency System and Water System [July 17, 2019]	FS	A high-measure, multi-acurent, estemically safe emergency firefiling water supply will be costly but it assential to protect the City.	Mayor (Engtember 15, 2019)	Agree with the finding	As the City considers what is essential to protect sine Francis, it is important to advanced the protect sine Francis, it is important to advanced the protect sine Francis, it is important to advanced the protect sine francis (and the protect sine francis (and the protect sine francis (and the protect sine francis (and the protect sine francis (and the protect sine francis (and the protect sine francis (and the protect sine francis (and the protect sine francis (and the protect sine francis (and the protect sine francis (and the protect sine francis (and the protect sine francisco), the city of the protect sine francis (and the protect sine francis (and the protect sine francisco), the city of the protect sine francis (and in the protect sine francisco), the city has taken (applicant stops afrom 2000 the protect sine francisco must keep an open and forther similarmously). The city has taken (applicant stops afrom 2000 the protect sine francisco must keep an open and forther similarmously). The city has taken (applicant stops afrom 2000 the protect similar similar significant scanning in significant significant stops afrom 2000 the protect significant scanning in s	R1 [for F1-F6]	the SFPU, the SFPD, and the Office of Reciliance and Capital Planning should jointly present to the Board of Supervisions a detailed present to the Board of Supervisions a detailed plan to ensure the City to well present of the Planning of the Capital Ca	Nayer (September 15, 2019)	Wil be	Resuring 64t San Francisco has the ininfrastructure and resources to be well propaged to fight fires in all parts of San francisco is something that will be a feasure of Americanico is something that will be a feasure of Administrative Coule 3.20, that Plan must be constituted to the Mayor and Sbaard no later than March 1 of each odd-numbered year for grapmoral in later than May 1. The respected procentation would be delivered as part of that proporal in later than May 1. The respected procentation would be delivered as part of that the proporal in later than Pay 1. The respected procentation would be delivered as part of that the proporal in later than Pay 1. The respected procentation would be delivered as part of that the proposal proporal in later than 1. The proposal proporal in later than 1. The proposal proposal in the proposal proposal proposal proposal proposal proposal proposal proposal proposal proposal proposal proposal proposal processing the proposal propo
Act Now Before it Is Too Late: Too Late: Aggressively Expand and Enhance Our High-Possure Fireflighting Water System [July 17, 2019]	FS	A high-pressure, multi-sourced, scennically set on empressure from the management (might paster supply with the costly but is essential to protect the City.	Mayor (September 15, 2019)	Agree with the finding	As the City consider was constraint to present sin Francisco. It is important to acknowledge our multiple, compiler resilient acknowledge our multiple, compiler resilient acknowledge our multiple, compiler resilient acknowledge. These clearly compiler resilient to the steady of the compiler resilient acknowledge our multiple compiler resilient to the compiler resilient to the compiler resilient acknowledge of the compiler acknowledge of the compile	R2 (for F1.F6)	The plan discussed in Recommendation fit and building financing sources, for the installation within 15 years of a light plant of the p	Mayor (Suppember 15, 2019)	Requires kirther analysis	The commitment of sources for specific tuses on specific tustions for San Franchook public inflations. San Franchook public inflations. San Franchook public inflations. The San Franchook public inflations. The San Franchook public inflations. The San Franchook public inflations. The San Franchook public inflations. The San Franchook public inflations. The San Franchook public inflations. The San Franchook public inflations. The San Franchook public inflations. The San Franchook public inflations. The San San Franchook public inflations. The San San Franchook public inflations. San Franch

Act Now Before It is Too late: Aggressively Expand and Enhance Our High-Pressure Priedighting Water System [July 17, 2019]	rs .	A high-resizance, multi-sourced, petermically a Serverger or the control of the control of the control of the control of the cost of the c	Mayor (September 15, 2019)	Agree with the finding	As the CIR's considers what is excented to present send reaction, it is important to acknowledge our muldiple, complex resilience of the controlledge, the properties of the three controlledge, the controlledge of the controlle	[for FS, FG, F11]	By no later than June 30, 2022, the Mayer and the Board of Superious should analyze whether to propose a separate bond for the development of a light-research, malifi-account, and superior should be superior to the CIV that don't currently have one, with a superior date of completing construction by no later than June 30, 2034.	Mayor (Geptember 15, 1019)	Will be implemented	The enables will be performed as part of the CTys 10-feet. Design Jam development process. The next full update to the Capital Part of the Capital
Act Now Befare It Is Too Lates: Aggressively Expand and Enhance Our High-Pressure Energency Freelighting Water System [July 17, 2019]		unites the City Increases hundre levels; I will be several cleased; I.e., after the USIGS predicts one or more major earthquakes will occur) before the counterparts of the City have a high-pressure, multi-sourced, selamically safe emergency fireflighting water supply.	Mayor (September 15, 2019)	Disagree, wholly	Decisions about programming and funding levels of fixeus ESE bonds and other complementary sources that could support the expansion of the AWSS have yet to be made.	[for F1-F6]	By no later than December 31, 2000, the Mayor, the SPILVI, the SPILVI, the SPILVI, the SPILVI, the SPILVI, the SPILVI, the SPILVI, the SPILVI, the SPILVI process to the Geodesia of Supervisors a detailed plan to ensure the CBIV is well prepared to flight library and the SPILVI process of the SPILVI process	[September 15, 2019]	Will be Implemented	Ensuring that San Franchico has the infrastructure and recourses to be well prepared to fight fires in all parts of San Franchicos is something that will be a focus of the next 10-Year Capital Pfan. Per Administrative Code 3.20, that Pfan must be submitted to the Nayor and Board no later than March 10 elected and disturbed year for supread later that who disturbed year for supread later that who disturbed year for supread which the code of the part of the property of the pr
Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Market Sweet Market July 17, 2019]	F6	Unlets the City increases funding levels, I well be served ideaded; i.e., after the USGs predicts one or more major earthquakes will occur) belong the server in the control of the contro	Mayor (September 15, 2019)	Diagree, wholly	Decisions about pregramming and funding levels of flume SER bonds and other complementary sources that could support the complementary sources that could support the capanish of the AMSS have yet to be made.	R2 (far F1-F6)	The plan discussed in Recommendation fit about finding a depaid or process, including financing courses, for the Installation within 15 years of a high-pressure, mailth-sources from the stallation within 15 years of a high-pressure, mailth-sources from the stallation of the stallat	Mayor (September 15, 2019)	Requires further analysis	The commitment of sources for specific uses a specific dimellion for San Francisco's public infrastructure is the work for San Francisco's public infrastructure is the work of the 20 New Capita. The plan discussed in Recommendation in the plan discussed in Recommendation in the plan discussed in Recommendation based on analysis, will be done on the capital lasted on analysis, will be done on the capital lasted on analysis, will be done on the capital land freedome. The capital planning process gathers, documents, and balances planned flunding for needs consistent of the capital infrastructure portfolia and secres San Francisco's resilience oblinates. The Capital results of the secretary of the capital public being the profetitation of public infrastructure performs on the capital public results of the capital public results on the public infrastructure treatments. These investments are teened; (1 address legal and/or regulatory mandates; or scharce planned and programmate resilience; preserve assets and promote sustainabilities; advance planned and programmate resilience; preserve assets and promote sustainabilities; advance object and programmate resilience; preserve and programs and resilience; produces the professional control of the capital professional programs and feasinify sources or dance these professions. Committed to entire funding a single program out of ontota and control of the trade-effs of the Cryl longstanding and highly regurded capital planning process and likely create significant vulnerabilities deewhere in the portfolio.
Act Now Before it is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Fireflighting Water System (July 17, 2019)	F6	Unless the City increases funding levels, it will be several discases (i.e., after the USGS predicts once or mare major sarthquake will occur) before the southern parts of the City have a high-pressure, midscareds, sebrically safe omergency firetighting water supply.	Mayor [September 15, 2019]	Olsogree, wholly	Decident about programming and funding levels of fuure ESFS bonds and other complementary bonners that could support the expansion of the AWSS have yet to be made.	R4 {for F6-F7}	As interfin measure, by no later than June 30, 2021, the City should purchase the 20 new 1995 Shoet under body requested by the 3973, to replace and espand to currently inadequate inventory.	Mayor (September 15, 2019)	Requires further analysis	The fire Department has been ellocated landing by purches he units through funds from the PTI9-30 City budge and an alocation from the STI8 The Department is currently working with the Office of Contract Administration to Department is currently working with the Office of Contract Administration to develop a multi-year term contract for hose tenders so in the case the additional funding is seamed in future years, the Department will be able to reduce the apparatus. Each hose tender cast SI million out, and we need to welph purchase of additional hose tenders to other budget request and priority.
Act Now Before It is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [Judy 17, 2019]	f6	Unless the City Increases funding levels, it will be several decades (i.e., after the USGS predict one or more major enafthysises will occur) before the southern parts of the City have a high-pressure, multi-sourced, seleminally sife emergency fireflighting water supply.	Mayor (September 15, 2019)	Disagree, wholly	Decisions about programming and funding levels of future EEER bonds and other complementary sources that could support the expansion of the AWSS have yet to be made.	R8 [for F5, F6, F11]	By no later than tune 80, 2012, the Mayor and the Board of Supendrose should analyze whether to propose a seenante bond for the development of a high-pressure, multi-sourced, scatterically said emergency water system for those parts of the City that don't currently have one, with a target date of completing construction by no later than June 30, 2034.	Mayor [September 15, 2019]	Will be implemented	The analysis will be performed as part of the (IV)s 10-Year Capital Plan devolopment process. The next full update to the Capital Plan will be submitted to the Mayer and Board no later than March 1, 2021, for approval no late than fixed than 1, 2021.
Act New Before It is Too late: Aggressively Expand and Enhance Out 16th - Pressure Emergency Fireffighting Water System (July 17, 2019)	F11	The City does not have a timefare to find and complete development of a high-processor of a high-processor, multi-sourced, steinficially size or engrancy, multi-sourced, steinficially size or engrancy water scupply for all parts of the City, Including poor neighborhoods that historically have not been as well protected as the downtown business district and many richer neighborhoods.	Major (September 15, 2019)	Diagree, partially	The PTW see built after the SDIG earthweaks, and this location, primarily the the northeest portion of San Francisco, corresponds to the contain of the melging of the city's population at that titine. Since 2010, the STPUC, STPD, and PSUE, Verbra. Law and the state of the melging of the city's population at the titine. Since 2010, the STPUC, STPD, and PSUE yield the section of the melging that the existing the state of the state o	#8 [for F5, F6, F11]	by no laster than June 20, 2022, the Mayor and the Board of Superiors should analyze whether to propose a separate bond for the development of a high-pressure, multi-ourced, solitorisally sale emergency water system for this part of the City that don't nurnershy have one, with a target date of completing construction by no later than June 30, 2014.	Mayor (September 15, 2019)	Will be Implemented	The analysis will be performed as part of the CITY's 10 Year Capital Pland development process. The next full update to the Capital Will be submitted to the Mayor and Board in a later than March 1, 2021, for appreval no list than May 1, 2021.

Report Title		Finding	Respondent Assigned by	Finding Response		Raf	Recommendation	Respondent Assigned by	Recommendation Response	Recommendation Response Text
[Publication Date]	F#	(text may be dupilcated due to spanning and multiple respondent effects)	(GS) [Response Due Date]	(Agree/Disagree)	Finding Response Yext	[for F#]	(text may be duplicated due to spanning and multiple respondent effects)	CGJ [Response Due Date]	(Implementation)	Ensuring that San Francisco has the
Act Now Before It is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency FireInghiting Water System [July 17, 2019]	F1	Fives resulting from an earthquake represents - specificant risk of blesspread damage and potential loss of life in San Francisco.	General Manager, San Francisco Public Utilites Commission (September 15, 2019)	Agree with the finding		R1 [for F1-F6]	By no later than December 31, 2000, the Mayor, the SPULP, the SPILP, the SPILP, and the Office of Redifferen and Capital Planding thould jointly represent to the Secular of Supervisions a detailed to the SPILP, and t	General Manager, San Frandsco-Pulife Utilitet Commission (September 15, 2019)	implemented	Informativativa and recovaries to the well separed to fight five, and jump to Sian Franchos to stored-hing that will be a focus of the next 30-Vera Classifi Plan. Fer Administrative Code 3.20, that Plan must be submitted to the Mayer and Board on later than March 10 resh odd-numbered year for supervise in later than May 1. The recented precentation would be delivered as parc of that supervise in later than May 1. The recented precentation would be delivered as part of the precentation would be delivered as part of the delivered of the supervised to the precent of the property and trends out that the SERS 2020 plan passes, for the resizes, the forty will yare this recommendation with the Capital Plan and possible that the territory of property of the property of property of the property of the property of the property of the property of property of the property of th
Act Now Before It is Too late; Too late; Aggresolvely Espand and Enhance Our High-Pressure Emergency Fireflighting Water System (July 17, 2019)	F2	Fives exclusing from an earthquake represent a significant risk or indicarporal damage and petendial less of life in San Francisco.	General Manager, San Francisco Public Hillites Garmitosion (Suptember 15, 2019)	Agree with the finding		92 [for F1-F6]	The plan alloussed in Recommendation fit is build include a developed proposal, including financing sources, for the Installation within 15 years of a high-pressure, multi-sources, multi-sources, cascination of the plant of the plant of a high-press of high-pression, multi-sources, cascination size of the plant of the plant of the City Plant don't currently when one, i.e., by no later than June 30, 2014.	General Manager, San Francisco Public Utilities Commission (September 15, 2019)	Regules further analysis	The commitment of sources for specific trues on specific truellates for San Franciscos public infestructures is the work of the LOYest Capital infestructures is the work of the LOYest Capital Plan. The plant docused in Recommendation i will be acknowledged in the Capital Plan, and based on analysis, will be often on the capital plant models. The similar design plants specific plants are some public infestructures portfolio and aeross San Franciscos's resilience challenges. The Capital Plan has longstanding funding principles to qualific the prioritisms of public Infestructure investments. These investments are tiernet; 17) across the public selection of public infestructure investments. These investments are tiernet; 17 across public selective and enhance resiliences (1) across selection of public infestructures investments. These investments are tiernet; 10 across plant public selective and enhances (1) across plants and across the public selection of the public selection of public selection of public selection of public selection of public investments. These investments are tiernet (1) across public selection of selection selection selection of selection s
Act Now Before It is Too Lake: Aggressively Expand and Enhance Our High-Pressure Emergency Friedighting Water System (July 17, 2019)	F2	The municipal water supply system (MWSS) is highly voluneable to damage from a new earthquake and is mot a reliable source for water supply for firefighting after a major earthquake.	General Manager, San Francisca Public Utilities Commission (September 15, 2019)	Disagree, partially	The MWSA has been significantly upgraded in the last 15 years through the Water Supply Inspresement Program (MSP) inlitated by the SPOUL. The gala of WSP included or reduce values allowed the water system to damage from earth quades and increase oreself water with the most program of the spoul of the water system of the wate	R1 [for F1-F6]	By no later than December 31, 2000, the Mayor, the SPEUL, the SPID and the Office of Recillence and Capital Planning thould John Persent to the Board of Supervisors a detailed plan to excess the City is well presented the Board of Supervisors a detailed plan to excess the City is well presented to Right from an all pour to Sent Franchico in the event of a 10 John College The Transchool in the event of a 1000-magnitude (7.3) earthquake.	General Manager, San Francisco Public Utilities Commission [September 15, 2019]	Will be	Ensuring that San Francisco has the inforstruture and recourses to be well prepared to fight first in all parts of San Francisco is smerting that will be a locus of the next 15 or Grapha 10 or
Act Now Before it is Too late: Appressively Expand and Enhance Our High-Pressure High-Pressure Emergency System (July 137, 2019)	F2	The municipal water supply system (MWSS) is highly witherable to damage from a major activates and star activates and six as reliable source for water supply for fireflighting after a mujor earthquake.	General Manager, San Francisco Public Utilities Commission (September 15, 2019)	Dkagee, pardally	The MWS5 has been zignificantly upgraded in the last IS years through the Water Supply in the last IS years through the Water Supply in the last IS years through the Water Supply in the last IS years through the Wash Pinched by relative to the SPUIC. The pask of WSP Incheded to reduce the Water Supply in the WSP Incheded to reduce the WSP Incheded to reduce the WSP Incheded to reduce the WSP Incheded to reduce the WSP Incheded to reduce the WSP Incheded to reduce the WSP Incheded to reduce the WSP Incheded to reduce the WSP Incheded to the	R2  for F1-F6	The plan discussed in Recommondation R1 should include a detailed proposal, including include a detailed proposal, including including a detailed proposal, including including a detailed proposal including a detailed	General Manager, San Franchico Public Lettities Commissian (September 15, 2019)	Requires further analysis	The commitment of source for specific uses on specific transfaces from the commitment of the production of the productio
Act Now Before it is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Fireflighting Water System [July 17, 2019]	F4	The City's high-pressure emergency water supply system, known as the Audilary Water supply system, known as the Audilary Water Supply System (Most), does not cover large parts of System's class (System's Audilary City System's	General Manager, San Franctico Public Utilities Commission (September 15, 2019)	Agree with the finding	The SFPLIC, SFPD, and San Francisco Public Works (BFVV) are committed to intreasing file works (BFVV) are committed to intreasing from the strength of the ME STATE (BFVV) and STATE (BFVV) and STATE (BFVV) and STATE (BFVV) and STATE (BFVV) and STATE (BFVV) and STATE (BFVV) and STATE (BFVV) and STATE (BFVV) and STATE (BFVV) and an ope of coverage to all areas of the City would carge of coverage, Enhanding the AWSS range of coverage to all areas of the City would carge to develop and implement projects utilities prove under the original implement projects utilities prove upon the original software the original software committee in exhibit some committee in exhibit some state of the STATE (BFVV) and materials, hydrians, and seleminal sources state the earthquake resistant plesilite design and materials, hydrians, and seleminal sources state the earthquake resistant plesilite design and materials, hydrians, and seleminal sources state the earthquake resistant plesilite design and materials, hydrians, and seleminal sources stated that the City Intends to use the best possible technology available to meet the performance standards of the SFPD.		If no later than December 31, 2000, the Mayor, Maryor,	General Manager, San Francisco Pullic L'Ullibre Commission (September 15, 2019)	Will be Implemented	Easting that San Francisco has the infortraturation and recourses to the well proposed to flight first in all parts of San Francisco is something that will be a focus of the next SOYear Capital Plan. Per Administrative Code 3.00, that Plan must be submitted to the Mayer and Board no later than March 1 of each odd-numbered year for approval no later than May 1. The requested prevenession would be delivered as part of that Plants authorization to number of plants provided to the second of the proposed proposed on the company of the public proposed on the company of public proposed on the company of public proposed on the second of public p

Jack New Before It Is Too Late: Aggressively Epand and Enhance Our High-Pressure Emergency Friefighting Water Stranger (July 17, 2019)	F4	The City hills-pressure emergency water supply various, morem as the Audillan Water Supply various, morem as the Audillan Water Supply System (AWSS), does not cever large sparr of Supprivated Distracts 1, 4, 7 and 11, roughly one-shird of the City's developed area, for a result, these districts are not designately protected from fixes after a major earthquake.	General Manager, San Francisco Public Utilities Commiscion (September 15, 2019)	Agree with the finding	The SPEL, SPEL, and San Francisco Public Words (SPEV) are committed to increasing the protection throughout San Francisco. Since the protection throughout San Francisco. Since the protection throughout San Francisco. Since the protection of the San San San San San San San San San San	82 [for F1-F6]	The plan discussed in Recommendation 11 involved including floading proposal, including floranding sources, for the Incalation within 15 years of a high pressure, multi-sourcest, 15 years of a high pressure, multi-sourcest, 15 inclinically safe emergency water pytem for local more pressured to the pressure of the pressured pressured to the pressure of the pressured pressured to the pressure of the pressured pressured to the pressure of the pressured pressured to the pressure of the pressure of the pressured pressured to the pressure of the pressure of the pressured pressured to the pressure of the pressured pressured to the pressured pressured to the pressure of the pressured pressured to the pressure of the pressured pressured pressured to the pressured pressured to the pressured pressured to the pressured pressured to the pressured pressured to the pressured pressured to the pressured pressured to the pressured pressured to the pressured pressured to the pressured pressured to the pressured pressured to the pressured pressured to the pressured pressured to the pressured to the pressured pressured to the pressured pressured to the pressured pressured to the pr	General Managor, San Frandsco Public Utilities Commission (September 15, 2019)	Requires further analysis	The committeement of sources for specific turning in Cost Park Familiance's subsilic Infrastructure is the work of the LO Year Capital Infrastructure is the work of the LO Year Capital Infrastructure is the work of the LO Year Capital Infrastructure is the work of the LO Year Capital Infrastructure is the work of the LO Year Capital Infrastructure is the control of the LO Year Capital Infrastructure portfolio and across San Francisco's resilience challenges. The Capital Prian test incipated line funding for needs some challenges in the Capital Prian test incipated in funding for mode in the Capital Prian test incipated in funding for the Capital Prian test incipated in funding for funding promption to the Capital Prian test incipated in funding for funding promption for the Capital Prian test incipated in funding for the Capital Prian test incipated in funding the Capital Prian test in Cap
Act Now Before It is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Water System (July 17, 2019)	55	A high-pressure, multi-sourced, sentimathy as energy memory memory and the energy memory memory memory memory to be costly but it is essential to protect the City.	General Manager, San Francisco Public Utillera Commission (General Services) (General Services) (General Services) (General Services)	Agreewith the finding	As the CRY considers what is exemital to prevent San Francisco, it is important to admonified our middle, compiler retilience with the control of the contro	R1 [for F1-F6]	Sy no later than December 31, 2010, the Mayor, Most PPUP, the STPL on the Office of Resillence and Capital Planding bould jointly represent to the Board of Supervisors a debaled plan to emisure the CTV yield well prepared to fight and a supervisor of the Supervisors and sealed plan to emisure the CTV yield well prepared to fight a 1006-magnitude (7.6) carthquak to	General Manger, San Francisco Public Utilities Commission (September 15, 2019)	Will be	Ensuring that San Francisco has the ininfrastructure and recovers to be well prepared to flight fires in all parts of San reactions to sending the service of the service o
Act Now Before It is foo Later Aggressively Expand and Enhance Out High-Pressure Emergency Firefighting Water string Later (July 17, 2019)	P5	A high-pressure, multi-sources, scienteally safe emergency file-filency water supply will be costly but is essential to protect the City.	General Makager, San Francisco Public Villilies Commission (September 15, 2019)	Agree with the finding	As the City considers what is executed to governed to a schooledge our multiple, compiler retilience should be commented in the Bellinest Streament of the Stre	R2 [for F1-F6]	The plan discussed in Recommendation 11. School Individe a detailed proposal, including financing sources, for the Installation within 15 years of a high-pressure, multi-sources, and sources, and continued a claimscally safe emergency water system for those parts of the CV that dust 12 currently have one, i.e., by no leter than tune 30, 2094.	General Manager, San Francisco Public Utilides Commission Beptember 15, 2019]	Requires further analysis	The commisment of sources for specific turnes in some formation and sources for specific turnes in some framework public infrastructure is the work of the 10-Year Capital infrastructure is the work of the 10-Year Capital infrastructure is the work of the 10-Year Capital infrastructure is the work of the 10-Year Capital infrastructure in the specific infrastructure poerfolio and arose show public infrastructure poerfolio and arose San Infrastructure poerfolio and arose San Infrastructure poerfolio and arose San Infrastructure poerfolio and arose San Infrastructure poerfolio and arose San Infrastructure poerfolio and arose San Infrastructure poerfolio and arose San Infrastructure poerfolio and arose San Infrastructure poerfolio and arose San Infrastructure poerfolio and arose San Infrastructure poerfolio and arose San Infrastructure infrastructure poerfolio and arose San Infrastructure infrastru
Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]	F6	United the City Jucceases, funding levels, It will be several ideated (e.g., after the USGS 2015) and it has several ideated (e.g., after the USGS 2015) and or more major earthquaked will conceiv judiced whe ocuber parts of the City Nava a Nightpressure, multi-ourced, selaminally rafe emergency fireflighting water supply.	General Manager, Sen Francisco Public Utilities Commission [September 15, 2019]	Disagree, wholly	Decisions, about pregnaming and funding levels of insure SES bonds and other covered future SES bonds and other complementary sources that could support the expansion of the AWSS have yet to be made.	R1 {for F1·F6}	Sy no laive than December 11, 2020, the Mayer, the SPEUP, the SPEUP, and the Office of Redillence and Capital Planning should John Service and Capital Planning should John Service and Capital Planning should John Service and Capital Planning should be supported to the Board of Spervices or Service and Ser	Francisco Public Utilities Commission [September 15, 2019]	W/B be Implemented	counting that San Franchisco has the infiniteraturature and responses to be well prepared to fight files in all pare of San Franchisco is comediting that will be a focus of the next SO-year Capital Plan. Per Administrative Cost 20, that Plan must be submitted the the Mayor and Board no later than March 1, of each odd-numbered year for approval no later than March 1, of each odd-numbered year for approval no later than March 1, of each odd-numbered year for approval no later than March 1, of each odd-numbered year for approval no later than March 1, of each odd-numbered year for approval no later than March 1, of each of the investment of the property of the prop
Act Now Belore It is Too Late: Too Late: Aggressively Expand and Enhance Our High-Pressure Fredighting Water System (July 17, 2019)	P6	Unlets the City Increases funding levels, twell be several decades [i.e., after the USS predicts one or more major earthquakes will occur) belief the several person of the City and the control of the City and the control of the City and th	General Manger, San Francisco Public Utilities Commission (September 15, 2019)	Disagree, wholly	Decidines about programming and funding levels of littles (ESE bonds and other complementary sources that could support the expansion of the AWSS have yet to be made.	82 {for F1-F6}	The plan discussed in Recommendation R1 involved Include a detailed proposal, including financing sources, for the Installation within 15 years of a high-pressure, multi-sources, and the sources of the Proposal of the Prop	General Manager, San Francisco Public Utilities Genmination III.	Requires further analysis	The commitment of sources for specific uses on specific timelines for San Franciscos public infrastructures is the work of the 10-freet Cashid infrastructures is the work of the 10-freet Cashid infrastructures is the work of the 10-freet Cashid infrastructures in Secondary San San San San San San San San San San

Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure	F8	Redundancy is an important feature of an emergency firelighting water system.	General Manager, San Francisco Public Utilities Commission [September 15, 2019]	Agree with the finding		R6 (for F8-F9)	The SPPUC, the SFFD and the SF Department of the Environment should study adding salt- water pump stations to improve the redundancy of water sources, especially on the west side. Findings and recommendations from	General Manager, San Francisco Public Utilities Commission [September 15, 2019]	Will be Implemented	SFPUC and SFFD will complete this study by June 30, 2021.
Emergency Firefighting Water System [July 17, 2019] Act Now Before It Is	F9	Current plans to extend protections to the	General Manager, San	Disagree, partially	While It is true that the SEPUC and SEFD are	R6	this study should be presented to the Board of Supervisors by no later than June 30, 2021.  The SPPUC, the SFFD and the SF Department of	General Manager, San	Will be	SFPUC and SFFO will complete this study by
Ace New Metorie It is Too Late: Troo Late: T	29	western par of the City do not include any high- pressure water sources north of Golden Gate Park.	Francisco Public Utilities Commission [Bestember 15, 2019]		sudying four patiental water sources proposed to supply a patient EVFG on the work pict of the City, which are not located north of Golden Gate Park, which no means would recibe the proposed systems' resiliency, reliability, performance, and ability to provide abundant of the proposed patients' and proposed systems' resiliency, reliability, performance, and patient part of the Reliability of provide abundant of Reliability of the Reliability of the Reliability of the Reliability of the Reliability of the Reliability of the Reliability, with a total water capacity of approximately 4 JADO, 200, 200, 200 pilong to the Section of the Reliability of the Re	[for F8-F9]	the Environment should soully define salf- water pump salfonts to Improve the results of the Section of the Section of the redundancy of water sources, specially on the west table. Fidding and recommendations from this study should be precented to the Board of Supprivious by no later than time 30, 2021.	Francisco Public Utilities Commission (September 15, 2019)	implemented	hune 20, 2021.
Act Now Before it is Too Late: Too Late: Aggressively Expand and Enhance Our Migh-Pressure Free Infection of the Control of th	F10	The reliability across being used by the SFPUC Impact an overly administic Impression of the protection provided.	General Kanager, San Francisco Public Utilider Commission (September 15, 2019)	Chapee, partially	Fine Reposition & Average (FRA) were sulfised by SPEVL and SPTO in the planning study (C-1936. This study divided the City Into areas based on those defined by the SPTO for fridat all surface (FRA) and the sulface of the SPTO for fridat all surface (FRA) and the sulface of the SPTO for fridat all surface of the SPTO for fridat all sufficient of the SPTO for fridat all sufficient of the SPTO for fridat all sufficient of the SPTO for fridat all sufficient of the SPTO for fridat all sufficient of the SPTO for fridat all sufficient on the SPTO for fridat all sufficient on the SPTO for fridat all sufficient on the SPTO for fridat all sufficient on the SPTO for fridat all sufficient on the SPTO for fridat all sufficient on the SPTO for fridat sufficient on the SPTO for fridat sufficient on the SPTO for fridat sufficient on the SPTO for fridat sufficient on the SPTO for fridat sufficient on the SPTO for fridat sufficient on the SPTO for fridat sufficient on the SPTO for fridat sufficient on the SPTO for fridat sufficient on the SPTO for fridat sufficient on the SPTO for fridat sufficient on the SPTO for fridat sufficient on the SPTO for fridat sufficient on the SPTO for fridat sufficient on the SPTO for fridat sufficient on the SPTO for fridat the SPTO for fridat sufficient on the SPT	87 [for F10]	The SPEUs hould (a) continue to efforts to complete a more decided analysis of unexpensive from the continue to the continue t	General Manger, San Francisco Public Utilities Commission (September 15, 2019)	Will Ee	SPUC and SPTD will complete this analysis. by June 3 0, 2021.
Act Now Before It is Too Later ely Espand and Enhance Our High-Pressure Emergency Fireflighting Water System [July 17, 2019]	Fil	The City does not have a bincher so fund and complete development of a high precipitation of the property of t	General Manger, San Francisco Public Utilities Commission (September 15, 2019)	Otagree, partially	The NEW such shift after the SDIG estimated and to location, principly with enrollment special countries of San Francisco, corresponds to the constant of the majority of the city's population at that time. Since 2010, the SPIPUL, SPIPL, and Public Works have made citized in improvements to the existing ETWS system. Bayanding the STWS prior to ensuring that the existing ETWS is resilient and reliable would have controlled the strengthening proceedings. The STWICH and STPD are freedings by the strengthening that the existing ETWS is resilient and reliable would be seen confidence of the strengthening shall be suited in spikement as for the strengthening shall be suited in spikement as for the Westella of San Francistors. The Post for the Westella of San Francistors and an analyzed would propose the best resident for the right process and recillant high-pressure fireflightness that the strengthening is suffer systems to the Western neighborhoods in San Franciscos that is capable of providing water systems to the Western neighborhoods and the STPO fireflightness at the high-pressure needed for fireflightness at the high-pressure needed for fireflightness in the high-pressure needed for fireflightness in the high-pressure needed for fireflightness in the high-pressure needed for fireflightness in the high-pressure needed for fireflightness in the high-pressure needed for fireflightness in the high-pressure needed for fireflightness in the high-pressure needed for fireflightness in the high-pressure needed for fireflightness in the high-pressure needed for fireflightness in the high-pressure needed for fireflightness in the high-pressure needed for fireflightness in the high-pressure needed for fireflightness in the high-pressure needed for fireflightness in the high-pressure needed for fireflightness in the high-pressure needed for the needed for the needed for the needed for the needed for the needed for the needed for the needed for the needed for the needed for the needed for the needed for the needed for the nee					
Act. New Before 115 Too Late: Aggressively Expande and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]	F12	The SEPL has not developed a number of the roution maintenance given recommending plan recommending plan recommending and 2014 report (CS-199), and has not adequately defined which AVES views are "fortifical" and therefore require increased attention.	General Manager, San Francisco Public Utillities Cammissian (September 15, 2019)	Chagree, wholly	Sone siking over maintenance responsibilities, SPUCh has completed digilization maintenance activities. For example, on a monthly basis, staff much spSPUC test both Pump Station #1 and Pump Station #2. There are 6 maintenance recommendations provided in the CS-198 study as shown blowl in Table 7-1 from CS-198. The SPUCh has developed overeind of the recipit realization pulsar recommendation private in the CS-198 study as shown blowl in Table 7-1 from CS-198. The SPUCh has developed overeind of the responsibilities and the complete maintenance plants recommended in their responsibilities and the complete maintenance plants recommendation (L. Confirm that Table 1-1 from the CS-198 study and the CS-198 study and the CS-198 study are contained and the CS-198 study are extended in CS-198 study are extended into COO's Maximum and CS-198 for CS-198 study are extended from COO's Maximum and CS-198 for CS-198 study are extended from COO's Maximum and CS-198 for CS-198 study are contained from COO's Maximum and CS-198 for CS-198 study are contained from COO's Maximum and CS-198 for CS-198 study are contained from COO's Maximum and CS-198 for CS-1	R9 [for £12]	By no laster Phan December 31, 2020 the SPPU. Of the SPPU. Of the SPPU. Chould (a) Implement "Test practices" for the maintenance of AWSS assets, and of the SPPU. Chould (a) Implement "Test practices" for the maintenance of AWSS assets, and the SPPU. Chould (a) Implement "Test practices" of "Test practices" and "Test pract	General Managor, San Francisco Public Utilibre Commission (September 15, 2019)	Ns been implemented	(a) SPIVC (Implements "best practices" for the maintenance of Not Seaset In collaboration with SFIP, and consistent with the terms of the Memoranthum of Inderstanding Regerflam (Proceedings of the Proceedings of the Procee

Act Now Before it is	F13	In the 2015 MOU between the SFFD and the	General Manager, San	Disagree, partially	There are no formal protocol putlining specific	R10	By no later than June 30, 2020, the 2015 MOU	General Manager, San	Will be	SFFD and SFPUC will work together to amend
Too Late:	l	SFPUC, the two agencies agreed to conduct	Francisco Public Utilities	1	joint AWSS exercises or drills in the MOU;	[for F13]	between the SFPUC and the SFFD should be	Francisco Public Utilities	Implemented	the MOU by June 30, 2020.
Aggressively Expand	l	joint AWSS trainings annually, but there is no	Commission	ì	however, there are multiple apportunities to	1	amended to include a detailed roadmap for	Commission		
and Enhance Our		formal protocol outlining specific joint AWSS	[September 15, 2019]		train together during operation, maintenance,		annual emergency response exercises, including	[September 15, 2019]		(
High-Prossure	l	exercises or drills using hypothetical disaster			and construction of improvement projects for		simulated disaster and earthquake drills			
Emergency		scenarios, such as a major earthquake.			the AWSS facilities as previously described in		Involving the AWSS and the PWSS.			i I
Firefighting Water		1			the response to the Grand Jury questions sent					1
System	1			1	In May 2019.					
[July 17, 2019]	l			i			1			
		*			The SFFD and SFPUC have had multiple field					i
				i	training opportunities during the maintenance					l i
1	l	1	1	l	and start-up testing of AWSS facilities in the last	1	]	J		1
	1			i	5 years. For example, on December 20, 2018,					1
	i				SFFD and SFPUC personnel conducted					
					emergency generator start-up procedures for					.
			1		Pump Station No. 2 (PS2). On April 5, 2018	1 :				J I
	i		1		SFPUC and SFFD performed joint-department					
					full-scale test of AWSS Pump Station No. 1 (PS1)					
					Including pumping seawater into an isolated					
			1		section of the AWSS distribution through					
1		1	1	J	system hydrants. On August 29, 2018, SFPUC,					
			1		SFFD and DPW personnel conducted a seawater		[	ſ	ſ	i
1					drafting drill and confirmation test from the					
1			1		new suction connection at Pier 50. In addition,					
					SFFD and SFPUC periodically test different	1				
1					facilities to assure systems are in good working					
,			1		order, and to train personnel on operations and	1				{
					joint-agency communications. For example, a					
					full-scale emergency exercise was performed				1	
1		J.	1	J	between SFFD and SFPUC staff in January 2016				I	

г	1	T	T	T		Т	D	Bernandant *!	Becommende:	
Report Title [Publication Date]	F#	Finding (text may be duplicated due to spanning and multiple respondent effects)	Respondent Assigned by CGI [Response Due Date]	Finding Response (Agree/Disagree)	Finding Response Text	R# [for F#]	Recommendation (text may be duplicated due to spanning and multiple respondent effects)	Respondent Assigned by CGJ [Response Due Date]	Recommendation Response (Implementation)	Recommendation Response Text
Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighing Water System [July 17, 2019]	Fi	Fires resulting from an earthquake represent a significant risk etdeopread damage and potential less of life in San Francisco.	Chief, San Francisco Fire Department [ September 15, 2019]	Agree with the finding		R1 [for F1-F6]	By no lister than December 31, 2020, the Mayor, the SPULP, the SPILP, the SPILP, and the Office of Recillations and Capital Planning bould jointly proceed to the Commission of Supervisions and detailed proceed to the Geodesia of Supervisions and detailed proceedings of the Commission of Spicory (Commission of Spicory) of the Commission of the Commissio	Chief, San Francisco Fire Department [September 15, 2019]	Will be Implemented	Enouring bits San Francisco has the Ininstructure and recognizes to be well prepared to light free in all parts of San Francisco is semeding that will be a focus of Administrative Code 1,20, that Flan must be considerable to the Wayer and Board on Olsar than March Lof each odd numbered variety approval no laster than March Lof each odd numbered variety approval no laster than March Lof each odd numbered variety approval no laster than March Lof each odd numbered variety approval no laster than March Lof each odd numbered variety approval no laster than March Lof each odd numbered variety approval no laster than March 1, the requested presentation would be delivered a parent fination. The control of the company of the
Act Now Before It is Too Later. Aggressively, Espand Aggressively, Espand Aggressively, Espand Aggressively, Espand Aggressively, Espand Aggressively, Espand Aggressively, Espand Aggressively, Espand Aggressively, Espand	F1	Ries resulting from an eurhquisker represent a rightfloat filt of widespread damage and potential lies of life in San Francisco.	Chief, San Francisco Fre Department (perpendent 15, 2019)	Agree with the finding		R2 [For F1.F6]	The glan discussed in Recommendation RI.  should include a detailed prograph, including financing courses, for the inexalization within 15 years of a high-pressure, multi-sources, de- section of the state of the s	Chef, San Fundsch Fire Department (September 15, 2019)	Requires further analysis	he commissioned of sources for specific used as could intelligent for San Franciscos or public inflastracture is the work of the LOYear Capital Inflastracture is the work of the LOYear Capital Inflastracture is the work of the LOYear Capital Inflastracture is the work of the LOYear Capital Inflastracture is the sand of the LOYear Capital Inflastracture is used on analysis, will be done on the capital plant middle. The capital plant might great a source of the public inflastracture is used to the capital plant the loyear inflastracture for the capital Plant has longstanding funding principles to public inflastracture investments, These Investments are Generic (1) address legisland principles to public safety and enhance resiliences (1) advances planted and promotion statistically consumption of the capital principles and promotion statistically in the capital principles to promotion statistically consumption of the capital principles and promotion statistically consumption of the capital principles and promotion statistically capital principles and promotion statistically capital principles. Committeling to entirely funding a single preparation of contexts of that commitments would be out of staps with the City's longstanding and highly regarded capital planting process and like views as lightly interesting the capital planting process and like views as lightly interest as polaring process and like views as lightly interest as polaring process and like views as lightly interest as polaring process and like views as lightly with the City's longstanding and highly regarded capital planting process and like views as lightly and polaring process and like views as lightly and principles and programments.
Act Now Before It is Too Later. Aggressively Expand and Enhance Our High-Pressure Emergency Freelighting Water System (July 17, 2019)	F2	The municipal water supply system (MWSS) is Nighly-vulnerable to damage from a major earthquake and is not a reliable source for water supply for fireflighting after a major earthquake.	Chief, San Francisco Fire Oppartment (September 15, 2019)	Disagree, partially	The MWSS has been significantly upgraded in the last 15 years through the Water Supply Improvement Program (WSP) Initiated by the SPUCL. The goals of WSP Included to reduce values ability of the water option to disnay form certificated and finesces overall water residence of the spurious of the spurio		By no later than December 31, 2020, the Mayor, the SFPUC, the SFPL, and the Diffice of Redifices and Capital Planning, should jointly present to the lost of Supervisor, a detailed joint to cause the City is well presented to Right from real parts of the SFPL	Chief, San Francisco Fire Department [September 15, 2019]	Will be Implemented	winerabilities elsewhere in the portiolio.  Flooring that San Francisco has the infestructure and resources to be well prepared to fight fires in all parts of San Francisco is summering that will be a focus of the next EV-Feer Capital Plan, Per Administrative Coeff San, Other Plan must be Administrative Coeff San, Other Plan must be Administrative Coeff San, Other Plan must be Administrative Coeff San, Other Plan must be proported in the Plan May 1. The received processing that we have been suppressed to be delivered as part of that proportion to see that May 1. The received processing the coefficient of the proportion of the Plan May 1. The received processing the proportion to see that the seek of the coefficient of the Coe
Act New Before It Is Tool late: Aggressively Expand and Enhance Our High-Pressure Emergency Fire(Eghning Water System (July 17, 2019)	F2	The municipal water supply system (MWSS) is highly whilenable to damage from a major earthquake and in activable source for water supply for fireflighting after a major earthquake.	Chief, San Francisco Fire Department (September 15, 2019)	Diagree, pardally	The MWSh has been significantly upgraded in the less If Syear: through the Water Supply improvement Program (WSP) indicated by the SPULC. The goals of WSP included to reduce witherability of the water pastern to define your control water of the water pastern to desire your mobility of the water pastern to desire yourneedlike of the receiver of the WSP included and through the program. The water has been supplementably the water water for financial water for the water for th	82 [for F1-F6]	The plan discussed in Recummendation R1 should include a detailed proposal, including linearing source, for the Installation width 15 years of a Night-pressure, muldi-coursed, sectionally as demangency water system for those parts of the City that don't currently have one, i.e., by no later than June 30, 2094.	Chief, San Francisco Pire Department [September 15, 2019]	Requires further	The commitment of sources for specific uses on specific trelines for San Francisc's public inclinations of the control of the Carter Capital Plan. The plan discussed in Necommendation at Water Capital Plan. The plan discussed in Necommendation at Water Capital Plan. The plan discussed in Necommendation at Water Capital Plan. The plan discussed in Necommendation and Sandar
Act Now Before it is Too Late: Aggressively Expand and Enhance Our . High-Pressure Emergency Fireflighting Water System [July 17, 2019]	B	Approximately 30 externs have recently been added with funds from ISSR bonds, but citation only have to to about an hour of water on hour of water only have fund to about a new or of water of high fire for a following a major cartiquake. Righting fires following a major cartiquake.		Agree with the finding	Caterns serve as one of many important tools for use by the SFD in response to a distance. Given the oath os a strategicially located in the City in the event of a major configuration to a strategic or served to the city in the event of a major configuration to make the control of the City's major throroughfaters. This was resilized control of the configuration to the control of the control of the control of the configuration to the control of the cont	81 (for F1-F6)	By no later than December 31, 2020, the Mayor, the SFPUL, the SFPD, and the Office of Recellines and Capital Planning should jointly present to the Bloard of Supervitors a detailed plan on enurse the City the wolf present of the Bloard of Supervitors and the Bloard of Supervitors and the Bloard of Supervitors and the Bloard of Supervitors and the Bloard of Supervitors and the Bloard of Supervitors and the Supervitors and the Supervitors and the Supervitors and the Supervitors and the Supervitors and the Supervitors and the Supervitors and the Supervitors and the Supervitors and the Supervitors and the Supervitors and Supervitors a	Chief, San Frantsco Pire Department [Saptember 15, 2019]	Will be Implemented	Ensuring that San Francisco has the infrastructure and resources to be well represent 50 fight from all parts of San Francisco is something that will be a focus of Francisco is something that will be a focus of the next Librar Calabil Plan. Per must be submitted to the Mayor and Board no later than Marti 1 of each dod-numbered year for approval no later than May 1. The requested presentation would be delivered as part of that Plan's submission to enable helitic planning second San Francisco from the challenge, lugidate swolable on this timeline would be contacted to the challenge of the proposed of the challenge of lugidate swolable on this timeline would be contacted to the strength of the proposed of the proposed of the proposed of proposed to proposed the proposed of proposed of proposed propose

Act New Before it Is Too Late! Aggregate years and the Search of the Sea		Approximately 30 distorns have recently been added with funds them SSR hours, but closer with here of the sound have of well and the sound have the sound ha	Chief, San Franckoo Fee Desatranet (September 15, 2019)	Agree with the finding	Cisterns serve as one of many important tools for use by the SPFO in response to a disaster. Cistern basedows are strategishly justice to a disaster of the cistern basedows are strategishly justice to a state of the cistern basedows are strategishly justice to a state of the cistern basedown as a Turmarasidon lute. One some of the cistern basedown as a Turmarasidon lute. One some of the cistern basedown as a strategishly improved the cistern base been asternically improved throughout the City and the overall number of distarts has increased to approximately 230, providing the FIE postmeriant cases to millions of gallons of water in an emergency.	R2 [for F1-F6	The plan discussed in Recommendation 9.1 should include a detailed process, including immediate the plant of the Installation within 15 manning source. For the Installation within 15 scientification within 15 scientification within 15 scientification within 15 scientification with the Installation with Installa		Requires further unalysis	The commitment of sources for specific uses on specific timelihers for San Franction's public influencement is the west of the 10-19 for Capital influencement is the west of the 10-19 for Capital is will be extraordedged in the Capital Plan, and Sand on analysis, will be done or the capital plan timeline. The capital plan timeline. The capital plan timeline. The capital plans timeline. The capital plans timeline. The capital plans timeline. The capital plans timeline. The capital plans timeline. The capital plans timeline. The Capital Finance capital plans are capital to the capital plans have long-taking funding principles to guide the prior timeline of the public infrastructures. These irrestrients are directly all capital plans have long-taking funding principles to guide the prior time of the plans and prior timestrients. The directly and contained the plans are capital plans and those this follow, the Capital Plans and those this follow, the Capital Plans and those this follow, the Capital Plans and those this follow, the Capital Plans and those this follow, the Capital Plans and those this follow, the Capital Plans and those this follow, the Capital Plans and those this follow, the Capital Plans and those this follow, the Capital Plans and those this follow, the Capital Plans and those this follow, the Capital Plans and those this follow, the Capital Plans and these pital plans and the capital plans and the capital plans and the capital plans and the capital plans and the plans and the capital plans and the capital plans and the plans and the capital plans and the plans and the capital plans and the plans and the plans and the plans and the capital plans and the plans and the plans and the plans and the plans and the plans and the plans and the plans and the plans and the plans and the plans and the plans and the plans and the plans and the pla
Act Now Before It is Too Late: Aggressively Expand and Enhance Our High-Pressor Emergency Free English (Water System (July 17, 2019)		The CITy's high-pressure emergency water supply system, rown as the Auditan Water supply system (MVSS), does not core Irgo part of Supen-broad losteries 1, 4, 7 and 11, roughly one-shird of the CITy's developed area, As a result, these districts are not adequate or a result, these districts are not adequate protected from fires after a major earthquake.	Chlef_SanFanctaceFiee Department (September 15, 2019)	Agree with the finding	ne SPILC, SPID, and Sair Francisco Public Works (SPIV), are committed to Innevating for protection throughout San Francisco, Store the susage of the first Earthquake Safeky and Emergency Response Grand In 2010, the three suggesteds have been implementing projects to Improve the AWSS systems's sebanic reliability and range of converge, in Enhancing the AWSS range of coverage to all areas of the City would caught of the Converge to all areas of the City would require the allocation of funds to do so. The three agencies will combine to develop and implement projects usulfing new and proven technologies that improve upon the original system delpt. There have been range existent populations of the City would be supported to the control of the City and the City Spilos (Spilos) and the City Instructs to use the best possible technology available to meet the performance standards of the SFFD.	RI [for F1-F6]	Recillence and Capital Planning aboutil plotty present to the Sead of Symproson 2 sold of Symproson 2 sold present control of Symproson 2 sold present of the Sead of Symproson 2 sold present of the Sead of Symproson 2 sold present of the Sead of Symproson 2 sold present of Symproso	Department [September 15, 2019]	Will be Implemented	Insuling that San Franckison has the infinishmenture and resources to be well prepared to light fires in all parts of San Franckison is sententing that will be a focus of the rest 1.0 Year Capital Plan. Per Adminishtrative Code 3.10, that Plan must be submitted to the Mayor and Board no later than March 1 of each odd-inumbered year for approval no later than Mays 1. The requested presentation would be delivened a part of that Plan's submission to enable holistic planning corrects San Practice of settlience shellings. Updates swalphission to enable holistic planning corrects San Practice of settlience shellings. Updates swalphission to enable holistic planning corrects San Practice of settlience shellings. Updates swalphission to the shellings would be received to the settlement of the SER 2000 plan passes.  The settlement of the SER 2000 plan passes.
Act Now Before It is Too Late: Aggressively Expand and Enhance Our and Enhance Our Enrichment of the Comment Friedlighting Water System [July 17, 2019]	54	The Clip's high-pressure emergency water supply system, some as the Audillary Water Supply system (MWSS), does not cover large parts of Supple-vision (Editoris 5.4, 7 and 11.6, 5.4, 5.4). The state of the supple system (Editoris 5.4, 7 and 11.6, 5.4). As a result, these districts are not adequately protected from fires after a major earthquake.	Chief, San Francisco Fire Department [Beptember 15, 2019]	Agree with the finding	The SEPLIC, SEPL, and San Francisco Public Vords SEPPV and committed to increasing file protection throughout San Francisco. Since the protection throughout San Francisco. Since the protection throughout San Francisco. Since the protection of the service of the service	R2 [for F1-F6]	The plan discussed in Recommendation fit in Audition of the Control of the Contro	Chel, San Francisco Fee Department (September 15, 2019)	Requires further analysis.	The commitment of sources for specific uses as specific immellers for San Francisco's public infrastructure is the work of the 10Vez Capital infrastructure is the work of the 10Vez Capital infrastructure is the work of the 10Vez Capital infrastructure is the work of the 10Vez Capital infrastructure in the 10Vez Capital pinning process pathers, documents, and balances planned funding for needs across the public infrastructure portfolio and across San Infrastructure portfolio and across San Infrastructure portfolio and across San Infrastructure portfolio and across San Infrastructure portfolio and across San Infrastructure portfolio and across San Infrastructure portfolio and across San Infrastructure portfolio and across San Infrastructure portfolio and across San Infrastructure public across in the Infrastructure public across investments are lettered. (1) address legal and/or regulatory mandates; (2) preserve assets and promote sustainability; (4) address legal and/or regulatory mandates; (3) proserve assets and promote sustainability; (4) address legal and or programs and intendity across and promote across in the Infrastructure in the Infrastructure in the Infrastructure in the Infrastructure in the Infrastructure in the Infrastructure in the Infrastructure in the Infrastructure in the Infrastructure in the Infrastructure in the Infrastructure in the Infrastructure in the Infrastructure in the Infrastructure in the Infrastructure in Infrastructure in the Infrastructure in Infras
Act Now Before It is Too Late: Aggressively Essand and Eshance Out villed-Pressure Emergency Fireflighting Water System [July 17, 2019]	F4	The Clyf. Nigh-pressure emergency wasts supply system, romes the Assallary Water Soughly System (WSSS), does not cover large parts of Super-prices (Editories 1, 4, 7 and 11, roughly one-third of the Clyf's developed area. As a result, those districts are not already parts of the clyfe of the Clyf's developed area. As a result, those districts are not already parts of the clyfe of the clyf's area parts of the clyfe of the clyf's area parts of the clyfe of the clyfe of the clyfe of the clyfe parts of the clyfe of the clyfe of the clyfe parts of the clyfe of the clyfe parts of the clyfe of the clyfe parts of	Cick-San Francisco Fice Department (September 15, 2019)	Agree with the finding	The SPFU, SFFQ, and San Francisco Public Works (SPFV) are committed to Increasing five protection throughout San Francisco. Since the processor throughout San Francisco. Since the processor of the first Enthrouse Seafery and Emergency Response Bond in 2010, whe three spenders have been implementing products to und range of coverage, software products and reason of the seafer of the Works Sanger of coverage of all eress of the Clay would require the allocation of funds to do so. The three agencies will candiduce to develop and Implement projects utilifiating new and provent inches the seafer of the Sanger of the Sanger Sanger of the Sanger	R5 [for F4]	majority of the PWSS hose tenders in areas that	Chief, San Francisco Fire Debarativent (September 15, 2019)	Will be Implemented	The Desartment is currently finalling specifications for those units, after which they will go not to bid through the City's procurement processes before construction. It is anticipated the Department will take receipt of these units in the second half of 2000/2004 of these units in the second half of 2000/2004 of these units in the second half of 2000/2004 of these units in the second half of 2000/2004 of these units in the second half of 2000/2004 of these units of the second half of the second and moved throughout the City depending on need, giving the Department needed operational flexibility in its response.
Act now Before It is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency FireRighting Water System (July 17, 2019)		A https://six.ur.mails.courced.schmically.safe memperenty finelight, waster supply will be costly but is essential to protect the City.	Chef, San Francisco Fire Docartment (September 15, 2019)	Agree with the finding	As the City considers what is exceeded to protect Safe Francisco, it is limportant to advisorable groun multiple, compiler resilience and consideration of the control of t	R1 [for F1-F6]	Sy no laker than Desember 31, 2000, the Major, the SFPL (th. SEP), and the office of Resillence and Capital Planning, should jointy present to the Beard of Supervisors - Selected plant to enture the Clark of Supervisors - Selected plant to enture the Clark is well preseared to flight free hall plant of Self-Residence in the event of a 3000-magnitude (7.8) synthysises.	Chef, San Francisco Pire Deparament, [September 15, 2019]	Will be implemented	Ensuring that San Frenches has the infrastructure and recourses to be well prepared to flight filters in all parts of San Francisco is controlling that will be a flocus of the next 10 Year Capital Plan, Per Administrative Code 3.00, that Plan must be submitted to the Moyer and Board no later than March 1 of each oded numbered year for superved no later than March 1 of each oded numbered year for superved no later than May 1. The requested presentation would be delibered a part of that superved not later than May 1. The requested presentation would be delibered as part of that surrors. San Francisco's resilientes challenges. Undertes available on this timeline would be included. The City cannot discuss the project and timeline until the ESER 2020 plan passes. For this reason, the City will your this recommendation with the Capital Plan, and push back the timeline to December 31, 2021.

.

Act Now Before It is Too Late. Py Espand and Eshames (or Heave It is a second to the It is a second to the It is a mergency Fire(Bything Water System (July 17, 2019)	PS	A high-pressure, multi-sourced, sebmically safe energency firefighting water associal will be coosily but it is essential to present the City.	Department (Supperment 15, 2019)	Approvide the finding	As the CIV perceivage what is executed to process that Facelow, it is important to seimoniced power until selection, it is important to seimoniced power multiple, complex recilience of continuous development of the Recilience SP survivery (2014) and underfice the strategic efforts of our capital Privarient control and the strategic efforts of our capital Privarient control and the strategic efforts of our capital Privarient control and the strategic efforts of the Civil Republication of the Civil Repub	R2 [for P1-F6]	The plan efficience of in Recommendation 81 should include a deadled reprocals, fellowing financing sources, for the Installation within 15 years of a high-pressure, multi-sources, costmically rate emergency water system for those parts of the cry that don't nurmod hy have one, i.e., by no later than June 30, 2034.	Chief, San Francisco Pier Oppartment (September 15, 2019)	Requires further analysis	The commitment of sources for specific traves in contribution of the contribution of t
Act Now Before It is Too Late: Aggressively Example and Enhance Our High-Pressure Energency Prefighting Water System (July 17, 2019)	F6	Unleas the City Increases funding levels, I will be several decoded to., after the USBS predict one or more major enthquakes will occur? one or more major enthquakes will occur? All the control of the	Chief, San Francisco Fire Operatriment (September 15, 2019)	Olsagree, wholly	levels of future SER bonds and other complementary sometis the could support the organization of the AWSS have yet to be made.	R1 [for F1-F6]	By no later than December 3.1, 2010, the Market Mar	Department (September 15, 2019)	Implemented	Inflastructure and resources to be well respected to fight first not laptor to \$5 an franction to something that will be a focus of franction to something that will be a focus of the next 10-feet and that the something that the next 10-feet and the something that produce the something that the something that the something that the something that approval no later than May 1. The resourched resonations would be delivered as part of that Plan's submission to enable holistic planning acreas San Francisco's resilience challenges. Updates available on this timeline would be included. The Circ Fourand classors he project and simeline until the SBR 2000 plan passes. For this research, the Cynell stype test for this research, the Cynell stype test for this research existing proposed to the state of produced that the circ yell stype test for the instance, the circumstance produced that the strength of produced that the strength of produced produced that the strength of produced prod
Act New Before It is Too Late: Too Late: Aggressively Expand and Enhance Out High-Pessure Emergency Pressure Emergency Riverlighting Water right 17, 2019]	F6	Unless the City horsease funding levels, I well to be several decades (Le., Alter the USGS predicts one or more major earthquakes will occur) before the scuther parts of the City Nava a high-pressure, multi-sourced, schmidally sale emergency fireflighting water supply.	Chlef. San Francisco Pire Department (Beptember 15, 2019)	Diagree, wholly	Decisions about programming and funding levels of luture SES bonds and offer complementary sources that could support the organishm of the AWSS have yet to be made.	R2 [[or F1-∓6]	The plan discussed in Recommendation 13 biological process of including financing sources, for the installation within 15 years of a high-pressure, multi-sources, for the control of the process of a high-pressure, multi-sources, calculationary and entire the process of a high-pressure, multi-sources, claim facility and remorgancy water system for the process of th	Chef, San Prancisco Pre Department (September 15, 2019)	Requires further analysis	The commisterent of sources for specific tumber for San Franchascy shall confized methods for San Franchascy shall confized methods for the source of the San Franchascy shall confized methods for the San Franchascy shall confized methods for the San Franchascy shall be sha
Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency FireRighting Water System [July 17, 2019]	F6	Unless the City horsexes funding levels, it will be several decades (i.e., after the USSS predicts on or more nargie entitysakes will occur) before the southern parts of the City laws all high preciation, making covered, infamiliarly and entiting making the control of the City laws and the control of the City laws and the southern parts of the City laws are southern parts of the City laws and the control of the City laws are so that the control of the City laws and the City laws are so that the City laws are so that the City laws are so that the City laws are so that the control of the City laws are so that t	Chief, San Francisco Fire Department (Soptember 15, 2019)	Disagree, wholly	Decidence about programming and funding level of finnes SES bunch and other previous of finnes SES bunch and other complementary sources that could support the orpanision of the AWSS have yet to be made.	R4 [for F6-F7]	As loadern measure, by no later than I une 30, 2021, the City should burshase the 30 men. PWSS hose tenders being requested by the PWSS hose tenders being requested by the SPG1, to replace and expand its currently nadequate Inventory.	Chief, San Francisco Five Department (September 15, 2019)	Requires further analysis	The fire Department has been allocated (funding to packed for units through funds from the PT3-20 City budget and an allocated from the PT3-20 City budget and an allocation from the State. The Department is currently working with the Office of Contrave the contravent for hose tenders a multi-year term contract for hose tenders as not all-year term contract for hose tenders so in the case that additional funding is secured in future years, the Department will be able to reduce the amount of time for pocurement of the appearant. Each hose tender cost \$1 million each, and we need to weigh purchase of additional hose tenders to other budget request and pricipit,
Act Now Before It is Too Late: Too Late: Aggressively Expand and Enhance Out High-Pressure Emergency Fireflydring Water System [July 17, 2019]	FJ	The existing Porable Water Supply System (PWSS) Investors in Indequase, Investing in more PWSS have trenders would provide a relatively quick, coal-flet/we histeriam means to improve procession of the southern and western parts of the City until a high-pressure, multi-sourcest, sell-mixally safe emergency water supply can be developed in those areas.	Chef. San Francisco Fire Department (Supplement 15, 2019)	Agree with the finding	The Fire Department has been allocated funding to purches the units brough funds from the PTI-3-DLT ky budget and an ellocated from the State. White the Department currenty has the elder have tenders greed-out throughout the Chip, whose new units are much more modern and provide the Department with a number of operational benefits, including the authority of the provides and provides the Department with a number of operational benefits, including the control of the control of the Chip of the C	R4. (for F6-F7)	As Interim measure, by no later than fune 30, 2022, the City should purchase the 20 new PMVS hose tenders being requested by the STPD, to replace and engrad its currently inadequate inventory.  The SPPUC, the SFFD and the STP Department of	Chef. San Francisco Pier Department (September 15, 2019)	Requires further analysis	The Fire Department has been allocated funding to puches for even lib through funds from the F13-20 City budget and an allocated from the F13-20 City budget and an allocated more than the state. The Department for currently working with the Office of Common and Co
Act Now Before It is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]	FB	Redundancy is an important feature of an emergency firelighting water system.	Chief, San Francisco Fire Department [September 15, 2019]	Agree with the finding		R6 (for F8-F9)	The SPRUC, the SFFD and the SF Department of the Environment brould study adding salr- water pump stations to Improve the redundancy of water sources, especially on the west side. Findings and recommendations from this study should be presented to the Board of Supervisors by no later than June 30, 2021.	Chief, San Francisco Fire Gepartment (September 15, 2019)	Will be implemented	SFPUC and SFFD will complete this study by June 30, 2021.

Act Now Before It is	F9	Current plans to extend protections to the	Chilef, San Francisco Fire	Disagree, partially	While It is true that the SFPUC and SFFO are		The SFPUC, the SFFD and the SF Department of		Will be	SFPUC and SFFD will complete this study by
Too Late Aggressively Expand and Snhance Our High-Pressure Emergency Emergency Foreighting Waser Special Parks (1997) (July 17, 2019)		western par of the CIty do not Include amy high- pressure water sources north of Golden Gate Park.	Department (September 15, 2019)		studying four potential water sources proposed to supply a potate PEVS on the west side of the City, which are not located nonth of Golden to start Park, which you means would reduce part Park, which we not located nonth of Golden Start Park, which you means would reduce part Park, which you want to be proposed to the Park Park Park Park Park Park Park Park		the Environment should study adding salf- water purps station to fingmore the redundancy of water sources, sendoily on the redundancy of water sources, sendoily on the states study should be presented to the floating Supervisors by no later than June 30, 2021.	Opparment (September 15, 2019)	inglemented	June 30, 2021.  SPFUC and SFFD will complete this analysis by
Act Now Before It is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Fixed Highling Water (July 17, 2019)	F10	The "rollshifty score" being used by the SPIVL impart an overly optimistic lempression of the protection provided.	Department (September 15, 7029)	Diagree, partially	role negotions areas; privaly were studies or y.  SPOIL and SPTO the by planning passed to be a planning passed to those defined by the SPTO for Initial alarm topon and the SPTO for Initial alarm representations are seen as the SPTO for Initial alarm (FRA), Probable fire demands were developed seen each FRA will probable for demands generated by Charles Seawhorn, PhD using a Montac Carlo analysis of fire fightions and fire growth using the ground motions from the design earthquark of Amaginado, Than fire growth using the ground motions from the design earthquark of Amaginado, Than fire growth using the ground motions from the design earthquark of Amaginado, Than fire growth using the ground motions from the explanning that the second of the second		complete a more detailed analysis of comorgancy fivelights water needs [Individual above the median needs) by neighborhood, and not just by FAA and (b) provents completed analysis to the Board of Supervisors by no later than June 30, 2021.	Gepatrment [September 15, 2019]	implomented	June 30, 2021.
Act Now Before it is Too Late: Too Late: Aggressively Epand and Enhance Our High-Penner Our High-Penner Our High-Penner Our High-Penner Our High-Penner Our High-Penner Our High-Penner Our High-Penner Our High-Penner Our	F11	The City does not have a simplifier to fund and complete development of a high-pressure, multi-sourced, esteroically sale emergency water supply for all parts of the City. Mulding the superance of the City. Mulding the superance of the City. Mulding the superance of the City. Mulding the superance of the City. Mulding the superance of the city of the superance of the city of the superance of th	Chief San Franckoo Fie Department (September 13, 2019)	Gisagree, pardally	The ETWA was built after the 1900 centinguisty and to location, primarily in the northeast, and to location, primarily in the centerious and to location, primarily in the centerious control of the majority of the notification control of the majority of the North population that time, Since 2000, the STPUC, STPU, and Public Works have made critical improvements on the eacting ETWA systems. Depanding the ETWS print to ensuring that the desting ETWA is regilierated in the STPUC and ST		·			
Jack New Before It Is for Later New Texts of Later Agares/NeV Expand and Enhance Court High-Pressure Emergency Fireflighting Water System [July 17, 2019]	F13	In the 2025 MOU between the 25°C and the 5°PUL, the two agendes agreed to continue joint and the second service of the control joint a MOS crainings annually, but there is no formal protected underline specific joint with exercises or drifts using hypothetical distancer scenarios, such as a major earthquake.	Chel, San Francisco Five Department. [Saptember 15, 2019]	Disagree, particily	There are no formal protocol outsthring spedific point. AWSS searcies or drills in the Mo (II). Newexp, there are multiple opportunities to star inappetr during operation, maintenance, and unanstruction of improvement projects for the AWSS facilities as previously secretion of the response to the Grand Jury questions sent in May 2015.  The SFFS and SFFUC have had multiple field than the proposed of the second of the control of the company of the second of the control of the second search years and second of the control of the second of the se	R10 [for F13]	boxween the SPPUC and the SPFO choulds be ammeded to Include a detailed readmin for annual emergency response services, including instructed classes and extractives deligibility for annual emergency response services. Including instructed classes and extractives deligibility for an extractive and including the AWSS and the PWSS.	Department [September 15, 2019]	Will be	The Fire Department conducts weekly hospitate that official that it cottees through companies throughout the CID, The File Department will have with the SPFU to have them In attendance and participate in these distillations of the CID and the CID
Act Now Before It Is Too Late: Aggressively Expand and Enhance Our High Precaure Emergency Firefighting Water System [July 17, 2019]						R9 [for F12]	Se no later than December 31, 2000 the SPUC, with the addice and subject to the approach of the SPSQ, should (a) Invalement. Test practices for the maintenance of NWSS assets, and of the redding which AWSS valves in the systems are "critical," and, therefore, require most attention and priority in the SFPUC's maintenance plans.	Department	Has been Implemented	(a) SFPL (involences "box poactions" for the maintenance of ANOS access in collisionation with SFRD, and consistent with the terms of the Memorandum of Indonestanding Regarding Operation and Maintenance of San Francisco Water Supply Seams Rollsted to Fire Suppression (MOLD), SPPLO will seek SFPLY Suppression (MOLD), SPPLO will seek SFPLY Suppression (MOLD), SPPLO will seek SFPLY Suppression (MOLD), SPPLO will seek SFPLY Suppression (MOLD), SPPLO will seek SFPLY Suppression (MOLD), SPPLO will seek SFPLY Suppression (MOLD), SPPLO will seek SFPLY SEEK SEEK SEEK SEEK SEEK SEEK SEEK SEE

Report Title [Publication Date]	F#F	Finding  {text may be duplicated due to spanning and multiple respondent offects}	Respondent Assigned by CGJ [Response Due Date]	Finding Response (Agree/Disagree)	Finding Response Text	RSI [for F#]	Recommendation (text may be duplicated due to spanning and multiple respondent effects)	Respondent Assigned by CGJ [Response Due Date]	Recommendation Response (Implementation)	Recommendation Response Yext
Act Now Before it Is Too Late: Aggresslowly Espand and Ethance Out High-Pressure Emergency Firefliphting Water System (July 17, 2019)		Unless the City Increases funding levels, I will be several decade lie., After the USSS predicts one or more major earthquakes will occup before the southern parts of the City Nave a high-pressure, multi-sourced, selamically safe emergency firelighting water supply.	City Administrator [September 15, 2019]	Olaagree, wholly	Decisions about programming and hunding levels of future ESEs bands and other complementary sources that could support the caparacters of the AWSS have yet to be made.	R1 (Sor F1-F6)	Resilience and Capital Planning should John's present to the Board of Supervisors a dod of Supervisors a deligible of Supervisors a deligible of the Capital Supervisors and Planning Supervisors and Planning Supervisors and Planning Supervisors and Superv	City Administrator (September 15, 2019)	Will be Implemented	Ensuring bat San Francisco has the ininfastratura and recourses to be well prepared to fight fires in all parts of San Francisco is to meet to fight fires in all parts of San Francisco is something that will be a focus of the next 20-Year Capital Plan, Per Administrative Code 3.00, that Plan must be solmitted to the Mayor and Board on later than March 1 of each and-maintening when the part of first approach in later than Nafar, 1 to exhibit and demandered year for approach in later than Nafar, 1 to exhibit planning in protectionation would be devicered as part of first Planting and the protection of the protection of the protection of the protection of the protection of the protection of the protection of the state of the protection of the state of the protection of the prote
Act Now Before it is Too Late: Aggressively Epand and and Enhance Our High-Tressure Emergency Fireflighting Water System July 17, 2019	F6	be served decades (I.e., after the USOS prediction or or more major endreshaveke will considerable the control of the country and the country area of the City have a Michigherentum, michoured, submicially after omney from the country and the country of the coun		Disgree, whelly	Decisions about programming and furnifle levels of hurse ESEA bands and other complementary sources that could support the capacition of the AWSS have yet to be made.	R2 [far F1_46]	If landing sources, for the Installation within 15 years of a high-resure, multi-source, desired, selamically safe energency water system for debece parts of the first had don't comprohy have one, i.e., by no later than June 10, 2014.	Clip Administrator (Repromber 15, 2019)		The commisment of sources for specific tease or specific teaming for San Frandscos or public inflastructure is the work of the LOTerc capable inflastructure is the work of the LOTerc capable inflastructure is the work of the LOTerc capable. The public discounted in Recommendation 1 will be acknowledged in the Capital Plan, and based on analysis, will be done on the capital plan should be supplied to the capital plan should be supplied to the capital plan should be supplied to the capital plan should be supplied to the capital plan should be supplied to the capital plan should be supplied to the capital plan should be supplied to the protriation of public linfaratureurs investments. These Investments are tilenet; (1) address legial and from plants purchase the capital plan should be protected because the supplied supplie
Act Now Before it is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]	F6	Unless the City increases funding levels, it will be several decade (i.e., a her the USS predicts one or mare major earthquakes will occur) before the susthern parts of the City have a high-pressure, multi-sourced, selamically safe emergency fireflighting water supply.	City Administrator (September 15, 2019)	Disagree, wholly	Decisions about programming and funding levels of future SERR bands and other complementary sources that could support the expansion of the AWSS have yet to be made.		By no later than June 30, 2022, the Nayor and the Board of Slowerivers should analyze whether to propose a separate band for the development of a high-pressure, multi-sourced, sciemitally safe emerging water system for these parts of the City that don't currently have one, with a target date of compelleding construction by no later than June 30, 2034.	City Administrator [Septomber 15, 2019]	Will be Implemented	The analysis will be performed as part of the CITY, 10 Poer Jostal Plan development; process. The next full update to the Capital Plan will be submitted to the Mayer and Board not later than March 1, 2021, for approval no later than May 1, 2021.
Act Now Before It is Too Late: Too Late: Aggressively Expand and Enhance Our Might-Pessure Excellipting Water System [July 17, 2019]		The City does not have a dimelline for find and complete development of a high-mersure, multi-coursed, soismitally sale emergency water spagity for all pare of the City, including sale water spagity for all pare of the City, including the complete of the City, including the complete of the City, including the complete of the City of the Cit	City Administrator [September 15, 2019]		The EFM's was built after the 1906 centinguists, and its losation, formally in the nembrase parties of 3an Francisco, corresponds to the considered field in the properties of the control of the 1904 population of the properties of the control of the 1904 population. The 1904 population of the 1904	RS (for F5, F6, F11)	By no later than June 30, 2022, the Mayer and the Board of Superious, should analyze whether to propose a separate bond for the development of a high-pressure, multi-parcent, and the superior should be superior to the superior should be supe	Clip Administrator [Sepsember 15, 2019]	·	The analysis will be performed as part of the Ord, 3 1/Ver Capital Pland Govelgament process. The next full update to the Capital Plan will be authented to the Mayor and Rosel not lake the March 1, 2012, for approved no later has May 1, 2022.

						-				
Report Title [Publication Date]	F#	Finding (text may be duplicated due to spanning and multiple respondent effects)	Respondent Assigned by CGJ [Response Due Date]	Finding Response (Agree/Disagree)	Finding Response Yext	RM [for F#]	Recommendation (text may be duplicated due to spanning and multiple respondent effects)	Respondent Assigned by CGJ [Response Due Date]	Recommendation Response (Implementation)	Recommendation Response Text
Act Now Before It Is Too Late: Appressively Expand and Enhance Our High-Pressure Emergency Firefighting Water System [July 17, 2019]						R6 [far F8-F9]		Department of the Environment [September 15, 2019]		Nor applicable to the San Francisco Department of the Environment