

File No. 191029

Committee Item No. 5

Board Item No. _____

COMMITTEE/BOARD OF SUPERVISORS

AGENDA PACKET CONTENTS LIST

Comm: Public Safety & Neighborhood Services

Date: November 8, 2019

Board of Supervisors Meeting:

Date: _____

Cmte Board

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| <input type="checkbox"/> | <input type="checkbox"/> | Motion |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Resolution |
| <input type="checkbox"/> | <input type="checkbox"/> | Ordinance |
| <input type="checkbox"/> | <input type="checkbox"/> | Legislative Digest |
| <input type="checkbox"/> | <input type="checkbox"/> | Budget and Legislative Analyst Report |
| <input type="checkbox"/> | <input type="checkbox"/> | Youth Commission Report |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Introduction Form |
| <input type="checkbox"/> | <input type="checkbox"/> | Department/Agency Cover Letter and/or Report |
| <input type="checkbox"/> | <input type="checkbox"/> | MOU |
| <input type="checkbox"/> | <input type="checkbox"/> | Grant Information Form |
| <input type="checkbox"/> | <input type="checkbox"/> | Grant Budget |
| <input type="checkbox"/> | <input type="checkbox"/> | Subcontract Budget |
| <input type="checkbox"/> | <input type="checkbox"/> | Contract/Agreement |
| <input type="checkbox"/> | <input type="checkbox"/> | Form 126 – Ethics Commission |
| <input type="checkbox"/> | <input type="checkbox"/> | Award Letter |
| <input type="checkbox"/> | <input type="checkbox"/> | Application |
| <input type="checkbox"/> | <input type="checkbox"/> | Public Correspondence |

OTHER

- | | | |
|-------------------------------------|--------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>Referral FYI – October 16, 2019</u> |
| <input type="checkbox"/> | <input type="checkbox"/> | _____ |
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Prepared by: John Carroll

Date: November 1, 2019

Prepared by: John Carroll

Date: _____

[Declaring a State of Urgency - Expanding the City's Emergency Firefighting Water System]

Resolution declaring a state of urgency to rapidly expand the City's Emergency Firefighting Water System (EFWS) to protect all neighborhoods in the event of a major earthquake and fire, and calling for a comprehensive EFWS action plan to expand the City's EFWS to cover all unprotected neighborhoods by 2034; to expand the Fire Department's firefighting apparatus such as portable hose tenders to provide interim protection to neighborhoods not currently covered by the EFWS; and to require an annual report to the Board of Supervisors on the state of the City's EFWS preparedness for a major earthquake and fire.

WHEREAS, The United States Geological Survey (USGS) estimates that the probability an earthquake magnitude 6.0 or larger will occur in the San Francisco region before 2043 is 98 percent, the probability of at least one earthquake of magnitude 6.7 or larger is 72 percent, and the probability of at least one earthquake of magnitude 7.0 or larger is 51 percent; and

WHEREAS, In San Francisco, the most densely populated city in California, over 90 percent of buildings are constructed from wood, many of them directly touching their neighbor buildings, and earthquakes in places with this type of construction have caused the two largest peacetime urban fires in history: in 1906 in San Francisco and in 1923 in Tokyo, and San Francisco remains highly vulnerable to fire after an earthquake, as explained in a 2008 article for the *International Association for Fire Safety Science*; and

WHEREAS, The San Francisco Fire Department (SFFD), the San Francisco Public Utilities Commission (SFPUC), and this Board of Supervisors share a common goal of increasing the firefighting capabilities of all areas of San Francisco; and

1 WHEREAS, The EFWS is a high-pressure fire suppression water system that can be
2 utilized during large fires and is vital for protection against the loss of life, homes, and
3 businesses from fire following a major earthquake and non-earthquake multiple-alarm fires;
4 and

5 WHEREAS, The EFWS does not cover large parts of nor adequately protect
6 Supervisorial Districts 1, 4, 7, and 11, roughly one-third of the City's developed area, which
7 also have the fewest cisterns, and each fewer than ten miles of EFWS mains and fewer
8 than 50 EFWS fire hydrants; and

9 WHEREAS, In June 2003, the 2002-2003 Civil Grand Jury recommended that the
10 EFWS be extended "to serve all parts of the City," and 16 years later many neighborhoods still
11 do not have new EFWS pipelines; and

12 WHEREAS, The SFPUC is developing a preliminary list of potential projects for various
13 parts of the City where there is currently limited access to the EFWS, as well as other projects
14 to reinforce or otherwise improve the existing EFWS; and

15 WHEREAS, The City does not have an agreed-upon timeline to fund and complete
16 development of EFWS for all areas of the City, including neighborhoods that historically have
17 not been as well protected as other areas of the City; and

18 WHEREAS, Unless the City increases funding levels, it will be several decades (i.e.,
19 after the USGS predicts one or more major earthquakes will occur) before some parts of the
20 City have a high-pressure, multi-sourced, seismically safe emergency firefighting water
21 supply; and

22 WHEREAS, While the amount of money needed to implement EFWS citywide is
23 estimated to be in the hundreds of millions of dollars, the potential loss of life and potential
24 property damage could be far greater if an extremely large earthquake strikes San Francisco;
25 and

1 WHEREAS, Based on the City's current pace of issuing ESER Bonds, it could take
2 approximately 35 years or more to build out EFWS pipelines to serve all neighborhoods,
3 unless the timing of the ESER Bond issuances are expedited or other sources of funding are
4 identified; and

5 WHEREAS, SFPUC and SFFD are in the process of analyzing the best method for
6 bringing a robust and resilient high-pressure firefighting water system to the Western
7 neighborhoods in San Francisco that is capable of providing water to the SFFD firefighters at
8 the high-pressure needed for firefighters to combat large fires after a seismic event, and are
9 examining several options for the Westside, including potential development of a potable
10 EFWS with over 14 miles of new EFWS pipelines and two new pump stations that could be
11 supplied by four water sources; and

12 WHEREAS, To best utilize the existing EFWS and serve areas where the EFWS is
13 lacking, it is critical that the SFFD obtain new updated Hose Tenders; and

14 WHEREAS, SFFD hose tenders are specialized apparatus designed for pumping and
15 transporting large volumes of water from any source, are recognized worldwide for their ability
16 to successfully move large amounts of water to a fire at high-pressures and volumes for
17 firefighting, and are the ideal solution for areas with limited access to the EFWS because
18 these vehicles can be dynamically deployed to any area of the City; and

19 WHEREAS, The SFFD currently has five Hose Tenders, three from 1973, one
20 from 1987, and one from 1992, all of which are two-wheel drive, and do not have the capacity
21 to draft or pump water; and

22 WHEREAS, In FY 2019-20 SFFD submitted a request for funding to purchase 20
23 Portable Water Supply System (PWSS) hose tenders, the Board of Supervisors and Mayor
24 funded four new PWSS hose tenders, and the State of California funded one; and

1 WHEREAS, On October 8, 2019 Supervisor Gordon Mar requested the Budget and
2 Legislative Analyst to study through an equity lens and issue a report to the Board no later
3 than December 31, 2020 (a) which areas of the City do not have sufficient water supplies for
4 the anticipated demand for water to fight fires following a major earthquake similar in
5 magnitude to the 1906 earthquake, and (b) options to address the issue in both the short term
6 and the long term; and

7 WHEREAS, On October 1st, 2019, the San Francisco Board of Supervisors adopted a
8 Resolution responding to the Presiding Judge of the Superior Court on the findings and
9 recommendations contained in the 2018-2019 Civil Grand Jury Report, entitled "Act Now
10 Before It Is Too Late: Aggressively Expand and Enhance Our High-Pressure Emergency
11 Firefighting Water System," on file with the Clerk of the Board of Supervisors in File
12 No. 190786, which is hereby declared to be a part of this Resolution as if set forth fully herein;
13 now, therefore, be it

14 RESOLVED, That the Board of Supervisors hereby declares a State of Urgency to
15 rapidly expand the City's EFWS to protect all neighborhoods in the event of a major
16 earthquake and fire, given that the vulnerability of the City poses a serious and urgent threat
17 to the well-being of San Francisco and the safety of its inhabitants and environment; and, be it

18 FURTHER RESOLVED, That the Board of Supervisors urges the SFPUC, SFFD and
19 the Office of Resilience and Capital Planning to develop a comprehensive EFWS action plan,
20 including funding sources, to install a high-pressure, multi-sourced, seismically safe
21 emergency water system to fight fires in the event of a major earthquake in all the parts of the
22 City where it is lacking by June 30, 2034, to be submitted to the Board of Supervisors by
23 December 31, 2021; and, be it

1 FURTHER RESOLVED, That the Board of Supervisors urges the SFPUC and SFFD to
2 complete a study for adding an EFWS saltwater pump station on the Westside of San
3 Francisco to be presented to the Board no later than June 30, 2021; and, be it

4 FURTHER RESOLVED, That the Board of Supervisors urges the SFPUC to continue
5 its efforts to complete more detailed analysis of emergency firefighting water needs by
6 neighborhood and prepare a completed analysis by June 30, 2021; and, be it

7 FURTHER RESOLVED, That by June 30, 2022, the City should analyze whether to
8 propose a separate bond for the development and implementation of EFWS projects for areas
9 of the City with limited EFWS access as part of the City's regular capital planning process;
10 and, be it

11 FURTHER RESOLVED, That the Board of Supervisors urges the Mayor to prioritize
12 funding for the purchase of new PWSS hose tenders, apparatus, and equipment to replace
13 and expand SFFD's currently inadequate inventory within the next three Fiscal Years; and, be
14 it

15 FURTHER RESOLVED, That the Board of Supervisors urges the Department of
16 Emergency Management, SFPUC, SFFD, and the Office of Resilience and Capital Planning
17 to provide a consolidated annual report to the Board of Supervisors on the state of the City's
18 EFWS preparedness for a major earthquake and fire and planned funding from the ten-year
19 Capital Plan for EFWS.

BOARD of SUPERVISORS



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San Francisco 94102-4689
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Fax No. 554-5163
TDD/TTY No. 554-5227

MEMORANDUM

TO: Harvey Rose, Budget and Legislative Analyst
Naomi Kelly, City Administrator
Mary Ellen Carroll, Executive Director, Department of Emergency Management
Jeanine Nicholson, Chief, Fire Department
Harlan Kelly, Jr., General Manager, Public Utilities Commission

FROM: John Carroll, Assistant Clerk,
Public Safety and Neighborhood Services Committee

DATE: October 16, 2019

SUBJECT: HEARING MATTER INTRODUCED

The Board of Supervisors' Public Safety and Neighborhood Services Committee has received the following resolution, introduced by Supervisor Mar on October 8, 2019:

File No. 191029

Resolution declaring a state of urgency to rapidly expand the City's Emergency Firefighting Water System (EFWS) to protect all neighborhoods in the event of a major earthquake and fire, and calling for a comprehensive EFWS action plan to expand the City's EFWS to cover all unprotected neighborhoods by 2034; to expand the Fire Department's firefighting apparatus such as portable hose tenders to provide interim protection to neighborhoods not currently covered by the EFWS; and to require an annual report to the Board of Supervisors on the state of the City's EFWS preparedness for a major earthquake and fire.

If you have any comments or reports to be included with the file, please forward them to me at the Board of Supervisors, City Hall, Room 244, 1 Dr. Carlton B. Goodlett Place, San Francisco, CA 94102.

c: Debra Newman, Office Budget and Legislative Analyst
Severin Campbell, Office Budget and Legislative Analyst
Gabriela Loeza, Office Budget and Legislative Analyst
Brian Strong, Office of the City Administrator
Lynn Khaw, Office of the City Administrator
Victor Lim, Department of Emergency Management
Theresa Ludwig, Fire Department
Juliet Ellis, Public Utilities Commission
Donna Hood, Public Utilities Commission
John Scarpulla, Public Utilities Commission
Mona Panchal, Public Utilities Commission

Introduction Form

By a Member of the Board of Supervisors or Mayor

RECEIVED
BOARD OF SUPERVISORS
SAN FRANCISCO2019 OCT 8 PM 12:25
Time stamp
or meeting date

I hereby submit the following item for introduction (select only one):

- ☒ 1. For reference to Committee. (An Ordinance, Resolution, Motion or Charter Amendment).
- ☐ 2. Request for next printed agenda Without Reference to Committee.
- ☐ 3. Request for hearing on a subject matter at Committee.
- ☐ 4. Request for letter beginning : "Supervisor [] inquiries"
- ☐ 5. City Attorney Request.
- ☐ 6. Call File No. [] from Committee.
- ☐ 7. Budget Analyst request (attached written motion).
- ☐ 8. Substitute Legislation File No. []
- ☐ 9. Reactivate File No. []
- ☐ 10. Topic submitted for Mayoral Appearance before the BOS on []

Please check the appropriate boxes. The proposed legislation should be forwarded to the following:

- ☐ Small Business Commission ☐ Youth Commission ☐ Ethics Commission
- ☐ Planning Commission ☐ Building Inspection Commission

Note: For the Imperative Agenda (a resolution not on the printed agenda), use the Imperative Form.

Sponsor(s):

Mar; Fewer, Yee

Subject:

Declaring a State of Urgency to rapidly expand the City's Emergency Firefighting Water System to protect all neighborhoods in the event of a major earthquake and fire

The text is listed:

Resolution declaring a State of Urgency to rapidly expand the City's Emergency Firefighting Water System (EFWS) to protect all neighborhoods in the event of a major earthquake and fire and calling for a comprehensive EFWS action plan to expand the City's EFWS to cover all unprotected neighborhoods by 2034, to expand the San Francisco Fire Department's firefighting apparatus such as portable hose tenders to provide interim protection to neighborhoods not currently covered by the EFWS, and to require an annual report to the Board of Supervisors on the state of the City's EFWS preparedness for a major earthquake and fire.

Signature of Sponsoring Supervisor: []

For Clerk's Use Only