

**Report to Congress for Future Water Resources Development (WRRDA 7001) Submission
Package**

Proposal Name: South San Francisco Flood Control Feasibility Study

Submission Date: 08/07/2017

Proposal ID Number: 76e66262-7458-45d1-a081-52e06026b525

Purpose of Proposal: The City of South San Francisco (SSF) faces an increasing threat from sea level rise which could severely flood up to 1,203 acres by the year 2100. The City would like to conduct a Feasibility Study to look at infrastructure, land use planning and adaptation and mitigation strategies to define what opportunities exist to provide protection against tidal flooding. The Colma Creek watershed, which flows through the southern part of South San Francisco into the Bay, contains residential neighborhoods that have been severely flooded, habitat for threatened and endangered species and substantial public infrastructure. South San Francisco has been declared a natural disaster area due to flooding by FEMA four times in the past 22 years, and three times in 2017 alone. Possible solutions to mitigate the flooding problems include adaptation and protection measures that reduce exposure such as traditional levees, seawalls, floodwalls, horizontal levees, and wetlands restoration. Other possible recommendations to improve adaptive capacity or reduce the consequences of sea level rise could include asset elevation, flood proofing, relocation, land use planning policies, enhanced crisis management efforts, and flood insurance.

1. Administrative Details

Proposal Name: South San Francisco Flood Control Feasibility Study

by Agency: City of South San Francisco

Locations: CA

Date Submitted: 08/07/2017

Confirmation Number: 76e66262-7458-45d1-a081-52e06026b525

Supporting Documents

File Name	Date Uploaded
Army Corps of Engineers-7001 Support letter 8.7.17.pdf	08/07/2017
7001 map2.pdf	08/07/2017
7001-map.pdf	08/07/2017

2. Provide the name of the primary sponsor and all non-Federal interests that have contributed or are expected to contribute toward the non-Federal share of the proposed feasibility study or modification.

Sponsor	Letter of Support
City of South San Francisco(Primary)	<p>The City of South San Francisco would like to partner with the Corps of engineers to develop a Feasibility Study to examine flood control adaptation and mitigation strategies in the lower Colma Creek watershed and San Bruno Channel because of increased flooding and threat of sea level rise. The City is a willing cost share partner and is asking to be a new start feasibility study for FY18. The City of South San Francisco ranks first in the world for biotechnology innovation, with over 20,000 biotech jobs and over 200 companies, employing a 62,614 strong workforce from all over the Bay Area region. This region has already experienced extreme flooding this year and faces additional threats due to increasing sea level rise. In 2017 alone, the entire region was declared a disaster area by the Federal Emergency Management Agency due to flooding in January, February, and March. Of particular regional concern is the San Francisco International Airport (SFO). As the 7th busiest airport in the nation, SFO is critical to the Bay Area economy. SFO is United Airlines' primary transpacific gateway and serves as Virgin America's principal base of operations. Flooding and sea level rise would inundate the power supply, ceasing power to homes, hospitals, and businesses and disrupt the regional transportation network. The anticipated flood zone would affect the South San Francisco Bay Area Rapid Transit (BART) station, the South San Francisco and San Bruno Caltrain stations, the SamTrans bus service, and four PG&E electrical substations.</p> <p>The City of South San Francisco is committed to working with the Army Corps of Engineers and regional partners to conduct a Feasibility Study. The City's planned investment in the Feasibility Study is the first step in a large scale plan to mitigate rising sea levels for residents and businesses in the region. For these reasons, we request that the City of South San Francisco flood control Feasibility Study be a new start study in FY18.</p>

3. State if this proposal is for a feasibility study, a modification to an authorized USACE feasibility study or a modification to an authorized USACE project. If it is a proposal for a modification, provide the authorized water resources development feasibility study or project name.

Feasibility Study

4. Clearly articulate the specific project purpose(s) of the proposed study or modification. Demonstrate that the proposal is related to USACE mission and authorities and specifically address why additional or new authorization is needed.

The City of South San Francisco (SSF) faces an increasing threat from sea level rise which could severely flood up to 1,203 acres by the year 2100. The City would like to conduct a Feasibility Study to look at infrastructure, land use planning and adaptation and mitigation strategies to define what opportunities exist to provide protection against tidal flooding. The Colma Creek watershed, which flows through the southern part of South San Francisco into the Bay, contains residential neighborhoods that have been severely flooded, habitat for threatened and endangered species and substantial public infrastructure. South San Francisco has been declared a natural disaster area due to flooding by FEMA four times in the past 22 years, and three times in 2017 alone. Possible solutions to mitigate the flooding problems include adaptation and protection measures that reduce exposure such as traditional levees, seawalls, floodwalls, horizontal levees, and wetlands restoration. Other possible recommendations to improve adaptive capacity or reduce the consequences of sea level rise could include asset elevation, flood proofing, relocation, land use planning policies, enhanced crisis management efforts, and flood insurance.

5. To the extent practicable, provide an estimate of the total cost, and the Federal and non-Federal share of those costs, of the proposed study and, separately, an estimate of the cost of construction or modification.

	Federal	Non-Federal	Total
Study	\$0	\$2,600,000	\$2,600,000
Construction	\$0	\$0	\$0

Explanation (if necessary)

6. To the extent practicable, describe the anticipated monetary and nonmonetary benefits of the proposal including benefits to the protection of human life and property; improvement to transportation; the national economy; the environment; or the national security interests of the United States.

Multiple critical infrastructure elements would be severely impacted by sea level rise in South San Francisco and the surrounding area. It would inundate the power supply, ceasing power to homes, hospitals, and businesses and disrupt the regional transportation network:

- Of particular regional concern is the San Francisco International Airport (SFO): As the 7th busiest airport in the nation, SFO is critical to the Bay Area economy.
- The South San Francisco Bay Area Rapid Transit (BART) station is immediately adjacent to the Colma Creek flood control channel;
- The South San Francisco Caltrain station is also in the lower watershed, approximately 0.5-mile north of the flood control channel and adjacent to Hwy-101;
- SamTrans, a regional bus service providing service throughout San Mateo County and into San Francisco and Palo Alto, has a bus depot within the Colma Creek watershed.
- There are four PG&E electrical substations in the Colma Creek watershed; two are in the vicinity of the flood control channel in the lower watershed.
- There are three major highways in the lower Colma Creek watershed and San Bruno Channel in danger of inundation: U.S. Highway-101, CA State Route-82, and Interstate-380. Airport Blvd and the North Access road are also vulnerable and inundation would block access for emergency vehicles and supplies.

The only wastewater treatment facility in our local service area is also vulnerable. A loss of function of the plant could affect up to 100,000 customers, and there would be a danger of electrocution on site. Additionally, sea level rise will impact one in five South City fire stations, one quarter of all City outpatient health care facilities, half of the City's 59 acres of wetlands, parks and trails, the City's Samaritan House homeless shelter, as well as more than 50 homes and 850 businesses.

7. Does local support exist? If 'Yes', describe the local support for the proposal.

Yes

Local Support Description

Yes, The City of South San Francisco will provide \$2.6M for this Feasibility Study. It is part of the City's approved 5 year Capital Improvement Plan. South San Francisco will be working with regional partners such as the City and County of San Francisco, SFO, and cities in San Mateo County to coordinate efforts.

8. Does the primary sponsor named in (2.) above have the financial ability to provide for the required cost share?

Yes

Primary Sponsor Letter of Support

(As uploaded)

Army Corps of Engineers_7001 Support letter 8.7.17.pdf



CITY COUNCIL 2017

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MIKE FUTRELL, CITY MANAGER

August 3, 2017

OFFICE OF THE CITY MANAGER

Major General Donald E. Jackson, Jr.
Deputy Commanding General for Civil and Emergency Operations
Civil Works, United States Army Corps of Engineers
United States Department of Defense
441 G Street, NW
Washington, DC 20314

Dear General Jackson,

The City of South San Francisco would like to partner with the Corps of engineers to develop a Feasibility Study to examine flood control adaptation and mitigation strategies in the lower Colma Creek watershed and San Bruno Channel because of increased flooding and threat of sea level rise. The City is a willing cost share partner and is asking to be a new start feasibility study for FY18.

The City of South San Francisco ranks first in the world for biotechnology innovation, with over 20,000 biotech jobs and over 200 companies, including Genentech, Merck, Johnson & Johnson Innovation, and Amgen. Other sectors such as food manufacturing (Torani, See's Candies), merchandise (Hello Kitty), database solutions (SAP), and hundreds of other businesses can be found in the City, employing the 62,614 strong workforce that travels into town from all over the Bay Area region.

This region has already experienced extreme flooding this year and faces additional threats due to increasing sea level rise. In 2017 alone, the entire region was declared a disaster area by the Federal Emergency Management Agency due to flooding in January, February, and March. Of particular regional concern is the San Francisco International Airport (SFO). As the 7th busiest airport in the nation, SFO is critical to the Bay Area economy. SFO is United Airlines' primary transpacific gateway and serves as Virgin America's principal base of operations. Flooding and sea level rise would inundate the power supply, ceasing power to homes, hospitals, and businesses and disrupt the regional transportation network. The anticipated flood zone would affect the South San Francisco Bay Area Rapid Transit (BART) station, the South San Francisco and San Bruno Caltrain stations, the SamTrans bus service, and four PG&E electrical substations.

The City of South San Francisco is committed to working with the Army Corps of Engineers and regional partners to conduct a Feasibility Study. The City's planned investment in the Feasibility Study is the first step in a large scale plan to mitigate rising sea levels for residents and businesses in the region.

For these reasons, we request that the City of South San Francisco flood control Feasibility Study be a new start study in FY18.

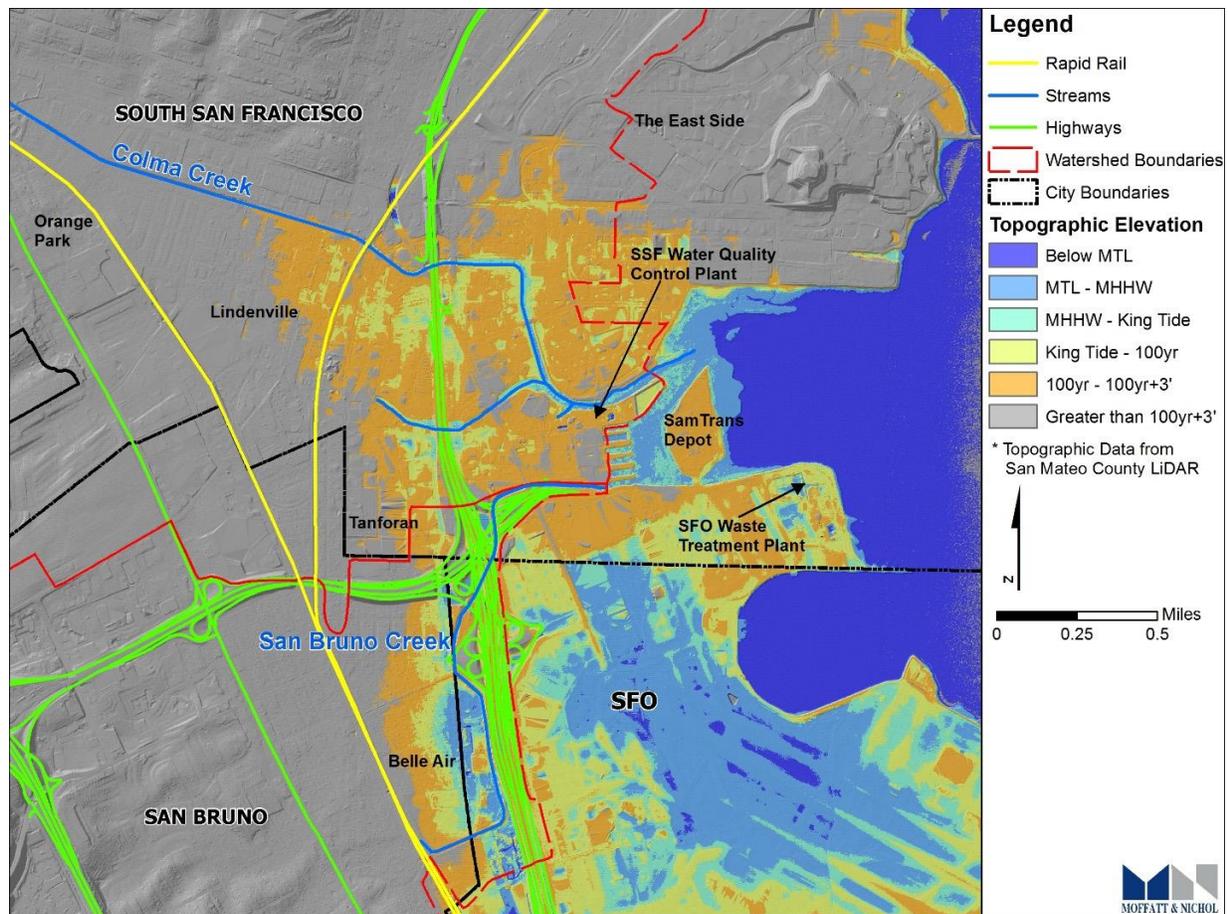
Sincerely yours,


Mike Futrell
City Manager

Additional Proposal Information

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7001 map2.pdf



Topographical Elements in the Lower Watersheds, San Bruno Creek/Colma Creek Resiliency Study Final Report, August 2015

Map Document

(This is as uploaded, a blank page will show if nothing was submitted)

7001_map.pdf

- **South San Francisco is the hub of biotechnology in America**
- **The city is close to the world's major research universities, UC San Francisco, Stanford & UC Berkeley.**
- **Businesses have access to the Bay Area's venture capital and angel investors.**

South
San Francisco



UCSF

UC
Berkeley

San Francisco
International Airport (SFO)

Stanford
University

CITY OF SOUTH
SAN FRANCISCO

