



## **COLMA CREEK CITIZENS ADVISORY COMMITTEE MEETING**

**Tuesday, September 14, 2021, at 3:00 pm**

Due to the risk of COVID-19 transmission and local and State guidelines, this meeting will be held remotely. To join the meeting, click on:

<https://us02web.zoom.us/j/82021088022?pwd=RVZqVGYxeWxnWkptYi8zNHYvcnJiQT09>

**or call 669-900-6833 Meeting ID: 821 2108 8022# Password: 662462#**

### **AGENDA**

- I. Roll Call
- II. Approve minutes of the June 8, 2021 meeting
- III. Public Comment
- IV. Update on Colma Creek Flood Zone Projects and Maintenance Activities
  - a. Channel Discharge Pipe Repair/Replacement Project between Highway 101 and Utah Avenue
  - b. El Camino Box Culvert and Mission Road Diversion Structure
  - c. Work Completed through Maintenance Agreement with BART
- V. Update on Orange Memorial Park Project Construction
- VI. Countywide Future Conditions Dashboard, beginning with Colma Creek
- VII. Adjournment

**NEXT MEETING: Tuesday, December 14, 2021, 3:00 p.m.**

**DRAFT** Meeting Minutes  
**Tuesday, June 8, 2021**

**AGENDA:**

**CALL TO ORDER**

Helen Fisicaro called to order the regular meeting of the Colma Creek Flood Control Zone Citizens Advisory Committee at 3:05 pm on Tuesday, June 8, 2021, via Zoom.

**I. ROLL CALL**

**Members:**

**Present**

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**Absent**

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Helen Fisicaro, Chair – Town of Colma

Sue Vaterlaus – City of Pacifica

Mike Futrell – City of South San Francisco

Jovan Grogan – City of San Bruno

Raymond Buenaventura, City of Daly City

Gail DeFries, Member at Large – City of Daly City

Ed Bortoli, Member at Large – City of South San Francisco

Richard Irl, Member at Large – City of South San Francisco

Ryan Mayfield, Member at Large – City of South San Francisco

**Staff:**

**Present**

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Len Materman – San Mateo County Flood and Sea Level Rise Resiliency District (OneShoreline)

Colin Martorana – OneShoreline

Makena Wong – OneShoreline

Mark Chow – County of San Mateo, Department of Public Works

Ann Stillman – County of San Mateo, Department of Public Works

Jim Porter – County of San Mateo, Department of Public Works

Dave Pine – County of San Mateo, Board of Supervisors

Michael Barber – County of San Mateo, Supervisor Dave Pine's Office

Brad Donohue – Town of Colma

Richard Chiu – City of Daly City

Eunejune Kim – City of South San Francisco

Kim Santos – City of South San Francisco

Matthew Ruble – City of South San Francisco

Ken Anderson – City of South San Francisco

Dave Bockhaus – City of South San Francisco

Louis Langi – City of South San Francisco

**II. APPROVAL OF MINUTES OF December 8, 2020 & March 9, 2021 MEETING**

The minutes for December 8, 2020, and March 9, 2021, meetings were approved. Motion was made by Mike Futrell and seconded by Richard Irl.

**III. PUBLIC COMMENT**

No comments from the public.

#### **IV. UPDATE ON COLMA CREEK FLOOD ZONE PROJECTS AND MAINTENANCE ACTIVITIES**

##### **Status on Projects:**

- Ann Stillman requested that the contract documents for the Channel Discharge Pipe Repair/Replacement Project between U.S. Highway 101 and Utah Avenue be approved by the OneShoreline Board of Directors over the summer to prevent any delays. The current plan is to complete project design by July.
- Maintenance activities such as sediment dredging, mitigation site maintenance, and El Camino box culvert repairs are carried out by the County Department of Public Works on OneShoreline's behalf.
- Regarding the PUC site development, OneShoreline, with the support of the County Department of Public Works, is negotiating easements to maintain access to Colma Creek and create natural improvements to the Creek.
- Regarding the Stormwater Capture Project at Orange Memorial Park, Eunejune Kim provided an update that the project is under construction and is scheduled for completion by Spring 2022. The sanitary sewer line manhole in the middle of the center ball field will not be affected.

#### **V. ITEMS RECENTLY APPROVED BY THE ONESHORELINE BOARD**

- Richard Irli's appointment to the Committee for his third term was approved by the OneShoreline Board at its May 24, 2021, meeting.

#### **VI. UPDATE TO COLMA CREEK HYDROLOGY & HYDRAULIC MODEL: FUTURE 100-YEAR STORM AND 6 FEET SLR**

- No comments

#### **ADJOURNMENT**

**NEXT MEETING** – Tuesday, September 14, 2021, 3:00 p.m.

**Colma Creek Citizens Advisory Committee Meeting**  
**Tuesday, September 14, 2021, 3:00 pm (Remote Meeting)**

**AGENDA ITEM 4**

**Status of the Colma Creek Flood Zone Projects and Maintenance Activities**

A reference map of all Colma Creek Flood Zone Projects and Maintenance Activities (Appendix A) is enclosed. Questions on any of the material referenced below can be discussed at this Committee meeting.

**Status of Projects:** Non-recurring large planning or construction efforts led by the San Mateo County Flood and Sea Level Rise Resiliency District (OneShoreline) or by the County Department of Public Works on behalf of OneShoreline.

**Planning and Coordination with City of South San Francisco's General Plan**

1. OneShoreline plans to resume its conversations with the City of South San Francisco on its General Plan update after the City completes its technical analyses related to the Preferred Land Use Scenario and defines next steps toward implementation. In the meantime, OneShoreline has developed a Future Conditions Mapping Dashboard that can assist stakeholders (including developers, City staff, homeowners, floodplain managers, planners, engineers, etc.) visualize flooding under future conditions in areas adjacent to Colma Creek, including modeled water surface elevations that can be used for advisory purposes. The map also includes land use (including the City's General Plan Preferred Alternative), tree cover, parcel, and demographic data to help identify opportunities to provide community benefits along Colma Creek. OneShoreline also continues to manage the potential projects described below:

**a. Utah Avenue to Navigable Slough Flood Protection Project**

Following the submission of a grant extension request letter to Cal OES in the spring, OneShoreline continues to have discussions with Cal OES staff leadership to explore its options for extending grant funding and amending the proposed project's scope to enable natural improvements to the Creek and better align with the City of South San Francisco's General Plan process.

**b. Produce Avenue Area Channel Bank Project**

On July 15, staff from the City of South San Francisco and OneShoreline met with developers and engineers working on a proposed development adjacent to OneShoreline's project site. OneShoreline's comments on the proposed development focused on ways that that development can be coordinated with OneShoreline's work in this area and how that development's storm drain system would perform under a future condition with sea level rise. The developer's latest round of submittals in response to these comments are currently being reviewed.

**2. Channel Discharge Pipe Repair/Replacement Project between U.S. Highway 101 and Utah Avenue**

This project will repair or replace deteriorated discharge pipes. County staff is finalizing the contract documents for the project to complete the work by end of October 2022. The latest construction cost estimate from the consultant team is \$425,000.

**Status of Maintenance Activities:** Recurring activities to maintain the existing Colma Creek channel, led by OneShoreline or by the County Department of Public Works on behalf of OneShoreline.

**1. Work Completed Under Colma Creek Long-Term Maintenance Permit**

**\*Update on Permit Extension:** Because the current State and federal permits to maintain the channel expire soon, County staff and its consultants have reached out to the following regulatory agencies to renew or secure new permits (which will now be held by OneShoreline):

- CA Dept. of Fish & Wildlife (CDFW) Lake and Streambed Alteration Agreement (expires 12/31/21),
- U.S. Army Corps of Engineers (USACE) Nationwide Permit, valid to March 18, 2022, and
- San Francisco Bay Regional Water Quality Control Board (Regional Board) 401 Certification, which has no expiration date but is a requirement of the USACE permit.



#### **a. Ongoing Maintenance and Minor Repairs**

The quarterly inspection of the Colma Creek Flood Control Channel was performed on August 6, 2021, by staff from the County and the City of South San Francisco -- see attached Appendix B.

The illegal dumping and homeless encampment activities downstream of Utah Avenue have been cleaned up. Abandoned vehicles remain at 202 Littlefield Avenue and homeless encampment activities are still visible under the S. Airport Boulevard and Produce Avenue bridges. These sites continue to be a concern for impact to the channel and water quality.

The County has identified and finalized the following maintenance work planned through October 2021 (and the 2021 report was submitted to the appropriate regulatory agencies on May 20, 2021):

1. Vegetation management, and weep-hole vegetation and debris removal (various locations) – ongoing;
2. Dredging upstream of Produce Avenue – scheduled for September;
3. Spalling repairs downstream of Spruce Avenue – ongoing;
4. Channel bottom repair (various locations) – postponed;
5. Culvert outlet repairs downstream of the South San Francisco BART culvert - ongoing;
6. Expansion joint repair downstream of the Mission Road culvert – ongoing;
7. Graffiti management (various locations) – ongoing;
8. Fence repair (various locations) – ongoing.

Items #1, #7, and #8 may be performed by the City of South San Francisco and Town of Colma staff or their contractors throughout the year under their Maintenance Agreements with OneShoreline. Item #1 is intended to also remove illegally discarded debris such as, shopping carts, bikes, tree branches, etc.

#### **b. El Camino Box Culvert and Mission Road Diversion Structure**

The majority of the El Camino Real box culvert repairs occurred between June and August 2021, with the remaining repairs to be completed by the end of September 2021. The original estimate for the El Camino Box Culvert repairs was \$400,000. The actual cost may be higher due to changes made in the field for additional coffer dams needed to ensure compliance with permit conditions.

#### **c. Work Completed through Maintenance Agreement with BART**

OneShoreline acceptance of a maintenance agreement with BART is contingent upon BART completing punch list items and repairs in the channel. Some of these items were completed in 2020 and the remaining items are anticipated to be completed in 2021. Costs associated with punch list items (i.e. repairs to expansion joints and a fence, removing vegetation, and grouting a culvert outfall) will be invoiced to BART.

### **2. Sediment Dredging Downstream of Utah Avenue**

On behalf of the District, the County continues to monitor sediment depositions in the channel from Utah Avenue bridge to Navigable Slough (through bathymetric surveys) to determine if dredging is needed. County staff will work to have the next bathymetric survey completed by December 2021.

### **3. Mitigation Site Maintenance**

Mitigation site maintenance at sites downstream of Utah Ave. continued with general monitoring and maintenance provided by Ecological Concerns, Inc. (ECI) and trash pickup by County staff/Sheriff Work Program (SWP) participants. The next cleanup date has been scheduled for September 11, 2021. Another event on Colma Creek has been planned on September 18, 2021 (Coastal Cleanup Day).

With COVID-19 restrictions and social distancing still in place and budget reductions to the SWP, County staff expects the amount of trash removed this year will be less than during previous years. The use of contractors to perform trash pickup is an option to make up for this reduction, but the cost would be higher. This table summarizes the trash removed from the Mitigation Sites since 2005 and trash pick-up dates in 2021.

<b>Year</b>	<b>Trash Removed in cubic yards</b>	<b>Event Dates</b>
2021	8.39	1/23, 2/20, 3/20, 4/17, 4/24, 5/29, 6/26, 7/24
Total (2005-2021)	711.62	

In addition, 223.96 cubic yards of trash has been removed from other sites along the channel since 2005.

#### 4. Municipal Regional Permit (MRP)

##### a. Contribution to Orange Memorial Park Operations & Maintenance

On June 30, OneShoreline met with the City of South San Francisco to discuss potential options for an agreement to fund operations and maintenance (O&M) for the Orange Memorial Park Water Capture Project that is currently under construction (see further details in the update on Page 4). OneShoreline plans to work with City staff in facilitating the development of this agreement amongst entities benefitting from the project, as well as supporting coordination with the City/County Association of Governments of San Mateo County and the San Francisco Bay Regional Water Quality Control Board.

##### b. Co-permittee Administration

On behalf of OneShoreline, the County continues to perform MRP compliance activities, such as public outreach and habitat restoration planting events, trash hot spot monitoring/cleanup/reporting, review of development projects related to stormwater quality impacts, and responding to Regional Board requests for public comments on proposed MRP requirements.

#### 5. Maintenance Agreements

- a. **With the City of South San Francisco:** No further updates since the Maintenance Agreement was executed as of February 2021.
- b. **With the Town of Colma:** Maintenance Agreements between OneShoreline and Town for maintenance of portions of the Colma Creek and a key tributary within the incorporated limits of the Town were executed as of September 3, 2021.

**Status of Non-District Projects:** Non-recurring, big-ticket planning or construction efforts in the Colma Creek Flood Zone that are not led by OneShoreline.

#### 1. Regional Stormwater Capture Project at Orange Memorial Park (City of South San Francisco and San Mateo Countywide Water Pollution Prevention Program)

The Orange Memorial Park Stormwater Capture project construction continues on schedule. The contractor completed the installation of the diversion pipe that will transfer water from Colma Creek to the underground stormwater storage reservoir and is making progress to install the subsurface system. There are two locations where the project cuts into the Colma Creek channel wall: 1) an upstream location where the project diverts water from the channel and 2) a downstream location where a pipe discharges any excess water back into the channel. The work at both these locations has progressed smoothly. At the upstream location, the creek channel wall and bottom were cut in August 2021 to prepare for the installation of the box culvert and gate that will divert water from the creek (Figures 1 and 2). At the downstream location, the channel wall is currently scheduled to be cut in September.



*Figure 1. Before and After the Creek Channel cut at the Upstream Location.*





*Figure 2. Creek Channel cut at the Upstream Location.*



*Figure 3. Progression of construction at the Downstream Location.*

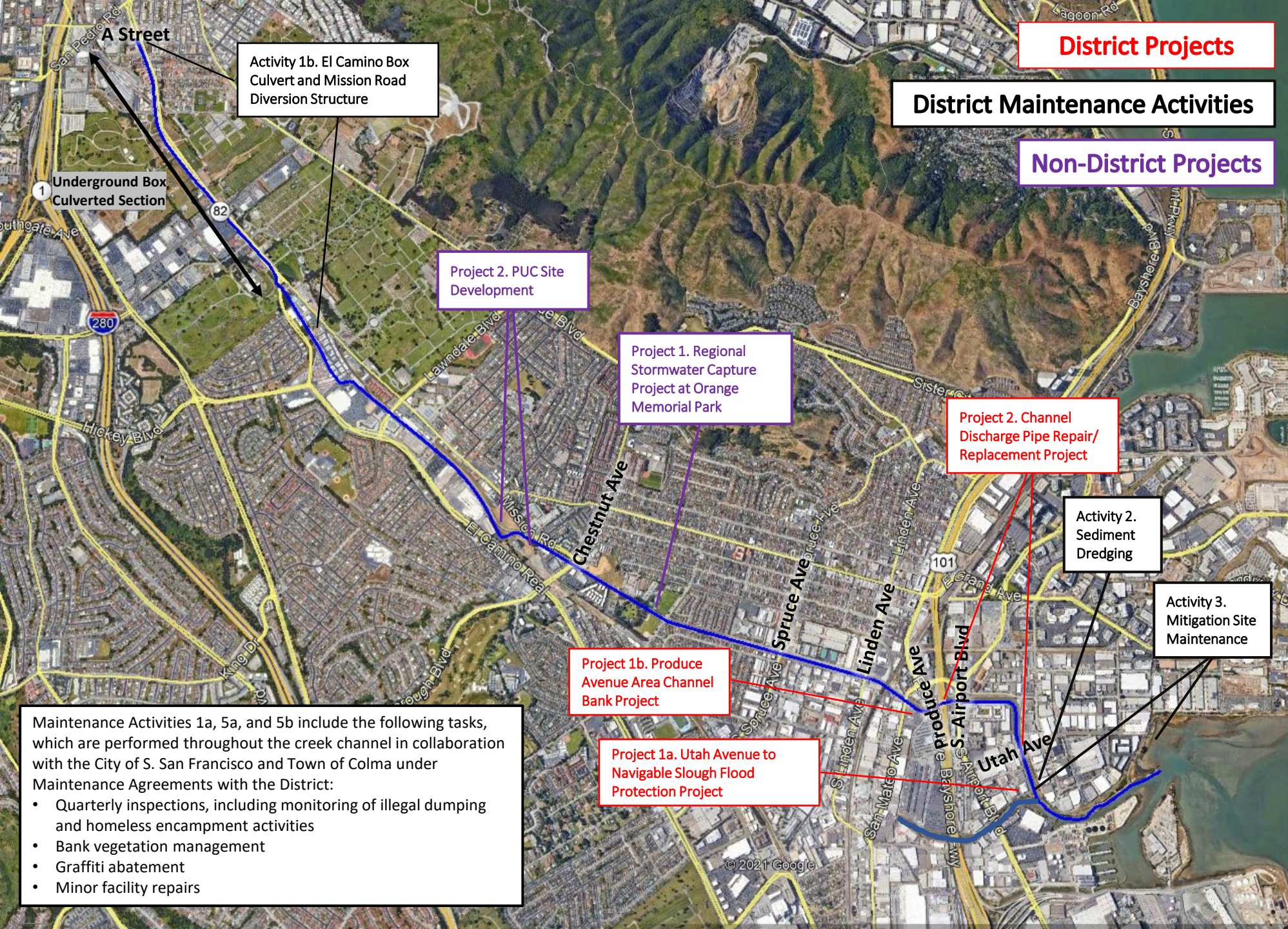
## **2. PUC Site Development**

On July 20, staff from OneShoreline met with developers to discuss dedicating a portion of Colma Creek right-of-way currently owned by the City of South San Francisco to OneShoreline and enhancements to the Colma Creek channel that would be completed by the developer. OneShoreline plans to review proposed designs for any improvements later this year.

		Total of Prior 5 Years (FY14-15 through 18-19)*	2019-20 (Actual)*	2020-21 (Actual)	2021-22 (Estimated)	2022-23 (Estimated)	
<b>Revenue</b>		\$ 21,130,749	\$ 5,350,021	\$ 4,916,434	\$ 3,306,675	\$ 3,306,675	
<b>Project Expenditures</b>							
Project Number	Project Name						Total (FY14-15 through 22-23)
1	<b>Planning &amp; Coordination with SSF General Plan for Colma Creek and Navigable Slough</b>						
	Staff engagement with SSF and stakeholders	\$ -	\$ -	\$ 4,178	\$ 45,000	\$ -	\$ 52,000
	Technical analysis and Master Plan preparation	\$ 71,381	\$ 14,568	\$ 2,499	\$ 60,000	\$ -	\$ 161,449
	Project Administration	\$ -	\$ -	\$ -	\$ 25,000	\$ -	\$ 25,000
	Project Total						\$ 238,449
1a	<b>Utah Avenue to Navigable Slough Flood Protection Project</b>						
	Preliminary Study	\$ 53,790	\$ -	\$ -	\$ 100,000	\$ -	\$ 153,790
	Design & Permitting	\$ 298,796	\$ 5,179	\$ 13,517	\$ 200,000	\$ 300,000	\$ 823,974
	Construction & Mitigation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Project Administration	\$ 162,146	\$ 105,285	\$ -	\$ 50,000	\$ 50,000	\$ 367,431
	Project Total						\$ 1,345,195
1b	<b>Produce Avenue Area Channel Bank Project</b>						
	Preliminary Study	\$ 105,926	\$ -	\$ -	\$ 100,000	\$ -	\$ 205,926
	Design & Permitting	\$ 95,301	\$ -	\$ -	\$ -	\$ 400,000	\$ 495,301
	Construction & Mitigation	\$ -	\$ -	\$ -	\$ -	\$ 2,000,000	\$ 2,000,000
	Project Administration	\$ 25,612	\$ 19,831	\$ 4,025	\$ 50,000	\$ 300,000	\$ 399,468
	Project Total						\$ 3,100,695
2	<b>Channel Discharge Pipe Repair/ Replacement (between U.S. Highway 101 &amp; Utah Ave)</b>						
	Design & Permitting	\$ -	\$ 67,308	\$ 8,219	\$ -	\$ -	\$ 102,308
	Construction	\$ -	\$ -	\$ -	\$ 467,500	\$ -	\$ 467,500
	Project Administration	\$ -	\$ 69,799	\$ 21,768	\$ 116,875	\$ -	\$ 211,674
	Project Total						\$ 781,482
	<b>Total Project Expenditures/Estimates</b>	\$ 812,952	\$ 281,969	\$ 54,207	\$ 1,214,375	\$ 3,050,000	\$ 5,465,821
<b>Maintenance Activities Expenditures</b>							
Activity Number	Activity Name						Total (FY14-15 through 22-23)
1a	<b>Colma Creek Long-Term Maintenance Permit: Ongoing Maintenance/Minor Repairs</b>						
	Design & Permitting	\$ 201,862	\$ 29,020	\$ -	\$ 56,000	\$ -	\$ 286,881
	Construction	\$ 360,054	\$ 80,645	\$ 221,612	\$ 176,616	\$ 100,000	\$ 767,315
	Project Administration	\$ -	\$ -	\$ -	\$ 58,154	\$ 25,000	\$ 83,154
	Project Total						\$ 1,137,350
1b	<b>Colma Creek Long-Term Maintenance Permit: El Camino Real Culvert/Mission Road Diversion Structure</b>						
	Design	\$ 80,441	\$ -	\$ -	\$ -	\$ -	\$ 80,441
	Construction	\$ 91,883	\$ -	\$ 164,654	\$ 300,000	\$ -	\$ 656,883
	Project Administration	\$ -	\$ 1,479	\$ -	\$ 75,000	\$ -	\$ 142,729
	Project Total						\$ 880,054
1c	<b>Colma Creek Long-Term Maintenance Permit: BART Maintenance Agreement (Mission Road - Oak Avenue)</b>						
	Construction	\$ 65,386	\$ -	\$ -	\$ 150,000	\$ -	\$ 215,386
	Project Administration	\$ 21,994	\$ -	\$ -	\$ 37,500	\$ -	\$ 59,494
	Project Total						\$ 274,880
1d	<b>Colma Creek Long-Term Maintenance Permit: Admin</b>						
	Project Administration	\$ -	\$ -	\$ 188,501	\$ 200,000	\$ 200,000	\$ 600,000
	Project Total						\$ 600,000
2	<b>Sediment Dredging (Between Utah Ave. to Navigable Slough)</b>						
	Sediment Study & Monitoring	\$ 40,400	\$ -	\$ -	\$ 20,000	\$ -	\$ 60,400
	Design & Permitting	\$ 8,593	\$ -	\$ -	\$ -	\$ -	\$ 8,593
	Construction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Project Administration	\$ 12,248	\$ -	\$ -	\$ 5,000	\$ -	\$ 17,248
	Project Total						\$ 86,241
3	<b>Mitigation Site Maintenance (Sites 2, 3 &amp; 4)</b>						
	Annual Maintenance Activities	\$ 395,085	\$ 3,910	\$ -	\$ -	\$ -	\$ 398,995
	Design & Permitting	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Construction	\$ -	\$ 15,212	\$ -	\$ -	\$ -	\$ 15,212
	Project Administration	\$ -	\$ 103,707	\$ 83,293	\$ 90,000	\$ 90,000	\$ 323,707
	Project Total						\$ 737,914
4a	<b>Municipal Regional Permit: Contribution to Orange Memorial Park O&amp;M</b>						
	Construction	\$ -	\$ -	\$ -	\$ -	TBD	\$ -
	Project Administration	\$ -	\$ -	\$ -	\$ -	TBD	\$ -
	Project Total						\$ -
4b	<b>Municipal Regional Permit: Admin</b>						
	Project Administration	\$ 51,899	\$ 7,586	\$ 6,901	\$ 7,700	\$ 7,700	\$ 82,586
	Project Total						\$ 82,586
5a	<b>Maintenance Agreement with South San Francisco</b>						
	Annual Maintenance Activities	\$ 12,364	\$ -	\$ 5,546	\$ 45,000	\$ 45,000	\$ 112,364
	Project Administration	\$ -	\$ -	\$ 2,811	\$ 2,000	\$ 2,000	\$ 7,000
	Project Total						\$ 119,364
5b	<b>Maintenance Agreements with Colma</b>						
	Annual Maintenance Activities	\$ 48,622	\$ -	\$ -	\$ 35,000	\$ 35,000	\$ 118,622
	Project Administration	\$ -	\$ -	\$ 4,634	\$ 2,000	\$ 2,000	\$ 9,000
	Project Total						\$ 127,622
	<b>Total Maintenance Activities Expenditures/Estimates</b>	\$ 1,390,830	\$ 241,559	\$ 677,952	\$ 1,259,970	\$ 506,700	\$ 4,046,009
	<b>Total Expenditures/Estimates</b>	\$ 2,203,782	\$ 523,528	\$ 732,159	\$ 2,474,345	\$ 3,556,700	\$ 9,511,831
<b>Fund Balance at Ending of Fiscal Year</b>			\$ 26,031,019	\$ 30,193,978			

\*Expenditures for FY14-15 through FY19-20 do not include staff time





**Appendix A.**  
Map of Colma Creek  
Flood Zone Projects and  
Maintenance Activities



**Appendix B**  
**Colma Creek Channel Maintenance Monitoring Photos**  
Survey Date: August 6, 2021  
**Mouth to Produce Avenue Maintenance Segment**



**Photos 1 & 2** – Top photo shows copy of a public notice for the City of South San Francisco Sewer Force Main Project has been posted on the bench location behind 222 Littlefield Avenue. Bottom photo shows native vegetation within mitigation Site 2c was removed by SSF staff during the clearing of vegetation east of the Bay Trail pedestrian bridge. **SSF Parks Department has been notified that plants within the mitigation site are not to be removed or trimmed without District directions.**



# Colma Creek Channel Maintenance Monitoring Photos

Survey Date: August 6, 2021



**Photos 3 & 4** – Top photo shows Colma Creek looking downstream from the Bay Trail pedestrian bridge. Bottom photo shows Colma Creek looking upstream from the pedestrian bridge.



## Colma Creek Channel Maintenance Monitoring Photos

Survey Date: August 6, 2021



**Photos 5 & 6** – The top photo shows the cleared homeless encampment activity along the Colma Creek Service Road. Recent trash and fence damage was observed. **Trash will be picked up during the upcoming Sheriff Work Program event.** The bottom photo shows Colma Creek looking downstream from the Utah Avenue bridge at mitigation Site 2.



## Colma Creek Channel Maintenance Monitoring Photos

Survey Date: August 6, 2021



**Photos 7 & 8** – Top photo shows Colma Creek looking upstream from the Utah Avenue bridge. Bottom photo shows Colma Creek looking downstream toward the Utah Avenue bridge during an outreach event for the private company, Nurix, on July 24, 2021. This event was arranged by the South San Francisco Environmental Compliance Program with assistance from County staff.



# Colma Creek Channel Maintenance Monitoring Photos

Survey Date: August 6, 2021



**Photos 9 & 10** – Top photo shows Colma Creek looking downstream toward the Utah Avenue bridge. Bottom photo shows Colma Creek looking upstream toward the S. Airport Blvd. bridge.



## Colma Creek Channel Maintenance Monitoring Photos

Survey Date: August 6, 2021



**Photos 11 & 12** – Top photo shows Colma Creek looking downstream from the S. Airport Blvd. bridge. Bottom photo shows Colma Creek looking upstream from the S. Airport Blvd. bridge.



## Colma Creek Channel Maintenance Monitoring Photos

Survey Date: August 6, 2021

### Produce Avenue to the Dissipater Teeth Maintenance Segment:



**Photos 13 & 14** – Top photo shows Colma Creek looking downstream towards the Highway 101 bridge. Trash accumulation was observed on the north bank. Bottom photo shows Colma Creek looking upstream from the Produce Avenue bridge. **Sediment accumulated near the northern (right) bank is scheduled to be dredged in September 2021.**



## Colma Creek Channel Maintenance Monitoring Photos

Survey Date: August 6, 2021



**Photos 15 & 16** – Top photo shows Colma Creek looking downstream from the San Mateo Avenue bridge. Bottom photo shows Colma Creek looking upstream from the San Mateo Avenue Bridge.



# Colma Creek Channel Maintenance Monitoring Photos

Survey Date: August 6, 2021



**Photos 17 & 18** – Top photo shows Colma Creek looking downstream from the Linden Avenue Bridge. Bottom photo shows Colma Creek looking upstream from the Linden Avenue Bridge.



## Colma Creek Channel Maintenance Monitoring Photos

Survey Date: August 6, 2021



**Photos 19 & 20** – Top photo shows Colma Creek looking downstream from the Spruce Avenue Bridge. Bottom photo shows Colma Creek looking upstream from the Spruce Avenue Bridge.



## Colma Creek Channel Maintenance Monitoring Photos

Survey Date: August 6, 2021

### Dissipater Teeth to Old Channel Maintenance Segment



**Photos 21 & 22** – Top photo shows dislodged sidewalk panel on the north sidewalk upstream of the Spruce Avenue bridge in the vicinity of SSF Corporation Yard. **The voids below the subsided sidewalk will be repaired during the 2021 maintenance season.** Bottom photo shows the Canal Street fence that's being pushed into the channel by vegetative growth. Photo is looking upstream toward the Orange Street bridge.



## Colma Creek Channel Maintenance Monitoring Photos

Survey Date: August 6, 2021



**Photos 23 & 24** – Top photo shows Colma Creek looking upstream from the Orange Avenue bridge. Bottom photo shows Colma Creek looking upstream from Orange Park pedestrian bridge. The coffer dam installed for the Orange Memorial Park Storm Water Capture Project can be seen within the channel but appears ineffective at the time as water is flowing downstream. Construction is also observed in SFPUC property on the right bank. Debris was observed within the channel but difficult to determine it is from which project. **District did not request County to provide inspection assistance for these projects.**



## Colma Creek Channel Maintenance Monitoring Photos

Survey Date: August 6, 2021



**Photos 25 & 26** – Top photo shows Colma Creek looking downstream from the Centennial Way pedestrian bridge. Bottom photo shows fence cut downstream of the Centennial Way pedestrian bridge.



## Colma Creek Channel Maintenance Monitoring Photos

Survey Date: August 6, 2021



**Photos 27 & 28** – Top photo shows Colma Creek looking upstream from the Centennial Way pedestrian bridge. Bottom photo shows Colma Creek looking downstream from the SSF BART Station box culvert.



## Colma Creek Channel Maintenance Monitoring Photos

Survey Date: August 6, 2021



**Photos 29 & 30** – Top photo shows Colma Creek looking upstream from McLellan Drive. Bottom photo shows Colma Creek looking upstream from the Costco pedestrian bridge. New graffiti was observed throughout this segment of the channel. **The Town of Colma will be notified for inclusion into Town maintenance work under the MOA with the District.**



## Colma Creek Channel Maintenance Monitoring Photos

Survey Date: August 6, 2021



**Photos 31 & 32** – Top photo shows Colma Creek looking downstream from the Mission Road box culvert. A secondary coffer dam installed by County JOC contractor for the expansion joint repairs appears to be effective. Bottom photo shows one of the repaired expansion joints.



## Colma Creek Channel Maintenance Monitoring Photos

Survey Date: August 6, 2021



**Photos 33 & 34** – Top photo shows construction activities and removed trees on the south bank of Old Colma Creek channel. Bottom photo shows Old Colma Creek channel downstream of the El Camino Real bridge at the Mission Road intersection. The primary coffer dam and water diversion system was required by the long-term maintenance permits and was installed by County JOC contractor for the Colma Creek expansion joint repairs downstream.