AGENDA October 24, 2022 4:00 PM

1. Roll Call

2. Public Comment Persons wishing to address the Board on District-related matters not on this Agenda may speak for up to two minutes; comments on Agenda items shall be heard during that item for up to two minutes.

3. Action to Set the Agenda and Approve the Consent Agenda
   A. Adopt Resolution 2022-10-24 to continue conducting meetings of the Board of Directors remotely due to public health concerns caused by the COVID-19 pandemic
   B. Approve the Minutes of the September 26, 2022 District Board meeting

4. Regular Business – California Flood Preparedness Week Items
   A. Update on efforts since the October 24, 2021 flood to reduce flooding in San Bruno’s Belle Air neighborhood
   B. Presentation by Stanford PhD student June Choi on her OneShoreline fellowship regarding flood insurance

5. Chair’s Report *

6. CEO’s Report * Bayfront Canal & Atherton Channel Project operations, San Francisquito Creek maintenance, Colma Creek Citizen’s Advisory Committee recruitment, SFO Draft EIR, Stanford PhD Fellow Elisa Boles

7. Board Member Reports and Items for a Future Agenda *

8. Adjournment
Agenda Item 4A:
Update on efforts since the 10/24/21 flood to reduce flooding in Belle Air neighborhood

California’s Flood Preparedness Week (October 22-29, 2022) is a statewide program of the California Department of Water Resources to inform agencies, residents, and businesses about flood risks they face and preparedness actions they can take to reduce that risk.

This and the following agenda item discuss: 1) efforts by OneShoreline and our partners to reduce flood risks in San Bruno, and 2) flood insurance in our county and a specific neighborhood that pays a disproportionately high share of income for flood insurance.
San Bruno’s Belle Air neighborhood is located along the last mile of San Bruno Creek before it drains into San Francisco Bay. In that stretch, the Creek winds through major infrastructure owned by, or within the jurisdiction of, multiple agencies. This has made solutions to chronic flooding difficult.

Agenda Item 4A: Update on efforts since the 10/24/21 flood to reduce flooding in Belle Air neighborhood
The 10/24/21 storm and high tide resulted in the worst flooding in this disadvantaged community in years.

Agenda Item 4A: Update on efforts since the 10/24/21 flood to reduce flooding in Belle Air neighborhood

Sunny day flooding occurs there now; sea level rise will make flooding worse.
In the 24 hours beginning at 9:00 PM on October 23, 2021, over 6” of rain fell in the area. According to NOAA, this atmospheric river is equivalent to between a 200-year and 500-year storm for a 24-hour period.

OneShoreline’s Flood Early Warning System detected increasing, dangerous water levels. Shortly after noon (before flooding began) on 10/24, we notified San Bruno, County, and emergency response personnel.

OneShoreline’s Flood Early Warning System will continue to be a key part of the monitoring and emergency response in this flood-prone area and will inform the planning of climate resilience projects.
To address flooding in the near-term, OneShoreline is coordinating with the Public Works departments of the City of San Bruno and San Mateo County, and staff of Board Chair Dave Pine’s office, on the following efforts to improve flood protection as compared to one year ago:

1. Replace the pump and motor at the Walnut Pump Station (see photo to the right)
2. Repair the San Bruno Creek Tide Gate
3. Work with Caltrans to identify solutions to this flooding, including the installation of a backflow valve in a Caltrans storm drain outfall
Repair the San Bruno Creek Tide Gate: In the fall of 2021, three of the four flap gates that reduce the flow of Bay water into San Bruno Creek detached from the tide gate. Following Board approval in February 2022, all four flap gates were replaced.
Agenda Item 4A: Update on efforts since the 10/24/21 flood to reduce flooding in Belle Air neighborhood

Backflow Valve on Caltrans Storm Drain Outfall: During rain and/or high tide events, water from San Bruno Creek appears to flow backwards through the outfall into land under 380 and onto streets in Belle Air.

While a valve on this outfall won’t eliminate flooding, we believe it would help to reduce flooding.
Potential long-term protection projects:

- Replace OneShoreline’s San Bruno Creek tide gate and build a pump station connected to the tide gate.
- Replace OneShoreline’s Walnut and Angus pump stations.
- Elevate the shoreline between San Bruno Creek and Colma Creek.
- Build a new stormwater detention basin, potentially near 380.
• Stanford’s Haas Center for Public Service supports partnerships between Stanford students, faculty, and staff and Bay Area organizations and leaders focused on building equitable climate change solutions.

• Over the past 15 months, we hosted three Stanford graduate student fellows to support our activities.

• Stanford PhD student June Choi is researching how people’s experience with flooding motivates insurance demand within the United States. For her summer 2022 fellowship with OneShoreline, she utilized federal data to understand flood insurance trends at the local level and help to identify communities where the cost burden of flood insurance is disproportionately high.

• June continues to work with us to explore whether neighborhoods within San Mateo County with a disproportionately high insurance burden and adjacent high-value insured assets may be candidates for a community-based flood insurance pilot project.
San Mateo County Flood Risk and Insurance Overview

October 2022
Countywide Statistics: Flood Insurance Numbers

- Total households in San Mateo County: 263,351 (as of 2020 census)
- 26% of total households in the county are in census tracts exposed to high flood risk
- 4.3% of total households in the county are directly located within the high-risk floodplain (11,307 units)

### National Flood Insurance Program in San Mateo County (2021 data)

<table>
<thead>
<tr>
<th>Floodplain</th>
<th>Average Cost</th>
<th>Policy Count (residential)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Flood Hazard Area</td>
<td>$2,217</td>
<td>1665</td>
</tr>
<tr>
<td>Non-Special Flood Hazard Area</td>
<td>$694</td>
<td>2185</td>
</tr>
</tbody>
</table>

Sources: FEMA floodplain maps (as of 2022), 2020 ACS census, Corelogic, NFIP
Countywide Statistics: Trends in NFIP policies and costs

Policy count (San Mateo County)

Policy cost (San Mateo County)
Top 20 census tracts by criteria

- % of households within the 100-yr floodplain
- Lowest median income
- NFIP policy count
National Flood Insurance Program (NFIP) Overview of policy cost and coverage

<table>
<thead>
<tr>
<th>Location</th>
<th>2011 average (SFHA vs non-SFHA rate)</th>
<th>2021 average (SFHA vs non-SFHA rate)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2011 average (SFHA vs non-SFHA rate)</td>
<td>2021 average (SFHA vs non-SFHA rate)</td>
</tr>
<tr>
<td></td>
<td>(policy count) (SFHA vs non-SFHA rate)</td>
<td>(policy count) (SFHA vs non-SFHA rate)</td>
</tr>
<tr>
<td>Belle Haven</td>
<td>$1387 / $829 (237 / 8) (57% / 0.1%)</td>
<td>$2751 / $620 (96 / 35) (21% / 3.3%)</td>
</tr>
<tr>
<td>Menlo Park</td>
<td>$1301 / $618 (700 / 146) (47% / 1.4%)</td>
<td>$1788 / $755 (387 / 151) (25% / 1.5%)</td>
</tr>
<tr>
<td>San Mateo County</td>
<td>$1336 / $613 (4654 / 2393) (46% / 1%)</td>
<td>$2217 / $694 (1665 / 2185) (22% / 0.9%)</td>
</tr>
</tbody>
</table>

"% of households" indicates the estimated share of policy holders among total households in SFHA and nSFHA zones, respectively.
NFIP policy cost vs household median income

**NFIP Policy Cost (SFHA)**

- **Belle Haven**
- **Countywide**
- **Menlo Park**

**household median income**

- **Belle Haven**
- **Countywide**
- **Menlo Park**
Cost burden of Insurance

(Avg policy cost divided by household median income)

<table>
<thead>
<tr>
<th>SFHA Zone</th>
<th>SFHA</th>
<th>Non-SFHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belle Haven</td>
<td>3.7%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Menlo Park</td>
<td>1.1%</td>
<td>0.5%</td>
</tr>
<tr>
<td>San Mateo County</td>
<td>1.7%</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

Cost burden of SFHA policy greater than 3% of median income
Question for OneShoreline and Cities

Are there neighborhoods within San Mateo County, like Belle Haven in Menlo Park, with a disproportionately high insurance burden and adjacent high-value insured assets that may be candidates for a community-based flood insurance pilot project to reduce the insurance burden on families?
Bayfront Canal & Atherton Channel Flood Protection and Ecosystem Restoration Project

Since the last Board meeting:

- Following Menlo Park approvals, electricity to the Project was turned on by PG&E on 10/21.
- OneShoreline coordinated the first Flood Protection Joint Operations Workshop with staff from the National Wildlife Refuge, South Bay Salt Pond Restoration Project, and City of Redwood City.

Over the next month:

- Test, commission, and provide training of the system’s dewatering system and automated trash rack in coordination with the contractor, equipment manufacturers, and Project funding partners (cities of Menlo Park, Redwood City, Town of Atherton, and San Mateo County).
- Evaluate the observed groundwater infiltration to determine the rates and locations of infiltration in order to identify any needed mitigations.
2022 San Francisquito Creek Annual Pre-Winter Maintenance

• Annual maintenance walks of San Francisquito Creek, organized by the San Francisquito Creek Joint Powers Authority, occurred on September 13 and 14, in coordination with OneShoreline, cities of Menlo Park, East Palo Alto, and Palo Alto, Valley Water, and San Mateo County.

• Two locations within OneShoreline’s responsibility for maintenance were identified, due to overgrown vegetation choking the channel, approximately 300 feet upstream of the Newell Road bridge.
Colma Creek Citizens Advisory Committee Vacancy

• With the passing of Richard Irli, a lifelong SSF resident and long-standing member of the Colma Creek Citizens Advisory Committee, there is a vacancy for a OneShoreline Board-appointed “at large” member.

• We are reaching out to jurisdictions in the watershed and former applicants to the Committee for nominations with the goal to come back for approval of a new “at large” member at the December 12, 2022 Board meeting.
On 10/17, OneShoreline submitted comments on SFO’s Shoreline Protection Program Draft EIR:

Need for continued collaboration to align specific reaches of SFO’s project with efforts to the northwest and southeast, including:

• **Reach 16** – Landside Protection
• **Reach 1** – San Bruno Channel
• **Reaches 14 and 15** with OneShoreline’s Millbrae-Burlingame Shoreline Area Project

Draft EIR must fully consider impacts to water levels, habitat, and recreation along:

• the Bay shoreline of cities of SSF, Millbrae, Burlingame, and San Mateo and
• creeks and channels flowing to the Bay in SSF, San Bruno, Millbrae, and Burlingame
Welcome our newest Stanford Haas Center Fellow – Elisa Boles

• PhD Student in Civil and Environmental Engineering, focused on coastal fluid dynamics (fieldwork in tropical locations) and a passion for community-based climate adaptation planning

• Prior to Stanford: Undergraduate studies in Earth, Atmosphere and Planetary Science at MIT; Elisa researched El Niño events to Arctic ice melt

• Primary OneShoreline effort: Developing a countywide Map of Future Conditions to inform our planning guidance and projects
Next Scheduled Board meeting

November 14, 2022

4:00 p.m.