



# 2021 Multijurisdictional Local Hazard Mitigation Plan

## Volume 2—Planning Partner Annexes



October | 2021



TETRA TECH



# 2021 Multijurisdictional Local Hazard Mitigation Plan

October 2021

## PREPARED FOR

---

### County of San Mateo Department of Emergency Management

501 Winslow  
Redwood City, CA 94063

## PREPARED BY

---

### Tetra Tech

1999 Harrison St., Suite 500  
Oakland, CA 94612  
510-302-6300 | [tetrattech.com](http://tetrattech.com)

Tetra Tech Project #103s7389

\\ts121fs1\Data\EMCR\_Projects\California\SanMateoCounty\HMP\_2021\_103S7389\Plan Development\Plan Documents\2021-10\_Final\2021-10-18\_SanMateoHMP\_Vol2\_AdoptionDraft.docx



# CONTENTS

<b>Introduction.....</b>	<b>xviii</b>
Background.....	xviii
The Planning Partnership.....	xviii
Partner Annex Development.....	xxi
<b>1. San Mateo County .....</b>	<b>1-1</b>
1.1 Local Hazard Mitigation Planning Team.....	1-1
1.2 Jurisdiction Profile .....	1-2
1.3 Current Trends .....	1-5
1.4 Capability Assessment.....	1-7
1.5 Integration Review.....	1-14
1.6 Risk Assessment .....	1-17
1.7 Status of Previous Plan Actions .....	1-20
1.8 Hazard Mitigation Action Plan .....	1-30
1.9 Public Outreach.....	1-38
1.10 Information Sources Used for This Annex .....	1-40
1.11 Future Needs to Better Understand Risk/Vulnerability .....	1-41
<b>2. Town of Atherton .....</b>	<b>2-1</b>
2.1 Local Hazard Mitigation Planning Team.....	2-1
2.2 Jurisdiction Profile .....	2-1
2.3 Current Trends .....	2-2
2.4 Capability Assessment.....	2-3
2.5 Integration Review.....	2-9
2.6 Risk Assessment .....	2-10
2.7 Status of Previous Plan Actions .....	2-12
2.8 Hazard Mitigation Action Plan .....	2-14
2.9 Information Sources Used for This Annex .....	2-17
<b>3. City of Belmont .....</b>	<b>3-1</b>
3.1 Local Hazard Mitigation Planning Team.....	3-1
3.2 Jurisdiction Profile .....	3-2
3.3 Current Trends .....	3-2
3.4 Capability Assessment.....	3-3
3.5 Integration with Other Planning Initiatives.....	3-11
3.6 Risk Assessment .....	3-13
3.7 Status of Previous Plan Actions .....	3-15
3.8 Hazard Mitigation Action Plan .....	3-17
3.9 Public Outreach .....	3-23
3.10 Information Sources Used for This Annex.....	3-24
<b>4. City of Brisbane .....</b>	<b>4-1</b>
4.1 Hazard Mitigation Planning Team.....	4-1

4.2 Jurisdiction Profile .....	4-1
4.3 Current Trends .....	4-2
4.4 Capability Assessment .....	4-4
4.5 Integration Review .....	4-10
4.6 Risk Assessment .....	4-13
4.7 Status of Previous Plan Actions .....	4-15
4.8 Hazard Mitigation Action Plan .....	4-17
4.9 Public Outreach.....	4-20
4.10 Information Sources Used for This Annex .....	4-20
4.11 Future Needs to Better Understand Risk/Vulnerability .....	4-21
<b>5. City of Burlingame.....</b>	<b>5-1</b>
5.1 Local Hazard Mitigation Planning Team.....	5-1
5.2 Jurisdiction Profile .....	5-1
5.3 Current Trends .....	5-2
5.4 Capability Assessment .....	5-3
5.5 Integration with Other Planning Initiatives.....	5-9
5.6 Risk Assessment .....	5-10
5.7 Status of Previous Plan Actions .....	5-11
5.8 Hazard Mitigation Action Plan .....	5-13
5.9 Public Outreach.....	5-17
5.10 Information Sources Used for This Annex .....	5-17
<b>6. Town of Colma .....</b>	<b>6-1</b>
6.1 Local Hazard Mitigation Planning Team.....	6-1
6.2 Jurisdiction Profile .....	6-1
6.3 Current Trends .....	6-2
6.4 Capability Assessment.....	6-3
6.5 Integration with Other Planning Initiatives.....	6-10
6.6 Risk Assessment .....	6-11
6.7 Status of Previous Plan Actions .....	6-12
6.8 Hazard Mitigation Action Plan .....	6-14
6.9 Public Outreach.....	6-18
6.10 Information Sources Used for This Annex .....	6-19
<b>7. City of Daly City .....</b>	<b>7-1</b>
7.1 Local Hazard Mitigation Planning Team.....	7-1
7.2 Jurisdiction Profile .....	7-1
7.3 Current Trends .....	7-2
7.4 Capability Assessment.....	7-3
7.5 Integration Review .....	7-9
7.6 Risk Assessment .....	7-10
7.7 Status of Previous Plan Actions .....	7-11
7.8 Hazard Mitigation Action Plan .....	7-13
7.9 Public Outreach.....	7-17
7.10 Information Sources Used for This Annex .....	7-17

<b>8. City of East Palo Alto .....</b>	<b>8-1</b>
8.1 Local Hazard Mitigation Planning Team.....	8-1
8.2 Jurisdiction Profile .....	8-1
8.3 Current Trends .....	8-2
8.4 Capability Assessment .....	8-3
8.5 Integration with Other Planning Initiatives.....	8-9
8.6 Risk Assessment .....	8-10
8.7 Status of Previous Plan Actions .....	8-11
8.8 Hazard Mitigation Action Plan .....	8-12
8.9 Public Outreach.....	8-16
8.10 Information Sources Used for This Annex .....	8-17
<b>9. City of Foster City.....</b>	<b>9-1</b>
9.1 Local Hazard Mitigation Planning Team.....	9-1
9.2 Jurisdiction Profile .....	9-2
9.3 Current Trends .....	9-3
9.4 Capability Assessment .....	9-4
9.5 Integration Review .....	9-10
9.6 Risk Assessment .....	9-12
9.7 Status of Previous Plan Actions .....	9-14
9.8 Hazard Mitigation Action Plan .....	9-19
9.9 Public Outreach .....	9-25
9.10 Information Sources Used for This Annex.....	9-26
9.11 Future Needs to Better Understand Risk/Vulnerability .....	9-27
<b>10. City of Half Moon Bay.....</b>	<b>10-1</b>
10.1 Local Hazard Mitigation Planning Team.....	10-1
10.2 Jurisdiction Profile .....	10-1
10.3 Current Trends .....	10-3
10.4 Capability Assessment.....	10-4
10.5 Integration Review .....	10-10
10.6 Risk Assessment .....	10-11
10.7 Status of Previous Plan Actions .....	10-13
10.8 Hazard Mitigation Action Plan .....	10-14
10.9 Public Outreach.....	10-19
10.10 Information Sources Used for This Annex .....	10-19
10.11 Additional Comments .....	10-20
<b>11. Town of Hillsborough.....</b>	<b>11-1</b>
11.1 Local Hazard Mitigation Planning Team.....	11-1
11.2 Jurisdiction Profile .....	11-1
11.3 Current Trends .....	11-3
11.4 Capability Assessment.....	11-4
11.5 Integration Review .....	11-10
11.6 Risk Assessment .....	11-12
11.7 Status of Previous Plan Actions .....	11-13
11.8 Hazard Mitigation Action Plan .....	11-15

11.9 Public Outreach.....	11-22
11.10 Information Sources Used for This Annex .....	11-23
<b>12. City of Menlo Park .....</b>	<b>12-1</b>
12.1 Local Hazard Mitigation Planning Team.....	12-1
12.2 Jurisdiction Profile .....	12-1
12.3 Current Trends .....	12-3
12.4 Capability Assessment.....	12-4
12.5 Integration Review.....	12-16
12.6 Risk Assessment .....	12-19
12.7 Status of Previous Plan Actions .....	12-22
12.8 Hazard Mitigation Action Plan .....	12-27
12.9 Public Outreach.....	12-34
12.10 Information Sources Used for This Annex .....	12-35
<b>13. City of Millbrae .....</b>	<b>13-1</b>
13.1 Local Hazard Mitigation Planning Team.....	13-1
13.2 Jurisdiction Profile .....	13-1
13.3 Current Trends .....	13-2
13.4 Capability Assessment.....	13-3
13.5 Integration Review.....	13-12
13.6 Risk Assessment .....	13-13
13.7 Status of Previous Plan Actions .....	13-15
13.8 Hazard Mitigation Action Plan .....	13-16
13.9 Public Outreach.....	13-20
13.10 Information Sources Used for This Annex .....	13-20
<b>14. City of Pacifica .....</b>	<b>14-1</b>
14.1 Local Hazard Mitigation Planning Team.....	14-1
14.2 Jurisdiction Profile .....	14-1
14.3 Current Trends .....	14-2
14.4 Capability Assessment.....	14-4
14.5 Integration Review.....	14-10
14.6 Risk Assessment .....	14-11
14.7 Status of Previous Plan Actions .....	14-13
14.8 Hazard Mitigation Action Plan .....	14-15
14.9 Public Outreach.....	14-19
14.10 Information Sources Used for This Annex .....	14-19
14.11 Additional Comments .....	14-19
<b>15. Town of Portola Valley .....</b>	<b>15-1</b>
15.1 Local Hazard Mitigation Planning Team.....	15-1
15.2 Jurisdiction Profile .....	15-1
15.3 Current Trends .....	15-2
15.4 Capability Assessment.....	15-4
15.5 Integration Review.....	15-10
15.6 Risk Assessment .....	15-11



15.7 Status of Previous Plan Actions .....	15-13
15.8 Hazard Mitigation Action Plan .....	15-16
15.9 Public Outreach.....	15-24
15.10 Information Sources Used for This Annex .....	15-24
15.11 Future Needs to Better Understand Risk/Vulnerability .....	15-24
<b>16. City of Redwood City.....</b>	<b>16-1</b>
16.1 Local Hazard Mitigation Planning Team.....	16-1
16.2 Jurisdiction Profile .....	16-1
16.3 Current Trends .....	16-3
16.4 Capability Assessment.....	16-4
16.5 Integration Review .....	16-11
16.6 Risk Assessment .....	16-12
16.7 Status of Previous Plan Actions .....	16-14
16.8 Hazard Mitigation Action Plan .....	16-16
16.9 Information Sources Used for This Annex .....	16-21
<b>17. City of San Bruno .....</b>	<b>17-1</b>
17.1 Local Hazard Mitigation Planning Team.....	17-1
17.2 Jurisdiction Profile .....	17-1
17.3 Current Trends .....	17-2
17.4 Capability Assessment.....	17-3
17.5 Integration Review .....	17-9
17.6 Risk Assessment .....	17-10
17.7 Status of Previous Plan Actions .....	17-11
17.8 Hazard Mitigation Action Plan .....	17-16
17.9 Public Outreach.....	17-21
17.10 Information Sources Used for This Annex .....	17-21
17.11 Future Needs to Better Understand Risk/Vulnerability .....	17-21
17.12 Additional Comments .....	17-22
<b>18. City of San Carlos.....</b>	<b>18-1</b>
18.1 Local Hazard Mitigation Planning Team.....	18-1
18.2 Jurisdiction Profile .....	18-1
18.3 Current Trends .....	18-3
18.4 Capability Assessment.....	18-4
18.5 Integration Review .....	18-11
18.6 Risk Assessment .....	18-12
18.7 Status of Previous Plan Actions .....	18-14
18.8 Hazard Mitigation Action Plan .....	18-16
18.9 Public Outreach.....	18-20
18.10 Information Sources Used for This Annex .....	18-20
18.11 Future Needs to Better Understand Risk/Vulnerability .....	18-21
18.12 Additional Comments .....	18-21
<b>19. City of San Mateo.....</b>	<b>19-1</b>
19.1 Local Hazard Mitigation Planning Team .....	19-1

19.2 Jurisdiction Profile .....	19-2
19.3 Current Trends .....	19-3
19.4 Capability Assessment .....	19-4
19.5 Integration Review .....	19-10
19.6 Risk Assessment .....	19-12
19.7 Status of Previous Plan Actions .....	19-14
19.8 Hazard Mitigation Action Plan .....	19-17
19.9 Public Outreach .....	19-22
19.10 Information Sources Used for This Annex .....	19-23
19.11 Future Needs to Better Understand Risk/Vulnerability .....	19-24
<b>20. City of South San Francisco .....</b>	<b>20-1</b>
20.1 Local Hazard Mitigation Planning Team .....	20-1
20.2 Jurisdiction Profile .....	20-1
20.3 Current Trends .....	20-2
20.4 Capability Assessment .....	20-3
20.5 Integration Review .....	20-9
20.6 Risk Assessment .....	20-10
20.7 Status of Previous Plan Actions .....	20-11
20.8 Hazard Mitigation Action Plan .....	20-13
20.9 Public Outreach .....	20-18
20.10 Information Sources Used for This Annex .....	20-18
<b>21. Town of Woodside .....</b>	<b>21-1</b>
21.1 Local Hazard Mitigation Planning Team .....	21-1
21.2 Jurisdiction Profile .....	21-1
21.3 Current Trends .....	21-2
21.4 Capability Assessment .....	21-4
21.5 Integration Review .....	21-10
21.6 Risk Assessment .....	21-12
21.7 Status of Previous Plan Actions .....	21-13
21.8 Hazard Mitigation Action Plan .....	21-15
21.9 Information Sources Used for This Annex .....	21-18
21.10 Future Needs to Better Understand Risk/Vulnerability .....	21-19
21.11 Additional Comments .....	21-19
<b>22. Coastside County Water District .....</b>	<b>22-1</b>
22.1 Local Hazard Mitigation Planning Team .....	22-1
22.2 Jurisdiction Profile .....	22-1
22.3 Current Trends .....	22-2
22.4 Capability Assessment .....	22-2
22.5 Integration Review .....	22-6
22.6 Risk Assessment .....	22-7
22.7 Hazard Mitigation Action Plan .....	22-8
22.8 Public Outreach .....	22-10
22.9 Information Sources Used for This Annex .....	22-11

<b>23. Colma Fire Protection District .....</b>	<b>23-1</b>
23.1 Local Hazard Mitigation Planning Team.....	23-1
23.2 Jurisdiction Profile .....	23-1
23.3 Current Trends .....	23-2
23.4 Capability Assessment.....	23-2
23.5 Integration Review .....	23-6
23.6 Risk Assessment .....	23-6
23.7 Status of Previous Plan Actions .....	23-8
23.8 Hazard Mitigation Action Plan .....	23-9
23.9 Information Sources Used for This Annex .....	23-11
<b>24. Highlands Recreation District .....</b>	<b>24-1</b>
24.1 Local Hazard Mitigation Planning Team.....	24-1
24.2 Jurisdiction Profile .....	24-1
24.3 Current Trends .....	24-2
24.4 Capability Assessment.....	24-3
24.5 Integration Review .....	24-6
24.6 Risk Assessment .....	24-7
24.7 Status of Previous Plan Actions .....	24-9
24.8 Hazard Mitigation Action Plan .....	24-10
24.9 Public Outreach.....	24-12
24.10 Information Sources Used for This Annex .....	24-12
<b>25. Menlo Park Fire Protection District.....</b>	<b>25-1</b>
25.1 Local Hazard Mitigation Planning Team.....	25-1
25.2 Jurisdiction Profile .....	25-1
25.3 Current Trends .....	25-4
25.4 Capability Assessment.....	25-4
25.5 Integration Review .....	25-8
25.6 Risk Assessment .....	25-8
25.7 Hazard Mitigation Action Plan .....	25-10
25.8 Public Outreach.....	25-12
25.9 Information Sources Used for This Annex .....	25-12
<b>26. Midpeninsula Regional Open Space District.....</b>	<b>26-1</b>
26.1 Local Hazard Mitigation Planning Team.....	26-1
26.2 Jurisdiction Profile .....	26-1
26.3 Current Trends .....	26-2
26.4 Capability Assessment.....	26-3
26.5 Integration Review .....	26-6
26.6 Risk Assessment .....	26-6
26.7 Hazard Mitigation Action Plan .....	26-8
26.8 Information Sources Used for This Annex .....	26-11
<b>27. Mid-Peninsula Water District .....</b>	<b>27-1</b>
27.1 Local Hazard Mitigation Planning Team.....	27-1
27.2 Jurisdiction Profile .....	27-1

27.3 Current Trends .....	27-2
27.4 Capability Assessment .....	27-3
27.5 Integration Review .....	27-6
27.6 Risk Assessment .....	27-7
27.7 Status of Previous Plan Actions .....	27-8
27.8 Hazard Mitigation Action Plan .....	27-9
27.9 Information Sources Used for This Annex .....	27-11
<b>28. Montara Water &amp; Sanitary District.....</b>	<b>28-1</b>
28.1 Local Hazard Mitigation Planning Team.....	28-1
28.2 Jurisdiction Profile .....	28-1
28.3 Current Trends .....	28-3
28.4 Capability Assessment.....	28-3
28.5 Integration Review .....	28-6
28.6 Risk Assessment .....	28-7
28.7 Hazard Mitigation Action Plan .....	28-8
28.8 Information Sources Used for This Annex .....	28-11
<b>29. North Coast County Water District.....</b>	<b>29-1</b>
29.1 Local Hazard Mitigation Planning Team.....	29-1
29.2 Jurisdiction Profile .....	29-1
29.3 Current Trends .....	29-3
29.4 Capability Assessment.....	29-3
29.5 Integration Review .....	29-6
29.6 Risk Assessment .....	29-7
29.7 Status of Previous Plan Actions .....	29-8
29.8 Hazard Mitigation Action Plan .....	29-9
29.9 Information Sources Used for This Annex .....	29-11
29.10 Future Needs to Better Understand Risk/Vulnerability .....	29-11
<b>30. San Mateo Community College District.....</b>	<b>30-1</b>
30.1 Local Hazard Mitigation Planning Team.....	30-1
30.2 Jurisdiction Profile .....	30-1
30.3 Current Trends .....	30-3
30.4 Capability Assessment.....	30-3
30.5 Integration Review .....	30-8
30.6 Risk Assessment .....	30-11
30.7 Status of Previous Plan Actions .....	30-12
30.8 Hazard Mitigation Action Plan .....	30-15
30.9 Information Sources Used for This Annex .....	30-18
30.10 Future Needs to Better Understand Risk/Vulnerability .....	30-18
30.11 Additional Comments .....	30-18
<b>31. San Mateo County Flood &amp; Sea Level Rise Resiliency District .....</b>	<b>31-1</b>
31.1 Hazard Mitigation Planning Team .....	31-1
31.2 Jurisdiction Profile .....	31-1
31.3 Current Trends .....	31-3

31.4 Capability Assessment.....	31-3
31.5 Integration Review.....	31-8
31.6 Risk Assessment .....	31-11
31.7 Hazard Mitigation Action Plan .....	31-14
31.8 Public Outreach.....	31-22
31.9 Information Sources Used for This Annex .....	31-23
<b>32. San Mateo County Harbor District .....</b>	<b>32-1</b>
32.1 Local Hazard Mitigation Planning Team.....	32-1
32.2 Jurisdiction Profile .....	32-1
32.3 Current Trends .....	32-4
32.4 Capability Assessment.....	32-4
32.5 Integration Review.....	32-7
32.6 Risk Assessment .....	32-8
32.7 Hazard Mitigation Action Plan .....	32-10
32.8 Public Outreach.....	32-11
32.9 Information Sources Used for This Annex .....	32-11
<b>33. San Mateo County Office of Education.....</b>	<b>33-1</b>
33.1 Hazard Mitigation Planning Team.....	33-1
33.2 Jurisdiction Profile .....	33-1
33.3 Current Trends .....	33-2
33.4 Capability Assessment.....	33-2
33.5 Integration Review.....	33-6
33.6 Risk Assessment .....	33-6
33.7 Hazard Mitigation Action Plan .....	33-7
33.8 Information Sources Used for This Annex .....	33-10
<b>34. San Mateo Resource Conservation District .....</b>	<b>34-1</b>
34.1 Local Hazard Mitigation Planning Team.....	34-1
34.2 Jurisdiction Profile .....	34-1
34.3 Current Trends .....	34-2
34.4 Capability Assessment.....	34-2
34.5 Integration Review.....	34-7
34.6 Risk Assessment .....	34-9
34.7 Hazard Mitigation Action Plan .....	34-11
34.8 Information Sources Used for This Annex .....	34-17
34.9 Additional Comments .....	34-18
<b>35. Westborough Water District .....</b>	<b>35-1</b>
35.1 Local Hazard Mitigation Planning Team.....	35-1
35.2 Jurisdiction Profile .....	35-1
35.3 Current Trends .....	35-2
35.4 Capability Assessment.....	35-3
35.5 Integration Review.....	35-7
35.6 Risk Assessment .....	35-8
35.7 Status of Previous Plan Actions .....	35-9

35.8 Hazard Mitigation Action Plan .....	35-10
35.9 Information Sources Used for This Annex .....	35-13
35.10 Future Needs to Better Understand Risk/Vulnerability .....	35-13
<b>36. Woodside Fire Protection District.....</b>	<b>36-1</b>
36.1 Local Hazard Mitigation Planning Team.....	36-1
36.2 Jurisdiction Profile .....	36-1
36.3 Current Trends .....	36-3
36.4 Capability Assessment.....	36-3
36.5 Integration Review.....	36-7
36.6 Risk Assessment .....	36-9
36.7 Status of Previous Plan Actions .....	36-10
36.8 Hazard Mitigation Action Plan .....	36-11
36.9 Public Outreach.....	36-14
36.10 Information Sources Used for This Annex .....	36-14

## Appendices

---

- Appendix A. Planning Partner Expectations
- Appendix B. Procedures for Linking to Hazard Mitigation Plan
- Appendix C. Annex Instructions and Templates

## ACRONYMS

The following acronyms are used throughout the annexes in this volume:

- AB—Assembly Bill
- AFG—Assistance for Firefighter Grant
- ACWA—Association of California Water Agencies
- BART—Bay Area Rapid Transit
- BAWSCA—Bay Area Water Supply & Conservation Agency
- BCEGS—Building Code Effectiveness Grading Schedule
- BMP—best management practice
- BRIC—Building Resilient Infrastructure and Communities
- C/CAG—City/County Association of Governments of San Mateo County
- Cal OES—California Office of Emergency Services
- CAL FIRE—California Department of Forestry and Fire Protection
- CBC—city building code
- C&CB—Core Capacity and Capability Building funding under BRIC
- CCFD—Central County Fire Department
- CCR—California Code of Regulations
- CCWD—Coastside County Water District
- CDAA—California Disaster Assistance Act
- CDC—Center for Disease Control
- CDFA—California Department of Food and Agriculture
- CDD—Community Development Department
- CEQA—California Environmental Quality Act
- CERPP—Citizens' Emergency Response and Preparedness Program
- CERT—Community Emergency Response Team
- CFPD—Colma Fire Protection District
- CFR—Code of Federal Regulations
- CIP—capital improvement program
- CMAP—Climate Mitigation and Adaptation Plan
- COOP/COG—continuity of operations plan and continuity of government
- CPAW—Community Partners for Wildfire Assistance
- CSM—College of San Mateo
- CWPP—community wildfire protection plan
- CWSRF—EPA Clean Water State Revolving Fund
- DEM—San Mateo County Department of Emergency Management
- DWR—Department of Water Resources
- EAP—emergency action plan
- EIR—Environmental Impact Report
- EMID—Estero Municipal Improvement District
- EMPG—Emergency Management Performance Grant
- EOC—emergency operations center
- EOP—emergency operations plan
- EPA—Environmental Protection Agency
- FEMA—Federal Emergency Management Agency
- FMA—Flood Mitigation Assistance Grant Program
- FMAG—Fire Management Assistance Grants

- FPD—fire protection district
- FSLRRD—Flood & Sea Level Rise Resiliency District
- GHG—greenhouse gas
- GIS—geographic information system
- HMA—Hazard Mitigation Assistance
- HMB—Half Moon Bay
- HMGP—Hazard Mitigation Grant Program
- HMP—hazard mitigation plan
- HRD—Highlands Recreation District
- HSGP—Homeland Security Grant Program
- IBC—International Building Code
- ISO—Insurance Services Office (insurance underwriter)
- JPA—joint powers authority
- LCP—Local Coastal Program
- LHMP—local hazard mitigation plan
- LUP—land use plan
- MJLHMP—Multijurisdictional Local Hazard Mitigation Plan
- MPFPD—Menlo Park Fire Protection District
- MPWD—Mid-Peninsula Water District
- MRP—Municipal Regional Stormwater Permit
- MWSD—Montara Water and Sanitary District
- NCCWD—North Coast County Water District
- NEPA—National Environmental Policy Act
- NFIP—National Flood Insurance Program
- NIMS—National Incident Management System
- NOAA—National Oceanic and Atmospheric Administration
- NRCS—Natural Resources Conservation Service
- OPC—California Ocean Protection Council
- POC—point of contact
- RCD—resource conservation district
- RHNA—Regional Housing Needs Allocation
- RICAPS—Regionally Integrated Climate Action Planning Suite
- SAFER—Staffing for Adequate Fire and Emergency Response Grants
- SB—Senate Bill
- SCC—California State Coastal Conservancy
- SFHA—special flood hazard area
- SFO—San Francisco International Airport
- SFPUC—San Francisco Public Utilities Commission
- SLR—sea-level rise
- SMCCD—San Mateo Community College District
- SMCFire or SMCFD—San Mateo County Fire Department
- SMCO—San Mateo County
- SMRCD—San Mateo Resource Conservation District
- SSF—South San Francisco
- SSFFD—South San Francisco Fire Department
- SSMP—Sanitary Sewer Management Plan
- SWRCB—California State Water Resources Control Board
- TEP—Training and Exercise Program
- THIRA—Threat & Hazard Identification & Risk Assessment
- TMDL—total maximum daily load
- UASI—Urban Area Security Initiative
- USDA—U.S. Department of Agriculture



- UWMP—urban water management plan
- WFPD—Woodside Fire Protection District
- WUI—wildland urban interface
- WWD—Westborough Water District

# INTRODUCTION

---

## BACKGROUND

The Federal Emergency Management Agency (FEMA) encourages multi-jurisdictional planning for hazard mitigation. All participating jurisdictions must meet the requirements of Chapter 44 of the Code of Federal Regulations (44 CFR):

“Multi-jurisdictional plans (e.g., watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process and has officially adopted the plan.” (Section 201.6(a)(4)).

For the *San Mateo County 2021 Multi-Jurisdictional Local Hazard Mitigation Plan*, a planning partnership was formed to leverage resources and to meet requirements of the federal Disaster Mitigation Act for as many eligible local governments as possible. The Disaster Mitigation Act defines a local government as follows:

“Any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, or Alaska Native village or organization; and any rural community, unincorporated town or village, or other public entity.”

In addition, federally recognized tribes may participate in local/tribal multi-jurisdictional plans as long as the requirements of Section 201.7 of 44 CFR are met for tribal components of the plan.

Two types of planning partners participated in this process for the *2021 Multi-Jurisdictional Local Hazard Mitigation Plan*, with distinct needs and capabilities:

- Incorporated municipalities
- Special districts

Each participating planning partner prepared a jurisdiction-specific annex to this plan. These annexes, as well as information on the process by which they were created, are contained in this volume.

## THE PLANNING PARTNERSHIP

### Initial Solicitation and Letters of Intent

A planning team made up of San Mateo County and consultant staff solicited the participation of all eligible municipalities and special districts at the outset of this project. A kickoff meeting was held on January 5, 2021, to identify potential stakeholders and planning partners for this process. The purpose of the meeting was to introduce

the planning process to jurisdictions in the County that could have a stake in the outcome of the planning effort. All eligible local governments in the planning area were invited to attend. The goals of the meeting were as follows:

- Provide an overview of the Disaster Mitigation Act.
- Review the *2016 San Mateo County Hazard Mitigation Plan* and planning partnership
- Outline the work plan for this hazard mitigation plan.
- Describe the benefits of multi-jurisdictional planning.
- Outline planning partner expectations.
- Solicit planning partners.
- Solicit volunteers/recommendations for the steering committee.

Local governments wishing to join the planning effort were asked to provide the planning team with a “letter of intent to participate” that agreed to the planning partner expectations (see Appendix A) and designated lead and alternate points of contact for their jurisdiction. In all, the planning team received formal commitment from 37 planning partners in addition to the County. A map showing the location of participating special purpose districts is provided at the end of this introduction. Maps showing risk assessment results for participating cities are provided in the individual annexes for each city. Risk assessment maps for all planning areas countywide are provided in Volume 1 of this hazard mitigation plan.

## Planning Partner Expectations

The planning team developed the following list of planning partner expectations, which were provided and discussed at the kickoff meeting (see Appendix A for details):

- Complete a “letter of intent to participate.”
- Designate lead and primary points of contact for this effort.
- Support and participate in the selection and function of the Steering Committee.
- Provide support required to implement the public involvement strategy.
- Participate in the process through opportunities such as:
  - Steering Committee meetings
  - Public meetings or open houses
  - Workshops and planning partner specific training sessions
  - Public review and comment periods prior to adoption.
- Attend the mandatory Phase 3 jurisdictional annex workshop.
- Complete the jurisdictional annex.
- Perform a “consistency review” of all technical studies, plans and ordinances specific to hazards.
- Review the risk assessment and identify hazards and vulnerabilities specific to the jurisdiction.
- Review and determine if the mitigation recommendations chosen in Volume 1 will meet the needs of the jurisdiction.

- Create an action plan that identifies each project, who will oversee the task, how it will be financed, and when it is estimated to occur.
- Formally adopt the hazard mitigation plan.

By adopting this plan, each planning partner also agrees to the plan implementation and maintenance protocol established in Volume 1. Failure to meet these criteria may result in a partner being dropped from the partnership by the Steering Committee, and thus losing eligibility under the scope of this plan.

## Final Coverage

Two jurisdictions that submitted letters of intent to participate withdrew from the planning process prior to its completion. The rest fully met the participation requirements for this update, completed an annex template, and will be covered by the updated hazard mitigation plan upon FEMA approval and adoption by their governing bodies. This final coverage will apply to the following jurisdictions:

- **Cities/County**
  - Town of Atherton
  - City of Belmont
  - City of Brisbane
  - City of Burlingame
  - Town of Colma
  - City of Daly City
  - City of East Palo Alto
  - City of Foster City
  - City of Half Moon Bay
  - Town of Hillsborough
  - City of Menlo Park
  - City of Millbrae
  - City of Pacifica
  - Town of Portola Valley
  - City of Redwood City
  - City of San Bruno
  - City of San Carlos
  - City of San Mateo
  - City of South San Francisco
  - Town of Woodside
  - San Mateo County
- **Special Purpose Districts**
  - Coastside County Water District
  - Colma Fire Protection District
  - Highlands Recreation District
  - Menlo Park Fire Protection District
  - Midpeninsula Regional Open Space District
  - Mid-Peninsula Water District
  - Montara Water & Sanitary District
  - North Coast County Water District
  - San Mateo Community College District
  - San Mateo County Flood & Sea Level Rise Resiliency District
  - San Mateo County Harbor District
  - San Mateo County Office of Education
  - San Mateo Resource Conservation District
  - Westborough Water District
  - Woodside Fire Protection District

## Linkage Procedures

Eligible local jurisdictions that did not participate in development of this multi-jurisdictional plan may comply with Disaster Mitigation Act requirements by linking to this plan following procedures outlined in Appendix B.

## **PARTNER ANNEX DEVELOPMENT**

### **Capability Assessment**

All participating jurisdictions compiled an inventory and analysis of existing authorities and capabilities called a “capability assessment.” A capability assessment creates an inventory of a jurisdiction’s mission, programs, and policies, and evaluates its capacity to carry them out. This assessment identifies potential gaps in the jurisdiction’s capabilities. If the capability assessment identified an opportunity to add a missing core capability or expand an existing one, then doing so has been selected as an action in the jurisdiction’s action plan. The sections below describe the specific capabilities evaluated under the assessment.

#### **Planning and Regulatory Capabilities**

Jurisdictions can develop policies and programs and implement rules and regulations to protect and serve residents. Local policies are typically identified in planning documents, implemented via a local ordinance, and enforced by a governmental body. Because the planning and regulatory authority of municipal partners is generally broader than that of special-purpose districts, the assessment of these capabilities is more detailed for the municipal partners.

#### **Development and Permitting Capability**

This set of capabilities is not applicable to special purpose districts and was assessed only for municipal partners (cities and the County). Municipal jurisdictions regulate land use through the adoption and enforcement of zoning, subdivision, and land development ordinances, building codes, building permit ordinances, floodplain, and stormwater management ordinances. When effectively prepared and administered, these regulations can lead to hazard mitigation.

#### **Fiscal Capabilities**

Assessing a jurisdiction’s fiscal capability provides an understanding of the ability to fulfill the financial needs associated with hazard mitigation projects. This assessment identifies both outside resources, such as grant-funding eligibility, and local jurisdictional authority to generate internal financial capability, such as through impact fees.

#### **Administrative and Technical Capabilities**

Without appropriate personnel, the mitigation strategy may not be implemented. Administrative and technical capabilities focus on the availability of personnel resources responsible for implementing all the facets of hazard mitigation. These resources include technical experts, such as engineers and scientists, as well as personnel with capabilities that may be found in multiple departments, such as grant writers.

#### **Education and Outreach Capability**

Regular engagement with the public on issues regarding hazard mitigation provides an opportunity to directly interface with community members. Assessing this outreach and education capability illustrates the connection between the government and community members, which opens a two-way dialogue that can result in a more resilient community based on education and public engagement.

## **Compliance with National Flood Insurance Program Requirements**

The National Flood Insurance Program (NFIP) is not available to special purpose districts, so this set of capabilities was assessed only for municipal partners (cities and the County). Flooding is the costliest natural hazard in the United States and homeowners face increasingly high flood insurance premiums. Community participation in the NFIP opens up opportunity for additional grant funding associated specifically with flooding issues. Assessment of a jurisdiction's current NFIP status and compliance provides a greater understanding of the local flood management program, opportunities for improvement, and available grant funding opportunities.

## **Participation and Classification in Other Programs**

Other programs, such as the Community Rating System, Storm/Tsunami Ready, and Firewise USA, can enhance a jurisdiction's ability to mitigate, prepare for, and respond to natural hazards. These programs indicate a jurisdiction's desire to go beyond minimum requirements set forth by local, state, and federal regulations in order to create a more resilient community. These programs complement each other by focusing on communication, mitigation, and community preparedness to save lives and minimize the impact of natural hazards on a community. The programs reviewed here are applicable to municipal partners only so they are not included in the capability assessments for special-purpose districts.

## **Adaptive Capacity**

An adaptive capacity assessment evaluates a jurisdiction's ability to anticipate impacts from future conditions. By looking at public support, technical adaptive capacity, and other factors, jurisdictions identify their core capability for resilience against issues such as sea level rise. The adaptive capacity assessment provides jurisdictions with an opportunity to identify areas for improvement by ranking their capacity high, medium, or low.

## **Mitigation Action Plan Development**

### **Risk Ranking**

In the risk-ranking exercise, each planning partner was asked to review the ranked risk specifically for its jurisdiction, based on the impact on its population and/or facilities. Municipalities based this ranking on probability of occurrence and the potential impact on people, property, and the economy. Special purpose districts based this ranking on probability of occurrence and the potential impact on their constituency, their vital facilities, and the facilities' functionality after an event. Additionally, to support the social equity lens for this plan update, a social vulnerability ranking factor and weighting was established to support planning partners wishing to apply an equity lens to their risk ranking and project identification and prioritization. The risk-ranking methodology for partner annexes was the same as that used for the countywide risk ranking, as described in Volume 1.

The objectives of this exercise were to familiarize the partnership with how to use the risk assessment as a tool to support other planning and hazard mitigation processes and to help prioritize types of mitigation actions that should be considered. Hazards that were ranked as "high" and "medium" for each jurisdiction as a result of this exercise were considered to be priorities for identifying mitigation actions, although jurisdictions also identified actions to mitigate "low" ranked hazards, as appropriate.

## **Information Reviewed to Develop Action Plan**

The tool kits were used during the workshops and in follow-up work conducted by the planning partners. A large portion of the workshop focused on how the tool kit should be used to develop the mitigation action plan. Planning partners were specifically asked to review the following to assist in the identification of actions:

- The Jurisdiction’s Capability Assessment—Reviewed to identify capabilities that the jurisdiction does not currently have but should consider pursuing or capabilities that should be revisited and updated to include best available information; also reviewed to determine how existing capabilities can be leveraged to increase or improve hazard mitigation in the jurisdiction.
- The Jurisdiction’s National Flood Insurance Program Compliance Table—Reviewed to identify opportunities to increase floodplain management capabilities.
- The Jurisdiction’s Review of Its Adaptive Capacity for Climate Change—Reviewed to identify ways to leverage or continue to improve existing capacities and to improve understanding of other capacities.
- The Jurisdiction’s Identified Opportunities for Future Integration—Reviewed to identify specific integration actions to be included in the mitigation strategy.
- Jurisdiction-Specific Vulnerabilities—Reviewed to identify actions that will help reduce known vulnerabilities.
- The Mitigation Best Practices Catalog—Reviewed to identify actions that the jurisdiction should consider including in its action plan.
- Public Input—Reviewed to identify potential actions and community priorities.

## **Action Plan Prioritization**

The actions recommended in the action plan were prioritized based on the following factors:

- Cost and availability of funding
- Benefit, based on likely risk reduction to be achieved
- Number of plan objectives achieved
- Timeframe for project implementation
- Eligibility for grant funding programs

Two priorities were assigned for each action:

- A high, medium, or low priority for implementing the action (with and without considerations of social equity)
- A high, medium, or low priority for pursuing grant funding for the action.

The sections below describe the analysis of benefits and costs and the assignment of the two priority ratings.

## ***Benefit/Cost Review***

The action plan must be prioritized according to a benefit/cost analysis of the proposed actions (44 CFR, Section 201.6(c)(3)(iii)). For this hazard mitigation plan, a qualitative benefit-cost review was performed for each action by assigning ratings for benefit and cost as follows:

- **Cost:**
  - **High**—Existing funding will not cover the cost of the action; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).
  - **Medium**—The action could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the action would have to be spread over multiple years.
  - **Low**—The action could be funded under the existing budget. The action is part of or can be part of an ongoing existing program.
- **Benefit:**
  - **High**—Action will provide an immediate reduction of risk exposure for life and property.
  - **Medium**—Action will have a long-term impact on the reduction of risk exposure for life and property, or action will provide an immediate reduction in the risk exposure for property.
  - **Low**—Long-term benefits of the action are difficult to quantify in the short term.

To assign priorities, each action with a benefit rating equal to or higher than its cost rating (such as high benefit/medium cost, medium benefit/medium cost, medium benefit/low cost, etc.) was considered to be cost-beneficial. This is not the detailed level of benefit/cost analysis required for some FEMA hazard-related grant programs. Such analysis would be performed at the time a given action is being submitted for grant funding.

### ***Implementation Priority***

Implementation priority ratings were assigned as follows:

- **High Priority**—An action that meets multiple objectives, has benefits that exceed costs, and has a secured source of funding. Action can be completed in the short term (1 to 5 years).
- **Medium Priority**—An action that meets multiple objectives, has benefits that exceed costs, and is eligible for funding though no funding has yet been secured for it. Action can be completed in the short term (1 to 5 years), once funding is secured. Medium-priority actions become high-priority actions once funding is secured.
- **Low Priority**—An action that will mitigate the risk of a hazard, has benefits that do not exceed the costs or are difficult to quantify, has no secured source of funding, and is not eligible for any known grant funding. Action can be completed in the long term (1 to 10 years). Low-priority actions may be eligible for grant funding from programs that have not yet been identified.

### ***Social Equity Implementation Priority***

For planning partners that chose to apply an equity lens to their prioritization scheme, the following parameters were established:

- **High Priority**—The mitigation action is designed to reduce harm to multiple socially vulnerable groups in the County from one or more of the hazards identified in the hazard mitigation plan.
- **Medium Priority**—The mitigation action is designed to reduce harm to a single socially vulnerable population in the County from at least one hazard identified in the hazard mitigation plan.
- **Low Priority**—The mitigation action fails to advance social equity in any measurable way in the County



## ***Grant Pursuit Priority***

Grant pursuit priority ratings were assigned as follows:

- **High Priority**—An action that meets identified grant eligibility requirements, has high benefits, and is listed as high or medium implementation priority; local funding options are unavailable or available local funds could be used instead for actions that are not eligible for grant funding.
- **Medium Priority**—An action that meets identified grant eligibility requirements, has medium or low benefits, and is listed as medium or low implementation priority; local funding options are unavailable.
- **Low Priority**—An action that has not been identified as meeting any grant eligibility requirements.

## **Classification of Actions**

Each recommended action was classified based on the hazard it addresses and the type of mitigation it involves. Mitigation types used for this classification are as follows:

- **Prevention**—Government, administrative or regulatory actions that influence the way land and buildings are developed to reduce hazard losses. Includes planning and zoning, floodplain laws, capital improvement programs, open space preservation, and stormwater management regulations.
- **Property Protection**—Modification of buildings or structures to protect them from a hazard or removal of structures from a hazard area. Includes acquisition, elevation, relocation, structural retrofit, storm shutters, and shatter-resistant glass.
- **Public Education and Awareness**—Actions to inform residents and elected officials about hazards and ways to mitigate them. Includes outreach projects, real estate disclosure, hazard information centers, and school-age and adult education.
- **Natural Resource Protection**—Actions that minimize hazard loss and preserve or restore the functions of natural systems. Includes sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, wetland restoration and preservation, and green infrastructure.
- **Emergency Services**—Actions that protect people and property during and immediately after a hazard event. Includes warning systems, emergency response services, and the protection of essential facilities.
- **Structural Projects**—Actions that involve the construction of structures to reduce the impact of a hazard. Includes dams, setback levees, floodwalls, retaining walls, and safe rooms.
- **Climate Resiliency**—Actions that incorporate methods to mitigate and/or adapt to the impacts of climate change. Includes aquifer storage and recovery activities, incorporating future conditions projections in project design or planning, or actions that specifically address jurisdiction-specific climate change risks, such as sea-level rise or urban heat island effect.
- **Community Capacity Building**—Actions that increase or enhance local capabilities to adjust to potential damage, to take advantage of opportunities, or to respond to consequences. Includes staff training, memorandums of understanding, development of plans and studies, and monitoring programs.

## Annex-Preparation Process

### Templates

Templates were created to help the planning partners prepare their jurisdiction-specific annexes. Separate templates were created for the two types of jurisdictions participating in this plan. The templates were created so that all criteria of Section 201.6 of 44 CFR for local governments would be met based on the partners' capabilities and mode of operation. Separate templates were available for partners updating a previous hazard mitigation plan and those developing a first-time hazard mitigation plan. These templates were deployed in three phases during the course of this plan update process. These phases are described as follows:

- **Phase 1**—Profile, Trends, Previous Plan Status
  - Deployed: February 19, 2021
  - Due: March 19, 2021
- **Phase 2**—Capability Assessment and Information Sources
  - Deployed: April 2, 2021
  - Due: May 21, 2021
- **Phase 3**—Risk Ranking, Action Plan, and Information Sources
  - Deployed: June 11, 2021
  - Workshops: June 14 – 16, 2021
  - Due: July 23, 2021

The templates were set up to lead all partner through steps to generate Disaster Mitigation Act-required elements specific to their jurisdictions. The templates and their instructions are included in Appendix C of this volume.

### Tool Kit

Each planning partner was provided with a tool kit to assist in completing the annex template and developing an action plan. The tool kits contained the following:

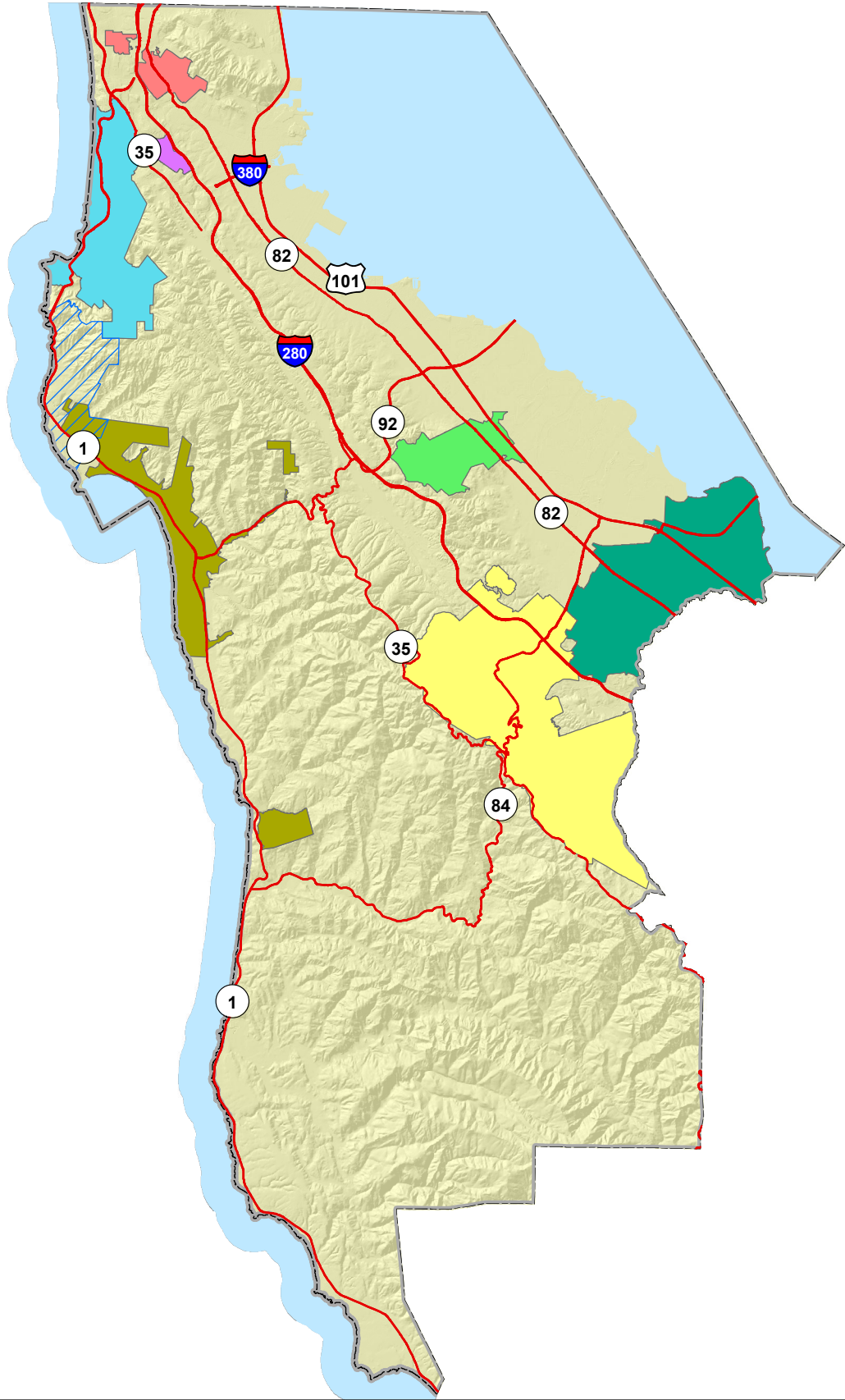
- The *2016 San Mateo County Hazard Mitigation Plan* annexes
- A catalog of mitigation best practices and adaptive capacity
- The guiding principle, goals and objectives developed for the update to the plan
- A list of jurisdiction-specific issues noted during the risk assessment
- Information on the FEMA Hazard Mitigation Assistance grant program
- Information on past hazard events that have impacted the planning area
- County-wide and jurisdiction-specific maps for hazards of concern
- Special district boundary maps showing the sphere of influence for each special purpose district partner
- The risk assessment results developed for this plan
- Information on climate change and expected impacts in the planning area

- Jurisdiction-specific annex templates, with instructions for completing them
- FEMA guidance on plan integration
- The results of a public survey conducted as part of the public involvement strategy
- A copy of the presentation that was given at the workshop sessions.











## **Workshop**

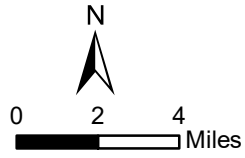
All partners were required to participate in a technical assistance workshop, where key elements of the template were discussed and the templates were subsequently completed by a designated point of contact for each partner and a member of the planning team. Multiple online workshops were held the week of June 14, 2021 and attended by at least one representative from each planning partner, addressed the following topics:

- The templates and the tool kit
- Natural events history
- Jurisdiction-specific issues
- Risk ranking
- Status of prior actions
- Developing your action plan
- Cost/benefit review
- Prioritization protocol
- Next steps.



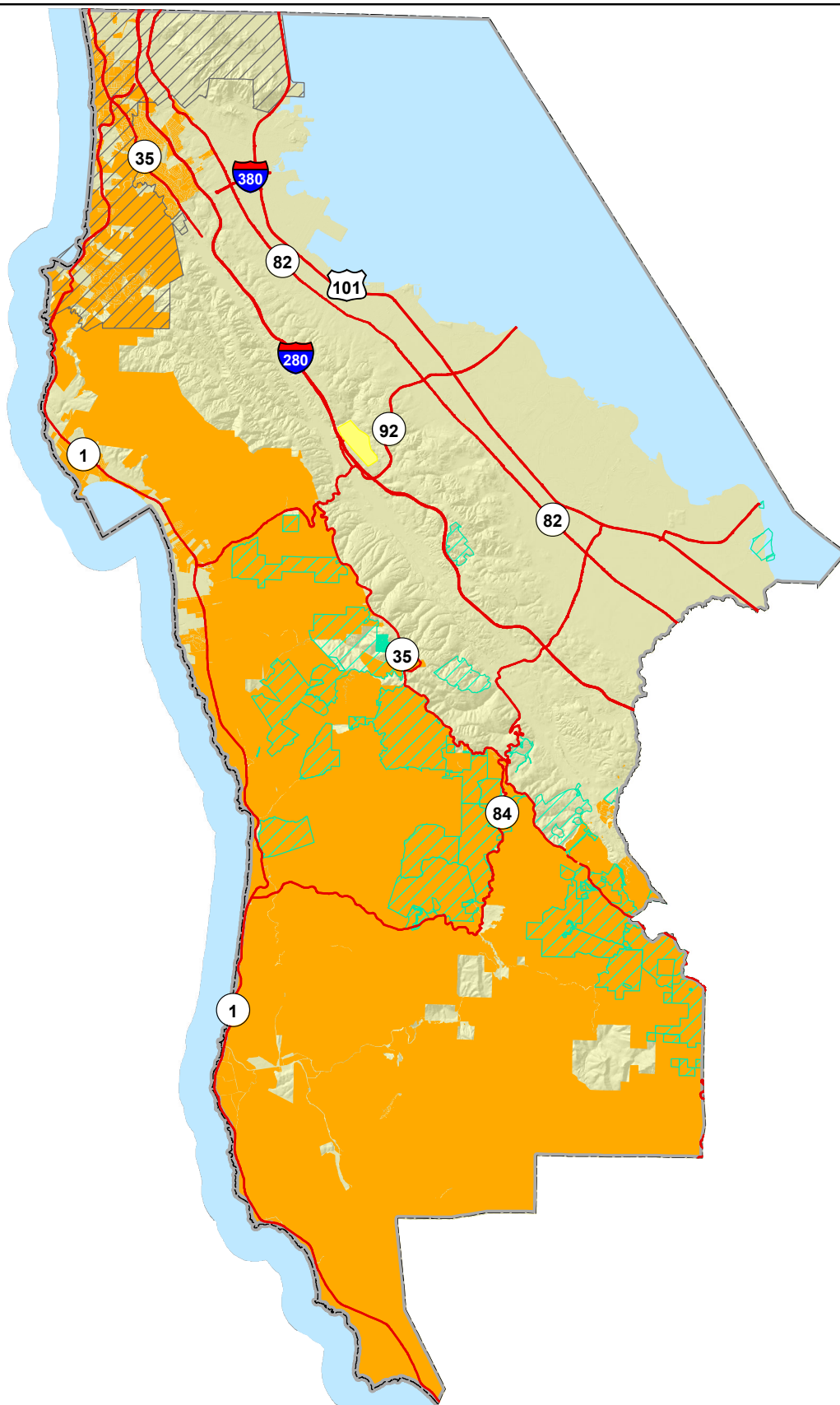
### Special Purpose District Planning Partners, 1 of 2

- |   |  |   |
|---|--|---|
|  Highways        |  Colma FPD      |  Coastside County WD   |
|  County Boundary |  Menlo Park FPD |  Mid-Peninsula WD      |
|   |  Woodside FPD   |  North Coast County WD |
|   |  Montara WSD    |  Westborough WD        |

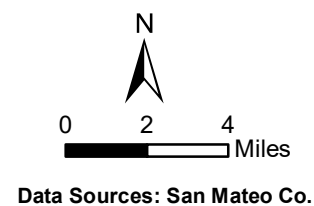


Data Sources: San Mateo Co.

San Mateo County Community College District, San Mateo County Flood and Sea Level Rise Resiliency District, San Mateo County Harbor District, and San Mateo County Office of Education extend countywide.



### Special Purpose District Planning Partners, 2 of 2





# 20. CITY OF SOUTH SAN FRANCISCO

## 20.1 LOCAL HAZARD MITIGATION PLANNING TEAM

### Primary Point of Contact

Ken Anderson Sr., Emergency Services Manager  
480 N. Canal Street  
South San Francisco, CA 94080  
650-829-3950  
[ken.anderson@ssf.net](mailto:ken.anderson@ssf.net)

### Alternate Point of Contact

Matt Powleson, Public Works Supervisor  
550 N. Canal Street  
South San Francisco, CA 94080  
650-829-6652  
[matt.powleson@ssf.net](mailto:matt.powleson@ssf.net)

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 20-1.

Table 20-1. Local Mitigation Planning Team Members	
Name	Title
Ken Anderson Sr.	Emergency Services Manager
Matt Powleson	Public Works Supervisor
Mike Futrell	City Manager
David Bockhaus	Deputy Director of Public Works
Alex Greenwood	ECD Director
Greg Mediati	Parks and Recreation Deputy Director
Matt Samson	SSFFD Deputy Fire Chief

## 20.2 JURISDICTION PROFILE

### 20.2.1 Location and Features

Located in San Mateo County, California. Situated in the San Francisco Bay Area, just south of the City of San Francisco, the City is 9.5 square miles. South City borders the cities of San Bruno to the South, and Daly City and the Town of Colma to the North.

South San Francisco has warm, dry summers and cool, relatively wet winters. South San Francisco is frequently windy. Summer is the windiest with winds averaging 13.6 mph. The City gets an average of 20 inches of rain per year. And its warmest days come in July averaging 71 degrees.

## **20.2.2 History**

In 1890, after Charles Lux’s death, his heirs sold the land to Peter Iler of Omaha, who was representing meat packer Gustavus F. Swift. Swift selected the site as South San Francisco, a West Coast stockyard and marketplace, similar to his operations in South Omaha and South Chicago.

Needing money, Swift aligned with several Chicago capitalists and formed two joint stock corporations: South San Francisco Land and Improvement Company, and the Western Meat Company. The driving force behind the Land and Improvement Company was William J. Martin whose efforts to attract industries and workers to South San Francisco led to the city’s growth and its incorporation on September 19, 1908. Major industries continued to locate in South San Francisco and two world wars brought a transition to shipbuilding. The Shaw-Batcher shipyard built cargo ships and between wars it built barges and dredges and fabricated pipe, becoming one of the pioneers of automatic welding machinery. The shipyard in South San Francisco had four berths from which ships were launched sideways, two on each side of a large basin at Oyster Point. Following World War II, the population boomed, and a well-balanced community of industrial and residential areas developed.

The 1950’s brought modern industrial parks to the East of 101 area, such as Cabot, Cabot, and Forbes; freight forwarding, light industries, and other airport related businesses thrived. A new era for South San Francisco began in 1976 with the founding of Genentech by venture capitalist Robert Swanson and molecular biologist Dr. Herbert Boyer. Their objective: to explore ways of using recombinant DNA technology to create breakthrough medicines. This earned South San Francisco the title of “Birthplace of Biotechnology”, and thus attracted other biotech and pharmaceutical businesses to the area, bringing economic growth and stability to the community for several years. In 2008, the city celebrated its centennial with many memorable events honoring its forefathers, and recognizing businesses, organizations, and outstanding citizens for their contributors.

## **20.2.3 Governing Body Format**

Five members are elected to four-year Council terms. Elections are held in even-numbered years. Three members are elected together, and the other two are elected in the next election. The Mayor and Vice Mayor are selected by the Council from its members in non-election years. During election years, the Mayor and Vice Mayor are selected after election results have been tabulated.

The Council also directs the City Manager and sits as the Successor Agency Board of Directors.

The City Council assumes responsibility of the adoption of this plan; the City Manager will oversee its implementation.

## **20.3 CURRENT TRENDS**

### **20.3.1 Population**

According to the as of California Department of Finance, the population of South San Francisco January 2020 was 67,879. Since 2020, the population has grown at an average annual rate of 1.21 percent.



## 20.3.2 Development

Anticipated development levels for the City of South San Francisco (City) within the next five years are moderate to high, consisting of both residential rental and for-sale housing, commercial mixed-use, and public facilities. All of the new development will be infill, as the city is a medium sized City in the San Francisco Bay Area and surrounding by other developed jurisdictions. The City recently received a grant to fund a new specific plan that focuses new development adjacent to the downtown core and nearby the Caltrain commuter station. Additionally, adoption of a sales tax measure has provided funds for development of a new library, and a shared police and fire municipal facility that are currently under construction.

Table 20-2 summarizes development trends in the performance period since the preparation of the previous hazard mitigation plan, as well as expected future development trends.

**Table 20-2. Recent and Expected Future Development Trends**

Criterion	Response
Has your jurisdiction annexed any land since the preparation of the previous hazard mitigation plan? • If yes, give the estimated area annexed and estimated number of parcels or structures.	No
Is your jurisdiction expected to annex any areas during the performance period of this plan? • If yes, describe land areas and dominant uses. • If yes, who currently has permitting authority over these areas?	No
Are any areas targeted for development or major redevelopment in the next five years? • If yes, briefly describe, including whether any of the areas are in known hazard risk areas	Yes  We are projecting significant continued office, R&D, industrial and commercial development in the “East of 101” area and continued medium to high density housing and commercial development in the Downtown and El Camino Real corridor areas.
How many permits for new construction were issued in your jurisdiction since the preparation of the previous hazard mitigation plan?	The City of South San Francisco has issued 210 building permits for new construction (all construction types) during the past 5 years.
Provide the number of new-construction permits for each hazard area or provide a qualitative description of where development has occurred.	Approximately half of the permits were for the East of 101 area, and half were for the rest of the city (i.e., west of 101).
Describe the level of buildout in the jurisdiction, based on your jurisdiction’s buildable lands inventory. If no such inventory exists, provide a qualitative description.	The City of South San Francisco is fully built out, with very few vacant lots.

## 20.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and

determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 20-3.
- Development and permitting capabilities are presented in Table 20-4.
- An assessment of fiscal capabilities is presented in Table 20-5.
- An assessment of administrative and technical capabilities is presented in Table 20-6.
- An assessment of education and outreach capabilities is presented in Table 20-7.
- Information on National Flood Insurance Program (NFIP) compliance is presented in Table 20-8.
- Classifications under various community mitigation programs are presented in Table 20-9.
- The community’s adaptive capacity for the impacts of climate change is presented in Table 20-10.

**Table 20-3. Planning and Regulatory Capability**

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
<b>Codes, Ordinances, &amp; Requirements</b>				
<b>Building Code</b> <i>Comment: MC Title 15 Adopted March 2014 Chapter 15.08.010</i>	Yes	No	Yes	Yes
<b>Zoning Code</b> <i>Comment: MC Title 20 Adopted July 28<sup>th</sup>, 2010 Effective August 28<sup>th</sup>, 2010 Div. 1 thru 6</i>	Yes	No	Yes	Yes
<b>Subdivisions</b> <i>Comment: MC Title 19 Adopted 1982 Chapter 19</i>	Yes	No	Yes	Yes
<b>Stormwater Management</b> <i>Comment: MC Chapter 14.04 Adopted 2013</i>	Yes	No	Yes	Yes
<b>Post-Disaster Recovery</b> <i>Comment: MC Title 2 Adopted August 1971 Chapter 2.72.080 managed by SSFFD</i>	Yes	No	No	Yes
<b>Real Estate Disclosure</b> <i>Comment: CA State Civil Code 1102 requires full disclosure on natural Hazard Exposure of the sale of any and all real Prop</i>	No	No	Yes	No
<b>Growth Management</b> <i>Comment:</i>	No	No	No	No
<b>Site Plan Review</b> <i>Comment: MC Chapter 20.440</i>	Yes	No	No	Yes
<b>Environmental Protection</b> <i>Comment: CA Environmental Quality Act (CEQA)</i>	Yes	No	Yes	Yes
<b>Flood Damage Prevention</b> <i>Comment: MC Title 15, January 2009 Chapter 15.56.030</i>	Yes	No	Yes	Yes
<b>Emergency Management</b> <i>Comment: MC Title 2, Adopted July 1971, Chapter 2.72 Managed by SSFFD</i>	Yes	No	No	Yes
<b>Climate Change</b> <i>Comment: Adopted Climate Action Plan</i>	Yes	No	No	Yes
<b>Other</b> <i>Comment: Unreinforced Structure MC Chapter 15.28 1990, Fire Code Adopted 2014 as per MC 15.24.010</i>	Yes	No	No	Yes

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
<b>Planning Documents</b>				
<b>General Plan</b> <i>Is the plan compliant with Assembly Bill 2140? YES</i> <i>Comment: General Plan Adopted 1999 (Housing Element Adopted 2015) and currently being updated for 2040</i>	Yes	No	No	Yes
<b>Capital Improvement Plan</b> <i>How often is the plan updated? Annually</i> <i>Comment:</i>	Yes	No	No	Yes
<b>Disaster Debris Management Plan</b> <i>Comment: New Plan Currently in the Planning Stages</i>	No	No	No	Yes
<b>Floodplain or Watershed Plan</b> <i>Comment:</i>	No	No	No	No
<b>Stormwater Plan</b> <i>Comment: Stormwater Pollution Prevention Plan June 2015 (Water Quality Control Plant)</i>	Yes	No	No	Yes
<b>Urban Water Management Plan</b> <i>Comment:</i>	No	No	No	No
<b>Habitat Conservation Plan</b> <i>Comment: General Plan Conservation Element, Open Space Element, 1999</i>	No	No	No	Yes
<b>Economic Development Plan</b> <i>Comment: General Plan, Economic Development Element, 1999</i>	Yes	No	No	Yes
<b>Shoreline Management Plan</b> <i>Comment: Jurisdiction of Bay Conservation Development Commission</i>	No	No	No	Yes
<b>Community Wildfire Protection Plan</b> <i>Comment: MC Title 8, Article 2, Chapter 8.54.070 and 8.54.080 Adopted January 2013</i>	Yes	No	No	Yes
<b>Forest Management Plan</b> <i>Comment: MC Title 13, Tree Preservation Chapter 13.30 March 2016</i>	Yes	No	No	Yes
<b>Climate Action Plan</b> <i>Comment: Approved 2/2014</i>	Yes	No	Yes	Yes
<b>Other Downtown Station Specific Plan, Parks &amp; Recreation Master Plan</b> <i>Comment: Adopted February 2015, Adopted July 2015</i>	Yes	No	No	
<b>Emergency Operations Plan</b> <i>Comment: SSF EOP Managed by the SSFFD 2007</i>	Yes	No	No	Yes
<b>Threat &amp; Hazard Identification &amp; Risk Assessment (THIRA)</b> <i>Comment:</i>	No	No	No	Yes
<b>Post-Disaster Recovery Plan</b> <i>Comment: SSF EOP (TAB 13 Recovery and Chapter 4 Recovery) Managed by SSFFD 2007</i>	Yes (Partial)	No	No	Yes
<b>Continuity of Operations Plan</b> <i>Comment: SSF EOP (Page 104 Use of SSF Employees) Managed by SSFFD 2007, Administrative Instruction (AI) City Employee Responsibility to Respond in Emergencies June 2005, SSF COOP Plan Update 2020</i>	Yes (Partial)	No	No	Yes
<b>Public Health Plan</b> <i>Comment: Managed by San Mateo County Health Agency</i>	No	Yes	No	Yes

**Table 20-4. Development and Permitting Capability**

Criterion	Response
Does your jurisdiction issue development permits? • If no, who does? If yes, which department?	Yes Building, Planning, and Engineering
Does your jurisdiction have the ability to track permits by hazard area?	Yes
Does your jurisdiction have a buildable lands inventory?	No

**Table 20-5. Fiscal Capability**

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes Sewer
Incur Debt through General Obligation Bonds	Yes Civic Campus
Incur Debt through Special Tax Bonds	Yes Oyster Point Interagency
Incur Debt through Private Activity Bonds	Yes
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes, Library, Parks & Rec, Public Safety Grants
Development Impact Fees for Homebuyers or Developers	Yes
Other	Yes Commercial Linkage, Transportation, Library Impact Fee, Public Safety Impact Fee

**Table 20-6. Administrative and Technical Capability**

Staff/Personnel Resource	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	ECD/PW
Engineers or professionals trained in building or infrastructure construction practices	Yes	ECD/PW
Planners or engineers with an understanding of natural hazards	Yes	ECD/PW/Fire
Staff with training in benefit/cost analysis	Yes	PW/Consultants
Surveyors	Yes	PW/Consultants
Personnel skilled or trained in GIS applications	Yes	IT/GIS Coordinator, ESM
Scientist familiar with natural hazards in local area	Yes	USGS
Emergency manager	Yes	Fire/Emergency Services Manager
Grant writers	Yes	Fire/PW/Parks/ECD/Consultant

**Table 20-7. Education and Outreach Capability**

Criterion	Response
Do you have a public information officer or communications office?	Yes City Manager's Office
Do you have personnel skilled or trained in website development?	No each Dept. has trained person who can update the website IT is lead
Do you have hazard mitigation information available on your website? • If yes, briefly describe.	Yes Fire Dept. Page
Do you use social media for hazard mitigation education and outreach? • If yes, briefly describe.	Yes Fire/PD/PW/Parks/City use of Social Media
Do you have any citizen boards or commissions that address issues related to hazard mitigation? • If yes, briefly describe.	No
Do you have any other programs already in place that could be used to communicate hazard-related information? • If yes, briefly describe.	Yes City Cable Channel/CERT
Do you have any established warning systems for hazard events? • If yes, briefly describe.	Yes SMC Alert, Social Media Sites, Twitter, FB, ZoneHaven

**Table 20-8. National Flood Insurance Program Compliance**

Criterion	Response
What local department is responsible for floodplain management?	PW/Engineering
Who is your floodplain administrator? (department/position)	PW/Director & City Engineer
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the date that your flood damage prevention ordinance was last amended?	1/14/2009
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Meets
When was the most recent Community Assistance Visit or Community Assistance Contact?	8/22/2014
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state what they are.	No
Are any RiskMAP projects currently underway in your jurisdiction? • If so, state what they are.	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If no, state why.	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed?	No
Does your jurisdiction participate in the Community Rating System (CRS)? • If yes, is your jurisdiction interested in improving its CRS Classification? • If no, is your jurisdiction interested in joining the CRS program?	No Yes
How many flood insurance policies are in force in your jurisdiction? <sup>a</sup> • What is the insurance in force? • What is the premium in force?	206 \$78,947,900 \$323,905
How many total loss claims have been filed in your jurisdiction? <sup>a</sup> • What were the total payments for losses?	78 \$3,427,156

a. According to FEMA statistics as of March 31, 2021

**Table 20-9. Community Classifications**

	Participating?	Classification	Date Classified
FIPS Code	Yes	0608173262	N/A
DUNS#	Yes	004952263	N/A
Community Rating System	No	N/A	N/A
Building Code Effectiveness Grading Schedule	No	N/A	N/A
Public Protection	No	N/A	N/A
Storm Ready	Yes	Active	Ongoing
Firewise	No	N/A	N/A
Tsunami Ready	No	N/A	N/A

**Table 20-10. Adaptive Capacity for Climate Change**

Criterion	Jurisdiction Rating <sup>a</sup>
<b>Technical Capacity</b>	
<b>Jurisdiction-level understanding of potential climate change impacts</b> <b>Comment:</b> Incorporate climate change adaptation into relevant local and regional plans and projects.	Medium
<b>Jurisdiction-level monitoring of climate change impacts</b> <b>Comment:</b> Establish an ongoing monitoring program to track local and regional climate impacts and adaptation strategy effectiveness.	Low
<b>Technical resources to assess proposed strategies for feasibility and externalities</b> <b>Comment:</b> Identify and pursue new sources of funding for mitigation and adaptation activities	Low
<b>Jurisdiction-level capacity for development of greenhouse gas emissions inventory</b> <b>Comment:</b> Ask local employers and business associations to participate in local efforts to address climate change and natural hazard risk reduction.	Medium
<b>Capital planning and land use decisions informed by potential climate impacts</b> <b>Comment:</b> Develop coordinated plans for mitigating future flood, landslide, and related impacts through concurrent adoption of updated general plan safety elements and local hazard mitigation plans.	Medium
<b>Participation in regional groups addressing climate risks</b> <b>Comment:</b> Incorporate climate change adaptation into relevant local and regional plans and projects.	Medium
<b>Implementation Capacity</b>	
<b>Clear authority/mandate to consider climate change impacts during public decision-making processes</b> <b>Comment:</b> Establish a climate change adaptation and hazard mitigation public outreach and education program.	Low
<b>Identified strategies for greenhouse gas mitigation efforts</b> <b>Comment:</b> Identify and pursue new sources of funding for mitigation and adaptation activities	Low
<b>Identified strategies for adaptation to impacts</b> <b>Comment:</b> Use performance metrics and data to evaluate and monitor the impacts of climate change and natural hazard risk reduction strategies on public health and social equity.	Low
<b>Champions for climate action in local government departments</b> <b>Comment:</b> Hire new staff or provide training to current staff to ensure an adequate level of administrative and technical capability to pursue mitigation and adaptation activities.	Medium
<b>Political support for implementing climate change adaptation strategies</b> <b>Comment:</b> Hire new staff or provide training to current staff to ensure an adequate level of administrative and technical capability to pursue mitigation and adaptation activities.	Medium
<b>Financial resources devoted to climate change adaptation</b> <b>Comment:</b> Identify and pursue new sources of funding for mitigation and adaptation activities.	Medium
<b>Local authority over sectors likely to be negative impacted</b> <b>Comment:</b> Develop coordinated plans for mitigating future flood, landslide, and related impacts through concurrent adoption of updated general plan safety elements and local hazard mitigation plans.	Medium

Criterion	Jurisdiction Rating <sup>a</sup>
<b>Public Capacity</b>	
<b>Local residents knowledge of and understanding of climate risk</b> <b>Comment:</b> Establish a climate change adaptation and hazard mitigation public outreach and education program.	Low
<b>Local residents support of adaptation efforts</b> <b>Comment:</b> Increase participation of low-income, immigrant, non-English-speaking, racially and ethnically diverse, and special-needs residents in planning and implementation.	Unsure
<b>Local residents' capacity to adapt to climate impacts</b> <b>Comment:</b> Establish an ongoing monitoring program to track local and regional climate impacts and adaptation strategy effectiveness.	Unsure
<b>Local economy current capacity to adapt to climate impacts</b> <b>Comment:</b> Increase participation of low-income, immigrant, non-English-speaking, racially and ethnically diverse, and special-needs residents in planning and implementation.	Medium
<b>Local ecosystems capacity to adapt to climate impacts</b> <b>Comment:</b> Establish an ongoing monitoring program to track local and regional climate impacts and adaptation strategy effectiveness.	Unsure
a. High = Capacity exists and is in use; Medium = Capacity may exist but is not used or could use some improvement; Low = Capacity does not exist or could use substantial improvement; Unsure= Not enough information is known to assign a rating.	

## 20.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as general planning and capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

### 20.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- **City General Plan**, provides guidance and supports the LHMP actions and efforts to acquire grant funding or other financing opportunities as well as land use or redevelopment
- **Smoke Alarm Program**, Our Fire department engine companies install fire smoke alarms in an existing dwelling as needed upon discovery during incident calls or public calls to schedule installation. Providing a Safer City to live in.
- **City’s Emergency Operations Plan 2007 (EOP)** provides mitigation improvements, grant opportunities and guidance after a disaster

### 20.5.2 Opportunities for Future Integration

The capability assessment presented in this annex identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- **City’s Emergency Operations Plan (EOP)** to be Revised. Provides grant opportunities and guidance after a disaster



- **Pedestrian Master Plan** can provide grant opportunities and guidance and reduce risk
- **Sea Level Rise (County Master Plan)** Impact on Critical Infrastructure such as City’s Water Quality Control Plant
- **City 2040 General Plan**, (Currently undergoing revision) provides guidance and supports the LHMP actions and efforts to acquire grant funding or other financing opportunities as well as land use or redevelopment. All chapters of the existing General Plan, except for the Housing Element, will be comprehensively updated.
- **ZoneHaven Evacuation Platform**, Master Plan for evacuations within San Mateo County, County Guidelines currently in the planning stages.
- **Debris Removal Plan**, Currently in the Planning Stages for Locals of San Mateo County, hazard mitigation,
- **Environmental Impact Report (EIR)** currently being revised, An Environmental Impact Report will be prepared, including the analysis and disclosure of the potential impacts of the General Plan on the environment. This process is required by the State’s California Environmental Quality Act (CEQA).
- **Climate Action Plan (CAP)** currently being revised, including the vision for climate action, quantitative goals and tracking metrics, recent accomplishments and implementation actions related to climate and sustainability efforts, and programs/actions that reduce greenhouse gas emissions and increase community resiliency.
- **Zoning Code** currently being revised, to streamline implementation of the General Plan, the City’s Municipal Zoning Code will be updated in parallel.

## 20.6 RISK ASSESSMENT

### 20.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 20-11 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

**Table 20-11. Past Natural Hazard Events**

Type of Event	FEMA Disaster #	Date	Damage Assessment
Drought	N/A	July/August 2021	Unknown
Severe Weather/Heat	N/A	August 20, 2020	Unknown
Severe Weather/Lightning	N/A	August 16-18	Unknown
Wildfire/Diamond Fire	N/A	October 16 2020	Unknown
Severe Weather/Flood	N/A	12/11/2015	\$3,598,050
Wildfire (San Bruno Mtn. located in SSF)		8/2002	Unknown
Severe Storm(s)	DR-1646	6/5/2006	Unknown
Severe Storm(s)	DR-1628	2/3/2006	Unknown
Severe Weather-Tornado	N/A	3/20/2005	Unknown
Severe Storm(s)	DR-1046	3/12/1995	Unknown
Severe Storm(s)	DR-1044	1/10/1995	Unknown
Earthquake	DR-845	10/18/1989	Unknown



## 20.6.2 Hazard Risk Ranking

Table 20-12 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy. Mitigation actions target hazards with high and medium rankings.

**Table 20-12. Hazard Risk Ranking**

Rank	Hazard	Risk Ranking Score	Risk Category
1	Landslide/Mass Movements	117	High
2	Earthquake	78	High
3	Sea Level Rise/Climate Change	72	High
4	Flood	54	High
5	Severe Weather	24	Medium
6	Wildfire	0	Medium
7	Drought	9	Low
8	Tsunami	3	Low
9	Dam Failure	0	Low

\*Wildfire risk was increased based on recent local wildfires in the City on Sign Hill and San Bruno Mountain. The mountain and hill area in the city are more vulnerable to this hazard.

## 20.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. This section provides information on a few key vulnerabilities for this jurisdiction. Available jurisdiction-specific risk maps of the hazards are provided at the end of this annex.

### Repetitive Loss Properties

Repetitive loss records are as follows:

- Number of FEMA-identified Repetitive-Loss Properties: 1
- Number of FEMA-identified Severe-Repetitive-Loss Properties: 1
- Number of Repetitive-Loss Properties or Severe-Repetitive-Loss Properties that have been mitigated: 0

### Other Noted Vulnerabilities

No jurisdiction-specific issues were identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources.

## 20.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 20-13 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

**Table 20-13. Status of Previous Plan Actions**

Action Item	Completed	Removed; No longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
<b>Action SSF-1</b> Implement Colma Creek flood control improvement measures by raising flood walls to mitigate overflow along areas of the canal <b>Comment:</b>			✓	SSF-13
<b>Action SSF 2</b> Initiate storm drain improvements with the goal of mitigating flood damage to reduce or eliminate claims <b>Comment:</b>			✓	SSF-12
<b>Action SSF 3</b> Construct a tide gate to mitigate flood waters from SF Bay <b>Comment:</b>			✓	SSF-12
<b>Action SSF 4</b> Identify critical City-owned bridges and roads that are affected by flooding and are in need of seismic retrofiting <b>Comment:</b>			✓	SSF-7
<b>Action SSF 5</b> Integrate planning elements of the Hazard Mitigation Plan into the General Plan, Emergency Operations Plan (EOP), Parks Master Plan and Facility Master Plan; conduct ongoing maintenance of these plans (AB2140) <b>Comment:</b>			✓	SSF-8
<b>Action SSF 6</b> Develop an Oyster Point Landfill Master Plan to mitigate flood damage and reduce or eliminate claims <b>Comment:</b>			✓	SSF-17
<b>Action SSF 7</b> Conduct an inventory of building types (i.e., soft-story commercial, residential, or industrial structures) for all City-owned and privately owned buildings as a first step to establishing voluntary or mandatory programs for retrofiting these buildings <b>Comment:</b> Completed in 9/2019	✓			
<b>Action SSF 8</b> Due to building age and condition, construct a new City Center to house the Library, PD Station, Fire Station, and Parks & Rec. <b>Comment:</b>			✓	SSF-11
<b>Action SSF 9</b> Implement Sign Hill wildfire mitigation measures (i.e., removal of dead trees due to drought and disease) <b>Comment:</b>			✓	SSF-14
<b>Action SSF 10</b> Retrofit, acquire, or relocate the identified severe repetitive loss property within SSF. <b>Comment:</b> Completed 10/2019	✓			
<b>Action SSF 11</b> Construction to the current Emergency Operations Center (EOC) to include a 2nd floor. Improving emergency management and preparedness capabilities as well as continuity of operations and continuity of government caused by any hazard. <b>Comment:</b>			✓	SSF-18
<b>Action G-1</b> —Where appropriate, support retrofiting, purchase, or relocation of structures in hazard-prone areas to prevent future structure damage. Give priority to properties with exposure to repetitive losses. <b>Comment:</b>			✓	SSF-21
<b>Action G-2</b> —Consider participation in incentive-based programs such as the Community Rating System, Tree City, and StormReady. <b>Comment:</b>			✓	SSF-22

Action Item	Completed	Removed; No longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
<b>Action G-3</b> —Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts. <b>Comment:</b>			✓	SSF-23
<b>Action G-4</b> —Where feasible, implement a program to record high water marks following high-water events. <b>Comment:</b>			✓	SSF-5
<b>Action G-5</b> —Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment. <b>Comment:</b>			✓	SSF-8
<b>Action G-6</b> —Provide incentives for eligible non-profits and private entities, including homeowners, to adapt to risks through structural and nonstructural retrofitting. <b>Comment:</b>			✓	SSF-24
<b>Action G-7</b> — Support the County-wide initiatives identified in Volume I of the hazard mitigation plan. <b>Comment:</b>			✓	SSF-1
<b>Action G-8</b> — Actively participate in the plan maintenance protocols outlined in Volume I of the hazard mitigation plan. <b>Comment:</b>			✓	SSF-12

## 20.8 HAZARD MITIGATION ACTION PLAN

Table 20-14 lists the identified actions, which make up the hazard mitigation action plan for this jurisdiction. Table 20-15 identifies the priority for each action. Table 20-16 summarizes the mitigation actions by hazard of concern and mitigation type.

**Table 20-14. Hazard Mitigation Action Plan Matrix**

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline <sup>a</sup>
<b>Action SSF-1</b> —Support the County-wide and City-wide initiatives identified in Volume I of the hazard mitigation plan.						
<i>Hazards Mitigated:</i> Sea Level Rise/Climate Change, Landslide/Mass Movements, Earthquake, Dam Failure, Flood, Severe Weather, Wildfire, Drought, Tsunami						
New & Existing	1, 2, 3, 5, 7,8	SSF	County	Low	General Fund	Ongoing
<b>Action SSF-2</b> — Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.						
<i>Hazards Mitigated:</i> Sea Level Rise/Climate Change, Landslide/Mass Movements, Earthquake, Dam Failure, Flood, Severe Weather, Wildfire, Drought, Tsunami						
New & Existing	1, 2, 3, 5, 7,8	SSF	County	Low	General Fund	Ongoing

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline <sup>a</sup>
<b>Action SSF-3</b> —Identify and pursue strategies to incorporate earthquake, tsunami and wildfire hazards into project planning, design, and implementation.						
<u>Hazards Mitigated:</u> New & Existing	Earthquake, Wildfire, Tsunami 1, 5, 6, 7, 8	SSF FSLRRD	County	High	General Fund	Ongoing
<b>Action SSF-4</b> —Update and enhance existing water-related climate hazard mapping (including flood, sea level rise, coastal erosion, stormwater, and groundwater emergence) to better reflect current conditions and most current long-term future conditions.						
<u>Hazards Mitigated:</u> New & Existing	Sea Level Rise/Climate Change, Landslide/Mass Movements, Flood, Severe Weather 1, 5, 6, 7, 8,9	SSF	FSLRRD, County, C/CAG	Low	Tax-Funded Flood Zones, Grant Funding-FEMA HMA (BRIC, FMA and HMGP)	Ongoing
<b>Action SSF-5</b> —Develop and implement a program to capture perishable data after significant events (e.g., high water marks, preliminary damage estimates, damage photos) to support future mitigation efforts including the implementation and maintenance of the hazard mitigation plan.						
<u>Hazards Mitigated:</u> New & Existing	Sea Level Rise/Climate Change, Flood, Severe Weather, Tsunami 1, 5, 6, 7, 8	SSF	FSLRRD, County	Medium	General Fund	Short-term
<b>Action FSL-6</b> —Incorporate consideration of the FEMA 100-year tide and sea level rise, and climate change-driven extreme storms, into land use planning and shoreline development. This includes new policies by local jurisdictions, and County and City actions regarding their General Plans, Climate-related Plans, and the development applications.						
<u>Hazards Mitigated:</u> New & Existing	Sea Level Rise/Climate Change, Flood, Severe Weather 1, 2, 5, 6, 7, 8, 9, 13, 14	SSF	FSLRRD, County	Low	General Fund, Private Developers, City Capital Project Funding	Ongoing
<b>Action SSF-7</b> —Identify critical City-owned bridges and roads that are affected by flooding and are in need of seismic retrofitting						
<u>Hazards Mitigated:</u> New & Existing	Sea Level Rise/Climate Change, Flood, Earthquake, Severe Weather 1, 3, 4, 5, 6, 7, 8,11	SSF	County, U.S. Army Corps of Engineers, Caltrans	High	Tax-Funded Flood Zones, Grant Funding	Ongoing
<b>Action SSF-8</b> —Integrate planning elements of the Hazard Mitigation Plan into the General Plan, Emergency Operations Plan (EOP), Parks Master Plan and Facility Master Plan; conduct ongoing maintenance of these plans (AB2140)						
<u>Hazards Mitigated:</u> New & Existing	Sea Level Rise/Climate Change, Landslide/Mass Movements, Earthquake, Flood, Severe Weather, Wildfire, Drought, Tsunami All	SSF	N/A	Medium	General Fund	Ongoing
<b>Action SSF-9</b> —Continue to identify and plan upgrades of utility systems, equipment, and critical facilities, including pump stations, generators, tide gates, stream gages, open channel, and culvert/pipeline infrastructure.						
<u>Hazards Mitigated:</u> New & Existing	Sea Level Rise/Climate Change, Flood, Severe Weather 2, 6, 7,8	SSF	FSLRRD, County, San Mateo Resource Conservation District	Medium	Tax-Funded Flood Zones, Grant Funding-FEMA HMA (BRIC, FMA and HMGP)	Ongoing
<b>Action SSF-10</b> —Support green infrastructure projects that enhance resiliency to natural disasters and incorporate green design elements into hazard mitigation projects where feasible.						
<u>Hazards Mitigated:</u> New & Existing	Sea Level Rise/Climate Change, Landslide/Mass Movements, Flood, Severe Weather, Drought 2, 6, 7, 8, 14	SSF	County, C/CAG*, FSLRRD, San Mateo Resource Conservation District	Medium	Tax-Funded Flood Zones, Property/Vehicle Fees, Stormwater Fees, - EPA Grants (Section 319 grants, CWSRF), City Capital Project Funding	Ongoing

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline <sup>a</sup>
<b>Action SSF-11</b> —Due to building age and condition, construct a new City Center to house the Library, PD Station, Fire Station, and Parks & Rec.						
<u>Hazards Mitigated:</u> Climate Change, Flood, Severe Weather, Drought, Earthquake						
New & Existing	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	SSF	County, State	High	Tax-Funded Flood Zones, Property/Vehicle Fees, Stormwater Fees, City Capital Project Funding	Ongoing
<b>Action SSF-12</b> —Improve stormwater drainage to alleviate repeated localized flooding, especially storm drain systems connected to FSLRRD Flood Zone channels and infrastructure.						
<u>Hazards Mitigated:</u> Climate Change, Flood, Severe Weather						
New & Existing	1, 2, 4, 6, 7, 8	SSF	FSLRRD, County	Medium	Tax-Funded Flood Zones, Property/Vehicle Fees, Stormwater Fees, Grant Funding-FEMA HMA (BRIC, FMA and HMGP), City Capital Project Funding	Ongoing
<b>Action SSF-13</b> —Plan, design, and implement long-term resilience to sea level rise, extreme storms, and coastal erosion for culverts, roadways, and bridges in the vicinity of other flood protection projects, including assets identified in the Caltrans District 4 Adaptation Priorities Report.						
<u>Hazards Mitigated:</u> Sea Level Rise/Climate Change, Landslide/Mass Movements, Flood, Severe Weather						
New & Existing	2, 4, 6, 7, 8, 13	SSF	Caltrans, County, FSLRRD, San Mateo Resource Conservation District	Medium	Grant Funding-FEMA HMA (BRIC, FMA and HMGP)	Ongoing
<b>Action SSF-14</b> —Implement Sign Hill wildfire mitigation measures (i.e., removal of dead trees due to drought and disease)						
<u>Hazards Mitigated:</u> Wildfire, Landslide/Mass Movements, Severe Weather, Drought						
New & Existing	1, 2, 3, 4, 5, 6, 7, 8, 10, 11,	SSF		Medium	Grant Funding-FEMA HMA (BRIC, FMA, FMAG and HMGP)	Ongoing
<b>Action SSF-15</b> —Identify and pursue strategies to enhance recycled water infrastructure planning/implementation in the vicinity of FSLRRD projects.						
<u>Hazards Mitigated:</u> Drought						
New & Existing	1, 6, 7, 8	SSF	County FSLRRD, San Mateo Resource Conservation District	Medium	Grant Funding-FEMA HMA (BRIC, FMA and HMGP)	Ongoing
<b>Action SSF-16</b> —Improve community response to flood emergencies in various ways, including but not limited to: - Upgrade and expand the countywide flood early warning system - Conduct community flood preparation, education, and recovery outreach.						
<u>Hazards Mitigated:</u> Sea Level Rise/Climate Change, Flood, Severe Weather						
New & Existing	2, 3, 7, 8, 9, 10, 11	SSF	County, FSLRRD	Low	Grant Funding-EMPG and HSGP. National Weather Service grants for flood warning systems	Short-term
<b>Action SSF-17</b> —Develop Emergency Action Plans for three multi-jurisdictional watersheds/Oyster Point Landfill area: 1) Bayfront Canal and Atherton Channel 2) Belmont Creek 3) Navigable Slough, Colma Creek, and San Bruno Creek						
<u>Hazards Mitigated:</u> Sea Level Rise/Climate Change, Flood, Severe Weather						
Existing	3, 4, 7, 8, 9, 11	SSF	FSLRRD,	Low	Grant Funding-EMPG and HSGP	Short-term

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline <sup>a</sup>
<b>Action SSF-18</b> —Construction to the current Emergency Operations Center (EOC) to include a 2nd floor. Improving emergency management and preparedness capabilities as well as continuity of operations and continuity of government caused by any hazard.						
<u>Hazards Mitigated:</u> Climate Change, Landslide/Mass Movements, Earthquake, Flood, Severe Weather, Wildfire, Drought, Tsunami						
New & Existing	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	SSF	County, State	High	Grant Funding-FEMA EOC grants, EMPG and HSGP	Long-term
<b>Action SSF-19</b> —Advance long-term resilience to sea level rise and extreme storms for the communities and critical assets adjacent to Colma Creek, San Bruno Creek, Navigable Slough, and nearby areas of the shoreline, as well as provide environmental, recreation, community/connectivity enhancements where possible.						
<u>Hazards Mitigated:</u> Sea Level Rise/Climate Change, Flood, Severe Weather						
New & Existing	6, 7, 8, 14	SSF	FSLRRD	Low	Tax-Funded Flood Zones, Grant Funding-FEMA HMA (BRIC, FMA and HMGP), USACE CAP	Ongoing
<b>Action SSF-20</b> —Continue routine maintenance responsibilities of the Colma Creek Channel through collaborative agreements with neighboring jurisdictions so that the Channel operates as designed.						
<u>Hazards Mitigated:</u> Sea Level Rise/Climate Change, Flood, Severe Weather						
Existing	2, 7, 8, 10	SSF	FSLRRD, County	Low	Tax-Funded Flood Zones	Ongoing
<b>Action SSF-21</b> —Where appropriate, support retrofitting, purchase, or relocation of structures in hazard-prone areas to prevent future structure damage. Give priority to properties with exposure to repetitive losses.						
<u>Hazards Mitigated:</u> Sea Level Rise/Climate Change, Flood, Severe Weather, Earthquake						
New & Existing	1, 3, 4, 5, 6, 7, 11	SSF	County, State	High	Grant Funding-FEMA HMA (BRIC, FMA and HMGP)	Ongoing
<b>Action SSF-22</b> —Consider participation in incentive-based programs such as the Community Rating System, Tree City, and Storm Ready						
<u>Hazards Mitigated:</u> Sea Level Rise/Climate Change, Flood, Severe Weather, Drought						
New & Existing	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	SSF		Low	General Fund	Ongoing
<b>Action SSF-23</b> —Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts						
<u>Hazards Mitigated:</u> Sea Level Rise/Climate Change, Flood, Severe Weather						
New & Existing	6, 7, 8, 14	SSF		Medium	General Fund	Ongoing
<b>Action SSF-24</b> —Provide incentives for eligible non-profits and private entities, including homeowners, to adapt to risks through structural and nonstructural retrofitting.						
<u>Hazards Mitigated:</u> Earthquake						
New & Existing	2, 3, 4, 5, 6, 7, 8, 10, 11,	SSF		Medium	Grant Funding--FEMA HMA (BRIC, FMA and HMGP), City Capital Project Funding	Long-term

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

Acronyms used here are defined at the beginning of this volume.

**Table 20-15. Mitigation Action Priority**

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Eligible for Outside Funding?	Can Project Be Funded Under Existing Programs/Budgets?	Implementation Priority <sup>a</sup>	Outside Funding Source Pursuit Priority <sup>a</sup>	Social Equity Priority <sup>a</sup>
1	6	Medium	Low	Yes	Yes	Yes	High	Medium	Medium
2	6	Medium	Low	Yes	No	Yes	High	Low	Medium
3	5	High	High	Yes	Yes	No	Medium	High	Medium
4	6	Medium	Low	Yes	Yes	Yes	High	Medium	Medium
5	5	Medium	Medium	Yes	Yes	Yes	High	Medium	Medium
6	9	High	Low	Yes	Yes	Yes	High	High	Medium
7	8	High	High	Yes	Yes	No	Medium	High	Medium
8	1	Medium	Medium	Yes	Yes	Yes	High	Medium	High
9	4	High	Medium	Yes	Yes	Yes	High	High	Medium
10	5	Medium	Medium	Yes	Yes	Yes	High	Medium	Medium
11	14	High	High	Yes	Yes	No	High	High	High
12	6	High	Medium	Yes	Yes	Yes	High	High	Medium
13	6	High	Medium	Yes	Yes	Yes	High	High	Medium
14	11	High	Medium	Yes	Yes	Yes	High	High	Medium
15	4	Medium	Medium	Yes	Yes	Yes	High	Medium	Low
16	7	High	Low	Yes	Yes	Yes	High	Low	High
17	6	High	Low	Yes	Yes	Yes	High	Low	High
18	14	High	High	Yes	Yes	No	Medium	High	Medium
19	4	High	Low	Yes	Yes	Yes	High	High	Medium
20	4	High	Low	Yes	Yes	Yes	High	High	Medium
21	7	Medium	High	Yes	Yes	No	Medium	Medium	Medium
22	14	Medium	Low	Yes	No	Yes	Low	Low	Medium
23	4	High	Medium	Yes	Yes	Yes	High	High	Medium
24	9	High	Medium	Yes	Yes	No	High	High	Medium

a. See the introduction to this volume for explanation of priorities.

**Table 20-16. Analysis of Mitigation Actions**

Hazard Type	Action Addressing Hazard, by Mitigation Type <sup>a</sup>							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building
<b>High-Risk Hazards</b>								
Landslide/Mass Movements	1,8	1, 10, 18	1	14	18	10,13	1, 10, 13	1, 2, 4,8
Earthquake	1, 3, 8	1, 7, 11, 18, 21	1		18		1	1, 2, 8,24
Sea Level Rise/Climate Change	1, 6, 8, 17, 22, 23	1, 7, 9, 10, 11, 18, 21	1,16	19	16,18	9, 10, 12, 13, 20	1, 10, 13, 19, 22	1, 2, 4, 5, 6, 8, 17, 19, 20, 22
Flood	1, 6, 8, 17, 22, 23	1, 7, 9, 10, 11, 18, 21	1,16	19	16,18	9, 10, 12, 13, 20	1, 10, 13, 19, 22	1, 2, 4, 5, 6, 8, 17, 19, 20, 22



Hazard Type	Action Addressing Hazard, by Mitigation Type <sup>a</sup>							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building
<b>Medium-Risk Hazards</b>								
<b>Severe Weather</b>	1, 6, 8, 17, 22, 23	1, 7, 9, 10, 11, 18, 21	1,16	14,19	16,18	9, 10, 12, 13, 20	1, 10, 13, 19, 22	1, 2, 4, 5, 6, 8, 17, 19, 20, 22
<b>Wildfire</b>	1, 3, 8	1,18	1	14			1	1, 2, 8
<b>Low-Risk Hazards</b>								
<b>Drought</b>	8	10, 11, 18	1	14,15		15	1, 15, 22	1, 2, 8, 15, 22
<b>Tsunami</b>	1, 3, 8	1,18	1				1	1, 2, 5,8
<b>Dam Failure</b>	1	1	1				1	1,219

a. See the introduction to this volume for explanation of mitigation types.

## 20.9 PUBLIC OUTREACH

Table 20-17 lists public outreach activities for this jurisdiction.

**Table 20-17. Local Public Outreach**

Local Outreach Activity	Date	Number of People Involved
General Plan Update Meetings	2019-Current	Thousands
Social Media posts	March/April 2021	
SSF CERT Meeting	March 2021	97
Social Media Posts	June 2021	

## 20.10 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **City of South San Francisco Municipal Code**—The municipal code was reviewed for the full capability assessment and for identifying opportunities for action plan integration.
- **City of South San Francisco Flood Damage Prevention Ordinance**—The flood damage prevention ordinance was reviewed for compliance with the National Flood Insurance Program.
- **City of South San Francisco General Plan (Current)**
- **City of South San Francisco General Plan (2040 version Currently being revised)**
- **City of South San Francisco Climate Action Plan**
- **South San Francisco Pedestrian Master Plan**
- **City of South San Francisco Citizen Participation Plan**
- **City of South San Francisco Urban Forest Master Plan**
- **SSF Commission on Racial and Social Equity DRAFT Action Plan Outline: Goals, Strategies and Actions**



- **South San Francisco Green Infrastructure Plan**
- **SSF General Plan Phase 1 Outreach Key Themes**

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

# South San Francisco

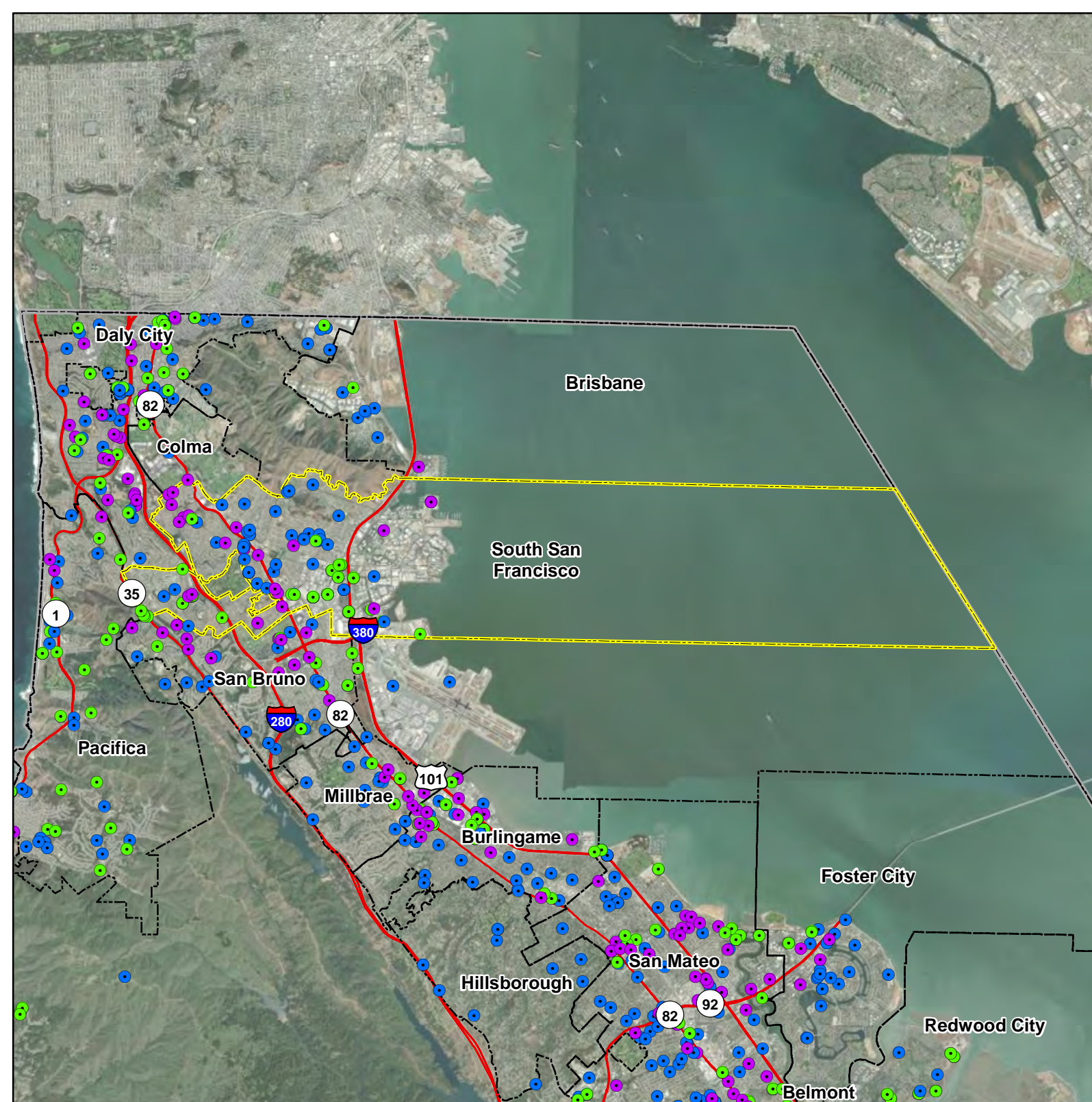
## Critical Facilities, 1 of 2

- Food, Water, Shelter
- Health and Medical
- Safety and Security
- Selected City
- Incorporated Cities
- County Boundary
- Highways

Data Sources: ESRI Basemap,  
San Mateo Co., DHS HIFLD



0 0.75 1.5 3  
Miles





# South San Francisco

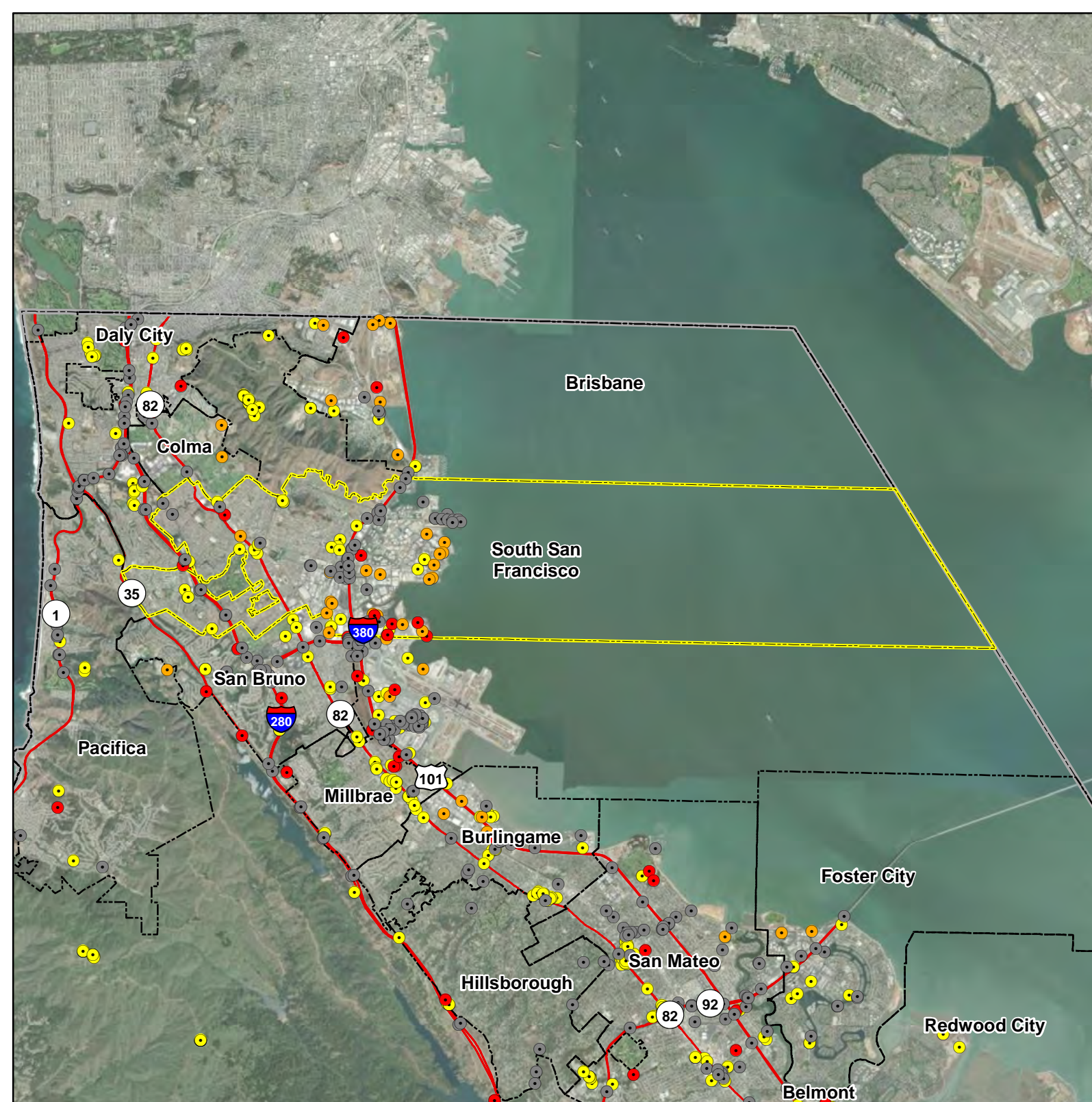
## Critical Facilities, 2 of 2

- Communications
- Energy
- Hazardous Materials
- Transportation
- Selected City
- Incorporated Cities
- County Boundary
- Highways

Data Sources: ESRI Basemap,  
San Mateo Co., DHS HIFLD









0 0.75 1.5 3  
Miles





# South San Francisco

## Dam Failure Inundation Area Used for Risk Assessment

-  Inundation Area
-  Dam
-  Selected City
-  Incorporated Cities
-  County Boundary
-  Highways

Data Sources: ESRI Basemap,  
San Mateo Co., CA DWR



0 0.75 1.5 3  
Miles





# South San Francisco

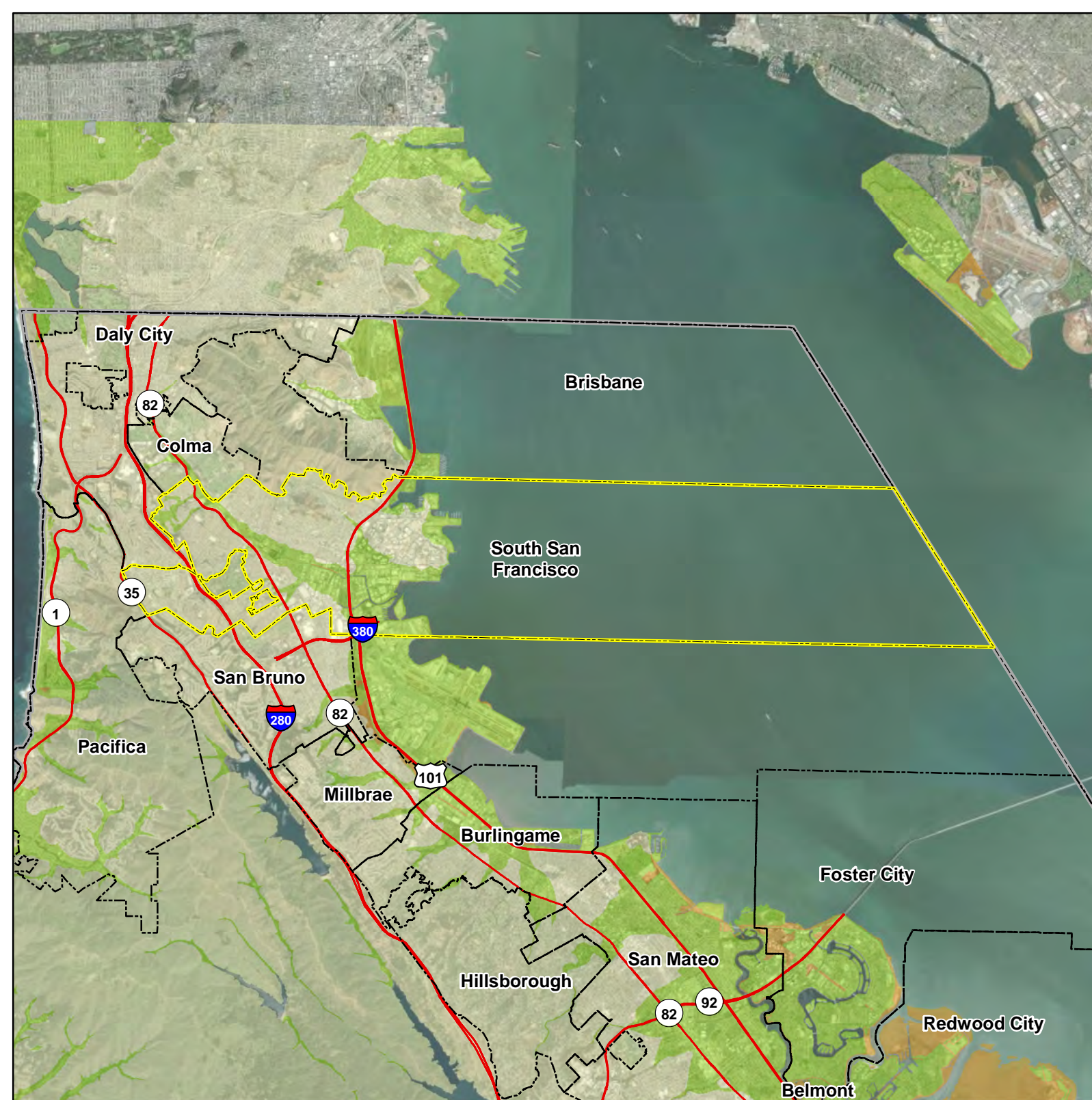
## NEHRP Soil Class

- C (Dense soil/soft rock)
- D (Stiff soil)
- E (Soft clay)
- Selected City
- Incorporated Cities
- County Boundary
- Highways

Data Sources: ESRI Basemap,  
San Mateo Co., CGS



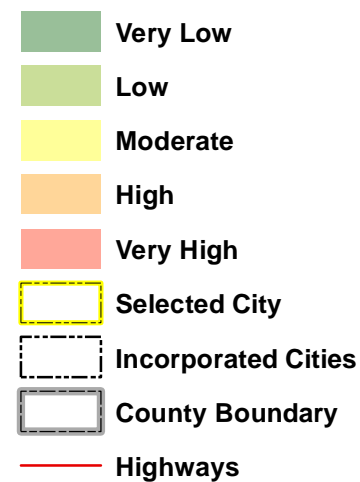
0 0.75 1.5 3  
Miles



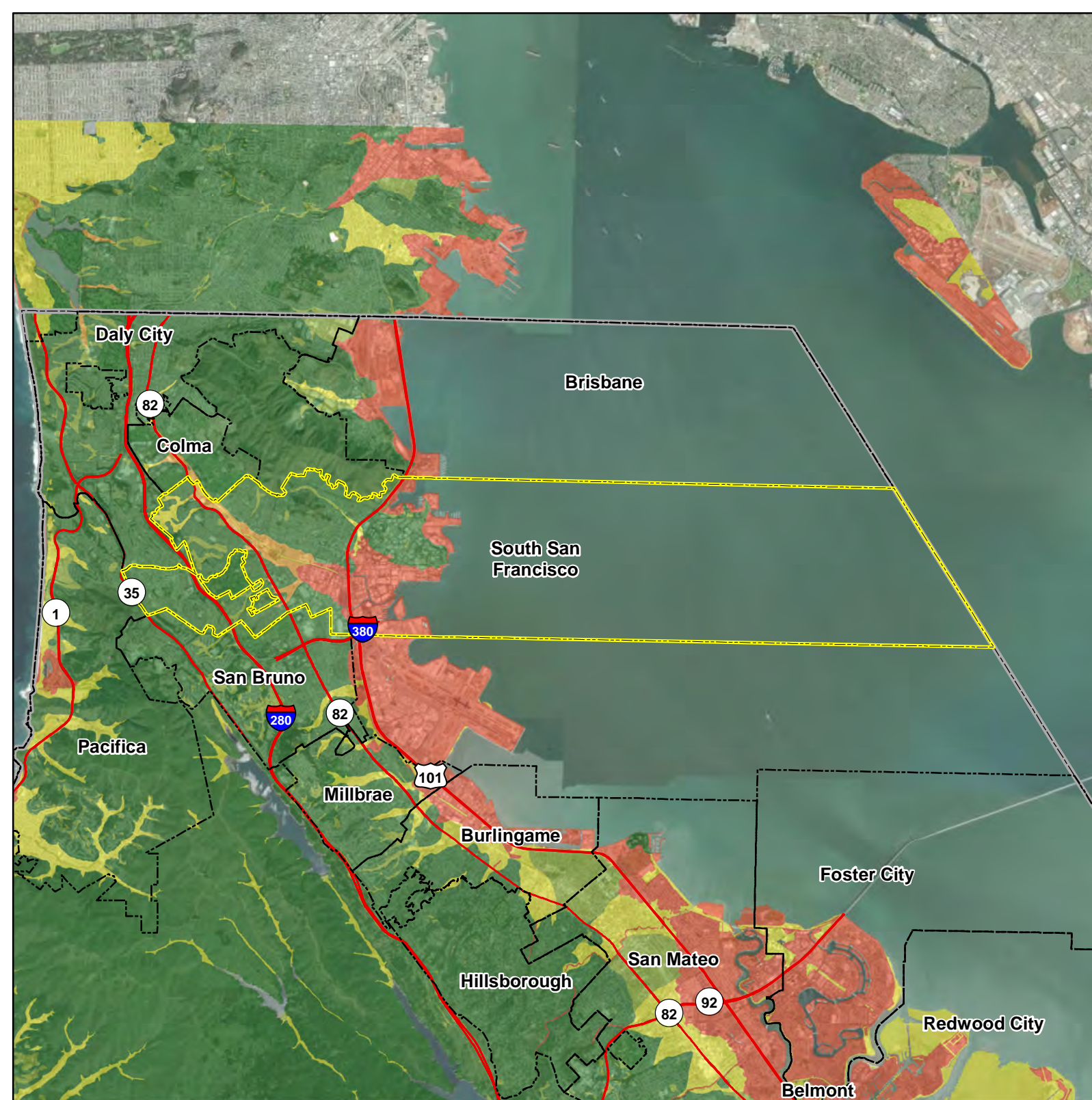
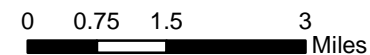


# South San Francisco

## Liquefaction Susceptibility



Data Sources: ESRI Basemap,  
San Mateo Co., ABAG (USGS)





# South San Francisco

## Butano M6.93 Earthquake Scenario

### Mercalli Intensity Scale

V (Moderate/Very Light)

VI (Strong/Light)

Selected City

Incorporated Cities

County Boundary

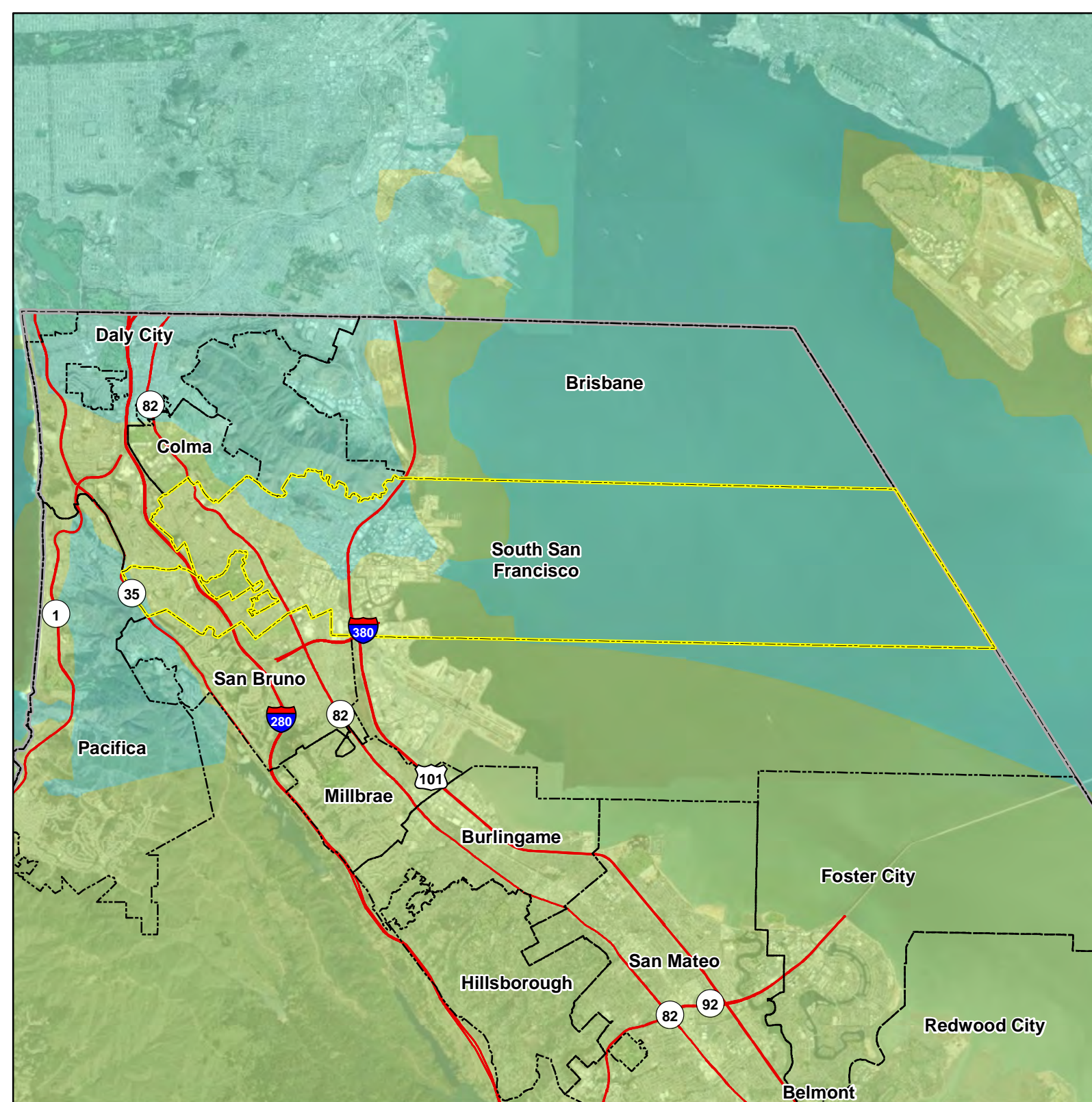
Highways

Intensity scale described as:  
(perceived shaking / potential damage)

Data Sources: ESRI Basemap,  
San Mateo Co., USGS



0 0.75 1.5 3  
Miles





# South San Francisco

## Monte Vista Shannon M7.14 Earthquake Scenario

### Mercalli Intensity Scale

- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- Selected City
- Incorporated Cities
- County Boundary
- Highways

Intensity scale described as:  
(perceived shaking / potential damage)

Data Sources: ESRI Basemap,  
San Mateo Co., USGS



0 0.75 1.5 3  
Miles





# South San Francisco

## 100-Year Probabilistic Earthquake Scenario

### Mercalli Intensity Scale

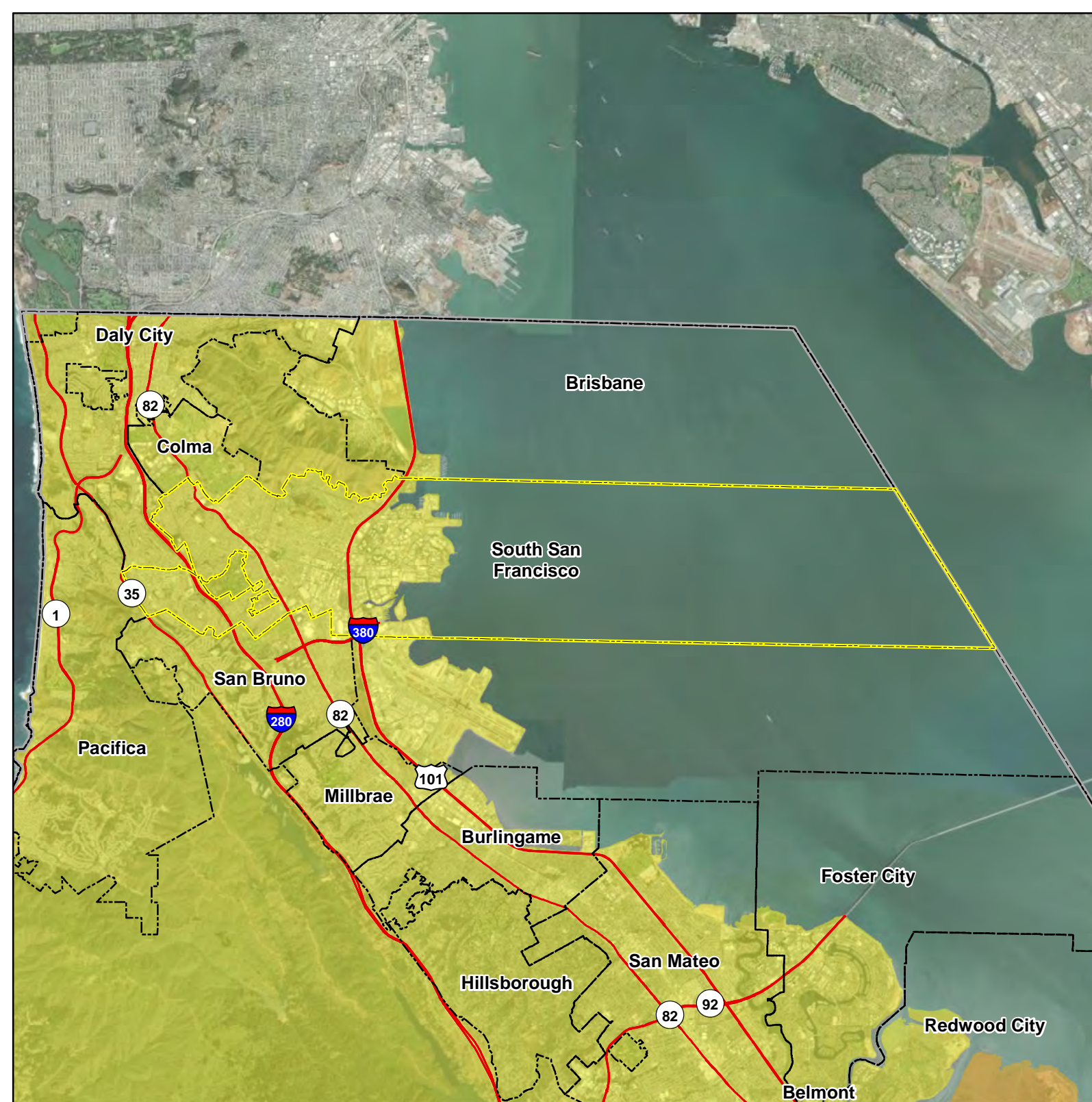
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- Selected City
- Incorporated Cities
- County Boundary
- Highways

Intensity scale described as:  
(perceived shaking / potential damage)

Data Sources: ESRI Basemap,  
San Mateo Co., USGS



0 0.75 1.5 3  
Miles





# South San Francisco

## San Andreas Peninsula M7.38 Earthquake Scenario

### Mercalli Intensity Scale

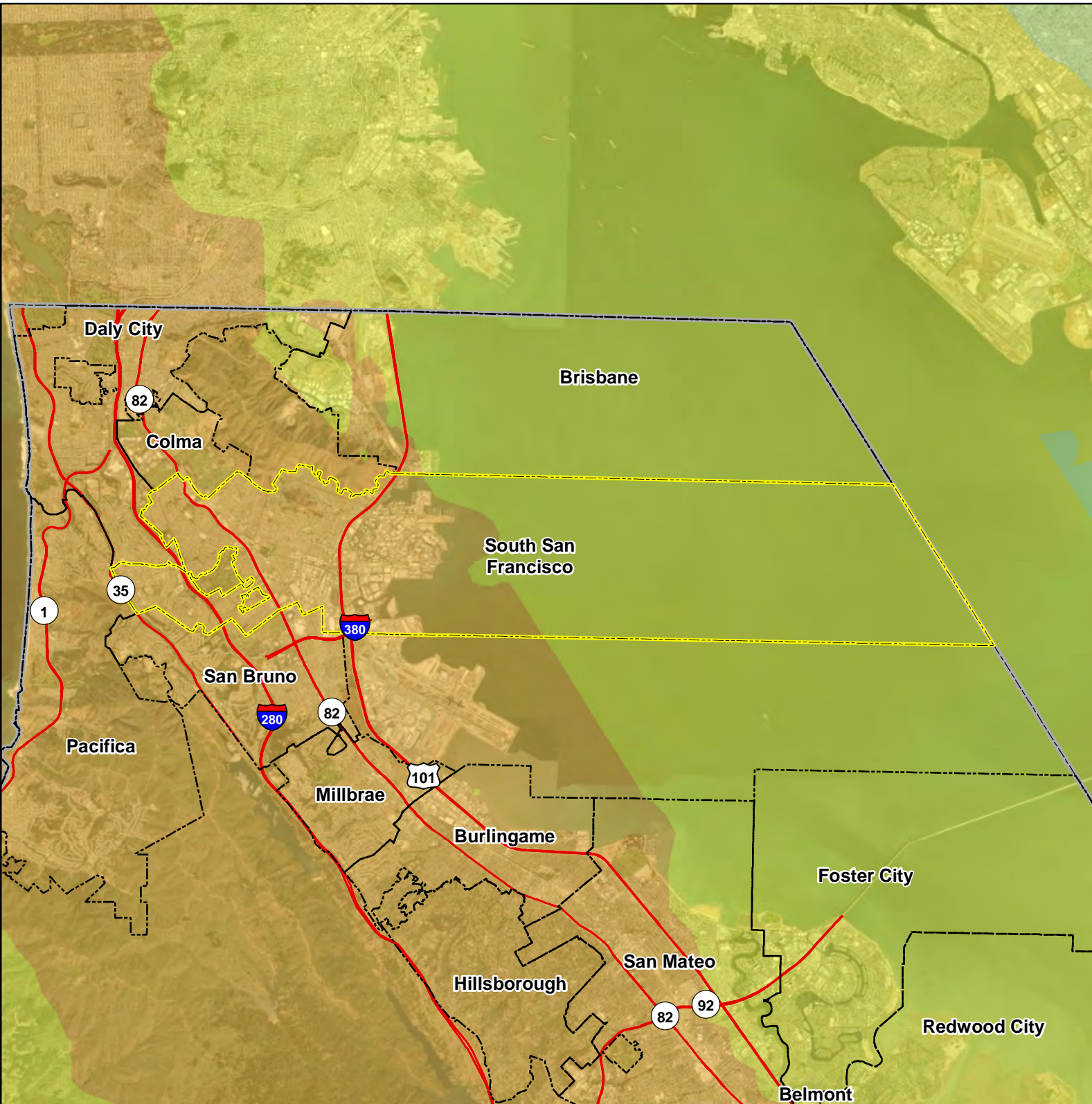
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- Selected City
- Incorporated Cities
- County Boundary
- Highways

Intensity scale described as:  
(perceived shaking / potential damage)

Data Sources: ESRI Basemap,  
San Mateo Co., USGS



0 0.75 1.5 3  
Miles





# South San Francisco

## San Gregorio North M7.44 Earthquake Scenario

### Mercalli Intensity Scale

- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- Selected City
- Incorporated Cities
- County Boundary
- Highways

Intensity scale described as:  
(perceived shaking / potential damage)

Data Sources: ESRI Basemap,  
San Mateo Co., USGS



0 0.75 1.5 3  
Miles





# South San Francisco

## FEMA Flood Hazard Areas

- 1% Annual Chance Flood (100-Year)
- 0.2% Annual Chance Flood (500-Year)
- Selected City
- Incorporated Cities
- County Boundary
- Highways

Data Sources: ESRI Basemap, San Mateo Co., FEMA



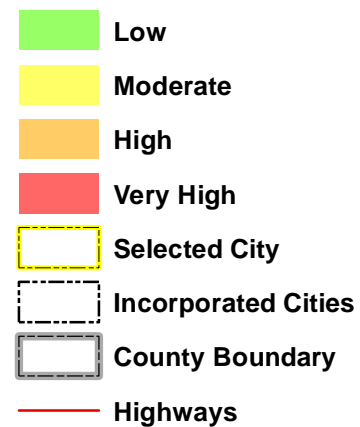
0 0.75 1.5 3 Miles





# South San Francisco

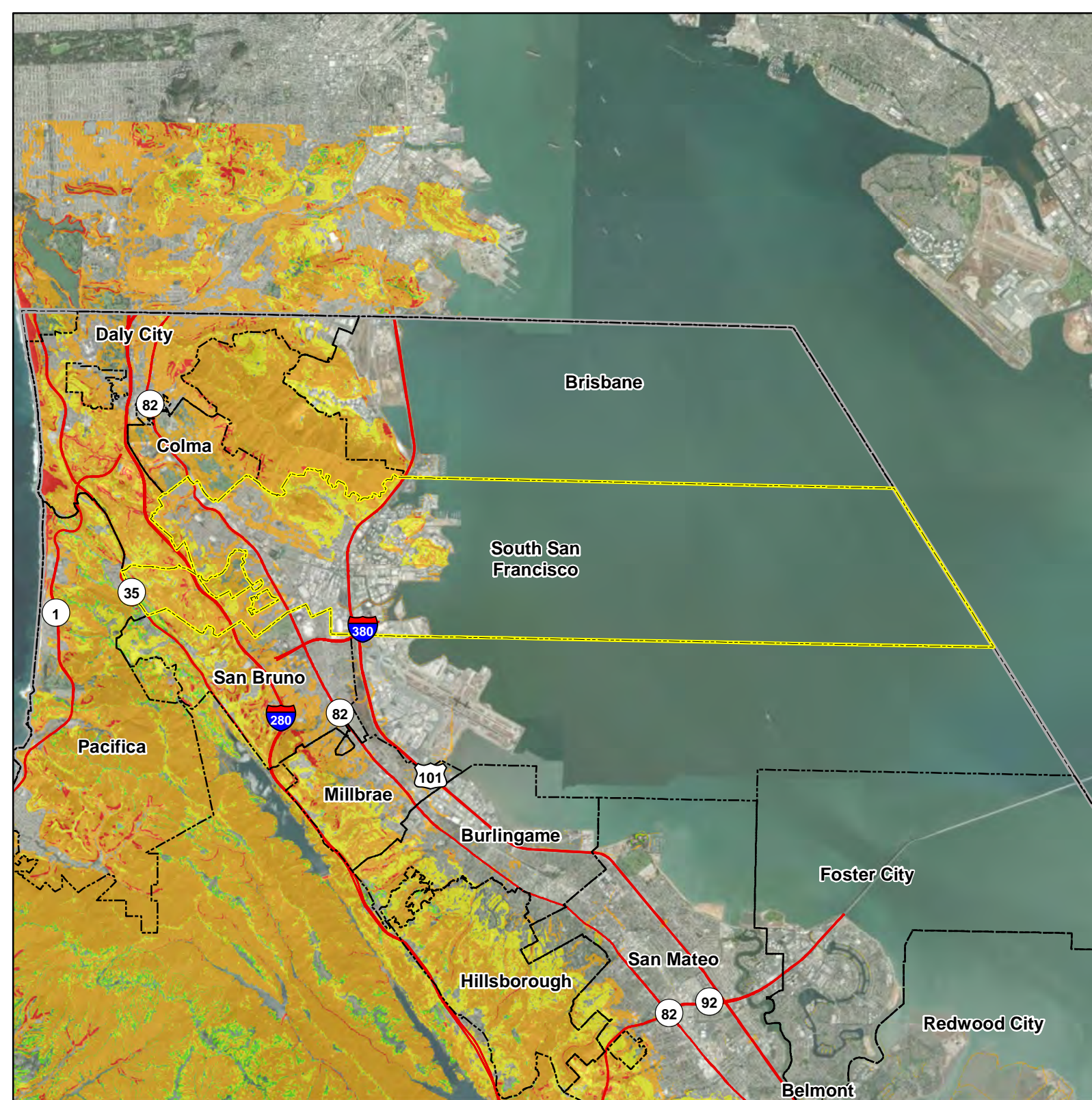
## Susceptibility to Deep-Seated Landslides



Data Sources: ESRI Basemap,  
San Mateo Co., CGS








0 0.75 1.5 3  
Miles





# South San Francisco

## Sea Level Rise

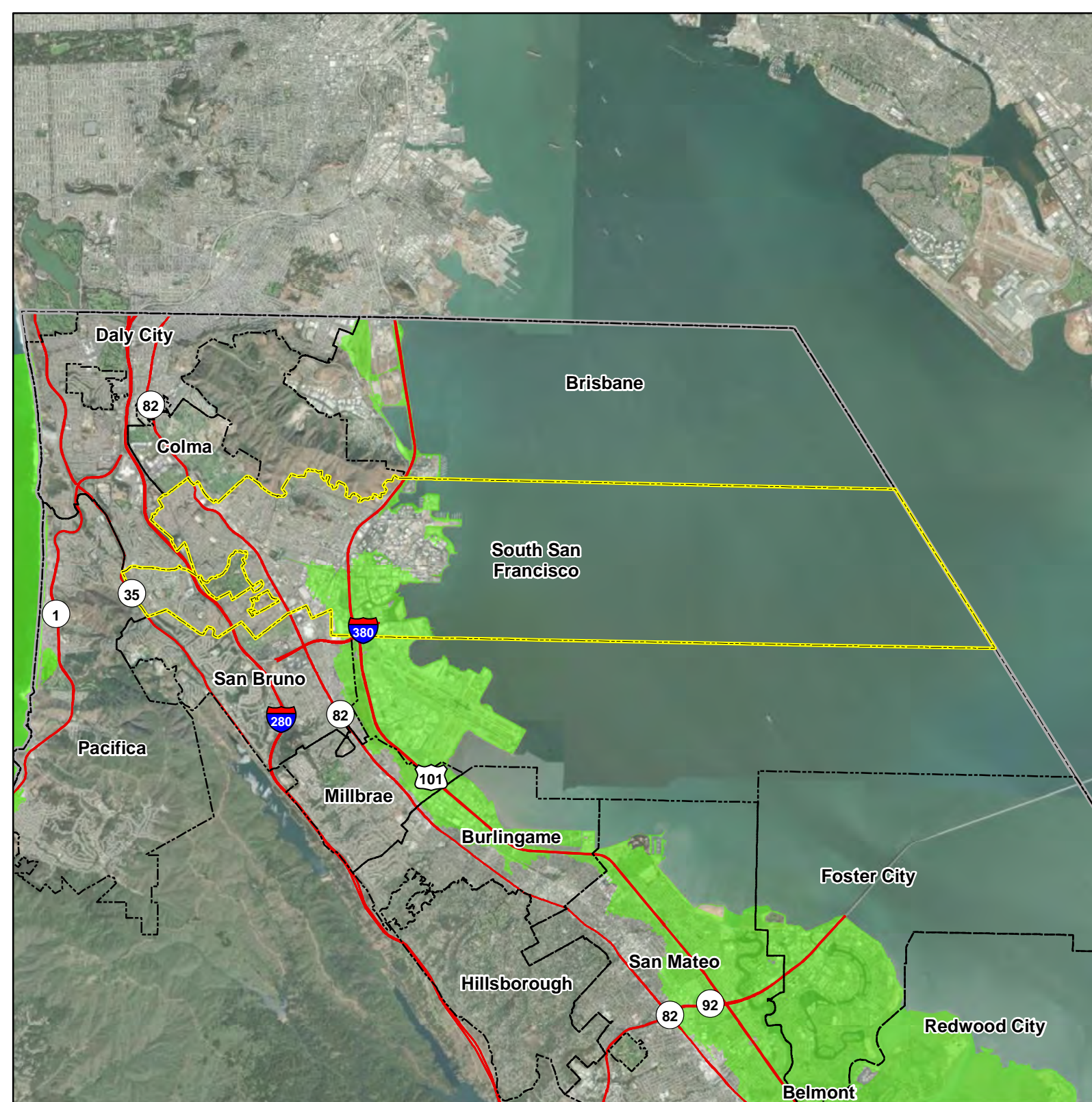
-  Inundation Area
-  Selected City
-  Incorporated Cities
-  County Boundary
-  Highways

Inundation areas are a combination of Our Coast Our Future 200cm (6.6 feet) of SLR with 100-year storm for the Pacific Ocean coastline, and Adapting to Rising Tides 108 inches (9 feet) of SLR for the San Francisco Bay coastline.

Data Sources: ESRI Basemap, San Mateo Co., ART, OCOF








0 0.75 1.5 3 Miles





# South San Francisco

## Tsunami Hazard Areas

-  Hazard Areas
-  Selected City
-  Incorporated Cities
-  County Boundary
-  Highways

Data Sources: ESRI Basemap,  
San Mateo Co., CGS



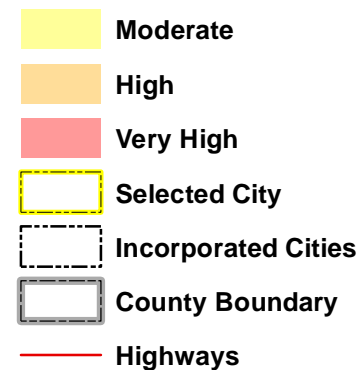
0 0.75 1.5 3  
Miles





# South San Francisco

## Wildfire Hazard Severity Zones



Data Sources: ESRI Basemap, San Mateo Co., CAL FIRE



0 0.75 1.5 3 Miles

