

wood.



City of Tracy Local Hazard Mitigation Plan

Hazard Mitigation Planning Committee Meeting #2

Fire Administration – Upstairs Conference Room
835 Central Avenue
Tracy CA 95376

Thursday, December 20, 2018

woodplc.com

Agenda

1. Introductions
2. Review of Planning Process
3. Review of Identified Hazards
4. Vulnerability Assessment Overview by Hazard
5. Capabilities Assessment
6. Developing Goals for the Mitigation Plan
7. Update on Community Outreach
8. Schedule and Next Steps
9. Questions and Answers



Introductions

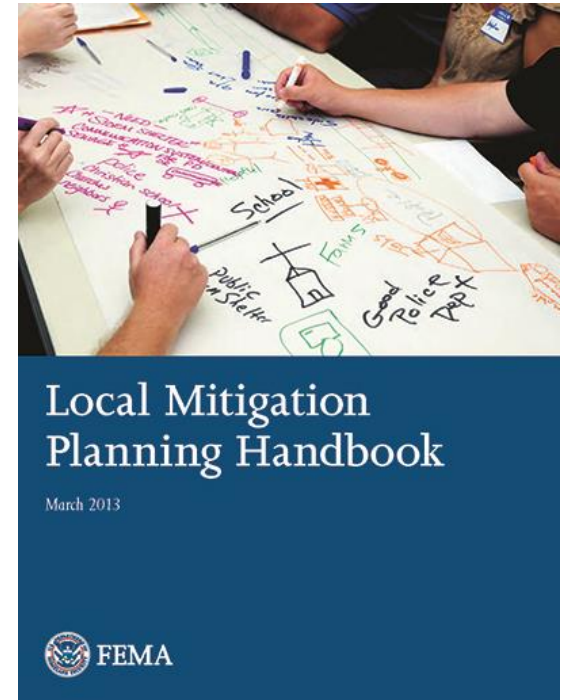
- City of Tracy
 - Karin Schnaider (Finance Director/HMPC Coordinator)
- Wood Environment & Infrastructure Solutions, Inc.
 - Jeff Brislawn, CFM (Senior Associate, Hazard Mitigation and Emergency Management Specialist)
 - Juliana Prospero, AICP (Project Manager)



Review of Planning Process

Disaster Mitigation Act of 2000

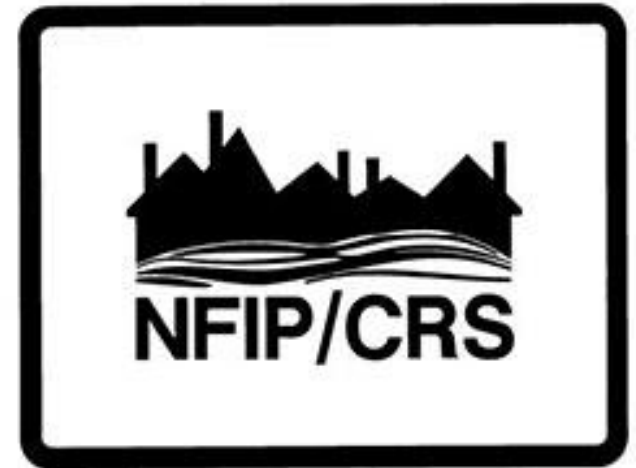
- Requires local governments to have hazard mitigation plans for continued eligibility for mitigation funds, pre- and post- disaster (No Plan, No \$)
- Guide mitigation activities in a coordinated & economic manner
- Incorporate into other existing planning mechanisms
- Future Development: plan and build wisely
- Reduce losses
- Make community more disaster resistant (Resilience!)



Review of Planning Process

National Flood Insurance Program Community Rating System

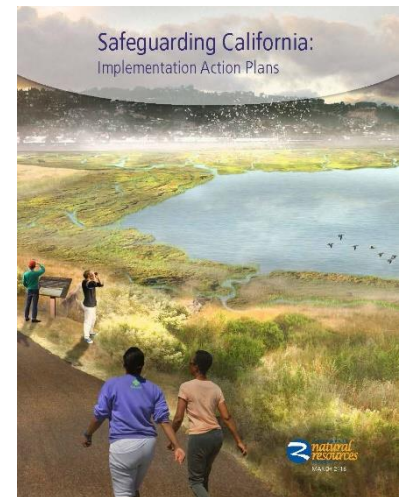
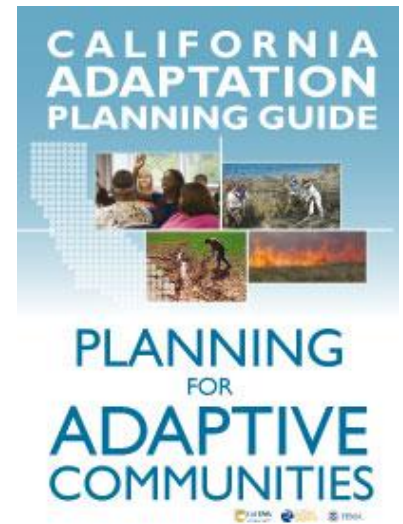
- Created in 1990 as a voluntary incentive program
- Recognizes communities that manage their floodplains beyond the minimum standards by providing discounted flood insurance rates
- Floodplain Management Planning earns credits in CRS
- San Joaquin County is a CRS participant



Review of Planning Process

California Legislation

- **SB 379:** Requires inclusion of climate adaptation strategies in General Plan Safety Elements and encourages inclusion of climate change discussion in LHMPs.
- **SB 1000:** Requires inclusion of Environmental Justice and Equity into General Plan Safety Elements.
- **AB 2140:** Encourages the adoption of LHMPs into General Plan Safety Element (after LHMP Approval).
- **SB 1241:** Revised safety element requirement of General Plans to address risk of State Responsibility Areas (SRA) and Very High Fire Hazard Severity Zones



Review of Planning Process

FEMA's 2013 Nine-Step Process

- Step 1** Determine the Planning Area and Resources
- Step 2** Build the Planning Team
- Step 3** Create an Outreach Strategy
- Step 4** Review Community Capabilities
- Step 5** Conduct a Risk Assessment
- Step 6** Develop a Mitigation Strategy
- Step 7** Keep the Plan Current
- Step 8** Review and Adopt the Plan
- Step 9** Create a Safe and Resilient Community



Review of Planning Process

Progress So Far

- Established and Convened a Hazard Mitigation Planning Committee (HMPC) in September
- Facilitated a Stakeholder's Workshop in November
- Collected and reviewed hazards information and identified hazards to evaluate in Risk Assessment
- Organized and reviewed City parcel database
- Conducted spatial analysis using Geographic Information Systems (GIS) and FEMA HAZUS Software
- Reviewed City's existing capabilities for hazard mitigation
- **Launched City of Tracy LHMP Webpage**
- **Circulated Online Public Survey**



Review of Planning Process

Hazard Mitigation Planning Committee

- **City Departments**
 - Public Works
 - Utilities
 - Human Resources
 - Finance Department
 - Fire Department
 - Development Services
 - Building Safety and Fire Prevention
 - Code Enforcement
 - Engineering
 - Economic Development
 - Planning Division
 - Parks and Recreation
 - Police Department
 - City Manager's Office, City Clerk's Office, City Attorney's Office
 - Information Technology/GIS



Review of Planning Process

Stakeholder Participation

- **San Joaquin County**
 - **Office of Emergency Services**
 - **Public Health**
 - **Fire Department**
- SJCOG
- Regional Transit District and Bay Area Rapid Transit
- **Pacific Gas & Electric**
- **California Conservation Corps**
- Local Businesses
- **Cal Fire**
- CNRA
- Cal OES
- **Neighboring Counties**
- FEMA Region IX
- US Bureau of Reclamation
- US Forest Service
- NOAA/NWS
- Tracy Unified School District
- **Sutter Tracy Community Hospital**



Review of Planning Process

What goes into the Local Hazard Mitigation Plan?

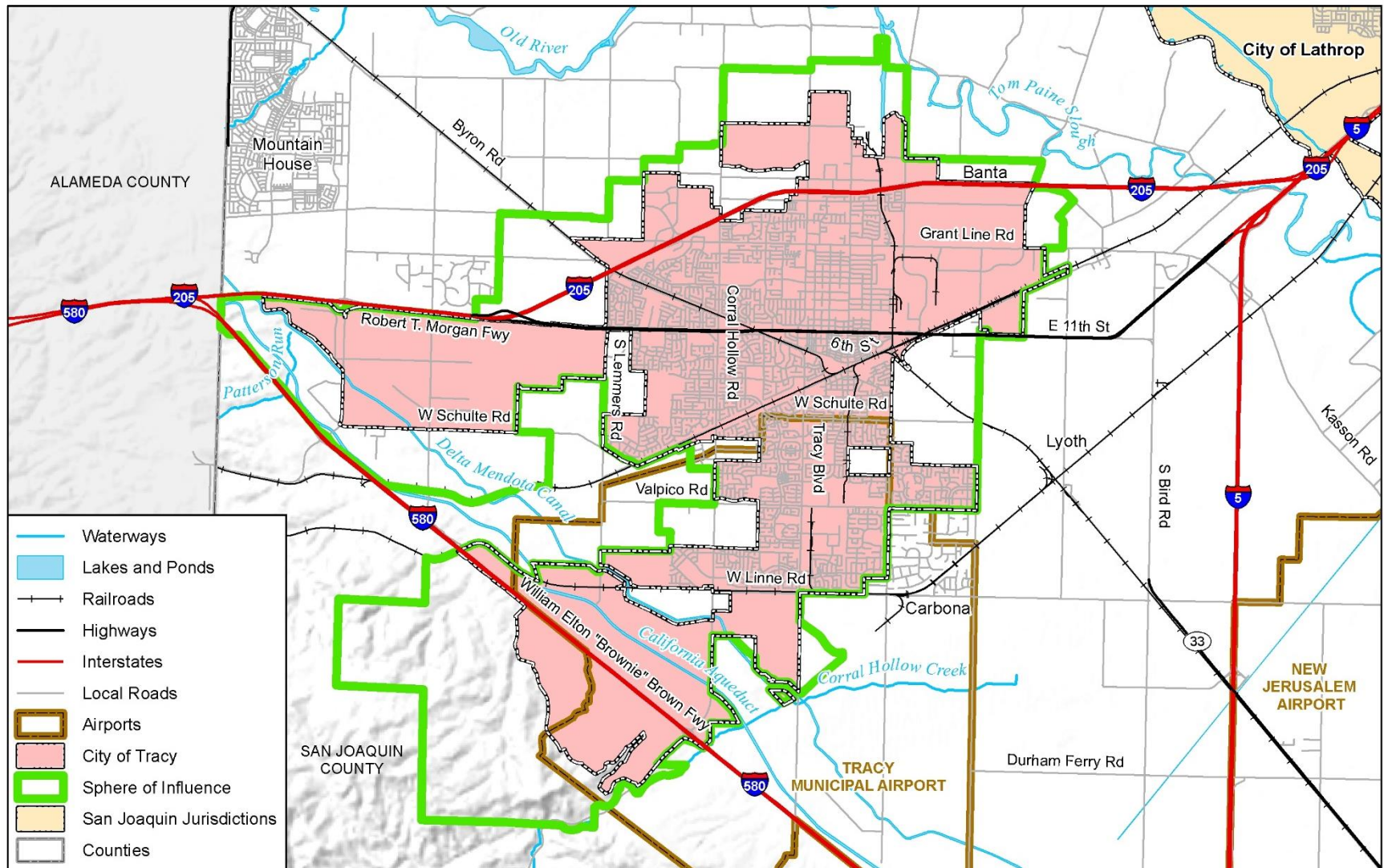
- Section 1 – Introduction
- Section 2 – Community Profile
- Section 3 – Planning Process
- **Section 4 – Risk Assessment, plus Capability Assessment**
- Section 5 – Mitigation Strategy
- Section 6 – Plan Adoption
- Section 7 – Plan Implementation and Maintenance

- Appendices and Annexes



Review of Identified Hazards

Planning Area: Sphere of Influence



Map compiled 9/2018;
intended for planning purposes only.
Data source: San Joaquin County,
US Census TIGER database, City of Tracy

Review of Identified Hazards

Hazards of Concern

- Flooding (100-, 200-, 500-year events) and Levee Failure
- Dam Failure
- Seismic Hazards (earthquake)
- Wildland/Urban Fires
- Drought
- Extreme Heat
- Severe Weather (e.g. heavy rain/storms, wind/tornado)
- Human-Caused Hazards
 - Hazardous Materials
- Climate Change as part of existing natural hazards



Review of Identified Hazards

Hazards Dismissed from Detailed Analysis

- Agricultural Hazards
- Landslide/Debris Flow
- Coastal Erosion/Tropical Storms
- Tsunami
- Sea Level Rise
- Volcanoes
- Hurricanes
- Human-Health Hazards



Review of Identified Hazards

Terminology

- **Hazard/Threat:** Act or phenomenon with potential to do harm
- **Vulnerability:** susceptibility to harm, damage, loss
- **Exposure:** People, property, systems or functions that could be lost to a hazard
- **Risk:** Combines hazard, vulnerability, exposure and probability
- **Mitigation:** Actions taken in advance of a hazard's impact that reduce its severity



Review of Identified Hazards

Hazard Profiles

Hazard/Problem Description

- Area, Seasonal Patterns, Speed of Onset/Duration

Geographic Extent (or Spatial Extent)

- Limited: Less than 10% of Planning Area
- Significant: 10-50% of Planning Area
- Extensive: 50-100% of Planning Area

Past Occurrences

- Information on Historical Incidents, Known Impacts

Magnitude/Severity:

- Catastrophic: More than 50% of property severely damaged
- Critical: 25-50% of property severely damaged
- Limited: 10-25% of property severely damaged
- Negligible: Less than 10% of property severely damaged

Significance

- Low: Minimal potential impact
- Medium: Moderate potential impact
- High: Widespread potential impact

Frequency/Likelihood of Future Occurrences

- Highly Likely: Near 100% chance of occurrence in next year
- Likely: Between 10-100% chance of occurrence in next year
- Occasional: Between 1-10% chance of occurrence in next year
- Unlikely: Less than 1% chance of occurrence in next year



Review of Identified Hazards

Hazard Profiles

Climate Change Considerations

- An increasingly important factor affecting disaster management
- Addressed under each Hazard Profile as a factor intensifying impacts of many natural hazards
- California is already experiencing impacts:
 - Prolonged drought
 - Increased coastal flooding and erosion
 - Tree mortality
 - Larger wildfires
- Can affect the frequency and severity of hazard events
 - 1,800 more wildfires in 2015 than average (from SHMP)
 - Wildfires are now less predictable and more catastrophic
 - Occur outside of typical fire season
 - Larger conflagration sizes, more damaging



Vulnerability Assessment

What will be affected?

- Inventory residential and commercial structures
- Inventory vacant parcels
- Inventory critical facilities and infrastructure
- Determine value of structures
- Determine the number of people in hazard areas
- Identify vulnerable infrastructure
- Identify development trends/constraints
- Identify historic, cultural, and natural resource areas
- Estimate losses by hazard
- **Special Considerations**
 - Commuter Population
 - Regional Transportation Impacts



Review of Identified Hazards

Risk Summary

Hazard	Geographic Extent	Probability of Future Occurrences	Magnitude/Severity	Significance
Dam Failure	Limited	Unlikely	Limited	Low
Drought	Extensive	Likely	Critical	High?
Earthquake	Extensive	Occasional	Critical	Medium
Flood: 100/500 year	Limited	Occasional	Limited	Medium
Severe Weather: Extreme Heat	Extensive	Highly Likely	Limited	Medium
Severe Weather: Heavy Rains and Storms (Lighting and Hail)	Extensive	Highly Likely	Negligible	Low
Severe Weather: Wind (Tornadoes)	Extensive	Likely	Negligible	Low
Fire (Urban and Wildland)	Limited	Likely	Limited	Medium
Hazardous Materials	Significant	Highly Likely	Limited	Medium



Review of Identified Hazards

Declared Disaster Declarations in San Joaquin County

Event/ Hazard	Year	Declaration Type	Remarks/Description
Severe Storms and Flooding	1969	Presidential—Major Disaster Declaration	San Joaquin County (and 39 other counties) 47 deaths; 161 injuries; \$300,000,000 in damage
Drought	1976	Presidential—Emergency Declaration	\$4.8 million (2009 dollars) statewide
Delta Levee Break	1980	Presidential – Emergency Declaration	San Joaquin (and 2 other counties) \$17,388,013 in damages(all involved counties)
Jones Tract Levee Break	1980	Major Disaster Declaration	San Joaquin County \$21,510,956 in damages
Levee Break	1982	Major Disaster Declaration	McDonald Island San Joaquin County; \$11,561,870 in damages
Winter Storms – Flooding	1983	Major Disaster Declaration	San Joaquin County(and 43 other counties) \$523,617,032 in damages
1986 Storms- Flooding	1986	Major Disaster Declaration	San Joaquin County (and 38 other counties) 13 deaths, 67 injuries, \$407,538,904 in damages
Loma Prieta Earthquake	1989	Major Disaster Declaration	City of Tracy (and 1 other city and 10 counties) 63 deaths, 3,757 injuries, \$888,662,382 in damages
Flood – Late Winter Storms	1995	Major Disaster Declaration	Statewide (except Del Norte county) \$132,040,111 in damages
Flood – 1997 January Flood	1996	Major Disaster Declaration	San Joaquin County (and 47 other counties) 8 deaths, \$195,342,509 in damages
Flood – 1998 El Nino	1998	Major Disaster Declaration	San Joaquin County (and 39 other counties) 17 deaths, \$385,141,192 in damages
Flood – San Joaquin Levee Break	2004	Major Disaster Declaration	\$27,214,428 in damages
Hurricane Katrina Evacuation (economic)	2005	Emergency Declaration	Statewide
Flooding and Mudslides – Feb. 2017 Storms	2017	Major Disaster Declaration	San Joaquin County(and 42 other counties and 1 tribe) 8 deaths



Review of Identified Hazards

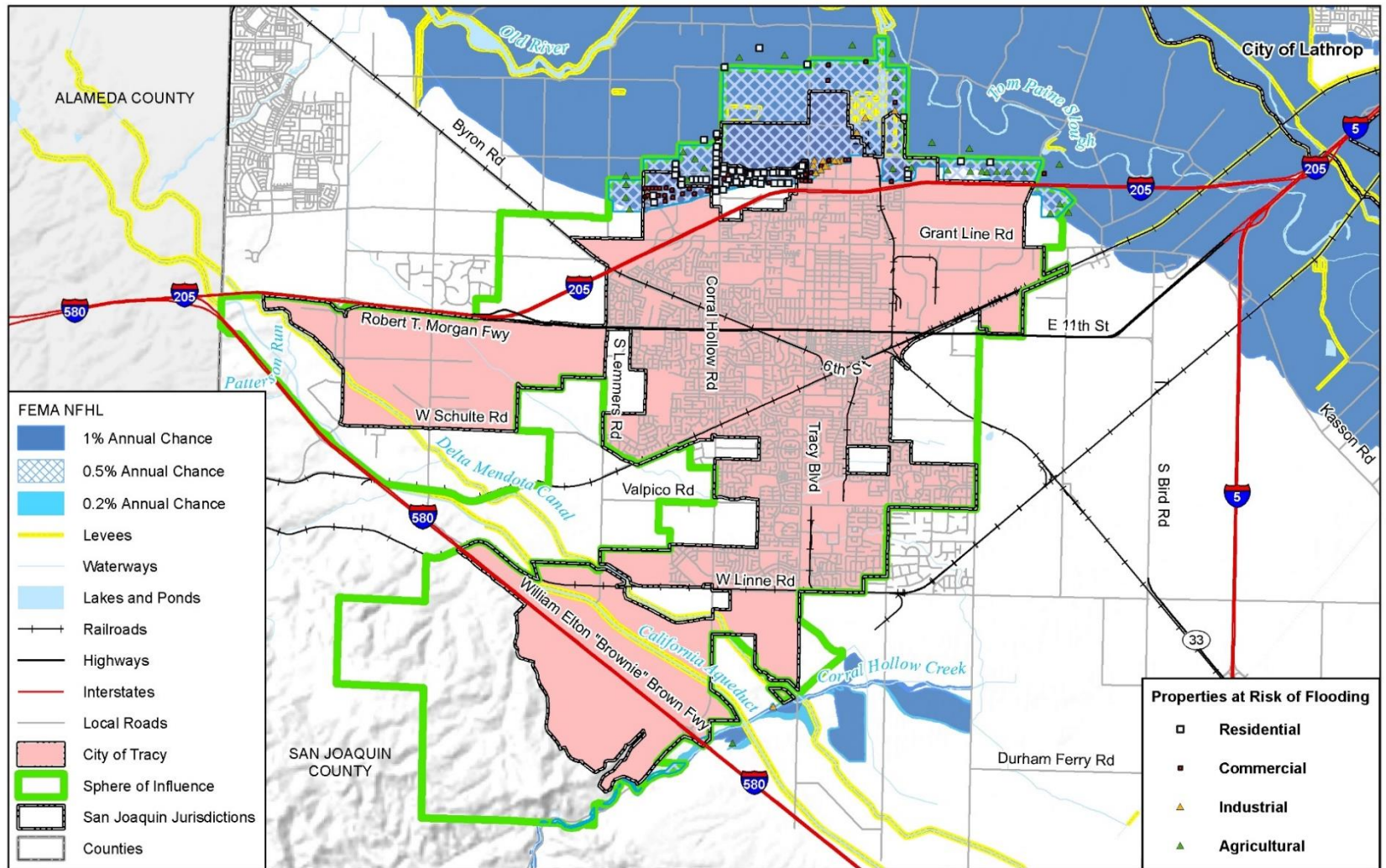
Flood: 100-, 200-, and 500-Year Events

- **Hazard/Problem Description:** North of City, Southeast of City at Corral Hollow Creek area, several levees traverse SOI. 200 properties at risk.
- **Geographic Extent:** Limited
- **Past Occurrences:** 11 declared disasters in San Joaquin County; 2 disasters at the city level (with \$4.3 million in property losses, \$7.8 million in crop damages, failed levees, and one death back in 1998)
- **Magnitude/Severity:** Limited
- **Significance:** Medium
- **Likelihood of Future Occurrences:** Occasional
- **Existing Capabilities:** City's General Plan, Storm Drainage Plans, Flood Insurance Studies, NFIP Participation



Review of Identified Hazards

Flood: Properties at Risk



Map compiled 12/2018;
intended for planning purposes only.
Data source: San Joaquin County,
US Census TIGER database,
City of Tracy, FEMA NFHL



Review of Identified Hazards

Flood: Properties at Risk

Flood Hazard	Parcel Count	Structure Value	Content Value	Total Value	Loss Estimate	Population
1% Annual Chance	196	\$ 81,939,766	\$ 78,054,058	\$ 159,993,824	\$ 39,998,456	288
0.5% Annual Chance	4	\$ 55,797	\$ 55,797	\$ 111,594	\$ 27,899	--
0.2% Annual Chance	--	--	--	--	--	--
Total	200	\$ 81,995,563	\$ 78,109,855	\$ 160,105,418	\$ 40,026,355	288



Review of Identified Hazards

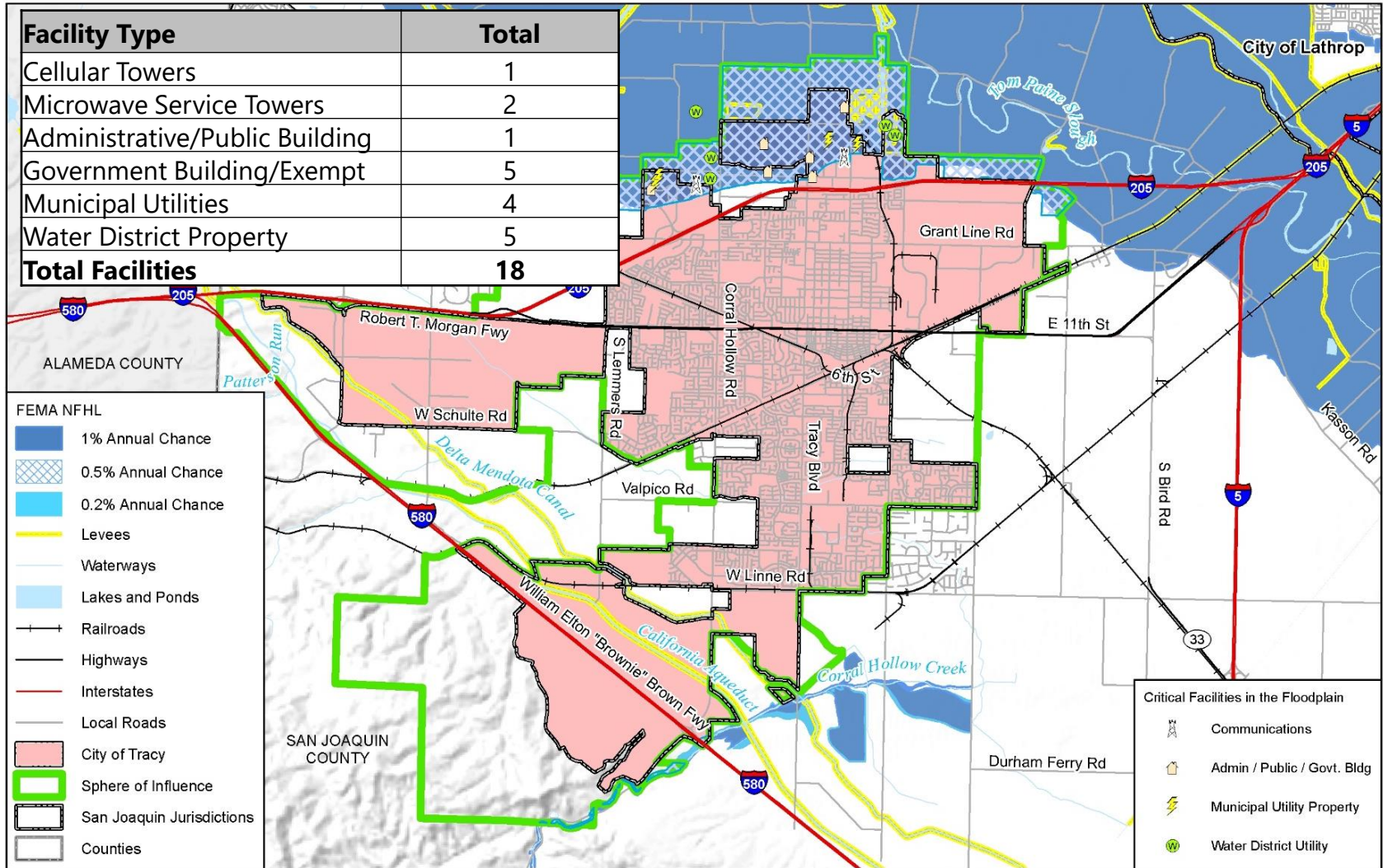
Flood: Properties at Risk – Details by Type

Flood Event	Property Type	Total Structures	Structure Value	Content Value	Total Value	Loss Estimate	Population
100yr	AGRICULTURAL	25	\$ 951,379	\$ 951,379	\$ 1,902,758	\$ 475,690	--
	PASTURE	1	\$ 15,300	\$ 15,300	\$ 30,600	\$ 7,650	--
	COMMERCIAL	33	\$ 33,244,514	\$ 33,244,514	\$ 66,489,028	\$ 16,622,257	--
	COMMERCIAL VACANT LAND	6	\$ 158,531	--	\$ 158,531	\$ 39,633	--
	INDUSTRIAL	23	\$ 20,069,168	\$ 30,103,752	\$ 50,172,920	\$ 12,543,230	--
	RESIDENTIAL	75	\$ 11,060,863	\$ 5,530,432	\$ 16,591,295	\$ 4,147,824	257
	MULTI-FAMILY UNIT	5	\$ 15,577,199	\$ 7,788,600	\$ 23,365,799	\$ 5,841,450	17
	DUPLEX	1	\$ 267,285	\$ 133,643	\$ 400,928	\$ 100,232	3
	MOBILE HOME	3	\$ 572,879	\$ 286,440	\$ 859,319	\$ 214,830	10
	RESIDENTIAL VACANT LAND	24	\$ 22,648	--	\$ 22,648	\$ 5,662	--
TOTAL		196	\$ 81,939,766	\$ 78,054,058	\$ 159,993,824	\$ 39,998,456	288



Review of Identified Hazards

Flood: Critical Facilities at Risk of the 100-, 200-, 500-year events



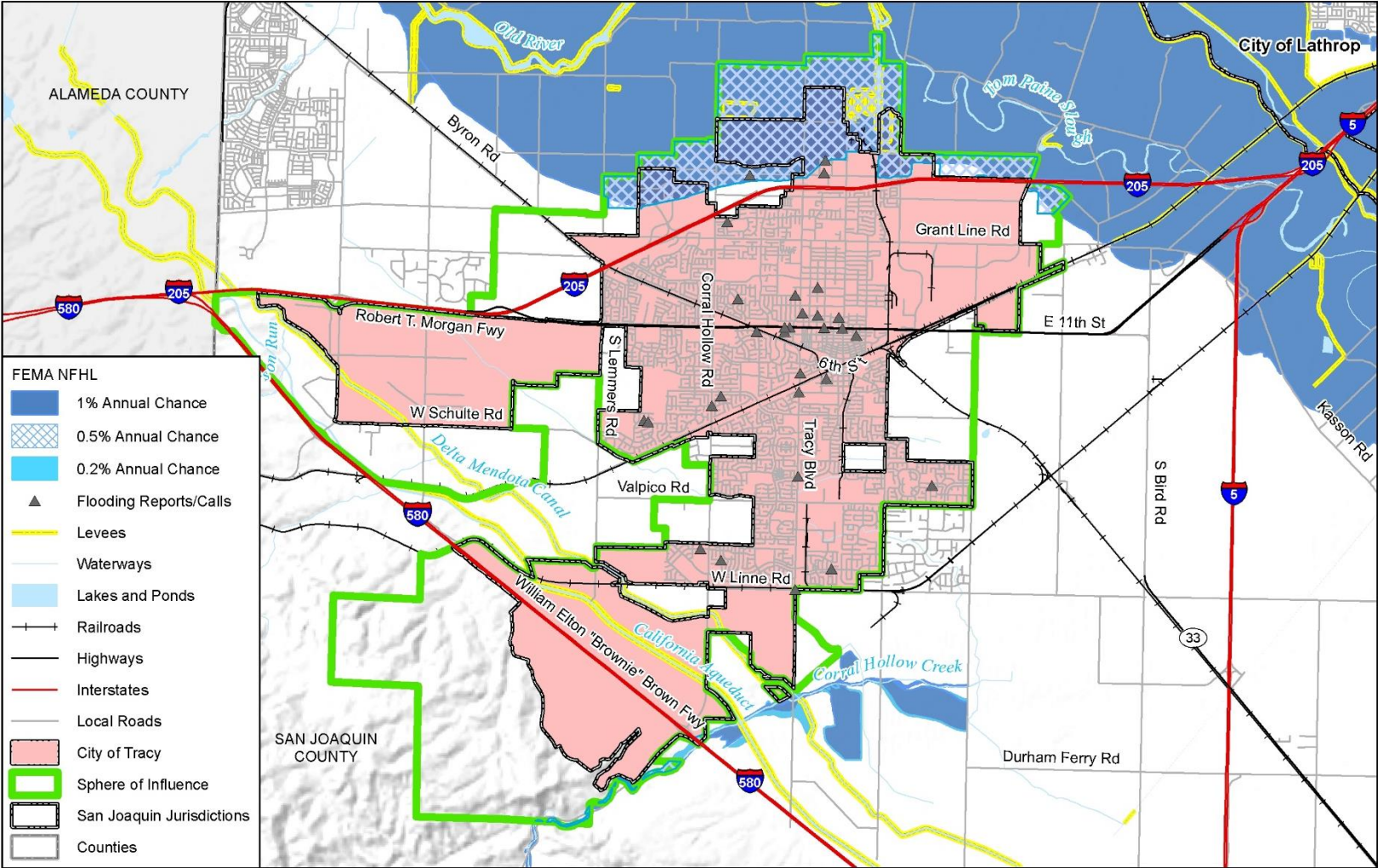
Map compiled 11/2018;
intended for planning purposes only.
Data source: San Joaquin County,
US Census TIGER database, City of
Tracy, FEMA NFHL, HIFLD 2017

0 1 2 4 Miles

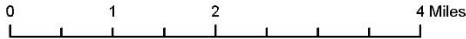


Review of Identified Hazards

Flood: Localized Flood Hazards (Recent Flood Related Calls)



Map compiled 12/2018;
intended for planning purposes only.
Data source: San Joaquin County,
US Census TIGER database,
City of Tracy, FEMA NFHL



wood.

Review of Identified Hazards

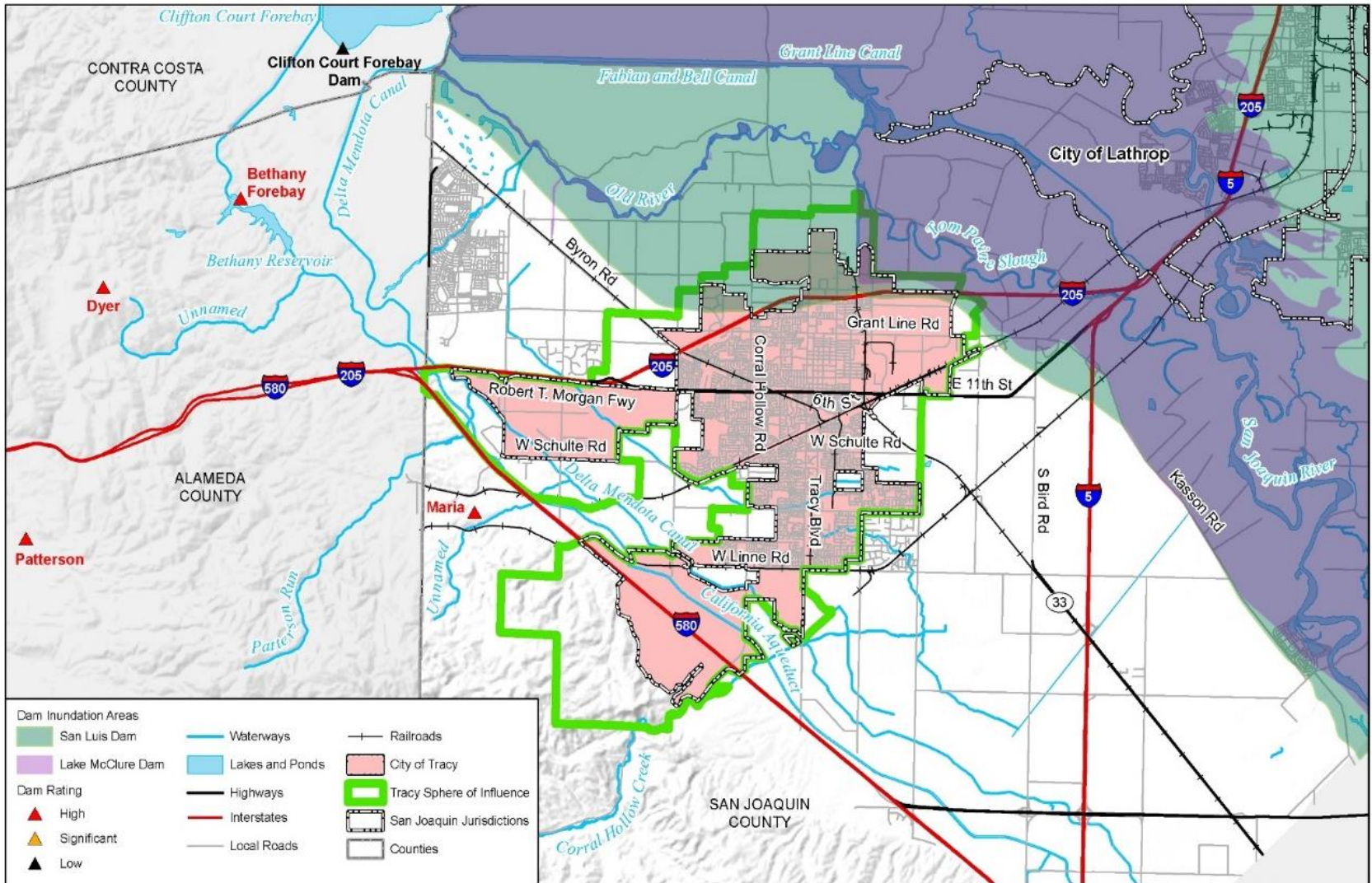
Dam Failure

- **Hazard/Problem Description:**
 - 1 high hazard dam in close proximity (Maria Dam)
 - Other high hazard dams in region pose potential risk
 - San Luis Dam (Merced County), Lake McClure Dam (Mariposa County), New Melones (Calaveras County)
 - 402 properties in Tracy in inundation zones
- **Geographic Extent:** Limited
- **Past Occurrences:** No history, but potential exists
- **Magnitude/Severity:** Limited
- **Significance:** Low
- **Future Likelihood of Occurrence:** Unlikely
- **Existing Capabilities:** EAP's, GIS mapping

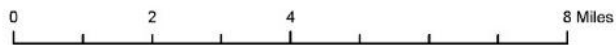


Review of Identified Hazards

Dam Failure Inundation Zones



Map compiled 10/2018;
intended for planning purposes only.
Data source: San Joaquin County, OES,
US Census TIGER database, City of Tracy,
CA Dept. of Water Resources, CalFish



Review of Identified Hazards

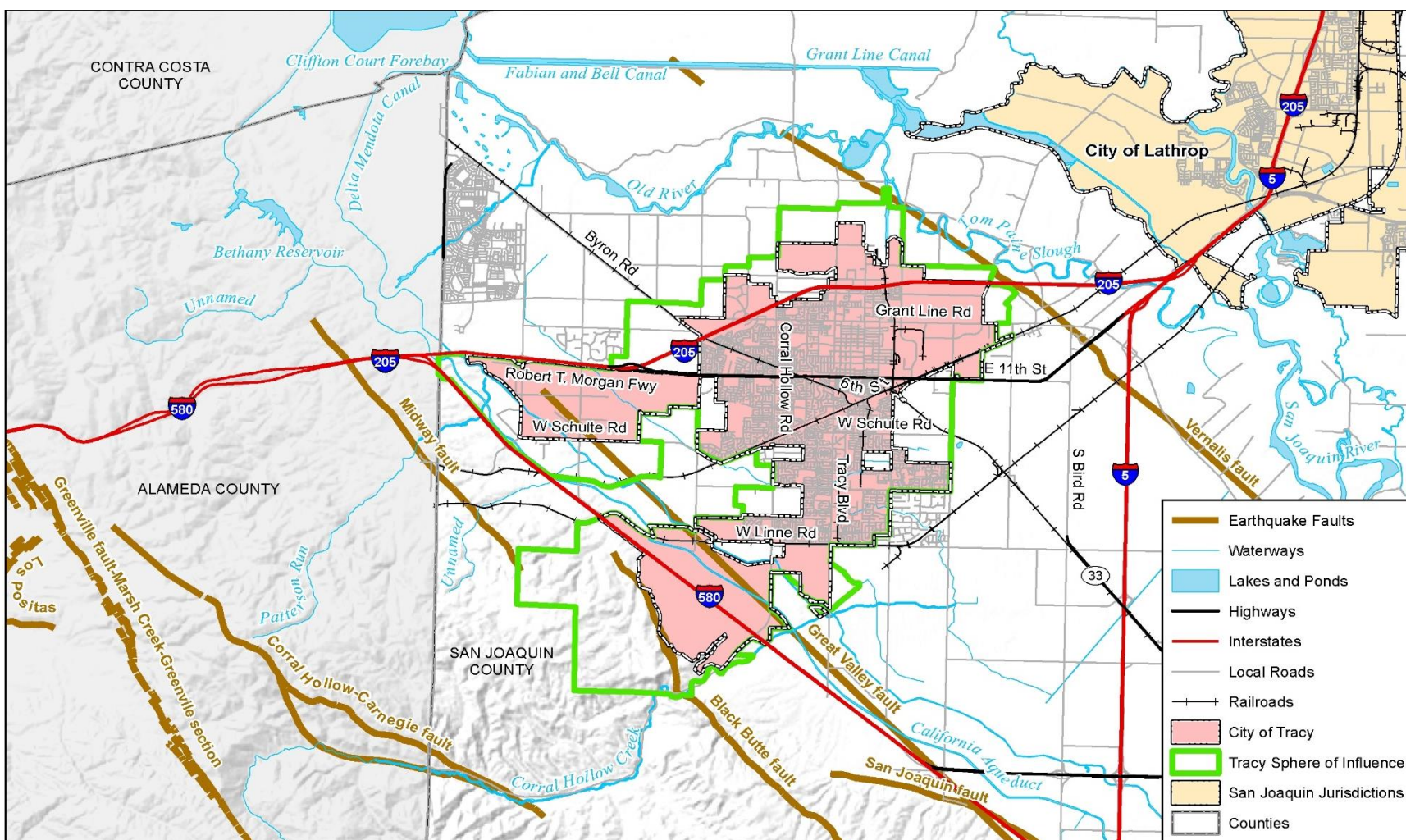
Earthquake Hazards

- **Hazards/Problem Description:**
 - Multiple Faults within/around planning area
 - Corral Hollow/Carnegie
 - Black Butte
 - Midway
 - Green Valley Fault System
 - Moderate Potential for Ground Shaking
 - Potential for Secondary Hazards for ground shaking hazard:
 - Pipeline Failure
 - Flooding: Levee Failure
- **Geographic Extent:** Extensive
- **Past Occurrences:** Loma Prieta Earthquake
- **Magnitude/Severity:** Critical
- **Significance:** Medium
- **Future Likelihood of Occurrence:** Occasional
- **Existing Capabilities:** 2018 Great ShakeOut Participation, City's General Plan, Building Code



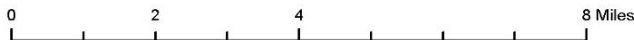
Review of Identified Hazards

Earthquake Hazards



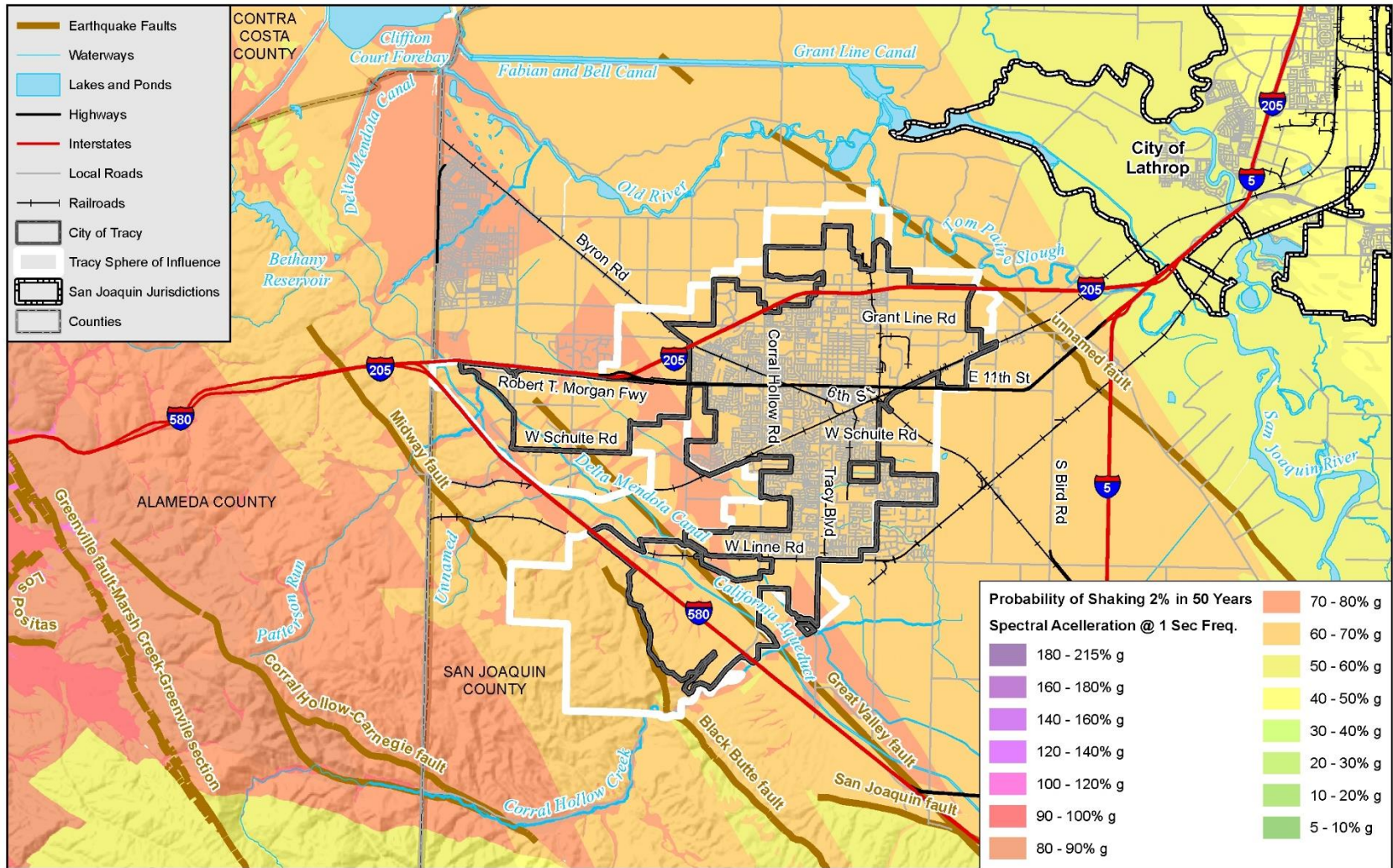
wood.

Map compiled 11/2018;
intended for planning purposes only.
Data source: San Joaquin County,
US Census TIGER database, City of Tracy,
CA Dept. of Water Resources, CalFish, USGS

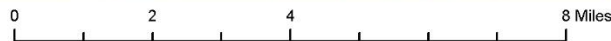


Review of Identified Hazards

Earthquake Hazards - Groundshaking



Map compiled 12/2018;
intended for planning purposes only.
Data source: San Joaquin County,
US Census TIGER database, City of Tracy,
CA Dept. of Water Resources, CalFish,
California Geological Survey, USGS



Review of Identified Hazards

Earthquake Hazards – Hazus Loss Modeling Results

2,500-year Probabilistic Scenario

- Total economic loss \$1.9 billion (includes building and lifeline losses based on the Hazus-MH inventory)
- Building-related losses \$1.8 billion (includes direct building losses and business interruption losses)
- 10,510 buildings (34% of total in the study area) were at least moderately damaged
- 671 buildings were damaged beyond repair
- Residential structures made up 61 percent of total loss
- 14 percent of the estimated losses were related to business interruptions.
- Mid-day earthquake (2 p.m.) would cause the most injuries: 296 hospitalizations, 49 life threatening cases, 94 fatalities



Review of Identified Hazards

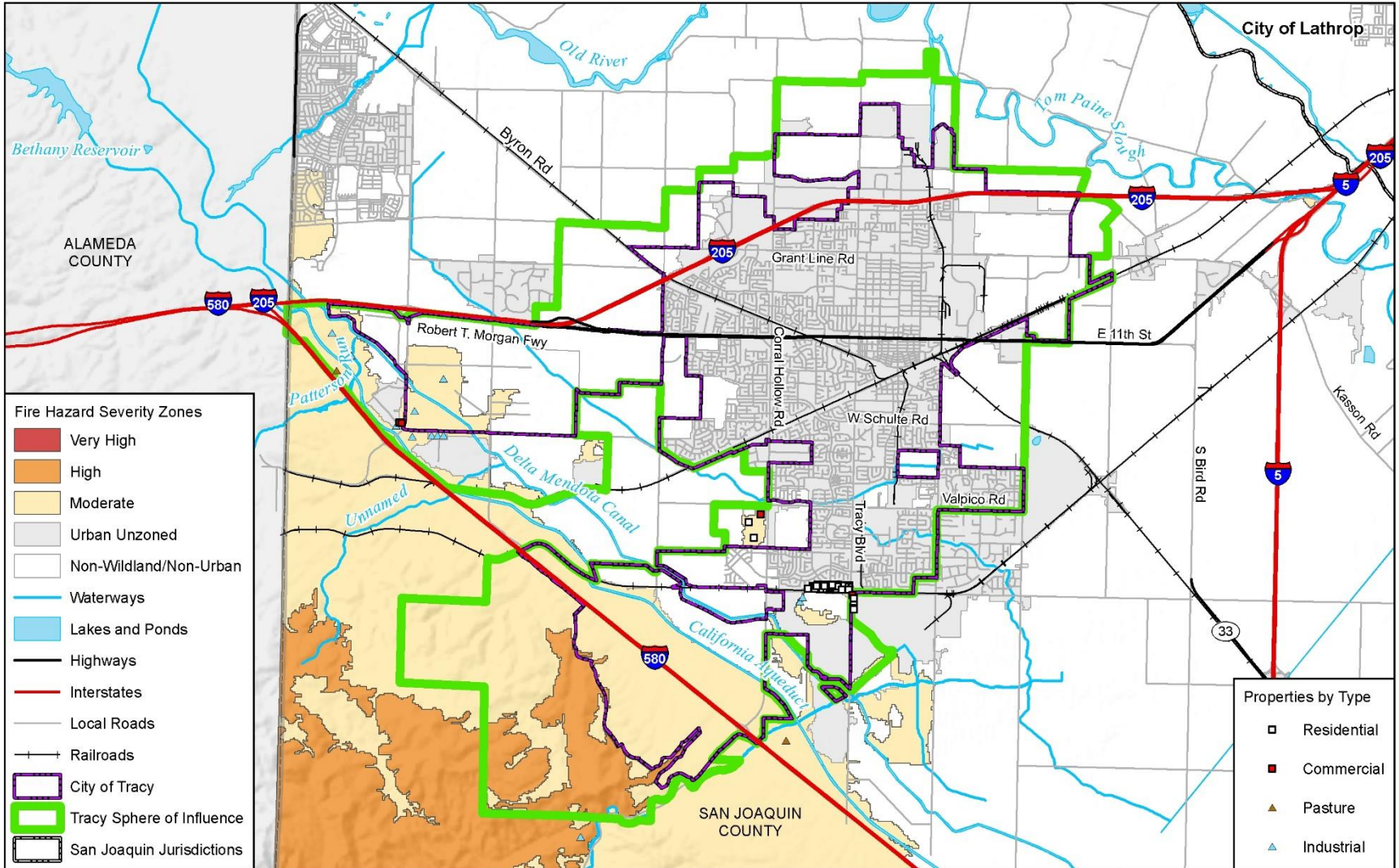
Fire: Urban and Wildland

- **Hazard/Problem Description:** Fire severity fire zones southwest of the City
- 120 properties at risk (mostly moderately ranked).
- **Geographic Extent:** Limited
- **Past Occurrences:** 6 fires in the last 8 years in or near Tracy (from CalFire), and others more since 2000 (federally reported)
- **Magnitude/Severity:** Limited
- **Significance:** Medium
- **Future Likelihood of Occurrence:** Likely
- **Areas at risk slated for new development:** Tracy Hills
- **Existing Capabilities:** Fire Authority partnerships, Fire Department Reports, CalFire Strategic Fire Plan



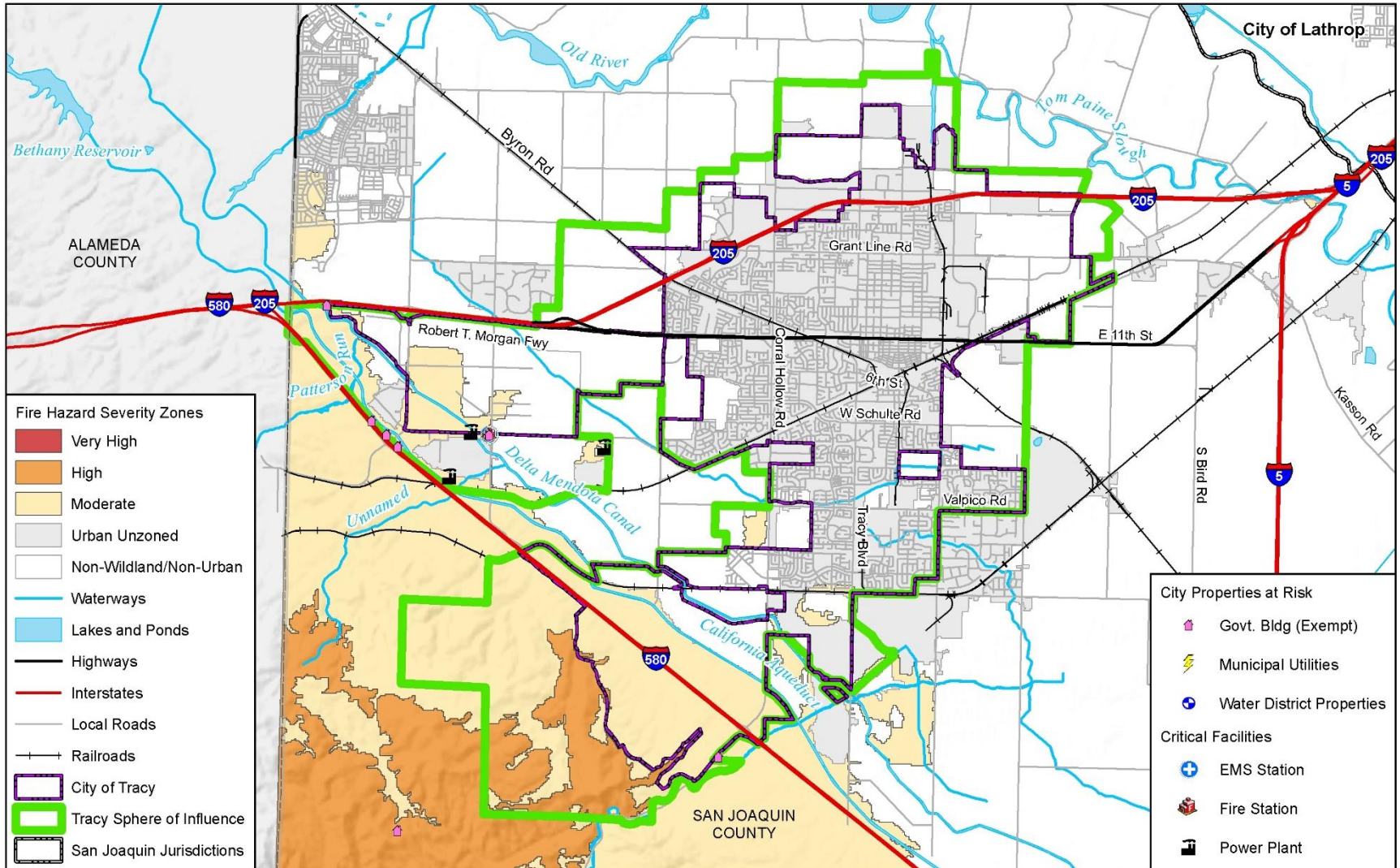
Review of Identified Hazards

Fire Severity Zones – Properties at Risk



Review of Identified Hazards

Fire Severity Zones – Critical Facilities/City Structures at Risk



Review of Identified Hazards

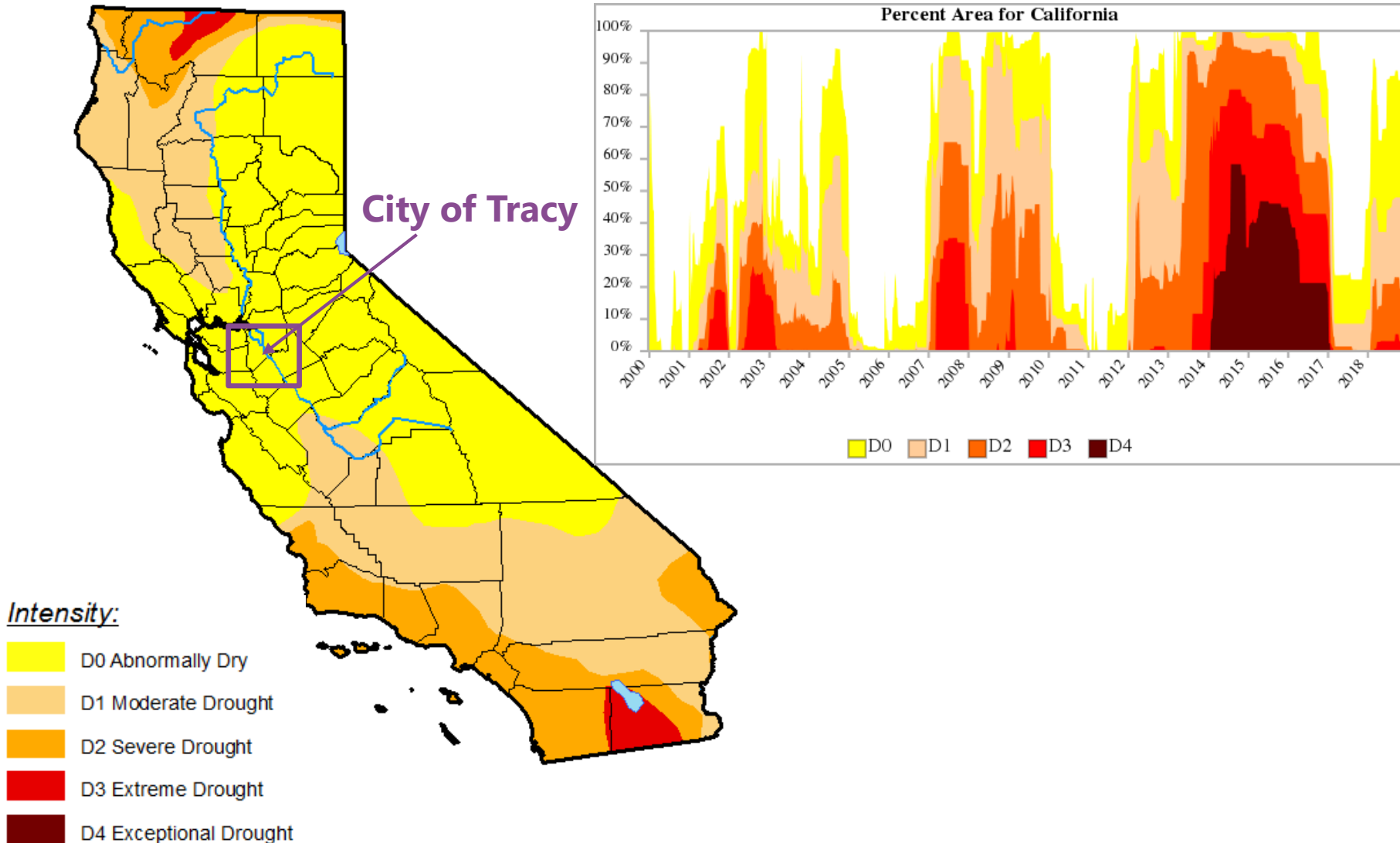
Drought

- **Hazard/Problem Description:**
 - Latest USDA declaration was in 2017
 - Ongoing problem across San Joaquin County, affecting crops, water resources, economies
- **Geographic Extent:** Extensive
- **Past Occurrences:**
 - 6 Multi-Year Droughts since 1950
 - 15 disaster declarations since 1976 in Tracy and/or San Joaquin County
- **Magnitude/Severity:** Critical
- **Significance:** High?
- **Future Likelihood of Occurrence:** Likely
- **Existing Capabilities:** 2015 Urban Water Management Plan, Draft Water Shortage Contingency Plan



Review of Identified Hazards

Drought Monitor Nov 27, 2018



Review of Identified Hazards

Extreme Heat

- **Hazard/Problem Description:**
 - Period when high temperatures are expected to have a significant impact on public safety. Extreme temperatures have an adverse impact on human health and agriculture.
- **Geographic Extent:** Extensive
- **Past Occurrences:**
 - Heat waves have claimed more lives in state than all other declared disaster event combined
 - 42 heat and excessive heat events in past 28 years in San Joaquin County
 - Highest recorded daily extreme temperature was 112°F on June 16, 1961
- **Magnitude/Severity:** Limited
- **Significance:** Medium
- **Future Likelihood of Occurrences:** Highly Likely
- **Existing Capabilities:** Designated Cooling Zones, Free TRACER Rides, Urban Heat Island Mitigation Policies in General Plan



Review of Identified Hazards

Severe Weather

- **Hazard/Problem Description:** Heavy Rain, Thunderstorms, Hail, Lighting
- **Geographic Extent:** Extensive
- **Past Occurrences:**
 - 47 Hail, Heavy Rain, and Lighting Events in past 67 Years in San Joaquin County
 - Majority are heavy rain events (43 Events)
 - Average annual precipitation: 9.86 inches
 - Highest recorded annual precipitation: 21.14 inches (1983)
- **Magnitude/Severity:** Negligible
- **Significance:** Low
- **Future Likelihood of Occurrence:** Highly Likely
- **Existing Capabilities:** Under Analysis



Review of Identified Hazards

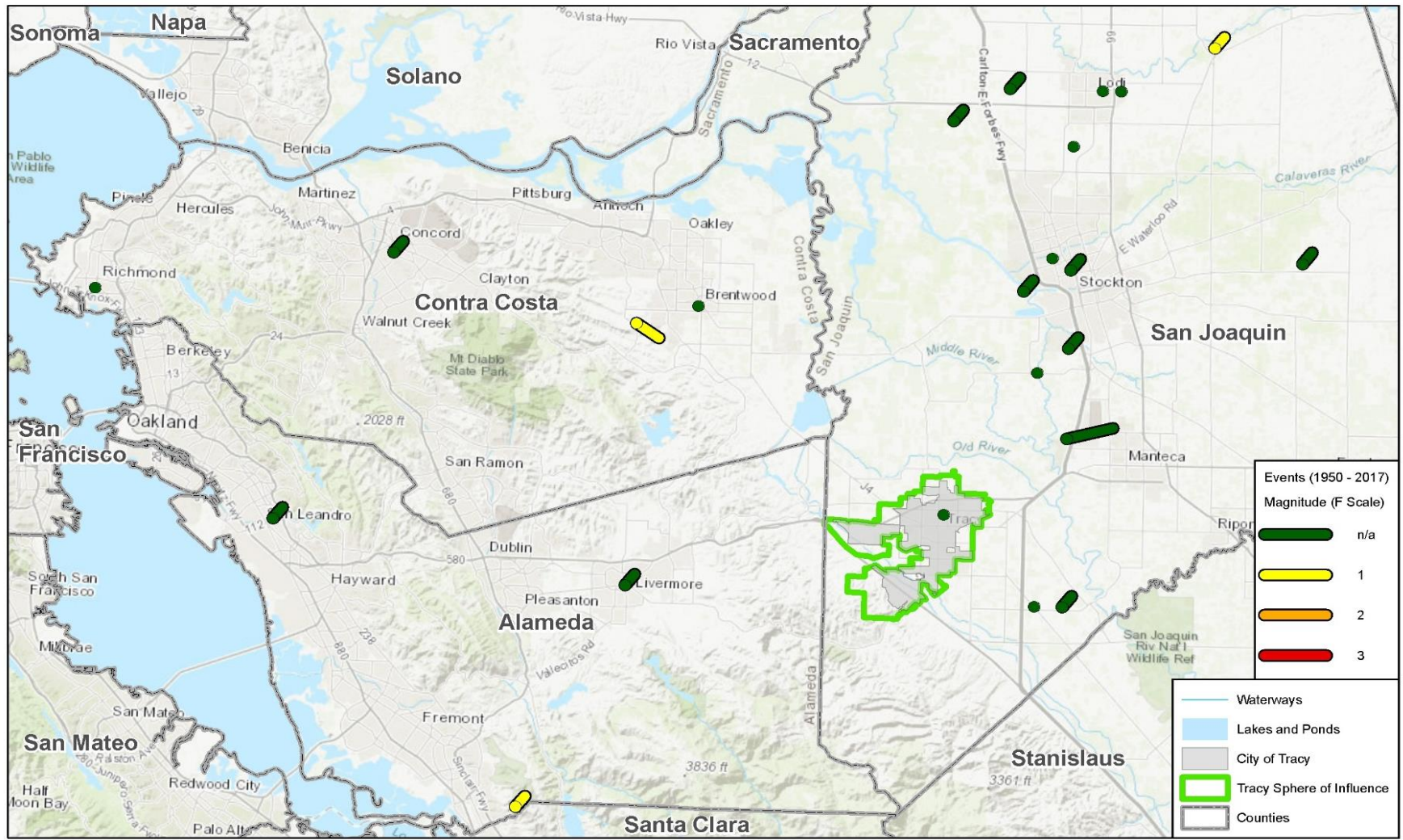
Wind and Tornadoes

- **Hazard/Problem Description:** Wind and tornadoes cause potential property and critical facilities damage, loss of life
- **Geographic Extent:** Extensive
- **Past Occurrences:**
 - 2 tornado events in past 67 years (1950-2017)
 - March 29, 1998 (\$1,000 in property damage)
 - December 26, 2005 (\$20,000 in property damage)
- **Magnitude/Severity:** Negligible
- **Significance:** Low
- **Future Likelihood of Occurrence:** Likely
- **Existing Capabilities:** Under Analysis



Review of Identified Hazards

Wind and Tornadoes



Map compiled 11/2018;
intended for planning purposes only.
Data source: San Joaquin County,
US Census TIGER database,
City of Tracy, NOAA Storm Database

0 5 10 20 Miles



Review of Identified Hazards

Hazardous Materials

- **Hazard/Problem Description:**
 - Hazardous Materials, Gas Pipelines, Powerlines, Chemical Facilities
 - 13 Risk Management Plan (RMP) facilities in the City
 - Store over five million pounds of toxic chemicals
 - 4.6 million pounds of chlorine
 - 375,000 pounds of anhydrous ammonia
 - 40,000 pounds of sulfur dioxide
- **Geographic Extent:** Significant
- **Past Occurrences:** 85 reported hazardous materials incidents since 1999
 - Average of 4 incidents/year
 - 34% were transportation-related
 - 22% road/highway, 11% rail, 1% vessel/marine
 - 11% were pipeline releases
- **Magnitude/Severity:** Limited
- **Significance:** Medium
- **Future Likelihood of Occurrence:** Highly Likely
- **Existing Capabilities:** San Joaquin County CUPA Programs: Hazardous Materials Area Plan, HMBPs, CalARP, Routine Inspections



Review of Identified Hazards

Risk Summary

Hazard	Geographic Extent	Probability of Future Occurrences	Magnitude/Severity	Significance
Dam Failure	Limited	Unlikely	Limited	Low
Drought	Extensive	Likely	Critical	High?
Earthquake	Extensive	Occasional	Critical	Medium
Flood: 100/500 year	Limited	Occasional	Limited	Medium
Severe Weather: Extreme Heat	Extensive	Highly Likely	Limited	Medium
Severe Weather: Heavy Rains and Storms (Lighting and Hail)	Extensive	Highly Likely	Negligible	Low
Severe Weather: Wind (Tornadoes)	Extensive	Likely	Negligible	Low
Fire (Urban and Wildland)	Limited	Likely	Limited	Medium
Hazardous Materials	Significant	Highly Likely	Limited	Medium



Capability Assessment

Let's Review the City's Capabilities Again

- Inventory the City of Tracy's existing and proposed policies, programs, and ordinances that may affect its vulnerability to hazards
- Evaluate the effectiveness of each for mitigation purposes
 - Note gaps, shortfalls, conflicts associated with design, enforcement, and implementation
 - Identify special opportunities
- Determine City's technical, administrative, and fiscal capabilities to implement mitigation actions.
- Include ability to attract and leverage funding



Developing Goals for the Mitigation Plan

What are Mitigation Goals?

- Broad statements of what the plan is to achieve
- Based on risk
- Estimated losses
 - At-risk facilities and infrastructure (e.g. transportation utility lines?)
 - At-risk critical facilities
 - At-risk cultural and natural resources
- Goals from other existing plans
- Other opportunities
 - At-risk areas and facilities for future development
 - Repetitive losses
 - Public education
 - Increased insurance coverage



Developing Goals for the Mitigation Plan

2011 City of Tracy General Plan Safety Element

Geologic Hazards

- Goal SA-1: A reduction in risks to the community from earthquakes and other geologic hazards.

Flooding

- Goal SA-2: A reduction of hazards related to flooding or inundation.

Wildland Fires

- Goal SA-3: Protection of lives and property from wildland fire hazards.

Hazardous Materials and Waste

- Goal SA-4: Protection from the harmful effects of hazardous materials and waste.

Airport Safety

- Goal SA-5: Protection from risks associated with aircraft operations at the Tracy Municipal Airport.

Emergency Preparedness

- Goal SA-6: Preparation for emergencies.



Developing Goals for the Mitigation Plan

2017 San Joaquin County Local Hazard Mitigation Plan

- **Goal 1:** Prevent Future Hazard Related Losses of Life and Property
- **Goal 2:** Increase Public Awareness/Action of Vulnerability to Hazards
- **Goal 3:** Improve Community Emergency Services/Management Capability
- **Goal 4:** Implement and Complete Identified High Priority Projects Listed in the Plan



Developing Goals for the Mitigation Plan

2018 Enhanced State Multi-Hazard Mitigation Plan

- **Goal 1:** Significantly reduce life loss and injuries.
- **Goal 2:** Minimize damage to structures and property, as well as minimizing interruption of essential services and activities.
- **Goal 3:** Protect the environment.
- **Goal 4:** Promote community resilience through integration of hazard mitigation with public policy and standard business practices.



Developing Goals for the Mitigation Plan

Goal Development

Sticky Note Exercise

- Write goals for mitigation planning effort on each note
- Review example goals on handout
- Review sample goals from other Plans
- Use one note for each goal



Developing Goals for the Mitigation Plan

Example Goal Statements

- Minimize risk and vulnerability from natural hazards
- Increase communities' awareness of vulnerability to hazards
- Increase the use of shared resources
- Improve communities' capabilities to mitigate losses
- Maintain coordination of disaster plans with changing OES/FEMA needs
- Maintain FEMA eligibility and position the City for grant funding
- Enhance the flood mitigation program to provide 200/500-year flood protection
- Maintain current service levels
- Provide protection for existing buildings from hazards
- Provide protection for future development from hazards
- Provide protection for natural and cultural resources from hazard impacts
- Provide protection for people's lives from hazards
- Provide protection for public health
- Provide protection for critical services (fire, police, etc.) from hazard impacts
- Provide protection for critical lifeline utilities from hazard impacts
- Reduce exposure to hazard related losses
- Reduce the number of emergency incidents
- Make better use of GIS and other technologies



Update on Community Outreach

Planning for Public Involvement

- Community Outreach Strategy
 - Hazard Mitigation Plan Website
 - Regular Website Postings
 - Event Flyers and Advertisements
 - Newsletters
 - Online Public Survey
 - Public Workshop
 - Hazard Mapping
 - Farmer's Market Informational Booth
- Other ideas/recommendations?



Schedule and Next Steps

Additional Data Needs

- Data Collection Guide
 - **Worksheet #4 Capability Assessment**
- Provide any additional information to inform hazards and risk assessment and capabilities section of plan
- GIS data on growth and development trends
 - Specific Plan areas
- Recently updated plans and policies
- Follow-up with key staff and stakeholders where needed
- Next meeting will focus on updating mitigation actions



Schedule and Next Steps

When will we meet next?

Task or Key Milestone	Anticipated Date
Notice to Proceed	June 8, 2018
Project Kick-Off Meeting	August 9, 2018
Submit HMPC Invite List	September 11, 2018
HMPC Meeting #1	September 25, 2018
Submit Draft Community Engagement Study	October 5, 2018
City Review of Draft Community Engagement Study	October 12, 2018
Prepare Hazard Identification and Risk Assessment	TBD
Stakeholder Workshop	November 14, 2018
Develop GIS Geodatabase (pending City Assessor and Property Value Data)	November 30, 2018
HMPC Meeting #2	December 20, 2018
HMPC Meeting #3	February 12, 2019
Public Workshop	February 12, 2019
Finalize Goals and Objectives	February 15, 2019
Compile Mitigation Actions Worksheets	March 1, 2019
Submit 1 st Administrative Draft HMP	March 15, 2019
City provides Consolidated Staff Comments on 1 st Administrative Draft HMP	March 29, 2019
Submit 2 nd Administrative Draft LHMP	April 12, 2019
Circulate Public Review Draft LHMP	April 19, 2019
Public Review Ends	May 18, 2019
Complete FEMA Region IX Review Tool	May 31, 2019
Submit LHMP to FEMA for Review	June 4, 2019
Submit to Cal OES for Review	July 18, 2019
City Council Hearing	August 6, 2019*



*City Council Meetings are held on the first and third Tuesdays of each month



Schedule and Next Steps

When will we meet next?

- **HMPC #3 – February 12, 2019 from 1:00 – 4:00 PM**
- Public Workshop – February 12, 2019 @ 7:00 PM



Questions?

Juliana Prosperi, AICP
10940 White Rock Rd, Suite 190
Rancho Cordova, CA 95670
Juliana.Prosperti@woodplc.com
(916) 853-3200

Jeff Brislawn, CFM
1942 Broadway
Boulder, CO 80302
Jeff.Brislawn@woodplc.com
(303) 704-5506

wood.

Environment & Infrastructure Solutions
<https://www.woodplc.com/>