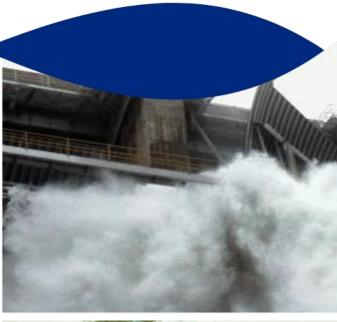
2016 Sacramento Countywide Local Hazard Mitigation Plan Update

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Prepared for:

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Executive Summary

Sacramento County prepared this Local Hazard Mitigation Plan (LHMP) to guide hazard mitigation planning to better protect the people and property of the County and participating jurisdictions from the effects of natural disasters and hazard events. This plan demonstrates the community's commitment to reducing risks from hazards and serves as a tool to help decision makers direct mitigation activities and resources. This plan was also developed in order for the County and participating jurisdictions to be eligible for certain federal disaster assistance, specifically, the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation (PDM) Program, and the Flood Mitigation Assistance (FMA) Program.

Each year in the United States, natural disasters take the lives of hundreds of people and injure thousands more. Nationwide, taxpayers pay billions of dollars annually to help communities, organizations, businesses, and individuals recover from disasters. These monies only partially reflect the true cost of disasters, because additional expenses to insurance companies and nongovernmental organizations are not reimbursed by tax dollars. Many natural disasters are predictable, and much of the damage caused by these events can be alleviated or even eliminated. The purpose of hazard mitigation is to reduce or eliminate long-term risk to people and property from hazards

The Sacramento County LHMP is a multi-jurisdictional plan that geographically covers the entire area within Sacramento County's jurisdictional boundaries (hereinafter referred to as the planning area). While many more local jurisdictions participated in the development of this LHMP, the following jurisdictions participated in the planning process and are seeking approval of this LHMP plan:

- Sacramento County*
- Brannan Andrus Levee Maintenance District (RDs 317, 407, 2067)
- City of Citrus Heights*
- City of Elk Grove*
- City of Folsom*
- City of Galt*
- City of Isleton
- City of Rancho Cordova*
- City of Sacramento*
- Cosumnes Community Services District Fire Department*
- Los Rios Community College*
- Reclamation District 3
- Reclamation District 341*
- Reclamation District 369
- Reclamation District 551
- Reclamation District 554
- Reclamation District 556
- Reclamation District 563
- Reclamation District 800*
- Reclamation District 1000*
- Reclamation District 1002
- Reclamation District 1601

- Reclamation District 2111
- Sacramento Area Sewer District
- Sacramento Metro Fire District
- Sacramento Regional County Sanitation District*
- Southgate Recreation and Park District*
- Twin Rivers School District*
 - * Participated in 2010 Plan

LHMP Plan Development Process

Hazard mitigation planning is the process through which hazards that threaten communities are identified, likely impacts determined, mitigation goals set, and appropriate mitigation strategies determined, prioritized, and implemented. This plan documents the hazard mitigation planning process and identifies relevant hazards and vulnerabilities and strategies the County and participating jurisdictions will use to decrease vulnerability and increase resiliency and sustainability in the community.

This LHMP was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 (Public Law 106-390) and the implementing regulations set forth by the Interim Final Rule published in the Federal Register on February 26, 2002, (44 CFR §201.6) and finalized on October 31, 2007. The County and participating jurisdictions followed a planning process prescribed by FEMA as detailed in Table ES-1.

Table ES-1 Local Hazard Mitigation Planning Process

DMA Process	Modified CRS Process
1) Organize Resources	
201.6(c)(1)	1) Organize the Planning Effort
201.6(b)(1)	2) Involve the Public
201.6(b)(2) and (3)	3) Coordinate with Other Departments and Agencies
2) Assess Risks	
201.6(c)(2)(i)	4) Identify the Hazards
201.6(c)(2)(ii)	5) Assess the Risks
3) Develop the Mitigation Plan	
201.6(c)(3)(i)	6) Set Goals
201.6(c)(3)(ii)	7) Review Possible Activities
201.6(c)(3)(iii)	8) Draft an Action Plan
4) Implement the Plan and Monitor Progress	
201.6(c)(5)	9) Adopt the Plan
201.6(c)(4)	10) Implement, Evaluate, and Revise the Plan

The planning process began with the organizational phase to establish the hazard mitigation planning committee (HMPC) comprised of key County and City representatives, and other local and regional stakeholders; to involve the public; and to coordinate with other departments and agencies. A detailed risk assessment was then conducted followed by the development of a focused mitigation strategy for the



Sacramento County planning area. Once approved by Cal OES and FEMA, this plan will be adopted and implemented by Sacramento County and the participating jurisdictions over the next five years.

Risk Assessment

The HMPC conducted a risk assessment that identified and profiled hazards that pose a risk to the Sacramento County planning area, assessed the vulnerability of the planning area to these hazards, and examined the existing capabilities to mitigate them.

The County is vulnerable to numerous hazards that are identified, profiled, and analyzed in this plan. Floods, levee failures, drought, wildfires, and other severe weather events are among the hazards that can have a significant impact on the Sacramento County planning area. Table ES-2 details the hazards identified for the Sacramento County LHMP.

Table ES-2 Sacramento County Hazard Identification Assessment

Geographic Extent	Probability of Future Occurrences	Magnitude/ Severity	Significance	Climate Change Influence
Significant	Highly Likely	Critical	Medium	Medium
Limited	Highly Likely	Critical	Medium	Low
Extensive	Highly Likely	Critical	High	_
Significant	Unlikely	Catastrophic	Medium	High
Extensive	Likely	Limited	High	High
Limited	Occasional	Critical	Medium	None
Significant	Occasional	Limited	Medium	None
Significant	Occasional/Unlikely	Catastrophic	High	High
Limited	Highly Likely	Limited	Medium	High
Limited	Unlikely	Negligible	Low	Medium
Significant	Occasional	Catastrophic	High	High
Limited	Highly Likely	Limited	Medium	High
Extensive	Likely	Limited	Low	High
Extensive	Highly Likely	Critical	High	High
Extensive	Highly Likely	Limited	Low	Medium
Extensive	Highly Likely	Critical	Medium	High
Limited	Highly Likely	Limited	Low	Medium
Significant	Highly Likely	Limited	Low	Medium
Limited	Unlikely	Limited	Low	None
Significant	Highly Likely	Limited	Medium	High
	Extent Significant Limited Extensive Significant Extensive Limited Significant Limited Limited Significant Limited Extensive Extensive Extensive Extensive Limited Limited Limited Limited Limited Limited Extensive	Geographic Extent Significant Limited Highly Likely Limited Highly Likely Extensive Highly Likely Extensive Likely Limited Occasional Significant Occasional Significant Occasional Limited Highly Likely Limited Unlikely Limited Highly Likely Limited Highly Likely Limited Highly Likely Extensive Likely Extensive Highly Likely Extensive Highly Likely Extensive Highly Likely Limited Highly Likely Limited Highly Likely Extensive Highly Likely Highly Likely Limited Limited Highly Likely Limited Limited Unlikely	Geographic ExtentFuture OccurrencesMagnitude/ SeveritySignificantHighly LikelyCriticalLimitedHighly LikelyCriticalExtensiveHighly LikelyCriticalSignificantUnlikelyCatastrophicExtensiveLikelyLimitedLimitedOccasionalCriticalSignificantOccasionalLimitedSignificantOccasional/UnlikelyCatastrophicLimitedHighly LikelyLimitedLimitedUnlikelyNegligibleSignificantOccasionalCatastrophicLimitedHighly LikelyLimitedExtensiveLikelyLimitedExtensiveHighly LikelyCriticalExtensiveHighly LikelyLimitedLimitedHighly LikelyLimitedLimitedHighly LikelyLimitedLimitedHighly LikelyLimitedLimitedUnlikelyLimited	Geographic ExtentFuture OccurrencesMagnitude/ SeveritySignificanceSignificantHighly LikelyCriticalMediumLimitedHighly LikelyCriticalMediumExtensiveHighly LikelyCriticalHighSignificantUnlikelyCatastrophicMediumExtensiveLikelyLimitedHighLimitedOccasionalCriticalMediumSignificantOccasionalLimitedMediumSignificantOccasional/UnlikelyCatastrophicHighLimitedHighly LikelyLimitedMediumLimitedUnlikelyNegligibleLowSignificantOccasionalCatastrophicHighLimitedHighly LikelyLimitedMediumExtensiveLikelyLimitedMediumExtensiveHighly LikelyCriticalHighExtensiveHighly LikelyLimitedLowExtensiveHighly LikelyCriticalMediumLimitedHighly LikelyLimitedLowSignificantHighly LikelyLimitedLowLimitedHighly LikelyLimitedLowLimitedUnlikelyLimitedLow

Geographic Extent

Limited: Less than 10% of planning area Significant: 10-50% of planning area Extensive: 50-100% of planning area

Probability of Future Occurrences

Highly Likely: Near 100% chance of occurrence in next year, or happens every

Likely: Between 10 and 100% chance of occurrence in next year, or has a recurrence interval of 10 years or less.

Occasional: Between 1 and 10% chance of occurrence in the next year, or has a recurrence interval of 11 to 100 years. Unlikely: Less than 1% chance of occurrence Medium: moderate potential impact

of greater than every 100 years.

Magnitude/Severity

Catastrophic—More than 50 percent of property severely damaged; shutdown of facilities for more than 30 days; and/or multiple deaths Critical—25-50 percent of property severely damaged; shutdown of facilities for at least two weeks; and/or injuries and/or illnesses result in permanent disability

Limited—10-25 percent of property severely damaged; shutdown of facilities for more than a week; and/or injuries/illnesses treatable do not result in permanent disability

Negligible—Less than 10 percent of property severely damaged, shutdown of facilities and services for less than 24 hours; and/or injuries/illnesses treatable with first aid

Significance

Low: minimal potential impact in next 100 years, or has a recurrence interval High: widespread potential impact



Mitigation Strategy

Based on the results of the risk assessment, the HMPC developed a mitigation strategy for reducing the Sacramento County planning area's risk and vulnerability to hazards. The resulting Mitigation Strategy for the Sacramento County planning area is comprised of LHMP goals and objectives and a mitigation action plan which includes a series of mitigation action projects and implementation measures.

The goals and objectives of this Sacramento County LHMP are:

Mission Statement: This Local Hazard Mitigation Plan assesses natural hazards of concern to the Sacramento community; evaluates risk to life safety, public health, property, and the environment; and evaluates mitigation measures to reduce these risks and vulnerabilities, minimize losses, and increase community resilience.

GOAL 1: Minimize risk and vulnerability of the Sacramento County community to the impacts of natural hazards and protect lives and reduce damages and losses to property, public health, economy, and the environment.

Objectives:

- Protect, preserve, and promote public health and safety, livability, and the environment
- Assure long term protection and resiliency of existing and future development (including infill areas) from natural hazards
- Protect critical facilities from natural hazards and minimize interruption of essential infrastructure, utilities, and services
- Protect natural resources; Protect and enhance water quality and supply, critical aquatic resources and habitat for beneficial uses.
- Maintain/enhance the flood mitigation program to provide 100/200/500 year flood protection
- Minimize risk of levee breach, overtopping or other failures
- Mitigate Repetitive Loss Properties
- Continued enhancement of CRS programs
- Address localized drainage issues
- Reduce the potential of wildfire in Sacramento County and protect the community
- From adverse effects of wildfire, including secondary impacts such as air quality
- Protect vulnerable populations from the threat of natural hazards
- Address climate change influence in project design and development
- > Promote hazard mitigation as an integrated public policy and as a standard business practice

GOAL 2: Improve public outreach, awareness, education, and preparedness for all hazards to minimize hazard related losses

Objectives:

- Increase outreach, communication and awareness of natural hazards and reduce exposure to all hazard related losses, including climate change
- Improve the communities' understanding of natural hazards and how to effectively be prepared and take action to mitigate the impacts of hazard events
- Develop and target outreach and education for each hazard type and risk area



- Increase access to natural hazard information via enhanced web and mobile applications before, during, and after a disaster
- Enhance public outreach programs to target all vulnerable populations, including multi-language communications and multi-mode delivery
- > Continued promotion of flood insurance

GOAL 3: Improve the capabilities of the community to mitigate losses and to be prepared for, respond to, and recover from a disaster event

Objectives:

- > Promote interagency coordination of mitigation planning and implementation efforts
- Minimize hazard-related damage in order to maintain current service levels
- Continued enhancements to emergency services capabilities, integrating new technologies to reduce losses and save lives
- Promote intergovernmental and interagency coordination, planning, training, exercising and communication to ensure effective community preparedness, response, and recover
- ➤ Increase the use of coordinated, shared resources between agencies
- > Promote public/private partnerships in hazard mitigation and preparedness programs
- Identify, coordinate, and implement countywide evacuation and shelter in place planning for all populations and increase community awareness of these activities

GOAL 4: Assure conformance to Federal and State Hazard Mitigation Initiatives and Maximize Potential for Mitigation Implementation

Objectives:

- Maintain FEMA Eligibility/Position Jurisdictions for Grant Funding
- Maintain good standing with FEMA and State hazard mitigation programs, regulations and requirements
- > Develop an overall mitigation funding strategy to prioritize and pursue mitigation projects in an equitable manner to benefit all populations
- Maximize funding opportunities through identification and tracking of all types of Federal and state grant programs to implement identified mitigation projects

Actions to support these goals are shown on Table ES-1.



Table ES-3 Sacramento County Planning Area Mitigation Actions

Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
Sacramento County						
Multi-Hazard Actions						
Integrate Local Hazard Mitigation Plan into Safety Element of General Plan	1, 2, 3, 4	2011 Action	X	X	X	Prevention
Enhance Public Education and Awareness of Natural Hazards and Public Understanding of Disaster Preparedness	1, 2, 3, 4	2011 Action	X	X	X	Public Information Emergency Services
Increase pedestrian and bicycle evacuation routes by constructing regional bike/pedestrian trail infrastructure, and expanding connection to neighborhoods (particularly in vulnerable areas)	1, 2, 3, 4	New Action	X	X		Emergency Services
Community Rating System (CRS) Program for Public Information (PPI)	1, 2, 3, 4	2011 Action	X	X	X	Prevention Public Information
Flood Insurance Assessment, Awareness, and Promotion	1, 2, 3, 4	New Action	X	X	X	Prevention Public Information
Public Outreach Mailers	1, 2, 3, 4	2011 Action	X	X	X	Public Information
Toxic Substance Release	1, 2, 3, 4	New Action	X	X	X	Natural Resource Protection Property Protection
Climate Change Actions						
Increase average fuel efficiency and reduce GHG emissions from the County Fleet and Fuels	1, 2, 3, 4	New action	X	X		Prevention Natural Resource Protection
Reduce Sacramento County's vulnerability to Climate Change by reducing GHG emissions in the commercial and residential sectors by making energy efficiency a priority through building code improvements	1, 2, 3, 4	New action	X	X		Prevention Natural Resource Protection

Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
Mitigate Climate Change impacts by integrating climate change research and adaptation planning into County operations and services	1, 2, 3, 4	New action	X	X		Prevention
Reduce Sacramento County's vulnerability to extreme heat events and associated hazards by Increase tree planting/canopy preservation/enhancement	1, 2, 3, 4	New action	X	X		Prevention Natural Resource Protection
Drought Actions						
Implement Water Supply CIP	1, 2, 3, 4	New Action	X	X		Prevention Property Protection Natural Resource Protection Structural
Flood, Levee Failure, and Localized Flood Actions						
Keep the PPI current	1, 2, 3, 4	New action	X	X	X	Public Outreach
Alder Creek flood control	1, 2, 3, 4	New action	X	X	X	Property Protection Structural
Alder Creek flood mitigation (dam)	1, 2, 3, 4	New action	X	X	X	Structural
Alder Creek miners reservoir, property owned by the City of Folsom	1, 2, 3, 4	New action	X	X	X	Structural
Delta Small Communities flood protection - structural and nonstructural mitigation	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural
Gum Ranch flood control - joint use basin	1, 2, 3, 4	New action	X	X	X	Structural
Implement Storm Drain CIP	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural



Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
Laguna Creek at Triangle Aggregate flood control -joint use basins	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural
Laguna Creek mitigate flood hazard south of Jackson Highway	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural
Model Sacramento River levee breach (LAMP) south of Freeport	1, 2, 3, 4	New action	X	X	X	Emergency Services Property Protection Natural Resource Protection Structural
Morrison Creek Miners Reach Flood Insurance Study	1, 2, 3, 4	New action	X	X	X	Prevention
Morrison Creek Miners Reach levee improvements	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural
Outreach stormwatch guide (ALERT, Stormready, weather radio)	1, 2, 3, 4	New action	X	X	X	Emergency Services Public Information
Peak flow floodplain mitigation Arcade Creek near Auburn Blvd	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural
Risk Map (flood frequency, depth, velocity)	1, 2, 3, 4	New action	X	X	X	Prevention Emergency Services
Elevation & Acquisition Projects (to Mitigate Flood Risk)	1, 2, 3, 4	2011 Action	X	X	X	Property Protection
Repetitive Loss Properties (to Mitigate Flood Risk)	1, 2, 3, 4	2011 action	X	X	X	Property Protection
Five-Year Capital Improvement Plan – Drainage Projects	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural

Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
Arcade Creek Corridor Plan	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural
Elevate Homes on Long Island (Grand Island Road, Sacramento River)	1, 2, 3, 4	New action	X	X	X	Property Protection
Repetitive Loss Church Building on Dry Creek	1, 2, 3, 4	New action	X	X	X	Property Protection
South Branch Arcade Creek – Gum Ranch Basin (with Fair Oaks Park District) and Kenneth Avenue Bridge Improvements (with Sacramento County Department of Transportation)	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural
Dry Creek Flood Hazard Mitigation Acquisitions with County Regional Park Department	1, 2, 3, 4	New action	X	X	X	Property Protection
Arcade Creek at Evergreen Estates Floodwall Improvements	1, 2, 3, 4	New action	X	X	X	Structural
Linda Creek Peak Flow Mitigation	1, 2, 3, 4	New action	X	X	X	Property Protection Structural
Flood Preparation in the American River Parkway	1, 2, 3, 4	New action	X	X	X	Emergency Services Prevention
Improve County ALERT (Automated Local Evaluation in Real Time) System of Stream and Rain Gauges	1, 2, 3, 4	2011 Action	X	X	X	Emergency Services
Update County Hydrology Standards	1, 2, 3, 4	New action	X	X	X	Prevention
Woodside Condominiums Repetitive Flood Loss Property	1, 2, 3, 4	New action	X	X	X	Property Protection Structural
Bridge Replacement on Elk Grove Florin Road at Elder Creek	1, 2, 3, 4	New action	X	X	X	Structural
Michigan Bar Bridge Replacement at the Cosumnes River	1, 2, 3, 4	New action	X	X	X	Structural
El Camino Avenue Phase 2 Road Improvements	1, 2, 3, 4	New action	X	X	X	Structural



Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
Improve Flood Protection and/or Evacuation Planning for Mobile Home/RV Park at Manzanita/Auburn. Alternatively, the Park Should Establish Flood Warning and evacuation procedures.	1, 2, 3, 4	2011 action	X	X	X	Emergency Services Property Protection Structural
Hydromodification and Stormwater Quality Countywide	1, 2, 3, 4	2011 action	X	X	X	Property Protection Structural
Evacuation Mapping	1, 2, 3, 4	New Action	X	X	X	Emergency Services
Regional Flood Management Plan Projects	1, 2, 3, 4	New Action	X	X	X	Prevention Natural Resource Protection Property Protection Structural
River/Stream/Creek Bank Erosion						
Erosion Site Repairs	1, 2, 3	New action	X	X	X	Structural
Wildfire Actions						
Wildfire Suppression	1, 2, 3, 4	New Action	X	X		Property Protection
Wildfire Fighting - Support	1, 2, 3, 4	New Action	X	X		Emergency Services
Wildfire Suppression – Regional Parks and Open Space (urban interface)	1, 2, 3, 4	New Action	X	X		Property Protection Natural Resource Protection
City of Citrus Heights						
Integrate Local Hazard Mitigation Plan into Safety Element of General Plan, as well as other Local Planning Efforts	1, 2, 3, 4	2011 Action	X	X	X	Prevention
Rinconada Flood Wall	1, 2, 3, 4	2011 Action	X	X	X	Structural
Drainage Project Implementation	1, 2, 3, 4	New Action	X	X	X	Property Protection Structural
City of Elk Grove						
Integrate Local Hazard Mitigation Plan into Safety Element of General Plan, as well as other Local Planning Efforts	1, 2, 3, 4	2011 Action	X	X	X	Prevention



Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
Mutual Aid Agreements	1, 2, 3, 4	New action	X	X		Prevention Emergency Sevices
Elk Grove Green Street Project: Repurposing Urban Runoff with Green Instructure Technologies	1, 2, 3	New action	X	X		Property Protection Structural
Hazard Education and Risk Awareness	1, 2, 3, 4	New action	X	X	X	Public Information
City of Elk Grove's Storm Drainage Master Plan (SDMP)	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural
City of Folsom						
Integrate Local Hazard Mitigation Plan into Safety Element of General Plan, as well as other Local Planning Efforts	1, 2, 3, 4	2011 Action	X	X	X	Prevention
Stormwater Basin Maintenance and Operation Project	1, 2, 3, 4	2011 Action	X	X	X	Property Protection Natural Resource Protection Structural
Alder Creek Watershed Council	1, 2, 3, 4	2011 Action	X	X	X	Prevention
Drainage System Maintenance Tax Assessment	1, 2, 3, 4	2011 Action	X	X	X	Prevention
Floodplain Mapping	1, 2, 3, 4	2011 Action	X	X	X	Prevention
Redevelopment Area Drainage Improvements	1, 2, 3, 4	2011 Action	X	X	X	Property Protection Natural Resource Protection Structural
Stormwater Basin Maintenance and Operation Project	1, 2, 3, 4	New Action	X	X	X	Property Protection Natural Resource Protection Structural
Heating and Cooling Centers	1, 2, 3, 4	2011 Action	X	X		Emergency Services
Public Education/Outreach Extreme Weather	1, 2, 3, 4	2011 Action	X	X	X	Public Information
Weed Abatement Program	1, 2, 3, 4	New Action	X	X		Prevention



Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
Arson Prevention and Control Outreach	1, 2, 3, 4	2011 Action	X	X		Prevention
Wildfire Hazard Identification	1, 2, 3, 4	2011 Action	X	X		Prevention
Ignition Resistant Building Construction Upgrades	1, 2, 3, 4	2011 Action	X	X		Property Protection
Wildfire Prevention Outreach	1, 2, 3, 4	2011 Action	X	X		Public Information
City of Galt						
Integrate Local Hazard Mitigation Plan into Safety Element of General Plan, as well as other Local Planning Efforts	1, 2, 3, 4	2011 Action	X	X	X	Prevention
Increase Redundancy/Functionality of Water Wells and Sewer Lift Stations	1, 2, 3, 4	2011 Action	X	X	X	Property Protection Natural Resource Protection Structural
Drain Inlet Retrofit Capital Improvement Plan (CIP)	1, 2, 3, 4	2011 Action	X	X	X	Property Protection Natural Resource Protection Structural
Creek/Streams Vegetation Management Plan	1, 2, 3, 4	2011 Action	X	X		Natural Resource Protection
Increase Data Capacity of Emergency Frequencies	1, 2, 3, 4	2011 Action	X	X		Emergency Services
City of Isleton*						
Integrate Local Hazard Mitigation Plan into Safety Element of General Plan	1, 2, 3, 4	New Action	X	X		Prevention
Storm Water Runoff Rehabilitation Project	1, 2, 3, 4	New Action	X	X	X	Property Protection Natural Resource Protection Structural
Wastewater Treatment Plant Pond Levee Elevation Raise to 200-year Flood Standard	1, 2, 3, 4	New Action	X	X	X	Property Protection Natural Resource Protection Structural
City of Rancho Cordova						



Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
Integrate Local Hazard Mitigation Plan into Safety Element of General Plan	1, 2, 3, 4	2011 Action	X	X	X	Prevention
Sunrise Boulevard Widening Kiefer to Jackson	1, 2, 3	2011 Action	X	X		Property Protection Natural Resource Protection Structural
City of Rancho Cordova Disaster Debris Management Plan	1, 2, 3, 4	New Action	X	X		Emergency Services
Transportation Interconnectivity	1, 2, 3, 4	New Action	X	X		Emergency Services
Intergovernmental Agreement between the County of Sacramento and the City of Rancho Cordova	1, 2, 3	New Action	X	X		Emergency Services
Land Use (Long range)	1, 2, 3, 4	New Action	X	X		Prevention
Post disaster training for staff	1, 2, 3, 4	New Action	X	X		Emergency Services
Update/Maintain Emergency Operation Plans (EOPs)	1, 2, 3, 4	New Action	X	X	X	Emergency Services
Increase Everbridge Enrollment	1, 2, 3, 4	New Action	X	X	X	Emergency Services Public Information
Developing and maintaining a database to track community vulnerability.	1, 2, 3, 4	New Action	X	X		Prevention Public Information
City Website HMP and City Website, Press Notification, and Social Media Emergency Information	1, 2, 3	New Action	X	X	X	Emergency Services Public Information
Building & Safety Division Disaster Inspector Training	1, 2, 3, 4	New Action	X	X		Prevention
Landscape and Irrigation Requirements/Retro	1, 2, 3, 4	New Action	X	X		Prevention
Landscape Ordinance	1, 2, 3	New Action	X	X		Prevention
Impervious surface	1, 3, 4	New Action	X	X	X	Property Protection
Porous pavement and vegetative buffers	1, 3, 4	New Action	X	X	X	Property Protection Natural Resource Protection

Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
Storm Water Pump Station Infrastructure Upgrades	1, 2, 3, 4	New Action	X	X	X	Property Protection Natural Resource Protection Structural
SB-5 Urban Level of Flood Protection	1, 2, 3, 4	New Action	X	X	X	Prevention Property Protection Structural
Channel Vegetation Management and Erosion Control	1, 2, 3, 4	New Action	X	X	X	Property Protection Natural Resource Protection
Adoption of Hydromodification and Low Impact Development (LID) Standards	1, 2, 3, 4	New Action	X	X	X	Prevention Property Protection
Stormwater Capital Improvement Program Master Plan	1, 2, 3, 4	New Action	X	X	X	Property Protection Natural Resource Protection Structural
Sunrise Blvd. & Monier Circle Drainage Improvements	1, 2, 3, 4	New Action	X	X	X	Property Protection Natural Resource Protection Structural
Roundabouts	1, 2, 3, 4	New Action	X	X	X	Property Protection
City of Sacramento						
Multi-Hazard Actions						
Integrate Local Hazard Mitigation Plan into Safety Element of General Plan	1, 2, 3, 4	2011 action	X	X	X	Prevention
Coordination with Relevant Organizations and Agencies to Consider the Impacts of Urbanization and Climate Change on Long-Term Natural Hazard Safety	1, 2, 3, 4	New action	X	X		Prevention
Maintain and Identify Changes in Critical Facilities GIS Layer to Support Emergency Management Efforts	1, 2, 3, 4	New action	X	X	X	Emergency Services



Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
Community Outreach on Multi-Hazard Preparation & Premitigation	1, 2, 3, 4	New action	X	X	X	Public Information
Evaluation and Mitigation of Critical Facilities in Identified Hazard Areas	1, 2, 3, 4	2011 Action	X	X	X	Emergency Services
Retrofit of Repetitive Loss Properties	1, 2, 3, 4	2011 Action	X	X	X	Property Protection
Safeguard Essential Communication Services	1, 2, 3, 4	New action	X	X		Emergency Services
Multi-lingual Disaster Education	1, 2, 3, 4	New action	X	X		Emergency Services Public Information
Cal OES Safety Assessment Program Evaluators	1, 2, 3, 4	New action	X	X		Emergency Services
National Flood Insurance Program & Community Rating System Continuation	1, 2, 3, 4	New action	X	X	X	Prevention Property Protection Natural Resource Protection Structural Public Information
Coordinate with Sacramento Area Flood Control Agency on Completion of South Sacramento Streams Group Projects	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural
Develop a Master Generation Plan for Pump Stations	1, 2, 3, 4	New action	X	X	X	Prevention Property Protection
Develop a Disaster Housing Plan	1, 2, 3, 4	New action	X	X	X	Emergency Services
Disaster Resistant Business Program	1, 2, 3, 4	New action	X	X	X	Prevention
Develop Enhanced Emergency Planning for Special Needs Populations in the City of Sacramento Emergency Operations Plan and Other Planning Documents	1, 2, 3, 4	New action	X	X	X	Emergency Services Public Information
Establish a Post-Disaster Action Plan	1, 2, 3, 4	New action	X	X	X	Emergency Services
Flood Recovery Plan	1, 2, 3, 4	New action	X	X	X	Emergency Services
Public Information Flood Response Plan	1, 2, 3, 4	New action	X	X	X	Public Information

Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
Construction of a new Emergency Operation Center (EOC)	1, 2, 3, 4	New action	X	X	X	Emergency Services
Emergency Operation Center (EOC) Expansion and Information Technology Upgrade	1, 2, 3, 4	New Action	X	X		Emergency Services
Protection of Transportation Infrastructure	1, 2, 3, 4	New action	X	X	X	Emergency Services Property Protection Structural
Public Education Campaign for Everbridge System	1, 2, 3, 4	New action	X	X	X	Emergency Services Public Information
Regional Emergency and Disaster Preparedness Exercises to Test Operational & Emergency Plans	1, 2, 3, 4	New action	X	X	X	Emergency Services
Special Needs and Critical Facilities Database and Advanced Warning System	1, 2, 3, 4	New action	X	X	X	Emergency Services Public Information
Assets Inventory	1, 2, 3, 4	New Action	X	X		Prevention Property Protection
Protection of City Assets from Cyber Terrorism	1, 2, 3	New Action	X	X		Property Protection
Protection of City Information Technology Infrastructure	1, 2, 3, 4	New Action	X	X		Property Protection
Climate Change Actions						
Map and Assess Vulnerability to Sea Level Rise	1, 2, 3, 4	New action	X	X	X	Prevention
Emission Study of City Sump and Pump Stations	1, 2, 3	New Action	X	X		Prevention
Drought and Water Shortage Actions						
Aquifer Storage	1, 2, 3, 4	New action	X	X	X	Structural
Perform a Groundwater Recharge Feasibility Study	1, 2, 3, 4	New action	X	X	X	Prevention
Earthquake Actions						
Map and Assess Community Vulnerability to Earthquakes	1, 2, 3, 4	New action	X	X	X	Prevention
Seismic Vulnerability Assessment on Sacramento Levees, Infrastructure & Buildings	1, 2, 3, 4	New action	X	X	X	Property Protection Structural
Retrofit Historical Buildings	1, 2, 3, 4	New action	X	X		Property Protection



Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
Extreme Cold and Heat Actions	•				•	
Heating Centers in High Priority Locations	1, 2, 3, 4	New action	X	X		Prevention Emergency Services
Cooling Centers in High Priority Locations	1, 2, 3, 4	New action	X	X		Prevention Emergency Services
Extreme Weather Outreach Strategy	1, 2, 3, 4	New action	X	X	X	Prevention
Severe Weather Action Plan	1, 2, 3, 4	New Action	X	X		Prevention Emergency Services
Flood, Localized Flood, and Levee Failure Actions						
Coordinate with Stakeholder on Proposed Flood Control Project on Magpie Creek	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural Public Information
Adopt Additional Floodplain Development Standards	1, 2, 3, 4	2011 action	X	X	X	Prevention
Drainage Projects for Repetitive Loss Properties	1, 2, 3, 4	2011 Action	X	X	X	Property Protection Natural Resource Protection Structural
Emergency Notification and Evacuation Planning	1, 2, 3, 4	2011 Action	X	X	X	Emergency Services
Historic Magpie Creek	1, 2, 3, 4	2011 Action	X	X	X	Property Protection Natural Resource Protection Structural
Natomas Internal Drainage Canals/Levees	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural



Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
Drainage Projects from the City's Priority Drainage Project List	1, 2, 3, 4	2011 Action	X	X	X	Property Protection Natural Resource Protection Structural
Projects Identified in the Combined Sewer System Improvement Plan Update	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural
Easements for Open Land Along Levees	1, 2, 3, 4	New action	X	X	X	Prevention Property Protection Natural Resource Protection
Emergency Management Planning and Levee Security	1, 2, 3, 4	New action	X	X	X	Emergency Services
Flood Fighting Equipment	1, 2, 3, 4	New Action	X	X	X	Emergency Services
Flood Management Land Use Planning and Development	1, 2, 3, 4	New Action	X	X	X	Prevention Property Protection Natural Resource Protection
Florin Creek Pump at Pomegranate Avenue	1, 2, 3, 4	New Action	X	X	X	Property Protection
Internal Drainage System Improvements	1, 2, 3, 4	New Action	X	X	X	Property Protection Natural Resource Protection Structural
Levee and Structural Flood Management Improvements	1, 2, 3, 4	New Action	X	X	X	Property Protection Natural Resource Protection Structural
Master planning to identify facilities needed to prevent 10- year event street flooding and 100-year event structure flooding	1, 2, 3, 4	New Action	X	X	X	Prevention Property Protection Natural Resource Protection Structural



Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
Retrofit Pumping Plants with Discharge Monitoring Devices	1, 2, 3, 4	New Action	X	X	X	Property Protection
Risk Communication and NFIP/CRS Projects	1, 2, 3, 4	New Action	X	X	X	Public Information
Steamers and Rio City Café Floodwalls	1, 2, 3, 4	New Action	X	X	X	Structural
Trash Racks and Debris Cages	1, 2, 3, 4	New Action	X	X	X	Property Protection
Multi-Jurisdictional Modeling for Drainage Watersheds Greater Than 10 Square Miles	1, 2, 3, 4	New action	X	X	X	Prevention Property Protection
Wind and Tornado Actions						
Tree Trimming & Debris Removal	1, 2, 3, 4	New action	X	X		Property Protection
Upgrading Overhead Utility Lines & Burying Critical Power Lines	1, 2, 3, 4	New action	X	X		Property Protection
Install Redundancies and Loop Feeds for Power Lines & Infrastructure	1, 2, 3, 4	New Action	X	X		Property Protection
Erosion Actions						
Stabilization of Erosion Hazard Areas	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural
Wildfire Actions						
Implement a Fire Education and Information Program	1, 2, 3, 4	New action	X	X		Public Information
Fuels Reduction on the American River Parkway	1, 2, 3, 4	2011 Action	X	X		Property Protection Natural Resource Protection
Outreach on the Effects of Smoke on Air Quality	1, 2, 3, 4	New Action	X	X		Public Information
Cosumnes Community Services District						
Flood Response Equipment	1, 2, 3, 4	2011 Action	X	X	X	Emergency Services
Flood Response Training	1, 2, 3, 4	2011 Action	X	X	X	Emergency Services
Los Rios Community College						



Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
District Wide Roofing Renovations	1, 2, 3	2011 Action	X	X		Property Protection
ARC Drainage at Arcade Creek	1, 2, 3	New Action	X	X	X	Property Protection Natural Resource Protection Structural
Protect District Property	1, 2, 3	New Action	X	X		Property Protection
Metro Fire District						
Relocate the essential facilities in the 200-year flood plain	1, 2, 3, 4	New Action	X	X	X	Emergency Services Property Protection Structural
Perform seismic study of all district facilities and identify those facilities at greatest risk for earthquake damage.	1, 3, 4	New Action	X	X		Prevention
Implement a Wildland Urban Interface (WUI) Building/Fire Code	1, 3, 4	New Action	X	X		Prevention
Develop and Implement a comprehensive WUI fuels management program.	1, 2, 3, 4	New Action	X	X		Prevention Property Protection Natural Resource Protection
Deploy 2 remote automated weather stations (RAWS) in Metro Fire jurisdiction	1, 2, 3, 4	New Action	X	X		Emergency Services
Defensible space ordinance	1, 2, 3, 4	New Action	X	X		Prevention
Brannan Andrus Levee Maintenance District						
Implement Bioengineered Bank Stabilization techniques	1, 2, 3, 4	New Action	X	X	X	Property Protection Natural Resource Protection Structural
Development of Dredge Stockpile Site	1, 2, 3, 4	New Action	X	X		Property Protection Natural Resource Protection

Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
Georgiana Slough Waterside Erosion Repair	1, 2, 3, 4	New Action	X	X	X	Property Protection Natural Resource Protection Structural
Hydrographic surveys and data collection	1, 2, 3, 4	New Action	X	X	X	Prevention
Mokelumne River Crown Raising	1, 2, 3, 4	New Action	X	X	X	Property Protection Natural Resource Protection Structural
San Joaquin River Waterside Erosion Repair	1, 2, 3, 4	New Action	X	X	X	Property Protection Natural Resource Protection Structural
Sevenmile Slough French Drain and Seepage Berm	1, 2, 3, 4	New Action	X	X	X	Property Protection Natural Resource Protection Structural
Reclamation District #3*						
Levee Improvements	1, 3	New Action	X	X	X	Property Protection Natural Resource Protection Structural
Reclamation District #341*						
San Joaquin River Setback Levee/Habitat Bench Multi- Benefit Project, Phase 1	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural
Complete Projects from Regional Flood Management Plan	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural



Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
RD 551*						
Levee Improvements	1, 3	New Action	X	X	X	Property Protection Natural Resource Protection Structural
Reclamation District #554*						
Apply for a Letter of Map Revision (LOMR) to bring the District back into Zone X. (outside of the 100-year flood zone)	1, 2, 3, 4	New Action	X	X	X	Prevention
Fill Abandoned Slough	1, 2, 3, 4	New Action	X	X		Property Protection Natural Resource Protection
Geotechnical Investigation	1, 2, 3, 4	New Action	X	X	X	Prevention
Snodgrass Slough Levee Improvements	1, 2, 3, 4	New Action	X	X	X	Property Protection Natural Resource Protection Structural
Reclamation District #556*						
Flood Response Activities, Georgiana Slough Weir	1, 2, 3, 4	New Action	X	X	X	Emergency Services
Georgiana Slough Vegetation Management	1, 2, 3	New Action	X	X	X	Natural Resource Protection
Georgiana Slough Waterside Erosion Repair	1, 2, 3, 4	New Action	X	X	X	Property Protection Natural Resource Protection Structural
Topographic and Hydrographic Surveys and Data Collection	1, 2, 3, 4	New Action	X	X	X	Prevetnion
Reclamation District #563*						



Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
Rock Slope Protection Project	1, 3	New action	X	X		Property Protection Structural projects Natural resource protection
HMP and PL-8499 Levee Improvement Projects	1, 3	New action	X	X	X	Property Protection Structural projects Natural resource protection
Reclamation District #800						
Erosion Repair	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural
Emergency Supplies	1, 2, 3, 4	New action	X	X		Emergency Services
Reclamation District #1000						
River Berm and Levee Erosion	1, 2, 3, 4	2011 action	X	X	X	Property Protection Natural Resource Protection Structural
Erosion Protection Canal Banks	1, 2, 3, 4	2011 action	X	X	X	Property Protection Natural Resource Protection Structural
Implement Security Measures at Key Facilities	1, 2, 3, 4	2011 action	X	X	X	Emergency Services
2014 Capital Improvement Plan	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural
Implement Supervisory Control and Acquisition Data system (SCADA) on District canals and pump stations	1, 2, 3	New Action	X	X	X	Prevention
Public Outreach and Education	1, 2, 3, 4	New action	X	X	X	Public Information



Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
Stockpile and pre-stage flood emergency response materials	1, 2, 3, 4	New action	X	X	X	Emergency Services
Emergency response improvements including radios for communications	1, 2, 3, 4	New action	X	X	X	Emergency Services
Emergency Back-up Generator for pump stations	1, 2, 3, 4	New action	X	X	X	Emergency Services
Reclamation District #1002*						
Geotechnical Investigation	1, 2, 3	New Action	X	X		Prevention
Snodgrass Slough Levee Improvements	1, 2, 3	New Action	X	X	X	Property Protection Natural Resource Protection Structural
Snodgrass Slough Vegetation Management	1, 2, 3	New Action	X	X	X	Property Protection Natural Resource Protection
Reclamation District #1601*						
Levee Improvement Project	1, 3	New action	X	X	X	Property Protection Structural projects Natural resource protection
Reclamation District #2111*						
Rock Slope Protection Project	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural
HMP and PL-8499 Levee Improvement Projects	1, 2, 3, 4	New action	X	X	X	Property Protection Natural Resource Protection Structural



Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
South River Pump Station Flood Protection Project	1, 2, 3, 4	2011 action	X	X	X	Property Protection Protection Structural
Reduction of Fire Hazard SRCSD Bufferlands	1, 2, 3, 4	2011 action	X	X		Property Protection
Sacramento Area Sewer District						
MOU for Dedicated Cell Phone Tower and Cell Phone Pack	1, 2, 3	New Action	X	X		Emergency Services
Southgate Recreation and Park District						
Drought Mitigation Actions/Drought Contingency Plan	1, 2, 3, 4	2011 Action	X	X		Prevention
Flood Mitigation Actions/Land Acquisition	1, 2, 3, 4	2011 Action	X	X	X	Prevention Property Protection Natural Resource Protection Structural
Conservation Easements	1, 2, 3, 4	2011 Action	X	X		Prevention
Multi-jurisdictional Cooperation within Watersheds	1, 2, 3, 4	2011 Action	X	X	X	Prevention
Storm Water Management Practices – Implement Storm Water Management Practices as identified in Stormwater Quality Design Manual	1, 2, 3, 4	2011 Action	X	X	X	Property Protection Natural Resource Protection
Severe Weather: Heavy Rains and Storms Mitigation Actions/Tree Management	1, 2, 3, 4	2011 Action	X	X		Property Protection Natural Resource Protection
Twin Rivers School District						
New drainage plans to sites within the flood areas including, site drainage, storm drain upgrades and regrading fields to shed water (on-site) away from buildings	1, 2, 3, 4	2011 action	X	X	X	Property Protection Natural Resource Protection Structural



Action Title	Goals Addressed	New Action/ 2011 Action	Address Current Development	Address Future Development	Continued Compliance with NFIP	CRS Category
Work with City/County/Water departments to create defensible spaces at sites where nearby creeks are prone to flooding. Build-up earthen berms (off-site) to shed water away from critically located schools.	1, 2, 3, 4	2011 action	X	X	X	Prevention Property Protection
Working with the Department of the State Architect (DSA) on Earthquake Retrofit Plan on all sites.	1, 2, 3, 4	2011 action	X	X		Property Protection
Revise and update district-wide Storm Water Prevention Plan	1, 2, 3, 4	2011 action	X	X	X	Prevention Property Protection Natural Resource Protection Structural
Create defensible perimeter space – for fire areas. Trees trimmed and vegetation removed to minimize impact during fire season.	1, 2, 3, 4	2011 action	X	X		Property Protection Natural Resource Protection