



## **Roseville Multi-Hazard Mitigation Plan 2018 PROGRESS REPORT**

### **Reporting Period**

February 15, 2017 to November 1, 2018

### **Background**

Following a tradition of progressive and innovative planning, the City of Roseville City Council approved an update to the Roseville Multi-Hazard Mitigation Plan (RMHMP) on February 15, 2017. The RMHMP details the City's vision for reducing risk from all hazards, identifying resources, information, and strategies for risk reduction. In accordance with requirements of the Disaster Mitigation Act of 2000, the City completed a 10-month process to update its 2011 RMHMP in a way that provided as many tangible benefits for the City as possible from a single planning effort. These benefits are associated with grant funding eligibility and maintaining the nation's only Class 1 rating under FEMA's Community Rating System (CRS). The plan was approved by FEMA Region IX for compliance with Section 201.6, Chapter 44 of the Code of Federal Regulations on February 21, 2017. By completing this process, the City complied with the Disaster Mitigation Act and maintained eligibility for hazard mitigation grant funding opportunities afforded under the Robert T. Stafford Act. The plan is available to the public through the City of Roseville Public Library online at the following website:

[roseville.ca.us/hazardplan](http://roseville.ca.us/hazardplan)

### ***Benefits of Mitigation Planning***

Maintenance of this plan enables the City of Roseville to pursue hazard mitigation grant funding administered by FEMA under the Robert T Stafford Act. A FEMA-approved Hazard Mitigation Plan is a principal prerequisite for this funding. Roseville has leveraged funding from this program in the past to significantly reduce the City's risk associated with natural hazards.

### ***Summary Overview of the Plan's Progress***

The performance period for the Hazard Mitigation Plan began on February 21, 2017, with FEMA's final approval. The initial performance period for this plan is 5 years, with an update anticipated before February of 2022. The Hazard Mitigation Plan identified 62 hazard mitigation initiatives to be pursued during the 5-year performance period. As of the most recent reporting period, the following progress can be reported:

- 51 out of 62 initiatives (82%) reported ongoing action toward completion.
- 10 out of 62 initiatives (16%) reported no action taken.
- 0 out of 62 initiatives (0%) was completed.
- 0 initiative was removed due to elimination of a program.

## **Purpose**

The purpose of this report is to provide the Roseville City Council, stakeholders and citizens an annual update on implementation of the action plan identified in the RMHMP. The objective of the annual evaluation is to ensure a continuous planning process that keeps the RMHMP dynamic and responsive to the needs of the stakeholders. This report was prepared by the planning team. It was reviewed and confirmed by the RMHMP Steering Committee, in accordance with Section 7.4 of the Plan, at the Steering Committee's annual meeting on November 14, 2018. This report discusses the following:

- Natural hazard events that have occurred within the last year
- Changes in risk exposure within the planning area
- Mitigation success stories
- Review of the action plan
- Changes in capability in the planning area that could impact plan implementation
- Recommendations for changes/enhancement

## **The RMHMP Steering Committee**

The update to the RMHMP was overseen by a steering committee appointed by the Roseville City Council and made up of stakeholders in the planning area. During the plan's development, the Steering Committee agreed that it would remain as a body to oversee the maintenance of the plan as established in Chapter 7. The Steering Committee continues to exist and function as organized in its established ground rules. At a minimum, it provides technical review and oversight on development of the annual progress report. It is anticipated the Steering Committee's role in overall plan implementation will evolve, based on the hazard mitigation needs of the city. Annual turnover in its membership is monitored via the progress report. For this reporting period, the Steering Committee membership is as indicated in Table 1.

<b>TABLE 1 2018 STEERING COMMITTEE MEMBERS</b>		
<b>Name</b>	<b>Title</b>	<b>Jurisdiction or Agency</b>
Jason Rizzi	Emergency Preparedness Manager	City of Roseville, Fire Department
Kinarick Shallow	Assistant Planner	City of Roseville, Development Services Dept.
Brian Walker	Senior Engineer/Floodplain Manager	City of Roseville, Public Works Department
Helen Dyda	Marketing & Communications Analyst	City of Roseville, Public Works Department
Grace Keller	Resident	Community Emergency Response Team
Eric Angle	Emergency Preparedness Program	Sutter Roseville Medical Center
Joe Van Zant	Resident	RCONA (South Cirby Neighborhood Assoc)
Jim Williams	Resident	RCONA (Meadow Oaks)
Rod Rodriguez	Senior Emergency Services Specialist	Placer County OES
Brad Brewer	Development Coordinator/Manager	Placer County Flood Control Water Cons. District
Rick Stalker	Stalker & Burnett RE Group	Placer County Association of Realtors
Rob Flaner	Emergency Preparedness Manager	Supporting City of Roseville

## Natural Hazard Events in the Planning Area

During the reporting period, the following hazard events affected the planning area: No natural hazard events were reported during this reporting period.

## Changes in Risk Exposure in the Planning Area

The RMHMP update addressed the probable impact of the following natural hazard events in the City of Roseville:

- Dam failure
- Drought
- Earthquake
- Flood
- Landslides
- Human-caused hazards
- Human health hazards
- Severe weather
- Wildland fire

The growth of recreational access to and residential units adjacent to the Pleasant Grove Creek oak forest in the Woodcreek, Crocker Ranch, and Fiddymont Farms neighborhoods increases the frequency, risk, and human impact of wildland fires. These increases in access may increase risk exposure and therefore may require considerations to reduce or limit this additional exposure. Some suggested solutions are captured within the “Recommended for Changes or Enhancements” section below.

## Mitigation Success Stories

During the current reporting period, the City had a number of mitigation success stories that reflect the City’s commitment to multi-hazard mitigation and the philosophy that the City Council and staff are responsible for the good stewardship of City resources.

The City is currently developing and was scheduled to complete a Groundwater Strategic Plan in March 2019; the revised completion date is June 2020. This plan is focused on enhanced aquifer recharge and planning for enhanced use of groundwater wells in the extreme case there is an outage of the City’s primary water supply source. With the current 2019/20 precipitation in Northern California being at 50% of normal amounts, the completion and use of this strategic plan could not be more timely.

City staff strive to maintain high availability of essential communication services. The city has multiple, fully functional data centers which provide redundant hardware infrastructure. In the event of an extended outage; procedures are in place to restore essential communication and information services. One of the current production data centers was relocated during the reporting period. This move reduced the risk from flooding as it moved the critical technology infrastructure further away from the nearby creek to an elevation above FEMA’s (100-year) base flood elevation. The City was presented an opportunity in October 2018 with events that triggered broad scale network communication (phone and email) outages for most City staff for 2-3 days. City IT staff worked tirelessly and restored all network communications as swiftly as possible, implementing current protocol. The experience provided insights and “lessons learned” to enhance network deficiencies.

## Review of the Action Plan

This section reviews the action plan and lists the status of each initiative from the hazard mitigation plan, grouped by the agency or department responsible for its completion. The action plan matrix in Table 2 provides the following information:

- Initiative number and brief summary; initiative numbers are coded by hazard type as follows:
  - DF = dam failure
  - D = drought
  - EQ = earthquake
  - F = flood
  - HC = human-caused hazards
  - HH = human health hazards
  - LS = landslides
  - SW = severe weather
  - WF = wildland fire
  - MH = multiple hazards
- Indication of whether any action has been taken
- Current timeline
- Indication of whether the project priority has changed
- Status (complete, ongoing or no progress)
- Comments, including the following information:
  - Was any element of the initiative carried out during the reporting period?
  - If no action was completed, why?
  - Is the timeline for implementation for the initiative still appropriate?
  - If the initiative was completed, does it need to be changed or removed from the action plan?

Part 4 of the plan provides detailed descriptions of each initiative and the prioritization process.

## **Planning Area Changes That May Impact Plan Implementation**

The planning area for the City changed with the adoption of 3 new Specific plans. The impacts of these changes will be addressed at the next update to this plan.

## **Recommendations for Changes or Enhancements**

Based on the review of this report by the RMHMP Steering Committee, the following recommendations will be noted for future updates or revisions to the plan.

- The Information Technology Department has recommended that Initiatives MH-3 and MH-7 be combined into a single initiative
- Include information on the potential impacts of the Biggerts/Waters Flood Insurance Reform Act in annual mailings to floodplain residents.
- Continue to hold a pre-rainy season meeting with all key departments and stakeholders, such as the meeting held on December 10, 2013 to review the City's Flood Warning & Response Plan.
- Continue to train with WebEOC to enhance communication with the county. Continue to offer classes prior to every EOC exercise; last year over 100 city staff received a WebEOC refresher class.
- Try to better forecast impacts on city storm drains from debris accumulations.
- Consider training in street closure in a flood scenario for street workers.

- Data from stream gauges was not a representation of actual emergencies in the field. During flooding events, field observers should be deployed to known street flooding locations, even if no gauge information indicates flooding at those locations.
- Continue to evaluate (and add as appropriate) new social media channels, which have proven essential for public and media communication in emergencies.
- The growth of recreational access to and residential units adjacent to the Pleasant Grove Creek oak forest in the Woodcreek, Crocker Ranch, and Fiddymont Farms neighborhoods increases the frequency, risk, and human impact of wildland fires. These increases may require fire and safety personnel reviews of first responder vehicle access to newly populated sections of the creek, updates of resident fire emergency notification and evacuation procedures, and creation or updates of interagency coordination procedures for resident relocation.
- Create different wording for the WebEOC initiative
- Enhance the drought hazard profile based on new information available on current drought situation in CA.
- Enhance human caused hazard profile to include discussion on cyber-terrorism.
- Create separation between natural and non-natural hazards of concern in part II of the plan

**TABLE 2.  
ACTION PLAN MATRIX**

Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
<b>City of Roseville</b>				
Initiative F-20— Retrofit the City’s Downtown library by sealing the exterior and installing a flood door to protect against flood damage should Dry Creek overflow the existing floodwall.				
No	Long Term (5+yrs.)	No	No progress was completed on this Action item during the reporting period.	No Progress
Initiative HC-3—Seek to establish appropriate staffing levels of public safety personnel to address vulnerabilities identified through an incremental targeted study that provides immediate needs as well as anticipated needs in 1 year, 5 years, and 10 years.				
Yes	Short Term (<5yrs.)	No	The Police and Fire Chiefs meet quarterly with the City Manager to discuss staffing levels and needs based on current trends, population growth, and calls for service. Staffing levels are addressed on an annual basis as part of the City's budget process.	Ongoing
Initiative HH-3—Collaborate with the Placer County Mosquito Abatement District to review resource protection policies that conflict with human health protection in the City of Roseville and work to resolve these policy issues.				
Yes	Short Term (<5yrs.)	No	The Placer Mosquito Abatement District and Roseville Environmental Coordinator are working together to both protect open space and wetland areas while limiting the amount of habitat for mosquitoes and vectors.	Ongoing
Initiative HH-2—Support the public education efforts of the Placer County Health Department and the Placer Mosquito Abatement District				
Yes	Short Term (<5yrs.)	No		Ongoing
Initiative MH-2—Continue to maintain the hazard mitigation page on City website that provides following types of information: The Hazard Management Plan and its progress reports Hazard-specific information Mitigation information by hazard, with specific emphasis on private property Emergency response and warning information Links to county, state, and federal related agencies				
Yes	Short Term (<5yrs.)	No	This is an on-going action. The City continues to maintain its website as specified in the plan maintenance section of the plan. The website can be viewed at: <a href="https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&amp;pageId=8917243">https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&amp;pageId=8917243</a>	Ongoing

**TABLE 2.  
ACTION PLAN MATRIX**

Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
Initiative EQ-1—Perform building-specific, structural seismic vulnerability assessment of City-owned critical facilities constructed prior to 1980 (including infrastructure). Included in this assessment will be recommended mitigation alternatives that meet goals and objectives of this Plan.				
No	Long Term (5+yrs.)	Yes	Major construction on any city-owned building would require an assessment of seismic vulnerability. The City will continue to apply for a Planning Grant under applicable FEMA programs to complete this task. The recently constructed city hall annex (316 Vernon Office Building) was awarded the nation's first Platinum rating for seismic performance by the US Resiliency Council during the reporting period.	No Progress
Initiative EQ-2—Incorporate earthquake mitigation measures for private property into existing City-sponsored outreach programs such as printed media and the City’s website.				
Yes	Short Term (<5yrs.)	No	Information regarding earthquake safety and building requirements are communicated in existing Building Division literature made available at the front counter and on the City's website. In addition, the California Building Officials (CALBO) website has consumer web pages with information regarding seismic safety.	Ongoing
Initiative EQ-3—Reassess the overall vulnerability to the earthquake hazard using the best available science and technology as it becomes available. State-sponsored programs, Seismic Hazards Mapping Act, and future FEMA- sponsored initiatives are anticipated to create a wealth of knowledge regarding this hazard that did not exist during the preparation of this Plan.				
Yes	Short Term (<5yrs.)	No	Development Services will avail itself of any state- or federally-sponsored program aimed at improving seismic safety as they become available. The City will conduct seismic risk assessments as necessary with applicable MHMP updates should new or revised earthquake fault or hazard zone maps be published by the California Department of Conservation.	Ongoing
Initiative F-1—The City shall designate all areas identified as the 100-year floodplain. The boundaries of the 100-year floodplain shall be as specified in the floodplain designations section of this component of the City’s General Plan. Floodplain areas shall be preserved as specified in the open space and conservation element. Such preservation may include required dedication to the City. If needed, modify the City’s ordinances to include floodplain use regulations consistent with the goals, policies, and implementation measures of the safety, land use, open space and conservation, and parks and recreation elements of the City’s General Plan.				
Yes	Long Term (5+yrs.)	No	The city continued to implement its ongoing protocols and standard for identifying, mapping, and preserving the 100 yr floodplain during this reporting period. This initiative will continue to be implemented on an on-going basis, with a high priority.	Ongoing

**TABLE 2.  
ACTION PLAN MATRIX**

Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
<p>Initiative F-2—Refer any development proposal that has a direct or indirect impact on flood protection to Public Works for comment. In addition, forward such proposals to other agencies as applicable, including the U.S. Army Corps of Engineers, California Central Valley Flood Protection Board, FEMA, California Department of Fish and Wildlife, Placer County Resource Conservation District, and Placer County Flood Control District. Consider the comments of the agencies during the development review process.</p>				
Yes	Short Term (<5yrs.)	No	The city continued to implement its ongoing protocols and standard for reviewing flooding impacts that may be caused by new developments and forward such developments to other agencies as applicable during this reporting period. This initiative will continue to be implemented on an ongoing basis, with a high priority.	Ongoing
<p>Initiative F-9—Ensure that future specific plans and specific plan amendments are consistent with the goals and policies of the General Plan. The specific plans shall include the designation and preservation of floodplain areas and adjacent habitat. Provisions shall be incorporated to ensure that public infrastructure, utilities, and emergency services remain functional during flood conditions. Such infrastructure and facilities include water, sewer and gas mains, telephone and electric lines, streets and bridges, hospitals, and fire and police stations. Financing mechanisms shall be explored to fund necessary flood protection improvements and maintenance. Development agreements may be used to secure implementation and funding provisions. (Specific plans have 100% cost recovery by developers).</p>				
Yes	Long Term (5+yrs.)	No	The city continued to implement its protocols and standard for reviewing proposed public infrastructure, utilities, and other emergency services so that they would remain functional during flood during this reporting period. This initiative will continue to be implemented on an ongoing basis, with a high priority.	Ongoing
<p>Initiative F-11—Require a master drainage plan as part of the approval process for all specific plans and large development projects as determined by the Public Works director. The master drainage plan should consider cumulative regional drainage and flooding mitigation. The plan's intent is to ensure that the overall rate of runoff from a project does not exceed predevelopment levels. If necessary, this objective shall be achieved by incorporating run-off control measures to minimize peak flows and/or assistance in financing or otherwise implementing comprehensive drainage plans.</p>				
Yes	Long Term (5+yrs.)	No	The City will continue to require preparation of master drainage plans and flood studies for new growth areas. The priority and timeline for this initiative will remain as assigned.	Ongoing



**TABLE 2.  
ACTION PLAN MATRIX**

Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
<b>Initiative LS-2— Continue to implement policies adopted by the General Plan that promote open space land uses within identified steep slope areas of Roseville. The City of Roseville Northeast Roseville Specific Plan and Stoneridge Specific Plans include the identified steep slope areas within Roseville. Both Plan Areas have continuing development.</b>				
Yes	Short Term (<5yrs.)	No	The Northeast Roseville Specific Plan and Stoneridge Specific Plan development areas include the identified steep slope areas within Roseville. Both plan areas have continuing development. When individual projects are submitted, for example a housing development along a ravine in the Stoneridge area, all City development departments and the Fire Department enforce the General Plan, Specific Plan, City construction standards and individual project conditions to protect the steep slope open space that is dedicated to the City as part of the final maps for the projects.	Ongoing
<b>Initiative MH-1—Continue to maintain Office of Emergency Services certification of all City inspectors for post-disaster damage assessment.</b>				
Yes	Short Term (<5yrs.)	No	All building inspectors are certified by the Office of Emergency Services. The Building Division will continue to make sure staff maintains their certifications and that the certifications are documented per the International Accreditation requirements.	Ongoing
<b>Initiative D-1—Perform a groundwater recharge feasibility study to determine the most cost-effective way to replenish groundwater resources within Roseville.</b>				
Yes	Long Term (5+yrs.)	No	The City is currently developing and scheduled to complete a Groundwater Strategic Plan in March 2019. This plan is focuses on enhanced aquifer recharge and planning for enhanced use of groundwater wells in the extreme case there is an outage of the City's primary water supply source.	Ongoing
<b>Initiative D-2—Implement aquifer storage and recovery program that uses direct injection technique in areas identified as appropriate.</b>				
Yes	Long Term (5+yrs.)	No	The City has implemented this action by injecting treated drinking water into two wells in early 2013. Two more wells were completed prior to the current reporting period to increase the injection capabilities. The City completed two more Aquifer Storage & Recovery (ASR) wells during this reporting period, making six total built and permitted. A long-term ASR operations plan was also developed. The City will be establishing a capital improvement project (CIP) in the FY 2020 budget that will fund and schedule out the building of the next batch of ASR wells. The locations of these new wells will be driven by the conclusions in the Groundwater Strategic Plan.	Ongoing

**TABLE 2.  
ACTION PLAN MATRIX**

Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
Initiative D-3—Continue to implement the Environmental Utility Department’s recycled water program and seek all opportunities to expand its coverage, currently focusing on urban growth areas. The City pumps recycled water through a system of purple pipes completely separate from potable (drinking water) pipes. The City pumps the recycled water to customers such as streetscapes, golf courses and parks, where it irrigates turf and shrubs. Using recycled water for uses such as landscape irrigation reduces demand on the potable water system, creating a more reliable water supply for the entire City. Recycled water is not subject to the effects of drought.				
Yes	Short Term (<5yrs.)	No	A Water Recycling Master Plan has been developed and is being implemented. This includes expanding recycled water in the region as well as finding opportunities in the existing service areas. Recycled water is considered as a resource in all new development areas being considered.	Ongoing
Initiative D-4—Promote active water conservation techniques and strategies to private property owners through Roseville-sponsored outreach projects such as printed media and the City’s website.				
Yes	Short Term (<5yrs.)	No	Conservation efforts are an ongoing initiative of the Water Division and have been increased and accelerated in all areas due to the unprecedented drought conditions facing the state.	Ongoing
Initiative HC-5—Address vulnerabilities identified in vulnerability assessment of water facilities performed by the Environmental Utilities Department in response to EPA initiative.				
Yes	Long Term (5+yrs.)	No	A Water System Security CIP was completed several years ago by the Environmental Utilities Department and continues to be updated as new facilities come on line. The project enhanced the physical security of water facilities with video monitoring and access control. Timeline for this initiative has been changed from long-term to on-going.	Ongoing
Initiative SW-4—Enhance and implement strategies for debris management and removal during severe weather events.				
Yes	Short Term (<5yrs.)	No	No change in the debris management and removal strategy that was adopted in 2009. The Parks and Open Space Divisions implemented an Emergency action plan for storm situations. The Open Space Division under Parks Department purchased a new bucket truck during the previous reporting period that aids in the removal of hazardous and storm damaged trees.	Ongoing

**TABLE 2.  
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Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
<b>Initiative HC-9—Protect the City’s data, technology infrastructure and staff against malicious cyber-attacks and Cyber terrorism, such as but not limited to: Identity Theft Virus/Malware/Ransomware/Spyware/Spam/Phishing Network and system attacks Web site hacking Denial-of-service attacks</b>				
Yes	Short Term (<5yrs.)	No	The Information Technology Department uses several strategies and technologies to combat Cyber-attacks including: • Anti-phishing capability • Internet content filtering • PCI-DSS compliance • Virus, malware, spyware and spam scanning • Perimeter firewalls report and prevent intrusions • Secure authentication • Encryption • EOC Cyber Security Incident Exercises	Ongoing
<b>Initiative MH-7—Strive to maintain high availability of essential communication services</b>				
Yes	Other, please specify	No	For the Communication and Information Systems: The city has multiple, fully functional data centers which provide redundant hardware infrastructure. In the event of an extended outage; procedures are in place to restore essential communication and information services. The city’s primary radio system has redundant components throughout. In addition the Police and Fire departments have alternative and independent systems in case the primary system fails. One of the current production data centers was relocated during the reporting period. This move reduced the risk from flooding as it moved the critical technology infrastructure further away from the nearby creek to an elevation above FEMA's (100-year) base flood elevation. The City is at present, working on an enterprise wide Business Impact Analysis study. This report will look at all information systems and services to evaluate and rank the level of impact to the City. This Business Impact Analysis report will be the primary input to developing a revised, more comprehensive Disaster Recovery/Business Continuity Plan.	Ongoing
<b>Initiative MH-8—Secure the City’s physical locations that contain technology infrastructure</b>				
Yes	Other, please specify	No	Both of the City's data centers are armed with perimeter alarm systems and internal and external security cameras. Also access to these sites is restricted to a limited number of city employees. In addition, vendors and visitors will be required to sign in and be escorted.	Ongoing

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ACTION PLAN MATRIX**

Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
Initiative F-12—Continue the Parks, Recreation & Libraries Department’s regular creek maintenance program within the City’s creeks and floodplain areas. This program clears and removes debris that could contribute to blockage and flooding and may include the removal of silt. This is only done in areas of high risk to flood damage or where property or facilities are threatened by flooding.				
Yes	Long Term (5+yrs.)	No	The city continued to implement its ongoing protocol of inspecting and maintaining its creeks and streams during the reporting period. The Department of Fish and Wildlife executed a 12-year Routine Maintenance Agreement with the City in March 2017 covering the summer clearing work during the reporting period: 2017/18. During the previous reporting period, the City of Roseville worked with the Placer County Resource Conservation District to remove Red Sesbania from stream segments within the Dry Creek basin. This initiative will continue to be implemented on an ongoing basis, with a high priority. The City began collecting all data in GIS to improve mapping and tracking of creek maintenance activities. The City will continue to seek grant funding opportunities from FEMA and state agencies, when available, to assist in funding Arundo eradication along infested stream channels in the Dry Creek watershed. During the reporting period, the City began implementing its Saugstad Restoration Project - a creekbank restoration project along Saugstad Park.	Ongoing
Initiative F-21—Continue the Tree Mitigation Fund program administered by the Open Space Division in conjunction with non-profit organizations. The planting of oak trees in the open spaces adjacent to riparian zones increases infiltration and slows storm water surges.				
Yes	Long Term (5+yrs.)	No	The Tree Mitigation program for native oak woodland restoration uses oak mitigation funds for projects in the open spaces. Over 8,000 trees have been planted to date. An additional 500 Oaks are being planted this year with our local non-profit organization, the Roseville Urban Forest Foundation and volunteers for the community. The Oak plantings are maintained for 3 years and monitored for 5 years to ensure success criteria is met.	Ongoing

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Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
Initiative F-22—Manage beaver dam sites for flood control protection and habitat restoration after dam removal. One primary issue is impacts to floodwater capacity of creeks. Part of the desired comprehensive approach to beaver management includes establishment of quantitative and qualitative “carrying capacity,” including acre-feet of flood capacity lost. Implement a standard monitoring and reporting process to track beaver dam locations, population, and impacts. Gain regulatory approval for beaver management techniques such as biological control and habitat manipulation using the most benign options first.				
Yes	Long Term (5+yrs.)	No	The Park Maintenance—Open Space Division continues to use a Geographical Information Systems (GIS) database for tracking beaver dam locations and coordinates beaver removal per the City’s Beaver Management Policy and Nuisance Abatement Ordinance. Beaver dam removal is also covered under the City’s Routine Maintenance Agreement with the CDFW.	Ongoing
Initiative WF-1—Continue “Goat Grazing” program for removal of grassland in areas of Roseville potentially vulnerable to wildfire. Implement goat grazing in City open space and preserve areas for fire and invasive plant species management and native plant restoration.				
Yes	Short Term (<5yrs.)	No	The Fire Department and the Open Space Division continue working together to implement a goat grazing program. Approximately 1,200 goats have been utilized for the grazing of open space preserves, grazing over 1,100 acres. Goats provide an innovative, environmentally sensitive way to reduce fire fuel load by keeping open space vegetation under control. Grazing reduces fuel load by removing thatch and thinning woody plants and also removes non-native vegetation. This initiative will be implemented as funding allows. The City continues to look for opportunities to expand and maintain this practice.	Ongoing
Initiative MH-4—Implement an “Adopt an Open Space” program in coordination with the open space management program. Develop “adoption contracts” with neighborhoods, organizations, businesses, etc., describing the level of stewardship and the terms of the “adoption.” Publicize these activities through online resource directory and other media to encourage participation.				
Yes	Short Term (<5yrs.)	No	During the reporting period, the City has implemented an “Adopt a Creek” program. The Adopt a Creek program is administered by the City’s Park Maintenance—Open Space Division. The City publicizes the program at the following website: <a href="https://roseville.ca.us/cms/one.aspx?portalId=7964922&amp;pageId=10783887">https://roseville.ca.us/cms/one.aspx?portalId=7964922&amp;pageId=10783887</a>	Ongoing

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Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
Initiative MH-5—Develop and disseminate best practices information to private property owners whose land is adjacent to open space areas describing stewardship opportunities and owners’ role in preserving beneficial uses of open space areas (including vernal pool grassland and creek or riparian uses). Offer classes to provide in-depth information, such as demonstration projects, techniques for ecologically friendly weed abatement and vegetation control, and creating a backyard habitat compatible with open space areas.				
Yes	Short Term (<5yrs.)	Yes	The City has begun developing brochures and pamphlets to provide information on the do’s and don’ts related best management practices for residents living adjacent to open space areas as well as providing the benefits of the open space to the community. This included code enforcement-related door hanger placards, which are currently in use.	Ongoing
Initiative MH-6—Work with the Roseville City School District, local high school districts, and non-profit organizations to promote ecology-oriented curricula and stewardship activities. Identify resource and administrative barriers that may be limiting schools’ abilities to more actively participate in stewardship, and work collaboratively to identify solutions.				
No	Long Term (5+yrs.)	No	No actions towards the completion of this initiative were completed during the reporting period. This will continue to be an ongoing initiative with a medium priority pending funding.	No Progress
Initiative DF-1—Create a dam failure element for the City’s emergency response plan that includes a phased warning protocol in response to the findings of the Folsom Dam Containment Dike Risk Assessment.				
Yes	Short Term (<5yrs.)	No	This phased response plan that guides City emergency management staff was created during the reporting period.	Ongoing
Initiative F-19—Implement recommendation of Downtown Roseville Specific Plan to relocate the Public safety Building				
No	Short Term (<5yrs.)	No		No Progress
Initiative HC-2—Enhance emergency response capability of City by contingency planning for specific events based on identified vulnerabilities.				
Yes	Short Term (<5yrs.)	No	The Police Department continues to plan for specific response to critical incidents either by incident type or location. Specifically this year, continued training in response to active shooter incidents occurred along with the implementation of the combined Rescue Task Force concept for police and fire response to these incidents. The Police Department specifically trained with the Galleria Mall for planning and response to incidents at the mall. Additionally, the Police Department developed training, purchased equipment, and planned for response to crowd control events/protests as the result of recent events in the city and area.	Ongoing

**TABLE 2.  
ACTION PLAN MATRIX**

Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
<b>Initiative HC-4—Prepare a site-specific vulnerability assessment of City- owned critical facilities that use the best available science and technology with regards to human-caused hazards.</b>				
Yes	Short Term (<5yrs.)	No	The Police Department Threat Assessment Unit has conducted site assessments at numerous city facilities including Fire Stations, Libraries, the Corporation Yard complex, the Civic Center, and power facilities. Assessments are completed with the stake holder to include areas of needed improvement and potential action plans. Threat Assessment has also completed similar assessments for critical potential threat locations within the city to include the Galleria Mall and other identified locations with target potential.	Ongoing
<b>Initiative HH-1—Continue to collaborate with the Placer County Health Department to ensure the health and welfare of the community</b>				
No	Short Term (<5yrs.)	No		No Progress
<b>Initiative SW-3—Continue education/outreach programs to improve winter preparedness and minimize loss of life or injury.</b>				
No	Short Term (<5yrs.)	No		No Progress
<b>Initiative WF-2—Enhance existing City public outreach programs to include information on fire safety, defensible spaces, and areas of concern.</b>				
No	Short Term (<5yrs.)	No		No Progress
<b>Initiative MH-3—Establish/maintain a post-disaster action plan to be part of the City Emergency operations plan that will include following elements: Procedures for public information Post-disaster damage assessment Grant writing Code enforcement Redundant operations</b>				
No	Short Term (<5yrs.)	No		No Progress
<b>Initiative F-3—Continue City participation in the National Flood Insurance Program and the Community Rating System (CRS). Seek CRS classification improvements within capabilities of City programs, including adoption and administration of FEMA-approved ordinances and flood insurance rate maps (FIRM).</b>				
Yes	Short Term (<5yrs.)	No	The City of Roseville continued to participate in the NFIP and CRS programs and re-certified its participation in CRS during the reporting period. The City's CRS Class 1 classification became effective on October 1, 2006. Flood insurance policy holders within the City for property owners in flood areas will receive up to a 45% premium discount based on this classification. Roseville is the first and only CRS Class 1 community in the nation. This initiative will continue to be implemented on an ongoing basis, with a high priority. The City has maintained its Class 1 rating through the reporting period.	Ongoing

**TABLE 2.  
ACTION PLAN MATRIX**

Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
<b>Initiative F-4—Maintain Roseville’s compliance and good standing under the National Flood Insurance program.</b>				
Yes	Short Term (<5yrs.)	No	A Community Assistance Visit (CAV) was last performed on the City of Roseville on September 10, 2014. The CAV is the principle means by which FEMA monitors a community's NFIP compliance. This CAV found that the City was in full compliance and is in good standing under the NFIP.	Ongoing
<b>Initiative F-5—Continue the City’s outreach program to flood-prone property owners and the citizens of Roseville, to help make them aware of the flood threat and how best to deal with them.</b>				
Yes	Short Term (<5yrs.)	No	This is an on-going action that is a part of the City's CRS program. A county-wide flood-focused public meeting on August 7, 2018 was well attended with 50+ Roseville residents inquiring of their flood risk; this outreach event stimulated 60+ additional Roseville residents doing the same.	Ongoing
<b>Initiative F-6—Continue to pursue a regional approach to flood issues by remaining actively involved in the Placer County Flood Control District. This involvement includes cooperation in the development of a comprehensive regional database. Continue to participate in regional flooding studies, including the Auburn Creek/Coon Creek/Pleasant Grove Creek flood mitigation plan and the Dry Creek watershed flood control plan.</b>				
Yes	Long Term (5+yrs.)	No	The City continued to be actively involved in the Placer County Flood Control & Water Conservation District (District) and participate in regional flooding studies during this reporting period. Staff from the City's Floodplain Management Section attends the District meetings on a monthly basis and a City Councilmember serves on the District Board. The District developed the Antelope Creek Flood Control Project, which is a regional flood control project, located within the City of Roseville. City staff assisted the District with the development and construction of the regional flood control project, construction completed in 2018. This initiative will continue to be implemented on an ongoing basis, with a high priority.	Ongoing



**TABLE 2.  
ACTION PLAN MATRIX**

Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
Initiative F-7—Continue City coordination with other agencies on issues of flood control. Coordination between the City and adjacent jurisdictions occurs through several mechanisms, including distribution of development proposals for review and comment. Continue City cooperation with federal, state, and local agencies, including the U.S. Army Corps of Engineers, California Central Valley Flood Protection Board, FEMA, California Department of Fish and Wildlife, Placer County Resource Conservation District, and the Placer County Flood Control District.				
Yes	Short Term (<5yrs.)	No	The City continued to coordinate with other outside agencies on issues of flood control during this reporting period. The coordination typically occurs on a project-by-project basis and agencies are included in the meetings based on their particular jurisdiction or expertise. This initiative will continue to be implemented on an on-going basis, with a high priority. The City is also actively involved with the State Dept. of Water Resources (DWR) Flood Emergency Response Program and implementing California Central Valley Flood Protection Board project encroachment permits.	Ongoing
Initiative F-8—Continue to develop, implement, and expand the Flood Alert and Early Warning Program systems and integrate the systems with other local jurisdictions to form a regional warning program.				
Yes	Long Term (5+yrs.)	No	The City continues to develop, implement, and expand the Flood Alert system. New “ALERT” software was installed and the Flood Warning web site was updated. During the reporting period, the City and the Placer County Flood Control & Water Conservation District applied for a State Department of Water Resources Flood Emergency Response Projects grant to upgrade the Flood Alert System data transmission system to the “ALERT-2” protocol and install 2 new District stations. Both the grant applications were successful, and the City and District are actively implementing the upgrade projects. The ALERT 2 protocol better integrates with multiple agencies. This initiative will continue to be implemented on an ongoing basis with a high priority.	Ongoing

**TABLE 2.  
ACTION PLAN MATRIX**

Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
Initiative F-10—Monitor and regularly update City flood studies, modeling, and associated land use, zoning, and other development regulations at a minimum of every 5 years or whenever information becomes available that would significantly modify previous data. New information could include new studies, change in City policy, consideration of a major development project or specific plan, or implementation of a flood control project.				
Yes	Long Term (5+yrs.)	No	During the reporting period, the City participated with FEMA in the multi-year effort to update FEMA floodplain maps and the related Flood Insurance Study (FIS); City staff submitted best available topographic data to improve the FEMA maps/study. City staff are in discussion with Placer County staff regarding the concept of making Roseville's future "Reason Farms" volumetric detention basin a regional flood control facility; stormwater/flood studies support the discussion. New floodplains have been developed for and within the Amoruso Ranch Specific Plan; they will be added to the City's Regulatory Floodplain once the ARSP annexation is complete. When hydraulic models are updated for various projects, these models are then used as best available data. The priority and timeline for this initiative will remain as assigned.	Ongoing
Initiative F-13—Continue annual inspection and maintenance program of City storm drain systems. Review after every major storm system function and performance. This program removes debris that could contribute to blockage of the storm drain system.				
Yes	Short Term (<5yrs.)	No	The City continued to implement its ongoing protocol of inspecting and maintaining its storm drain system during the reporting period. This initiative will continue to be implemented on an ongoing basis with a high priority.	Ongoing
Initiative F-14—Complete the final phase of the Cirby/Linda/Dry Creek flood control project (Phase 2). Six of the seven phases of this project have been completed at a cost of about \$29,900,000 (in July 2018 dollars). The basis for determining viability of this project will be a benefit /cost analysis to determine if project meets federal grant eligibility requirements.				
No	Long Term (5+yrs.)	No	No actions towards the completion of this initiative were completed during the reporting period. This will continue to be a long-term initiative with a low priority pending funding.	No Progress

**TABLE 2.  
ACTION PLAN MATRIX**

Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
Initiative F-15—Analyze alternative improvements to the Cirby/Linda/Dry Creek flood control project that may be cost effective in the flood-prone areas of Roseville: Dry Creek from Darling Way to Riverside Avenue Area on Dry Creek upstream of Folsom Road in the Columbia Avenue/Marilyn Avenue/Bonita Street area Linda Creek near Champion Oaks Drive/Samoa Way/Hurst Way area Cirby Creek in the Trimble Way/Zien Court area				
Yes	Long Term (5+yrs.)	No	Multiple actions towards the completion of this initiative were completed during the reporting period. The City continues to pursue opportunities to acquire (from willing sellers), elevate, or floodproof flood-prone buildings to significantly reduce their flood risk as a viable alternative to structural flood control. With aid of a FEMA grant, the City is nearing completion of the acquisition of flood-prone 645 Riverside Ave property, demolishing the building, and returning the area to open space. Offers were made to multiple owners of flood-prone properties for City aid in obtaining FEMA hazard mitigation grants; two grant applications are currently pending. This will continue to be a long-term initiative with a low priority pending funding.	Ongoing
Initiative F-16—Replace the Huntington Drive/Cirby Creek culvert with a bridge to protect Queens Court/Huntington Drive area. The Public Works Department oversees this project.				
Yes	Long Term (5+yrs.)	No	The City is continuing to research grants that may be available for this project. The City has the 25% match for the project. The priority for this project has been changed to low and awaits City staff availability and available grant funding to move forward. The City plans to update the hydraulic model to verify mitigation measures required.	Ongoing
Initiative F-17—Divert the main drainage storm drain system down Crestmont Avenue to Cirby Way and then into Dry Creek so that the existing system will not exceed capacity. If system capacity is exceeded, the intersection on Cirby Way and Crestmont Avenue and nearby homes will flood during major flood events.				
Yes	Short Term (<5yrs.)	No	A portion of the project, consisting of the 48-inch outfall into Linda Creek and the storm drain pipe crossing South Cirby Way at the intersection of Piedmont Way, was constructed in 2010. A constructable design for the complete engineered solution is complete. This design was put out to bid during the summer of 2018. The City received only a single bid valued at twice the engineer’s estimate; construction was not authorized. The City plans to bid the project again in the spring of 2019 for construction during 2019. The priority and timeline for this initiative will remain as assigned.	Ongoing

**TABLE 2.  
ACTION PLAN MATRIX**

Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
<b>Initiative F-18—Continue to promote and sponsor programs to buy out, relocate, and flood-proof existing flood-prone structures within Roseville.</b>				
Yes	Short Term (<5yrs.)	No	The City will continue to pursue flood hazard reduction via these "nonstructural mitigation measures" of additional target properties with a high priority. During the reporting period, the City was successful in obtaining a FEMA Predisaster Mitigation (PDM) grant for the property on Riverside Drive. The property was acquired voluntarily. The building demolition and site restoration project are scheduled for spring 2019. Additionally, City Floodplain Management staff are supporting two requests - from a Roseville business and a Roseville non-profit - to the Governor's Office of Emergency Services (Cal OES) for FEMA hazard mitigation grants. We are awaiting a response from FEMA/Cal OES. This activity remains largely influenced by available grant funding.	Ongoing
<b>Initiative F-23—Develop the City's multi-use, multi-benefit stormwater water retention project for volumetric floodflow mitigation within the Pleasant Grove Creek Watershed, the Reason Farms Stormwater Retention Project at the site recently named Al Johnson Wildlife Preserve.</b>				
Yes	Long Term (5+yrs.)	No	Placer County desires to participate in the City of Roseville's volumetric flood control project, thus making it a regional project. City and County staff have been meeting through 2017 and 2018 to evaluate the opportunities of the City's flood control project to accommodate the County's mitigation needs. Discussions have been fruitful. An identified action item is to investigate the formation of a JPA, or other entity to construct, oversee, and operate the facility. During this reporting period, a conceptual basin redesign has been produced that adds additional storage capacity within the City flood control project to include the County needs, assessed the hydraulic capability of the creek systems to deliver enough water to meet those needs, and assessed the fair share construction costs of the added capacity.	Ongoing
<b>Initiative HC-10—Improve evacuation transportation routes within the City of Roseville by removing traffic constrictions.</b>				
Yes	Long Term (5+yrs.)	No	The proposed Andora Widening Project will widen Washington Boulevard to four-lanes between Sawtell Road and Pleasant Grove Boulevard in Roseville. Washington Blvd is a four-lane roadway in the region except for at the project site, where it is a two-lane road beneath a UPRR rail bridge. The City applied for a FEMA grant for this project and is awaiting a response from FEMA/Cal OES. The project plans are currently developed to ~60% completion with final plans scheduled for completion by end of 2018. Environmental documents are scheduled for completion in spring 2019. Construction could occur as soon as 2020 if sufficient funding is identified.	Ongoing

**TABLE 2.  
ACTION PLAN MATRIX**

Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
<b>Initiative LS-1—Once California Geological Survey (CGS) completes soils mapping for the Roseville vicinity under the Seismic Hazards Mapping Act, reassess landslide hazard using best available data to gauge the true vulnerability to this hazard.</b>				
No	Long Term (5+yrs.)	No	There was no mapping performed by CGS in the Roseville vicinity under the Seismic Hazards Mapping Act during the reporting period. Time line and priority for this project will remain unchanged, pending action by CGS.	No Progress
<b>Initiative HC-6—Maintain compliance with California Energy Commission (“CEC”) license conditions for the operations of the Roseville Energy Park (“REP”) with respect to Hazardous Material Management</b>				
Yes	Short Term (<5yrs.)	No	The operation of the REP is in compliance with the CEC license conditions including the preparation of a Business Plan and a Risk Management Plan (RMP) submitted to the City’s Fire Department and the CEC. In addition, a Vulnerability Assessment has been prepared and Site Security measures have been implemented to ensure that neither the REP site nor a shipment of hazardous material is the target of unauthorized access.	Ongoing
<b>Initiative HC-7—Maintain compliance with state and local laws and regulations for the operation of the Roseville Power Plant #2.</b>				
Yes	Long Term (5+yrs.)	No	All operating and compliance permits are being maintained by the power generation staff. Compliance with state and local laws is an ongoing practice.	Ongoing
<b>Initiative HC-8—Maintain compliance with all North American Electric Reliability Corporation mandatory reliability standards related to the utility as a distribution provider and resource planner including critical infrastructure protection standards (cyber security).</b>				
Yes	Short Term (<5yrs.)	No	Establishing compliance through development, implementation, and adherence to policies and procedures.	Ongoing
<b>Initiative SW-1—Continue the Shade Tree Program, an energy conservation rebate program provided by Roseville Electric</b>				
Yes	Short Term (<5yrs.)	No	Although temporarily suspended due to the drought, this ongoing program was reactivated to offer Roseville residents a rebate for trees that they select, purchase and plant at their own convenience. Rebates are limited to 6 trees per household and available to Roseville Electric customers only.	Ongoing
<b>Initiative SW-2—Continue ongoing line clearing and weed abatement of electrical utility facilities in order to reduce public exposure to vegetation hazards and maintain higher reliability during severe weather conditions.</b>				
Yes	Short Term (<5yrs.)	No	This is an ongoing program of Roseville Electric to both protect the public from hazards and to maintain the reliability of electricity service to Roseville Electric’s more than 56,000 customers.	Ongoing

**TABLE 2.  
ACTION PLAN MATRIX**

Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
Initiative SW-5—Continue to operate the Roseville Energy Park to support the City’s electrical requirements and maintain service continuity during severe weather events.				
Yes	Short Term (<5yrs.)	No	The Roseville Energy Park (REP), which opened in October 2007, is producing power and provides additional electric support to meet the City’s electrical needs. In the event of a transmission line outage, the REP will help maintain electric service continuity. The Operations Department’s Emergency Action Plan (EAP) specifically addresses severe weather operations in Section 5.9. The severe weather EAP will ensure continuity of operations while securing the safety of personnel and equipment.	Ongoing
Initiative SW-6—Continue to maintain and operate Roseville Power Plant #2 to support the City’s electrical requirements and maintain service continuity during severe weather events.				
Yes	Short Term (<5yrs.)	No	Roseville Power Plant #2 is operated from the Roseville Energy Park Control Room. The Operations Department’s Emergency Action Plan (EAP) specifically addresses severe weather operations in Section 5.9. The severe weather EAP will ensure continuity of operations while securing the safety of personnel and equipment.	Ongoing

**Public review notice:** *The contents of this report are considered to be public knowledge and have been prepared for total public disclosure. Copies of the report have been provided to the Roseville City Council and local media outlets. The report is also posted on the City of Roseville Multi-Hazard Mitigation Plan website. Any questions or comments regarding the contents of this report should be directed to:*

*Brian Walker  
City of Roseville  
311 Vernon St.  
Roseville, CA 95678  
(916) 746-1300  
[WalkerBrian@roseville.ca.us](mailto:WalkerBrian@roseville.ca.us)*