



*City of Roseville Hazard Mitigation Plan
Pre-Adoption Review Draft
June 2005*

PART 4—MITIGATION STRATEGIES

CHAPTER 16. MITIGATION GOALS AND OBJECTIVES

16.1 INTRODUCTION TO MITIGATION STRATEGY

Section 201.6.c.3 of Title 44 of the *Code of Federal Regulations* (44 CFR) requires a mitigation strategy that will provide the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment based on existing authorities, policies, programs, and resources, and based on its abilities to expand on and improve these existing tools. This chapter describes the following:

- A description of mitigation goals and objectives to reduce or avoid long-term vulnerabilities to the identified hazards (see Chapter 16)
- A section that identifies and compares a comprehensive range of specific mitigation actions and projects being considered to the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure (see Chapter 17)
- An action plan describing how the actions identified will be prioritized, implemented, and administered by the local jurisdiction; prioritization shall include special emphasis on the extent to which benefits are maximized according to a benefit/cost analysis of the proposed projects and their associated costs (see Chapter 18)

Under Part 4 of the Roseville hazard mitigation plan (RHMP), each of these elements is addressed. The following sections discuss the mitigation goals and objectives.

16.2 GOALS AND OBJECTIVES

This section presents mitigation goals and objectives identified to reduce or avoid long-term vulnerabilities to the identified hazards. The City of Roseville developed these goals and objectives through discussions, research, and meetings of the steering committee and based on input from participating stakeholders and the public.

Using information garnered from the public involvement strategy, the risk assessment, and review of the California State hazard mitigation plan and Placer County hazard mitigation plan, the steering committee went through a process to identify goals and objectives for this RHMP. Seven goals were identified by the steering committee through a facilitated exercise working from a catalog of goal statements created through review of other similar plans and Federal Emergency Management Agency (FEMA) planning guidance. Once the goals were established, objectives that met multiple goals were selected through a similar facilitated exercise. For the purposes of this plan, goals and objectives are defined as summarized below.

- **Goals** are general guidelines that explain what is to be achieved. They are usually broad-based, policy-type statements, long-term, and represent global visions. Goals help define the benefits that the plan is trying to achieve. The success of the RHMP, once implemented, should be measured by the degree to which its goals have been met (that is, by the actual benefits in terms of hazard mitigation that occurs on the ground).
- **Objectives** are defined as short-term aims which, when combined, form a strategy or course of action to meet a goal. Unlike goals, objectives are specific and measurable.

16.2.1 Goals

The goals for the RHMP include the following:

- G-1: Protect lives and reduce injury
- G-2: Promote hazard mitigation as an integrated policy.
- G-3: Protect the continuity of local government to ensure no significant disruption of services during or due to a disaster
- G-4: Improve community emergency management preparedness, collaboration, and outreach
- G-5: Minimize or reduce damage to property, including critical facilities
- G-6: Develop and implement mitigation strategies that optimize public funds in an efficient and cost-effective way
- G-7: Maintain, enhance, and restore the natural environment’s capacity to deal with the impacts of disasters

16.2.2 Objectives

The steering committee selected the objectives listed in Table 16.1 to meet multiple goals. Therefore, the objectives serve as a stand-alone measurement of a mitigation action rather than as a subset of a goal. Achievement of the objectives is a measure of the effectiveness of a mitigation strategy. The objectives are also used to help establish priorities.

TABLE 16.1 ROSEVILLE HAZARD MITIGATION PLAN OBJECTIVES		
Objective No.	Objective Statement	Goals to Which Objective Applies
O-1	Consider the impacts of hazards on future land uses in the City of Roseville by coordinating with other planning mechanisms such as the general plan and land-use code development	1,2,5,7
O-2	Protect and sustain reliable local emergency operations and communication facilities during and after disasters	1,3,4
O-3	Develop new or enhance existing early warning response systems and plans	1,3,4,5
O-4	Seek to enhance emergency response capabilities through improvements to infrastructure and City programs.	1,4,5
O-5	Enhance the understanding of all hazards that impact the City of Roseville and the risk they pose	1,3,4,5,7
O-6	Seek mitigation projects that provide the highest degree of hazard protection at the least cost	1,5,6
O-7	Seek to update information on natural, environmental, and human-caused hazards, vulnerabilities, and mitigation measures by coordinating planning efforts and creating partnerships with appropriate local, county, state, and federal agencies	1,2,3,4,5,7
O-8	Seek to implement codes, standards, and policies that will protect life and property, including natural habitat, from the impacts of hazards within the City of Roseville	1,2,3,5,6
O-9	Educate the public on preparedness for and mitigation of potential impacts of hazards to the City of Roseville	1,2,4
O-10	Retrofit, purchase, or relocate structures in high hazard areas, including those known to be repetitively damaged	3,5,6

CHAPTER 17. REVIEW OF MITIGATION ALTERNATIVES

17.1 SWOO SESSIONS

The planning team used an effective planning technique to generate a comprehensive list of alternatives that met the following objectives:

- Use information obtained from the public involvement strategy
- Use information provided in the risk assessment
- Seek alternatives consistent with the goals and objectives for the RHMP
- Create catalogs of mitigation alternatives to be used as a tool by the planning team in selection of mitigation strategies for this RHMP

On March 15, 2005, two Strengths, Weaknesses, Opportunities, and Obstacles (SWOO) sessions were held with the technical subcommittee and the steering committee. The purpose of these sessions was to review information garnered from the risk assessment and the public involvement strategy to identify strengths, weaknesses, opportunities and obstacles in hazard mitigation within Roseville through a facilitated brainstorming session on risks, vulnerabilities, and capabilities within the planning area. All information shared during sessions was recorded by the planning team and used to prepare catalogs of mitigation alternatives to be used by the planning team (see Section 17.2) in preparing the mitigation strategy matrix presented in Chapter 18. It should be noted that many of the strategies (such as community outreach) identified in the catalogs discussed in Section 17.2 below could be applied to multiple hazards. This RHMP identifies strategies for multiple hazards in Chapter 18 even though a separate catalog has not been created for multiple hazards in this chapter.

17.2 CATALOGS OF MITIGATION ALTERNATIVES

Based on information garnered during the SWOO Sessions, catalogs of mitigation alternatives were created that list initiatives that could manipulate the hazard, reduce exposure to the hazard, reduce vulnerability to the hazard, and increase Roseville's capability to respond or be prepared for a hazard. These catalogs are separated by scale of implementation (in other words, who would most likely implement the initiative: personal property owners, private sector business, or government). The hazards addressed by the catalogs were deemed to be those to which the City is most vulnerable based on the risk assessment.

The catalogs are not meant to be exhaustive or site-specific but rather to inspire thought and provide each division of the Roseville City government with a role in hazard mitigation and a baseline of initiatives backed by a planning process, consistent with the goals and objectives of the planning area, and within the capabilities of the City. The City departments were not bound to these alternatives. They could have added to the catalogs if an initiative was not included. However, it should be noted that this did not occur. It should also be noted that initiatives included in the catalogs not selected by the City in the action plan were not selected based on the following:

- Initiative is currently outside the scope of capabilities (funding)
- City's jurisdiction is not vulnerable to the hazard
- Initiative is already being implemented

17.2.1 Mitigation Alternatives Catalog—Drought

Table 17.1 is the catalog of mitigation alternatives for the drought hazard.

TABLE 17.1 CATALOG OF RISK REDUCTION MEASURES—DROUGHT				
Scale	Manipulate Hazard	Reduce Exposure	Reduce Vulnerability	Increase Capability
Personal Scale	None	None	<ol style="list-style-type: none"> 1. Drought-resistant landscapes 2. Reduce water system losses 3. Modify plumbing systems (through water saving kits) 	Practice active water conservation
Corporate Scale	None	None	<ol style="list-style-type: none"> 1. Drought-resistant landscapes 2. Reduce private water system losses 	Practice active water conservation
Government Scale	Groundwater recharge through stormwater management	Identify and create groundwater backup sources	<ol style="list-style-type: none"> 1. Water use conflict regulations 2. Reduce water system losses 3. Distribute water saving kits 	<ol style="list-style-type: none"> 1. Public education on drought resistance 2. Identify alternative water supplies for times of drought; mutual aid agreements with alternative suppliers 3. Develop drought contingency plan 4. Develop criteria “triggers” for drought-related actions 5. Improve accuracy of water supply forecasts 6. Modify rate structure to influence active water conservation techniques

17.2.2 Mitigation Alternatives Catalog—Earthquake

Table 17.2 is the catalog of mitigation alternatives for the earthquake hazard.

TABLE 17.2 CATALOG OF RISK REDUCTION MEASURES—EARTHQUAKE				
Scale	Manipulate Hazard	Reduce Exposure	Reduce Vulnerability	Increase Capability
Personal Scale	None	Locate outside of hazard area (off soft soils)	<ol style="list-style-type: none"> 1. Retrofit structure (anchor house structure to foundation) 2. Secure household items that can cause injury or damage (such as water heaters, bookcases, and other appliances) 3. Build to higher design 	<ol style="list-style-type: none"> 1. Practice “drop, cover, and hold” 2. Develop household mitigation plan, such as creating a retrofit savings account, communication capability with outside, 72-hour self-sufficiency during an event 3. Increase capability by having cash reserves for reconstruction
Corporate Scale	None	Locate or relocate mission-critical functions outside hazard area where possible	<ol style="list-style-type: none"> 1. Build redundancy for critical functions and facilities 2. Retrofit critical buildings and areas housing mission-critical functions 	<ol style="list-style-type: none"> 1. Adopt higher standard for new construction; consider “performance-based design” when building new structures 2. Increase capability by having cash reserves for reconstruction
Government Scale	None	Locate critical facilities or functions outside hazard area where possible	<ol style="list-style-type: none"> 1. Harden infrastructure 2. Provide redundancy for critical functions 3. Higher regulatory standards 	<ol style="list-style-type: none"> 1. Provide better hazard maps 2. Provide technical information and guidance 3. Enact tools to help manage development in hazard areas such as tax incentives and information 4. Include retrofitting and replacement of critical system elements in capital improvements plan (CIP) 5. Develop strategy to take advantage of post-disaster opportunities 6. Warehouse critical infrastructure components such as pipe, power line, and road repair materials 7. Develop and adopt a Continuity of Operations Plan (COOP) 8. Initiate triggers guiding improvements (such as < 50% substantial damage or improvements)

17.2.3 Mitigation Alternatives Catalog—Flood

Table 17.3 is the catalog of mitigation alternatives for the flood hazard.

TABLE 17.3 CATALOG OF RISK REDUCTION MEASURES—FLOOD				
Scale	Manipulate Hazard	Reduce Exposure	Reduce Vulnerability	Increase Capability
Personal Scale	<ol style="list-style-type: none"> 1. Clear stormwater drains and culverts 2. Institute low-impact development techniques on property 	<ol style="list-style-type: none"> 1. Locate outside of hazard area 2. Elevate utilities above base flood elevation (BFE) 	<ol style="list-style-type: none"> 1. Retrofit structures (elevate structures above BFE) 2. Elevate items within house above BFE 3. Build new homes above BFE 4. Flood-proof existing structures 	<ol style="list-style-type: none"> 1. Enforce National Flood Insurance Program (NFIP) 2. Buy flood insurance 3. Develop household mitigation plan, such as retrofit savings, communication capability with outside, 72 hr self-sufficiency during and after an event
Corporate Scale	<ol style="list-style-type: none"> 1. Clear stormwater drains and culverts 2. Institute low-impact development techniques on property 	<p>Locate business critical facilities or functions outside hazard area</p>	<ol style="list-style-type: none"> 1. Build redundancy for critical functions or retrofit critical buildings 2. Provide flood-proofing measures when new critical infrastructure must be located in floodplains 	<ol style="list-style-type: none"> 1. Increase capability by having cash reserves for reconstruction 2. Support and implement hazard disclosure for the sale/re-sale of property in identified risk zones. 3. solicit "cost-sharing" through partnerships with private sector stakeholders on projects with multiple benefits.
Government Scale	<ol style="list-style-type: none"> 1. Drainage system maintenance 2. Institute low-impact development techniques on property 3. Dredging, levee construction, and providing regional retention areas 4. Structural flood control, such as completion of Cirby/Linda/Dry Creek flood control project 5. Stormwater management regulations and master planning 	<ol style="list-style-type: none"> 1. Locate or relocate critical facilities outside of hazard area 2. Acquire or relocate identified repetitive loss properties 3. Promote open space uses in identified high hazard areas through techniques such as Planned Unit Developments (PUD), easements, setbacks, greenways, and sensitive area tracks 	<ol style="list-style-type: none"> 1. Harden infrastructure 2. Provide redundancy for critical functions and infrastructure 3. Adopt appropriate regulatory standards, such as cumulative substantial improvement or damage and freeboard; lower substantial damage threshold; compensatory storage 	<ol style="list-style-type: none"> 1. Produce better hazard maps 2. Provide technical information and guidance 3. Enact tools to help manage development in hazard areas (stronger controls, tax incentives, and information) 4. Incorporate retrofitting or replacement of critical system elements in CIP 5. Develop strategy to take advantage of post-disaster opportunities 6. Warehouse critical infrastructure components 7. Develop and adopt a COOP 8. Improve Community Rating System (CRS) Classification 9. Maintain existing data as well as gather new data needed to define risks and vulnerability 10. Train emergency responders 11. Create a building and elevation inventory of structures in the floodplain 12. Develop and implement a public information strategy

TABLE 17.3 (continued)
 CATALOG OF RISK REDUCTION MEASURES—FLOOD

Scale	Manipulate Hazard	Reduce Exposure	Reduce Vulnerability	Increase Capability
Government Scale (continued)	6. Acquire vacant land or promote open space uses in developing watersheds to control increases in runoff	4. Adopt land development criteria such as PUDs, density transfers, and clustering 5. Beaver dam management		13. Charge a hazard mitigation fee on all new permits to create a hazard mitigation funding source for initiatives or grant cost-share requirements 14. Scenario-based dam failure analysis 15. Create a dam failure element in emergency response plan

17.2.4 Mitigation Alternatives Catalog—Landslide

Table 17.4 is the catalog of mitigation alternatives for the landslide hazard.

TABLE 17.4 CATALOG OF RISK REDUCTION MEASURES—LANDSLIDE				
Scale	Manipulate Hazard	Reduce Exposure	Reduce Vulnerability	Increase Capability
Personal Scale	<ol style="list-style-type: none"> 1. Stabilize slope (de-water, armor toe, etc.) 2. Reduce weight on top of slope 3. Minimize vegetation removal and the addition of impervious surfaces 	<ol style="list-style-type: none"> 1. Locate structures outside of hazard area (off unstable land and away from slide-run out area) 	None	<ol style="list-style-type: none"> 1. Institute warning system and develop evacuation plan 2. Increase capability by having cash reserves for reconstruction
Corporate Scale	<ol style="list-style-type: none"> 1. Stabilize slope (de-water, armor toe, etc.) 2. Reduce weight on top of slope 	<ol style="list-style-type: none"> 1. Locate structures outside of hazard area (off unstable land and away from slide-run out area) 	None	<ol style="list-style-type: none"> 1. Increase capability by having cash reserves for reconstruction 2. Institute warning system and develop evacuation plan
Government Scale	<ol style="list-style-type: none"> 1. Stabilize slope (de-water, armor toe, etc.) 2. Reduce weight on top of slope 	<ol style="list-style-type: none"> 1. Locate structures outside of hazard area (off unstable land and away from slide-run out area) 2. Property buy-out of most exposed structures (fee simple, life estate, etc.) 	None	<ol style="list-style-type: none"> 1. Provide technical information and guidance 2. Enact tools to help manage development in hazard areas, such as better land controls, tax incentives, and information 3. Develop strategy to take advantage of post-disaster opportunities 4. Warehouse critical infrastructure components 5. Develop and adopt a COOP 6. Produce better hazard maps

17.2.5 Mitigation Alternatives Catalog—Human-Caused

Table 17.5 is the catalog of mitigation alternatives for the human-caused hazard.

TABLE 17.5 CATALOG OF RISK REDUCTION MEASURES—HUMAN-CAUSED				
Scale	Manipulate Hazard	Reduce Exposure	Reduce Vulnerability	Increase Capability
Personal Scale	None	None	None	<ol style="list-style-type: none"> 1. Increase awareness of vulnerability to threats 2. Neighborhood watch program 3. Keep informed 4. Develop an emergency response plan 5. Report suspicious activities
Corporate Scale	None	<ol style="list-style-type: none"> 1. Incorporate anti-terrorism and security mitigation measures in site and layout design of facilities 2. Consider site security in landscape design of facilities 	<ol style="list-style-type: none"> 1. Restrict access by implementing controlled access zones 2. Increase security measures 3. Install physical barriers around critical facilities 4. Employ parking restrictions as a means to reduce vulnerability 	<ol style="list-style-type: none"> 1. Become a partner (stakeholder) in mitigation and prevention 2. Educate employees 3. Develop an emergency response plan 4. Develop a COOP 5. Use liberal signage techniques to inform and increase capability of users of facilities
Government Scale	None	<ol style="list-style-type: none"> 1. Construct new critical facilities with Clear Zones. 2. Retrofit existing Critical Facilities 	<ol style="list-style-type: none"> 1. Restrict access by implementing controlled access zones 2. Reduce single-point vulnerabilities such as: redundancy for critical lifelines and infrastructure 3. Install physical barriers around critical facilities 	<ol style="list-style-type: none"> 1. Educate public on threats and vulnerability 2. Enhance emergency response capability by contingency planning for specific events based on identified vulnerabilities 3. Consider performance-based zoning as a land use alternative to mitigate impacts of human-caused hazards 4. Employ Crime Prevention Through Environmental Design (CPTED techniques in design of public facilities 5. Consider providing incentives for mitigation

17.2.6 Mitigation Alternatives Catalog—Human Health

Table 17.6 is the catalog of mitigation alternatives for the human health hazard.

TABLE 17.8 CATALOG OF RISK REDUCTION MEASURES—HUMAN HEALTH				
Scale	Manipulate Hazard	Reduce Exposure	Reduce Vulnerability	Increase Capability
Personal Scale		Eliminate or reduce environments on private property that favor mosquito infestation	Immunization	Get informed
Corporate Scale		Eliminate or reduce environments on private property that favor mosquito infestation	Immunize employees	Inform employees on human health hazards
Government Scale	Mosquito abatement	Eliminate or reduce environments on private property that favor mosquito infestation	Immunize employees	<ol style="list-style-type: none"> 1. Collaborate with the Placer County Health Department to ensure the health and welfare of the community 2. Public education on Mosquito Abatement and general human health issues

17.2.7 Mitigation Alternatives Catalog—Severe Weather

Table 17.7 is the catalog of mitigation alternatives for the severe weather hazard.

TABLE 17.7 CATALOG OF RISK REDUCTION MEASURES—SEVERE WEATHER				
Scale	Manipulate Hazard	Reduce Exposure	Reduce Vulnerability	Increase Capability
Personal Scale	None	None	<ol style="list-style-type: none"> 1. Insulate house 2. Provide redundant heat and power 3. Insulate structure 4. Plant appropriate trees near home and power lines (“Right tree, right place” National Arbor Day Foundation Program) 	<ol style="list-style-type: none"> 1. Trim or remove trees that could affect power lines 2. Promote 72-hour self-sufficiency
Corporate Scale	None	None	<ol style="list-style-type: none"> 1. Relocate critical infrastructure (such as power lines) underground 2. Reinforce or relocate critical infrastructure such as power lines to meet performance expectations 3. Install tree wire 	<ol style="list-style-type: none"> 1. Trim or remove trees that could affect power lines 2. Create redundancy
Government Scale	None	None	<ol style="list-style-type: none"> 1. Harden infrastructure such as locating utilities underground 2. Trim trees back from power lines 3. Designate snow routes and strengthen critical road sections and bridges 	<ol style="list-style-type: none"> 1. Support programs such as “Tree Watch” that proactively manage problem areas through use of selective removal of hazardous trees, tree replacement, etc. 2. Establish and enforce building codes that require all roofs to withstand snow loads 3. Increase communication alternatives 4. Modify land use and environmental regulations to support vegetation management activities that improve reliability in utility corridors

17.2.8 Mitigation Alternatives Catalog—Wildfire

Table 17.8 is the catalog of mitigation alternatives for the wildfire hazard.

TABLE 17.8 CATALOG OF RISK REDUCTION MEASURES—WILDFIRE				
Scale	Manipulate Hazard	Reduce Exposure	Reduce Vulnerability	Increase Capability
Personal Scale	Clear potential fuels on property such as dry overgrown underbrush and diseased trees	<ol style="list-style-type: none"> 1. Create and maintain defensible space around structures 2. Locate outside of hazard area 3. Mow regularly 	<ol style="list-style-type: none"> 1. Create and maintain defensible space around structures and provide water on site 2. Use fire-retardant building materials 3. Create defensible spaces around home 	Employ “Firewise” techniques to safeguard home
Corporate Scale	Clear potential fuels on property such as dry underbrush and diseased trees	<ol style="list-style-type: none"> 1. Create and maintain defensible space around structures and infrastructure 2. Locate outside of hazard area 	<ol style="list-style-type: none"> 1. Create and maintain defensible space around structures and infrastructure and provide water on site 2. Use fire-retardant building materials 	Support “Firewise” community initiatives.
Government Scale	<ol style="list-style-type: none"> 1. Clear potential fuels on property such as dry underbrush and diseased trees 2. Implement best management practices on public lands 3. Goat grazing in City of Roseville open space and preserve areas for fire management, invasive plant species management, and native plant restoration 	<ol style="list-style-type: none"> 1. Create and maintain defensible space around structures and infrastructure 2. Locate outside of hazard area 	<ol style="list-style-type: none"> 1. Create and maintain defensible space around structures and infrastructure 2. Use fire-retardant building materials 3. Consider higher regulatory standards (such as class A roofing) 	<ol style="list-style-type: none"> 1. More public outreach and education efforts, including an active “Firewise” program 2. Possible weapons of mass destruction funds available to enhance fire capability in high-risk areas 3. Identify fire response and alternative evacuation routes 4. Seek alternative water supplies 5. Become a “Firewise” community 6. Purchase new equipment

CHAPTER 18. HAZARD MITIGATION ACTION PLAN

18.1 INTRODUCTION

After assessing the risk, setting goals and objectives, and reviewing possible mitigation alternatives, the City of Roseville planning team, aided by guidance from the steering committee, developed an action plan to mitigate the hazards identified. The mitigation activities developed for this plan are grouped by hazard and presented in a series of tables in Section 18.5. Each alternative mitigation activity was evaluated qualitatively using several evaluation criteria, including social, technical, administrative, political, legal, economic, and environmental opportunities and implementation constraints. Each evaluation criterion was defined by input from the public, the steering committee, and a capability assessment performed by city staff. The evaluation criteria are described below in terms of situations that present opportunities for implementation success.

- **Social criteria**—The public must support the overall implementation strategy and specific mitigation activities. Therefore, community acceptance of the proposed mitigation activities must be considered. These social criteria were defined through the public involvement strategy of the planning process.
- **Technical criteria**—Factors such as technical feasibility of the proposed mitigation activity to reduce losses in the long term with minimal secondary impact must be considered.
- **Administrative criteria**—Anticipated staffing, funding, and maintenance for each mitigation activity must be considered.
- **Political criteria**—The political leadership of the communities must support the overall implementation strategy and specific mitigation activities. Therefore, decision-maker acceptance of the proposed mitigation activities must be considered.
- **Legal criteria**—Whether the communities have legal authority to implement the proposed mitigation activities must be considered.
- **Economic criteria**—Budget constraints must be considered.
- **Environmental criteria**—Environmental impacts caused by implementing specific mitigation activities must be considered.

In addition to the criteria above, a capability assessment was performed, the mitigation actions were prioritized, a benefit/cost analysis was performed, and implementation timeframes were evaluated. Particular attention was given to mitigation activities that addressed existing and new buildings and infrastructure. All mitigation activities presented in the tables in Section 18.5 include, to the extent that information was available, implementation timelines, funding sources, and the jurisdictions responsible for carrying out the actions.

18.2 CAPABILITY ASSESSMENT

Section 201.6.c.(3) of 44 CFR requires a mitigation strategy that provides a blueprint for reducing the potential losses identified in the risk assessment based on existing authorities and capabilities and its abilities to expand on and improve these existing tools.

To accomplish this, the planning team performed an inventory and analysis of these existing tools called a “capability assessment.” A capability assessment has two components: an inventory of an agency’s

mission, programs, and policies, and an analysis of its capacity to carry them out. A capability assessment is an integral part of the planning process in which a community’s actions to reduce losses are identified, reviewed, and analyzed and the framework for implementation is identified. The following capabilities were reviewed under this assessment.

- Legal and regulatory capability
- Administrative and technical capability
- Fiscal capability

The sections below discuss each type of capability.

18.2.1 Legal and Regulatory Capability

Table 18.1 summarizes the legal and regulatory capability of the City of Roseville.

TABLE 18.1 LEGAL AND REGULATORY CAPABILITY					
Regulatory Tools (Codes, Ordinances, Plans)	Local Authority (Y or N)	Prohibitions (State or Federal)	Other Jurisdictional Authority (Y or N)	State Mandated (Y or N)	Comments
1. Building Code	Y	NA	N	Y	Roseville Municipal Code (RMC) 16.04.100 adopts 2001 California Building Standards Code by reference.
2. Zoning Ordinance	Y	NA	N	N	RMC Title 19 (Zoning)
3. Subdivision Ordinance	Y	NA	N	N	RMC Title 18 (Subdivisions)
4. Special Purpose Ordinances (floodplain management and critical or sensitive areas)	Y	N/A	Y	N	Zoning Ordinance (RMC Title 19) incorporates combining or overlay of districts to regulate floodplain development, open space preservation, and other sensitive habitat. Outside agencies with jurisdiction over sensitive habitats include the U.S. Army Corps of Engineers and California Department of Fish and Game. RMC 9.80 (Flood Damage Prevention) regulates development in special flood hazard areas.
5. Growth Management	Y	NA	N	N	Growth management strategies are incorporated into the land- use element of the 2020 general plan.
6. Floodplain Management or Basin Plan	Y	NA	N	N	RMC 9.80 and Safety Element of the 2020 general plan

TABLE 18.1 (continued)
LEGAL AND REGULATORY CAPABILITY

Regulatory Tools (Codes, Ordinances, Plans)	Local Authority (Y or N)	Prohibitions (State or Federal)	Other Jurisdictional Authority (Y or N)	State Mandated (Y or N)	Comments
7. Storm Water Management Plan/Ordinance	Y	NA	Y	Y	City of Roseville has a storm water management plan for 2004. The plan is required by the State of California as part of the U.S. Environmental Protection Agency (EPA) National Pollution Discharge Elimination System (NPDES) program. Outside jurisdictional authority is through the State Water Resources Control Board and Regional Water Quality Control Board (Central Valley Region).
8. General Plan or Comprehensive Plan	Y	NA	N	Y	Technical update to the 2010 general plan was completed in 2004 and is now the 2020 general plan, which is implemented through nine specific plans (SERSP, NERSP, NWRSP, NCRSP, NRSP, HRNSP, SRSP, DWSP, and WRSP) and one other planning area (NIPA).
9. CIP	Y	NA	N	N	The 2002 CIP (update) was adopted by the RCC in June 2002 (Resolution #02-407). An update to the CIP is anticipated to be approved during Summer 2005 (2004 CIP).
10. Site Plan Review Requirements	Y	NA	N	N	The Zoning Ordinance (RMC 19.74.010.C) requires a design review permit (DRP) for all new construction (except single-family and two-family residences). Site design, building architecture, landscape design, and lighting are reviewed through the DRP. DRPs are reviewed and approved by the City's Design Committee or Planning Commission.
11. Habitat Conservation Plan	N	NA	N	N	There are no Habitat Conservation Plans within the City. However, preserve areas have been established throughout the City as a condition of Section 404 (Clean Water Act) permits and biological opinions of the U.S. Fish and Wildlife Service. The City's open space and conservation element of the general plan also contains policies relative to habitat conservation.
12. Economic Development Plan	Y	NA	N	N	Current (1993) economic development strategy was adopted by the RCC on June 2, 1993. An update to the 1993 economic development strategy is currently underway, with completion anticipated in Summer 2005.
13. Emergency Response Plan	Y	NA	N	Y	The City of Roseville emergency operations plan was adopted by the RCC on July 21, 2004 (Resolution #04-301). The plan is mandated by the California Office of Emergency Services (OES).

TABLE 18.1 (continued)
LEGAL AND REGULATORY CAPABILITY

Regulatory Tools (Codes, Ordinances, Plans)	Local Authority (Y or N)	Prohibitions (State or Federal)	Other Jurisdictional Authority (Y or N)	State Mandated (Y or N)	Comments
14. Shoreline Management Plan	NA	NA	N	N	This is not applicable to Roseville. Shoreline management plans are applicable to coastal communities and are incorporated into local coastal plans reviewed and approved by the California Coastal Commission.
15. Post-Disaster Recovery Plan	N	NA	N	N	A post-disaster recovery plan is a recommendation of this plan.
16. Post-Disaster Recovery Ordinance	N	NA	N	N	None at this time.
17. Real Estate Disclosure Requirements	N	NA	Y	N	California Civil Code 1102 governs real estate and various disclosure laws and does not mandate disclosure at the local government level but does require local governments to make known information on natural hazards available to the real estate community.
18. Other	N	N	N	N	

18.2.2 Administrative and Technical Capability

Table 18.2 summarizes the administrative and technical capability of the City of Roseville.

TABLE 18.2 ADMINISTRATIVE AND TECHNICAL CAPABILITY		
Staff/ Personnel Resources	Available (Y or N)	Department or Agency (Positions)
1. Planner(s) or engineer(s) with knowledge of land development and land management practices	Y	Planning and Redevelopment Department (13 Planners)
2. Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Public Works, Engineering Division (7 Engineering Inspectors); Building Inspection Division (15 Building Inspectors); Environmental Utilities Department (5 Engineering Inspectors for Water/Sewer/Storm water)
3. Planners or engineers with an understanding of natural hazards	Y	Planning and Redevelopment Department (13 Planners); Public Works (22 Engineers)
4. Floodplain manager	Y	Public Works, Floodplain Management Division (Associate Engineer)
5. Surveyor(s)	N	No licensed Surveyors on City Staff. City can and has contracted for survey work on as needed basis.
6. Personnel skilled or trained in Geographic Information System (GIS) Applications	Y	Planning and Redevelopment Department (Planning Technicians); Public Works (Engineering Assistants); Fire Department (GIS Analysts); Environmental Utilities Department (Mapping Manager); Community Development Department (GIS Analyst); Information Technology Division (GIS Analyst)
7. Scientist familiar with natural hazards in Roseville	N	
8. Emergency manager	Y	Fire Department (Emergency Preparedness Manager)
9. Grant writer(s)	Y	City Manager's Office (Government Relations Manager)
10. Staff with expertise or training in benefit/cost analysis		Finance Department (8 – administration and budget); City Manager's Office (Deputy City Manager, Economic Development Team); Community Development Department; Public Works; Environmental Utilities Department; Electric Department

18.2.3 Fiscal Capability

Table 18.3 summarizes the fiscal capability of the City of Roseville.

TABLE 18.3 FISCAL CAPABILITY	
Financial Resources	Accessible or Eligible to Use (Y/N/Unknown)
1. Community Development Block Grants	Y
2. Capital Improvements Project Funding	Y
3. Authority to Levy Taxes for Specific Purposes	Y
4. User Fees For Water, Sewer, Gas or Electric Service	Y
5. Impact Fees for Homebuyers or Developers of New Development/Homes	Y
6. Incur Debt through General Obligation Bonds	Y
7. Incur Debt through Special Tax Bonds	Y
8. Incur Debt through Private Activity Bonds	N
9. Could Withhold Public Expenditures in Hazard-Prone Areas	N
10. State-Sponsored Grant Programs	Y
11. Other	NA

18.3 PRIORITIZATION

As stated earlier, Section 201.c.3.iii of 44 CFR requires an action plan describing how the actions identified will be prioritized. The City of Roseville planning team and steering committee have developed a prioritization methodology for the action plan that meets the needs of the City while at the same time meeting the requirements of Section 201.6 of 44 CFR. The mitigation strategies identified in the Section 18.5 were prioritized according to the criteria defined below.

- **High Priority:** A project that meets multiple plan objectives, benefits exceed cost, has funding secured under existing programs or authorizations, or is grant-eligible, and can be completed in 1 to 5 years (short-term project) once project is funded
- **Medium Priority:** A project that meets at least one plan objective, benefits exceed costs, funding has not been secured and would require a special funding authorization under existing programs, grant eligibility is questionable, and can be completed in 1 to 5 years once project is funded
- **Low Priority:** A project that will mitigate the risk of a hazard, benefits exceed costs, funding has not been secured, and project is not grant-eligible and/or timeline for completion is considered long-term (5 to 10 years)

It should be noted that these priority definitions are considered to be dynamic and can change from one category to another based on changes to a parameter such as availability of funding. For example, a project might be assigned a medium priority because of the uncertainty of a funding source. This priority could be changed to high once a funding source has been identified such as a grant. The prioritization schedule for this plan will be reviewed and updated as needed annually through the plan maintenance strategy described in Part 5 of this plan.

18.4 BENEFIT/COST ANALYSIS

Section 201.6.c.3iii of 44 CFR requires the prioritization of the action plan to include special emphasis on the extent to which benefits are maximized according to a benefit/cost analysis of the proposed projects and their associated costs. As stated in Section 18.3, the benefits of a proposed project were weighed against its estimated costs as a parameter in the prioritization of that project. This benefit/cost analysis was anecdotal and was not of the detailed variety required by FEMA for project grant eligibility under the Hazard Mitigation Grant Program (HMGP) and Pre-Disaster Mitigation (PDM) grant program. This anecdotal approach was used because it made little or no sense to perform a detailed and expensive benefit/cost analysis for a project that may not be implemented for up to 10 years. The associated costs and benefits could change dramatically in that time frame. Therefore, a review of the apparent benefits versus the apparent cost of each project was performed. Parameters were established for assigning subjective ratings (high, medium, and low) to the costs and benefits of these projects. Cost ratings are defined below.

- **High:** Existing funding levels are not adequate to cover the costs of the proposed project and would require an increase in revenue through an alternative source (for example, bonds, grants, and fee increases) to implement.
- **Medium:** The project could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
- **Low:** The project could be funded under the existing budget. The project is part of or can be part of an existing, ongoing program.

Benefit ratings were defined as follows:

- **High:** Project will have an immediate impact on the reduction of risk exposure to life and property
- **Medium:** Project will have a long-term impact on the reduction of risk exposure to life and property or project will provide an immediate reduction in the risk exposure to property
- **Low:** Long-term benefits of the project are difficult to quantify in the short term

Using this approach, projects with positive benefit versus cost ratios (such as high over high, high over medium, medium over low, etc.) are considered cost-beneficial and are prioritized accordingly.

It should be noted that for many of the strategies identified in this action plan, the City of Roseville may seek financial assistance under FEMA's HMGP or PDM programs. Both of these programs require detailed benefit/cost analysis as part of the application process. These analyses will be performed on projects at the time of application preparation. The FEMA model process will be utilized by the City to perform this review. The City is committed to implementing a mitigation strategy with benefits that exceeds costs. For projects not seeking financial assistance from grant programs that require this sort of analysis, the City reserves the right to define "benefits" according to parameters that meet its needs and the goals and objectives of this plan.

18.5 MITIGATION STRATEGY MATRIX

The following sections illustrate the hazard mitigation action plan identified by the planning team and steering committee. This action plan is presented in a mitigation strategy matrix that includes two parts. The first part identifies the following:

- Initiative number and summary description of the initiative
- Goals met by the initiative
- Objectives met by the initiative
- Lead agency for implementation of the initiative
- Estimated cost (if available)
- Possible sources of funding
- Timeline for completion

Under timeline for completion, the City has identified the following parameters:

- **Ongoing:** Initiative is currently being implemented under existing programs and budgets
- **Short-term:** Initiative can be completed within 1 to 5 years once funding has been secured
- **Long-term:** Initiative will take 5 or more years to complete once funding has been secured

The second part of the matrix prioritizes the initiative according to the parameters discussed in Sections 18.3 and 18.4. This priority matrix illustrates the following:

- Number of objectives met by the initiative
- Benefits of the project (high, medium, or low)
- Cost of the project (high, medium, or low)
- Do the benefits equal or exceed the costs?
- Is the project grant-eligible?
- Can the project be funded under existing programs and budgets?
- Priority (high, medium, or low)

18.5.1 Mitigation Strategy Matrix—Drought

TABLE 18.4
MITIGATION STRATEGY MATRIX – DROUGHT

Mitigation Initiative	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
D-1 —Perform a groundwater recharge feasibility study to determine the most cost-effective way to replenish groundwater resources within Roseville.	2, 6	5, 6	Environmental Utilities District (EUD) Public Works	Medium	Water utility funds, general fund Developer-based funding under specific plan requirements Possible grant funding under PDM program	Long-Term
D-2 —Implement aquifer storage and recovery program that uses direct injection technique in areas identified as appropriate.	6, 7	6, 8	EUD	High	Water Construction Fund	Short-term, ongoing
D-3 —Continue to implement EUD’s recycled water program and seek all opportunities to expand its coverage, focusing first on the Sunset Industrial area. 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 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.	2, 6	6, 8	EUD	Medium	Water utility rates, developer-based fees under specific plan requirements	Ongoing
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.	2, 7	5, 9	Roseville Public Information Office	Low	Currently funded by General Fund allocation	Short-term, ongoing

TABLE 18.5
DROUGHT STRATEGY PRIORITIZATION

Initiative No.	No. of Objectives Met	Benefits	Costs	Benefits Equal or Exceed Costs (Y or N)	Grant-Eligible (Y or N)	Can Be Funded Under Existing Programs or Budgets (Y or N)	Priority
D-1	2	Medium	Medium	Y	Y	N	Medium
D-2	2	High	High	Y	Y	N	Medium
D-3	2	High	Medium	Y	Y	Y	High
D-4	2	Low	Low	Y	Y	Y	High

18.5.2 Mitigation Strategy Matrix—Earthquake

TABLE 18.6 MITIGATION STRATEGY MATRIX - EARTHQUAKE						
Mitigation Initiative	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
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.	1, 5	5, 10	Public Works	High	General Fund Possible grant funding under PDM program	Long-term
EQ-2 —Incorporate earthquake mitigation measures for private property into existing City-sponsored outreach programs such as printed media and the City’s website.	2, 7	5, 9	Roseville Public Information Office	Low	Currently funded by General Fund allocation	Short-term, ongoing
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.	1, 2, 3, 4, 5	1, 5, 7, 9	Planning and Public Works	Medium	General Fund Possible grant funding under PDM program	Short-term
EQ-4 —Implement seismic construction standards under the International Building Code (IBC) as an “alternative means” code until the IBC is formally adopted as the California State Building Code.	1, 2, 5	1, 6, 8	Community Development	Low	Currently funded by General Fund allocation	Short-term, ongoing

TABLE 18.7 EARTHQUAKE STRATEGY PRIORITIZATION							
Initiative No.	No. of Objectives Met	Benefits	Costs	Benefits Equal or Exceed Costs (Y or N)	Grant-Eligible (Y or N)	Can Be Funded Under Existing Programs or Budgets (Y or N)	Priority
EQ-1	2	High	High	Y	Y	N	Medium
EQ-2	2	Low	Low	Y	Y	Y	High
EQ-3	4	Medium	Medium	Y	Y	N	Medium
EQ-4	3	High	Low	Y	Y	Y	High

18.5.3 Mitigation Strategy Matrix—Flood

TABLE 18.8
MITIGATION STRATEGY MATRIX - FLOOD

Mitigation Initiative	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
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.	1, 6, 7	1, 6, 7,	Planning	Low	Currently funded by General Fund allocation	Ongoing
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 Reclamation Board, FEMA, California Department of Fish and Game, Placer County Resource Conservation District, and Placer County Flood Control District (PCFCD). Consider the comments of the agencies during the development review process.	2, 6, 7	1, 5, 7,	Public Works Planning	Low	Currently funded by General Fund allocation	Ongoing
F-3 —Continue City participation in the NFIP and the CRS. Seek CRS classification improvements within capabilities of City programs, including adoption and administration of FEMA-approved ordinances and flood insurance rate maps (FIRM).	1, 2, 4,	1, 5, 9	Public Works	Low	Currently funded by General Fund allocation	Ongoing
F-4 —Continue the City’s outreach program to flood-prone property owners and the citizens of Roseville to program is to help make them aware of the flood threat and how best to deal with them.	1, 3, 4,	5, 9	Public Works	Low (\$5000/year)	Currently funded by General Fund allocation	Ongoing

TABLE 18.8 (continued)
MITIGATION STRATEGY MATRIX - FLOOD

Mitigation Initiative	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
F-5 —Continue to pursue a regional approach to flood issues by remaining actively involved in the PCFCD. This involvement includes cooperation in the development of a comprehensive regional database. Encourage regional drainage planning and design for all individual developments in the PCFCD to address cumulative flooding impacts. 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.	1, 2, 3	1, 5, 7	Public Works	Low (\$90,000/year for membership to PCFCD)	Currently funded by General Fund allocation	Ongoing
F-6 —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 Reclamation Board, FEMA, California Department of Fish and Game, Placer County Resource Conservation District, and PCFCD.	2, 3, 7	1, 5, 7	Planning Public Works	Low	Currently funded by General Fund allocation	Ongoing
F-7 —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.	1, 2, 3, 4	2, 3	Public Works	Low	General Fund Possible grant funding (PDM, HMGP, and FMA)	Short-Term

TABLE 18.8 (continued)
MITIGATION STRATEGY MATRIX - FLOOD

Mitigation Initiative	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
<p>F-8—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>	1, 2, 6	1, 6, 7, 8	Planning Public Works	Low	Specific plans have 100% cost recovery by developers	Short-term
<p>F-9— 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.</p>	2, 4	1, 5, 7	Public Works	Medium (\$15,000/year)	General Fund FEMA map modernization Developer-based funding and specific plan requirements	Short-Term
<p>F-10—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>	1, 2, 6	1, 6, 8	Planning Public Works	Low	General Fund Developer-based funding under specific plan requirements	Short-term

TABLE 18.8 (continued)
MITIGATION STRATEGY MATRIX - FLOOD

Mitigation Initiative	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
F-11 —Continue the Parks and Recreation 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.	1, 2, 5, 7	8	Parks and Recreation	Low (\$100,000/year)	Currently funded by General Fund allocation	Ongoing
F-12 —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.	1, 5	8	Street Department	Low (\$400,000/year)	Currently funded by General Fund allocation and gas tax	Ongoing
F-13 —Complete the final two phases of the Cirby/Linda/Dry Creek flood control project (Phase 1 and 2). Five of the seven phases of this project have been completed at a cost of about \$18,000,000. The basis for determining viability of this project will be a benefit /cost analysis to determine if project meets federal grant eligibility requirements.	1, 5, 7	6, 8, 10	Public Works	High (\$3,000,000)	General Fund Impact fees Grant funding (PDM and HMGP) based on benefits exceeding costs	Long-term
F-14 —Analyze alternative improvements to the Cirby/Linda/Dry Creek flood control project that may be cost effective in the flood-prone areas of Roseville: <ul style="list-style-type: none"> • 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 	1, 5, 7	6, 8, 10	Public Works	High (\$30,000 to \$100,000 per study)	General Funds Developer-based funds, grant funding (PDM, HMGP, and FEMA) based on benefits exceeding costs	Long-term

TABLE 18.8 (continued)
MITIGATION STRATEGY MATRIX - FLOOD

Mitigation Initiative	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
F-15 — Replace the Huntington Drive/Cirby Creek culvert with a bridge to protect Queens Court/Huntington Drive area. This project is overseen by Public Works department.	1, 5, 6	6, 10	Public Works	Medium (\$100,000)	General Fund CIP, developer-based funds, grant funding (PDM, HMGP, and FEMA) based on benefits exceeding costs	Short-term
F-16 —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.	1, 5, 6	6, 10	Public Works	Medium (\$150,000)	General Fund, CIP, developer-based funds, grant funding (PDM, HMGP, and FEMA) based on benefits exceeding costs	Short-term
F-17 —Continue to promote and sponsor programs to buy out, relocate, and flood-proof existing flood-prone structures within Roseville.	1, 5, 6	6, 10	Public Works	High (\$100,000 per structure for acquisition or relocation). (\$50,000 per structure for retrofitting)	Grant funding (PDM, HMGP, and FEMA) based on benefits exceeding costs	Short-term
F-18 —Set back and raise the sewer ponds levees at the Dry Creek Sewer Plant so raw sewage will not enter Dry Creek.	1, 5, 6	6, 10	Public Works EUD	High (\$5,000,000)	SPWA Grant funding (PDM, HMGP, and FEMA) based on benefits exceeding costs	Short-term, ongoing
F-19 — Replace existing wood flood wall along Dry Creek that protects the City’s Main Library and Public Safety Building because wood wall allows flood water to leak through, and constant pumping is required.	1, 5, 6	6, 10	Public Works	High (\$300,000)	Grant funding (PDM, HMGP, and FEMA) based on benefits exceeding costs	Long-term

TABLE 18.8 (continued)
MITIGATION STRATEGY MATRIX - FLOOD

Mitigation Initiative	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
F-20 —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.	2, 7	8	Parks and Recreation	Medium	General Fund	Short-term
F-21 —Perform a scenario-based dam failure analysis to determine the probable impact of flooding within Roseville if western levees on Folsom Reservoir fail. These levees are considered a part of the entire dam system that creates Folsom Reservoir and are an integral part of a dam failure analysis. This study would generate an inundation area map.	2, 4	1, 5, 7	Public Works	Medium	General Fund Developer-based funding under specific plans Possible grant funding under FEMA or Department of Homeland Security (DHS) programs	Long-term
F-22 —Once dam failure analysis is complete, create a dam failure element for the City’s emergency response plan.	1, 2, 3	2, 3, 4, 9	Police and Fire Departments	Medium	General Fund DHS grant funding	Long-term
F-23 —Develop a comprehensive interpretive sign program, including trail and open space preserve signage, at road crossings. Create creek corridor trail maps and coordinate with local schools and public stewardship events to increase public awareness of the need to preserve, restore, and proactively manage open space corridors and provide a sense of civic identity and pride. Interpretive signs are particularly important along the many trails adjacent to or that provide access to the City’s open space resources, which are habitat for endangered species.	1, 2, 7	1, 5, 7, 9	Community Development	Medium	General Fund PDM grant funding	Short-term

TABLE 18.9
FLOOD STRATEGY PRIORITIZATION

Initiative No.	No. of Objectives Met	Benefits	Costs	Benefits Equal or Exceed Costs (Y or N)	Grant-Eligible (Y or N)	Can Be Funded Under Existing Programs or Budgets (Y or N)	Priority
F-1	3	High	Low	Y	N	Y	High
F-2	3	Medium	Low	Y	N	Y	High
F-3	3	Medium	Low	Y	N	Y	High
F-4	2	Medium	Low	Y	Y	Y	High
F-5	3	Medium	Low	Y	N	Y	High
F-6	3	Low	Low	Y	N	Y	High
F-7	2	Medium	Low	Y	N	Y	High
F-8	4	Medium	Low	Y	N	Y	High
F-9	3	Medium	Medium	Y	N	N	Medium
F-10	3	Medium	Low	Y	N	Y	High
F-11	1	Medium	Low	Y	N	Y	Medium
F-12	1	Medium	Low	Y	N	Y	Medium
F-13	3	Medium	High	N	Y	N	Low
F-14	3	Medium	High	N	N	N	Low
F-15	2	High	Medium	Y	Y	N	High
F-16	2	High	Medium	Y	Y	N	High
F-17	2	High	High	Y	Y	N	High
F-18	2	High	High	Y	Y	N	High
F-19	2	High	High	Y	Y	N	High
F-20	1	Medium	Medium	Y	N	Y	Medium
F-21	3	Low	Medium	N	Y	Y	Low
F-22	4	Low	Medium	N	Y	Y	Low
F-23	4	Medium	Medium	Y	Y	Y	High

18.5.4 Mitigation Strategy Matrix—Landslide

TABLE 18.10 MITIGATION STRATEGY MATRIX - LANDSLIDE						
Mitigation Initiative	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
LS-1 —Once California Geological Survey (CAGS) 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.	2, 4	1, 5, 7	Public Works	Medium	General Fund Developer-based funding and specific plan requirements Possible grant funding under PDM program	Long-term
LS-2 — Implement soil testing standards under IBC as an “alternative means” code until the IBC is formally adopted as California State Building Code.	1, 2, 5	1, 6, 8	Community Development	Low	Currently funded by General Fund allocation	Short-term, ongoing
LS-3 — Continue to implement policies adopted by the general plan that promote open space land uses within identified steep slope areas of Roseville.	1, 2, 5	1, 6, 8	Planning	Low	General Fund Developer-based funding and specific plan requirements	Ongoing

TABLE 18.11 LANDSLIDE STRATEGY PRIORITIZATION							
Initiative No.	No. of Objectives Met	Benefits	Costs	Benefits Equal or Exceed Costs (Y or N)	Grant-Eligible (Y or N)	Can Be Funded Under Existing Programs or Budgets (Y or N)	Priority
LS-1	3		Medium	Medium	Y	N	Low
LS-2	3		Low	High	N	Y	High
LS-3	3		Low	High	N	Y	High

18.5.5 Mitigation Strategy Matrix—Human-Caused

TABLE 18.12
MITIGATION STRATEGY MATRIX – HUMAN-CAUSED

Mitigation Initiative	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
HC-1 — Incorporate Crime Prevention Through Environmental Design strategies into future enhancements and revisions to community design guidelines.	1, 2, 5	1, 5, 8	Planning	Low	General Fund	Short-term
HC-2 — Commit support to Sacramento Urban Area Security Initiative in the form of staff support from City of Roseville public safety departments.	1, 2, 3	2, 7	Police/Fire	Medium	General Fund DHS funding under Sacramento Urban Area Security Initiative	Short-term
HC-3 — Enhance emergency response capability of City by contingency planning for specific events based on identified vulnerabilities.	1, 2, 3	2, 3, 4, 9	Police and Fire Departments	Low	General Fund DHS grant funding	Short-term, ongoing
HC-4 — Seek to establish appropriate staffing levels of public safety personnel to address vulnerabilities identified.	1, 2, 3, 4,	2, 4,	City Council	High	General Fund	Short Term
HC-5 — Prepare a site-specific vulnerability assessment of City- owned critical facilities that use the best available science and technology with regards human-caused hazards.	1, 3, 4.5	2, 5, 7	Police, Fire, and Planning Departments	Medium	General Fund DHS grant funding	Long-term
HC-6 — Develop and enhance a COOP specific to human-caused hazards.	2, 3, 4	2, 3	Police and Fire Departments	Low	General Fund DHS grant funding	Short-term, ongoing
HC-7 — Enhance camera surveillance program to improve security at electrical substations, receiving stations, and energy park.	2, 3	2, 4	Roseville Electric	Medium	Roseville Electric CIP	Short-term
HC-8 — Address vulnerabilities identified in vulnerability assessment of water facilities performed by EUD in response to EPA initiative.	1, 5	5, 7	EUD	High	EUD CIP, and EPA grant funding	Long-term

TABLE 18.13
HUMAN-CAUSED STRATEGY PRIORITIZATION

Initiative No.	No. of Objectives Met	Benefits	Costs	Benefits Equal or Exceed Costs (Y or N)	Grant-Eligible (Y or N)	Can Be Funded Under Existing Programs or Budgets (Y or N)	Priority
HC-1	3	Medium	Low	Y	Y*	Y	High
HC-2	2	High	Medium	Y	Y*	N	High
HC-3	4	Medium	Low	Y	Y*	Y	High
HC-4	2	High	High	Y	Y*	N	High
HC-5	3	Medium	Medium	Y	Y*	N	Medium
HC-6	2	Medium	Low	Y	Y*	Y	Medium
HC-7	2	Medium	Medium	Y	N	Y	High
HC-8	2	High	High	Y	Y*	N	Medium

* Projects that mitigate the impacts of human-caused hazards are not grant-eligible under FEMA programs such as the HMGP or PDM program. The “Y” entries indicated in this column refer to grant programs sponsored by the DHS that can be applied to human-caused hazards.

18.5.6 Mitigation Strategy Matrix—Human Health

TABLE 18.14 MITIGATION STRATEGY MATRIX - HUMAN HEALTH							
Mitigation Initiative	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline	
HH-1 — Continue to collaborate with the Placer County Health Department to ensure the health and welfare of the community	1,2	5,6,7,9	Fire Department, Public Information Office	Low	Currently budgeted for under the General Fund	Ongoing	
HH-2 — Support the public education efforts of the Placer County Health Department and the Placer Mosquito Abatement District	1,2	5,6,7,9	Public Information Office, Fire Department,	Low	Currently budgeted for under the General Fun	Ongoing	
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	1,2	5,6,7,9	Community Development Departments	Low	Currently budgeted for under the General Fun	Short-term	

TABLE 18.15 HUMAN HEALTH STRATEGY PRIORITIZATION							
Initiative No.	No. of Objectives Met	Benefits	Costs	Benefits Equal or Exceed Costs (Y or N)	Grant-Eligible (Y or N)	Can Be Funded Under Existing Programs or Budgets (Y or N)	Priority
HH-1	4	Low	Low	Y	N	Y	High
HH-2	4	Low	Low	Y	N	Y	High
HH-3	4	High	Low	Y	N	Y	High

18.5.7 Mitigation Strategy Matrix—Severe Weather

TABLE 18.16 MITIGATION STRATEGY MATRIX - SEVERE WEATHER						
Mitigation Initiative	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
SW-1 —Continue ongoing program of conversion of overhead utilities to underground service.	2, 3, 5	2, 10	Roseville Electric	Medium (\$2 million /year)	CIP	Ongoing
SW-2 —Purchase mobile generators to provide redundancy for electrical utilities.	3, 5	2, 4	Roseville Electric	Medium	CIP General Fund	Short-term
SW-3 — Continue “Right Tree, Right Place” program, a community service sponsored by Roseville Electric and Roseville Urban Forest Foundation.	2, 3	7, 9	Roseville Electric	Low	Roseville Electric operational budget	Ongoing
SW-4 — Continue ongoing line clearing and weed abatement of electrical utilities to reduce exposure to severe weather hazards.	3, 5	2	Roseville Electric	Low (\$460,000/ year)	CIP	Ongoing
SW-5 — Continue education/outreach programs to improve winter preparedness and minimize loss of life or injury.	1, 4, 6	6, 9	Fire Department	Low	General Fund	Short-term, ongoing
SW-6 — Enhance and implement strategies for debris management and removal during severe weather events.	1, 3	6, 8	Public Works Roseville Electric	Low	General Fund	Ongoing

TABLE 18.17 SEVERE WEATHER STRATEGY PRIORITIZATION							
Initiative No.	No. of Objectives Met	Benefits	Costs	Benefits Equal or Exceed Costs (Y or N)	Grant-Eligible (Y or N)	Can Be Funded Under Existing Programs or Budgets (Y or N)	Priority
SW-1	2	Medium	Medium	Y	N	Y	High
SW-2	2	Medium	Medium	Y	N	N	Low
SW-3	2	Medium	Low	Y	N	Y	High
SW-4	1	Medium	Low	Y	N	Y	High
SW-5	2	High	Low	Y	Y	Y	High
SW-6	2	Medium	Low	Y	N	N	Medium

18.5.8 Mitigation Strategy Matrix—Wildfire

TABLE 18.18
MITIGATION STRATEGY MATRIX – WILDFIRE

Mitigation Initiative	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
WF-1 — Continue ongoing line clearing and weed abatement of electrical utilities to reduce exposure to fire and severe weather hazards.	3, 5	2	Roseville Electric	Low (\$460,000/year)	CIP	Ongoing
WF-2 — 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.	1, 5, 6	6, 9	Community Development	Low	General Fund PDM grant funding	Ongoing
WF-3 —Enhance existing City public outreach programs to include information on fire safety, defensible spaces, and areas of concern.	1, 4, 6	6, 9	Fire Department	Low	General Fund Grant funding under PDM program and HMGP	Short-term Ongoing
WF-4 —Purchase a minimum 4,000-gallon water tender with wildfire fighting capability.	1, 3, 4, 5	2, 4, 6	Fire Department	High (\$225,000)	General Fund Bond issue	Long-term
WF-5 —Consider adopting building code regulations that would allow only class “A” roofing on new or substantially improved structures.	1, 2, 5	1, 6, 8	Community Development	Low	General Fund	Short-term
WF-6 —Enhance wildfire-fighting capabilities of the Fire Department through approaches that include <ul style="list-style-type: none"> • Use of gel for fire protection of threatened structures, • Equipment with adequate supplies of class A foam, • Expanded vegetation management areas, • Enhanced wildfire training for response personnel, and • Establishment of a reserve supply of wildfire-fighting land equipment. 	1, 3, 4, 5	2, 4, 6	Fire Department	Medium	General Fund	Short-term

TABLE 18.19
WILDFIRE STRATEGY PRIORITIZATION

Initiative No.	No. of Objectives Met	Benefits	Costs	Benefits Equal or Exceed Costs (Y or N)	Grant-Eligible (Y or N)	Can Be Funded Under Existing Programs or Budgets (Y or N)	Priority
WF-1	1	Medium	Low	Y	N	Y	High
WF-2	2	Medium	Low	Y	Y	Y	High
WF-3	3	Low	Low	Y	Y	Y	High
WF-4	3	High	High	Y	N	N	Medium
WF-5	3	Medium	Medium	Y	N	N	Medium
WF-6	3	High	Medium	Y	N	Y	High

18.5.9 Mitigation Strategy Matrix—Multiple Hazards

TABLE 18.20
MITIGATION STRATEGY MATRIX - MULTIPLE HAZARDS

Mitigation Initiative	Hazards Addressed	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
MH-1 —Adopt IBC as amended once approved as the California State Building Code.	All	1, 2, 5, 6	1, 8	Community Development	Low	General Fund	Short-term
MH-2 — Continue to seek OES certification of all City inspectors for post-disaster damage assessment.	All	2, 3, 4	2, 7	Community Development	Low	General Fund	Ongoing
MH-3 —Establish hazard mitigation page on City website that provides following types of information: <ul style="list-style-type: none"> • RHMP and its progress report(s) • 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 	All	1, 2, 3, 4, 5, 6, 7	2, 3, 5, 6, 9	Public Information Office	Medium	General Fund PDM grant funding	Short-term
MH-4 — Review existing automatic/mutual aid agreements with outside public safety agencies to identify opportunities for enhancement.	All	1, 2, 3, 4, 5, 6	2, 4, 7	Police and Fire Departments	Medium	General Fund	Short-term
MH-5 —Establish post-disaster action plan to be part of the City COOP that will include following elements: <ul style="list-style-type: none"> • Procedures for public information • Post-disaster damage assessment • Grant writing • Code enforcement • Redundant operations 	All	1, 2, 3, 4	2, 3, 4, 7	Police, Fire, and Planning Departments	Medium	General Fund PDM Grant Funding	Short-term
MH-6 —Relocate City Emergency Operations Center out of the floodplain, and construct new facility to current seismic standards; this project would mitigate impacts of flood, earthquake, and human-caused hazards.	F, EQ, HC	2, 3, 5	2, 10	Police and Fire Departments	High (estimated \$4 million)	Bond issues PDM grant funding CIP	Short-term

TABLE 18.20 (continued).
MITIGATION STRATEGY MATRIX - MULTIPLE HAZARDS

Mitigation Initiative	Hazards Addressed	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
MH-7 —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.	F, EQ, WF, LS, SW	1, 2, 7	1, 5, 7, 9	Community Development	Medium	General Fund PDM grant funding	Short--term
MH-8 —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.	F, EQ, WF, LS, SW	1, 2, 7	1, 5, 7, 9	Community Development	Medium	General Fund PDM grant funding	Short-term
MH-9 —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.	F, EQ, WF, LS, SW	1, 2, 7	1, 5, 7, 9	Community Development	Medium	General Fund PDM grant funding	Short-term

TABLE 18.20 (continued).
MITIGATION STRATEGY MATRIX - MULTIPLE HAZARDS

Mitigation Initiative	Hazards Addressed	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
MH-10 —Institute a city program requiring a “Resale Property Report” for all sale of developed real property for a fee. The report would disclose information on hazards to be provided to a prospective buyer. This disclosure would be consistent with the requirements of California Civil Code #1102. Revenue generated would fund services provided and could be used to fund minor mitigation projects within the City identified in this plan.	All	1, 2, 5	1, 5, 7, 9	Community Development	Low (Would actually generate revenue)	General Fund	Short-term

TABLE 18.21
MULTIPLE-HAZARD STRATEGY PRIORITIZATION

Initiative No.	No. of Objectives Met	Benefits	Costs	Benefits Equal or Exceed Costs (Y or N)	Grant-Eligible (Y or N)	Can Be Funded Under Existing Programs or Budgets (Y or N)	Priority
MH-1	2	Medium	Low	Y	N	Y	High
MH-2	2	Low	Low	Y	N	Y	High
MH-3	5	Medium	Medium	Y	Y	Y	High
MH-4	3	Medium	Medium	Y	N	Y	High
MH-5	4	Medium	Medium,	Y	Y	Y	High
MH-6	2	High	High	Y	Y	N	High
MH-7	4	Medium	Medium	Y	N	Y	Medium
MH-8	4	Medium	Medium	Y	Y	Y	High
MH-9	4	Medium	Medium	Y	N	Y	Medium
MH-10	4	Medium	Low	Y	N	Y	High



*City of Roseville Hazard Mitigation Plan
Pre-Adoption Review Draft
June 2005*

PART 5—PLAN IMPLEMENTATION AND MAINTENANCE

CHAPTER 19. PLAN MAINTENANCE

19.1 OVERVIEW

Title 44 of the *Code of Federal Regulations* (CFR) Section 201.6.c.4 requires a hazard mitigation plan to include a plan maintenance process that includes the following:

- A section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a 5-year cycle.
- A process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate
- A discussion on how the community will continue public participation in the plan maintenance process

The plan maintenance section of this document details the formal process that will ensure that the City of Roseville hazard mitigation plan (RHMP) remains an active and relevant document. The RHMP maintenance process includes a schedule for monitoring and evaluating the plan annually and producing an updated plan every 5 years. This chapter also describes how the City will integrate public participation throughout the plan maintenance and implementation process. Finally, this chapter explains how the City intends to incorporate the mitigation strategies outlined in this RHMP into existing planning mechanisms and programs, such as the City comprehensive land-use planning process, capital improvement planning process, and building code enforcement and implementation. The RHMP's format allows the City to review and update sections when new data become available. New data can be easily incorporated, resulting in a plan that will remain current and relevant to the City of Roseville.

19.2 RHMP IMPLEMENTATION

The effectiveness of the City's non-regulatory RHMP depends on the implementation of the plan and incorporation of the outlined action items into existing City plans, policies, and programs. The RHMP includes a range of action items that, if implemented, would reduce loss from hazard events in the City of Roseville. Together, the action items in the RHMP provide the framework for activities that the City can choose to implement over the next 5 years. The planning team and RHMP steering committee have prioritized the plan's goals and identified actions that will be implemented (resources permitting) through existing plans, policies, and programs.

The Roseville City Manager's Office and the Planning and Redevelopment Department will be jointly responsible for overseeing the plan's implementation and maintenance through the City's existing programs. The Deputy City Manager or designated appointee will assume lead responsibility for facilitating RHMP implementation and maintenance meetings. Although the City Manager's Office will have primary department responsibility for review, coordination, and promotion, plan implementation and evaluation will be a shared responsibility among all departments and agencies identified as lead agencies in the mitigation action plan (see Chapter 18).

19.3 RHMP STEERING COMMITTEE

The RHMP steering committee as a body was formally recognized by Roseville City Council on July 21, 2004. The RHMP steering committee was a total volunteer body that contributed greatly to the development of the plan. The purpose of this committee was to oversee the development of the RHMP

and make recommendations on key elements of the plan, including a maintenance strategy. It was the steering committee's position that an oversight committee with representation similar to the initial RHMP steering committee should have an active role in the maintenance strategy for the RHMP. Therefore, the RHMP recommends that an RHMP steering committee remain a viable body involved in key elements of the RHMP maintenance strategy proposed in this chapter. The steering committee should include representation from the City, the citizens of Roseville, and other stakeholders.

A steering committee of not more than 14 members as determined by the Roseville City Manager's Office will convene annually at a place and time to be determined to implement RHMP annual review procedures outlined in Section 19.4. The make-up of this steering committee will strive for no less than 50 percent representation from citizens, citizen groups, and stakeholders within the planning area. Individuals involved in the initial RHMP will be contacted and given the option to remain involved in the process.

A technical subcommittee with a make-up similar to the subcommittee used for initial RHMP development is an option that could be utilized in this plan maintenance strategy at the discretion of the planning team and the steering committee.

19.4 RHMP ANNUAL PROGRESS REPORT

The minimum task of the ongoing annual steering committee meeting will be the evaluation of the progress of the RHMP. This review will include the following:

- Summary of any hazard events that occurred during the prior year and their impact on the planning area
- Review of successful mitigation initiatives identified in the RHMP
- Brief discussion about why targeted strategies were not completed
- Re-evaluation of the action plan to determine if the timeline for identified projects needs to be amended (such as changing a long-term project to a short-term project because of funding availability)
- Recommendations for new projects
- Changes in or potential for new funding options (grant opportunities)
- Impact of any other planning programs or initiatives within the City that involve hazard mitigation

The planning team will create a template to guide the steering committee in preparing a progress report. The steering committee will provide feedback to the planning team on items included in the template. The planning team will then prepare a formal annual report on the progress of the RHMP. This report will be used as follows:

- Posted on the City website on the page dedicated to the RHMP
- Provided to the local media through a press release
- Presented in the form of a council report to the Roseville City Council.
- Provided as part of the Community Rating System (CRS) annual re-certification package

The CRS program requires an annual recertification to be submitted by October 1 of every calendar year for which the community has not received a formal audit. To meet this recertification timeline, the

planning team will strive to complete this progress report process between the months of June and September of every year.

19.5 RHMP UPDATE

Section 201.6.d.3 of 44 CFR requires that local hazard mitigation plans be reviewed, revised if appropriate, and resubmitted for approval in order to remain eligible for benefits awarded under the Disaster Mitigation Act (DMA). The City of Roseville intends to update the RHMP on a 5-year cycle from the date of initial plan adoption. This cycle may be accelerated to less than 5 years based on the following triggers:

- A Presidential Disaster Declaration that impacts the City of Roseville
- A hazard event that causes loss of life
- A comprehensive update of the City of Roseville general plan

It will not be the intent of this update process to start from scratch and develop a new complete hazard mitigation plan for the City of Roseville. Based on needs identified by the planning team, this update will, at a minimum, include the elements below.

- The update process will be convened through a steering committee as described under Section 19.4.
- The hazard risk assessment will be reviewed and updated using best available information and technologies.
- The action plan will be reviewed and revised to account for any initiatives completed, dropped, or changed and to account for changes in the risk assessment or new City policies identified under other planning mechanisms, as appropriate (such as the general plan).
- The draft update will be sent to appropriate agencies and organizations for comment.
- The public will be given an opportunity to comment on the update prior to adoption.
- The Roseville City Council will adopt the updated plan.

19.6 CONTINUING PUBLIC INVOLVEMENT

The public will continue to be apprised of RHMP actions through the City website and by providing copies of the annual progress reports to the media. Copies of the RHMP will be distributed to the Roseville City Library System. Upon initiation of the RHMP update process, a new public involvement strategy will be initiated based on guidance from the steering committee. This strategy will be based on the needs and capabilities of the City at the time of the update. At a minimum, this strategy will include the use of local media outlets within the planning area.

19.7 INCORPORATION INTO OTHER PLANNING MECHANISMS

The information on hazard, risk, vulnerability, and mitigation contained in this plan is based on the best science and technology available at the time the RHMP was prepared. As stated in Section 2.5 of the RHMP, the City's general plan is considered to be an integral part of this plan. The City, through adoption of its 1992 general plan (safety element), has planned for the impact of natural hazards. The RHMP process provided the City with the opportunity to review and expand on policies contained within the general plan. The City views the general plan and the RHMP as complementary planning documents that work together to achieve the ultimate goal of the reduction of risk exposure to the citizens of

Roseville. As stated in Section 19.5, a comprehensive update to the general plan will trigger an update to the RHMP. Many of the ongoing recommendations identified in Chapter 18 of the RHMP are programs recommended by the general plan. Capital improvement programs and specific plan development dictated by the general plan will be coordinated with the RHMP recommendations. Other planning processes and programs the City will coordinate with the recommendations of the RHMP include the following:

- City emergency response plan
- Capital Improvement Programs
- Roseville municipal code
- Community design guidelines
- Water-efficient landscape design guidelines
- Storm water management program
- Water system vulnerability assessment
- Sacramento Urban Area Security Initiative

Some action items do not need to be implemented through regulation. Instead, these items can be implemented through the creation of new educational programs, continued interagency coordination, or improved public participation.

CHAPTER 20. PLAN ADOPTION

20.1 PRE-ADOPTION REVIEW

Section 201.6.c.5 of 44 CFR requires documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting federal approval of the plan. This RHMP will be submitted to the California Office of Emergency Services (OES) and the Insurance Service Office (ISO) prior to adoption for a pre-adoption review. Once the RHMP has been determined to be compliant with the criteria specified under the Disaster Mitigation Act (DMA) of 2000. OES will then forward the plan to Federal Emergency Management Agency (FEMA) Region IX for review and approval.

ISO, which administers the CRS program for FEMA, is responsible for determining program compliance for the CRS program. Since this plan will be a key element in the City meeting the prescribed prerequisites for CRS class 1, ISO will be asked to review the RHMP CRS activity 510 compliance and compliance for compliance with all classification prerequisites. Once pre-adoption approval has been granted by both OES and ISO, the City will initiate its process to formally adopt the RHMP.

Simultaneous with the process described above, the draft action plan of the RHMP was sent to the following agencies with a request for review and comment:

- Placer County Office of Emergency Services
- City of Rocklin
- Sacramento County Department of Water Resources
- California Department of Water Resources
- City of Citrus Heights
- Placer County Flood Control District

20.2 ADOPTION

Pre-adoption approval of the RHMP was granted by the OES on _____, and ISO on _____. The Roseville City Council adopted the RHMP through Resolution #_____ on _____. A copy of the resolution is provided in below. Final FEMA approval was granted on _____, subsequent to the formal City Council adoption.

(Insert copy of Resolution as figure 20-1)