



STAFF REPORT

Report To: Board of Supervisors

Meeting Date: August 4, 2016

Staff Contact: Robert Schreihans, rschreihans@carson.org

Agenda Title: For Possible Action: To adopt a resolution adopting and approving the Carson City Hazard Mitigation Plan.

Staff Summary: This Plan identifies and evaluates specific hazards that can affect Carson City. The Plan offers supporting documentation from subject matter experts and identifies mitigation strategies that can be implemented to reduce the impact of those identified hazards upon the community.

Agenda Action: Resolution

Time Requested: 15 minutes

Proposed Motion

I move to adopt Resolution No. _____, a resolution adopting and approving the Carson City Hazard Mitigation Plan.

Board's Strategic Goal

Safety

Previous Action

N/A

Background/Issues & Analysis

The development of this plan is required by the Federal Disaster Mitigation Act of 2000. In order for a community to be eligible for pre, post and active disaster funds through FEMA, this plan must be adopted and updated every 5 years. The Carson City Hazard Mitigation Plan was first adopted in 2005; updated and adopted again in 2011. This is a completely updated version of the 2011 document. The Plan has received tentative approval from FEMA, final approval will be forthcoming upon adoption of the Plan by the Board.

Applicable Statute, Code, Policy, Rule or Regulation

Disaster Mitigation Act of 2000.

Financial Information

Is there a fiscal impact? Yes No

If yes, account name/number:

Is it currently budgeted? Yes No

Explanation of Fiscal Impact: No direct fiscal impact from the adoption of this document.

Alternatives

The alternative, choosing not to adopt the plan, would restrict any future disaster funding Carson City could receive.

Board Action Taken:

Motion: _____

1) _____

2) _____

Aye/Nay

(Vote Recorded By)

RESOLUTION NO. _____

**A RESOLUTION ADOPTING AND APPROVING THE
CARSON CITY HAZARD MITIGATION PLAN**

WHEREAS, Carson City has historically experienced severe damage from natural and human-caused hazards such as flooding, wildfire, drought, thunderstorms/high winds, and hazardous materials incidents on many occasions in the past century, resulting in loss of property and life, economic hardship, and threats to public health and safety;

WHEREAS, the Carson City Hazard Mitigation Plan (the Plan) has been developed after more than one year of research and work by the Carson City Office of Emergency Management in association and cooperation with a multi-jurisdictional and multi-agency Planning Team for the reduction of hazard risks to the community;

WHEREAS, the Plan specifically addresses hazard mitigation strategies and plan maintenance procedures for Carson City;

WHEREAS, the Plan recommends several hazard mitigation actions/projects that will provide mitigation for specific natural and human caused hazards that impact our community with the effect of protecting people, property, and the environment from loss associated with those hazards;

WHEREAS, public input was gathered through meetings, direct mail, and media outlets to garner comments and collect input as required by law;

NOW THEREFORE BE IT RESOLVED that:

1. The Plan is hereby Adopted as an official plan of Carson City
2. The respective officials identified in the mitigation strategy of the Plan are hereby requested to pursue implementation of the recommended actions based upon availability of resources.
3. Future revision and Plan maintenance required by the Disaster Mitigation Act of 2000 and FEMA are hereby adopted as part of this resolution for a period of five (5) years from the date of this resolution

Upon motion by Supervisor _____, seconded by Supervisor _____, the foregoing Resolution was passed and adopted this 4th day of August, 2016 by the following vote.

VOTE: AYES:

NAYS:

ABSENT:

ABSTAIN:

Robert L. Crowell, Mayor
Carson City, Nevada

ATTEST

Susan Merriwether, Clerk Recorder
Carson City, Nevada

LOCAL MITIGATION PLAN REVIEW TOOL

The *Local Mitigation Plan Review Tool* demonstrates how the Local Mitigation Plan meets the regulation in 44 CFR §201.6 and offers States and FEMA Mitigation Planners an opportunity to provide feedback to the community.

- The Regulation Checklist provides a summary of FEMA’s evaluation of whether the Plan has addressed all requirements.
- The Plan Assessment identifies the plan’s strengths as well as documents areas for future improvement.
- The Multi-jurisdiction Summary Sheet is an optional worksheet that can be used to document how each jurisdiction met the requirements of the each Element of the Plan (Planning Process; Hazard Identification and Risk Assessment; Mitigation Strategy; Plan Review, Evaluation, and Implementation; and Plan Adoption).

The FEMA Mitigation Planner must reference this *Local Mitigation Plan Review Guide* when completing the *Local Mitigation Plan Review Tool*.

Jurisdiction: Carson City, Nevada	Title of Plan: Carson City Hazard Mitigation Plan 2016	Date of Plan: November 2015 1st Resubmittal: March 2016
Local Point of Contact: Stacey Belt	Address: 777 S. Stewart St. Carson City, Nevada 89701	
Title: Deputy Emergency Manager		
Agency: Carson City Fire Department		
Phone Number: 775-283-7218	E-Mail: sbelt@carson.org	

State Reviewer:	Title:	Date:
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FEMA Reviewer: Emma Reed Wynne Kwan	Title: Hazard Mitigation Specialist Region IX Mitigation Champion/QA- QC	Date: February 2016 23 February 2016 1st Resubmittal: 18 March 2016
Date Received in FEMA Region 9	February 1, 2016; 1st Resubmittal: 18 March 2016	
Plan Not Approved	The plan is not approved at this time.	
Plan Approvable Pending Adoption	The Plan is APPROVED PENDING ADOPTION. (23 March 2016)	
Plan Approved		

LOCAL MITIGATION PLAN REVIEW TOOL

SECTION 1:

REGULATION CHECKLIST

INSTRUCTIONS: The Regulation Checklist must be completed by FEMA. The purpose of the Checklist is to identify the location of relevant or applicable content in the Plan by Element/sub-element and to determine if each requirement has been ‘Met’ or ‘Not Met.’ The ‘Required Revisions’ summary at the bottom of each Element must be completed by FEMA to provide a clear explanation of the revisions that are required for plan approval. Required revisions must be explained for each plan sub-element that is ‘Not Met.’ Sub-elements should be referenced in each summary by using the appropriate numbers (A1, B3, etc.), where applicable. Requirements for each Element and sub-element are described in detail in this *Plan Review Guide* in Section 4, Regulation Checklist.

1. REGULATION CHECKLIST Regulation (44 CFR 201.6 Local Mitigation Plans)	Location in Plan (section and/or page number)	Met	Not Met
ELEMENT A. PLANNING PROCESS			
A1. Does the Plan document the planning process, including how it was prepared and who was involved in the process for each jurisdiction? (Requirement §201.6(c)(1))	Pages 4-1 to 4-9; 5-1 to 5-4 Appendices C, E	X	
A2. Does the Plan document an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development as well as other interests to be involved in the planning process? (Requirement §201.6(b)(2))	Pages 4-3 to 4-9; Appendices D, E	X	
A3. Does the Plan document how the public was involved in the planning process during the drafting stage? (Requirement §201.6(b)(1))	Pages 4-6 to 4-9; Appendices D, E	X	
A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement §201.6(b)(3))	Pages 4-9 to 4-10; pages 10-1 to 10-3	X	
A5. Is there discussion of how the community(ies) will continue public participation in the plan maintenance process? (Requirement §201.6(c)(4)(iii))	Page 9-4	X	
A6. Is there a description of the method and schedule for keeping the plan current (monitoring, evaluating and updating the mitigation plan within a 5-year cycle)? (Requirement §201.6(c)(4)(i))	Pages 4-1; 9-1 to 9-2 Appendix F	X	

LOCAL MITIGATION PLAN REVIEW TOOL

ELEMENT A: REQUIRED REVISIONS

1. REGULATION CHECKLIST Regulation (44 CFR 201.6 Local Mitigation Plans)	Location in Plan (section and/or page number)	Met	Not Met
ELEMENT B. HAZARD IDENTIFICATION AND RISK ASSESSMENT			
B1. Does the Plan include a description of the type, location, and extent of all natural hazards that can affect each jurisdiction(s)? (Requirement §201.6(c)(2)(i))	Pages 5-1 to 5-61; Appendices B, H Avalanche: page 5-11 Drought: Pages 5-12 to 5-15 Earthquake: pages 5-16 to 5-21 Floods: pages 5-22 to 5-28 Landslide: pages 5-41 to 5-44 Severe Weather: pages 5-45 to 5-50 Volcanic Activity: 5-55 to 5-57 Wildland Fire: 5-58 to 5-61 1st Resubmittal: p. 5-44	Avalanche; Drought; Earthquake; Floods; Severe Weather; Volcanic Activity; Wildland Fire; Landslide	
B2. Does the Plan include information on previous occurrences of hazard events and on the probability of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))	Pages 5-6 to 5-61	X	
B3. Is there a description of each identified hazard's impact on the community as well as an overall summary of the community's vulnerability for each jurisdiction? (Requirement §201.6(c)(2)(ii))	Pages 6-4 to 6-11 1st Resubmittal: p. 5-4, 5-44	Avalanche; Drought; Earthquake; Floods; Severe Weather;	

LOCAL MITIGATION PLAN REVIEW TOOL

		Volcanic Activity; Wildland Fire; Landslide	
B4. Does the Plan address NFIP insured structures within the jurisdiction that have been repetitively damaged by floods? (Requirement §201.6(c)(2)(ii))	Pages 6-9; 8-7 to 8-8	X	
<p><u>ELEMENT B: REQUIRED REVISIONS</u></p> <p>B1. The Plan does not provide information about the magnitude/extent of the potential landslide hazard. The landslide hazard description, or profile, must include information on magnitude/ extent.</p> <p>Extent means the strength or magnitude of the hazard. For example, extent could be described in terms of the specific measurement of an occurrence on a scientific scale (for example, Enhanced Fujita Scale, Saffir-Simpson Hurricane Scale, Richter Scale, flood depth grids) and/or other hazard factors, such as duration and speed of onset. Extent is not the same as impacts, which refers to the effect of a hazard on the people and property in the community, such as injuries/deaths, percent of property damaged and duration of governmental/business operations shutdown.</p> <p>1st Resubmittal: The revised submittal includes information that landslides take place in areas with slope gradients of 30% or higher. This element is met.</p> <p>B3. The Plan does not provide a discussion of the impacts on and overall vulnerability of the City and County of Carson City from potential landslide hazard events. The plan must describe the potential impacts of the landslide hazard on the community and provide an overall summary of the City/County of Carson City’s vulnerability to the landslide hazard.</p> <p>Impact means the consequence or effect of the hazard on the community and its assets. Assets are determined by the community and include, for example, people, structures, facilities, systems, capabilities, and/or activities that have value to the community. For example, impacts could be described by referencing historical disaster impacts and/or an estimate of potential future losses (such as percent damage of total exposure).</p> <p>The overall summary of vulnerability identifies structures, systems, populations or other community assets as defined by the community that are susceptible to damage and loss from hazard events. Vulnerable assets and potential losses is more than a list of the total exposure of population, structures, and critical facilities in the planning area. An example of an overall summary is a list of key issues or problem statements that clearly describes the community’s greatest vulnerabilities and that will be addressed in the mitigation strategy.</p> <p>1st Resubmittal: The revised submittal includes information that areas prone to landslide hazards are remote rural areas at high elevations away from the city where there are no residences or existing infrastructure. Such occurrence would not impact the population, infrastructure or produce significant damage to property. This element is met.</p>			

LOCAL MITIGATION PLAN REVIEW TOOL

1. REGULATION CHECKLIST	Location in Plan	Met	Not Met
Regulation (44 CFR 201.6 Local Mitigation Plans)	(section and/or page number)		
ELEMENT C. MITIGATION STRATEGY			
C1. Does the plan document each jurisdiction’s existing authorities, policies, programs and resources and its ability to expand on and improve these existing policies and programs? (Requirement §201.6(c)(3))	Pages 7-1 to 7-4	X	
C2. Does the Plan address each jurisdiction’s participation in the NFIP and continued compliance with NFIP requirements, as appropriate? (Requirement §201.6(c)(3)(ii))	Pages 7-1 to 7-2; 8-7 to 8-8	X	
C3. Does the Plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement §201.6(c)(3)(i))	Page 8-1 (Table 8-1)	X	
C4. Does the Plan identify and analyze a comprehensive range of specific mitigation actions and projects for each jurisdiction being considered to reduce the effects of hazards, with emphasis on new and existing buildings and infrastructure? (Requirement §201.6(c)(3)(ii))	Pages 8-2 to 8-7 (Table 8-2)	X	
C5. Does the Plan contain an action plan that describes how the actions identified will be prioritized (including cost benefit review), implemented, and administered by each jurisdiction? (Requirement §201.6(c)(3)(iv)); (Requirement §201.6(c)(3)(iii))	Pages 8-9 to 8-18 (Tables 8-3 and 8-4)	X	
C6. Does the Plan describe a process by which local governments will integrate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate? (Requirement §201.6(c)(4)(ii))	Pages 8-11 to 8-13 (Table 8-4); pages 9-2 to 9-3 Appendix G	X	
<u>ELEMENT C: REQUIRED REVISIONS</u>			

LOCAL MITIGATION PLAN REVIEW TOOL

1. REGULATION CHECKLIST	Location in Plan (section and/or page number)	Met	Not Met
Regulation (44 CFR 201.6 Local Mitigation Plans)			
ELEMENT D. PLAN REVIEW, EVALUATION, AND IMPLEMENTATION (applicable to plan updates only)			
D1. Was the plan revised to reflect changes in development? (Requirement §201.6(d)(3))	Pages 3-6; 6-3 to 6-4 Appendix B	X	
D2. Was the plan revised to reflect progress in local mitigation efforts? (Requirement §201.6(d)(3))	Pages 8-2 to 8-18 (Tables 8-2 and 8-4); Appendix G (Previous goals/actions)	X	
D3. Was the plan revised to reflect changes in priorities? (Requirement §201.6(d)(3))	Pages 4-1 to 4-2; 8-10 to 8-18 Appendix G	X	
<u>ELEMENT D: REQUIRED REVISIONS</u>			
ELEMENT E. PLAN ADOPTION			
E1. Does the Plan include documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval? (Requirement §201.6(c)(5))	Appendix A; page 1-1		X
E2. For multi-jurisdictional plans, has each jurisdiction requesting approval of the plan documented formal plan adoption? (Requirement §201.6(c)(5))	N/A	N/A	N/A
<u>ELEMENT E: REQUIRED REVISIONS</u>			
E1. Adoption resolution located in Appendix A is not signed. Adoption and submittal of supporting documentation must take place within one calendar year of receipt of FEMA’s “Approval Pending Adoption” (APA) letter.			
ELEMENT F. ADDITIONAL STATE REQUIREMENTS (optional for State reviewers only; not to be completed by FEMA)			
F1.			
F2.			

LOCAL MITIGATION PLAN REVIEW TOOL

1. REGULATION CHECKLIST	Location in Plan (section	Met	Not
Regulation (44 CFR 201.6 Local Mitigation Plans)	and/or page number)		Met
<u>ELEMENT F: REQUIRED REVISION</u>			

LOCAL MITIGATION PLAN REVIEW TOOL

SECTION 2: PLAN ASSESSMENT

INSTRUCTIONS: The purpose of the Plan Assessment is to offer the local community more comprehensive feedback to the community on the quality and utility of the plan in a narrative format. The audience for the Plan Assessment is not only the plan developer/local community planner, but also elected officials, local departments and agencies, and others involved in implementing the Local Mitigation Plan. The Plan Assessment must be completed by FEMA. The Assessment is an opportunity for FEMA to provide feedback and information to the community on: 1) suggested improvements to the Plan; 2) specific sections in the Plan where the community has gone above and beyond minimum requirements; 3) recommendations for plan implementation; and 4) ongoing partnership(s) and information on other FEMA programs, specifically RiskMAP and Hazard Mitigation Assistance programs. The Plan Assessment is divided into two sections:

1. Plan Strengths and Opportunities for Improvement
2. Resources for Implementing Your Approved Plan

Plan Strengths and Opportunities for Improvement is organized according to the plan Elements listed in the Regulation Checklist. Each Element includes a series of italicized bulleted items that are suggested topics for consideration while evaluating plans, but it is not intended to be a comprehensive list. FEMA Mitigation Planners are not required to answer each bullet item, and should use them as a guide to paraphrase their own written assessment (2-3 sentences) of each Element.

The Plan Assessment must not reiterate the required revisions from the Regulation Checklist or be regulatory in nature, and should be open-ended and to provide the community with suggestions for improvements or recommended revisions. The recommended revisions are suggestions for improvement and are not required to be made for the Plan to meet Federal regulatory requirements. The italicized text should be deleted once FEMA has added comments regarding strengths of the plan and potential improvements for future plan revisions. It is recommended that the Plan Assessment be a short synopsis of the overall strengths and weaknesses of the Plan (no longer than two pages), rather than a complete recap section by section.

Resources for Implementing Your Approved Plan provides a place for FEMA to offer information, data sources and general suggestions on the overall plan implementation and maintenance process. Information on other possible sources of assistance including, but not

LOCAL MITIGATION PLAN REVIEW TOOL

limited to, existing publications, grant funding or training opportunities, can be provided. States may add state and local resources, if available.

Element A: Planning Process

Plan Strengths

- The Plan includes supporting documentation of the planning process, as well as public and stakeholder outreach activities.
- The Planning Team includes a variety of stakeholders from a number of local government departments and agencies involved with mitigation actions.
- The Plan includes good guidelines for future plan maintenance and monitoring activities.
- The Plan includes a detailed discussion of how the Committee used and incorporated existing plans, reports, technical studies, etc. into the document.

Opportunities for Improvement

- For the next plan update, consider gaining participation from the local media to help increase public awareness and participation.

Element B: Hazard Identification and Risk Assessment

Plan Strengths

- The Plan provides comprehensive explanation of how the hazards were identified and screened.
- Impact assessments for all hazard profiles are detailed and comprehensive.
- The Plan includes comprehensive maps and figures to enhance the hazard profiles to enable readers better understand the hazards and impacts.
- The Plan includes a comprehensive discussion of land uses and future development trends and identifies exposure for each development area.
- The Plan includes a discussion of the effects of climate changes on the frequency and intensity of various hazards.

Opportunities for Improvement

- The Plan should identify and discuss any data gaps that can be filled as new data become available.
- The Plan should include the types and numbers of existing future buildings, infrastructure, and critical facilities located in identified hazard areas.
- The methodology on how values/loss estimates were estimated should be included in the next iteration of the Plan.
- The Plan includes a summary of how each hazard scored based on the identified vulnerability criteria. The Plan should include a breakdown of the scoring to show how the hazards ranked/scored for each sub-element (frequency, magnitude/extent (which is really impact); warning time, and duration. Doing this would help identify for each

LOCAL MITIGATION PLAN REVIEW TOOL

hazard the probability, impact, and magnitude/extent (as defined by FEMA, warning time and duration).

Element C: Mitigation Strategy

Plan Strengths

- The capabilities assessment is comprehensive and presented in an easy-to-read and understand manner.
- Some of the mitigation actions are integrated with existing local authorities, policies, programs, plans, and resources, making it potentially easier to implement.

Opportunities for Improvement

- Future plan updates could include additional potential implementation steps for prioritized mitigation actions.

Element D: Plan Update, Evaluation, and Implementation (Plan Updates Only)

Plan Strengths

- The Plan includes a thorough discussion of the process undertaken to update the previous version of the Hazard Mitigation Plan.
- The Plan provides a comprehensive table showing the annual update information for all the previously identified mitigation actions. This is useful in providing information on the monitoring and evaluation of the plan and mitigation actions during the Plan Maintenance period and to determine what actions to take in the Plan update.

Opportunities for Improvement

- The Plan should discuss barriers or obstacles to the successful implementation or completion of mitigation actions, as well as provide possible solutions for overcoming risk.
- The Plan should provide documentation of plan maintenance activities (i.e., annual reviews, committee involvement, etc.) since the approval of the previous version of the Hazard Mitigation Plan.

LOCAL MITIGATION PLAN REVIEW TOOL

SECTION 3:

MULTI-JURISDICTION SUMMARY SHEET (OPTIONAL)

INSTRUCTIONS: For multi-jurisdictional plans, a Multi-jurisdiction Summary Spreadsheet may be completed by listing each participating jurisdiction, which required Elements for each jurisdiction were 'Met' or 'Not Met,' and when the adoption resolutions were received. This Summary Sheet does not imply that a mini-plan be developed for each jurisdiction; it should be used as an optional worksheet to ensure that each jurisdiction participating in the Plan has been documented and has met the requirements for those Elements (A through E).

MULTI-JURISDICTION SUMMARY SHEET												
#	Jurisdiction Name	Jurisdiction Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	Requirements Met (Y/N)					
							A. Planning Process	B. Hazard Identification & Risk Assessment	C. Mitigation Strategy	D. Plan Review, Evaluation & Implementation	E. Plan Adoption	F. State Requirements
1												
2												
3												
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FEMA

March 23, 2016

Ms. Stacey Belt
Deputy Emergency Manager
Carson City Fire Department
777 S. Stewart Street
Carson City, NV 89701

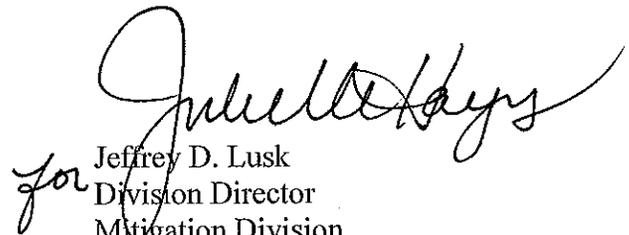
Dear Ms. Belt:

We have completed our review of the *Carson City Local Natural Hazard Mitigation Plan Update*, and have determined that this plan is eligible for final approval pending its adoption by Carson City.

Formal adoption documentation must be submitted to the Regional office by the lead Jurisdiction within one calendar year of the date of this letter, or the entire plan must be updated and resubmitted for review. We will approve the plan upon receipt of the documentation of formal adoption.

If you have any questions regarding the planning or review processes, please contact JoAnn Scordino, Community Planner at (510) 627-7225, or by email at JoAnn.Scordino@fema.dhs.gov. Thank you.

Sincerely,


for Jeffrey D. Lusk
Division Director
Mitigation Division
FEMA Region IX

Enclosure

cc: Karen Johnson, Nevada Division of Emergency Management