## **APPENDICES**

**Appendix A: Plan Review Crosswalk** 

**Appendix B: Action Implementation Plans** 

**Appendix C: Planning Process Documentation** 

**Appendix D: Mitigation Action Evaluation** 

**Appendix E: Plan Maintenance Forms** 

**Appendix F: References** 

This page intentionally left blank.

# APPENDIX A LOCAL MITIGATION PLAN REVIEW CROSSWALK

This page intentionally left blank.

## INSTRUCTIONS FOR USING THE PLAN REVIEW CROSSWALK FOR REVIEW OF LOCAL MITIGATION PLANS

Attached is a Plan Review Crosswalk based on the *Local Multi-Hazard Mitigation Planning Guidance*, published by FEMA in July, 2008. This Plan Review Crosswalk is consistent with the *Robert T. Stafford Disaster Relief and Emergency Assistance Act* (Stafford Act), as amended by Section 322 of the *Disaster Mitigation Act of 2000* (P.L. 106-390), the *National Flood Insurance Act of 1968*, as amended by the *National Flood Insurance Reform Act of 2004* (P.L. 108-264) and *44 Code of Federal Regulations (CFR) Part 201 – Mitigation Planning*, inclusive of all amendments through October 31, 2007.

#### **SCORING SYSTEM**

- N Needs Improvement: The plan does not meet the minimum for the requirement. Reviewer's comments must be provided.
- **S Satisfactory:** The plan meets the minimum for the requirement. Reviewer's comments are encouraged, but not required.

Each requirement includes separate elements. All elements of a requirement must be rated "Satisfactory" in order for the requirement to be fulfilled and receive a summary score of "Satisfactory." A "Needs Improvement" score on elements shaded in gray (recommended but not required) will not preclude the plan from passing.

When reviewing single jurisdiction plans, reviewers may want to put an N/A in the boxes for multi-jurisdictional plan requirements. When reviewing multi-jurisdictional plans, however, all elements apply. States that have additional requirements can add them in the appropriate sections of the *Local Multi-Hazard Mitigation Planning Guidance* or create a new section and modify this Plan Review Crosswalk to record the score for those requirements. Optional matrices for assisting in the review of sections on profiling hazards, assessing vulnerability, and identifying and analyzing mitigation actions are found at the end of the Plan Review Crosswalk.

#### The example below illustrates how to fill in the Plan Review Crosswalk.:

This description <b>shall</b> include an overall summ		<ul> <li>i] description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) and its impact on the community.</li> </ul>		ORE
Element	annex and page #)	Reviewer's Comments	N	S
A. Does the <b>new or updated</b> plan include an <b>overall summary</b> description of the jurisdiction's <b>vulnerability</b> to each hazard?	Section II, pp. 4-10	The plan describes the types of assets that are located within geographically defined hazard areas as well as those that would be affected by winter storms.		
B. Does the <b>new or updated</b> plan address the <b>impact</b> of each hazard on the jurisdiction?	Section II, pp. 10- 20	The plan does not address the impact of two of the five hazards addressed in the plan.  Required Revisions:  Include a description of the impact of floods and earthquakes on the assets.  Recommended Revisions:  This information can be presented in terms of dollar value or percentages of damage.		

## **LOCAL MITIGATION PLAN REVIEW SUMMARY**

The plan cannot be approved if the plan has not been formally adopted. Each requirement includes separate elements. All elements of the requirement must be rated "Satisfactory" in order for the requirement to be fulfilled and receive a score of "Satisfactory." Elements of each requirement are listed on the following pages of the Plan Review Crosswalk. A "Needs Improvement" score on elements shaded in gray (recommended but not required) will not preclude the plan from passing. Reviewer's comments must be provided for requirements receiving a "Needs Improvement" score.

Prerequisite(s) (Check Applicable Box)	NOT MET	MET
1. Adoption by the Local Governing Body: §201.6(c)(5) OR		
2. Multi-Jurisdictional Plan Adoption: §201.6(c)(5)  AND		
3. Multi-Jurisdictional Planning Participation: §201.6(a)(3)		
Planning Process	N	s
Planning Process	N	<u> </u>
4. Documentation of the Planning Process: §201.6(b) and §201.6(c)(1)		
Risk Assessment	N	S
5. Identifying Hazards: §201.6(c)(2)(i)		
6. Profiling Hazards: §201.6(c)(2)(i)		
7. Assessing Vulnerability: Overview: §201.6(c)(2)(ii)		
8. Assessing Vulnerability: Addressing Repetitive Loss Properties. §201.6(c)(2)(ii)		
Assessing Vulnerability: Identifying Structures, Infrastructure, and Critical Facilities: §201.6(c)(2)(ii)(B)		
10. Assessing Vulnerability: Estimating Potential Losses: §201.6(c)(2)(ii)(B)		
11. Assessing Vulnerability: Analyzing Development Trends: §201.6(c)(2)(ii)(C)		
12. Multi-Jurisdictional Risk Assessment: §201.6(c)(2)(iii)		

#### **SCORING SYSTEM**

Please check one of the following for each requirement.

- N Needs Improvement: The plan does not meet the minimum for the requirement. Reviewer's comments must be provided.
- **S Satisfactory:** The plan meets the minimum for the requirement. Reviewer's comments are encouraged, but not required.

Mitigation Strategy	N	S
13. Local Hazard Mitigation Goals: §201.6(c)(3)(i)		
14. Identification and Analysis of Mitigation Actions: §201.6(c)(3)(ii)		
15. Identification and Analysis of Mitigation Actions: NFIP Compliance. §201.6(c)(3)(ii) 16. Implementation of Mitigation Actions:		
§201.6(c)(3)(iii)		
17. Multi-Jurisdictional Mitigation Actions: §201.6(c)(3)(iv)		
Plan Maintenance Process	N	s
18. Monitoring, Evaluating, and Updating the Plan: §201.6(c)(4)(ii)		
19. Incorporation into Existing Planning Mechanisms: §201.6(c)(4)(ii)		
20. Continued Public Involvement: §201.6(c)(4)(iii)		
Additional State Requirements*	N	s
Insert State Requirement		
Insert State Requirement		
Insert State Requirement		
LOCAL MITIGATION PLAN APPROVAL STA	rus	
PLAN NOT	APPROVE	D
See Reviewer's	s Comment	ts
DI ANI	APPROVE	n .

<sup>\*</sup>States that have additional requirements can add them in the appropriate sections of the *Local Multi-Hazard Mitigation Planning Guidance* or create a new section and modify this Plan Review Crosswalk to record the score for those requirements.

## **Local Mitigation Plan Review and Approval Status**

Title of Plan:	d Mitigratian Dlan	Date of Plan:	
Update 2009	ivilligation Plan	July 24, 2009	
		f Emergency Management	
	•	Avenue	
Kio	owa, CO 80117		
	\# *I		
		The art County CO Cour	
Lai	Riea. i nompson@E	ibertCounty-CO.Gov	
Title		Date:	
Title.		Date.	
Title:		Date:	
	Elbert County Multi-Hazard Update 2009  Ad Elk PC Kid ent  Title:  Title:	Elbert County Multi-Hazard Mitigation Plan Update 2009  Address: Elbert County Office of PO Box 295, 751 Ute Kiowa, CO 80117  ent  E-Mail: LaRiea.Thompson@E  Title:	

		NFIP S	Status*	
Jurisdiction:	Y	N	N/A	CRS Class
1. Elbert County	X			
2. Town of Elizabeth		X		
3. Town of Kiowa	X			
4. Town of Simla	X			
5. Elizabeth Fire Protection District			X	

* Notes:	Y = Participating	N = Not Participating	N/A = Not Mapped				
				NFIP	Status*		
Jurisdiction:			Y	,	N	N/A	CRS Class
6. Kiowa Fire I	Protection District					X	
7. Rattlesnake	Fire Protection District					X	
8. Kiowa Cons	servation District					X	

## PREREQUISITE(S)

## 1. Adoption by the Local Governing Body

**Requirement §201.6(c)(5):** [The local hazard mitigation plan **shall** include] documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan (e.g., City Council, County Commissioner, Tribal Council).

	Location in the			SCC	RE
Element	Plan (section or annex and page #)	Reviewer's Comments		IOT MET	MET
A. Has the local governing body adopted <b>new or</b>	Resolutions of				
updated plan?	Adoption, p. vi-vii,				
	Pending				
B. Is supporting documentation, such as a resolution,	Resolutions of				
included?	Adoption, p. vi-vii,				
	Pending				
		SUMMARY SCOR	E		

#### 2. Multi-Jurisdictional Plan Adoption

Requirement §201.6(c)(5): For multi-jurisdictional plans, each jurisdiction requesting approval of the plan must document that it has been formally adopted.

	Location in the		SCC	RE
Element	Plan (section or annex and page #)	Reviewer's Comments	NOT MET	MET
A. Does the <b>new or updated</b> plan indicate the specific jurisdictions represented in the plan?	Executive Summary p. viii; Ch.1 p.1.			
B. For each jurisdiction, has the local governing body adopted the <b>new or updated</b> plan?	Resolutions of Adoption, p. vi-vii, Pending			
C. Is supporting documentation, such as a resolution, included for each participating jurisdiction?	Resolutions of Adoption, p. vi-vii, Pending			
		SUMMARY SCORE		

## 3. Multi-Jurisdictional Planning Participation

**Requirement §201.6(a)(3):** Multi-jurisdictional plans (e.g., watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process ... Statewide plans will not be accepted as multi-jurisdictional plans.

	Location in the		SCC	ORE
	Plan (section or		NOT	
Element	annex and page #)	Reviewer's Comments	MET	MET
A. Does the <b>new or updated</b> plan describe <b>how</b> each				
jurisdiction participated in the plan's development?	Ch. 3 p. 11-13			

LOCAL MITIGATION PLAN REVIEW CROSSWALK				
B. Does the updated plan identify all participating jurisdictions, including new, continuing, and the jurisdictions that no longer participate in the plan?	Ch.1 p.1			
		SUMMARY SCORE		

<u>PLANNING PROCESS:</u> §201.6(b): An open public involvement process is essential to the development of an effective plan.

## 4. Documentation of the Planning Process

**Requirement §201.6(b):** In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process **shall** include:

- (1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;
- (2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and
- (3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

**Requirement §201.6(c)(1):** [The plan **shall** document] the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

		Location in the		SC	ORE
Ele	ement	Plan (section or annex and page #)	Reviewer's Comments	N	S
A.	Does the plan provide a narrative description of the process followed to prepare the <b>new or updated</b> plan?	Ch. 3 p. 13-18			
B.	Does the <b>new or updated</b> plan indicate who was involved in the <b>current</b> planning process? (For example, who led the development at the staff level and were there any external contributors such as contractors? Who participated on the plan committee, provided information, reviewed drafts, <i>etc.</i> ?)	Ch. 3 p. 11-13; Appendix C			
C.	Does the <b>new or updated</b> plan indicate how the public was involved? (Was the public provided an opportunity to comment on the plan during the drafting stage and prior to the plan approval?)	Ch. 3 p. 14-15 Appendix C			
D.	Does the new or updated plan discuss the opportunity for neighboring communities, agencies, businesses, academia, nonprofits, and other interested parties to be involved in the planning process?	Ch. 3 p. 15-16 Appendix C			
E.	Does the planning process describe the review and incorporation, if appropriate, of existing plans, studies, reports, and technical information?	Ch. 3 p. 15			
F.	Does the updated plan document how the planning team reviewed and analyzed each section of the plan and whether each section was revised as part of the update process?	Ch. 3 p. 11-18			

#### 4. Documentation of the Planning Process

Requirement §201.6(b): In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include:

- (1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;
- (2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and
- (3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

**Requirement §201.6(c)(1):** [The plan **shall** document] the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

p. 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		
	SC	ORE
SUMMARY SCORE		

<u>RISK ASSESSMENT</u>:  $\S 201.6(c)(2)$ : The plan shall include a risk assessment that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards.

#### 5. Identifying Hazards

Requirement §201.6(c)(2)(i): [The risk assessment shall include a] description of the type ... of all natural hazards that can affect the jurisdiction.

	Location in the		SCC	RE
Element	Plan (section or annex and page #)	Reviewer's Comments	N	s
A. Does the <b>new or updated</b> plan include <b>a description</b> of the types of <b>all natural hazards</b> that affect the jurisdiction?	Ch. 4 p 20-23			
		SUMMARY SCORE		

## 6. Profiling Hazards

**Requirement §201.6(c)(2)(i):** [The risk assessment **shall** include a] description of the ... location and extent of all natural hazards that can affect the jurisdiction. The plan **shall** include information on previous occurrences of hazard events and on the probability of future hazard events.

	Location in the	cation in the		ORE
Element	Plan (section or annex and page #)	Reviewer's Comments	N	S
A. Does the risk assessment identify the <b>location</b> ( <i>i.e.</i> , geographic area affected) of each natural hazard addressed in the <b>new or updated</b> plan?	Ch. 4 p. 23-66			
B. Does the risk assessment identify the <b>extent</b> ( <i>i.e.</i> , magnitude or severity) of each hazard addressed in the <b>new or updated</b> plan?	Ch. 4 p. 23-66			

LOCAL MITIGATION PLAN REVIEW CROSSWALK			
C. Does the plan provide information on <b>previous</b> occurrences of each hazard addressed in the <b>new or</b> updated plan?	Ch. 4 p. 23-66		
D. Does the plan include the <b>probability of future events</b> ( <i>i.e.</i> , chance of occurrence) for each hazard addressed in the <b>new or updated</b> plan?	Ch. 4 p. 23-66		
	SUMMARY SCORE		

## 7. Assessing Vulnerability: Overview

**Requirement §201.6(c)(2)(ii):** [The risk assessment **shall** include a] description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description **shall** include an overall summary of each hazard and its impact on the community.

	Location in the		SC	ORE
Element	Plan (section or annex and page #)	Reviewer's Comments	N	S
A. Does the <b>new or updated</b> plan include an <b>overall summary</b> description of the jurisdiction's <b>vulnerability</b> to each hazard?	Ch. 4 p. 23-66			
B. Does the <b>new or updated</b> plan address the <b>impact</b> of each hazard on the jurisdiction?	Ch. 4 p. 23-66			
		SUMMARY SCORE		

## 8. Assessing Vulnerability: Addressing Repetitive Loss Properties

**Requirement §201.6(c)(2)(ii):** [The risk assessment] **must** also address National Flood Insurance Program (NFIP) insured structures that have been repetitively damaged floods.

	Location in the		SC	ORE
Element	Plan (section or annex and page #)	Reviewer's Comments	N	S
A. Does the new or updated plan describe vulnerability in terms of the types and numbers of <i>repetitive loss properties</i> located in the identified hazard areas?	Ch. 4 p. 45	Note: This requirement becomes effective for all local plans approved after October 1, 2008.		
		SUMMARY SCORE		

## 9. Assessing Vulnerability: Identifying Structures

**Requirement §201.6(c)(2)(ii)(A):** The plan **should** describe vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard area ....

	Location in the		SC	ORE
Element	Plan (section or annex and page #)	Reviewer's Comments	N	S
A. Does the <b>new or updated</b> plan describe vulnerability in terms of the <b>types and numbers</b> of <b>existing</b> buildings, infrastructure, and critical facilities located in the identified hazard areas?	Ch. 4 p. 23-66	Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.		
<b>B.</b> Does the <b>new or updated</b> plan describe vulnerability in terms of the <b>types and numbers</b> of <b>future</b> buildings, infrastructure, and critical facilities located in the identified hazard areas?	Ch. 4 p. 23-66	Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.		
		SUMMARY SCORE		

#### 10. Assessing Vulnerability: Estimating Potential Losses

**Requirement §201.6(c)(2)(ii)(B):** [The plan **should** describe vulnerability in terms of an] estimate of the potential dollar losses to vulnerable structures identified in paragraph (c)(2)(ii)(A) of this section and a description of the methodology used to prepare the estimate ....

	Location in the		SC	ORE
Element	Plan (section or annex and page #)	Reviewer's Comments	N	S
A. Does the <b>new or updated</b> plan estimate <b>potential dollar losses</b> to vulnerable structures?	Ch. 4 p. 23-66	Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.		
B. Does the <b>new or updated</b> plan describe the <b>methodology</b> used to prepare the estimate?	Ch. 4 p. 23-66	Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.		
		SUMMARY SCORE		

## 11. Assessing Vulnerability: Analyzing Development Trends

**Requirement §201.6(c)(2)(ii)(C):** [The plan **should** describe vulnerability in terms of] providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.

	Location in the		SCC	ORE
Element	Plan (section or annex and page #)	Reviewer's Comments	N	S
A. Does the <b>new or updated</b> plan describe land uses and	Ch. 4 p. 78-81	Note: A "Needs Improvement" score on this requirement will		
development trends?		not preclude the plan from passing.		
		SUMMARY SCORE		

#### 12. Multi-Jurisdictional Risk Assessment

**Requirement §201.6(c)(2)(iii):** For multi-jurisdictional plans, the risk assessment **must** assess each jurisdiction's risks where they vary from the risks facing the entire planning area.

	Location in the		SCC	ORE
Element	Plan (section or annex and page #)	Reviewer's Comments	N	S
A. Does the <b>new or updated</b> plan include a risk assessment for each participating jurisdiction as needed to reflect unique or varied risks?	Ch. 4 p. 23 Ch. 4 p. 65-66 Ch. 4 p. 23-87			
		SUMMARY SCORE		

<u>MITIGATION STRATEGY</u>: \$201.6(c)(3): The plan shall include a mitigation strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools.

#### 13. Local Hazard Mitigation Goals

**Requirement §201.6(c)(3)(i):** [The hazard mitigation strategy **shall** include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

	Location in the			SCC	ORE
Element	Plan (section or annex and page #)	Reviewer's Comments		Ν	S
A Does the <b>new or updated</b> plan include a description of mitigation <b>goals</b> to reduce or avoid long-term vulnerabilities to the identified hazards?	Ch. 5 p. 89-90				
		SUM	MARY SCORE		

#### 14. Identification and Analysis of Mitigation Actions

**Requirement §201.6(c)(3)(ii):** [The mitigation strategy **shall** include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.

	Location in the		SCC	ORE
Element	Plan (section or annex and page #)	Reviewer's Comments	N	S
A. Does the <b>new or updated</b> plan identify and analyze a <b>comprehensive range</b> of specific mitigation actions and projects for each hazard?	Ch. 5 p. 90-93 Appendix D			
B Do the identified actions and projects address reducing the effects of hazards on <b>new</b> buildings and infrastructure?	Ch. 5 p. 94-97 Appendix B			
C. Do the identified actions and projects address reducing the effects of hazards on <b>existing</b> buildings and infrastructure?	Ch. 5 p. 94-97 Appendix B			
		SUMMARY SCORE		

#### 15. Identification and Analysis of Mitigation Actions: National Flood Insurance Program (NFIP) Compliance

**Requirement:** §201.6(c)(3)(ii): [The mitigation strategy] must also address the jurisdiction's participation in the National Flood Insurance Program (NFIP), and continued compliance with NFIP requirements, as appropriate.

	Location in the		SC	ORE
Element	Plan (section or annex and page #)	Reviewer's Comments	N	s
A. Does the new or updated plan describe the jurisdiction (s) participation in the NFIP?	Ch. 4 p. 43-44	Note: This requirement becomes effective for all local mitigation plans approved after October 1, 2008.		
B. Does the mitigation strategy identify, analyze and prioritize actions related to continued compliance with the NFIP?	Ch. 5 p. 93	Note: This requirement becomes effective for all local mitigation plans approved after October 1, 2008.		
		SUMMARY SCORE		

#### 16. Implementation of Mitigation Actions

**Requirement:** §201.6(c)(3)(iii): [The mitigation strategy section **shall** include] an action plan describing how the actions identified in section (c)(3)(ii) will be prioritized, implemented, and administered by the local jurisdiction. Prioritization **shall** include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

	Location in the		SC	ORE
Element	Plan (section or annex and page #)	Reviewer's Comments	N	S
A. Does the <b>new or updated</b> mitigation strategy include how the actions are <b>prioritized</b> ? (For example, is there a discussion of the process and criteria used?)	Ch.5 p. 91-93 Appendix D			
B. Does the <b>new or updated</b> mitigation strategy address how the actions will be implemented and administered, including the responsible department, existing and potential resources and the timeframe to complete each action?	Ch.5 p. 91-97 Appendix B			
C. Does the <b>new or updated</b> prioritization process include an emphasis on the use of a <b>cost-benefit review</b> to maximize benefits?	Ch.5 p. 91-97 Appendix B Appendix D			
D. Does the <b>updated</b> plan identify the completed, deleted or deferred mitigation actions as a benchmark for progress, and if activities are unchanged ( <i>i.e.</i> , deferred), does the updated plan describe why no changes occurred?	Ch. 5. p. 90 Appendix D			
		SUMMARY SCORE		

## 17. Multi-Jurisdictional Mitigation Actions

**Requirement §201.6(c)(3)(iv):** For multi-jurisdictional plans, there **must** be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.

	Location in the		SC	ORE
Element	Plan (section or annex and page #)	Reviewer's Comments	N	S
A Does the <b>new or updated</b> plan include identifiable <b>action items</b> for each jurisdiction requesting FEMA approval of the plan?	Ch.5 p. 94-97 Appendix B			
B. Does the <b>updated</b> plan identify the completed, deleted or deferred mitigation actions as a benchmark for progress, and if activities are unchanged ( <i>i.e.</i> , deferred), does the updated plan describe why no changes occurred?	Ch. 5. p. 90 Appendix D			
		SUMMARY SCORE		

## PLAN MAINTENANCE PROCESS

## 18. Monitoring, Evaluating, and Updating the Plan

**Requirement §201.6(c)(4)(i):** [The plan maintenance process **shall** include a] section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.

	Location in the		SC	ORE
Element	Plan (section or annex and page #)	Reviewer's Comments	N	S
A. Does the <b>new or updated</b> plan describe the method and schedule for <b>monitoring</b> the plan, including the responsible department?	Ch. 6 p. 98-100 Appendix E			
B. Does the <b>new or updated</b> plan describe the method and schedule for <b>evaluating</b> the plan, including how, when and by whom ( <i>i.e.</i> the responsible department)?	Ch. 6 p. 98-100 Appendix E			
C. Does the <b>new or updated</b> plan describe the method and schedule for <b>updating</b> the plan within the five-year cycle?	Ch. 6 p. 98-100 Appendix E			
		SUMMARY SCORE		

## 19. Incorporation into Existing Planning Mechanisms

**Requirement §201.6(c)(4)(ii):** [The plan **shall** include 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.

	Location in the		SC	ORE
Element	Plan (section or annex and page #)	Reviewer's Comments	N	S
A. Does the <b>new or updated</b> plan identify other local planning mechanisms available for incorporating the mitigation requirements of the mitigation plan?	Ch. 6 p. 100 Appendix E			
B. Does the <b>new or updated</b> plan include a process by which the local government will incorporate the mitigation strategy and other information contained in the plan (e.g., risk assessment) into other planning mechanisms, when appropriate?	Ch. 6 p. 100 Appendix E			
C. Does the <b>updated</b> plan explain how the local government incorporated the mitigation strategy and other information contained in the plan ( <i>e.g.</i> , risk assessment) into other planning mechanisms, when appropriate?	Ch. 6 p. 100 Appendix E			
		SUMMARY SCORE		

#### **Continued Public Involvement**

**Requirement §201.6(c)(4)(iii):** [The plan maintenance process **shall** include a] discussion on how the community will continue public participation in the plan maintenance process.

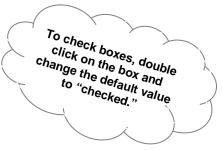
,	Location in the		SCO	ORE
Element	Plan (section or annex and page #)	Reviewer's Comments	N	S
A. Does the <b>new or updated</b> plan explain how <b>continued public participation</b> will be obtained? (For example, will there be public notices, an on-going mitigation plan committee, or annual review meetings with stakeholders?)	Ch. 6. 101 Appendix E			
		SUMMARY SCORE		

#### **MATRIX A: PROFILING HAZARDS**

This matrix can assist FEMA and the State in scoring each hazard. Local jurisdictions may find the matrix useful to ensure that their plan addresses each natural hazard that can affect the jurisdiction. **Completing the matrix is not required**.

Note: First, check which hazards are identified in requirement §201.6(c)(2)(i). Then, place a checkmark in either the N or S box for each applicable hazard. An "N" for any element of any identified hazard will result in a "Needs Improvement" score for this requirement. List the hazard and its related shortcoming in the comments section of the Plan Review Crosswalk.

Hazard Type	Hazards Identified Per Requirement §201.6(c)(2)(i)	A. Lo	ocation	В. Е	Extent		evious rences	D. Prob Future	e Events
	Yes	N	S	N	S	N	S	N	S
Avalanche									
Coastal Erosion									
Coastal Storm									
Dam Failure									
Drought									
Earthquake									
Expansive Soils									
Levee Failure									
Flood									
Hailstorm									
Hurricane									
Land Subsidence									
Landslide									
Severe Winter Storm									
Tornado									
Tsunami									
Volcano									
Wildfire						$\Box$			
Windstorm									
Other									
Other									
Other									



Legend:

§201.6(c)(2)(i) Profiling Hazards

- A. Does the risk assessment identify the location (i.e., geographic area affected) of each hazard addressed in the **new or updated** plan?
- B. Does the risk assessment identify the extent (i.e., magnitude or severity) of each hazard addressed in the **new or updated** plan?
- C. Does the plan provide information on previous occurrences of each natural hazard addressed in the **new or updated** plan?
- D. Does the plan include the probability of future events (i.e., chance of occurrence) for each hazard addressed in the plan?

#### MATRIX B: ASSESSING VULNERABILITY

This matrix can assist FEMA and the State in scoring each hazard. Local jurisdictions may find the matrix useful to ensure that the new or updated plan addresses each requirement. Completing the matrix is not required.

Note: First, check which hazards are identified in requirement §201.6(c)(2)(i). Then, place a checkmark in either the N or S box for each applicable hazard. An "N" for any element of any identified hazard will result in a "Needs Improvement" score for this requirement. List the hazard and its related shortcoming in the comments section of the Plan Review Crosswalk. Note: Receiving an N in the shaded columns will not preclude the plan from passing. To check boxes, double

Hazard Type	Hazards Identified Per Requirement §201.6(c)(2)(i)		Sun Descri Vulne	Overall nmary iption of erability	Im	Hazard pact	Š	of Exist in H (E	es and Number ting Structures lazard Area Estimate)	Number Structures Area (E	oes and of Future s in Hazard stimate)	Losses					click on the box and to "checked."
A a la a a la a	Yes		N	S	N	<u>s</u>	Structures	N.	<u></u>	N	<u> </u>		N	S	N	S	
Avalanche		>	Ц	- Ц	Щ	- Ц	25		Ц Ц			tial		1 4	Щ		
Coastal Erosion	↓	je.	닏ᆜ	<u></u>			Str			$\sqcup \sqcup \sqcup$		en	ᅵᆜ	<del>⊢</del> └	ᅵᆜ		
Coastal Storm		Overview	Ш				g					Potential					
Dam Failure							₹										
Drought		Ę					Identifying					ati					
Earthquake		pili					9					Estimating					
Expansive Soils		Vulnerability:					Ä					Est					
Levee Failure		Ę					I≣					÷					
Flood		\ \cdot \( \cdot \)					raf					ij					
Hailstorm		iš					Vulnerability:					rak					
Hurricane		ess					>					Vulnerability:					
Land Subsidence		Assessing					ing										
Landslide							Assessing					Assessing					
Severe Winter Storm		(2)(					SSI					ess					
Tornado		§201.6(c)(2)(ii)										SS					
Tsunami		1.6					§201.6(c)(2)(ii)										
Volcano		\$20					િંહ					2)(i					
Wildfire							9.1					૽					
Windstorm							50					<u>.</u>					
Other							w					§201.6(c)(2)(ii)					
Other												w					
Other																	

#### Legend:

§201.6(c)(2)(ii) Assessing Vulnerability: Overview

- A. Does the new or updated plan include an overall summary description of the jurisdiction's vulnerability to each hazard?
- B. Does the **new or updated** plan address the impact of each hazard on the jurisdiction?

§201.6(c)(2)(ii)(A) Assessing Vulnerability: Identifying Structures

A. Does the new or updated plan describe vulnerability in terms of the types and numbers of existing buildings, infrastructure, and critical facilities located in the identified hazard areas? B. Does the **new or updated** plan describe vulnerability in terms of the types and numbers of future buildings, infrastructure, and critical facilities located in the identified hazard areas?

§201.6(c)(2)(ii)(B) Assessing Vulnerability: Estimating Potential Losses

- A. Does the **new or updated** plan estimate potential dollar losses to vulnerable structures?
  - B. Does the **new or updated** plan describe the methodology used to prepare the estimate?

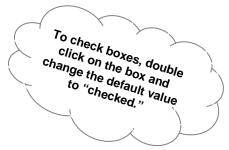
JULY 1, 2008 A - 16

#### MATRIX C: IDENTIFICATION AND ANALYSIS OF MITIGATION ACTIONS

This matrix can assist FEMA and the State in scoring each hazard. Local jurisdictions may find the matrix useful to ensure consideration of a range of actions for each hazard. **Completing the matrix is not required.** 

Note: First, check which hazards are identified in requirement §201.6(c)(2)(i). Then, place a checkmark in either the N or S box for each **applicable** hazard. An "N" for any identified hazard will result in a "Needs Improvement" score for this requirement. List the hazard and its related shortcoming in the comments section of the Plan Review Crosswalk.

Hazard Type	Hazards Identified Per Requirement §201.6(c)(2)(i)	A. Comprehensive Range of Actions and Projects			
	Yes	N	<u>s</u>		
Avalanche					
Coastal Erosion					
Coastal Storm					
Dam Failure					
Drought					
Earthquake					
Expansive Soils					
Levee Failure					
Flood					
Hailstorm					
Hurricane					
Land Subsidence					
Landslide					
Severe Winter Storm					
Tornado					
Tsunami					
Volcano					
Wildfire					
Windstorm					
Other					
Other					
Other					



#### Legend:

§201.6(c)(3)(ii) Identification and Analysis of Mitigation Actions

A. Does the **new or updated** plan identify and analyze a comprehensive range of specific mitigation actions and projects for each hazard?



# APPENDIX B MITIGATION ACTION IMPLEMENTATION PLANS

This page intentionally left blank.

Elbert County—1	
Action Title:	Convene Elbert County Hazard Mitigation Planning Committee semi-annually to monitor, evaluate, and update the hazard mitigation plan.
Background/Issue:	Scheduling semi-annual meetings to evaluate the plan's progress will help to keep the plan action-oriented and will assist with the five-year update process. This action also implements the process for monitoring, evaluating, and updating the plan described in Chapter 6 Plan Maintenance.
Ideas for Implementation:	The Elbert County Hazard Mitigation Planning Committee will meet semi-annually to evaluate the implementation of the plan. The existing Elbert County Community Development Pre-Application Group meets weekly. Twice during the year these regularly scheduled meetings will be devoted to discussing the ongoing monitoring of the mitigation plan. The Elbert County Emergency Manager will schedule this discussion on the agenda and invite members of the Hazard Mitigation Planning Committee to attend.
Responsible Agency:	Elbert County Office of Emergency Management
Partners:	All jurisdictions participating in plan
Potential Funding:	Staff time
Cost Estimate:	Staff time
Benefits:	Maintains an updated and effective plan to reduce risk to people and property in
(Losses Avoided)	Elbert County from natural hazard events
Timeline:	Semi-annually beginning in December 2009
Worksheet Completed by:	LaRiea Thompson, Director/Elbert County Office of Emergency Management

Elbert County—2	
Action Title:	Continue to pursue StormReady designation.
Background/Issue:	Elbert County has a large land mass with property and population spread out.  Warning sirens are not effective. Weather radios work in some portions of the county. Elbert County and partners have invested in a reverse emergency notification and specific weather warning program.
	The project is carried over from the previously approved hazard mitigation plan and only needs the final paperwork submitted to the National Weather Service for recognition.
Ideas for	To be officially StormReady, a community must:
Implementation:	<ul> <li>Establish a 24-hour warning point and emergency operations center</li> <li>Have more than one way to receive severe weather warnings and forecasts and to alert the public</li> <li>Create a system that monitors weather conditions locally</li> <li>Promote the importance of public readiness through community seminars</li> <li>Develop a formal hazardous weather plan, which includes training severe weather spotters and holding emergency exercises</li> </ul>
Responsible Agency:	Elbert County Office of Emergency Management
Partners:	Municipalities, special districts
Potential Funding:	Staff time
Cost Estimate:	Staff time
Benefits: (Losses Avoided)	Early warning will help prevent loss of life and property
Timeline:	Complete in two years
Worksheet Completed by:	LaRiea Thompson, Director/Elbert County Office of Emergency Management

Elbert County—3					
Action Title:	Establish a hazards and risk education campaign.				
Background/Issue:	mproving education and awareness related to hazards and risk in Elbert County is a loal of this plan. Communication is difficult with no media located in the county other han newspapers. This is a project being carried over from the 2003 plan.				
Ideas for Implementation:	<ul> <li>Distribute flyers</li> <li>Conduct workshops</li> <li>Provide information for kids at home through the schools</li> <li>Issue press releases</li> <li>Meet with local groups</li> </ul>				
Responsible Agency:	Elbert County Office of Emergency Management				
Partners:	Elbert County and all jurisdictions participating in the mitigation plan.				
Potential Funding:	Staff time and partnerships with other agencies having community events.				
Cost Estimate:	\$1,500 for flyers to be developed and printed.				
Benefits: (Losses Avoided)	Informing and educating the public on hazard mitigation issues will help reduce future loss of property and life.				
Timeline:	Ongoing activity in next five years				
Worksheet Completed by:	LaRiea Thompson, Director/Elbert County Office of Emergency Management				

Elbert County—4	
Action Title:	Improve coordination between community development, building, and road and bridge departments related to the National Flood Insurance Program (NFIP).
Background/Issue:	Elbert County adopted the NFIP in 2006 and certified a floodplain manager in 2007. Preliminary digital Flood Insurance Rate Maps (DFIRMs) are scheduled to be ready in fall 2009. Because the NFIP is new to the County and the associated regulations are unfamiliar, the affected departments would benefit from some coordination and training with regard to reading the maps and interpreting the additional regulations required for the program. Residents, especially those immediately affected by this program, will have questions and concerns for these County departments following the release of the preliminary DFIRMs in fall 2009.
Ideas for Implementation:	The Building Department will be affected by this program to a greater degree than other departments. It would be beneficial to the County and its residents for a member of that department to become a certified floodplain manager and to be fully trained with regards to FEMA building requirements. Additionally, one or more general workshops in conjunction with the NFIP, including all three departments and open to all departments, would help both the County regulatory departments and the public with the transition to a NFIP community.
Responsible Agency:	Elbert County Community and Development Services/Office of Emergency Management
Partners:	FEMA, Association of State Floodplain Managers, Colorado Water Conservation Board
Potential Funding:	Local building associations and organizations, staff time
Cost Estimate:	\$1,000 Certified Floodplain Manager training; \$2,500 printed material, local training, and workshops
Benefits: (Losses Avoided)	Protect people and property from future flood losses. Improve education and coordination. Avoid possible costly consequences of noncompliance. There will also be unintended negative effects to builders and residents in terms of both property loss and costs of flood insurance as a result of inadequate understanding of the requirements.
Timeline:	Coordination with the arrival of the DFIRMs due in Elbert County in October/November 2009.
Worksheet Completed by:	Carolyn Parkinson/Elbert County Community and Development Services

Elbert County—5	
Action Title:	Incorporate hazard mitigation in Elbert County Master Plan update.
Background/Issue:	The residential component of the Elbert County Master Plan update is completed and approved. However, Community and Development Services plans to add a new section into a future amendment to the Master Plan specifically to address hazard mitigation.
Ideas for Implementation:	The additional chapter would address issues including but not limited to flood hazards, wildfire, and protection from erosion in areas of 20 percent or more slope.
Responsible Agency:	Elbert County Community and Development Services
Partners:	Elbert County Engineering, Colorado Geological Survey, FEMA
Potential Funding:	Chapter will be written in house, funding will be internal
Cost Estimate:	Staff time and contract engineering fees
Benefits: (Losses Avoided)	Minimize property loss and damage; reduce risk to future development
Timeline:	Begin by the end of 2009 and finish by the end of 2010
Worksheet Completed by:	Carolyn Parkinson/Elbert County Community and Development Services

Elbert County—6	
Action Title:	Identify and prioritize stormwater drainage system improvements.
Background/Issue:	Determine potential protection devices to deter catastrophic damage/failure to infrastructure and property via a countywide drainage study.
Ideas for Implementation:	<ul> <li>Prioritize study by population then by drainage basin size</li> <li>Examine former stormwater permit sites</li> <li>Identify areas with many landowner/homeowner complaints</li> </ul>
Responsible Agency:	Elbert County Road and Bridge, Elbert County Public Health
Partners:	FEMA, Colorado Department of Health and Environment, Urban Drainage and Flood Control District, engineering consulting firm
Potential Funding:	Undetermined
Cost Estimate:	Staff time. Consultant services \$40,000-\$60,000.
Benefits: (Losses Avoided)	Protect life, infrastructure, and property by reducing potential flood damage and loss of critical facilities; reduce liability
Timeline:	Complete in two to three years
Worksheet Completed by:	Elbert County Road and Bridge Department/Elbert County Public Health

Elbert County—7	
Action Title:	Develop drainage/erosion control study or project coordinating objectives of various agencies for the Town of Elbert to reduce future flood damage.
Background/Issue:	The unincorporated town of Elbert has significant problems with flooding and ponding caused by years of sediment runoff and inadequate drainage facilities
Ideas for Implementation:	Hire a consulting firm to conduct a drainage study
Responsible Agency:	Elbert County Road and Bridge Department
Partners:	Elbert Water and Sanitation District, Urban Drainage and Flood Control District
Potential Funding:	FEMA Hazard Mitigation Grant Program, Pre-Disaster Mitigation Program
Cost Estimate:	To be determined
Benefits: (Losses Avoided)	Protect life, infrastructure, and property from flood and erosion damage
Timeline:	Complete in five years depending upon funding.
Worksheet Completed by:	Elbert County Road and Bridge Department

Elbert County—8	
Action Title:	Protect historical community documents through digitization.
Background/Issue:	Historic images are deteriorating on the aperture cards and film. No rolled film reading is available in the Recording Office for public or staff use. Microfiche / aperture card reader is obsolete and parts are no long available. All the County departments have old historical books and paper documents that have never been scanned and need to be preserved in case of a hazard event.
Ideas for	Implement the project through a phased approach over the next five-year period:
Implementation:	<ul> <li>Identify scope of paper documents that are needed for digitization with all County departments</li> </ul>
	<ul> <li>Determine most effective cost for equipment needs and personnel to accomplish task</li> </ul>
	Prioritize documents for digitization
	Establish policy and procedures for current day records for all departments
Responsible Agency:	Elbert County Information Technology Department and Administration Department
Partners:	All County departments
Potential Funding:	Grants and County funding
Cost Estimate:	\$350,000
Benefits: (Losses Avoided)	Protect County documents from damage from future hazard events. The benefits of this project also include reduced handling of historical records to preserve them for future generations, reduced need for physical storage, and higher productivity.
Timeline:	Complete in five years
Worksheet Completed by:	Janet L Phillips/ Elbert County Information Technology Department

Elbert County—9	
Action Title:	Develop a special needs population database inventory/registry.
Background/Issue:	A special needs population database needs to be created to ensure emergency responders are aware of where this population resides during emergency events.
Ideas for	Partners to this project have already developed a special needs list.
Implementation:	To implement the project Elbert County will:develop private registry forms from partners,write procedures for privacy of special needs population that are agreed by each participating partner,create GIS map layer, anddevelop method of periodic update and removal from system.
Responsible Agency:	Elbert County Office of Emergency Management
Partners:	Elbert County Social Services/Mental Health/Public Health/Rural Solution partners
Potential Funding:	Grants and donated time
Cost Estimate:	\$10,000 to build database and incorporate into to a web registry.
Benefits: (Losses Avoided)	Protect public health and safety. Knowing where populations with special needs are located will enable emergency response to be adequately prepared ahead of time. It will also provide the ability to prioritize in areas that may experience a disaster or emergency.
Timeline:	Complete in two years
Worksheet Completed by:	LaRiea Thompson, Director/Elbert County Office of Emergency Management

This page intentionally left blank.

Town of Elizabeth—1	
Action Title:	Implement stormwater drainage system improvements.
Background/Issue:	Elizabeth has a historic flow of stormwater that requires redirection and accumulation into detention areas.
Ideas for Implementation:	Update the stormwater ordinance.
	<ul> <li>Budget for stormwater improvements in concert with street improvements through the capital facilities plan to upgrade storm drainage system throughout town.</li> </ul>
Responsible	Elizabeth Public Works Department
Agency:	
Partners:	
Potential Funding:	Municipal Capital Improvement Fund
Cost Estimate:	To be determined
Benefits: (Losses Avoided)	Reduce future flood damage and protect structures and infrastructure
Timeline:	Program implementation would be over next five years with continuous maintenance after.
Worksheet	Chris LaMay/ Michael Gibbs/ Stacey Yarrington
Completed by:	Elizabeth Town Administrator/ Public Works Director/ Town Planner

Town of Elizabeth—2	
Action Title:	Update stormwater ordinance.
Background/Issue:	Stormwater runoff can create flooding problems in Elizabeth. The stormwater ordinance is dated and needs to be updated to help control stormwater runoff.
Ideas for Implementation:	
Responsible Agency:	Elizabeth Planning Department
Partners:	Elizabeth Public Works Department
Potential Funding:	Staff time
Cost Estimate:	Staff time
Benefits: (Losses Avoided)	Reduce future flood damage and protect structures and infrastructure
Timeline:	Ordinance adoption within one year.
Worksheet Completed by:	Chris LaMay/ Michael Gibbs/ Stacey Yarrington Elizabeth Town Administrator/ Public Works Director/ Town Planner

Town of Elizabeth—3		
Action Title:	Develop a special needs populations registry.	
Background/Issue:	Certain populations in our community, such as the elderly and disabled, are more vulnerable during hazard and emergency events. The registry will allow local government to contact vulnerable households when appropriate during emergencies.	
Ideas for Implementation:	Registration will be implemented through the following agencies:  Police contact Social services Medical offices Fire Department contact Senior Center	
Responsible Agency:	Elizabeth Police Department	
Partners:	Medical community, Elbert County Office of Emergency Management, Elbert County Department of Social Services,	
Potential Funding:	Staff time	
Cost Estimate:	Staff time	
Benefits: (Losses Avoided)	Protect human life and safety	
Timeline:	Complete in six months	
Worksheet Completed by:	Chris LaMay/ Michael Phibbs/ Stacey Yarrington Elizabeth Town Administrator/ Chief of Police/ Town Planner	

Town of Elizabeth—4	
Action Title:	Implement water delivery system improvements.
Background/Issue:	There are existing water lines in the Town of Elizabeth that are over 20 years old. Water savings and design for drought events could by incorporated into replacement lines. New lines also would be less vulnerable to other hazard events.
Ideas for Implementation:	<ul> <li>Potential to share costs with new development to replace existing lines</li> <li>Budget for water line improvements through the capital facilities plan to upgrade water lines throughout town.</li> </ul>
Responsible Agency:	Elizabeth Public Works Department
Partners:	
Potential Funding:	Municipal Capital Improvement Fund
Cost Estimate:	To be determined
Benefits: (Losses Avoided)	Reduce impacts of future drought events; protect critical facilities vulnerable to hazard events
Timeline:	Program implementation would be over next five years with continuous maintenance after.
Worksheet Completed by:	Chris LaMay/ Michael Gibbs/ Stacey Yarrington Elizabeth Town Administrator/ Public Works Director/ Town Planner

Town of Kiowa—1	
Action Title:	Assess condition/level of protection of Kiowa levee and upgrade and maintain.
Background/Issue:	The levee located at the edge of Kiowa, on the eastern side, has been there for several years. When the property including its boundary was purchased two years ago, the town began investigating the status and background of the levee. It was discovered that the property was not "recognized" as a levee by the U.S. Army Corps of Engineers; therefore, FEMA does not recognize it either. This is critical to Kiowa's flood insurance rate map and to the protection of the residents.
Ideas for Implementation:	The town is looking for documentation of when and by whom this levee was constructed, then we can have a starting point to gather the critical information on the levee's condition, age, and history. The town will work with surrounding agencies to gather the information necessary to have this levee certified and recognized by FEMA and the Army Corps of Engineers.
Responsible Agency:	Town of Kiowa Water and Planning
Partners:	FEMA, U.S. Army Corps of Engineers, Elbert County, Colorado Department of Transportation
Potential Funding:	U.S. Army Corps of Engineers
Cost Estimate:	This may be a lengthy process if the actual history of this levee cannot be determined. Engineers estimate that we looking at \$ .5 million for the certification of the levee.
Benefits: (Losses Avoided)	A certified and maintained levee is essential to protecting people and structures in Kiowa. It also helps the owners of the adjoining property to be allowed to build in what is now designated as a floodplain area.
Timeline:	Begin the process by securing the funding to determine the condition of the levee.
Worksheet Completed by:	Tina Ceresoli/Kiowa Water and Planning

Town of Kiowa—2	
Action Title:	Mitigate flood risk to the Kiowa schools.
Background/Issue:	This will tie into the status of the levee at the edge of Town, that we are going to examine and determine what happens if this levee is not recognized and kept up to the future safety of the schools located in Kiowa Town limits.
Ideas for Implementation:	Meet with Brett Robinson, the School Administrator, to discuss what actions can be implemented to insure the safety of students and staff in the case of flooding to the buildings and surrounding grounds. Gain support from the schools and the Board of Education.
Responsible Agency:	Town of Kiowa
Partners:	The Board of Education and Kiowa School District, including all three schools that would be affected by the outcome.
Potential Funding:	FEMA Pre-Disaster Mitigation Program, Hazard Mitigation Grant Program
Cost Estimate:	Part of the levee process
Benefits: (Losses Avoided)	Reduce potential flood damages; protect people, property, and critical facilities
Timeline:	Begin the process by securing the funding to determine the condition of the levee
Worksheet Completed by:	Tina Ceresoli/Kiowa Water and Planning

Town of Kiowa—3	
Action Title:	Participate in floodplain map modernization process with Elbert County and update flood damage prevention ordinance as needed.
Background/Issue:	The town has floodplain criteria adopted as part of our planning and approval process for all building within Kiowa since 2001. It is part of all development packages and part of the checklist that is reviewed by all projects, before it even goes before the Planning Commission for review. It is something that the Town of Kiowa takes very seriously since the Elbert flood that wiped out Kiowa in 1935. We are always taking the floodplain and the surrounding areas as a priority within all development reviews. We do review and make sure that the criteria is distributed to each builder with a copy of the current floodplain standards and the effective flood map. The effective flood map is from 1976. New digital Flood Insurance Rate Maps (DFIRMs) are currently being developed as part of FEMA's Map Modernization program. Preliminary DFIRMs are expected in September 2009 and effective DFIRMs in fall 2010.
Ideas for Implementation:	Kiowa will attend meetings related to map modernization process and will review and comment, as appropriate on preliminary DFIRMs when available. Upon effective DFIRMs, the Town will review the flood damage prevention ordinance to determine any needed changes and adopt new maps and updated ordinance.
Responsible Agency:	Kiowa Water and Planning
Partners:	Town of Kiowa Planning Commission and the Board of Trustees; Kiowa Building Inspector.
Potential Funding:	Staff time
Cost Estimate:	Staff time
Benefits: (Losses Avoided)	Reduce potential flood damage to new development. Protect public health and safety.
Timeline:	We can update the ordinance by resolution, when we receive any new information that may improve our existing criteria.
Worksheet Completed by:	Tina Ceresoli/Kiowa Water and Planning

Town of Kiowa—4	Town of Kiowa—4	
Action Title:	Implement stormwater drainage system improvements	
Background/Issue:	Rick Morgan, the Street and Parks supervisor for the Town of Kiowa has met with our administrator, Lyn Boswell, and a potential group of engineers that are coordinating with the Colorado Department of Transportation (CDOT) to implement a strategy for stormwater drainage in the Town of Kiowa. This is an ongoing project and we have already started meetings. We are ready to schedule a meeting with the business owners located along Highway 86, which is one of the most critical areas of concern.	
Ideas for Implementation:	We are looking at a project that will be in coordination with CDOT, Kiowa Street and Parks Department, local businesses, and all properties that are located on the north side of Highway 86, on Kiowa's main street. We are looking at a potential drainage ditch and retention system at the end of the properties, along the north side of Highway 86, and at the same time repairing the sidewalks for the businesses located along this stretch of road.	
	We are also looking at inventive ways to reuse collected stormwater for park irrigation, as well as potential methods for water savings for all parties that participate.	
Responsible Agency:	Kiowa Street and Parks Department, Kiowa Town Administrator	
Partners:	CDOT, businesses and property owners located along northern side of Highway 86	
Potential Funding:	Federal grant money distributed by CDOT. Businesses and property owners will be obligated for \$2,500 for each section of linear footage.	
Cost Estimate:	We are still in negotiations as to the amount of money that the town must match to qualify for the additional funding from CDOT.	
Benefits: (Losses Avoided)	Reduce potential stormwater flooding. Use Recycle- Reuse program with the collected stormwater.	
Timeline:	Within the next 120 days from acceptance of the project and buy-in with the property owners located on the northern corridor of Highway 86 in Kiowa.	
Worksheet Completed by:	Tina Ceresoli/Kiowa Water and Planning	

Town of Kiowa—5	
Action Title:	Implement water delivery system improvements.
Background/Issue:	The Town of Kiowa is in the final days of completing a new water transmission system that includes a new well house and pump system, as well as brand new transmission lines that will deliver the water from our new 1 million gallon tank that is located in the western part town. This project was a huge undertaking that will improve our water deliverance to our residents, as well as future residents that are making Kiowa home.
Ideas for Implementation:	This project began in 2002 with the original designs. It has taken us seven years to be near completion. We are in the beginning stages of start up and it should be online and operating in summer 2009.
Responsible Agency:	Town of Kiowa Water and Planning; Utilities Supervisor
Partners:	RN Civil Construction, State of Colorado Public Health Department, and Colorado Rural Water.
Potential Funding:	This has been funded by grant monies that were initially received, and then by bonds that were issued, and are now is being paid through water bills to property owners.
Cost Estimate:	This is a \$2.5 million project and has taken a lot longer than was first anticipated by the town.
Benefits: (Losses Avoided)	Reduce impacts of future drought events; protect critical facilities vulnerable to hazard events
Timeline:	Completed and tested in summer 2009
Worksheet Completed by:	Tina Ceresoli/Kiowa Water and Planning

Town of Kiowa—6	
Action Title:	Assess and designate shelters and distribute information to public and agencies.
Background/Issue:	We are also working with various agencies to designate buildings to be storm shelters. One of the approved ones is the fellowship hall basement of the Kiowa Creek Community Church. We are also trying to get the Bank of the West to develop a plan so that there is a ready facility located at the middle of town. The Senior Center is also located in the center of town and could potentially be used.
Ideas for Implementation:	Communicate the idea to the Bank of West and explain the urgency to have a safe shelter as well as the goodwill created and example set in the community. Have a representative from the bank talk to the County and establish the criteria for a designated shelter.
	Kiowa will work with the Elbert County Health Department, Sheriff's Office, and Office of Emergency Management to deliver information to citizens. Kiowa will also work with the Elbert County Coalition for Outreach to provide information to residents on safety issues.
Responsible Agency:	Kiowa Water and Planning
Partners:	Elbert County Office of Emergency Management, Elbert County Health Department, Elbert County Social Services, Elbert County Coalition for Outreach, Kiowa Creek Community Church, Bank of the West, and Elbert County Fairgrounds
Potential Funding:	Staff time
Cost Estimate:	Staff time
Benefits: (Losses Avoided)	Protects public health and safety and improves public education and awareness. It provides the residents of Kiowa more potential shelters during emergency events, especially with Ute Village located on the far west end of the town. It also helps alleviate the burden from just one agency.
Timeline:	Ongoing
Worksheet Completed by:	Tina Ceresoli/Kiowa Water and Planning

Town of Kiowa—7	
Action Title:	Adopt a stormwater ordinance.
Background/Issue:	The Town of Kiowa is currently working with the Colorado Department of Transportation (CDOT) to implement a strategy for stormwater drainage along Highway 86 in Kiowa. When this project is completed, the town will adopt a stormwater ordinance. This will provide stormwater drainage criteria for all future projects that are up for approval from the Kiowa Planning Commission and the Board of Trustees.
Ideas for Implementation:	Once the details for the CDOT project are established, we can draft a stormwater ordinance.
Responsible Agency:	Kiowa Town Administrator
Partners:	Kiowa Board of Trustees; Town Attorney
Potential Funding:	Staff time. Kiowa Street and Parks fund.
Cost Estimate:	Staff time. The cost of publishing the ordinance by title is \$250.
Benefits: (Losses Avoided)	Protects existing and future development from stormwater flooding
Timeline:	Within 90 days from the acceptance and completion of the stormwater infrastructure project on Highway 86 in Kiowa.
Worksheet Completed by:	Tina Ceresoli/Kiowa Water and Planning

Town of Kiowa—8	
Action Title:	Develop education and incentives program to encourage water savings measures by property owners in Kiowa.
Background/Issue:	Kiowa is beginning a project with the Colorado Governor's Energy Office and Colorado Resource Conservation and Development Office (RC&D) in Hugo with energy savings program funds from the Energy Efficiency and Community Block Grants. The project will involve the implementation of energy efficiency improvements in public buildings, as well as energy retrofits in existing homes.
Ideas for Implementation:	This will be an educational process that will be backed by the funding from the State of Colorado and will be presented to our residents at the Kiowa Street Fair with an information booth put on by the town government. Additional information will be distributed through the town's newsletter in water bills.
Responsible Agency:	Kiowa Water and Planning
Partners:	Town of Kiowa staff, Colorado Governor's Energy Office, and the RC&D office located in Hugo
Potential Funding:	U.S. Department of Energy, Energy Efficiency and Conservation Block Grant Program
Cost Estimate:	No local match required
Benefits: (Losses Avoided)	Reduce vulnerability to drought through improved water efficiency
Timeline:	Completed by September 2010
Worksheet Completed by:	Tina Ceresoli/Kiowa Water and Planning

Town of Kiowa—9	
Action Title:	Assess protective measures needed for historic structures
Background/Issue:	There are 12 structures that have historical relevancy located within the Town of Kiowa.
Ideas for Implementation:	We have just established a Historical Board. This project will be presented to the Board as a potential first project, once we have determined the structures that are going to be recognized as historical.
Responsible Agency:	Kiowa Water and Planning
Partners:	Kiowa Historical Board; Carol Beam, Historian from Elbert County; and the Elbert County Museum
Potential Funding:	To be determined
Cost Estimate:	To be determined
Benefits: (Losses Avoided)	Reduce risk to community assets in Kiowa
Timeline:	Completed in three to five years
Worksheet Completed by:	Tina Ceresoli, Kiowa Water and Planning

Town of Simla—1	
Action Title:	Identify and prioritize stormwater drainage system improvements.
Background/Issue:	There are numerous locations on Washington Avenue, Cheyenne Avenue, Sioux Avenue, and along Highway 24 throughout town with flooding problems related to stormwater drainage.
Ideas for Implementation:	Hire a professional engineer to evaluate appropriate solutions to correct the affected areas. Develop a drainage plan for the entire town.
Responsible Agency:	Simla Public Works Department
Partners:	
Potential Funding:	General funds for public works; FEMA Pre-Disaster Mitigation Program and Hazard Mitigation Grant Program
Cost Estimate:	\$200,000 to \$300,000
Benefits: (Losses Avoided)	Reduce losses to public and private property and avoid potential liability loss to the town.
Timeline:	Completed in five years or as soon as funding is available.
Worksheet Completed by:	Town Board Committee and Administration

Town of Simla—2								
Action Title:	Assess and designate shelters for natural hazards and other emergencies.							
Background/Issue:	In case of tornado, the town needs a secure place for sheltering residents. The town also needs a place to shelter travelers caught in blizzards until roads open.							
Ideas for	Obtain signed agreements with owners of potential sites.							
Implementation:	Plan for supplying/stocking shelters.							
	<ul> <li>Identify need for tornado safe room and apply for grants if needed.</li> </ul>							
Responsible Agency:	Simla Police Department							
Partners:	Big Sandy Fire Protection District							
Potential Funding:	Staff time. General funds for public safety. FEMA Pre-Disaster Mitigation and Hazard Mitigation Grant Program if determine the need for designated tornado safe room.							
Cost Estimate:	Staff time. Not much cost until stocking the shelters from public safety fund.							
Benefits: (Losses Avoided)	Protect public health and safety. Avoid loss of life due to tornados. Provide refuge for stranded travelers.							
Timeline:	By the end of 2009							
Worksheet Completed by:	Town Board Committee and Administration							

Town of Simla—3									
Action Title:	Obtain backup generators for critical facilities.								
Background/Issue:	Critical facilities, including water and sewer, do not have alternate power sources and service can be interrupted during power outages due to hazard events, such as severe weather, tornados, and winter storms.								
Ideas for	Designate critical systems.								
Implementation:	Price out generators								
	Regularly test and maintain current ones.								
Responsible	Simla Public Works and Water and Sewer Departments								
Agency:									
Partners:	Big Sandy Fire Protection District								
Potential Funding:	General and Water and Sewer funds, Department of Homeland Security grants								
Cost Estimate:	\$25,000 to \$50,000								
Benefits:	Protect critical facilities and continuity of lifeline utilities								
(Losses Avoided)									
Timeline:	Complete in five years								
Worksheet Completed by:	Town Board Committee and Administration								

Elizabeth Fire Protect Kiowa Fire Protect Rattlesnake Fire P	
Action Title:	Develop an Elbert County Wildfire Protection Program that includes public information, resources, and special events to reduce wildfire risk.
Background/Issue:	Improving education and awareness of property owners regarding measures to take and resources available to reduce wildfire risk is essential to protecting people, structures, and agricultural resources from future losses.
Ideas for Implementation:	Develop an Elbert County Wildfire Protection Program with wildfire mitigation information and resources for property owners publicized through County and fire district websites, community events, and newsletters.
	Develop a template for wildfire mitigation that all agencies can use for their jurisdictions.
Responsible Agency:	Elbert County Fire Chiefs Association
Partners:	Elbert County Office of Emergency Management; Agate, Big Sandy, Elbert, Elizabeth, Kiowa, North Central, and Rattlesnake Fire Districts
Potential Funding:	State and federal grant programs
Cost Estimate:	\$260,000
Benefits: (Losses Avoided)	Reduce future losses to structures, life-safety, and agriculture due to wildfire events. Improve public education and awareness.
Timeline:	Establish within two years then ongoing
Worksheet Completed by:	Kara Gerczynski / Elizabeth Fire Protection District

Kiowa Conservation	on District—1								
Action Title:	Form task force to improve coordination with Elbert County and conservation districts, assess conditions of dams, and identify funding sources for repair and maintenance.								
Background/Issue:	The dams along the Kiowa Creek drainage are the Pilot Project for the Watershed Dams and lie within the Kiowa Conservation District. The dams along the Big Sandy Drainage fall within the Double El Conservation District. These watershed (flood control) dams were built by the government under PL-566 in the 1950s and 1960s. The purpose of the dams is to prevent loss of life and/or property from floodwater, erosion, and sediment. With aging, the condition of the dams needs to be closely monitored to identify repair and/or maintenance that may be required.								
	Currently the dams are inspected every five years on a rotating basis by the district. The majority of the dams are also inspected by the Colorado Division of Water Resources-Dam Safety Branch, also on a five-year rotation.								
	Funding currently is by donation only; the district has no mill levy or other income source for funding dam maintenance and/or repair.								
Ideas for Implementation:	Utilize current inspection reports and disseminate the information to Elbert County Commissioners and Elbert County Community and Development Services. Foster communication between County and Kiowa Conservation District with the development of a task force. Continue with inspection of dams and the dissemination of information to County. Along with the Task Force, brainstorm for additional areas of possible funding.								
Responsible Agency:	Kiowa Conservation District – 52 Dams on Kiowa Creek drainage (Elbert County)  Double El Conservation District – 8 Dams on Big Sandy drainage (Elbert County)								
Partners:	Natural Resources Conservation Service, Colorado Division of Water Resources- Dam Safety Branch, Colorado Water Conservation Board, Colorado State Conservation Board								
Potential Funding:	Elbert County Commissioners, donations, grants								
Cost Estimate:	Approximately \$1,000 per year								
Benefits: (Losses Avoided)	Avoid losses to life and/or property from floodwater, erosion, and sediment. Reduce potential loss of agricultural producing land, damage to roads/bridges, and damage to infrastructure. Increase communication between the County and the districts.								
Timeline:	Form within one year, then ongoing.								
Worksheet Completed by:	Eileen Rademacher/Kiowa Conservation District								

Kiowa Conservation	on District—2							
Action Title:	Minimize new development in dam inundation areas and educate public on flood control dam structures and easements.							
Background/Issue:	The dams along the Kiowa Creek drainage are the Pilot Project for the Watershed Dams and lie within the Kiowa Conservation District. The dams along the Big Sandy Drainage fall within the Double El Conservation District. These watershed (flood control) dams were built by the government under PL-566 in the 1950s and 1960s. The purpose of the dams is to prevent loss of life and/or property from floodwater, erosion, and sediment. With aging, the condition of the dams needs to be closely monitored to identify repair and/or maintenance that may be required.							
	Currently the dams are inspected every five years on a rotating basis by the district. The majority of the dams are also inspected by the Colorado Division of Water Resources-Dam Safety Branch, also on a five-year rotation.							
	The district needs to work with Elbert County to identify dam inundation areas. The district also needs to work with Elbert County Community and Development Services on how to best minimize development within these inundation areas. The District and the County together need to widen the scope of information available to the public regarding the flood control structures and their easements.							
Ideas for Implementation:	The district will approach the Natural Resources Conservation Service for possible assistance in delineation of dam inundation areas.							
	The district will work with the task force (identified in the District's Mitigation Action—1), and Community and Development Services to utilize dam inundation information in future development.							
	The district will work with the County to provide public education in relation to the flood control dams through workshops, websites, and news articles. The County and district will also disseminate information on the flood control dams to developers and realtors via brochures.							
Responsible Agency:	Kiowa Conservation District and Double El Conservation District Elbert County Community and Development Services							
Partners:	Natural Resources Conservation Service, Colorado Water Conservation Board, Colorado State Conservation Board							
Potential Funding:	Elbert County, Kiowa Conservation District, Grants, Donations							
Cost Estimate:	Education – approximately \$1,300 per year Consult with contract engineer to determine cost of mapping inundation areas							
Benefits: (Losses Avoided)	Avoid loss to life and property from floodwater, erosion, and sediment. Reduce loss of agricultural land and damage to roads and bridges and infrastructure. Increase awareness of the flood control dams and their purpose by developers, realtors, county employees, landowners of dam properties, and the general public. Identify dam inundation areas for use in future planning and development.							
Timeline:	Complete in five years							
Worksheet Completed by:	Eileen Rademacher/Kiowa Conservation District							

# APPENDIX C PLANNING PROCESS DOCUMENTATION

#### **Contents**

- 1. Invite List to Hazard Mitigation Planning Committee
- 2. Agenda: Hazard Mitigation Planning Committee Kickoff Meeting
- 3. Sign-In Sheet: Hazard Mitigation Planning Committee Kickoff Meeting
- 4. Minutes: Hazard Mitigation Planning Committee Kickoff Meeting
- 5. Agenda: Hazard Mitigation Planning Committee Meeting #2
- 6. Sign-In Sheet: Hazard Mitigation Planning Committee Meeting #2
- 7. Minutes: Hazard Mitigation Planning Committee Meeting #2
- 8. Agenda: Hazard Mitigation Planning Committee Meeting #3
- 9. Sign-In Sheet: Hazard Mitigation Planning Committee Meeting #3
- 10. Agenda: Hazard Mitigation Planning Committee Meeting #4
- 11. Sign-In Sheet: Hazard Mitigation Planning Committee Meeting #4
- 12. Newspaper Articles Publicizing Plan Development
- 13. Mitigation Information Flyer and Questionnaire
- 14. Summary of Responses to Mitigation Plan Questionnaire
- 15. Elbert County Website Screen Shot with Mitigation Questionnaire
- 16. Agenda: Elbert County Planning Commission Meeting
- 17. Newspaper Notices of Availability of Draft Plan for Public Review and Comment
- 18. Letter to Community Distribution List Inviting Comment on Draft Plan
- 19. Public Comment Received

# **Invite List to Hazard Mitigation Planning Committee**

Elbert County Board of County Commissioners

All Elbert County Departments

Town of Elizabeth

Town of Kiowa

Town of Simla

All Fire Protection Districts

Elbert Water and Sanitation District

Kiowa Conservation District

Elbert County News

CH2M Hill, County Engineering Contractor

Colorado Division of Emergency Management

Colorado Water Conservation Board

Colorado State Forest Service

Colorado State University Extension Service

# Agenda

# **Elbert County Multi-Hazard Mitigation Plan Kickoff Meeting**

February 17, 2009 9:00 AM-12:00 PM Elbert County Government Building Board of County Commissioners Meeting Room 215 Comanche Kiowa, CO 80117

- 1. Opening Remarks (5 min)
- 2. Introductions (10 min)
- 3. Hazard Mitigation Planning: Purpose, Benefits, and Requirements (30 min)
- 4. Multi-Jurisdictional Participation (10 minutes)
- 5. Hazard Mitigation Planning Committee (10 min)
- 6. Planning for Public Involvement (15 min)

Break (10:30-10:45)

- 7. Hazard Identification and Data Sources (45 min)
- 8. Homework I: Capability Assessment Form
- 9. Next Meeting

Sign-In Sheet Kickoff Meeting: February 17, 2009

Name	Jurisdiction/ Department	Address	Phone	E-Mail
Demy VAN WAY	DEM ELBERT (OUNTY	751 UTE AVE KICWA (O	3) 805 6132	DENNY. VAN WHY  @EBERTIOUNTY- (O. GO)
LAKIEH Memisson	13		(3)805 6131	DELBERTIONNIY-CO. GOD
MEG HALFORD	CSFS	Hwy 83 FT	307-660-9625	303-660-9625 mhalkerd @ Janas. colopy
12 Se EW Meland	Beart Care Die	16706 C. R.166 Kussely 303-621-2114	303-621-2114	
Del Schurch	Comm Office		303-621-3132	
Daw Harted	HEMITH DODT	POBUXDU/ KlawA	36313193	36213193 40Ry. hMTzelledoerTam
Caren Pelina	Om Day		3.1.735	30 2 - 735 revolun sich leuse
BOB MURICK	Meintannor	213 COMMUNISE	303-621-3151	Co of court
Janne McLain	Dss	3080× SHY Know 303-621-3214	403-621-3214	joanne. melaing state co.
CASS KILDUFF	RATTURNAKE	44220 WAL CREDE	1118.48 EDE	303 94.8111 Chief _52 @ CATILES WAKE
Ting Bulas	Suila fire	76 hox (61 Svila	719-541-2883	719-541-2883 + Daylow@ Simbofine of
MING PHON	ELIENBATH P.D.	POR 1547, EUZHBETH BOIDT 7 646-4664 MANIBARCEI. GIZABETH LOUS	7 646-4664	manibor Oci. elizabeth cous
1 Stack	ALZAROTATO	Po Box 441, ELizabeth	3/246-3800	A Box 441, ELILABETH 3/646-3800 MODELINGETHFIRE SON
Kara Gerczynski	EFT)	DOBOX44/ Elicabath	646-380C	(Cerral Delizabetire
Billy Tann	BLD Dipt	PO Box 7 Kiona 621- 3146	9hR -129	) )

Sign-In Sheet Kickoff Meeting: February 17, 2009

×

	olbertoun to	(12 docth.co. c)	lat. cow	(B)	) sy	35	0 - 201 2 - 201 2 - 201	A. C. us	dirpoint.et	A. gall A. com t. et	A. gold for	dir point to the	A. Cous A. Cous A. Cous A. Cous A. Cous A. Cous B. Cou	A. and A.
E-Mail	richard.miller collection to	clamay Ocivelization	الحراهم هادر، وإن	marilyngally@			Sedi-Maisman C slow transby-la-gol Lob-wold postek.co. u	Shesidan B	Shesidan Books	Shes: dan a	Shes: dan a	Shesidan as	Shesidan B.	Shes: dan as
Phone	303 621-3136	303 616-4166	1 303. 64 k-09-16	303273 1712		3/621-2630		31-21-2030 320872631 719-541-3268	303-626-2030 319-541-2268 303-626	3621-2030 Jod: Maisman & all 120 852651 Job: wolders let. co. us 720 852651 Job: wolders let. co. us 303-6216 Shes: Jun @ Pair point 118th	302-2030 308-541-2268 303-621	302-2030 319-541-2268 303-621.	305-2030 319-541-3268 303-636 303-636 303-636	303-2030 308-541-2268 303-626 303-626 303-626
Address		PO BUX 157 ELIZORO7 303 616-4166	16. Bux 159 Elizable Strong 303. 64 14-0916 Maybe Ach, Elizably Coly	152205. Edden Rd, Centruliac			9195 E. MILLIAM BOILD							
				Kraf	1	\$ 1700 G	oth	Et.	To My	TE MES	£ 2	£ 20	£ 20	£ 2
Jurisdiction/ Department	CXDSO	Townor Eleabell	Fun 1/8/ 124	CO Div of EMERG. MAG		S. TO TOTA	Eller Camman	Ellest Cammuca Cacm	Ellert Cammune CACM Elle Co Re Ellert Cam	Elbertan	Elbertan	Elbertan	Ellert Cammune CACM EllertCam EllertCam	Ellert Cennana CACM Elbert Cam
Name	1. CAMPS 4/1/65	LAMAS.	S	un Gally		9	ni Meisman	Sman	C, san	C, san	C, Dan	C, Dan	C, Dan	C, Dan C, Dan
	Xick	Chair	- 10/2	Marilyn			Sec. 1	Sal Li	ST ST	1 20 Page 1 1 20 Page 1 1 20 Page 1	Se la Se	See 1 20 See	Sept 1 Sept 1	Sept 12 Sept 1 S



# Memorandum

Date: February 19, 2009

To: Elbert County Hazard Mitigation Planning Committee

From: Julie Baxter, URS Project Manager

Subject: Meeting Minutes: Elbert County Multi-Hazard Mitigation Plan Kickoff

This memo includes the meeting minutes from the February 17, 2009, kickoff meeting for the Elbert County Multi-Hazard Mitigation Plan. The kickoff meeting was held from 9:00 am-12:00 pm at the Elbert County Government Building in Kiowa, Colorado.

#### 1.0 ATTENDEES

LaRiea Thompson	Elbert County Office of Emergency Management
Denny VanWhy	Elbert County Office of Emergency Management
Del Schwab	Elbert County Commissioners Office
Gary Hartzell	Elbert County Health Department
Carolyn Parkinson	Elbert County Community and Development Services
Richard Miller	Elbert County Community and Development Services
Jodi Meisman	Elbert County Communications - GIS
Bart Chambers	Elbert County Assessors Office - GIS
Bob Murick	Elbert County Maintenance
Billy Tanner	Elbert County Building Official
Tim Sheridan	Elbert County Road and Bridge
Mike Phibbs	Elizabeth Police Department
Michael Gibbs	Elizabeth Public Works
Chris LaMay	Town of Elizabeth
TJ Steck	Elizabeth Fire District
Kara Gerczynski	Elizabeth Fire District
Tina Barlow	Simla Fire Department
Cass Kilduff	Rattlesnake Fire District
Robert Whitehead	Kiowa Conservation District
Meg Halford	Colorado State Forest Service
Joanne McLain	Colorado Department of Human Services
Marilyn Gally	Colorado Division of Emergency Management
Bob Wold	Colorado Division of Emergency Management
Ashley Dieterle	Elbert County News
Julie Baxter	URS
Cindy Popplewell	URS



#### 2.0 INTRODUCTIONS

LaRiea Thompson, chair of the Hazard Mitigation Planning Committee, began the meeting by welcoming and thanking the attendees. LaRiea described the previous hazard mitigation planning project, the Northeast Colorado Emergency Managers Association Hazard Mitigation Plan completed in 2003, in which the County participated with 10 other counties. This planning project is a required update of the previous plan and will focus specifically on the risks and priorities of Elbert County and its communities. LaRiea introduced the consulting firm, URS Corporation, hired by the County to facilitate the plan's development. The attendees at the meeting introduced themselves and the organization they represented. Julie Baxter, the URS project manager for the plan facilitated the remainder of the meeting.

#### 3.0 HAZARD MITIGATION PLANNING OVERVIEW

The purpose of natural hazards mitigation is to reduce or eliminate long-term risk to people and property from natural hazards. Elbert County is developing this multi-hazard mitigation plan to reduce future losses to the County and its communities resulting from natural hazards. The plan is being prepared pursuant to the requirements of the Disaster Mitigation Act of 2000. Julie presented information on the purpose and requirements of the Disaster Mitigation Act. She explained the benefits for local governments and districts of participating in the mitigation plan including eligibility for federal funding programs.

Julie also described the need to form a Hazard Mitigation Planning Committee to guide the planning process and make key decisions. Participants in the committee will need to:

- Attend and participating in meetings,
- Provide available data.
- Review and comment on plan drafts,
- Advertise and assist with the public input process, and
- Coordinate the formal adoption of the plan.

Julie outlined the planning process and its phases, which are designed to meet the requirements of the Disaster Mitigation Act of 2000 and the Federal Emergency Management Agency's (FEMA) associated guidance, as shown in the table below.

#### 10-Step Planning Process

- 1. Organize Resources
- 2. Plan for Public Involvement
- 3. Develop Risk Assessment
- 4. Identify Goals and Objectives
- 5. Identify Mitigation Actions
- 6. Establish Plan Maintenance Process
- 7. Draft the Plan
- 8. Review and Revise Plan
- 9. Submit the Plan
- 10. Adopt the Plan

Representatives of Elbert County; the towns of Elizabeth and Simla; the fire districts of Elizabeth and Rattlesnake; and the Kiowa Conservation District were present at the kickoff meeting and will be participating jurisdictions in the plan. The group discussed the participation requirements for jurisdictions. LaRiea and Julie



will follow-up with and provide additional information to the Town of Kiowa, school districts, and remaining fire districts about participating in the plan.

#### 4.0 PLANNING FOR PUBLIC INVOLVEMENT

The group identified the following additional stakeholders that should be involved in the planning process.

- Rural Electric Districts
- Upper Big Sandy Groundwater Management District
- Colorado Department of Transportation

The meeting attendees discussed methods for involving the public in the plan. Information about the planning process and plan drafts will be posted on the County website and available at community locations, such as libraries. The committee discussed presenting information on the hazard mitigation plan as part of Severe Weather Awareness Week, an Elbert County Planning Commission meeting, and/or the Elizabeth Stampede in June. The committee will finalize the outreach strategy at the next meeting.

#### 5.0 HAZARD IDENTIFICATION

The group discussed a list of potential hazards that could affect the planning area and the information available on previous occurrences, location, and magnitude of each hazard. The major hazards that the plan will focus on are flood, wildfire, winter storm, tornados, and drought. The committee indicated that manmade hazards should not be addressed in this plan, although pipelines, railroads will be discussed as critical infrastructure vulnerable to multiple hazards.

#### 6.0 HOMEWORK I: CAPABILITY ASSESSMENT FORM

Julie handed out the Capability Assessment Form to help collect more detailed information from each jurisdiction on their existing capabilities related to mitigation, including regulatory, personnel, technical, and fiscal capabilities. Attendees were asked to assign one person as the point of contact for each participating jurisdiction and to coordinate returning one Capability Assessment Form for each jurisdiction to Julie by Friday, February 27.

#### 7.0 NEXT MEETING

The group tentatively decided upon holding the next meeting to review the draft risk assessment and develop goals and objectives on Tuesday, April 14, 2009, from 9:00 am-12:00 pm at the Elbert County Government Building in Kiowa, Colorado. An email invitation will be sent two weeks prior to the meeting.



### ELBERT COUNTY MULTI-HAZARD MITIGATION PLAN 2009 UPDATE

### Agenda

# Elbert County Multi-Hazard Mitigation Plan Meeting #2 Risk Assessment

April 14, 2009 9:00 AM-12:00 PM Elbert County Government Building Board of County Commissioners Meeting Room 215 Comanche Kiowa, CO 80117

- 1) Welcome and Introductions
- 2) Brief Review of Plan Purpose and Process
- 3) Update on Jurisdictional Participation
- 4) Results of Risk Assessment

Break (10:30-10:45)

- 5) Mitigation Strategy Overview
  - Mission
  - Goals
  - Actions
- 6) Review and Approve Outreach Strategy
- 7) Next Steps



Sign-In Sheet Meeting - Risk Assessment: April 14, 2009

Name	Jurisdiction/ Department	Address	Phone	E-Mail
MICHAEL F. FOOT	RICER P.D.	P.O. BOX237 60. 8117	303-621.2160	KeoTul Town frank. con
TIMA CERESOLZ	Kiona	DO 60x 23) KINSAIN	303 62/336	0 60x 23) King 303 62/236 Technica) Town of Knagon
Your Harriel	BEST P.H+ ENUIR.	PO.BUX 301 KILLY	303 62 (3193 -00,501)	They thatself elbertland
SHELLANE () DRUAN			303614-634	3035141-6348 SVAdornan@ Jahas.con
BryAn Bowsn	RATIESMANIE FINE	Years at creen on	303-981-1686	Green on 303-981-1686 RSCTIC MY SOL. COM
Chais La MAY	Town Elizabeth		797 - 4186	clamay @ c. elimbetha.
Lool Meisman	Communications		3/621-2030	3/621-2030 Jost Maisman
Meridan Pulens	Paning + Zonny	Bont Counthouse	3621-3135	Bent Counthouse 3 621-3135 Carolyn. parlainsa (C)
Del Schwab	9			libert comm
Kara Gercernoli	# lizabethana	P.O. BOX 441 & 1.20.12	h 3/646-3800	P.O. Box 441 & lizabeth 3/646-3800 Kara(OctizabethRive.
Ed Ehmann	N. W.		3621/3157	3621/3157 ed. chman @ elsotiggisty
Janes Phillips	System Specialism		503-621-3183	1.0. Box7 K. Ow 303-621-3183 janet. Phillips Redont
GARAY ROHLEDED	Covary Scholeyor	PO POX GOZ	303 6489755	307 6489755 WRSERSGNATERPECA
Kipo Nye	19CSU Faterson	P.O. Bux 189	303-421-3162	303421-3162 Kipp. Mye Quolostato, edu
1,1				

Sign-In Sheet Meeting - Risk Assessment: April 14, 2009

E-Mail	Kevin, houdiostate, co.us	Distrostel Palhertanni	THE WITH DET MFIRE, CON	Washordy struct	)					
Phone	303-866-3441 x3219	303.621-3117	3/646-3820	3)62-2233	(3)621-3193			* a		
Address	1313 Sheman St # 721 303-866-3441 Kevin, houck@state, co.us	PO Box 26 Kiawa 303.621-3117 pirtrostel Palnertanis	BBX441 ELINBEN	1. 70 Hore 321 (3) 621-2233 Kinapordyportment						
Jurisdiction/ Department	Rd	2	STANDEN FIRE	LEAST PARTIN.	GIS.				v	
Name	Kavin Houch	PS TRESTER	1 Sugar	DIAN BOWERS	Bartehambas					



# Memorandum

Date: April 14, 2009

To: Elbert County Hazard Mitigation Planning Committee

From: Julie Baxter, URS Project Manager

Subject: Meeting Minutes: Elbert County Multi-Hazard Mitigation Plan Meeting #2

This memo includes the meeting minutes from the April 14, 2009, meeting of the Elbert County Hazard Mitigation Planning Committee. The meeting was held from 9:00 am-12:00 pm at the Elbert County Government Building in Kiowa, Colorado.

# 1.0 ATTENDEES

LaRiea Thompson	Elbert County Office of Emergency Management
Del Schwab	Elbert County Commissioners Office
Gary Hartzell	Elbert County Health Department
Carolyn Parkinson	Elbert County Community and Development Services
PJ Trostel	Elbert County Assessor
Bart Chambers	Elbert County Assessors Office - GIS
Jodi Meisman	Elbert County Communications - GIS
Janet Phillips	Elbert County Systems Specialist
Bob Murick	Elbert County Maintenance
Billy Tanner	Elbert County Building Official
Ed Ehmann	Elbert County Road and Bridge
Gary Rohleder	Elbert County Surveyor
Shellane Dorman	Elbert County Water Board
Tina Ceresoci	Town of Kiowa
Michael Root	Kiowa Police Department
Chris LaMay	Town of Elizabeth
TJ Steck	Elizabeth Fire Protection District
Kara Gerczynski	Elizabeth Fire Protection District
Bryan Bowen	Rattlesnake Fire Protection District
Dian Bowers	Kiowa Fire Protection District
Kipp Nye	Colorado State University Extension Service
Kevin Houck	Colorado Water Conservation Board
Julie Baxter	URS

## 2.0 INTRODUCTIONS

LaRiea Thompson, chair of the Hazard Mitigation Planning Committee, began the meeting by welcoming and thanking the attendees. LaRiea introduced the consulting firm, URS Corporation, hired by the County to facilitate the plan's development. The attendees at the meeting introduced themselves and the organization they represented. Julie Baxter, the URS project manager for the plan facilitated the remainder of the meeting.



### 3.0 MULTI-JURISDICTION PARTICIPATION

Julie reported that she had collected Homework I: Mitigation Capability Assessment from the following jurisdictions:

- Elbert County
- Town of Elizabeth
- Town of Kiowa
- Town of Simla
- Rattlesnake Fire District
- Elizabeth Fire District
- Kiowa Fire District

These jurisdictions are officially participating in the plan to become eligible applicants for FEMA mitigation grant programs.

### 4.0 RISK ASSESSMENT

Julie presented information on each of the hazards identified in the plan, including information on past occurrences, future probability, magnitude, and overall risk ranking to the planning areas. The risk assessment identified the following hazards affecting Elbert County:

Ha	zard	Risk Ranking
•	Flood	High
•	Wildfire	High
•	Tornado	High
•	Severe Winter Storm	High
•	Severe Weather	High
•	Drought	Medium
•	Dam Failure	Low
•	Earthquake	Low

The Planning Committee discussed the following items related to hazards:

- Change the risk ranking of severe weather from medium to high due to the frequency of severe lightning, hail, and wind events.
- Dam Failure: Potential action to form a task force/group to study dam maintenance and upkeep issues and include a public education component.
- Flood: The age, owner, or condition of the levee in Kiowa is unknown; neither the Town nor Colorado Water Conservation Board have a design record. The integrity of the levee in protecting the downtown Kiowa in a large flood event is unknown. New flood maps will not show the levee. Kiowa Middle School is located within the floodplain. Elbert wastewater treatment plant has been elevated.
- Wildfire: Planning Committee would like to see infrastructure and oil tank farms mapped with wildfire hazard layer. Peaceful Valley Boy Scout Camp is a high use area in the summer with fire risk. Evacuation may be a concern.
- Tornado: Mainly occur in the eastern parts of the County where population is sparse. There is also a pocket in the northwest corner of the County that is more prone to tornados.
- Severe winter storm: Livestock are a concern. In the 40s animals had to be fed and there were mass burials.



- Drought: Many homes in the County are on wells. During drought, need to publicize recommendations for water conservation. The Planning Committee discussed other water conservation policies, such as tiered rate structures.
- The Planning Committee decided to remove the hazards of landslide, noxious weeds, and wildlife/insects from the plan. There is low risk and no record of past events for landslides. Noxious weeds and wildlife/insects are better addressed in other plans and programs and are not eligible for FEMA mitigation funding programs.
- The Planning Committee decided not to address expansive soils and erosion/deposition in the plan because they have not caused notable damage to property or people in the past. Expansive soils and other soil-related hazards are addressed in County's development policies.

### 5.0 MITIGATION STRATEGY

Julie presented definitions and examples of a mission, goals, and actions for a mitigation plan and described six categories of mitigation actions: prevention, property protection, natural resources protection, structural, emergency services, education and awareness. The Planning Committee reviewed the goals of the Colorado State Hazard Mitigation Plan and the 2003 regional hazard mitigation plan. Julie presented proposed updated mission and goals, which the group reviewed and revised. The following were approved for the 2009 plan:

**Mission:** Reduce risk to the people and property of Elbert County from the impacts of natural hazards **Goals:** 

- Improve education and awareness of hazards and risk reduction measures
- Protect critical facilities, infrastructure, and other community assets from hazards
- Incorporate hazard mitigation into future development plans and policies
- Enhance local mitigation capabilities, including human, technical, financial, and regulatory capabilities
- Improve communication and coordination of mitigation activities between federal, state, and local governments and with private and non-profit organizations

### 6.0 PUBLIC INVOLVEMENT STRATEGY

The Planning Committee agreed on the following strategy to involve the public and other interested parties in the hazard mitigation plan.

### **Provide/Receive Information at Community Events**

- 9 News Health Fair April 18
- Elizabeth Stampede June 5-7

# **Present and Discuss with Local Officials**

- Elbert County BOCC
- Elbert County Planning Commission
- Town Boards: Elizabeth, Kiowa, Simla

### **Distribute Draft Plan for Review**

- Websites
- Community Locations

# 7.0 NEXT STEPS

The two final meetings of the Planning Committee will identify and prioritize mitigation actions and will take place in May. Invitations will be sent in the next few weeks.

This page intentionally left blank.



# ELBERT COUNTY MULTI-HAZARD MITIGATION PLAN 2009 UPDATE

# Agenda

# **Elbert County Multi-Hazard Mitigation Plan Meeting #3 Mitigation Actions**

May 12, 2009 12:30-3:30 PM Public Health Building, Bijou Room 75 Ute Avenue Kiowa, CO 80117

- 1) Welcome and Introductions
- 2) Risk Assessment Summary
- 3) Review Mitigation Strategy Components
- 4) Mitigation Actions Brainstorming

Break (1:45-2:00)

- 5) Hazard Working Groups
- 6) Report Back
- 7) Next Steps



Sign-In Sheet Meeting 3- Mitigation Actions: May 12, 2009

Name	Jurisdiction/ Department	Address	Phone	E-Mail
Michelle Mattive	9503	F.a. 484 8017	3/605-6110	michelle. mattive @ estantesunty-00.gov
Robert Enhitehead	Mow 2 Coms Dist	P.O.BOX 688 Fram 1 Town, 80116	303-621-0070	
Tha content	3	PO 30x 23 2 80117	(3)621-3366	
Kichard Marcan	Tawn of Hina	125 44 237 Co 80(17 (3)601- 334	3/601-336	
Lock Mersmer	(D MMUNICATION		9421-2030	
Land L. Phillips	77	20. BOX 7	303-621-3183	303-621-3183 jand. Phillips @ Gov
Jon Borus	Kinahu	n 2432/w 2011 (3) 121-2233	3)621-2233	Considerations at not
Haven Vaxington	Town & Elizabeth	POBOY 159 80107	203	4.
App. 184		10362 C.R. 120	303-621-2088	CAROLD OMTODE. COM
Kara Cerrerusti	Elizabeth Fire	44	303-646-5800	80107 303 646-5800 Haralelizabethrire.com
Commen Pallanson	Community +		33631-3135	23621-3135 Cardyn Jarkingman Charles
GARRY ROHEDER	E.C. Surveyor	P.O. Box 602	303-648-9738	303-648-9738 WR SERVISSE retrogenor
John Milan	GC 055	PO Box 544	3-621-324	3-621-324 panne malan Bistide cous
Del Scharb (	By missioner		3-621-3231	3-621-3231 Cp. Shuab county
Ed Ehmann	Elbort Co R&B Sinla Ai	7(621/3157 ed chramp CO.90	3/621/3157 ed	erteamp co.900



# ELBERT COUNTY MULTI-HAZARD MITIGATION PLAN 2009 UPDATE

# Agenda

# Elbert County Multi-Hazard Mitigation Plan Meeting #4 Mitigation Actions

May 19, 2009 9:00-11:00 AM Elbert County Government Building Board of County Commissioners Meeting Room 215 Comanche Kiowa, CO 80117

- 1) Welcome and Introductions
- 2) Plan Maintenance Process
- 3) Summary of Responses to Mitigation Questionnaire
- 4) Mitigation Action Prioritization
- 5) Homework III: Jurisdictional Implementation Worksheets
- 6) Draft Plan Review Schedule



Sign-In Sheet Meeting 4- Mitigation Actions: May 19, 2009

Address Phone
Elosationala asan ost
10562 C. R. 120 308-621-2088
1
18 Bx 441 A12.

# Plan to help emergency situation Elbert County News

Special to the News April 30, 09

Elbert County, the towns of Elizabeth, Kiowa and Simla, and local fire districts are developing a Multi-Hazard Mitigation Plan to reduce the vulnerability of people and property to the impacts of natural hazards and disasters before they occur.

# What Is a Multi-Hazard **Mitigation Plan?**

is sustained action taken to reduce or eliminate longterm risk to human life and property from natural haz- tion and coordination of mitards. Elbert County has experienced disasters in the federal, state, and local govpast and our citizens, prop- ernments and with private vent hazards from reaching government Web site, Plan, contact I erty, and infrastructure are and non-profit organizavulnerable to flooding, tions wildfire, tornados, severe winter storms, and other Types of Mitigation Actions sizing replacement and www.elbertcounty-bertCounty-CO.Gov hazards.

disasters. An approved mitigation plan also establishes eligibility for mitigation project funding programs of

# **Multi-Hazard Mitigation** Plan goals

The Elbert County Hazard Mitigation Planning committee, which is composed of plan:

people and property of El- struction and defensible

bert County from the im- space/fuels modification. pacts of natural hazards

Goals:

- awareness of hazards and risk reduction measures
- Protect critical facilities, infrastructure, and other community assets from haz-

Incorporate hazard mitigation into future development plans and policies

- Enhance local mitiga-Natural hazard mitigation tion capabilities, including human, technical, financial, and regulatory capabilities
  - Improve communicaigation activities between

The Hazard Mitigation The mitigation plan iden- Planning Committee is contifies potential hazards and sidering mitigation actions vulnerabilities and outlines to reduce the impacts of long-term strategies to min- future disasters on people imize the impacts of future and property in the County. Here are examples of the types of actions they are considering:

- Prevention: Measures the Federal Emergency designed to keep the prob-Management Agency (FE- lem from occurring or getting worse using planning and zoning, open space preservation, floodplain development regulations, and storm-water management.
- Property Protection: participating jurisdictions Measures used to modify and stakeholders, developed buildings to reduce damage the following mission and from hazards using acquisigoals for the mitigation tion/relocation of floodprone property, flood-Mission: Reduce risk to the proofing, fire wise con-

- Natural Resource Protection: Measures to reduce tivities to advise citizens, tionnaire. The co Improve education and hazard impacts by protecting natural functions of tors about hazards and mit-turned by mail to th ecosystems and open space igation measures using haz- County Office of Em using erosion and sediment ard maps, outreach and ed- Management, P.O. control, wetlands protec- ucation programs, real es- Kiowa, COLO, 8011 tion, open space preserva- tate disclosures and techni- to 303-805-6161 or tion and wildfire fuels man
  - during and after a hazard event using warning and evacuation methods, protection of critical facilities and protection of lifeline about your priorities for reutilities.
  - Measures to reduce or pre- linked to the Elbert County Multi-Hazard Mit properties using deten- www.elbertcounty-co.gov Thompson, Elbert tion/retention structures, under the Emergency Man- Emergency Mana sediment basins, culvert re- agement link or visit 303-805-6131 or Ol

storm sewers.

Public Information: Ac- cy.php to answer th property owners, and visi- questionnaire may cal assistance.

We need your input on CO.Gov by May 8. Emergency Services: this important plan, which Measures to protect people must be approved by each will also be available participating jurisdiction, at www.elbertc the State of Colorado, and co.gov and at sever FEMA.

A questionnaire asking ducing risk to natural haz-Structural Projects: ards in Elbert County is about the Elbert

co.gov/dept\_em to or OEM@Elbert

The complete dr munity locations th for public review ar ment.

If you have qu

# County hazard mitigation group seeking public input by May 8

By Beth Shelly

The Elbert County Hazard Mitigation Planning Committee is looking for public input by May 8 to assist in developing a multi-hazard mitigation plan to reduce the vulnerability of people and property to the impacts of natural hazards and disasters before they occur.

Elbert County, the towns of Elizabeth, Kiowa and Simla, and local fire districts are developing the plan to reduce or eliminate long-term risk to human life and property from natural hazards.

Elbert County has experienced disasters in the past and our citizens, property, and infrastructure are vulnerable to flooding, wildfire, tornados, severe winter storms, and other hazards.

The mitigation plan identifies potential hazards and vulnerabilities and outlines long-term strategies to minimize the impacts of future disasters. An approved mitigation plan also establishes eligibility for mitigation project funding programs of the Federal Emergency Management Agency (FEMA).

The mission set by the Elbert County Hazard Mitigation Planning Committee, composed of participating jurisdictions and stakeholders, is to reduce risk to the people and property of Elbert County from the impacts of natural hazards with the following goals:

- Improve education and awareness of hazards and risk reduction measures.
- Protect critical facilities, infrastructure, and other community assets from hazards.
- Incorporate hazard mitigation into future development plans and policies.
- Enhance local mitigation capabilities, including human,

technical, financial, and regulatory capabilities.

• Improve communication and coordination of mitigation activities between federal, state, and local governments and with private and non-profit organizations.

Examples of the types of actions they are considering:

Prevention: (Measures designed to keep the problem from occurring or getting worse) planning and zoning, open space preservation, floodplain development regulations, and stormwater management.

Natural Resource Protection: (Measures to reduce hazard impacts by protecting natural functions of ecosystems and open space) erosion and sediment control, wetlands protection, open space preservation, and wildfire fuels management.

Structural Projects: (Measures to reduce or prevent hazards from reaching properties) detention/retention structures, sediment basins, culvert resizing replacement, and storm sewers.

Property Protection: (Measures used to modify buildings to reduce damage from hazards) acquisition/relocation of flood-prone property, floodproofing, firewise construction, and defensible space/fuels modification.

Emergency Services: (Measures to protect people during and after a hazard event) warning and evacuation, protection of critical facilities, protection of lifeline utilities, and communications.

Public Information: (Activities to advise citizens, property owners and visitors about hazards and mitigation measures) hazard maps, outreach/education programs, real estate disclosure, and technical assistance.

See HAZARD Page 5A

WECS - 4/23/09



# WE NEED YOUR INPUT!

# ELBERT COUNTY MULTI-HAZARD MITIGATION PLAN

Elbert County, the towns of Elizabeth, Kiowa, and Simla, and local fire districts are developing a Multi-Hazard Mitigation Plan to reduce the vulnerability of people and property to the impacts of natural hazards and disasters before they occur.

# What Is a Multi-Hazard Mitigation Plan?

Natural hazard mitigation is sustained action taken to reduce or eliminate long-term risk to human life and property from natural hazards. Elbert County has experienced disasters in the past and our citizens, property, and infrastructure are vulnerable to flooding, wildfire, tornados, severe winter storms, and other hazards. The mitigation plan identifies potential hazards and vulnerabilities and outlines long-term strategies to minimize the impacts of future disasters. An approved mitigation plan also establishes eligibility for mitigation project funding programs of the Federal Emergency Management Agency (FEMA).



# Multi-Hazard Mitigation Plan Goals

The Elbert County Hazard Mitigation Planning Committee, which is composed of participating jurisdictions and stakeholders, developed the following mission and goals for the mitigation plan:

**Mission:** Reduce risk to the people and property of Elbert County from the impacts of natural hazards

### Goals:

- Improve education and awareness of hazards and risk reduction measures
- Protect critical facilities, infrastructure, and other community assets from hazards
- Incorporate hazard mitigation into future development plans and policies
- Enhance local mitigation capabilities, including human, technical, financial, and regulatory capabilities
- Improve communication and coordination of mitigation activities between federal, state, and local governments and with private and non-profit organizations



# **Types of Mitigation Actions**

The Hazard Mitigation Planning Committee is considering mitigation actions to reduce the impacts of future disasters on people and property in the County. Here are examples of the types of actions they are considering:

<b>Prevention:</b> Measures designed to keep the	Property Protection: Measures used to modify
problem from occurring or getting worse	buildings to reduce damage from hazards
Planning and zoning	Acquisition/relocation of flood-prone property
Open space preservation	Floodproofing
Floodplain development regulations	Firewise construction
Stormwater management	Defensible space/fuels modification
Natural Resource Protection: Measures to reduce	Emergency Services: Measures to protect people
hazard impacts by protecting natural functions of	during and after a hazard event
ecosystems and open space	
Erosion and sediment control	Warning and evacuation
Wetlands protection	Protection of critical facilities
Open space preservation	Protection of lifeline utilities
Wildfire fuels management	Communications
Structural Projects: Measures to reduce or prevent	Public Information: Activities to advise citizens,
hazards from reaching properties	property owners, and visitors about hazards and
	mitigation measures
Detention/retention structures	Hazard maps
Sediment basins	Outreach/education programs
Culvert resizing replacement	Real estate disclosure
Storm sewers	Technical assistance

# We Need Your Input!

We need your input on this important plan, which must be approved by each participating jurisdiction, the State of Colorado, and FEMA. A questionnaire asking about your priorities for reducing risk to natural hazards in Elbert County is attached to this flyer with instructions on how to return it.

The complete draft plan will be available online at http://www.elbertcounty-co.gov/ and at several community locations this June for public review and comment. Information on accessing and commenting on the plan will be posted in the *Elbert County News* and the County's website in the future.

**Contact Information:** If you have questions about the Elbert County Multi-Hazard Mitigation Plan, contact LaRiea Thompson, Elbert County Emergency Manager, at 303.805.6131 or LaRiea.Thompson@ElbertCounty-CO.Gov.

# Please share your priorities for reducing risk to hazards in Elbert County.

1.	In your opinion, what are important community assets to protect from disaster events (e.g., specific historic or community buildings, environmental assets, large employers, critical facilities)?	
2.	What are potential issues associated with risk reduction in Elbert County related to current and future population, infrastructure, economy, environment, vulnerable populations, and etc?	
3.	Out of the types and examples of mitigation actions described in the information flyer, what are three (general or specific) that you think should be top priorities?	
4.	Please provide us with any historic information that you recall, such as past hazard events, date, and types of damage, and/or provide us with any other general comments:	
M La	Return your questionnaire to the Elbert County Office of Emergency Management at the 9 News Health Fair or drop off, mail, or fax by May 8 to LaRiea Thompson, Elbert County Emergency Manager, at PO Box 295, 751 Uto Avenue Kiowa, CO 80117, fax: 303.805.6159.	

This page intentionally left blank.



# ELBERT COUNTY MULTI-HAZARD MITIGATION PLAN 2009 UPDATE

# **Summary of Responses to Mitigation Questionnaire**

This document provides a general summary of the responses to the mitigation questionnaire, which was distributed by the Elbert County Office of Emergency Management (OEM) by email and made available on OEM's website from April 17 to May 18, 2009. Elbert County OEM received 12 completed questionnaires.

1. In your opinion, what are important community assets to protect from disaster events (e.g., specific historic or community buildings, environmental assets, large employers, critical facilities)?

Several respondents made note that lifeline utilities services are the highest priority

- Water and wastewater treatment facilities
- Police and fire departments
- Communication facilities (towers, Qwest building)
- County government building/town halls
- Schools
- Power utilities
- Proprane services
- Safeway
- Medical facilities
- Roads and bridges (Highway 86 bridge Elizabeth)
- Community shelters
- First responder equipment
- Government records
- Wells
- Historical museum
- Historical buildings (downtowns)
- Post offices
- Fairgrounds
- Libraries
- Churches
- Judicial system
- Walmart
- Russell Gates mercantile
- Food banks
- High density housing



# 2. What are potential issues associated with risk reduction in Elbert County related to current and future population, infrastructure, economy, environment, vulnerable populations, and etc?

General themes were problems with road conditions, lack of funding to implement mitigation, scattered population and long distances in County, wildfire issues, and public/landowner education.

- Poor road conditions/impassible roads
- Funding/cost
- Support for training
- Loss of records
- Loss of government services and finances
- Public education
- Reverse 911 emergency alert systems/public warning systems
- Long distances to services and health care/scattered population
- Fuel reduction plans are not popular in residential areas
- Lack of water infrastructure
- Wildland mitigation codes not in place
- Protecting the water supply and wells
- Reduce power outages
- Lack of east-west travel options over Running Creek
- Habitat destruction
- Unsafe structures in Agate
- Structural integrity of facilities. Those facilities that are designated as essential should be investigated to insure that they are structurally sound and protected from flood potential.
- Long term survival. Facilities designated as essential should be provided with items needed
  for survival for a specific time frame with a specific number of people in mind. Those items
  might be food stocks, sleeping facilities and clothes, etc
- Sanitary and sewage. Facilities designated as essential should have adequate sanitary and sewage disposal systems that will remain free of potential contamination problems during an emergency condition and should be designed to handle the number of people that would potentially occupy a facility in a disaster situation.
- Elbert County has a large area and a small population. A potential problem is notification of
  people and providing for their evacuation to a safe place in a disaster condition. Certain roads
  should be designated as disaster use roads and those roads should be inspected to insure that
  they would be passable in various types of disaster conditions.
- Assignment to emergency facilities. Plan and have facilities where people know to go in the
  event of a disaster and emergency response teams would know where they are to direct or
  take people. Infrastructure required to get to those locations should be examined and
  upgraded if necessary to insure access to the emergency sites.



- Emergency access through large properties throughout the county. (Hopefully the new management of the various services can re-open talks in a constructive manner with landowners)
- Determining how, who and where a listing of our shut-ins, home care and disabled citizens will be kept; how we will manage evacuating these folks when the need arises; where they will be housed until returned home; and how proper care will be provided before, during and after the evacuation.
- Managing family and community points-of-contact before, during and after a disaster, particularly where minor children and disabled folks have been separated from family
- Including auxiliary fire department locations in new developments & requiring all new developments be part of a fire district
- Educating landowners regarding smart landscaping, land management and fire mitigation & educating landowners regarding water ways, flood plains and mitigation techniques
- Limiting building development in floodplains and encourage ag/ranching development minimizing pollution and overall costs when large floods occur
- Maintain an ongoing presence in literature, websites and articles about our county that we are living with wild life and certain precautions and sensible actions are required

# 3. Out of the types and examples of mitigation actions described in the information flyer, what are three (general or specific) that you think should be top priorities?

Mitigation Category	Number of Response
Emergency Services	8 (primarily for protection of lifeline utilities and critical facilities)
Preventive (i.e. planning and zoning)	3
Property Protection (i.e., acquisition, retrofitting, defensible space)	3
Public Information	3
Natural Resources Protection	1
Structural (i.e., culvert resizing, detention/retention structures)	1

# Specific mitigation actions suggested:

- Designate disaster (emergency) locations and insure structural stability and that stand alone water and sanitary systems are in place. Also insure that communications are in tact to central location.
- Review County drainage patterns and 100 year floodplains and start to work on a Stormwater Management plan including detention facilities and best management practices. Use this plan for identifying potential problems for Planning and Zoning issues.
- Notification of residents and identification of where emergency facilities exist so that residents know where to go in a disaster and emergency response teams know where to direct people.

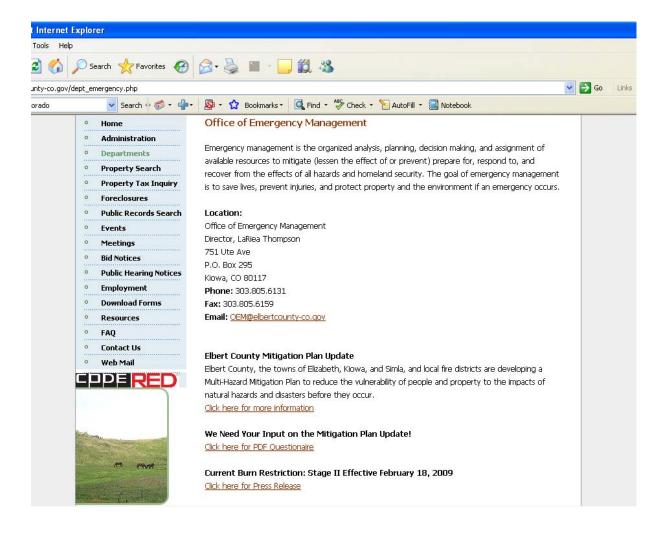


# 4. Please provide us with any historic information that you recall, such as past hazard events, date, and types of damage, and/or provide us with any other general comments:

- Wildfire; weed fires; Magic Dog fire
- Blizzards occur annually; lost 2 children in 1977; locks up transportation regionally; roof collapses in March 2006, April 2009
- Spring 2003 snowstorm and the inability of responders to clear massive snow
- Summer 2005 viral outbreak at Peaceful Valley Scout Ranch (large increase to population during summer camps)
- Flood 1965 bridges, roads, and fields destroyed or damaged; floods (not frequent but destructive)
- Tornados Limon, 1990 and north of Simla about four years ago



# **Elbert County Website Screen Shot with Mitigation Questionnaire**



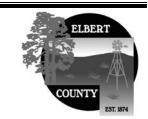
This page intentionally left blank.



# COUNTY OF ELBERT

# COMMUNITY & DEVELOPMENT SERVICES

P.O. BOX 7 215 COMANCHE STREET KIOWA, COLORADO 80117 303-621-3136 FAX: 303-621-3165 cds@elbertcounty-co.gov



# ELBERT COUNTY AGENDA REGULAR PLANNING COMMISSION MEETING HEARING ROOM 215 COMANCHE STREET, KIOWA, CO 80117

May 14, 2009 @ 7:00 P.M.

- 1. PLEDGE OF ALLEGIANCE
- 2. ROLL CALL
- 3. STAFF REPORT ON BOARD OF COUNTY COMMISSIONERS ACTION(S)
- 4. CONSENT CALENDAR (If anyone desires to address the Commissioners regarding an item from this day's consent agenda, please ask that the item be removed from the consent agenda for further discussion. If you have comments on a regular agenda item, please hold your comments until that item is up for consideration by the Commissioners. Comments on regular agenda items will be invited at the appointed time.)
  - A. None

# 5. **COMMUNITY INPUT**

A. Members of the public may express their view to the Commission on matters that affect the County. Comments will be limited to three (3) minutes.

Note: Issues will not be debated.

The order of business for the preceding Public Hearings will be as follows:

- 1. Staff Presentation
- 2. Applicant Presentation
- 3. Open Public Comment
- Speakers in Favor
- Speakers Opposed
- 6. Public Comment Closed
- 7. Applicant Rebuttal

- 8. Commission Discussion
- 9. Commission Motion and Vote

Note: Once the Public Hearing has been closed, no further testimony will be taken.

### 6. NEW BUSINESS

New appointment to the Planning Commission – Stuart Felde.

# 7. PUBLIC HEARINGS/WORKSHOPS:

- A. PRE-DISASTER MITIGATION PLAN PRESENTATION Lariea Thompson.
- B. **ZONING REGULATION CHANGES WORK SESSION** Editorial changes as a result of the recent changes to the "housing" section of the Master Plan.

# 8. UNFINISHED BUSINESS

None

# 9. ANNOUNCEMENTS

A regular meeting of the Elbert County Planning Commission will be held on Thursday, May 28, 2009 @ 7:00 PM in the BOCC Hearing Room located at 215 Comanche St., Kiowa, CO.

10. ADJOURNMENT (No later than 11:00 PM per Resolution 00-01)

# Public comment encouraged on Mitigation draft plan

Plan developed by Multi-Hazard Mitigation and encouraged on a draft version of the Elbert County Public comment is invited The towns of Elizabeth, Elbert

special districts. The purpose and to maintain eligibility for impacts of natural hazards of the plan is to reduce the Management Agency (FEfrom the Federal Emergency property in the County to the Kiowa, and Simla and several mitigation funding programs vulnerability of people and

ards to communities in Ellikely impacts of these hazdrought and assesses the weather, tornado, and ing to wildfire, severe winter impacts of future disasters tizes projects to reduce the bert County. It also priorihazards- ranging from flood-The plan addresses natural Government Building in

on people and property. for review at the following locations: The draft plan is available

Emergency Management Web site at Elbert County Office of

www.elbertcounty-

co.gov/dept\_emergency.php Elbert County

Kiowa and Simla Kiowa Rattlesnake Fire Protection Kiowa, Big Sandy and Districts Town Halls in Elizabeth, Main offices of Elizabeth,

District locations Mall Elbert County Library

:01 to the final plan and must be 15 by mail, e-mail, or fax sidered for incorporation insubmitted in writing by July All comments will be con-

County Office of Emergency Management LaRiea Thompson, Elbert

enue Kiowa, CO 80117 PO Box 295, 751 Ute Av-

son@elbertcounty-co.gov

Denver, CO 80237 Fax: 303-740-2650

E-mail: julie\_bax-

ter@urscorp.com

the governing bodies of each tion plan must be approved Mitigation Planning Comthe State of Colorado, and participating jurisdiction, FEMA. Public comments will by the Elbert County Board be considered by the Hazard The multi-hazard mitiga-County Commissioners,

E-mail: lariea.thomp-States, disasters take the lives Each year in the United

of hundreds of people and

well as documented as part mittee and incorporated into the plan, as appropriate, as 8181 East Tufts Avenue lions of dollars annually to viduals recover from disastargeted natural disaster loss the damage caused by these are predictable, and much of quires local governments to reduction as one of its prieven eliminated. FEMA has events can be alleviated or tions, businesses, and inditionwide, taxpayers pay bilard mitigation plan to mainhave a FEMA-approved haz-Mitigation Act of 2000 remary goals. The Disaster ters. Many natural disasters help communities, organizaigation funding programs. tain eligibility for hazard mit-

taken to reduce or eliminate long-term risk to human life fined as any sustained action

Julie Baxter, URS Corpora- injure thousands more. Na- and property from hazards. Natural hazard mitigation planning is the process by which natural hazards that tized, and implemented. risk are developed, priorithreaten a community are priate strategies for reducing tion goals are set, and appropacts are assessed, mitigaidentified, their likely im-

oping this plan with assisof Emergency Management provided the lead on devel-URS Corporation. tance from consultants at The Elbert County Office

agement at 303-805-6131 or this project, contact LaRiea lariea.thompson@elbert-Office of Emergency Man-Thompson, Elbert County For more information on

# Elbert County Multi-hazard Mitigation Plan Draft Available for Public Review and Comment

Elbert County, CO—Public comment is invited and encouraged on a draft version of the Elbert County Multi-Hazard Mitigation Plan developed by Elbert County; the towns of Elizabeth, Kiowa, and Simla; and several special districts. The purpose of the plan is to reduce the vulnerability of people and property in the County to the impacts of natural hazards and to maintain eligibility for mitigation funding programs from the Federal Emergency Management Agency (FEMA).

The plan addresses natural hazards—ranging from flooding to wildfire, severe winter weather, tornado, and drought—and assesses the likely impacts of these hazards to communities in Elbert County. It also prioritizes projects to reduce the impacts of future disasters on people and property.

The draft plan is available for review at the following locations:

- Elbert County
  Office of Emergency
  Management website at
  http://www.elbertcountyco.gov/dept\_emergency.php
- Elbert County Government Building in Kiowa
- Town Halls in Elizabeth, Kiowa, and Simla
- Main offices of Elizabeth, Kiowa, Big Sandy and Rattlesnake Fire Protection Districts
- All Elbert County Library District locations

All comments will be considered for incorporation into the final plan and must be submitted in writing by Wednesday, July 15, 2009 by mail, email, or fax to: LaRiea Thompson, Elbert County Office of Emergency Management, PO Box 295, 751 Ute Avenue, Kiowa, CO 80117, Fax: (303) 805-6161, Email: lariea. thompson@elbertcounty-co.gov or Julie Baxter, URS Corporation, 8181 East Tufts Avenue, Denver, CO

80237, Fax: (303) 740-2650, Email: julie baxter@urscorp.com.

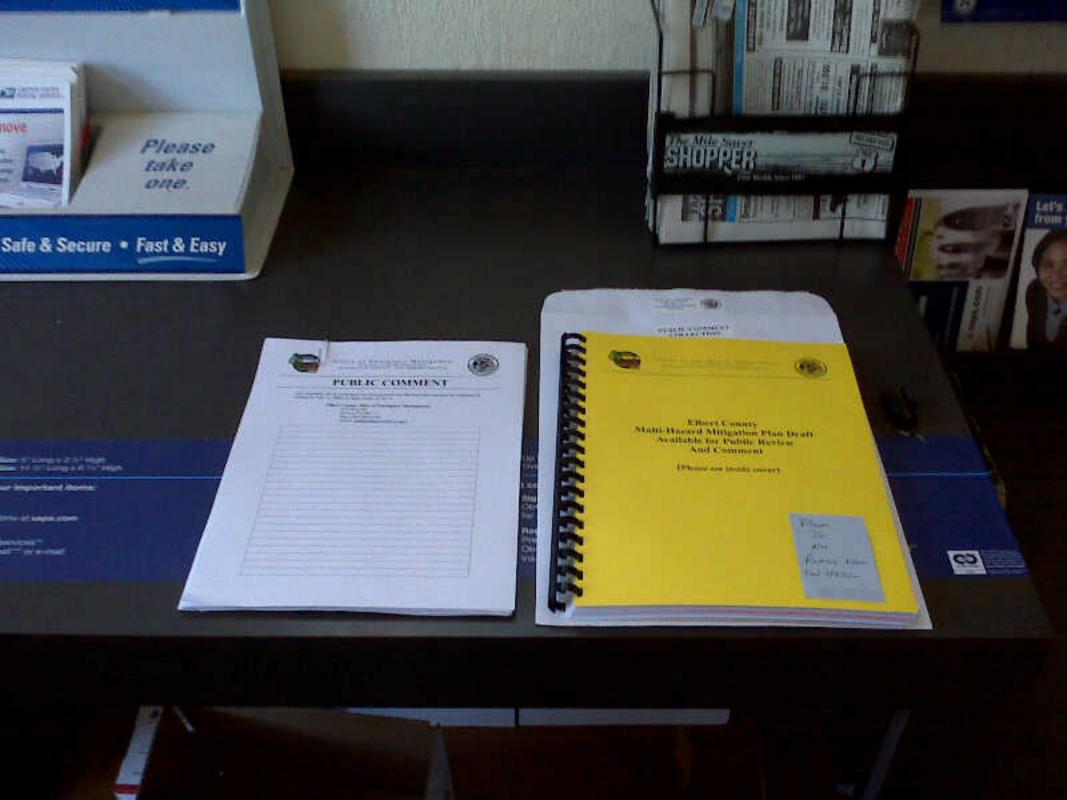
The multi-hazard mitigation plan must be approved by the Elbert County Board of County Commissioners, the governing bodies of each participating jurisdiction, the State of Colorado, and FEMA. Public comments will be considered by the Hazard Mitigation Planning Committee and incorporated into the plan, as appropriate, as well as documented as part of the planning process.

Each year in the United States. disasters take the lives of hundreds of people and injure thousands more. Nationwide, taxpayers pay billions of dollars annually to help communities, organizations, businesses, and individuals recover from disasters. Many natural disasters are predictable, and much of the damage caused by these events can be alleviated or even eliminated. FEMA has targeted natural disaster loss reduction as one of its primary goals. The Disaster Mitigation Act of 2000 requires local governments to have a FEMA-approved hazard mitigation plan to maintain eligibility for hazard mitigation funding programs.

Hazard mitigation is defined as any sustained action taken to reduce or eliminate long-term risk to human life and property from hazards. Natural hazard mitigation planning is the process by which natural hazards that threaten a community are identified, their likely impacts are assessed, mitigation goals are set, and appropriate strategies for reducing risk are developed, prioritized, and implemented.

The Elbert County Office of Emergency Management provided the lead on developing this plan with assistance from consultants at URS Corporation.

For more information on this project, contact LaRiea Thompson, Elbert County Office of Emergency Management at (303) 805-6131 or lariea.thompson@elbertcounty-co.gov.



 From:
 lariea.thompson@elbertcounty-co.gov

 Reply To:
 LaRiea.Thompson@ElbertCounty-CO.Gov

 To:
 lariea.thompson@elbertcounty-co.gov

Subject: Elbert County Multi-Hazard Mitigation Plan Draft - OPEN TO PUBLIC COMMENT!

**Date:** 07/06/2009 09:23 AM

Importance: High

### **Elbert County Multi-Hazard Mitigation Plan Draft**

### \*\*OPEN TO PUBLIC COMMENT\*\* July 1 thru July 15th

http://www.elbertcounty-co.gov/dept\_emergency.php (to see PDF Draft Plan and Appendices)

Elbert County and the towns of Elizabeth, Kiowa, and Simla are seeking public comment on the Draft Elbert County Multi-Hazard Mitigation Plan. All comments will be considered for incorporation into the final plan and must be submitted in writing by July, 15, 2009, by mail, email, or fax to:

Elbert County Office of Emergency Management

PO Box 295

Kiowa, CO 80117 Fax: (303) 805-6161

Email: <u>OEM@elbertcounty-co.gov</u>

Elbert County; the incorporated towns of Elizabeth, Kiowa and Simla; the Elizabeth, Kiowa, and Rattlesnake Fire Protection Districts; and the Kiowa Conservation District prepared this plan to guide hazard mitigation activities to better protect the people and property of the County from the effects of disasters. Additionally, proactive mitigation planning will help reduce the costs of disaster response and recovery by protecting critical community facilities, reducing liability exposure, and minimizing overall community impacts and disruptions.

Each year in the United States, disasters take the lives of hundreds of people and injure thousands more. Nationwide, taxpayers pay billions of dollars annually to help communities, organizations, businesses, and individuals recover from disasters. Many natural disasters are predictable, and much of the damage caused by these events can be alleviated or even eliminated.

Hazard mitigation is defined by the Federal Emergency Management Agency (FEMA) as "any sustained action taken to reduce or eliminate long-term risk to human life and property from a hazard event." The Disaster Mitigation Act of 2000 requires that local governments have hazard mitigation plans approved by FEMA to be eligible for hazard mitigation funding programs. Upon approval of the final plan by FEMA, it will be formally adopted by the governing boards of the participating jurisdictions.

### Hard copies of the plan are also available for review at

- Elbert County Government Center in Kiowa
- Fairgrounds / Extension Office
- Public Health Office
- Elizabeth Town Hall
- Kiowa Town Hall
- · Simla Town Hall

Main offices of Elizabeth, Kiowa, and Rattlesnake Fire Protection Districts

• All Elbert County Library District locations

### Resources

The following resources provide more information about hazard mitigation and hazard mitigation planning.

FEMA: Hazard Mitigation Planning

Colorado Division of Emergency Management: Mitigation

<u>Hazard Mitigation Saves: An Independent Study to Assess the Future Savings from Mitigation Activities</u>

LaRiea Thompson

Elbert County
Office of Emergency Management
P.O. Box 295, 751 Ute Ave , Kiowa, CO 80117
Direct: 303.805.6131 / Cell: 720.841.1419
Fax: 303.805.6161 / Pqr: 303.413.5863

LaRiea.Thompson@ElbertCounty-CO.Gov



# Office of Emergency Management

751 Ute Ave. – P.O. Box 295 - Kiowa, CO 80117 PH: 303.805.6131/Fx: 303.805.6161 • Email: OEM@ElbertCounty-CO.Gov



# **PUBLIC COMMENT**

All comments will be considered for incorporation into the final plan and must be submitted in writing by July 15, 2009, by mail, email, or fax to:

# **Elbert County Office of Emergency Management**

P O Box 295 Kiowa, CO 80117 Fax: (303) 805-6161

Email: oem@elbertcounty-co.gov

The town of Agate has one source of water which has its pump house and treatment center on County Road 170. This equipment needs to be checked daily and must have access in case of breakdowns. County Road 170 has a one lane bridge that at times hazardous and sometimes impossible to cross during extreme weather conditions. Due to low traffic use the one lane does not present a problem but the bridge itself needs to be replaced with a higher elevated bridge that would allow runoff, more clearance from the creek level and perhaps safety rails to keep from sliding off into the creek.

AWA=s water line crosses the creek at this location and should also be considered as a risk.

AWA President
Robert Tatum



 $O\ ffice \quad of \quad E\ mergency \quad M\ anagement \\ -751\ Ute\ Ave. - P.O.\ Box\ 295\ - Kiowa,\ CO\ 80117 \\ PH:\ 303.805.6131/Fx:\ 303.805.6161 \quad \cdot \quad Email:\ OEM@ElbertCounty-CO.Gov$ 



# PUBLIC COMMENT

All comments will be considered for incorporation into the final plan and must be submitted in writing by July 15, 2009, by mail, email, or fax to:

# **Elbert County Office of Emergency Management**

P O Box 295 Kiowa, CO 80117 Fax: (303) 805-6161

Email: oem@elbertcounty-co.gov

Lipa notices should be essued
to any persons owners property in the Country that is on posels a
the Country that is I on posels a
Dances to others and or their property.
Bing Health possable cryury of Children
Being Health possable Enjury of Children because of Lin Sabe distroyed uninhabit
able Structures and materials.
Unaste rundown Structures must become
safe by reconstruction, removing or
Country will Consider buttding to be
a hearth risk of result in harmon
persone state mandelle with the
pessible seath begand and seize the preperty from the property broke further further
Community groups and Volenter
Dra. S I roused and associate
ried the properties of the bay arlons
nations and property reache, Lorate
or town (community) sale of any sellable
Materials (windows doors etc. and any
Moneys gained relein to the advancement
and improvenut of that town or commendy.
Mand Mouton Mour line
Il a Man De me al Presentes Olunes.
Hand Now Low Your line, the, 2009 Very Concerned Property Owner Cooker
, , , , , , , , , , , , , , , , , , , ,

I am Willing to put my Jame and Ideals
to Work, I am Interested in term work and
expect Change for a brighter more
beautiful Community that can get back
to some of the basics where neighbors bookout
for one worker help when able and take
for one worker help when able and take
Pride in Ul Way we should share,
Then I County - Agate.

# **APPENDIX D MITIGATION ACTION EVALUATION**

# **Contents**

- 1. 2003 Mitigation Action Progress Worksheet
- 2. Mitigation Alternatives by Hazard Type
- 4. Mitigation Action Prioritization

This page intentionally left blank.



# Elbert County Multi-Hazard Mitigation Plan 2009 Update

# Mitigation Action Progress Worksheet, 2003-2009

For plan updates, FEMA requires that the updated plan identify the completed, deleted, or deferred action or activities from the previously approved plan as a benchmark for progress. If mitigation action or activities remain unchanged from the previously approved plan, the updated plan much include why changes are not necessary.

The following tables list mitigation actions identified by Elbert County in the 2003 Northeast Colorado Emergency Managers Association Hazard Mitigation Plan and the responsible agency for action implementation. Please provide comments on the status of the action under the appropriate row - completed, ongoing, or not completed - for each action for which you represent the responsible agency.

1. Elbert OEM	County should work to become certified as Storm Ready by the National Weather Service.
Completed What aspects made the task effective or successful? Ongoing Should the task be changed or revised?	Trational vication Sci vice.
Not Completed Is the task still relevant and should it be included in the updated plan? If yes, how could it be improved?	Yes.
2. Elbert OEM	Obtain sirens for church, the fairgrounds, Kiowa High School, and one for the west end of County.
Completed What aspects made the task effective or successful? Ongoing Should the task be changed or revised?	

Is the rele it be upd how	completed ne task still vant and should e included in the ated plan? If yes, could it be roved?  Elbert OEM	Yes, but not specific for those areas. It should be directed to any location of public gatherings, such as sports fields, fairgounds, etc. Funding was an issue to obtain sirens, and the coverage overall would not be effective. Instead, we have launched a reverse notification system in 2009 and includes an automatic weather warning directly to those citizens signed up for the service (no cost to citizens).  Continue the pursuit and installation of a countywide emergency
<i>J</i> .	Elbert OEM	warning notification system.
Wh the	npleted at aspects made task effective or cessful?	Semi-Complete. Elbert County implemented the CodeRED reverse emergency notification system with a weather warning feature that contacts citizens who have signed up, of warning directly in their address location. It's still in progress, however, having the capability will greatly enhance early warning to the citizens.
Sho	going uld the task be nged or revised?	
Is the rele it be upd how	Completed ne task still vant and should e included in the ated plan? If yes, could it be roved?	
4.	Elbert OEM, Elizabeth, Kiowa	Improve the overall stature of floodplain management within Elbert County. Elbert County and the Town of Elizabeth should consider joining the NFIP. Kiowa should seek to revise their floodplain map. Kiowa school, which serves as the community shelter, needs to be protected against floodwaters.
Cor	<u>npleted</u>	Elbert County was successful in adopting the NFIP, along with the Town
the	at aspects made task effective or cessful?	of Simla. Elbert County has become more aware of mitigation tasks that can be incorporated into our building codes and master plan.
Sho	going uld the task be nged or revised?	The Town of Elizabeth is still up in the air about adoption of the NFIP. Since the County has adopted, Zone A mapping is being completed for 840 miles of streams in the 1858 sq miles of Elbert County. This will impact the Town of Elizabeth if they do not adopt the NFIP.

Not Completed Is the task still relevant and should it be included in the updated plan? If yes, how could it be improved?	
5. Elbert OEM	Establish an ongoing or annual public education campaign regarding hazards and emergency management.
Completed What aspects made the task effective or successful?	
Ongoing Should the task be changed or revised?	This is an ongoing activity. It is good to keep this in the mitigation plan thereby keeping the focus.
Not Completed Is the task still relevant and should it be included in the updated plan? If yes, how could it be improved?	
6. Elbert OEM	Verify the potential landslide hazard, and take actions that are appropriate for the risk.
Completed What aspects made the task effective or successful? Ongoing Should the task be changed or revised?	
Not Completed Is the task still relevant and should it be included in the updated plan? If yes, how could it be improved?	I don't think this task is relevant.

7.	Elbert OEM	Identify special needs populations and have emergency medical equipment (e.g., oxygen tanks)
the suc	ompleted hat aspects made e task effective or eccessful?	
Sh	ngoing ould the task be anged or revised?	This should be revised. We have made awareness for the special need population; however, affordability of maintaining a database is our challenge. It's important to know what the needs are in case of disaster. Manpower also prohibits getting this completed.
Is rel it t up ho	ot Completed the task still evant and should be included in the dated plan? If yes, w could it be proved?	



# ELBERT COUNTY MULTI-HAZARD MITIGATION PLAN 2009 UPDATE

# **Multi-Hazard Mitigation**

#### Risk Assessment Key Issues: Multi-Hazard

- Majority of population and structures in Elbert County are dispersed in unincorporated areas
- The largest employers are H&B Foundations, Peaceful Valley Boy Scout Ranch, schools, County government, and Safeway
- Social vulnerability is highest in Simla, where elderly and low-income populations are higher
- Development trends characterized by numerous rural subdivisions in western part of County

#### 2003 Multi-Hazard Mitigation Actions

3.	3. Elbert OEM Continue the pursuit and installation of a countywide emergency warning notification system.					
Completed What aspects made the task effective or successful?		Semi-complete. Elbert County implemented the CodeRED reverse emergency notification system with a weather warning feature that contacts citizens who have signed up, of warning directly in their address location. It's still in progress; however, having the capability will greatly enhance early warning to the citizens.				

5.	Elbert OEM	Establish an ongoing or annual public education campaign regarding hazards and emergency management.
Sho	oing uld the task be nged or revised?	This is an ongoing activity. It is good to keep this in the mitigation plan thereby keeping as focus.

7. Elbert OEM Identify special needs populations and have emergency medical equipment oxygen tanks)			
Sho	going ould the task be unged or revised?	This should be revised. We have made awareness for the special needs populations; however, affordability of maintaining a database is our challenge. It's important to know what the needs are in case of disaster. Manpower also prohibits getting this completed.	

### **New Multi-Hazard Mitigation Ideas**

- Develop a collaborative plan for debris removal and stabilization (Planning Committee)
- Increase web-based public outreach and information
- Provide educational materials about natural hazards and risks to customers in utility bills
- Involve schools in education regarding local hazards and risk
- Develop a program or system for supporting vulnerable populations during periods of infrastructure failure or other emergency events
- Implement natural hazards review criteria for new development for long-term loss prevention



- Establish a countywide emergency management and/or mitigation council to bring together resources for comprehensive planning, analysis, and decision making
- Develop continuity of operations/governance plan (lifeline utilities, public health, water sewer, partnerships/contracts)
- Evaluate vulnerability of designated shelters
- Obtain backup power for critical facilities
- Increase technical data on natural hazards to inform policies and programs
- Improve data sharing among agencies and communities for mitigation, response, and recovery
- Develop a disaster recovery plan
- Update building codes
- Review capital improvement plans for projects that could be included in mitigation plan
- Integrate hazard mitigation plan with community master/comprehensive plans

#### **FEMA Hazard Mitigation Program**

#### **Eligible Projects**

- Public awareness and education (brochures, workshops, videos, etc.)
- Protective measures for utilities (e.g., electric and gas), water and sanitary sewer systems, and/or infrastructure (e.g., roads and bridges)
- Any of the mitigation projects for a critical facility may include the purchase of a generator or related equipment purchases (e.g. generator hookups) as a functional portion to the larger eligible mitigation project subapplication as long as the generator or related equipment purchase directly relates to the hazard(s) that threatens the critical facility

#### Ineligible Projects

- Warning and alert notification systems
- Phased or partial projects
- Studies that do not result in a project (e.g., engineering designs, feasibility studies, or drainage studies that are not integral to a proposed project)
- Projects that solely address maintenance or repairs of existing structures, facilities, or infrastructure (e.g, dredging and removal)
- Generators for noncritical facilities
- Generators and related equipment (e.g., generator hookups) for critical facilities that are not part of a larger eligible mitigation project sub-application and are not directly related to the hazard(s) that threaten that critical facility
- Projects that solely address a man-made hazard
- Response and communication equipment
- Any project for which another Federal agency has primary authority



# **Flood Mitigation**

#### **Risk Assessment Key Issues: Flood**

- Only 6 flood insurance policies in Elbert County; approximately 500 structures in floodplain
- Long history of damaging floods in Elbert County, including four federal disaster declarations and the catastrophic flood of 1935
- Problem areas include Kiowa Creek in Kiowa and Gold Creek and Running Creek in Elizabeth
- Vulnerable assets include roads, bridges, structures in floodplain, Kiowa Middle School
- The condition, age, and owner of the levee providing protection to Kiowa on Kiowa Creek are unknown. The level of protection provided by the levee in a flood event is unknown.
- New DFIRMs will create more accurate risk information on which to base future mitigation measures
- Elizabeth has not joined the National Flood Insurance Program (NFIP); therefore, flood insurance is not available to property owners and the community is not required to manage development in the floodplain according to minimum NFIP requirements

#### **2003 Flood Mitigation Actions**

4.	Improve the overall stature of floodplain management within Elbert County. Elbert County and the Town of Elizabeth should consider joining the NFIP. Kiowa should seek to revise their floodplain map. Kiowa school, which serves as the community shelter, needs to be protected against floodwaters.						
Completed What aspects made the task effective or successful?		Elbert County was successful in adopting the NFIP. Elbert County has become more aware of mitigation tasks that can be incorporated into our building codes and master plan.					
Ongoing Should the task be changed or revised?		The Town of Elizabeth is considering joining the NFIP. Since the County has adopted, Zone A mapping is being completed for 840 miles of streams in the 1,858 sq miles of Elbert County. This will impact the Town of Elizabeth if they do not adopt the NFIP.					
Not Completed Is the task still relevant and should it be included in the updated plan? If yes, how could it be improved?		Mitigation of flood risk to Kiowa Middle School?					

#### **New Flood Mitigation Ideas**

- Mitigate flood risk to Kiowa Middle School
- Assess condition/level of protection of Kiowa levee and upgrade/maintain as needed
- Join NFIP (Elizabeth)
- Develop acquisition and management strategies to preserve open space in the floodplain
- Review and update/strengthen floodplain ordinances upon adoption of new DFIRMs
- Increase number of flood insurance policy holders/promote NFIP
- Implement other stormwater drainage system and maintenance projects to reduce flooding problems
- Promote stormwater and urban design best management practices to reduce runoff and urban flooding
- Adopt stormwater/erosion control ordinance to reduce stormwater runoff
- Provide back-up generators for pumping and lift stations
- Address CWCB mitigation recommendations after July 2000 flood event: Western Country Ranches subdivision retention reservoir should be breached or significantly altered. A residential structure and appurtenant structures were built just below the spillway of the reservoir and received flood damage during July 2000 event.
- Provide flood education and outreach to households and businesses
- Obtain detailed studies and mapping of priority stream reaches
- Enhance early warning systems

### **FEMA Hazard Mitigation Program**

#### **Eligible Projects**

- Voluntary acquisition of real property (structures and land) for conversion to open space in perpetuity
- Relocation of public or private structures
- Elevation of existing public or private structures to avoid riverine flooding
- Hydrologic and hydraulic studies/analyses, engineering studies, and drainage studies for the purpose of project design and feasibility determination
- Wetland restoration
- Protective measures for utilities (e.g., electric and gas), water and sanitary sewer systems, and/or infrastructure (e.g., roads and bridges).
- Stormwater management projects (culverts, retention basins, diversions, flapgates/floodgates) to reduce or eliminate long-term risk from flood hazards
- Localized flood control projects, such as certain ring levees, bank stabilization, and floodwall
  systems that are designed specifically to protect critical facilities and that do not constitute a
  section of a larger flood control system.
- Any of the mitigation projects for a critical facility may include the purchase of a generator
  or related equipment purchases (e.g. generator hookups) as a functional portion to the larger



eligible mitigation project subapplication as long as the generator or related equipment purchase directly relates to the hazard(s) that threatens the critical facility

#### **Ineligible Projects**

- Major flood control projects
- Water quality infrastructure projects
- Studies that do not result in a project (e.g. engineering designs, feasibility studies, or drainage studies that are not integral to a proposed project)
- Flood studies or flood mapping
- Dry floodproofing of residential structures
- Any mitigation activities involving demolishing an existing structure and building a new structure in floodplains
- Localized flood control projects that do not protect a critical facility or constitute a part of a larger project
- Projects that solely address maintenance or repairs of existing structures, facilities, or infrastructure (e.g, dredging and removal)
- Any project for which another federal agency has primary authority

#### **Example Past Flood Projects in Colorado**

Hazard Mitigation, Pre-Disaster Mitigation, Flood Mitigation Assistance, Project Impact, and Unmet Needs funds:

- La Junta built a lift station
- Canon City built retention ponds
- Crowley floodproofed a historic public building
- Fort Collins floodproofed residences and one historic building
- Fort Collins and Pueblo improved their early warning systems
- Morgan County did improvements to a pre-school property to protect it from flood
- Larimer County improved drainage in the West Vine area
- Otero County improved drainage along a county road by an Aurora reservoir
- Georgetown improved drainage in the creek through the Town
- Delta built a flood protection structure around the treatment plan
- Jamestown buried pipelines under the creek
- Fort Collins has done five drainage improvement projects including detention projects;
- Colorado Springs implemented an erosion control project near a critical facility
- Erie rebuilt a culvert under an access road at the airport,
- Grand Junction implemented drainage improvements through the city
- Denver constructed a detention pond and improvements near a police substation



# **Wildfire Mitigation**

#### **Risk Assessment Key Issues: Wildfire**

- Wildland-urban interface areas with high wildfire hazard are primarily in the western part of the County near the border with Douglas County
- Drought conditions contribute to fast-moving grassland fires
- Accurate or updated wildfire hazard assessment data is not available for Elbert County
- The location of pipelines in relation to high wildfire hazard areas is a concern
- The Peaceful Valley Boy Scout Ranch is a community asset and one of the County's largest employers. It is vulnerable to wildfire due to high use in summertime
- Local jurisdictions have limited wildfire mitigation policies adopted as part of planning and zoning

#### 2003 Wildfire Mitigation Actions

None

#### **New Wildfire Mitigation Ideas**

- Improve GIS assessment and mapping of wildfire hazard risk areas
- Create and maintain wildfire defensible spaces around community assets/critical facilities in wildfire hazard areas
- Develop public education program to promote fire safe construction, landscaping, and defensible space/property maintenance
- Educate public about LEOSAD (leave early or stay and defend) (Planning Committee)
- Develop countywide Community Wildfire Protection Plan to tie into hazard mitigation plan (Planning Committee)
- Designate a wildland-urban interface zone and require wildfire mitigation measures within it
- Develop new and/or improve existing planning and development policies related to wildfire mitigation
- Support neighborhood, subdivision, and community efforts to reduce the risk of wildfires
- Conduct specific community-based demonstration projects of fire mitigation in the wildlandurban interface
- Partner with insurance companies or utility providers to include wildfire safety information in materials provided to area residents

#### **FEMA Hazard Mitigation Program**

#### **Eligible Projects**

See FEMA Mitigation Policy – MRR-2-01-1 Wildfire Mitigation Policy for the Hazard Mitigation Grant Program and Pre-Disaster Mitigation Program

- Defensible space that involves the creation of perimeters around residential and nonresidential buildings and structures through the removal or reduction of flammable vegetation
- The application of non-combustible building envelope assemblies, the use of ignition-resistant materials, and the proper retrofit techniques of new and existing structure
- Hazardous fuels reduction vegetation management, vegetation thinning, or reduction of flammable materials to protect life and property beyond defensible space perimeters but proximate to at-risk structures.

#### **Ineligible Projects**

- Projects that do not protect homes, neighborhoods, structures, or infrastructure
- Projects for hazardous fuels reduction in excess of two miles from structures
- Projects to address ecological or agricultural issues related to land and forest managements
- Projects for prescribed burning
- Projects for maintenance activities
- Projects for the purchase of fire-related equipment or communication equipment
- Projects for the creation and maintenance of fire breaks, access roads, staging areas
- Purchase of equipment to accomplish eligible work (i.e., chippers, chainsaws)
- Projects on federal lands; any project for which another federal agency

#### **Tornado Mitigation**

#### **Risk Assessment Key Issues: Tornado**

- Tornado hazard is greater in eastern part of County, including the communities of Simla, Agate, and Matheson
- Hazard is greatest in May, June, and July
- Tornado strength is generally weak, but an F3 tornado hit Limon in 1990
- Warning sirens and systems and safe room and sheltering needs should be assessed



# **2003 Tornado Mitigation Actions**

1.	Elbert OEM	County should work to become certified as Storm Ready by the National Weather Service.
Is the and incluption	Completed e task still relevant should it be ided in the updated ? If yes, how could improved?	Not completed.

2.	Elbert OEM  Obtain sirens for church, the fairgrounds, Kiowa High School, and one for the west en County.					
Is the and in the yes.	Completed ne task still relevant should it be included ne updated plan? If , how could it be roved?	Yes, but not specific for those areas. It should be directed to any location of public gatherings, such as sports fields, fairgounds, etc.  Funding was an issue to obtain sirens, and the coverage overall would not be effective. Instead, we have launched a reverse notification system in 2009 and includes an automatic weather warning directly to those citizens signed up for the service (no cost to citizens).				

3. Elbert OEM Continue the pursuit and installation of a countywide emergency warning notifical system.					
Completed What aspects made the task effective or successful?		Semi-Complete. Elbert County implemented the CodeRED reverse emergency notification system with a weather warning feature that contacts citizens who have signed up, of warning directly in their address location. It's still in progress, however, having the capability will greatly enhance early warning to the citizens.			

### **New Tornado Mitigation Ideas**

- Upgrade fire stations in Elizabeth to provide safe rooms (Planning Committee)
- Identify community safe room and sheltering needs and develop strategy to address these needs
- Prepare and educate residents for tornados in May, June, and July
- Require anchoring of manufactures homes and exterior attachments such as carports and porches
- Work with mobile home parks to provide alternate shelters for residents
- Promote NOAA weather radios
- Upgrade/enhance warning systems
- Emphasize/require designs in construction that can withstand and other high winds

# **FEMA Hazard Mitigation Program**

#### **Eligible Projects**

- Construction residential and community safe rooms in tornado-prone areas
  - FEMA 361: Design and Construction Guidance for Community Safe Rooms



- FEMA 320: Taking Shelter From the Storm: Building a Safe Room For Your Home or Small Business
- Identify best available refuge areas within existing shelters
  - FEMA 431: Tornado Protection: Selecting Refuge Areas in Buildings
- Retrofitting structures and facilities to minimize damages from high winds
- Any of the mitigation projects for a critical facility may include the purchase of a generator or related equipment purchases (e.g. generator hookups) as a functional portion to the larger eligible mitigation project subapplication as long as the generator or related equipment purchase directly relates to the hazard(s) that threatens the critical facility

#### **Ineligible Projects**

- Warning and alert notification systems
- Phased or partial projects
- Studies that do not result in a project (e.g., engineering designs, feasibility studies, or drainage studies that are not integral to a proposed project)
- Projects that solely address maintenance or repairs of existing structures, facilities, or infrastructure (e.g, dredging and removal)
- Response and communication equipment

# Winter Storm Mitigation

#### Risk Assessment Key Issues: Winter Storm

- Winter storms are highly likely and can be critical in magnitude
- The greatest impacts of winter storms are often related to shutting down transportation routes blocking the flow of supplies, isolating rural areas, and stranding travelers
- Winter storms result in high costs to local governments through snow removal and road maintenance
- Snow, ice, and downed trees can cause power outages
- Winter storms may create the need for sheltering and outreach to vulnerable and isolated populations
- The starvation of livestock and subsequent burial/disposal needs are a concern

#### **2003 Winter Storm Mitigation Actions**

1.	Elbert OEM	County should work to become certified as Storm Ready by the National Weather Service.
Is the and inclusion	Completed e task still relevant should it be ided in the updated ? If yes, how could improved?	Not completed.



3.	Elbert OEM	Continue the pursuit and installation of a countywide emergency warning notification system.
Wha task	npleted at aspects made the effective or essful?	Semi-Complete. Elbert County implemented the CodeRED reverse emergency notification system with a weather warning feature that contacts citizens who have signed up, of warning directly in their address location. It's still in progress, however, having the capability will greatly enhance early warning to the citizens.

#### **New Winter Storm Mitigation Ideas**

- Plan for addressing livestock needs
- Distribute family and traveler emergency preparedness information related to severe winter weather hazards
- Establish heating centers or shelters for vulnerable populations, not only for residents, but also for stranded motorists/travelers.
- Plan to systematically contact isolated, vulnerable, or special-needs populations.
- Use snow fences (also rows of trees) to limit blowing/drifting snow over critical road segments
- Weatherproof critical facilities
- Maintain tree trimming for above ground power lines
- Support underground utility construction or other methods of preventing utility disruption by protecting lines from damage
- Update and enforce building codes
- Set up inspection system and recommend repairs to buildings vulnerable to snow load stress

# **FEMA Hazard Mitigation Program**

#### **Eligible Projects**

- Retrofitting structures and facilities to minimize damages
- Protective measures for utilities (e.g., electric and gas), water and sanitary sewer systems, and/or infrastructure (e.g., roads and bridges)
- Any of the mitigation projects for a critical facility may include the purchase of a generator
  or related equipment purchases (e.g. generator hookups) as a functional portion to the larger
  eligible mitigation project subapplication as long as the generator or related equipment
  purchase directly relates to the hazard(s) that threatens the critical facility

#### **Ineligible Projects**

- Warning and alert notification systems
- Phased or partial projects
- Studies that do not result in a project (e.g., engineering designs, feasibility studies, or drainage studies that are not integral to a proposed project)



- Generators for noncritical facilities
- Generators and related equipment (e.g., generator hookups) for critical facilities that are not part of a larger eligible mitigation project sub-application and are not directly related to the hazard(s) that threaten that critical facility
- Projects that solely address maintenance or repairs of existing structures, facilities, or infrastructure (e.g, dredging and removal)
- Response and communication equipment

# Severe Weather (Hail, Lightning, Windstorms) Mitigation

#### **Risk Assessment Key Issues: Severe Weather**

- Hail storms can block culverts and drainage structures causing flooding
- Hail damage is costly but usually covered by private insurance
- Lightning causes damage to communications systems
- Public education and warning about lightning safety can help prevent deaths and injuries
- High winds damage structures and cause power outages

#### **2003 Severe Weather Mitigation Actions**

1.	Elbert OEM	County should work to become certified as Storm Ready by the National Weather Service.
Is the and inclusion	Completed e task still relevant should it be uded in the updated ? If yes, how could improved?	Not completed.

3. Elbert OEM Continue the pursuit and installation of a countywide emergency warning notificatio system.					
Wha task	npleted at aspects made the effective or eessful?	Semi-complete. Elbert County implemented the CodeRED reverse emergency notification system with a weather warning feature that contacts citizens who have signed up, of warning directly in their address location. It's still in progress; however, having the capability will greatly enhance early warning to the citizens.			

#### **New Severe Weather Mitigation Ideas**

- Promote NOAA weather radios
- Weatherproof critical facilities
- Maintain tree trimming for above ground power lines
- Support underground utility construction or other methods of preventing utility disruption by protecting lines from damage
- Require tie-downs with anchors and ground anchors for manufactured homes



- Update and enforce building codes
- Install surge protection on critical electronic equipment
- Install lightning protection devices, such as lightning rods, on communications infrastructure

#### **FEMA Hazard Mitigation Program**

#### **Eligible Projects**

- Retrofitting structures and facilities to minimize damages from high winds
- Protective measures for utilities (e.g., electric and gas), water and sanitary sewer systems, and/or infrastructure (e.g., roads and bridges)
- Any of the mitigation projects for a critical facility may include the purchase of a generator
  or related equipment purchases (e.g. generator hookups) as a functional portion to the larger
  eligible mitigation project subapplication as long as the generator or related equipment
  purchase directly relates to the hazard(s) that threatens the critical facility

#### **Ineligible Projects**

- Warning and alert notification systems
- Phased or partial projects
- Studies that do not result in a project (e.g., engineering designs, feasibility studies, or drainage studies that are not integral to a proposed project)
- Generators for noncritical facilities
- Generators and related equipment (e.g., generator hookups) for critical facilities that are not part of a larger eligible mitigation project sub-application and are not directly related to the hazard(s) that threaten that critical facility
- Projects that solely address maintenance or repairs of existing structures, facilities, or infrastructure (e.g, dredging and removal)
- Response and communication equipment

# **Drought Mitigation**

### **Risk Assessment Key Issues: Drought**

- Palmer Drought Severity Index: Elbert County has experienced severe and extreme drought 15-20 percent during a 100-year period
- In the South Platte Basin, the greatest impacts due to drought are loss of water supply and system flexibility and loss of crop yield
- Many rural residents in Elbert County get water from private wells
- Population growth and climate change are factors likely to increase vulnerability to drought in the future



#### **2003 Drought Mitigation Actions**

None

#### **New Drought Mitigation Ideas**

- Develop education and incentives program to encourage water saving measures by citizens
- Develop and adopt a tiered rate structure to encourage responsible water use
- Develop a drought management plan to anticipate needs and identify the measures and responses to prepare for, monitor, and mitigate the effects of drought
- Encourage water management entities to develop a water conservation plans to outline how to improve water use efficiency over the long term and how the efforts fit within their overall water supply and demand management efforts
- Adopt water conservation ordinance to prioritize or control water use, particularly in emergency situations, such as firefighting or drought
- Develop new or upgrade water delivery systems, including improving pipelines and lining ditches

# **Dam Failure Mitigation**

#### Risk Assessment Key Issues: Dam Failure

- There are 110 dams in Elbert County but all are low hazard classification
- The condition of conservation district dams are unknown and funding for monitoring and maintenance is limited
- There is a lack of public awareness about the conservation district dams and safety

#### 2003 Dam Failure Mitigation Actions

None

#### **New Dam Failure Mitigation Ideas**

- Form task force to develop strategy for assessing condition of dams and identify funding for dam repair and maintenance
- Improve coordination with dam owners/conservation districts
- Minimize new development in dam inundation areas

This page intentionally left blank.



# ELBERT COUNTY MULTI-HAZARD MITIGATION PLAN 2009 UPDATE

# **Mitigation Action Prioritization**

This worksheet is used to prioritize the order in which mitigation actions will be implemented. Actions will be evaluated based on the following criteria:

- **Structures Protected** What is the number and value of structures potentially protected by the action?
- **Life Safety Protected** Does the action prevent injuries and/or loss of life?
- Administrative Capability Does the community have the personnel and administrative capabilities to implement the action and maintain it or will outside help be necessary?
- **Technical Feasibility** Is the mitigation action technically feasible? Is it a long-term solution?
- **Public and Political Support** Is there overall public support for the mitigation action? Is there the political will to support the action?
- **Local Champion** Is there a strong advocate for the project among local departments/agencies that will support the action's implementation?
- **Cost-Benefit Review** Will the project be funded by current or future internal or external sources? Do the benefits, or losses avoided, of the action outweigh the costs?
- Other Community Objectives Does the action also further other community objectives, such as capital improvements, environmental quality, or open space preservation?

Using the table on the following pages, rank each of the criteria for each project with a 1, 2, or 3 using the following scale, in which "High" (3) has the most potential benefits or likelihood for successful implementation:

- 1=Low
- 2=Moderate
- 3=High



# **Mitigation Actions Continued from 2003 Plan**

Action	Structures Protected	Life Safety Protected	Admin Capability	Technical Feasibility	Public/ Political Support	Local Champion	Cost Benefit Review	Other Community Objectives	Total Score	HMPC Votes
Continue to seek Storm     Ready designation	3	3	3	3	3	3	3	3	24	0
Develop special needs populations inventory/registry	1	3	1	2	2	3	3	2	17	0
3. Establish hazard/risk education campaign: distribute flyers, conduct workshops, provide info for kids home alone, issue press releases, present to local service groups, invite state reps	3	3	1	3	3	3	3	3	22	0
4. Join NFIP (Elizabeth)	2	2	2	2	1	2	2	2	15	0
5. Mitigate flood risk to Kiowa school	3	3	1	2	3	3	3	2	20	0

# **New Mitigation Actions**

Action	Structures Protected	Life Safety Protected	Admin Capability	Technical Feasibility	Public/ Political Support	Local Champion	Cost Benefit Review	Other Community Objectives	Total Score	HMPC Votes
6. Assess condition/level of protection of Kiowa levee and upgrade/maintain	3	3	2	2	3	3	3	2	21	2
7. Implement stormwater drainage system improvements	3	3	2	3	3	3	3	2	22	3
8. Adopt a stormwater ordinance	3	3	2	2	3	3	3	2	21	1

Action	Structures Protected	Life Safety Protected	Admin Capability	Technical Feasibility	Public/ Political Support	Local Champion	Cost Benefit Review	Other Community Objectives	Total Score	HMPC Votes
Develop education and incentives program to encourage water savings measures by property owners	1	1	1	2	2	3	3	2	15	1
10. Implement water delivery system improvements	3	3	1	2	2	3	3	2	19	3
11. Develop water conservation plan	1	1	3	2	3	3	3	2	18	1
12. Form task force to improve coordination with conservation districts, assess condition of dams. and identify funding sources for repair and maintenance.	3	3	1	2	3	3	3	2		3
13. Minimize new development in dam inundation areas and educate public on dams flood control structures and easements	3	3	1	2	2	3	2	2	18	1
14. Improve coordination between planning, building, and road and bridge departments related to NFIP information and requirements	3	3	3	2	2	3	3	3	22	6
15.Conduct outreach to builders on building designs acceptable in floodplains	3	3	3	3	3	3	3	2	23	1
16. Incorporate hazard mitigation in Elbert County Master Plan update	3	3	3	3	3	3	3	3	24	1
17. Incorporate hazard criteria in development review process	3	3	3	3	3	3	3	3	24	4
18. Develop drainage/erosion control study/project	3	3	1	2	3	3	3	2	20	2



Action	Structures Protected	Life Safety Protected	Admin Capability	Technical Feasibility	Public/ Political Support	Local Champion	Cost Benefit Review	Other Community Objectives	Total Score	HMPC Votes
coordinating objectives of various agencies for Town of Elbert										
19. Obtain back-up generators for critical facilities	2	3	3	3	3	3	2	1	20	5
20. Assess and designate shelters and distribute information to public/agencies	1	3	1	2	3	3	3	3	19	3
21. Coordinate with agencies to develop livestock protection plan (winter storm), including CSU Extension Service	1	1	1	1	2	1	1	1	9	1
22. Install lightning rods on critical facilities and historic structures	1	1	1	1	1	1	1	1	8	0
23. Assess protection measures needed for critical facilities	3	3	2	2	3	3	3	3	22	5
24. Assess protection measures needed for historic structures	2	1	2	2	1	1	1	2	12	0
25. Complete a continuity of governance plan	1	2	2	2	2	2	2	2	15	0
26. Develop an Elbert County Wildfire Protection Program that includes public information, resources, and special events to reduce wildfire risk	3	3	1	1	1	3	3	3	18	6
27. Protect historical community documents through digitization project	1	1	3	3	2	3	2	3	18	3
28. Construct a second access road to County Road 118 from Pine Meadows to improve response capabilities to 93	3	3	1	1	1	3	2	2	16	0



Action	Structures Protected	Life Safety Protected	Admin Capability	Technical Feasibility	Public/ Political Support	Local Champion	Cost Benefit Review	Other Community Objectives	Total Score	HMPC Votes
homes with high wildfire risk										
29. Construct additional cisterns to improve water supply capabilities for firefighting	2	2	3	3	2	3	1	1	17	0
30. Create a Community Wildfire Protection Plan template for subdivision scale	3	3	1	1	1	3	3	3	18	0
31. Conduct property level assessments of wildfire risk and recommend mitigation measures to landowners	3	3	1	1	1	3	2	2	16	0
32. Improve wildfire mitigation and response considerations in development codes	3	3	3	2	1	3	3	3	21	0



# **APPENDIX E PLAN MAINTENANCE FORMS**

#### **Contents**

- 1. Mitigation Action Progress Report
- 2. Plan Annual Review Questionnaire

This page intentionally left blank.

Mitigation Action/Project Progress Report							
Progress Report Period From (date):	Т	Γο (date):					
Project Title:							
Project Plan ID:							
Responsible Agency:							
Contact Name:							
Contact Number/E-mail:							
Project Status: Completed, Uncompleted, Ongoing?							
Anticipated Completion Date:							
Summary of Project Progress for this Reporting Period							
1. What was accomplished for this pro	oject during this reporti	ing period?					
2. What obstacles, problems, or delay	s did the project encou	nter, if any?					
3. If uncompleted, is the project still relevant? Should the project be changed or revised?							
4. Other comments							

This page intentionally left blank.

	Mitigation Plan Annual	Review Questionnaire
Plan Chapter	Considerations	Explanation
	Should new jurisdictions and/or districts be invited to participate in future plan updates?	
	Have any internal or external agencies been invaluable to the mitigation strategy?	
PLANNING PROCESS	Can any procedures (e.g., meeting announcements, plan updates) be done differently or more efficiently?	
	Has the Planning Team undertaken any public outreach activities?	
	How can public participation be improved?	
	Have there been any changes in public support and/or decision-maker priorities related to hazard mitigation?	
	Has a natural and/or man-made disaster occurred?	
RISK	Should the list of hazards addressed in the plan be modified?	
ASSESSMENT	Are there new data sources and/or additional maps and studies available? If so, what are they and what have they revealed? Should the information be incorporated into future plan updates?	
	Do any new critical facilities or infrastructure need to be added to the asset lists?	
VULNERABILITY ANALYSIS	Have any changes in development trends occurred that could create additional risks?	
	Are there repetitive losses and/or severe repetitive losses to document? Has NFIP participation changed in the participating jurisdictions?	

Mitigation Plan Annual Review Questionnaire							
Plan Chapter	Considerations	Explanation					
CAPABILITY ASSESSMENT	Are there different or additional technical, financial, and human resources available for mitigation planning?						
	Have jurisdictions adopted new policies, plans, regulations, or reports that could be incorporated into this plan?						
	Is the mitigation strategy being implemented as anticipated? Were the cost and timeline estimates accurate?						
MITIGATION STRATEGY	Should new mitigation actions be added to the Implementation Strategy? Should existing mitigation actions be eliminated from the plan?						
	Are there new obstacles that were not anticipated in the plan that will need to be considered in the next plan update?						
	Are there new funding sources to consider?						
PLAN	Was the plan monitored and evaluated as anticipated?						
MAINTENANCE PROCESS	Have elements of the plan been incorporated into other planning mechanisms?						

# **APPENDIX F REFERENCES**

Colorado Drought and Water Supply Assessment. 2004. Colorado Water Conservation Board. http://cwcb.state.co.us/Conservation/RelatedInformation/Publications/ColoradoDroughtWaterSupplyAssessmentDWSA/CWCBDroughtWaterSupplyAssessment.htm.

Community Directory for Elizabeth, Colorado. 2009. http://www.elizabethcolorado.net/id1.html.

Draft Field Report. Elbert County Flood of July, 2000. Whiskey Gulch and Tributaries near Elizabeth. Colorado Water Conservation Board (2000).

Earthquake Evaluation Report. Colorado Division of Emergency Management. http://www.dola.colorado.gov/dem/mitigation/earthquakerpt.pdf.

Elbert County website. 2009. http://www.elbertcounty-co.gov/.

Elbert County Historical Society and Museum website. 2009. http://www.elbertcountymuseum.org/.

Levee Information for Stakeholders. Federal Emergency Management Agency website. 2009. http://www.fema.gov/plan/prevent/fhm/lv\_intro.shtm.

National Center for Atmospheric Research. 2009. South Platte and Arkansas Basins: June 14-20, 1965. The Weather and Climate Impact Assessment Science Program. http://www.assessment.ucar.edu/flood/flood\_summaries/06\_14\_1965.html.

"Ruin and rebirth/Tornado gave Limon opportunity to change." June 4, 2000. *The Gazette* (Colorado Springs).

Town of Elizabeth website. 2009. http://www.townofelizabeth.org/.

Town of Kiowa website. 2009. http://www.townofkiowa.com/.