

Unit 4: Local Plan Review Working Session – Mitigation Strategy



62

Mitigation Strategy

What is the purpose of this portion of the Plan Review Requirements?

The main point of the plan is to come up with a coherent strategy to address the relevant risks for the community.



63

Mitigation Strategy

IFR Requirement: § 201.6 (c) (3) (i) Local Hazard Mitigation Goals (1 of 4)

- A. *Does the plan include a description of mitigation goals to reduce or avoid long term vulnerability to the identified hazards?*

Key Words and Issues

the connection between the goals (and objectives) and the results of the risk assessment, i.e., “the identified hazards” is not always immediately apparent – including hazards that are identified, profiled and assessed but do not show up in the goals and goals that speak to issues that were not heretofore identified



64

Mitigation Strategy

IFR Requirement:
§ 201.6 (c) (3) (ii) Identification and Analysis of Mitigation Actions (2 of 4)

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

Key Words and Issues

the original intent was for communities to analyze all mitigation options, i.e., “a comprehensive range”, for each identified problem hazard and/or area – most plans do not include anything more than a solitary action that is selected for a specific problem



65

Mitigation Strategy

IFR Requirement:

§ 201.6 (c) (3) (ii) Identification and Analysis of Mitigation Actions (2 of 4 continued)

- B. Do the identified action and projects address reducing the effects of each hazard on new buildings and infrastructure?**

- C. Do the identified actions and projects address reducing the effects of each hazard on existing buildings and infrastructure?**



66

Mitigation Strategy

IFR Requirement:

§ 201.6 (c) (3) (iii) Implementation of Mitigation Actions (3 of 4)

- A. Does the mitigation strategy include how actions are prioritized?**

Key Words and Issues

strategies for determining "**prioritized**" actions range from application of decision making tools such as STAPLEE to develop scores and ranks; to assigning a sense of urgency (high, medium, low); to simply listing actions in the chronological order the community expects to implement them



67

Mitigation Strategy

IFR Requirement:

§ 201.6 (c) (3) (iii) Implementation of Mitigation Actions (3 of 4)

- B. Does the mitigation strategy address how the actions will be implemented and administered?**
- C. Does the prioritization process include an emphasis on the use of cost - benefit review to maximize benefits?**

Key Words and Issues

“**implemented and administered**” imply that responsible parties “should” be identified but this cannot necessarily be required based on the Rule language

“**cost-benefit review**” can be interpreted as any process that takes into account relative or general cost and benefit relationships and does not require the application of tools like the benefit-cost module



68

Mitigation Strategy

IFR Requirement:

§ 201.6 (c) (3) (iv) Multi-Jurisdictional Mitigation Actions (4 of 4)

- A. Does the plan include at least one identifiable action item for each jurisdiction requesting FEMA approval of the plan?**

Key Words and Issues

mitigation actions that affect an entire planning area can be applied to the requirement of “**at least one identifiable action item**”

(this leads to a similar “what if” scenario as IFR Requirement: § 201.6 (c) (5) Multi-Jurisdictional Plan Adoption (slide 37))



69

Small Group Working Session – Mitigation Strategy

This session covers the bottom of page 7 through the top of page 9 of the Crosswalk.

The end product is a completed plan review of the Mitigation Strategy for the City of Darwin, Iowa plan.



Small Group Results

Mitigation Strategy

Element	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8	Group 9	Group 10
§ 201.6 (c) (3) (i) Local Hazard Mitigation Goals										
A. Description of mitigation goals										
§ 201.6 (c) (3) (ii) Identification and Analysis of Mitigation Actions										
A. Comprehensive list of mitigation actions identified and analyzed										
B. Identified actions address new buildings										
C. Identified actions address existing buildings										
§ 201.6 (c) (3) (iii) Implementation of Mitigation Actions										
A. Description of how actions were prioritized (including the process and criteria used)										
B. Description of how cost and benefits were considered during the prioritization process										
C. Description of how actions will be implemented and administered										



MITIGATION GOALS AND ALTERNATIVES CONTENTS

Mitigation Goals	1
Mitigation Alternatives	2
Current Mitigation Activities	2
Alternatives Considered	3
Alternative Evaluation, By Hazard	4
Mitigation Recommendations Summary	8
Funding of Alternatives	9
Implementation	10
Priorities	
Phasing	
Integration into Other Planning Mechanism	
Responsibility	
Review Schedule	
Mitigation Plan Evaluation	11
Evaluation and Review Process	
Mitigation Plan Evaluation Worksheet	

MITIGATION GOALS - ALTERNATIVES

Mitigation Goals

The Hazard Mitigation Planning Committee established the following goals to make their community more disaster resistant.

- Minimize injuries and loss of life
- Reduce or eliminate damages due to natural disasters
- Manage response operations with or without State and Federal Assistance
- Return to pre-disaster conditions in a timely and pre-planned manner

Accomplishing these goals requires an integrated emergency management program, including:

Preparedness activities ensure the community and its residents are ready for a disaster and that they respond effectively. Preparedness involves determining what the community will do if essential services break down, developing a plan for contingencies, and practicing the plan.

Response activities begin as soon as the disaster threatens. Response includes access control, search and rescue, mass care, medical services, and restoring essential services.

Recovery activities help the community to return to pre-disaster condition. They include rebuilding services, infrastructure (utilities, communications, and transportation systems), facilities, operations, and the lives affected by the disaster.

Mitigation activities are sustained actions that reduce the long-term risk of disasters. They reduce threats to the public health and safety, reduce or eliminate damages caused by disaster, and reduce the burden placed on local, state, and federal preparedness, response and recovery activities.

Mitigation Alternatives

The Committee focused on mitigation activities that would minimize injuries and loss of life and reduce or eliminate damages due to natural disasters. They identified a wide range of mitigation approaches and, based on the hazard analysis and risk assessment and the community's current mitigation activities, selected alternatives for further review and evaluation. Following their review and evaluation of the alternatives, the Committee selected and prioritized actions they felt should be implemented.

The following sections summarize the mitigation segment of the planning process:

- Current Mitigation Activities
- Mitigation Alternatives
- Mitigation Recommendations
- Mitigation Implementation

Current Mitigation Activities

1. Ordinances

Tree Trimming ordinances reduce damages from trees and tree branches damaged during ice storms or by heavy winds.

Snow Removal ordinances ensure streets are cleared promptly and provide emergency access to the citizens.

2. Emergency Service

Fire

The Darwin Volunteer Rural Fire and Ambulance Service provides primary fire protection. Darwin's fire insurance class is (8). Additional protection is provided through Mutual Aid Agreements with communities in Beagle County.

Emergency Management

The Beagle County Emergency Management Coordinator's office is located in Newton. The County Emergency Management Coordinator works in conjunction with all community fire, rescue, police, and government officials to ensure community emergency mitigation, preparedness, and response and recovery plans are current and to assist community's implementation of these plans.

The City adopted the Multi-Hazard Emergency Operations Plan in December 2000. The Major will coordinate emergency operations within the City.

Medical Services

Skiff Medical Center is a 68-bed primary care hospital located in Newton, Iowa. Accredited by the Joint Commission on Accreditation of Healthcare Organizations, the hospital is an active member in Beagle County. Additional medical services are available from the Pella Regional Health Center in Pella, Iowa, the Grinnell Regional Medical Center in Grinnell, Iowa and Des Moines, Iowa medical facilities.

Additional emergency medical services are available through Mutual Aid Agreements with Beagle County communities.

Warning Systems

The City of Darwin warning siren system provides coverage to the entire community. However, atmospheric conditions can impact the coverage. In accordance with the City's emergency procedures, the Fire Department warns neighborhoods of severe weather and other emergency situations and ensures vulnerable segments of the community receive notification. NOAA Weather Radio and television and radio announcements provide emergency warning for the community.

Storm Spotters

The City participates in the Storm Spotter program. Storm spotters take a position near their communities and report wind gusts, hail size, rainfall, and cloud formations that could signal a developing tornado. Spotter information is relayed to County and City Emergency Management and to the National Weather Service.

Shelter and Feeding Sites

The Red Cross coordinates shelter and feeding emergency needs. City churches and the schools serve as shelter and feeding sites.

Sewer System Maintenance Program

The City conducts smoke tests and camera inspections to identify vulnerable areas in the system and has implemented a maintenance program to clean and inspect vulnerable portions of the system. Inspecting and maintaining vulnerable portions of the system reduces sewer inflow/infiltration.

Alternatives Considered

Flood Mitigation

1. Public information
2. Storm water drainage ordinances
3. Sewer Maintenance Program

Tornado-High Winds

1. Improve public awareness of tornado and high wind risks, safe rooms, wind construction methods, safe zones around homes, and NOAA weather radio warning system
3. Assess current warning siren system.
4. Provide NOAA weather radios at reduced cost
5. Trim trees to reduce wind damages

Thunderstorms - Lightning and Hail

1. Trim dead or weak branches from trees
2. Improve public awareness of lightning and hail risk, measures that can be taken to reduce risk (i.e., trimming trees, purchasing generators) and community warning systems (sirens and NOAA weather radio).

Hazardous Materials

1. Increase public awareness about hazardous materials risk.
2. Continue hazardous materials preparedness and response and recovery activities such as support of LEPC, review and update of response and recover plans, evacuation routes, and community shelters.

Earthquake

1. Increase public awareness of earthquake threat and NOAA weather radio

Winter Storms

1. Increase public awareness of winter storm hazards and risks and measures they can take to reduce risks, including weatherizing homes, protecting pipes from freezing, and recommended snow load building standards.
2. Promote NOAA weather radios.
3. Establish tree-trimming programs.
4. Identify vulnerable populations who may require special assistance.

Drought

1. Establish burn restrictions and water conservation measures for localized drought conditions.
2. Increase public awareness of drought risks and measures the public can take to reduce the risk.

Flood Mitigation

Public Information. Educating the public about their hazard risks and ways to reduce the risks is one of the most cost effective mitigation alternatives. Many materials are available free of charge, or at a minimal cost, from FEMA, the Institute of Business and Home Safety, and insurance companies.

The planning Committee felt that the current flood and flash flood information provided through county emergency management weather awareness efforts meets the needs of their community.

Storm Water Drainage Ordinances

The City currently enforces ordinances that prevent homeowners from typing their residential drainage system—gutters, down spouts and pump sumps—into the City's sanitary sewer system.

The Committee recommends continuing to enforce storm water drainage ordinances.

Sanitary Sewer System Maintenance Program

The City conducts smoke tests and camera inspections to identify vulnerable areas in the system and has implemented a maintenance program to clean and inspect vulnerable portions of the system. Inspecting and maintaining vulnerable portions of the system reduces sewer inflow/infiltration.

The Committee recommends continuing the sanitary sewer system maintenance program.

Tornado-High Winds

Improve public awareness of tornado and high wind risks safe rooms, wind construction methods, safe zones around homes and NOAA weather radio warning system

The Committee reviewed several measures that can reduce damages and the risk of damages and also reduce threats to residents' safety. These measures ranged from clearing the area of objects that could become flying projectiles (gravel driveways, trees and other objects that could fall or be uprooted) to installing "hurricane" clips. Studies have shown that the effectiveness of any warning system is the public taking the appropriate action once emergency warnings have been issued. Therefore, an important component of any educational program would be increasing the public awareness of the City's current warning system.

The Committee recommends working with the County Emergency Manager (who has educational

materials and implements annual educational projects) and ordering free/low-cost materials from FEMA, the Institute of Business and Home Safety, insurance companies, Red Cross, etc. to place in public places, for example where City Council meetings are held and in schools

Assess Current Warning Siren System

The City's emergency warning system consists of several components including sirens, notification by the fire department, radio and television warnings, and NOAA Weather Radio. Warning sirens provide coverage throughout the community. However atmospheric conditions can impact the signal coverage. The cost of replacing or adding sirens is approximately \$12.00 per siren.

The Committee's primary concern is ensuring that the citizens are protected through an efficient, effective, and cost-effective warning system. The Committee agreed that the before recommending the purchase of additional warning sirens, the City staff, with the assistance of the county emergency management coordinator, should review the effectiveness of the current warning system.

Provide NOAA weather radios at reduced cost

The entire county has NOAA weather radio coverage. NOAA weather radios transmit advance warning of all hazards and can be used by the County Emergency Management Coordinator to warn residents of other emergencies. Several features are also available for hearing impaired.

The Committee agreed providing NOAA weather radio receivers at 25% of their regular cost would be a cost effective warning alternative. The Committee's first priority would be to ensure NOAA weather radio receivers are made available to all public facilities, schools, businesses, and clinics. Once this is accomplished, the Committee's recommendation is to make the receivers available to all households in the community

Trim trees to reduce wind damages

The community currently has a tree-trimming ordinance. The Committee agreed that continuing to enforce the ordinance was an effective way of reducing property damage and protecting the citizens.

Thunderstorms- Lightning and Hail

Trim dead or weak branches from trees

The community currently has a tree-trimming ordinance.

The Committee agreed that continuing to enforce the ordinance was an effective way of reducing property damage and protecting the citizens.

Improve public awareness of lightning and hail risk measures that can be taken to reduce risk (i.e. trimming trees purchasing generators and community warning systems sirens and NOAA weather radio).

Improving public awareness about hazard risks and measures the public can take to protect themselves and their property is a cost-effective method of reducing those risks.

The Committee recommends working with the County Emergency Manager (who has educational materials and implements annual educational projects) and ordering free/low-cost materials from FEMA, the Institute of Business and Home Safety, insurance companies, Red Cross, etc. to place in public places, for example where City Council meetings are held and in schools.

Hazardous Materials

Increase public awareness about hazardous materials risk.

Improving public awareness about hazard risks and measures the public can take to protect themselves and their property is a cost-effective method of reducing those risks. The Committee agreed it was particularly important that people understand the risks from hazards commonly found in the home. The City has an area in the lobby of City Hall set aside for displaying information about building permits, ordinance requirements, and other items of interest to its citizens. Information regarding hazardous materials risk and measures the public can take to protect themselves and their community is available.

The Committee feels the City is doing a good job of informing the public of risks and protective measures they can take and recommends continuing the practice of placing information in the Lobby of City Hall.

Continue hazardous materials preparedness and response and recovery activities such as support of LEPC. review and update of response and recover plans, evacuation routes, and community shelters.

The Superfund Amendments and Reauthorization Act (SARA) of 1986. Title III of this legislation requires establishing a Local Emergency Planning Committee (LEPC) to be responsible for developing an emergency plan for preparing for and responding to chemical emergencies in that community. The County LEPC represents all incorporated and unincorporated communities within Beagle County.

This emergency plan includes: an identification of local facilities and transportation routes where hazardous material are present; procedures for immediate response in case of an accident (including a community-wide evacuation plan); a plan for notifying the community that an incident has occurred; the names of response coordinators at local facilities; and a plan for conducting exercises to test the plan. The Beagle County LEPC is required to review, test, and update the plan each year.

The LEPC's effectiveness depends on the support it receives from communities within the County, the EMC, and the public. Without this support the County may be able to meet the minimum legal requirements, but the actual affect of the LEPC will be minimal.

The Committee recommends continuing to support the LEPC and its emergency planning efforts.

Earthquake

Increase public awareness of earthquake threat and NOAA weather radio

Improving public awareness about hazard risks and measures the public can take to protect themselves and their property is a cost-effective method of reducing those risks. However, the

Committee decided that because of the low risk of an earthquake and the limited damages that would occur in Seismic Zone o, the City's limited resources should be targeted toward hazards that pose a greater threat to the community.

Winter Storms

Increase public awareness of winter storm hazards and risks and measures the can take to reduce risks including weatherizing homes protecting pipes from freezing and recommended snow load building standards.

Improving public awareness about hazard risks and measures the public can take to protect themselves and their property is a cost-effective method of reducing those risks. The County

Emergency Management Coordinator's officer current conducts public awareness programs for the entire County, including Darwin. The Committee felt that the majority of their citizens were long-time residents of the area and well informed about winter storm hazards and preparedness and mitigation measures such as insulating and winterizing the home.

The Committee decided that the current County efforts meet the needs of their citizens and that community resources would be more effectively spent on other educational programs.

Provide NOAA weather radios at reduced cost

The entire county has NOAA weather radio coverage. NOAA weather radios transmit advance warning of all hazards and can be used by the County Emergency Management Coordinator to warn residents of other emergencies. Several features are also available for hearing impaired. Providing NOAA weather radio receivers at 25% of their regular cost would be a cost effective of ensuring warning coverage throughout the community.

The Committee recommends applying for funds to provide NOAA Weather Radios at reduced cost. The Committee's first priority would be to ensure NOAA weather radio receivers are made available to all public facilities, daycare facilities, businesses, and clinics. Once this is accomplished, the Committee's recommends making the receivers available to all households in the community.

Establish tree-trimming programs.

Trees growing too close to overhead electric wires may threaten the public's safety and cause power outages. The loss of power anytime during the year can lead to a critical situation, but the loss of power and heat during the winter is particularly dangerous. The community currently enforces a tree-trimming ordinance.

The Committee recommends continuing to enforce the current tree-trimming ordinance.

Drought

Severe Drought

The Committee reviewed the hazard and risk information and concluded that because of the widespread nature of droughts and the low probability of a severe drought; focal level drought mitigation measures would not be effective against severe drought.

Local Drought

The City currently implements water conservation actions in the event of short-term events. The Committee felt that these measures were sufficient.

Establish burn restrictions and water conservation measures for localized drought conditions.

The City currently implements water conservation actions in the event of short-term events. The Committee felt that these measures were sufficient.

Increase public awareness of drought risks and measures the public can take to reduce the risk.

Improving public awareness about hazard risks and measures the public can take to protect themselves and their property is a cost-effective method of reducing those risks.

The Committee felt that drought information provided by local Department of Agriculture and ISU extension services meet the community public information needs.

Mitigation Recommendations

Darwin is a small community with limited resources. Therefore, the Committee decided that the community should focus its efforts on minimizing injuries and loss of life and reducing or eliminating damages due to natural hazards that poses the greatest degree of risk--Winter Storms, Tornados and Extreme Winds and on continuing current mitigation activities.

Recommendations

Priority 1, by rank

- Continue sanitary sewer maintenance program.
- Continue community storm spotter program.
- Improve public awareness of tornado and high wind risks, safe rooms, wind construction methods, safe zones around homes, and NOAA weather radio warning system
- Provide NOAA weather radios at reduced cost
- Continue to enforce Tree Trimming ordinances to reduce damages from trees and tree branches damaged during ice storms or by heavy winds.
- Continue to enforce Snow Removal ordinances ensure streets are cleared promptly and provide emergency access to the citizens of Darwin.
- Continue to implement Burn restrictions-Water Conservation policies to reduce the threat of fire during period of localized drought and to ensure an adequate water supply.

The Committee noted that NOAA weather radio, storm spotters, and public education activities mitigate risks from all hazards.

Priority 2, by rank

- Increase public awareness of hazardous materials risks in the home.
- Support LEPC and County Emergency Management hazardous materials preparedness, response, and recovery efforts.

Alternatives Funding Table

Alternative	Est. Cost	Federal Funds	State or County Funds	Local Funds	Feasibility	Comments
Continue sanitary sewer maintenance program	3,000			3,000	Good	Annual cost of 5-year contract.
Public awareness – tornado and extreme wind	100			100	Good	In addition to the County’s public awareness program.
NOAA Receivers	27,810	20,857		6,953	Fair	Individual receiving radio will pay 25% local matches.
Continue enforcing Tree Trimming ordinance	200			200	Good	Enforce, review and revise.
Continue enforcing Snow Removal ordinance	200			200	Good	Enforce, review and revise. Does NOT include snow removal costs.
Continue enforcing Burn restrictions-Water Conservation policies	150			150	Good	Enforce, review and revise. Does NOT include snow removal costs.
Public awareness – hazardous household materials	100		75	25	Good	Coordinate with County Emergency Management.
Support LEPC	0				Good	No cost to community.

MITIGATION STRATEGY: §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.*

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.*

Element	Location in the Plan (section or annex and page #)	Reviewer’s Comments	SCORE	
			N	S
A Does the plan include a description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards? (GOALS are long-term; represent what the community wants to achieve, such as “eliminate flood damage”; and are based on the risk assessment findings.)	Mitigation Goals and Alternatives P. 1	<p>Goals are stated.</p> <p>Recommended Revisions:</p> <ul style="list-style-type: none"> • Explain how the goals are intended to reduce or avoid vulnerability. • Describe how these goals were developed. The goals could be developed early in the planning process and refined based on the risk assessment findings, or developed entirely after the risk assessment is completed. They should also be compatible with the goals of the jurisdiction as expressed in other documents. • Although the Rule does not require a description of objectives, jurisdictions are highly encouraged to include objectives developed to achieve the goals so that the connection between goals, objectives, and mitigation actions is clear. <p>For more information on developing local mitigation goals and objectives, see <i>Developing the Mitigation Plan</i> (FEMA 386-3), Step 1.</p>		✓
SUMMARY SCORE				✓

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.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the plan identify and analyze a comprehensive range of specific mitigation actions and projects for each hazard?	Mitigation Goals and Alternatives P. 3 - 9	<p>Recommended Revisions:</p> <ul style="list-style-type: none"> • If the plan identified data limitations in the risk assessment section, list actions to address the data limitations. <p>For more details on identifying and evaluating mitigation actions, see <i>Developing the Mitigation Plan</i> (FEMA 386-3), Step 2.</p>		✓
B. Do the identified actions and projects address reducing the effects of hazards on new buildings and infrastructure?	Mitigation Goals and Alternatives P. 3 - 9	<p>The plan does not include actions such as zoning ordinances and building codes that address hazards to new construction.</p> <p>Required Revisions:</p> <ul style="list-style-type: none"> • Include actions that address new buildings and infrastructure. <p>Recommended Revisions:</p> <ul style="list-style-type: none"> • While the Rule does not specify critical facilities, the plan should also address new critical facilities. • Develop a matrix to show what actions address specific hazards and new buildings and infrastructure. <p>For more details on identifying and evaluating mitigation actions, see <i>Developing the Mitigation Plan</i> (FEMA 386-3), Step 2.</p>	✓	
C. Do the identified actions and projects address reducing the effects of hazards on existing buildings and infrastructure?	Mitigation Goals and Alternatives P. 3 - 9	<p>The actions include public information programs and enforcement that apply to existing buildings and infrastructure.</p> <p>Recommended Revisions:</p> <ul style="list-style-type: none"> • While the Rule does not specify critical facilities, the plan should also address existing critical facilities. • Develop a matrix to show what actions address specific 		✓

Jurisdiction: City of Darwin, Iowa

		<p>hazards and existing buildings and infrastructure.</p> <p>For more details on identifying and evaluating mitigation actions, see <i>Developing the Mitigation Plan</i> (FEMA 386-3), Step 2.</p>		
SUMMARY SCORE			✓	

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.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the mitigation strategy include how the actions are prioritized ? (For example, is there a discussion of the process and criteria used?)	Mitigation Goals and Alternatives P. 9	<p>There are two priority groupings, each with several actions. No discussion explains how priority actions were ranked.</p> <p>Required Revisions:</p> <ul style="list-style-type: none"> Describe the method for prioritizing actions. (In addition to cost benefit review, considerations may include social impact, technical feasibility, administrative capabilities, and political and legal effects, as well as environmental issues.) <p>For a detailed description of the development of the mitigation strategy or action plan, see <i>Developing the Mitigation Plan</i> (FEMA 386-3), Step 3.</p>	✓	
B. Does the mitigation strategy address how the actions will be implemented and administered ? (For example, does it identify the responsible department, existing and potential resources, and timeframe?)	Mitigation Goals and Alternatives P. 11	<p>Eight of the ten actions are identified as "ongoing." There is no discussion regarding how the actions will be implemented or by whom they will be administered.</p> <p>Required Revisions:</p> <ul style="list-style-type: none"> Identify how the actions will be implemented and administered. Include in the description the responsible party(s)/agency(s), the funding source(s), and the target completion dates for each action. <p>Recommended Revisions:</p> <ul style="list-style-type: none"> Include a cost estimate and/or resources required for each action, when possible. 	✓	

Jurisdiction: City of Darwin, Iowa

		For a detailed description of the development of the mitigation strategy or action plan, see <i>Developing the Mitigation Plan</i> (FEMA 386-3), Step 3.		
C. Does the prioritization process include an emphasis on the use of a cost-benefit review (see page 3-36 of <i>Multi-Hazard Mitigation Planning Guidance</i>) to maximize benefits?		<p>There is no cost-benefit review found in the plan.</p> <p>Required Revisions:</p> <ul style="list-style-type: none"> Describe the cost benefit review performed during the prioritization process to identify actions/projects with the greatest benefits. (If cost and benefit data are missing, a qualitative assessment of the comparative benefits will suffice.) <p>For a detailed description of the development of the mitigation strategy or action plan, see <i>Developing the Mitigation Plan</i> (FEMA 386-3), Step 3; and <i>Mitigation Benefit Cost Analysis (BCA) Toolkit Compact Disc (CD)</i>.</p>	✓	
SUMMARY SCORE			✓	

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.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A Does the plan include at least one identifiable action item for each jurisdiction requesting FEMA approval of the plan?				
SUMMARY SCORE			N/A	N/A