

# **CITY OF CLEBURNE**



## **MITIGATION ACTION PLAN**

February 2007

# City of Cleburne Mitigation Action Plan

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## Introduction

### **Local Planning and Implementation Process**

While presented as a stand-alone document, this Mitigation Action Plan goes hand in hand with the City of Cleburne's "Hazard Analysis" which profiles the most significant natural and technological hazards and identifies the risk and vulnerability associated with these hazards. This Mitigation Action Plan also serves as a supplement to Annex P of the City of Cleburne's "Emergency Response Plan" and complies with the requirements of the Governor's Division of Emergency Management planning requirements. Annex P outlines the Hazard Mitigation Team for the city and its responsibilities.

The City of Cleburne has participated in a multi-jurisdictional planning effort coordinated by the North Central Texas Council of Governments (NCTCOG). During the years 2003 and 2004 the NCTCOG developed the "*Multi-Hazard Risk Assessment: Forewarnings of Natural Hazards to the year 2030*", the multi-jurisdictional "*Mitigation Strategies for Hydrologic Hazards: Top Ten Priority Actions to the Year 2010*", and "*Mitigation Strategies for Geologic, Severe Weather & Climate Hazards*". These regional strategies have been supplemented, where appropriate, by additional information on local risk assessment and or local mitigation strategies.

## Planning Process

### **Who was involved in the planning process**

The City of Cleburne Hazard Mitigation Team was the primary planning group to develop this Mitigation Action Plan. The Hazard Mitigation Team consists of the cities Public Works Director, Street Superintendent, Building Inspector, Water Supervisor, Floodplain Administrator, Health Official, Planning and Zoning Coordinator, Environmental Coordinator, Emergency Management Coordinator, and a representative from private industry. The local Hazard Mitigation Team met and developed the local mitigation strategies and action items for the City of Cleburne based on local hazards, historical data, and previous ongoing mitigation strategies in place.

### **How the public was involved**

The City of Cleburne has provided opportunity for the public, neighboring communities, and businesses to comment and suggest ideas on mitigation strategies by open meeting on February 27, 2007 and will do so again before the adoption of the plan by the City Council. The City also provided the mitigation planning information on the cities web page and community cable channel for public review and comment. Contact information was included to allow feedback from the public on proposed local mitigation strategies.

### **How were opportunities given for neighboring communities and local businesses, non-profits, businesses, academia, and others interested parties to be involved in the planning process**

A copy of our regional goals and our local objectives and action items was sent to the neighboring cities of Keene and Joshua to solicit feedback on the proposed mitigation strategies for the City of Cleburne. A member of the local industrial group was included on the Hazard Mitigation Team, thus allowing for input from private industry. The information on the cities web page and local cable channel also allowed for feedback from all other agencies and groups.

**Describe the review and incorporation of existing plans, studies, reports, and technical information**

The City Hazard Mitigation Team met in February 2006 and again on February 2, 2007 and reviewed our local City of Cleburne Hazard Analysis and the Multi-Hazard Risk Assessment compiled by the NCTCOG to determine the vulnerability and associated risks to the City of Cleburne to the different natural hazards. The Hazard Analysis has historical data for the City and surrounding area. Based on historical data and a review of the vulnerability and risk to our city, the mitigation strategies and actions were developed. Other City documents which assisted in the development of our local strategies included; City of Cleburne FEMA Flood Plain Maps, Cleburne Drainage System Plan, Drought Contingency Plan, Water and Wastewater Master Plan, and the Long Range Water Supply Plan.

**Vulnerability and Risk Assessment**

**Describe vulnerability in terms of the types and numbers of existing buildings, infrastructures, and critical facilities located in the identified hazard area**

The City of Cleburne has been divided into four sectors in our local Hazard Analysis and in each sector seven vulnerabilities have been identified to include; people, housing units, critical facilities, infrastructure and lifelines, hazmat facilities, and governmental facilities. The amount in each category for each sector includes;

| Sectors | People | Housing | Critical Facilities | Special Facilities | Infrastructure & Lifelines | Hazmat Facilities | Commercial Facilities |
|---------|--------|---------|---------------------|--------------------|----------------------------|-------------------|-----------------------|
| 1       | 11,800 | 4,624   | 5                   | 8                  | 10                         | 5                 | 5                     |
| 2       | 6,800  | 2,000   | 2                   | 3                  | 7                          | 1                 | 1                     |
| 3       | 2,000  | 650     | 2                   | 1                  | 4                          | 3                 | 2                     |
| 4       | 8,200  | 3,163   | 1                   | 3                  | 8                          | 1                 | 1                     |

**Describe vulnerability in terms of the types and numbers of future buildings, infrastructures, and critical facilities located in the identified hazard area**

Buildings, infrastructures, and critical facilities, in the near future include three schools which are under construction. The new schools are similar construction to previous schools and are located on the fringes of the city. The schools are not located in the flood plain and face similar risks and vulnerabilities as the other schools. A new radio communications tower is to be constructed in 2007 in the southeast portion of the city. The communication tower is of engineered construction and will have back-up power to allow it to operate when electricity is out. No other critical facilities are in the immediate plans. It has been proposed that the City of Cleburne's population may double within the next decade, therefore numerous houses and other building will be built. Also critical facilities such as fire stations, public works facilities will also have to be built as funding is allocated.

**Identify potential dollar loss to structures identified**

| Sectors Values | Housing       | Critical Facilities | Special Facilities | Infrastructure & Lifelines | Hazmat Facilities | Commercial Facilities |
|----------------|---------------|---------------------|--------------------|----------------------------|-------------------|-----------------------|
| <b>1</b>       | <b>4,624</b>  | <b>5</b>            | <b>8</b>           | <b>10</b>                  | <b>5</b>          | <b>5</b>              |
| Dollar Value   | \$203,200,000 | \$4,321,410         | \$72,353,312       | \$69,943,360               | \$67,699,290      | \$39,443,260          |
| <b>2</b>       | <b>2,000</b>  | <b>2</b>            | <b>3</b>           | <b>7</b>                   | <b>1</b>          | <b>1</b>              |
| Dollar Value   | \$100,000,000 | \$3,120,000         | \$4,896,173        | \$2,024,000                | \$00.00           | \$3,535,980           |
| <b>3</b>       | <b>650</b>    | <b>2</b>            | <b>1</b>           | <b>4</b>                   | <b>3</b>          | <b>2</b>              |
| Dollar Value   | \$100,000,000 | \$8,562,871         | \$2,594,771        | \$437,641                  | \$176,641         | \$9,266,435           |
| <b>4</b>       | <b>3,163</b>  | <b>1</b>            | <b>3</b>           | <b>8</b>                   | <b>1</b>          | <b>1</b>              |
| Dollar Value   | \$158,150,000 | \$1,255,100         | \$21,500,823       | \$5,093,900                | 00.00             | \$1,253,400           |

**Describe the methodology used to identify potential dollar loss**

Several data bases were reviewed to determine potential dollar loss of the housing, critical facilities, special facilities, infrastructure & lifelines, hazmat facilities, and commercial facilities in the City of Cleburne. The potential dollar loss values of the buildings belonging to the City of Cleburne were obtained from the insured values of each building as listed in the “Texas Municipal League Intergovernmental Risk Pool Real and Property Value Schedule” dated December 5, 2006. The potential dollar values for all of the public schools were based on the insured values for each campus as listed by the Cleburne Independent School Districts “Statement of Values” dated June 1, 2004. The potential dollar loss values for housing were estimated based on the median house appraisal value for the City of Cleburne based on the 2000 census. Finally, all commercial and hazmat facilities potential loss values were taken from the current Johnson County Appraisal District tax rolls.

**Describe the land uses and development trends**

The City of Cleburne has a population of around 30,000 and the county has a population of 140,000 and has been predominately a rural community. The biggest trend in the City of Cleburne and the surrounding area is the development of the Barnett Shale gas field. Numerous gas wells and gas pipelines have been added to the City and surrounding area. This has increased the amount of truck traffic and a large number of support businesses for the industry. This growth will continue for the foreseeable future. The City also has a large industrial park, which is also experiencing growth. The City is also experiencing housing growth mainly to the west and south areas of the City in residential housing.

**Hazard Mitigation Action Planning Goals**

**City of Cleburne local goals, objectives, and action items for Hazard Mitigation**

**1. Protect existing and new properties from the effects of all hazards.**

**Objective 1.1 Minimize flooding along McAnear & Buffalo Creek.**

- Maintain Marti Reservoir & E. Buffalo Creek overflow channel.
- Continue vegetative management control program for creek waterways.
- Clean storm drains and ditches of debris.

**Objective 1.2 Minimize damage from storm runoff.**

- Perform storm water analysis on each new development.
- Complete drainage study to update master utility plan.
- Establish capital improvement program for storm drainage.
- Update GIS capabilities/data collection to optimize drainage collection and control system.

**2. Reduce or eliminate loss of life and property damage resulting from severe weather events.**

**Objective 2.1 Improve early warning systems.**

- Maintain and add additional outdoor warning sirens as the City grows.
- Promote the use of weather radios in commercial, city and residential buildings.
- Train, provide equipment, and utilize storm spotters.

**Objective 2.2 Reduce repetitive flooding locations in the city.**

- Establish drainage department within Public Works.
- Monitor, evaluate, and repair drainage system in areas of the city which have repetitive flooding.
- Add additional staff to validate plans and perform on-site inspections.
- Implement Master Parks Plan to increase green spaces.

**3. Identify and implement hazard mitigation projects to reduce the impact of hazardous events and disasters.**

**Objective 3.1 Protect critical infrastructure.**

- Additional staff and resources for Inflow and Infiltration.
- Provide adequate back-up power for EOC/City Hall.
- Use engineered construction methods for new facilities and infrastructure.

**Objective 3.2 Conservation of water resources.**

- Improve the water protection / leak detection capability of public works staff.
- Complete long range water supply plan for city.
- Development of re-use water system.
- Fund capital improvements for water / sewer system.
- Develop and maintain drought contingency plan.

**4. Increase public support and understanding of hazard mitigation and disasters.**

**Objective 4.1 Increase community awareness of mitigation strategies.**

- Develop and distribute pamphlets on Hazard Mitigation to the public.
- Maintain Hazard Mitigation information on the cities web page and cable station.

**Objective 4.2 Increase community disaster preparedness.**

- Obtain Storm Ready certification from National Weather Service.
- Obtain and maintain an AM radio station for the City to disseminate emergency and preparedness information.

**5. Reduce losses and repetitive damages for chronic hazardous events while promoting insurance coverage for catastrophic hazards.**

**Objective 5.1 Identify repetitive loss houses and businesses.**

- Enact engineering changes to reduce flooding to chronically affected areas.
- Purchase houses which have been subjected to repetitive losses due to flooding.

**Objective 5.2 Provide flood insurance to persons in or out of the flood zone.**

- Provide flood insurance through the National Flood insurance program (NFIP).
- Educate citizens on the need and availability of flood insurance.

## **Plan Adoption & Maintenance**

The NCTCOG has developed the “*Multi-Jurisdictional Hazard Mitigation Action Planning Process to the Year 2010*”. The document describes the multi-jurisdictional planning process to be used to monitor and evaluate plan implementation, and to update the multi-jurisdictional elements as new information emerges that substantially changes our understanding of a hazard and its risk; state requirements change; or to update the plan every five years as required by federal regulation.

**Describe the method and schedule for monitoring the local plan**

The plan will be monitored on a day to day basis by the members of the local Hazard Mitigation Team led by the Public Works Director and coordinated with the Office of Emergency Management. Our local strategies, objectives and actions items were developed by the Hazard Mitigation Team and the responsibility for implementing the strategies, objectives, and actions items is the responsibility of the Public Works Department and the Office of Emergency Management.

**Describe the method and schedule for evaluating the local plan**

The City of Cleburne Hazard Mitigation Team will evaluate the progress of the plan annually in January when we review our Emergency Response Plan and annex P, “Hazard Mitigation” and after major incidents to determine the progress and effectiveness of our local mitigation actions.

**Describe the method and schedule for updating the local plan**

The local goals and objectives of our Mitigation Action Plan will be updated every four years and submitted for approval every 5 years as required. The long-range goals of the City will be reviewed and incorporated into the plan when appropriate. Mitigation strategies will be reviewed as to progress of goals based on City priorities, and availability of funds for mitigation projects. Our local Hazard Mitigation Team will continue to have the lead role in the updating of the plan.

The City of Cleburne will continue to involve the public in the mitigation process by educating them on flood insurance, flood safety, tornado preparedness, and other mitigation activities to help reduce or eliminate the risk and vulnerability from natural hazards.