

4. PLAN FOR ACTION



PLAN FOR ACTION

This section describes meaningful, focused strategies to address the top priority hazards as identified by citizens of Beltrami County. These specific actions are designed to be practical, cost effective approaches to dealing with immediate threats and high priority future hazard events.

Potential strategies were identified by the HRDC and the task force, then chosen based on their potential effectiveness locally. Strategy suggestions were taken from Task force experience, discussions about successful actions with neighboring jurisdictions, FEMA documents, and Tools and Techniques: An Encyclopedia of Strategies to Mitigate the Impacts of Natural Hazards, from the North Carolina Division of Emergency Management.

Collaboration with adjoining and internal jurisdictions was achieved in a number of ways. Beltrami County's Emergency Manager participates in a quarterly regional Emergency Management team with other jurisdictions to support and review each others activities. Plan facilitator HRDC also facilitated plans in several adjoining counties and coordinated with the RDC planners in the rest. Finally all adjoining counties city/township leaders in Beltrami County were given an opportunity to review and connect on the plan prior to adoption. Comments were incorporated as appropriate.

For each hazard area, a brief summary of the problem is stated, followed by a description of possible actions, and finally, a specific identification of the objective that is desired, the strategies that will be undertaken, the responsible parties for those strategies, the resources needed, and a general timeline for the strategy.

There are four local governments that are identified as participants in strategy implementation — Beltrami County and the Cities of Bemidji, Kelliher, and Blackduck. Each of these jurisdictions was represented on the advisory committee. Additional entities such as the Red Lake Band of Chippewa and the various state and local agencies, also participated in relevant parts of this project on both a formal and informal basis. Several strategies have participants listed as the County Emergency Management Team. This group includes all of the entities listed on the advisory committee for this planning process, resulting in strategies that cover all of the jurisdictions in the County who participated.

An informal assessment of the costs and benefits was completed by the task force when they developed prioritized strategies based on the assessments, including a cost estimate of the proposed strategy. An in-depth financial review was not feasible. A thorough cost/benefit analysis will be undertaken prior to any action being taken. Strategies were prioritized based on the expected availability of resources.

Due to the nature of the process used to develop this plan, the “goals” referred to in 44CFR201.6 (c) (3) (1) are listed as “objectives” in this plan.

Wildfire

Summary of Problem. Wildfires pose a significant potential future problem in all sectors, particularly the Bemidji and South sectors. The combination of rural, scattered site development, extensive forest cover and fuels build up, and the relatively remote nature of parts of the County make potential wildfire hazards a significant concern. There are no regulations that presently govern structure design or material usage, or that address landscaping issues.

Discussion of Solutions. Two different sets of solutions are available to address this problem. First, a more effective response would minimize damage from wildfires. One way to improve response is to increase the availability of dry hydrants within the more remote areas of each sector.

Second, regulations or educational efforts can assist homeowners in fireproofing their dwellings through a variety of techniques including improved access, vegetative removal around structures, and the use of fire retardant materials. In the case of Beltrami County, it seems appropriate to use educational measures prior to any thought being given to the adoption of additional regulations.

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Objective: Improve emergency response to wildfires.

Strategy: **Place three to four new dry hydrants in areas not now within three miles of an existing municipal water supply or dry hydrant.**

Priority: High

Resources needed: Approximately \$200 - 400 apiece.

Responsible party: Fire Departments

Other Participants: NRCS, SWCD, Red Lake Game Fund, County Natural Resource Department

Timeline: Mid Term

Objective: Prevent and/or minimize damage to structures through fireproofing measures.

Strategy: **Implement the federal Firewise Program in priority areas of Beltrami County.**

Priority: High

Resources needed: \$150,000 (\$60,000 received)

Responsible party: Fire Departments, SWCD

Other Participants:

Timeline: Underway

Strategy: **Work with landowners to remove budworm infested timber as**

soon as is feasible.

Priority: High
Resources needed: Current timber harvest capacity
Responsible party: DNR, SWCD, County Natural Resources Department
Other Participants: Private timber companies
Timeline: Short to Mid Term

Strategy: Identify townships or areas that don't have fire protection and provide coverage.

Priority: Medium
Resources needed: Unknown.
Responsible party: Beltrami County Emergency Management
Other Participants: Fire Departments, County Board, Townships
Timeline:

Flooding

Summary of Problem. Overland flooding caused by a major summer storm is a problem of moderate concern in the northwest portion of the County. As shown by its history of damaging storms, the rural population base in this area is vulnerable to isolation from road, culvert, and ditch washouts.

The other flooding concern in Beltrami County is high groundwater during extended periods of high precipitation. While most prevalent west of Bemidji in Eckles and Grant Valley townships, this type of flooding can occur throughout the Bemidji and Southern sectors. Rising groundwater levels in the late 1990s slowly overcame basements, roads, and other structures in this area.

Discussion of Solutions. The maintenance of the road and drainage system in all areas of the County is critical for protection from localized flooding events. Additional efforts to protect private structures will require encouraging proper building techniques in flood-prone areas.

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Objective: Improve the flood capacity and operation of road and ditch systems in the County.

Strategy: Create an early warning system for jurisdictions downstream of rain events.

Priority: High

Resources needed: Unknown
Responsible party: SWCD
Other Participants: County Engineer, City Engineers, DNR
Timeline: Mid Term

Strategy: Improve and maintain the judicial ditch system in southwest Beltrami County.

Priority: High
Resources needed: Unknown
Responsible party: County Engineer
Other Participants: SWCD
Timeline: Mid Term

Strategy: Improve railroad culvert capacity in the groundwater flooding area of southern Beltrami County.

Priority: Medium
Resources needed: Unknown
Responsible party: Railroad
Other Participants: County Engineer, MN/DOT, SWCD
Timeline: Mid Term

Objective: Promote construction methods that will minimize damage that could result from a groundwater flood event in southern Beltrami County.

Strategy: Identify areas where the lowest levels of a structure and ISTS systems are prone to flooding.

Priority: High
Resources needed: Staff time
Responsible party: County Environmental Services
Other Participants: County GIS, County Engineer, SWCD, FEMA
Timeline: Short Term

Strategy: Develop and distribute information on appropriate building methods in the flood prone areas, utilizing a brochure or county newsletter.

Priority: High

Resources needed: Staff time, \$20,000 for publication and distribution
Responsible party: County Environmental Services
Other Participants: County Board, Media
Timeline: Mid Term

Tornado

Summary of Problem. Tornadoes pose a risk to the largely rural population of the Red Lake Reservation. While the dispersed population reduces the potential damage and bodily harm from one storm, it also impedes storm warnings, the ability of residents to move to safe areas, and recovery.

Discussion of Solutions. Pending Red Lake Band approval.

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Pending Red Lake Band approval.

Windstorms

Summary of Problem. Windstorms are a potential problem in all sectors, but are of most concern in the rural development areas surrounding Bemidji and into the Southern sector. They are often considered a moderate hazard due to the extensive forest cover and the potential for power and communications loss from downed trees.

Discussion of Solutions. In addition to continuing the level of service provided by the County to clear roads and provide emergency services to rural residents, the most important activity may be to educate rural homeowners about preparations should power and communications be disrupted. This is particularly important for urban retirees who are accustomed to a higher level of service than can be provided in a rural setting.

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Objective: Educate homeowners about the necessary precautions they can take in the event of power and communications disruptions.

Strategy: **Develop and distribute a county resource brochure to new residential permits and emergency information to the County's homeowners.**

Priority: Medium
Resources needed: \$12,000
Responsible party: Beltrami County Environmental Services
Other Participants: County Emergency Management Team
Timeline: Short Term, ongoing

Blizzard

Summary of Problem. The main concern regarding blizzard events is similar to that of windstorms — the loss of power and communications during and immediately after an event. An additional concern is providing access to all areas of the County for emergency personnel, particularly on those roads known to have a problem with ice and blowing snow. While the County and State Highway Departments have the capability to handle most storm events and coordinate in the event emergency access is needed, steps can be taken to improve the level of service provided to rural residents.

Discussion of Solutions. Educational activities for homeowners, discussing the need and strategies for emergency preparedness, are the same as for windstorms and are not repeated here. Additional work can be taken, however, to keep repeatedly snowbound roads open through the use of living snowfences. Studies in other areas of the state have shown them to have an overall benefit to cost ratio of 27 to 1. One experimental area in Beltrami County is expected to begin showing results in the winter of 2003-2004.

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Objective: Improve wintertime access to key intersections and roadways throughout the County.

Strategy: **Identify roads that have a repeating problem with snow and ice build up and evaluate their potential for improvement.**

Priority: Medium
Resources needed: \$1,000
Responsible party: County Highway Department
Other Participants: Townships, Cities
Timeline: Short Term

Strategy: **Develop living snowfences or maintain existing vegetative buffers in those locations that have an identified need and the placement of a snowfence is feasible.**

Priority: Medium
Resources needed: Upwards of \$10,000
Responsible party: County Highway Department
Other Participants: SWCD, County Natural Resources Department, Local Jurisdictions, DNR
Timeline: Short to Mid Term

Infectious Disease — Natural

Summary of Problem. While wild and domestic disease outbreaks are a concern, the most critical issue in effectively dealing with a widespread outbreak will be enforcing an extended quarantine, especially in rural areas. Recent epidemic outbreaks around the world highlight the effectiveness in quarantines, but also the difficulty in administering them.

Discussion of Solutions. While this problem has been recently identified and is known to emergency management officials, no solutions have yet been identified. A more comprehensive review of available techniques is needed to fully gauge potential solutions for Beltrami County.

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Objective: Research, develop, and adopt an effective quarantine plan for Beltrami County.

Strategy: **Complete a separate planning process to identify the best approach to an infectious disease outbreak in the County.**

Priority: High
Resources needed: Unknown
Responsible party: County Emergency Management
Other Participants:
Timeline: Short Term

Hazardous Material

Summary of Problem. The main issues regarding hazardous materials in Beltrami County include the transportation of materials and illegal methamphetamine labs. Local response units are trained to deal with hazardous material spills in a defensive manner, and have little capability for offensive action before state assistance arrives.

Illegal methamphetamine labs are a growing problem in Beltrami County. The dangerous materials present in these labs can create a dangerous situation for emergency or law enforcement units. At an average clean up cost of \$25,000 each, they are also expensive to clean up and can quickly consume local government budgets.

Discussion of Solutions. While state-trained personnel and equipment are available for hazard material spills, training local officials in the safe handling and clean up of the most likely types of events would greatly improve response times and reduce potential damages. Assistance is needed for local jurisdictions with the high costs of cleaning up methamphetamine labs. A plan that identifies ways to share, defer, or mitigate the cost of clean up is the best way to start.

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Objective: Improve the capacity of local agencies for an offensive response to hazardous materials spills.

Strategy: **Train and equip a local team for the handling and clean up of the most likely types of hazardous materials spills, possibly in conjunction with Clearwater County.**

Priority: High
Resources needed: \$50,000
Responsible party: Bemidji Fire Department
Other Participants: MN PCA, County Emergency Management
Timeline: Mid Term

Objective: Reduce the cost to local jurisdictions for methamphetamine lab clean up.

Strategy: **Research, develop, and implement a plan for reducing the cost to local jurisdictions of lab clean up.**

Priority: Medium
Resources needed: No additional expenditures needed
Responsible party: Emergency Services
Other Participants:
Timeline: Short Term

Water Supply Contamination

Summary of Problem. The Red Lake Reservation has a significant amount of water supply infrastructure that is old, deteriorating, and difficult to locate. If a large portion of this older infrastructure were to fail, sizeable portions of the local population could be left with either contaminated water or no water at all.

Discussion of Solutions. Pending Red Lake Band approval.

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Pending Red Lake Band approval.

Terrorism

Summary of Problem. Two types of terrorist activities are of concern in Beltrami County: local terrorist incidents and assisting in the response to metro area incidents. Attacks on the Twin Cities metro area are of greater concern, as it is likely that large portions of the metro would evacuate. Local officials anticipate that an evacuation would lead to a large influx of people in Beltrami and surrounding counties, exceeding the capacity of local services.

Discussion of Solutions. While Beltrami County has experience dealing with large influxes of people (thanks to the summer tourist season and the flood of 1997), a major terrorist event causing an evacuation of the Twin Cities metro area would far outstrip local capacities. More planning and coordination is needed to ensure an effective response. Top priorities would likely include food and housing, transportation, medical services, schools, and services for the elderly.

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Objective: Plan for an effective response to a large influx of people due to an emergency situation in a nearby metro area.

Strategy: **Develop a detailed, comprehensive emergency response plan for Beltrami County and the region that provides the capacity to deal with people's needs in the event of a large influx of people.**

Priority: Medium

Resources needed: Approximately \$75,000

Responsible party: County Emergency Manager

Other Participants: County Emergency Management Team

Timeline: Mid Term

Emergency Preparedness

Summary of Problem. Due to the size and growing population of Beltrami County, multiple communications systems would help emergency officials to coordinate responses in the event of a failure in one system. Similarly, the placement of firefighting equipment in a geographically advantageous distribution around the City of Bemidji would help in providing a more timely response to rural structural fires.

Discussion of Solutions. In the event of a widespread power failure or other disruption in radio and cellular phone communications, a back up satellite phone system would provide a critical link between key emergency managers in the field. Currently, the Bemidji Fire Department does not have a capital improvement plan that includes the positioning of equipment in the rural areas surrounding the City. Opportunities to expand that service will have to be explored.

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Objective: Provide an additional means of back up communications between emergency service providers in the field.

Strategy: **Purchase up to six satellite phones and service subscriptions for the sheriff, fire, and ambulance services, and central dispatch.**

Priority: Medium

Resources needed: Approximately \$1,000 per phone, plus \$500 annual service subscription

Responsible party: Emergency Management

Other Participants: County Emergency Management Team

Timeline: Short Term

Objective: Preposition firefighting equipment outside the City of Bemidji.

Strategy: **Closely monitor developments and changes within this area in order to identify opportunities for the positioning of equipment.**

Priority: Medium

Resources needed: Existing staff resources

Responsible party: Bemidji Fire Department

Other Participants: County Emergency Management Team

Timeline: Long Term