

Chapter 1. Introduction

1.1. Background

Kankakee County is subject to natural hazards that threaten life, safety, health, and welfare and cause extensive property damage. Some recent examples include:

- Flooding that caused the Kankakee and Iroquois Rivers to rise above flood stage fourteen times since 1990.
- Snow storms in 1999 and 2001 that resulted in emergencies declared by the President.
- Severe thunderstorms and tornadoes in 2004 that caused the President to declare the County a disaster area.



To better understand these hazards and their impacts on people and property, and to identify ways to reduce those impacts, the Kankakee County Regional Planning Department undertook this *Hazard Mitigation Plan*. “Hazard mitigation” does not mean that all hazards are stopped or prevented. It does not suggest complete elimination of the damage or disruption caused by such incidents. Natural forces are powerful and most natural hazards are well beyond our ability to control. Mitigation does not mean quick fixes. It is a long-term approach to reduce hazard vulnerability.

“Hazard mitigation” is defined as any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event. – FEMA

Why this plan? Every community faces different hazards and every community has different resources and interests to bring to bear on its problems. Because there are many ways to deal with natural hazards and many agencies that can help, there is no one solution or cookbook for managing or mitigating their effects.

Planning is one of the best ways to correct these shortcomings and produce a program of activities that will best mitigate the impact of hazards and meet other needs. A well-prepared plan will ensure that all possible activities are reviewed and implemented so that the problem is addressed by the most appropriate and efficient solutions. It can also ensure that activities are coordinated with each other and with other goals and activities, preventing conflicts and reducing the costs of implementing each individual activity.

Mitigation activities need funding. A mitigation plan is a requirement for Federal mitigation funds under Section 104 of the Disaster Mitigation Act of 2000 (42 USC 5165). Therefore, a mitigation plan will both guide the best use of mitigation funding and meet the prerequisite for obtaining such funds from the Federal Emergency Management Agency (FEMA). FEMA also recognizes plans through its Community Rating System, a program that reduces flood insurance premiums (discussed in Section 1.5).

This Plan: This *Plan* identifies activities that can be undertaken by both the public and the private sectors to reduce safety hazards, health hazards, and property damage caused by natural hazards. The *Plan* addresses the eight major natural hazards facing Kankakee County:

- Overbank flooding
- Local drainage problems
- Tornadoes
- Earthquakes
- Winter storms
- Thunderstorms
- Drought/extreme heat
- Wildfire

This *Plan* fulfills the Federal mitigation planning requirements, qualifies for Community Rating System credit and provides the County and its municipalities with a blueprint for reducing the impacts of these natural hazards on people and property.

1.2. Planning Approach

This *Plan* is the product of a rational thought process that reviews alternatives and selects and designs those that will work best for the situation. This process is an attempt to avoid the need to make quick decisions based on inadequate information. It provides carefully considered directions to the County government and to the participating municipalities and other participating governmental bodies by studying the overall damage potential and ensuring that public funds are well spent.

The Task Force: This *Hazard Mitigation Plan* was developed under the guidance of a Mitigation Advisory Task Force. All municipalities within Kankakee County were invited to participate in the plans update. The municipalities that chose to participate are listed in the table to the right. It can be seen by the 2010 population information that both large and small communities participated.

Kankakee Community College and three (3) fire protection districts also opted to participate as separate local governments. A representative from the Economic Alliance, Kankakee County Highway Department, the Kankakee County Health Department, and the Kankakee County Sheriff’s Department also participated.

Municipal Participation	
Community	Population
Aroma Park	743
Bourbonnais	18,631
Bradley	15,895
Kankakee	27,537
Manteno	9,204
Momence	3,310
Sun River Terrace	528
Uninc. County	28,698
Fire District Participation	
Bourbonnais FPD	
Kankakee FPD	
Manteno FPD	
Other Participants	
Economic Alliance	
Kankakee Community College	
Kankakee County Health Dept.	
Kankakee County Highway Dept.	
Kankakee County Sheriff’s Dept.	

Mitigation Advisory Task Force 2013

Participant	Agency/Organization	
County Offices		
Sgt. David Zinanni	Sheriff's Department	
Mark Rogers	Highway Department	
Don Pallissard	Planning Department – Building Division	
Delbert Skimerhorn	Planning Department	
Michelle Sadler	Planning Department	
Michael Van Mill	Planning Department – Economic Alliance	
Marilyn Campbell	Economic Alliance	
John Bevis	Health Department	
Municipalities		
Linda Fowler	Mayor	Village of Aroma Park
Walter Schneider	Village Trustee	Village of Aroma Park
Gary Preston	Building Commissioner	Village of Bourbonnais
Mike Gingerich	Consulting Engineer	Villages of Bradley
Cliff Cross	City Planner	City of Kankakee
Chris Larocque	Building Official	Village of Manteno
Tim Swanson	Police	City of Momence
Ralph J. Bailey	Mayor	Village of Sun River Terrace
George Mataja	Physical Plant Director	Kankakee Community College
Other Agencies and Organizations		
Ed St.Louis	Bourbonnais Township Fire Protection District	
Phil Perkins	Kankakee City Fire Department	
Scott O'Brien	Manteno Township Fire Protection District	

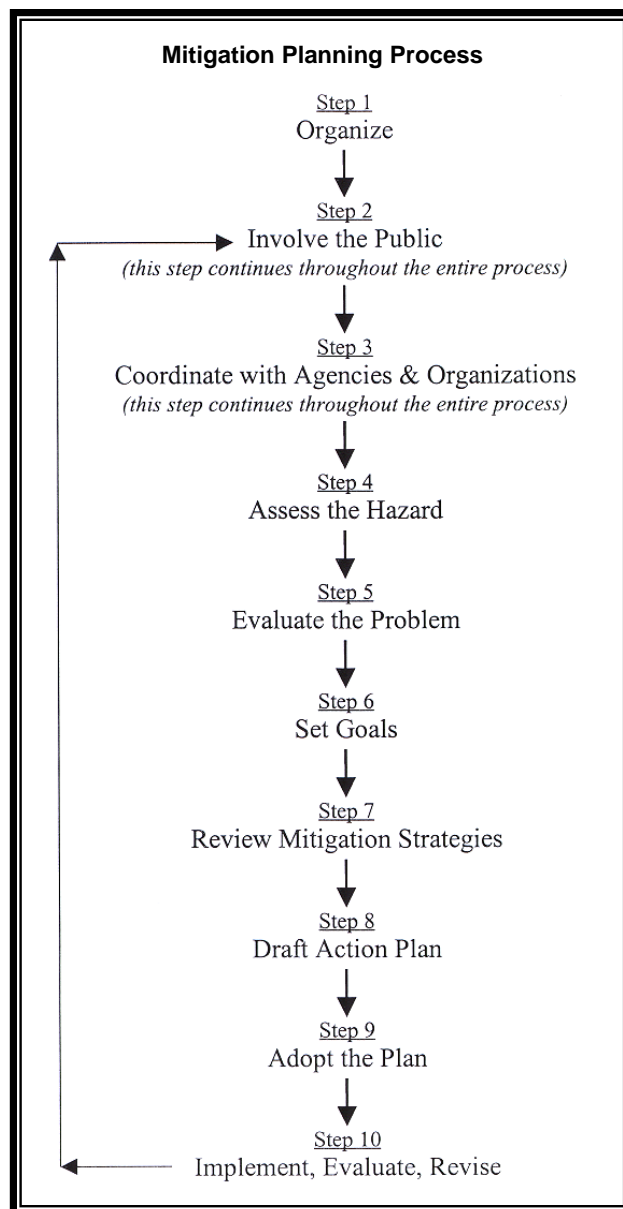
The Task Force initially met on June 21, 2013. The Table to the right depicts the plan's update schedule that was followed by the Task Force. Technical support for the planning effort was provided by the County's Planning and Health Departments, and the County Emergency Services and Disaster Agency (EMA).

Planning process: The Mitigation Advisory Task Force followed a standard 10-step process, based on FEMA's guidance and requirements. This process is summarized in the flow chart to the right.

Public Involvement: Step 2 of the planning process was to obtain input from the public, particularly residents and businesses that have been affected by natural hazards. The public was invited to participate through several concurrent means, examples of which public involvement efforts can be seen in Appendix A. They included:

- Contact with Task Force members and their organizations
- A standing invitation to attend Task Force meetings
- Press releases.
- A special website, <http://planning.k3county.net/hmplplan2013.html>. The site included updated information on the Task Force's meetings and encouraged interested parties to submit information about their experiences through an online survey.

Task Force Meetings		
Date	Steps	Topics
6/21/13	1, 2, 3	Organize / set goals
7/12/13	4-7	Hazard analysis, goals, property protection, emergency management, preventative measures, and action plan.
7/22/13	8	Public input, final plan
7/23/13	8	Public Meeting
7/24/13	9	PZA Committee Recommendation
8/13/13	9	County Board Adoption





June 26, 2013, Planning, Zoning, & Agriculture Committee meeting

Coordination: Existing plans and programs were reviewed during the planning process. It should be underscored that this plan does not replace other planning efforts, such as the County’s comprehensive plan and the Local Emergency Planning Committee. This plan complements those efforts and, as noted in later chapters, builds on their recommendations.

During the planning process of this update, contacts were made with regional, state, and federal agencies and organizations.

- Federal Emergency Management Agency, Region V
- Illinois Emergency Management Agency
- Illinois Department of Natural Resources, Office of Water Resources
- Kankakee County Farm Bureau
- Kankakee County Soil and Water Conservation District
- Kankakee River Basin Commission
- Kankakee River Valley Chamber of Commerce
- National Weather Service

Direct discussions with several of these agencies did prove quite helpful.

On July 6, at the end of the planning process, each of these agencies was sent a notice requesting their review of the draft *Plan*. They were advised that the draft could be reviewed on the County’s website and they were asked to provide any comments in time for the July 23, 2013, public meeting. This notice also went to all municipalities in the County, all 17 townships, the adjoining counties of Iroquois, Ford, Livingston, Grundy, and Will, and Lake and Newton Counties, Indiana.

Hazard assessment and problem evaluation: The Task Force tackled steps 4 and 5 of the planning process concurrently during the July 12 meeting. The hazards reviewed

include those locally reported and all natural hazards listed in the state’s *Hazard Mitigation Plan*. The hazard data and their impact on the County are covered in Chapters 2 and 3 of this *Plan*.

Goals: The Task Force conducted a goal setting exercise at its June 21st meeting. The goals were then drafted and revised at the July 12th meeting. The results are discussed in Chapter 4 of this *Plan*.

Mitigation Strategies: The Mitigation Advisory Task Force considered everything that could affect the impact of the hazards and reviewed a wide range of alternatives. The Task Force’s work and the subsequent plan document explored five general strategies for reaching the goals. These strategies are the subject of Chapters 5 – 9 in this *Plan*.

- Preventive – e.g., zoning, building codes, and other development regulations
- Property protection – e.g., relocation out of harm’s way, retrofitting buildings
- Emergency services – e.g., warning, sandbagging, evacuation
- Structural projects – e.g., levees, reservoirs, channel improvements
- Public information – e.g., outreach projects, technical assistance

Action plan: After the many alternatives were reviewed, the Task Force drafted an “action plan” that specifies recommended projects, who is responsible for implementing them, and when they are to be done. The action plan is included in Chapter 10 of this *Hazard Mitigation Plan*.

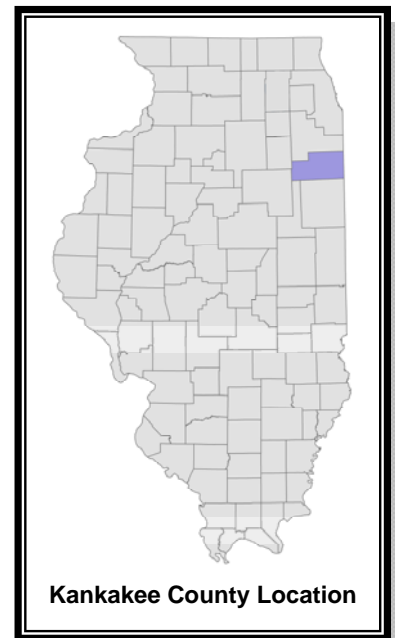
It should be noted that this Plan serves only to recommend mitigation measures. Implementation of these recommendations depends on adoption of this *Plan* by the Kankakee County Board and the city council or board of trustees of each participating municipality. It also depends on the cooperation and support of the offices designated as responsible for each action item.

1.3. The Setting

Kankakee County is located in northeastern Illinois, 60 miles south of the City of Chicago (see map). The County measures 38 miles east to west and 20 miles north to south. It covers 680 square miles.

Kankakee County is flat, a legacy of the great glaciers that spread across Illinois. It’s main topographic feature is the Kankakee River and its largest tributary, the Iroquois. The Kankakee River has a drainage area of 5,280 square miles, of which 60% is in Indiana. The Iroquois River basin accounts for 2,175 square miles or 2/5 of the Kankakee’s basin.

The area was originally settled by the Pottawatomie Indians, until a treaty in 1832 relocated them to a



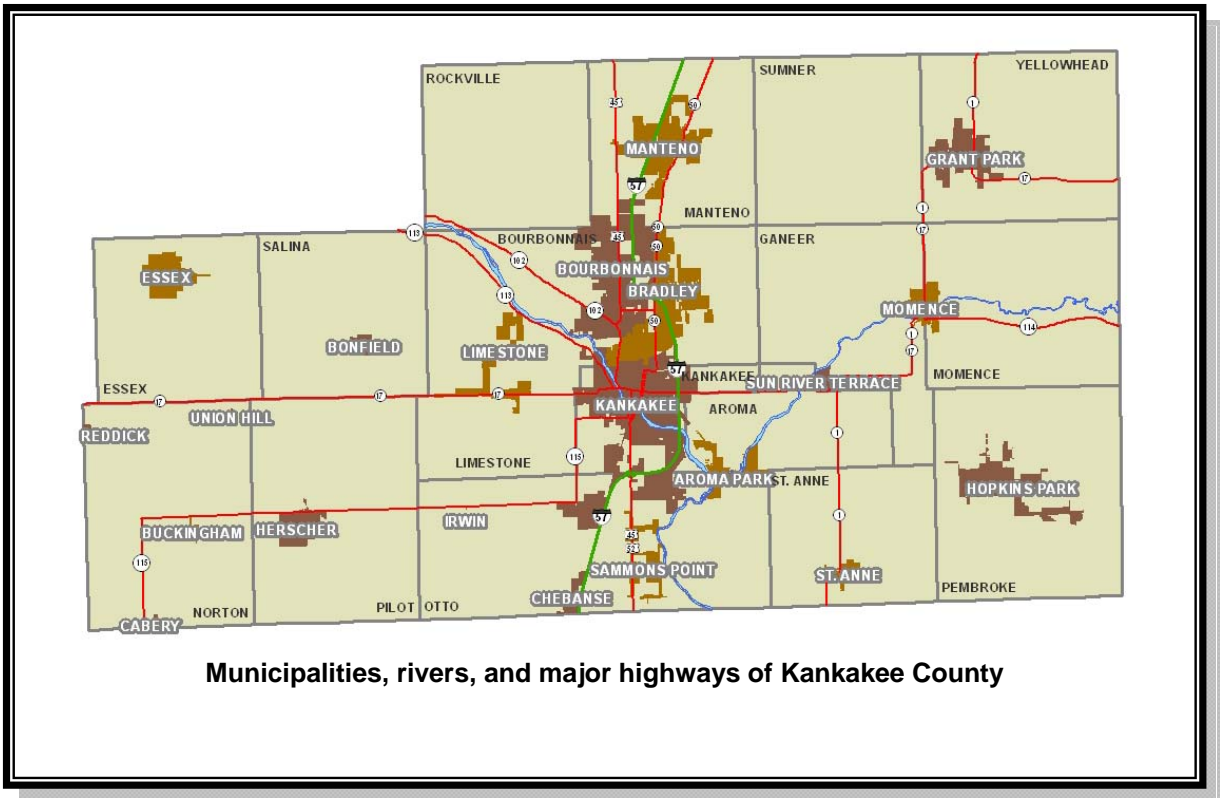
reservation in Iowa. White settlers followed soon after. They drained the flat, wet prairie lands and planted corn and wheat.

The first permanent city was Mokena, established around a mill on the Kankakee River in 1846. Bourbonnais was settled in 1850 by French Canadians. Growth took off after the Illinois Central Railroad laid tracks in 1853 and established Kankakee Depot where the tracks crossed the river. Within two years, this community became the County Seat.

After the 1870's, the County's economic base of agriculture was diversified with industry. By 1909, the value of manufacturing amounted to half the value derived from farm production. In 1877, the area was selected as the site for a State mental hospital. Now called the Shapiro Developmental Center, it has been the County's largest employer for many years.

The 1992 *Comprehensive Plan* reported that 93% of the County's land area is devoted to agriculture. Of the balance, 4% is incorporated, 2.4% is residential, and the remainder devoted to commercial, industrial or public uses.

Kankakee County has a population of 113,449, most of whom live within municipal boundaries. The 21 municipalities within the County account for 74.7% of the County's population. The municipalities of Bourbonnais, Bradley, Kankakee and Manteno account for nearly 62% of the County's population in 2010.



1.4. Critical Facilities

When dealing with natural disasters, some development is more important than others, and these are considered to be “critical facilities.” Critical facilities are buildings and infrastructure whose exposure or damage can affect the well being of a large group. For example, the impact of a flood or tornado on a hospital is greater than on a home or most businesses.

Critical facilities are not strictly defined by any agency. Generally, they fall into two categories:

- Buildings or locations vital to public safety and the disaster response and recovery effort
- Buildings or locations that, if damaged, would create secondary disasters



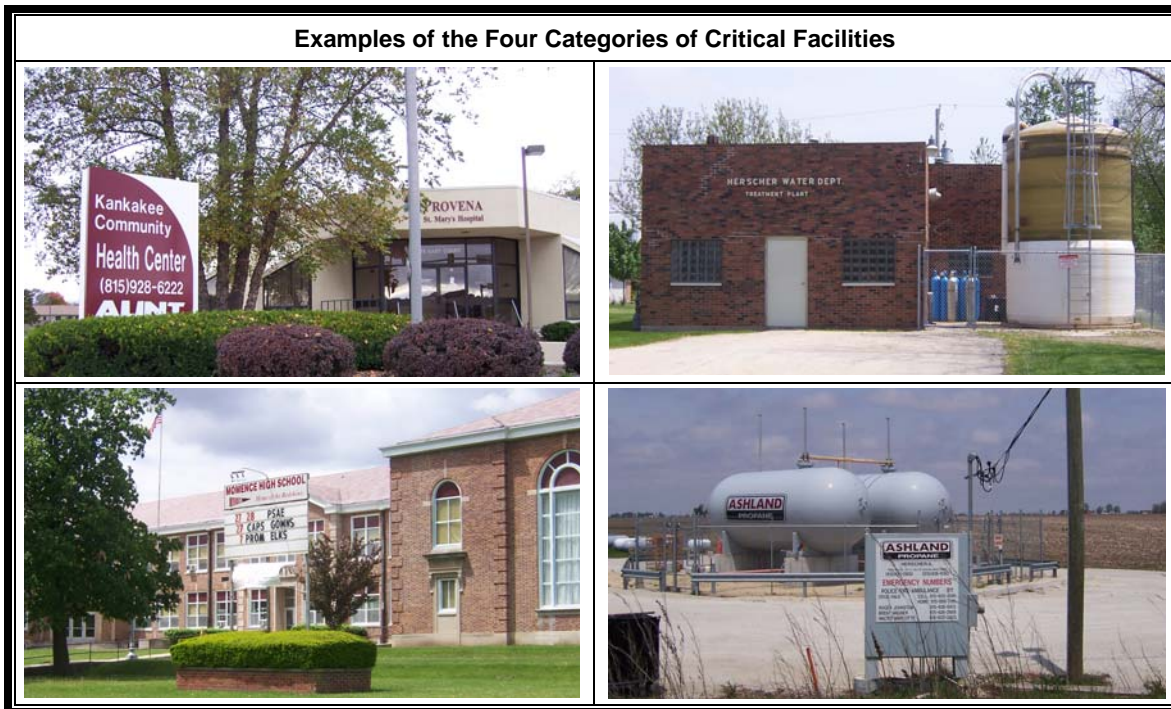
For this mitigation planning effort, four categories of critical facilities were used:

1. Public safety: police, fire, corrections, and health care
2. Utilities: power stations, water treatment, and wastewater treatment
3. Schools (also emergency shelters)
4. Hazardous materials facilities

A fifth, “other,” category was used to include facilities like village halls, radio stations, and dams. The complete list of the facilities was reviewed by the Task Force but is not included with this *Plan*. It is kept by County EMA.

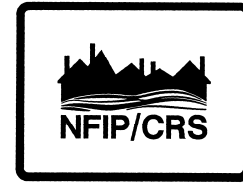
The distribution of these facilities is shown in the table to the right. Chapter 3 discusses critical facilities that are impacted by the natural hazards reviewed in Chapter 2. For some hazards, such as floods, affected critical facilities can be readily identified since we can predict where a flood is likely to be. For other hazards, such as tornadoes, the impact on critical facilities can only be broadly identified.

Distribution of Critical Facilities						
	Public Safety	Utilities	Schools	Hazardous Materials	Other	Total
Aroma Park	2	2	1			5
Bonfield	1		1			2
Bourbonnais	2	4	11	3	1	21
Bradley	2	3	5	3	2	15
Buckingham	1	2			1	4
Chebance	2	2	2	2	2	10
Essex	1					1
Grant Park	2	3	3	1	3	12
Herscher	2	2	2	3		9
Hopkins Park	4	2	3			9
Kankakee	16	5	21	12	9	63
Manteno	4	9	5	1		17
Momence	3	1	6	2		12
Sun River Terrace	1	2				3
Uninc. County	1	5	2	11	2	21
K. Com. College	0	0	1	0	0	1
Total	44	42	63	38	20	207



1.5. The Community Rating System

As discussed in Chapters 2 and 3, flooding and local drainage problems have a great impact on Kankakee County and its municipalities. A mitigation plan for a floodprone community should be coordinated with the credits that are possible under the Community Rating System (CRS).



The CRS is part of FEMA’s National Flood Insurance Program (NFIP). Under the CRS, flood insurance premiums for properties in participating communities are reduced to reflect the flood protection activities that are being implemented.

A community receives a CRS classification based upon the credit points it receives for its activities. It can undertake any mix of activities that reduce flood losses through better mapping, regulations, public information, flood damage reduction and/or flood warning and preparedness programs. The CRS provides an incentive not just to start new mitigation programs, but to keep them going.

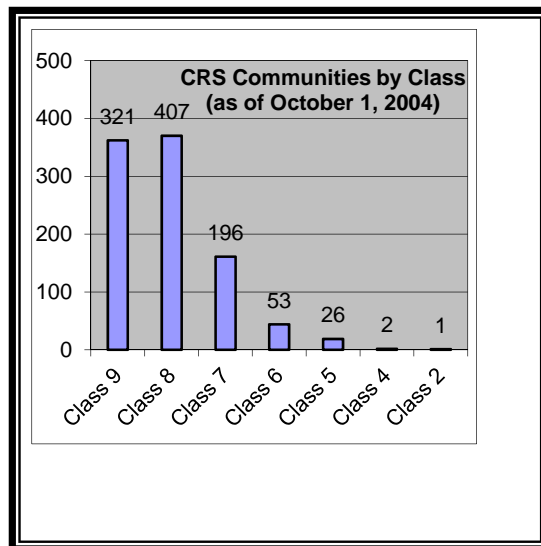
There are ten CRS classes: class 1 requires the most credit points and gives the largest premium reduction; class 10 receives no premium reduction (see table). A community that does not apply for the CRS, or that does not obtain the minimum number of credit points, is a class 10 community.

Of the 21,000 communities in the NFIP, just 1,211 participate in the CRS, 56 in Illinois (including Adams and Sangamon Counties). None of the Kankakee County communities participate at this time.

To continue to receive its credit, a community must annually recertify to FEMA that it is continuing to implement its CRS credited activities. Failure to maintain the same level of involvement in flood protection can result in a loss of CRS credit points and a resulting increase in flood insurance rates to residents.

Benefits of CRS participation: There are many reasons to participate in the CRS in addition to the direct financial reward to flood insurance policy holders. As FEMA staff often say, “if you are only interested in saving premium dollars, you’re in the CRS for the

Class	Points	Premium Reduction	
		In Floodplain	Outside Floodplain
1	4,500+	45%	10%
2	4,000–4,499	40%	10%
3	3,500–3,999	35%	10%
4	3,000–3,499	30%	10%
5	2,500–2,999	25%	10%
6	2,000–2,499	20%	10%
7	1,500–1,999	15%	5%
8	1,000–1,499	10%	5%
9	500– 999	5%	5%
10	0 – 499	0	0



wrong reason.”

The other benefits that are more difficult to measure in dollars include:

1. The activities credited by the CRS provide direct benefits to residents, including:
 - Enhanced public safety;
 - A reduction in damage to property and public infrastructure;
 - Avoidance of economic disruption and losses;
 - Reduction of human suffering; and
 - Protection of the environment.
2. A community’s flood programs are better organized and more formal. Ad hoc activities, such as responding to drainage complaints rather than an inspection program, are conducted on a sounder, more equitable basis.
3. A community can evaluate the effectiveness of its flood program against a nationally recognized benchmark.
4. Technical assistance in designing and implementing a number of activities is available at no charge from the Insurance Services Office.
5. The public information activities build a knowledgeable constituency interested in supporting and improving flood protection measures.
6. A community has an added incentive to maintain its flood programs over the years. The fact that its CRS status could be affected by the elimination of a flood-related activity should be taken into account by its governing board when considering such actions.
7. Every time residents pay their insurance premiums, they are reminded that the community is working to protect them from flood losses, even during dry years.

More information on the Community Rating System can be found at <http://training.fema.gov/EMIWeb/CRS/>

1.6. References

1. *Comprehensive Plan*, Kankakee County, Illinois, 1992 & 2005.
2. Data supplied by municipalities and County offices.
3. *Example Plans*, FEMA/Community Rating System, 2002
4. *Getting Started – Building Support for Mitigation Planning*, FEMA, FEMA-386-1, 2002
5. Kankakee County web site, <http://www.k3county.net>

6. *State and Local Plan Interim Criteria Under the Disaster Mitigation Act of 2000, FEMA, 2002*