



Stacy Robinson

MIDWEST FLOODS of 2008

IN IOWA & WISCONSIN

5 Mitigation Program Assessment

Since the 1993 floods in the Midwest, existing and new mitigation programs have evolved to encourage and fund mitigation efforts, particularly in incorporating mitigation into the planning process at the state and community level. When Iowa and Wisconsin experienced large-scale flooding in 1993 and subsequently worked to recover as well as mitigate future losses in some locations, federal support for mitigation began to gain momentum in these areas.

As a result, several mitigation grant programs have been created that increase the amount of funding available for hazard mitigation. In light of this evolution, it is worth exploring how Iowa and Wisconsin have used these programs and how the current programs are assisting recovery efforts.

FEMA offers several programs that provide technical assistance and grant funding to sponsor mitigation efforts across the United States. Numerous mitigation grants are awarded each year to states and communities to undertake mitigation projects to prevent future loss of life and property resulting from hazard impacts. This chapter will assess the following programs and how they relate to the impacted areas in Iowa and Wisconsin:

- Mitigation Planning
- Hazard Mitigation Assistance Programs
- Public Assistance
- Flood Insurance

5.1 Mitigation Planning

In an effort to reduce the nation's mounting natural disaster losses, Congress passed the Disaster Mitigation Act of 2000 (DMA 2000) in order to amend the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act). Section 322 of DMA 2000 emphasizes the need for state and local government entities to closely coordinate on mitigation planning activities, and it makes the development of a hazard mitigation plan a specific eligibility requirement for any local government applying for federal mitigation grant funding, thus pre-positioning communities to receive available mitigation funds before and after the next disaster strikes. The rules governing how state, local, and Indian Tribal governments meet these requirements are outlined in the Mitigation Planning Regulations (interim Final Rule), as published in the CFR.

FEMA published multi-hazard mitigation planning guidance for state, local, and Indian Tribal governments to use in meeting the requirements of the Mitigation Planning regulations under the Stafford Act and 44 CFR § 201. Also, FEMA provides several publications with information and tools to assist mitigation planning efforts:

- *Getting Started: Building Support for Mitigation Planning* (FEMA 386-1)
- *Understanding Your Risks: Identifying Hazards and Estimating Losses* (FEMA 386-2)
- *Developing the Mitigation Plan: Identifying Mitigation Actions and Implementing Strategies* (FEMA 386-3)
- *Bringing the Plan to Life: Implementing the Hazard Mitigation Plan* (FEMA 386-4)
- *Using Benefit-Cost Review in Mitigation Planning* (FEMA 386-5)
- *Integrating Historic Property and Cultural Resource Considerations into Hazard Mitigation Planning* (FEMA 386-6)
- *Integrating Manmade Hazards into Mitigation Planning* (FEMA 386-7)
- *Multi-Jurisdictional Mitigation Planning* (FEMA 386-8)
- *Using the Hazard Mitigation Plan to Prepare Successful Mitigation Projects* (FEMA 386-9)

A hazard mitigation plan should establish a comprehensive approach to hazard mitigation, including the broad community vision and guiding principles for reducing risk. By investing in mitigation before a hazard event occurs, a community can prevent or lessen future damages, and, thus, significantly reduce the need for emergency response, and repair and recovery operations and funding. Mitigation practices help communities to become more resilient—able to recover more quickly and with fewer long term impacts. Residents, businesses, and industries re-establish themselves in the wake of a disaster, getting the community economy back on track sooner and with less interruption.

Mitigation planning offers many benefits, including:

- Saving lives and property
- Saving money (including insurance payouts; federal, state, local, and private dollars; etc.)
- Demonstrating a firm commitment to improving community health and safety
- Expediting recovery following disasters, as well as the receipt of pre-disaster and post-disaster grant funding
- Reducing future vulnerability through wise development and post-disaster recovery and reconstruction

The benefits of mitigation planning go beyond solely reducing hazard vulnerability. Measures such as the acquisition or regulation of land in known hazard areas can help achieve multiple community goals, such as preserving open space, maintaining environmental health, and enhancing recreational opportunities. Thus, the local mitigation planning process should be integrated with other concurrent local planning efforts, and any proposed mitigation strategies must take into account other existing community goals or initiatives that will either complement or hinder their future implementation.

However, some communities may not approach the mitigation planning process properly, neglecting to incorporate good planning practices and meaningful strategies into their plan as they try to meet the requirements of DMA 2000. Though the planning process is federally mandated, communities should not complete it as an exercise in achieving FEMA approval. Rather, communities should embrace the process with the goal of developing wisely and protecting citizens and property through mitigation. FEMA provides numerous resources and technical assistance to communities to support local mitigation planning efforts.

Those communities that embrace the planning process and identify specific areas of concern and actions to pursue are often better prepared to submit grant applications for mitigation funds. Ultimately, a good mitigation plan should provide a “road map” that can be followed over time to strategically pursue holistic mitigation efforts. Ideally, a mitigation plan should include specific projects to target mitigation efforts and assign local department or staff personnel to bring the project to fruition. Mitigation actions target residential and commercial structures as well as critical facilities, and include education and outreach components as well.

Both Iowa and Wisconsin have FEMA-approved Enhanced State Mitigation Plans, and four Tribal groups in Wisconsin each have a FEMA-approved Tribal State Plan. In Iowa, as of February 3, 2009, 209 jurisdictions are covered by Hazard Mitigation Plans and 519 jurisdictions have plans in progress. In Wisconsin, as of March 2009, there are 58 approved plans covering 532 jurisdictions, and 14 multi-jurisdictional plans are currently in progress. Since 2006, Iowa has received funding through the Pre-Disaster Mitigation (PDM) program for the creation or update of 87 mitigation plans. Wisconsin has received funding for 21 mitigation plans through the PDM program, as well as one plan through the Flood Mitigation Assistance (FMA) program. Most of the locations visited by the MAT were covered under a FEMA-approved Hazard Mitigation Plan at the time of the flood. However, the jurisdictions of Des Moines, Iowa City, Coralville, Columbus Junction, Oakville, and Palo in Iowa and Richland Center in Wisconsin are not covered by a mitigation plan. According to Iowa Homeland Security, the jurisdictions of Des Moines, Iowa City, and Coralville are in the process of developing a mitigation plan as of February 2009.

5.2 Hazard Mitigation Assistance (HMA) Programs

FEMA manages several HMA programs specifically targeting mitigation, including the Hazard Mitigation Grant Program (HMGP), and the FMA, PDM, Repetitive Flood Claims (RFC), and Severe Repetitive Loss (SRL) programs. The HMGP and PDM programs are authorized by the Stafford Act and offer funding for mitigation planning and project activities that address multiple natural hazard events. The FMA, RFC, and SRL programs are authorized by the National Flood Insurance Act as amended in 2004 and focus funding efforts on reducing claims against the NFIP. Funding under HMA programs is subject to availability of annual appropriations and under HMGP to the amount of FEMA disaster recovery assistance under a presidential major disaster declaration. Table 5-1 briefly describes each program and purpose.

Table 5-1. FEMA Hazard Mitigation Assistance Programs

Mitigation Grant Program	Authorization	Year Authorized	Purpose
Hazard Mitigation Grant Program (HMGP)	Robert T. Stafford Disaster Relief and Emergency Assistance Act	1988	Activated after a presidential disaster declaration; provides funds on a sliding scale formula based on a percentage of the total federal assistance for a disaster for long-term mitigation measures to reduce vulnerability to natural hazards
Flood Mitigation Assistance (FMA)	National Flood Insurance Reform Act	1994	Reduce or eliminate claims against the NFIP
Pre-Disaster Mitigation (PDM)	Disaster Mitigation Act	2000	National competitive program focuses on mitigation project and planning activities that address multiple natural hazards
Repetitive Flood Claims (RFC)	Bunning-Bereuter-Blumenauer Flood Insurance Reform Act	2004	Reduce flood claims against the NFIP through flood mitigation; properties must be currently NFIP insured and have had at least one NFIP claim
Severe Repetitive Loss (SRL)	Bunning-Bereuter-Blumenauer Flood Insurance Reform Act	2004	Reduce or eliminate the long-term risk of flood damage to SRL residential structures currently insured under the NFIP

Through Fiscal Year (FY) 2008, FEMA has conducted these programs separately, with separate application cycles and guidance. Beginning in FY2009, FEMA’s Mitigation Directorate has unified the multi-hazard PDM program with the FMA, RFC, and SRL programs into a new HMA program application cycle. Aligning these programs into one application cycle will streamline the application review and program delivery resources; encourage sound, cost-effective mitigation projects; and enhance the quality and efficiency of grant awards on an allocation and competitive basis to state, territory, Tribal, and local entities to expand national outreach for all types of mitigation. The HMGP has been added to the HMA program for FY2010.

FEMA’s HMA grant programs provide funding for eligible mitigation activities that reduce disaster losses and protect life and property from future disaster damages (see Table 5-2).

Table 5-2. Eligible Flood Mitigation Activities by Program

Eligible Activities	HMGP	PDM	FMA	RFC	SRL
Mitigation Projects					
Property Acquisition and Structure Demolition for purposes of open space	✓	✓	✓	✓	✓
Property Acquisition and Structure Relocation	✓	✓	✓	✓	✓
Structure Elevation	✓	✓	✓	✓	✓
Dry Floodproofing of Historic Residential Structures	✓	✓	✓	✓	✓
Dry Floodproofing of Non-residential Structures	✓	✓	✓	✓	
Minor Localized Flood Reduction Projects	✓	✓	✓	✓	✓
Mitigation Reconstruction					✓
Hazard Mitigation Planning	✓	✓	✓		

5.2.1 Hazard Mitigation Grant Program (HMGP)

After a major disaster declaration, the HMGP provides grants to state and local governments to implement hazard mitigation measures that will make a long-term impact and reduce the loss of life and property due to natural disasters.

As of July 31, 2008, there have been 90 flood-related approved HMGP projects (totaling 1,422 properties) in Iowa and 47 flood-related approved HMGP projects (totaling 483 properties) in Wisconsin, as shown in Figure 5-1. The vast majority of these projects, funded in Iowa from 1993 to 2005 and in Wisconsin from 1994 to 2008, have focused on acquisition activities to remove

structures prone to riverine flooding. FEMA requires that any property voluntarily acquired by local governments through FEMA mitigation grant programs be deed-restricted to be used only for open space, recreation, or wetlands in perpetuity. Figure 5-2 is an example of a residential lot converted to open space utilizing HMGP funding.

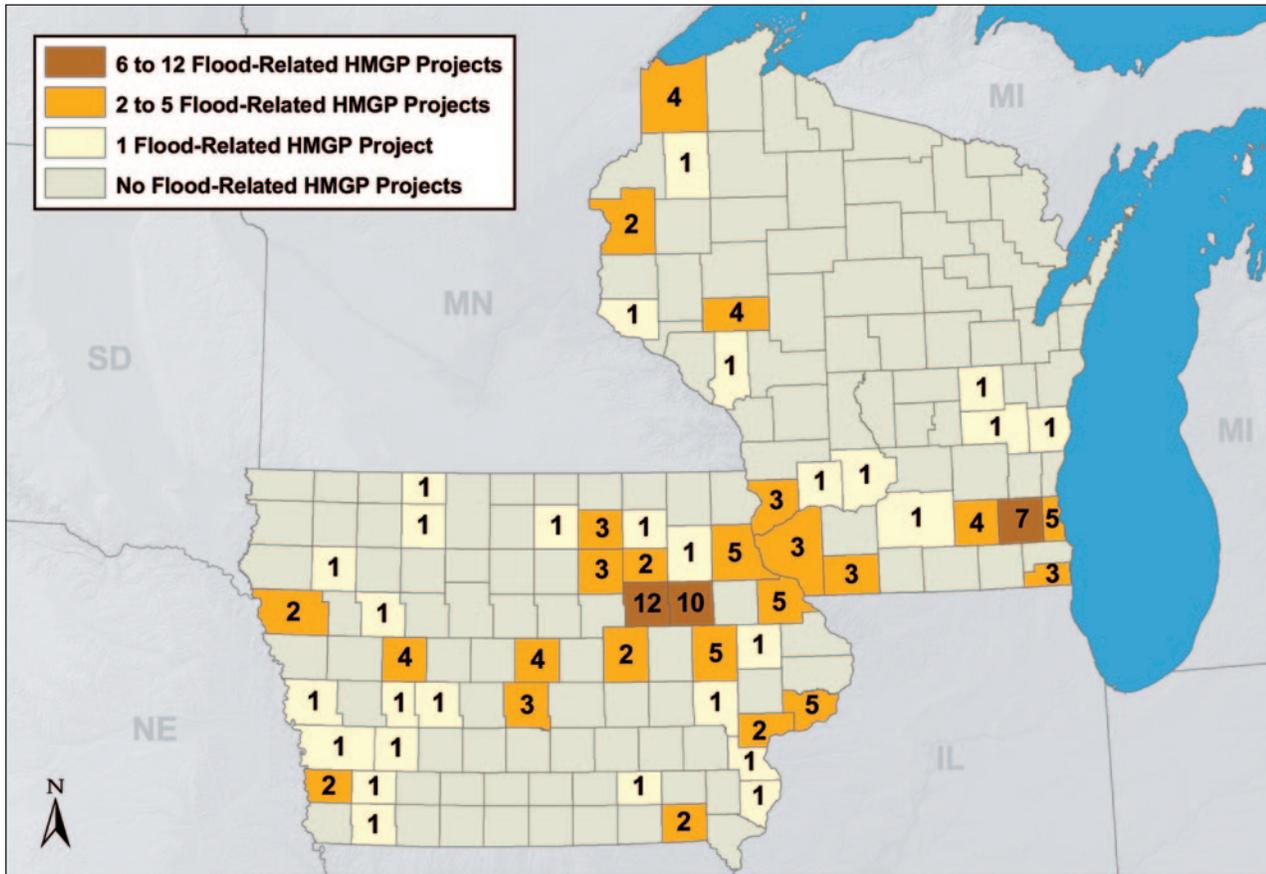


Figure 5-1. Location of HMGP projects in Iowa and Wisconsin (Based on FEMA mitigation grant programs data through July 31, 2008)

Figure 5-2.
Acquisition for the purposes of open space removes buildings from the floodplain to prevent future damages. Residents relocate outside of the floodplain and green open space is provided in a community (Marion, Iowa).



Acquisition guidelines are provided in 44 CFR § 80, Property Acquisition and Relocation for Open Space, and describe the requirements of land use following acquisition. Acquiring floodprone properties with FEMA funds requires that deed restrictions be recorded to ensure that the property be dedicated as open space in perpetuity to restore and/or conserve the natural floodplain functions and that no new development can ever occur on the property (limited uses are allowed but must be coordinated with FEMA). This mitigation option permanently removes people and structures from harm's way, and reduces future emotional despair and financial costs associated with a community's disaster response, recovery, and repair. Iowa and Wisconsin have supported and successfully completed numerous acquisition projects, and they were among the first to acquire floodprone properties through the HMGP program following the 1993 floods. Figure 5-3 displays the location of FEMA-funded acquisitions in Cedar Falls, Iowa, along with substantial damage inspection results using FEMA's RSDE software for numerous properties in the same area. If the substantially damaged properties had been acquired, their damages could have been avoided.

HMGP funding is available to eligible communities in both Iowa and Wisconsin as a result of this disaster. Both states support using acquisition projects as a priority for HMGP funding for the 2008 flood disaster. As of January 2009, the State of Iowa had received notices from 35 communities interested in pursuing acquisition of 2,562 properties totaling over \$251 million. The City of Cedar Rapids alone submitted a notice of interest to acquire 1,126 properties through HMGP, making up 44 percent of the total properties interested in acquisition across the state. Wisconsin also places a priority on acquisition, especially focusing on substantially damaged structures and repetitive loss properties that are primary residences or residential rental properties.

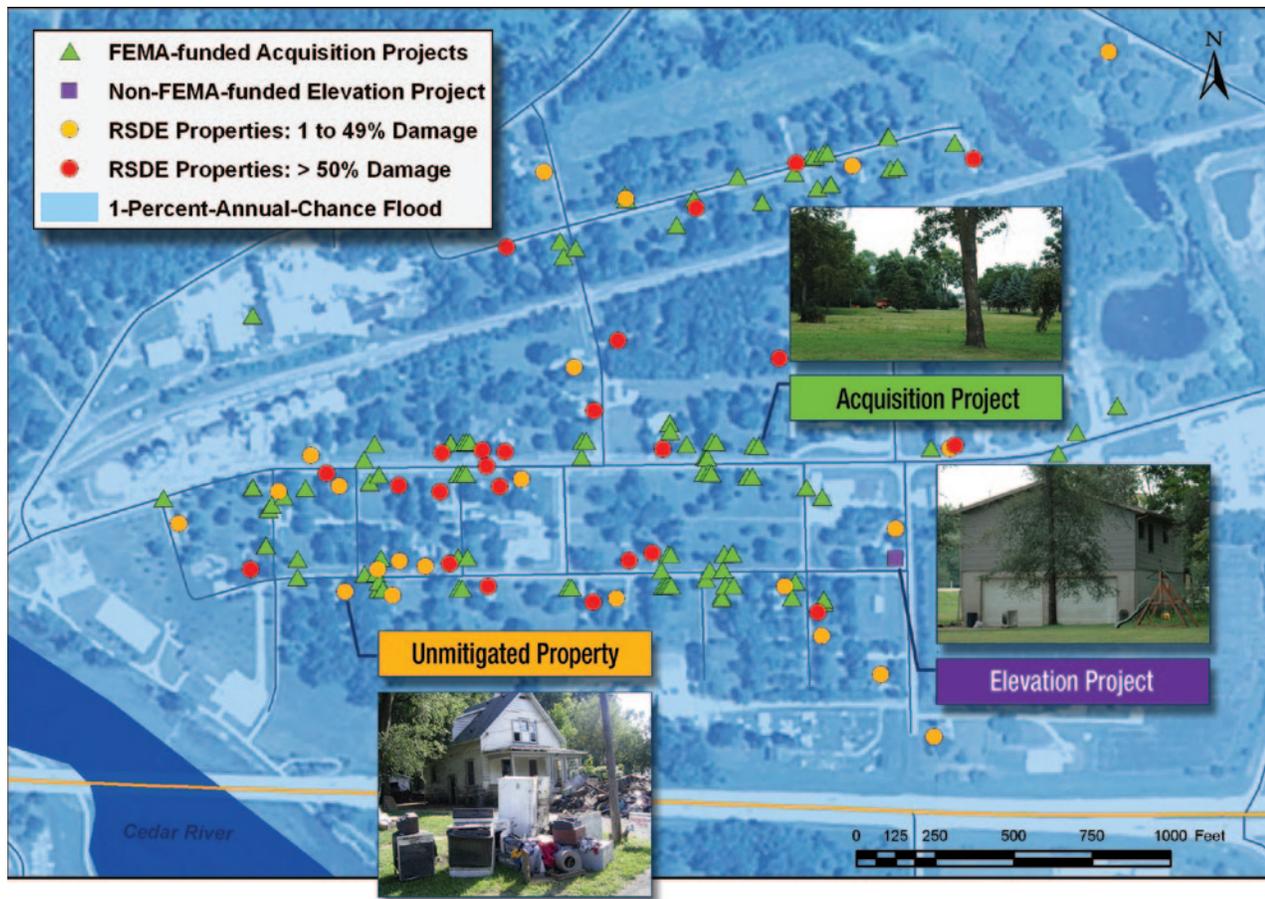


Figure 5-3. Location of FEMA acquisition projects funded primarily through the HMGP, along with substantial damage inspection information for residences in the same area (Cedar Falls, Iowa) (Based on FEMA mitigation grant programs data through July 31, 2008)

5.2.2 Flood Mitigation Assistance (FMA)

The FMA grant program was created as part of the National Flood Insurance Reform Act of 1994 (42 U.S.C. 4101) with the goal of reducing or eliminating claims under the NFIP. An allocation is provided to each state based on the total number of NFIP insurance policies and the total number of repetitive loss properties within the state. States can submit additional projects that exceed their annual allocation for national consideration.

As of July 31, 2008, there had been 11 approved FMA projects in Iowa including acquisition and stormwater management and 8 approved projects in Wisconsin acquiring 9 properties. The majority of these projects, funded in Iowa from 2001 to 2006 and in Wisconsin from 1997 to 2007, focused on acquisition of structures prone to riverine flooding.

5.2.3 Pre-Disaster Mitigation (PDM)

The PDM grant program, authorized under DMA 2000, awards funds prior to the occurrence of a disaster event. This competitive grant process encourages planning and mitigation measures before disaster strikes so that overall risks to people and property are reduced while also reducing the need for funding following a disaster declaration. Congress allocates funding for this program each year, offering millions of dollars for award.

As of July 31, 2008, there had been one approved flood-related PDM project mitigating three properties in Iowa and five approved flood-related projects in Wisconsin mitigating several properties through acquisition and stormwater management. The majority of these projects, funded in Iowa in 2005 and in Wisconsin from 2003 to 2007, focused on acquisition of structures prone to riverine flooding.

5.2.4 Repetitive Flood Claims (RFC)

The RFC grant program was authorized in 2004 by the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act (P.L. 108–264), which amended the National Flood Insurance Act (NFIA) of 1968 (42 U.S.C. 4001, et al). Up to \$10 million in RFC funds is available each year to encourage states and communities to reduce flood damages to insured properties that have had one or more claims to the NFIP. Unlike other FEMA mitigation programs, RFC funds do not require a local match and can be funded with up to a 100 percent federal share.

As of July 31, 2008, Iowa had submitted one RFC application for acquisition in FY2006 (and an application for corresponding management costs), and Wisconsin had not submitted any applications for RFC program funds.

5.2.5 Severe Repetitive Loss (SRL)

The SRL grant program was authorized in 2004 by the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act, which amended the NFIA of 1968. SRL program funds are provided to reduce or eliminate the long-term risk of flood damage to SRL structures insured under the NFIP.

The definition of SRL as applied to this program was established in Section 1361A of the NFIA, as amended in 2004, 42 U.S.C. 4102a, and reads as follows:

An SRL property is defined as a residential property that is covered under an NFIP flood insurance policy and:

(a) That has at least four NFIP claim payments (including building and contents) over \$5,000 each, and the cumulative amount of such claims payments exceeds \$20,000; or

(b) For which at least two separate claims payments (building payments only) have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building.

For both (a) and (b) above, at least two of the referenced claims must have occurred within any ten-year period, and must be greater than 10 days apart.

FEMA maintains a list of properties that may qualify as SRL properties based on NFIP claim data and validates properties before deeming them as SRL. State allocations are provided on an annual basis and are based on the number of validated SRL properties per state. Competitive funds are often available from remaining unallocated funds.

It should be noted that the designation of an SRL property applies only to structures with a history of flood insurance and does not consider those uninsured structures that have been impacted by multiple events over time that potentially resulted in losses.

As outlined in the FY2010 SRL guidance, “Property owners who decline formal offers of mitigation assistance, in the form of a Mitigation Offer Letter, will be subject to increases to their insurance premium rates.” Facing the potential of large increases in flood insurance premiums, property owners should seriously consider any offers for mitigation assistance under the SRL program.

For the FY2009 SRL program, both Iowa and Wisconsin are considered “non-target states,” meaning that they each have fewer than 51 structures designated as SRL properties. As of November 30, 2008, Iowa had 20 validated SRL properties and Wisconsin had 3 validated SRL properties that qualified for SRL funding, as shown in Figure 5-4. As of November 30, 2008, neither Iowa nor Wisconsin had submitted any applications for SRL program funds.

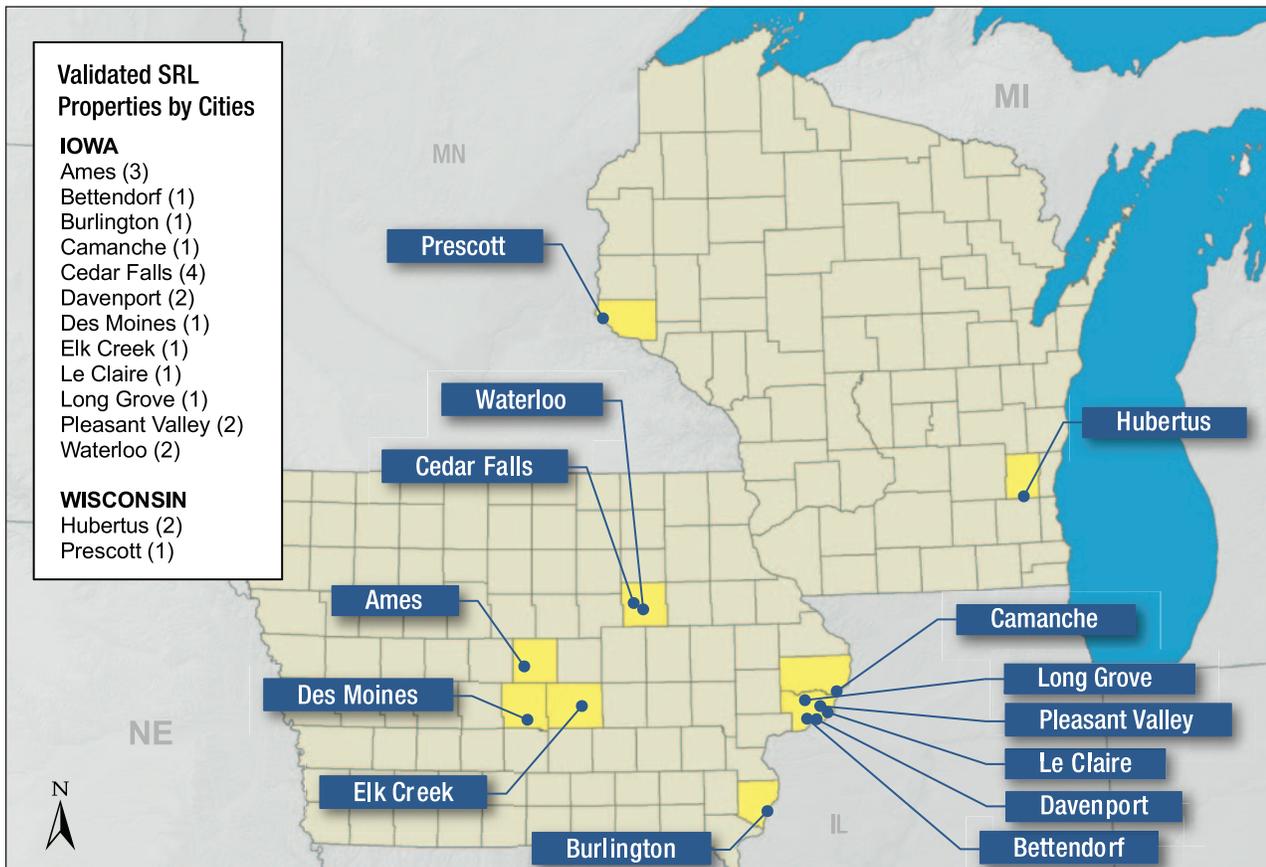


Figure 5-4. SRL property locations in Iowa and Wisconsin

5.3 Public Assistance

FEMA's Public Assistance (PA) disaster recovery program, in partnership with Mitigation, ensures federal grants and technical assistance are effectively provided to local, state, and Tribal communities by planning and implementing immediate rebuilding actions that are conducive to long-term community sustainability and disaster resilience.

FEMA's PA program was authorized under Section 406 of the Stafford Act. It provides assistance to state, Tribal, and local governments, and certain types of Private Nonprofit (PNP) organizations following a presidentially declared disaster to aid with response and recovery through debris removal and emergency protective measures, and repair, replacement, or restoration of disaster-damaged, publicly owned facilities and the facilities of certain PNP organizations. Section 406 provides discretionary authority to fund mitigation measures in conjunction with the repair of damaged facilities. The mitigation measures, which may amount to up to 15 percent of the total eligible cost of the eligible repair work on a particular project, must be cost-effective, related to eligible disaster-related damages, and directly reduce the potential of future, similar disaster damages to the eligible facility. Costs approved for project-specific mitigation measures under PA may not be applied to improved projects that will involve the replacement of a disaster-damaged facility, whether on the same site or an alternate site.

Under the federal disaster declarations for this event, 84 counties in Iowa and 29 counties in Wisconsin are eligible for PA program funding. In Iowa, the State/FEMA Public Assistance program obligated over \$651 million to the state for reimbursements for more than 1,100 applications representing over 9,000 PA projects for government-related, eligible expenses in the area of emergency response measures, debris removal, and repair or restoration of disaster-damaged public infrastructure by April 2009.¹ The University of Iowa is working with PA to request over \$231 million for building and contents damage, protective measures and debris removal as a result of the floods.² In Wisconsin as of March 2009, FEMA PA grants totaling more than \$70 million had been obligated for projects from public entities for government-related, eligible expenses in the areas of emergency response measures, debris removal, and repair or restoration of disaster-damaged public infrastructure.³

5.4 Flood Insurance

Flood insurance is sold separately from homeowners insurance and protects against losses to buildings and their contents, not the land surrounding them. The coverage is available for residential and commercial buildings in communities that participate in the NFIP and applies whether the flooding results from heavy or prolonged rains, coastal storm surge, snow melt, blocked storm drainage systems, levee dam failure, or other causes. To be considered a flood, the water must cover at least two acres or affect at least two properties. Flood insurance is sold and serviced by private

1 Rebuild Iowa Office. "Facts and Figures." April 15, 2009. <http://www.rio.iowa.gov/resources/facts.html>

2 University of Iowa. "University of Iowa Flood Action Plans, January 2009." <http://www.uiowa.edu/floodrecovery/recovery-reports/action-plan-jan-09.pdf>

3 Gray, Roxanne. Wisconsin State Hazard Mitigation Officer.

insurers, and backed by the federal government. Flood insurance covers both homes and businesses. For residential properties, the maximum building coverage is \$250,000 and the maximum contents coverage is \$100,000. Commercial properties can be insured to a maximum of \$500,000 in building coverage and \$500,000 for contents. A 30-day waiting period is required for new flood insurance policies, which prevents property owners from obtaining insurance while a flood is in progress. However, two exceptions to this waiting period include:

- If the initial purchase of flood insurance is in connection with the making, increasing, extending, or renewing of a loan, there is no waiting period. Coverage becomes effective at the time of the loan, provided application and payment of premium is made at or prior to loan closing.
- If the initial purchase of flood insurance is made during the 13-month period following the effective date of a revised flood map for a community, there is a 1-day waiting period. This applies only where the FIRM is revised to show the building to be in a SFHA when it had not previously been in a SFHA.

Flood insurance is available for properties located both within and outside of floodplains, and the type of policy and cost vary depending on the subject property's flood risk. Factors such as date of construction, type of building, and methods of construction are considered in the rating. For properties located in high-risk areas, mortgage lenders require the property owner to purchase and maintain a Standard Policy for loan approval and throughout the life of the loan. Outside of high-risk areas, flood insurance is available through a Preferred Risk Policy, which offers lower premiums due to the decreased risk. Although these low-to-moderate risk areas are statistically less likely to experience flooding, it does happen. In fact, nearly 25 percent of all claims made to the NFIP are for properties from low-to-moderate risk areas.

The NFIP's CRS is a voluntary incentive program that recognizes community floodplain management activities that exceed the NFIP requirements. For CRS-participating communities, incentives are provided for the community to take actions that not only improve citizen health and safety, but that can also result in out-of-pocket savings for property owners through reduced insurance rates.

After a building is determined by the appropriate authority (i.e., local building department or floodplain administrator) to be substantially damaged or a repetitive loss property, Increased Cost of Compliance funds may be claimed through the NFIP to pay for additional mitigation and risk reduction measures to be implemented during recovery or reconstruction as required to bring the building to local code requirements, including (but not limited to) elevation or relocation of the structure. Wisconsin floodplain management regulations require that damages calculated to structures are cumulative over the life of the structure, so a home can be considered substantially damaged at a much lower threshold. To assist flood insurance policyholders in covering the costs of meeting these requirements, the NFIP includes up to \$30,000 of Increased Cost of Compliance coverage for all new and renewed Standard Flood Insurance Policies. An Increased Cost of Compliance claim is handled separately from the standard policy and can only be filed if the community determines that the policyholder's home or business has been substantially damaged or repetitively damaged by a flood. Once a community has made this determination,

policyholders should contact their insurance company or agent who wrote their flood policy to file an Increased Cost of Compliance claim, and their insurer will assign a claims representative to assist with the processing of the Increased Cost of Compliance claim. The NFIP provides a brochure entitled “National Flood Insurance Program Increased Cost of Compliance Coverage How You Can Benefit” to educate property owners on this program.

A local floodplain administrator must understand and execute his post-flood responsibilities, particularly substantial damage assessments. In addition, the community can add a repetitive loss provision to their floodplain management ordinance, if not already included. FEMA has prepared “The NFIP Increased Cost of Compliance Coverage: Guidance for State and Local Officials” (FEMA 301) to assist local officials with the Increased Cost of Compliance process.

Many policyholders and insurance agents in the impacted area lack knowledge regarding additional funds available through the NFIP’s Increased Cost of Compliance program. Several property owners in Iowa indicated to the MAT that they contacted their flood insurance agent after the flooding to inquire about Increased Cost of Compliance availability and were met with confusion and lack of awareness of the program by the agents. Other policyholders were not aware that these funds were available through their existing policy. Policyholders and insurance agents, as well as floodplain managers, should educate themselves regarding the Increased Cost of Compliance program before flooding occurs.

NFIP data indicates that a large number of properties impacted by the June 2008 floods were underinsured or had no insurance coverage, including those both inside and outside of the SFHA. According to the City of Cedar Rapids, only 36 percent of flood-impacted homes in the Cedar Rapids SFHA had flood insurance at the time of the flood. Many residents appeared to misunderstand the flood risk of their property, despite their locations in the floodplain or behind levees. Some residents understood that their property was located in the floodplain but did not believe that their property could be affected, while others were unaware of their property’s location in relation to the floodplain, including the 0.2-percent-annual-chance (or 500-year) floodplain as indicated on the FIRM. Several residents reported that they did not experience any flooding in 1993, which led them to mistakenly assume that they would not experience flooding in the 2008 flood event. Misperception of personal risk is a common reason why property owners choose not to purchase flood insurance.⁴

⁴ Rosenbaum, Walter A. and Boulware, Gary. “The Developmental and Environmental Impact of the National Flood Insurance Program: IA Summary Research Report.” October 2006.

