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October 4, 2018

The Honorable Donald Trump  
President of the United States  
The White House  
Washington, D.C.

Through: Regional Administrator James K. Joseph  
FEMA Region V  
536 South Clark Street, 6<sup>th</sup> Floor  
Chicago, IL 60605-1521

Dear Mr. President:

Under the provisions of Section 401 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §§ 5121-5207 (Stafford Act), and implemented by 44 CFR § 206.36, I request that you declare a major disaster for the State of Wisconsin as a result of severe storms, flooding, landslides, straight-line winds, and tornadoes that occurred August 17-September 14, 2018. This request includes Adams, Crawford, Dane, Dodge, Fond du Lac, Green Lake, Juneau, La Crosse, Marquette, Monroe, Ozaukee, Richland, Sauk, and Vernon counties for both Public Assistance and Individual Assistance; Iron County for Public Assistance only; and Columbia, Jefferson and Washington counties for Individual Assistance only.

On Friday, August 17, 2018, a noted change in weather patterns occurred which marked the beginning of multiple rounds of severe weather and flooding across Wisconsin. Until mid-August, Wisconsin had seen normal to below-normal precipitation for the summer months. Starting Friday, August 17, a very warm and moist air-mass set up across much of Wisconsin and then persisted through the first week in September. A series of storm systems moving through this pattern caused multiple rounds of severe weather and flooding across portions of Wisconsin and followed it with longer-term river flooding as well. The first of these systems moved through southern Wisconsin on Friday, August 17, and put down a large swath of heavy rainfall. Each event where heavy rain fell helped to set conditions for additional flooding to occur. The most widespread severe weather day was August 28, 2018, when 19 tornadoes and widespread damaging winds of 90-110 mph occurred from central Wisconsin through east central Wisconsin. The last of the series of storm systems came through on Wednesday, September 5, and the last river in southern Wisconsin to recede below major flood stage being the Rock River at Lake Koshkonong, which dropped below major flood stage on Friday, September 14. Record crests occurred on some rivers in Wisconsin including the Baraboo River at La Valle (25.2') and Reedsburg (21.85'), and the Kickapoo River at Viola (25.7'), Readstown (23.7'), Gays Mills (22.31'), and Steuben (20.5').

In response to the situation, I took appropriate action under state law and directed the execution of the State Emergency Plan on August 21, 2018, in accordance with Section 401 of the Stafford Act, and issued Executive Order #303 on August 21, 2018, proclaiming that a State of Emergency existed in Dane County. EO #303 was amended in EO #305 to include the additional counties of Fond du Lac, Juneau, La Crosse, Monroe, Vernon, and Washington on August 28, 2018, and again in EO #306 to include the remainder of the state in the State of Emergency on August 29, 2018. In this Order, I directed all state agencies to assist as appropriate to support response and recovery efforts statewide. Adams, Calumet, Dane, Dodge, Fond du Lac, Green Lake, Juneau, La Crosse, Marquette, Monroe, Ozaukee, Richland, Sauk, Sheboygan, and Vernon counties, along with many municipalities, declared local States of Emergency by September 4, 2018.

Tragically, this event included the loss of two lives, one in Dane County and one in Sauk County on August 29. In Dane County on August 20, an individual was swept away and drowned after his vehicle was caught in flood waters. The body was recovered the following day. In Sauk County on August 29, an individual was walking down wooden stairs at Lake Redstone that had been damaged by the flooding. The individual tripped and fell about 20 feet down a steep incline and sustained fatal injuries. There were also two injuries to first responders in Dane County on August 21 when they were struck by lightning while responding to a structure fire.

Many of the communities impacted by this storm system are among the most economically vulnerable in the state. High poverty levels, an aging population, and significant unemployment have exacerbated the impacts of this event. Homes that have had repetitive flood damage over the years are now rendered completely unlivable. Lack of income and borrowing ability prevent homeowners from repairing critical housing components, like furnaces, water heaters, and foundations. Mold remediation and well testing are also beyond the ability of many residents to complete without assistance. With the onset of winter mere weeks away, this is an extremely urgent situation. An additional compounding factor is the lack of available housing units. As displaced individuals and families seek long-term shelter, they realize they must travel long distances from their hometowns and work places to find any available rental housing, which is often out of their price range. To pay for rental housing while keeping up with mortgage payments on their primary homes is also untenable for many displaced individuals in the impacted areas. Impacted parts of the state are likely to see an unprecedented number of mortgage foreclosures.

Entire business districts in many communities were inundated with high flood waters, the likes of which had never been experienced there before. Many businesses and quite possibly entire downtowns will never reopen, bringing even more economic depression to already downtrodden regions of the state. Perhaps most surprising is that quite a few of the communities impacted in this event have implemented significant hazard mitigation measures with available federal funds over the past 20 or 30 years. While those efforts saved a lot in disaster damages, the severity of this event has surpassed others to such an extent that some communities that have mitigated a lot of their risk still experienced record losses.

The resulting damage from this storm system produced numerous challenges for the affected communities. Highway crews were busy implementing road closures, making temporary road repairs, and cleaning up debris. Several major roadways experienced partial or complete washouts or blockages, including Interstate Highways 90/94, 39/90, and 43; US Highways 12, 14, and 61; State

Highways 27, 33, 35, 42, 56, 58, 71, 80, 82, 131, 162, and 171. Many county highways and local roads were closed including much of downtown Madison. These are critical routes for local first responders, the closure of which delayed the response to emergencies throughout the region. Residents were advised not to travel throughout much of the area due to washouts and inundated roadways. Several residents were isolated in their homes and unable to obtain necessary supplies. Roads with permanent damage expect repair completion as late as November 2018.

Seven dams failed in this event, resulting in the severe exacerbation of flooding downstream and additional residences impacted. Nine other dams suffered serious damage. No timeline has been established for the repair of these dams. Six of the dams that failed and five with serious damage have no identified funding source for repairs.

Emergency management and local officials expressed other concerns related to tourism. Road closures have made tourist travel difficult during the peak summer and fall tourist season, which resulted in a significant reduction in business revenues in the impacted areas and continues to have negative impacts. Many communities in the impacted area host a variety of fall festivals and events that had to be cancelled.

### **Volunteer Agency Response**

Immediately following the repeated rounds of heavy rainfall, high winds, and the tornado outbreak, many voluntary organizations arrived to assist impacted residents. Trees toppled and hazardous waters began to fill homes and overwhelm septic systems, causing hazardous living conditions for many. This triggered the American Red Cross to open a total of 9 emergency shelters and provide 124 overnight stays. One additional independently-run shelter was opened and managed by United Methodist Church in Elroy in Juneau County.

Emergency mass feeding was necessary to assist impacted residents and relief workers. American Red Cross, The Salvation Army, and Southern Baptist Disaster Relief provided a total of 6,501 meals and 14,573 snacks to support mass feeding operations. Kwik Trip donated 10 pallets of bottled water to be distributed by the American Red Cross. Food pantries in La Farge, Viola, and Black Earth were heavily impacted and required assistance to handle the damages to the pantries and the increased feeding needs of their residents. Second Harvest Food Bank worked diligently to support these food pantries and impacted households, sending 700 households worth of food and beverages, totaling 37,000 pounds of food.

As flood waters receded, clean-up operations began. American Red Cross, The Salvation Army, Southern Baptist Disaster Relief, and United Methodist Committee on Relief (UMCOR) deployed over 6,861 clean-up kits and distributed over 8,486 bulk items such as shovels, work gloves, bleach, masks, and insect repellent to households. Team Rubicon volunteers responded to mud-filled basements in Dane County and thousands of downed trees in the East Central region, logging 3,036 work hours through providing cleanup, heavy equipment operations, debris management and sawyer services. Samaritan's Purse U.S. Disaster Relief and Southern Baptist Disaster Relief mobilized to assist homeowners with mud-out, tearing down drywall, debris removal, and mold suppression. 176 volunteers registered with Samaritan's Purse and provided a total of 4,312 volunteer hours to assist 73 homeowners with clean-up. Southern Baptist Disaster Relief assisted 47 homeowners with mud out and household sanitizing. Knights of Columbus dedicated over 4,662 volunteer hours in

response to this event, assisting with flood fighting and household cleanup. LDS Charities coordinated 179 volunteers, providing 644 volunteer hours with mud out and debris removal.

Beginning August 21, 2-1-1 Wisconsin volunteers worked tirelessly to collect damage reports and refer survivors to available disaster resources. By September 25, 2-1-1 call centers had fielded a total of 4,559 damage reports. Within the 17 counties included in this presidential declaration request, 728 callers reported sewage back-up in their basements, and at the time of their damage report 528 callers indicated they could not live in or use their property, and 327 reported flood waters were blocking access to their properties.

The road to recovery for many of these communities will be long and challenging, and this incident has inevitably already taken, and will continue to take, an emotional toll on thousands of Wisconsinites. Two Multi-Agency Resource Centers were opened in Dane County to provide immediate assistance to flood survivors such as emotional and spiritual care, case management, recovery information, food, water, cleanup items, and more. Through these centers and in the communities, the American Red Cross opened 377 cases with individuals and families, serving 1,000 individuals in these households. Additionally, American Red Cross provided crisis counseling for 776 individuals and assisted 702 individuals with replacing medications and medical equipment and provided other health-related information. 416 comfort kits including items such as basic toiletries, tissues, and stuffed animals for youth were provided by The Salvation Army and American Red Cross. Southern Baptists Disaster Relief provided 192 showers and 58 loads of laundry. Adventist Community Services assisted Sauk County with a donations management center in Reedsburg, providing 29 volunteers over 9 days.

### **State Agency Response**

The following information outlines the nature and amount of state and local resources that have been or will be used to alleviate the conditions of this disaster. Local governments and volunteer agencies responded to the immediate needs of those impacted and coordinated the flood response. County and local law enforcement, emergency medical services, and fire personnel responded to emergency calls throughout the crisis period, with longer response times due to the number of calls for service and road closures. Public works and highway crews conducted damage assessments and worked to maintain essential services. Local emergency responders and public works crews cleared debris from roadways, following both the initial event and the continued flooding, and established emergency protective measures to prevent loss of life. County health departments provided necessary services to residents, including supplies and well testing kits.

The State Emergency Operations Center (SEOC) opened at Level IV the morning of August 21 for this event, before elevating to Level III on August 28 after further severe weather. And scaling back to normal operations on September 11. Wisconsin Emergency Management acted on requests for assistance, obtaining needed personnel and equipment, and coordinated the compilation of damage assessment information from local assessment teams. Wisconsin Emergency Management's Response Section Supervisor and Regional Directors deployed to the hardest-hit counties to provide guidance and assistance to county emergency management directors and elected officials. The team also relayed information back to the SEOC and played a significant role in allocating vital state assets to the areas that needed them. Wisconsin Emergency Management's Geographic Information System staff provided up-to-date road closure maps, dam failure maps, and story maps with aerial photos. The Wisconsin Department of Military Affairs Public Information Officers shared

information with counties, municipalities, and the 2-1-1 program, monitored media reports, and issued regular press releases and incident reports.

The Wisconsin Air Operations Branch in the SEOC utilizes the Air Coordination Group (ACG) to facilitate the efficient planning and execution of air support to joint, multi-agency response forces in the field. When aviation resources are required to support a multi-agency response, the ACG will be established as the centralized point of contact for the coordination of all aviation operations involved in the response effort.

State Aviation assets from the Wisconsin Air Coordination Group collected high resolution photos and videos to provide situational awareness, support planning for response and recovery efforts, and damage assessments. This group consisted staff members from the Wisconsin Drone Network, Wisconsin Department of Natural Resources (DNR), Civil Air Patrol (CAP), Wisconsin State Patrol (WSP), Wisconsin Emergency Management, and the Wisconsin National Guard.

The following is a summary of the hard work and dedication of the SEOC Air Operations Branch, the Wisconsin Air Coordination Group, and Wisconsin Emergency Management GIS personnel in response to the recent flooding event:

- 7,329 images and 31 videos processed
- 5 surge staff, 40 surge staff hours, 2 GIS WEM Leads
- 2 GIS WEM leads, 271 WEM GIS hours
- 56 story map applications; 6 large story map series applications
- 1 image service published for before after image
- Web application total of 7,084 views
- Over 50 maps with KML data for flight missions and Governor tours
- 8 Governor binders created.

Flight summary by agency:

- Civil Air Patrol – 7 missions, 26.6 hours
- DNR – 8 missions, 26.5 hours
- WSP – 7 missions, 16.1 hours
- Drone Network – 31 photo and video missions

The Wisconsin Department of Transportation worked with county highway commissioners to assess damage to federal, state, county, and local roads, culverts, and bridges. Representatives from the Wisconsin Department of Transportation coordinated and delivered barricades, detour signs, portable messaging boards, and other resources to affected counties. Their 511 service provided information on road conditions, road closures, and recommended detour routes. The Wisconsin Department of Transportation also provided information to the public on the status of road closures. In addition, the Department of Transportation temporarily shut down the interstate near Mauston and led the Interstate 39 and Interstate 90/94 sandbagging operation in Columbia County by developing and implementing a detailed plan to protect the interstate from flooding. The Department of Transportation also assisted with evacuations in Sauk County and provided general security.

The Wisconsin Department of Corrections deployed an eight-member strike team to fill sandbags near the Rock River at Milford in Jefferson County. In addition, they provided approximately 120 inmates to assist with filling sandbags in the City of Madison, City of Monona, and Sauk County. Additional correctional inmates assisted with debris efforts in the Town of Waupun.

Wisconsin Department of Natural Resources (DNR) personnel from 16 different programs provided everything from dam safety inspections to waste and hazardous waste management information and water quality assessments. This included life safety rescue missions. Key personnel assisted in the State Emergency Operations Center along with GIS and Public Information personnel from DNR. Waste water management personnel were working with local units of government with their waste water treatment plant issues.

DNR deployed its Incident Management Team which assisted several counties in residential pumping and provided additional assistance near Portage. DNR staff participated in the Preliminary Damage Assessment and will continue to support recovery efforts. Approximately 100 staff personnel assisted with this incident. Included in the efforts was assistance with evacuations, inspections, and debris removal coordination.

The DNR provided pumps for Viola and the Interstate 90/94 and 39 intersection near Portage along with pump operators.

The Wisconsin National Guard (WING) provided support to flooding mitigation efforts from August 24 to September 7, 2018, to protect life and property. The WING supported 19 requests for assistance, including 12 missions for Dane County, 1 mission for Sauk County, 3 missions for Columbia County, and 3 regional overflight missions. WING support included transportation to replenish stockpiles of 700,000 empty sandbags, and one sandbag filling machine during five separate haul missions. Repositioning these assets were required in order to support storm response and future operations. Wisconsin Soldiers and Airmen provided manpower to fill and place sandbags in the municipalities of Madison, Monona, North Freedom, and West Baraboo. WING was also asked to assist with emplacing sandbags along Interstates 90/94 and 39, and the Cascade Mountain Road junction in order to keep those major transportation networks open. WING personnel filled over 22,100 sandbags in order to place sandbag structures along impacted sections of the Interstate 90/94 and 39 junction. A total of 421 separate Service Members supported the flooding response with 842 total man-days of State Active Duty and 1,229 total man-days of combined Technician, Active Guard Reserve, and State Active Duty statuses. Wisconsin National Guard Airmen and Soldiers provided support during this response effort.

The Wisconsin Department of Health Services (DHS) provided private well-testing kits to local health departments for water quality monitoring of private wells. They also coordinated with American Red Cross and other voluntary organizations active in disaster to support families affected by the event and provide resources, such as flood clean-up kits. The DHS provided public information regarding health concerns following flood events. DHS staff participated in the Preliminary Damage Assessment and will continue to support recovery efforts.

Road closures, trail damage, and limited access to popular outdoor recreational areas impacted normal tourism activities in southwest Wisconsin during the peak summer travel season. The Department of Tourism led with a multi-faceted marketing and communication plan to report conditions to travelers, media, and stakeholders using Travel Wisconsin social media channels,

website, state welcome centers, and media interviews. In addition, the Department of Tourism conducted ongoing outreach with tourism industry stakeholders to assess the impact, monitor recovery, and provide marketing resources and support. At this time the Department of Tourism is not able to quantify a financial impact of lost tourist activity due to the floods and severe weather.

Unfortunately, this is not the only recent event to draw on the resources and capacity of the state and its counties. In the previous 12 months, the State of Wisconsin, including many of these same counties, has been impacted by a number of events that have required response by resources from the State and one or more counties.

On Friday, June 15, 2018, multiple rounds of severe thunderstorms impacted much of Wisconsin, hitting northwest and west central Wisconsin particularly hard. A line of thunderstorms moved through parts of the region during the late afternoon and evening of June 15, producing large hail, damaging winds, and torrential rain over northwest Wisconsin. A second line of thunderstorms hit the northern half of the state during the day on Saturday, June 16, and overnight into Sunday, June 17, producing additional flooding in the northwest portion of the state. Record crests occurred on some rivers in Wisconsin including the Nemadji River at Superior (31.06'), Whittlesy Creek at Ashland (7.52'), the White River at Ashland (9.91'), and the St. Croix River at Danbury (11.66'). The Town of Drummond in Bayfield County received 15.04 inches of rain over those three days. I requested and Wisconsin received a Public Assistance Federal Disaster Declaration, DR-4383, for six counties in west central and northern Wisconsin.

In the past year alone, local applicants reached the damage indicator of \$3.68 per capita on nine separate occasions, making them eligible to receive assistance from the Wisconsin Disaster Fund to include:

- Flooding in Green, Juneau, Monroe, Pepin, and Sauk counties on July 19, 2017
- Flooding in Douglas County on October 3, 2017
- Coastal flooding in Bayfield County on October 24, 2017
- Flash flooding in Green and Lafayette counties on February 19, 2018
- Flooding in Calumet, Fond du Lac, and Manitowoc counties on May 4, 2018
- Flash flooding in Grant County on June 10, 2018
- Power loss on Washington Island (Town of Washington) in Door County starting on June 15, 2018
- Flooding and severe storms in Clark, Columbia, Marathon, Pepin, Price, Taylor, Washburn and Waushara counties on June 16, 2018
- Flash flooding in Iron and Washburn counties on September 21, 2018

In those events, the state will be assisting county and local governments in recouping some of their costs through the Wisconsin Disaster Fund and the Wisconsin Department of Transportation's Disaster Damage Aids program. Current eligible damage requests for the Wisconsin Disaster Fund total close to \$2.7 million, without including the damages from this event. This illustrates the State's commitment to helping those in need, but without the assistance of the federal government it will be very difficult for the citizens of the state to recover and move forward.

### **Local Impacts**

Of the 16 counties affected during this weather event, Dane County sustained the most damage in the Black Earth Creek and Yahara River watersheds. However, several other counties and watersheds also experienced very severe private and public sector impacts due to high levels of poverty and repetitive flooding over the past decade. The following statements provide an overview of the damages experienced from this event:

**Kickapoo River Watershed** (Monroe, Vernon, Richland, and Crawford counties)

Known for its forested hills, lush valleys, abundant trout streams, and historic blue-collar communities, the Kickapoo River Valley provides recreational, employment, and agricultural amenities for thousands of residents, businesses, and visitors every year. However, the repeated periods of heavy storms and precipitation from August 17 through September 14 turned one of Wisconsin's most beautiful landscapes into one filled with rushing waters and devastating floods that still permeate communities in Monroe, Vernon, Richland, and Crawford counties.

The area is not new to historic flooding events. All four counties have received numerous federal declarations for flooding, with Crawford and Vernon counties leading the state in number of declarations. Nearly all of the thirteen declared events since 1990 that have impacted the watershed occurred during the late spring and early summer. Major events occurring from May through July, the period during which many flooding declarations occur, can be attributed to moist air masses in spring that accompany late winter snow melts. There are very few late summer/early-fall declarations in this part of the state, as most of these storm-system-induced events cause localized incidents, not watershed-wide impacts. In fact, only two major events that caused widespread flooding in the Kickapoo Valley occurred in August through early September, both of which resulted Presidential Disaster Declarations in 1992 and 2016.

Because of the history of historic flooding events, this area routinely planned and implemented hazard mitigation measures in hopes of lessening impacts to residents. Over the last 30 years, these four counties used over \$56.4 million in federal, state, and local mitigation dollars to acquire and demolish residential and commercial structures, proactively perform streambank maintenance to decrease potential woody debris blockages in the river, install flood warning systems, elevate residential structures, repair dams, and install mitigation in public facilities and utilities (Wisconsin State Hazard Mitigation Plan, 2016). Despite investing so many resources in decreasing the risk of flooding from storm systems like this, these communities were still severely inundated with waters that destroyed communities. Even a community like Gays Mills (Crawford County), which worked tirelessly to relocate most of its downtown and elevate remaining structures two feet above the base flood elevation, saw historic damages to residences due to a new historic crest of 22.31' at its National Weather Service stream gauge on August 29, 2018; this crest was 5.3' above major flood stage and nearly 2.5' above the previous historic high in 2008. It was from flood waters like these across the four counties that comprise the Kickapoo River watershed that 177 homes were destroyed or sustained major damages, in addition to sustaining a validated \$16.3 million in repair and response costs.

The residents did not sit idly back and wait for flood waters to rise. From August 20 through 27, communities up and down the Kickapoo engaged in sandbagging operations in communities like Ontario (Vernon County), Cashton (Monroe County), Viola (Richland and Vernon counties), Readstown (Vernon County), La Farge (Vernon County), Coon Valley (Vernon County), and Gays Mills (Crawford County). Fire departments, public works officials, residents, and volunteers alike

joined forces to fill and stack sandbags and remove debris, but the waters overcame these measures in many locations. As residents and officials began to assess damages, the watershed was hit with another storm system September 3 through 6, propelling the river to even higher levels. Wastewater treatment ponds, sewage treatment plants, and sanitary/stormwater systems were inundated. Assistance from the Wisconsin Department of Natural Resources and local officials prevented numerous deaths by engaging swift water rescue teams across the watershed.

In Vernon County, the villages of La Farge, Coon Valley, Ontario, Viola, and Chaseburg were without electricity for up to a week or more. Multiple assisted living facilities were flooded and schools in Kickapoo, Westby, and LaFarge were unable to open in time for the start of the school year. Thankfully, American Red Cross and Salvation Army aided some displaced residents by opening short-term shelters, caring for pets, and providing crucial services for residents with functional needs. Even with the support and partnership of state, local, and private resources, residents and officials continue to identify unmet needs and are not sure where to go next. The large list of unmet needs, especially as they pertain to housing, is particularly troublesome because the Kickapoo Valley is neither affluent nor does it have a large tax base to raise funds to recover from this event using private, local, and/or state resources alone.

Making repairs immediately after such a long incident period is difficult in an area with low income. According to the US Census, the median household income for these four counties is \$48,800, which is \$5,800 lower than the median household income for the State of Wisconsin. This translates to a per capita income that is almost \$5,000 less than the state and national averages. 177 households are without safe housing and another 129 households must make timely repairs when about 14% of their overall population falls below the poverty line (US Census Bureau, 2018). As seen on the map on page 1 of Enclosure D, for parts of Monroe, Vernon, Richland, and Crawford counties along the Kickapoo River, the percentage of the population living in poverty is between 20 and 30% (Ibid.). Impacted residents are among the poorest in the state and are forced to borrow money at high interest rates to repair their homes that have been exposed to flood hazards recently in 2007, 2008, 2013, 2016, and 2017.

Exacerbating the problems caused by the low-income levels, there are extremely few affordable housing units that are available to house displaced residents. 74.4% of residents live in owner-occupied housing units, which is well above the state and national averages (US Census Bureau, 2018). The high level of home ownership means that few resources have been historically used to invest in affordable rental housing units should large numbers of residents be displaced by flooding events. During a Wisconsin Recovery Task Force meeting, a housing expert from the Department of Administration's Division of Energy, Housing, and Community Resources highlighted a shortage of affordable housing in the impacted area with high owner-occupied housing, especially the Kickapoo River Valley. This means that unless people can afford a down payment to purchase a new home, they are unlikely to find a different housing unit to occupy for the upcoming winter months and must repair the units that they own, even if their housing units have been destroyed.

Low availability of housing units, coupled with low income places additional stress on households in Monroe, Vernon, Richland, and Crawford counties. Homeowners with lower incomes suffer more than renters, as these households often cannot afford to meet unexpected expenses for which they are responsible, such as repairs to necessary utilities like wells or furnaces. 28% of households across the Kickapoo Valley already pay at least one-third of their income toward housing expenses and are identified as "burdened households" by the U.S. Census and Bureau of Labor Statistics (Ibid, 2018;

US Bureau of Labor Statistics, 2018). The fact that most of the impacted burdened households in the Kickapoo River Valley own their homes and have no other place to go for temporary housing places homeowners up against a wall as winter rapidly approaches in Wisconsin. In order for this population to continue to weather the cycle of flood-repair-repeat, residents simply cannot jump-start recovery without the assistance of federal resources like the Individual and Public Assistance programs.

Vernon County experienced the highest amount of damages in the entire state, with \$413.71 in public sector damages per person and almost 100 homes that sustained major damages or were destroyed. The County's municipalities have extremely limited budgets to repair infrastructure. Some municipalities have exhausted borrowing limits following other repair projects from previous disasters in 2016 and 2017; these townships are already at their maximum borrowing limits and have concerns about defaulting on existing lines of credit.

These counties are extremely rural in nature. In fact, the average population density is approximately 32 people per square mile (Ibid). Low population density suggests what we already know about this area: its people are geographically dispersed across the landscape. The miles of town- and county-owned roads are the lifeblood to get people to their jobs, and allow them to obtain food and afford access to key community resources, like well-testing kits or other public health resources. Despite having six percent of the residents exposed to this weather event, these three counties experienced over 40% of the total permanent work estimated to be completed to recover these communities to pre-disaster capacity and function in Public Assistance. Even today as communities work hard to reopen the hundreds of closed roads and bridges, first responders must take lengthy reroutes, delaying services that could mean life or death for residents.

This watershed has a high percentage of residents at risk due to access and functional needs as shown in the map on page 2 of Enclosure D. The map on page 3 of Enclosure D shows that some places in this region have 25 to 30% of their total population over the age of 65 (Ibid). These at-risk populations requires additional services in disaster recovery and disproportionately experience problems when public services are closed or inaccessible. Obtaining financial assistance to make these crucial public health and emergency response services available is a necessity for many of the communities impacted, like Viroqua, Viola, Gays Mills, and Bell Center.

When comparing this 2018 event to the damages sustained in 2007 and 2008 where the Kickapoo River saw similar historic crests (many river gauges observed higher readings during this 2018 event), the state and local housing assistance programs that targeted Monroe, Vernon, Richland, and Crawford counties still fell short. With President Bush's approval of the Individual Assistance program in 2007, 2,902 households were awarded \$7.5 million in housing assistance to replace furnaces and repair damages to utilities and another \$499,000 was awarded in other needs assistance (Wisconsin State Hazard Mitigation Plan, 2016). With even less time before winter in an area that has been impacted by new historic levels of flooding, residents in Monroe, Vernon, Richland, and Crawford counties need help more than ever in the form of Individual and Public Assistance.

### **Yahara River and Black Earth Creek Watersheds (Dane County)**

On August 17, 2018, six inches of rain fell on Eastern Dane County, causing heavy road damage and minor property damage. Three days later, on August 20, 2018, up to 15 inches of rain fell on Central and Western Dane County, breaking the 11.72 inch-precipitation record set in 1946. This

overwhelmed watersheds and caused significant flooding and flash flooding in local rivers, lakes, and municipal storm water systems.

During the initial 10-day response period, the Dane County Emergency Operations Center remained open 24 hours a day. There were over 1,000 emergency calls placed to 9-1-1 and more than 80 water rescue missions were dispatched, although many more were requested. First responders worked around the clock to rescue and evacuate residents, even while their own stations were flooding. More than 1,500 cars had to be towed. Most grievously, there was one fatality.

As the event progressed, over 1,800 property owners in Dane County reported damages totaling more than \$70 million in losses. Businesses in Dane County reported over \$50 million in damages and profit losses. Public-sector damage exceeded \$28 million. The storm water contaminated private wells. Of the 623 wells tested in Dane County, more than 130 had bacterial contamination. Three shelters were established in Dane County. This event overwhelmed the resources of local and county communities, and it will take a serious and expensive effort to make these communities whole again.

In Western Dane County, Black Earth Creek exceeded its previous flood stage record by nearly five feet, imposing devastating damage on the villages of Mazomanie, Cross Plains, and Black Earth. More than 20 percent of homes were flooded in each of these villages, and officials ordered evacuations in all three. Flooding caused a significant number of road and culvert washouts, effectively isolating these flood-damaged communities. Four bridges along HWY 14, which transits 10,000 vehicles per day, were rendered impassable due to washouts. In response, the state announced \$2.4 million in emergency contracts to reconstruct the most damaged bridge. Mazomanie lost a daycare center for 100 children and was unable to relocate for several weeks. Of Mazomanie's population, 14.2% reside below the poverty line, 10.6% are disabled, and only 9% of damaged homes have flood insurance because most are located outside of the floodplain. More than 5,000 feet of railway in Dane County was washed out, effectively disconnecting rail passage from Madison to the Mississippi River.

On August 20, 2018, the City of Madison received over 10 inches of rain, with the heaviest rain on the west side. Major streets remained closed for days and weeks after the storm. Disabled vehicles blocked roads in numerous locations. East Johnson Street and East Washington Avenue, both major corridors through Madison's Isthmus that connect the downtown area to the east side, experienced road or lane closures for several weeks. Most notable was the impact on a 96-unit senior housing project that was uninhabitable for weeks following the incident. Of Madison's population, 18.7% reside below the poverty line, as shown in the map on page 4 of Enclosure D.

Lake Monona remains above the 100-year flood stage level. These high-water levels, associated with the August 20<sup>th</sup> storm and subsequent rainfall, may extend into the spring and summer of 2019 because the Yahara River system is slow to drain. In response, Dane County has announced an \$18 million initiative focused on watershed management for the Yahara River watershed to better prepare for the future. The Madison area, especially the west side, has experienced three 100-year storms in the last three years, making it difficult for many residents to recover.

The City of Monona has over four miles of shoreline along Lake Monona and at least 100 private parcels and several roads and lift stations required sandbagging due to the high lake levels. Over 85,000 sandbags were filled and deployed in Monona requiring the purchase and delivery of 1,500

tons of sand. Because the lake level is still high, the sandbags remain in place. Estimated cost for removal and disposal exceeds \$100,000.

The City of Middleton is contiguous to the west side of Madison. Middleton absorbed approximately \$6.9 million in public-sector damages. From Middleton alone, more than 130 residents reported private property damages to 2-1-1. Pheasant Branch Creek Corridor is the primary conduit for storm water to Lake Mendota. Rushing water through the corridor washed out water retention and conveyance systems and destroyed a lift station. A significant impact persists for those with functional needs: The Pheasant Branch Creek Corridor is unavailable for wheelchaired persons and those using walkers for the foreseeable future. Moreover, many of city's pedestrian, bike, and trail systems were washed out. In preparation for storm cleanup, Middleton's City Council authorized \$641,000 in emergency funding.

In Middleton, the University of Wisconsin Health headquarters relocated 800 employees, five hotels absorbed significant damage, and several stores, to include Costco and Saco Foods, lost significant inventory. Several dozen customers and employees had to stay overnight at Costco because surrounding flood waters prevented their departure. Middleton's business community sustained about \$30 million in structural damages.

### **Baraboo River Watershed** (Juneau and Sauk counties)

The Baraboo River caused large amounts of flooding and damage throughout the watershed, especially in Juneau and Sauk counties resulting from up to two feet of rain over several days. The initial crest of the river exceeded record flood stage in some locations, which was previously set during the historic 2008 flooding event. This caused widespread roadway and residential damage along the watershed. Several major bridges, culverts, and roads were destroyed, forcing lengthy detours across the counties. Sandbagging efforts were attempted in several spots throughout Sauk County, but the water rose too rapidly, forcing emergency evacuations of several residences and businesses. All local resources were utilized to assist with evacuations, including the Wisconsin Dells Army Ducks, a local tourist attraction featuring amphibious vehicles.

Approximately one week later, the northern portion of the watershed received another 7-8 inches of rain in a short amount of time, which resulted in a second crest in the river. The second crest exceeded the first crest in some locations along the river and reached major flood stage much quicker. This caused additional emergency evacuations and made previous damages from the initial crest worse, while also damaging homes and public infrastructure previously unscathed from the first crest.

Both crests forced the closure of Interstate 90/94 in Juneau County for over 24 hours each time. One of the closures occurred around the Labor Day holiday weekend, causing hefty delays for travelers and commercial trade vehicles. To prevent road closures further south in Sauk and Columbia counties, the Wisconsin Department of Transportation commenced a major sandbagging operation to prevent Interstate 90/94 and Interstate 39 from shutting down over Labor Day weekend and the following weekend. With the sandbagging operations, some lanes were still shut down for several hours during the busy holiday weekend.

Two record and near-record crests approximately one week apart caused significant damage to homes and businesses. The City of Elroy in Juneau County had several homes with substantial

foundation damage and destruction, and many others that had a few feet of water in their homes. Several businesses were destroyed and are unable to reopen. That area of the county has a high percent of elderly residents as shown in the map on page 5 of Enclosure D.

In Sauk County, the villages of La Valle and Rock Springs, and the City of Reedsburg received sizeable amounts of damage. Several residences and businesses in La Valle were moved off their foundation and destroyed. State Highway 33, the major roadway through the western portion of Sauk County, experienced several washouts and water overtopping the roadway, shutting it down for several days. The Village of Rock Springs had previously done several mitigation projects to buy out residences along the Baraboo River. Despite the mitigation efforts, several additional homes were damaged or destroyed, and nearly all the businesses in the downtown area were destroyed and will likely not be able to rebuild. This is exacerbated by the high poverty level of the village. While Sauk County's poverty level is over 10%, the Village of Rock Springs has nearly 20% of people living below the poverty line (American Community Survey, 2012-2016). Poverty is not uncommon in small communities in this part of the state as shown in the map on page 6 of Enclosure D. One flood-related fatality occurred in Sauk County, when an individual fell down flood-damaged stairs at Lake Redstone.

The Baraboo River watershed has experienced flooding previously, most notably in 2008. All of these communities experienced the devastation of 2008, and now have lost everything again with limited income to make all necessary repairs. There is a great concern over the mental health of the residents, who have to go through this all over again as the communities were finally finishing recovery. The amount of widespread damage from this event is more significant than previous events, leaving hundreds of residents and business owners without a place to live or work. All the communities impacted are rural and do not have the resources or finances available to repair the damages to the public infrastructure or private residences. The loss to agriculture was also noteworthy. With many crop fields sitting under water for several weeks, millions of dollars in crops have been lost and are unable to be harvested.

## **Wind and Flood Damage** (Adams, Dodge, Fond du Lac, Green Lake, and Marquette counties)

As the severe storms rolled through the state on August 28, 2018, several counties experienced damages from the high winds and tornadoes of these storms. The counties with the most significant damage from high wind are Adams, Dodge, Fond du Lac, Green Lake, and Marquette. These counties experienced extensive power outages from damaged power lines. Thousands of local power lines were damaged, as well as major transmission lines that run through the region. Tens of thousands of citizens were without power for several days, resulting in thousands of people displaced from their homes and businesses. Several individuals that require advanced medical treatment depend on electricity to maintain their equipment. These people were forced to seek shelter while power was restored.

Large amounts of trees and debris were scattered throughout the area, blocking major roadways into and out of the impacted areas. This delayed the response of local police, fire, and EMS agencies to emergencies in the region, and forced detours to local hospitals to transport patients. Dodge County lost power to their 9-1-1 system several times throughout the storm, delaying response further to those who needed immediate assistance. Power restoration was delayed as utility crews waited for county and municipal highway departments to clear roadways to gain access. Many of the trees and debris landed on homes, destroying several homes and causing significant damage to many others, particularly across Fond du Lac and Dodge counties. Several municipalities in Fond du Lac and Dodge counties established a curfew for residents because of an extended power outage.

This region of the state is heavily agricultural. The high winds from these storms destroyed many crop fields, resulting in millions of dollars in lost revenue. Several cattle farms were also destroyed by high winds, including a large milking farm that lost several dairy cows in Fond du Lac County.

These storms also caused significant flash flooding throughout the counties, which resulted in long-standing high water and riverine flooding. As much as 8 inches of rain fell throughout this area in a short period of time. With additional rainfall that occurred prior to this, the water did not have any place to go. Several county and state roads experienced culvert and road washouts, closing the roads and resulting in detours that are still in effect at the writing of this letter. With the power loss across this area including to sump pumps, hundreds of homes received several feet of water in their basement, causing significant damage to furnaces, water heaters, and other appliances. With sump pumps unable to run and high water remaining in homes for several weeks, local health departments are concerned about mold development in all these residences and the safety of the occupants.

Riverine flooding impacts were particularly significant in Marquette and Green Lake counties. The Fox River watershed flows through these counties and has remained high since the storm event. In Marquette County, all the roads that cross the Fox River and Buffalo Lake were damaged or overtopped by water, splitting the county in half. Detour routes to travel to the other side of the county exceeded an hour in some locations. Local first responders were required to stage equipment on both sides of the river, and transport times to local hospitals increased dramatically with the detour routes in place. The City of Montello, which is the largest municipality in Marquette County, was forced to close all schools for a week because of the flooding. Emergency evacuations were required along the river, and two shelters were established. In Green Lake County, evacuations were also required, and significant damage to residences and businesses occurred. The Fox River in Green Lake County is still above flood stage a month after the initial storms. Therefore, thorough assessments are still pending as the river continues to recede.

All these counties and local municipalities are relatively small in population with low annual budgets. Several municipalities are still cleaning up debris from these storms, with no timetable for completion. The lack of funding and personnel to cover emergency costs puts a tremendous stressor onto the municipalities, with limited options to try and fund cleanup activities. Wholly, these counties rely on tourism as their primary source of revenue. The end of the primary tourism season has passed, meaning a significant revenue source will not return for these counties until next summer. The municipalities also must worry about the pending winter snow season and snow removal. The additional costs for emergency work for local municipalities and private property owners is prohibitive, making recovery difficult or impossible without federal assistance.

### **Other Impacted Communities**

Several other areas outside of the main watersheds and impacted areas received significant damage. Ozaukee and Washington counties received up to 8 inches of rain overnight on August 26, 2018. This forced road closures throughout both counties, including Interstate 43 in Ozaukee County. This is the major route connecting the Milwaukee area with the Green Bay area and the Upper Peninsula of Michigan. These closures lasted several hours, resulting in significant detours for first responders and commercial truck traffic. Hundreds of homes were impacted, including several with foundation wall collapses and a few feet of water in the homes, damaging mechanical appliances. Numerous local businesses were forced to lay off employees and temporarily close, causing lost business revenue and increased spending for cleanup operations.

Jefferson County suffered heavy damages from the Rock River watershed. The Rock River is a slow-responding river. The river reached major flood stage and stayed at that level for several days, ultimately dropping below flood stage three weeks after the initial rain event. Several road and culvert washouts caused problems for local first responders. Many residences experienced several feet of water in their home. Some businesses were forced to close due to high water and have not reopened at this time. Once the waters receded, the concern over private well water monitoring and mold development created ongoing difficulties for local health departments to ensure homeowners remain safe.

La Crosse County endured flood damages for the third year in a row. The county has been involved in two federal disaster declarations in 2016 and 2017, both because of severe flooding. During this event, many roads were closed due to high water, including State Road 35 and US Highway 14/61, both of which are major routes through the county. Power was lost throughout the county for two days, forcing some residents out of their homes into shelters while power was being restored. Several of the same homes affected over the past two years were impacted again. Several creeks had faster water flows than previously, resulting in increased erosion for residences along the waterways. All the communities in the county are still trying to recover from the previous two years and were in extreme financial hardship before this round of storms affected the county. Several roadways that were under repair from the previous storms were destroyed and require additional work to be completed.

Iron County has also experienced catastrophic flood damage over recent years, and for the second time this year alone. Iron County was involved in a federal disaster declaration in 2016 and was recently included in a disaster declaration in June 2018. The same roads that were under repair were damaged or destroyed again, and several homes and businesses were affected again before repairs could be completed. Iron County has one of the highest unemployment rates in the state, and the

continued heavy rainfall is making travel throughout the county very difficult. Tourism is the county's largest industry, and this rain event has compounded the losses from the June 2018 rain event. Local businesses make their annual revenue from the tourist season, and the roadway and business damages has resulted in an extreme loss of revenue.

### Demographic Information for Impacted Counties

Community	Average of Persons Below Poverty Level*	Median Household Income*	Percent Elderly*	Percent Disabled, Under Age 65*	Percent Pre-Disaster Unemployment*
<b>National Average</b>	12.3%	\$55,322	15.6%	8.6%	3.9%
<b>Wisconsin</b>	11.3%	\$54,610	16.5%	8.3%	3.1%
Adams County	13.9%	\$43,554	28.8%	16.4%	4.3%
Crawford County	14.2%	\$45,780	22.6%	11.1%	3.4%
Dane County	10.9%	\$64,773	13.2%	6.1%	2.3%
Dodge County	9.8%	\$54,111	17.1%	7.6%	2.6%
Fond du Lac	7.7%	\$56,376	18.0%	7.2%	2.9%
Green Lake County	11.6%	\$47,174	21.9%	7.9%	3.2%
Iron	14.4%	\$41,270	30.0%	12.1%	5.4%
Jefferson	9.3%	\$57,290	16.5%	7.5%	2.8%
Juneau	14.4%	\$47,243	20.1%	12.3%	2.7%
La Crosse	12.0%	\$51,477	15.9%	7.7%	2.6%
Marquette	12.0%	\$48,445	23.9%	11.1%	3.1%
Monroe	12.0%	\$53,394	16.8%	9.6%	2.5%
Ozaukee	5.4%	\$78,415	19.2%	5.5%	2.7%
Richland	13.4%	\$46,564	22.2%	8.2%	2.6%
Sauk	10.1%	\$53,225	18.0%	9.3%	2.3%
Vernon	16.5%	\$49,476	19.0%	7.2%	2.4%
Washington	5.6%	\$70,325	17.5%	6.8%	2.7%

Sources: U.S. Census Bureau Quick Facts at: <https://www.census.gov/quickfacts/wi>; Wisconsin Department of Workforce Development at: <https://worknet.wisconsin.gov>.

### Preliminary Damage Assessment

On September 13, 2018, I requested a joint federal, state, and local survey of damaged areas. The Preliminary Damage Assessment (PDA) for Public Assistance (PA) and Individual Assistance (IA) was conducted September 24-28, 2018. Teams surveyed damages for both PA and IA in Adams, Crawford, Dane, Dodge, Green Lake, Juneau, La Crosse, Marquette, Monroe, Ozaukee, Richland, and Vernon counties. They surveyed only for PA in Iron County (the fifth time in seven years); and for IA only in Jefferson and Washington counties. We appreciate the assistance in the assessment process from the eight assessment teams, and other personnel and support staff that FEMA provided to conduct the PDAs.

### **Individual Assistance PDA Results**

The Individual Assistance Joint Preliminary Damage Assessment Cost Estimate Worksheets and IA PDA numbers are included as Enclosure A. For the 17 counties surveyed, the IA PDA validated a total of 22 destroyed homes, 348 with major damage, 572 with minor damage, and 353 categorized as affected. Following is the breakdown by county:

County	Destroyed	Major	Minor	Affected
Adams	1	2	6	0
Columbia	0	3	3	2
Crawford	0	29	16	5
Dane	2	85	310	207
Dodge	0	2	21	13
Fond du Lac	1	6	13	3
Green Lake	0	2	1	2
Jefferson	0	0	6	11
Juneau	0	31	25	9
La Crosse	0	7	2	3
Marquette	0	8	4	7
Monroe	6	29	14	3
Ozaukee	0	3	19	15
Richland	3	12	16	8
Sauk	1	38	69	21
Vernon	8	90	42	25
Washington	0	1	5	19
<b>Total</b>	<b>22</b>	<b>348</b>	<b>572</b>	<b>353</b>

Flood insurance coverage in Wisconsin is very low. In Wisconsin's Special Flood Hazard Area (SFHA), where flood insurance is required for any structure with a federally-backed mortgage, only about 5% of structures actually carry flood insurance (Wisconsin State Hazard Mitigation Plan, 2016, and FEMA National Flood Insurance Program Bureau and Statistical Agent, 2018). The insurance in force is about 6% of the value of improvements in the SFHA (Ibid.). Therefore, it is expected that most of the private flood damage will not be covered by insurance.

### Public Assistance PDA Results

For the PA PDA, the impacted counties are a combination of urban and rural agricultural areas. The information below is extracted from Table A-1 (Enclosure B) and warrants expansion. The PDA conducted to develop Table A-1 included the participation of fifteen counties. Based on this information, the damage per capita for the State of Wisconsin amounts to \$6.54. This amount of damage per capita exceeds the \$1.50 state threshold.

- **Vernon County** – Of the fifteen counties, Vernon County has reported the highest countywide damage per capita loss at \$413.71. Verified damages in Vernon County currently amount to \$12,317,472. Damages occurred in all categories of work, with more than half occurring in Category G due to multiple dam breaches.
- **Monroe County** – Verified damages in Monroe County currently amount to \$3,353,164, resulting in a high damage indicator of \$75.06. Monroe County indicated damages in all

categories of work except for Category D. More than 90% of all damage occurred to roads and bridges.

- **Crawford County** – Verified damages in Crawford County currently amount to \$1,103,688, resulting in a high damage per capita amount of \$66.31. Damages occurred in all categories of work except D, with the majority of the damages documented in categories C and G.
- **Juneau County** – Verified damages in Juneau County currently amount to \$1,748,793, resulting in a high damage per capita amount of \$65.59. Categories of work for damages included A, B, C, F, and G, with the majority occurring in C.
- **Marquette County** – Verified damages in Marquette County currently amount to \$972,109, resulting in a high damage per capita amount of \$62.94. The majority of costs were in Category C, with A, B, D, F, and G also having documented costs.
- **Sauk County** – Verified damages in Sauk County currently amount to \$1,487,200, resulting in a damage per capita amount of \$24.00. All categories of work had documented costs, with categories C and G making up the majority.
- **Dane County** – Verified damages in Dane County currently amount to \$11,451,903, resulting in a damage per capita amount of \$23.46. All categories of work had documented damages with almost half occurring in Category G.
- **Adams County** – Verified damages in Adams County currently amount to \$362,424, resulting in a damage per capita amount of \$17.36. All damages were recorded in Categories A and C.
- **Richland County** – Verified damages in Richland County currently amount to \$308,134, resulting in a damage per capita amount of \$17.10. Damages were in Categories A, B, C, and G, with road damages comprising of the majority of the costs.
- **Iron County** – Verified damages in Iron County currently amount to \$70,480, all of which is in Category C. Damages resulted in a per capita amount of \$11.91.
- **La Crosse County** – Verified damages in La Crosse County currently amount to \$1,359,201, resulting in a damage per capita amount of \$11.86. Damages were primarily in Category C, with some costs documented in Categories A, B, F, and G.
- **Fond du Lac, Green Lake, and Ozaukee counties** all had a damage per capita of less than \$10.00. Damages were verified in all categories of work.
- **Dodge County** – Verified damages in Dodge County currently amount to \$289,645, resulting in a per capita amount of \$3.26, which is less than the \$3.78 per capita indicator the county would need for inclusion in a declaration.

I request that the Public Assistance program be made available in Adams, Crawford, Dane, Dodge, Fond du Lac, Green Lake, Iron, Juneau, La Crosse, Marquette, Monroe, Ozaukee, Richland, Sauk, and Vernon counties.

I request that the Individual Assistance program be made available in Adams, Columbia, Crawford, Dane, Dodge, Fond du Lac, Green Lake, Jefferson, Juneau, La Crosse, Marquette, Monroe, Ozaukee, Richland, Sauk, Vernon, and Washington counties.

I request that the Hazard Mitigation Grant Program be made available statewide. The state has an approved Enhanced State Hazard Mitigation Plan.

I certify that for this major disaster, the state and local governments will assume all applicable non-federal shares of costs required by the Stafford Act.

I have designated Brian Satula as the State Coordinating Officer for this request. He will coordinate with the Federal Emergency Management Agency in damage assessments and may provide further information or justification on my behalf.

In closing, I want to reaffirm the urgency of this request and emphasize the need to assist the victims and municipalities as quickly as possible so that life can return to normal. Additionally, winter will set in very soon and many survivors are living in severely damaged homes without furnaces or water heaters. I therefore respectfully request that you review this documentation and act quickly to declare a major disaster for the State of Wisconsin.

Sincerely,



Scott Walker  
Governor

Attached: OMB No. 1660-0009/FEMA Form 010-0-13  
Enclosure A: Individual Assistance  
Enclosure B: Public Assistance  
Enclosure C: Requirements for Other Federal Agency Programs  
Enclosure D: Maps  
Enclosure E: National Weather Service Statement

**ENCLOSURE A**

Estimated Requirements for Individual Assistance  
under the Stafford Act

**INDIVIDUALS AND HOUSEHOLDS PROGRAM (IHP) COST ESTIMATES**

**STATE: Wisconsin**

**INCIDENT DATE: /2018 to 09/14/2018**

<b>ESTIMATED HOUSING ASSISTANCE (HA)</b>	<b>NUMBER OF HOUSEHOLDS (Uninsured)</b>	<b>COST</b>	<b>TOTAL COST</b>	<b>CATEGORY TOTAL COST</b>
<b>TEMPORARY HOUSING</b>				<b>\$ 404,430</b>
Rent (Pre-Disaster Renters)- 1 month	156		\$ 135,662	
Rent (Owners w/Major or Destroyed)- 1 month	329		\$ 268,768	
<b>REPAIR ASSISTANCE</b>				<b>\$ 11,185,043</b>
Repair Costs (Owners w/Affected)	165	\$ 1,500	\$ 247,500	
Repair Costs (Owners w/Minor)	433	\$ 3,588	\$ 1,553,543	
Repair Costs (Owners w/Major)	276	\$ 34,000	\$ 9,384,000	
<b>REPLACEMENT ASSISTANCE</b>				<b>\$ 630,800</b>
Replacement Cost (Owners w/Destroyed)	19	\$ 33,200	\$ 630,800	
<b>Total Estimated Housing Assistance (HA)</b>	<b>1,049</b>		<b>\$ 12,220,273</b>	
Estimated Average HA Award per Household		\$ 11,649		
<b>ESTIMATED OTHER NEEDS ASSISTANCE</b>	<b>NUMBER (Uninsured)</b>	<b>COST</b>	<b>TOTAL COST</b>	<b>CATEGORY TOTAL COST</b>
ONA (All Renters and Owners w/Affected, Minor, Major)	1,013	\$ 1,329	\$ 1,346,591	
ONA (Owners- Destroyed)	0	\$ 1,329	\$ -	
<b>Total Estimated Other Needs Assistance (ONA)</b>	<b>1,013</b>		<b>\$ 1,346,591</b>	<b>\$ 1,346,591</b>
Total Estimated Federal Share (75%)		\$ 1,009,943		
Total Estimated State Share (25%)		\$ 336,648		
Estimated Average ONA Award per Household		\$ 1,329		
<b>Total Estimated HA and ONA (Federal Share)</b>			<b>\$</b>	<b>13,230,216</b>

**ENCLOSURE B**

Estimated Stafford Act Requirements for Public Assistance



**FEMA**

**TABLE A-1 SUMMARY OF ELIGIBLE PUBLIC ASSISTANCE  
PDA CONDUCTED 9/24/2018**

**STATE: *Wisconsin* POPULATION: 5,686,986**

<b>Applicant</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>TOTAL</b>	<b>Population</b>	<b>Per/Cap Loss</b>
County of Adams	\$192,203	\$0	\$170,221	\$0	\$0	\$0	\$0	\$362,424	20,875	\$17.36
County of Crawford	\$114,730	\$186,384	\$489,949	\$0	\$25,077	\$48,903	\$238,645	\$1,103,688	16,644	\$66.31
County of Dane	\$934,087	\$1,328,924	\$1,251,284	\$1,868,297	\$448,985	\$293,832	\$5,326,494	\$11,451,903	488,073	\$23.46
County of Dodge	\$143,890	\$26,682	\$42,348	\$0	\$0	\$56,017	\$20,708	\$289,645	88,759	\$3.26
County of Fond du Lac	\$290,142	\$31,272	\$9,956	\$0	\$0	\$70,431	\$7,300	\$409,100	101,633	\$4.03
County of Green Lake	\$59,370	\$0	\$15,676	\$0	\$0	\$0	\$0	\$75,045	19,051	\$3.94
County of Iron	\$0	\$0	\$70,480	\$0	\$0	\$0	\$0	\$70,480	5,916	\$11.91
County of Juneau	\$123,757	\$162,494	\$1,383,579	\$0	\$0	\$18,445	\$60,518	\$1,748,793	26,664	\$65.59
County of LaCrosse	\$63,291	\$21,866	\$1,170,954	\$0	\$0	\$23,140	\$79,950	\$1,359,201	114,638	\$11.86
County of Marquette	\$388,562	\$75,256	\$220,800	\$13,727	\$0	\$188,967	\$84,797	\$972,109	15,444	\$62.94
County of Monroe	\$63,797	\$107,888	\$3,035,373	\$0	\$8,920	\$64,094	\$73,092	\$3,353,164	44,673	\$75.06
County of Ozaukee	\$36,745	\$7,903	\$104,023	\$29,803	\$6,226	\$25,412	\$232,876	\$442,988	86,395	\$5.13
County of Richland	\$9,946	\$5,422	\$275,805	\$0	\$0	\$0	\$16,960	\$308,134	18,021	\$17.10
County of Sauk	\$187,509	\$28,395	\$540,604	\$28,060	\$43,800	\$236,170	\$422,661	\$1,487,200	61,976	\$24.00
County of Vernon	\$103,658	\$193,515	\$2,429,029	\$1,041,608	\$635,077	\$1,080,833	\$6,833,752	\$12,317,472	29,773	\$413.71
State Agencies	\$62,008	\$0	\$143,000	\$0	\$0	\$0	\$1,247,230	\$1,452,238		
<b>TOTAL</b>	<b>\$2,773,696</b>	<b>\$2,176,001</b>	<b>\$11,353,080</b>	<b>\$2,981,495</b>	<b>\$1,168,085</b>	<b>\$2,106,244</b>	<b>\$14,644,983</b>	<b>\$37,203,584</b>	<b>5,686,986</b>	<b>6.541880791</b>
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>			
category percentage	7.46%	5.85%	30.52%	8.01%	3.14%	5.66%	39.36%	federal share (75%)		

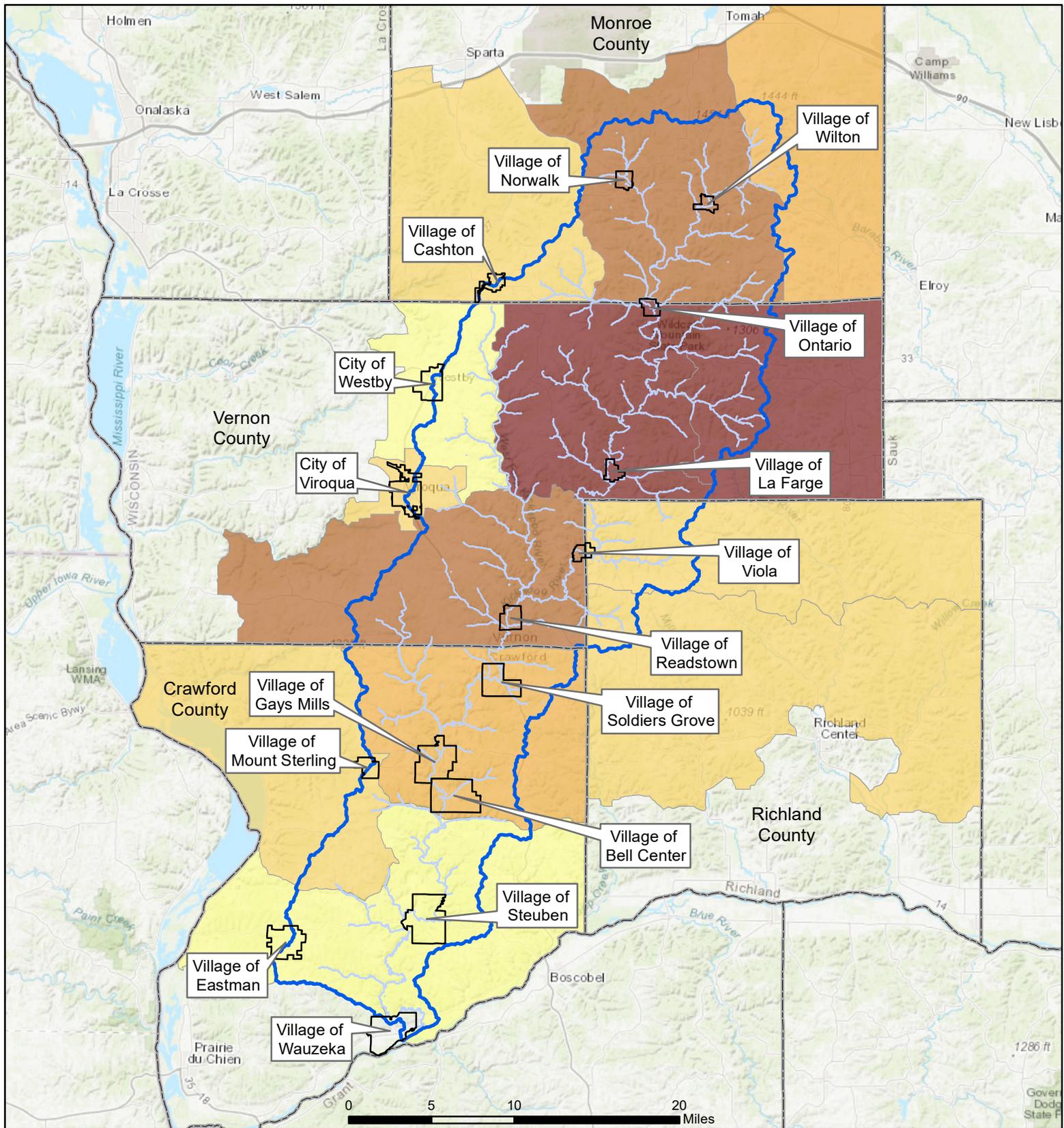
**ENCLOSURE C**

SBA Final Summary



**ENCLOSURE D**

Maps

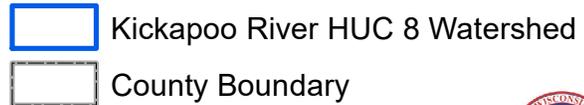


**Percentage of Persons Below Poverty Level**

(by Census Tract)

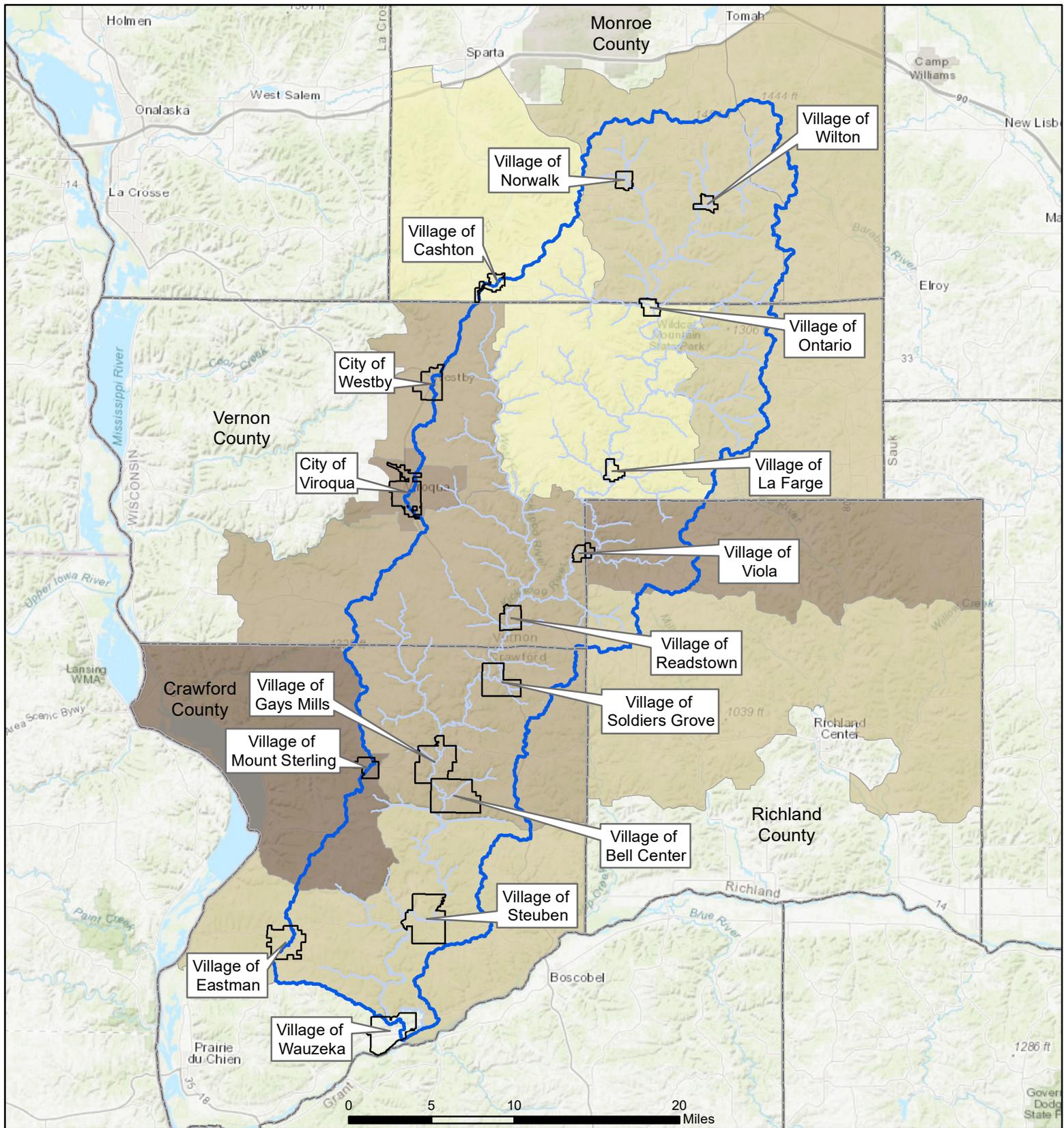


**Wisconsin Multi-Region Flood Event Incident Period: August 17 - Sept 14, 2018**

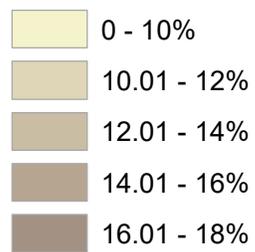


Data Sources:  
 CDC SVI (2016), WI DNR, WEM, ESRI  
 by Wisconsin Emergency Management, 10/02/2018

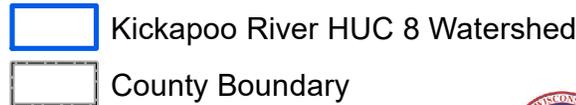




**Percent Disabled**  
(by Census Tract)

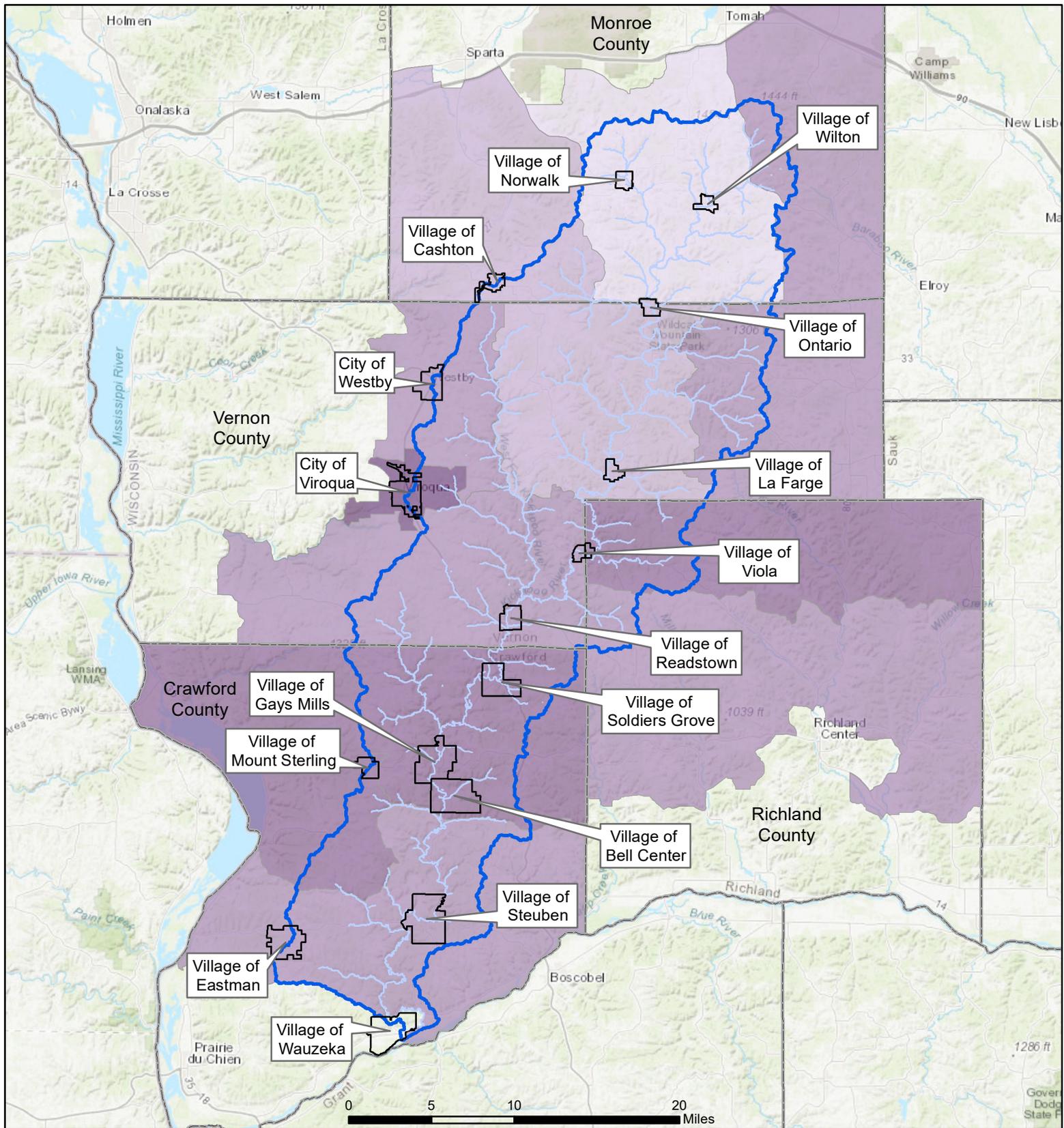


**Wisconsin Multi-Region Flood Event**  
Incident Period: August 17 - Sept 14, 2018

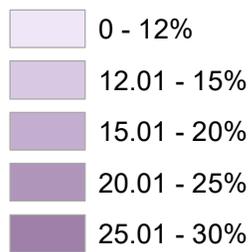


Data Sources:  
ACS SVI (2016), WI DNR, WEM, ESRI  
by Wisconsin Emergency Management, 10/03/2018

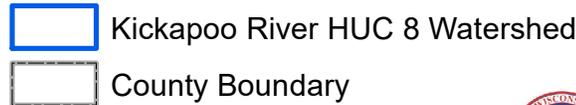




**Percent Elderly**  
(by Census Tract)

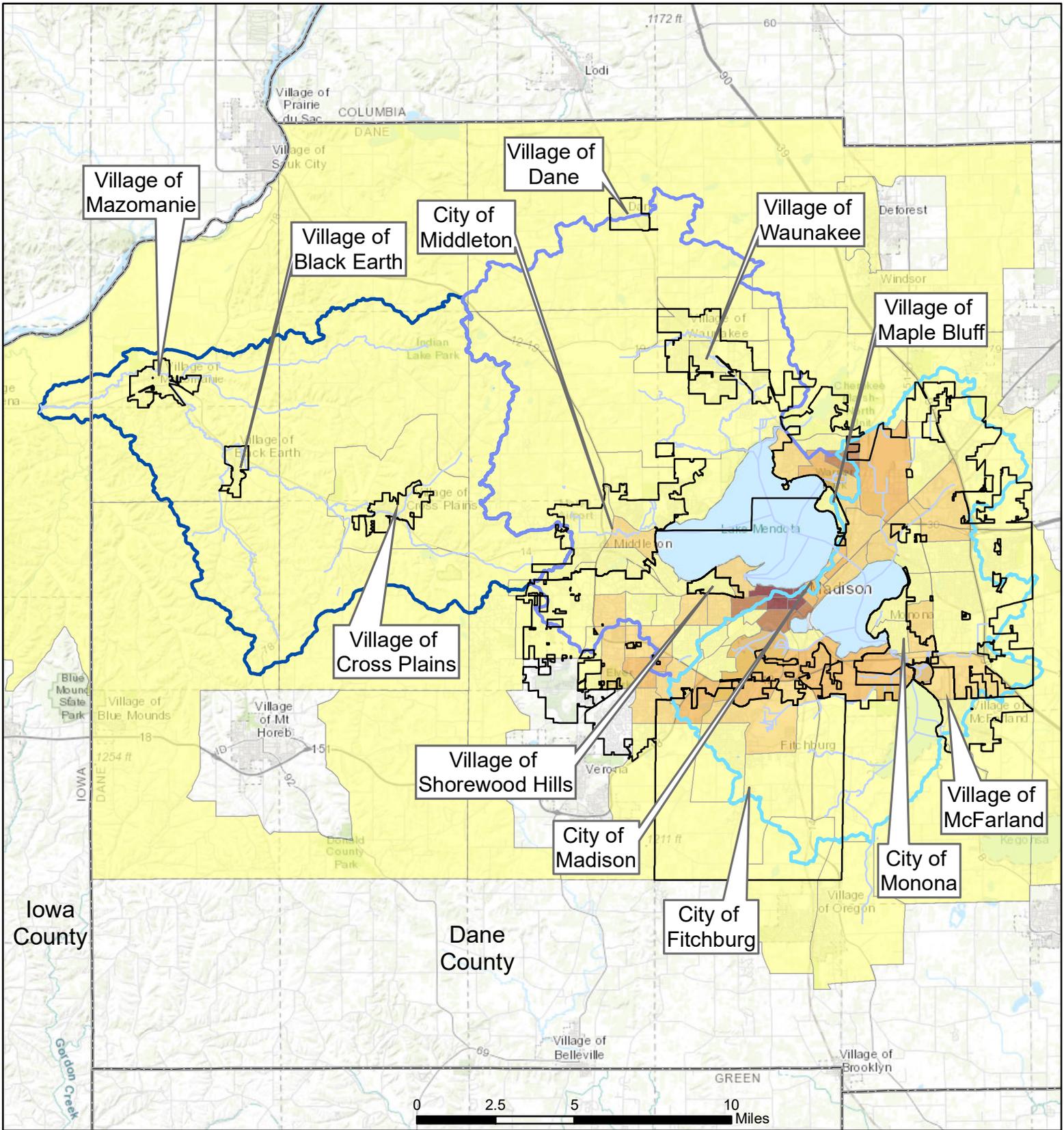


**Wisconsin Multi-Region Flood Event**  
Incident Period: August 17 - Sept 14, 2018

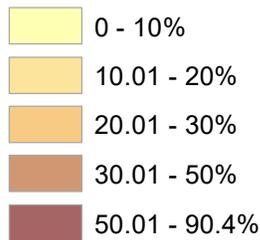


Data Sources:  
ACS SVI (2016), WI DNR, WEM, ESRI  
by Wisconsin Emergency Management, 10/02/2018





**Percentage of Persons Below Poverty Level**  
(by Census Tract)



County Boundary

**HUC10 Watershed Name**

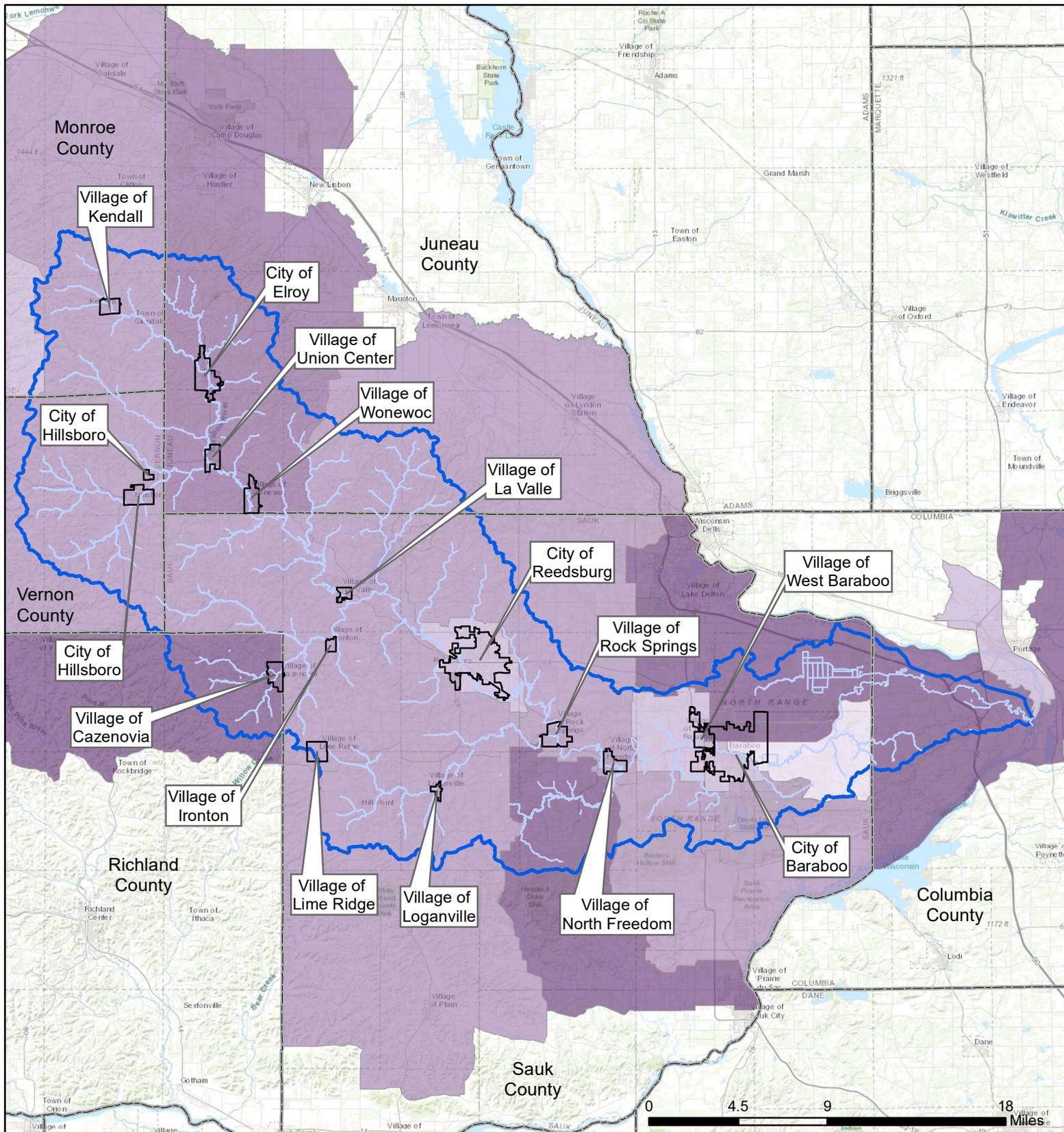


**Wisconsin Multi-Region Flood Event**

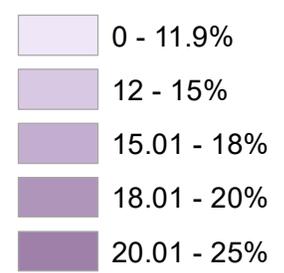
Incident Period:  
August 17 - Sept 14, 2018



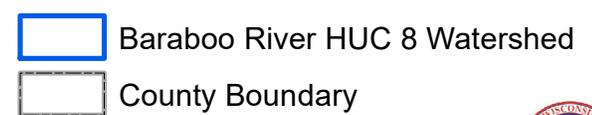
Data Sources:  
ACS SVI (2016), WI DNR, WEM, ESRI  
by Wisconsin Emergency Management, 10/03/2018



**Percent Elderly**  
(by Census Tract)

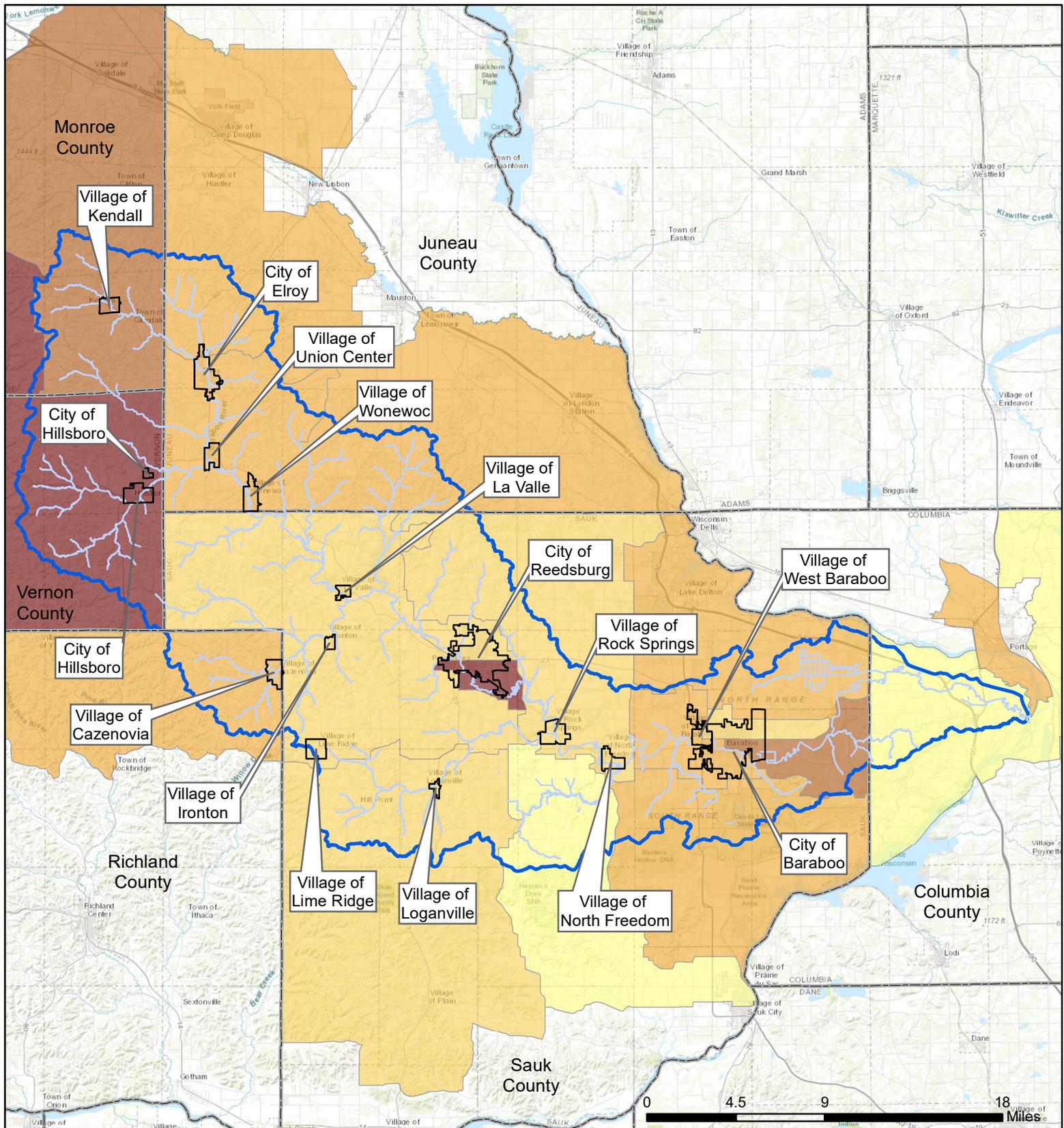


**Wisconsin Multi-Region Flood Event**  
Incident Period: August 17 - Sept 14, 2018



Data Sources:  
ACS SVI (2016), WI DNR, WEM, ESRI  
by Wisconsin Emergency Management, 10/03/2018

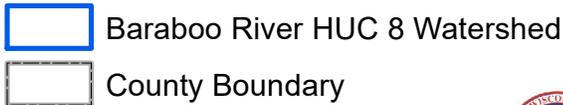




**Percentage of Persons Below Poverty Level (by Census Tract)**



**Wisconsin Multi-Region Flood Event Incident Period: August 17 - Sept 14, 2018**



Data Sources: ACS SVI (2016), WI DNR, WEM, ESRI by Wisconsin Emergency Management, 10/03/2018



**ENCLOSURE E**

National Weather Service Statement



U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
National Weather Service - WFO Milwaukee/Sullivan  
N3533 Hardscabble Rd.  
Dousman, WI 53118

9/29/2018

TO: Paul Cooke, Wisconsin Emergency Management

FROM: Timothy Halbach, Warning Coordination Meteorologist

SUBJECT: Late August into Early September 2018 Flooding and Severe Weather Period

On Friday, August 17<sup>th</sup>, 2018, a noted change in our weather pattern occurred which marked the beginning of multiple rounds of severe weather and flooding across Wisconsin. Up until mid-August, Wisconsin had seen normal to below-normal precipitation for the summer months. Starting Friday, August 17<sup>th</sup>, a very warm and moist air-mass set up across much of Wisconsin and then persisted through the first week in September. A series of storm systems moving through this pattern caused multiple rounds of severe weather and flooding across portions of Wisconsin and followed it with longer term river flooding as well. The first of these systems moved through southern Wisconsin on Friday, August 17<sup>th</sup> and put down a large swath of heavy rainfall with the heaviest amounts occurring near Watertown. Each event where heavy rain fell helped to set conditions for additional flooding to occur. The most widespread severe weather day was August 28<sup>th</sup>, 2018 when 19 tornadoes and widespread damaging winds of 90-110 mph occurred from central Wisconsin through east central Wisconsin.

The last of the series of storm systems came through on Wednesday, September 5<sup>th</sup> with the last river in southern Wisconsin to go below major flood stage being the Rock River at Lake Koshkonong, which dropped below major flood stage on Friday, September 14<sup>th</sup>. It marked an end to the period of this event as the weather pattern has shifted with the warm, moist air-mass now well east of the Great Lakes region.

If you have any questions, please don't hesitate to ask.

Sincerely,

Timothy Halbach  
Warning Coordination Meteorologist  
National Weather Service Milwaukee/Sullivan  
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