Exhibit C Capacity

State of Iowa

Iowa_PhaseII_Capacity.pdf

Capacity

The Iowa Economic Development Authority is leading the State of Iowa's application to HUD's National Disaster Resilience Competition (NDRC), with three key management partners: Homeland Security and Emergency Management, the Iowa Flood Center, and the City of Dubuque. As demonstrated, these four partners have the experience and expertise to ensure the proposed Iowa Watersheds Approach is highly successful and serves as a model for the future.

a. Past Experience and Capacity of Applicant

Iowa Economic Development Authority (IEDA): IEDA has managed Iowa's Community Development Block Grant (CDBG) Program since the 1980s and has successfully administered nearly $1B in 2008 CDBG-DR funding, including the largest property buyout program in the history of the United States. Since 2011, IEDA has partnered with U. of Iowa's Iowa Flood Center and state, local, and regional partners jointly awarded $10.5M to plan, design, and implement Iowa's current CDBG-DR "Iowa Watersheds Project" (see example project below). Additional IEDA disaster recovery activities include traditional infrastructure projects, rehabilitation of nearly 600 housing units, and construction assistance for almost 5,000 new housing units in Iowa's 85 disaster-affected counties.

IEDA has disaster policies and procedures in place that are annually monitored by HUD-DR for compliance with the following: overall grant/project management, procurement of contractors and professional services, contract management, duplication of benefits, quality assurance, financial management systems drawing DR funds from the federal system, reporting to the Disaster Recovery Grant Reporting (DRGR) system, project monitoring, and other federal requirements specific to administration of CDBG-DR grants. Iowa will use the existing DR administrative structure, which includes current disaster recovery staff experienced in project

management of traditional infrastructure, housing rehabilitation, and watershed projects to ensure this program's rapid launch and successful completion.

The Iowa Flood Center (IFC) of IIHR—Hydroscience & Engineering (IIHR), the University of Iowa (UI): IIHR, of which the IFC is a subprogram, is a renowned hydraulics laboratory with 95 years of expertise in river hydraulics and hydrology. Its activities encompass all aspects of the hydrologic cycle—from precipitation to surface and groundwater flow, to river processes, to water quantity and quality. IIHR manages about $20M/year in grant and contract funding. One of IIHR's hallmarks is its long history of local, national, and international partnerships.

The IFC is highly qualified to lead the scientific and technical elements of this program's watershed projects. Following the historic floods of 2008, the State of Iowa laid the groundwork for long-term disaster recovery and resilience through establishment of the IFC. Since 2009, the IFC has developed an extensive network of stream-stage sensors and rain gauges, a radar network, and other remote-sensing instruments deployed across Iowa in support of flood-related monitoring and modeling. The IFC develops detailed interactive flood inundation maps for the state's most vulnerable river communities and is working with FEMA and the Iowa Department of Natural Resources (IDNR) to recreate and improve Iowa's regulatory floodplain maps. The IFC also developed the nation's most comprehensive user-friendly, publically-accessible flood-related online platform, the Iowa Flood Information System (IFIS). Users can monitor precipitation, river and stream levels, flood warnings, and many other real-time variables in the context of their watershed (see Phase II, Soundness of Approach). All IFC activities take into consideration the impact of changing precipitation and temperature patterns in Iowa (see Phase II, Need Factor).

Example Project: The Iowa Watershed Project (2011–2016); **Primary Partners: IFC and IEDA**. IEDA incorporated a watershed resiliency program as part of its 2008 CDBG Disaster

Recovery grant. As identified in Iowa's 2008 Action Plan, the project had three components: watershed planning, watershed projects, and floodplain education. *The core of the IEDA watershed resiliency program is the Iowa Watersheds Project (IWP), which forms the foundation and serves as the model for this proposal.*

The largest component of the IWP is planning and project implementation within watersheds. In 2010, Iowa lawmakers passed legislation authorizing the creation of Watershed Management Authorities (WMAs) to improve watershed planning and to develop a more coordinated approach for flood mitigation (See Phase 2, Soundness of Approach). The IDNR worked with a consortium of local governments to establish WMAs; IEDA required frequent progress reports and created criteria to evaluate the prospective WMAs.

Formation of the WMAs was the first step of the IWP. The primary component involved working directly in the watersheds with each WMA. IEDA contracted with each WMA's lead county and provided guidance on federal procurement standards, environmental compliance, Davis-Bacon and related compliance issues, fiscal management, additional CDBG regulatory compliance, and audit responsibilities. IEDA helped each WMA's lead county hire a qualified CDBG administrator to assist with compliance. IEDA also contracted with IFC to provide technical guidance, including a detailed assessment of each watershed and assistance in selecting, siting, design, and construction of specific watershed improvements on privately owned property. IEDA worked with the lead counties to help landowners secure contracts for constructed projects.

IEDA will play a similar role as defined in the management structure for this competition. For the IWP, IEDA developed the policy and procedures for the watershed program and handled contract management with counties, IDNR, and the IFC. IEDA has staff who process draws for

recipients, track fiscal compliance, evaluate project outcomes, report these outcomes to HUD via DRGR, and monitor the projects for CDBG compliance.

Under IEDA leadership, the IWP will be completed on time. Program successes to date include: all expected WMAs are formed; IFC engineers completed a hydrologic assessment for each partner watershed; researchers and stakeholders developed a plan for each watershed; projects were constructed in 2015; and monitoring instrumentation (stream-stage sensors, water-quality monitoring sensors) are in place and collecting data. The IWP is based on scientific evidence that Iowa is experiencing an increase in the frequency of high-volume precipitation events and floods (see Phase II, Need Factor). It is also based on past research experience, physically-based models, and demonstration sites that illustrate the efficacy of retaining water at multiple locations in the watershed to reduce the magnitude of downstream floods. This decreases the financial costs of flooding, reduces other flood-related risks to local community services and to individuals (water-borne disease, mental stress, injury, fatality), reduces soil erosion, and enhances environmental resilience to flooding.

Professor and IIHR Director Larry Weber, co-founder of the IFC, conceived the IWP and manages its technical elements in collaboration with IEDA and many partners. IIHR engineers with expertise in watershed processes and watershed-scale modeling conducted the watershed assessments. Key collaborators in this program include local Soil and Water Conservation Districts (SWCD), the IDNR, USDA-Natural Resources Conservation Service (NRCS), NGOs, local producers, and other local stakeholders. The partner watersheds were selected based on their applications to participate, in which they described their capacity to form a WMA and their commitment to sustainability and cooperation. Landowners and other stakeholders in each watershed made the final decisions regarding project placement and priorities. All projects are environmentally sound. Two criteria guided selection of the project sites: 1) locations with the

greatest potential to reduce downstream flooding as identified by the watershed assessment and watershed plan; and 2) landowner participation. Landowners contribute a 25% cost share for projects on their land and sign a long-term project maintenance agreement. All sites were reviewed for potential cultural resources prior to project implementation or construction as appropriate.

The IWP is successful because of strong collaboration among a wide range of partners with project management skills, technical and scientific expertise, and broad experience. However, Iowa landowners and producers play a particularly important role in the IWP's success; they are eager to engage in projects that are environmentally sound and good for their land, and that improve the quality of life for Iowans.

The City of Dubuque is experienced in data analysis to mitigate and prepare for natural disasters. The city works with a multi-disciplinary team of public, private, and nonprofit partners at the state and local levels to implement large-scale infrastructure projects, create a more resilient community, and execute a community-wide disaster response and recovery.

The City of Dubuque has the necessary capacities in project and contract management, quality assurance, financial management and procurement, and internal control to quickly launch and implement major projects related to housing rehabilitation and infrastructure design and construction. The management structure defined below outlines how the Housing & Community Development (H&CD), Engineering, Sustainability & Resiliency, Neighborhood Development, Finance, Public Health, Planning Economic Development, Human Rights, Public Information, and Geographic Information Services (GIS) departments coordinate activities to ensure rapid program design and launch, continued quality control, and adequate checks and balances.

The H&CD department oversees CDBG, inspection and licensing, lead hazard control, healthy homes production, homeowner programs, rental assistance (Section 8), shelter plus care,

urban revitalization, and crime-free multi-housing. H&CD staff administer programs with approximately $1.2M in federal CDBG funds each year for housing, economic development, neighborhood and public services, public facilities, and planning/administration. Engineering staff provide design, survey, and inspection services for construction projects, including bridge construction, stormwater management, and green alleys. GIS staff develop and manage the geographic information system and provide technical expertise, including the use of climate data to predict impact on infrastructure and neighborhoods. Working with NGOs, individuals, and neighborhood groups, the Human Rights Department implements programs to ensure equitable access to services and support civic engagement. The city is also involved in the Dubuque Co. Local Emergency Planning Committee and coordinates with regional entities to prepare for and respond to disasters.

Example Project: Bee Branch Watershed Flood Mitigation Project (2001–present) **Primary Partner: City of Dubuque**. Dubuque and its partners have demonstrated extensive technical capacity and community engagement and inclusiveness experience, as illustrated by the Bee Branch Watershed Flood Mitigation Project. Fifty percent of Dubuque residents live or work in the Bee Branch watershed, which encompasses historic neighborhoods and some of Dubuque's most affordable workforce housing. Buried as a storm sewer in the 1890s, Bee Branch Creek Watershed was very susceptible to flash floods.

The Bee Branch Watershed Flood Mitigation Project is a multi-phased, fiscally-responsible, and environmentally-sound program to protect at-risk neighborhoods from the regional trend toward more frequent extreme precipitation events. After severe flooding in Dubuque in 1999, especially in the Bee Branch Watershed, the city and its partners developed a Drainage Basin Master Plan to identify future vulnerabilities based on these weather patterns. Improvements associated with the Bee Branch Project are consistent with the improvements outlined in the

Drainage Basin Master Plan, which was updated in 2013. Collaborations with local stakeholders led to a shift in Dubuque's traditional disaster recovery path from urban infrastructure-centered project development to a more holistic integrated watershed systems management approach. A 16-member community advisory committee collaborated with city staff and consultants to design the pathway of the now daylighted creek, which has been returned to its natural above-ground setting. Dubuque hired a Bee Branch Communications Specialist to share information with the affected neighborhoods in a variety of formats and to gather and respond to neighborhood feedback and concerns

Dubuque has also successfully administered a HUD-funded Lead Hazard Control Program since 1997, targeted in this at-risk neighborhood. Through June 30, 2014, 413 properties were enrolled, 241 lead inspection/risk assessments conducted, and 185 properties completed and cleared. HUD has continuously rated Dubuque as high performing for meeting and/or exceeding all benchmarks and goals through the "green" designation assessed in all quarterly performance reports of both recent grant programs.

When complete, the Bee Branch Project will leverage more than $200M from federal agencies, the state, grants, private funding, stormwater utility fees, and a new State Flood Mitigation Sales Tax Increment financing program to implement green infrastructure and prevent an estimated $582M in future damage to public and private property.

Homeland Security and Emergency Management (HSEMD): HSEMD has managed Iowa's Disaster Programs since the 1960s and currently oversees the daily activities of 14 open presidential disaster responses across Iowa, which include projects totaling more than $2B in Stafford and Act National Flood Insurance Act funding. HSEMD has in place policies and procedures that are annually monitored by FEMA for compliance with overall grant/project management, procurement, contract management, duplication of benefits, quality assurance,

financial management systems, project monitoring, reporting, and all other federal requirements specific to administering grants. If awarded, HSEMD will use its existing administrative structure, which includes current disaster recovery staff experienced in the project management of traditional infrastructure, property acquisitions/relocations to ensure rapid program design, implementation, and completion.

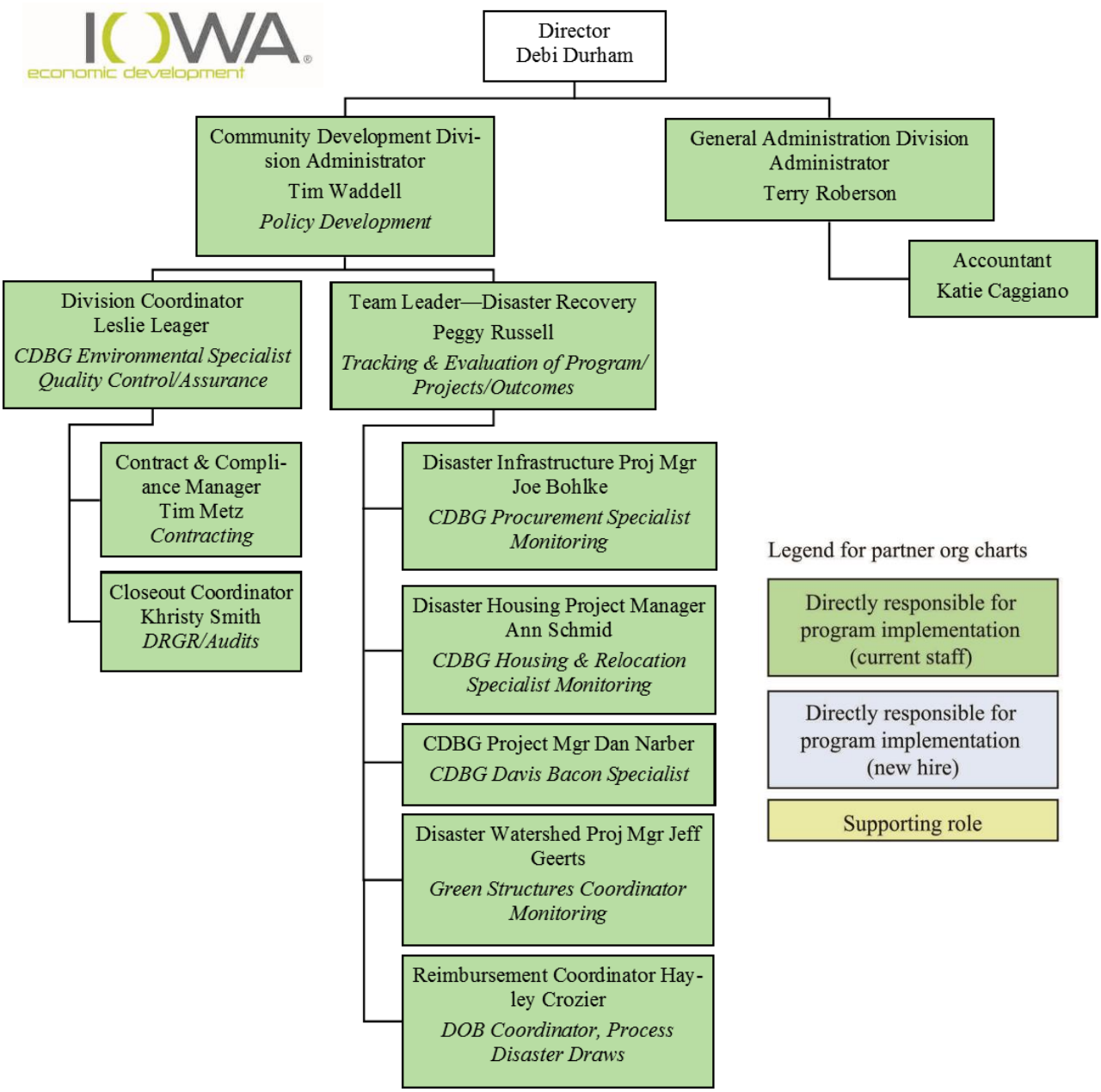
The organizational structure of the countywide emergency management commissions for response, recovery, and mitigation planning and implementation enhance HSEMD's capacity in Iowa. These commissions, made up of local leaders, provide input for the implementation of resilient recovery strategies and participate in educational and outreach opportunities for watershed-based hazard mitigation. Because disasters start locally, county emergency management coordinators and agencies play a vital role in preparation for, response to, and recovery from disasters — both natural and manmade. Local emergency management agencies are the backbone of the state's emergency management system. They provide coordination of local resources and work in partnership with HSEMD to ensure emergency management teams are well-equipped, trained, and exercised. County boards of supervisors, city councils, and county sheriffs establish a commission to carry out the provisions of Iowa law (Iowa Code, Chapter 29C). Each local commission appoints an emergency management coordinator to fulfill the commission's duties. Two or more county commissions may form a multi-county emergency management agency. HSEMD's experience and close connection with local emergency management agencies make it particularly well-suited to help lead the proposed disaster planning and technical assistance activities and the public resilience programs (See Soundness of Approach, Program 2).

Example Project: City of Des Moines and WRA Flood Protection Project (2015–2035); Primary Partner: HSEMD. This Iowa Flood Mitigation Program project aims to develop a flood

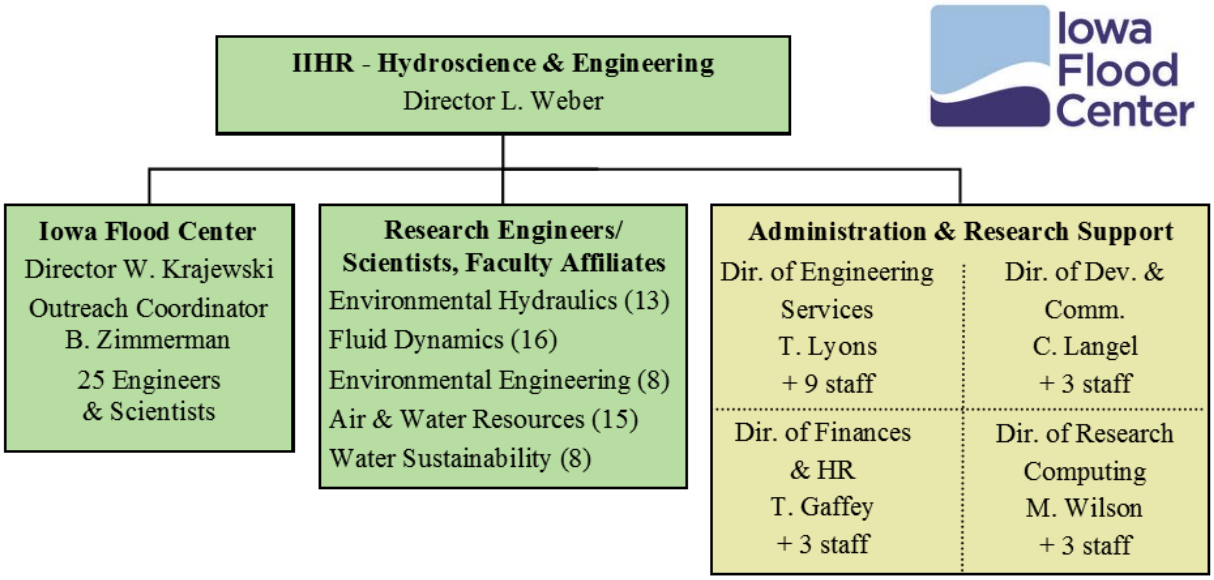
control plan to protect critical facilities and public and private property, as well as to preserve the health and safety of Des Moines residents. HSEMD was integral in the development of the proposal and (current) project implementation. Specific post-award activities by HSEMD include the solicitation, review, consolidation, validation, and submission of applicant's reports (financial, progress, and performance-oriented). HSEMD also: uses qualitative and quantitative metrics to determine how well the program is being implemented and whether it is achieving its described goals, objectives, activities, and services; and makes sure individual projects achieve overarching program goals. HSEMD will play a similar role in monitoring the technical and programmatic activities of the Iowa Watershed Approach (IWA).

b. Management Structure and Lead Personnel

Iowa Economic Development Authority: IEDA's Community Development Division operates under the leadership of Director Debi Durham, who reports directly to the Governor. If awarded an NDRC project, IEDA will be responsible for day-to-day CDBG administration, including writing policy and procedures, awarding funds, contracting, processing expenditure requests, monitoring, close-outs, and quarterly reporting in DRGR. The team will include: Tim Waddell, Community Development Division Administrator, responsible for policy development and adherence; Leslie Leager, Division Coordinator, responsible for CDBG policy and regulatory research, approval of Requests for Release of Funds (as the environmental specialist), and quality control/assurance oversight; Peggy Russell, Disaster Recovery Team Leader, responsible for tracking and evaluating program/projects/outcomes and coordinating HUD and Office of Inspector General monitoring visits and audits; Tim Metz, responsible for contract coordination and tracking allocations; Khristy Smith, responsible for DRGR data entry and action plans, QPR submittals, closing contracts, and tracking audits; Joe Bohlke, responsible for managing infrastructure projects and acting as the CDBG procurement specialist; Ann Schmid,



responsible for managing housing projects and serving as the CDBG acquisition and relocation specialist; Dan Narber, the CDBG Davis-Bacon Specialist; Jeff Geerts, responsible for managing watershed projects and serving as green infrastructure specialist; Haley Crozier, responsible for processing expenditure requests and completing the duplications of benefits (DOB) for awarded projects; and Katie Caggiano, Accountant, responsible for fiscal and internal audits.

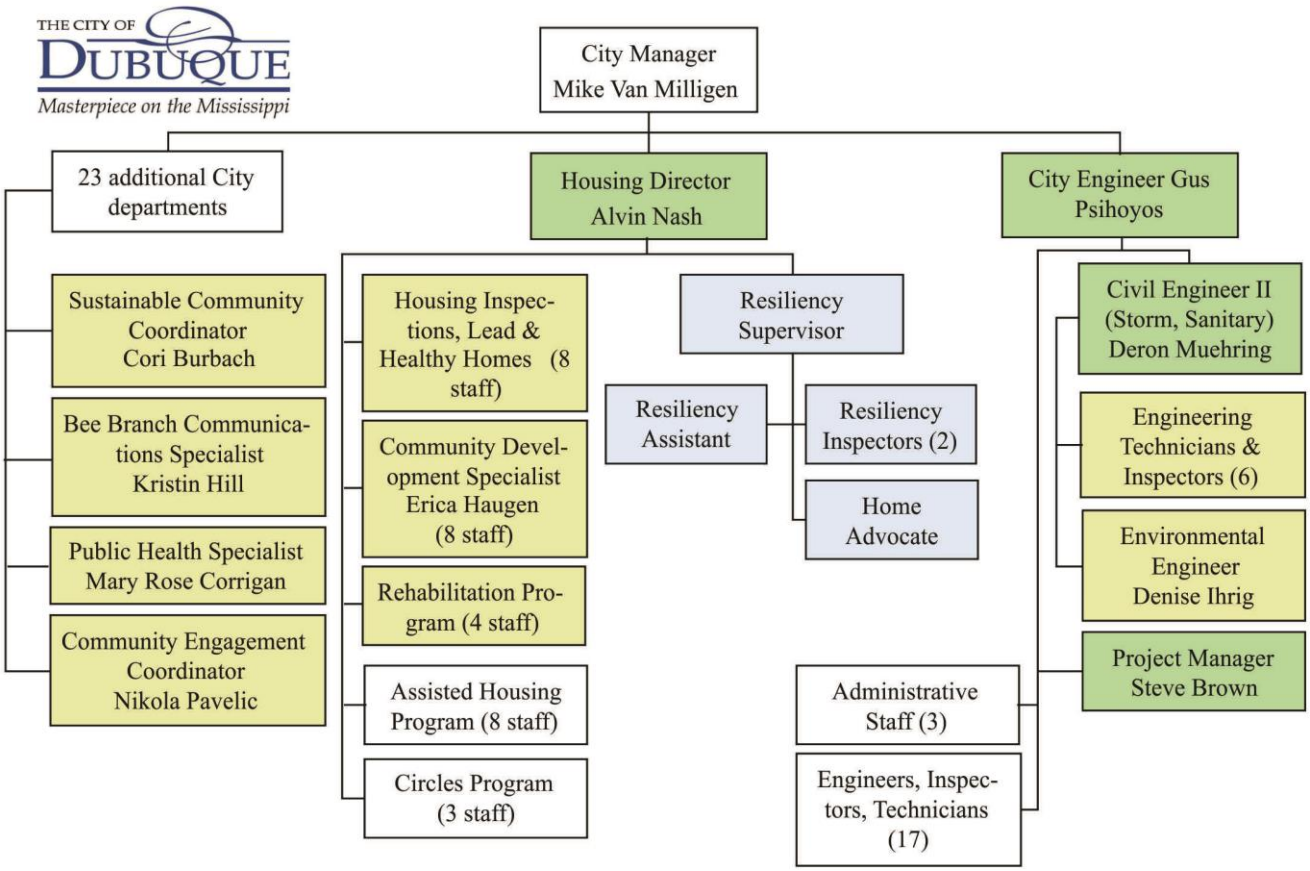


The Iowa Flood Center (IFC) of IIHR—Hydroscience & Engineering (IIHR), the University of Iowa: The IFC is managed under the auspices of IIHR. The Director of IIHR reports to the Dean of the College of Engineering, who reports to the UI Provost. The provost reports to the UI President, who reports to the Iowa Board of Regents. Dr. Larry Weber, UI Professor of Civil and Environmental Engineering, will lead all IFC activities. As Director of IIHR, Weber oversees and makes final decisions regarding IIHR's overall fiscal management, personnel, and vast facilities and equipment resources. He oversees management of the IFC and the Iowa Geological Survey, both organized under IIHR. In addition to 10 years of experience as IIHR Director, Weber has managed his own portfolio of sponsored projects totaling more than $50M over the past 20 years. He is the IFC's principle investigator for the Iowa Watersheds Project. Weber's extensive background in project management will be instrumental in making sure this project is successfully completed on time. Other key IFC personnel implementing this project will include: Drs. Antonio Arenas and Marcela Politano, Engineers, leading hydraulic analysis and modeling; Drs. Keith Schilling and Chris Jones, Geologists, leading nutrient monitoring and modeling; Dr. Ibrahim Demir, Engineer, leading informatics and online visualization; Mark Wilson, Principal Engineer, leading research computing for numerical modeling exercises; Teresa Gaffey, Director

of Finance and Human Resources, responsible for managing the programmatic budget; and Breanna Zimmerman, IFC Communications Coordinator, responsible for coordinating and communicating with WMAs. More than 10 additional BS- and MS-level engineers with expertise in river hydraulics, remote-sensing, numerical (computer) modeling, floodplain mapping, water quality, and informatics will help implement the program; many are certified floodplain managers.

The City of Dubuque operates under the city manager form of government. Although multiple departments will be involved in program implementation, the primary departments responsible for project management will be Housing & Community Development (H&CD) and Engineering.

When grant funds are issued, the city will hire several new staff members who will work under the direction of Housing Director Alvin Nash: a new Resiliency Supervisor, a Resiliency



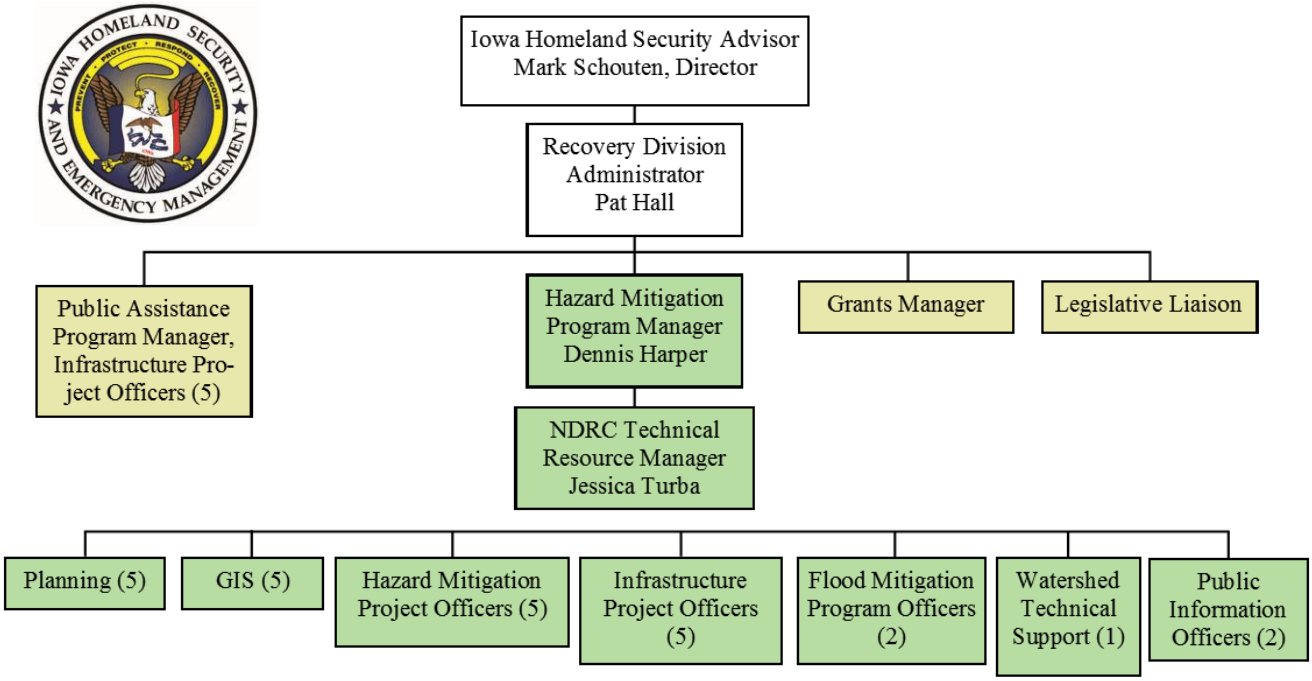
Assistant, two Resiliency Inspectors, and a Home Advocate. Director Nash currently oversees

expansive inspection, rehabilitation, assisted housing, family self-sufficiency, urban revitalization, and financing programs, all of which were involved in Dubuque's recovery from previous floods. H&CD directors, inspectors, and support staff will work collaboratively with the new Resiliency Division. The Resiliency Supervisor will manage Dubuque's relationship with IEDA and act as Dubuque's program manager. The Assistant and Inspectors will coordinate to identify and inspect impacted homes, manage contractor implementation of work, and report on outcomes of the program. The Home Advocate will serve as liaison to the community and complete community education and outreach for resilient homes and neighborhoods. The H&CD Community Development Specialist and Rehabilitation Programs Inspector will support the new staff.

The Engineering Department is staffed by more than 30 people, including seven licensed Professional Engineers. In Fiscal Year 2015, the department administered $53M in capital improvements for the planning, design, and construction of streets, sanitary sewers, storm sewers, and other public improvements. The department has a long history of working with local, state, and federal agencies on permitting and funding. More recently, the department administered state and federal funding, including federal CDBG, Federal Highway Administration, EPA SRF, and TIGER programs. In addition to these departments, the following positions will be part of Dubuque's management structure: a Bee Branch Communications Specialist who will integrate the program's resiliency outreach into neighborhood-wide educational programs and engagement, including outreach to neighborhood associations, schools, and businesses; a Sustainable Community Coordinator who will lead Dubuque's climate adaptation and resiliency work, provide technical expertise, and integrate the program into the development of Dubuque's climate adaptation plan; a Community Engagement Coordinator who will assist in developing plans to engage residents in sustainable living education, targeting

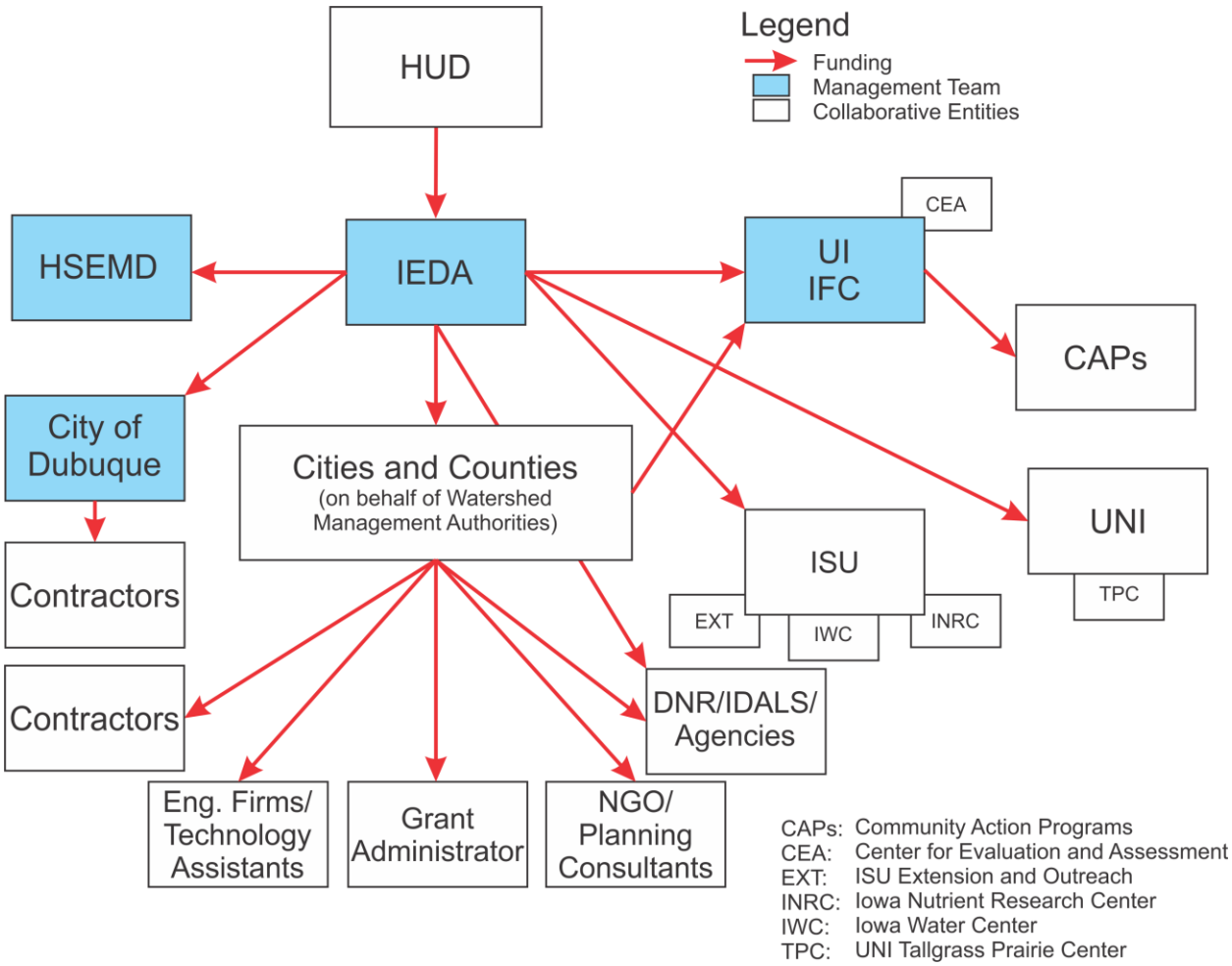
vulnerable or traditionally unengaged populations, and developing partnerships with nonprofit and religious service providers; and a Public Health Specialist who will monitor the health outcomes in the impacted area, serve as liaison to the health care community, and provide health oversight and education.

Homeland Security and Emergency Management: HSEMD Director Mark Schouten reports



directly to the Governor. Schouten will lead the strategic decision-making process regarding the implementation of tasks assigned to HSEMD under the IWA, with support from the department's Legislative Liaison (John Benson), Disaster Recovery Administrator (Pat Hall), and supporting Bureau Chiefs for Recovery Operations (Aimee Bartlett), Hazard Mitigation (Dennis Harper), and Public Assistance (Katie Waters). The functional tasks associated with the IWA will be accomplished through the daily activities of Public Information Officers, Hazard Mitigation Project Officers, Infrastructure Project Officers, Geographic Information Technology Specialists, Watershed Analysts, and Hazard Mitigation and Disaster Recovery planners. HSEMD maintains these positions for Hazard Mitigation and Disaster Recovery work, and they will be available to

carry out resiliency program activities. The staff managing disaster recovery and hazard mitigation programs have decades of experience working with communities, developing projects, and monitoring project outcomes.



Program Management: The management organizational chart demonstrates the structure of the Iowa Watersheds Approach management team (in green) and the flow of funds (arrows). IEDA will lead and oversee all aspects of the IWA program, ensure its timely and successful completion, monitor CDBG compliance in all areas, and make all final financial decisions. The IFC and the City of Dubuque, based on their technical expertise and stakeholder connections, will lead technical and programmatic implementation. HSEMD will provide technical support in HUD

programmatic implementation and coordinate disaster preparedness and hazard mitigation activities. In the rural watersheds, the WMAs will make project selection and siting decisions, based on the required criteria (See Phase II, Soundness of Approach, Program 1), and make recommendations to IEDA for contract funding for project design and construction. A WMA Advisory Board will provide technical guidance and assistance to the WMAs and advise the program management team on challenges and strategies. Each WMA will procure a COG (Council of Government) or other qualified grant administrator to oversee local distribution of CDBG funds and ensure compliance with CDBG regulations.

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