

Welcome to the Statewide Flood Hazard Mitigation Plan Update

Planning Committee Meeting

12/14/2021



If you encounter any technical difficulties, please send a private chat message to Michele York, or email Michele.York@Nebraska.gov



To ask a question or provide comment – utilize the Chat box or use the “Raise Hand” function and the host will unmute you.

Attendees will not be able to unmute themselves



This webinar is being recorded and will be posted for those unable to attend

WELCOME & INTRODUCTIONS

STUDY TEAM

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AGENDA

- 01 Welcome and Introductions
- 02 Federal Regulatory Framework & Capabilities
- 03 State Regulatory Framework & Capabilities
- 04 Local Regulatory Framework & Capabilities
- 05 Plan Development Committee Feedback
- 06 Ongoing Efforts Update
- 07 Next Steps

GOAL OF TODAY'S MEETING

- To discuss state, federal, and local capabilities for flood risk identification and reduction.
 - Intent today is not to get into emergency management and disaster response.
- To solicit feedback on:
 - If Nebraska should consider more stringent standards
 - Identifying opportunities for floodplain improvement in regulation or administration
 - Potential training and educational topics
 - If Nebraska should consider a dedicated funding stream related to flood hazards

02 FEDERAL REGULATORY FRAMEWORK & CAPABILITIES

NATIONAL FLOOD INSURANCE PROGRAM (NFIP)

- Was created in 1968 by the National Flood Insurance Act to:
 - Provide Flood Insurance through the Federal Government as a means of disaster relief
 - Distributed Floodplain Management responsibility to all levels of Government
 - Set a National Standard for regulating development in floodplains
 - Initiated a comprehensive mapping program

PARTICIPATION IN THE NFIP

- NFIP Participation is *voluntary*. To participate a community must:
 - Adopt a Floodplain Management Ordinance for regulating development in the floodplain
 - Adopt a Resolution for Participating in the NFIP
 - Complete the Application for Participation

NFIP COMMUNITY DEFINITION

- A political entity that has the authority to adopt and enforce floodplain ordinances for the area under its jurisdiction.

*Note that a city, town, village, Indian tribe, or authorized tribal organization is a separate community from the county in which it resides; each must participate in the NFIP individually. The State is also considered a separate community under the NFIP.

OTHER IMPORTANT NFIP DEFINITIONS

- **Base Flood** - A flood having a one percent chance of being equaled or exceeded in any given year. This is the regulatory standard also referred to as the "100-year flood."
- **Base Flood Elevation (BFE)** - The elevation of surface water resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year.
- **Special Flood Hazard Area (SFHA)** – An area having special flood, mudflow or flood-related erosion hazards and shown on a Flood Hazard Boundary Map (FHBM) or Flood Insurance Rate Map (FIRM).

OTHER IMPORTANT NFIP DEFINITIONS

- **Flood Insurance Rate Map (FIRM)** - Official map of a community on which FEMA has delineated the Special Flood Hazard Areas (SFHAs), the Base Flood Elevations (BFEs) and the risk premium zones applicable to the community.
- **Development** - Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations or storage of equipment or materials.

NFIP PARTICIPATION REQUIREMENTS

- Adopt and enforce all applicable NFIP regulations
- Require permits for ALL development in the SFHA
- Obtain proof of compliance with local floodplain management ordinance for all permits
- Maintain Floodplain Management Records
- Helping residents obtain information on flood hazards, floodplain map data, flood insurance and proper construction measures

FEDERAL REQUIREMENTS OF COMMUNITY FLOODPLAIN MANAGEMENT ORDINANCES

(Cornerstone Requirements – Only)

- The first floor of all new or substantially improved/damaged structures must be elevated to or above the BFE (non-residential structures may be dry-floodproofed)
- Structures must be designed to be reasonable safe from flooding (withstand flood forces, materials and constructed to minimize flood damage, utilities designed/located to prevent water from entering or accumulating within components)
- No new development is allowed in the floodplain that will cause the BFE to increase more than a foot
- No new development is allowed in floodplain with a floodway that will cause the BFE to increase (0.00 ft.)
- Substantially improved or substantially damaged structures must brought into compliance

FEMA OTHER CAPABILITIES

- Community Assistance Program – State Support Services Element (CAP-SSSE)
 - CAP-SSSE helps states proactively identify, prevent and resolve floodplain management issues in participating communities before a flood event even occurs.
- Community Rating System (CRS)
 - CRS is a voluntary incentive program that recognizes and encourages community floodplain management practices that exceed the minimum requirements of the National Flood Insurance Program (NFIP)

FEMA OTHER CAPABILITIES

- Cooperative Technical Partners (CTP) Program
 - The CTP Program's leverages partnerships to deliver high-quality hazard identification and risk assessment products, provide outreach support and empower communities to take action to reduce risk based on informed, multi hazard-based data and resources. This is in support of FEMA's Risk Mapping, Assessment and Planning (Risk MAP) Program.
- Increased Cost of Compliance (ICC) Coverage
 - ICC Coverage is included with all NFIP policies located in high-risk flood areas that allow policyholders to receive up to \$30,000 to bring their home or business into compliance with local floodplain management regulations.

FEMA OTHER CAPABILITIES

- Hazard Mitigation Assistance (HMA) Grants
 - FEMA's HMA grant programs provide funding for eligible mitigation activities that reduce disaster losses and protect life and property from future disaster damages including the Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation (PDM), Flood Mitigation Assistance (FMA) and Building Resilient Infrastructure and Communities (BRIC).

03 STATE REGULATORY FRAMEWORK AND CAPABILITIES

NEBRASKA FLOODPLAIN MANAGEMENT PROGRAM

- Was created in 1967 by the Nebraska Floodplain Regulations Act to:
 - Accelerate the mapping of flood-prone areas;
 - Assist local governments in the promulgation and implementation of effective flood plain management regulations and other flood plain management practices;
 - Assure that when state lands are used and state-owned and state-financed facilities are located and constructed, flood hazards are prevented, flood losses are minimized, and the state's eligibility for flood insurance is maintained; and
 - Encourage local governments with flood-prone areas to qualify for participation in the national flood insurance program.”
- The Nebraska Department of Natural Resources (NeDNR) is named as the State Agency responsible for fulfilling the Statutory Requirements.

NEDNR STATUTORY RESPONSIBILITIES

- Coordinating a Statewide Floodplain Management Program
- Provide state coordination for the National Flood Insurance Program (NFIP)
- Receive federal funds to accomplish floodplain management objectives
- Provide floodplain management technical assistance to local, state and federal agencies
- Identify and delineate floodplains and floodways
- Develop minimum standards for Floodplain Management Programs in Nebraska
- Provide technical assistance for the development of flood mitigation programs including administering FEMA's Flood Mitigation Assistance Grant

NEDNR TECHNICAL ASSISTANCE CAPABILITIES

- Provide base flood elevation data to local, state and federal agencies based on the best available data.
- Assist in monitoring floodplain management administration and enforcement activities.
- Assist communities in joining the NFIP and the Community Rating System
- Review all ordinances before adoption.

NEDNR TECHNICAL ASSISTANCE CAPABILITIES

- Provide educational workshops and trainings on floodplain management.
 - Monthly virtual trainings – typically on the 3rd Thursday of each month
 - In-person Workshops twice a year
- Obtain federal funds through FEMA's:
 - Community Assistance Program – State Support Services Element (CAP-SSSE) Program, and
 - Cooperative Technical Partners (CTP)'s Risk Mapping, Assessment and Planning (Risk MAP) Program

NEDNR TECHNICAL ASSISTANCE CAPABILITIES

- NFIP Statistics (as of 10/9/2021)
 - 418 NFIP Communities in Nebraska
 - Total policies: 8,396
 - Total premium: \$9,084,991
 - Insurance in force: \$1,812,694,000
 - Total claims since 1978: 5,977
 - Total paid since 1978: \$95,813,653

NEDNR TECHNICAL ASSISTANCE CAPABILITIES

Nebraska CRS Communities

Community	County	Class Rating	Effective Date	Total Points	Total Savings
Fremont, City of	Dodge County	8	10/01/2016	1,257	\$65,678
Omaha, City of	Douglas County	7	10/01/2017	1,780	\$141,824
Valley, City of	Douglas County	8	10/01/2008	1,132	\$37,565
Lincoln, City of	Lancaster County	5	05/01/2015	2,591	\$405,721
Papillion, City of	Sarpy County	7	05/01/2016	1,817	\$7,239
Scottsbluff, City of	Scotts Bluff County	9	10/01/2018	810	\$7,188

NEDNR TECHNICAL ASSISTANCE CAPABILITIES

- Monthly Virtual Trainings
 - Basic Floodplain Management
 - Permitting
 - Ordinance Enforcement
 - Substantial Damage Assessment
 - Interactive Map
 - Mitigation
 - Elevation Certificates



Over 500 in total attendance throughout the last year!

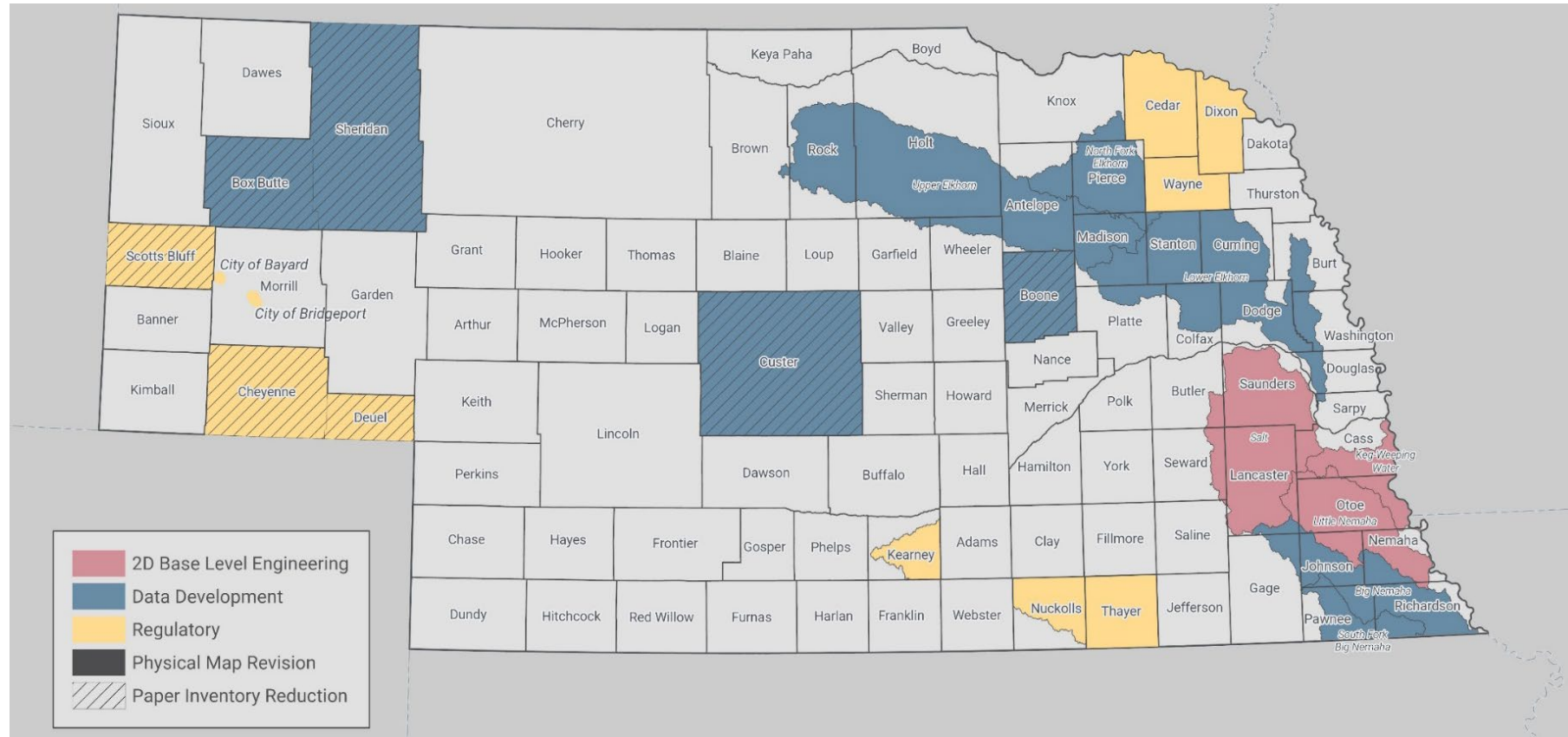
NEDNR TECHNICAL ASSISTANCE CAPABILITIES

- NeDNR has hosted trainings with:
 - Nebraska Planning and Zoning Association
 - Insurance Agents
 - Judiciary Districts
 - Nebraska Association of County Officials
 - Nebraska Clerk's Academy
 - Professional Surveyors Association of Nebraska

NEDNR FLOODPLAIN MAPPING CAPABILITIES

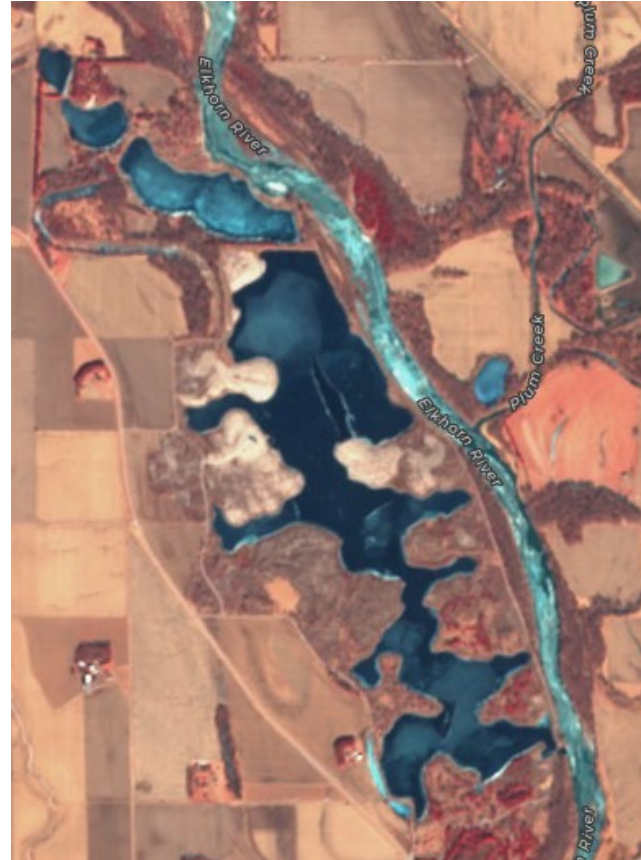
- NeDNR is able accelerate mapping through the FEMA's Cooperating Technical Partners (CTP) Program.
- NeDNR obtains a CTP grant each year for mapping, project management, community outreach and technical assistance.
- When CTP funds are not available, NeDNR continues to map flood risk with State funds.

NEDNR CURRENT MAPPING PROJECTS



NEDNR FLOODPLAIN MAPPING CAPABILITIES

- Upper and Lower Elkhorn have been “on hold” since the 2019 Flood
- Waiting on new LiDAR, which has been delayed again until February 2022



Imagery from Copernicus Sentinel 2019

NEDNR FLOODPLAIN MAPPING PRIORITIZATION

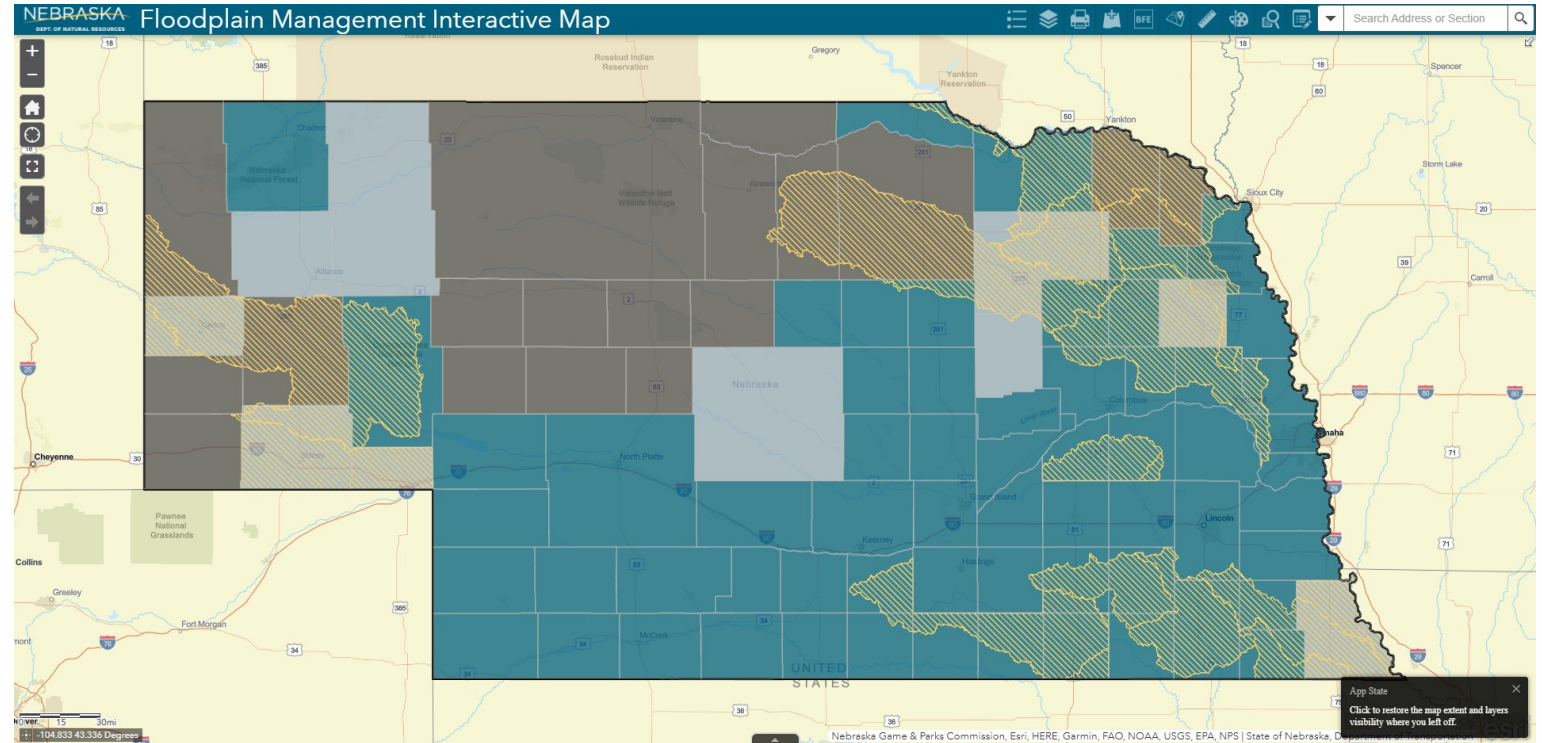
- NeDNR, by state statute, prioritizes mapping needs by considering the following factors:
 - Potential for future development;
 - Potential for flood damage or loss of life;
 - Probability that adequate data and maps will be prepared within a reasonable time by other sources;
 - Availability and adequacy of any existing maps;
 - Availability of flood data and other information necessary to produce adequate maps; and
 - Degree of interest shown by the local governments in the area in utilizing flood data and maps in an effective flood plain management program.

NEDNR FLOOD RISK PRODUCTS

Floodplain Management Interactive Map

- Flood Awareness Areas
- Depth Grids
- Regulatory Maps

<http://ne.gov/go/floodriskmap>



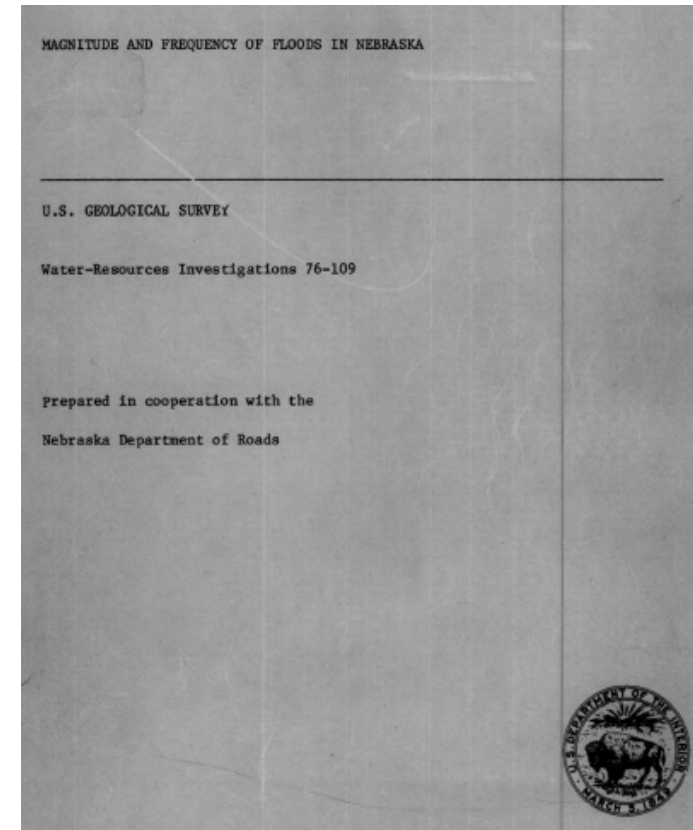
NEDNR FLOOD RISK PRODUCTS

- Nebraska Real-Time Flood Forecasting (NeRFF)
 - NeDNR working in partnership with NEMA
 - HMGP funds for the project received in spring of 2021
 - Funds received as a response to the 2019 flood event
 - The project will provide pre-delineated inundation boundaries for every ½ foot stage for 48 gages, benefiting 54 communities across the state
 - The result of the project will be an online interactive map

NEDNR FLOOD RISK PRODUCTS

- Nebraska Regression Project
 - NeDNR working in partnership with DOT, USGS, USACE, FEMA
 - Regression equations estimate flow in areas without gages
 - Currently digitizing streamlines in the state
 - Slowed by staffing issues

Beckman Regression Report 1976



NEDNR FLOOD MITIGATION CAPABILITIES

- Governor's Task Force for Disaster Recovery (GTF-DR)
 - The GTF-DR includes several entities to guide the state through post disaster recovery.
- Nebraska Silver Jacket's State co-lead.
 - This is a team of Nebraska Federal and State partners that work together to promote flood risk management within the context of shared responsibility.
- Help communities identify potential flood mitigation projects and programs
- Administer the Flood Mitigation Assistance Grant (FMA) for FEMA

SILVER JACKET PROJECTS

Recently Completed Projects

- Lower Platte River Pre-Development Risk Identification
- Sandpits Risk Assessment and Risk Management Evaluation
- Repetitive Loss Analysis 2.0
- Wood River Flood Risk Identification

Projects Being Finalized

- Little Papillion Creek Modeling and Mapping
- High Water Mark Archive
- Fremont HEC-LifeSim Analysis

SILVER JACKET PROJECTS

On-going or New Projects

- Educational Resource Toolkit
- Flood Mitigation History
- Emergency Action Plan for Fremont
- Highwater Mark Signs

FLOOD MITIGATION ASSISTANCE GRANT (FMA)

- FMA is awarded yearly and is a nationally competitive grant.
- NeDNR is the applicant for the State of Nebraska, and State, local, and tribal governments are the subapplicants.
- In Nebraska, FMA has be used mostly for acquisition of Repetitive Loss (RL) or Severe Repetitive Loss (SRL).
- Nebraska has a hard time being competitive for other types of project under this grant. For example a large portion of points is given for:
 - Jurisdictions with 50 or more Repetitive Loss (RL) or Severe Repetitive Loss (SRL) Structures and has received an Individual Assistance declaration for flood in the past 10 years. (200 pts)

STATE OF NEBRASKA HIGHER STANDARDS

- Requires new construction and substantial improvements of residential structures to have the lowest floor be built one foot above the Base Flood Elevation (BFE).
- Requires new construction and substantial improvements of non-residential structures to have the lowest floor be built one foot above the BFE or be floodproofed to a level one foot above the BFE.
- Requires manufactured homes to be placed or substantially improved to be elevated on a permanent foundation such that the lowest floor of the manufactured home is one foot above the BFE.

STATE OF NEBRASKA HIGHER STANDARDS

- Prohibits the storage or processing of materials that are in time of flooding buoyant, flammable, explosive, or could be injurious to human, animal or plant life in the floodplain.
- New and substantial improvements of structures for human habitation in the floodway is prohibited.

OTHER NEBRASKA STATUTORY ITEMS

- It is the duty of the local government to administer and enforce any regulations adopted by the department.
 - Local governments can adopt more restrictive regulations
- All state agencies, boards, and commissions are required to get permits from local governments when developing in floodplains/floodways.
 - If a local floodplain management program does not exist, they are required to self-permit to State Minimum Standards
 - Only NeDNR can grant a variance to state agencies, boards and commissions.

NEBRASKA STATE REGULATIONS

- Nebraska Floodplain Management Statutes:
<https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/desk-reference/legal-authority/FloodplainStatutes201909.pdf>
- Nebraska Minimum Standards for Floodplain Management Programs:
https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/desk-reference/legal-authority/Title_455_0708.pdf

04 LOCAL REGULATORY FRAMEWORK AND CAPABILITIES

LOCAL FLOODPLAIN MANAGEMENT REGULATIONS

- Starts with the decision to join the NFIP
- Benefits include:
 - Makes NFIP Flood Insurance available to everyone in the community, regardless of location
 - Federal grants and loans for development in the identified SFHA are available from Federal Agencies such as:
 - Environmental Protection Agency
 - Housing and Urban Development
 - Small Business Administration

LOCAL FLOODPLAIN MANAGEMENT REGULATIONS

- (Benefits continued)
 - Federal disaster assistance for flood damage is available to repair insurable private and public buildings in identified flood hazard areas.
 - Federal mortgage insurance or loan guarantees, such as those written by:
 - Federal Housing Administration
 - Department of Veteran Affairs
 - Farmer's Home Administration
 - Small Business Administration
 - Fannie Mae and Freddie Mac

LOCAL NEBRASKA STATUTORY ITEMS

- It is the duty of the local government to administer and enforce any regulations adopted by the department.
 - Local governments can adopt more restrictive regulations
- All state agencies, boards, and commissions are required to get permits from local governments when developing in floodplains/floodways.
 - Local Floodplain Administrator must review these permits, and ensure they meet their community's local floodplain management ordinance
 - Local Floodplain Administrators cannot issue variances for State Agencies

EXAMPLES OF HIGHER STANDARDS ADOPTED BY NEBRASKA COMMUNITIES

- Higher Freeboard Standards (2 ft)
- Cumulative Substantial Damage
- Compensatory Storage
- Designated Setback Requirements
- No mobile or manufactured homes in the floodplain

OTHER LOCAL CAPABILITIES

- Comprehensive Planning
 - This is a 5-year plan that looks at where possible growth will occur and what regulations need to be put into place before it occurs.
- Zoning Regulations
 - Can be used to steer development away from hazardous areas or to preserve natural functions.
- Subdivision Regulations
 - Establish rules for drainage, and emergency routes during flood events.
- Building Codes
 - Establish rules for ensuring properties are build safe from flooding.

OTHER LOCAL CAPABILITIES

- Hazard Mitigation Planning
 - This is a 5-year plan that identifies projects that will reduce the risk within the community.
- Acquisition Programs
 - Establish a program that allows the community to acquire land in the floodplain to preserve open space and permanently relocate buildings.
- Public Education/Awareness
 - Provide a yearly mailing explaining the risks within the community, how to obtain flood insurance, and other prudent information.
- Emergency Response
 - Including early warning systems and other emergency response capabilities.

05 PLAN DEVELOPMENT COMMITTEE FEEDBACK

ADMINISTRATIVE / REGULATORY

- Question: Should Nebraska consider adopting more stringent standards?
- Question: Where do you see opportunities for improvement in regulation or administration regarding floodplains?

TECHNICAL ASSISTANCE

- Question: What additional technical support would benefit flood hazard mitigation (existing services or new services needed)?

FLOOD HAZARD IDENTIFICATION

- Question: Are there alternative or improved ways in which you'd like flood hazard information conveyed?
- Question: How should future mapping projects be prioritized?

TRAINING AND EDUCATION

- Question: Are there training topics or educational issues that would support better flood hazard mitigation in Nebraska?

FUNDING

- Question: Should Nebraska consider a dedicated funding stream for supporting flood mitigation projects or other activities to mitigate flood hazards?

OTHER

- Question: What additional State capabilities in flood hazard mitigation and flood mitigation planning have we not identified and with which your agency may be involved?

06 ONGOING EFFORTS UPDATE

ONGOING EFFORTS

- Risk Assessment
 - Approach reviewed at October meeting – no comments received
 - Have added building footprint (Bing database) and dam breach hazard data to analysis
 - Authorization to begin work in early December
- Mitigation Actions
 - Developing templates – drafts to be complete by end of December

PLAN DOCUMENTS FOR REVIEW



- <https://dnr.nebraska.gov/floodplain/nebraska-flood-hazard-mitigation-plan>
 - Documents currently available for review
 - Review/comment form
- Sections available now through **December 31:**
 - Regulatory Framework Evaluation
 - Local Capability Assessment
 - State Capability Assessment
 - Primary State Programs
 - Programs administered by State and Federal Agencies
 - Flood Claim Analysis
- Upcoming:
 - Mitigation Templates



07 NEXT STEPS

NEXT STEPS

- Incorporating comments on Mitigation Strategies, Flood Claim Analysis, State/Federal Local Capability Assessment, and Regulatory Framework
- Finalize Plan Maintenance Process, Planning Process, and Flood Risk Types, and Funding, sections.
- Complete Risk Assessment
- Next Meeting
 - February 8, 2021 – 10:00 AM
 - Flood Impacts/Risk Assessment
 - Mitigation Strategies – Part 2
 - Coordination with local mitigation planning



FUTURE MEETING TOPICS

 Meeting	 Meeting Topic
Kickoff Meeting (July 23)	<ul style="list-style-type: none">• Introduction and Purpose• Public Meeting Recap• Flood Types and Flood History• Next Steps
Meeting #2 (August 10)	<ul style="list-style-type: none">• Recovery and Funding Sources• Assessment of Opportunities for Improvement• Plan Maintenance Process
Meeting #3 (October 12)	<ul style="list-style-type: none">• Flood Impact Analysis, Pt. 1• Mitigation Strategy, Pt. 1
Meeting #4 (TODAY)	<ul style="list-style-type: none">• State Capability Assessments• Regulatory Framework Evaluation
Meeting #5	<ul style="list-style-type: none">• Flood Impact Analysis, Pt. 2• Mitigation Strategy, Pt. 2• Coordination with Local Mitigation Planning
Meeting #6	<ul style="list-style-type: none">• Draft Plan Review
Meeting #7	<ul style="list-style-type: none">• Public Hearing Recap• Final Draft Plan Approval

Visit the website to access the online meeting, more information, links
<https://dnr.nebraska.gov/floodplain/nebraska-flood-hazard-mitigation-plan>

QUESTIONS?