

SALT CREEK FLOODPLAIN RESILIENCY STUDY

PUBLIC OUTREACH AND EDUCATION

Source: Federal Emergency Management Agency and Army Corps of Engineers

Topic: **Levee**

Resources:

- [What is a Levee](#)
- [So, You Live Behind A Levee](#)
- [Living with Levees: Ideas Effective Outreach](#)
- [National Levee Database](#)

Reason: According to the National Levee Database, Salt Creek levee systems are associated with 1,229 structures at risk, 5,912 people at risk, and \$847 million in property value. Effective outreach to residents affected by these levee systems could significantly improve flood preparedness and resiliency.

Opportunity: Lincoln could develop its own fact sheet that is specifically tailored to the Salt Creek levee systems.



FEMA



Source: National Oceanic and Atmospheric Administration (NOAA)

Topic: **Disaster Preparedness**

Resources:

- [Weather Ready Nation Website](#)
- [National Weather Service Flood Related Products](#)
- [Weather Ready Nation Ambassadors: In Their Own Words](#)
- [NOAA National Weather Service Flood Safety Tips and Resources](#)
- [Preparation Before a Flood](#)
- [Informed Response During a Flood](#)
- [Proper Action After a Flood](#)

Reason: Preparation and awareness are critical before, during, and after a disaster.

Opportunity: Institutionalizing NOAA's Weather Ready Nation principles can help the City of Lincoln increase its resilience to extreme weather and flooding.



National Oceanic and
Atmospheric Administration
U.S. Department of Commerce



PUBLIC OUTREACH AND EDUCATION

Source: *Pew Trust*

Topic: **Hazard Mitigation**

Resources:

- [Pew Charitable Trusts Flood Prepared Communities Project](#)
- [It's Time to Make U.S. Infrastructure Flood-Ready Video](#)
- [National Institute of Building Sciences Multihazard Mitigation Council Resources](#)

Reason: The Flood-Prepared Communities project resources are specifically tailored to help drive policy at the national level and to provide states and local communities with tools that can better communicate the value of flood mitigation to elected officials.

Opportunity: Establishing clear lines of communication with elected officials to drive flood risk mitigation planning and implementation will be a priority if subsequent policy changes are necessary.



Source: *National Academy of Sciences Committee on Urban Flooding*

Topic: **Flood Risk**

Resources:

- [Framing the Challenges of Urban Flooding in the United States](#)

Reason: There are important aspects of urban flooding, such as the effectiveness of stormwater systems, the importance local drainage patterns, and site-specific drainage designs, are often overlooked as critical factors in flood risk across a community. Innovative solutions are needed to better identify and communicate this risk.

Opportunity: Analyzing and communicating that nonriverine urban flooding risk will lead to greater preparedness for a full spectrum of different types of flooding that may occur.



COLLABORATION

Source: Resilient Nation Partnership Network (RNPN)

Topic: Resiliency and Risk Reduction

Resources:

- [Resilient Neighbors Framework](#)

Reason: Partnerships are critical to successful resilience initiatives. These partnerships may range from something as simple as a coordination call or as in depth as funding pursuits or pursuing the advancement of flood resilient policy.

Opportunity: Participation in the RNPN's annual forum that is held each year in Washington D.C. to learn about the latest trends and issues impacting resilience and how we can collectively prepare for tomorrow's risks.



Resilient Nation
Partnership Network



PUBLIC POLICY

Source: *Pew Trust*

Topic: **Risk Reduction**

Resources:

- [Prioritizing Flood-Ready Infrastructure: Statement of Principles](#)

Reason: The Flood-Prepared Communities project and the Statement of Principles strategically links mitigation efforts with the need to build political support and momentum. Joining forces to build a political platform focusing on reducing flood risk vulnerability and proactive efforts to protect life and property can result in the necessary momentum to move public policy forward. Involvement in larger, organized mitigation communities can garner public support and city council approval, and it can validate the need for funding resources.

Opportunity: Improve resiliency requirements for buildings and infrastructure systems built before and after flood-related catastrophes. Enhance the use of natural defenses in planning and preparedness and reduce unsustainable development in high-risk areas.



Source: *National Academy of Sciences Committee on Urban flooding*

Topic: **Environmental Justice**

Resources:

- [Framing the Challenges of Urban Flooding in the United States](#)

Reason: Research suggests that the impacts of flooding tend to fall disproportionately on socially vulnerable populations, including children, the elderly, nonwhite, immigrants, non-native English speakers, disabled, homeless, poor, renters, and those with low educational attainments. These groups are more vulnerable to flooding because they are more likely to reside in flood zones, have less mobility, lower awareness of flood hazards, higher rates of mortality, and lower resilience to recover after a flood event.

Opportunity: Public outreach and mitigation projects should be targeted specifically at socially vulnerable populations. Targeting outreach to these populations is critical to facilitating increased flood awareness. Planning mitigation projects to specifically benefit areas with high social vulnerability is more likely to mitigate the social impacts of future flooding. When crafting policy, it is also critical to include those who serve socially vulnerable populations to avoid creating unintended exclusivity of policy and that the policies will best meet the intention for all populations.



SALT CREEK FLOODPLAIN RESILIENCY STUDY

LAND USE

Source: National Oceanic and Atmospheric Administration (NOAA)

Topic: **Preservation**

Resources:

- [How to Map Open Space for the Community Rating System](#)
- [CRS for Community Resilience Green Guide](#)
- [A Guide to Assessing Green Infrastructure Costs and Benefits for Flood Reduction](#)

Reason: In the Salt Creek floodplain, the preservation of open space is critical to flood reduction strategies. Infiltration, storage capacity, uptake of water by vegetation, and more all have significant impact.

Opportunity: Preserving green space within the floodplain and throughout the community, Lincoln can potentially receive additional credits for their Community Rating System participation.



TECHNICAL MODELING/MAPPING

Source: Technical Mapping Advisory Council (TMAC)

Topic: Mapping and Residual Risk

Resources:

- [TMAC National Floodplain Mapping Review](#)
- [TMAC Annual Report – 2017](#)
- [TMAC Future Conditions Risk Assessment and Modeling Report](#)

Reason: Residual risk areas associated with levees and dams are of great concern. “Residual risk” is the risk that remains after consideration of natural or human-induced measures to reduce known risks.

Opportunity: Awareness of FEMA floodplain mapping trends allows the City of Lincoln to consider and prepare for the impacts of these changes before they are rolled out and perhaps to get involved in the conversation that will develop future guidance.



SALT CREEK FLOODPLAIN RESILIENCY STUDY

OPERATIONS

Source: Federal Emergency Management Agency and Army Corps of Engineers

Topic: **Levee**

Resources:

- [Fact Sheet - Meeting the Criteria for Accrediting Levee Systems](#)
- [FEMA - Levees Frequently Asked Questions](#)
- [CFR 44 65.10 - Mapping of areas protected by levee system](#)

Reason: Revising operations and maintenance plans to align with FEMA regulations will not result in accredited levees – the Salt Creek levee system is designed to overtop during the 2 percent annual chance flood event.

Opportunity: These materials can still provide a resilience benefit by assisting with planning for operations and emergencies, so the community is safer and better prepared.



FEMA

Source: National Oceanic and Atmospheric Administration (NOAA)

Topic: **Disaster Preparedness**

Resources:

- [Preparation Before a Flood](#)
- [Informed Response During a Flood](#)
- [Proper Action After a Flood](#)
- [NOAA National Weather Service Flood Safety Tips and Resources](#)

Reason: Preparation and awareness are critical before, during, and after a disaster.

Opportunity: Establish a culture of preparedness and a well-informed public. The City of Lincoln or Lincoln-Lancaster County Emergency Management could share information with community using these ready-made resources.



National Oceanic and
Atmospheric Administration
U.S. Department of Commerce