Updated flood protections 2022:

Keeping our community safe / Preventing loss of life / Reducing property damage

Why are we updating the flood protections?

The science and data on flood risk in Lincoln is clear and compelling: this is a public safety issue. City government's number one community responsibility is to protect public safety and health. Families and businesses in the floodplain face danger due to increased risk of flooding. The existing floodplain maps were created using rainfall data from 1961 – over 60 years ago. Updated rainfall totals from U.S. National Ocean and Atmospheric Association (NOAA) and hydrological analysis indicate that **the flood map is <u>too low</u>.** Anyone wanting to construct a new building or invest in a significant rehab of an existing building could potentially be risking that investment if they build to a level that is too low and still floods. Federal Emergency Management Association (FEMA) has begun the process to update the flood map. However, that effort is estimated to take 5-8 years to complete. We need to update the flood protections in the interim to keep homes and businesses safe.

What are the significant changes?

Since 2000, the Flood and Water Quality Protections Manual has helped ensure any construction of homes or businesses in the floodplain is built to protect the occupants and goods from possible flooding. Two of the most significant guidelines being updated are "Freeboard" and "Minimum Stream Corridors".

Freeboard is the distance between the flood water and the lowest floor of a building. The State of Nebraska requires one foot of freeboard – using the FEMA floodplain maps to determine the flood level. If you are in the floodplain, that typically involves raising the ground level (adding more dirt) to the lot during construction work. However, the current maps are using outdated rainfall information and **the flood water will be higher**. In response, the updated flood protections require two feet of freeboard in order to ensure properties are up out of the flood waters. After the floodplain remapping is completed using the updated rainfall data, we will be able to resume the one-foot freeboard.

Minimum Stream Corridors: For stream channels that drain more than 150 acres or have a defined "bed and bank" (which can be a few as 20 acres), a minimum width is <u>currently</u> required. This is because **a channel that is too narrow creates a faster moving stream that erodes away the stream bank**. They can actually cut away into property yards and even endanger buildings. This current requirement is applied on a case-by-case basis which creates additional work and expense for developers. The updated standards, widely used across the country, create a more consistent and easily defined way to establish the minimum corridor, which will reduce confusion and work for developers. In addition, Lincoln Transportation & Utilities analyzed the new standard against existing stream corridor locations in Lincoln and found that it matches up with virtually all of them. In other words, essentially none of the existing stream corridors would be increased in order to meet the new easier-to-use standard.

Who is affected by the changes?
Only new construction within the floodplain, a property immediately adjacent to the floodplain if it is low and at risk of flooding, or an existing structure in the floodplain if it is being expanded or rehabbed 50% or more of its current value. Most development is not affected by this change. Since 2004, development in the floodplain in new growth areas is discouraged. If permitted, it must currently meet higher standards of no rise and no net fill. Existing land within the floodplain available for infill is a very small percentage of the land otherwise available.

Does this increase construction and development costs?
Meeting the new flood protection standards only increases construction costs by a minimal amount. FEMA studies show each foot of freeboard adds between 0.25% and 1.5% percent to the total cost of construction. The good news is lower flood insurance premiums (which properties in the floodplain must purchase) pay back that expense in 2-3 years. In addition, every $1 spent on flood protections prevents $4-$11 in property damages PLUS lowers the risk of loss of life and injury.

Does this hurt housing affordability?
Sub-standard construction is NOT an affordability strategy. Buildings must be constructed safely to protect families and businesses from loss of life or property. City of Lincoln has been budgeting affordable housing funds to help close financing gaps for affordable projects. An affordable housing project proposed within the floodplain could potentially access both TIF and affordable housing funding to help with their project. We can help ensure affordable housing is built safely.

How does this affect existing neighborhoods?
The vast majority of neighborhoods are not located within the floodplain and are unaffected.

What if my house is currently in the floodplain?
You are not required to do anything unless you expand or remodel and the project cost is 50% or more of the value of the house. This is the current rule and the update does not change it. The updated standards simply add an additional one foot of freeboard (two feet total) to ensure that anyone making a substantial investment in their property (over 50% of the value), doesn't have their investment flooded because they build it too low.

How are we helping properties in the floodplain now?
The City continues to do structural stormwater improvements that reduce the size of the floodplain and help protect properties. For example, Antelope Valley reduced the size of the floodplain, so over 1,000 homes and businesses were no longer in danger of flooding. Current improvements to Dead Man's Run near University Place and East Campus will so the same for several hundred more. We recently created a consolidated Watershed Plan that lists needs and priorities for the entire community. This will guide our continued investment in structural solutions to protect neighborhoods.

What about additional flood protection strategies?
We are actively engaged in multiple strategies to improve flood protections including this proposal to update the guidelines, engaging FEMA to update the floodplain maps, analyzing and implementing structural solutions like dams and channel improvements, and exploring additional local, state, and federal funding opportunities. These will involve multiple community stakeholders and engagement. They all have different timelines to complete, however, and none of the additional strategies should delay the interim proposed flood protections from moving forward now to protect homes and businesses.

What was the process for updating flood protections?
Our outreach on this has been extensive and lengthy. The process initiated with the Salt Creek Resiliency study in 2019-2020 and a community stakeholder committee that included neighborhood associations, engineers, developers, environmental experts, business owners, and more. The draft flood protections were then reviewed at stakeholder meetings last year in August and October 2021 with our intention being to introduce them by the end of 2021. We paused that effort and held an additional series of Review Workshops in July, August, September, October of this year, 2022. Through this process 10 out of 28 initial proposed changes were modified or eliminated based on stakeholder feedback. The updated proposal and additional information can be found on the city website: lincoln.ne.gov type "flood and water" into the search box.

What happens next and how can people get involved?
We believe it's time to take action to protect the community.

The **Planning Commission** will hold a hearing on the proposed flood protections on **Wednesday November 16th at 1:00pm**. This will be followed by a public hearing at **City Council on Monday December 12th starting at 3:00pm**. We are encouraging community members to voice their support by attending the hearings and emailing both:
plan@lincoln.ne.gov
councilpacket@lincoln.ne.gov

Every month we wait is another chance for a home or business to be built unsafely – too low; they will be flooded in a major storm event. Please get involved and help keep our community safe.