



# Floodplain Management Update

Austin Minnesota 2023

# Historical Flooding – Austin

Confluence of Cedar  
River, Turtle Creek, and  
Dobbins Creek

<u>Date of Flood</u>	<u>Gauge Height(ft.) – Cedar River@Austin*</u>
1. September 15, 2004	25.0
• Turtle Creek @ Austin – Gage Height -14.8 ft. Flood stage is 10.5 ft. (9/16)	
• Dobbins Creek @ Austin – Gage Height - 14.5 ft. Flood stage is 11.5 ft. (9/15)	
2. July 10, 2000	23.4
3. June 12, 2008	22.4
4. July 17, 1978	21.9
5. August 15, 1993	21.3
6. September 24, 2010	20.6
7. September 23, 2016	19.8
8. July 2, 1983	18.2
9. July 7, 1978	18.1
10. March 26, 1950	17.8
11. May, June, July, 2000	17.4-17.6
12. March 29, 1962	17.2

\*Flood Stage is 15.0 Feet

Flood stage (NWS) = stage at which rivers and streams overflow their banks and begin to cause damage.

# NFIP 1971

- To participate in the National Flood Insurance Program, communities must:
  1. Complete an application;
  2. Adopt a resolution of intent to participate and cooperate with FEMA;
  3. Adopt and submit a floodplain management ordinance that meets or exceeds the minimum NFIP criteria. The floodplain management ordinance must also adopt any FIRM or FHBM for the community.
    - The community (flood plain administrator) must administer and enforce the ordinance, keep records, update data and flood maps as required, and make substantial improvement and substantial damage determinations.
    - Austin became an NFIP community in 1971.

# FIRM 1971

- The Flood Insurance Rate Map (FIRM) is the official flood map of a community on which FEMA has delineated both the Special Flood Hazard Areas and, prior to 2021, the risk premium zones applicable to the community.
- Used for floodplain management and, formerly, for insurance purposes.
- Special Flood Hazard Area = 100 yr flood = Base Flood = 1% chance per year flood = 26% chance of flood over 30 yr mortgage.
- SFHA/Floodplain includes “flood way” and “flood fringe”
- Flood way = main channel, higher velocity water
- Flood fringe = water that spills outside the floodway

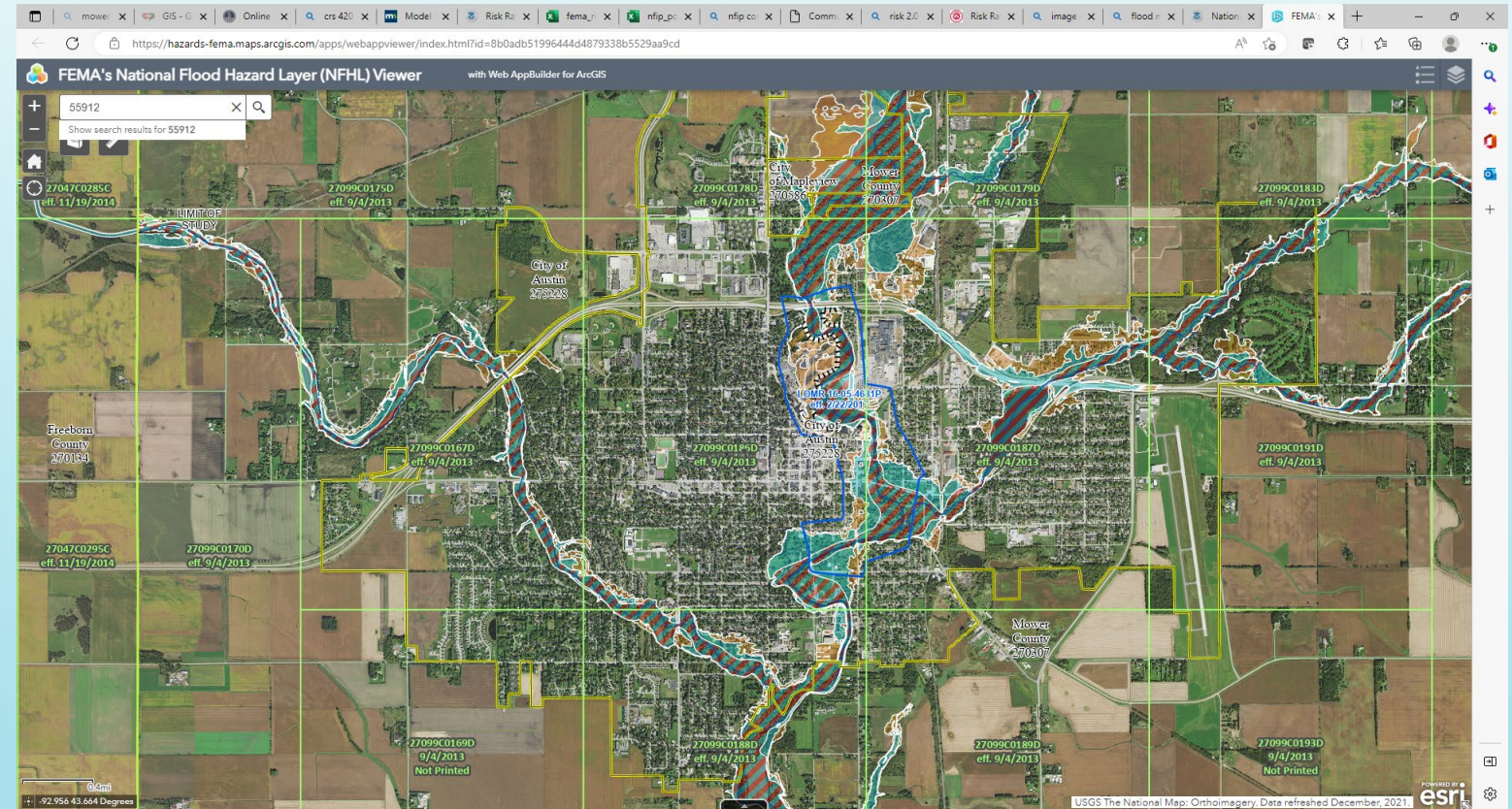
An aerial photograph of a flooded landscape, likely a coastal or riverine area. The water is a deep blue-grey, and the surrounding land is a mix of brown, tan, and green, indicating varying levels of flooding and vegetation. A solid teal rectangle covers the left side of the image. The text 'Special Flood Hazard Area' is centered in white, and 'National Flood Insurance Program (NFIP)' is centered below it in a smaller white font.

# Special Flood Hazard Area

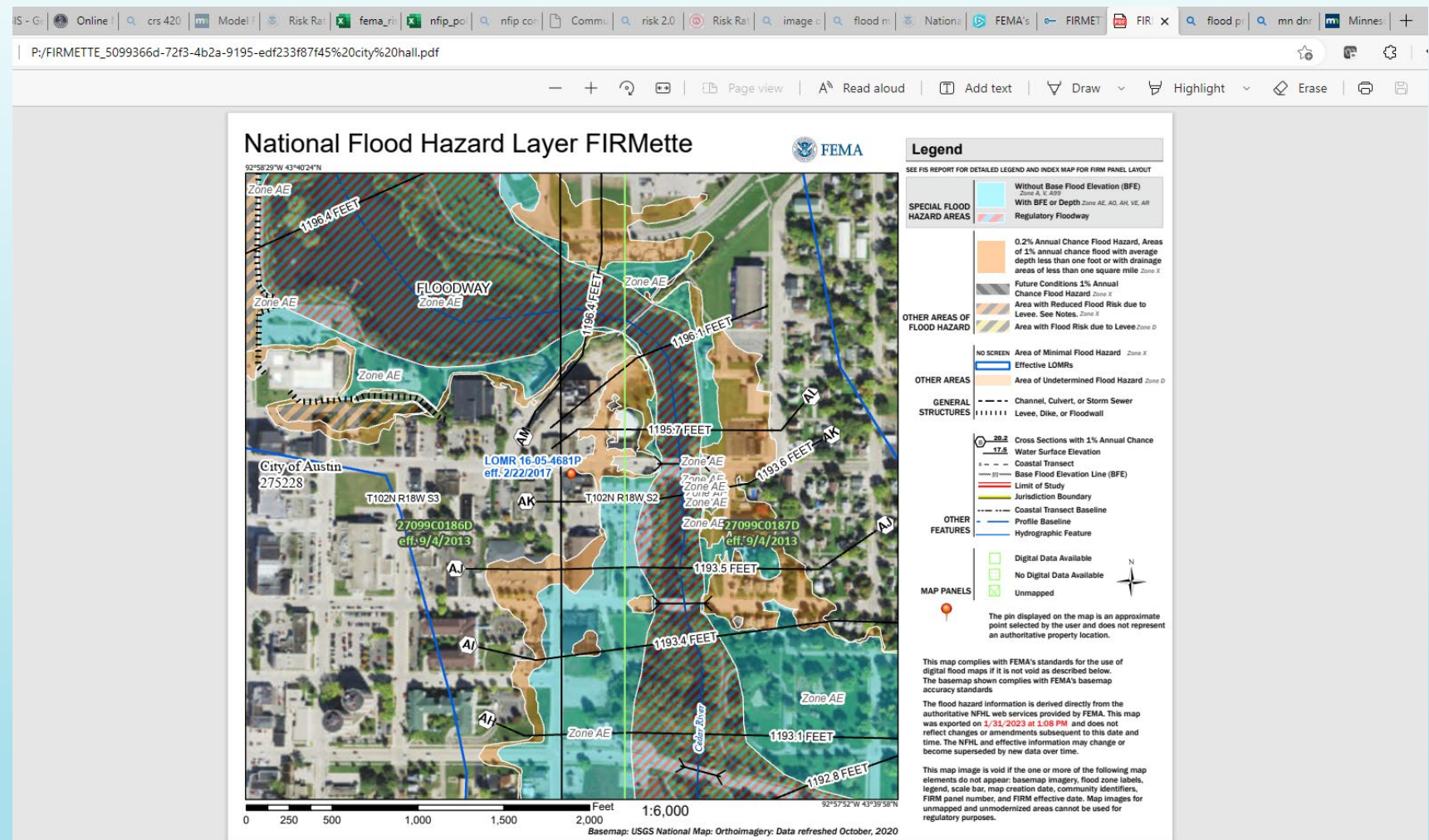
National Flood Insurance Program (NFIP)



# Austin DFIRM 2013 (last updated)

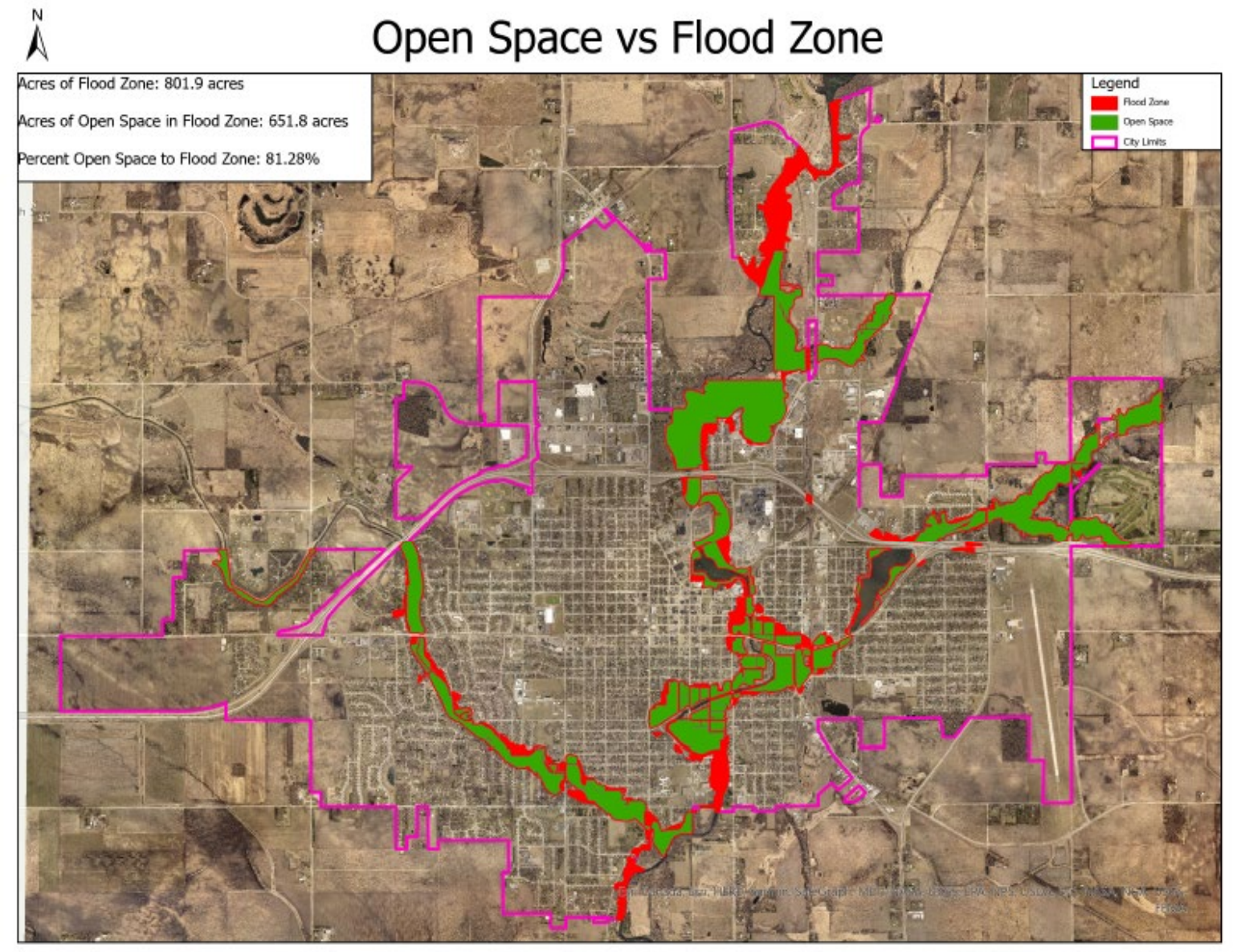


## Detail of FIRM panel





# SFHA (floodplain)





## Before, during and after flooding

- All Hazard Mitigation Plan (before)
  - <https://www.co.mower.mn.us/DocumentCenter/View/3075/MOWER-COUNTY-All-Hazard-Plan-Adopted-March-31-2016--FOR-OFFICAL-USE-ONLY>
  - Monitoring, preparing, assistance, prevention
- Public Works, Emergency Services (during)
  - Monitoring, assistance, safety
- Local, State, Federal response (after)
  - Assistance and assessment

# Mitigation Projects

And Funding Sources



# Property Buyouts

(typically deed  
restricted)

## 295 Total

- 1978- 95
- 1988 – 4
- 1993 – 54
- 2000 – 6
- 2003 – 60
- 2004 – 10
- 2005 – 5
- 2006-2009 – 32
- 2010-2013 – 13
- 2014- 2021 – 16

## Funding Sources

- FEMA
- State SA
- LOST (local option sales tax)
- DNR





# North Main Flood Mitigation Project, Mill Pond, Turtle Creek



Year	Description	Expenses	DNR Grant	LOST	Other/DEED/ Federal	Year-End LOST	Balance
2006	Commercial Propert Acq.	\$ 2,091,768	\$ 1,045,884	\$ 175,000	\$ 870,884		
2007	Wildwood Park Acquisition	\$ 2,210,975	\$ 275,000	\$ 75,000	\$ 1,860,975	\$	402,500
2008	N. Main Phase 8	\$ 1,085,000	\$ 566,000	\$ 737,500		\$	1,015,000
2009		\$ 700,000	\$ 374,000	\$ 55,500		\$	2,309,500
2010		\$ 375,000	\$ 229,000	\$ 92,500		\$	3,567,000
2011	N. Main Phase 2-9-10-12	\$ 3,726,000	\$ 1,893,000	\$ 1,531,000		\$	3,386,000
2012		\$ 511,000	\$ 232,000	\$ 189,000		\$	4,547,000
2013		\$ 1,925,000	\$ 1,620,000	\$ 533,000		\$	5,364,000
2014	N. Main Phase 3-4-5-6-7	\$ 13,740,000	\$ 3,012,000	\$ 5,621,000	\$ 5,000,000	\$	1,093,000
2015		\$ 2,140,000	\$ 205,000	\$ 623,000		\$	1,820,000
2016	Dobbins Misc. Acquisition	\$ 800,000	\$ 400,000	\$ 400,000		\$	3,040,000
2017	Equipment/Acq./East Side Dam	\$ 175,000	\$ 20,000	\$ 120,000	\$ 50,000	\$	3,775,000
2018	Dobbins Misc. Acquisition	\$ 80,000	\$ 40,000	\$ 40,000			
	N. Main Phase 1	\$ 1,650,000	\$ 825,000	\$ 825,000		\$	4,131,000
2019	Turtle Creek Flood Mitigation	\$ 5,310,000	\$ 2,655,000	\$ 2,655,000		\$	3,116,898
2020	WWTP Levee Design	\$ 525,000	\$ 262,500	\$ 262,500			
	Turtle Creek Interceptor	\$ 2,600,000		\$ 1,742,000	\$ 858,000	\$	2,462,400
2021						\$	4,000,000
2022						\$	5,070,000
		\$ 39,644,743	\$ 13,654,384	\$ 15,677,000	\$ 8,639,859		

Year	Description	Estimated Project	DNR Grant	LOST	Other	* Year-End
2023	Engineering Pickup Shed	\$ 564,600		\$ 564,600		\$ 6,005,400
	Stormwater Generator	\$ 250,000		\$ 250,000		\$ 5,755,400
2024	Cedar River Siphons	\$ 1,100,000		\$ 550,000	\$ 550,000	\$ 6,705,400
	WWTP Levee/Wall, Ph 1	\$ 5,500,000	\$ 2,750,000	\$ 2,750,000		\$ 3,955,400
	Dobbins Creek Trunk Sewer	\$ 1,000,000		\$ 500,000	\$ 500,000	\$ 3,455,400
	Ellis Ditch Drainge Study	\$ 100,000		\$ 66,667	\$ 33,333	\$ 3,388,733
2025	WWTP Levee/Wall, Ph 2	\$ 2,000,000	\$ 1,000,000	\$ 1,000,000		\$ 3,888,733
2026	Salvation Army Site Acq.	\$ 1,200,000	\$ 600,000	\$ 600,000		\$ 3,288,733
	Terp Ballroom	\$ 800,000	\$ 400,000	\$ 400,000		\$ 2,888,733
	Wildwood Park Acq.	\$ 800,000	\$ 400,000	\$ 400,000		\$ 2,488,733
	SE Interceptor, Ph 1	\$ 1,000,000		\$ 250,000	\$ 750,000	\$ 2,238,733
	Ellis Ditch Drainage Imp.	\$ 1,500,000		\$ 1,000,000	\$ 500,000	\$ 1,238,733
2027	9th Place Trunk Main	\$ 2,000,000		\$ 1,000,000	\$ 1,000,000	\$ 238,733
	4th Ave & ESL Dams	\$ 100,000		\$ 100,000		\$ 138,733
		\$ 17,914,600	\$ 5,150,000	\$ 9,431,267	\$ 3,333,333	
			\$ 5,150,000	remaining DNR dollars needed		

\* Using an average of \$1,500,000 LOST generated per year

\*\* Does not include misc. costs for levee certification or removal of properties from the floodplain (LOMR)

\*\* Does not include other misc. projects such as Ramsey Mill Dam or 4th Avenue Dam



To date, levee projects provide protection for 45 acres encompassing 30 residential and 30 commercial properties as well as 1.6 miles of infrastructure.





# Homes and businesses still in floodplain

- Official number = 142
- Two LOMRs in progress to remove approximately 32 properties
- Estimated number after LOMR = 110
- Insured properties in Austin (in or out of SFHA) = 65
- Insured properties in SFHA = 23 (pre LOMR)
- Total single family residences = 7,530 (per Maxfield 2017)
- Est. 11% of properties in 55912 zip code at risk of flooding (this includes areas outside the city of Austin) [Find Your Property's Climate Risks - Homepage | Risk Factor](#)
- Properties in the SFHA are subject to substantial improvement and substantial damage calculations.





# Total Special Flood Hazard Area

- Legend
- Landuse
- Agriculture
  - Residential
  - Commerical
  - Industrial
  - Institutional
  - Open Space
  - Transport
  - Municipal
  - Park
  - Golf Course

Esri, Canala, Esri, HERE, Garmin, Swg, Graph, METI, NASA, USGS, EPA, NPS, USDA, Esri, NASA, NGA, USGS, SDA, Esri, NASA, NGA, USGS, FEMA



# Flood Insurance

- 65 policies in Austin MN
- 15M in property insured
- 71k in premiums paid
- Mandatory if mortgage is federally insured.
- New premium calculation, Risk 2.0. Impact is that most will see a \$10/mo. increase in premiums after 2021.
- Voluntary participation in the CRS program is supposed to result in a premium discount for insureds in the SFHA, however I am still trying to verify that with MN DNR, NFIP and individual insureds.



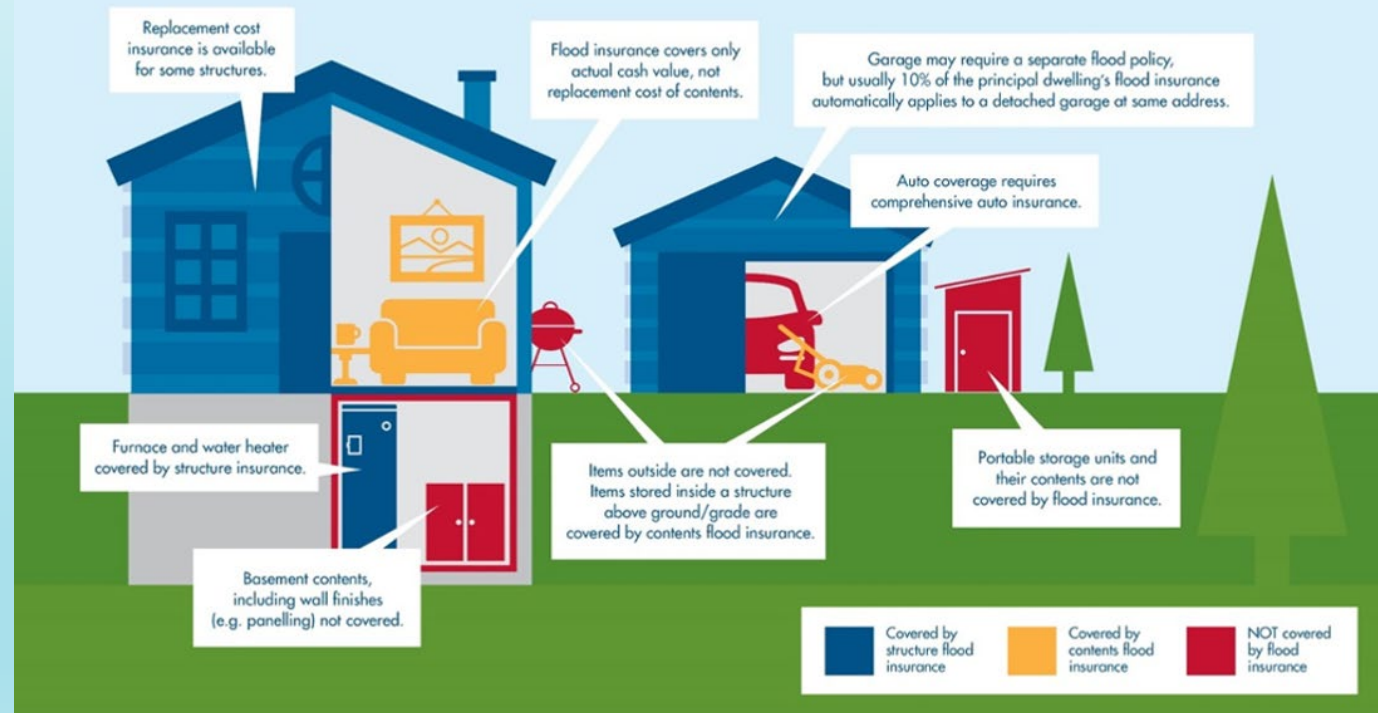
# Who can buy flood insurance and can't I get disaster assistance?

- Anyone who lives in a community that participates in the National Flood Insurance Program (NFIP) can buy flood insurance. More than 95% of all Minnesotans live in a community enrolled in NFIP. It is not necessary for your property to be mapped in a high flood risk area to be eligible to purchase flood insurance. There is a 30 day wait for insurance to become effective after purchase.
- Federal disaster assistance is only available if the President of the United States formally declares a disaster in that county. Even if your county is declared, most disaster assistance is in the form of a loan that you have to repay, with interest, in addition to your mortgage loan that you still owe on the damaged property. If your home is flooded and disaster assistance isn't offered, you'll have to shoulder the damage costs alone.

# What does flood insurance cover?

## FLOOD INSURANCE: WHAT IT COVERS AND WHAT IT DOESN'T

Homeowners Insurance is NOT flood insurance. Flood insurance must be purchased separately. Each structure requires a separate flood policy. However, you need only one contents policy. See your insurance agent for specific information.



# Risk Rating 2.0

- RR 2.0 will consider several rating factors that are not part of the legacy rating system.
  - The legacy system considers the following variables:
    - Flood Insurance Rate Map Zone
    - Base Flood Elevation
    - Foundation Type
    - Structural Elevation (Special Flood Hazard Area Only)
- RR 2.0 will consider these variables instead:
  - Distance to Flooding Source & Flood Type
  - Building Occupancy
  - Construction Type
  - Foundation Type
  - Ground Elevation
  - First Floor Height
  - Number of Floors
  - Prior Claims



# Community Rating System

Austin CRS  
PROGRAM –  
1991 to present  
(32 years)

Floodplain  
Administrator

The objective of the Community Rating System (CRS) is to recognize communities that are doing more than meeting the minimum NFIP requirements to help their citizens prevent or reduce flood losses. The *CRS Coordinator's Manual* is the guidebook for the CRS and sets the criteria for CRS credit and classification. It explains how the program operates, what is credited, and how credits are calculated.

- CRS Coordinator's Manual
  - 641 pages
  - 2021 Addendum
  - 68 pages
  - Total = 709 pages

- State of Minnesota (MN DNR) assists communities with floodplain regulation.
- 9 communities participate in MN – rating by class 1 thru 9.
  - Class 5 – (1)
    - Austin
      - 65 policies in force
      - 23 policies in the SFHA
      - 27 in 2% annual flood
      - 18 in Zone X (low risk)
  - Class 6 – (4)
  - Class 8 – (2)
  - Class 9 – (2)

The city of Austin reports on 13 activities for which we receive points, which determines our Class (5). Most activities have multiple prerequisites.

# Example of annual recertification (versus verification every 3 years)

- Your community has been verified as receiving CRS credit for the following Activities.
- \_\_\_\_ 310 EC: We are maintaining Elevation Certificates, Floodproofing Certificates, Basement Floodproofing Certificates, V Zone design certificates and engineered opening certificates on all new construction and substantially improved buildings in our Special Flood Hazard Area (SFHA) and make copies of all Certificates available at our present office location. [\_\_\_\_] Initial here if you have had no new construction or substantial improvement in the SFHA in the last year.
- \_\_\_\_ 310 EC: Attached is the permit list for only new or substantially improved structures in the SFHA that have been completed in the last year. We have permitted \_\_\_\_ new building and substantial improvements in the SFHA during this re-reporting period.
- \_\_\_\_ 310 EC: Attached are all the Certificates for new or substantially improved structures that have been completed during this reporting period that are included on the above permit list. \_\_\_\_ 310 CCMP: We continue to follow our Construction Certificate Management Procedures and update them when needed.
- \_\_\_\_ 330 OP: We continue to conduct or provide all credited outreach projects.
- \_\_\_\_ 350 LIB/LPD: Our public library continues to maintain flood protection materials.
- \_\_\_\_ 350 WEB: We continue to conduct an annual review and update of the information and links in our flood protection website.
- \_\_\_\_ 420 OSP: We continue to preserve our open space in the floodplain.
- \_\_\_\_ 420 LZ/OSI: We continue to enforce our ordinance(s) for low-density zoning and/or open space incentives. [\_\_\_\_] Initial here if you have changed the allowable density of development in any of your zoning districts, rezoned parcels in the floodplain or changed your open space incentives. Attach a copy of the amended regulations, provide a summary of the changes, and mark up the regulation indicating what has been changed.
- \_\_\_\_ 430: We continue to enforce the floodplain management provisions of our zoning, subdivision and building code ordinances for which we are receiving credit.
- [\_\_\_\_] Initial here if you have amended your floodplain regulations. Attach a copy of the amended regulations, provide a summary of the changes, and mark up the regulations indicating what has been changed.
- \_\_\_\_ 430 RA: We continue to enforce our procedures for administering our floodplain management regulations. If applicable, we also continue to employ CFMs and staff who took credited training courses. We currently have \_\_\_\_ CFMs on staff.
- \_\_\_\_ 440 AMD: We continue to use and update our flood data maintenance system on an annual basis as needed.
- \_\_\_\_ 520 AR: We continue to maintain as open space the lots where buildings were acquired or relocated out of the floodplain. [\_\_\_\_] Initial here if there have been any changes (additions or deletions) to the parcels credited as open space. Attach a description of those changes.
- Additional Comments:

CRS program  
moving  
forward  
- maintain as  
is, drop a level  
or two,  
discontinue.

- Pros

- A couple days for annual recertification
- 25% discount for Class 5 (not a discount on full premium, doesn't apply equally in all circumstances, and hard to verify, although it should be listed on the ins. declarations page).
- Many activities benefit the community.

- Cons

- Community can do activities unofficially and can choose which are most beneficial versus what's dictated by the program.
- 9 communities in MN participate.
- A week or more for three year verification.
  - Requirements change
  - GIS mapping required
  - The CRS program and manual are complicated at times.



