

**DOWNTOWN**

INFOCUS

A BLUEPRINT FOR FARGO'S CORE



October 12, 2016  
Working Committee

# INTERVIEWS & SMALL GROUP DISCUSSIONS

- Perceptions of Downtown from residents, businesses, service-providers
- Observations / explanations of how things work (or don't work) from local leaders and Downtown representatives

## INTERVIEWS SO FAR: 50+ different people in 35 sessions

- Elected officials
- Business leaders & start-ups
- Creative/cultural organizations
- Development community
- Design community
- Housing advocates
- Transportation agencies
- Downtown organizations
- Neighborhood associations
- Sanford representatives
- NDSU representatives
- City technical staff

## PLUS:

Breakfast Meet & Greet / Roundtable (61)

Working Group (24)

Social Media (building...)

# DOWNTOWN INFOCUS

A BLUEPRINT FOR FARGO'S CORE

- What is InFocus
- Why Downtown Fargo?
- What's Happening Now?
- Share Your Ideas



NEW WEBSITE by Hash Interactive

DO YOU HAVE A FAVORITE AREA IN DOWNTOWN FARGO?

A FAVORITE BLOCK OR BUSINESS, RESTAURANT OR ROUTE THAT YOU LOVE TO VISIT? WHAT DOES DOWNTOWN MEAN TO YOU?

Think about how much Downtown Fargo has changed in the past

TIMELINE

2016



TOUR & FIELD SURVEY



INTRODUCTIONS AND INTERVIEWS

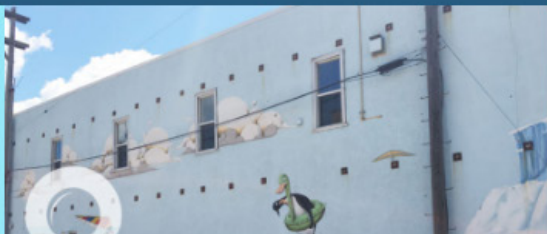
J  
U  
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SURVEY OF STAKEHOLDER

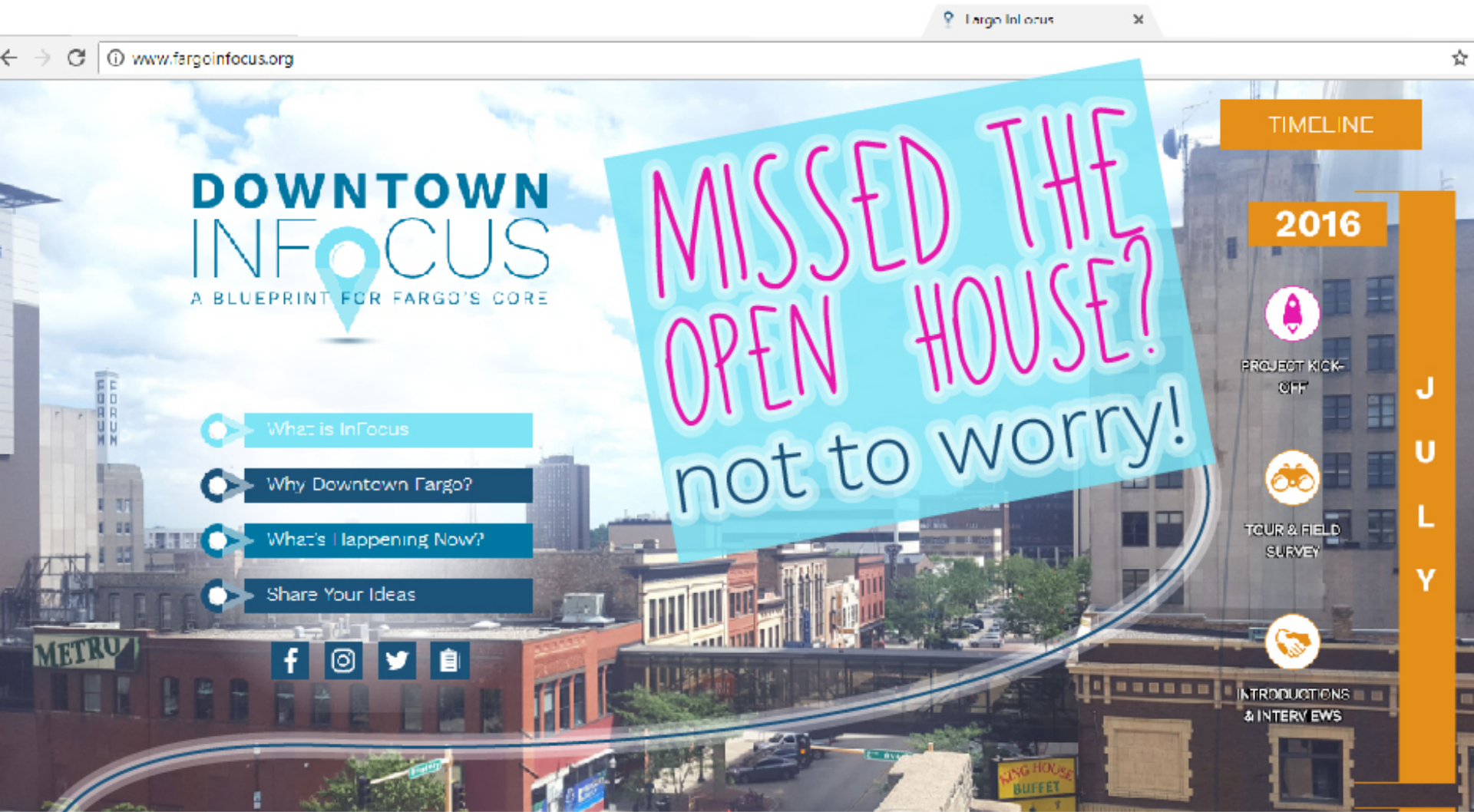
S  
E  
P  
T



THANKS to the 280 PEOPLE  
who joined us at last night's



**OPEN HOUSE**



# DOWNTOWN INFOCUS

A BLUEPRINT FOR FARGO'S CORE

- What is InFocus
- Why Downtown Fargo?
- What's Happening Now?
- Share Your Ideas



## TIMELINE

### 2016



PROJECT KICK-OFF



TOUR & FIELD SURVEY



INTRODUCTIONS & INTERVIEWS

J  
U  
L  
Y

MISSED THE OPEN HOUSE?  
not to worry!

↓  
**CHECK OUT OUR** <sup>SWEET NEW</sup> **WEBSITE**  
[www.fargoinfocus.org](http://www.fargoinfocus.org)

BIG THANKS TO  
**{H}ASH**  
INTERACTIVE



have an **OBSERVATION** or **IDEA** for Downtown  
to add to the **COLLABORATIVE MAP?**

**TRY OUT THE ONLINE VERSION:**  
[www.fargoinfofocus.org/interactive-map](http://www.fargoinfofocus.org/interactive-map)



**LIVE** or **WORK** Downtown and want to  
**TAKE THE SURVEY?**

**IT'S ONLINE TOO:**  
[www.surveymonkey.com/r/DowntownInFocus](http://www.surveymonkey.com/r/DowntownInFocus)



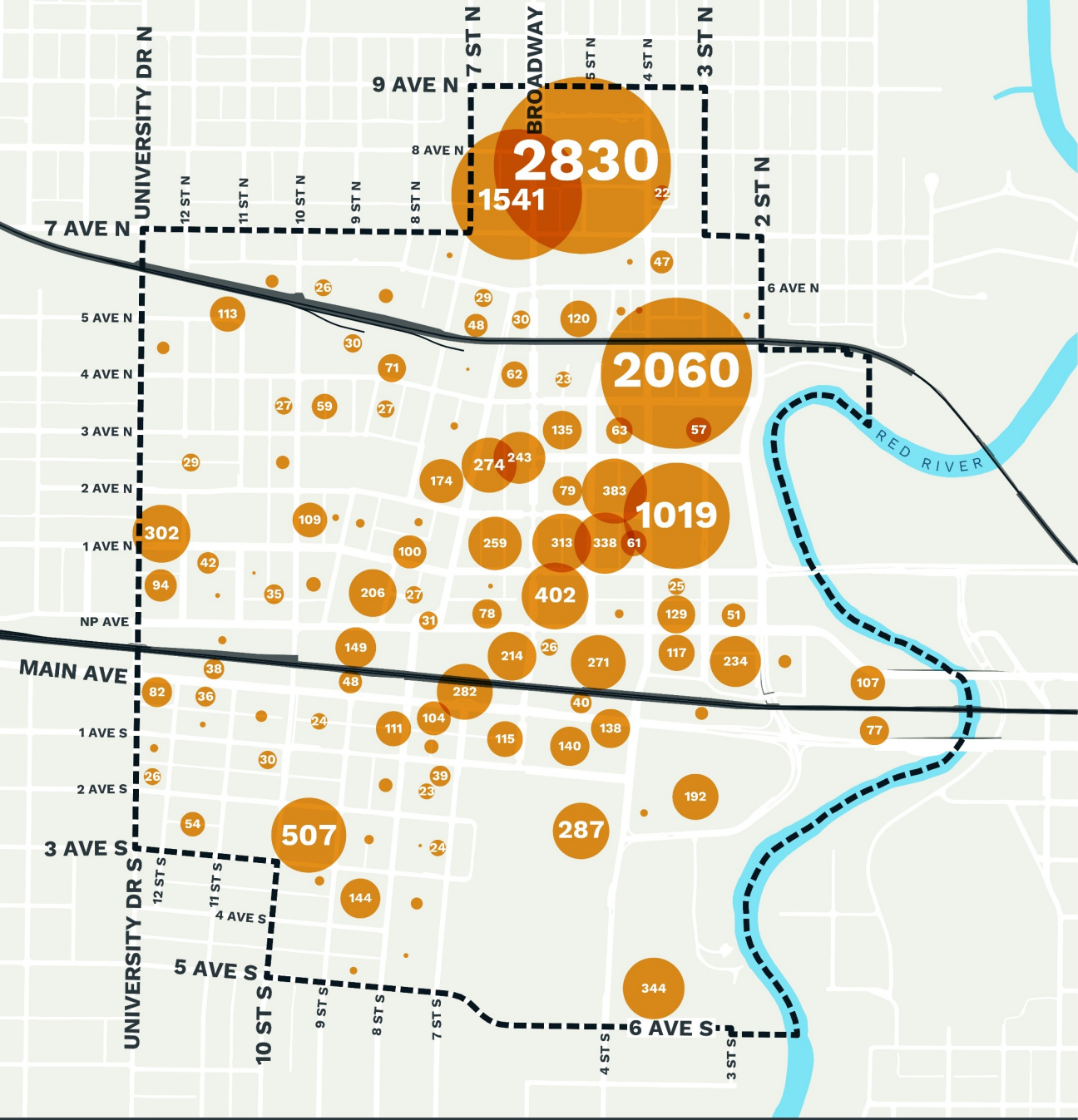


# Downtown Current Economic Conditions

Attracting and retaining talent is a major regional challenge

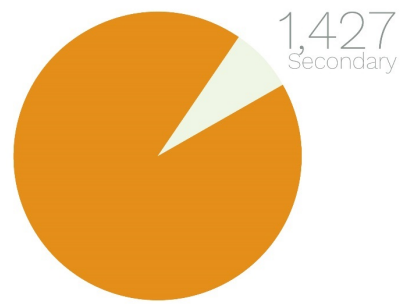


**“Downtown is a huge factor in attracting talent. People want a vibrant downtown whether you’re a downtown person or not”**



Almost 18,000 jobs are located Downtown – many in professional/technical services & health care

**17,945 TOTAL JOBS**

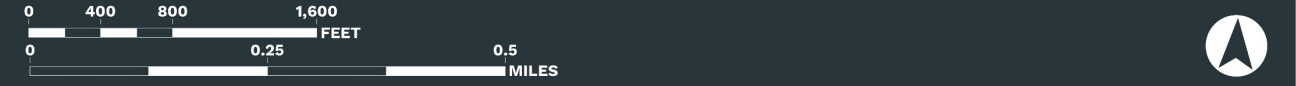


**16,518**  
Primary

# Primary Job Locations by Block, 2014

Source: Ninigret Partners, [onthemap.ces.census.gov/](http://onthemap.ces.census.gov/)

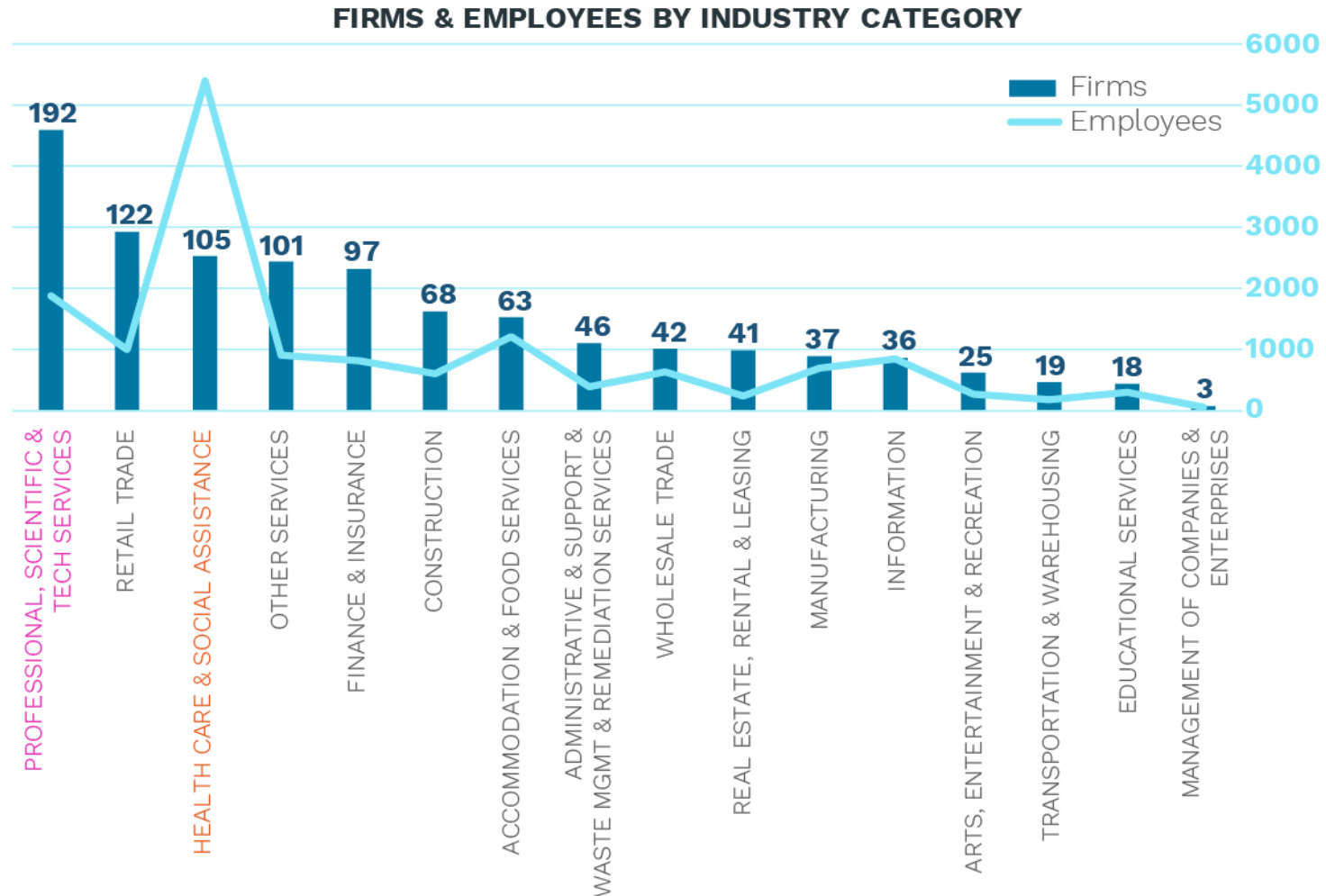
**[Dashed Box Icon] DOWNTOWN FOCUS AREA**



Professional/technical services have the most employers with  
Healthcare having the most employees

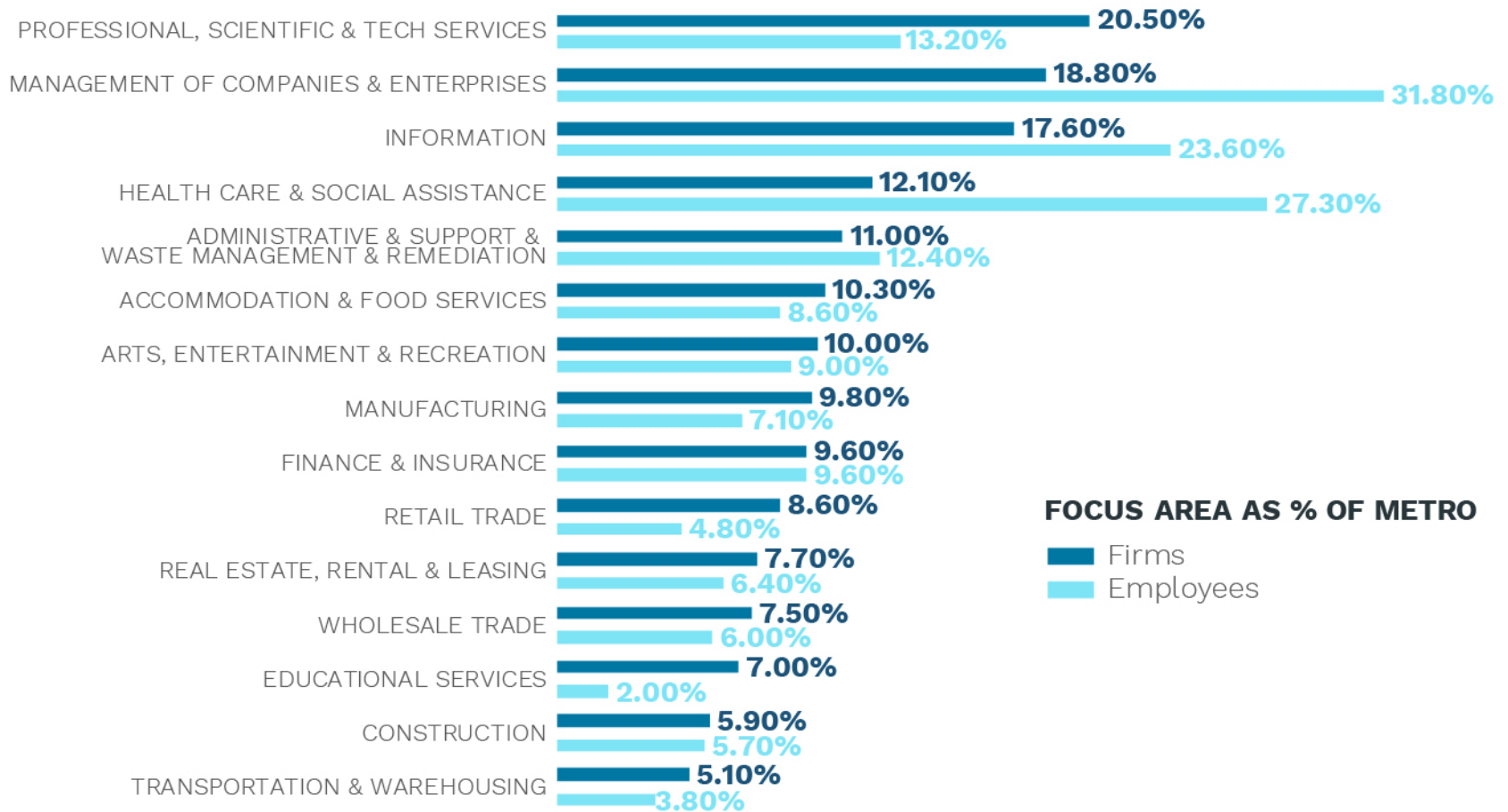
1,200 TOTAL EMPLOYERS

17,000 TOTAL EMPLOYEES



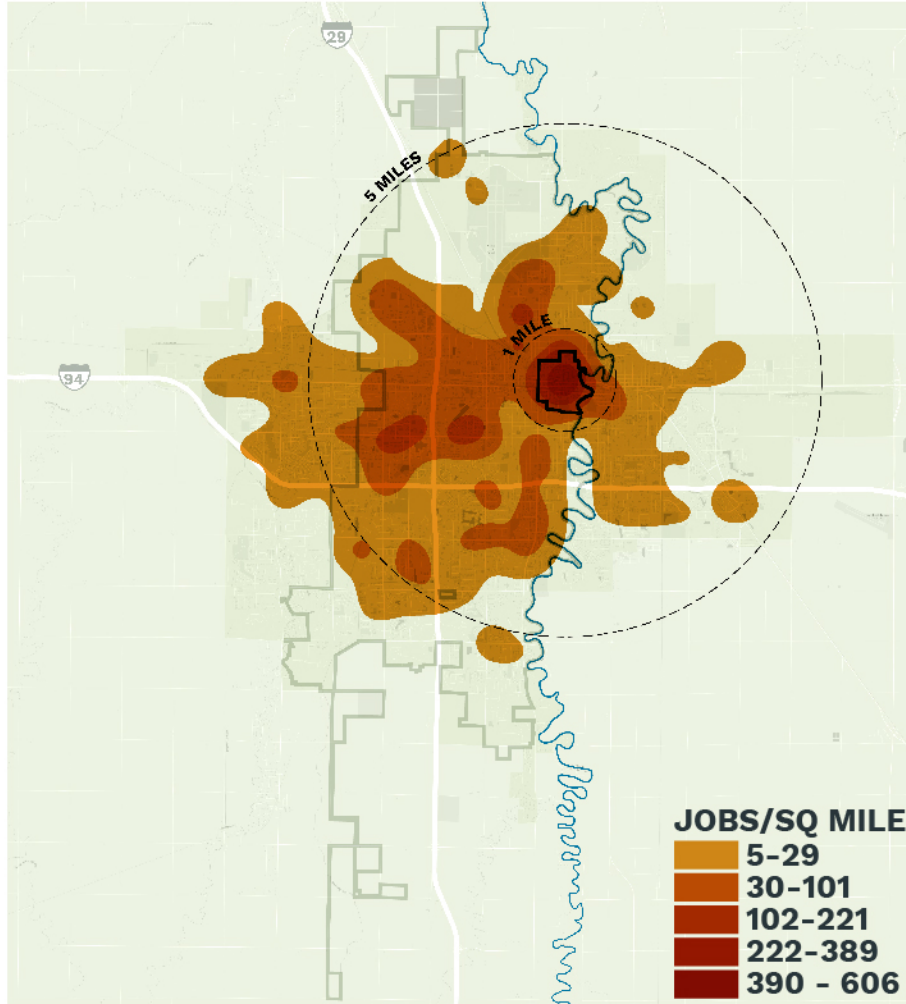
# Downtown is a core location for talent-driven businesses

**11% OF TOTAL METRO ACTIVITY APPROACHING 20% OF ACTIVITY IN THESE INDUSTRIES**



# Where do they live?

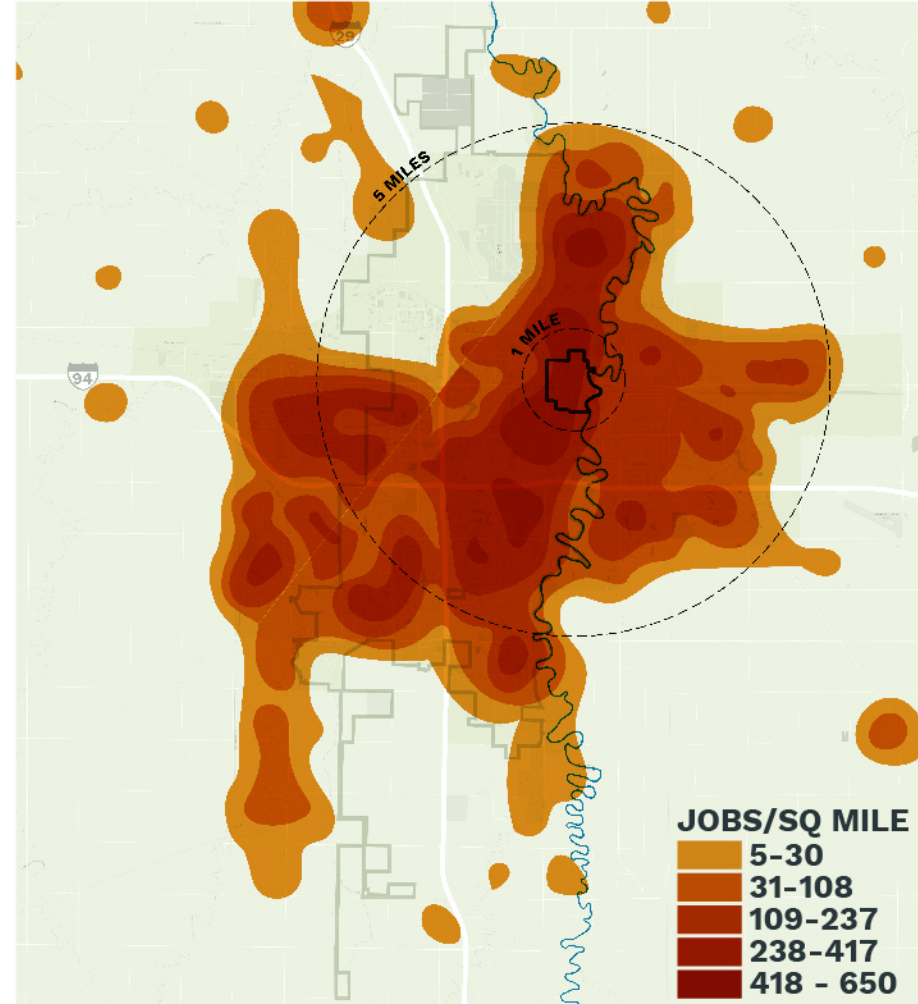
## Where People Who Live In Downtown **WORK**



### **JOBS BY DISTANCE HOME CENSUS BLOCK TO WORK CENSUS BLOCK**

Total Primary Jobs: 1,893  
Total All Jobs: 2,092

## Where People Who Work In Downtown **LIVE**

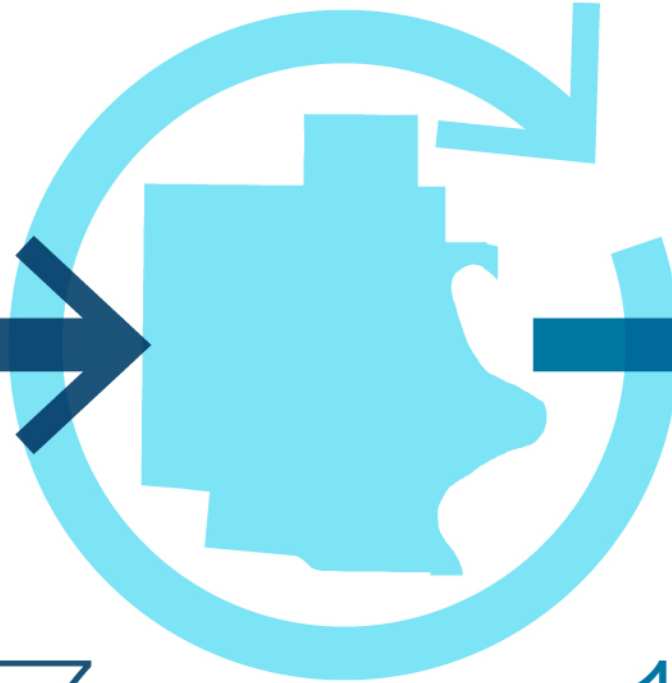


### **JOBS BY DISTANCE WORK CENSUS BLOCK TO HOME CENSUS BLOCK**

Total Primary Jobs: 16,518  
Total All Jobs: 17,945

431

WORK & LIVE  
IN DOWNTOWN



16,087

WORK IN DOWNTOWN  
LIVE OUTSIDE

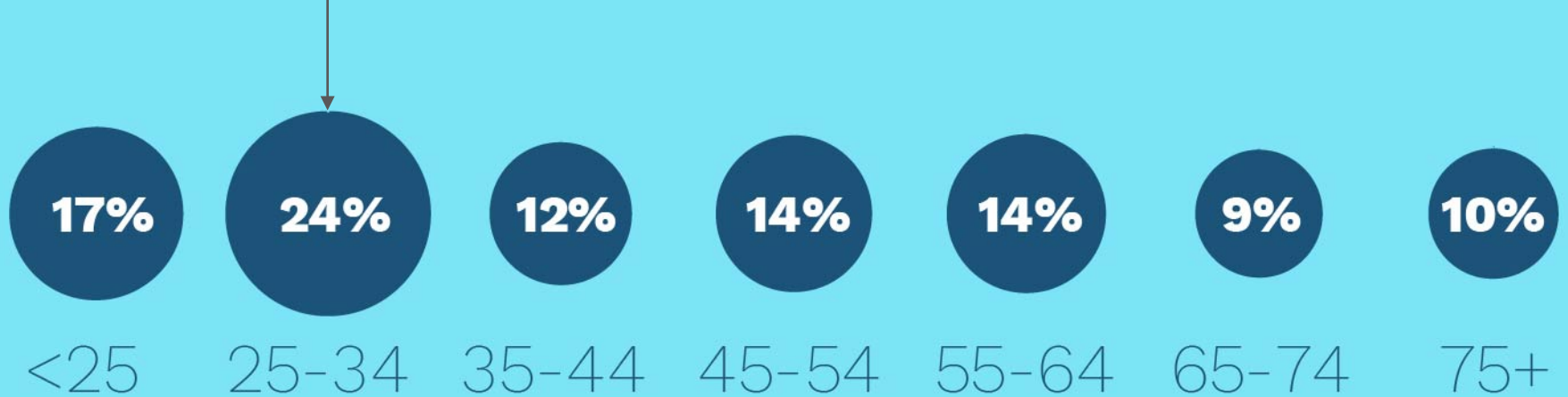
1,462

LIVE IN DOWNTOWN  
WORK OUTSIDE

# Who Lives Downtown?

Those that live Downtown are younger...

Post-college millennials are the largest single group of households



## AGE BREAKDOWN

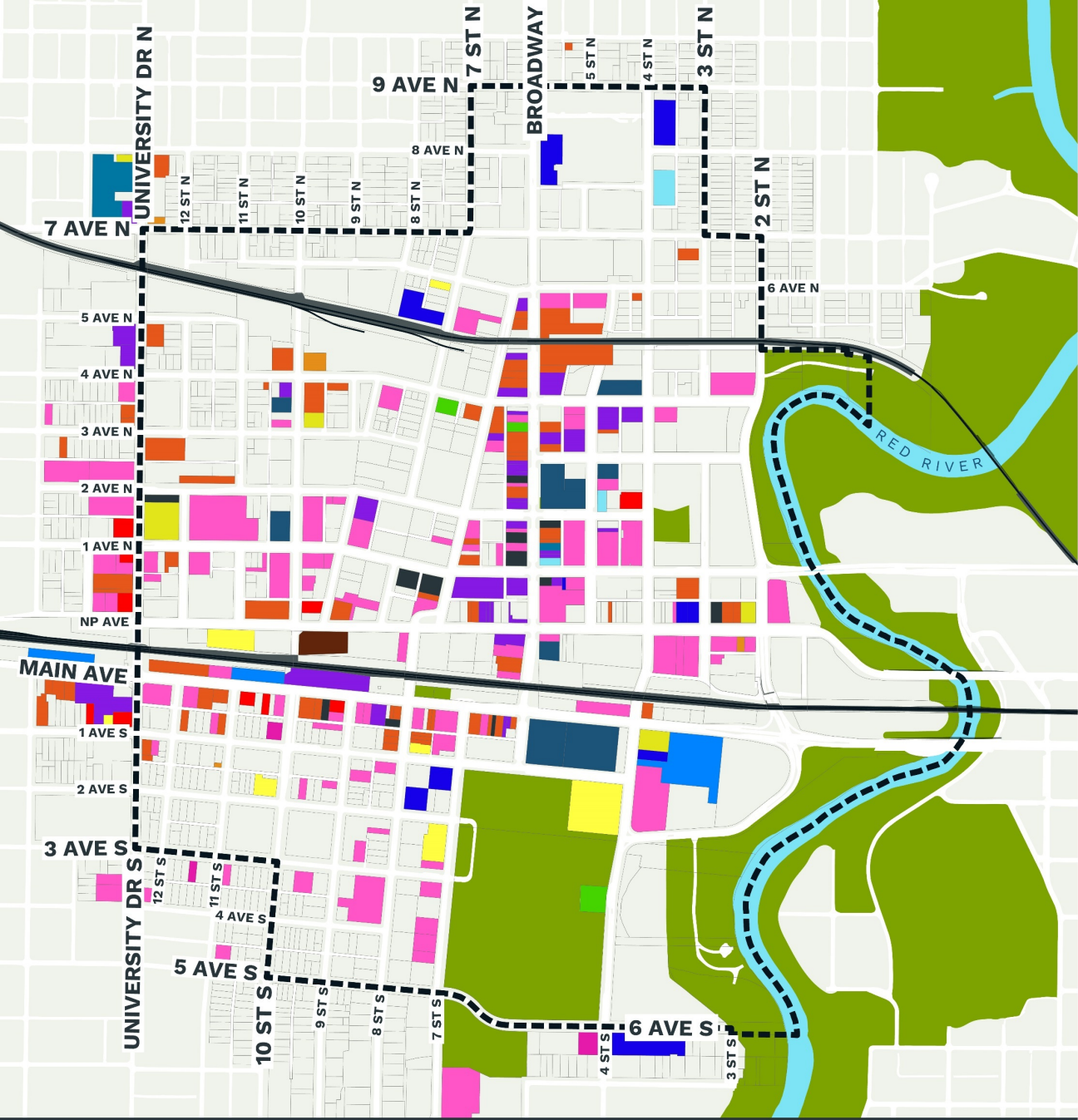


But overall Downtown represents a small percentage of the region's population and lags in income

**THE DOWNTOWN ALSO REPRESENTS A SMALL PERCENTAGE OF SOME OF ITS KEY AGE/INCOME COHORTS**

Downtown % of Metro							
2016 Households by Income and Age of Householder (Count)							
	<b>&lt;25</b>	<b>25-34</b>	<b>35-44</b>	<b>45-54</b>	<b>55-64</b>	<b>65-74</b>	<b>75+</b>
HH Income Base	6%	4%	3%	3%	3%	3%	4%
<\$15,000	10%	10%	9%	12%	10%	9%	9%
\$15,000-\$24,999	8%	7%	6%	8%	7%	7%	6%
\$25,000-\$34,999	5%	4%	4%	5%	4%	4%	3%
\$35,000-\$49,999	5%	4%	3%	4%	4%	4%	2%
\$50,000-\$74,999	4%	4%	3%	4%	3%	2%	3%
\$75,000-\$99,999	3%	2%	2%	2%	2%	1%	3%
\$100,000-\$149,999	2%	1%	1%	1%	1%	1%	1%
\$150,000-\$199,999	1%	2%	1%	1%	1%	0%	1%
\$200,000+	4%	2%	1%	1%	1%	1%	1%
Median HH Income	62%	60%	55%	51%	50%	55%	58%
Average HH Income	69%	68%	59%	56%	55%	54%	65%

# Real Estate overview



**Today**, there are **61** restaurants / bars/ cafes in the area...and only **11** vacant storefronts

# Commercial Type, 2016

Source: Interface Studio Windshield Survey, City Of Fargo

- **AUTOMOBILE REPAIR SHOP**
- **BANK/SAVINGS & LOAN**
- **CONVENIENCE STORE**
- **FRATERNAL LODGE**
- **GROCERY / SUPERMARKET**
- **HOTEL**
- **LAUNDRY/DRY CLEANER**
- **LUMBER YARD**
- **MEDICAL CLINIC**
- **OFFICE**
- **OTHER**
- **RESTAURANT**
- **RETAIL**
- **RETAIL & OFFICES**
- **STRIP CENTER**
- **THEATRE**
- DOWNTOWN FOCUS AREA**

BUT, it can be hard to buy produce...or toothpaste or other basic goods Downtown



**“Retail cannot survive just on events, and we’re an event driven Downtown. Retail cannot survive on student incomes... We need Downtown to become more of a neighborhood.”**



## RETAIL

- 46,000 SF available across 9 buildings
  - Largest space is 15,000 SF
- Rents \$12-\$16/SF
  - Peak at \$24/SF before CAM charges
- Existing retail could support ~\$11.5M in sales
  - Assuming \$250/SF sales with ranges typically between \$200-\$300/SF

## OFFICE

- 64,000 SF available in 14 spaces
  - Largest single space is 22,000 SF
  - 4 spaces are less than 1,000 SF
- Rents range from \$11-\$18(NNN) with most rents falling between \$14-\$16
- Based on typical employee space ratios of 150 to 250 SF/employee this space could absorb approximately 250 to 425 workers

Analysis confirms Downtown is a retail destination, but currently demand is insufficient to support the retail supply.

**EVERY \$5,000 INCREASE IN CONSUMER DISPOSABLE INCOME (AFTER TAXES & HOUSING) REDUCES THE NUMBER OF HOUSEHOLDS REQUIRED BY 792 PEOPLE**

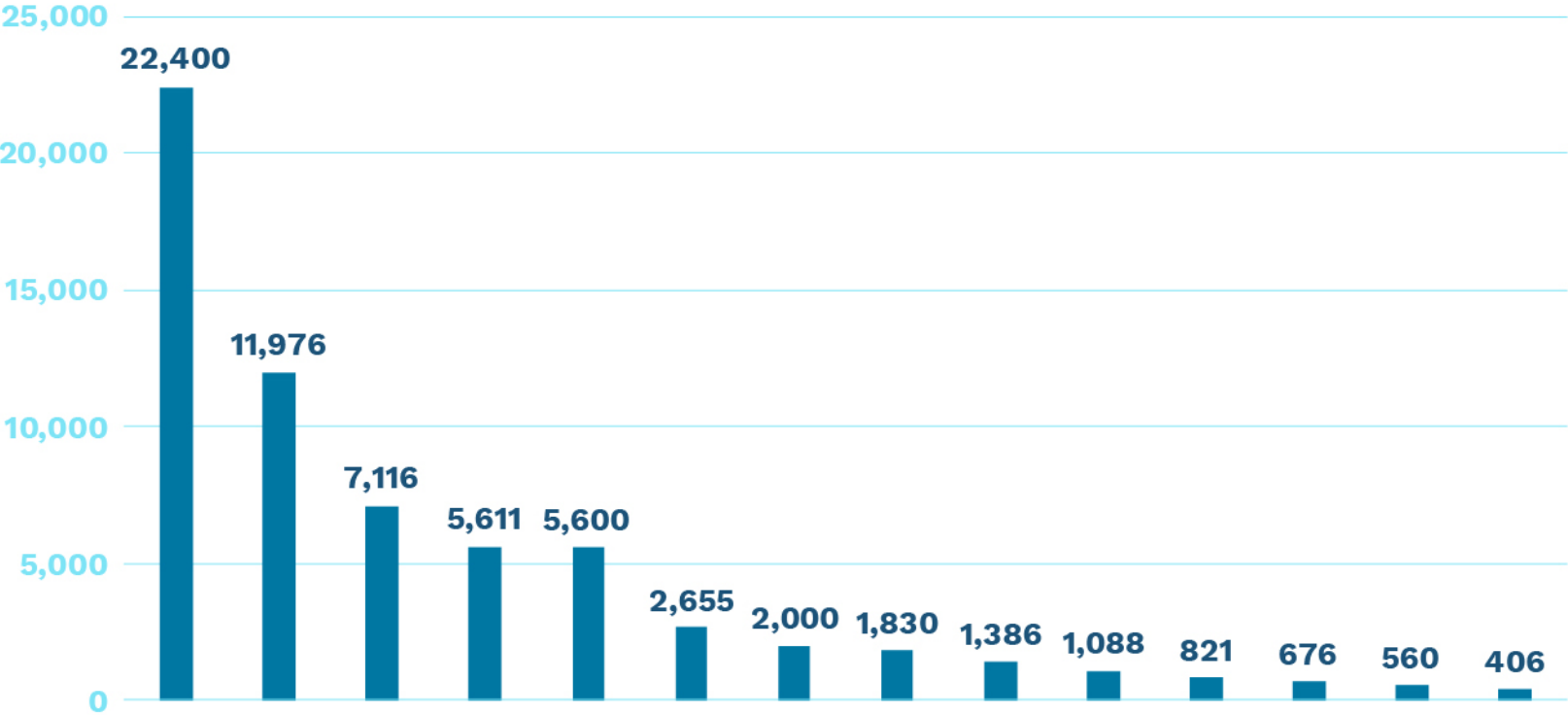
	<b>Estimated Demand</b>	<b>Estimated Supply</b>	<b>Difference</b>	<b>Number of additional households to fully support retail*</b>
¼ mile retail / restaurant	\$17m	\$79m	\$-62m	+3,487
½ mile retail / restaurant	\$51.8m	\$134m	\$-82.2m	+4,524

**SUPPORTING VACANT RETAIL BY THE “NEIGHBORHOOD” WOULD REQUIRE ANOTHER 605 HOUSEHOLDS**

\* Simplified model to represent level of residential density required to fully support existing retail capacity. Assumes 100% capture based on new residents with same disposable income (1/4m = \$17782; 1/2m = \$18168)

Currently, Downtown could not easily host an office dependent employer with 150+ employees in a single site without new construction

**SIZE OF AVAILABLE OFFICE SPACES**  
In Square Feet



Assumes 150 SF/employee  
Source: Ninigret Partners tabulations based on listed properties

Core Downtown apartment rents are 20% to 40% higher than the periphery and highest in the region

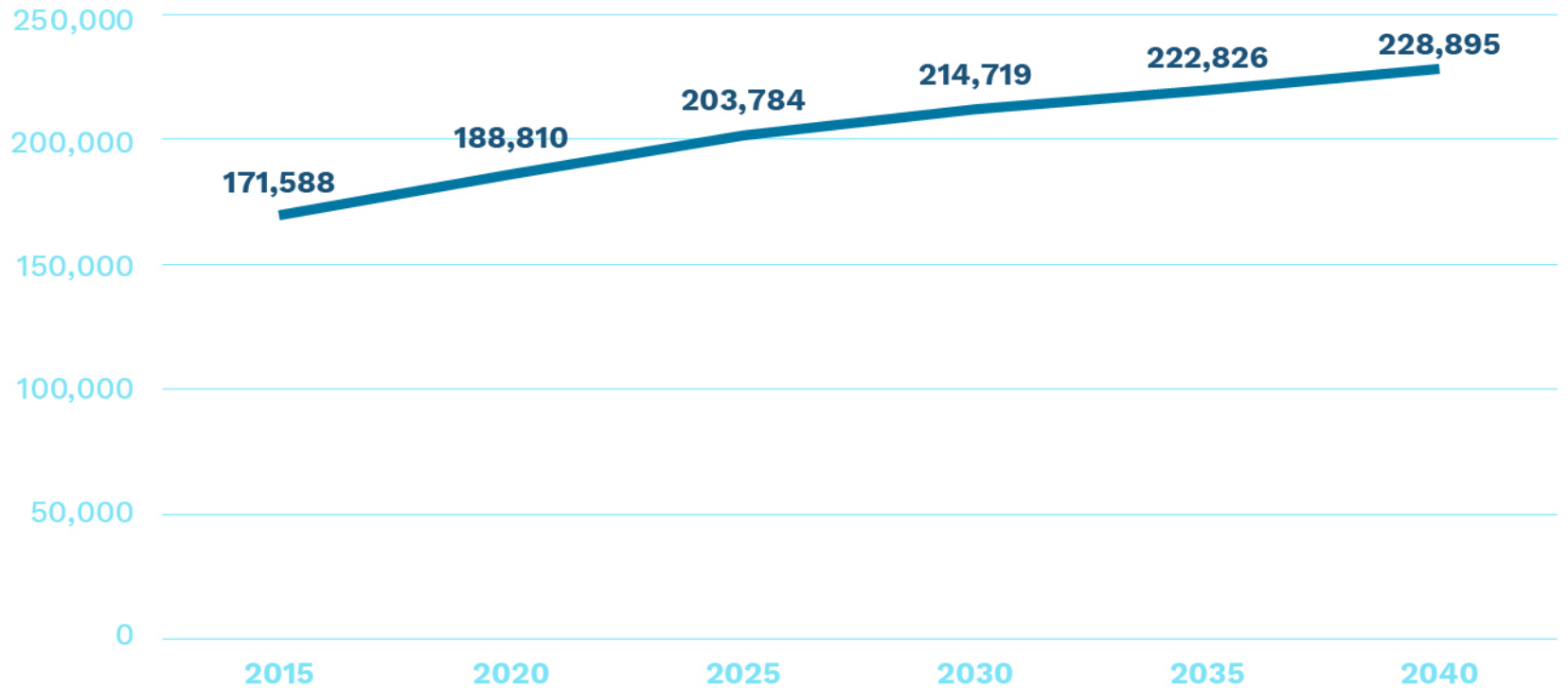




A Few Key Factors to  
Consider

Continued population growth will impact housing prices.

**EXPECTED NET MIGRATION**  
to Cass County, 2015-2040

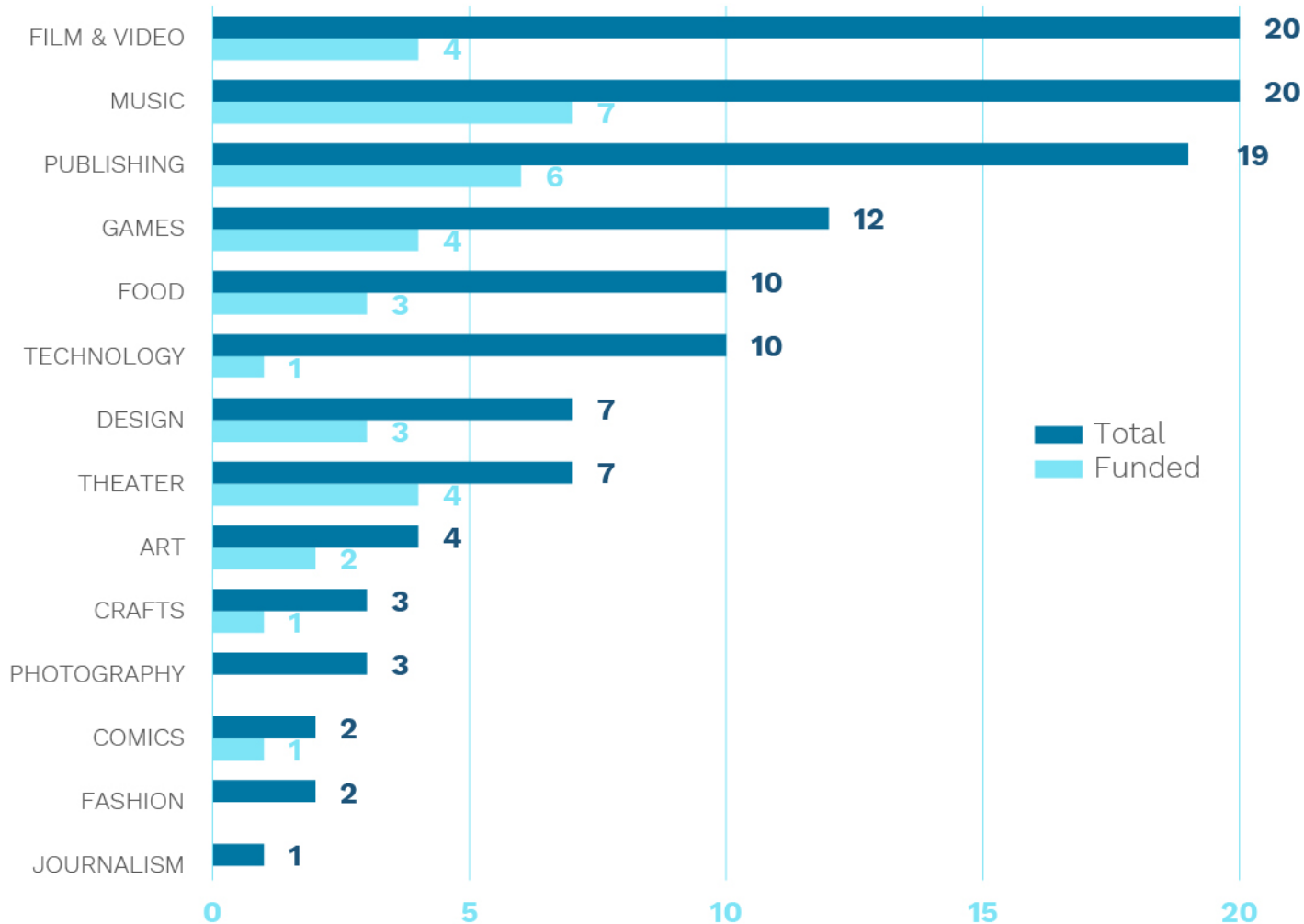


**32,000 PEOPLE AMOUNTS TO BETWEEN 11,000 AND 17,000 HOUSEHOLDS**

Creative entrepreneurs need different kinds of spaces. Kickstarter and Etsy indicate of areas of interest.

**TEACH AND PHYSICAL PRODUCTS ARE IMPORTANT BUT NOT THE MAIN AREA OF INTEREST**

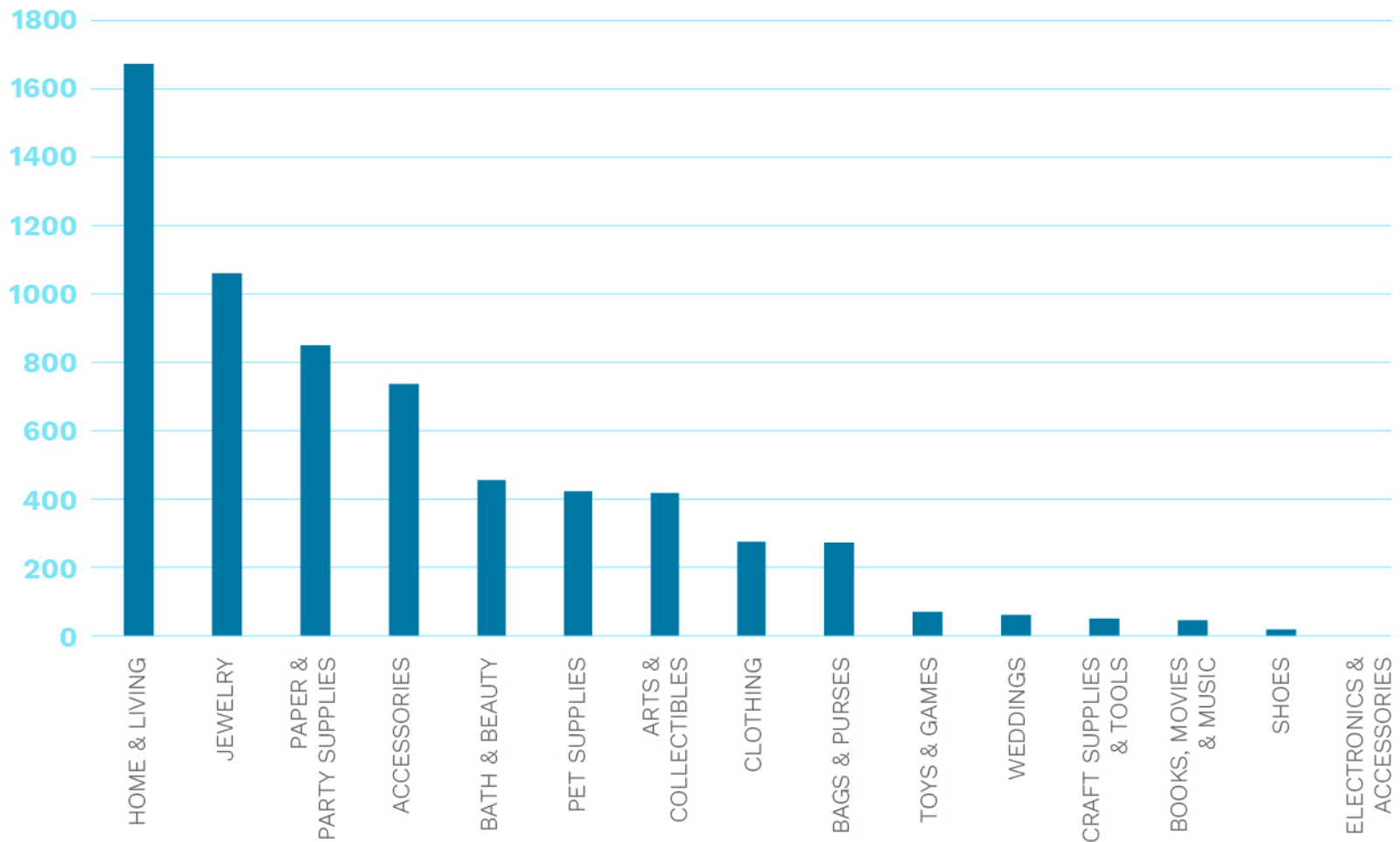
**KICKSTARTER ACTIVITY**



Creative entrepreneurs need different kinds of spaces. Kickstarter and Etsy indicate of areas of interest.

### ETSY HANDMADE PRODUCTS

OUT OF 6026 TOTAL LISTINGS



# ECOLOGY + ENVIRONMENT + INFRASTRUCTURE





GLACIAL CONDITIONS OF THE PAST HAVE CREATED  
AN UNIQUE REGIONAL ECOLOGY

# REGIONAL FLOODING: The River and The Plains



**Post-Glacial topography, deposits combined with land cover and seasonality create the conditions for regional flood events**

# GLACIAL LANDSCAPE



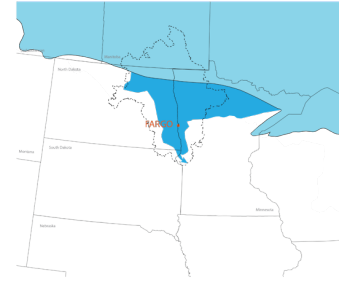
11,700 BP



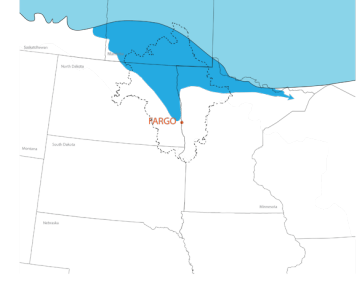
11,500 BP



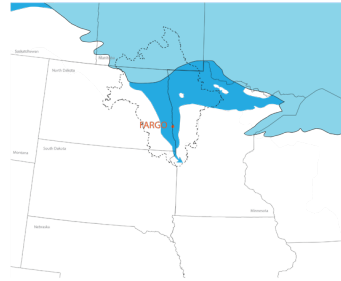
11,200 BP



11,100 BP



10,400 BP



9,900 BP



9,300 BP



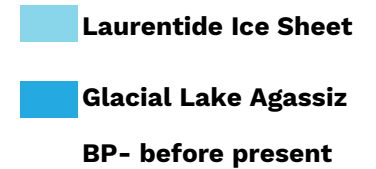
8,200 BP



7,800 BP



NOW





# RED RIVER BASIN



Saskatchewan

Manitoba

North Dakota

**RED RIVER BASIN**

**FARGO**

Montana

South Dakota

**MISSOURI RIVER BASIN**

**UPPER MISSISSIPPI RIVER**

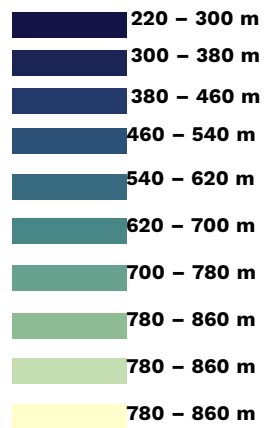
Minnesota

Nebraska

# RIVER VALLEY MORPHOLOGY

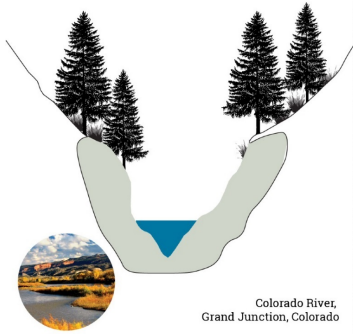
**Red river is meandering on the  
historic shallow lake bed of Lake  
Agassiz.**

**The age of the river is also quite  
young in comparison to others. This  
means that the depth of the river is  
shallow because it has not had time  
to be carved out**

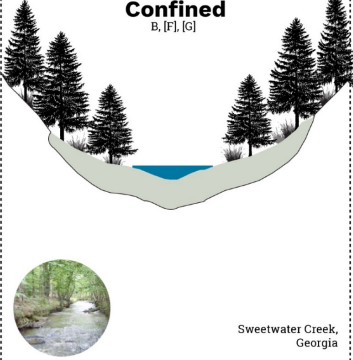


# RIVER VALLEY MORPHOLOGY

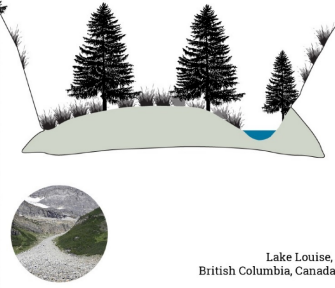
**Colluvial - Steep + V-Notched**  
Aa+, A



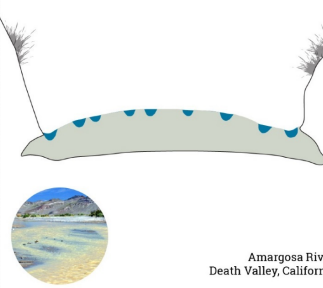
**Colluvial - Moderately Steep + Confined**  
B, [F], [G]



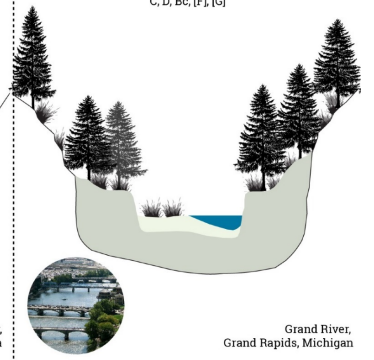
**Alluvial Fans - Inactive**  
B, [Fb], [G]



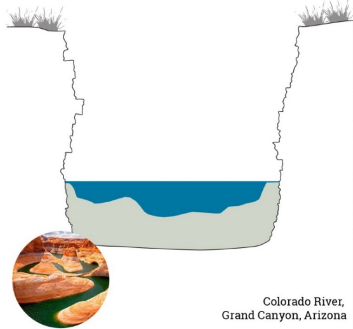
**Alluvial Fans - Active**  
D, [A], [Fb], [G]



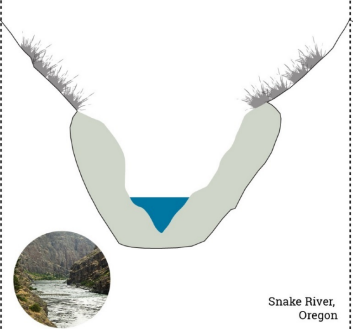
**Glacial Trough**  
C, D, Bc, [F], [G]



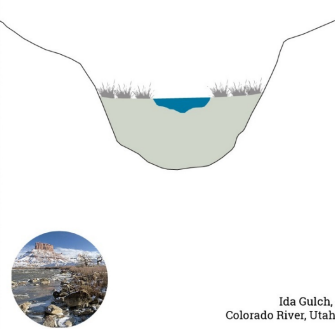
**Inner-Gorge**  
F, C, Bc



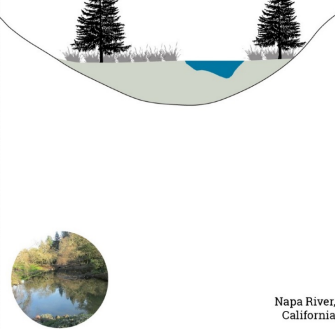
**Fluvial - Dissected**  
Aa+, A, B, C, F, G



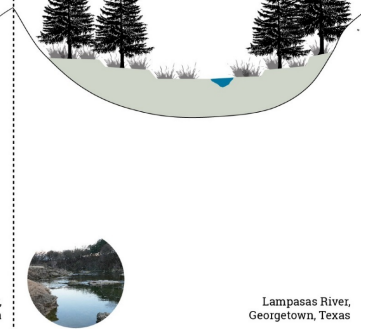
**Alluvial - Gulch Fill**  
B, C(b), Eb, [A], [D], [Fb], [G]



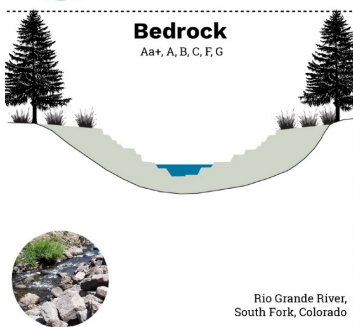
**Alluvial Fill**  
B, C(b), Eb, [A], [D], [Fb], [G]



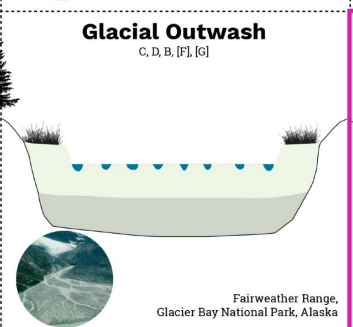
**Alluvial - Terraced**  
C, E, Bc, [A], [D], [F], [Gc]



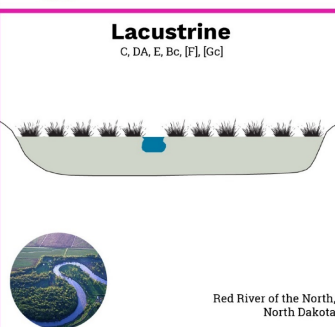
**Bedrock**  
Aa+, A, B, C, F, G



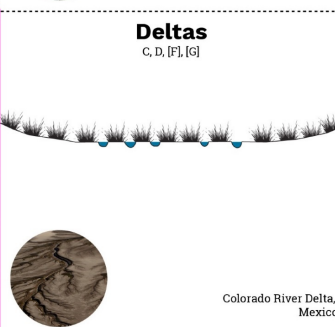
**Glacial Outwash**  
C, D, B, [F], [G]



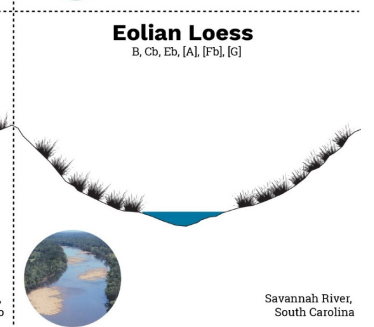
**Lacustrine**  
C, DA, E, Bc, [F], [Gc]



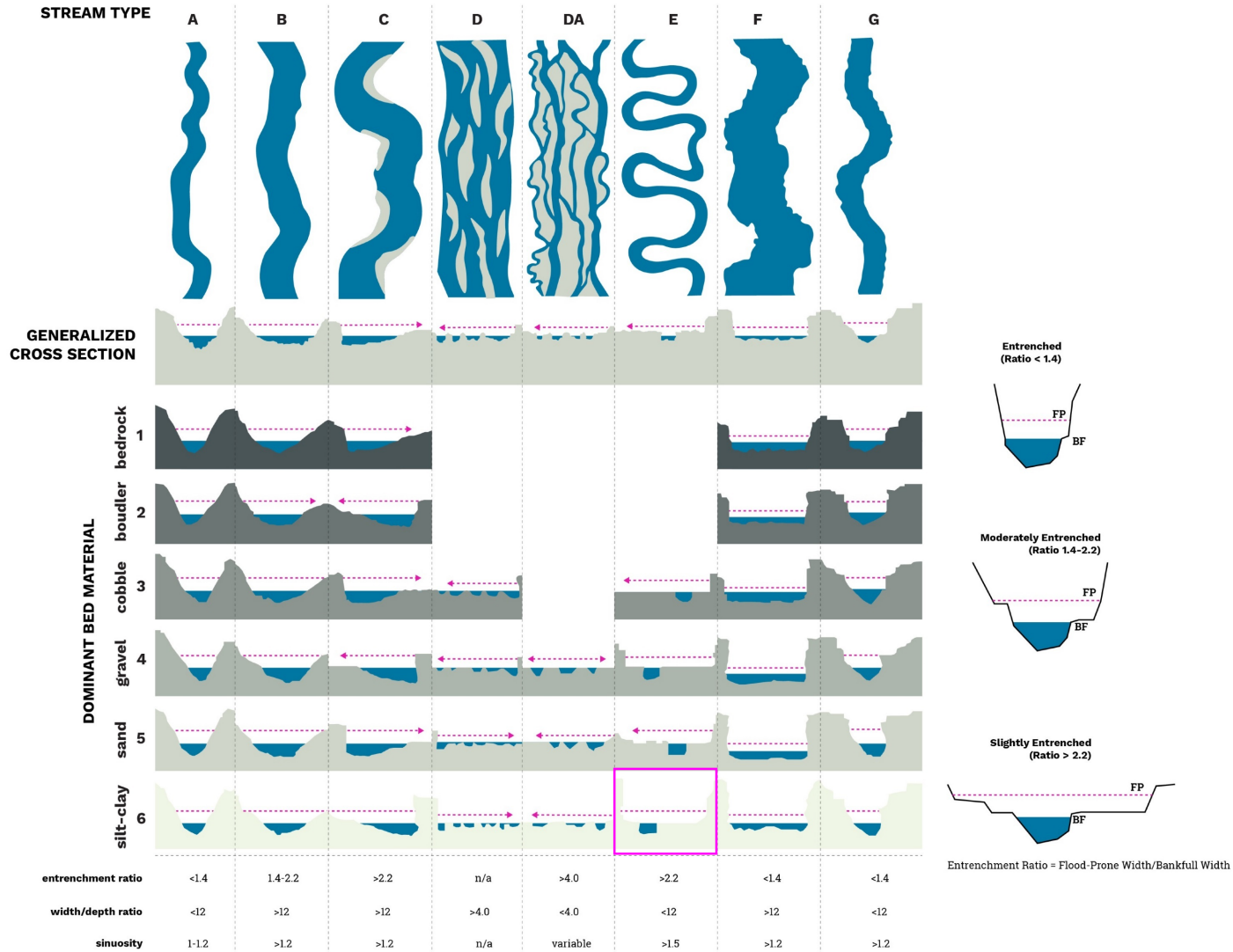
**Deltas**  
C, D, [F], [G]



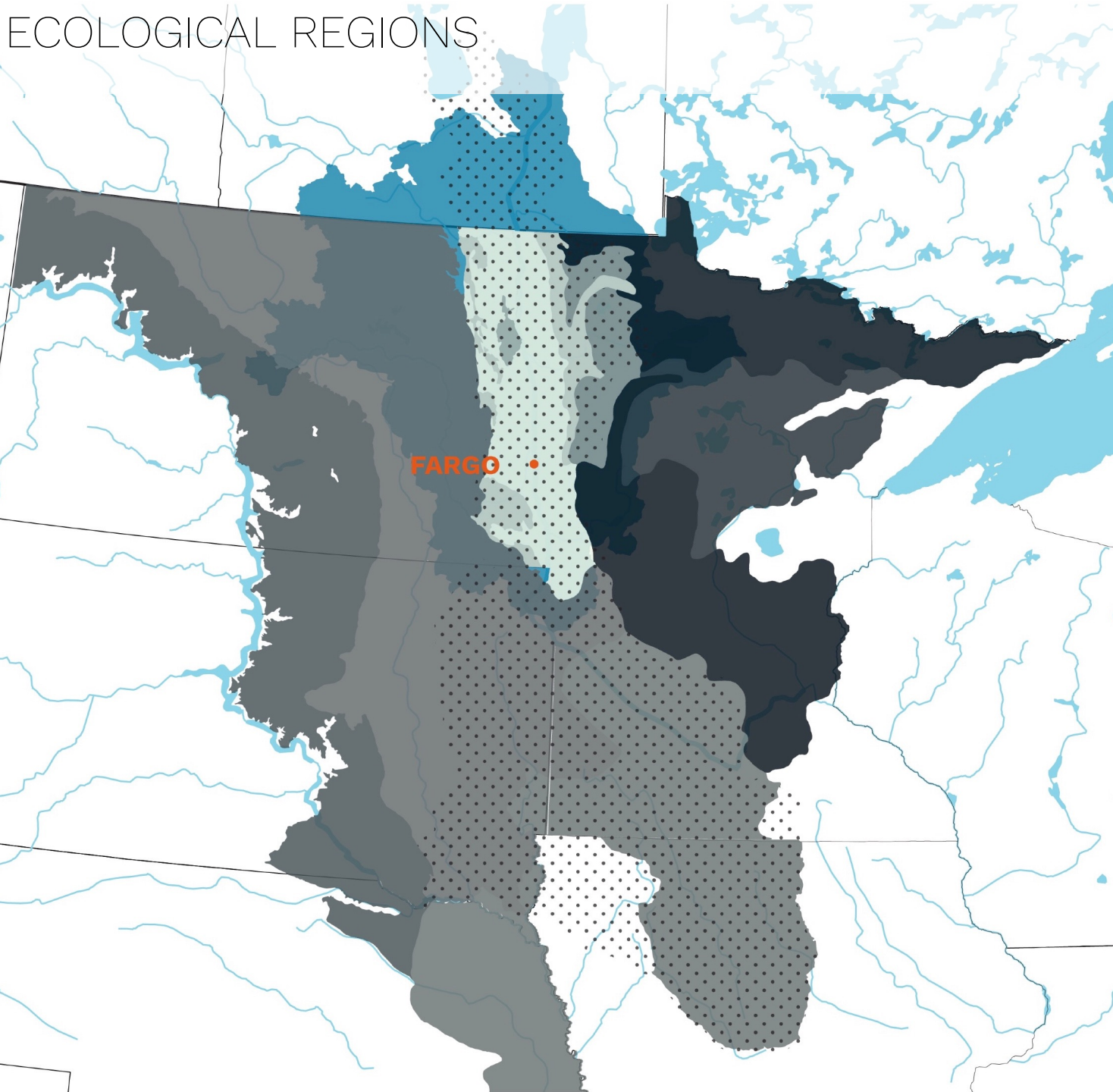
**Eolian Loess**  
B, Ch, Eb, [A], [Fb], [G]



# RIVER VALLEY CLASSIFICATION



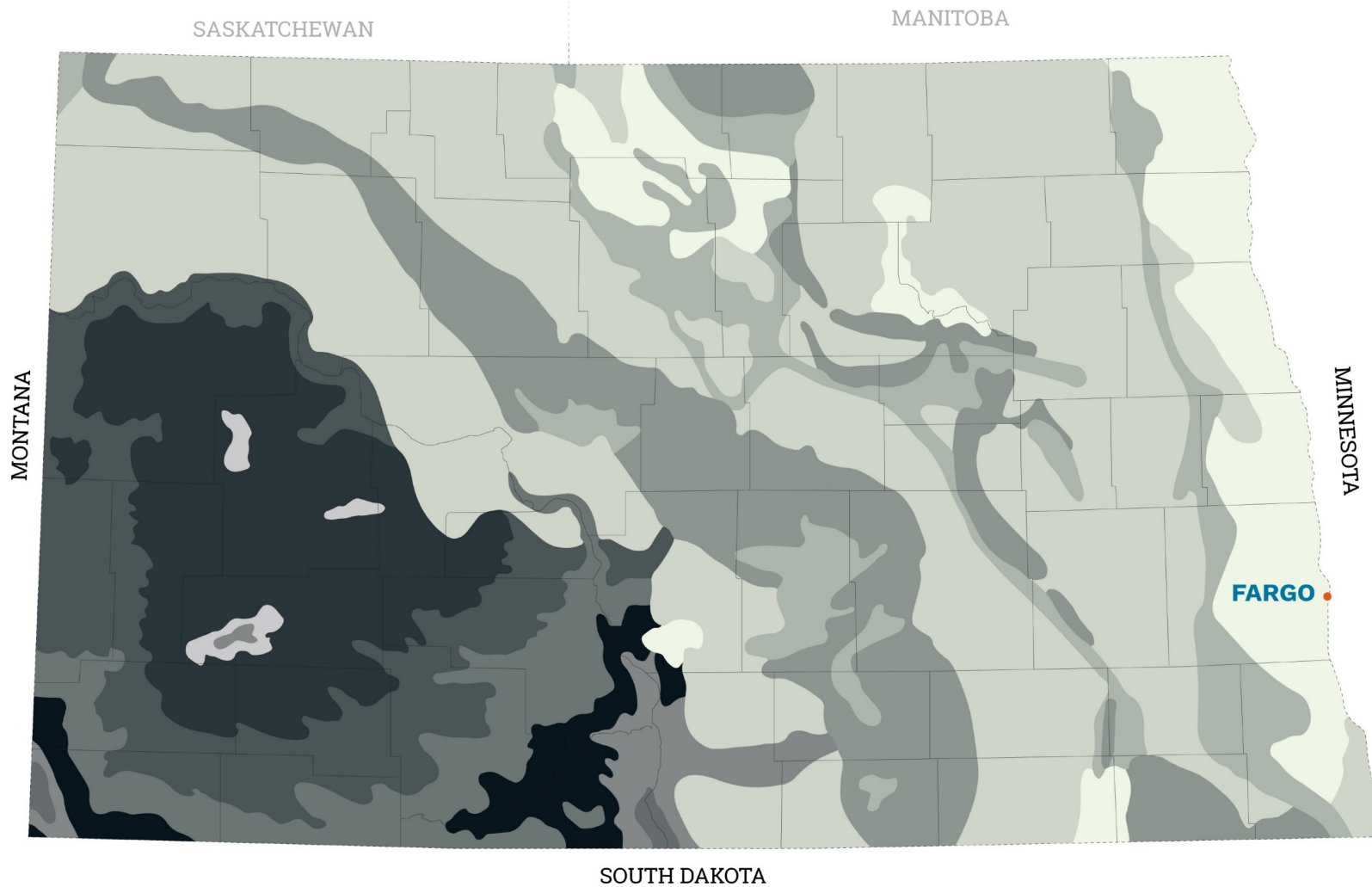
# ECOLOGICAL REGIONS



## Lake Agassiz Plain

- Glacial Lake Agassiz Basin
- Sand Deltas + Beach Ridges
- Saline Area
- Lake Agassiz Plains
- Western Cornbelt Plains
- Northern Glaciated Plains
- Northwestern Glaciated Plains
- Northern Lakes + Forests
- Northern Central hardwoods
- Northern Minnesota Wetlands
- Red River Basin
- Northern Tall Grass Prairie

# SURFICIAL GEOLOGY



## QUARTERNARY GEOLOGY (COLEHARBOR GROUP: glacial drift)

- lake sediment (silt + clay)
- river + beach sediment (sand + gravel)

### GLACIAL SEDIMENT

- flat to rolling land
- hilly land

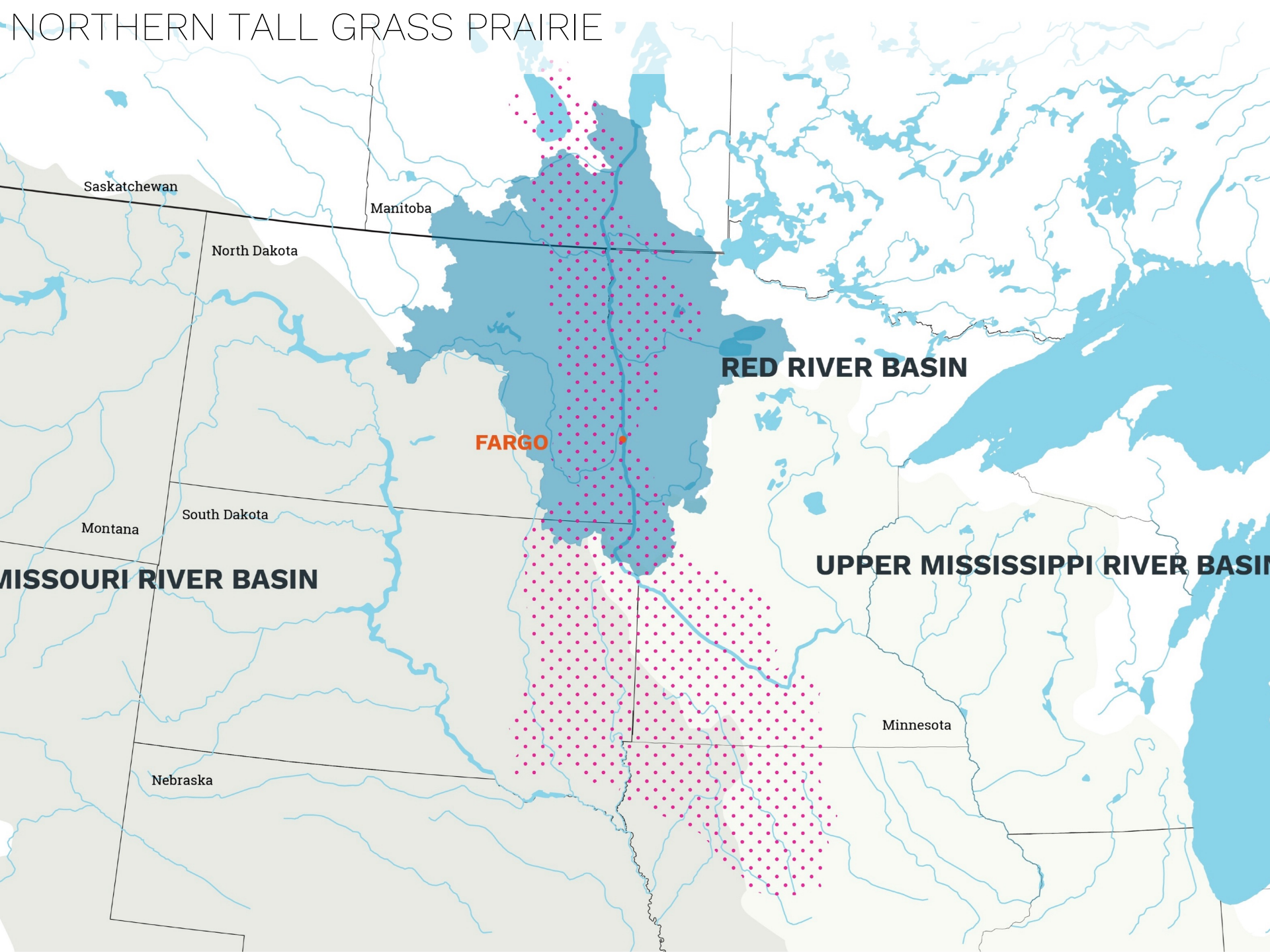
## TERTIARY GEOLOGY

- White River Group
- Golden Valley Formation
- Sentinel Butte Formation
- Bullion Creek Formation
- Cannonball and Lulow and Slop Formations

## CRETACEOUS GEOLOGY

- Hell Creek Formation
- Fox Hills Formation
- Pierre Formation

# NORTHERN TALL GRASS PRAIRIE



Saskatchewan

Manitoba

North Dakota

**RED RIVER BASIN**

**FARGO**

South Dakota

Montana

**MISSOURI RIVER BASIN**

**UPPER MISSISSIPPI RIVER BASIN**

Minnesota

Nebraska

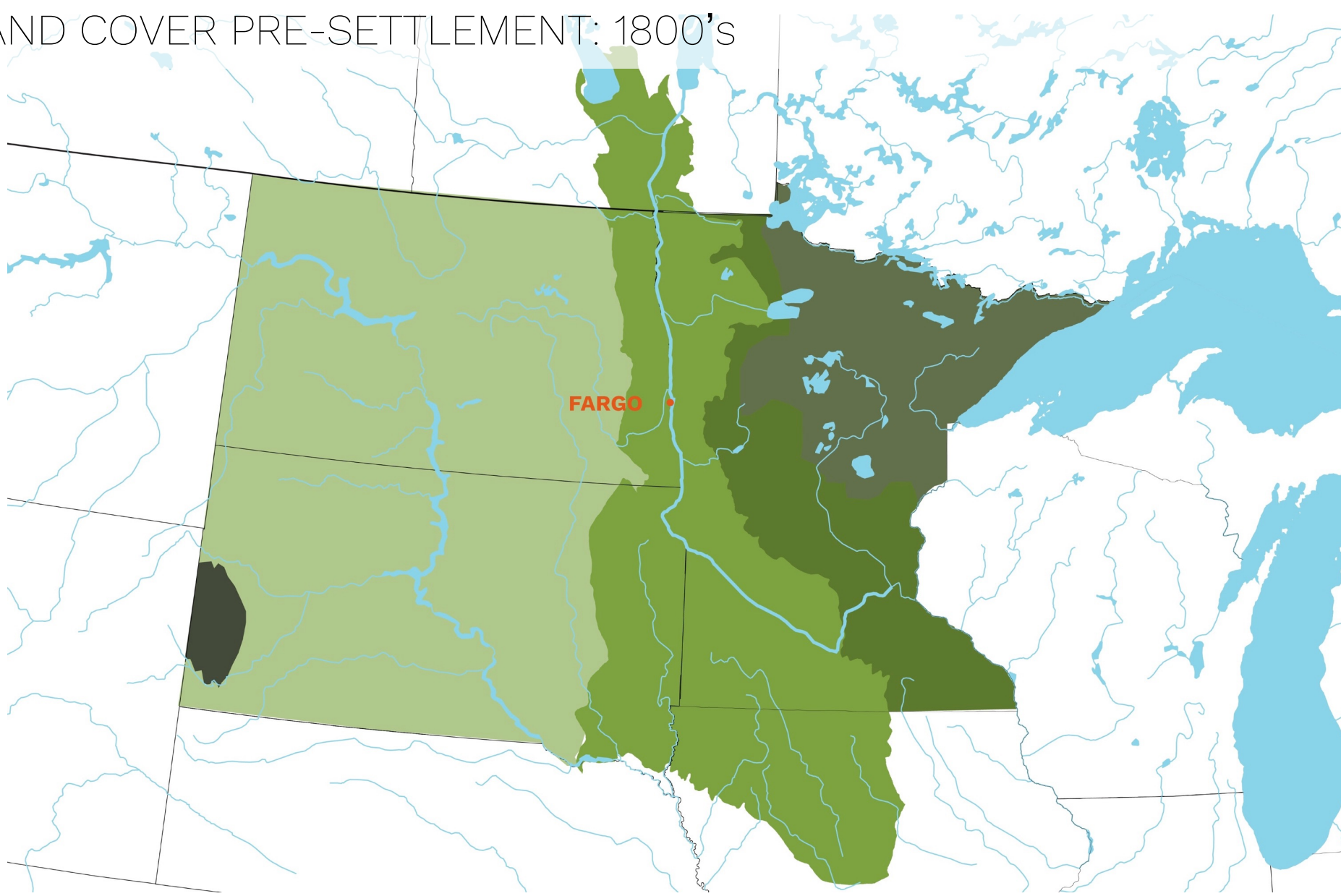
# NORTHERN TALL GRASS PRAIRIE

Theodore Roosevelt National Park, North Dakota





# LAND COVER PRE-SETTLEMENT: 1800's



FARGO

-  **Mixed Prairies: Transitional and Short-Grass**
-  **Northern Tall- Grass Prairie**
-  **Eastern Deciduous Forest**
-  **Northern Coniferous Forest**
-  **Rockies**

# CURRENT LAND COVER

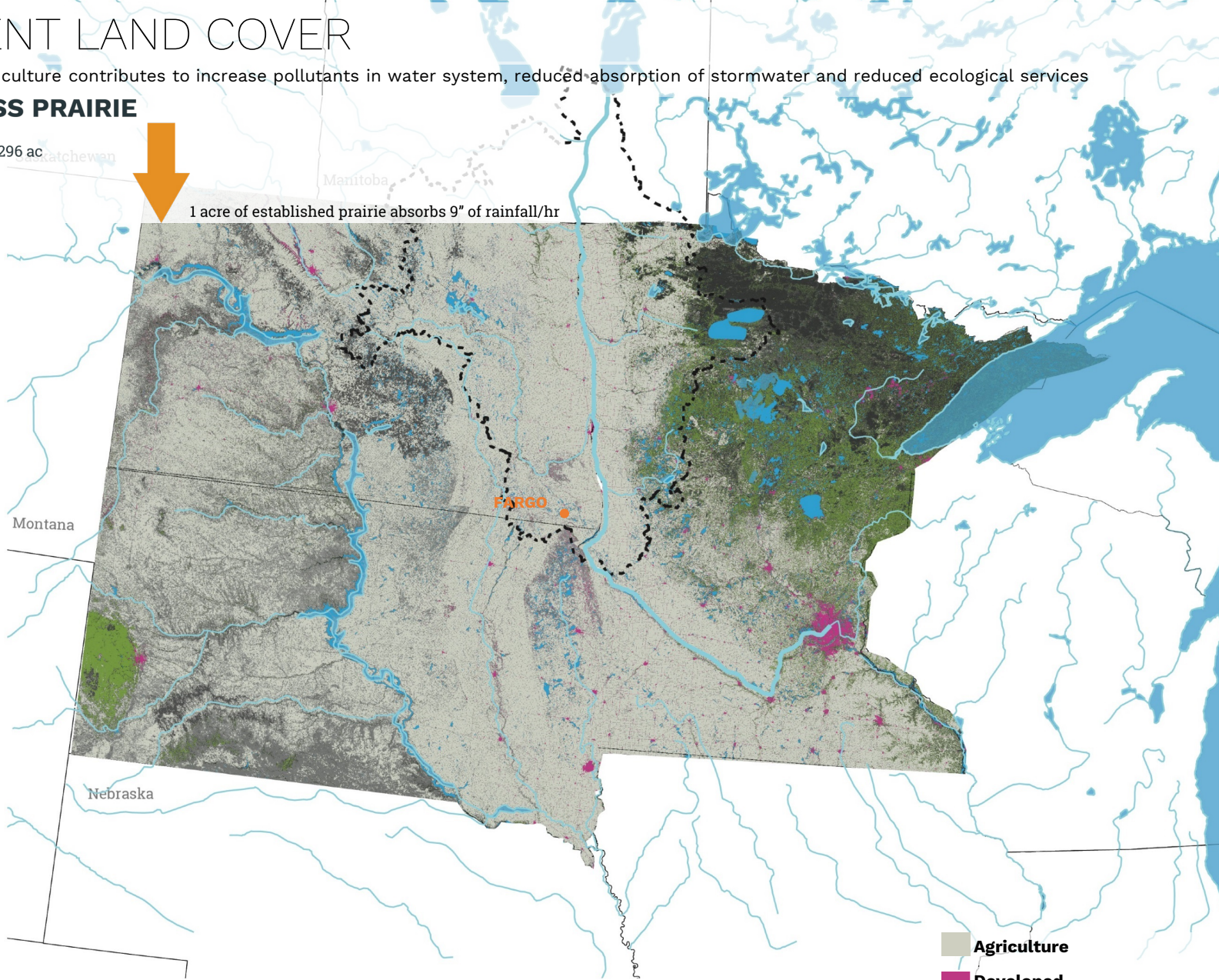
Transition to agriculture contributes to increase pollutants in water system, reduced absorption of stormwater and reduced ecological services

## TALL GRASS PRAIRIE

99.9% decrease  
from 321,000 ac to 296 ac



1 acre of established prairie absorbs 9" of rainfall/hr



-  Agriculture
-  Developed
-  Forest + Woodland
-  Semi-Desert

# REGIONAL FLOODING: Ice-Jam + Spring Thaw

**Ancestral flow of the river is to the North, which contributes to flooding for multiple reasons.**

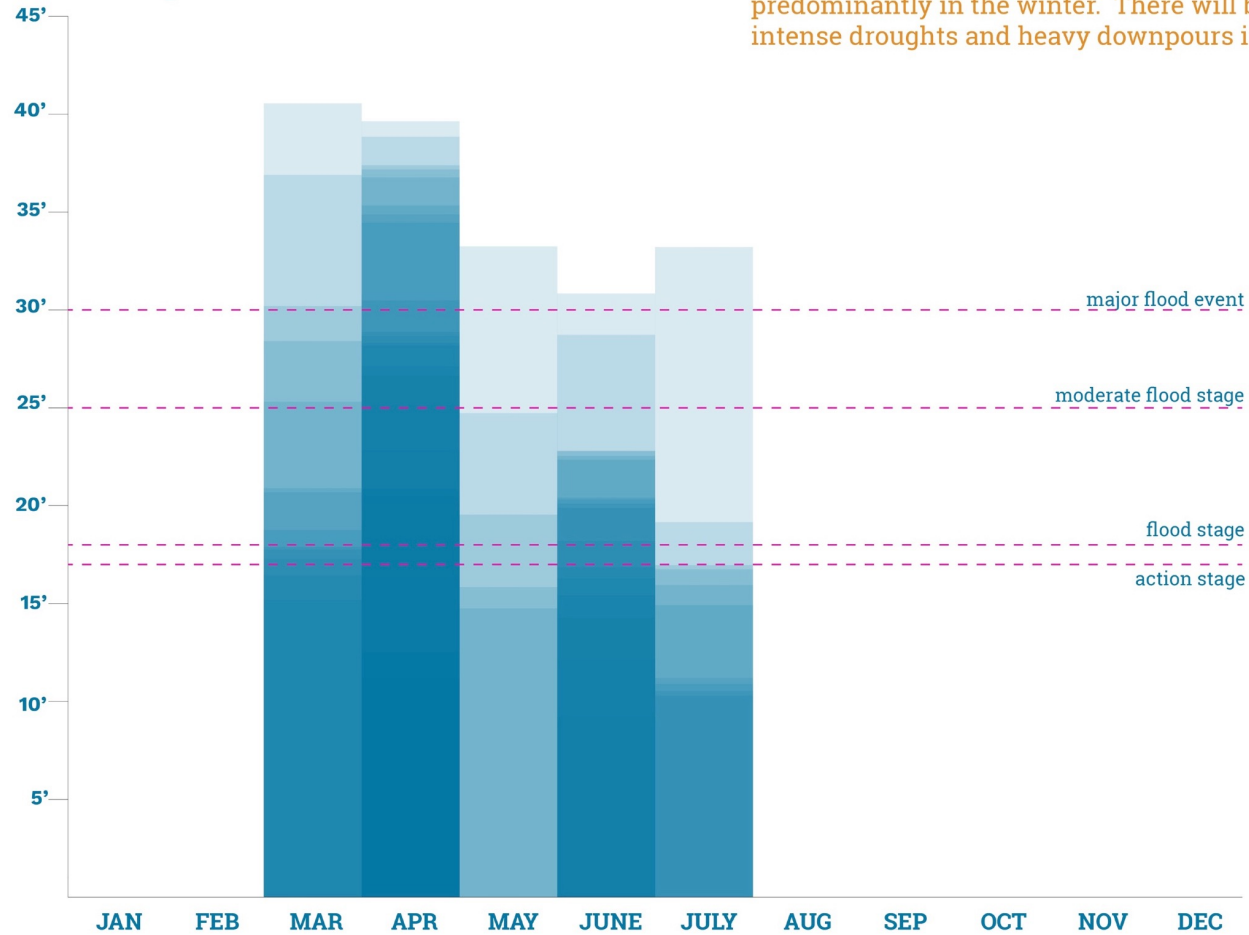
**As Spring approaches the ice melts from the south and flows north. This causes backflow because the northern portion of the river is still frozen.**



# FLOODING

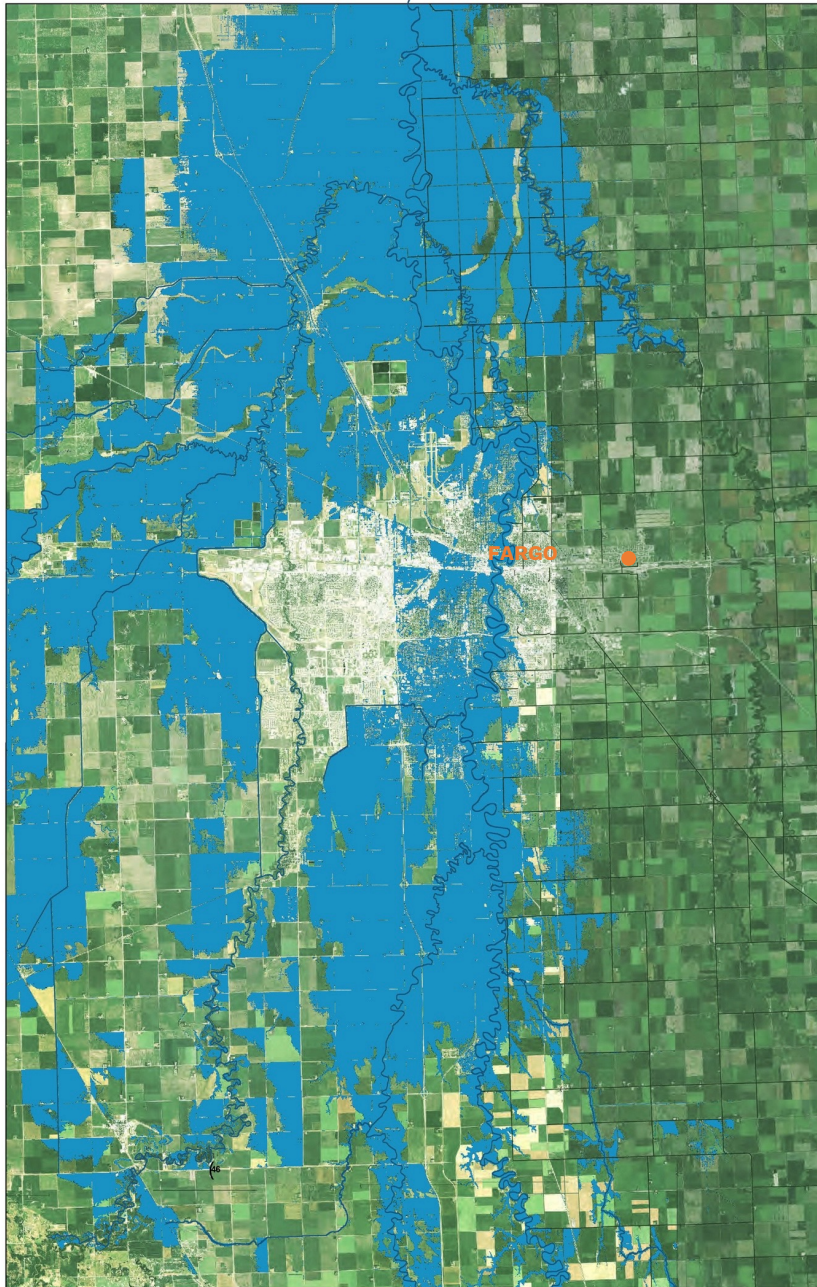
## 60-year seasonal floods

Climate change will affect precipitation levels with increases predominantly in the winter. There will be more frequent and intense droughts and heavy downpours in the summer.

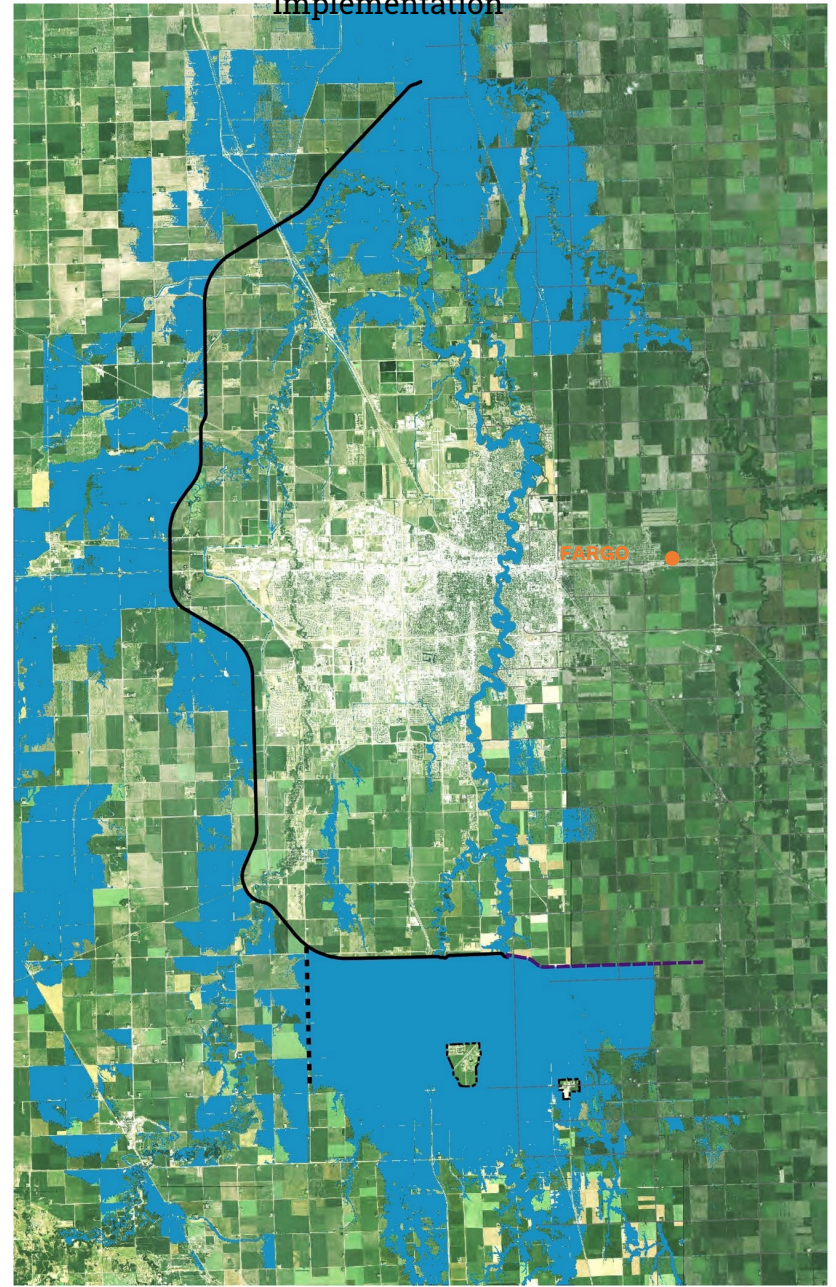


# PROPOSED FLOOD INFRASTRUCTURE

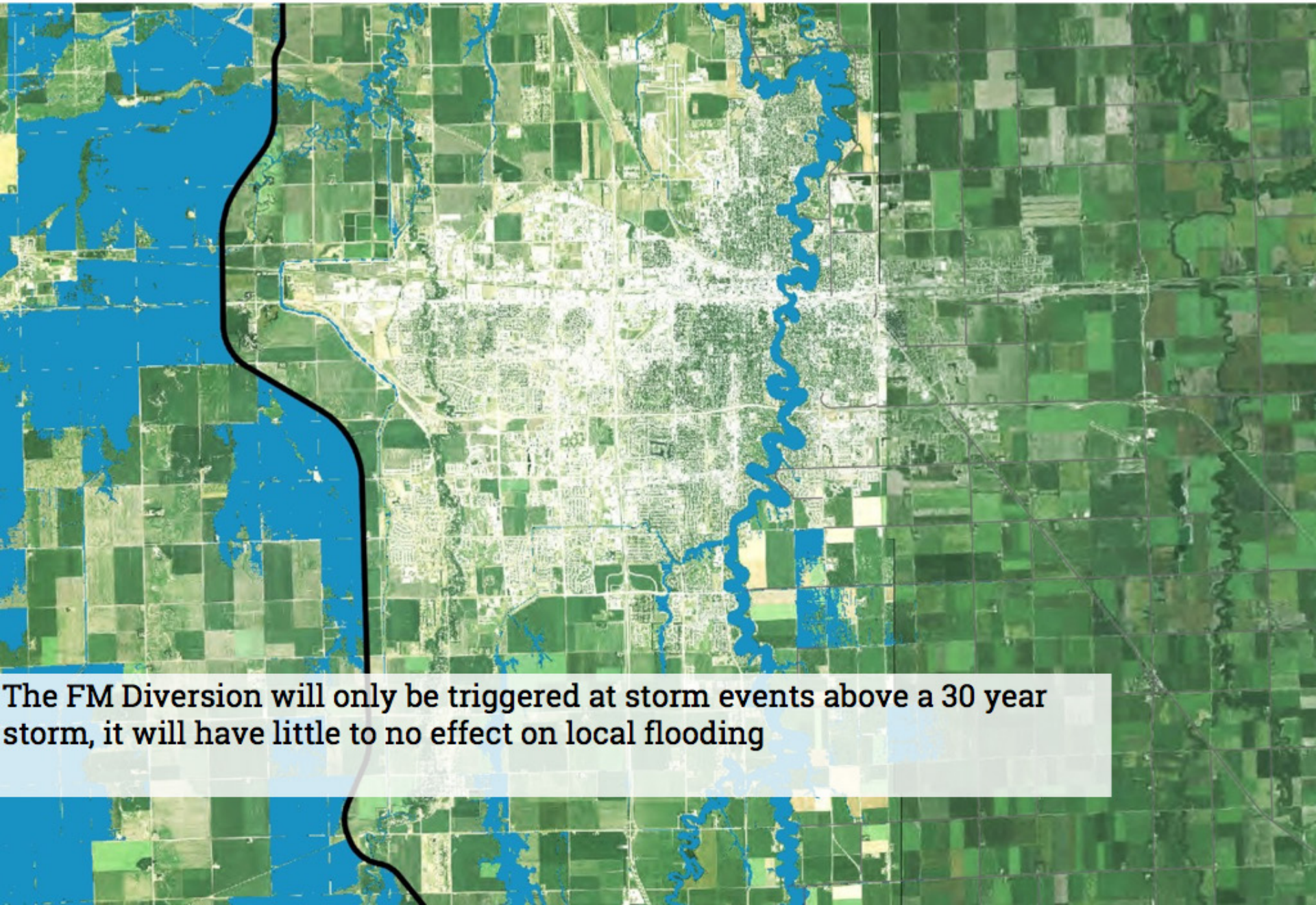
Before Implementation



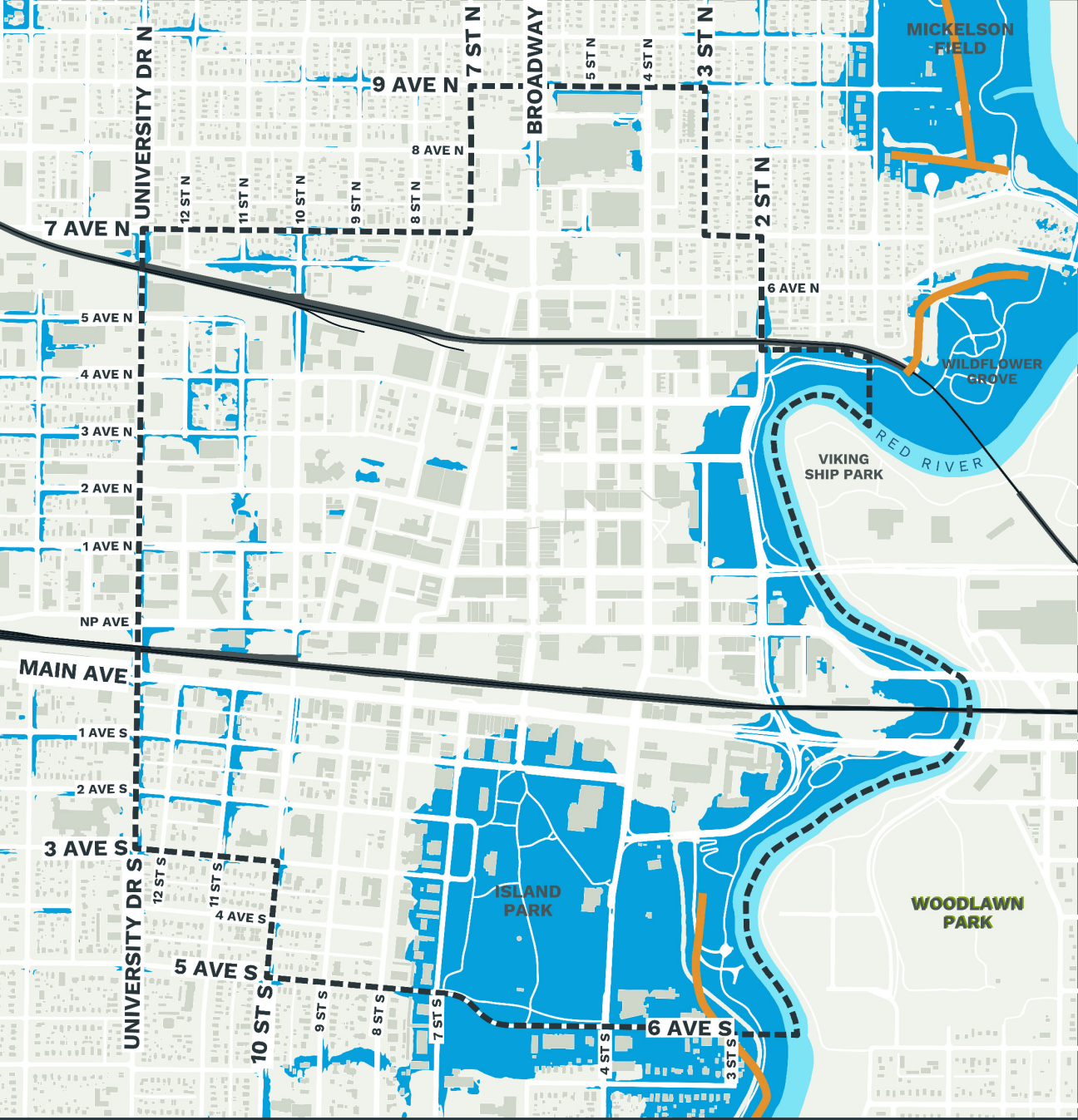
After Implementation



# PROPOSED FLOOD INFRASTRUCTURE



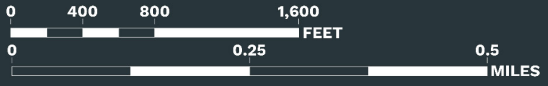
The FM Diversion will only be triggered at storm events above a 30 year storm, it will have little to no effect on local flooding

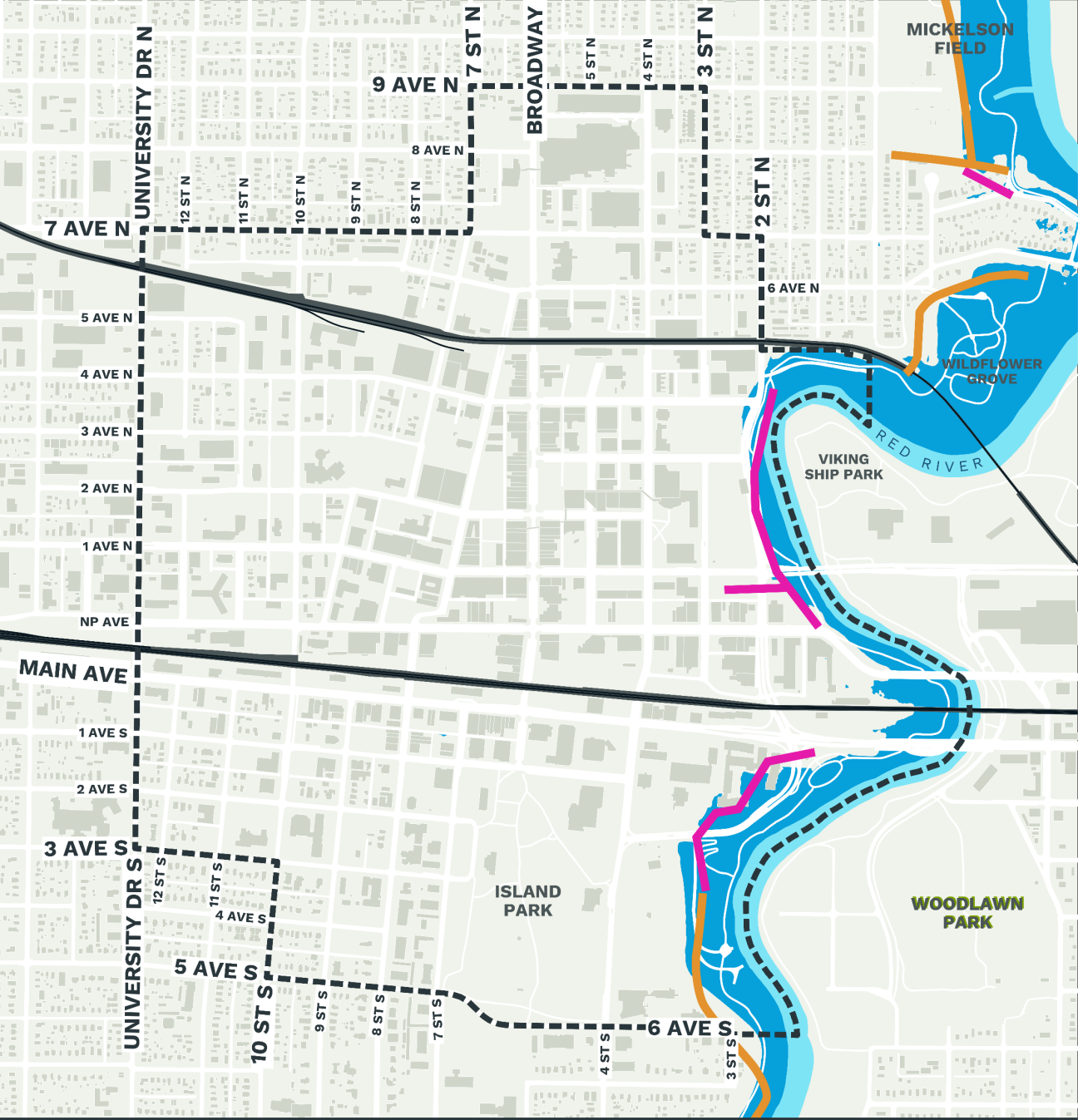


# 100 YEAR FLOOD DOWNTOWN

SOURCE: Fargo In-Town Flood Projects Status Report

- EXISTING LEVEES**
- 100 YEAR FLOOD**
- DOWNTOWN FOCUS AREA**

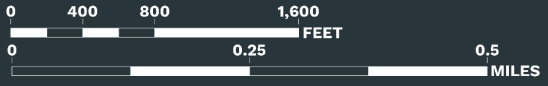




# 100 YEAR FLOOD DOWNTOWN (PROPOSED)

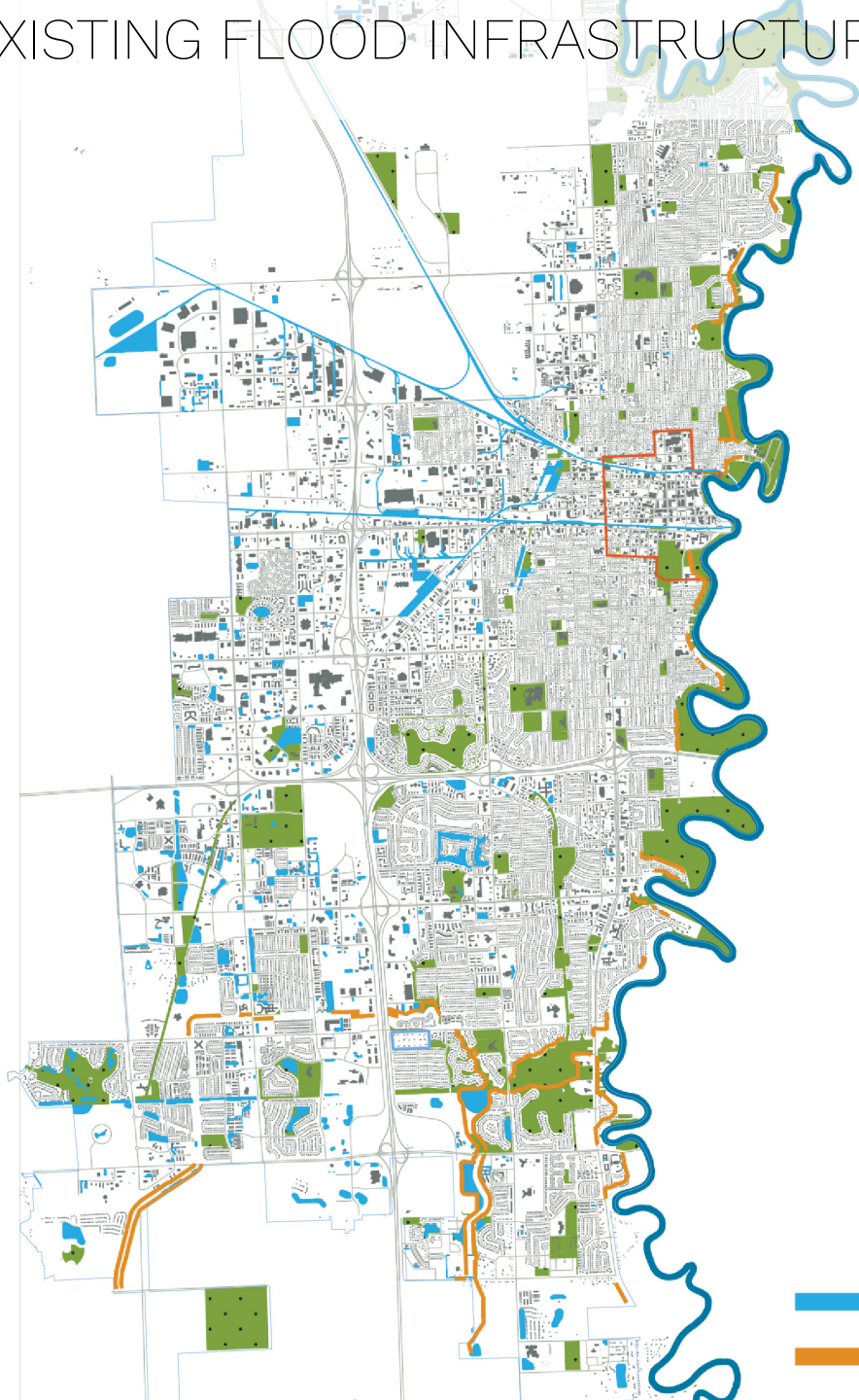
SOURCE: Fargo In-Town Flood Projects Status Report

- █ **PROPOSED LEVEES**
- █ **EXISTING LEVEES**
- █ **100 YEAR FLOOD**
- DOWNTOWN FOCUS AREA**





# EXISTING FLOOD INFRASTRUCTURE



**LOW to NO INFILTRATION DUE TO LAKE AGASSIZ  
SEDIMENT CREATE THE NEED FOR  
COMPARATIVELY LARGE STORMWATER BASINS +  
FLOOD INFRASTRUCTURE**

-  Detention Basins
-  Flood Walls

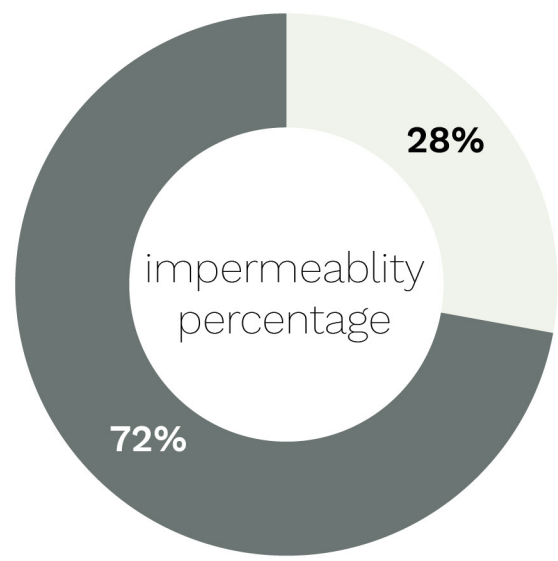
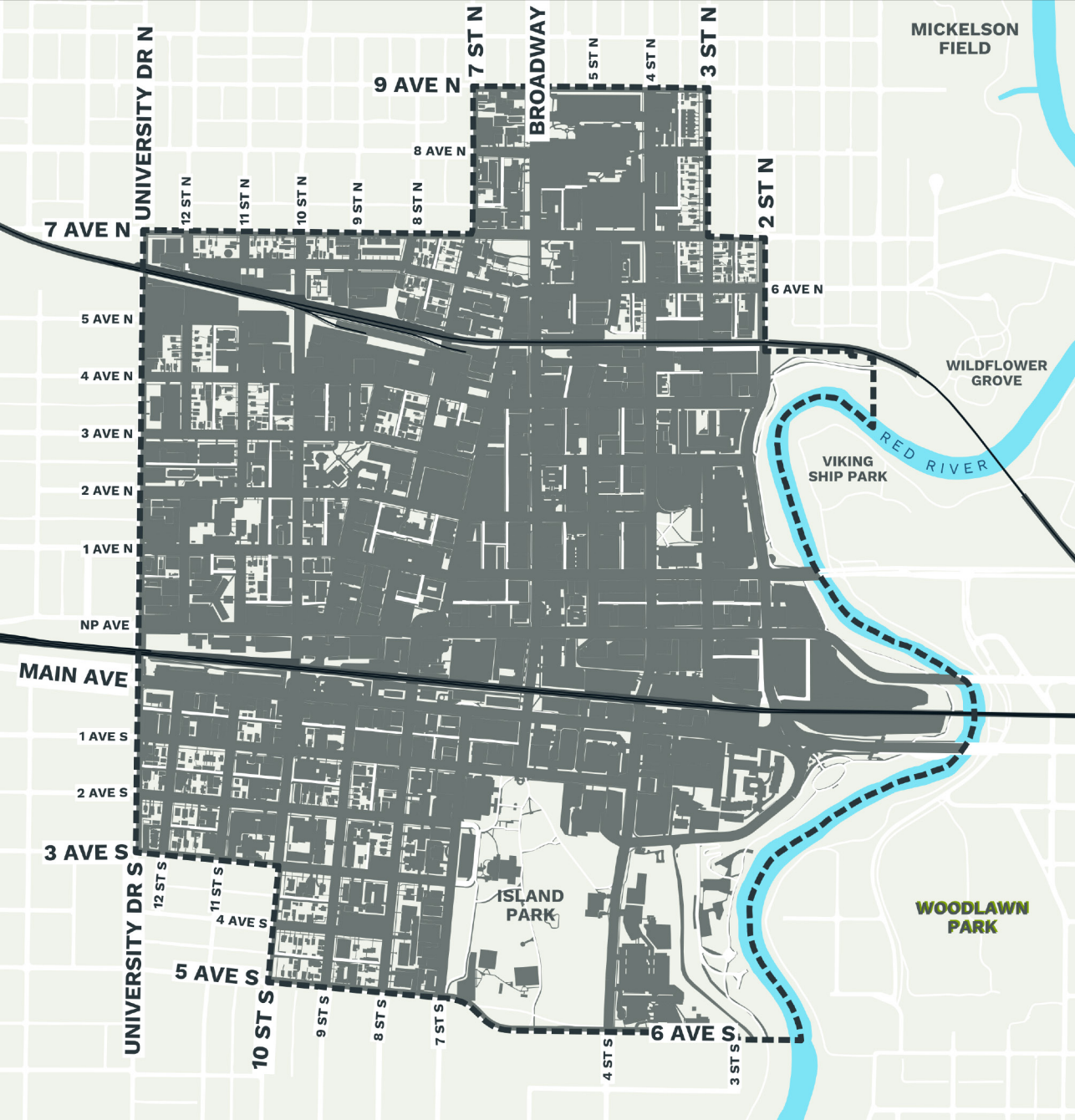
Approaches to managing stormwater differ throughout the city



# LOCAL FLOODING: What happens in Fargo...



Local storm drainage capacity, infiltration rate (land cover and soil capacity), durations and intensity of the storm create the conditions for local flooding

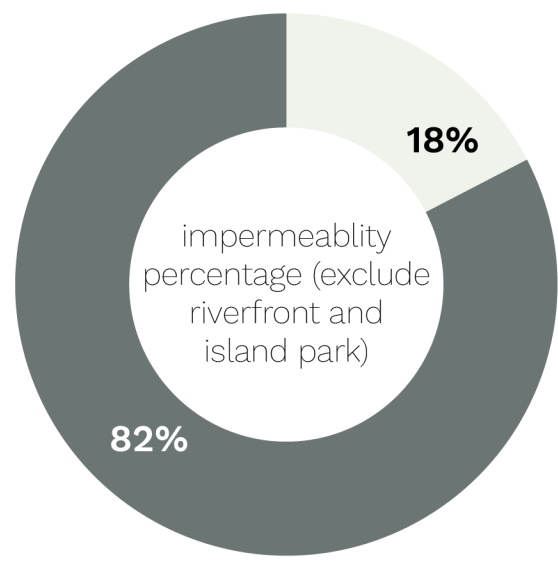
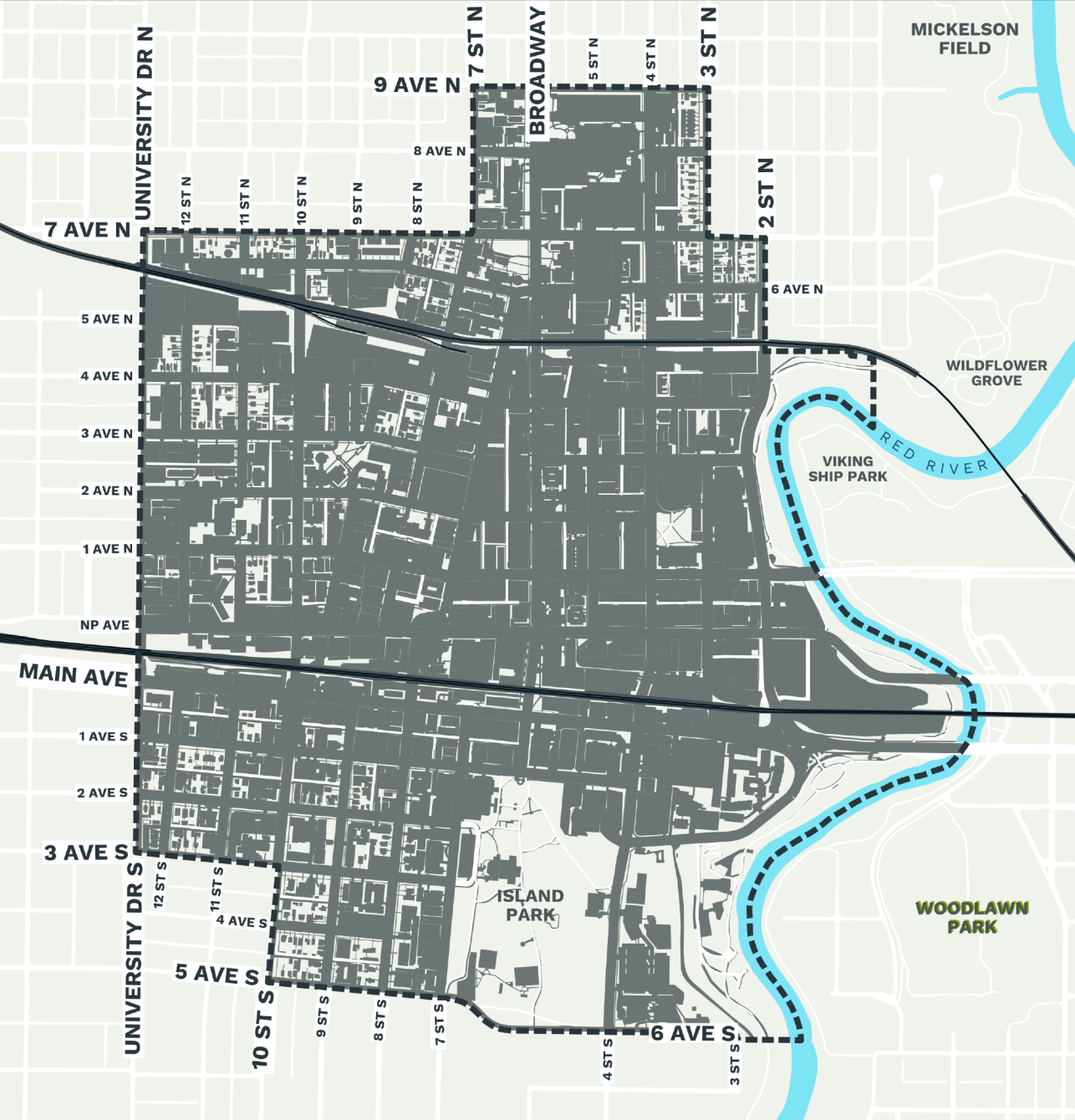


## Impermeable Surface

Source: City of Fargo

-  RAIL
-  IMPERMEABLE SURFACE
-  DOWNTOWN FOCUS AREA



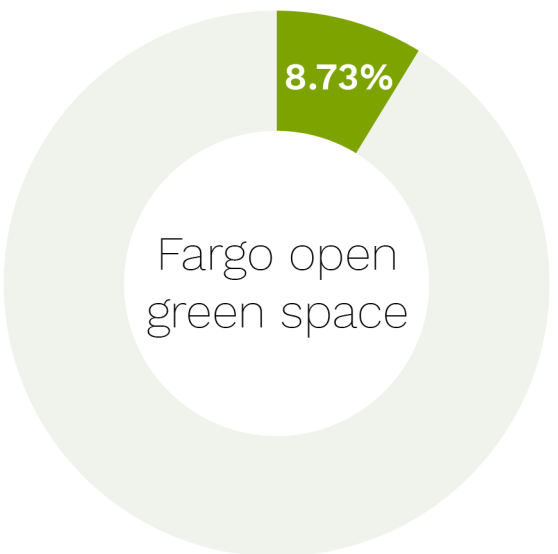
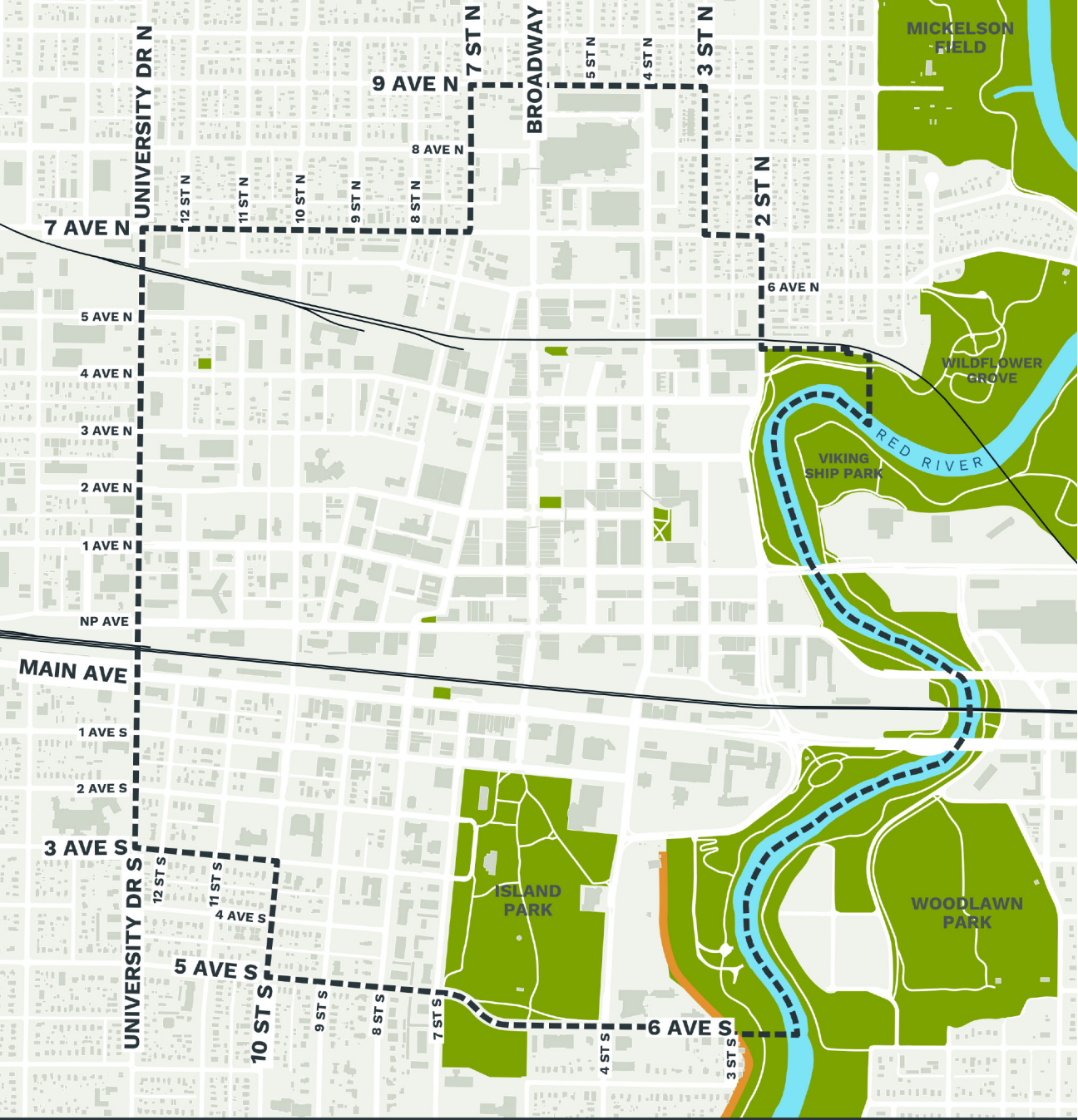


## Impermeable Surface

Source: City of Fargo

-  RAIL
-  IMPERMEABLE SURFACE
-  DOWNTOWN FOCUS AREA





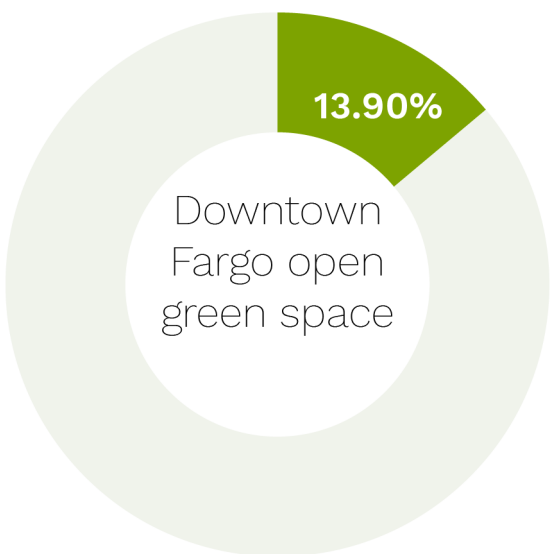
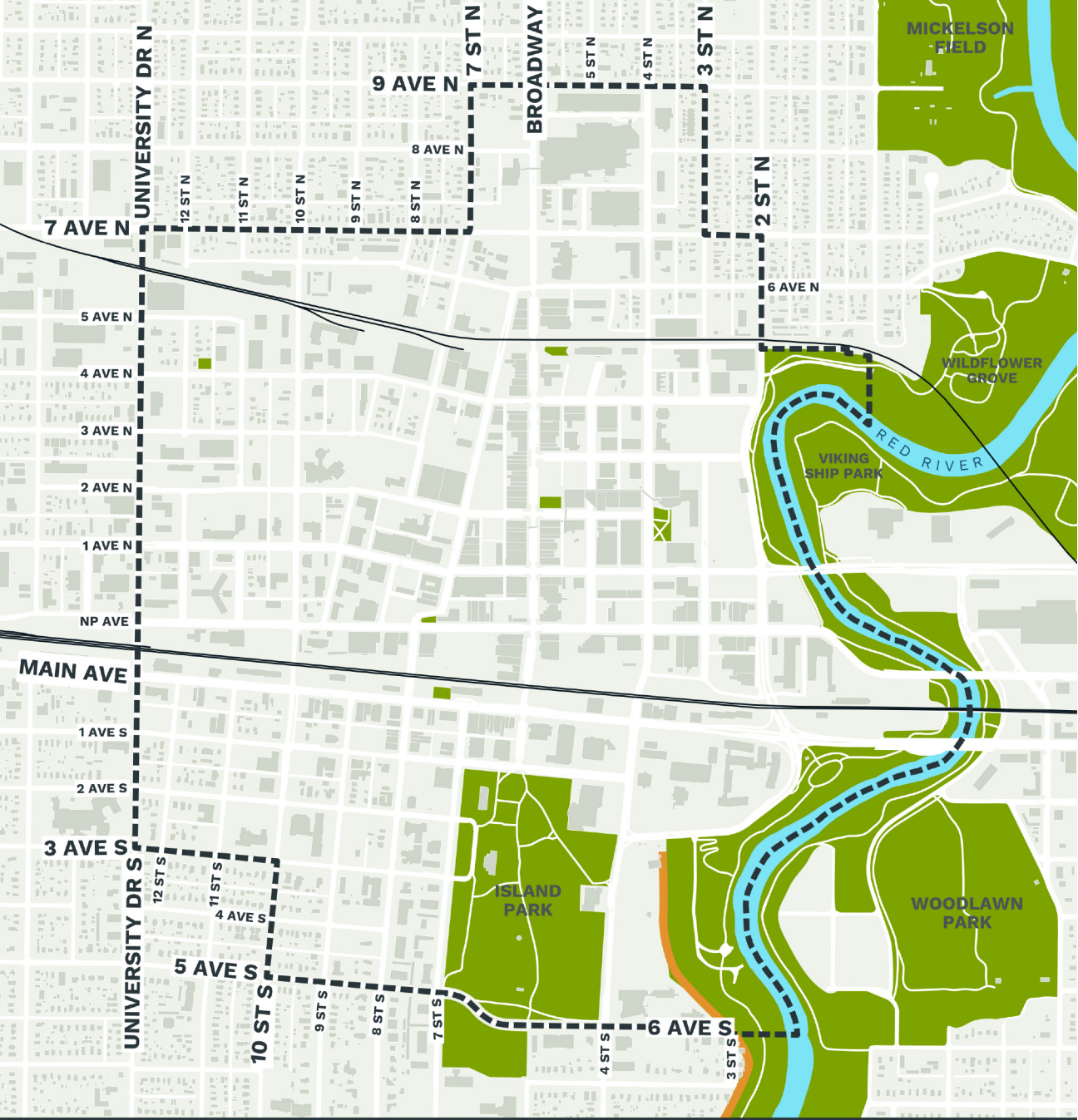
Fargo open green space

# FARGO OPEN GREEN SPACE

SOURCE: CITY OF FARGO

-  **CONSTRUCTED LEVEES**
-  **OPEN GREEN SPACE**
-  **DOWNTOWN FOCUS AREA**

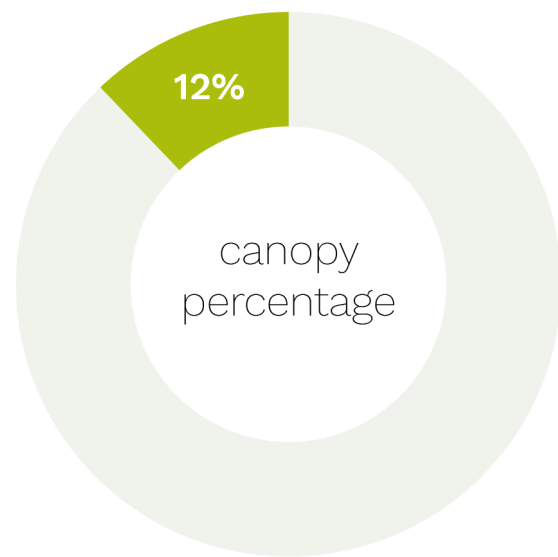
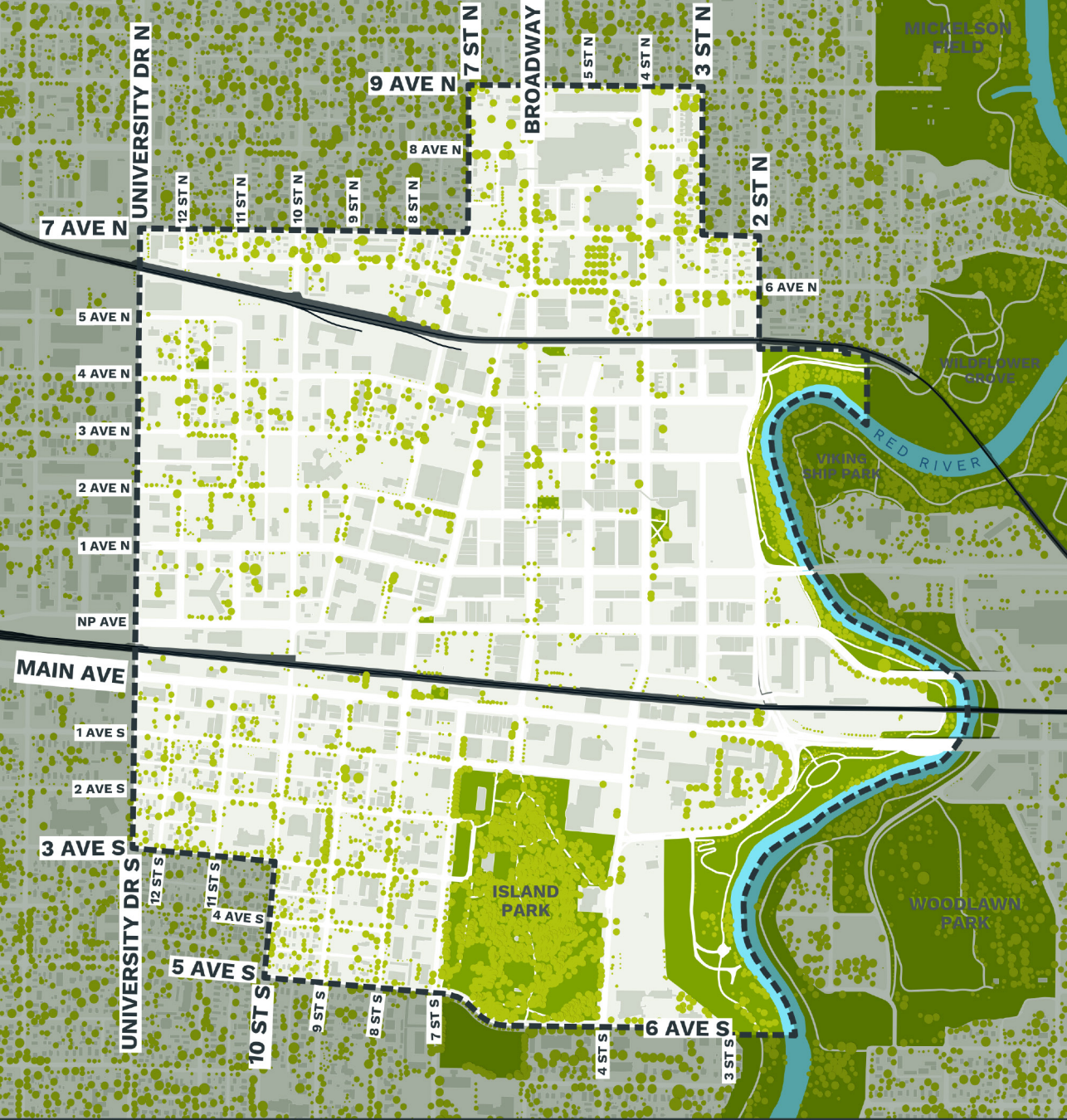




# DOWNTOWN OPEN GREEN SPACE

SOURCE: CITY OF FARGO

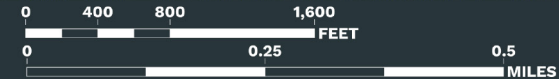
- CONSTRUCTED LEVEES**
- OPEN GREEN SPACE**
- DOWNTOWN FOCUS AREA**



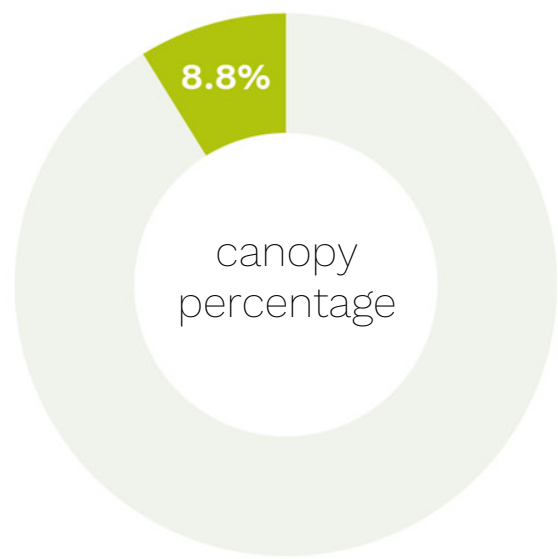
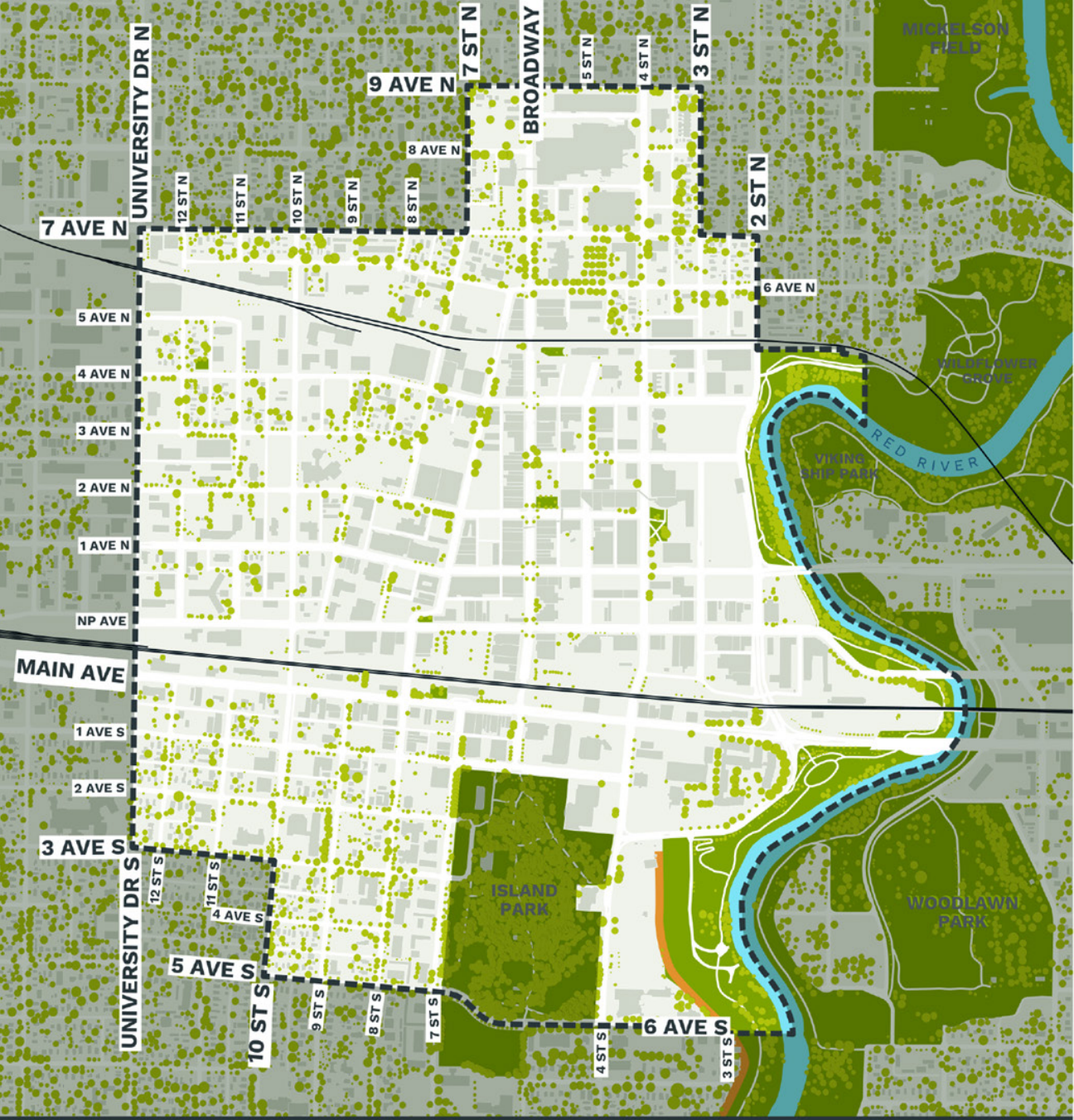
# TREE CANOPY

SOURCE: CITY OF FARGO

-  RAIL
-  OPEN SPACE
-  TREE CANOPY
-  DOWNTOWN FOCUS AREA





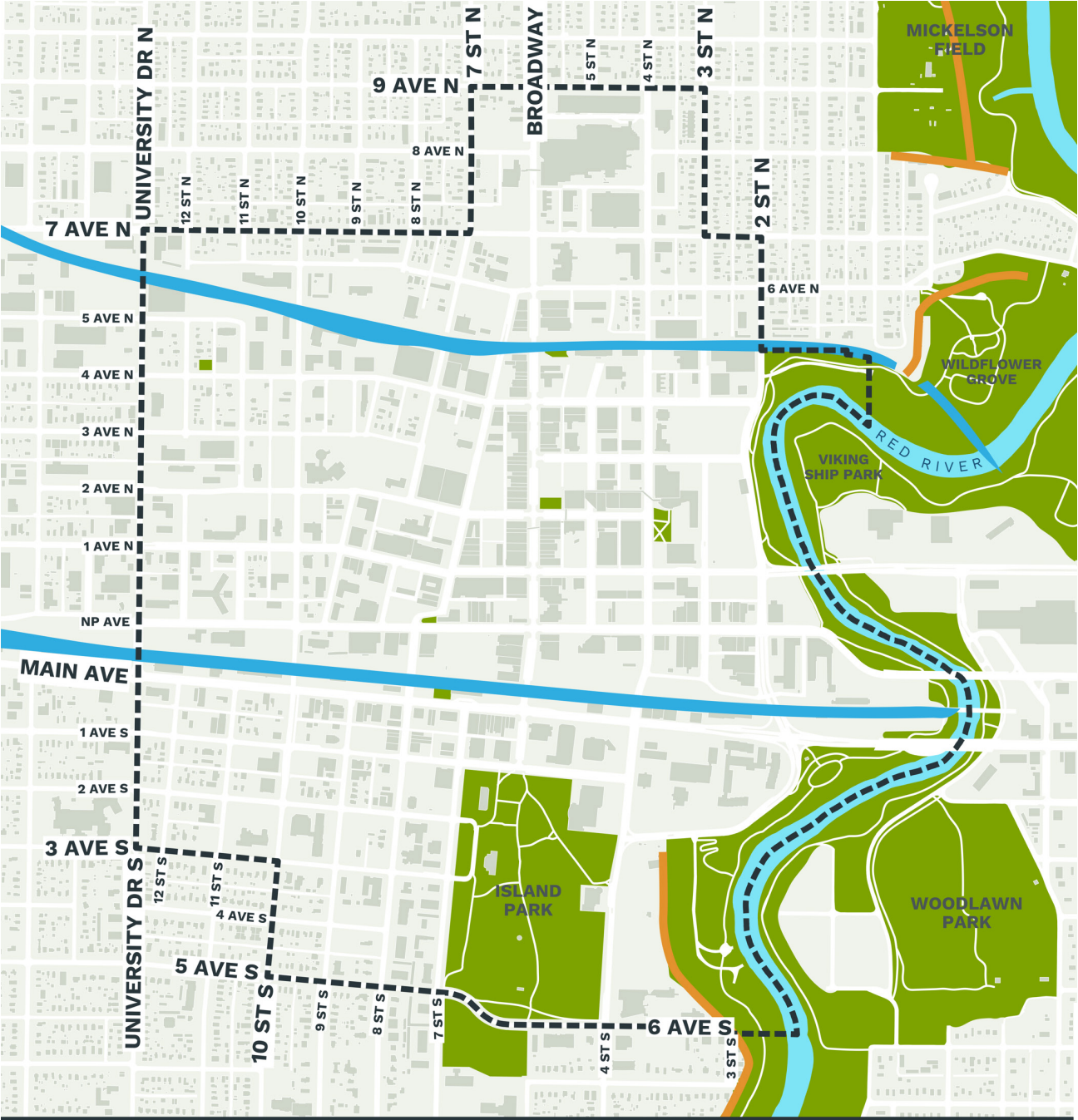


# TREE CANOPY (EXCLUDE ISLAND PARK)

SOURCE: CITY OF FARGO

-  RAIL
-  OPEN SPACE
-  TREE CANOPY
-  DOWNTOWN FOCUS AREA



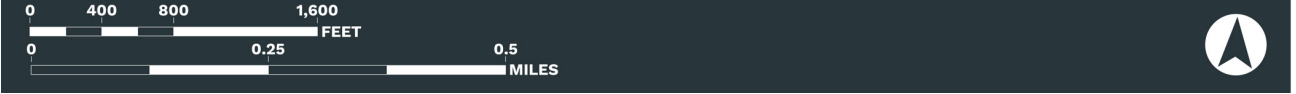


**Downtown has limited stormwater infrastructure in place. Due to space limitations current practices and changes in precipitation amounts. New solutions will have to be considered to reduce local flooding risks.**

### EXISTING FLOOD INFRASTRUCTURE

SOURCE: CITY OF FARGO FLOOD MITIGATION PROJECT


- REGIONAL DETENTION BASINS**
- CONSTRUCTED LEVEES**
- DOWNTOWN FOCUS AREA**



# EXISTING FLOOD INFRASTRUCTURE. WATER QUALITY

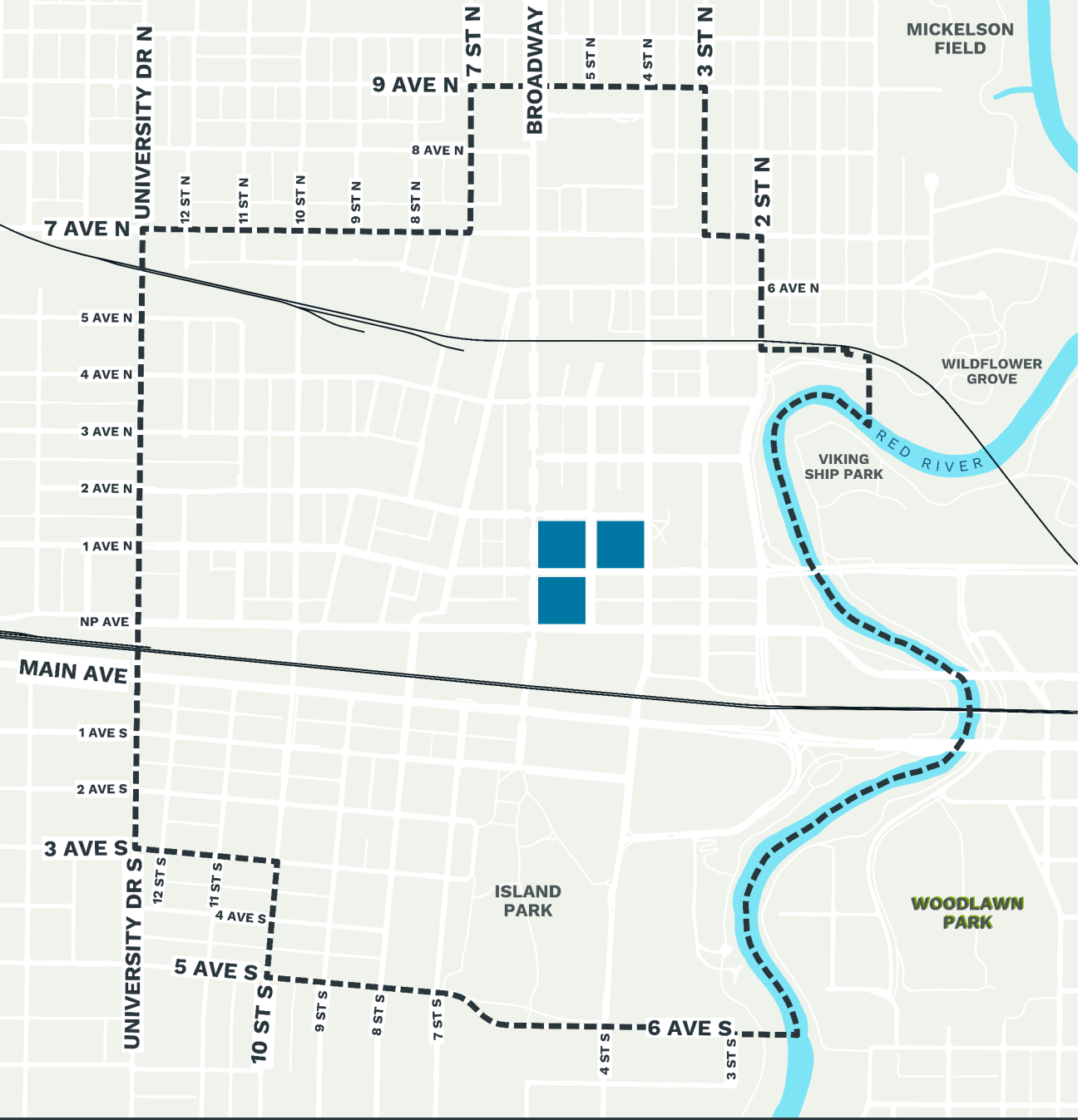


# THE INFLUENCE OF FIRST FLUSH



**First flush is the initial surface runoff of a rainstorm. During this phase, water pollution entering storm drains in areas with high proportions of impervious surfaces is typically more concentrated compared to the remainder of the storm.**

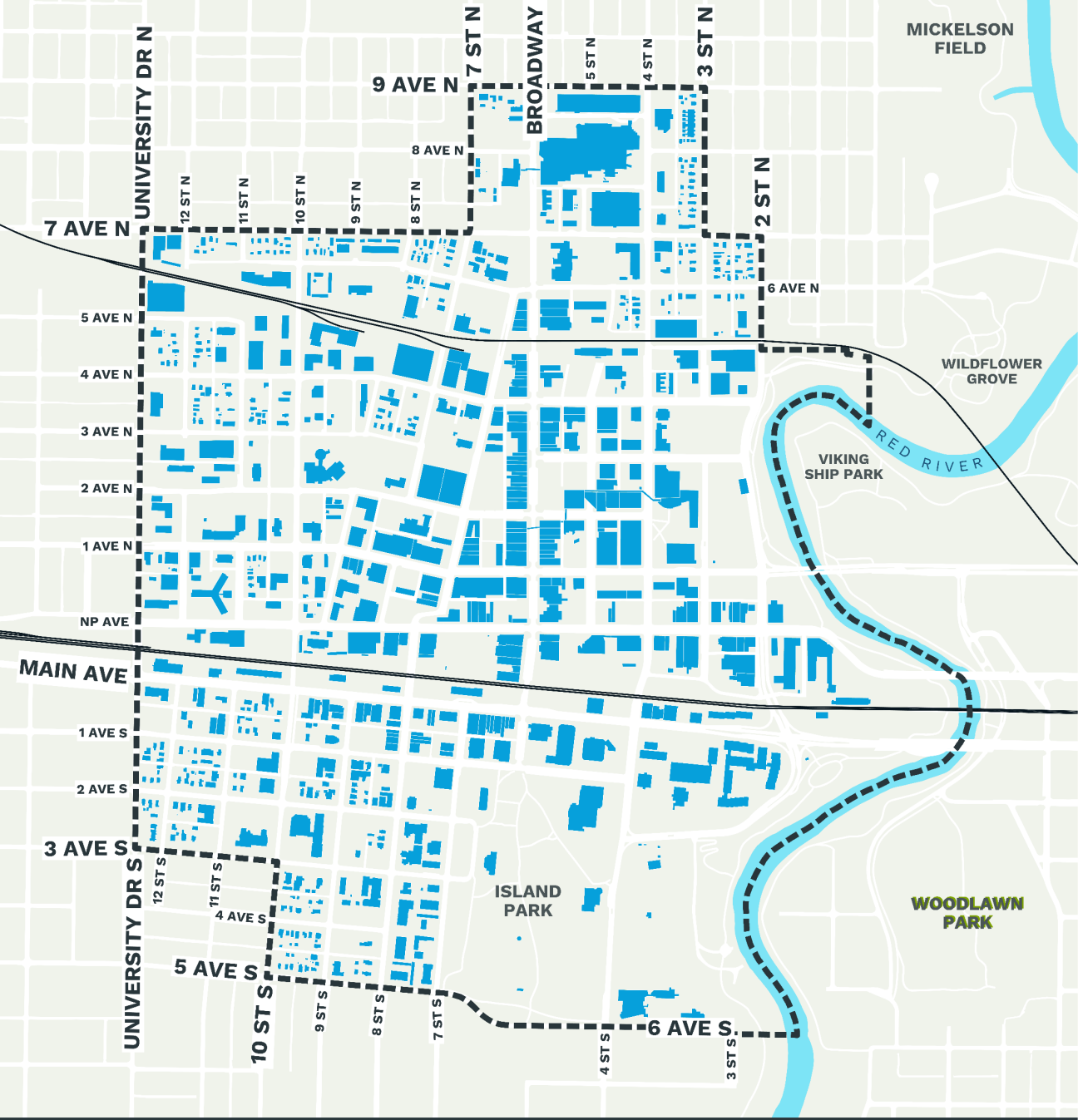
[https://en.wikipedia.org/wiki/First\\_flush](https://en.wikipedia.org/wiki/First_flush)



**TOTAL AREA = 1215941 ft<sup>3</sup>**  
**5 ft DEEP 3 BLOCK**  
**OF DETENTION PONDS**

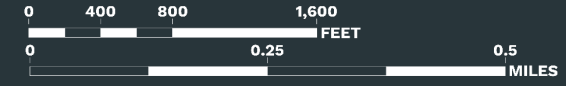
WATER QUALITY  
 TREATMENT

- DETENTION POND
- DOWNTOWN FOCUS AREA

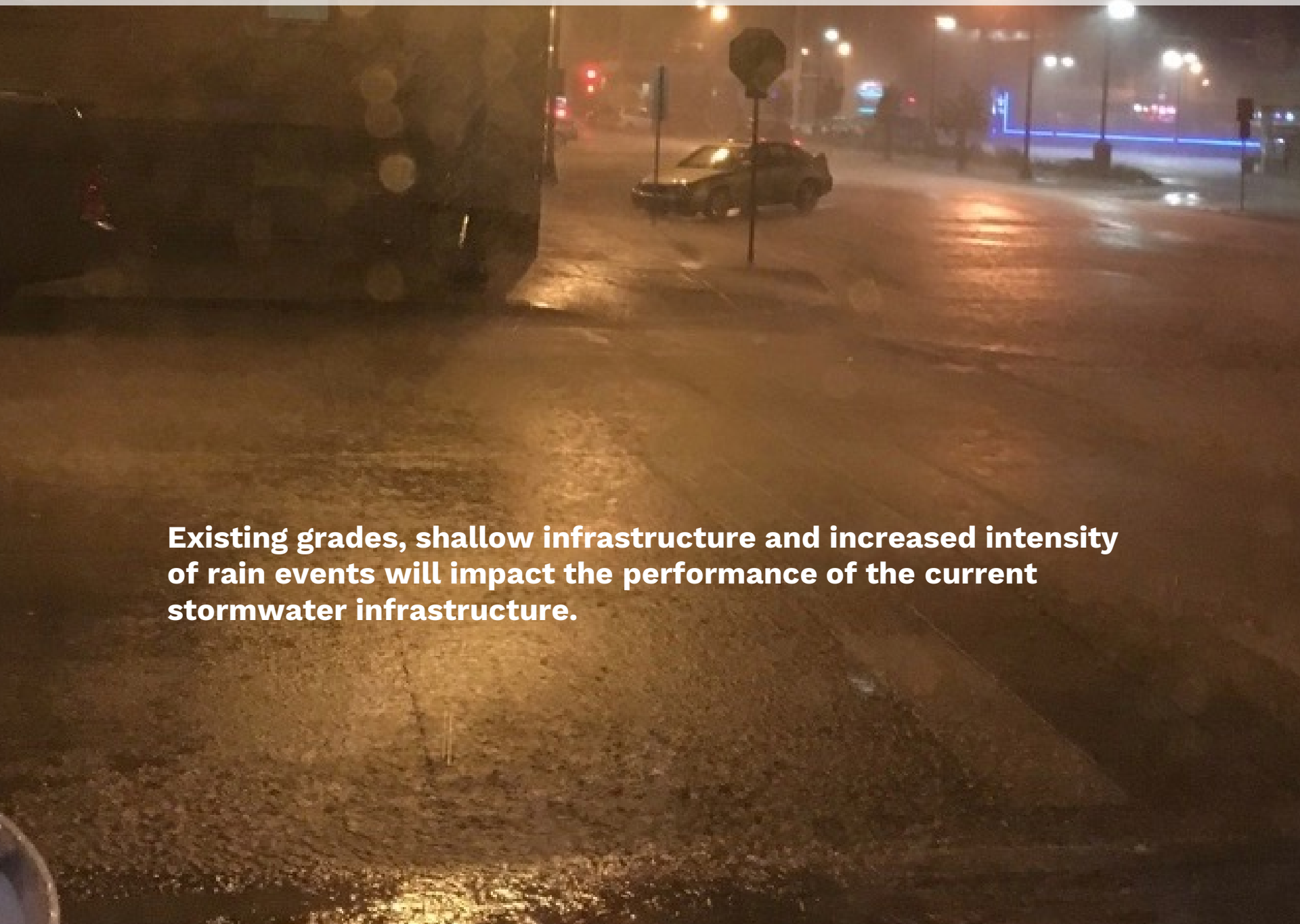


**OR**  
**3.13 INCHES ON ALL**  
**ROOFS OF BUILDINGS**  
**IN THE DOWNTOWN**

- GREEN ROOF
- DOWNTOWN FOCUS AREA

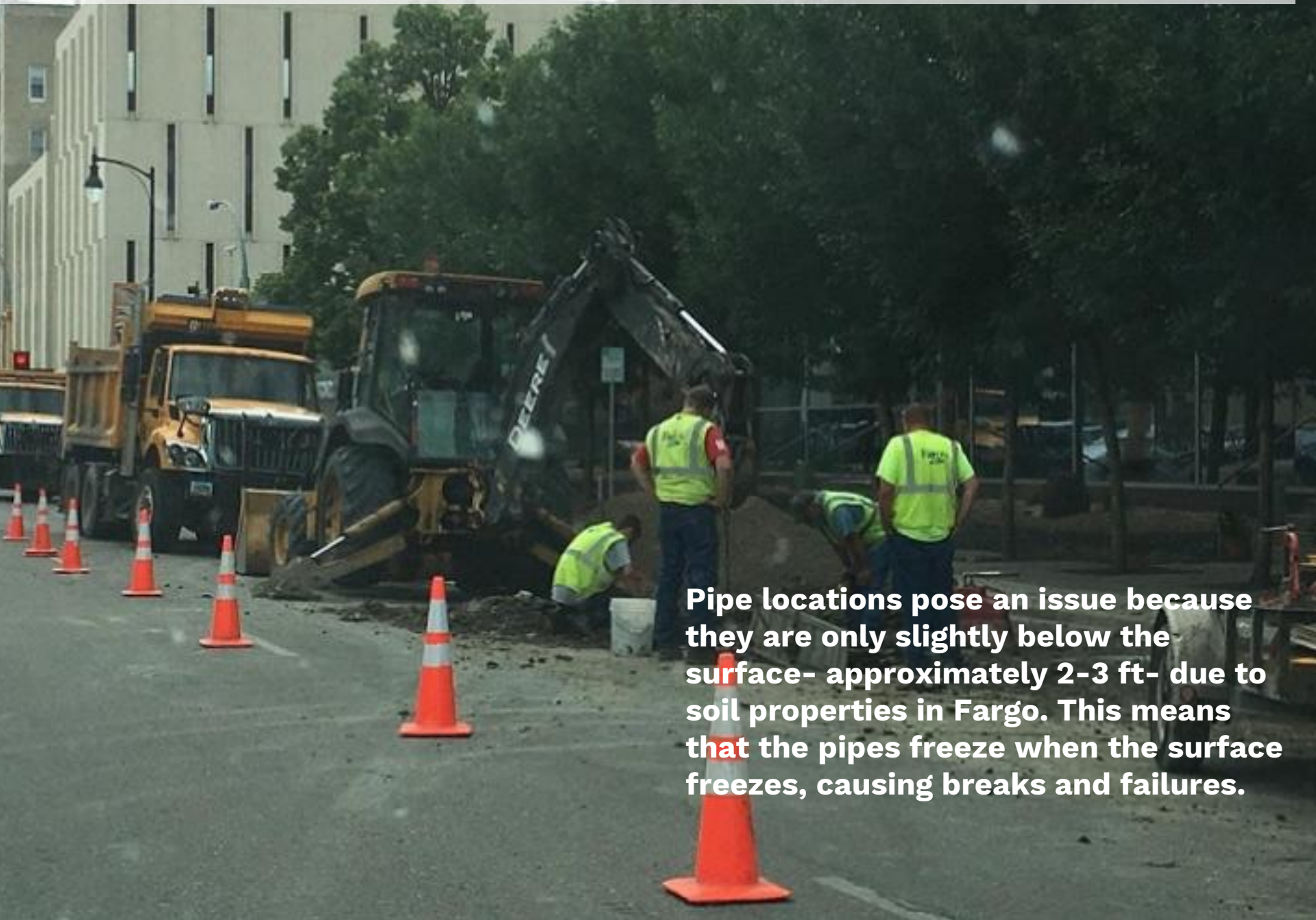


# EXISTING FLOOD INFRASTRUCTURE: STORMWATER QUANTITY



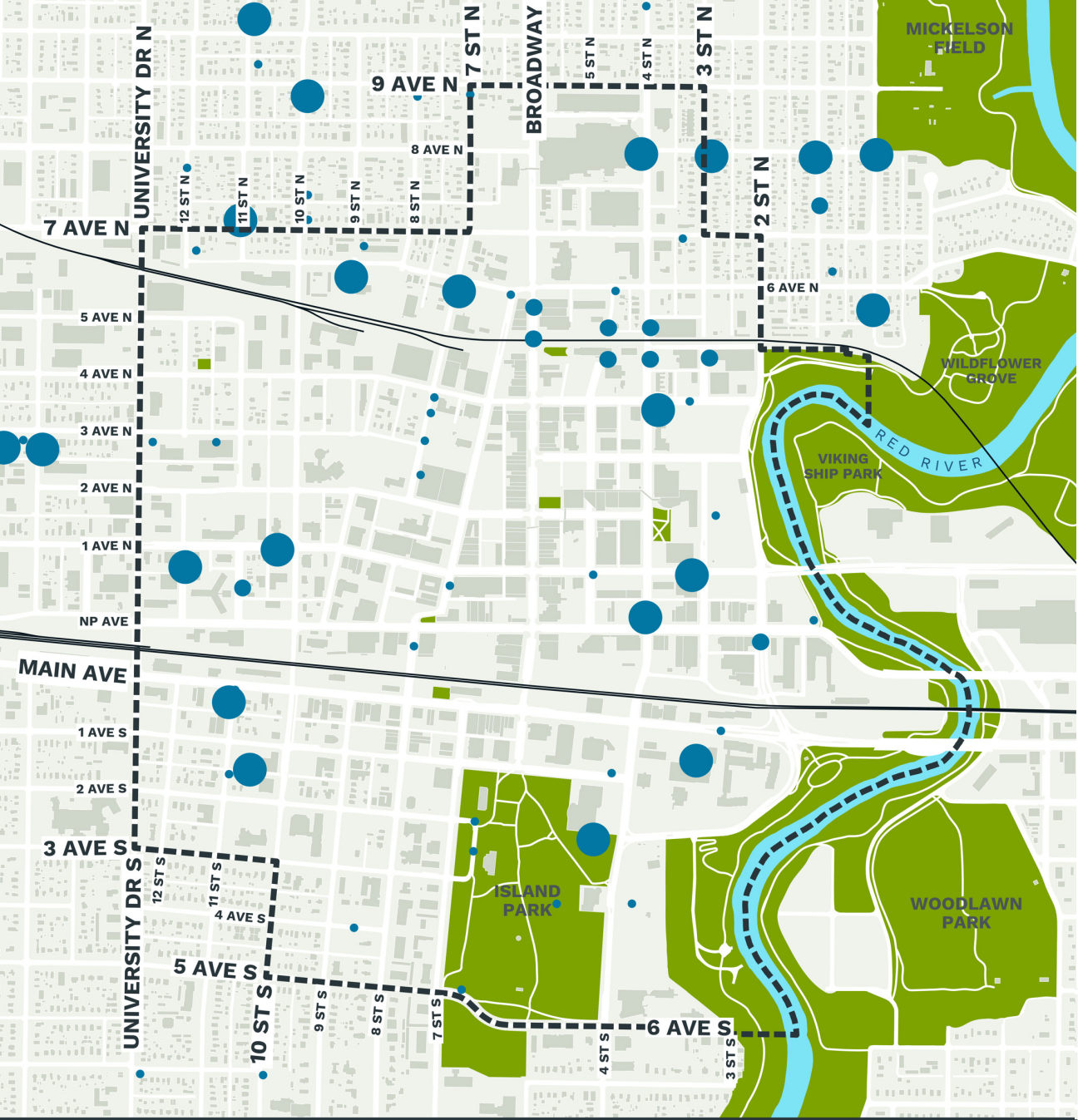
**Existing grades, shallow infrastructure and increased intensity of rain events will impact the performance of the current stormwater infrastructure.**

# EXISTING FLOOD INFRASTRUCTURE. STORMWATER QUANTITY



**Pipe locations pose an issue because they are only slightly below the surface- approximately 2-3 ft- due to soil properties in Fargo. This means that the pipes freeze when the surface freezes, causing breaks and failures.**





**Roads throughout Downtown are in need of replacement and water mains have been failing.**

# DOWNTOWN INFRASTRUCTURE CHALLENGES

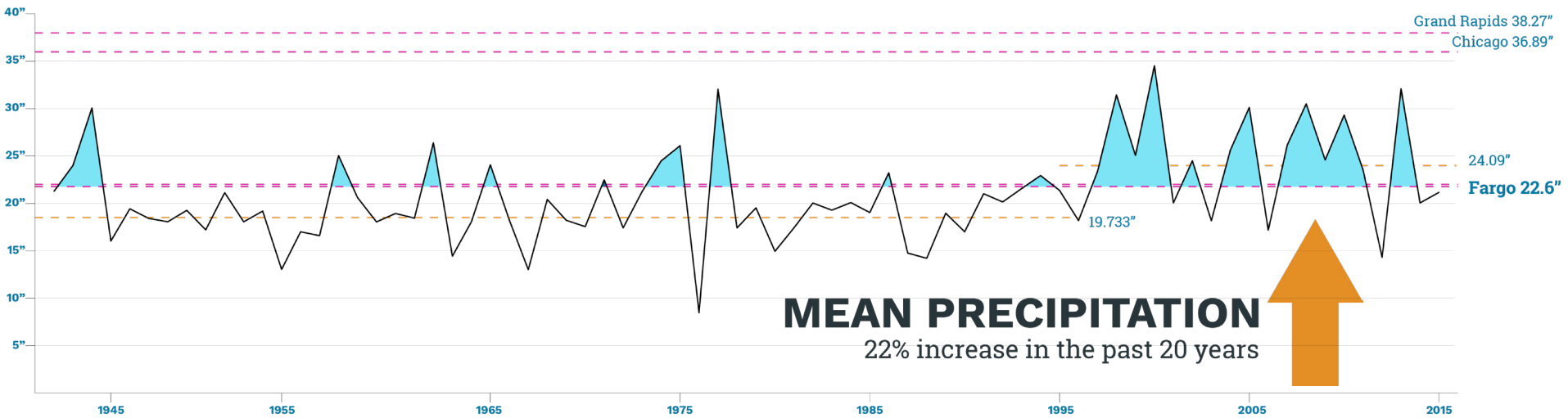
SOURCE: CITY OF FARGO

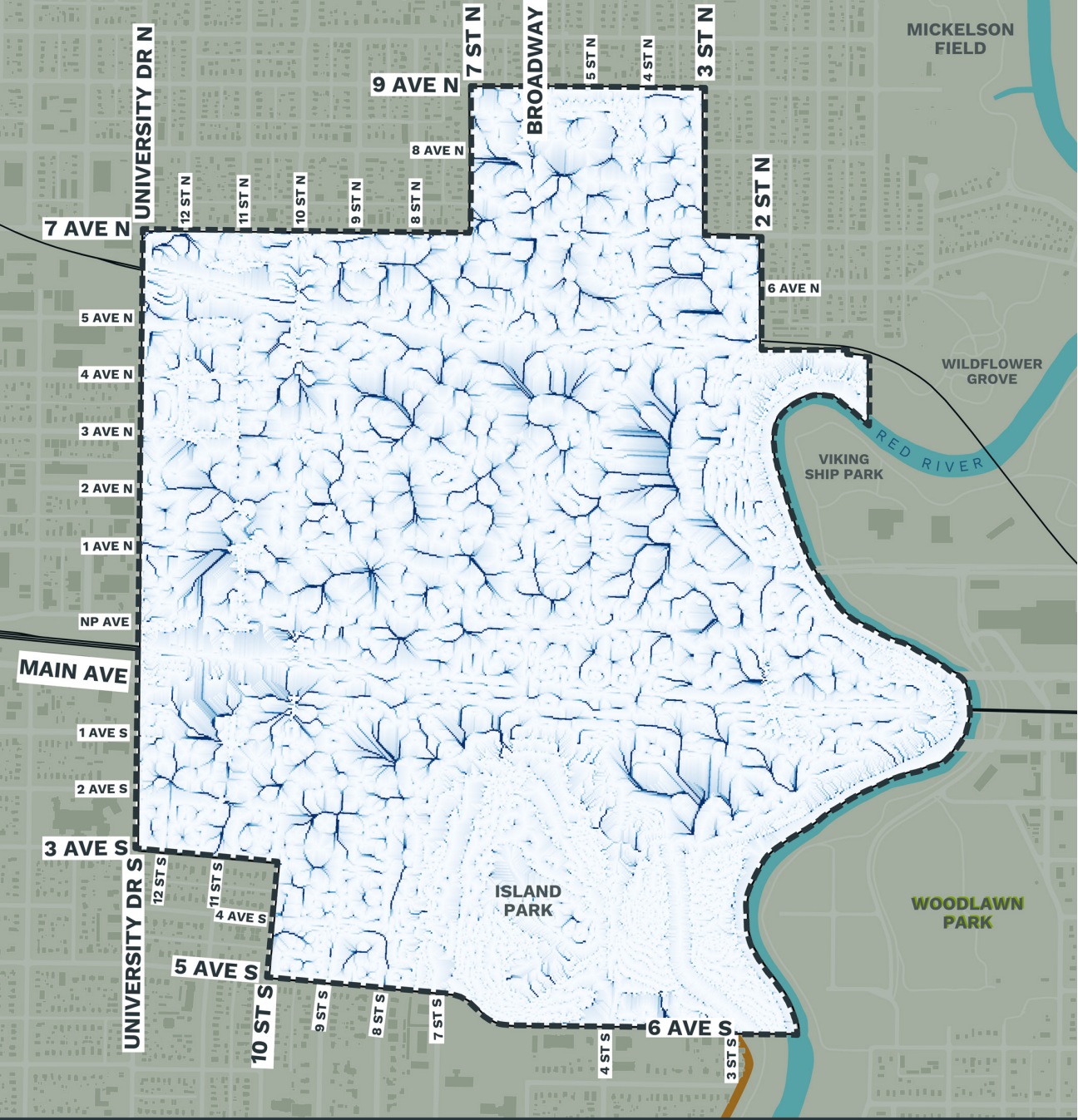
- HIGH POINT DENSITY
- LOW POINT DENSITY
- DOWNTOWN FOCUS AREA



# PRECIPITATION DELTA

## Total Yearly Precipitation

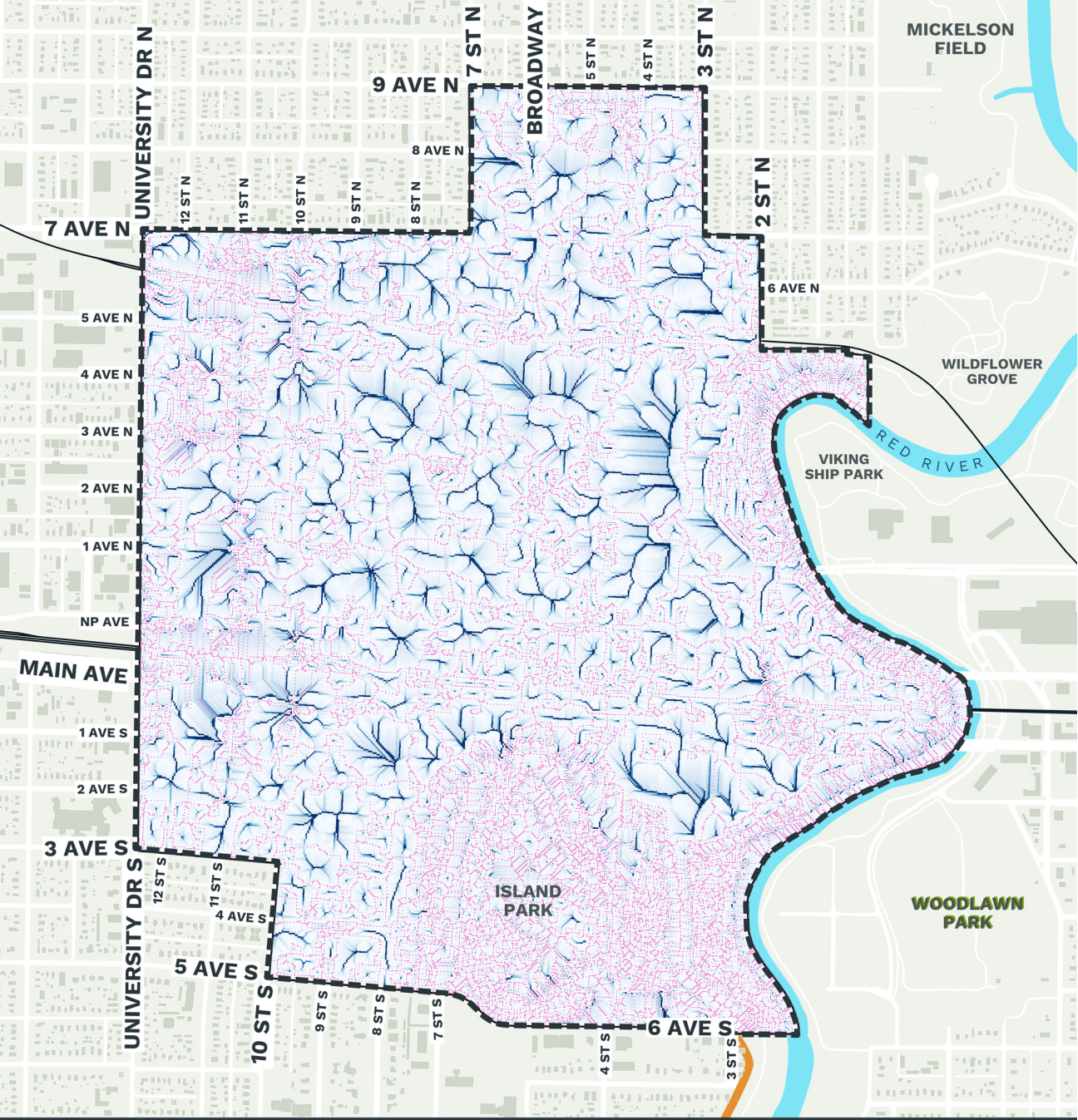




# LOCAL CATCHMENT BASINS

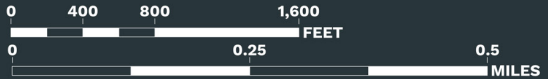
-  **FLOW DIRECITION**
-  **DOWNTOWN FOCUS AREA**

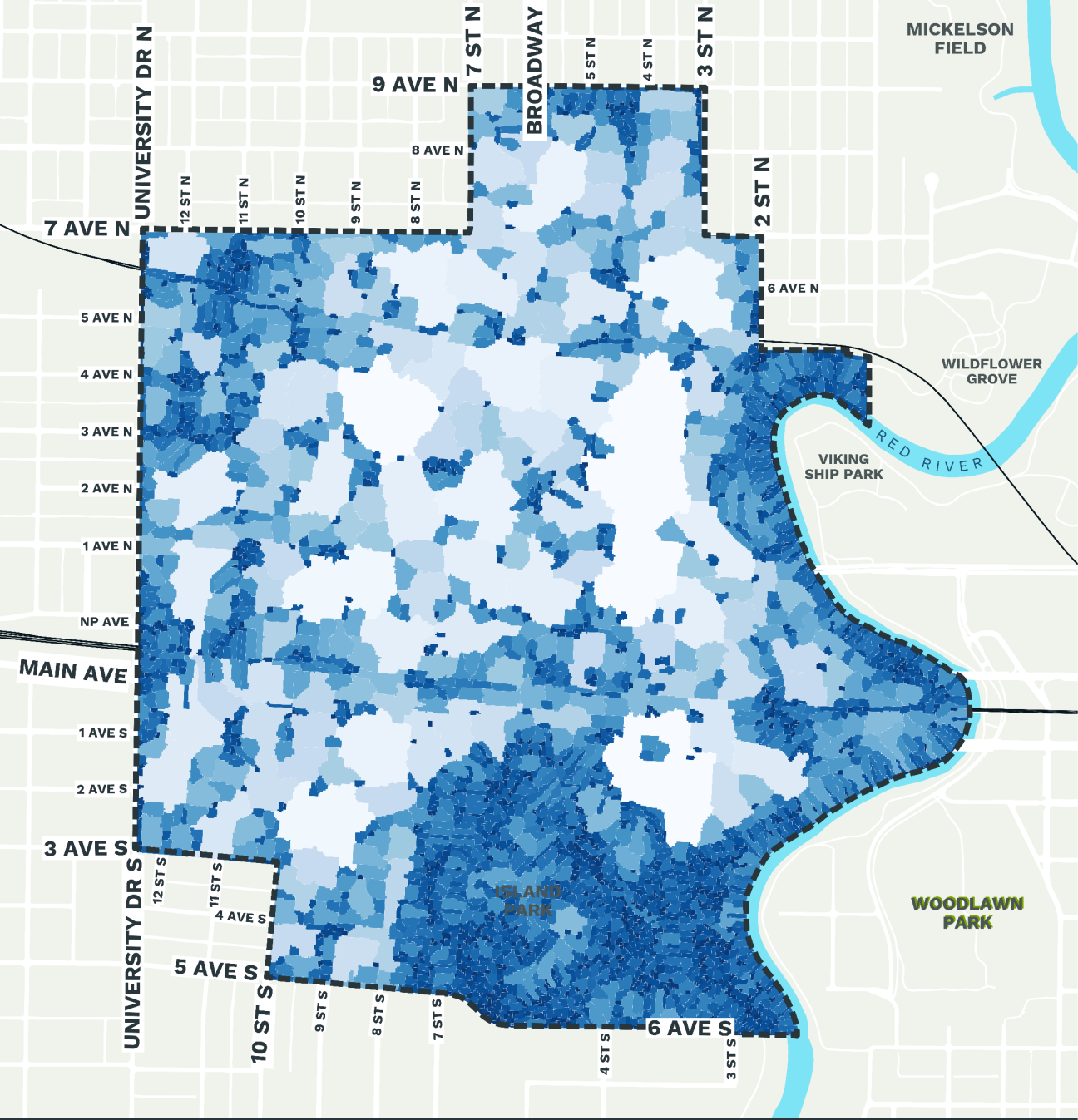




# LOCAL CATCHMENT BASINS

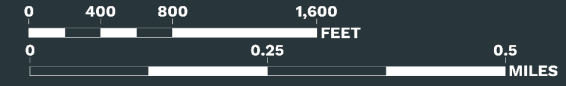
-  **FLOW DIRECITION**
-  **DOWNTOWN FOCUS AREA**
-  **LOCAL WATERSHED BASINS**



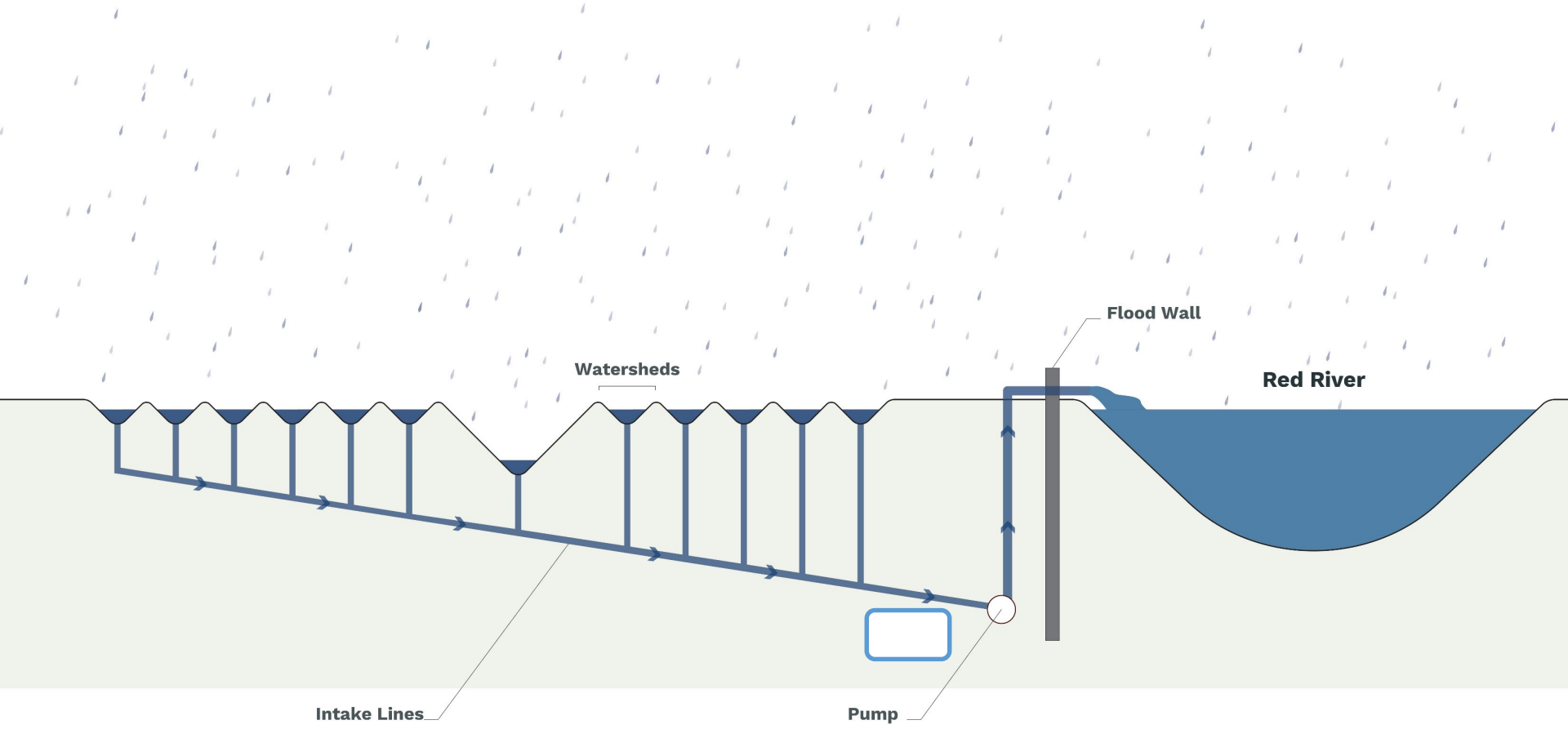


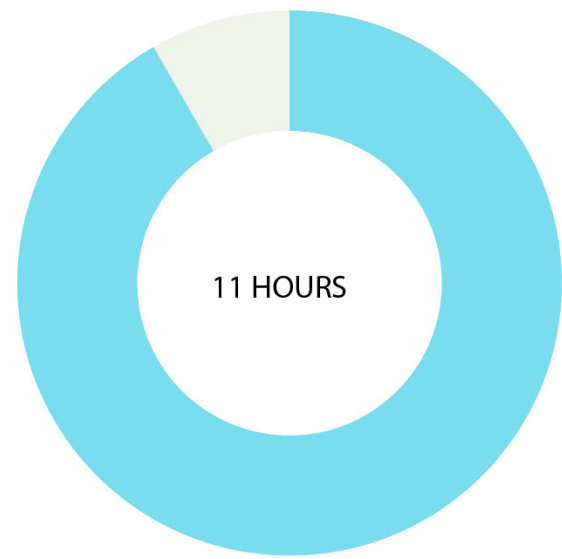
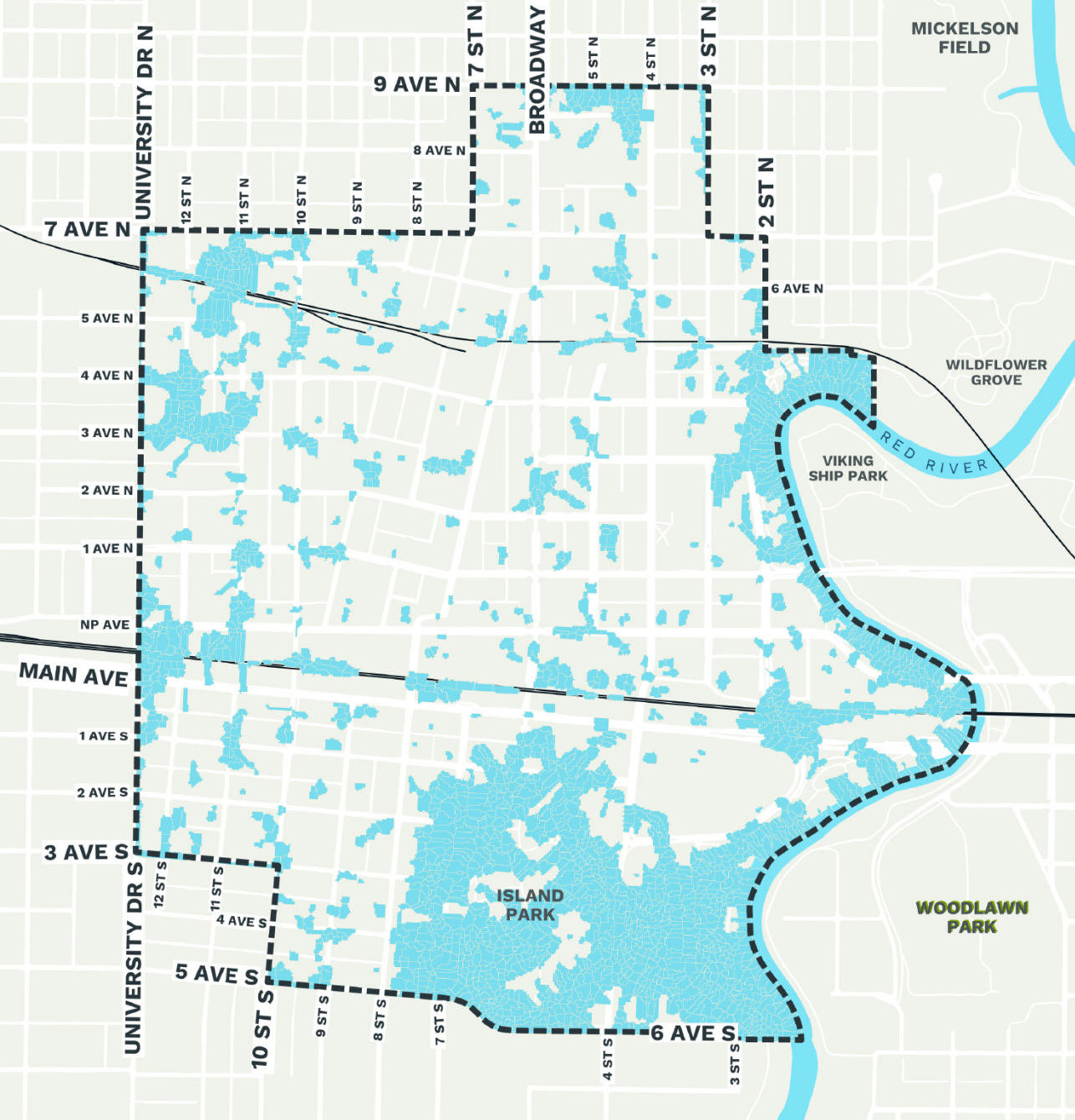
# LOCAL CATCHMENT AREAS

-  **RISK LEVEL BEING FLOOD BY STORM WATER**
-  **DOWNTOWN FOCUS AREA**



# ILLUSTRATIVE SECTION





**25 YEAR 24 HOUR STORM  
PRECIPITATION: 6.08 inches**

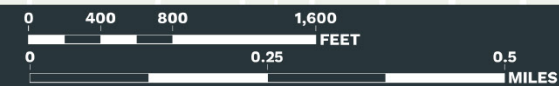
**TIME TO FLOOD A 5000 ft<sup>2</sup>  
AREA FOR 3 inches:  
11 HOURS**

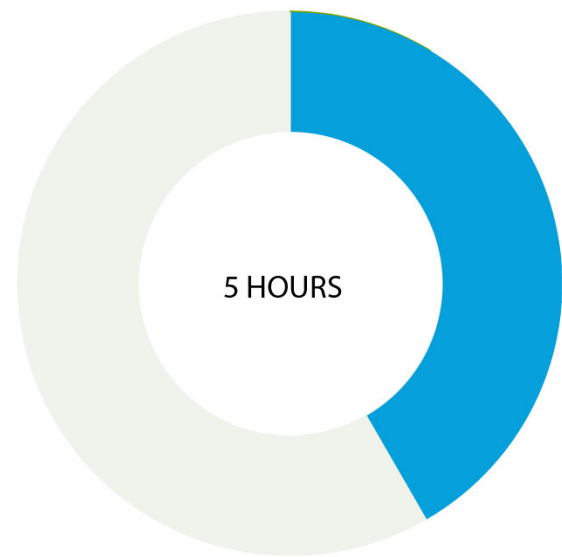
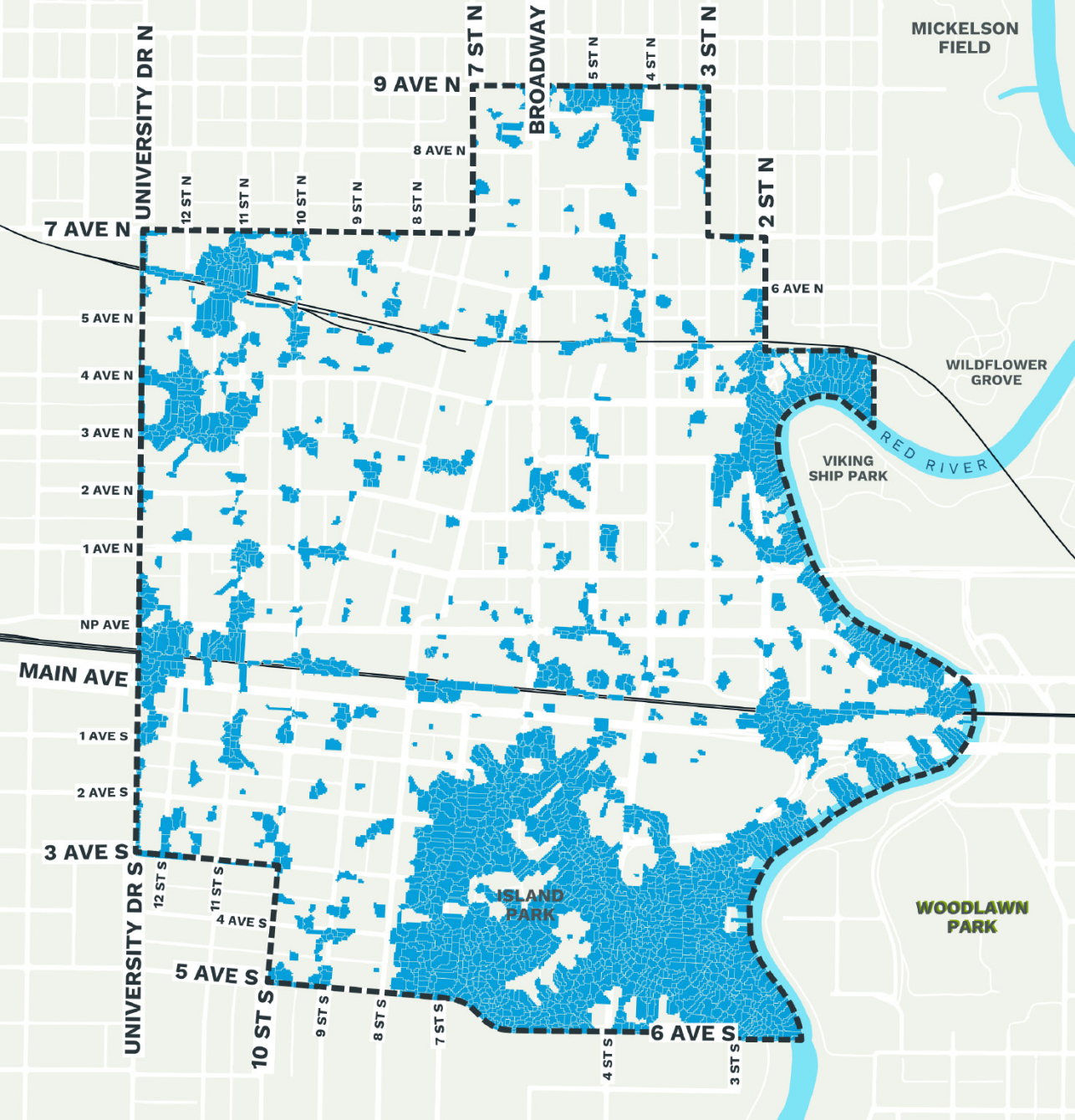
**TIME TO FLOOD A 2500 ft<sup>2</sup>  
AREA FOR 3 inches:  
2.75 HOURS**

## STORMWATER FLOOD

 **WATERSHED SMALLER THAN  
5000 ft<sup>2</sup>**

 **DOWNTOWN FOCUS AREA**





**50 YEAR 24 HOUR STORM  
PRECIPITATION: 7.20 inches**

**TIME TO FLOOD A 5000 ft<sup>2</sup>  
AREA FOR 3 inches:  
5 HOURS**

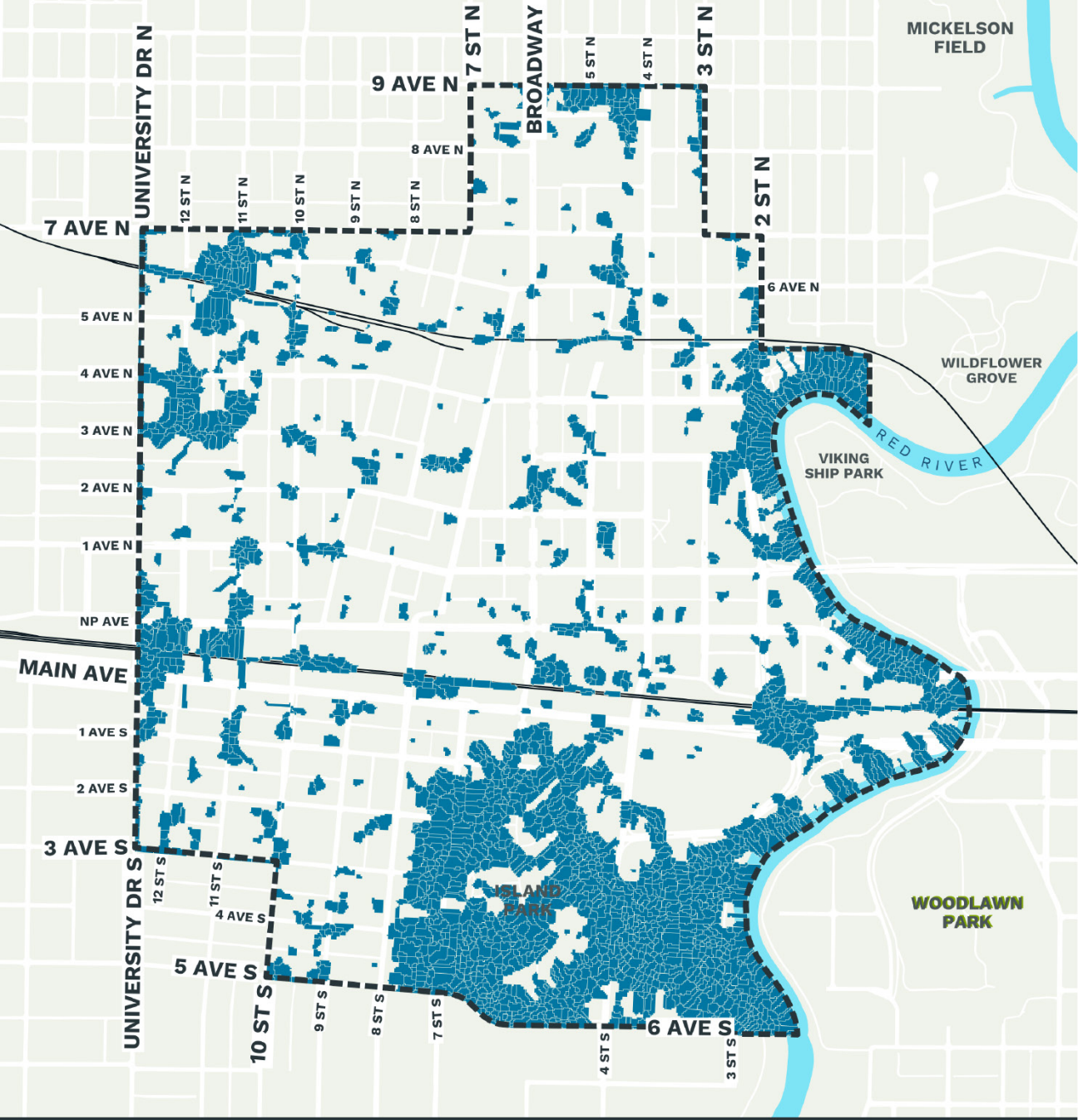
**TIME TO FLOOD A 2500 ft<sup>2</sup>  
AREA FOR 3 inches:  
1.25 HOURS**

## STORMWATER FLOOD

 **WATERSHED SMALLER THAN  
5000 ft<sup>2</sup>**

 **DOWNTOWN FOCUS AREA**





**100 YEAR 24 HOUR STORM PRECIPITATION: 8.54 inches**

**TIME TO FLOOD A 5000 ft<sup>2</sup> AREA FOR 3 inches: 3 HOURS**

**TIME TO FLOOD A 2500 ft<sup>2</sup> AREA FOR 3 inches: 45 MINUTES**

STORMWATER FLOOD

 **WATERSHED SMALLER THAN 5000 ft<sup>2</sup>**

 **DOWNTOWN FOCUS AREA**



COMING SOON PROPOSALS FOR POSITIVE CHANGE





THANK YOU!  
NEXT MEETING:  
NOVEMBER 16<sup>TH</sup>