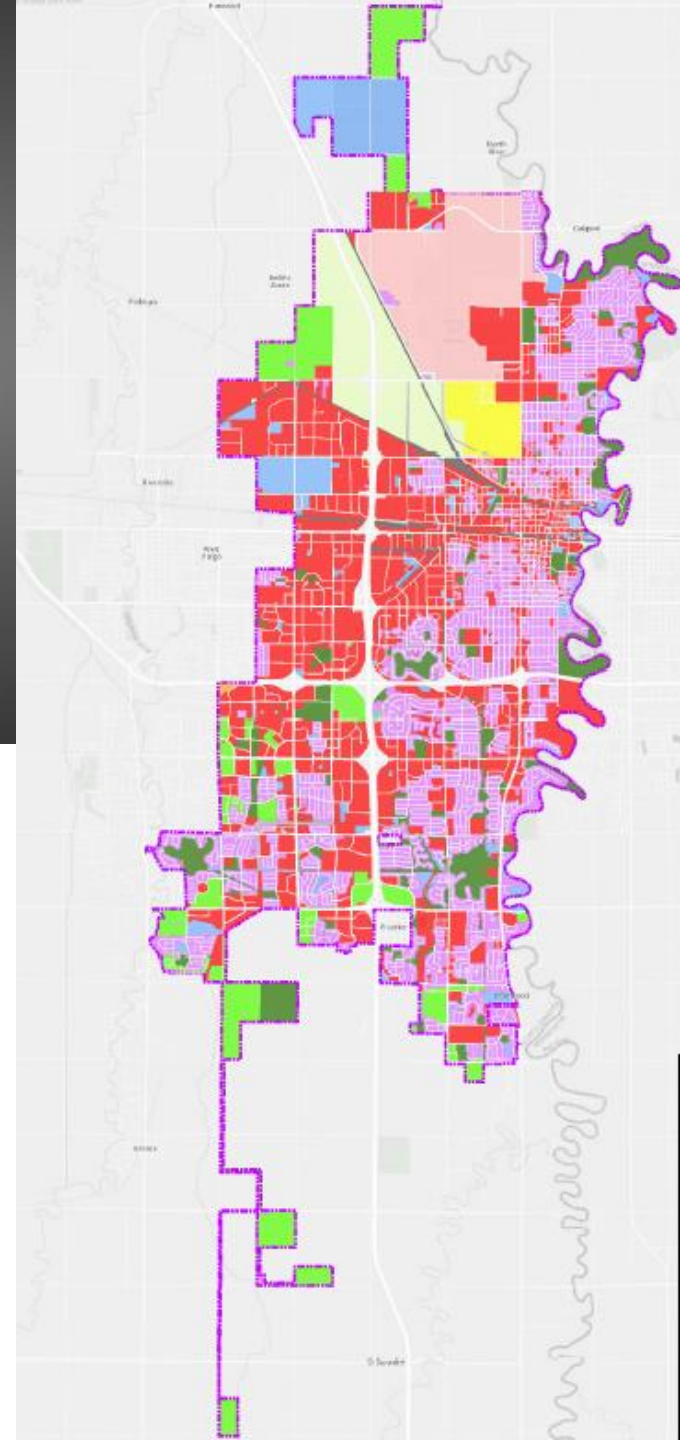


# STORM WATER UTILITY FEE STUDY

Public Information Meeting #2  
August 2, 2017



# STORM WATER UTILITY FEE STUDY

## Why Are the Fees Being Studied?

- More Equitable Distribution of Storm Water Management Costs (Cost Causer vs. Cost Payer)
- Better Utilize the Utility for Existing and Expanded Storm Water Funding
- Prepare Utility to Address On-going Regulatory Changes
- Adequately Fund Ongoing System Maintenance and Renewal
- Ease Burden on Other Revenue Sources (Sales Tax, General Fund, State Aid, etc.)

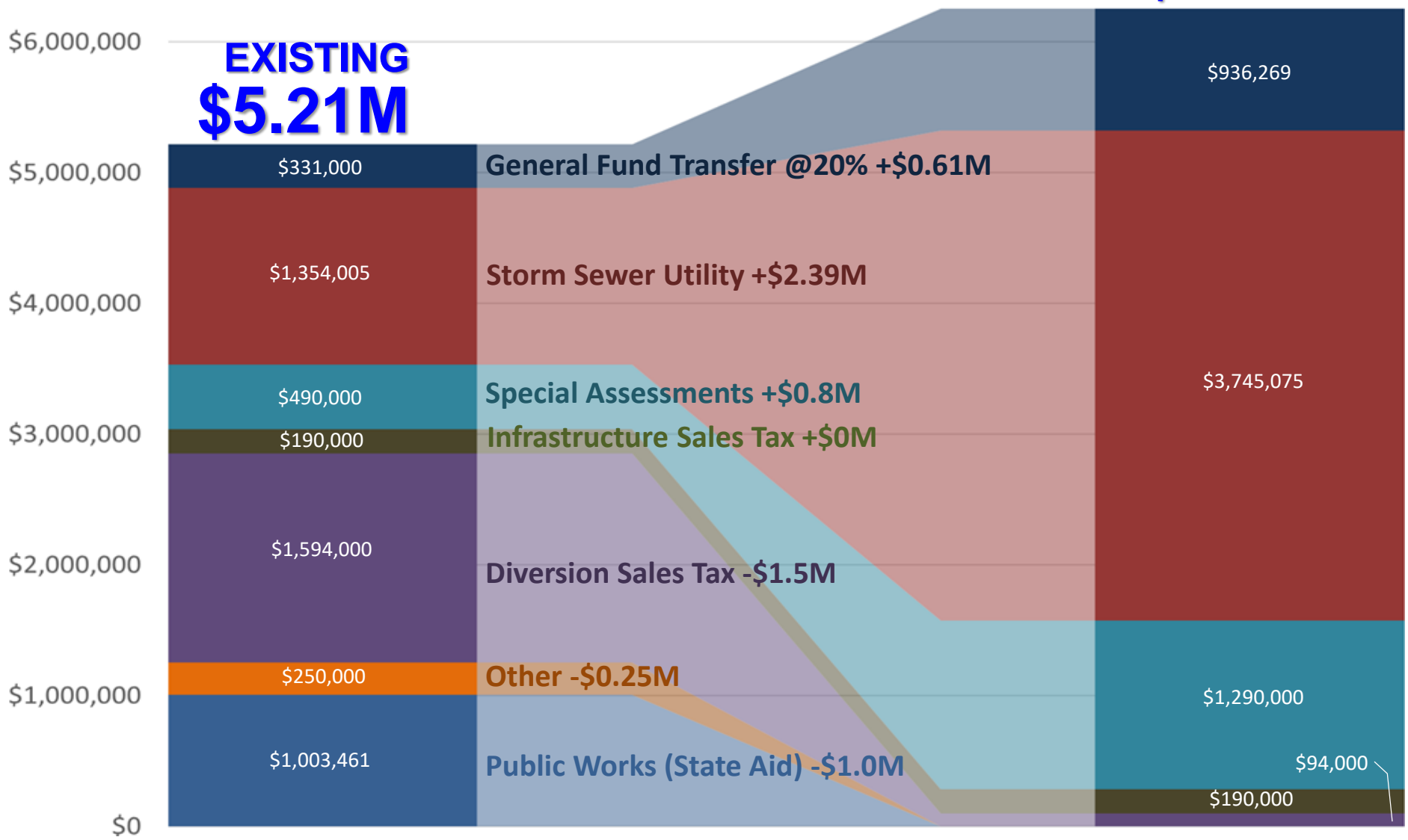
# STORM WATER UTILITY FEE STUDY

## Rational Nexus: Storm Water Service and Fee Setting

- Unlike Water or Sewer, Storm Water service is difficult to meter or measure
- Storm Water service demands are most often derived from hydrologic/runoff indicators
- *Size of Parcel, Land Use, and Impervious Surface Area* are common service demand indicators
- Most fee structures are typically constructed around these parameters and are considered to be fair and equitable

# STORM WATER BUDGETING

Existing versus Future Funding Sources (\$2017)



# STORM WATER UTILITY FEE STUDY

## Storm Water Rate History

Years	Residential Monthly Rate*	Non- Residential Monthly Rate*
1998 - 2000	\$1.00	\$5.00
2001	\$2.00	\$10.00
2002 – Present	\$3.00	\$15.00

\* Storm Water rate only charged to parcels with existing utility service.  
Large number of parcels without other utility service that receive storm  
water service (i.e. vacant land, parking lots, parks, etc.)

# RATE DESIGN

## Common User Fee Methods

- Common service demand indicators include *Size of Parcel*, *Land Use*, and *Impervious Surface Area*

### EXAMPLE STORMWATER USER FEE METHODS

RATE STRUCTURE	PRIMARY ADVANTAGES	PRIMARY DISADVANTAGES
FLAT RATE	<ul style="list-style-type: none"> <li>Easy to Administer</li> <li>All Parcels are Charged</li> </ul>	<ul style="list-style-type: none"> <li>Highly Inaccurate</li> </ul>
GROSS AREA FACTORED BY RUNOFF COEFFICIENT	<ul style="list-style-type: none"> <li>Accounts for Parcel Size</li> <li>Less Data Required</li> <li>Addresses Intensity of Development</li> <li>All Parcels are Charged</li> </ul>	<ul style="list-style-type: none"> <li>Relatively Inaccurate in Terms of Individual Property Impact</li> <li>Does Not Account for Land Management Practices</li> </ul>
IMPERVIOUS SURFACE AREA	<ul style="list-style-type: none"> <li>Accurate</li> <li>Data Requirements can be Simplified for Equivalent Residential Units (ERUs)</li> </ul>	<ul style="list-style-type: none"> <li>Large Amount of Data Required</li> <li>Does Not Account for Land Management Practices</li> <li>Does Not Account for Parcel Size</li> <li>Not all Parcels are Charged</li> </ul>
GROSS AND IMPERVIOUS SURFACE AREA	<ul style="list-style-type: none"> <li>Accurate</li> <li>Accounts for Parcel Size</li> <li>All Parcels are Charged</li> <li>Addresses Intensity of Development</li> </ul>	<ul style="list-style-type: none"> <li>Large Amount of Data Required</li> <li>Does Not Account for Land Management Practices</li> </ul>
CLASS INTENSITY OF DEVELOPMENT	<ul style="list-style-type: none"> <li>Accurate</li> <li>Addresses Intensity of Development</li> </ul>	<ul style="list-style-type: none"> <li>Large Amount of Data Required</li> <li>Does Not Account for Land Management Practices</li> <li>Not all Parcels are Charged</li> </ul>
EQUIVALENT HYDRAULIC AREA (PERVIOUS AND IMPERVIOUS)	<ul style="list-style-type: none"> <li>Accurate</li> <li>Accounts for Parcel Size</li> <li>Accounts for Land Management Practices</li> <li>All Parcels Charged</li> <li>Addresses Intensity of Development</li> </ul>	<ul style="list-style-type: none"> <li>Large Amount of Data Required</li> <li>More Complex than Other Methods</li> </ul>

ADDED COMPLEXITY = MORE EQUITABLE RATES

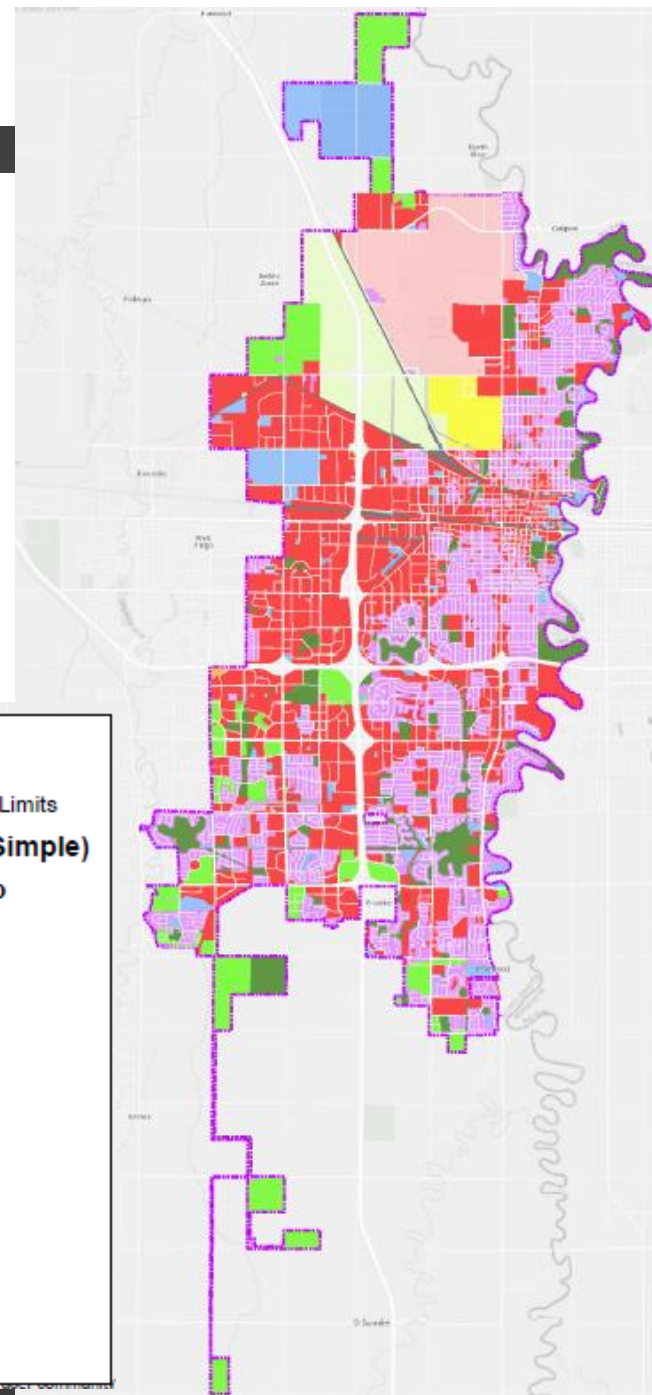
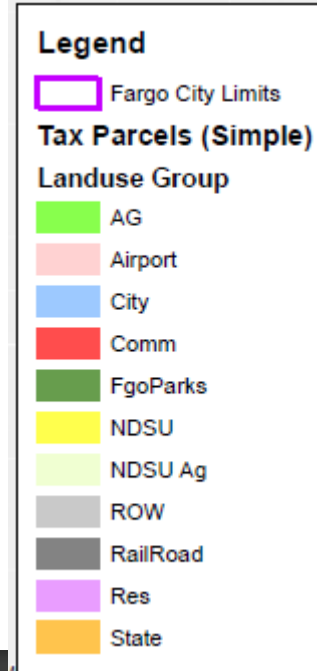
**Fargo's Proposed Rate Structure (w/ Maintaining Ex. Residential Minimums)**

# STORM WATER AND LAND USE

- A key component of the study is the analysis of the City's existing GIS parcel database
- Developed tabular parcel data for evaluation of parcel characteristics such as size, intensity of development and impervious surface area

Total Parcel Count	31,734*
Total Land Area (Acres)	25,922
Total Land Area (Sq. Ft)	1,129,170,326

\* 19,363 Single Family Parcels  
12,371 Non-Residential Parcels



# PROPOSED RATE DESIGN

## Gross and Impervious Surface Area

- Rates based on actual impervious area and gross area to also account for runoff from pervious area

### Total Revenue Requirements

#### Gross Area Charge Basis (25%):

	Allocated Revenue Requirements
÷	Total Land Area (Sq Ft)
=	Charge per 100 Sq Ft of Total Land Area

#### Impervious Area Charge Basis (75%):

	Allocated Revenue Requirements
÷	Total Impervious Surface Area (Sq Ft)
=	Charge per 100 Sq Ft of Impervious Area

### Monthly Bill Calculation:

$$\begin{aligned}
 &= (\text{Total Parcel Area (100 Sq ft)} * \text{Gross Charge per 100 Sq Ft}) / 12 \\
 &+ (\text{Parcel Impervious Area (100 Sq ft)} * \text{Impervious Charge per 100 Sq Ft}) / 12
 \end{aligned}$$



# PROPOSED RATE DESIGN

## Gross and Impervious Surface Area with Existing Minimum

### Rate Design Based on Preliminary 2018 Rate Revenue Requirements

Monthly Minimum (all land use types)*	\$3.00
Monthly Impervious Area Charge per 100 Sq Ft	\$0.04892
Monthly Gross Area Charge per 100 Sq Ft	\$0.00535

- \* Existing Monthly Minimum proposed to be charged until the point where Impervious and Gross Area charges exceed minimum.

# PROPOSED RATE DESIGN

## Gross and Impervious Surface Area, Cont'd

### Monthly Bill Examples (Based on Preliminary Projected 2018 Revenue Requirements):

Parcel	Total Acres	% Impervious	Estimated Monthly Bill	Existing Monthly Bill
Residential (Avg.)	0.23	32%	\$3	\$3
Non-Residential (Median)	0.54	28%	\$6	\$15
Non-Residential (Avg.)	2.50	28%	\$24	\$15
Bank	1.28	34%	\$17	\$15
Nursing Home	4.94	32%	\$38	\$15
Supermarket	5.18	91%	\$93	\$15
Retail	11.71	88%	\$205	\$15
Retail	31.80	80%	\$510	\$60*

*\*Parcel currently has 4 separate water meters*

# PROPOSED RATE DESIGN

## Gross and Impervious Surface Area, cont'd

### Regional Comparison:

Parcel	City of Fargo (\$2018)			Regional Comparisons (Existing 2017 Rates)				
	Total Acres	% Imp	Estimated Monthly Bill	Dickinson	Bismarck	Grand Forks	Sioux Falls	Moorhead
Residential (Avg)	0.23	32%	\$3.00	\$1.75	\$2.70	\$4.34	\$4.43	\$10.21
Non-Residential (Avg)	0.54	34%	\$6.46	\$6.61	\$17.42	\$27.03	\$39.74	\$38.57
Non-Residential (Median)	2.50	28%	\$24.10	\$29.92	\$74.53	\$101.38	\$169.98	\$137.43
Bank	1.28	34%	\$17	\$15	\$27	\$40	\$62	\$117
Nursing Home	4.94	32%	\$38	\$47	\$105	\$142	\$144	\$153
Supermarket	5.18	91%	\$93	\$49	\$111	\$148	\$252	\$153
Retail	11.71	88%	\$205	\$106	\$250	\$330	\$570	\$153
Retail	31.80	80%	\$510	\$281	\$679	\$888	\$1,548	\$153

## **CITY COMMISSION CONSIDERING KEY POLICY ITEMS W/ PROPOSED RATE STRUCTURE:**

- Future Utility Funding Levels
- Charges for Service from the General Fund
- On-going Use of Other Funds and Assessments to Support Storm Water Needs
- Minimums Policy
- Credit Policy
- Exemptions and Fee Caps

## EXEMPTION CONSIDERATIONS

- A key advantage and reason for support of the preferred rate structure is that all parcels can be charged (i.e. it is a fee for service regardless of use-type)
- It is common, however, for demand based fee structures to offer exemptions and/or fee caps for large parcels
- City Commission is currently considering various forms of caps and exemptions

## CREDIT POLICY CONSIDERATIONS

- City Staff is proposing a credit policy for non-residential parcels that provide structural controls that exceed existing storm water management requirements for volume and rate of runoff
- Credits are a basic component of the proposed fee approach that allow users to voluntarily reduce their fee
- Storm Water Credits increase equity of the User Fee

## PROPOSED SCHEDULE MOVING FORWARD

- On-going Large Stakeholder Outreach (August – Sept)
- Warehouse and Analyze Public/Large Stakeholder Input
- Further Commission and Staff Input (August)
  - 2<sup>nd</sup> Commission Brown Bag in August –TBD
  - Public Works Project Evaluation Committee-TBD
- Approval of Final Proposed 2018 Rates (Oct)
- Utility Customer Outreach w/ Bill Stuffers (Nov – Dec)
- New Rate Structure Implementation (January 2018)

# QUESTIONS?

