



STORM WATER UTILITY REPORT

LINO LAKES, MN

JUNE 30, 2021

Prepared for:
City of Lino Lakes
600 Town Center Parkway
Lino Lakes, MN 55014

WSB PROJECT NO. 017518-000



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FOR THE
CITY OF LINO LAKES, MN

JUNE 30, 2021

Prepared By:



CERTIFICATION

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed professional engineer under the laws of the State of Minnesota.



Jake Newhall, PE

Date: June 30, 2021

Lic. No. 49170

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CERTIFICATION SHEET
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1. INTRODUCTION

The City of Lino Lakes (City) desires to be just and equitable in their imposition of storm water utility (SWU) charges. The City is able to charge properties for the current and future costs of operating, maintaining, and improving the City stormwater system based on the expected stormwater runoff during a standard rainfall event. The expected runoff is largely dependent on the amount of impervious, or hard surface, area on a parcel.

The City desires to charge residential parcels a flat fee, while charging parcels of other land uses a fee based on the specific impervious coverage of each parcel. The residential base fee was determined based on the proportion of total impervious area on residential parcels. The non-residential base fee was set to cover the remainder of the anticipated SWU budget.

2. STORM WATER UTILITY FUNDING NEEDS

2.1 Eligible Expenses

Eligible expenses under the City's SWU fund may include, but are not limited to, the following activities:

- Maintenance and repair of the City's stormwater system, including stormwater structures, pipes, inlets, and outlets.
- Maintenance and dredging of the City's stormwater basins.
- Televising the City's storm sewer.
- Engineering, staff training, educational programs, and other relevant expenses required to comply with the City's NPDES MS4 permit (through the MPCA).
- Construction of new stormwater systems and replacement of existing stormwater systems.
- Erosion and sedimentation control inspections.
- Street sweeping.
- Stormwater asset management programs.
- Administration of the SWU Fund.
- Preparation of and revision to the City's SWU report.
- Updates to the City's Local Surface Water Management Plan.
- Flooding or water quality improvements.
- Slope stabilization improvements.
- Studies, programs, and capital improvements as outlined by the City.

Additionally, the City Council has the authority to determine whether specific expenses are eligible to be funded by the SWU fund.

2.2 Needs Analysis

The City anticipates average expenses from the SWU as outlined in **Table 1**.

Table 1: Average Budgeted Expenses

Expense Category	Annual Projection*
Personnel	\$183,200
Street Sweeping and Repairs	\$50,000
Engineering including studies, reports, and MS4 compliance	\$60,000
Ditch, Pond, and Pipe Maintenance and Cleaning	\$195,000
Equipment	\$61,000
Public Education and Training (NPDES)	\$10,000
Materials and Miscellaneous Supplies	\$20,000
TOTAL	\$579,200

*Does not account for inflation or regulatory changes

3. STORM WATER UTILITY FEE DETERMINATION

This section outlines the methodology to determine a just and equitable SWU fee that meets the City's needs to maintain and improve their storm water system. In general, parcels with higher percentages of impervious surface, which generate larger volumes of stormwater runoff, will be charged higher fees.

3.1 Land Use & Impervious Coverage Determination

A combination of the City's existing (2017) land use designations, (2020) Anoka County aerial imagery, and the most recent (2021) parcel data was used to determine the 2021 existing land use designations for each parcel (**Figure 1**). Impervious areas throughout the City were digitized, based on (2017) USDA Farm Service Agency and (2020) Anoka County aerial imagery. From this, the impervious area was computed for each parcel.

3.2 SWU Fees & Estimated Revenue

The SWU fee was determined for each parcel based on land use and impervious coverage. Land uses fall into one of three categories, residential, non-residential, and exempt. Residential parcels (single family, multi-family, and rural residential) are all charged per parcel at the residential base fee. The residential base fee is computed as follows:

$$\text{Residential Base Fee} = \frac{\frac{\text{Impervious area on residential parcels}}{\text{Total impervious area}} * \text{Annual budget}}{\text{Number of residential parcels}}$$

Non-residential parcels are charged per acre of impervious area on each individual parcel. The non-residential base fee is computed as follows:

$$\text{Non – residential base fee} = \frac{(\text{Annual budget} - \text{Annual fee from residential parcels})}{\text{Total impervious area of non – residential parcels}}$$

The minimum non-residential base fee is equal to the residential base fee (\$12 per parcel per quarter). Therefore, the computed fee was adjusted to account for the increase in expected revenue due to the minimum fee and the decrease in expected revenue due to anticipated credits as described in **Section 3.3**. Note that in both residential and non-residential computations, parcels that are exempt from the SWU fee are not included in the calculations. The proposed fee for each land use is shown in **Table 2**.

The proposed residential base fee is \$12 per quarter or \$48 per year. The proposed non-residential base fee is \$175 per impervious acre per quarter or \$700 per impervious acre per year, with a minimum fee equal to the residential base fee. With the existing land use and parcel designations, this framework is anticipated to generate approximately \$583,000 for the City's SWU fund (if all existing best management practices (BMPs) are leveraged to receive a credit, as described in **Section 3.3**, the total revenue generated would be reduced by approximately \$35,500).

Figure 2 shows the proposed SWU fee by parcel. **Figure 3** shows the parcels with proposed SWU fees that are not currently paying a utility fee and would generate a new utility billing account.

Table 2: Proposed SWU Fees

Land Use	Total Parcels	Base Fee	Annual Fee per Land Use
Single Family Residential	4899	\$12.00/parcel	\$235,152.00
Multi-Family Residential	813		\$39,024.00
Rural Residential	1461		\$70,128.00
Airport	4	\$175/ac impervious	\$928.39
Cemetery	8		\$708.12
Commercial	86		\$68,405.06
Government Facilities	10		\$11,209.46
House of Worship	7		\$19,116.84
Industrial	71		\$107,599.02
Schools	6		\$28,749.70
Utility	39		\$2,282.46
Agricultural	156	Exempt	N/A
City Park and Recreation	76		
County Park and Recreation	194		
Open Space/Conservation	206		
Open Water	1		
Roadway Rights-of-Way	16		
Vacant	582		

3.3 Credits and Adjustments

SWU fees may be adjusted for properties that have onsite, privately maintained BMPs and meet the criteria below. A maximum 25% credit is available per property.

3.3.1 Stormwater Retention (Infiltration or Filtration)

If a BMP has been constructed that retains or filters the first inch of runoff from the impervious surfaces on a parcel(s), those parcel(s) are eligible for a 25% credit. A partial credit may be received based on lesser treatment (i.e., retaining or filtering 50% of the first inch of runoff would receive a 12.5% credit). This credit is available only for non-residential land uses.

3.3.2 Water Quality Facility

If a parcel has a BMP that was constructed specifically to provide water quality treatment, it is eligible for a credit. A 25% credit is applicable if the BMP was designed to achieve NURP treatment (40-60% Total Phosphorus (TP) and 80-90% Total Suspended Solids (TSS) removal). A partial credit may be received based on lesser treatment (i.e., providing 50% of NURP treatment would receive a 12.5% credit). This credit is available only for non-residential land uses.

All properties eligible for a SWU fee credit are required to enter into a maintenance agreement with the City. The agreement shall define the entity responsible for maintenance and the type and frequency of maintenance required. To maintain their credit, all stormwater facilities shall be inspected annually and maintained in proper condition consistent with the performance standards for which they were originally designed.

To be considered for a credit, property owners must submit documentation to the City demonstrating that the criteria for a credit has been met.

Additionally, an adjustment may be allowed to the SWU fee for a parcel if the property owner can demonstrate that less impervious surface is present on the parcel than is reflected by the current rate. To be considered for an adjustment, property owners must submit an exhibit to the City documenting the total area of impervious surface on the parcel. Impervious surface includes pavement, roofs, water (swimming pools), gravel, and any other surface that prevents water from infiltrating into the ground.

3.4 SWU Comparison

SWU fees and the way they are administered vary by municipality. Lino Lake's proposed SWU fee falls within the range of nearby and comparison cities as shown in **Tables 3** and **4** for single family parcels and institutional/industrial/commercial parcels, respectively.

The SWU fees in **Tables 3** and **4** are based on information obtained from the comparison Cities' utility billing information and City code, as determined via a phone call with the Finance Department or published on their respective websites and accessed between March and June 2021. These fees are subject to change and their accuracy is not guaranteed.

Table 3: Single Family SWU Comparison

Municipality	SWU Fee (per quarter)
Lino Lakes	\$12.00
Arden Hills	\$15.16
Blaine	\$10.00
Centerville	\$13.95
Circle Pines	\$24.00
Mounds View	\$14.00
Shoreview	\$33.27

Although the non-residential Lino Lakes SWU fee is charged per acre of impervious, the average SWU fee per acre is shown below in **Table 4** for Institutional (Schools and House of Worship), Industrial, and Commercial land uses to more easily compare with surrounding Cities. **It is important to note that the fee shown for individual land uses in Lino Lakes is an average for comparison's sake. Each parcel will be charged based on actual impervious coverage.**

Table 4: Institutional, Industrial, and Commercial SWU Comparison¹

Municipality	Land Use	SWU Fee (per quarter)
Lino Lakes	All land uses	\$175.00/ac impervious (\$12.00 minimum per parcel)
Arden Hills	All land uses	\$193.18/ac
Blaine	Institutional	\$34.90/ac
	Industrial	\$84.40/ac
	Commercial	\$105.30/ac
Centerville	All land uses	\$174.50/ac impervious (\$13.95 minimum per parcel)
Mounds View	Institutional	\$42.72/ac
	Industrial	\$92.83/ac
	Commercial	\$118.90/ac
Shoreview	All land uses	\$278.12/ac

¹Circle Pines is not included because their fee is based on Residential Equivalency factors that are assigned individually to each parcel.

Example: 5 acre industrial parcel with 75% impervious would be:

Lino Lakes: \$656.25
 Arden Hills: \$965.90
 Blaine: \$422
 Centerville: \$654.38
 Mounds View: \$464.15
 Shoreview: \$1390.60

Example: 5 acre industrial parcel with 60% impervious would be:

Lino Lakes: \$525
 Arden Hills: \$965.90
 Blaine: \$422
 Centerville: \$523.50
 Mounds View: \$464.15
 Shoreview: \$1390.60

Example: 5 acre industrial parcel with 45% impervious would be:

Lino Lakes: \$393.75
 Arden Hills: \$965.90
 Blaine: \$422
 Centerville: \$392.63
 Mounds View: \$464.15
 Shoreview: \$1390.60

4. RECOMMENDED ORDINANCE LANGUAGE

The following language and exhibit can be incorporated into City ordinances to adopt and enact the SWU fee.

4.1 Ordinance Language

4.1.1 General Operation

The city stormwater system shall be operated as a public utility and convenience from which revenue will be derived, subject to the provisions of this chapter.

4.1.2 Findings and Determinations

In providing for such charges, the findings and determinations are as follows:

- 1) In the exercise of its governmental authority and in order to promote the public health, safety, convenience and general welfare, the City has constructed, operated, and maintained a stormwater system. This section is adopted in the further exercise and authority and for the same purpose;
- 2) It is necessary and desirable to provide a method of recovering the future costs of improving, maintaining, and operating the system by establishing a program of user charges;
- 3) In imposing charges, it is necessary to establish a methodology that undertakes to make them just and equitable to assign responsibility for some or all of the future costs of operating, maintaining, and improving the system on the basis of the expected storm water runoff from the various parcels of land within the City; and
- 4) Assigning costs and making charges based upon impervious coverage can only be accomplished within reasonable and practical limits. The provisions of this section establishes a reasonable and practical methodology for making such charges.

4.1.3 Definitions

For the purposes of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

STORM WATER UTILITY FEE. The charge developed for each parcel of land pursuant to this chapter, charged quarterly.

IMPERVIOUS SURFACE. A hard surface which prevents or restricts the infiltration of water into the soil. Impervious surface includes pavement, roofs, water (swimming pools), and gravel.

BEST MANAGEMENT PRACTICE (BMP). A stormwater practice used to provide water quality treatment or manage stormwater runoff. Examples include ponds, infiltration basins, rain gardens, etc.

4.1.4 Storm Water Utility Fee

- 1) **Determination.** The storm water utility fee was determined based on the impervious surface coverage throughout the City. First, exempt land uses (see #4 below) were excluded from the computations. Then, the proportion of residential impervious coverage was determined. The total residential fee was determined using this proportion and the expected storm water utility budgeted expenses. Finally, the remainder of the expected storm water utility budget will be funded by the total non-residential fee.
- 2) **Residential Fee.** The residential fee is charged per parcel to those parcels with Single Family Residential, Multi-Family Residential, and Rural Residential land uses. This includes single family, duplexes, and townhomes. This does not include Multi-family apartments where the owner pays the utility bills.

- 3) **Non-Residential Fee.** The non-residential fee is charged per acre of impervious surface to those parcels with Airport, Cemetery, Commercial, Government Facilities, House of Worship, Industrial, Schools, and Utility land uses. Multi-family apartments where the owner pays the utility bills are included in this grouping.
- 4) **Exemptions.** Those parcels with Agricultural, City Park and Recreation, County Park and Recreation, Open Space/Conservation, Open Water, Roadway Rights-of-Way, and Vacant land uses are exempt from the storm water utility fee. Parcels of other land uses may be exempt on a case-by-case basis as determined by the City. For example, the Correctional Facility is exempt because it is its own MS4.
- 5) **Credits.** If a Best Management Practice (BMP) has been constructed that retains or filters the first inch of runoff from the impervious surfaces on a parcel(s), those parcel(s) are eligible for a 25% credit. A partial credit may be received based on lesser treatment (i.e., retaining or filtering 50% of the first inch of runoff would receive a 12.5% credit). If a parcel has a BMP that was constructed specifically to provide water quality treatment, it is eligible for a credit. A 25% credit is applicable if the BMP was designed to achieve NURP treatment (40-60% Total Phosphorus (TP) and 80-90% Total Suspended Solids (TSS) removal). A partial credit may be received based on lesser treatment (i.e., providing 50% of NURP treatment would receive a 12.5% credit). These credits are available only for non-residential land uses.
- 6) **Establishment.** The residential and non-residential storm water utility fee may be set and established for a period of time as decided by City Council resolution. The fee shall be payable quarterly.

4.2 Resolution Language

The following can be included in a City Council resolution to establish the storm water utility fee.

Land Use	Base Fee
Single Family Residential	\$12.00/parcel
Multi-Family Residential	
Rural Residential	
Airport	\$175/ac impervious
Cemetery	
Commercial	
Government Facilities	
House of Worship	
Industrial	
Schools	
Utility	
Agricultural	Exempt
City Park and Recreation	
County Park and Recreation	
Open Space/Conservation	
Open Water	
Roadway Rights-of-Way	
Vacant	

In addition to this table, the City has a GIS file and spreadsheet of the land use designation and impervious coverage for each parcel within the City.

APPENDIX A

Figure 1 – Existing Land Use
Figure 2 – Proposed Fees
Figure 3 – New Utility Accounts

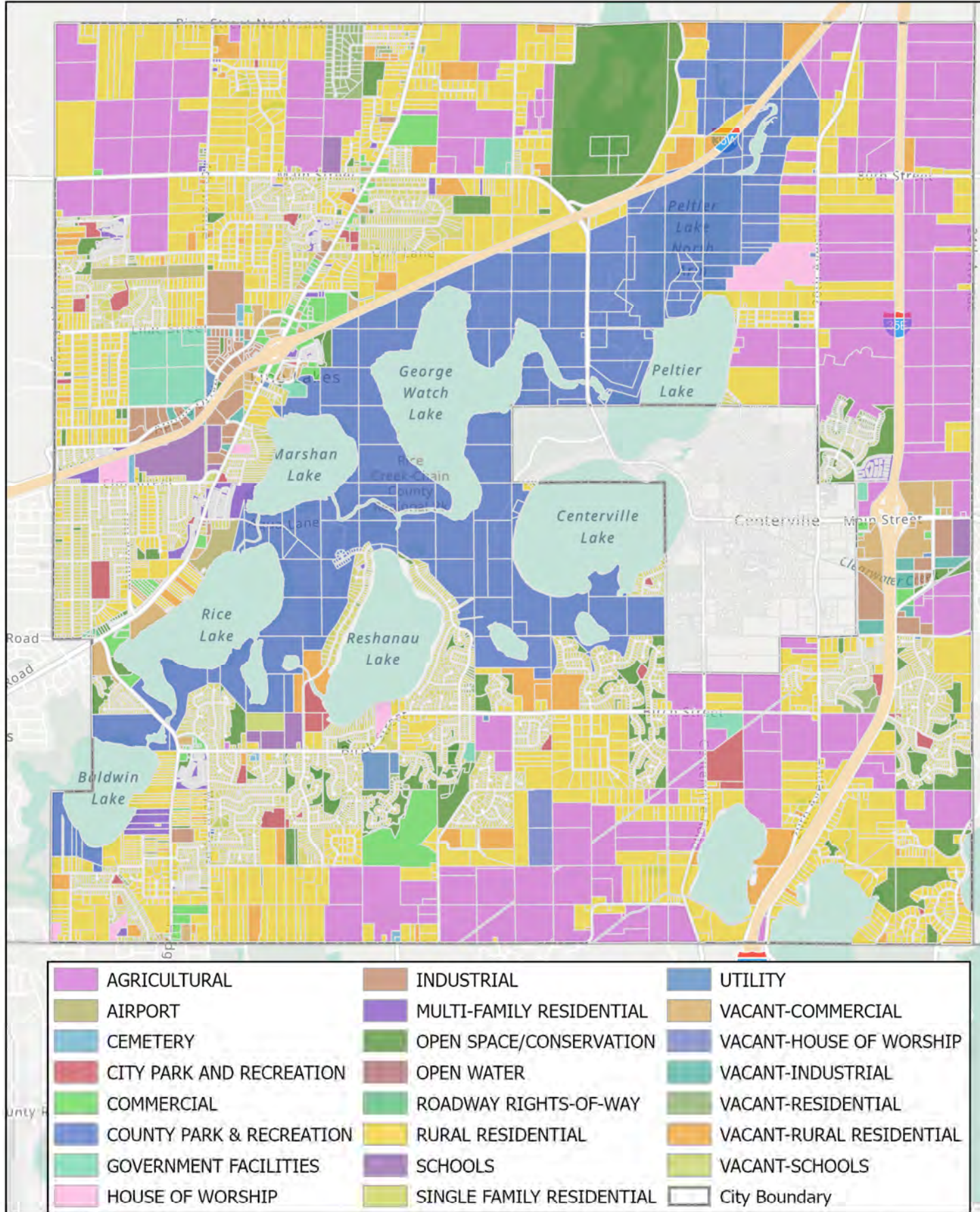


Figure 1 - Existing Land Use

Storm Water Utility Report
City of Lino Lakes, MN



0 4,500
Feet
1 inch = 4,500 feet



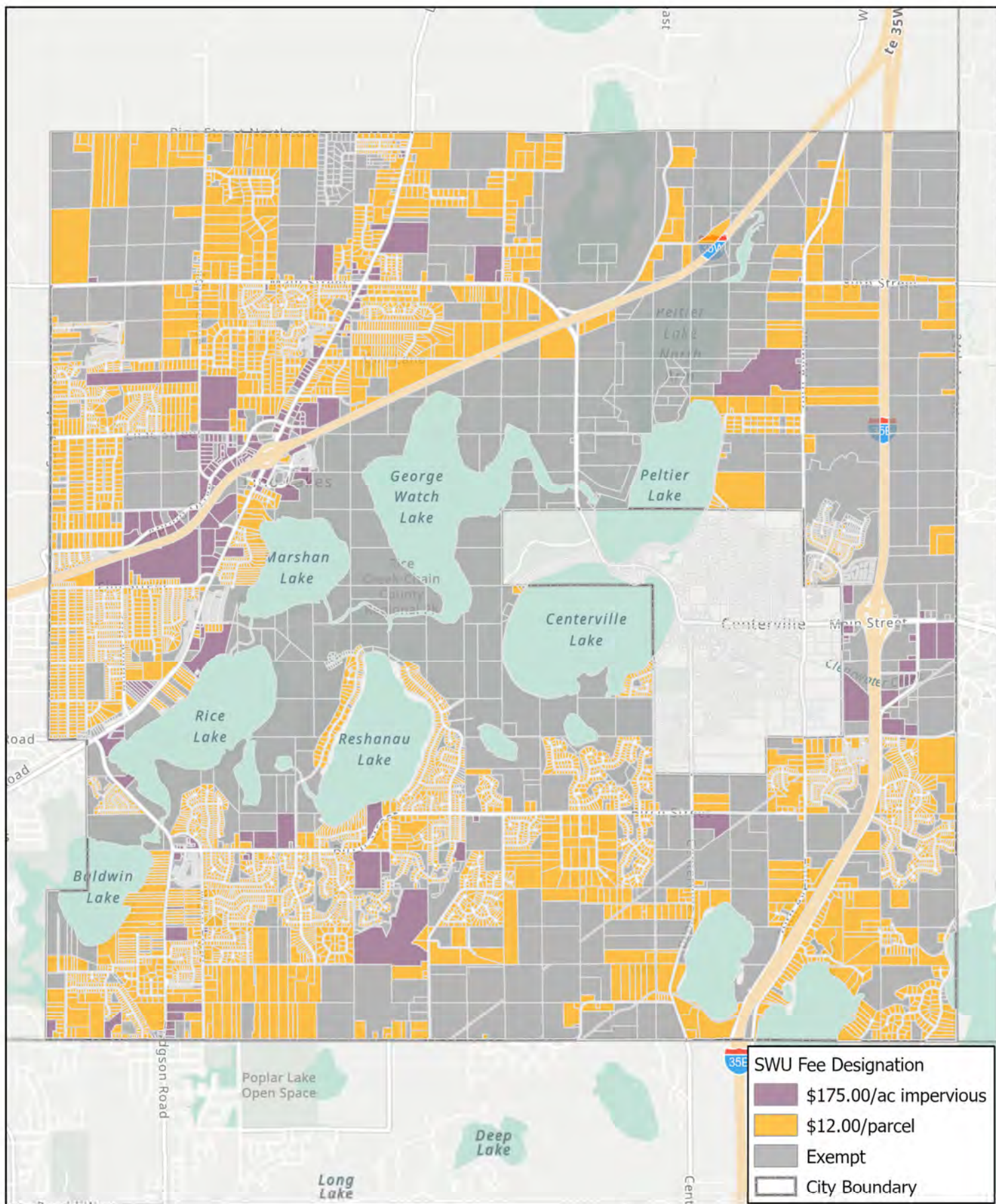


Figure 2 - Proposed SWU Fees

Storm Water Utility Report
City of Lino Lakes, MN



0 4,500
Feet
1 inch = 4,500 feet



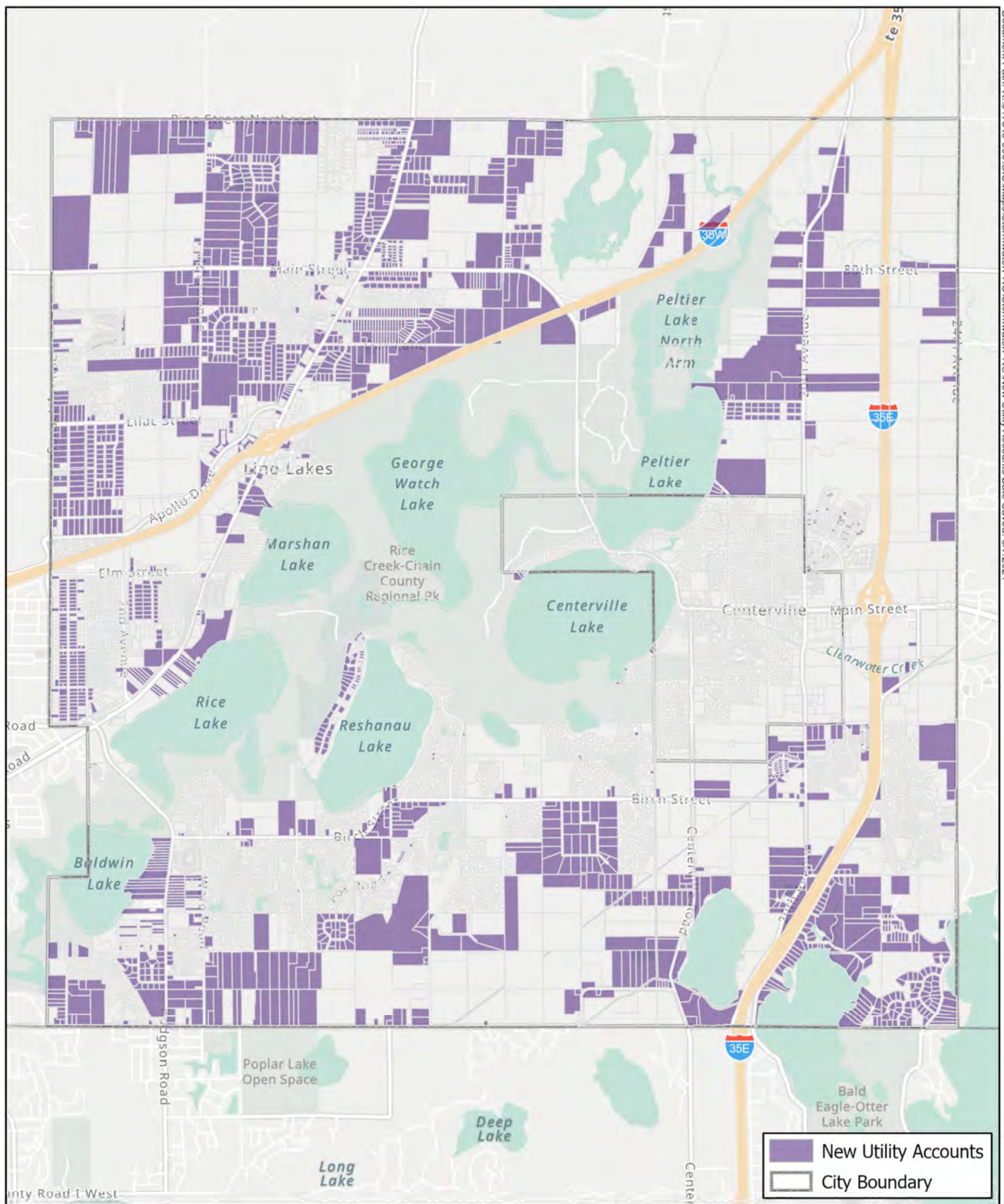


Figure 3 - New Utility Accounts

Storm Water Utility Report
City of Lino Lakes, MN



0 4,500
Feet
1 inch = 4,500 feet

