City of Park Ridge

October 12, 2015

Stormwater Utility Presentation #1

Purpose of Tonight's Presentation

- Explanation of a Stormwater Utility (SWU)
- Provide preliminary results and fee estimates
- Summarize feedback from Open House

Study Process – Public Involvement

1. Open House #1 (8/31/15)
   - Explain SWU concept, need, and preliminary fees by zoning class
   - Answer resident questions

2. City Council Update Presentation (10/12/15)
   - Incorporate feedback from Open House
   - Formalize preliminary results and anticipated fees
   - Opportunity for resident input to Council

3. City Council Final Presentation
   - Present final study report
   - Council to decide whether to establish Stormwater Utility

What is a Stormwater Utility?

- A Stormwater Utility (SWU) is a **fee** charged to all parcels in the City **based on** their **contribution of stormwater** runoff into the sewer system
    - More runoff = Greater chance of flooding
- What is an "impervious area"?
    - Those surfaces that prevent stormwater from infiltrating into the soil

Sidewalk/Driveways/Patios

Building Roofs

Parking Lots

How is a Stormwater Utility Equitable?

- An SWU is a fair and **equitable method** of funding stormwater projects
- The fee charged to each parcel is based on the runoff it generates, as defined by its impervious area
- More impervious area = bigger contribution to the sewer system = higher stormwater fee
- All properties, including tax exempt properties, are assessed a fee

Why is a Stormwater Utility Being Considered?

- Many expensive infrastructure projects need to be built to address flooding problems throughout the City

- City needs to establish a dedicated funding source to pay for stormwater projects

Why is a Dedicated Funding Source Necessary?

- Paying for projects through the City's General Fund means competing with other priorities such as police, fire, public works, capital improvements, etc.

- Increasing the Sewer and Water fees is not equitable since it is not based on impervious coverage

- Increasing property taxes is not equitable because many tax-exempt properties would not be included

What would a Stormwater Utility Pay For?

- SWU's **can** be used to fund anything related to the stormwater system
    - Stormwater Infrastructure projects
    - Repair/replacement of sewer mains
    - Costs to maintain the existing system, including City personnel
    - Street sweeping
    - Administrative costs for permits, studies, etc.

- At this time, planning has assumed the SWU funds would be used for design and construction of **new infrastructure projects**
    - Limits the funds necessary to be collected

How are the fees determined?

- A conceptual outline of a Stormwater Master Plan has been developed
  - Projects from Citywide Sewer Study still under discussion *($21 million)*
    - *Northwest Park, Mayfield Estates*
  - Green Infrastructure projects *($3 million)*
    - *Examples could include adding green elements to "traditional" street projects such as developing a green alley program*
  - Stormwater Storage projects *($12 million)*
    - *Examples could include relief sewer and underground storage projects, or detention basins where open space is available*
  - Evaluation and Design Engineering of Projects over life of SWU *($4 million)*

- Costs are estimated for the Stormwater Plan
  - Total estimated cost (in 2015 dollars) is **$40 million**

How are the fees determined?

- Multiple funding scenarios are evaluated (by Speer Financial)
  - Timing/scheduling of projects is developed
  - Municipal Bonds are used to fund projects
  - SWU fees used to pay back bonds
  - Multiple bonding scenarios are considered

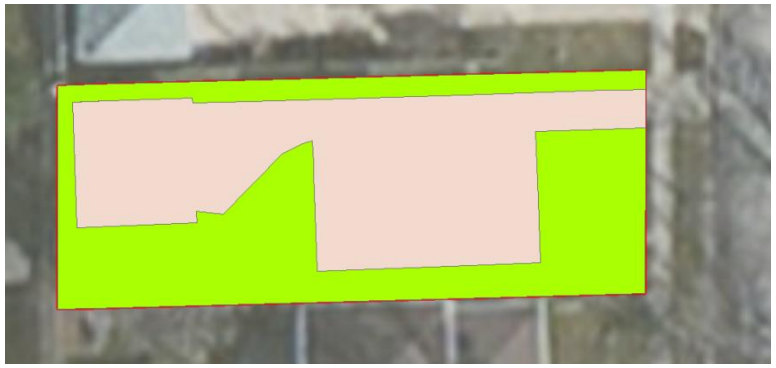
- Total program cost is determined
  - Including cost of projects and debt service

How are the fees determined?

- **Next**, the impervious area of an *average residential property* in each zoning class (R-1, R-2, etc) is determined

Typical Residential Lot

Pervious Area



Impervious Area

- R-3 Zoning has smallest average impervious area, and is defined as an ***Equivalent Residential Unit (ERU)***
  - 1 ERU = approximately 2,800 square feet

How are the fees determined?

- The ERU is determined for each Zoning Classification
  - **R-1** residential = **1.4** ERU *(1.4x the average impervious area)*
  - **R-2** residential = **1.1** ERU *(1.1x the average impervious area)*
  - **R-3** residential = **1** ERU *(1x the average impervious area)*
  - **R-4** residential = **3** ERU *(3x the average impervious area)*
  - **R-5** residential = **8** ERU *(8x the average impervious area)*
  - Non-residential = **4** ERU *(4x the average impervious area)*

- Before a SWU fee would be implemented, the actual impervious area for every parcel would be determined so that fees are not based on the average

How are the fees determined?

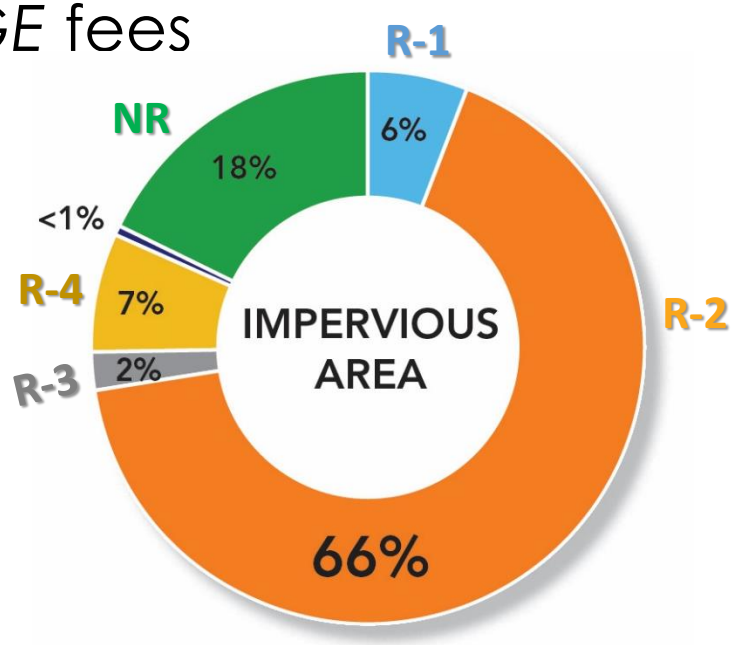
- Every parcel in the City is given an ERU value
- The total ERU for the City is added up
  - Park Ridge has approximately 18,000 ERU
- In simple terms, the total cost of the stormwater program is divided by the number of ERUs to establish the cost per ERU

1 ERU Cost = Total Program Cost / Total ERUs / # of Years

- The fee for each parcel will be based on its individual impervious area

What will it cost?

- The SWU Feasibility study is in the preliminary stage
  - Preliminary fees are based on *average* impervious area, not actual
  - Any changes to the list of projects or assumed costs for the program would affect the calculated fees
- The preliminary rate for 1 ERU is $11 per month
- Therefore, the preliminary *AVERGAGE* fees by zoning type are:
  - R-1 = 1.4 ERU = $15 per month
  - R-2 = 1.1 ERU = $12 per month
  - R-3 = 1 ERU = $11 per month
  - R-4 = 3 ERU = $33 per month
  - R-5 = 8 ERU = $88 per month
  - Non-residential will vary significantly



Other SWU Examples:

Community	Impervious Area (ft^2) of 1 ERU	Monthly Fee
Park Ridge (proposed)	2,800	$11
Rolling Meadows	3,604	$3.90
Highland Park	2,765	$7.00
Downers Grove	3,300	$9.72
Winnetka	3,400	$21.80

Example Calculations

- Example #1 – R-1 Residential (1900 Block of Fenton)

- Total Parcel Area = 11,800 ft^2
- Pervious Area = 7,886 ft^2
- Impervious Area = 3,914 ft^2

1 ERU = 2,800 ft^2

Example ERU = 3,914 / 2,800 = 1.4 ERU

Preliminary SWU Fee = 1.4 x $11 = $15.40/month

Example Calculations

- Example #1 – R-2 Residential (300 Block N. Delphia)

- Total Parcel Area = 6,620 ft^2
- Pervious Area = 3,250 ft^2
- Impervious Area = 3,370 ft^2

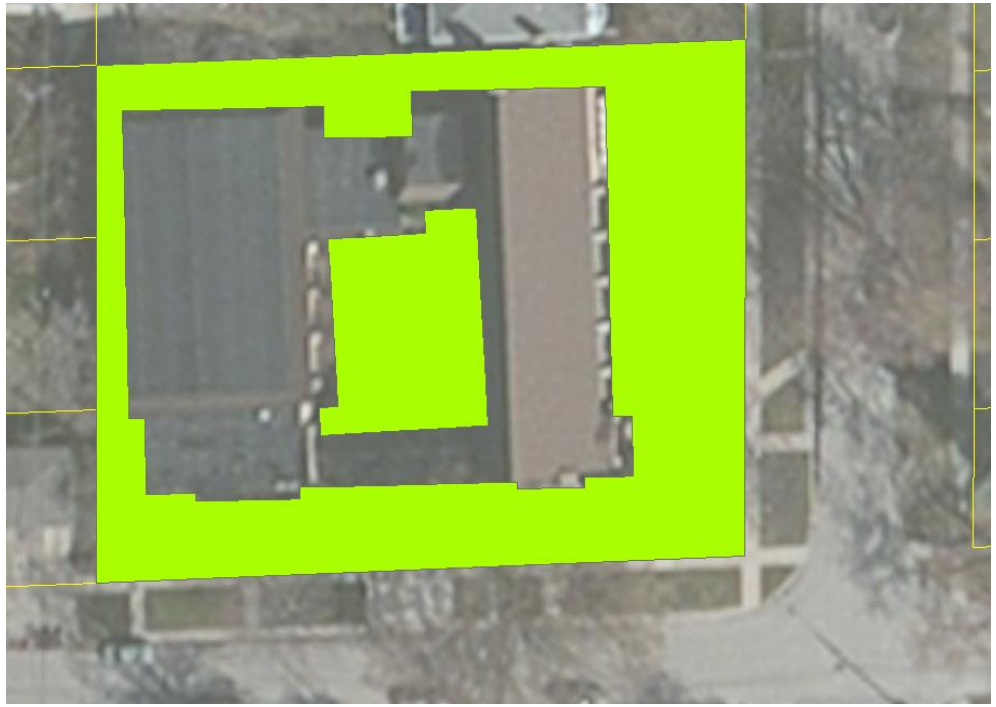
1 ERU = 2,800 ft^2

Example ERU = 3,370 / 2,800 = 1.2 ERU

Preliminary SWU Fee = 1.2 x $11 = $13.20/month

Example Calculations

- Example #2 – Non-residential – Church Property



- Total Parcel Area = 28,000 ft^2
- Pervious Area = 15,123 ft^2
- Impervious Area = 12,877 ft^2

1 ERU = 2,800 ft^2

Example ERU = 12,877 / 2,800 = 4.6 ERU

Preliminary SWU Fee = 4.6 x $11 = $50.60/month

Example Calculations

- Example #2 – Non-residential – School Property

- Total Parcel Area = 438,555 ft^2
- Pervious Area = 326,106 ft^2
- Impervious Area = 112,449 ft^2

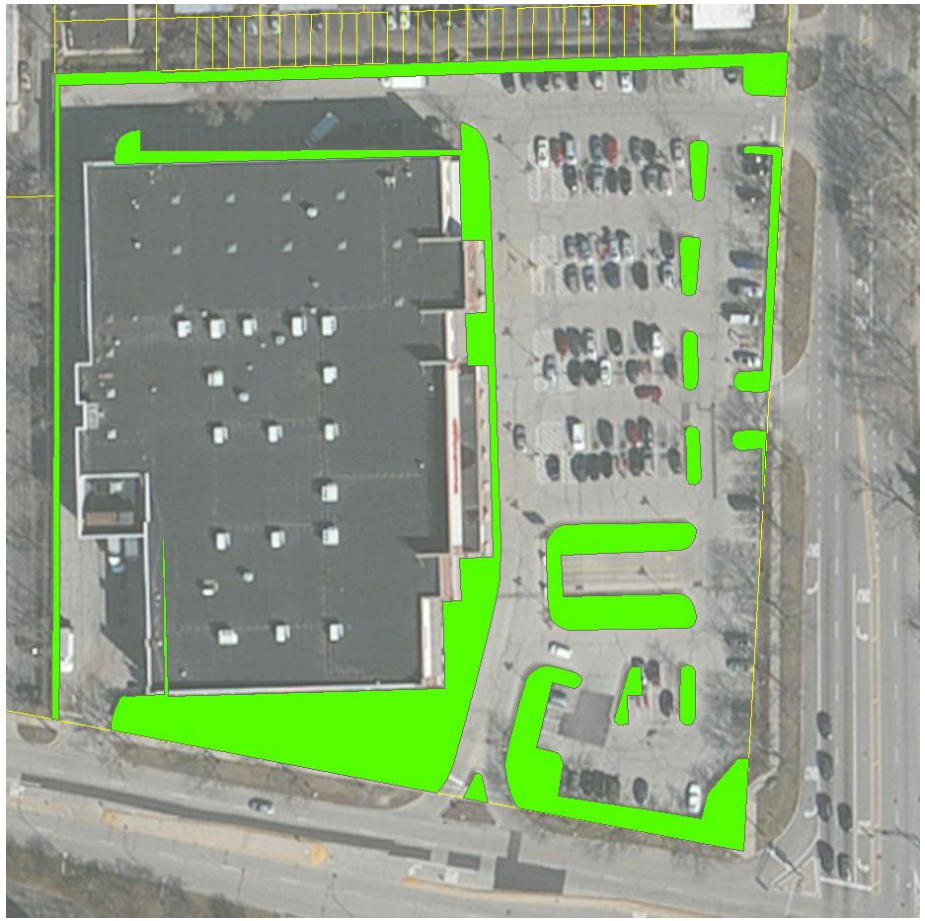
1 ERU = 2,800 ft^2

Example ERU = 112,449 / 2,800 = 40.2 ERU

Preliminary SWU Fee = 40.2 x $11 = $442/month

Example Calculations

- Example #2 – Non-residential – Commercial Property



- Total Parcel Area = 206,820 ft^2
- Pervious Area = 34,598 ft^2
- Impervious Area = 172,222 ft^2

1 ERU = 2,800 ft^2

Example ERU = 172,222 / 2,800 = 61.5 ERU

Preliminary SWU Fee = 61.5 x $11 = $676/month

Example Calculations

- Example #2 – Non-residential – Commercial Property

- Total Parcel Area = 29,069 ft^2
- Pervious Area = 7,361 ft^2
- Impervious Area = 21,708 ft^2

1 ERU = 2,800 ft^2

Example ERU = 21,708 / 2,800 = 7.8 ERU

Preliminary SWU Fee = 7.8 x $11 = $86/month

Credits and Incentives

- Most SWU programs include provisions for credits and incentives
  - ***Incentive*** *= one time rebate*
  - ***Credit*** *= permanent (or semi-permanent) reduction of SWU fee*

Credits and Incentives - Examples

- ***Incentives***
  - Typically used to encourage residents and businesses to construct small projects, such as:
    - Rain Barrels
    - Rain Gardens
    - Permeable Pavement
  - Typically set up as one-time rebate to avoid issues of long-term maintenance and inspection requirements
  - Common Incentive Amounts (per property):

Rain Barrels - $25

Rain Gardens - $200-300

Permeable Paving - $200-300

Credits and Incentives - Examples

- ***Credits***
  - Used to encourage large property owners to construct stormwater projects, such as:
    - Stormwater Detention Basins/Vaults
    - Infiltration Basins

Detention Vault

Detention Basin

- Typically set up as recurring fee reduction for a fixed period of time.
  - Property owner would need to regularly reapply for credit and prove that the stormwater project is still functioning
  - Minimizes burden on City for inspections
- Some SWU programs will credit a portion of construction cost; some only the monthly SWU fee.
- Details of credit program to be developed for final presentation and report.

Park Ridge SWU Summary

- The SWU fee would apply to all properties and be based on the amount of impervious area
- A preliminary Stormwater Master Plan has been outlined and estimated to cost approximately $40 million
- An "*Equivalent Residential Unit*" *(ERU)* is equal to 2,800 ft2 impervious area
- Each property will be assigned an ERU value
- Fees will be approximately $11 per ERU
- A credit/incentive program will be developed to offset fees

Next Steps

- Develop full database of impervious areas per parcel
- Prepare specific recommendations for credit program
- Review City Ordinances and develop new language as needed to implement SWU
- Establish preferred billing mechanism
- Prepare final report and presentation

Questions?