

# Stormwater Utility Fee Virtual Town Halls

January 28, 2021

February 11, 2021



# Mayor's Remarks

- Welcome
- This initiative has been part of a multi-year project to provide a funding source for stormwater maintenance and improvements
- Many residents think flooding is solely caused by new development. This does contribute; however, in the past few years the Village has made significant changes to requirements that contain stormwater to development site, working to not further exacerbate the problem
- The primary indicator is the amount of rain and the fact that the storms received are more intense as evidenced in 2017
- The staff will present the details of the fee and how it was established and how it will be utilized to make these improvements

# Introduction

- Tonight's Speakers
  - Terry Wepler – Mayor
  - Nicholas Mostardo – Director of Finance
  - Paul Kendzior – Director of Public Works
  - Jeff Cooper – Village Engineer
  - Eric Callocchia – Executive Consultant, NewGen Strategies & Solutions, LLC
- Housekeeping Items
  - Participants have been muted to avoid audio issues
  - If you would like to ask a question, you may:
    - Type the question in the chat box, where it will be read aloud and answered by staff, or;
    - Indicate in the chat that you would like to be unmuted to ask a question verbally
  - Comments received in advance of the meeting will be read aloud at the end of the presentation
  - The Village will post the video of this meeting along with a recap of questions on its website

# History of Funding – Village Stormwater



- The Village was historically able to fund stormwater operations and very basic maintenance of existing stormwater assets from its General Fund
  - Approximately \$50,000-\$100,000 per fiscal year
- General Fund resources do not sufficiently cover the cost of constructing new assets, particularly in the context of Master Stormwater Management Plan (approximately \$53 million over 15 years) or the ‘true’ cost of annual O&M
- The Village Board considered several options for funding the identified capital improvements:
  - Property tax increases
  - Special service areas
  - Utility fee

# Stormwater Utility Fee Concept Overview



- A stormwater utility fee is an impervious surface assessment made on a property parcel-by-parcel basis
  - Used to fund capital improvements and maintain existing assets
- Strengths of the utility fee approach versus other options:
  - Fair – All properties that contribute runoff to the stormwater system will pay to fund the system, including tax-exempt and properties inhabited by not-for-profits
  - Equitable – The amount a property owner pays is based on how much their property type contributes to stormwater runoff
  - Transparent – The fees collected are used solely for stormwater activities and accounted for separately
  - Dependable – Provides a dependable revenue stream to provide sufficient revenues for stormwater improvements and allow for proactive management of the system resulting in the lowest cost over time

# Stormwater Utility Rate Study

- The Master Stormwater Management Plan, adopted by the Village Board on May 28, 2019, identified a series of capital improvements to the Village's stormwater conveyance infrastructure in order to mitigate flooding
- On August 29, 2019, the Village Board awarded a contract to NewGen Strategies & Solutions to perform a stormwater utility feasibility and rate study
- On July 21, 2020, Phase I of the utility study was completed and presented to the Village Board. Phase I of the project:
  - Identified funding requirements for capital and O&M
  - Laid out the proposed capital plan over a 15-year construction schedule (FY 21-22 start)
  - Explored various fee structure options

# Stormwater Utility Rate Study

- The Village Board subsequently directed staff to proceed to Phase II of the rate study, which includes:
  - Identifying the fee amount for each Village parcel, creating a billing database, and merging it with existing utility billing records
  - Public outreach and online customer lookup tool development
  - Assistance in crafting the stormwater utility fee ordinance
- Remaining utility implementation milestones:
  - Virtual town hall meetings – January 28 and February 11
  - Formal Phase II presentation to Village Board – February 23
  - Approval of stormwater utility ordinance – March 9
  - Fee effective on Village utility bills – September 1

# Questions

# Master Stormwater Management Plan Recap



- Historically the Village experiences localized surface flooding in numerous older/mature neighborhoods during moderate to heavy rainfall events, usually in excess of two inches
- The storm sewer and drainage systems in these areas typically have a two-to-five-year frequency storm capacity, lack adequate surface detention and safe overland flood routes are non-existent
- The Village contracted with the firm of CBBEL in May of 2017 to prepare a Master Stormwater Plan for the Village
- The record setting rainfall/flooding event in July of 2017 provided valuable “real-life” data to better document actual flooding conditions and impacts

# Master Stormwater Management Plan Recap Cont.



## Master Stormwater Management Plan Recap Cont.



- The Master Plan contains ten proposed flood reduction capital projects that will benefit multiple neighborhoods in the Village
- The Master Plan also recommends a dedicated funding source (fee) for the capital projects along with the necessary operations and maintenance of the storm sewer and drainage system, which will help neighborhoods not initially benefitting from the Plan
- The proposed fee also sets aside funds for possible future capital projects for neighborhoods not currently provided in the Plan
- The Master Stormwater Plan was adopted by the Village Board with the passage of Resolution 19-R-100 on May 28, 2019

# Development of Capital Plan Schedule



Project	Cost	Year	Project	Cost	Year
Miscellaneous Capital	\$390,000	FY 20-21	Ellis Avenue – Construction	\$4,642,462	FY 30-31
Rockland Road – Engineering	\$147,500	FY 20-21	Liberty Bell and 4th – Engineering	\$684,549	FY 30-31
Rockland Road – Upsizing	\$1,068,371	FY 20-21	Liberty Bell and 4th – Construction	\$3,941,093	FY 31-32
Burdick & Ames – Engineering A	\$235,000	FY 20-21	Appley Avenue – Engineering	\$125,332	FY 32-33
C. Brown Reservoir	\$804,049	FY 20-21	Appley Avenue – Construction	\$719,761	FY 33-34
Burdick & Ames – Engineering	\$668,325	FY 21-22	Harding and Willow – Engineering	\$5,335	FY 33-34
Rockland Road – Construction	\$5,278,260	FY 21-22	Harding and Willow – Construction	\$10,819	FY 33-34
Burdick & Ames – Construction A	\$6,257,306	FY 22-23	Carriage Hill – Engineering	\$146,091	FY 34-35
Burdick & Ames – Construction B	\$6,288,592	FY 23-24	Carriage Hill – Construction	\$834,808	FY 34-35
Copeland Manor – Engineering	\$981,374	FY 23-24	Lange and Cook – Engineering	\$113,252	FY 35-36
Copeland Manor – Construction	\$5,678,230	FY 25-26	Lange and Cook – Construction	\$647,157	FY 35-36
Winchester/Interlaken/Stonegate – Engineering	\$1,857,448	FY 25-26	<b>Subtotal FY 30-31 through FY 35-36</b>	<b>\$11,870,659</b>	
Winchester/Interlaken/Stonegate – Construction	\$7,111,373	FY 26-27			
Winchester/Interlaken/Stonegate – Construction	\$3,582,376	FY 28-29			
Ellis Avenue - Engineering	\$802,361	FY 28-29			
<b>Subtotal FY 20-21 through FY 28-29</b>	<b>\$41,1150,565</b>				

**Total Sixteen-Year CIP = \$53,021,224**

Based on estimated FY 20-21 costs, inflated to future dollars.

Totals may not add due to rounding.

# Questions

# Stormwater Utility Fee Detail

## OUR FIRM



10

2012  
established



48

employees

management and economic consulting firm created by consultants who are dedicated to each of our client's missions and recognized as experts in our respective fields of service

*Thoughtful Decision Making for Uncertain Times*

NewGen  
Strategies & Solutions

In association with

**DONOHUE**

## OUR PEOPLE



27%

hold professional certifications



52%

have advanced degrees



42%  
female



58%  
male



Government Finance Officers Association



## OUR CLIENTS



Water



Wastewater



Stormwater



Solid Waste

Over **3,000** complete or active projects in **33** states



## OUR VALUES



### Our Vision

be a consulting company that makes a difference for our clients, our employees, and in our communities



**\$200,000+**

since 2015, NewGen has committed to giving 1% of our **gross revenues** to charity each year. We have given over \$200k since the program's inception.

## Definition of Impervious Area (IA)

- EPA Definition of Impervious Area: Any surface that cannot effectively absorb or infiltrate rainfall; for example, sidewalks, rooftops, roads, and parking lots
- In 2019, Ayers Associates “acquired Village-wide color aerial imagery, preparing an analytical aero triangulation solution, and providing planimetric mapping of all planimetric features and impervious area polygons”
- The Impervious Area Map was delivered as a Geographic Information System (GIS) database which was used by Donohue & Associates, Inc., Municipal GIS Partners, and Village Staff to develop a Village-wide parcel database

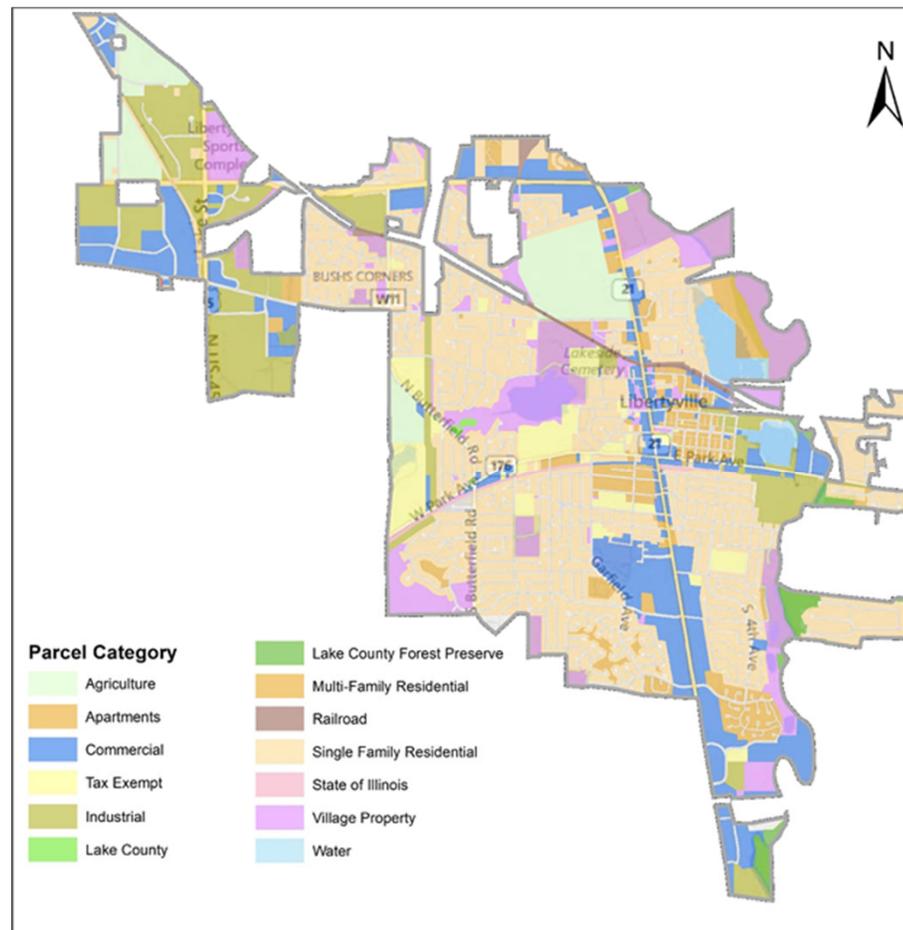
# Impervious Area Analysis



# Village Parcel Summary

Classification	Parcels	Total Area (ft <sup>2</sup> )	Pervious Area (ft <sup>2</sup> )	Impervious Area (ft <sup>2</sup> )
Single-Family Residential	5,437	84,536,998	61,578,562	22,958,435
Multi-Family Residential	1,766	12,739,474	8,412,811	4,326,663
Commercial	762	32,806,920	15,554,179	17,252,740
Industrial	202	26,237,323	13,073,851	13,163,472
Village Property	167	30,824,045	28,363,004	2,461,041
Tax Exempt	100	10,524,156	7,928,581	2,595,575
Apartments	31	776,092	310,939	465,153
Lake County Forest Preserve	16	3,708,399	3,695,403	12,995
Water	9	4,529,230	4,465,891	63,339
Lake County	9	565,657	545,882	19,775
Agriculture	6	8,895,493	7,473,782	1,421,712
State of Illinois	6	432,306	373,716	58,590
Railroad	5	708,687	657,180	51,507
<b>Totals</b>	<b>8,516</b>	<b>217,284,778</b>	<b>152,433,781</b>	<b>64,850,998</b>

Totals may not add due to rounding



# Fee Basis – ERU + IDF

- An Equivalent Residential Unit (ERU) describes the impervious area of each parcel in the Village as a multiple of the average residential (Single-Family and Multi-Family) parcel. If an average residential parcel is 2,000 square feet, a parcel with 4,000 square feet of impervious area would be assigned an ERU of 2.0:

$$\text{Parcel IA} / \text{Average Residential IA} = \text{Parcel ERU: } 4,000 / 2,000 = 2.0$$

- A parcel's Intensity of Development Factor (IDF) is based on the percentage of impervious area relative of the parcel's total area based on the following table:

<b>IDF Classification</b>	<b>% Impervious</b>	<b>IDF</b>
Vacant	0%	0.2
Light Development	1% - 20%	0.5
Medium Development	21% - 40%	1.0
Heavy Development	41% - 70%	1.5
Very Heavy Development	>70%	2.0

# Fee Basis – ERU + IDF

- Village ERU Calculation:

	<b>Parcels</b>	<b>Impervious Area (ft<sup>2</sup>)</b>
Single Family Residential	5,437	22,958,435
Multi-Family Residential	1,766	4,326,663
<b>Totals</b>	<b>(A) 7,203</b>	<b>(B) 27,285,099</b>

**Village ERU = (B) / (A)                      3,800 square feet (rounded)**

- The sum of all Village ERUs is 17,074.

- Village IDFs Calculation:

<b>IDF Classification</b>	<b>% Impervious</b>	<b>IDF</b>	<b>Parcels</b>	<b>% of Parcels</b>	<b>IDFs</b>	<b>% of IDFs</b>
Vacant	0%	0.2	263	3.1%	52.6	0.5%
Light Development	1% - 20%	0.5	641	7.5%	320.5	3.1%
Medium Development	21% - 40%	1.0	3,945	46.3%	3,945	38.7%
Heavy Development	41% - 70%	1.5	2,928	34.4%	4,392	43.1%
Very Heavy Development	>70%	2.0	739	8.7%	1,478	14.5%
<b>Totals</b>			<b>8,516</b>	<b>100.0%</b>	<b>10,188</b>	<b>100.0%</b>

- The total “Fee Basis” for the Village is ERUs + IDFs = 17,074 + 10,188 = 27,262

# Intensity of Development Factor



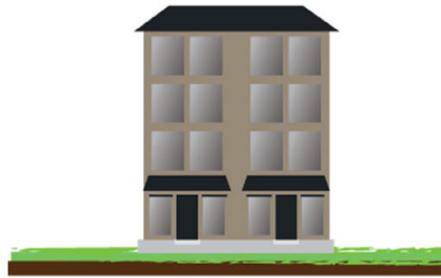
Vacant  
IDF Factor: 0.2



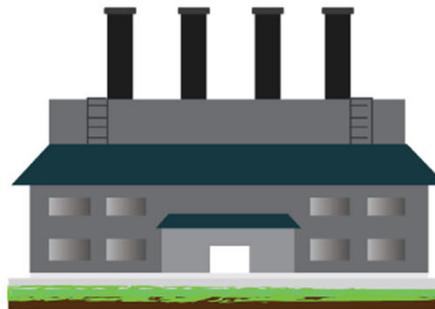
Light Development  
IDF Factor: 0.5



Medium  
Development  
IDF Factor: 1.0



Heavy  
Development  
IDF Factor: 1.5



Very Heavy  
Development  
IDF Factor: 1.5

# Intensity of Development Factor Example Bills

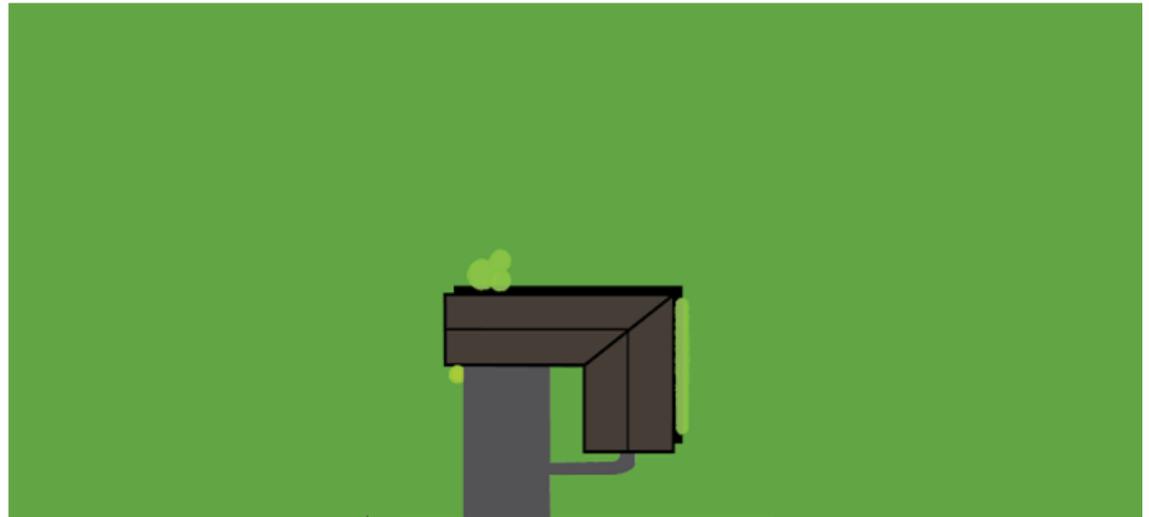
Impervious area = 3,800 for both parcels

FY 21-22 IDF Fee = \$13.00



ERU = 1.0  
IDF = 1.5

$$\begin{aligned}\text{Bi-Monthly Fee} &= (\text{ERU} \times \text{Fee}) + (\text{IDF} \times \text{Fee}) \\ &= (1.0 \times \$13.00) + (1.5 \times \$13.00) \\ &= \mathbf{\$32.50}\end{aligned}$$



ERU = 1.0  
IDF = 0.5

$$\begin{aligned}\text{Bi-Monthly Fee} &= (\text{ERU} \times \text{Fee}) + (\text{IDF} \times \text{Fee}) \\ &= (1.0 \times \$13.00) + (0.5 \times \$13.00) \\ &= \mathbf{\$19.50}\end{aligned}$$

# Stormwater Rate Calculation

- Stormwater Fees are set to cover the Operating, Capital, Debt Service, and Reserve costs of the system required to implement the Master Stormwater Management Plan
- Bi-Monthly Fees are calculated by taking the annual revenue need, divided by the fee basis, divided by six (to account for bi-monthly billing)

<b>Stormwater System Costs</b>	<b>FY 21-22</b>	<b>FY 22-23</b>	<b>FY 23-24</b>	<b>FY 24-25</b>	<b>FY 25-26</b>
Operating Expenses	\$737,318	\$752,561	\$768,171	\$784,159	\$782,250
Cash Funded Capital Projects	\$979,448	\$312,678	\$314,242	\$315,813	\$317,392
Debt Service for Capital Projects	\$0	\$360,104	\$787,002	\$1,282,988	\$1,282,988
Non-Home Rule Sales Tax	\$88,403	\$88,403	\$88,403	\$88,403	\$88,403
Reserve Contributions	\$1,112,455	\$638,028	\$207,424	\$23,098	\$190,502
<b>Total Expenses</b>	<b>\$2,917,624</b>	<b>\$2,151,774</b>	<b>\$2,165,242</b>	<b>\$2,494,461</b>	<b>\$2,661,535</b>
Non-Fee Revenues	\$1,500,000	\$25,338	\$38,806	\$40,881	\$44,383
Fee Revenues Needed ( <b>Revenue Target</b> )	\$1,417,624	\$2,126,436	\$2,126,436	\$2,453,580	\$2,617,152
<b>Total Revenues</b>	<b>\$2,917,624</b>	<b>\$2,151,774</b>	<b>\$2,165,242</b>	<b>\$2,494,461</b>	<b>\$2,661,535</b>
<b>Fee Basis (ERUs + IDFs)</b>	<b>27,262</b>	<b>27,262</b>	<b>27,262</b>	<b>27,262</b>	<b>27,262</b>
Fee per ERU and IDF ( <b>Revenue Target / Fee Basis / 6</b> )	\$13.00**	\$13.00	\$13.00	\$15.00	\$16.00
<b>Bi-Monthly Bill for Average Residential Parcel (1 ERU and 1 IDF)</b>	<b>\$26.00</b>	<b>\$26.00</b>	<b>\$26.00</b>	<b>\$30.00</b>	<b>\$32.00</b>

\* DCEO Grant

\*\* FY 21-22 Fee effective September 2021. FY 21-22 Fee Calculation is (Revenue Target / Fee Basis / 4)

# ERU + IDF Projected Bi-Monthly Sample Bills



<b>Property Type</b>	<b>Street</b>	<b>ERU</b>	<b>IDF</b>	<b>FY 21-22</b>	<b>FY 22-23</b>	<b>FY 23-24</b>	<b>FY 24-25</b>	<b>FY 25-26</b>
Low ERU/Low IDF SFR	Woodfield Lane	0.4	0.5	\$11.70	\$11.70	\$11.70	\$13.50	\$14.40
Low ERU/High IDF MFR	Lynn Circle	0.4	2.0	\$31.20	\$31.20	\$31.20	\$36.00	\$38.40
High ERU/Low IDF SFR	Camelot Lane	1.8	0.5	\$29.90	\$29.90	\$29.90	\$34.50	\$36.80
Low ERU/High IDF MFR	Parkside Court	0.5	2.0	\$32.50	\$32.50	\$32.50	\$37.50	\$40.00
Low ERU/High IDF MRF	Red Top Drive	0.7	2.0	\$35.10	\$35.10	\$35.10	\$40.50	\$43.20
Low ERU/Mid IDF MFR	Brainerd Avenue	0.5	1.5	\$26.00	\$26.00	\$26.00	\$30.00	\$32.00
Avg. ERU/Avg. IDF SFR	Old Peterson Road	1.0	1.0	\$26.00	\$26.00	\$26.00	\$30.00	\$32.00
Mid ERU/Mid IDF SFR	Harding Avenue	1.1	1.5	\$33.80	\$33.80	\$33.80	\$39.00	\$41.60
High ERU/Mid IDF SFR	Forest Lane	3.7	1.5	\$67.60	\$67.60	\$67.60	\$78.00	\$83.20
High ERU/Low IDF SFR	Lake Street	6.5	0.5	\$91.00	\$91.00	\$91.00	\$105.00	\$112.00
Office Building	W Park Avenue	4.4	2.0	\$83.20	\$83.20	\$83.20	\$96.00	\$102.40
Apartments	E Cook Avenue	7.0	2.0	\$117.00	\$117.00	\$117.00	\$135.00	\$144.00
Car Dealership	S Milwaukee Ave	29.4	2.0	\$408.20	\$408.20	\$408.20	\$471.00	\$502.40
Industrial Building	US Highway 45	86.8	1.0	\$1,141.40	\$1,141.40	\$1,141.40	\$1,317.00	\$1,404.80
Hospital	S Milwaukee Ave	427.3	41.1	\$6,089.20	\$6,089.20	\$6,089.20	\$7,026.00	\$7,494.40

The hospital is the sum of several parcels, resulting in the sum of IDFs.

# Stormwater Utility Fee Lookup Tool



- Available on the Village website
- Need Utility Billing Account number to see estimated FY 21-22 stormwater bill
- Accounts with multiple PINs or Addresses will be shown a pop-up with instructions to get more information

### Libertyville Stormwater Fee Lookup Tool

Enter your utility billing (UB) account number

Account Number

🔍
✎

Click [here](#) for assistance locating your utility billing account number    Click [here](#) for more information about the Village's stormwater utility fee

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12345 Street Road  
Service Address

1.10                  1.00

Number of [ERU](#)    Number of [IDF](#)

Estimated  
Bi-Monthly Bill

\$27.30

The Village of Libertyville bills customers on a bi-monthly basis.  
Monthly Fee: **\$13.65**

Impervious & Pervious Area  
(Square Feet)

● Impervious Area   ● Pervious Area

PIN numbers associated with this utility account		Service addresses associated with this utility account	
Account Number	PIN	Account Number	Service Address
123456789-10	987654321	123456789-10	12345 Street Road

All of the above information is estimated based off of the most recently completed stormwater fee study. If you feel the above information is inaccurate or have questions please contact [stormwaterhelp@libertyville.com](mailto:stormwaterhelp@libertyville.com)

# Credits and Appeals

- Two credits available, each granting a 50% reduction in fee, are not mutually exclusive:
  - Drainage Credit – Parcel owner must prove that 100% of runoff from property does not enter Village's stormwater system
  - Sampling Credit – Parcel owner must prove that 100% of runoff from property does not enter watershed managed and sampled by Village
- Fee Appeals available:
  - Billing Errors: Fee is correct but has been sent to the incorrect address or fee has been calculated incorrectly, but impervious area is correct
  - Impervious Calculation Errors:
    - Existence – Fee is based on impervious area that does not exist
    - Location – Fee is based on impervious area in an incorrect location
    - Amount – Parcel Impervious area is calculated incorrectly
- Appeals contesting the types of surface areas designated by the Village as impervious will not be considered

# Conclusion

- Reading of questions and comments received in advance of this meeting
- Additional questions from audience



# Resources

- Website
  - [www.libertyville.com/stormwaterutilityfee](http://www.libertyville.com/stormwaterutilityfee)
  - Information on fee, including frequently asked questions, appeal/credit forms, and a link to the projected fee lookup tool
- Email
  - [stormwaterhelp@libertyville.com](mailto:stormwaterhelp@libertyville.com)
  - Monitored by Village staff; emails and feedback shared with the Village Board
- Phone
  - Engineering Department (Project Inquiries) – 847-918-2100
  - Finance Department (Utility Fee Inquiries) – 847-362-2430