# Village of Downers Grove

## Stormwater Utility Study

**Stormwater Recommendations**

**October 18, 2011**

Municipal & Financial Services Group

# Agenda

I. Study Overview

II. Recommendations

# Timeline

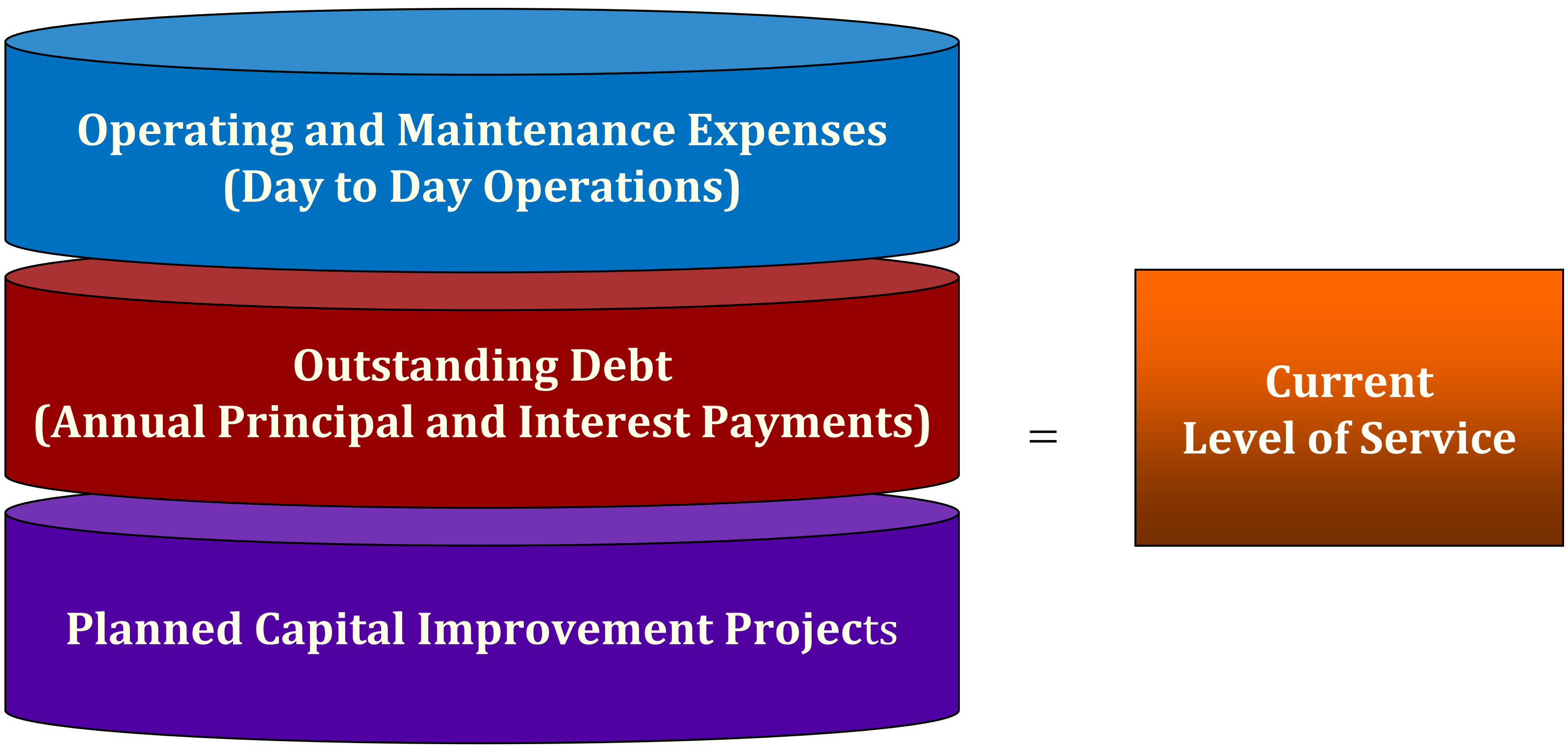
- Workshop #1 – Background / Overview / Policy (August 2, 2011)
- Workshop #2 – Level of Service and Magnitude of Fee (September 13, 2011)
- Workshop #3 – Stormwater Fee Analysis and Credits (October 4th, 2011)
- **Workshop #4 – Recommendations (October 18th 2011)**

# Stormwater Study Overview

# Village Stormwater System

- Three major watersheds
  - 11 miles of streams
- 2/3 of the Village is drained by storm sewers
  - 130 miles of storm sewers
  - 7,000 drainage structures
- 1/3 of the Village is drained by ditches
  - 140 miles of ditches
  - 47,000 feet of culverts
- 315 stormwater storage facilities

# Level of Service



# Current Level of Service

| | FY 13 | FY 14 | FY 15 | FY 16 | FY 17 |
|---|---|---|---|---|---|
| Operating and Maintenance | $1,659,200 | $1,715,700 | $1,774,200 | $1,834,700 | $1,897,300 |
| Existing Debt | $1,147,100 | $1,144,800 | $1,146,200 | $1,146,100 | $1,145,400 |
| Capital Maintenance & Replacement* | $552,500 | $797,700 | $1,185,000 | $1,715,000 | $1,000,000 |
| **Total** | **$3,358,800** | **$3,658,200** | **$4,105,400** | **$4,695,800** | **$4,042,700** |

*Stormwater mains on 220 year replacement cycle

# Recommended Level of Service

| | FY 13 | FY 14 | FY 15 | FY 16 | FY 17 |
|---|---|---|---|---|---|
| Current Level of Service | $3,358,700 | $3,658,200 | $4,105,400 | $4,695,800 | $4,042,600 |
| Recommended Incremental O&M* | $1,884,100 | $1,886,700 | $1,940,000 | $1,994,800 | $2,051,200 |
| Recommended Incremental Capital** | $516,100 | $516,100 | $969,600 | $969,600 | $1,007,700 |
| **Total** | **$5,758,900** | **$6,061,000** | **$7,015,000** | **$7,660,200** | **$7,101,500** |

*O&M expenditures as recommended in the Stormwater Masterplan

**Stormwater mains on 100 year replacement cycle and funds watershed improvement projects

# Current Revenues

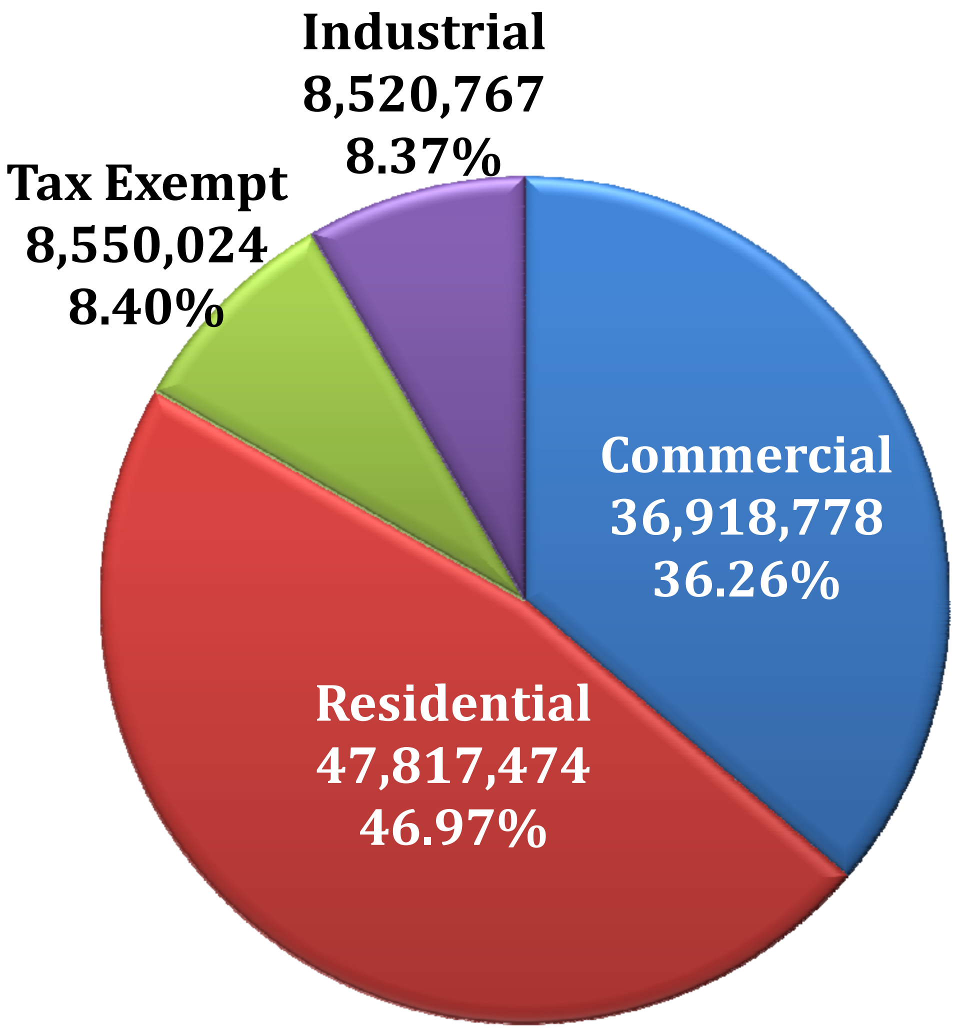
| Source of Revenues | 2013 |
|---|---|
| General Fund | $815,202 |
| Developer Contribution | $50,000 |
| Property Tax Levy for 2008 Bonds Repayment | $1,147,050 |
| Property Tax Levy for Stormwater Maintenance | $511,565 |
| **Total Revenues** | **$2,523,817** |

# Funding Gap Analysis

| | FY 13 | FY 14 | FY 15 | FY 16 | FY 17 |
|---|---|---|---|---|---|
| Total Current Revenues | $2,523,800 | $2,550,100 | $2,580,900 | $2,611,300 | $2,642,200 |
| | | | | | |
| Current Level of Service | $3,358,700 | $3,658,200 | $4,105,400 | $4,695,800 | $4,042,600 |
| **Funding Gap** | **($834,900)** | **($1,108,100)** | **($1,524,500)** | **($2,084,500)** | **($1,400,400)** |
| | | | | | |
| Recommended Level of Service | $5,758,900 | $6,061,100 | $7,015,000 | $7,660,200 | $7,101,500 |
| **Funding Gap** | **($3,235,100)** | **($3,511,000)** | **($4,434,100)** | **($5,048,900)** | **($4,459,300)** |

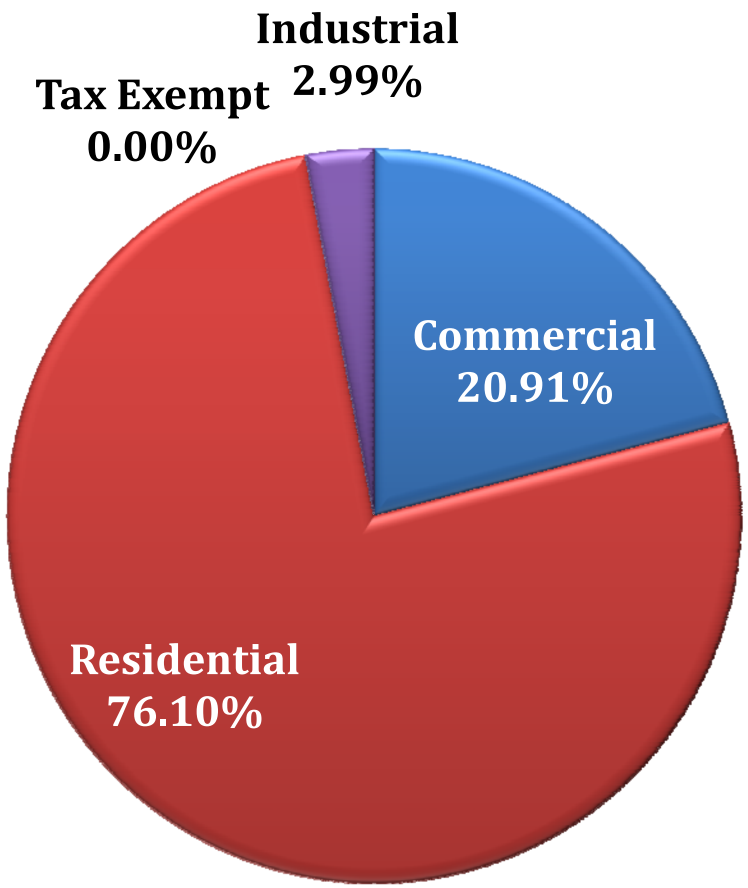
# Rate Base - Impervious Area (Sq. Ft.)

- Industry best practice
- Relates directly to runoff and demand on system.
- Impervious area is readily available for all parcels in Village

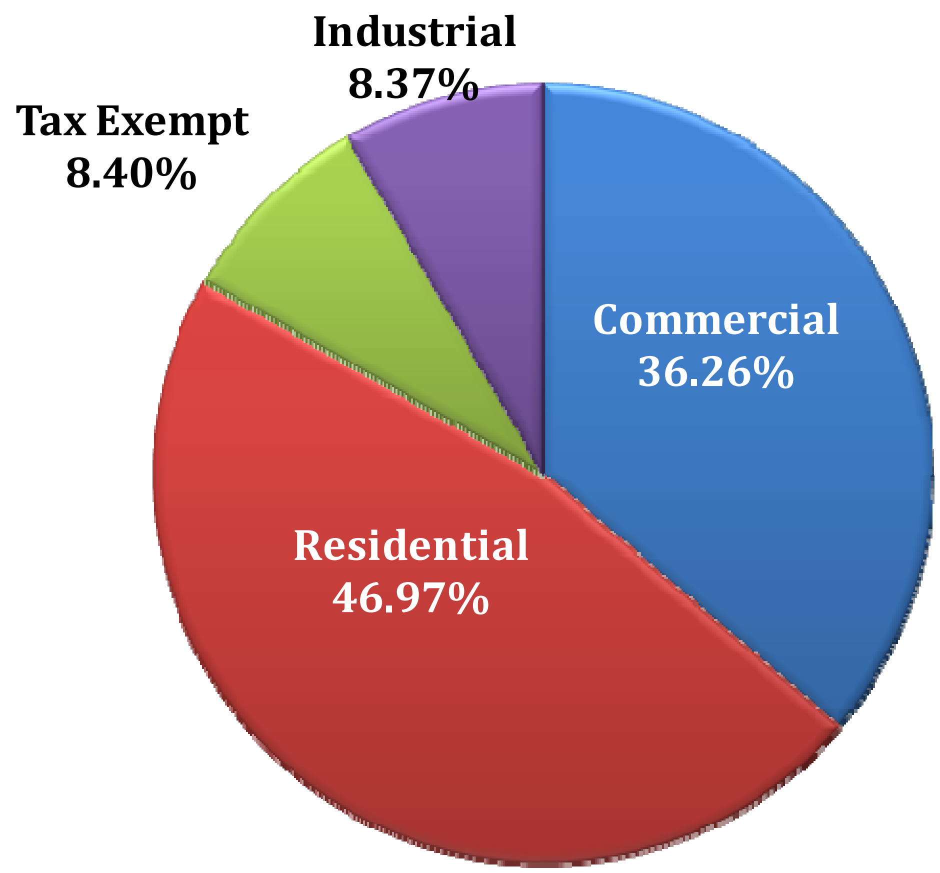


# Current Revenues vs. Impervious Area

Tax Revenue Allocation




Impervious Area by Class




76% of property tax revenues for stormwater come from residential properties but these properties only represent 47% of impervious area

# Recommendations

# Recommendation: Stormwater Utility

**The Village should implement a stormwater utility and a stormwater fee.**

➢ A stormwater utility and fee will provide:

- **Improved Equity**
- **Fiscal Accountability**
- **Dependable Revenue Stream**
- **Increased Public Awareness**

# Recommendation: Fee Structure

**The Village should implement a stormwater fee using impervious area and based on Equivalent Runoff Units (ERUs).**

Single Family Residential (Tiered ERUs)

| | Small | Medium | Large |
|---|---|---|---|
| Impervious | 1 - 2,500 Sq. Ft. | 2,501 - 4,000 Sq. Ft. | 4,001 - 7,000 Sq. Ft. |
| ERU's | 0.75 | 1.00 | 1.50 |

Non-Single Family Residential (Actual ERUs)

| | Actual Impervious Area Parcel by Parcel |
|---|---|
| Multiple of ERU's | 3,300 Sq. Ft. |

# Recommendation: Administration

**The Village should assess the stormwater fee on all properties in the Village (no exemptions) and offer credits for on-site stormwater management.**

- A well designed credit program should:
  - Focus on offering credits to properties that have the opportunity to actually reduce stormwater impact.
  - Limit the complexity of the program (at least initially).
  - Reductions in revenue result the need for increased fees.

# Recommendation: Funding Level

**The Village should fund the current level of service in 2013.**

- Recommended funding approach:
  - Reduce property taxes to fund only 2008 debt service.
  - Implement a stormwater fee that funds the remaining balance of the current level of service in 2013.

# Recommendation: Funding Approach

| | Current Revenues 2013 | Proposed Revenues 2013 |
|---|---|---|
| General Fund | $815,202 | - |
| Developer Contribution | $50,000 | $50,000 |
| Property Tax Levy for 2008 Bonds Repayment | $1,147,050 | $1,147,050 |
| Property Tax Levy for Stormwater Maintenance | $511,565 | - |
| Stormwater Fee | - | $2,361,651 |
| **Total** | **$2,523,817** | **$3,558,701** |

- Results in a reduction in property taxes of $1.33 million in 2013

# Recommendation: Stormwater Fees

**The Village should adopt a monthly stormwater fee beginning in 2013.**

| Single Family Residential | 2013 |
|---|---|
| Tier 1: (1 – 2,500 sq. ft.) | $4.20 |
| Tier 2: (2,501 – 4,000 sq. ft.) | $5.60 |
| Tier 3: (4,001 – 7,000 sq. ft .) | $8.40 |

| Non-SFR | 2013 |
|---|---|
| Per ERU (3,300 sq. ft.) | $5.60 |

# Monthly Property Owner Impact

| Property Type | Number of ERU | Assumed Credit | 2013 Monthly Stormwater Fee |
|---|---|---|---|
| SFR - Small | 0.75 | - | $4.20 |
| SFR - Medium | 1.0 | - | $5.60 |
| SFR - Large | 1.5 | - | $8.40 |
| Average Church | 18 | - | $100.80 |
| Hospital | 235 | 50% | $658.00 |
| University | 278 | 50% | $778.40 |
| Big Box Retail | 139 | - | $778.40 |
| Strip Mall | 100 | - | $560.00 |
| Average Commercial | 20 | - | $112.00 |

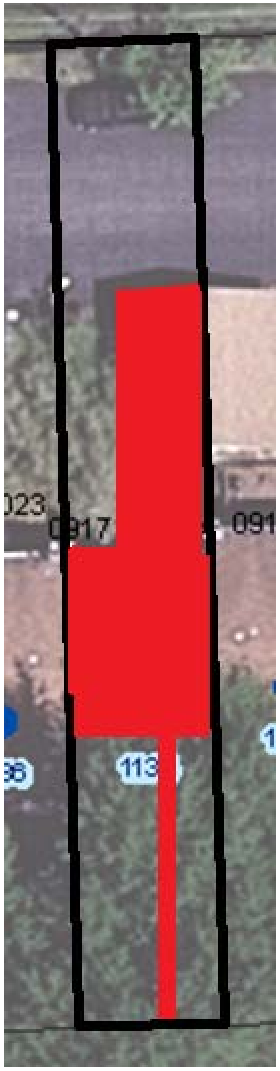
# Residential Sample Tier 1


Total Impervious Area: 1,724 Sq. Ft.

1,724 sq. ft. → 0.75 ERUs

Monthly Stormwater Fee - $4.20

# Residential Sample Tier 1

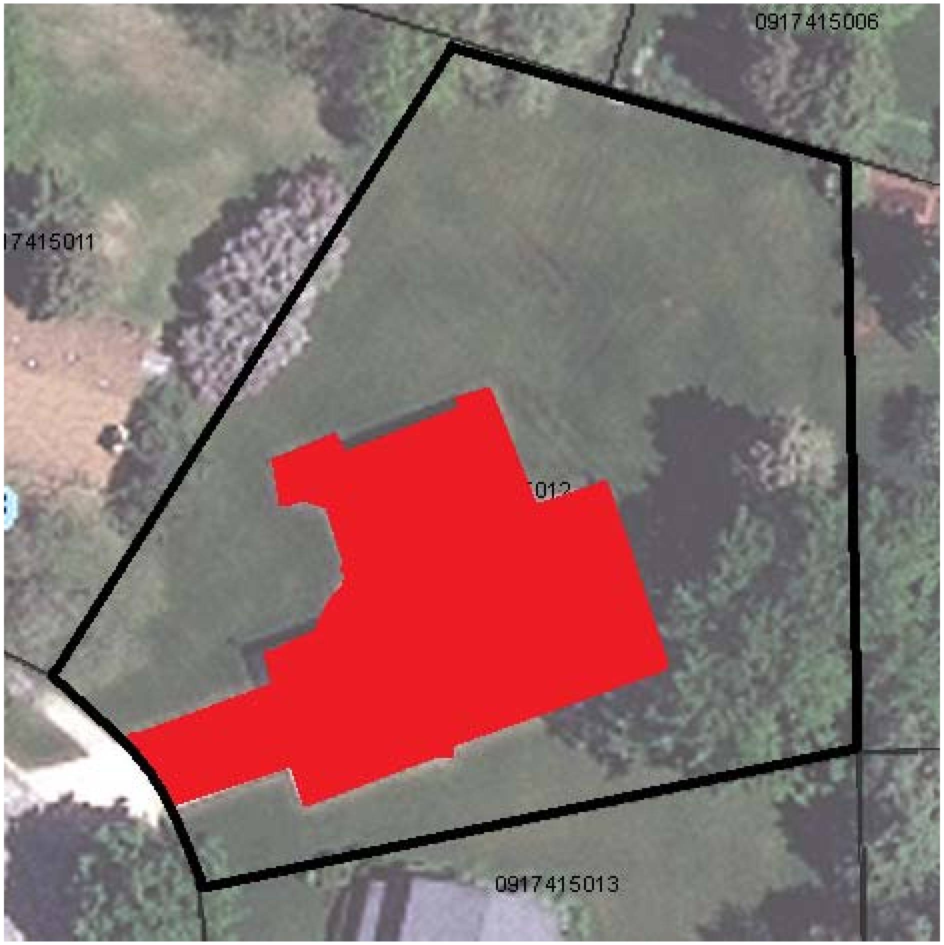



Total Impervious Area: 1,712 Sq. Ft.

1,712 sq. ft. → 0.75 ERUs

Monthly Stormwater Fee - $4.20

# Residential Sample Tier 2

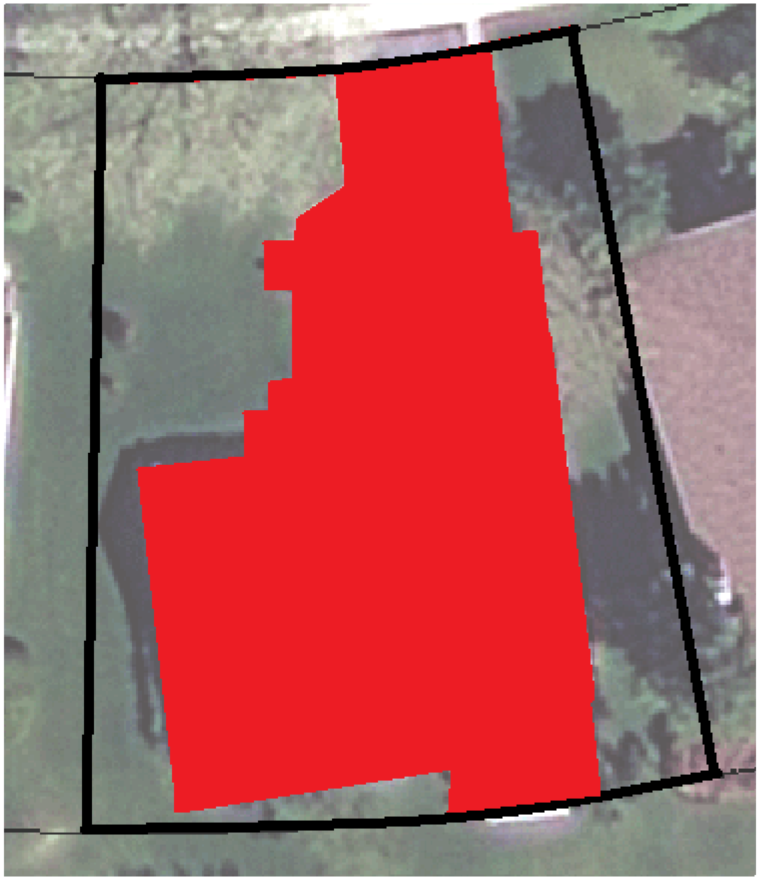



Total Impervious Area: 3,240 Sq. Ft.

3,240 sq. ft. → 1.00 ERUs

Monthly Stormwater Fee - $5.60

# Residential Sample Tier 2

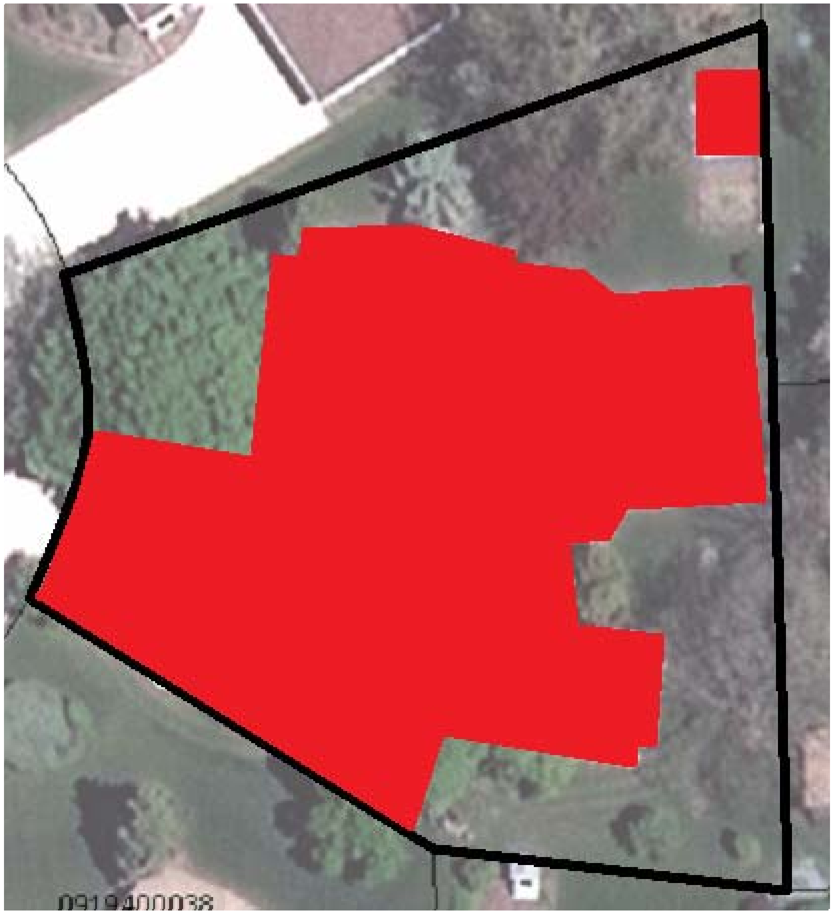


Total Impervious Area: 3,214 Sq. Ft.

3,214 sq. ft. → 1.00 ERUs

Monthly Stormwater Fee - $5.60

# Residential Sample Tier 3



Total Impervious Area: 5,072 Sq. Ft.

5,072 sq. ft. → 1.50 ERUs

Monthly Stormwater Fee - $8.40

# Residential Sample Tier 3

Total Impervious Area: 5,086 Sq. Ft.

5,086 sq. ft. → 1.50 ERUs

Monthly Stormwater Fee - $8.40

# Recommendation: Long-term Funding

**The Village should increase funding for the stormwater system over time to provide the recommended level of service.**

- Recommended long-term plan:
  - Increase the stormwater fee annually at a level to reach the recommended level of service by 2022 (ten-year phase-in)
  - Will require annual increases in of the stormwater fee of approximately 17%

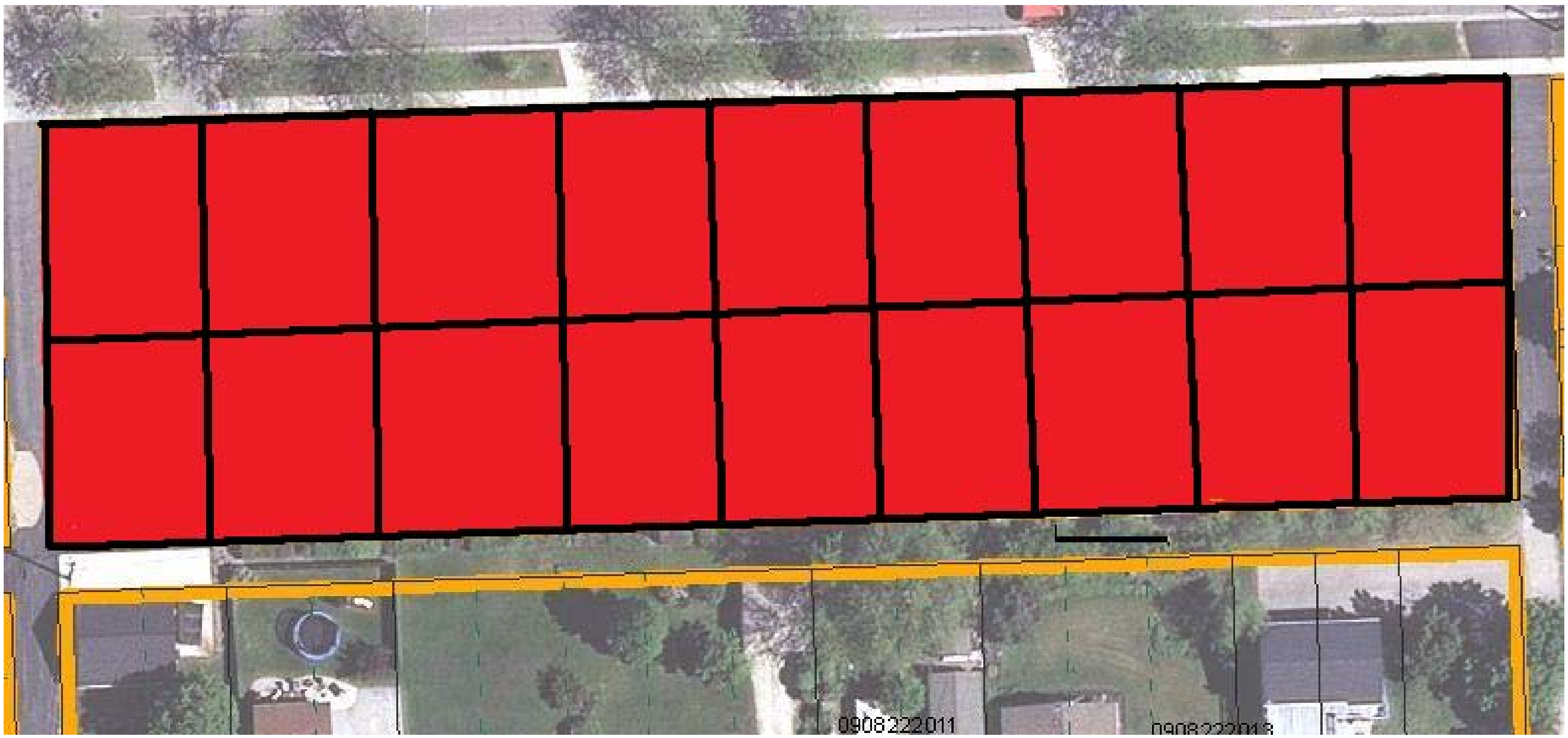
# Summary

**The implementation of the recommendations will:**

- Bring the level of funding for stormwater up to the current level of service in 2013
- Reduce the property tax levy by $1.33 million
- Begin addressing the inequity of the current funding approach
- Put in place a stormwater fee that will generate $2.4 million in revenues dedicated to stormwater
- Maintains source of funding for existing debt service
- Encourage on-site stormwater management

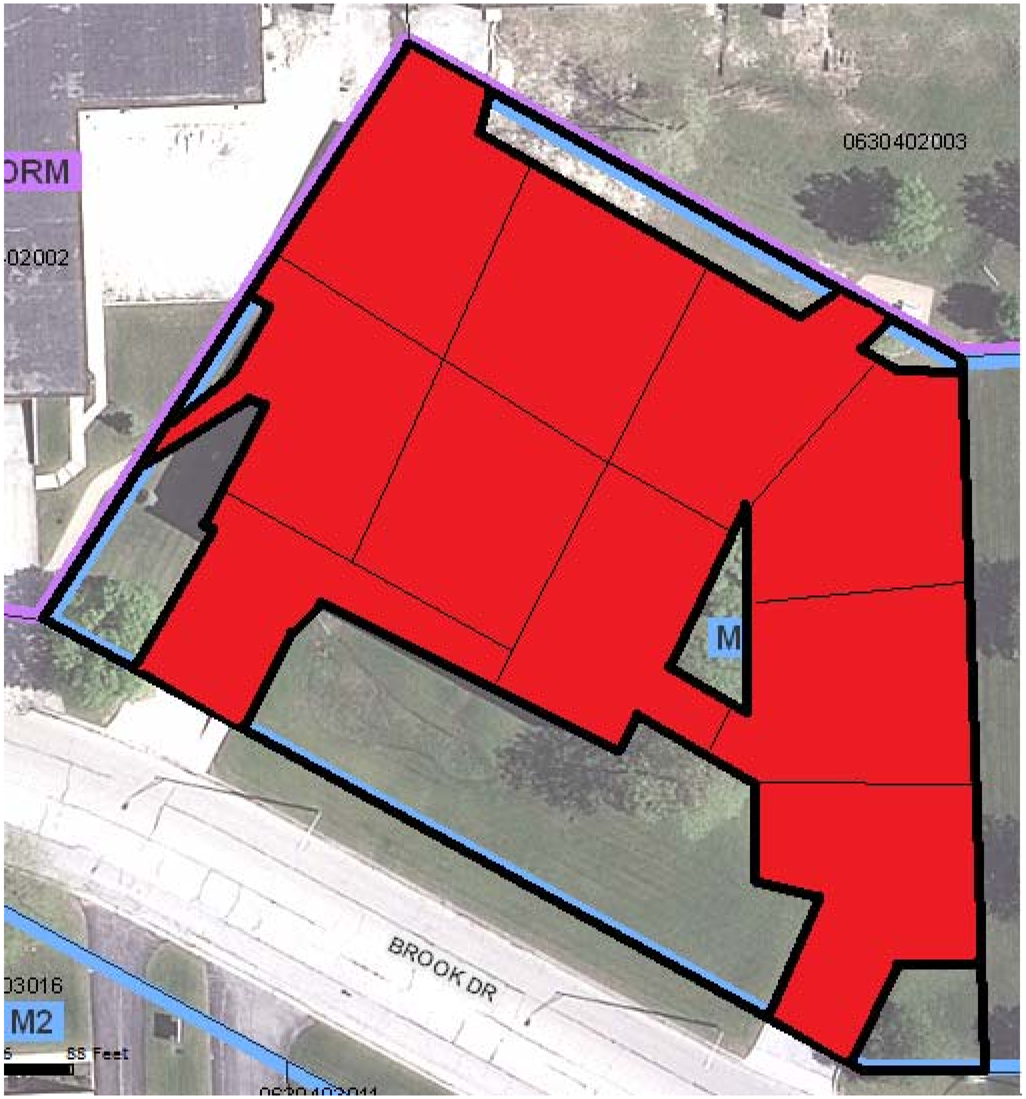
# Questions / Discussion

# Non-Residential Sample




Total Impervious = 59,000 square feet (18 ERU's)
Monthly Stormwater Fee = $100.80

# Non-Residential Sample




Total Impervious =32,500 sq. ft.
(10 ERU's)

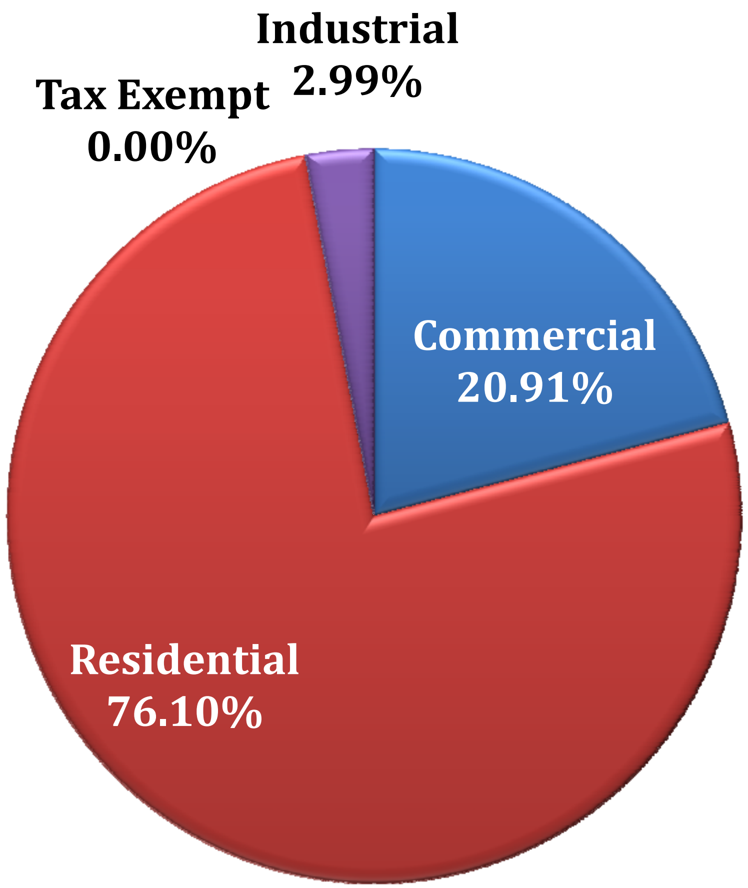
Monthly Stormwater Fee = $56

# Monthly Stormwater Fee Example: School Districts

| | Number of ERU's | 2013 |
|---|---|---|
| School District No. 58 | 363 | $1,423.74 |
| | | |
| School District No. 99 | 343 | $1,344.56 |

# Current Revenues vs. 2013 Revenues

Tax Revenue Allocation




2013 Revenue Allocation