

Storm Water Rate Study Update

June 14, 2019

Storm Water Fee History

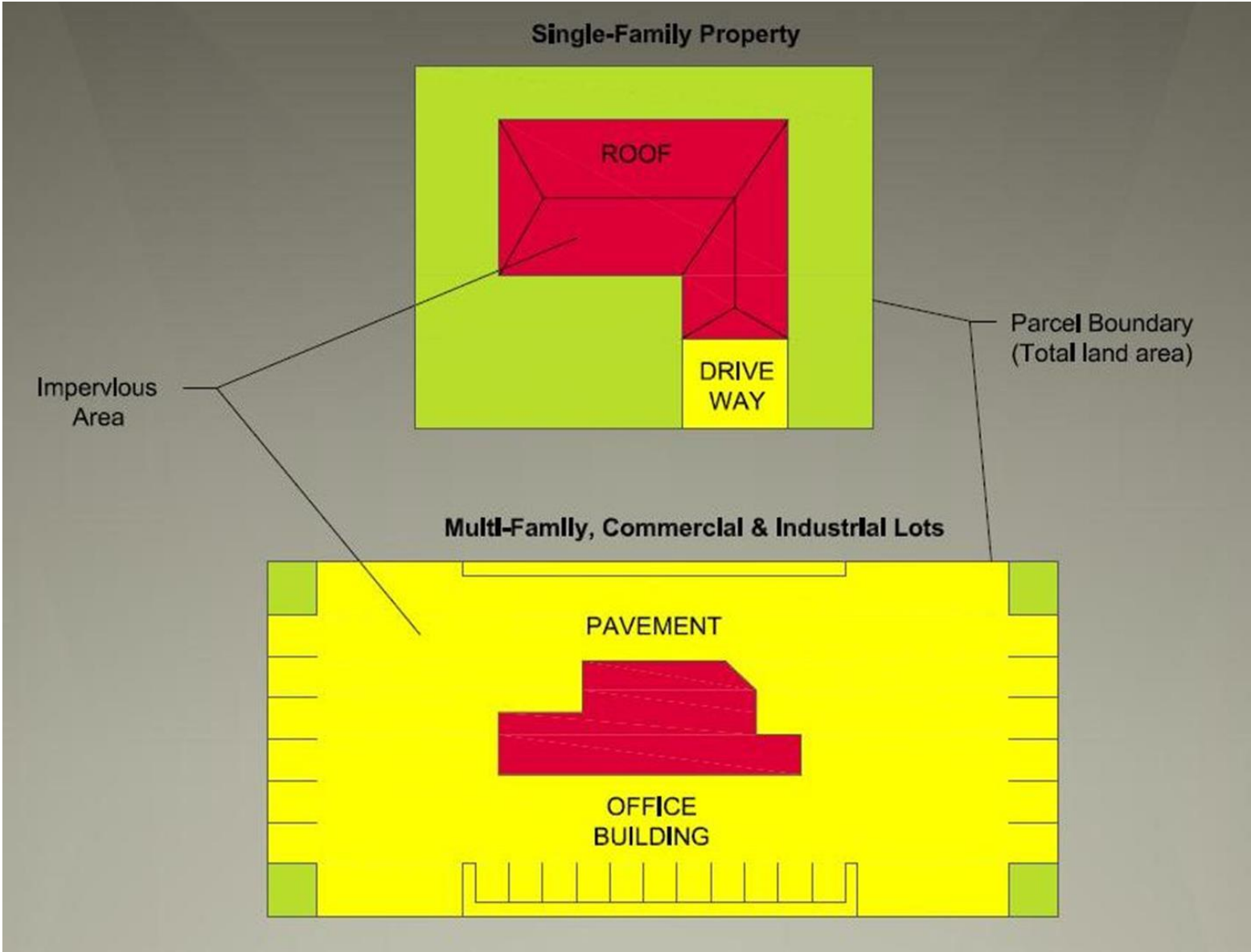
- **Stormwater Utility established in 1999**
 - Fund capital improvements
 - Fund operations and maintenance
- **Impervious Cover determined by parcel**
 - Equivalent Residential Unit (ERU) set to = 2,250 SF
- **Current Rate structure**
 - Residential rate based on lot size
 - Small Lot (0 to 6,000 sq. ft.)
 - Medium Lot (6,000 to 12,000 sq. ft.)
 - Large Lot (greater than 12,000 sq. ft.)
 - Commercial rate based on ERU's (impervious cover/2,250 SF)
 - Multi-Family rate based on ERU and lot size
- **Update needed to reflect priority of stormwater management**

Completed

- **Calculated impervious cover (IC) by parcel**
 - 2017 0.5" 4-band aerial imagery to determine IC in ETJ
 - Impervious cover by 2019 HCAD parcel boundaries
- **Parcel impervious cover matched to billing database**
 - Billing system based upon address not parcel
 - Billing data reviewed (IC, rate class, active account)
- **Rate structure review**
 - Updated Equivalent Residential Unit impervious cover
 - Residential impervious cover frequency distribution
 - Impervious cover most equitable and proportional method for fees

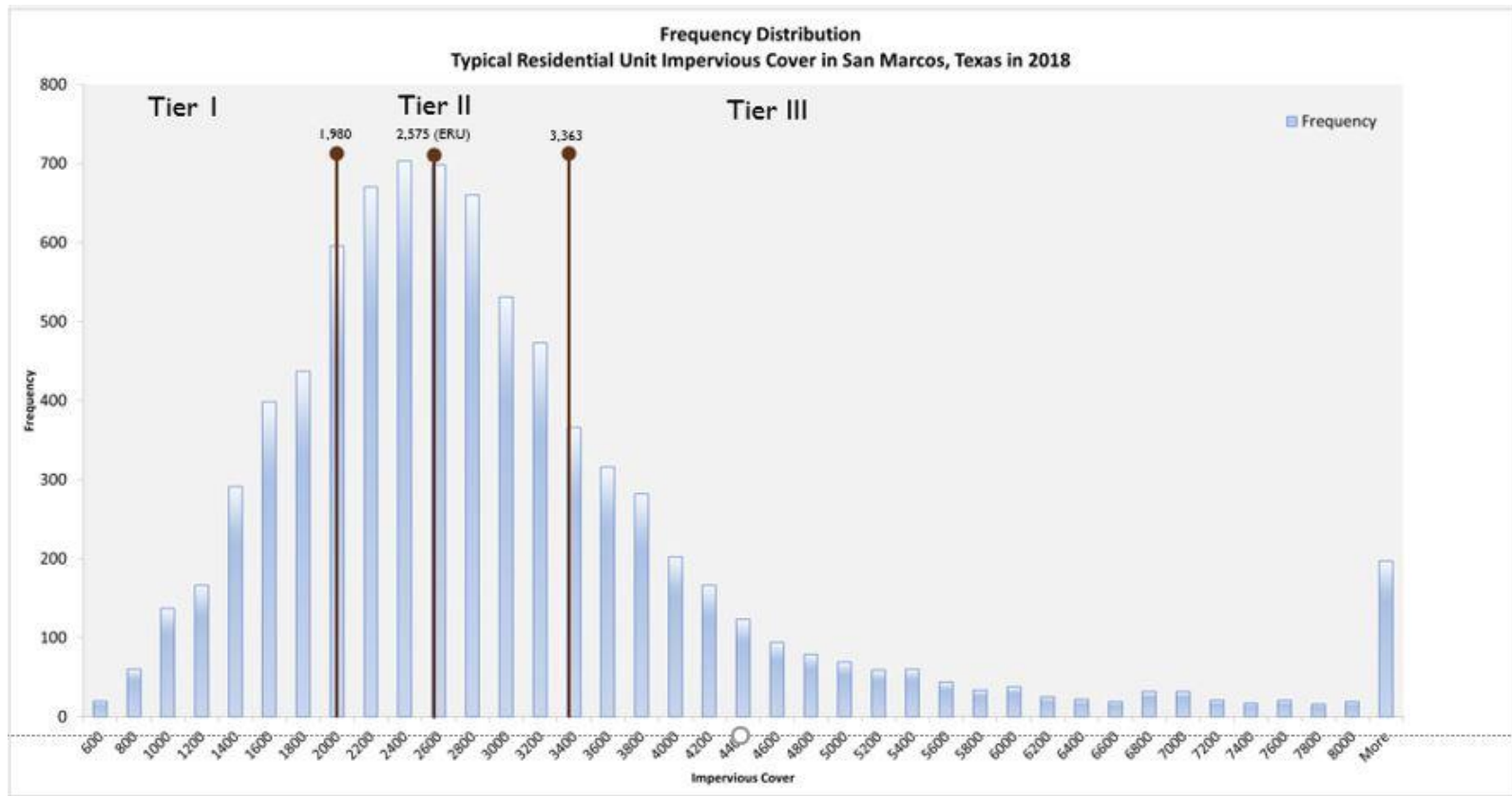
Key Findings

- Average Residential impervious cover has increased.
- Billing data matching identified over and under billings in the system.
 - Allocation of impervious cover in system
 - Rate class
 - Inactive accounts for water, wastewater & electric utilities but impervious cover remains
- Bring utility up to current best practices.
- Maintenance critical for both physical assets and data!
- Finalizing financial model for budget workshops.



Proposed Changes

- Change how residential rates are calculated
 - Impervious area instead of lot size
 - Three tiers



RATE STRUCTURE COMPARISON

Existing

Drainage Rates

Drainage Rates

Description	October 1, 2017 Rate	October 1, 2018 Rate
Residential Small Lot (0 to 6,000 Square Feet)	6.58	7.57
Residential Medium Lot (6,001 to 12,000 Square Feet)	10.52	12.10
Residential Large Lot (Greater than 12,000 Square Feet)	12.05	13.86
Commercial	*	***
Multi-Family	**	**

* \$10.52 per equivalent residential (ERU) per month - October 1, 2017 rate

*** \$12.10 per equivalent residential (ERU) per month - **October 1, 2018 rate**

One ERU for commercial land is determined to be 2,250 square feet of impervious cover.

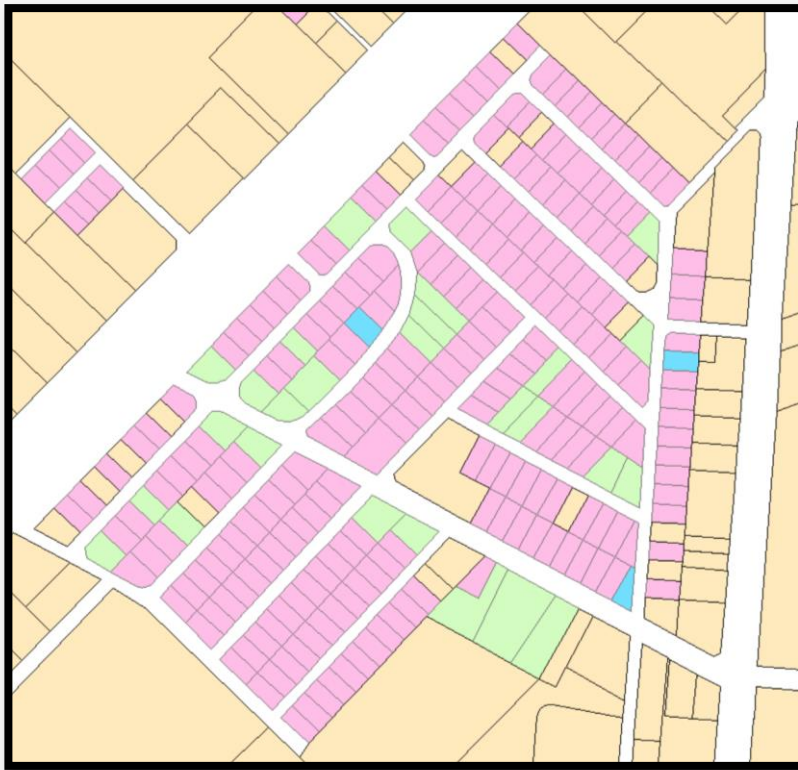
** Number of units times residential rate (determined by lot total SF / # units)

Proposed (ERU 2,575)

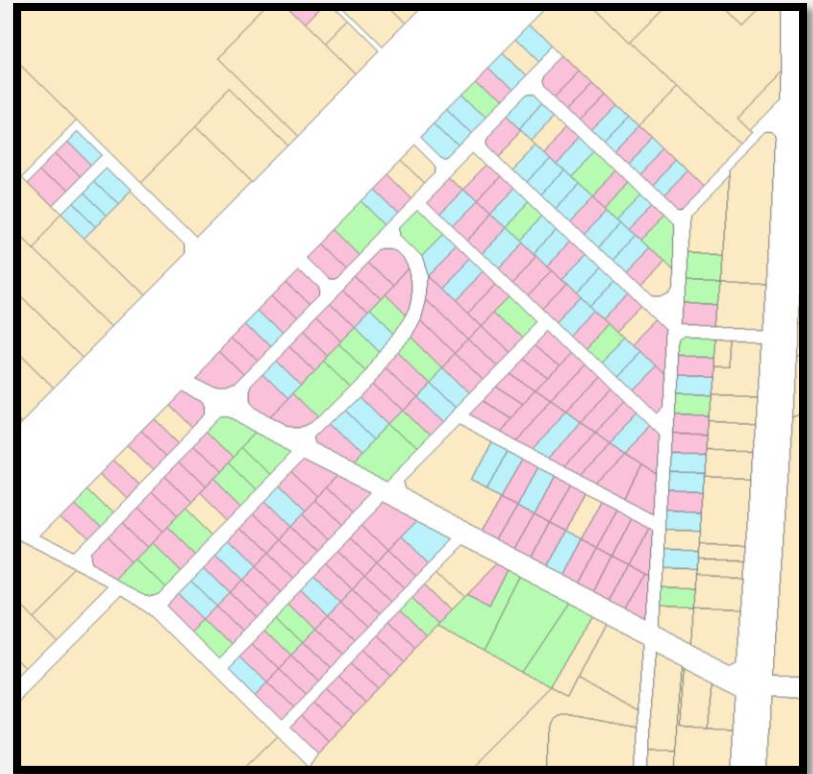
Class Code	Description	IC Range	Rate
R1	Small Residential	0-1,980	\$7.43
R2	Typical Residential	1,980-3,363	\$12.10
R3	Large Residential	3,363+	\$17.68
NR	Commercial, Retail, Government, Multi-family, Religious, non-profit, etc.	Impervious Area / ERU * Rate	\$12.10

RESIDENTIAL AREAS COMPARISON SUNSET ACRES

Existing Rate
Structure – Lot Size



Proposed Rate
Structure – Imp. Cover



• Tier 1 – Blue

• Tier 2 – Pink/Purple

• Tier 3 - Green

RESIDENTIAL AREAS COMPARISON WALLACE ADDITION

Existing Rate
Structure – Lot Size



- Tier 1 – Blue

- Tier 2 – Pink/Purple

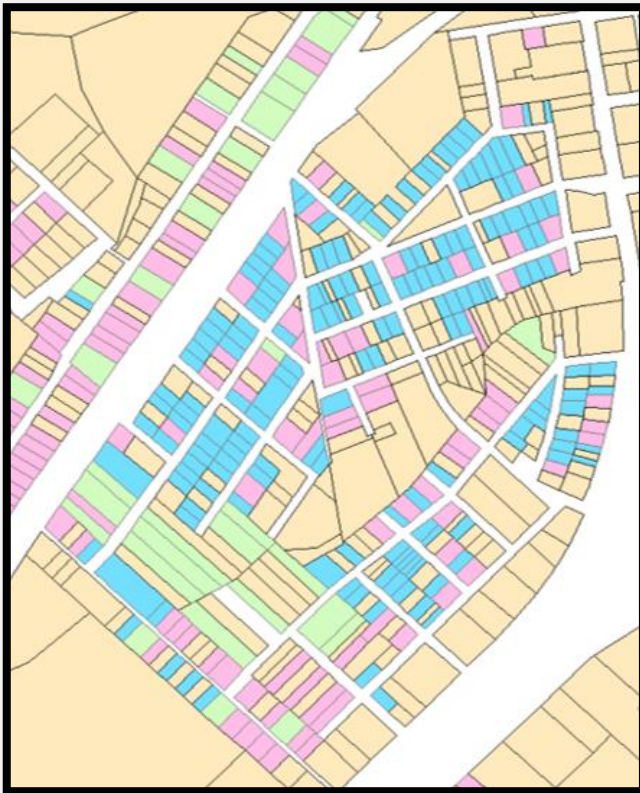
Proposed Rate
Structure – Imp. Cover



- Tier 3 - Green

RESIDENTIAL AREAS COMPARISON VICTORY GARDENS

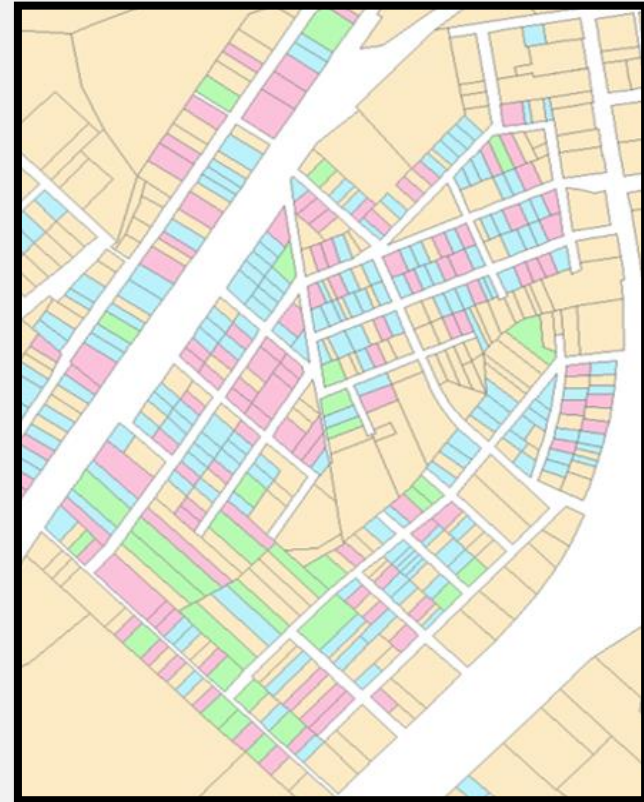
Existing Rate
Structure – Lot Size



• Tier 1 – Blue

• Tier 2 – Pink/Purple

Proposed Rate
Structure – Imp. Cover



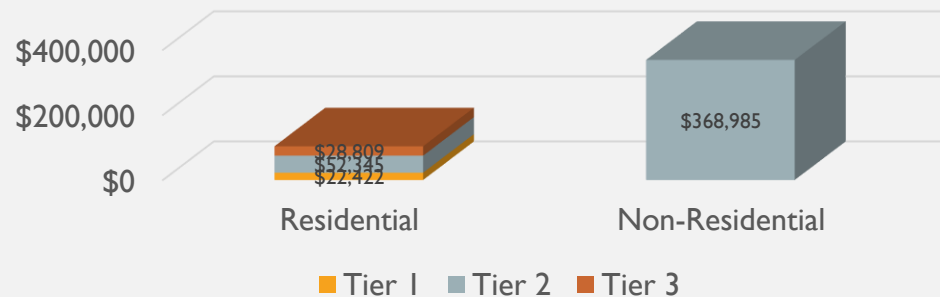
• Tier 3 - Green

Proposed Changes

- **All Other Development in Non-Residential Rate**
 - Commercial, Retail, Government, Multi-family, Religious, Non-profit, etc.
 - Rate based on Typical Residential – 2,575 s.f. of impervious cover
 - Charge = (Impervious Cover) / 2575 x Rate
- **Stormwater Fee assessed to property owner instead of utility customer.**
 - Account always remains active
 - May require transition time to implement in rental properties

DRAINAGE UTILITY REVENUE BY CUSTOMER CLASS

Existing Rate Structure, Existing Parcel Area,
Impervious Data

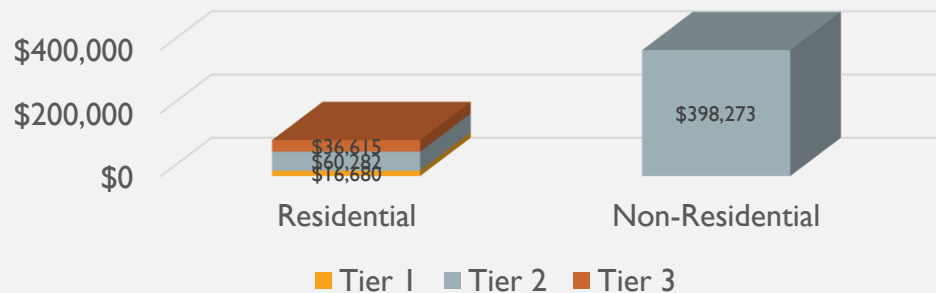


Monthly Revenue:
\$472,561
Annual Revenue:
\$5,670,732

*Based on total charges for active drainage accounts as of 04/09/2019

DRAINAGE UTILITY REVENUE BY CUSTOMER CLASS

New Rate Structure, New Parcel Area,
Impervious Data



Monthly Revenue:
\$511,850
Annual Revenue:
\$6,142,200

**8.3% increase from
existing**

*Based on total charges for active drainage accounts as of 04/09/2019

Next Steps

- **Additional discussion and direction in Budget Workshops**
- **Rate model results to evaluate**
 - Rate impacts of CIP debt
 - Adequate operations funding for maintenance
- **Develop Implementation Schedule**
 - Outreach
 - Billing system changes
 - Ordinance update