



Stormwater Utility

TRENDS IN TEXAS



Dedicating a fund specifically for the control of stormwater runoff gives residents and decision-makers more visibility to program costs and fees

NewGen
Strategies & Solutions

www.newgenstrategies.net



Research

BACKGROUND

Through ongoing work across the nation, NewGen Strategies and Solutions, LLC (NewGen) has recognized stormwater as an emerging topic in the utilities sector. We have compiled this resource to help Texas communities navigate this industry trend by highlighting how others in the state have approached the implementation of a drainage utility and related fees.

To gather our research, we examined the stormwater utilities of 73 cities throughout the great state of Texas. The data compiled centers around relevant stormwater inputs such as equivalent residential units and monthly rates for various customer classes. NewGen referenced municipal websites and codes of ordinances to gain insight into the structures that make up stormwater drainage utilities in the Lone Star State.

This research was conducted in August of 2021. We welcome any corrections or updates based on more recent rate actions and will be happy to revise our published copy.

Key

TERMS

As you begin to consider an approach to this relatively new utility, it is important to have a basic understanding of a few key terms. We will discuss how these terms relate to different customer classes and property types throughout our research findings.

EQUIVALENT RESIDENTIAL UNIT (ERU)

An ERU represents the average square footage of impervious area for a residential property in any given city.

IMPERVIOUS AREA

Impervious area refers to surfaces that allow little or no stormwater infiltration into the ground, such as asphalt, concrete, brick, and stone.

INTENSITY OF DEVELOPMENT FACTOR (IDF)

The area within a parcel that is impervious relative to the total area of a parcel, generally expressed as a percentage. As a measure, this is less prevalent in Texas, but is frequently employed in other states.

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Stormwater is gaining more prevalence and is becoming an integral aspect of municipal utility management. Communities both with and without Municipal Separate Storm Sewer System (MS4) Environmental Protection Agency (EPA) requirements are recognizing looming issues such as drainage needs and deteriorating assets. As the field continues to grow nationally, many entities around Texas are beginning to recognize the importance of dedicating a utility fund specifically for the management of stormwater runoff. In fact, the Texas Water Development Board has begun to offer statewide drainage plans and funding through its Flood Infrastructure Fund to aid communities with their drainage utility endeavors. As the trend continues upward, many Texas cities are dedicating more resources to utility implementation, maintenance activities, and capital projects for their stormwater drainage systems.

Texas Local Government

CODE 552

For Texas municipalities, the Texas Legislature authorized cities to adopt local stormwater drainage utility systems, as ordained within Subchapter C of Texas Local Government Code 552 (LGC 552). It states that such authority is needed to “protect the public health and safety in municipalities from loss of life and property caused by surface water overflows, surface water stagnation, and pollution arising from nonpoint source runoff within the boundaries of the established service area.” LGC 552 highlights the nuts and bolts of establishing a municipal drainage utility, including adoption procedures, drainage charges and exempt properties. Eligible expenses that make up the cost of service for this type of utility are defined in Sec. 552.044 (2).

Research

FINDINGS

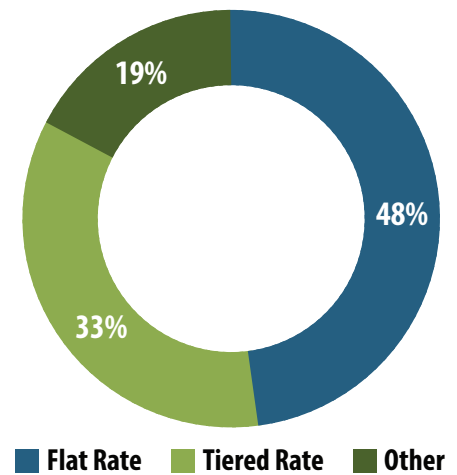
RESIDENTIAL RATE STRUCTURE

Of the cities examined, 48% implemented a flat residential rate for their stormwater utility. This pricing structure charges a monthly fixed fee for drainage to each single-family residential property, regardless of lot size or potential impervious area.

33% of the cities implemented a tiered residential rate for their stormwater utility. This pricing structure stratifies residential parcels into multiple ranges based on area. The area basis for the residential tiers is typically impervious square footage.

The remaining 19% of cities utilize other methods for their residential rate structures. These methods include charging per meter, per ERU, and per account, among others.

RESIDENTIAL RATE STRUCTURE



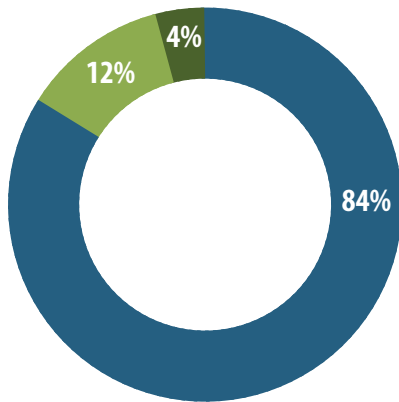
COMMERCIAL AREA BASIS

While examining the area basis for commercial rate structures, we determined that 84% of cities used an impervious area basis, 12% used a basis of gross (total) area of a given lot, and the remaining 4% did not base their rates on an area basis. This tendency for using impervious area is because it most accurately connects the benefits received with the cost to serve each property. The utility must size detention and drainage conveyance systems based on runoff, which is relative to the impervious surface cover per improved lot.

COMMERCIAL RATE STRUCTURE BASED ON IMPERVIOUS AREA

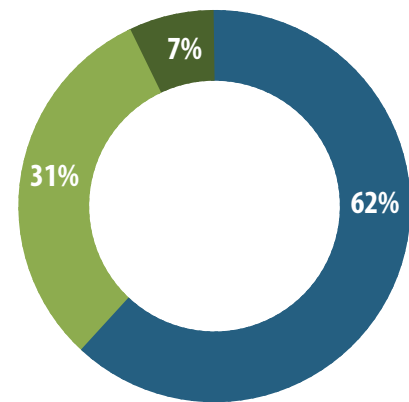
Of the 84% of cities that based their commercial rates on impervious area, 62% implemented a rate per Equivalent Residential Unit (ERU) for their commercial rate structure. 7% of the cities implemented a tiered commercial rate, and the remaining 31% utilized other structures such as formulaic rates using intensity of development factors or rates per impervious area measured in acres or square feet, which may or may not directly correlate to a defined ERU value.

COMMERCIAL AREA BASIS



■ Impervious Area ■ Gross Area ■ No Area Basis

COMMERCIAL RATE STRUCTURE CITIES THAT USED AN IMPERVIOUS AREA BASIS

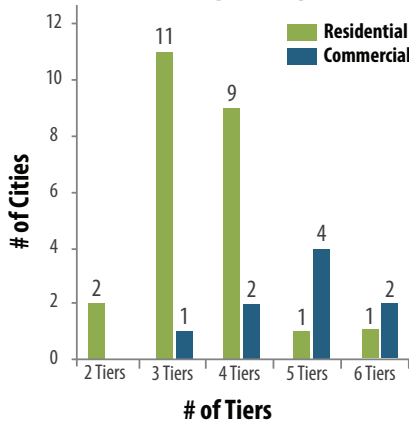


■ Rate per ERU ■ Other ■ Tiered Rate

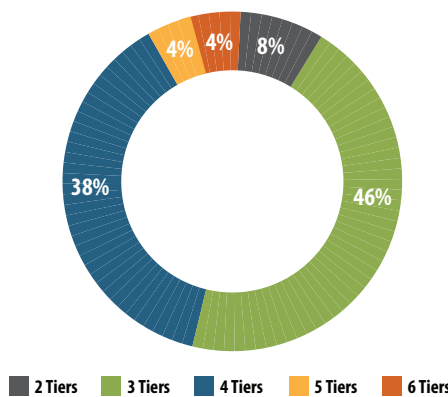
TIERED RATES

The tiers represented in the figures below may be based on either impervious area or gross area.

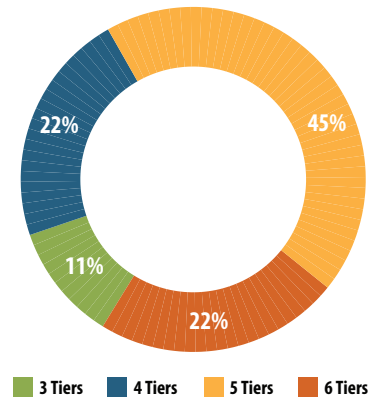
TIERED RATES



RESIDENTIAL



COMMERCIAL

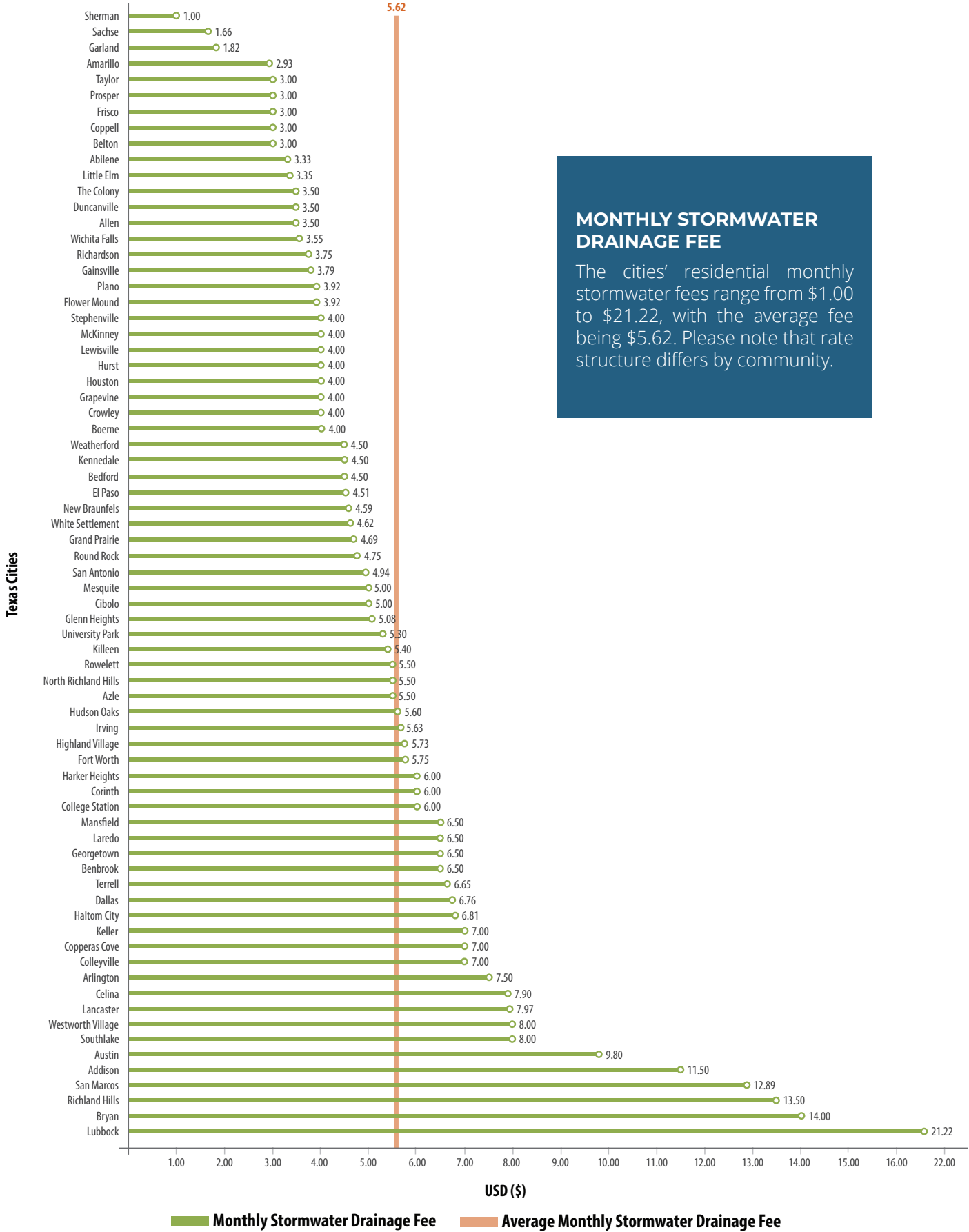




EQUIVALENT RESIDENTIAL UNIT (ERU) BY CITY



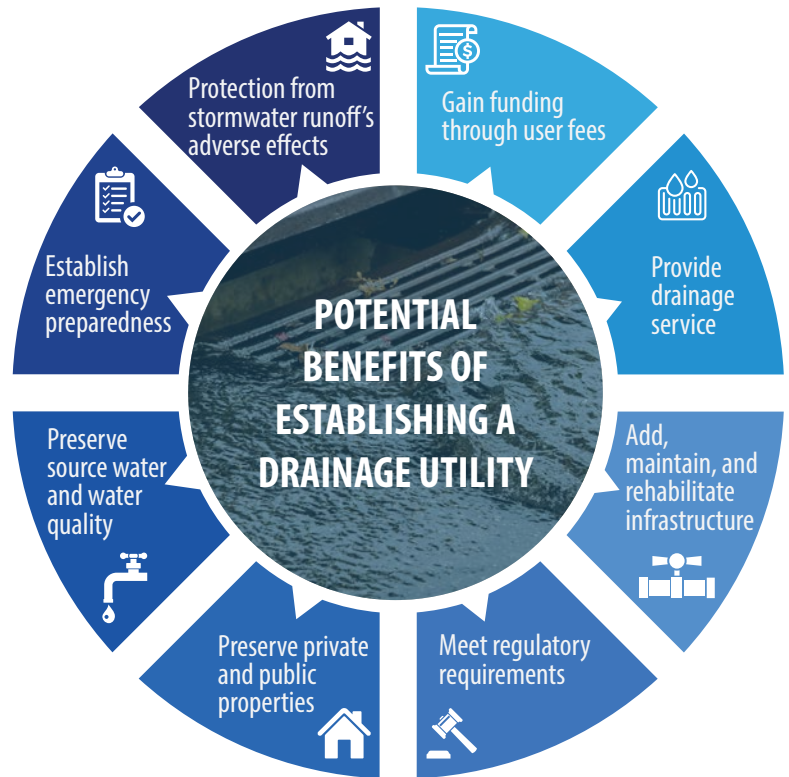
RESIDENTIAL MONTHLY STORMWATER DRAINAGE FEE



The Benefits of Establishing **A DRAINAGE UTILITY**

When not properly controlled or channeled, excess stormwater runoff poses risks such as flooding, erosion, and carrying contaminants and pollutants to plants, animals, and humans. To manage the adverse effects of excess stormwater runoff, and to fund these efforts through user fees, governing bodies should establish a Drainage Utility. This utility appoints a specific fund for providing drainage service, maintaining infrastructure, and meeting regulatory requirements – think a rainy-day fund, literally.

Dedicating a fund specifically for the control of stormwater runoff gives residents and decision-makers more visibility to program costs and fees, while producing a stable revenue stream to fund stormwater conveyance activities, and the rehabilitation of aging infrastructure. There is a common public misconception that drainage fees are a tax, but the establishment of a stormwater utility can provide so many benefits to a community. Establishing a Drainage Utility allows your governing body to levy fees to fund system costs, helps to preserve public and private properties, and ultimately allows for the protection of source water quality, and ultimately improves quality of life in your municipality.



CONTACT NEWGEN STRATEGIES & SOLUTIONS TO TALK ABOUT HOW WE CAN ASSIST YOU IN YOUR STORMWATER UTILITY ENDEAVORS AND FIND THE BEST FIT FOR YOUR COMMUNITY.

Contact **INFORMATION**

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