

NewGen Strategies & Solutions

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REPORT

DRAINAGE UTILITY FEE FEASIBILITY STUDY

NewGen
Strategies & Solutions

In support of Halff Associates, Inc.
City of Pflugerville, TX
Drainage Master Plan

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Subject: Drainage Utility Fee Feasibility Study - Report

Dear Ms. Davis:

In conjunction with the Drainage Master Plan being conducted by Halff Associates, Inc. (Halff), the City of Pflugerville, TX (City) engaged NewGen Strategies & Solutions, LLC (Project Team) to prepare a financial plan specific to the City's cost of service associated with the provision of Stormwater service (Stormwater or Drainage) and to develop projected rates for the Drainage Utility specific to Fiscal Years (FY) 2023 through FY 2027. This report describes the analysis performed by the Project Team and makes recommendations with respect to prospective rates to be considered to charge to the City's Stormwater customers.

Drainage as a Utility

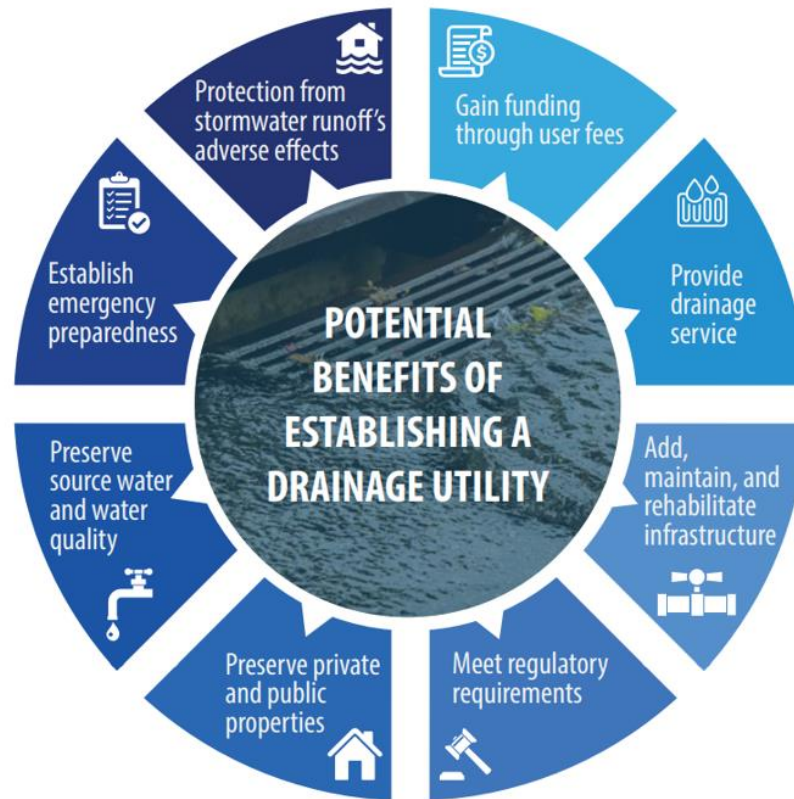
Establishing a Drainage or Stormwater Utility is a viable strategy for local governments to respond to the challenge of generating reliable revenue to support stormwater management activities. Setting up a drainage utility allows a community to establish a user fee based on the demands property owners place on the drainage system. It subsequently provides a dedicated revenue stream for stormwater programs.

There are several benefits to a local government of a dedicated drainage utility fee. These are visualized in Figure 1 on the next page, but the most commonly cited are described below.

- **Revenue** – A dedicated fee generates a stable source of revenue to fund stormwater BMPs.
- **Structure** – A distinct utility creates an organized entity to solve the problems regarding stormwater management including aging infrastructure, development, and legal challenges.
- **Environment** – Increased focus on stormwater issues such as erosion, flooding, preservation of source water and water quality can encourage environmental initiatives.
- **Regulation** – A dedicated Drainage Utility can focus on meeting the requirements of TPDES permits and other regulatory mandates.

Most importantly, a stormwater utility provides the means of collecting the revenue required to construct and maintain large stormwater capital improvements needed to help protect City businesses and residents from the effects of flooding.

Figure 1: Benefits of a Drainage Utility



There are several funding mechanisms that may be used to generate revenue for the operation of a stormwater utility. Examples are ad valorem taxes, rates based on lot size, and fees based on impervious area. Each funding mechanism has benefits and disadvantages. When deciding the funding mechanism of a stormwater utility a balance must be made between the administrative simplicity and understandability of the fee and the detail and equity by which it allocates costs to customers.

In all cases, assumptions and allocations must be made due to the impracticality of measuring the actual runoff contribution of each customer parcel within a stormwater system. In general, impervious area is considered the most equitable funding mechanism for a stormwater utility because it most accurately reflects the stormwater contribution of each customer's parcel to the system.

Financial Plan Development

To develop the forecasted costs and revenues for the City's potential Drainage Utility, NewGen coordinated city staff, as well as with Halff Associates. The forecasts contained herein estimates based on the latest available data and may change materially with changes in assumptions and the timing at which decisions are made to implement key policies. As the City makes decisions on the path forward, NewGen recommends updating the forecast with the latest available data.

The Project Team met with City staff multiple times to consider the City's existing activities as well as any potential new activities/services. In development of the financial plan, the Project Team included costs as

applicable and allowed under Section 522.044 of the Texas Local Government Code. Such costs may include the following:

- Cost of land acquisition;
- Capital cost of stormwater management facilities;
- Professional services fees including, but not limited to, architectural, engineering, planning, financial, and/or legal services;
- Operations & maintenance (O&M) and major repair and replacement expenses associated with stormwater facilities;
- Cost of rolling stock and other machinery and equipment;
- Interest and issuance costs associated with financing;
- Amortization of non-recurring costs (i.e., start-up costs, etc.);
- Direct and indirect administrative cost including, but not limited to, support services costs (i.e., utility billing, etc.); and;
- Any anticipated revenues from any ancillary funding mechanisms (i.e. revenue offsets).

The expenditures and estimated applicable revenues projected for FY 2023 and into the future based on the City's projected CIP and projected O&M costs, estimated annual inflation, and estimated customer growth are summarized in the remainder of this report.

Revenue Requirement

To develop the Test Year FY 2023 Revenue Requirement (i.e., the first year for which rates are developed), NewGen held discussions with City staff to determine the planned services and associated costs initially for this new utility. NewGen was able to meet with the City's Finance Director, Public Works Operations Director as well as the City Engineer to gather cost details. This first year was set transitioning a number of programs from the Public Works Department and included several new programs. These and other future year additions were forecasted through FY 2027 as shown below.

Personnel

Three total employees are included in revenue requirement. To reflect needed personnel specific to the management of stormwater within the City, NewGen worked with City staff to personnel needs beginning in FY 2023 as listed in Table 1-1 below.

Table 1-1: Estimated Personnel Need

Position Description	Estimated Costs	First Year Funded
2 Maintenance Technicians - Wages	\$ 114,000	2023
2 Maintenance Technicians – Benefits	\$ 51,300	2023
Technical Review Engineer - Wages	\$ 75,000	2023
Technical Review Engineer - Benefits	\$ 30,000	2023
New Maintenance Technician - Wages	\$ 60,471	2025
New Maintenance Technicians – Benefits	\$ 27,212	2025

Annual wages estimated for the Maintenance Technicians were provided by the Finance Department. Benefits were estimated at 45% of salaries or wages.

Operational Expenses

In addition to staffing, other operational expenses were identified. This includes general supplies, informs, personal protective equipment, transfers to Utility Billing (UB) and General Fund (GF) for services and facilities benefiting the utility, along with various contractual services. Table 1-2 below reflects these needs and outlines a few specific funding requests.

Table 1-2: Estimated Non-Personnel Operational Expenses

Position Description	Estimated Costs	First Year Funded
Crew Truck (Current Lease)	\$ 12,614	2023
New Crew Truck	\$ 13,449	2025
Contract Street Sweeping	\$ 160,000	2023
Contract Mowing	\$ 60,000	2023
Indirect Cost Allocations	\$ 30,000	2023
Transfers (Payments to UB and GF)	\$ 208,643	2023
General Operation Expenses	\$ 156,200	2023

Given the assumptions outlined above, NewGen estimates that the City will need to generate \$658,328 through stormwater fees in FY 2023 to cover personnel and other operational expenses.

Capital Projects

The Drainage-related CIP has been outlined in great detail in the Drainage Master Plan Document. The total listing of projects is over \$80M. Given that the Drainage Utility will be new and other operational expense demands, it is not currently assumed the Drainage Utility will undertake all the CIP projects provided in the Masterplan within the five-year financial forecast period. The ultimate rate to charge, if any, will be determined by the City Council. Based on the fee set, some expenses and projects may be delayed beyond FY 2027. Figure 1 below outlines a funding scenario for various CIP projects that could be funded over the next five years at possible Drainage Fee amounts. For example, if a \$9 or higher fee is set, the City could undertake the eleven projects with a red check mark under \$9 fee. This is in stark contrast to the listing of five projects under the blue \$3 fee column.

If the desire is to get each of the projects listed underway, NewGen estimates a \$12 fee should cover the related expenses. This estimate is provided but warrants additional review in subsequent years given the

rapidly increasing interest rate environment at the time of this review. Alternately, if market conditions make the cost of borrowing higher than expected or desirable for the City, the City may choose to complete these over a longer timeframe such as 15-20 years.

Figure 2: CIP Project Listing by Funding Option

Drainage CIP Project List						
\$9 FEE Funding \$7 for Capital	\$6 FEE Funding \$4 for Capital	\$3 Fee Funding \$1 for Capital	Ranking	Project Name	Ranking Value	Estimated Project Cost
✓	✓	✓	1	Immanuel Rd/Pecan Park at Gilleland Creek	81.7	\$4.86M
✓	✓	✓	2	Weiss Ln at Gilleland Creek	76.7	\$1.63M
✓	✓		3	Caldwell Elem. at Gilleland Creek	75.0	\$9.68M
✓	✓		4	Hidden Lake Dr at Wilbarger Creek Trib 200	74.0	\$4.03M
✓	✓		5	Pfenning Ln/Pecan St Intersection	73.3	\$372K
		Previously Funded	6	Villamoura St/Kelly Ln at Wilbarger Creek Trib 200	71.0	\$12.4M
✓	✓		7	Swenson Farms Blvd at Gilleland Creek	70.0	\$5.22M
✓			8	N. Heatherwilde at Gilleland Creek	66.7	\$8.49M
			9	Railroad Ave. at Gilleland Creek	66.7	\$16.84M
✓			10	Kenemer Dr at Wilbarger Creek Trib 200	59.3	\$3.11M
			11	FM 685/E. Pflugerville Pkwy at Wilbarger Creek Trib 200	56.3	\$15.94M

Operation & Maintenance Project List						
\$9 FEE Funding \$7 for Capital	\$6 FEE Funding \$4 for Capital	\$3 Fee Funding \$1 for Capital	Project ID	Project Name	Ranking Value	Estimated Project Cost
✓	✓	✓	Pf-01	Drainage Criteria Update	NA	\$30K
✓	✓	✓	Pf-02	Creek Maintenance Plan	NA	\$15K
✓	✓	✓	Pf-03	Stormdrain CCTV Evaluation	NA	\$330K

Inflation Assumptions in the Five-Year Financial Plan

The development of the five-year financial plan utilized FY 2023 as the base year for revenue requirement projections through FY 2027. Inflation factors were estimated and applied to the Test Year data. These factors are discussed in more detail below. It is worth noting that at the time of this Study and report, the United States has been recording record inflation figures relative to the last few decades. That said, the estimates derived in conversation and through City staff input are already informed with those adjustments. Therefore, the inflation adjustments scheduled for FY 2024-2027 rely heavily on the twenty-year historical averages.

- General – A general inflation factor of 3.26% was applied to all line-items not discussed specifically below per the 20 Year Average Municipal Cost Index developed by American City and County as of June 2022.
- Personnel – An inflation factor of 3.00% was applied to all salaries and wages, while a 7.50% factor is applied to benefit costs, based on conversations with City staff.
- Construction Cost Index (CCI) - 20 Year Average Engineering News Record CCI of 3.30 as of June 2022.
- Growth – Growth was assumed to be 640 Residential Accounts per year, similar to the Water and Wastewater Rate Study.

Drainage Utility Fee Basis and Billing Units

The Project Team developed rate scenarios for stormwater based on Equivalent Residency Units (ERU). The Project Team relied on Halff Associates GIS analysis to calculate ERUs per customer based on impervious square footage. This impervious cover was determined for every parcel in the City. Then Single Family (State Code A1) parcels were averaged to determine Pflugerville’s ERU value as 3,650 sq ft.

From the same impervious surface analysis, Halff was able to determine that Non-Residential Parcels in Pflugerville contain just over 93.4M sq ft of impervious area. To set the total paid by non-residential parcels equitably, we determine each parcels relative number of ERUs. Dividing this total by the ERU value determined as 3,650 results in 25,593 Non-Residential ERUs. This calculated value plus the Residential count of 18,753 makes the total monthly billable ERUs approximately 44,346.

Since neither the Project Team nor the City have yet to complete the Utility Billing matching effort it is assumed some of the values may not ultimately get assigned to an account or billed. NewGen makes a 7% adjustment reducing the total billing units to account for this uncertainty. Additionally, since this is billed normally on water bills, which are occasionally inactive and unbilled, NewGen has made a second adjustment of 3% for non-billed and nonpayment potential. These adjustments reduce the monthly billable revenue projection to \$39,912 per \$1 charged to each ERU.

Table 1-3 below reflects the expected billable ERUs less the adjustments mentioned, plus growth to derive annual revenues for several fee levels. Notably, FY 2023 only assumes six months of billed revenue to allow for City implementation of the fee and updates in the Utility Billing system.

Table 1-3: Calculated Drainage Utility Fee per ERU

	2023	2024	2025	2026	2027
Annual ERU Assumption	239,470	486,621	494,301	501,981	509,661
\$ 1 / ERU Annual Revenue	\$ 239,470	\$ 486,621	\$ 494,301	\$ 501,981	\$ 509,661
\$ 3 / ERU Annual Revenue	\$ 718,411	\$ 1,459,863	\$ 1,482,903	\$ 1,505,943	\$ 1,528,983
\$ 6 / ERU Annual Revenue	\$ 1,436,823	\$ 2,919,725	\$ 2,965,805	\$ 3,011,885	\$ 3,057,965
\$ 9 / ERU Annual Revenue	\$ 2,155,234	\$ 4,379,588	\$ 4,448,708	\$ 4,517,828	\$ 4,586,948
\$12 / ERU Annual Revenue	\$ 2,873,645	\$ 5,839,451	\$ 5,931,611	\$ 6,023,771	\$ 6,688,292

It is worth noting here that NewGen has made no assumptions for discretionary exemptions. The City has some discretion in exempting or partially exempting the fee to a number of customer classes per the statute. Should the City choose to exempt any eligible property owners, the revenue potential for the utility will decrease equal to the ERUs exempted.

Feasibility Study Rate Recommendations

Given the results of operational revenue requirements, substantial capital needs, and feedback from the City Council about the criticality of the projects, NewGen recommends the City consider a fee of no less than \$9 per ERU to help meet its five-year operational and capital objectives for the Drainage Utility.



THANK YOU!



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