



City of Savannah, GA

# Stormwater Utility Feasibility Study

Draft Report  
February 2018



February 2018

Mr. Roger Raines  
Stormwater Director  
City of Savannah, GA  
P.O. Box 1027  
2 East Bay St., Savannah, GA 31401

Re: Draft Report – Stormwater Utility Feasibility Study

Dear Mr. Raines,

Stantec Consulting Services is pleased to present this draft report on the Stormwater Utility Feasibility Study (Study) that Stantec, in partnership with EPG, performed for the City of Savannah, GA (City).

Please distribute this Draft Report to your staff as appropriate, and let us know of any comments or questions that may arise. We appreciate the professional assistance provided by you and your teams.

If you have any questions, please do not hesitate to call me at (770) 853-0025 or email me at [William.Zieburtz@stantec.com](mailto:William.Zieburtz@stantec.com). We appreciate the opportunity to be of service to the City.

Sincerely,

A handwritten signature in blue ink that reads "William Zieburtz".

William Zieburtz

Enclosure



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## **SECTION 1. INTRODUCTION**

Stantec Consulting Services has conducted a Stormwater Utility Feasibility Study (Study) for the City of Savannah, GA. This report presents the objectives, approach, methodologies, source data, assumptions, as well as the findings and recommendations of the Study.

### **1.1 BACKGROUND**

The City of Savannah (City) manages an extensive stormwater system within the City's service area. The system provides essential services within the community by protecting individual and personal property and the natural environment. In addition to the normal stormwater activities such as street sweeping and local flooding control, the City's stormwater program is unusual in that it operates a series of levees and pump stations. This critical infrastructure provides most of the City with flooding protection during large storm events, which is especially important given Savannah's low elevation and proximity to tidal marshes.

The City funds the management of the stormwater system from its general fund which is mainly supported via ad valorem tax revenue. The City also accounts for the expenditures of this fund within the general fund as cost center (101.2104). While the current funding approach used by the City is not uncommon, it is becoming more common for communities to develop a true enterprise fund for stormwater management to account for all expenditures and to develop dedicated self-supporting revenues to meet the identified needs.

### **1.2 SCOPE OF SERVICES**

The purpose of the Study was to explore the feasibility of developing a Stormwater Utility in the City of Savannah. This includes the development of a financial plan for the City's stormwater system that would consider the true cost of providing stormwater services and provide an equitable approach of allocating these costs to property owners within the City through an appropriate stormwater fee structure. The two primary areas of interest were:

- Stormwater Utility Feasibility – Review and discussion regarding the benefits and common concerns associated with the formation of a stormwater utility in the City of Savannah.
- Revenue Requirements – Development of the total annual revenue requirements of the stormwater system. Evaluate and review the different activities funded by the City currently, and calculate a test year revenue requirement for stormwater services to be collected in a Fee.
- Stormwater Fee – Identify and evaluate the feasibility of assessing stormwater fees in the City. Project a potential stormwater fee structure based on billing unit analysis and local data availability.

## SECTION 2. STORMWATER UTILITY FEASIBILITY

### 2.1 POTENTIAL STORMWATER UTILITY BENEFITS AND CONCEPTS

Many communities around the country have found a standalone stormwater utility to be a helpful solution to help address local flooding issues, water quality issues, and meet the requirements of state and federal regulators. Stormwater utilities are becoming more common in North America, with an estimate of over 1,600 active stormwater utilities in North America and 55 in Georgia according to a recent survey by Western Kentucky University. It is expected that the number of stormwater utilities will only grow in coming years to address the growing needs in communities large and small.

A stormwater utility is best characterized as an organizational structure that allows for stormwater management and funding to be provided effectively and fairly. Water and sewer services are great examples of other utilities where a measured service is provided and the cost of providing that service are paid for proportional to a customer's usage. In the case of stormwater, municipalities invest heavily in a system of assets to provide for the management of stormwater from a quantity and quality standpoint, while meeting applicable regulations.

Stormwater utilities represent a step forward in many communities, contributing to effective management in several ways, including:

**Fee Based Stable Funding** - By collecting revenues through a fee based mechanism, stormwater utilities are able to provide reliable, stable and dedicated funds for the provision of stormwater services.

**Fair and Equitable** - Stormwater fees are built to recover costs fairly, often reflecting on parcel attributes such as impervious area to create proportionality between the use of the service (stormwater contributions) and the resulting revenue remittance.

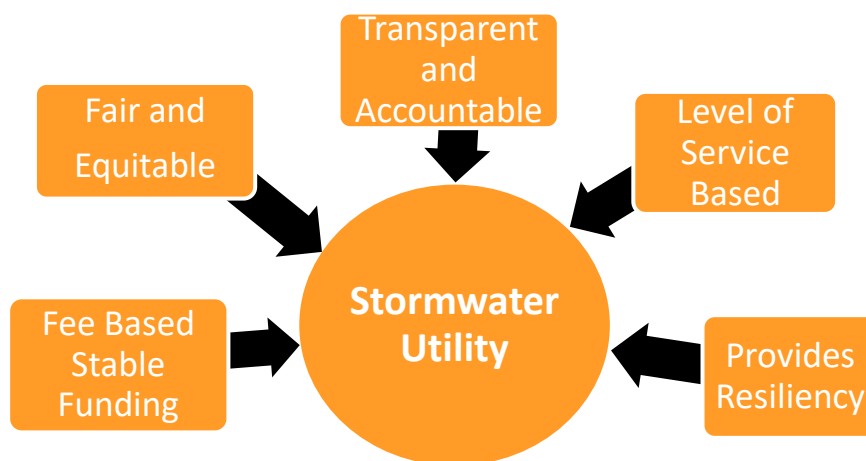
**Transparent and Accountable** - A utility fund is a standalone entity in which the revenue, expenses and fund balances are separate from the municipality's

general fund. As such each and every dollar can be accounted for and must be utilized for the provision of stormwater services.

**Level of Service Based** - Utilities are best operated on a needs basis, in which a level of service standard is set and a utility's mission is to plan, operate and invest concurrently with this identified goal in an accountable manner.

**Provides Resiliency** – Stormwater services must be provided even in the face of disruptive factors, such as extreme precipitation or other weather events. A standalone utility's ability to build and manage financial reserves, separate from other local government needs, can strengthen a community's ability to prepare for a variety of disasters, resulting in increased resiliency.

**Figure 2-1 Total Stormwater Utility Benefits**



A community's decision to pursue a stormwater utility hinges on the relative importance a community places on the collective benefits provided by a utility contrasted against the common concerns. It has been Stantec's experience that by engaging decision makers, stakeholders and the public at large early in the process of forming a stormwater utility, the community's unique priorities and concerns can be identified and evaluated.

A variety of concerns are often expressed as a community considers the formation of a stormwater utility. Many of them relate to the idea that a stormwater fee



could represent an increase in the cost of local government. While any new or increased charge or fee deserves such scrutiny, the drivers behind the City's spending on stormwater infrastructure and programs are independent of any discussion of revenue generation from stormwater fees. In considering the recovery of stormwater costs through a stormwater fee, the City is focusing on equity in revenue recovery, not on revenue generation. Stormwater needs and budgeted expenditures are expected to increase in the future, but the feasibility and appropriateness of a stormwater fee is independent of the amount of revenue that must be generated.

Another important and frequent concern relates to the impact of a stormwater fee on tax exempt parcels. In switching from a property value based revenue stream (ad valorem) to a fee based model, the tax status of a parcel no longer would prevent a property from sharing the costs of stormwater management. Schools, universities, churches, and other civic organizations are brought into the stormwater fee program, and this does create a budget impact for these types of organizations as a result of the new fee.

In the absence of a stormwater fee, the presence of tax-exempt parcels results in an additional tax burden for stormwater management on residential and commercial properties within a city. Savannah's tax-exempt properties receive the benefit of the City's expenditures, but make no contribution to help cover these costs. A stormwater user charge would bring tax-exempt parcels into the stormwater fee process and improve the equity with which these costs are recovered within the community. Such organizations do experience a budgetary impact, but this increase is directly offset by reductions in the allocations of stormwater costs to taxable parcels within the City.

Stormwater utilities also are sometimes criticized as representing an increase in the burden of local government on a community, sometimes characterized as "as a new layer" of regulation and cost. This view stems from a fundamental misunderstanding as to how a stormwater utility would fit into the municipality's service delivery model. Savannah is currently providing stormwater services under the umbrella of its general fund. Stormwater permitting and regulation, and the management of stormwater maintenance programs all are ongoing at present.



Should a stormwater utility be created, it would embrace stormwater management activities already being performed in the City. Based on our experience elsewhere, a stormwater utility would be expected to have a positive impact on operational efficiencies, as a more focused operation tends to manage its responsibilities with fewer interruptions and diversions from ongoing stormwater programs and projects.

Stormwater utilities also provide the opportunity to increase transparency in the provision of these key services. A more focused organization can more easily establish and communicate its key objectives, and citizens tend to have an easier time monitoring and understanding stormwater projects and expected deadlines.

## SECTION 3. REVENUE REQUIREMENTS

### 3.1 'DESCRIPTION

This section summarizes the development of the projected stormwater system revenue requirements as developed in the Study, describing source data, assumptions, and results of the analysis.

To initialize the Study, we obtained the City's historical and budgeted financial information regarding the operation of its stormwater system. This information included items within the stormwater budget as well as activities outside the cost center that are related to providing stormwater service, such as capital projects. Additionally, we discussed planned changes in organizational structure to allow the study to recognize all activities contributing to effective stormwater management. We collected information pertaining to the City's current utility billing processes as well as relevant property data necessary to evaluate alternative stormwater fee structures. We discussed other assumptions and policies that would affect the financial performance of the Utility, such as estimated increases in stormwater management activities (including NPDES permit requirements), planned developments/customer growth, levels of reserves, capital funding sources, earnings on invested funds and escalation rates for operating costs.

All of this information was entered into the financial module of our Financial Analysis and Management System (FAMS-XL®) interactive modeling system. This produced a ten-year projection of the sufficiency of the revenue provided by the current stormwater funding program to meet current and projected financial requirements, and demonstrated the level of revenue increases necessary in each year of the projection period to satisfy the system's annual financial requirements.

As part of the Study, we examined various stormwater funding scenarios for the City to consider. These ranged from the development of a true enterprise fund, where all stormwater related activities would be supported by a stormwater fee, to a status quo scenario, where only a portion of the activities (those currently within the operations budget) would be supported with the stormwater fee. To

examine these scenarios, we conducted interactive work sessions with City staff during which cost allocations and projections were reviewed and revised.

## 3.2 COMPONENTS OF REVENUE REQUIREMENTS

The following sections review the various components of the stormwater system revenue requirements examined during the course of the Study.

### 3.2.1 CURRENT OPERATING EXPENDITURES

As discussed earlier in this report, the City accounts for operating and maintenance expenditures of the stormwater system within general fund (101.2104). The following table (3-1) displays the preliminary operating budget for FY 2018 which totals approximately \$5.6M. Several on site meetings with staff indicated that the current level of operations funding is sufficient for the near term and no major programmatic adjustments or level of service changes are being considered at this time. As such, the operational budget has been set at its current level for the purposes of this study.

Whether the City creates a formal stormwater utility or not, the level of expenditures should be reevaluated periodically to allow the City to respond to changing circumstances, including among others, identification of new funding requirements, physical asset maintenance requirements, or regulatory requirements. Additionally, the creation of any new stormwater charge or organization can lead to new public pressure to increase the level of service provided to the community, which tends to increase in expenditures and revenue generation to accomplish the desired improvements.

**Table 3-1 Total Stormwater Revenue Requirement Components**

|                  |           |                  |
|------------------|-----------|------------------|
| Personnel        | \$        | 3,136,225        |
| Contractual      |           | 1,314,303        |
| Commodities      |           | 293,530          |
| Internal Service |           | 610,800          |
| Other            |           | 291,425          |
| <b>Total</b>     | <b>\$</b> | <b>5,646,283</b> |

## Capital Improvements Plan

The City provided a projection of the needs based stormwater capital improvements for the period of FY 2018 to FY 2039. In total, the CIP provided by the City for FY 2018 – FY 2039 is approximately \$483 million in major non-reoccurring projects. The City has historically used general government debt obligations to finance stormwater capital improvements, with commensurate funding of the associated annual debt service from the general fund. Additionally the City has advantageously sought grants and partnered with Chatham County on projects that benefit both entities. It is currently expected that future capital improvement projects will continue to be funded out of the general fund. In the longer term, a stormwater utility would have the potential to generate adequate funding for capital improvement projects as well as for operating expenses. This may be advantageous for the City as stormwater user fees could generate a dedicated revenue stream that could be equitably aligned with the proportional demands placed on the system by specific parcels.

**Table 3-2 Total Stormwater Major CIP Projects FY 2018 –FY 2039**

|  |    |                    |
|--|----|--------------------|
| Casey North Drainage Improvements                  | \$ | 99,000,000         |
| Bilbo Basin Drainage Improvements                  |    | 78,000,000         |
| Casey South Drainage Improvements Phase 2 c, d,& e |    | 40,000,000         |
| All Other Projects                                 |    | 266,074,257        |
| <b>Total</b>                                       | \$ | <b>483,074,257</b> |

### Minimum Reserves

Stormwater utility enterprise funds stand to varying degrees on their own financial strength independent of the City’s overall financial resources. As such, fund balance policies must be considered as part of the process of evaluating a stormwater utility. Broadly speaking, reserves are held on hand to recognize the risks inherent with the operation of any municipal enterprise. Some common sources of risk include operational liquidity, large asset failure, and severe storm events such as a hurricane. New utilities, often concentrate on the most immediate reserve needs, (liquidity), and then add to reserves, to recognize other risk factors as the utility matures. It is common to have at least three months of operations and maintenance expense on hand as a starting point, presuming the continuing ability to turn to the General Fund in case of more significant needs.

Applying this method to the current level of operational expenditures yields a minimum target balance of \$1.4M. As such, the projections reflect the development of this level of reserves within the first 5 years.

The total annual revenue requirements for each component of the program are summarized in the following table:

**Table 3-3 Total Stormwater Revenue Requirements**

| <b>Stormwater Activity</b>                         | <b>FY 2019 Estimate</b> |
|--|-------------------------|
| Operations & Maintenance and Regulatory Compliance | \$5,700,000             |
| Reserve Contribution*                              | \$282,000               |
| <b>Total Revenue Requirements</b>                  | <b>\$5,982,000</b>      |

*\*Represents a 5 year contribution rate to attain the target minimum balance*

Once all of the various components of the stormwater system revenue requirements were identified, the requirements were reviewed with City staff. Based on these discussions and projected revenue generation potential it was determined that the most appropriate approach for the planning period would be for the City to continue to fund major capital improvements (including retiring of debt) from the City's general fund.

## SECTION 4. STORMWATER FEE

Stormwater utilities need to be funded by user fee systems that are appropriately structured and documented. The rate methodology should reflect one or more measures to distinguish different types of parcels and determine the appropriate cost allocation to each. Different parcels of property represent different “customers” of the City’s stormwater system, and these different parcels make use of the City’s system in different ways.

Use of the City drainage system refers both to the demand placed on the drainage system as well as the benefits received by the customer from implementation of stormwater program services. The demand that a property places on the storm drainage system is related to the amount of runoff leaving the property. Larger parcels, and parcels with greater amounts of impervious area tend to generate greater volumes of stormwater runoff, and tend to generate runoff at increasing rates during storm events. The City’s conveyance system and facilities assist in protecting the customer’s property and downstream properties by safely conveying the flows into the receiving waters. As an example, the demands of a typical residential property can be contrasted to those of a shopping center, which could both be larger in size, as well containing a much higher ratio of impervious area to total parcel size.

In addition to placing demand on the City’s drainage system, each customer also benefits, either directly or indirectly, from stormwater services provided by the stormwater utility. The benefits include flood management, development regulation, regulatory compliance, and maintenance of the drainage systems along major thoroughfares that allow for access to individual neighborhoods and properties.

While many different stormwater user charge structures can be developed, many tend to allocate costs according to total parcel size, impervious area, or both, and often include provisions for other allocations on a per-parcel basis. In general, larger and less pervious parcels pay higher fees; as an example, consider shopping centers and other parcels with significant amounts of land dedicated to parking.

## 4.1 STORMWATER UTILITY RATE METHODOLOGY

Rate structures must recognize legal constraints as well as the patterns and practices underlying municipal utility rates in the US. Among the most important objectives is the requirement to be fair and equitable in the allocation of costs, but even this fundamental objective is balanced against the management costs and administrative burden of a user charge system. User charges should be technically defensible, reflecting current professional practices appropriate to the area. In addition, to be perceived as fair and equitable to customers, the preferred rate methodology should be easy to understand.

The nexus or relationship between the runoff (i.e. demand) and the corresponding user fee charge needs to be maintained (i.e. the greater the demand the higher the fee). The primary rate methodology that has been implemented in Georgia is the impervious area methodology, whereby stormwater utility customers are charged per unit area of impervious surface on their property. This methodology is considered the most equitable and easiest for SW Utility customers to understand. Essentially, the more impervious surface existing on a developed parcel, the more stormwater runoff will be generated and directed to the City's drainage system. The more stormwater runoff directed to the City's drainage system, the more the benefit (direct or indirect) the customer receives from the City's stormwater management program, and the higher their corresponding user fee should be.

Rate modification factors are often used to enhance equity or improve ease of SW Utility implementation and management without unduly sacrificing equity. Typical modification factors might include:

- A flat rate single-family residential (SFR) charge;
- A tiered rate for SFRs;
- A base rate for certain costs which are fixed per account;
- Partially impervious percentage considerations for compacted gravel and dirt;
- Basin-specific surcharges for major capital improvements;



- Credits against the monthly service charge for properties that reduce their impact on the SWMP.

#### **4.1.1 STORMWATER USER FEE CREDITS**

The SW Utility should provide a mechanism for customers to secure credits against the stormwater user fee charge where appropriate. The primary intent of credits is to recognize reductions in the cost to the City to deliver stormwater services that can be attributed to the customer's properly designed, constructed and maintained stormwater controls and activities. Credits are typically conditional and allowed when a customer demonstrates that they have mitigated the runoff contribution impacts from their parcel or otherwise reduced their cost burden on the City's SWMP.

Stormwater user fee credits are most commonly provided for parcels/customers that have onsite detention ponds or similar runoff mitigation controls. These types of stormwater controls mitigate the impacts of downstream discharges and theoretically reduce the downstream systems costs associated with conveyance. These controls may, if properly designed and maintained, enhance downstream water quality as well. This is especially true with regard to non-residential parcels that conduct industrial type activities onsite, or similar. Credits have also been issued to selected customers (such as local school systems) that augment the ongoing water resources education efforts of the local government as required by applicable regulatory permit requirements.

Stormwater user fee credit policies should reflect local conditions and stormwater program needs and can be designed to encourage the types of stormwater behavior desired by an individual community. For example, credits for tree plantings and green infrastructure have been recently offered by several Stormwater Utilities who place a value on these types of practices, in recognition of the benefit afforded to the SWMP by implementation of these features.

#### **4.1.2 EQUIVALENT RESIDENTIAL UNIT**

The most common method for determining the base billing unit in Georgia is the Equivalent Residential Unit (ERU). The ERU is based upon the median amount of impervious area for detached single family residential (SFR) parcels within the

jurisdiction. The ERU value is used to calculate the charges for the non-single family (NSFR) properties by equating the NSFR impervious footprint to an equivalent number of residential impervious footprints or ERUs.

An analysis was performed using available GIS data acquired from Savannah Area Geographic Information Systems (SAGIS) and the Chatham County Tax Assessor's office. The SAGIS datasets include the building footprints, parking, and pavement layers. Tax parcels were used to assist with the identification of land uses so that data could be categorized as SFR and NSFR. Property classified as SFR generally includes single family attached and detached property. Property classified as NSFR includes churches, schools, banks, apartments, restaurants, warehouses, government buildings, etc. According to the County's 2017 tax digest, there are 55,376 parcels in the City of Savannah. Using the Land Use Code field in the tax database, parcels within the City of Savannah were broken down into the following general land use categories:

**Table 4-1 Parcel Designation**

| Data                                 | Number of<br>Parcels |
|--------------------------------------|----------------------|
| Total Parcels                        | 55,376               |
| Single Family Residential (SFR)      | 36,954               |
| Non Single Family Residential (NSFR) | 10,341               |
| Undeveloped                          | 8,081                |

An analysis was performed using the building footprints to estimate the median and average amount of impervious area for the 36,954 SFR parcels. Since the SAGIS data only included building footprints for residential parcels, driveways and other impervious areas needed to be estimated accurately calculate the ERU. As such, EPG delineated a representative sample of 500 residential properties to account for an average and median impervious area for these additional, missing features. The results of this preliminary analysis determined that the median impervious area for the SFR parcels within the City is 2,705 square feet and the average is 2,940. The table below shows the details of this analysis.

**Table 4-2 Estimated ERU Calculation**

|                               | Median | Average | Number of Records |
|-------------------------------|--------|---------|-------------------|
| Building Footprint only       | 2,040  | 2,100.7 | 36,954            |
| Single Family Impervious Area | 2,705  | 2,940.4 | 500               |

Based on this information, we have utilized an estimated ERU value of 2,700 square feet for the purposes of the revenue projections herein. If the City elects to move forward with set up and implementation of a stormwater utility, we recommend that the City expand its ERU analysis to include a statistically significant sample of SFR delineations to determine the final ERU for billing purposes. In a previous study completed by the City, the ERU was 2,571 square feet, which is fairly consistent with the data shown above.

For the purposed of this feasibly study, we have assumed a flat rate charge of 1.0 ERU for each SFR customer. Many utilities in Georgia utilize a flat rate charge of 1.0 ERU for SFR customers to increase community understanding of the stormwater user fee and to ease the administrative burden to City staff. This concept is similar to a flat-rate sanitation charge for residential customers. Under such a flat rate user fee structure, all SFR customers would pay 1.0 ERU. If the City elects to proceed with stormwater utility development, the City may wish to consider tiered rates, or other rate modifiers, as appropriate.

### 4.1.3 ERU PROJECTION

Our available data indicates that there are currently 36,954 SFRs that will be assigned 1.0 ERU per dwelling unit. EPG has also completed a detailed analysis of the impervious area delineations for the NSFR properties within the City, including multi-family properties. Delineations during this phase only include “hard” surfaces and did not account for partially pervious areas such as compacted gravel and dirt. These areas have runoff characteristics similar to asphalt, concrete and other impervious areas.

Note: Should the City elect to charge for pervious purposes, we recommend that the City consider a multiplier of 0.85 – 0.90, which would

be applied to the ERUs associated with these areas to account for the minor amount of superficial infiltration associated with these types of ground cover. This multiplier was calculated as a ratio of the runoff coefficients of compacted gravel and dirt to that of completely imperious surfaces.

The impervious data (buildings and parking) was utilized to project the number of ERUs associated with the NSFR customer class based on an ERU of 2,700 square feet. The total number of projected ERUs (or billing units) using the flat rate billing approach for residential parcels described above and a custom calculation for NSFR parcels is shown in the table below.

**Table 4-3 ERU Data (Flat Rate SFR Billing Approach)**

| Land Use Classification | Impervious Surface | Factor | ERU (Billing Unit) | Total ERUs |
|-------------------------|--------------------|--------|--------------------|------------|
| NSFR                    | 201,378,092.17     | 1      | 2,700              | 74,820.97  |
| SFR                     | n/a                | n/a    | n/a                | 36,954     |
|                         |                    |        | Total              | 111,774.97 |

Combining the identified annual revenue requirements of \$5.9M with the projected ERUs from the imperious area analysis presented herein allows for a preliminary stormwater fee to be calculated. As such the following table displays the revenue requirements divided by the billing units (ERUs) and presents an estimate of the fee level that would be needed in order to generate the revenue requirement for the system.

**Table 4-4 ERU Fee Calculation**

|                            |                 |
|----------------------------|-----------------|
| Revenue Requirement        | \$ 5,982,000    |
| ERUs                       | 111,774         |
| <b>Monthly Fee Per ERU</b> | <b>\$ 4.46</b>  |
| <b>Annual Fee Per ERU</b>  | <b>\$ 53.52</b> |

## **4.2 BILLING AND COLLECTION METHODOLOGY**

There are three primary methods that the City could utilize to bill and collect a stormwater fee from parcels within the City. The City could include the stormwater fee on the property tax bill, on the existing utility bill or generate a separate standalone stormwater bill. While there are variations on these approaches, these three are the most common methods utilized by communities with stormwater fees. When considering which approach is most appropriate, it is necessary to evaluate items such as the availability of data, administration and overall cost of the approach. Our project has had the opportunity to review various datasets within the City and discuss with City staff the various aspects of each approach. The following section outlines each approach, as well as the advantages and disadvantages of each.

### **4.2.1 UTILITY BILL**

One of the key selling points for a stormwater utility is that it organizes and funds stormwater management in a manner similar to other utilities within the community, such as water and sewer utilities. As a result, it is fairly common for a community to consider using an existing utility bill as the means for billing and collecting stormwater fees. This approach clearly conveys the message within the community that the stormwater fee is related to the provision of utility service. This approach often works well for communities that are largely built-out with existing utility service provided to the majority of parcels. However even when this is the case there are a number of challenges that exist.

One of the key challenges is to correlate the parcel in the utility billing system with the parcel number maintained by the property appraiser. This process can be tedious and time-consuming because utilities are not billed according to parcel identification numbers. It is common for one parcel to have multiple utility

accounts or conversely to not have utility service at all. Additionally, there are often multiple parcels that may be served by a single master meter. In addition to the challenges associated with aligning parcels with utility accounts, some communities have shied away from using the utility bill for stormwater fees due to concerns with the ability to enforce payment. While communities have enforced payment by “interlocking” the stormwater fee with water service and discontinuing water service for nonpayment, the legal and administrative aspects of this approach need to be closely examined.

While the initial development of the stormwater billing database can be time consuming, using the utility bill to assess and collect the stormwater fee is generally a low cost approach. Outside of the initial setup, the costs associated with the utility bill approach would be for additional bills that would need to be billed and collected for parcels without existing utility service and the additional customer service activities resulting from the fee.

#### **4.2.2 PROPERTY TAX BILL**

The most common approach for billing and collecting a stormwater fee is the use of the property tax bill. This approach is generally the most practical and effective manner given the fact that utility services are typically not universally provided throughout the community. However one of the primary disadvantages to this approach is that it goes counter to the concept that the stormwater fee is in fact a fee and not a tax. Some communities have found it difficult to manage these apparent misaligned messages within the public realm. Another disadvantage is the cost associated with using the tax bill. The Property Appraiser will charge a fee of 4% of the total revenues associated with the stormwater fee. Additionally, property owners receive a 4% discount if the tax bill is paid in November which further reduces stormwater revenues. These costs/reductions in revenues must be considered when evaluating billing and collection options. Additionally, the revenue generated from the stormwater fee on the tax bill will be “lumpy” in nature, rather than spread out throughout the year.

Some of the key advantages to using the property tax bill include a high collection rate, the fact that a robust database exists with the property appraiser and the limited administrative burden placed on the City associated with this billing

approach. The use of the property tax bill is often the most straight forward and efficient means of billing and collecting stormwater fees.

#### 4.2.3 SEPARATE STORMWATER BILL

The third alternative billing and collection approach would include the development of a new standalone utility bill for stormwater services. This approach is often used within communities that do not have access to an existing utility bill (i.e. communities served by private water, sewer and electric utilities) and do not have the ability to or desire to place the stormwater fee on the tax bill. While the approach accomplishes the goal of communicating within the community that stormwater service is a utility, the approach is often too costly and time-consuming to manage. The establishment of a separate billing and collection mechanism, the lack of an ability to enforce payment and the associated administrative requirements make this approach one of the least common means of billing and collecting a stormwater fee.

#### 4.2.4 SUMMARY

The advantages and disadvantages to each of the billing and collection approaches are summarized in Table 4.5

**Table 4-4 Stormwater Billing and Collection Alternatives - Advantages and Disadvantages**

|                          | Advantages  | Disadvantages  |
|--------------------------|---|--|
| <b>Utility Bill</b>      | <ul style="list-style-type: none"> <li>• Consistent with other utilities / consistent messaging</li> <li>• Low cost of approach after initial setup</li> </ul>  | <ul style="list-style-type: none"> <li>• Challenge of alignment of utility account and parcel</li> <li>• Parcels without City provided utility service</li> <li>• Collection rate</li> </ul> |
| <b>Property Tax Bill</b> | <ul style="list-style-type: none"> <li>• Existing database with PA</li> <li>• High collection rate</li> <li>• Administratively simple and efficient</li> <li>• Precedent set with Fire Fee</li> </ul> | <ul style="list-style-type: none"> <li>• Inconsistent message of stormwater as a fee and not a tax</li> <li>• Cost / Impact on revenues</li> <li>• “Lumpy” cash flow</li> </ul>              |



|                                 | Advantages  | Disadvantages  |
|---------------------------------|---|--|
| <b>Separate Stormwater Bill</b> | <ul style="list-style-type: none"> <li>• Consistent messaging, stormwater as a service</li> <li>• Ability to reach all parcels</li> </ul> | <ul style="list-style-type: none"> <li>• Significant administrative effort and cost</li> <li>• Inability to enforce payment</li> </ul> |

## SECTION 5. CONCLUSIONS AND RECOMMENDATIONS

The following findings, conclusions and recommendations were developed during the completion of the stormwater feasibility Study.

### 5.1 FINDING AND CONCLUSIONS

Our analysis revealed that the current revenue collection (ad valorem) is not aligned with the proportional cost of serving residential and non-residential parcels with stormwater service. Additionally, the current revenue recovery structure does not provide a strong nexus between the stormwater generation potential of parcel and the method of revenue collection, as all parcels are assessed on value (mileage) regardless of the individual parcel attributes and ultimately the demands they place on the stormwater system.

In conducting a feasibility study regarding the implementation of a stormwater utility in Savannah, the City is evaluating an alternative approach to organizing stormwater management in the community. That evaluation requires detailed analysis to be addressed in subsequent sections of this report, but some of the foundational aspects of the analysis can be addressed at this time.

Fundamental to that evaluation is an identification of the City of Savannah's stormwater management objectives.

In providing a stable fee based funding stream, it was found that this would greatly assist managers in planning for the long term and reduce uncertainty with regards to year to year funding allocation.

Tying the stormwater fee to level of service objectives would also allow the system to be proactively managed and revenues sized to provide adequate resources.

Additionally, the costal proximity of the City and its vulnerability to extreme weather events, make the resiliency aspects of a stormwater fund attractive.

In weighing the initial investigation's findings a stormwater utility offers a compelling alternative to stormwater management in the community.

**Table 5-1 Stormwater Utility Benefits**

| <b>Benefit</b>              | <b>Primary Benefit</b> | <b>Secondary Benefit</b> |
|-----------------------------|------------------------|--------------------------|
| Fee Based Stable Funding    |                        |                          |
| Fair and Equitable          |                        |                          |
| Transparent and Accountable |                        |                          |
| Level of Service Based      |                        |                          |
| Provides Resiliency         |                        |                          |

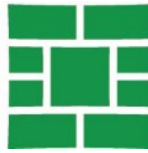
## 5.2 RECOMMENDATIONS

The following recommendations were developed during the course of the Study.

- We recommend that the City implement a stormwater fee to meet the current funding requirements and transition to fund all stormwater operating activities over time to a standalone stormwater utility Fund.
- We recommend that the stormwater fee be assessed on a per parcel (ERU) basis for residential parcels located in the City. Non-residential parcels should be billed based on the measured impervious area of the parcel (ERUs).
- We recommend that City continue to evaluate how stormwater capital expenditures are funded, with consideration of using the stormwater fund and stormwater fee in future years to better align the cost of service and the equity of revenue recovery.

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*Additionally, the purpose of this document is to summarize Stantec's analysis and findings related to this project, and it is not intended to address all aspects that may surround the subject area. Therefore, this document may have limitations, assumptions, or reliance on data that are not readily apparent on the face of it. Moreover, the reader should understand that Stantec was called on to provide judgments on a variety of critical factors which are incapable of precise measurement. As such, the use of this document and its findings by Savannah, GA should only occur after consultation with Stantec, and any use of this document and findings by any other person is done so entirely at their own risk.*



# MEMO

To: Jay Melder, City Manager  
Heath Lloyd, Assistant City Manager

From: Ron Feldner, Savannah Water Resources

Date: December 31, 2023

Subject: **Stormwater Utility Set-Up & Implementation Framework Development**

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## Introduction

The purpose of this memo is to provide a summary of the preliminary work tasks and analysis completed by the City staff in 2023 for the subject project. The City staff undertook selected Stormwater Utility (SWU) tasks in 2023 to develop a preliminary framework for SWU set-up and implementation beginning in 2024.

Over the last several years, City leadership has expressed an interest and shown a documented need to implement a dedicated funding source for the City's municipal stormwater management program (SWMP) services. One of the key level of service (LOS) operational elements of the City SWMP relates to drainage system maintenance which the City Council has previously emphasized as one of its key service delivery priorities. In order to provide the additional resources necessary to address the desired operational LOS, the City is considering establishment of a SWU because it is a more equitable, stable and comprehensive SWMP funding mechanism than the General Fund. Furthermore, providing additional funding for the SWMP via a SWU user fee system is more equitable than a millage rate increase because a property's taxable value is not well correlated to the parcel's runoff characteristics and its associated SWMP service delivery demand. Furthermore, many properties which generate stormwater runoff and receive SWMP services from the City are not subject to property tax.

## SWU Set-Up and Implementation Process Overview

The process to set-up and implement a SWU is a multi-year process encompassing specific due diligence tasks as detailed herein. The opportunity to perform some of the initial work related to SWU development has enabled the City to get a head start on the potential implementation of a full-scale SWU beginning in 2024. Full SWU implementation requires the completion of numerous tasks and activities to successfully set-up a SWU user fee program that will establish a dedicated funding source for the City's SWMP operations. An overview of the process steps/tasks is provided below.

### Task 1 – Stormwater Management Program (SWMP) Assessment

- City Specific SWMP Needs & Priorities
- SWMP Level of Service (LOS) and Cost of Service (COS) Analyses
- Future SWU Service Area Establishment & Extent of Service (EOS) Policy
- Evaluate Future SWU Management, Operational & Organizational Structure
- Overview of SWMP Funding Options & Potential Billing Options
- SWU Implementation Schedule

### Task 2 – Public Education & Outreach (PE&O) Plan

- Development of a PE&O Plan and Strategy
- Social Media Strategies, Educational Materials, and Frequently Asked Questions (FAQs)
- Public Meetings, City Council Workshops, and Open House Events

### Task 3 – SWU Data Development

- Impervious Area Assessment & Delineation
- Determination of the Equivalent Residential Unit (ERU)
- Land Use Analysis
- Parcel & Address Database Development

### Task 4 – SWU Rate Structure Development

- User Fee Rate Study & Revenue Analysis
- Customer Credit Manual & Policy Development
- SWU Ordinance

### Task 5 – Billing & Database Systems

- SWU Master Account File (MAF) Development
- Billing System/Process Set Up (i.e. utility billing system or tax bill)
- Customer Education/Notification (i.e. Key Customer Meetings)

### Task 6 – SWU Implementation

- Customer Service Training
- First Customer Billing
- Ongoing Customer Service Support
- SWMP Implementation

The City staff focused its work efforts in 2023 on several specific tasks from the comprehensive list above. The tasks were generally as follows: (1) review of previous SWMP Assessment work performed for the City by others; (2) analysis of the City's impervious area coverage and parcel data; (3) review of the City SWMP operations budget; (4) development of a SWU user fee revenue estimate; (5) evaluation of the advantages and disadvantages of the City's existing billing systems to deliver the future user fee charge to customers; and (6) development of a preliminary SWU set-up and implementation schedule for 2024-2025.

#### *Document Review*

The City staff reviewed the previous study work conducted by Stantec in 2018. The Stantec Study was a SWU Feasibility Study Report that evaluated several key elements of SWU set-up and implementation as it related to the City of Savannah at that time. The Study proposed that the City utilize an impervious area rate methodology to allocate SWMP costs to all developed properties within the City because impervious surface is directly correlated to the runoff demand imposed on the City SWMP by an individual parcel and the corresponding services provided by the City to that parcel. Furthermore, the established legal precedent in Georgia based on two Georgia Supreme Court rulings supports the use of this rate methodology.

One of the key issues that we extracted from the Stantec Report was data related to the preliminary ERU value of 2,700 expressed in square feet (SF) of impervious area. The ERU will be utilized as the primary customer billing metric for the future SWU user fee as it represents the median impervious area delineation for a representative sample set for detached single family residential (SFR) parcels within the City. Other key data obtained from the Stantec Report related to parcel analysis and impervious area delineation work. The Stantec Report included development of a SWU user fee revenue estimate based on 2017 data related to the ERU, parcel classifications, and impervious area coverage. This 2017 information was helpful as the City staff utilized the Stantec data as a benchmark for comparison with our updated database work performed in 2023. The findings section of this memo will provide revenue estimate data from the 2017 Stantec Study and the recent work of the City staff using 2023 data.

*Analysis of Parcel and Impervious Area Data*

Parcel Analysis: Based on our review of the 2018 Stantec Report, they utilized the 2017 Chatham County Tax Assessor digest data to obtain the parcel counts and the land use code field to delineate SFR versus non-single family residential (NSFR). The 2023 City update uses the 2022 Chatham County Tax Parcel Digest and the land use code field to delineate SFR versus NSFR. Specifically, SFR was determined by the following filters (Municipality = Savannah; Building Value > 0; Commercial = Res; Land Use Code <> (22, 22G, 07). Undeveloped was similarly determined (Municipality = Savannah; Building Value = 0). NSFR was the remainder of Total Parcels (Municipality = Savannah) after subtracting SFR Parcels and Undeveloped Parcels using the Land Use Codes noted (22 – multifamily; 22G – multifamily; 07 – Duplex).

The 2018 Stantec Report ERU value of 2,700 SF is not anticipated to have significantly changed based on similar SFR construction and is therefore retained for the purposes of this 2023 analysis. The number of NSFR parcels in the 2023 update decreased slightly compared to the 2018 Stantec Report (10,341). The rest of the parcel data appeared to change in an intuitive way. The data in Table 1 will be analyzed in much greater detail if the City elects to move forward with SWU set up in 2024 such that any issues will be rectified via a future, more detailed analysis.

**TABLE 1**

| <b>Parcel Classification<sub>1</sub></b> | <b>Parcel Data (2018)</b> | <b>Parcel Data (2023)</b> |
|--|---------------------------|---------------------------|
| Total Parcels                            | 55,376                    | 56,757                    |
| Single Family Residential (SFR)          | 36,954                    | 39,822                    |
| Non-Single Family Residential (NSFR)     | 10,341                    | 9,520                     |
| Undeveloped                              | 8,081                     | 7,415                     |

*Note 1: The Parcel Classifications in Table 1 preliminarily establishes the future customer type breakdown that will be billed the SWU user fee charge.*

Impervious Area Analysis: The 2021 National Land Cover Database (NLCD) Urban Imperious Layer was used to establish a preliminary quantification of the current impervious area condition of the City limits of Savannah. This data was created from analysis of remote imagery and ascribes a percent impervious to each 30m x 30m square grid section of the overall area. This contrasts to the 2018 Stantec method, which utilized: (1) building footprints, (2) parking areas, and (3) pavement GIS layers available through SAGIS in 2017. In addition to the NLCD data, the 2023 update also utilizes the 2023 road centerline data for City limits of Savannah, along with an average road width based on a random sample and manual digital measurement of 75 road segments. This average width including road surface, impervious shoulder, and sidewalks was calculated at 40.5 feet combined with 5,450,000 linear feet of roads yields 226,170,933 square feet (SF) of impervious road surface.

Also, data from Savannah Development Services Department was used to estimate the amount of land development activity since 2021, when the NLCD Impervious data was created. Considering the total built number of parcels and value of parcels, it was estimated that approximately half of the development occurred during 2017-2021 and the other half occurred during 2021-2023. As such, the impervious area increases between the 2017 Stantec SFR+NSFR value and the 2021 NLCD Impervious generated value was doubled to estimate a 2023 SFR+NSFR impervious value. The impervious area related to the 2018 Stantec Report and the City’s 2023 update is summarized in Tables 2 and 3.

**TABLE 2 (2018 Stantec Data)**

| Customer Type     | Impervious Area (SF) | ERU (Billing Unit) | Total ERUs     |
|-------------------|----------------------|--------------------|----------------|
| NSFR <sub>1</sub> | 201,378,092          | 2,700 SF           | 74,584         |
| SFR <sub>2</sub>  | n/a                  | n/a                | 36,954         |
|                   |                      | <b>Total</b>       | <b>111,538</b> |

Note 1: The NSFR Total ERU calculation is the division of the ERU (2,700 SF) into the total Impervious surface square footage.

Note 2: The SFR Total ERU calculation is the total number of SFR parcels from Table 1 under the assumption that each SFR parcel will be billed 1 billing unit or one ERU.

**TABLE 3 (2023 City Data)**

| Customer Type | Impervious Area (SF) | ERU (Billing Unit) | Total ERUs     |
|---------------|----------------------|--------------------|----------------|
| NSFR          | 257,324,300          | 2,700 SF           | 95,305         |
| SFR           | n/a                  | n/a                | 39,822         |
|               |                      | <b>Total</b>       | <b>135,127</b> |

**SWMP Operations Budget (FY24)**

The City staff utilized the proposed FY24 SWMP operations budget as the basis for the future SWU budget. The FY24 adopted Stormwater Department operations budget is **\$7,945,485** with additional capital funds being appropriated to the City SWMP from the General Fund, the BRIC Grant, and SPLOST.

**SWU User Fee Revenue Estimate**

Based on the number of ERUs estimated in this memo (135,127) the SWU could generate approximately **\$1.6 million for every \$1.00 of user fee charged**. The total user fee charged should be based on the amount of revenue required to operate the SWMP at the desired LOS. The City will also need to be considerate of the future customers "willingness to pay", which is based on the relationship between the customer's expectations for provision of SWMP services and the associated fee that is deemed "acceptable" for delivery of those services.

As an example of how the City's future SWU user fee could be calculated, the City staff combined the identified annual revenue requirement of \$7,945,485 (FY24) with the projected ERUs (i.e. billing units) from the parcel and impervious area analyses presented in Tables 1 and 3 such that a preliminary SWU user fee billing rate estimate could be calculated. As such, the following calculation displays the revenue requirement divided by the billing units (ERUs) with the resulting estimate of the SWU user fee billing rate that would be needed to generate the revenue requirement for the City SWMP at the FY24 budget level.

|  |                                       |
|--|---------------------------------------|
| SWMP Annual Revenue Requirement (FY24)           | \$7,945,485                           |
| <u>2023 Total Estimated ERUs</u>                 | <u>135,127</u>                        |
| <b>Example Annual SWU User Fee Amount</b>        | <b>\$58.80 (SFR Customer)</b>         |
| <b>Example Monthly SWU User Fee Billing Rate</b> | <b>\$4.90 per ERU (All customers)</b> |

It is important to note that the example scenario represented above would only fund the existing SWMP at current budget levels and the current LOS unless: (1) there was supplemental funding



provided from other sources (i.e. General Fund) to fund an enhanced LOS or (2) a higher SWU user fee was charged to fund an enhanced SWMP LOS.

#### *Estimated SWU Revenue Considerations*

It should be noted that a meaningful percentage of the impervious area in Table 3 and a corresponding amount of revenue would be associated with the City's impervious areas outside the road rights of way. The exact amount of City impervious area has not been quantified at this time, but this would need to be factored into the future revenue generation and billing rate calculations. In addition, the SWU will implement a customer credit program that will reward customers via a reduced SWU user fee charge for implementing activities that reduce their service demand on the City SWMP and that reduction in revenue must also be accounted for in the SWU revenue calculation. Lastly, all utility billing programs have some level of delinquencies that need to be accounted for in the SWU revenue generation exercise. As such, the SWU user fee charge billing rate would have to be adjusted to offset those factors and maintain the desired revenue level, unless the number of ERUs were to increase through a more detailed parcel and/or impervious area analyses.

#### *SWU User Fee Charge Customer Billing Systems*

The City staff has conducted a cursory assessment of the City's two potential SWU user fee charge delivery mechanism to future customers. The City's two bill delivery mechanisms include: (1) the existing, bi-monthly utility billing system for water, sewer, and sanitation customer charges and (2) the annual City Property Tax system to parcel owners. The City staff prepared a summary memo analysis related to this issue and that information is attached.

#### *SWU Set-Up and Implementation Schedule*

SWU set up and implementation is a community specific exercise that is dependent on several factors including: (1) community understanding and acceptance of the concept; (2) the future customer's willingness to pay and service delivery expectations; (3) fiscal year milestones; and (4) billing system considerations. The work of the City staff and its consultant can be accomplished on a set schedule that can be adhered to as the project progresses. The potential for schedule variation comes in regarding community acceptance of the "new fee" as well as ensuring that the elected officials are comfortable with the proposed SWU user fee program. As such, a recommended schedule on the order of at least 24 months will likely be required to successfully set up and implement the SWU Program in Savannah.

#### *Conclusions & Recommendations – 2023 SWU Implementation Study Update*

Based on the Stantec Report and the updated analysis work performed by the City staff, the following conclusions and recommendations are put forth for further consideration and discussion:

- Implementation of a SWU would enable the City to better address critical LOS elements of the SWMP with a focus on drainage system operations and regulatory compliance.
  - The City should continue to fund capital projects via SPLOST and Grants with the SWU user fee revenue being primarily dedicated to the SWMP elements noted.
- A SWU user fee charge would be the most fair, equitable, and stable method to establish a dedicated funding source for the future SWMP via codification of applicable legal provisions within the City Code of Ordinances.
  - In summary, the City could fund the SWMP operational elements with SWU user fee revenue and the capital projects via other secondary sources (i.e. SPLOST, Grants, etc) to fully fund the City's SWMP at the designated LOS.

- A SWU Enterprise Fund should be established via ordinance to reconcile all SWU user fee revenue and expenses as well as to ensure that all SWU revenues are dedicated exclusively to the SWMP budget expenditures.
- The future SWU user fee rate methodology should be the impervious area method because of its legal precedent in Georgia related to the established relationship that exists between the amount of runoff generated by an undeveloped or developed parcel; the resulting service demand imposed by the parcel on the SWMP; and the ability of the SWU user fee to equitably allocate the SWMP service cost to the parcel's service demand.
- The future SWU rate structure should incorporate applicable elements including establishment of an ERU or billing unit, customer credits, and customer billing provisions for the various parcel/customer classifications (i.e. SFR, NSFR and Undeveloped).
- It is recommended that the City strongly consider utilization of the existing utility billing system as the mechanism to deliver the future SWU user fee charge to customers.
- Implement proven SWU user fee bill delivery and payment remittance tools to include utilization of a "Combined Utility Ordinance" provision to compel customer payment.
- The City should develop a comprehensive public education & outreach (PE&O) program as part of the SWU set up and implementation process.
  - The PE&O program should focus on the key SWMP elements (i.e. operations & maintenance, regulatory compliance, stormwater quality management, etc.) that would be funded by the SWU and the benefits that customers will experience because of the future SWU program (e.g. customers benefit from effective drainage system maintenance).
  - The types of PE&O tools that have been successfully used by other SWUs in Georgia include social media, public meetings, City Council presentations, utility bill inserts, open house events, customer surveys, FAQs, local news media engagement, etc.
- The City staff has provided past (Stantec 2018) and updated (2023) information regarding the framework of a potential SWU user fee charge system for the City to utilize in making the decision to set-up and implement a SWU program.
  - The 2023 data indicates that the existing City FY24 SWMP Operations budget could be funded via SWU user fee revenue as noted herein with an estimated billing rate range of \$4.75/ERU to \$5.00/ERU. The final billing rate will be calculated based on the desired LOS and a comprehensive and detailed analysis of the City parcel and impervious area data.
  - A billing rate between \$4.75/ERU to \$5.00/ERU per ERU compares favorably to the Southeast Stormwater Association (SESWA) average of \$4.67 per ERU for Georgia SWUs as well as the local SWU customer billing rates paid in Garden City (\$4.75/ERU), Richmond Hill (\$4.75/ERU), Brunswick (\$4.50/ERU), Hinesville (\$6.42/ERU), and Statesboro (\$5.00/ERU).
    - In the case of NSFR customers (using the \$4.90/ERU example rate calculated above), their monthly SWU user fee charge would equal the number of ERUs (or 2,700 SF equivalents) associated with the impervious area multiplied by the ERU billing rate (e.g.  $8,100 \text{ SF} / 2,700 = 3 \text{ ERUs}$  and  $3 \text{ ERUs} \times \$4.90/\text{ERU} = \$14.70/\text{month}$ )
  - The current, average cost for a typical SFR customer for City of Savannah Water-Sewer charges is on the order of approximately \$51 which is one of the lowest rates in the state for 5,500 gallons per month of consumption/usage.

- If the SWU user fee charge was included on the utility bill as recommended herein, the amount of the SWU user fee charge could be offset by the customer via enhanced water conservation efforts which the City could encourage through the dissemination of appropriate educational materials.
- If the City elects to move forward with SWU set-up and implementation in 2024, the City should consider undertaking certain tasks in-house and outsourcing certain tasks:
  - The City staff can likely perform a majority of the parcel and impervious area database work in-house. This work task has already been initiated by City staff and those efforts could be continued and expanded in 2024.
    - A consultant that is experienced in SWU database work should also be engaged in 2024 to assist and advise the City staff in its efforts to develop these databases to ensure that the future information would be viable for accurate and efficient calculation of a customer's SWU user fee charge.
  - The City staff could initiate the PE&O program in 2024 as the City seeks to develop and disseminate the desired messaging to the community as it relates to SWMP needs and priorities as well as the benefits of a future SWU.
- The City will need to engage the services of a consulting firm with SWU set-up and implementation experience via a competitive procurement to assist with key technical, due diligence tasks including formulation of SWMP level of service (LOS), extent of service (EOS) and cost of service (COS) policies and data; SWU rate structure development; parcel and impervious area database support; SWU Ordinance development; MAF development and billing system integration; PE&O program support; SWU Credit Manual development; City customer service staff training; and preparation of the final SWU Implementation Report.

*Preliminary SWU Analysis Limitations*

It should be noted that the analysis presented herein and the data in the Stantec Report are preliminary and several of the variables and/or assumptions could change as part of the future, more detailed project work that must be undertaken. The specific variables that could change include (but are not necessarily limited to) a more detailed analysis of the impervious area and parcel data as well as the final calculated ERU based on a larger sample set of SFR parcels, all of which could result in a change in the established ERU and the total number of ERUs (or SWU billing units). The NSFR parcel and impervious area data will likely change because of more detailed analysis. Any significant reductions in the amount of NSFR billing units would affect the total number of ERUs (or SWU billing units) as well as the SWU revenue calculation. In addition, the actual number of NSFR ERUs associated with City-owned impervious area could differ from the assumptions herein and that would also affect the total ERU count. All of these factors as well as others will influence the total ERU count, which will directly affect the billing rate and total SWU revenue calculations. However, it is the City staff's opinion that the information presented in this memo is adequate from a preliminary analysis perspective for the purposes of making an informed and knowledgeable decision regarding the viability of implementing a SWU program in the City of Savannah.

Please contact me with any questions regarding the contents of this memo. Furthermore, I recommend that we schedule a meeting in early 2024 to discuss the contents of this memo and to address your questions.

Attachment: SWU Customer Billing System Analysis

## **MEMORANDUM**

---

# **Stormwater Utility and User Fee Billing Mechanism Analysis & Recommendations**

## ***City of Savannah, Georgia***

**Prepared by:** Water Resources Department

**Date:** December 31, 2023

---

### **Introduction**

The following memorandum contains an analysis of the future Stormwater Utility (SWU) User Fee billing options available to the City of Savannah. Based on City Water Resources staff research and consultation with City Utility Billing staff, we have identified two potential options to generate and deliver stormwater user fee bills to future City SWU customers. The City should review the advantages and disadvantages of the monthly utility bill and the annual property tax bill mechanisms to determine which is best for the City.

### **Option 1 – Utilize Existing Utility Billing System**

The City currently bills customers for water, sewer and sanitation services. At this time, the advantages of using this option to bill stormwater user fee charges are generally as follows:

- Future stormwater user fee customers already receive a “user fee” type bill for various utility services, notably a fixed base charge and variable usage charge for water and sewer services and a monthly fixed fee for sanitation services. It would seem logical that a fixed stormwater user fee line item could be added to the existing utility bill.
- A SWU and user fee is, in fact, a fee paid for services provided. As such, billing the stormwater user fee to customers in a similar manner to other user fees (i.e. water, sewer, sanitation, etc.) helps reinforce the educational message about what a SWU is and how it operates differently than an ad-valorem tax system.
- A majority of developed City properties currently have a City utility account so there will be little need to create new, stormwater-only accounts.
- The City has options to utilize such as a “Combined Public Utility Ordinance” similar to what Garden City, Georgia adopted when it set up its SWU in 2010 (Chapter 82-Utilities; Section 82). The basis of the Combined Public Utility Ordinance is that election of a one utility service is an election of all utility services such that payment of less than the full amount of the monthly utility bill will result in “short payment” of all accounts, including water.
- Because utilities are billed periodically throughout the year, cash flow to the future SWU will be consistent throughout the year. Furthermore, SWU customers will not be hit with a single large, annual fee as would be the case with an annual billing option such as the property tax bill or an annual stormwater-only bill. Instead, all customers would pay their annual stormwater user fee charge in six “installments” over the course of 12 months.

The disadvantages to utilizing the existing utility billing system to bill future SWU customers a stormwater user fee are generally as follows:

- Adding the stormwater user fee in any year the City is planning to increase other utility rates may create an environment where the customers may be less accepting of the new SWU user fee. The new SWU user fee charge amount on the utility bill and its association with the increased utility rates for other, existing utility services could potentially affect customer acceptance and/or support for the new SWU user fee.
- Where a property is not owner-occupied, the occupant or tenant is typically the utility account holder. If there are properties with high vacancy and/or turnover rates, the stormwater user fee charge will have to be reverted back to the property owner and collections of the stormwater user fees may be more difficult without other active utilities allowing for discontinuation of service due to non-payment.

### **Option 2 – Utilize Existing Property Tax Billing System**

The Chatham County Tax Commissioner maintains the tax digest utilized by the City of Savannah to bill property owners in the City for annual ad-valorem property taxes. Advantages of utilizing this system to deliver SWU user fee charges in the future are generally as follows:

- Many of the residential parcels in the City pay their property tax bill via an escrow account with their mortgage company. Mortgage companies typically pay SWU user fees that are included on the property tax bill, and the homeowner need not actively decide to pay or not their SWU user fee bill.
- Property tax bills, and the fees that are sometimes associated with these bills, typically have a high collection rate because many of the residential property tax bills are paid via escrow and because of the consequences that taxpayers potentially face for non-payment of property taxes.
- The SWU will receive most of its operating revenue in one lump sum prior to the start of the January 1 fiscal year, assuming the City bills customers prospectively for the stormwater services.
- The SWU user fee bill will be sent to the owner of the property, whether or not they currently occupy that building. Under this billing approach, vacancies and rentals with high turn-over become a non-issue.

The disadvantages to utilizing the property tax billing system to charge future customers a SWU user fee charge are generally as follows:

- State law prohibits the filing of a direct tax lien on real property for non-payment of SWU user fees, so that issue could affect the user fee collection rate. The City will be responsible for the initiation of any collection activities, separate from the current tax lien process used for delinquent ad-valorem property taxes.
- It should be noted that there has been discussions in Georgia about notating the SWU user fee line item as a “non-lienable fee” to alert taxpayers that failure to pay the user fee will not be handled in the same manner as failure to pay property taxes. In addition, a taxpayer also could notate on their tax payment that the payment amount does not include payment remittance for the SWU user fee charge on the tax bill.

- Many developed properties within the City of Savannah do not currently get a property tax bill because they are entirely tax exempt (e.g. churches and government facilities). As a result, the City would have to create “stormwater-only” bills for these future SWU customers that do not currently receive an annual property tax bill. In addition, many SWU customers that would begin receiving what they could perceive as a “tax bill” for the first time, which they may not pay and which could create a customer education and public relations challenge for the City.
- Placing any user fee charge on a tax bill can be confusing for customers and can lead to the perception that the SWU user fee is a tax since it appears on the annual property tax bill.
- When properties are sold during the year, a reconciling effort would have to be undertaken to allocate the annual SWU user fee to the correct property owner.
- There has been a movement in recent years at the Georgia State Legislature to prohibit the placement of any user fees on the property tax bill. If this type law were to be passed in the future, the impact to local governments that use the property tax bill to deliver these user fees to customers would require a modification to the tax bill delivery system.
- If the City sets an implementation and billing schedule such that stormwater services are billed in arrears then the revenues would come in one lump sum towards the end of the fiscal year, which could pose cash flow challenges for the stormwater budget.

**Example SWU Billing Mechanisms in Georgia**

The 70 (+/-) existing SW Utilities in Georgia have utilized two primary billing methods to deliver stormwater user fee charges to customers: (1) existing utility bills or (2) property tax bills with very good success.

| <b>Local Government/Utility</b> | <b>Billing Mechanism</b> |
|---------------------------------|--------------------------|
| Garden City                     | Monthly Utility Bill     |
| Hinesville                      | Monthly Utility Bill     |
| Valdosta                        | Monthly Utility Bill     |
| Albany                          | Monthly Utility Bill     |
| Decatur                         | Property Tax Bill        |
| Woodstock                       | Property Tax Bill        |
| Peachtree Corners               | Property Tax Bill        |
| Fayetteville                    | Monthly Utility Bill     |
| Brunswick                       | Monthly Utility Bill     |
| Gwinnett County                 | Property Tax Bill        |
| Duluth                          | Property Tax Bill        |
| Americus                        | Monthly Utility Bill     |
| Camilla                         | Monthly Utility Bill     |
| Sugar Hill                      | Property Tax Bill        |
| Griffin                         | Monthly Utility Bill     |
| Richmond Hill                   | Monthly Utility Bill     |

*NOTE: Most SWUs that utilize the tax billing system are located in Gwinnett County, GA.*

### **SWU Billing Mechanism Recommendation**

Based on the information contained in this memo, it is recommended by the Water Resources Department that the City utilize the existing utility billing system to deliver the future SWU user fee charge to customers. The City's utility billing system could place the SWU user fee charge on the utility bill similar to the fixed fee amount for sanitation services. If this billing system is used for the SWU user fee then the City should also consider adoption of a Combined Public Utility Ordinance to compel payment of the new fee. The SWU fixed fee amount for the customer accounts would have to be calculated by the Stormwater Department staff for initial upload into the City utility billing system and the Stormwater Department would have to work with City Utility Billing Services staff to update the customer billing data as parcel and/or impervious area data changes.

If the City opts to utilize the property tax bill, then a comprehensive, targeted public education campaign will need to be developed and implemented to specifically address the "tax versus fee" issue.

Regardless of the mechanism selected, it will be necessary to develop and implement a robust public education and outreach program to assist customers with their understanding of the stormwater program and the SWU.

Please contact the City Water Resources staff with any questions regarding the contents of this memo.