

CITY OF FLAGSTAFF, ARIZONA

Stormwater Financial Plan and Rate Analysis Report



"We are Water"

Management Services and Water Services Divisions

November 3, 2017

Executive Summary

The City Management Services prepared a short-term financial plan and rate and fee analysis for the Stormwater fund of the Water Services Division to ensure the division has sufficient revenues to meet their operational, capital and debt service obligations. The reason for preparing this plan was a result of future capital expenditures increases that exceed current revenue capacity. One key element to the increase is that the United States Army Corps of Engineers (USACE) notified city staff that due to project cost estimates and expenditures to dates, the City will be required to provide matching funds of approximately \$1.75M next calendar year. While it is possible to meet this obligation, it would come at the expense of the Stormwater Capital Improvement Plan (CIP) and the drainage maintenance program. Within the current CIP there are some critical projects staff would not recommend delaying. Therefore staff was directed to develop a financial plan and Stormwater rate alternatives to present to City Council.

Stormwater rates are based on Equivalent Runoff Unit (ERU). An ERU equals 1,500 square feet of impervious surface on a property. Residential customers are billed between one and a maximum of five ERUs. Commercial customers are billed based on total ERUs with no maximum.

As part of this rate analysis, Water Services and Management Services divisions facilitated dialogue with the Water Commission on October 19, 2017. During the meeting, the Water Commission agreed with staff recommendation and made a recommendation to forward to City Council for their consideration. The Water Commission requested that staff provide an alternative and demonstrate the impact of lesser revenues than the staff proposal.

This report has been prepared using generally accepted rate setting techniques. The City's accounting, budgeting, and billing records for Stormwater customers were the primary sources for the data contained within this report.

The City desires rates and fees that fully fund operations, maintenance, and present and future capital costs for Stormwater projects including pre construction expenses for the Rio de Flag project. The purpose of the fiscal analysis is to provide financial review of revenues that will cover the necessary expenditures.

Staff will be providing City Council with a recommendation for rate increases. The rates are based on level of operating and capital commitment the City would like to invest in the Stormwater system.

Staff Recommendation

Temporarily increase Stormwater Rates to a sufficient level to maintain all CIP and drainage maintenance levels as well as provide funding for the Rio de Flag project.

- Temporarily increase Stormwater ERU rate to \$2.26 for all customers, 3 years
- This provides an additional \$1.7M in revenues to maintain the Stormwater Fund.
- Results in a \$0.70 increase on 2/1/2018 over the current rate structure.

The following report provides detail regarding the supporting rate analysis and recommendations.

Future Council Discussion

Staff will present the recommendation to City Council at the November 14, 2017 Work Session to receive Council feedback and direction on the proposed fee changes. Staff will also invite the public to attend a public outreach forum on November 29, 2017 at 4:00 pm. The Public Hearing on Stormwater Rates is scheduled for December 5, 2017 at 6:00pm. With a second hearing on December 19, 2017 at 6:00pm. All meetings will be located at City Hall, 211 W Aspen Avenue in the Council Chambers. Rate changes may be approved, denied or amended for final adoption.

Established Principles & Guidelines

The American Water Works Association (AWWA) establishes a general set of principles to develop rates in the M1 Manual – Principles of Water Rates, Fees and Charges. These guiding principles help to ensure there is a consistent global approach that is employed by all utilities in the development of their rates (water and water-related utilities including sewer, reclaimed water and Stormwater).

Provided below is a short summary listing key guidelines around which public utilities should consider when setting their rates. These closely reflect the City's specified objectives.

- Rates should be cost-based and equitable, and set at a level such that they provide revenue sufficiency.
- Rates should provide reliable, stable and adequate revenue to meet the utility's financial, operation, and regulatory requirements.
- Rate levels should be stable from year to year.
- Rates should be easy to understand and administer.

These guidelines, along with the City's objectives, were utilized within this report to help develop the proposed Stormwater rates.

Revenue Requirements

The method used by most public utilities to establish their revenue requirements is called the “cash basis” approach of setting rates. As the name implies, a public utility combines its cash expenditures over a period of time to determine their required revenues from user rates and other forms of income. The figure below presents the “cash basis” methodology.

Overview of the “Cash Basis” Design
+ Operation and Maintenance Expenses
+ Transfers
+ Capital Additions Financed with Rate Revenue
+ Debt Service (Principal and Interest)
<hr/> <hr/>
= Total Revenue Requirements

Based on the revenue requirement analysis, the utility can determine the overall level of rate adjustment needed in order for the utility to meet its overall expenditure needs.

Stormwater Rate Analysis Development and Results

General Methodology

In order to develop rates which generate sufficient revenue to meet the fiscal requirements of the Utility, a determination of the annual revenue from rates which, combined with other sources of funds, will provide sufficient funds to meet those fiscal requirements must first be completed. This process is typically referred to as a Revenue Sufficiency Analysis.

The process employed in the Revenue Sufficiency Analysis resulted in the identification of revenue requirements of the system, such as operating expenses, capital expenses (minor and major), debt service expense (including a provision for debt service coverage, as applicable), transfers out and the maintenance of both restricted and unrestricted reserves at appropriate levels. These revenue requirements were then compared to the total sources of funds during each year of the forecast period to determine the adequacy of projected revenues to meet requirements. To the extent that the existing revenue stream was not sufficient to meet the annual revenue requirements of the system, a series of rate revenue increases were calculated to provide revenue sufficient to meet those needs.

The Capital Improvement Plan (CIP), including the timing of projects and estimated costs, was provided by the Utility. Staff relied on this information and the CIP was fully integrated into the Revenue Sufficiency Analysis.

Financial Management Goals of the Stormwater Utility

The financial management goals of the City's Stormwater Utility are described below.

Debt Service Management

Stormwater management is a capital intensive business. Oftentimes it is difficult to fully fund the significant capital requirements, whether driven by growth, regulatory pressures and/or system repair and maintenance, without the measured use of debt. As a means of controlling the debt load of the Water, Sewer, Reclaimed Water utilities the City has established a debt policy as follows.

Staff is not recommending financing Stormwater projects with debt service at this time.

Minimum Unrestricted Operating Reserve Fund Balance

In order to maintain a certain level of liquidity, utilities typically establish some form of unrestricted operating reserve fund balance target. Guided by the City's policy in this regard the analysis presented herein has a goal of an unrestricted working capital operating fund reserve amount greater than, or equal to, approximately 10% of Operating Revenues.

Staff recommends that, while 10% is a minimum requirement, the fund should carry a higher fund balance annually. To align with other Water Services funds, a minimum 20% fund balance should be maintained. This plan meets that recommendation.

Capital Improvement Projects and Drainage Maintenance Requirements

The Division’s capital improvements projects (CIPs) for Stormwater are summarized below. Individually, each project was identified by City staff as key projects required over the next 3-year period. The capital needs are for the following projects:

Capital Improvement Plan	2017-2018	2018-2019	2019-2020
Rio de Flag Project	\$ 1,900,861	2,255,000	520,000
Fanning/Lockett Culvert Construction	1,333,482	-	-
Wildwood Drainage Project	306,000	-	-
Phoenix Ave Culvert Repair-Design	130,000	-	-
Phoenix Ave Culvert Repair-Construction	109,000	400,000	650,000
Streets Drainage Projects	150,000	75,000	75,000
Total CIP	\$ 3,929,343	2,730,000	1,245,000

In addition to the CIP, the Stormwater Fund relies on a drainage maintenance program to help provide annual investments for existing drainage areas. This program is assisted with the staff and resources of the Highway User Revenue Fund. Stormwater transfers revenues to this fund based on actual work completed on an annual basis. Below is the current level of maintenance planned.

Drainage Maintenance Program	2017-2018	2018-2019	2019-2020
Transfer to Highway User Revenue Fund	\$ 314,245	316,724	319,981

Overview of Existing Rate Structure

The existing Stormwater rate structure is based on an Equivalent Runoff Unit (ERU). An ERU equals 1,500 square feet of impervious surface on a property. Residential customers are billed between one and a maximum of five ERUs. Commercial customers are billed based on total ERUs with no maximum. Staff does not propose any changes to this rate structure.

General Assumptions

In order to develop the financial and rate projections, certain assumptions were made with regard to elements of the revenue sufficiency analysis. For the financial analysis, staff is using the same annual growth projections as were provided in the previous rate study. We assume approximately 1% annual growth in utility customer base during the forecast period. Staff had also reviewed the current number

of ERUs billed to customers on an annual basis. Currently there are approximately 92,000 ERUs billed on an annual basis. For the operation expenditures, staff recommends a 3% growth on personnel costs and a 2.5% growth on contractual and commodities.

Stormwater Revenue Sufficiency Options

During our analysis, Water Service and Management Services staff discussed the impact to the fund if a rate increase is not approved as well as what are the revenue requirements to keep the fund whole. Staff identified that the current revenue deficiency would be at \$1.7M if no rate increases are approved.

Impact of No Rate Increase

Without a rate increase, staff would need to look at balancing the plan through reductions of expenditures. In order to reach the \$1.7M gap, staff needed to review the CIP and drainage maintenance program. The following are the considerations for reductions of expense to maintain a balanced fund.

- Eliminate two years of the current Stormwater Capital Program. This would be a \$600,000 reduction to the CIP program in FY 2019 and FY 2020.
- The impact of reduction of the CIP will delay the Wildwood Drainage to FY 2020 and the Phoenix Avenue Culvert Repair to FY 2021.
- Reduce the drainage maintenance program by \$200,000 in FY 2018 and FY 2019. This will impact the HURF Fund expenditures and work program. In addition, this could have an impact the City's Community Rating System.

Revenue Requirements to Maintain CIP and Drainage Maintenance

To maintain the same levels of CIP and drainage maintenance, staff looked at the revenue requirement to bridge the \$1.7M revenue deficiency. Based on the operating, CIP and drainage maintenance program, staff identified that a three-year temporary increase would assist in keeping the Stormwater Fund at current planning levels.

- Temporarily increase the Stormwater rate to \$2.26 per ERU on February 1, 2018
- Currently the rate schedule is \$1.56 on 1/1/2018, \$1.66 on 1/1/2019 and \$1.76 on 1/1/2020
- Reduce the rate back to \$1.76 on 1/1/2021
- Provides \$1.7M in revenue resources
- Maintains current CIP levels as well as provides funding for the Wildwood Drainage project sooner.
- Maintains the existing drainage maintenance program as the same levels as currently planned
- Provided funding for the Rio de Flag project's short term, pre-construction needs

Summary of Stormwater Rate Analysis Recommendations

Based on the financial plan and rate analysis Water Services and Management Services staff recommend a temporary rate increase that is sufficient maintain existing levels of CIP, drainage maintenance and funding for Rio de Flag expenditures. The fee schedule below demonstrates the current and proposed rates to be implemented.

The following table summarizes the Stormwater rate analysis recommendation.

Effective Date	Current Per ERU	Proposed Per ERU	Change Per ERU
January 1, 2017	\$ 1.47		
January 1, 2018 *	\$ 1.56	\$ 2.26	\$ 0.70
January 1, 2019	\$ 1.66	\$ 2.26	\$ 0.60
January 1, 2020	\$ 1.76	\$ 2.26	\$ 0.50
January 1, 2021		\$ 1.76	

- Rate would be effective February 1, 2018

Summary of Stormwater Rate Revenue Requirement and Cash Flow

We can demonstrate the rate increase meets the cash flow requirements of the Stormwater Fund while meeting the objectives mentioned earlier.

	2017-2018	2018-2019	2019-2020
Fund Balance	\$ 1,645,270	304,440	275,311
Resources			
Stormwater Fee Revenue	1,672,560	1,795,214	1,925,781
Recommended Fee Increase	386,400	724,776	619,404
Transfers	1,675,861	1,267,368	-
Other Revenues	28,000	28,000	28,000
Total Resources and Fund Balance	5,408,091	4,119,798	2,848,496
Uses of Funds			
Operations, Transfers and Contingencies	860,063	797,763	725,928
Transfers-Drainage Maintenance	314,245	316,724	319,891
Capital	3,929,343	2,730,000	1,245,000
Total Uses of Funds	5,103,651	3,844,487	2,290,819
Ending Fund Balance	\$ 304,440	275,311	557,677
Policy Fund Balance Minimum (10%)	205,896	251,999	254,519
% of Operating Revenues	15%	11%	22%

Council will discuss the staff recommendation per the schedule provided in the Executive Summary. These meetings are open for the public to provide comments.

Water Commission Meeting

Staff presented to the Water Commission on October 19, 2017. The commission agreed with the staff recommendation however, the commission recommended that staff provide alternate rate increases for consideration. Here is a summary of options staff could provide.

Option	Description	Impact (more details provide later in the report)
1	Decrease staff propose rate increases by \$0.10 for a rate of \$2.16 per ERU	This option would reduce revenues of the three-year period by \$300,000. This will impact CIP and the drainage maintenance program.
2	Decrease staff propose rate increases by \$0.20 for a rate of \$2.06 per ERU	This option would reduce revenues of the three-year period by \$600,000. This will impact CIP and the drainage maintenance program.

Staff does not intend on presenting these options to Council as we do not feel that increasing revenues short of the \$1.7M should be considered because of the impact it would have to the fund including key projects and maintenance.