Water and Wastewater

Utility Rate Study

Town of Wickenburg

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→ **The Power of Commitment**

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The Power of Commitment

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1. Introduction

GHD was engaged by the Town of Wickenburg (the Town) in evaluating the water and wastewater utility rates and impacts of infrastructure development on financial performance, through a study to identify recommendations for updates and improvements to rate structure(s), with the focus of identifying the path towards a sustainable revenue stream to fund operations, maintenance, and capital projects.

The results of the study presented in this report include ratemaking analysis and rate’s structure designed to provide revenues sufficient to cover ongoing operating and capital costs for the Town’s water and wastewater utilities.

A financial model was developed as part of this study, with this report delivering the findings. The model utilizes historic data from the Town’s various water and wastewater utilities. This data includes financial performance, customer levels, usage demand and forecasted budgets. The data was used to inform modelling of revenues, costs, and overall financial performance.

The model forecasts the following financial metrics, which are used to complete the analysis:

- Service revenue (revenue from providing water and wastewater services)
- Operating costs (costs associated with the ongoing operations of the utilities)
- Capital expenditure and Reserve Capital (expenditures from capital works and money inflows from Reserve Capital accounts and other external sources not related to rendering of services)

These financial metrics are then used to complete the following analyses:

- Revenue Sufficiency Analysis (assessing that revenues generated from utility rates are sufficient to cover all costs – operational and capital expenditures)
- Cost of Service (analysis of costs based on demands for the utility service)
- Rate Design Analysis (developing proportionate and sustainable fixed and variable rates for the customers of the utilities)

The model considers these financial metrics across two (2) water utility systems, and two (2) wastewater utilities systems. Those utilities include the following:

- Town Water
- Town Wastewater
- Wickenburg Ranch Water
- Wickenburg Ranch Wastewater

The data that was supplied by the Town and available within GHD for this project allowed for this level of granularity.

The forecast modelling is from fiscal year 2023 (FY23) ending June 30, 2023, and fiscal year 2034 (FY34), ending June 30, 2034. The model length is based on the capital expenditure budgets provided, which have expected capital works up to 2034.

1.1 Purpose of this report

The report provides an overview of the study and the associated financial model, including a discussion of the data sources, assumptions, forecasting methods, scenarios, and results. The areas of analysis in modelling are water and wastewater utility revenue sufficiency, cost of service, and rate design analysis. Results from the analysis are presented in this report, with the Town to utilize the report as a reference for future decisions concerning the financial governance of water utilities.

1.2 Goals and objectives

The primary goal of the study is to quantify and validate service rates level(s), structure, and other recommendations that would promote the ability for the Town water and wastewater utilities to meet ongoing costs commitments, in particular the upcoming capital expenditures planned.

In depth analysis of the forecasted capital expenditures are separately identified and discussed in the recent Town Water System Master Plan, and the recent Town Unified Wastewater Master Plan reports.

The modeling also investigated various cost scenarios, to assess the cost-of-service for the utilities and identify opportunities for cost reductions and reconfigurations.

1.3 Assumptions

GHD made the following assumptions in development of the rate study model:

- The historic data on water and wastewater utilities provided by the Town is correct and suitable for use as the basis for the assessment.
- The forecasted budgets provided by the Town aligns with Town goals and as developed by GHD is suitable for use as the basis for the assessment.
- The demand and population forecasts developed by GHD are suitable for use as the basis for the assessment.

Whilst the model and report provide valuable insight into utility rates for the Town, a number of information gaps create limitations, which included the following:

- The proposed utilities' rates are based on pipe diameter. Therefore, the granularity on both the water and wastewater service influences the precision of the forecast and recommendations. This study assumed that all water residential customers utilize a pipe size of 5/8-inch diameter, and all water commercial customers use a 1-inch diameter. Given the differences in service fee rates and base fees for various sizes, this assumption means that the revenue model does not account for the full division amongst various services sizes within each customer type.
- Capital expenditure is often non-linear, so developing a model that is solely based on growth rates can be inaccurate. Future budget and expense evaluation with greater granularity in labor, maintenance, and consumables expenditures and forecasts can return a reliable capital expenditure forecast, specifically across the utilities servicing the Wickenburg Ranch customer base.
- Lack of definitive direction around the desired or required "contingency" funding or the magnitude of, or approach in development of reserve funds increased the percent increase proposed and recommended for the cost of operating the utilities.
- Contingency is a significant and highly variable cost in the historic records of the utilities. Confirmation of how contingency and reserves are desired to be used the logic or scenario for implementation could improve the forecast of the model and recommendations.

2. Background

The development of this rate model is related to the *Wickenburg Water System Master Plan* and *Wickenburg Unified Wastewater Master Plan* (The Master Plans) developed in 2019 and 2023 respectively, and the Wickenburg Ranch Wastewater Master Plan developed in 2018 by GHD for the Town. Those Master Plans outline the broader strategy for the Town's water and wastewater utilities, with extensive population, demand, and infrastructure development forecasts.

The model provides additional information on the utilities' financial position and provides insights into future financial performance and options, given the forecasts present in the Master Plan. The core objective of the model is to capture the following:

- Future financial performance, especially around capacity for service revenue to cover future capital expenditures.
- Rate analysis (modelling revenue and overall financial results of various rate levels) to provide insight into potential rate levels across residential and commercial water and wastewater customers.
- Analysis of Reserve Capital and cash needs for future capital expenditures.
- A snapshot of current financial situation.

2.1 Utility Ratemaking

This study develops utility rates based on future cost budgets, forecasts, and growth assumptions. Utility rates must be sufficient to cover costs, with an inability to do so opening the potential for system failure, as there are inadequate funds for maintenance and improvements.

While the rates for a utility are based on a variety of factors, the development of rates should be consistent with general rate-making principles set forth in utility rate-making practice and literature. In short, rates designed for any utility should strike a reasonable balance between several key factors. These are:

- Generate, as much as possible, a stable rate which produces a sufficient revenue to meet financial goals and obligations of the utilities.
- Be fair and equitable to customers and charge different classes of customer in fair and equitable levels.
- Be easy to understand for customers and the staff of the utilities.

In addition to the principles above, ratemaking studies include the following analyses:

Revenue sufficiency analysis: this compares revenues to upcoming expense to determine required rate adjustment. To attain revenue sufficiency, revenues must cover all costs without the need for external funds.

Cost of service analysis: revenues requirements given fixed, and variables costs of providing service.

Rate design analysis: analyzing the rate levels and structures to deliver required revenues.

2.1.1 Revenue Sufficiency Analysis

Revenue Sufficiency is where revenues generated from utility rates are sufficient to cover all costs, including operational and capital expenditures. Core considerations for revenue sufficiency analysis are:

Ratemaking: rates must be set at a level that is sufficient to cover expenses from operations and capital works.

Capital funding vs. debt: determining appetite to take on debt to fund future expenses. Alternative is to use cash from operations and/or a build-up of cash. This is sometimes referred to as “pay-as-you-go” (PAYGO) and is only possible when operating in Revenue Sufficiency.

Financial plans: use of forecasts and budgets, as well as historic records to determine when and where future expenses will occur is important in setting rates. Requirements for cash requirements may fluctuate over time, which gives scope for rate changes. Appropriately considering financial plans also requires robust forecasting methods for costs, as well as conservative approaches to expectations around future revenues.

2.1.2 Cost of Service Analysis

To determine the required revenues levels, a cost-of-service analysis was undertaken. That analysis was focused on determining the required costs for operating, maintaining, and upgrading water and wastewater infrastructure.

The process of cost allocation was completed by GHD and the Town, through the Masterplans and other assessments. The analysis also draws upon the historic financial records of the utilities.

2.1.3 Rate Design Analysis

Once the revenue requirements were established, the setting of rates across various customer types and modes of service can be undertaken. The analysis considers a variety of factors in establishing rates, including cost allocations across the various utilities and customer impact. The rate design process is aimed to approximate a balance between the need for revenue sufficiency, and the need for providing a service in a fair and equitable manner. The rate design also deals with the timing of rate changes.

3. Utility Ratemaking Study and Model Development

This section outlines the revenue sufficiency, cost of service analysis and rate design analysis carried out by the model. It details the elements used in these analyses, the source data, and assumptions.

3.1 Revenue Sufficiency Development

As noted in section 2.1.1, the level of revenues generated by rates must be sufficient to cover all expenditures of the utility. Where current water or wastewater rates are not sufficient to meet the annual revenue requirements of the systems, revenue increases were modelled to provide the revenue necessary to meet those expenditure needs.

The service revenue forecast is based on the following inputs:

- Population and Subscriber Penetration
- Usage demand
- Service rates for residential and commercial customers
- Base fees for residential and commercial customers

These inputs were combined to deliver a total revenue for each of the utility providers[1]. Given the data that was supplied for the model, residential and commercial revenues were calculated for the providers.

The table below depicts the basis for the growth factors used for each of the inputs used in the service revenue development. It also shows the source of the inputs and information that drives the growth factors.

Table 1 – Revenue inputs

Input	Logic for input	Source
Population and Subscriber Penetration	Population data and subscriber penetration are used to determine total customer numbers. Subscriber penetration refers to the percentage of the population that uses water and wastewater services. Historic customer data is used as a basis for modelling. Additionally, the masterplans included population growth forecasts for the Town of Wickenburg, which are utilized in the model. These forecasts inform the base case scenario for future customer numbers. The other scenarios are sensitivity analysis to this.	Utility masterplans Historic financial records
Usage demand	The masterplans include usage demand forecasts which are used in the developing the rates in the scenarios. The base case utilizes this forecast, with the other scenarios based on sensitivity analysis.	Utility masterplans Historic financial records

[1] Number of customers, the usage demand and rates are multiplied to produce a total service revenue

Input	Logic for input	Source
	Usage demand forecasts in the Masterplan are for residential and commercial customers. Therefore, the model includes separate usage demand forecasts for residential and commercial customers.	
Service rates	Uses current rates provided by the Town. Current rates are escalated and reduced to observe impacts on revenue sufficiency and overall financial performance.	Historic financial records
Base Fees	Uses base fees provided by the Town. Current rates are escalated and reduced to observe impacts on revenue sufficiency and overall financial performance.	Historic financial records

3.2 Cost of Service Development

The key cost items considered in the model are:

- Capital expenditure
- Salaries and personnel cost
- Other operating expenditure
- Materials and maintenance
- Utilities

Table 2 – Cost inputs

Input	Logic for input	Source
Capital expenditure	For the utilities of Town Water and Town Wastewater, capital expenditure forecasts for FY23 – FY34 have been provided. Wickenburg Ranch utilities based on historic averages.	US Inflation data Historic financial records
Salaries and personnel costs	Based on historic averages across each utility. Growth rates in modelling based on inflation data.	US Inflation data Historic financial records
Other operating expenditure	Based on historic averages across each utility. Growth rates in modelling based on inflation data.	US Inflation data Historic financial records
Materials & Maintenance	Separated from other operating expenditure due to volatility. Growth rates based on historic data and reverted to inflation over life of model.	US Inflation data Historic financial records
Utilities costs	Separated from other operating expenditure due to volatility. Growth rates based on historic data and reverted to inflation over life of model.	US Inflation data Historic financial records

3.3 Rate Design Development

The historic financial records used in developing this model show the utility providers have access to Reserve, or Capital accounts. These are funds on which the utilities can draw funds to conduct business. Typically, these funds are used primarily for capital expenditure.

To conduct rate design analysis, the model considers the balance of the Reserve or Capital Account. Analyzing the final balance of this Reserve Account allows for the development of different rate design and structures. It allows for the model to consider various rate changes and how these impact the bottom line of the utilities.

To account for these funds, the model considers a Reserve Account, which can be drawn upon to fund capital expenditures if the cashflow from operations (total revenues less total operating costs) is insufficient to cover these capital expenditures.

If there is money remaining after operations and capital expenditure, this money is modelled to be return to the Reserve Account, where it will be utilized in the future, as required. Additional money in this Reserve Account is also assumed to be able to generate interest, which is added to the utilities' revenues. The scenarios allow for modelling a range of starting balances in the Reserve Account, as well as loan interest rates.

3.4 General Model Inputs

Below is a list of the model inputs, with the growth factor assumptions, along with sources. These inputs are used to complete the revenue sufficiency, cost of service and rate design analyses. The model allows for changes to the rates assumed currently. Users of the model can influence a variety of different inputs that will deliver differing financial outcomes.

Table 3 – Pipe Diameter Summary

Utility & Customer Type		Pipe Size	Source
Town Water	residential	5/8”	Assumption provided by the Town
Town Water	commercial	1”	
WR Water	residential	5/8”	
WR Water	commercial	1”	
Town Wastewater	residential	5/8”	
Town Wastewater	commercial	1”	
WR Wastewater	residential	5/8”	
WR Wastewater	commercial	1”	

Table 4 – Operating expenditure and depreciation inputs

Item	% Factor	Source
Salaries	2.50%	Inflation data
Other Personnel Cost	2.50%	Inflation data
Other Operational Costs (excluding Depreciation)	2.50%	Inflation data
Materials & Maintenance	2.50%	Inflation data
Utilities Costs	2.50%	Inflation data

Table 5 – CAPEX growth factors

Item	% Factor	Source
Town Water	2.50%	GHD Assumption
Town Wastewater	2.50%	GHD Assumption
Wickenburg Ranch Water	2.50%	GHD Assumption
Wickenburg Ranch Wastewater	2.50%	GHD Assumption

4. Analysis of Results and Discussion

This section shows the results from the modelling. The analysis focuses on:

- Revenue Sufficiency Analysis
- Rate Structure and Design Analysis

4.1 Revenue Sufficiency and Rate Design Analysis

4.1.1 Reserve Fund Balance

This section develops a rate design that will allow for revenue sufficiency across the utilities. The four utilities source funds from a Reserve Capital fund. This is a pool of money that exists outside of the utilities operational cashflow and can be drawn upon as required.

The modelling includes an assessment of this funding mechanism. This fund has a certain starting balance, which can be drawn upon as required by the expenditures each fiscal year. In years where revenues exceed expenditure, this surplus money is added to the Reserve Fund balance. Where expenditures exceed revenues, this balance will decrease and potentially fall into a deficit (i.e., Below $0).

Of course, the utilities need to operate such that this Reserve Capital balance does not go below zero. The actual balance of this fund was not provided by the client, so an assumption has been provided by the Town, which is listed in **Table 6** below.

Table 6 – Reserve/Capital Account Inputs

Item	$ amount/% Factor	Source
Reserve Fund Account Opening Balance	$1,000,000	Assumption provided by the Town

4.1.2 Budgeted Expenditures

Of course, understanding and forecasting future expenditures is crucial in understanding future revenue levels needed to deliver revenue sufficiency. The key cost items considered in the model are:

- Capital expenditure
- Salaries and personnel cost
- Other operating expenditure
- Materials and maintenance
- Utilities

The Town provided capital expenditure budgets for the utilities of Town Water and Town Wastewater from FY23 to FY34. From FY35-FY44, a ten-year historic average is used for capital expenditures for both Town utilities. For the Wickenburg Ranch based utilities, only FY23 has capital expenditure forecasted/budgeted by the utilities. A historic average of the previous three fiscal years is used to estimate future capital expenditures from FY24-FY44. These estimates then escalated by a long-term inflation estimate growth factor of 2.5%.

Table 7 – Capital Expenditures FY23-34 ($)

	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34
Town Water	1,582,803	1,071,500	5,639,913	4,806,285	2,000,146	3,305,696	1,785,447	1,954,956	1,961,028	2,357,418	2,188,376	1,969,681
Town Wastewater	614,095	7,273,000	4,977,535	4,705,019	2,763,686	2,751,237	3,478,323	4,561,016	30,313,442	15,594,219	3,249,702	4,622,313
Wickenburg Ranch Water	41,000	950,826	974,597	998,962	1,023,936	1,049,534	1,075,773	1,102,667	1,130,234	1,158,490	1,187,452	1,217,138
Wickenburg Ranch Wastewater	1,207,410	694,015	711,365	729,149	747,378	766,062	785,214	804,844	824,965	845,590	866,729	888,397
Total	**3,445,308**	**9,989,341**	**12,303,410**	**11,239,415**	**6,535,146**	**7,872,530**	**7,124,757**	**8,423,484**	**34,229,669**	**19,955,716**	**7,492,259**	**8,697,530**

Table 8 – Capital Expenditures FY35-44 ($)

	FY35	FY36	FY37	FY38	FY39	FY40	FY41	FY42	FY43	FY44
Town Water	2,640,040	2,782,635	2,522,883	2,315,300	2,343,951	2,256,520	2,299,344	2,330,652	2,364,255	2,521,358
Town Wastewater	3,899,593	4,228,142	3,923,657	3,818,269	3,729,594	3,826,185	3,933,679	3,979,215	3,995,627	3,925,996
Wickenburg Ranch Water	1,079,055	1,090,713	1,101,269	1,110,569	1,118,445	1,124,709	1,129,158	1,131,566	1,131,688	1,159,980
Wickenburg Ranch Wastewater	787,610	796,119	803,823	810,612	816,361	820,933	824,180	825,938	826,027	846,677
Total	**8,406,298**	**8,897,609**	**8,351,631**	**8,054,750**	**8,008,350**	**8,028,347**	**8,186,362**	**8,267,372**	**8,317,596**	**8,454,011**

For the operating costs listed above of salaries and personnel cost, other operating expenditure, materials and maintenance and utilities, only cost budgets for FY23 were provided. Average costs across these categories for the fiscal years FY21-23 are then used to estimate future operating expenditures. These estimates then escalated by a long-term inflation estimate growth factor of 2.5%, as noted in Section 3.4.

4.1.3 General Assumptions

To develop the financial and rate projections, assumptions were made regarding elements of the revenue sufficiency analysis. A summary of those assumptions is presented below.

4.1.3.1 Customer and demand growth

Customer and usage demand growth is informed by Masterplans previously developed by GHD for the Town. These Masterplans include forecasted population and water usage demand, which have been reused in this analysis. These are shown in the table below.

Note that as Well Users decreases, these customers are then absorbed into the Towns' customer base.

Table 9 – Population and Demand Inputs

Item	% Factor	Source
Town Total Population Growth Rate	1.06%	Utility Masterplan
Well User Growth Rate	-4.00%	Utility Masterplan
Wickenburg Ranch Population Growth Rate	1.06%	Utility Masterplan
Residential Demand	2.18%	Utility Masterplan
Commercial Demand	0.55%	Utility Masterplan

4.1.3.2 Other revenues

Other Revenues are shown in the utility's historic records. These are all revenues received besides those from service fees and base fees. For the purpose of the analysis, these are assumed to increase at a rate of 2.5% per year from FY22 levels.

4.1.4 Revenue Sufficiency Results

In short, Revenue Sufficiency is achieved when the Reserve Fund is maintained at a balance above $0. This section analyzes the impact of rate changes on this revenue sufficiency and produces different rate designs and structures that can be adopted to ensure revenue sufficiency of the Reserve Capital account.

The objective of this analysis is to explore how service rate and base fee changes can alter the Reserve Capital balance and what level of rate adjustment is required to ensure the balance does not become negative. It also shows the impact of the rate changes for the customers. This analysis informs the rate design and what rate changes will deliver revenue sufficiency. In the analysis, base fees for both water and wastewater are increased at the same rates.

The following tables show the Reserve Capital account balance given various rate increases across residential and commercial customers. The purpose of presenting various scenarios is to provide the Town with a set of options for modifying rates. Note that the assumed starting balance at the end of FY22 is $1,000,000.

Table 10 below shows the Base Case/Do nothing option. Base fees and service rates are increased in line with a long-term inflation assumption of 2.5%. From FY24 onwards the Reserve Fund balance will be negative, with the deficit increasing each year except for a slight uplift in FY34. The results from this option underscore the urgent need to increase rates to fund future expenditures.

Table 10 – Base Case/Do Nothing Option

FY	Base Fee Increase (residential)	Base Fee Increase (commercial)	Service Rate Increase	Reserve Fund Balance
FY2024	2.50%	2.50%	2.50%	-$5,724,376
FY2025	2.50%	2.50%	2.50%	-$14,432,162
FY2026	2.50%	2.50%	2.50%	-$21,846,720
FY2027	2.50%	2.50%	2.50%	-$24,319,921
FY2028	2.50%	2.50%	2.50%	-$27,885,215
FY2029	2.50%	2.50%	2.50%	-$30,448,875
FY2030	2.50%	2.50%	2.50%	-$34,048,449
FY2031	2.50%	2.50%	2.50%	-$63,182,048
FY2032	2.50%	2.50%	2.50%	-$77,759,772
FY2033	2.50%	2.50%	2.50%	-$79,581,925
FY2034	2.50%	2.50%	2.50%	-$82,306,593
FY2035	2.50%	2.50%	2.50%	-$84,426,164
FY2036	2.50%	2.50%	2.50%	-$86,711,583
FY2037	2.50%	2.50%	2.50%	-$88,113,455
FY2038	2.50%	2.50%	2.50%	-$88,868,241
FY2039	2.50%	2.50%	2.50%	-$89,213,232
FY2040	2.50%	2.50%	2.50%	-$89,201,061
FY2041	2.50%	2.50%	2.50%	-$88,955,381
FY2042	2.50%	2.50%	2.50%	-$88,384,192
FY2043	2.50%	2.50%	2.50%	-$87,441,065
FY2044	2.50%	2.50%	2.50%	-$86,195,861

Table 11 below uses an optimization process, to deliver yearly rate increases that ensure the Reserve Fund balance remains at or above zero. This option keeps service rate and base fee increases the same. As the table shows, significant increases are required in FY24-FY26 to ensure revenue sufficiency.

It is then possible to decrease rates by 0.14% each year following this. Beyond FY33, as capital expenditure declines, the Reserve Fund Balance undergoes significant growth, reaching over $99.6 million by FY44.

Table 11 – Option 1 – Optimal Rate

FY	Base Fee Increase (residential)	Base Fee Increase (commercial)	Service Rate Increase	Reserve Fund Balance
FY2024	134.09%	134.09%	134.09%	$891,059
FY2025	27.90%	27.90%	27.90%	$0
FY2026	-0.14%	-0.14%	-0.14%	$0
FY2027	-0.14%	-0.14%	-0.14%	$1,404,564
FY2028	-0.14%	-0.14%	-0.14%	$7,848,548
FY2029	-0.14%	-0.14%	-0.14%	$13,285,239
FY2030	-0.14%	-0.14%	-0.14%	$19,795,076
FY2031	-0.14%	-0.14%	-0.14%	$25,327,177
FY2032	-0.14%	-0.14%	-0.14%	$5,370,023
FY2033	-0.14%	-0.14%	-0.14%	$0
FY2034	-0.14%	-0.14%	-0.14%	$7,403,162
FY2035	-0.14%	-0.14%	-0.14%	$13,907,619
FY2036	-0.14%	-0.14%	-0.14%	$21,006,994
FY2037	-0.14%	-0.14%	-0.14%	$27,916,136
FY2038	-0.14%	-0.14%	-0.14%	$35,669,985
FY2039	-0.14%	-0.14%	-0.14%	$44,017,354
FY2040	-0.14%	-0.14%	-0.14%	$52,705,914
FY2041	-0.14%	-0.14%	-0.14%	$61,667,664
FY2042	-0.14%	-0.14%	-0.14%	$70,763,207
FY2043	-0.14%	-0.14%	-0.14%	$80,068,401
FY2044	-0.14%	-0.14%	-0.14%	$89,613,096

Table 12 below shows the rate changes required each year to produce a Reserve Fund balance of $0. As the results show, the changes year-on-year can be extreme, especially during high levels of capital expenditure such as in FY31, where rates would need to increase 258 percent.

In years of lower capital expenditure, such as FY27 and FY33, there is scope for customer to receive reductions of over around 40 percent on both service fees and base fees.

Table 12 – Option 2 - Reserve Fund Balance to $0

Financial Year	Base Fee Increase (residential)	Base Fee Increase (commercial)	Service Rate Increase	Reserve Fund Balance
FY2024	134.09%	134.09%	134.09%	$0
FY2025	27.90%	27.90%	27.90%	$0
FY2026	-10.31%	-10.31%	-10.31%	$0
FY2027	-39.45%	-39.45%	-39.45%	$0
FY2028	14.67%	14.67%	14.67%	$0
FY2029	-10.24%	-10.24%	-10.24%	$0
FY2030	13.08%	13.08%	13.08%	$0
FY2031	258.17%	258.17%	258.17%	$0
FY2032	-41.48%	-41.48%	-41.48%	$0
FY2033	-59.35%	-59.35%	-59.35%	$0
FY2034	11.51%	11.51%	11.51%	$0
FY2035	-4.62%	-4.62%	-4.62%	$0
FY2036	3.16%	3.16%	3.16%	$0
FY2037	-6.86%	-6.86%	-6.86%	$0
FY2038	-4.58%	-4.58%	-4.58%	$0
FY2039	-2.04%	-2.04%	-2.04%	$0
FY2040	-1.32%	-1.32%	-1.32%	$0
FY2041	0.13%	0.13%	0.13%	$0
FY2042	-0.64%	-0.64%	-0.64%	$0
FY2043	-0.92%	-0.92%	-0.92%	$0
FY2044	-0.05%	-0.05%	-0.05%	$0

Table 13 considers increasing rates by 10% for both service rates and base fees for both Residential and Commercial customers. The result is negative Reserve Fund balance from FY24 until FY38, where the surplus is over $4 million. From here, the Fund Balance rises exponentially as capital expenditures ease.

The prolonged period of negative balance may be possible for the utilities to absorb with loans and/or drawing upon other external funding sources.

Table 13 – Option 3 – 10% increase to service fee and base fee

Financial Year	Base Fee Increase (residential)	Base Fee Increase (commercial)	Service Rate Increase	Reserve Fund Balance
FY2024	10.00%	10.00%	10.00%	-$5,398,124
FY2025	10.00%	10.00%	10.00%	-$13,391,786
FY2026	10.00%	10.00%	10.00%	-$19,634,855
FY2027	10.00%	10.00%	10.00%	-$20,400,894
FY2028	10.00%	10.00%	10.00%	-$21,635,172
FY2029	10.00%	10.00%	10.00%	-$21,144,731
FY2030	10.00%	10.00%	10.00%	-$20,855,521
FY2031	10.00%	10.00%	10.00%	-$45,140,214
FY2032	10.00%	10.00%	10.00%	-$53,767,989
FY2033	10.00%	10.00%	10.00%	-$48,380,908
FY2034	10.00%	10.00%	10.00%	-$42,459,446
FY2035	10.00%	10.00%	10.00%	-$34,296,713
FY2036	10.00%	10.00%	10.00%	-$24,440,154
FY2037	10.00%	10.00%	10.00%	-$11,589,789
FY2038	10.00%	10.00%	10.00%	$4,298,786
FY2039	10.00%	10.00%	10.00%	$23,302,994
FY2040	10.00%	10.00%	10.00%	$45,722,752
FY2041	10.00%	10.00%	10.00%	$71,829,249
FY2042	10.00%	10.00%	10.00%	$102,156,590
FY2043	10.00%	10.00%	10.00%	$137,246,140
FY2044	10.00%	10.00%	10.00%	$177,582,004

Table 14 considers changing rates on a more granular level. the focus here is to focus price increases, especially for service fees, on commercial customers as they have higher demand per customer. Historical records show that for water customers, residential users are highly unlikely to use more than 50,00 gallons in a month. As the table shows, service rates are increased for usage over 50,000 gallons by customers by 25% from FY24-FY26, whilst keeping other increases at 5%.

Furthermore, commercial wastewater customers receive a 25% increase during this period compared to 5% for residential customers. A base fee increase of 30% in FY24 is for all customers, with previous options showing there is a need for a large base fee increase, and increasing only commercial base fees will be insufficient to stop a negative Reserve Fund balance. The results show negative results for FY24-FY4`, before returning to positive, with the largest deficit of over $50 million in FY32. Negative results are aligned with capital expenditure movements in other years.

Again, this option may be possible if the Town is able to ensure debt or other types of funding for the years with higher capital expenditures.

Table 14 – Option 4 – Focus on Commercial and high demand users

FY	Base Fee Increase (res.)	Base Fee Increase (com.)	Water (W) Service Rate Increase (SRI) 0-10k gal	W SRI 10k-20k gal	W SRI 20k-50k gal	W SRI 50,000+ gal	Res. Wastewater (WW) SRI	Com. WW SRI	Reserve Fund Balance
24	30.00%	30.00%	5.00%	5.00%	5.00%	25.00%	5.00%	25.00%	-$4,871,412
25	5.00%	5.00%	5.00%	5.00%	5.00%	25.00%	5.00%	25.00%	-$12,119,958
26	5.00%	5.00%	5.00%	5.00%	5.00%	25.00%	5.00%	25.00%	-$17,304,105
27	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	-$17,244,984
28	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	-$17,947,664
29	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	-$17,287,980
30	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	-$17,270,843
31	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	-$42,359,371
32	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	-$52,426,147
33	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	-$49,231,259
34	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	-$46,389,685
35	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	-$42,347,609
36	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	-$37,826,458
37	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	-$31,723,773
38	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	-$24,219,153
39	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	-$15,488,965
40	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	-$5,520,567
41	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	$5,632,316
42	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	$18,136,595
43	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	$32,118,939
44	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	$47,595,433

Table 15 considers keeping base fee increases at 5 percent per year, and only increasing service rates such that revenue sufficiency is achieved. As the table shows, there is a service rate increase of 137 and 60 percent respectively in FY24 and FY25, before a possibility of decreasing rates by 0.69 percent from FY26.

Reserve balance hits $0 again in FY32 after the significant capital expenditures of FY31-32. As these costs drop, the Reserve Fund Balance grows.

Table 15 – Option 5 – Increase of service rates, base fees kept to inflation

FY	Base Fee Increase (residential)	Base Fee Increase (commercial)	Service Rate Increase	Reserve Fund Balance
24	5.00%	5.00%	214.63%	$0
25	5.00%	5.00%	33.86%	$0
26	5.00%	5.00%	-0.54%	$1,366,658
27	5.00%	5.00%	-0.54%	$7,753,314
28	5.00%	5.00%	-0.54%	$13,132,071
29	5.00%	5.00%	-0.54%	$19,602,571
30	5.00%	5.00%	-0.54%	$25,133,572
31	5.00%	5.00%	-0.54%	$5,233,691
32	5.00%	5.00%	-0.54%	$0
33	5.00%	5.00%	-0.54%	$7,639,851
34	5.00%	5.00%	-0.54%	$14,503,328
35	5.00%	5.00%	-0.54%	$22,106,761
36	5.00%	5.00%	-0.54%	$29,688,517
37	5.00%	5.00%	-0.54%	$38,307,930
38	5.00%	5.00%	-0.54%	$47,739,153
39	5.00%	5.00%	-0.54%	$57,756,230
40	5.00%	5.00%	-0.54%	$68,318,636
41	5.00%	5.00%	-0.54%	$79,315,650
42	5.00%	5.00%	-0.54%	$90,853,079
43	5.00%	5.00%	-0.54%	$102,992,107
44	5.00%	5.00%	-0.54%	$115,678,628

Option 6 below retains the concept of Option 5, but instead increases Base Fees and keep service fee rates constant. We see rate increases of over 200 and 66 percent in FY24 and FY25, before a decline of 2.96 year-on-year from FY27 becomes possible.

Table 16 – Option 6 – increase base fee and keep service rates at 5%

FY	Base Fee Increase (residential)	Base Fee Increase (commercial)	Service Rate Increase	Reserve Fund Balance
24	341.04%	341.04%	5.0%	$0
25	34.52%	34.52%	5.0%	$0
26	-2.79%	-2.79%	5.0%	$1,419,885
27	-2.79%	-2.79%	5.0%	$7,883,098
28	-2.79%	-2.79%	5.0%	$13,334,581
29	-2.79%	-2.79%	5.0%	$19,849,407
30	-2.79%	-2.79%	5.0%	$25,374,228
31	-2.79%	-2.79%	5.0%	$5,397,903
32	-2.79%	-2.79%	5.0%	$0
33	-2.79%	-2.79%	5.0%	$7,372,522
34	-2.79%	-2.79%	5.0%	$13,852,291
35	-2.79%	-2.79%	5.0%	$20,944,401
36	-2.79%	-2.79%	5.0%	$27,877,952
37	-2.79%	-2.79%	5.0%	$35,704,942
38	-2.79%	-2.79%	5.0%	$44,194,098
39	-2.79%	-2.79%	5.0%	$53,115,925
40	-2.79%	-2.79%	5.0%	$62,428,246
41	-2.79%	-2.79%	5.0%	$72,020,581
42	-2.79%	-2.79%	5.0%	$82,000,896
43	-2.79%	-2.79%	5.0%	$92,434,477
44	-2.79%	-2.79%	5.0%	$103,273,309

The proposed rate increases in Table 17 is unrealistic to implement. In turn, a smoothing of these FY24 base fee increase is proposed, with a series of consecutive base rate increases over FY24-FY26. Service fees are also increased by 25 percent from FY24-27.

Base fees are then increased by 5 percent only. Whilst there are a number of years with a negative Reserve Fund Balance, following FY35 the rate design produces revenue sufficiency, as well as producing a positive balance in FY29 and FY30.

Table 17 – Option 7 – Smoothing of base fee increases

Financial Year	Base Fee Increase (residential)	Base Fee Increase (commercial)	Service Rate Increase	Reserve Fund Balance
24	60.00%	60.00%	25.00%	-$4,160,722
25	60.00%	60.00%	25.00%	-$8,824,610
26	30.00%	30.00%	25.00%	-$9,675,403
27	5.00%	5.00%	5.00%	-$4,897,068
28	5.00%	5.00%	5.00%	-$471,040
29	5.00%	5.00%	5.00%	$5,751,880
30	5.00%	5.00%	5.00%	$11,793,309
31	5.00%	5.00%	5.00%	-$6,781,759
32	5.00%	5.00%	5.00%	-$9,816,122
33	5.00%	5.00%	5.00%	$961,698
34	5.00%	5.00%	5.00%	$11,970,172
35	5.00%	5.00%	5.00%	$24,798,563
36	5.00%	5.00%	5.00%	$38,763,012
37	5.00%	5.00%	5.00%	$55,005,791
38	5.00%	5.00%	5.00%	$73,389,496
39	5.00%	5.00%	5.00%	$93,782,483
40	5.00%	5.00%	5.00%	$116,244,797
41	5.00%	5.00%	5.00%	$140,772,957
42	5.00%	5.00%	5.00%	$167,587,131
43	5.00%	5.00%	5.00%	$196,870,444
44	5.00%	5.00%	5.00%	$228,698,824

In a further attempt to spread the load of price increases, Option 8 shown below takes the concept of Option 4, and focusing the bulk of service fee increases on commercial and high-user customers. It also spreads the necessary base fee increases across Fy24-27, with a 30 percent increase in each of these years.

From FY27 onwards it is possible to then increase service and base fees by less than inflation – 0.48 precent. The primary concern is that this option does have negative Reserve Fund Balance from FY24-FY27.

Table 18 – Option 8 – another smoothing attempt

FY	Base Fee Increase (res.)	Base Fee Increase (com.)	Water (W) Service Rate Increase (SRI) 0-10k gal	W SRI 10k-20k gal	W SRI 20k-50k gal	W SRI 50,000+ gal	Res. Waste water (WW) SRI	Com. WW SRI	Reserve Fund Balance
24	30.0%	30.0%	10.0%	10.0%	10.0%	50.0%	10.0%	50.0%	-$3,992,341
25	30.0%	30.0%	10.0%	10.0%	10.0%	50.0%	10.0%	50.0%	-$8,944,889
26	30.0%	30.0%	10.0%	10.0%	10.0%	50.0%	10.0%	50.0%	-$9,603,634
27	30.0%	30.0%	10.0%	10.0%	10.0%	50.0%	10.0%	50.0%	-$882,559
28	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	$6,981,546
29	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	$16,076,028
30	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	$24,356,925
31	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	$7,319,659
32	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	$5,047,589
33	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	$15,733,783
34	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	$25,713,414
35	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	$36,487,226
36	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	$47,277,257
37	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	$59,125,711
38	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	$71,788,747
39	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	$85,021,481
40	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	$98,763,449
41	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	$112,882,908
42	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	$127,463,482
43	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	$142,542,916
44	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	$158,042,329

4.2 Rate Design Analysis

Section 4.1 outlined the various options for rate increases to ensure revenue sufficiency, with this section analyzing the design and structure of these possible rate changes. The analysis considers the impact of rate and base fee increases on customers and how adjustments can be shared amongst different classes of customers. It is crucial for the Town to consider how rate changes will impact the average monthly bills of customers and assess the likelihood of acceptance from the Wickenburg community.

From the analysis above, three options GHD identified as feasible to implement include **Options 5, 6 and 7.** Only those were considered in the rate design analysis.

4.2.1 Water and Wastewater Rates

The current service fee rates and base fees for FY23 across each of the utilities, customer types and pipe sizes are shown below.

Table 19 – Water service fee rates and base fees

Monthly Base	Town Water	Wickenburg Ranch Water
5/8" residential	$12.06	$16.95
1" Residential	$13.06	$18.46
5/8" commercial	$12.06	$18.19
1" commercial	$13.06	$19.69
1.5"	$50	$32.01
2"	$100	$49.51
3"	$150	$69.44
4"	$200	$90.56
6"	$250	$454.66
8"	$300	$504.66
10"	$350	$554.66
12"	$400	$604.66
Usage per 1,000 gallons		
0 to 10,000	$1.09	$1.75
11,000 to 20,000	$1.49	$2.39
21,000 to 50,000	$2.98	$4.32
51,000 and over	$3.14	$4.59

Table 20 – Wastewater service fees rates and base fees

Monthly Base	Town Wastewater	Wickenburg Ranch Wastewater
5/8" residential	$13.63	$40
1" Residential	$18.63	$57.3
5/8" commercial	$13.63	$47.16
1" commercial	$18.63	$64.46
1.5"	$100	$127.44
2"	$150	$200.8

Monthly Base	Town Wastewater	Wickenburg Ranch Wastewater
3"	$200	$271.63
4"	$250	$441.87
6"	$251.66	$1,179.07
8"	$294.98	$1,209.07
10"	$338.32	$1,239.07
12"	$381.33	$1,269.07
Usage per 1,000 gallons		
Residential	$2.23	$2.64
Commercial small	$3.72	$3.00
Commercial medium	$4.49	$3.75
Commercial large	$5.88	$4.90

4.2.2 Rate design analysis results

As noted previously, the financial modelling assumes:

- All water residential customers in the Town and Wickenburg Ranch have a 5/8” pipe
- All water commercial customers in the Town and Wickenburg Ranch have a 1” pipe

Therefore, the rate design analysis will only consider impacts on these customer types. The rates for these customers is shown below.

Table 21 – Water rates used in analysis

Monthly Base	Town Water	Wickenburg Ranch Water
5/8" residential	$12.06	$16.95
1" commercial	$13.06	$19.69
Usage per 1,000 gallons		
0 to 10,000 gallons	$1.09	$1.75
11,000 to 20,000	$1.49	$2.39
21,000 to 50,000	$2.98	$4.32
51,000 and over	$3.14	$4.59

Table 22 – Wastewater rates used in analysis

Monthly Base	Town Wastewater	Wickenburg Ranch Wastewater
5/8" residential	$13.63	$40
1" commercial	$18.63	$64.46
Usage per 1,000 gallons		
Residential	$2.23	$2.64

Monthly Base	Town Wastewater	Wickenburg Ranch Wastewater
Commercial small	$3.72	$3.00
Commercial medium	$4.49	$3.75
Commercial large	$5.88	$4.90

4.2.3 Customer rate design analysis

This section analyses the impacts on rates for customers if the options discussed in Section 4.1 are actioned. It shows the changes in base and service fees for customers and the corresponding changes to monthly bills and cumulative spend from FY23-FY44.

This is important for the Town to understand, as achieving revenue sufficiency must be achieved in a fair and equitable manner. The table below lists the impact from FY23-FY44 of adopting Option 5.

Table 23 – Option 5 – rate design analysis

	Change $ FY23-FY44	Change % FY23-FY44	Accumulative spend FY23-FY44	Average Yearly Spend
Town Water				
Residential	**$72.63**	**167%**	**$26,671.69**	**$1,212**
Commercial	**$171.90**	**165%**	**$55,053.80**	**$2,502**
Town Wastewater				
Residential	**$53.40**	**164%**	**$22,750.59**	**$1,034**
Commercial	**$215.55**	**164%**	**$70,668.73**	**$3,212**
Wickenburg Ranch Water				
Residential	**$71.50**	**192%**	**$28,020.74**	**$1,274**
Commercial	**$310.84**	**167%**	**$96,407.41**	**$4,382**
Wickenburg Ranch Wastewater				
Residential	**$115.46**	**217%**	**$51,751.11**	**$2,352**
Commercial	**$537.12**	**170%**	**$184,322.90**	**$8,378**

The table below shows the impacts of adopting Option 6. The average yearly spend for Option 6 is lower for all Town Water customers and commercial Town Wastewater. Residential customers in Wickenburg Ranch utilities have lower yearly spends in Option 5, whilst commercial customers have a lower average spend in Option 6.

Table 24 – Option 6 – rate design analysis

	Change $ FY23-FY44	Change % FY23-FY44	Accumulative spend FY23-FY44	Average Yearly Spend
Town Water				
Residential	$66.74	153%	$24,832.79	$1,129
Commercial	$165.52	159%	$53,062.42	$2,412
Town Wastewater				
Residential	$46.74	144%	$20,672.30	$940
Commercial	$206.46	157%	$67,828.05	$3,083
Wickenburg Ranch Water				
Residential	$63.22	170%	$25,436.22	$1,156
Commercial	$301.23	162%	$93,405.10	$4,246
Wickenburg Ranch Wastewater				
Residential	$95.93	181%	$45,651.95	$2,075
Commercial	$505.65	160%	$174,494.10	$7,932

Table 25 below shows the results for Option 7, where the large base fee increases are smoothed over three years. The accumulative spend is higher for all customer types compared with Option 6, as is average yearly spend, although the results are similar.

Table 25 – Option 7 – Rate Design Analysis

	Change $ FY23-FY44	Change % FY23-FY44	Accumulative spend FY23-FY344	Average Yearly Spend
Town Water				
Residential	$98.93	227%	$25,850.28	$1,175
Commercial	$200.37	192%	$54,164.28	$2,462
Town Wastewater				
Residential	$83.12	255%	$21,822.25	$992
Commercial	$256.17	195%	$69,399.84	$3,155
Wickenburg Ranch Water				
Residential	$108.46	291%	$26,866.28	$1,221
Commercial	$353.77	190%	$95,066.32	$4,321
Wickenburg Ranch Wastewater				
Residential	$202.67	382%	$49,026.71	$2,228
Commercial	$677.67	215%	$179,932.52	$8,179

5. Capacity Fee evaluation

Capacity fees, also commonly referred to as a development impact fee, provide a revenue path for the utilities to recover the costs of either establishing, expanding, or replacing infrastructure to be able to sustain compliant operation, and continued service to customers. Such fees are charged for the creation of new water and wastewater supply or treatment infrastructure. They are typically charged to existing or proposed customers at the time of a new proposed water or wastewater connection for services, or an upgrade or change in service, to support a residential or commercial development.

The fee level is in line with the level of demand likely from the new development, as more demand means more infrastructure and operating costs. As such, capacity fees increase with the service size(s) installed.

Neither of the four utilities currently charge capacity fees. With new developments of housing and commercial buildings anticipated to continue with in the service areas, it would be appropriate for the Town to consider Capacity Fees.

The recommended approach is to line-item the fees, based on water meter size, which can be equated to the volume of wastewater anticipated to be generated for collection, treatment, and disposal. The capacity fee is a sum of the water meter cost for the Town to provide, plus the fee for the Town to turn on the water meter once installation is completed and approved, plus a deposit for the water meter, based on the size of the water meter, plus the water system capacity fee. Then in addition, the capacity fee for the sewer system capacity is added for the total capacity fee.

Since the rate and magnitude of new development or customers is not known or defined, and can vary widely, the revenue from the capacity fees is not recommended to inclusion in the annual operating budget for the Town water and wastewater utilities. Instead, the capacity fee revenue should be funneled into the capital reserve fund specifically for capital investments to renew, replace, or expand the utility infrastructure to proactively sustain compliant service and operation.

The proposed capacity fees for Town water and wastewater new connections and new utility customers are outlined in **Table 26** below.

Table 26 – Recommended capacity fees

Water Meter Size	Meter Cost	Turn-on Fee	Deposit	Water System Capacity Fee	Sewer System Capacity Fee	Total* (meter + fees)
5/8”	$300	$50	$50	$1,729	$1,879	$4,007
1”	$350	$50	$50	$5,511	$5,962	$11,923
1.5”	$1,800	$50	$50	$21,100	$32,000	$55,000
2”	$2,100	$75	$150	$42,200	$48,001	$92,525
3”	$2,600	$100	$150	$63,299	$64,001	$130,150
4”	$4,400	$100	$150	$84,399	$80,001	$169,050
6”	$5,200	$200	$300	$105,499	$80,532	$191,731
8”	$5,600	$400	$350	$126,599	$94,395	$227,344

12”	$6,300	$400	$375	$147,699	$108,264	$263,038
16”	$6,600	$600	$400	$168,799	$122,027	$298,426
18”	$6,800	$600	$450	$197,468	$140,176	$345,494
20”	$71,000	$700	$500	$231,006	$161,025	$464,230
24”	$78,000	$800	$550	$270,240	$184,974	$534,564
36”	$82,000	$800	$600	$316,138	$212,485	$612,023

Note that these have been developed for Town customers only, as the Wickenburg Ranch area has a separate development agreements.

These have been calculated based on costs for utilities to supply services to the various services sizes. What that table reflects is that as the costs to operate and maintain the utility increase, based on capacity needs, the cost to support and recover increase.

6. Conclusions and Recommendations

In evaluation of each of the funding and rate adjustment alternatives evaluated and described in the chapters above, and in coordination with Town staff, the alternatives were distilled down to the following two Options as feasible and considered and evaluated for final recommendations:

- **Option 5:** aims to maintain the base fee low, and only increase at a similar rate to inflation, of approximately 5% and increase the service fee, or unit fee for the resources used to overcome the financial shortfall.
- **Option 6:** aims to maintain the unit fee for the resources used low, and only increase at a similar rate to inflation, of approximately 5% and increase the base fee to overcome the financial shortfall.

Based on a holistic consideration of the immediate capital investment needs, maintenance investment needs, and overall utility optimizations, **Option 6** is recommended to achieve a revenue sufficient utility. As detailed in the chapters above, and in the financial model, for the next two (2) years, the based fee will need to increase each year, and the service rate will also increase.

This will result in an approximate zero ($0) balance in the capital and operating fund (equating to all budget expended), and does not consider any capacity fee revenue, and only moderate grant funding or debt addition. However, by FY2026 a steady decrease in in the base fee could be applied, reducing the long-term burden, and helping to counteract the ongoing service rate increase of 5% annually.

The proposed rate change is outlined through FY44 in **Table 27** below.

Table 27 - Recommended Water & Wastewater Utility Rate Change

FY	Base Fee Increase	Service Rate Increase	FY	Base Fee Increase	Service Rate Increase
23	0.0%	0.0%	34	-2.79%	0.0%
24	341.04%	5.0%	35	-2.79%	5.0%
25	34.52%	5.0%	36	-2.79%	5.0%
26	-2.79%	5.0%	37	-2.79%	5.0%
27	-2.79%	5.0%	38	-2.79%	5.0%
28	-2.79%	5.0%	39	-2.79%	5.0%
29	-2.79%	5.0%	40	-2.79%	5.0%
30	-2.79%	5.0%	41	-2.79%	5.0%
31	-2.79%	5.0%	42	-2.79%	5.0%
32	-2.79%	5.0%	43	-2.79%	5.0%
33	-2.79%	5.0%	44	-2.79%	5.0%

When compared with the current base and service rate fees, as included in **Appendices 2**, the customer impact is summarized in **Table 28** below.

Table 28 - Recommended rate change comparison

	Change $ monthly bill FY23-FY44	Change % monthly bill FY23-FY44	Accumulative spend FY23-FY44	Average Yearly Spend
Town Water				
Residential	**$66.74**	**153%**	**$24,832.79**	**$1,129**
Commercial	**$165.52**	**159%**	**$53,062.42**	**$2,412**
Town Wastewater				
Residential	**$46.74**	**144%**	**$20,672.30**	**$940**
Commercial	**$206.46**	**157%**	**$67,828.05**	**$3,083**
Wickenburg Water				
Residential	**$63.22**	**170%**	**$25,436.22**	**$1,156**
Commercial	**$301.23**	**162%**	**$93,405.10**	**$4,246**
Wickenburg Wastewater				
Residential	**$95.93**	**181%**	**$45,651.95**	**$2,075**
Commercial	**$505.65**	**160%**	**$174,494.10**	**$7,932**

There is a significant investment that is required to overcome previous deferred maintenance and lack of investment, that will continue to negatively impact the ability for the utility to stay solvent, meet the level of service required and desired, and to efficiently plan and implement utility improvements and optimization to be able to accommodate new development, economic growth, and to sustain the health, safety, and welfare of the public.

It is recommended that the rate structure is reviewed annually and compared against the previous fiscal year budget and expenditures, and the utility rates structure should be formally re-evaluated at least every 5 years.

In all options that show revenue sufficiency in all years, Base fees for all customer types will need to be raised by over 50%, for consecutive years, or pass on a base fee increase of over 100%. The reality is, if the Town desires revenue sufficient utilities, average bills will need to almost double from FY23 levels by FY27.

However, this rate change, as recommended to support the identified and prioritized improvements, will help stabilize the water and wastewater utilities, ensure improved compliance, and support the ability for Town staff to focus on efficiencies in the utilities, which is the most valuable effort to invest and support, as it will help reduce the long-term cost to operate.

7. Appendices

Appendices 1 – Operating Expenditure used in financial modeling

	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37
Town Water														
Salaries	$154,944	$158,818	$162,788	$166,858	$171,029	$175,305	$179,688	$184,180	$188,784	$193,504	$198,342	$203,300	$208,383	$213,592
Other Personnel Cost	$73,756	$75,600	$77,490	$79,427	$81,413	$83,448	$85,534	$87,673	$89,864	$92,111	$94,414	$96,774	$99,194	$101,673
Admin and Operations	$322,372	$330,431	$338,692	$347,159	$355,838	$364,734	$373,852	$383,199	$392,779	$402,598	$412,663	$422,980	$433,554	$444,393
Utilities	$128,187	$131,391	$134,676	$138,043	$141,494	$145,031	$148,657	$152,373	$156,183	$160,087	$164,090	$168,192	$172,397	$176,707
Materials & Maintenance	$245,031	$251,157	$257,436	$263,872	$270,469	$277,231	$284,161	$291,265	$298,547	$306,011	$313,661	$321,502	$329,540	$337,778
Total	**$924,290**	**$947,397**	**$971,082**	**$995,359**	**$1,020,243**	**$1,045,749**	**$1,071,893**	**$1,098,690**	**$1,126,157**	**$1,154,311**	**$1,183,169**	**$1,212,748**	**$1,243,067**	**$1,274,143**
Town Wastewater														
Salaries	$134,031	$137,382	$140,816	$144,337	$147,945	$151,644	$155,435	$159,321	$163,304	$167,386	$171,571	$175,860	$180,257	$184,763
Other Personnel Cost	$57,184	$58,613	$60,079	$61,581	$63,120	$64,698	$66,316	$67,973	$69,673	$71,415	$73,200	$75,030	$76,906	$78,828
Admin and Operations	$278,173	$285,127	$292,255	$299,562	$307,051	$314,727	$322,595	$330,660	$338,926	$347,400	$356,085	$364,987	$374,111	$383,464
Utilities	$110,947	$113,721	$116,564	$119,478	$122,465	$125,526	$128,665	$131,881	$135,178	$138,558	$142,022	$145,572	$149,211	$152,942
Materials & Maintenance	$118,700	$121,668	$124,709	$127,827	$131,023	$134,298	$137,656	$141,097	$144,625	$148,240	$151,946	$155,745	$159,638	$163,629
Total	**$699,035**	**$716,510**	**$734,423**	**$752,784**	**$771,603**	**$790,894**	**$810,666**	**$830,933**	**$851,706**	**$872,998**	**$894,823**	**$917,194**	**$940,124**	**$963,627**
Wickenburg Ranch Water														
Salaries	$127,863	$131,059	$134,336	$137,694	$141,136	$144,665	$148,281	$151,988	$155,788	$159,683	$163,675	$167,767	$171,961	$176,260
Other Personnel Cost	$56,765	$58,184	$59,638	$61,129	$62,657	$64,224	$65,829	$67,475	$69,162	$70,891	$72,663	$74,480	$76,342	$78,250
Admin and Operations	$222,588	$228,153	$233,856	$239,703	$245,695	$251,838	$258,134	$264,587	$271,202	$277,982	$284,931	$292,055	$299,356	$306,840

	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37
Utilities	$93,211	$95,542	$97,930	$100,379	$102,888	$105,460	$108,097	$110,799	$113,569	$116,408	$119,319	$122,301	$125,359	$128,493
Materials & Maintenance	$155,236	$159,117	$163,095	$167,172	$171,352	$175,636	$180,026	$184,527	$189,140	$193,869	$198,716	$203,683	$208,775	$213,995
Total	**$655,663**	**$672,054**	**$688,856**	**$706,077**	**$723,729**	**$741,822**	**$760,368**	**$779,377**	**$798,861**	**$818,833**	**$839,304**	**$860,286**	**$881,794**	**$903,838**
Wickenburg Ranch Wastewater														
Salaries	$220,784	$226,304	$231,961	$237,760	$243,704	$249,797	$256,042	$262,443	$269,004	$275,729	$282,622	$289,688	$296,930	$304,353
Other Personnel Cost	$95,165	$97,544	$99,983	$102,482	$105,044	$107,671	$110,362	$113,121	$115,949	$118,848	$121,819	$124,865	$127,986	$131,186
Admin and Operations	$362,854	$371,925	$381,224	$390,754	$400,523	$410,536	$420,800	$431,319	$442,102	$453,155	$464,484	$476,096	$487,998	$500,198
Utilities	$77,531	$79,469	$81,456	$83,492	$85,580	$87,719	$89,912	$92,160	$94,464	$96,826	$99,246	$101,727	$104,271	$106,877
Materials & Maintenance	$77,393	$79,327	$81,311	$83,343	$85,427	$87,563	$89,752	$91,996	$94,295	$96,653	$99,069	$101,546	$104,084	$106,687
Total	**$833,727**	**$854,570**	**$875,934**	**$897,833**	**$920,278**	**$943,285**	**$966,867**	**$991,039**	**$1,015,815**	**$1,041,211**	**$1,067,241**	**$1,093,922**	**$1,121,270**	**$1,149,302**
Total Operating Expenditure	**$3,112,714**	**$3,190,532**	**$3,270,295**	**$3,352,052**	**$3,435,854**	**$3,521,750**	**$3,609,794**	**$3,700,039**	**$3,792,540**	**$3,887,353**	**$3,984,537**	**$4,084,150**	**$4,186,254**	**$4,290,910**

Appendix 1 cont.

	FY38	FY39	FY40	FY41	FY42	FY43	FY44
Town Water							
Salaries	$218,932	$224,405	$230,015	$235,766	$241,660	$247,701	$253,894
Other Personnel Cost	$104,215	$106,821	$109,491	$112,228	$115,034	$117,910	$120,858
Admin and Operations	$455,503	$466,890	$478,563	$490,527	$502,790	$515,360	$528,244
Utilities	$181,124	$185,652	$190,294	$195,051	$199,927	$204,925	$210,049
Materials & Maintenance	$346,223	$354,878	$363,750	$372,844	$382,165	$391,719	$401,512

	FY38	FY39	FY40	FY41	FY42	FY43	FY44
Total	**$1,305,997**	**$1,338,647**	**$1,372,113**	**$1,406,416**	**$1,441,576**	**$1,477,616**	**$1,514,556**
Town Wastewater							
Salaries	$189,382	$194,117	$198,970	$203,944	$209,043	$214,269	$219,625
Other Personnel Cost	$80,799	$82,819	$84,890	$87,012	$89,187	$91,417	$93,702
Admin and Operations	$393,051	$402,877	$412,949	$423,273	$433,854	$444,701	$455,818
Utilities	$156,765	$160,684	$164,701	$168,819	$173,039	$177,365	$181,800
Materials & Maintenance	$167,720	$171,913	$176,211	$180,616	$185,132	$189,760	$194,504
Total	**$987,718**	**$1,012,411**	**$1,037,721**	**$1,063,664**	**$1,090,255**	**$1,117,512**	**$1,145,450**
Wickenburg Ranch Water							
Salaries	$180,667	$185,183	$189,813	$194,558	$199,422	$204,408	$209,518
Other Personnel Cost	$80,207	$82,212	$84,267	$86,374	$88,533	$90,747	$93,015
Admin and Operations	$314,511	$322,374	$330,433	$338,694	$347,161	$355,840	$364,736
Utilities	$131,705	$134,998	$138,373	$141,832	$145,378	$149,013	$152,738
Materials & Maintenance	$219,345	$224,828	$230,449	$236,210	$242,116	$248,168	$254,373
Total	**$926,434**	**$949,595**	**$973,335**	**$997,668**	**$1,022,610**	**$1,048,175**	**$1,074,380**
Wickenburg Ranch Wastewater							
Salaries	$311,962	$319,761	$327,755	$335,949	$344,348	$352,956	$361,780
Other Personnel Cost	$134,466	$137,827	$141,273	$144,805	$148,425	$152,136	$155,939
Admin and Operations	$512,703	$525,521	$538,659	$552,125	$565,929	$580,077	$594,579
Utilities	$109,549	$112,288	$115,095	$117,973	$120,922	$123,945	$127,044
Materials & Maintenance	$109,354	$112,088	$114,890	$117,762	$120,706	$123,724	$126,817
Total	**$1,178,034**	**$1,207,485**	**$1,237,672**	**$1,268,614**	**$1,300,329**	**$1,332,838**	**$1,366,158**
Total Operating Expenditure	**$4,398,183**	**$4,508,138**	**$4,620,841**	**$4,736,362**	**$4,854,771**	**$4,976,141**	**$5,100,544**

Appendices 2 – Current Utility Summary - Primary Rates/Fees

Town of Wickenburg

Utility Summary - Primary Rates/Fees

ADDITIONAL FEES MAY APPLY, FOR ADDITIONAL INFORMATION PLEASE CALL (928) 668-0520

Deposits [1]		
Electric - Residential	$225.00	per meter
Electric - Commercial	Greater of 2x the average 6 month bill or $225, per meter	
Sanitation	Same as monthly	per can
Water - Residential	$50.00	per meter
Water - Commercial	Greater of 2x the average 6 month bill or $50, per meter	
Wastewater - Residential	$50.00	per meter
Wastewater - Commercial	Greater of 2x the average 6 month bill or $50, per meter	
Hydrant Meter	$1,500.00	per meter
Connect Fees		
$10 per electric/water meter		
Additional $40 fee per location same day 10 a.m. to 3 p.m. Monday-Thursday		
Additional $100 fee per location after 3 p.m. Monday-Thursday and all day Friday - Sunday		
Miscellaneous Fees		
Recycling Fee	$1.50	Monthly
Utility Bill/History	$3.00	Per Page, any format

	Electric	Sanitation
	Resolution #1578 Effective 08/01/2008	Resolution #1491 Effective 08/19/2005
Residential		
Base	$12.00	
Per kWh	$0.0857	
90 Gallon		$19.60
Commercial		
Small Base	$17.00	
Large Base	$25.00	
Small per kWh	$0.1100	
Large per kWh	$0.0700	
Demand	$4.7500	
90 Gallon		$32.88
300 Gallon		$57.72

	Water [2]		Wastewater	
	System 1	System 2 (WR)	System 1	System 2 (WR)
	Resolution #1785.01	Resolution #1880	Resolution #1785.01	Resolution #1880
Monthly Base	Effective 01/01/2019	Effective 03/01/2016	Effective 01/01/2019	Effective 03/01/2016
5/8" Residential	$12.06	$16.95	$13.63	$40.00
5/8" Commercial	$12.06	$18.19	$13.63	$47.16
1" Residential	$13.06	$18.46	$18.63	$57.30
1" Commercial	$13.06	$19.69	$18.63	$64.46
1.5"	$50.00	$32.01	$100.00	$127.44
2"	$100.00	$49.51	$150.00	$200.80
3"	$150.00	$69.44	$200.00	$271.63
4"	$200.00	$90.56	$250.00	$441.87
6"	$250.00	$454.66	$300.00	$1,179.07
8"	$300.00	$504.66	$350.00	$1,209.07
10"	$350.00	$554.66	$400.00	$1,239.07
12"	$400.00	$604.66	$450.00	$1,269.07
Usage Per 1,000	**System 1**	**System 2 (WR)**	**System 1**	**System 2 (WR)**
0 to 10,000 gallons	$1.09	$1.75		
11,000 to 20,000 gallons	$1.49	$2.39		
21,000 to 50,000 gallons	$2.98	$4.32		
51,000 gallons and over	$3.14	$4.59		
Residential			$2.23	$2.64
Commercial Small			$3.72	$3.00
Commercial Medium			$4.49	$3.75
Commercial Large			$5.88	$4.90
Hydrant Meters	**System 1**	**System 2 (WR)**		
Monthly Base	$100.00			
per 1,000 gallons	$3.00			

Due Date: 25 days from bill date
Delinquent: 5% penalty added on the 26th day if unpaid
Shutoff: 10 days after Delinquent Date

(1) Non-interest bearing, refunded as a bill credit after 12 continuous months of a good pay history
(2) Water rates outside the Town limits are 2 times the above rates

Updated: 10/13/2021

Appendices 3 – Other Revenues used in financial modeling

	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35
Town Water Other Revenue												
Lgip Loss	$25	$26	$27	$27	$28	$29	$29	$30	$31	$32	$32	$33
Water Connect Fees	$4,509	$4,622	$4,738	$4,856	$4,977	$5,102	$5,229	$5,360	$5,494	$5,632	$5,772	$5,917
Water Sales Tax Exempt	$14,390	$14,750	$15,118	$15,496	$15,884	$16,281	$16,688	$17,105	$17,533	$17,971	$18,420	$18,881
Water Installation	$36,101	$37,004	$37,929	$38,877	$39,849	$40,845	$41,866	$42,913	$43,986	$45,085	$46,213	$47,368
Backflow	$12,807	$13,127	$13,455	$13,792	$14,137	$14,490	$14,852	$15,224	$15,604	$15,994	$16,394	$16,804
Illegal Connect	$342	$350	$359	$368	$377	$387	$396	$406	$416	$427	$437	$448
Meter Re-Read Fees	$12	$12	$13	$13	$13	$14	$14	$14	$15	$15	$15	$16
Inspection & Testing Fees	$3,376	$3,462	$3,551	$3,641	$3,735	$3,830	$3,928	$4,028	$4,131	$4,237	$4,345	$4,457
Miscellaneous Revenues	$9,788	$10,034	$10,288	$10,547	$10,813	$11,086	$11,366	$11,652	$11,946	$12,248	$12,557	$12,873
Water Tower Use	$56,603	$58,012	$59,456	$60,935	$62,452	$64,006	$65,599	$67,231	$68,905	$70,619	$72,377	$74,178
Total	**$137,953**	**$141,400**	**$144,932**	**$148,553**	**$152,265**	**$156,069**	**$159,968**	**$163,964**	**$168,061**	**$172,260**	**$176,563**	**$180,974**
Town Wastewater Other Revenue												
Lgip Loss	$3	$3	$3	$3	$3	$3	$4	$4	$4	$4	$4	$4
Inspection & Testing Fees	$405	$415	$425	$436	$447	$458	$470	$481	$493	$506	$518	$531
Direct Haul Dumping	$87,290	$89,473	$91,709	$94,002	$96,352	$98,761	$101,230	$103,761	$106,355	$109,014	$111,739	$114,533
Contracted Services Reimb	$31	$32	$32	$33	$34	$35	$36	$37	$37	$38	$39	$40

	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35
Miscellaneous Revenues	$5,128	$5,256	$5,387	$5,522	$5,660	$5,802	$5,947	$6,095	$6,248	$6,404	$6,564	$6,728
Surplus Of Town Property	$615	$630	$646	$662	$679	$696	$713	$731	$749	$768	$787	$807
Total	**$93,472**	**$95,809**	**$98,204**	**$100,659**	**$103,175**	**$105,755**	**$108,399**	**$111,109**	**$113,886**	**$116,733**	**$119,652**	**$122,643**
Wickenburg Ranch Water Other Revenue												
Water Connect Fees	$2,422	$2,483	$2,545	$2,609	$2,674	$2,741	$2,809	$2,879	$2,951	$3,025	$3,101	$3,178
Construction Water Sales	$21,110	$21,638	$22,179	$22,733	$23,301	$23,884	$24,481	$25,093	$25,720	$26,363	$27,022	$27,698
Water Installation	$99,126	$101,605	$104,145	$106,748	$109,417	$112,152	$114,956	$117,830	$120,776	$123,795	$126,890	$130,062
Backflow	$148	$151	$155	$159	$163	$167	$171	$175	$180	$184	$189	$194
Inspection & Testing Fees	$165	$169	$173	$177	$182	$186	$191	$196	$201	$206	$211	$216
Miscellaneous Revenues	$297,441	$304,877	$312,499	$320,311	$328,319	$336,527	$344,940	$353,563	$362,403	$371,463	$380,749	$390,268
Sales & Use Tax Credit	$217	$222	$228	$234	$239	$245	$252	$258	$264	$271	$278	$285
Total	**$420,629**	**$431,144**	**$441,923**	**$452,971**	**$464,295**	**$475,903**	**$487,800**	**$499,995**	**$512,495**	**$525,307**	**$538,440**	**$551,901**
Wickenburg Ranch Wastewater Other Revenue												
Inspection & Testing Fees	$250	$256	$263	$269	$276	$283	$290	$297	$305	$312	$320	$328
Connection Fee	$1,366,516	$1,400,679	$1,435,696	$1,471,589	$1,508,378	$1,546,088	$1,584,740	$1,624,358	$1,664,967	$1,706,592	$1,749,256	$1,792,988
Contracted Services Reimb	$35,477	$36,364	$37,273	$38,204	$39,160	$40,139	$41,142	$42,171	$43,225	$44,305	$45,413	$46,548
Miscellaneous Revenues	$10	$10	$10	$10	$11	$11	$11	$11	$12	$12	$12	$13
Total	**$1,402,253**	**$1,437,309**	**$1,473,242**	**$1,510,073**	**$1,547,825**	**$1,586,520**	**$1,626,183**	**$1,666,838**	**$1,708,509**	**$1,751,221**	**$1,795,002**	**$1,839,877**

	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35
Total Other Revenue	**$2,054,306**	**$2,105,662**	**$2,158,301**	**$2,212,256**	**$2,267,560**	**$2,324,246**	**$2,382,350**	**$2,441,906**	**$2,502,951**	**$2,565,522**	**$2,629,657**	**$2,695,396**

Appendix 3 Continued

	FY36	FY37	FY38	FY39	FY40	FY41	FY42	FY43	FY44
Town Water Other Revenue									
Lgip Loss	$34	$35	$36	$37	$38	$38	$39	$40	$41
Water Connect Fees	$6,065	$6,216	$6,372	$6,531	$6,694	$6,861	$7,033	$7,209	$7,389
Water Sales Tax Exempt	$19,353	$19,837	$20,333	$20,841	$21,362	$21,896	$22,443	$23,005	$23,580
Water Installation	$48,552	$49,766	$51,010	$52,285	$53,592	$54,932	$56,306	$57,713	$59,156
Backflow	$17,224	$17,655	$18,096	$18,548	$19,012	$19,487	$19,975	$20,474	$20,986
Illegal Connect	$460	$471	$483	$495	$507	$520	$533	$546	$560
Meter Re-Read Fees	$16	$16	$17	$17	$18	$18	$19	$19	$20
Inspection & Testing Fees	$4,570	$4,687	$4,807	$4,930	$5,056	$5,185	$5,318	$5,454	$5,593
Miscellaneous Revenues	$13,198	$13,531	$13,873	$14,223	$14,581	$14,949	$15,326	$15,713	$16,109
Water Tower Use	$76,024	$77,916	$79,855	$81,842	$83,879	$85,966	$88,106	$90,298	$92,545
Total	**$185,496**	**$190,130**	**$194,880**	**$199,749**	**$204,740**	**$209,855**	**$215,098**	**$220,472**	**$225,980**
Town Wastewater Other Revenue									
Lgip Loss	$4	$4	$4	$4	$5	$5	$5	$5	$5
Inspection & Testing Fees	$545	$558	$572	$586	$601	$616	$631	$647	$663
Direct Haul Dumping	$117,396	$120,331	$123,339	$126,422	$129,583	$132,823	$136,143	$139,547	$143,035
Contracted Services Reimb	$41	$42	$43	$45	$46	$47	$48	$49	$50
Miscellaneous Revenues	$6,896	$7,069	$7,245	$7,426	$7,612	$7,802	$7,998	$8,197	$8,402
Surplus Of Town Property	$827	$848	$869	$891	$913	$936	$959	$983	$1,008
Total	**$125,709**	**$128,852**	**$132,073**	**$135,375**	**$138,759**	**$142,228**	**$145,784**	**$149,429**	**$153,164**
Wickenburg Ranch Water Other Revenue									
Water Connect Fees	$3,258	$3,339	$3,423	$3,508	$3,596	$3,686	$3,778	$3,873	$3,969

	FY36	FY37	FY38	FY39	FY40	FY41	FY42	FY43	FY44
Construction Water Sales	$28,390	$29,100	$29,828	$30,573	$31,338	$32,121	$32,924	$33,747	$34,591
Water Installation	$133,314	$136,647	$140,063	$143,565	$147,154	$150,833	$154,603	$158,468	$162,430
Backflow	$199	$203	$209	$214	$219	$225	$230	$236	$242
Inspection & Testing Fees	$221	$227	$233	$239	$244	$251	$257	$263	$270
Miscellaneous Revenues	$400,025	$410,025	$420,276	$430,783	$441,552	$452,591	$463,906	$475,504	$487,391
Sales & Use Tax Credit	$292	$299	$307	$314	$322	$330	$338	$347	$356
Total	**$565,699**	**$579,841**	**$594,337**	**$609,196**	**$624,425**	**$640,036**	**$656,037**	**$672,438**	**$689,249**
Wickenburg Ranch Wastewater Other Revenue									
Inspection & Testing Fees	$336	$345	$353	$362	$371	$381	$390	$400	$410
Connection Fee	$1,837,813	$1,883,758	$1,930,852	$1,979,123	$2,028,601	$2,079,316	$2,131,299	$2,184,582	$2,239,196
Contracted Services Reimb	$47,712	$48,905	$50,128	$51,381	$52,665	$53,982	$55,331	$56,715	$58,133
Miscellaneous Revenues	$13	$13	$14	$14	$14	$15	$15	$15	$16
Total	**$1,885,874**	**$1,933,021**	**$1,981,346**	**$2,030,880**	**$2,081,652**	**$2,133,693**	**$2,187,036**	**$2,241,711**	**$2,297,754**
Total Other Revenue	**$2,762,777**	**$2,831,844**	**$2,902,637**	**$2,975,200**	**$3,049,576**	**$3,125,812**	**$3,203,954**	**$3,284,050**	**$3,366,147**

Appendices 4 – Financial Results – Option 1

Financial Year	Service Revenue	Total Revenue	OPEX	CAPEX	Net Cash Flow	Reserve Fund
FY24	$10,183,323	$12,288,985	$3,190,532	$9,989,341	-$890,888	$171
FY25	$13,415,232	$15,573,533	$3,270,295	$12,303,410	-$171	$0
FY26	$13,783,642	$15,995,898	$3,352,052	$11,239,415	$1,404,431	$1,404,431
FY27	$14,147,331	$16,414,891	$3,435,854	$6,535,146	$6,443,892	$7,848,323
FY28	$14,506,674	$16,830,920	$3,521,750	$7,872,530	$5,436,641	$13,284,963
FY29	$14,862,034	$17,244,383	$3,609,794	$7,124,757	$6,509,833	$19,794,796
FY30	$15,213,761	$17,655,667	$3,700,039	$8,423,484	$5,532,144	$25,326,940
FY31	$15,562,196	$18,065,147	$3,792,540	$34,229,669	-$19,957,062	$5,369,878
FY32	$15,907,669	$18,473,190	$3,887,353	$19,955,716	-$5,369,878	$0
FY33	$16,250,499	$18,880,156	$3,984,537	$7,492,259	$7,403,360	$7,403,360
FY34	$16,590,996	$19,286,392	$4,084,150	$8,697,530	$6,504,711	$13,908,071
FY35	$16,929,462	$19,692,239	$4,186,254	$8,406,298	$7,099,687	$21,007,758
FY36	$17,266,189	$20,098,033	$4,290,910	$8,897,609	$6,909,514	$27,917,272
FY37	$17,601,461	$20,504,098	$4,398,183	$8,351,631	$7,754,284	$35,671,556
FY38	$17,935,555	$20,910,755	$4,508,138	$8,054,750	$8,347,867	$44,019,422
FY39	$18,268,741	$21,318,317	$4,620,841	$8,008,350	$8,689,126	$52,708,548
FY40	$18,601,279	$21,727,091	$4,736,362	$8,028,347	$8,962,382	$61,670,931
FY41	$18,933,427	$22,137,381	$4,854,771	$8,186,362	$9,096,247	$70,767,178
FY42	$19,265,432	$22,549,482	$4,976,141	$8,267,372	$9,305,969	$80,073,147
FY43	$19,597,539	$22,963,687	$5,100,544	$8,317,596	$9,545,546	$89,618,693
FY44	$19,929,986	$23,380,283	$5,228,058	$8,454,011	$9,698,215	$99,316,907

Appendices 5 – Financial Results – Option 2

Financial Year	Service Revenue	Total Revenue	OPEX	CAPEX	Net Cash Flow	Reserve Fund
FY24	$10,183,152	$12,288,813	$3,190,532	$9,989,341	-$891,059	$0
FY25	$13,415,404	$15,573,705	$3,270,295	$12,303,410	$0	$0
FY26	$12,379,212	$14,591,468	$3,352,052	$11,239,415	$0	$0
FY27	$7,703,440	$9,970,999	$3,435,854	$6,535,146	$0	$0
FY28	$9,070,034	$11,394,280	$3,521,750	$7,872,530	$0	$0
FY29	$8,352,201	$10,734,550	$3,609,794	$7,124,757	$0	$0
FY30	$9,681,616	$12,123,522	$3,700,039	$8,423,484	$0	$0
FY31	$35,519,258	$38,022,209	$3,792,540	$34,229,669	$0	$0
FY32	$21,277,547	$23,843,069	$3,887,353	$19,955,716	$0	$0
FY33	$8,847,139	$11,476,796	$3,984,537	$7,492,259	$0	$0
FY34	$10,086,285	$12,781,680	$4,084,150	$8,697,530	$0	$0
FY35	$9,829,775	$12,592,553	$4,186,254	$8,406,298	$0	$0
FY36	$10,356,675	$13,188,519	$4,290,910	$8,897,609	$0	$0
FY37	$9,847,178	$12,749,814	$4,398,183	$8,351,631	$0	$0
FY38	$9,587,689	$12,562,888	$4,508,138	$8,054,750	$0	$0
FY39	$9,579,615	$12,629,191	$4,620,841	$8,008,350	$0	$0
FY40	$9,638,897	$12,764,709	$4,736,362	$8,028,347	$0	$0
FY41	$9,837,179	$13,041,134	$4,854,771	$8,186,362	$0	$0
FY42	$9,959,463	$13,243,513	$4,976,141	$8,267,372	$0	$0
FY43	$10,051,993	$13,418,140	$5,100,544	$8,317,596	$0	$0
FY44	$10,231,772	$13,682,069	$5,228,058	$8,454,011	$0	$0

Appendices 6 – Financial Results – Option 3

Financial Year	Service Revenue	Total Revenue	OPEX	CAPEX	Net Cash Flow	Reserve Fund
FY24	$4,785,028	$6,890,690	$3,190,532	$9,989,341	-$6,289,183	-$5,398,124
FY25	$5,421,742	$7,580,043	$3,270,295	$12,303,410	-$7,993,662	-$13,391,786
FY26	$6,136,142	$8,348,398	$3,352,052	$11,239,415	-$6,243,069	-$19,634,855
FY27	$6,937,400	$9,204,960	$3,435,854	$6,535,146	-$766,039	-$20,400,894
FY28	$7,835,755	$10,160,002	$3,521,750	$7,872,530	-$1,234,278	-$21,635,172
FY29	$8,842,642	$11,224,992	$3,609,794	$7,124,757	$490,441	-$21,144,731
FY30	$9,970,827	$12,412,733	$3,700,039	$8,423,484	$289,210	-$20,855,521
FY31	$11,234,565	$13,737,516	$3,792,540	$34,229,669	-$24,284,693	-$45,140,214
FY32	$12,649,772	$15,215,294	$3,887,353	$19,955,716	-$8,627,775	-$53,767,989
FY33	$14,234,219	$16,863,876	$3,984,537	$7,492,259	$5,387,081	-$48,380,908
FY34	$16,007,747	$18,703,142	$4,084,150	$8,697,530	$5,921,462	-$42,459,446
FY35	$17,992,508	$20,755,285	$4,186,254	$8,406,298	$8,162,733	-$34,296,713
FY36	$20,213,235	$23,045,079	$4,290,910	$8,897,609	$9,856,559	-$24,440,154
FY37	$22,697,543	$25,600,180	$4,398,183	$8,351,631	$12,850,365	-$11,589,789
FY38	$25,476,264	$28,451,463	$4,508,138	$8,054,750	$15,888,575	$4,298,786
FY39	$28,583,823	$31,633,399	$4,620,841	$8,008,350	$19,004,207	$23,302,994
FY40	$32,058,655	$35,184,467	$4,736,362	$8,028,347	$22,419,758	$45,722,752
FY41	$35,943,676	$39,147,631	$4,854,771	$8,186,362	$26,106,497	$71,829,249
FY42	$40,286,804	$43,570,854	$4,976,141	$8,267,372	$30,327,341	$102,156,590
FY43	$45,141,543	$48,507,690	$5,100,544	$8,317,596	$35,089,550	$137,246,140
FY44	$50,567,635	$54,017,932	$5,228,058	$8,454,011	$40,335,863	$177,582,004

Appendices 7 – Financial Results – Option 4

Financial Year	Service Revenue	Total Revenue	OPEX	CAPEX	Net Cash Flow	Reserve Fund
FY24	$5,311,740	$7,417,401	$3,190,532	$9,989,341	-$5,762,471	-$4,871,412
FY25	$6,166,858	$8,325,158	$3,270,295	$12,303,410	-$7,248,546	-$12,119,958
FY26	$7,195,065	$9,407,321	$3,352,052	$11,239,415	-$5,184,146	-$17,304,105
FY27	$7,762,560	$10,030,120	$3,435,854	$6,535,146	$59,120	-$17,244,984
FY28	$8,367,354	$10,691,600	$3,521,750	$7,872,530	-$702,680	-$17,947,664
FY29	$9,011,885	$11,394,235	$3,609,794	$7,124,757	$659,684	-$17,287,980
FY30	$9,698,753	$12,140,659	$3,700,039	$8,423,484	$17,137	-$17,270,843
FY31	$10,430,730	$12,933,681	$3,792,540	$34,229,669	-$25,088,528	-$42,359,371
FY32	$11,210,771	$13,776,292	$3,887,353	$19,955,716	-$10,066,776	-$52,426,147
FY33	$12,042,027	$14,671,684	$3,984,537	$7,492,259	$3,194,888	-$49,231,259
FY34	$12,927,859	$15,623,254	$4,084,150	$8,697,530	$2,841,574	-$46,389,685
FY35	$13,871,851	$16,634,629	$4,186,254	$8,406,298	$4,042,076	-$42,347,609
FY36	$14,877,827	$17,709,671	$4,290,910	$8,897,609	$4,521,151	-$37,826,458
FY37	$15,949,863	$18,852,500	$4,398,183	$8,351,631	$6,102,685	-$31,723,773
FY38	$17,092,308	$20,067,508	$4,508,138	$8,054,750	$7,504,620	-$24,219,153
FY39	$18,309,803	$21,359,379	$4,620,841	$8,008,350	$8,730,188	-$15,488,965
FY40	$19,607,295	$22,733,107	$4,736,362	$8,028,347	$9,968,398	-$5,520,567
FY41	$20,990,063	$24,194,017	$4,854,771	$8,186,362	$11,152,884	$5,632,316
FY42	$22,463,741	$25,747,791	$4,976,141	$8,267,372	$12,504,278	$18,136,595
FY43	$24,034,338	$27,400,485	$5,100,544	$8,317,596	$13,982,345	$32,118,939
FY44	$25,708,265	$29,158,562	$5,228,058	$8,454,011	$15,476,493	$47,595,433

Appendices 8 – Financial Results – Option 5

Financial Year	Service Revenue	Total Revenue	OPEX	CAPEX	Net Cash Flow	Reserve Fund
FY24	$10,183,280	$12,288,941	$3,190,532	$9,989,341	-$890,932	$0
FY25	$13,415,854	$15,574,155	$3,270,295	$12,303,410	$0	$0
FY26	$13,746,343	$15,958,599	$3,352,052	$11,239,415	$1,367,132	$1,367,132
FY27	$14,090,593	$16,358,153	$3,435,854	$6,535,146	$6,387,154	$7,754,863
FY28	$14,449,312	$16,773,558	$3,521,750	$7,872,530	$5,379,279	$13,134,142
FY29	$14,823,248	$17,205,598	$3,609,794	$7,124,757	$6,471,047	$19,605,189
FY30	$15,213,191	$17,655,097	$3,700,039	$8,423,484	$5,531,574	$25,136,763
FY31	$15,619,975	$18,122,926	$3,792,540	$34,229,669	-$19,899,283	$5,237,481
FY32	$16,044,482	$18,610,004	$3,887,353	$19,955,716	-$5,233,065	$4,416
FY33	$16,487,643	$19,117,300	$3,984,537	$7,492,259	$7,640,504	$7,644,920
FY34	$16,950,442	$19,645,837	$4,084,150	$8,697,530	$6,864,157	$14,509,077
FY35	$17,433,918	$20,196,696	$4,186,254	$8,406,298	$7,604,143	$22,113,220
FY36	$17,939,170	$20,771,014	$4,290,910	$8,897,609	$7,582,495	$29,695,715
FY37	$18,467,359	$21,369,996	$4,398,183	$8,351,631	$8,620,181	$38,315,896
FY38	$19,019,711	$21,994,910	$4,508,138	$8,054,750	$9,432,022	$47,747,918
FY39	$19,597,523	$22,647,099	$4,620,841	$8,008,350	$10,017,908	$57,765,826
FY40	$20,202,166	$23,327,978	$4,736,362	$8,028,347	$10,563,269	$68,329,095
FY41	$20,835,088	$24,039,042	$4,854,771	$8,186,362	$10,997,908	$79,327,003
FY42	$21,497,821	$24,781,870	$4,976,141	$8,267,372	$11,538,358	$90,865,361
FY43	$22,191,984	$25,558,131	$5,100,544	$8,317,596	$12,139,991	$103,005,352
FY44	$22,919,290	$26,369,587	$5,228,058	$8,454,011	$12,687,518	$115,692,870

Appendices 9 – Financial Results – Option 6

Financial Year	Service Revenue	Total Revenue	OPEX	CAPEX	Net Cash Flow	Reserve Fund
FY24	$10,183,152	$12,288,813	$3,190,532	$9,989,341	-$891,059	$0
FY25	$13,415,404	$15,573,705	$3,270,295	$12,303,410	$0	$0
FY26	$13,799,096	$16,011,352	$3,352,052	$11,239,415	$1,419,885	$1,419,885
FY27	$14,166,653	$16,434,213	$3,435,854	$6,535,146	$6,463,213	$7,883,098
FY28	$14,521,516	$16,845,763	$3,521,750	$7,872,530	$5,451,483	$13,334,581
FY29	$14,867,027	$17,249,377	$3,609,794	$7,124,757	$6,514,826	$19,849,407
FY30	$15,206,438	$17,648,344	$3,700,039	$8,423,484	$5,524,821	$25,374,228
FY31	$15,542,933	$18,045,884	$3,792,540	$34,229,669	-$19,976,325	$5,397,903
FY32	$15,879,643	$18,445,165	$3,887,353	$19,955,716	-$5,397,903	$0
FY33	$16,219,661	$18,849,318	$3,984,537	$7,492,259	$7,372,522	$7,372,522
FY34	$16,566,054	$19,261,449	$4,084,150	$8,697,530	$6,479,769	$13,852,291
FY35	$16,921,885	$19,684,663	$4,186,254	$8,406,298	$7,092,110	$20,944,401
FY36	$17,290,225	$20,122,069	$4,290,910	$8,897,609	$6,933,550	$27,877,952
FY37	$17,674,168	$20,576,805	$4,398,183	$8,351,631	$7,826,990	$35,704,942
FY38	$18,076,844	$21,052,044	$4,508,138	$8,054,750	$8,489,156	$44,194,098
FY39	$18,501,442	$21,551,019	$4,620,841	$8,008,350	$8,921,827	$53,115,925
FY40	$18,951,218	$22,077,030	$4,736,362	$8,028,347	$9,312,321	$62,428,246
FY41	$19,429,515	$22,633,469	$4,854,771	$8,186,362	$9,592,335	$72,020,581
FY42	$19,939,778	$23,223,828	$4,976,141	$8,267,372	$9,980,315	$82,000,896
FY43	$20,485,573	$23,851,721	$5,100,544	$8,317,596	$10,433,580	$92,434,477
FY44	$21,070,604	$24,520,901	$5,228,058	$8,454,011	$10,838,832	$103,273,309

Appendices 10 – Financial Results – Option 7

Financial Year	Service Revenue	Total Revenue	OPEX	CAPEX	Net Cash Flow	Reserve Fund
FY24	$6,022,430	$8,128,092	$3,190,532	$9,989,341	-$5,051,781	-$4,160,722
FY25	$8,751,515	$10,909,816	$3,270,295	$12,303,410	-$4,663,888	-$8,824,610
FY26	$11,528,418	$13,740,674	$3,352,052	$11,239,415	-$850,793	-$9,675,403
FY27	$12,481,775	$14,749,335	$3,435,854	$6,535,146	$4,778,336	-$4,897,068
FY28	$13,496,061	$15,820,307	$3,521,750	$7,872,530	$4,426,027	-$471,040
FY29	$14,575,121	$16,957,471	$3,609,794	$7,124,757	$6,222,920	$5,751,880
FY30	$15,723,046	$18,164,952	$3,700,039	$8,423,484	$6,041,429	$11,793,309
FY31	$16,944,190	$19,447,141	$3,792,540	$34,229,669	-$18,575,068	-$6,781,759
FY32	$18,243,184	$20,808,706	$3,887,353	$19,955,716	-$3,034,363	-$9,816,122
FY33	$19,624,959	$22,254,616	$3,984,537	$7,492,259	$10,777,820	$961,698
FY34	$21,094,758	$23,790,154	$4,084,150	$8,697,530	$11,008,474	$11,970,172
FY35	$22,658,166	$25,420,944	$4,186,254	$8,406,298	$12,828,391	$24,798,563
FY36	$24,321,124	$27,152,968	$4,290,910	$8,897,609	$13,964,449	$38,763,012
FY37	$26,089,956	$28,992,593	$4,398,183	$8,351,631	$16,242,779	$55,005,791
FY38	$27,971,393	$30,946,593	$4,508,138	$8,054,750	$18,383,705	$73,389,496
FY39	$29,972,602	$33,022,178	$4,620,841	$8,008,350	$20,392,987	$93,782,483
FY40	$32,101,211	$35,227,023	$4,736,362	$8,028,347	$22,462,314	$116,244,797
FY41	$34,365,340	$37,569,294	$4,854,771	$8,186,362	$24,528,161	$140,772,957
FY42	$36,773,636	$40,057,686	$4,976,141	$8,267,372	$26,814,173	$167,587,131
FY43	$39,335,306	$42,701,453	$5,100,544	$8,317,596	$29,283,313	$196,870,444
FY44	$42,060,152	$45,510,449	$5,228,058	$8,454,011	$31,828,380	$228,698,824

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