



**WATER-WASTEWATER  
IRRIGATION  
MASTER PLAN  
2019**

# Water/Wastewater/Irrigation Master Plan 2019

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-  Sam Walls, Trustee
-  Jerry Seifert, Trustee
-  Kyle Knott, Trustee
-  Dina Prieto, Trustee
-  Andreia Poston, Trustee
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## Acronyms and Abbreviations

AF	acre-feet
AF/yr	acre-feet per year
aka	also known as
ADD	Average Daily Demand (Water)
ASWT	Activated Sludge Wastewater Treatment
CDPHE	Colorado Department of Public Health and Environment
CIP	Capital Improvement Plan
cfs	cubic feet per second
CO	Colorado
CR	Colorado River
CWCB	Colorado Water Conservation Board
EPA	United States Environmental Protection Agency
EQR	Single-family dwelling equivalency
GIS	Geographic Information System
gpcd	gallons per capita per day
gpd	gallons per day
gpm	gallons per minute
MF	Micro-filtration
MG, Mgal	million gallons
MGD	million gallons per day
O&M	Operations and Maintenance
Plan	Water/Wastewater/Irrigation Master Plan
PRV	Pressure Reducing Valve
PWD	Public Works Department
SCADA	Supervisory Control and Data Acquisition
sf	square feet
Town	Town of Silt
TTHM	Total Trihalomethanes
w/	with
w/o	without
WWWIP	Water/Wastewater Irrigation Master Plan
WQCD	Water Quality Control Division
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant
Yr/YR	Year

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## **Executive Summary**

The 2019 Water/Wastewater/Irrigation Master Plan (WWIP) presents facts and recommendations resulting from a comprehensive analysis of the water, wastewater, and irrigation divisions, for the Town of Silt through 2038. This 2019 plan builds on the previous master planning efforts, but is also a stand-alone document that the Board has approved by reference.

- The Town identifies recently completed infrastructure projects, as well as proposed future programs and projects needed to complete the Town's short-term and long-term infrastructure goals. The Town has prepared cost estimates for the proposed infrastructure with the understanding that each project will be competitively bid.
- The Silt Water System, the Silt Wastewater System, and the Silt Irrigation System shall expand as necessary due to population growth from both infill development and future Town annexations and expansion of the overall water service area. Timely planning and construction of new capital projects in close coordination with infrastructure projects by local developers, other Town departments and utility providers, is integral to the intelligent expansions of these systems.
- The Town will optimize the Silt Water System, the Silt Wastewater System, and the Silt Irrigation System as needed to ensure assets are maintained at the lowest possible costs to its citizens. The Town shall update operations and maintenance programs and institute asset management programs to accomplish this goal. The Town's capital programs will be used to rehabilitate and replace existing infrastructure in coordination with local developers. Lastly, the Town will coordinate its departments and utility providers to ensure optimization of entire Town infrastructure system.
- The Silt Water System supplies, treats, stores, pumps, transmits, and distributes potable water in accordance with best management practices, as well as state and federal regulations.

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- The Silt Wastewater System collects, stores, and treats wastewater, and disposes of sludge by-product. The Town's system does not include private residential or commercial ejector pumps, clean-outs or service lines.
- The Silt Irrigation System collects, stores, and distributes irrigation water. The Town's system does not include private irrigation systems or involve private irrigation rights.
- The Town's Water/Wastewater/Irrigation Master Plan (WWIP) focuses on the community's infrastructure needs, and will lend guidance in times of population growth or other water demand changes, development processes, state and federal drinking water regulatory changes, water rights issues (including water shortages and mandatory rationing), state and federal wastewater treatment requirements, and water supply source changes. The Town will regularly consult this plan, as well as revise the plan when presented with new information and/or new goals.

Currently, the Town of Silt serves a population of over 3,100 within the Town limits. The WTP treated and delivered almost 90 million gallons of water in 2017, which resulted in a peak daily demand of 479,371 gallons, and an average daily demand of 240,847 gallons, not including bulk water, which used an average of 21,918 gallons per day (8 million gallons in 2017).

The Town will strive to meet these following goals:

- ❖ Protect citizens, private/public property, animals, air, water, vegetation, and soil;
- ❖ Plan for future growth, future treatment conditions, and aging infrastructure;
- ❖ Coordinate infrastructure to operate in an efficient, effective, and sustainable manner;
- ❖ Operate each of the Water Enterprise Fund, the Wastewater Enterprise Fund, and the Irrigation Enterprise Fund in a responsible manner with respect to revenue and expenditures;
- ❖ Operate and maintains the Town's Water, Wastewater, and Irrigation Systems' infrastructure and capital improvements to maximize the citizens' value;

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- ❖ Ensure master planning is integral to a coordinated effort by all staff for the highest quality water, most efficient treatment of wastewater, and adequate but conserving delivery of irrigation water.

This Water/Wastewater/Irrigation Master Plan aims to look to future projections, existing water supply, current capacities, and staffing needs over a twenty year period. This plan will assist the Board and its staff in providing capital improvements, maintenance, and innovative techniques aimed at improving service, controlling costs, and meeting environmental regulations for the supply, treatment, storage, pumping, transmission and distribution systems to meet current demands and future projections, including maintenance, replacement, and augmentation over the next twenty years.

The purpose of monthly service fees for water, wastewater, and irrigation, is to provide for the costs the Town incurs to maintain and replace each system, as well as for payment of the capital bonds for construction of such facilities. This plan proposes to disperse the costs of such capital improvements so that citizens have relatively stable rates and fees over the years. System improvement fees (water, wastewater, and irrigation) are primarily paid by new development and expansions of existing development, and generally increase over time to keep up with general inflation. This plan proposes that monthly user volumetric fees increase three percent annually, beginning in 2019, to mirror actual variable maintenance and replacement costs.

The Town will continue to operate in a responsible manner to produce longevity of infrastructure, efficiency of delivery and treatment, and best practices to avoid breakage, as follows:

- Daily, monthly, and quarterly maintenance on Town distribution mains, including main valve exercising and hydrant flushing program;
- Institution of inspection, operations and maintenance programs, and capital replacement efforts to ensure adequate performance of Town infrastructure;
- Staff monitoring of water usage, backwashing, treatment, and storage of water, and response to variety of indicators as to quality, quantity, and inefficiencies;
- Maintenance of all facilities' buildings, ponds, tanks, lines, valves, PRVs, pumps, and lift stations, for conformance with industry, state, and federal standards;
- Forecasting and implementation of proper staffing, training, and succession;
- Monitoring and replacement of antiquated or aged infrastructure, vehicles, equipment, and processes.

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## 1. Introduction

### Protect the Town, Its Citizens, and Property

Water is a limited commodity in the state of Colorado, as it is in much of the United States, and the Colorado River has historically provided the Town with this vital life force. Successful at building a strong water rights portfolio, the Town will be able to accommodate growth far into the future, with careful stewardship. The Town of Silt is committed to efficiently delivering to the citizens high quality domestic water at a reasonable rate. The Town understands that good, safe water is critical for a person's health, and therefore, the Town will strive to remove bacteria, viruses, pollutants, and other organic and inorganic matter from the raw water through its microfiltration treatment and chlorination. It is crucial that the Town monitor the raw water for signs of nonpoint-source pollution, as well as to protect the Town's watershed in perpetuity by researching surrounding land uses, involving itself in County processes that could alter either the amount or the quality of the raw water. The hardness of the raw water (minerals within the water) is a quality that cannot be altered through microfiltration and chlorination, but can be altered by water softening within a home or business. While hardness in the water does not negatively affect a person's health, many have indicated that it alters the taste of the water.

The Town must take and test water samples and report to state and federal agencies as to the quality of the water. The Town makes available to the public the Annual Water Quality Report, also known as the Consumer Confidence Report (CCR), which indicates the levels of specific elements or compounds within the Town's domestic water, as directed by the State of Colorado and the Environmental Protection Agency. The Town publishes the CCR on the Town's website, provides copies at Town Hall, and can email or fax a copy to any interested party. The purpose of this report is as the name suggests: to give the water consumer a level of confidence that the domestic water is safe to drink, bathe in, and cook with, and the Town of Silt takes very seriously treatment of water for potable purposes.

The Town's wastewater collection mains, lift stations, and activated sludge wastewater treatment ("ASWT") plant serve to collect and treat all wastewater so that it is biologically and chemically appropriate to return to the Colorado River, according to state standards set by the CDPHE. The Town has updated its WWTP, as well as many wastewater mains through relining and replacement, and will continue to be responsible to the Town, its citizens, and the environment, returning 95% of the water delivered to households to the Colorado River.

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Compared to neighboring towns and cities, the Town's non-potable irrigation system is unique in that it simply transports screened irrigation water from various ditches through numerous pump stations to the Town's irrigation tanks in the higher elevations. This approach is better for vegetation and soil by avoiding expensive treatment and chlorine residual, which is more environmentally appropriate, economically efficient and logically effective for the Town. As it is a non-metered system, the Town does rely on its citizens to be good conservators of this very valuable resource, watering only on the days that are designated based on a property's address, for only the allotted time per zone and the maximum amount of square footage allowed (3,500 square feet for those properties developed after 2006). The Town also relies on its citizens to abstain from utilizing potable (treated) water on landscaped areas, unless permission is specifically granted, as is the case with Iron Horse Mesa Planned Unit Development, as the developer dedicated appropriate and sufficient quantity of water rights to satisfy the demand.

### Past Plan

In 2004, the Town prepared the Water/Wastewater Master Plan that examined the existing water and wastewater system infrastructure and identified water supply, water treatment, water storage, transmission and distribution, as well as wastewater collection, wastewater treatment system capital improvement projects required to provide service to existing and future development throughout the Town. Specifically, the 2004 plan included examination of the following components of the water and wastewater systems for a period of twenty years:

- Existing water supply, treatment, storage, transmission and distribution system capacity, and projected costs;
- Existing wastewater supply, wastewater treatment, sludge disposal, and collection system, and projected costs;
- Recommended capital improvements and replacements for both water and wastewater systems; &
- Necessary projected staffing for both water and wastewater systems.

Prior to 2004, the Town did not have a master plan for the water and wastewater systems but instead, reacted to maintenance issues. The Town recognized the relevance of such an endeavor with the construction of the water plant and the impending construction of the wastewater plant at that time. The Board reviewed and approved such plan, committing to the constraints, recommendations, and forecasts therein.

In 2005, the Town completed the Irrigation Master Plan, which explored various ways to create a self-sustaining irrigation fund. This plan included subsidization of the irrigation fund by the water and wastewater funds because the Town had not adequately and

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historically maintained the irrigation system for it to be self-sustaining, and in fact, the water and wastewater funds have continued this practice through 2018.

### Future Plan

This plan highlights critical findings and recommendations resulting from a reassessment of water, wastewater, and irrigation infrastructure needs for the Town from current conditions, including economic development, build-out of existing approved subdivisions, and modest growth to include annexations.

### Summary of Completed Projects

Since preparing the 2004 plan, the Town has improved and modified its approach to water supply, treatment, storage, transmission, distribution, wastewater generation, treatment, sludge disposal, collection system, irrigation supply, distribution, and storage. The Town has planned for, installed, and financed the following improvements since 2004:

- Installation of alluvial water wells adjacent to the Colorado River to facilitate the Town's efforts to put less turbid water through the WTP;
- Installation of new water mains and service connections in Orchard Avenue (3 blocks);
- Installation of new water mains and service connections in Main Street (6 blocks);
- Construction of a 600,000 gallon domestic storage tank in Sunrise Subdivision;
- Installation of a secondary water transmission line to augment the Town's main transmission line;
- Installation of new bulk water facilities and water line in S. 7<sup>th</sup> Street and Front Street;
- Replacement of both micro-filtration skid units at WTP;
- Completion of Source Water Protection Plan;
- Completion of Emergency Water Supply Plan;
- Replacement of main service pump at WTP;
- Rehabilitation of 800,000 gallon water tank, including sand blasting and painting;
- Replacement of 8<sup>th</sup> Street water line;
- Replacement of Pioneer Drive water main;
- Rehabilitation of 8 wastewater manholes;
- Relining of downtown wastewater main (2 phases);
- Replacement of downtown wastewater main;
- Completion of WWTP electrical upgrades;
- Installation of irrigation tank at Skyline Cemetery and at Eagle's View; demolition of old, leaky tanks;

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- Installation of irrigation pump stations; &
- Installation of screen and clean-outs on irrigation system.

The Town has conducted research on drilling more potable water wells throughout Town, but the Town shelved this option for the immediate future for lack of finding water at specified depths in several places throughout the Town. The Town, therefore, relies on the Colorado River intake system, as well as the alluvial well system, for its raw water capture. Due to the high turbidity in the Colorado River, the Town utilizes the wells at times of run-off and other events that the Town would have to pre-screen the raw water before its delivery to the WTP. The Town also maintains and utilizes a settling/backwash pond to the east of the WTP and a plate settler to further screen the raw water, if needed. Even with this pre-screening of raw water, the Town backwashes its microfiltration units constantly to deliver the best water possible. The Town's microfiltration plant is a highly technical operation, with automatic cycles for backwashing and monitoring equipment for filter viability. Finally, the Town's microfiltration water treatment removes bacteria, organic compounds, pathogens, and other river particulates, and the amount of post-chlorination is much reduced when compared to a conventional sand filtration water treatment plant.

In 2010, the Town experienced a higher than usual Total Trihalomethanes (TTHM), and immediately reported such condition to the state of Colorado. TTHM is caused by the interaction of organic compounds and chlorine, through the disinfection process. In 2018, the Town installed an agitator in the Mesa View water storage tank, which will minimize stratification of different temperature zones, and therefore decrease the potential for TTHM. As well, with the Town's installation of alluvial wells, a good deal of organic material is naturally filtered and kept at a colder temperature, and therefore decreases the likelihood of a TTHM level that exceeds state allowances. The Town will continue to closely monitor TTHM levels, as required by the CDPHE.

The Town has also experienced a build-up of manganese (Mn) from the Town's historical use of potassium permanganate, a coagulant the Town used to remove iron, manganese, and bacteria from the raw water. This manganese build-up coated many water transmission and distribution water mains, and the Town has utilized an aggressive hydrant flushing program to address this problem. As the Town uses a food-grade alum coagulant currently, there is no further build-up within the water mains; however, the Town must flush the micro-filtration units more frequently.

### Water and Wastewater Fund as an Enterprise

The Town's Water/Wastewater Fund acts as an enterprise fund, which segregates funds collected for the treatment, transmission, storage, and distribution of domestic water, as

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well as the collection and treatment of wastewater. An enterprise fund must be self-sustaining, utilizing only those monies within the fund for maintenance, capital improvements, labor, benefits, administrative fees, training, legal and audit expenses, and utility costs. The Water/Wastewater fund collects monthly fees for the delivery of potable water, collection and treatment of wastewater, one-time system improvement (tap) fees, one-time impact fees (upper pressure zone), water rights fees (in lieu of actual rights), and cost recovery fees (for infrastructure installed by Town). This fund also pays to the general fund administrative fees and allocations to other departments that help to maintain the Water/Wastewater department, in the selling of water and wastewater system improvements (taps) and water meters/pits, as well as assisting the public with questions, providing for master planning, answering legal questions and providing for water rights reviews and purchases, performing inspections, and repairing and maintaining each system.

### Irrigation Fund as an Enterprise

Although not formally approved as an enterprise fund (by ordinance or resolution), the Irrigation Fund has operated similarly for over a decade, with the exception of annual allocations from the Water/Wastewater Fund. An enterprise fund must be self-sustaining, utilizing only those monies within the fund for maintenance, capital improvements, labor, benefits, administrative fees, training, legal and audit expenses, and utility costs. The Town maintains that the rational nexus for the allocation from the Water/Wastewater Fund is the Town's continued desire to minimize the amount of potable water used for irrigation.

### Provide for Effective Long-Term Operation and Maintenance

This plan encompasses best management practices for longevity, economy, and efficiency of water, wastewater, and irrigation public infrastructure. The Town will implement a management plan that includes installation of improvements on an annual, three-year, five-year, ten-year, and twenty-year basis, including the appropriate inventory and timely replacement of critical parts of each system, as well as regular testing of components of the systems. The Town's implementation of this capital improvement and maintenance schedule is crucial in addressing the Town's current and future needs with respect to water, wastewater, and irrigation.

### Salaries, Benefits, Insurance, and Taxes

The Town must, to the extent possible, offer competitive salaries and benefits that are comparable to the towns within the Interstate-70 corridor, and should regularly monitor the cost of living for the employees in the Water/Wastewater and Public Works Departments and adjust wages and benefits accordingly, if possible. Retention of staff is important in any department, but is especially important to maintain a level of quality,

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efficiency, and effectiveness in these critical service departments. These funds should also specifically pay administrative fees to offset other departments' facilitation costs for water, wastewater, and irrigation tasks, including but not limited to customer service, emergency response, inspection, and permitting.

### Expenditures

Through its budgeting process, the Town shall scrutinize expenditures for the operations, maintenance, and capital outlays of the water, wastewater, and irrigation funds, to guarantee fiscal responsibility and value to its citizens. The Town shall strategically plan its replacements and expansions to include future growth (oversizing) and newer technologies, where possible, and shall not fail to look at available and affordable alternatives. The Town's current accounting procedures and policies deem that combination of water and wastewater administrative expenditures is appropriate, but the fund separates out the operations for each department. This is because such administrative expenditures as advertising, auditing, and vehicle expenses are not easily appropriated to either the water operations fund or the wastewater operations fund, and are better tracked through the administrative fund.

### Revenues

As the Town is responsible to operate, maintain, upgrade, and replace water, wastewater, and irrigation infrastructure and plants, as needed, these associated tasks require regular and complete review of all charges and fees, including water rights dedication (fee "in lieu"), monthly service fees, system improvement (tap) fees, impact fees, and special regional fees (i.e. upper pressure zone), to recover the Town's costs. Town staff shall present evidence and arguments for increases or decreases of fees, as necessary, based on the projected annual revenues, expenditures, and this plan's capital improvements.

The Town shall strive to minimize debt in these funds, unless it is absolutely necessary for large capital improvements or replacements that the Town was unable to allocate funding. Currently, the Town must repay municipal bonds (originally obtained in 2004 and refinanced in 2011) to construct the new water and wastewater plants, with escalating annual principal payments between \$250,000 and \$1,020,000 (final), and between \$44,900 and \$200,386 in interest (rates fluctuate from 2.25 to 4.5%), from both of the water and wastewater operations funds, until 2026. Any Town potential future indebtedness, or debt financing, would not require a vote of the electorate, as the funds described herein are enterprise in nature and would not violate the Taxpayer Bill of Rights (TABOR). However, the purpose of this document is to clearly describe the capital improvements anticipated over the next twenty years, to aid the Board of Trustee's approval of annual budgets that describe all revenues, including fees, charges, grants, and indebtedness.

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The Town of Silt has been successful obtaining grants to augment the budget with respect to the water, wastewater, and irrigation divisions. In fact, entities such as the Department of Local Affairs (DOLA), the Garfield County Federal Mineral Lease District (GCFMLD), Garfield County, Associated Governments of Northwestern Colorado (AGNC), and the Aspen Valley Land Trust (through Gerry Pace, Grantor), have awarded the Town approximately \$623,192 in water infrastructure and planning grants, \$365,863 in wastewater infrastructure grants, and \$397,000 in irrigation infrastructure grants. These figures do not include the \$1,919,261 in Main Street and Orchard Avenue improvements, a large portion of which was dedicated to water, wastewater, and irrigation replacements and extensions. The Town plans to continue applying for any and all grants available to augment revenues in these funds, but the Town’s master plan should not expect the approval of any grants within its projections over the next twenty years, as this is not a sustainable method of financing improvements.

### Domestic Water Rights

The Town of Silt has post-compact (1922) domestic water rights that include the following: 1.5 cfs (cubic feet/second) of Silt Pipeline (1940); 8.5 cfs of Silt Pipeline First Enlargement (2002); .385 cfs of Silt Well No. 1 (1979); and 4 cfs of Silt Wells 2-4 (2010). The Town also has an adjudicated augmentation plan in Case No. 07CW219, which provides that when the foregoing water rights are out of priority, the Town may continue to divert Colorado River water utilizing 130 acre feet of historic consumptive use associated with the Last Chance Ditch (1888) and 300 acre feet of U.S. Bureau of Reclamation release from Ruedi Reservoir. Although the Town currently serves 1,410 EQRs, this plan can provide up to 2,590 EQRs or more.

Structure	Appropriation Date	Adjudication Date	Amount	Case No.	Use	Comments
Silt Pipeline	2/10/1939	3/28/1940	1.43 cfs A 0.07 cfs C DD Oct 2014	CA 3322	D, F, I, M	Diligence Decrees: W-120, W-120-74, 82CW130(1), 86CW143(2), 90CW121, 96CW145, 03CW48, 06CW204(3) Change cases: 85CW195(4); 05CW19(5)
Silt Pipeline First Enlargement	9/20/2001	10/18/2002	8.5 cfs C DD Nov 2015	01CW321	M	Diligence decree: 08CW134 Change case: 05CW19(6)
Silt Well No. 1	07/05/1977	08/11/1979	0.35 cfs A 0.033 cfs C DD Oct 2014	W-3927	M, I, C	Diligence decree: 83CW177(7), 87CW144, 93CW151, 99CW___, 06CW204 Change case: 93CW152(8), 05CW19(9), Well Permit No. 22593-F(10)
Silt Well Nos. 2, 3, 4	12/1/2007	10/11/2010	1.0 cfs C Each DD Oct 2016	07CW219	I, M	
Plan for Augmentation		10/11/2010	Approved plan for augmentation utilizing 130 acre-feet of Last Chance Ditch irrigation HCU and up to 217 acre-feet of Ruedi Reservoir. Water augments Silt Pipeline and First Enlargement and Silt Well Nos. 1-4.			
Ruedi Reservoir	Contract No. 099D6C0147 (217 acre feet) Contract No. 0099D6C0149 (83 acre feet)					

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- (1) 0.4669 made absolute
- (2) 0.2031 made absolute
- (3) 0.2605 made absolute
- (4) Moved point of diversion to the Town's new water intake and treatment facilities;
- (5) New point of diversion at new municipal water treatment plant;
- (6) New point of diversion at new municipal water treatment plant;
- (7) 0.022 made absolute;
- (8) 0.385 moved to the Silt Pipeline;
- (9) New point of diversion at new municipal water treatment plant;
- (10) Maximum pumping rate 175 g.p.m.

Source: Karp, Neu, Hanlon, P.C.

The Town of Silt has irrigation water rights include the following: 13 shares of Farmer's Irrigation (Harvey Gap); 1.5 shares of Giacinta (Mesa View); 24.56 shares of Grand River Ditch; 201 shares of Last Chance Ditch (diverted); 4.3 shares of Rising Sun Ditch (diverted); and 58.5 shares of Ware and Hinds Ditch (Davis Point), each with varying amounts of water associated. Each lot within the Town developed after 2006 may only irrigate 3,500 square feet of landscaping, plus up to fifty trees and shrubs. In 2006, the Town allowed a one-time amnesty for those lots exceeding 3,500 square feet of irrigable space, but has not administratively allowed any other lots developed after 2006 to exceed 3,500 square feet of irrigable space. The Town began an irrigation audit in 2018 that so far has indicated that dozens of lots have unlawfully added irrigable space since 2006. As this is unsustainable (Town will run out of irrigation water), the Town will actively pursue the citizens' compliance with this provision.

Ditch/Diversion	Number of Shares	Calculated Amount of Water	Irrigation Tank/Area Irrigated
Farmer's Irrigation (Harvey Gap via Ditch 19)	13 Shares	3.5 gallons/minute/share	North Eagle's View
Giacinta Ditch	1.5 Shares	50 gallons/minute when available	Mesa View
Grand River (Cactus Valley) Ditch	24.56 Shares	88 gallons/minute/share	All Tanks
Last Chance Ditch	201 Shares		Iron Horse Mesa (Potable Irrigation)
Ware and Hinds Ditch	58.5 Shares	150-480 gallons/minute	All Tanks
Silt Pump Canal (Silt Project Water)	15 Shares	3.5 gallons/minute/share	North Eagle's View

The Town acquired the Silt River Preserve in 2010, and the appurtenant irrigation water rights as follows:

Water Right	Case Number	Amount Owned	Adjudication Date	Appropriation Date
Rising Sun Ditch Priority 16	CA89	0.69 cfs	05/05/1888	12/5/1883
Rising Sun 1 <sup>st</sup> Enlargement Priority 64	CA89	1.75 cfs	05/05/1888	12/1/1886
Rising Sun 2 <sup>nd</sup> Enlargement Priority 226	CA4954	1.86 cfs	07/09/1965	04/15/1953

Silt River Preserve has a one-acre community garden that staff has utilized to grow pumpkins and corn in recent years. The Town planted winter wheat on many of the degraded pastures and continues to 'sprinkle irrigate' to minimize erosion, maintain weedy species, and provide habitat for wild animals.

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The Town holds the following Silt River Preserve well permits:

Name	Permit No.	Use	Issued
Hereford Well	284595	Monitoring Well	11/26/2010
Angus Well	284596	Monitoring Well	11/26/2010
Holstein Well	284597	Monitoring Well	11/26/2010

The Silt Municipal Code requires an owner/developer of property requesting water services from the Town to dedicate actual water rights or a fee “in lieu” of water rights sufficient to allow the Town to deliver domestic and/or irrigation water to the property. This dedication can occur as a result of annexation or as a result of increase in the intensity of use on a property. A property owner/developer shall dedicate or transfer a direct flow and/or storage water rights of sufficient legal priority in a quantity adequate to meet or exceed the delivery requirements, consumptive use requirements and other use assumptions for each EQR, including both domestic EQRs and irrigation EQRs, that may be ultimately required to satisfy the proposed uses, as set forth in the schedule of uses (SMC). Any water rights dedicated to the Town pursuant to the basic dedication requirement shall enable the Town to divert such dedicated water at any point of diversion it may determine, and in the event that a change of diversion must occur, the property owner/developer shall either proceed through water court with such request, or conversely, shall pay to the Town a fee to cover such change of diversion. A property owner/developer shall submit an historical use affidavit for any actual water right he/she proposes to dedicate, to ensure the Town does not have difficulty utilizing such water right.

The Town should begin planning for augmentation of its water rights and current domestic water source, the Colorado River. This could include drilling more wells along the Colorado River and throughout Town. Some well locations could well work with a chlorination contact chamber, instead of additional water treatment facilities or transmission of the well water to the water plant. The Town could also begin to negotiate with water rights owners (Harvey Gap, Ware and Hinds) to provide an emergency source of water, in the event of a catastrophic event on or affecting the Colorado River.

### Existing Infrastructure

#### Water

The Town’s water system includes a 1 million gallon per day (1 MGD) microfiltration water treatment plant, a 1/2 acre backwash settling pond, a plate settler, two domestic wells adjacent to the Colorado River (but under the influence of the Colorado River flow), 174 fire hydrants, 131,255 lineal feet of water main, 1,376 separate service connections and curb stops (including empty lots), 645 water valves, 4 water tanks with 1,800,000 gallon capacity (800,000 gallon Eagle’s View tank, 600,000 gallon main

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Sunrise tank, 150,000 gallon Sunrise tank (to be decommissioned), and 250,000 gallon Mesa View tank), 597 water meters, one pressure reducing vault, and two transmission mains under railroad and I-70 sending water to the storage tanks.

### Wastewater

The Town's wastewater system includes a 750,000 gallon per day (.75 MGD) activated sludge wastewater plant (ASWT), 480 wastewater manholes, 21 wastewater clean-outs, 1 wastewater valve (forced main at Holiday Inn Express), 2 lift stations (Holiday Inn Express & Camp Colorado RV Park – Town does not own, but Utility Director is responsible to report to the state of Colorado regarding compliance), 108,039 lineal feet of wastewater main, and 1,386 separate service connections.

### Irrigation

The Town's irrigation system includes four irrigation tanks (2 uncovered concrete reservoirs) with a total of 505,000 gallons in capacity, one pond with 300,000 gallons in capacity, 236 irrigation valves, 8 pump stations, 111 irrigation drains, 1,075 irrigation, 94,335 lineal feet of irrigation mains, 1,075 separate service connections, and 2 booster stations. The Town moves water through the pump stations to tanks that need water depending on de-mossing of certain ditches, poor delivery of water, and maintenance on the system.

# Water/Wastewater/Irrigation Master Plan 2019

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## 2. Master Plan Elements

### Domestic Water Supply and Water Treatment

The Town of Silt operates the Silt Water Plant to treat raw water from the Colorado River, removing organic and inorganic elements from the water, and disinfecting with chlorine. The Town should use the following goals as guidance to meet this mission:

- Goal: The Town should investigate drilling another well at the WTP (in addition to existing two), to continue the Town's mission of delivering less turbid raw water to the microfiltration skids. As the Town's water supply includes a raw water intake from the Colorado River and an alluvial well within two hundred lineal feet of the floodway (channel), currently, the addition of an additional well will not only improve the efficiency with which the WTP operates, but will also decrease the costs for backwashing the filters and the rate at which alum is introduced as a coagulant. The Town should use this water only as needed when turbidity is high, since the well water is laden with minerals that affect taste and lead to calcification of plumbing appliances. The state of Colorado may permit the Town to utilize the existing de-watering well used when the site was developed in 2006 as a WTP and WWTP, at a significantly reduced price of \$5,000, and scheduled for utilization in 2020.
  
- Goal: The Town should investigate drilling potable wells in specific other areas throughout Town, to fully discover if the Town has an ability to augment the Colorado River source. The projected cost is \$15,000/well and may require the Town to negotiate for easement and/or purchase land, and it would be wise for the Town to receive prior engineering advice.
  
- Goal: The Town should continue to preserve and enhance its water rights by engaging the Town's water attorney to constantly monitor, improve, and augment the existing rights and other rights, when possible; this includes, of course, reviewing the fee that developers would pay in lieu of water rights dedication, as well as the amount of required water rights.
  
- Goal: The Town should either install a second plate settler next to the existing one to accommodate the turbid raw water from the Colorado River and allow for greater contact time with the alum coagulant (projected cost = \$400,000); or, conversely, the Town should install a high-grade

## Water/Wastewater/Irrigation Master Plan 2019

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sand filter at the Colorado River's edge with a projected cost of \$400,000. The Town should avoid any process that contemplates the addition of phosphorus compounds to aid in sequestering carbon, as there will likely be future phosphorus reduction requirements at the WWTP.

### Water Plant Capacity

Goal: The Town should investigate the expansion of the WTP by 2024, to include a high production capacity skid that includes the latest technology. Then, in 2029 and 2035, respectively, the Town should replace each of the original microfiltration units (2) with high production capacity skids. This expansion could include additional building footprint, but it is possible that the high production capacity skids will be a smaller footprint than the existing skids, which will allow the Town to avoid expansion. As the existing plant is quite antiquated, every possible effort to upgrade to better, more available technology will save the Town in the long term from costly delays, interruption in water service delivery, and labor spent to troubleshoot. The projected cost of each skid is \$350,000 in 2019 dollars.

Goal: The Town should investigate the possibility of expanding the backwash pond in the future, to accommodate future growth.

Goal: The Town should investigate the possibility of a higher elevation well and chlorination unit that can be used in the event the Town cannot process water from the Colorado River.

### Domestic Water Transmission & Distribution

#### Valves

645 water valves are positioned throughout the distribution system to aid in discontinuing service to a specific area for maintenance, replacement, or relocation. Exercising valves within the Town's distribution system is paramount to efficient and effective maintenance of the system, as valves deteriorate over time in the Town's corrosive soils.

#### Fire Hydrants Operation and Maintenance

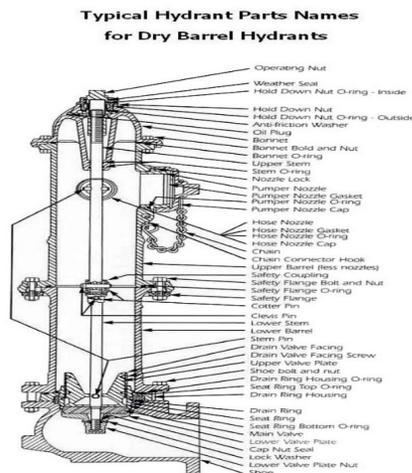
The Town operates and installs Kennedy and Mueller fire hydrants throughout Town. Each fire hydrant must be maintained each year by oiling and checking seals, and the operating stem must be exercised to ensure ease of operation in an event.

# Water/Wastewater/Irrigation Master Plan 2019

## Flushing

The Town flushes hydrants in the spring and in the fall of each year, expelling approximately 1,000 gallons per hydrant per flushing. By flushing hydrants, the Town tests for correct hydrant functioning, but also eliminates manganese that coats the water mains from historic water treatment.

Diagram Of Inside Of The Fire Hydrant



The Town must continuously, systematically, and diligently replace fire hydrants that it finds inadequate, non-functioning, or otherwise problematic for the Fire District.

In 2019, the Town will make improvements in the following locations:

- 1) Fire hydrant in the alley adjacent to and south of Grand Avenue between Kim Drive and Sheryl Drive; this fire hydrant is on a four-inch diameter water line and may not have adequate fire flow in the event of a fire, so therefore the Town will connect to the adjacent eight-inch diameter water main in Grand Avenue;
- 2) Fire hydrant north of Grand Avenue at 12<sup>th</sup> Street; this fire hydrant is on a four-inch diameter water line, as well, and will therefore the Town will relocate this hydrant to a better location (corner of Sheryl Drive and Grand Avenue) and connect to the adjacent eight-inch diameter water main in Grand Avenue;
- 3) Fire hydrant north of Grand Avenue at 8<sup>th</sup> Street; this fire hydrant is also on a four-inch diameter water line, and the Town will connect to the adjacent eight-inch diameter water main in Grand Avenue;

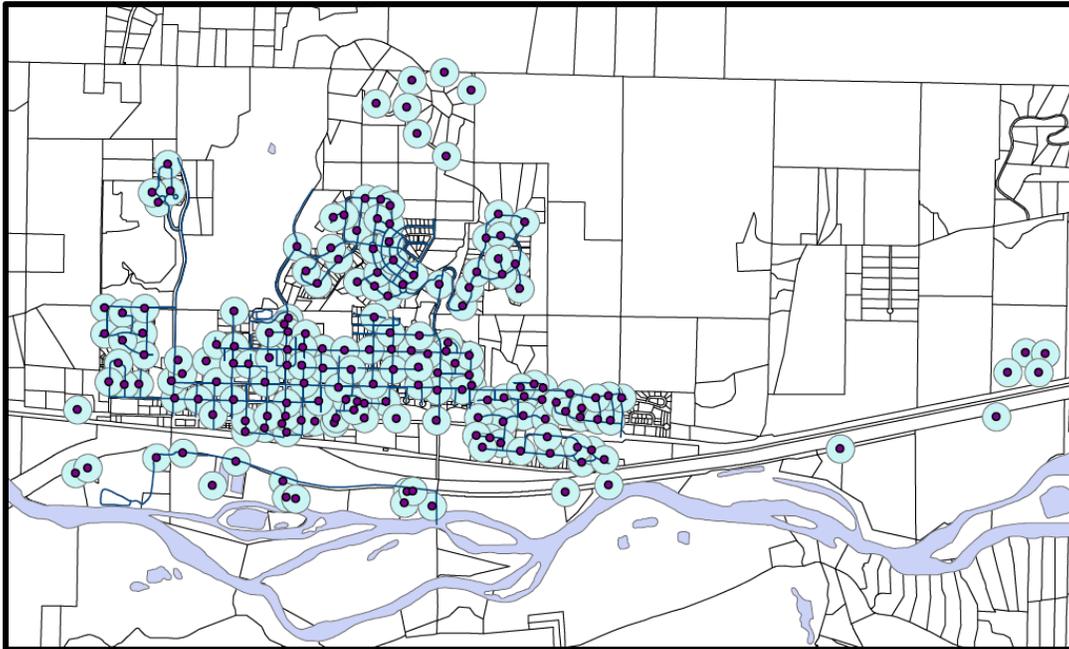
# Water/Wastewater/Irrigation Master Plan 2019

- 4) Fire hydrant on N. 4<sup>th</sup> Street has weep holes plugged, making it difficult to drain the hydrant body to avoid freezing.

## Fire Hydrant Spacing

Hydrants are to be placed no less than 300 feet from a property line or from the front of a lot. The maps below indicate the existing coverage, as well as several areas of Town where an additional fire hydrant is preferable to running fire apparatus.

## Future Hydrant Additions and/or Upgrades



Fire Hydrant Coverage Map 2018



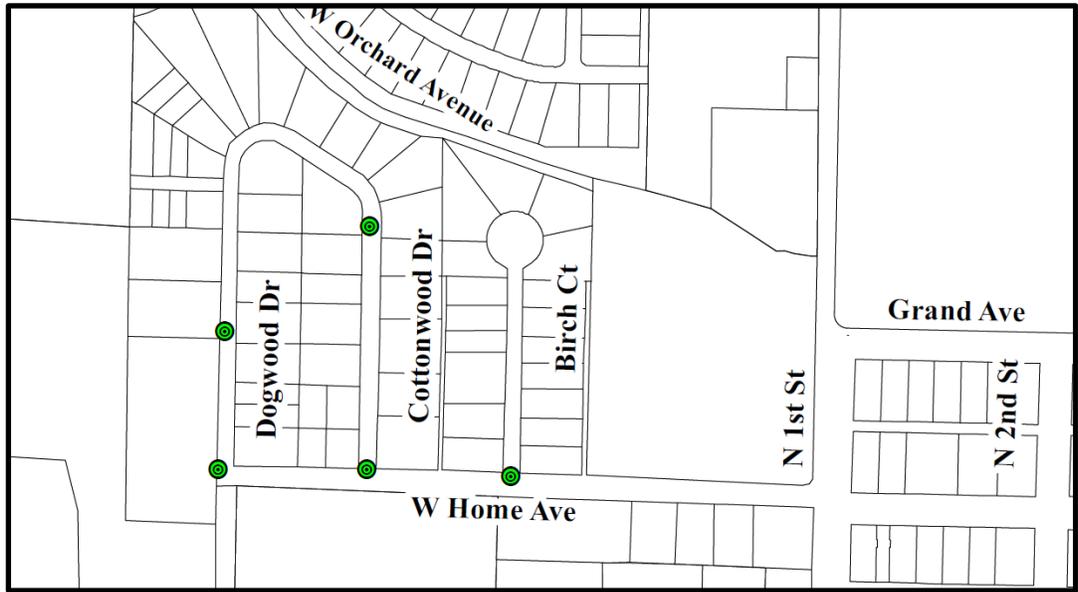
Fire Hydrant Additions Map

# Water/Wastewater/Irrigation Master Plan 2019

## Domestic Water Main Improvements

Goal: Replace water main in Front Street and S. 8<sup>th</sup> Street. This main is undersized, composed of pure core and PVC, and will be replaced with C900 pipe; proposed cost is \$328,015 and is slated for 2019.

Goal: Replace domestic water valve clusters in Tara Planned Unit Development (west Home Avenue, Cottonwood Drive, and Dogwood Drive) as shut-offs are difficult and valves are non-functioning; the Town will replace these clusters in 2019 at an approximate cost of \$15,000.



Goal: Abandon 4” domestic water main in Grand Avenue; create new residential service connections and valves to 8” domestic water main in Grand Avenue; this is a twenty-year phased improvement (2025 at a cost of \$374,638; 2028 at a cost of \$355,754; 2032 at a cost of \$385,733; 2035 at a cost of \$302,104; and 2038 at a cost of \$331,707, all in 2019 dollars).

Goal: Re-bore or put another type water line in 7<sup>th</sup> Street transmission main beneath Interstate-70 and railroad, to replace the existing ductile iron pipe; this is a 2030 improvement with a proposed cost of \$600,000 in 2019 dollars;

Goal: Replace or reline 14” asbestos cement transmission main from 7<sup>th</sup> Street & Richards Avenue, through Eagle’s View Subdivision, to the Eagle’s View

## Water/Wastewater/Irrigation Master Plan 2019

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domestic water tank; this is a phased improvement from 2030 to 2033, with a proposed cost of \$750,000 in 2019 dollars:

First Alternative – Replacement with 3,365’ of new HDPE pipe via 7<sup>th</sup> Street right-of-way and Eagle’s View Park (bypassing First Mesa Drive); this scenario has a projected cost of \$750,000 in 2019 dollars and would be preferable to the existing alignment on First Mesa Drive (possibility of flooding residential properties in case of a break);

Second Alternative – Reline the existing 1.25 mile main with a 12-12.5” pipe, with a decrease in capacity of 30%. This alternative is difficult to apply cost and/or timeline, as there are an unknown number of 45°-90° elbows that do not lend to relining, but could cost upwards of \$600,000 to \$700,000 in 2019 dollars.

Although various studies (Fawell, 2002; WHO, 2003) have indicated there is no evidence that asbestos cement causes adverse health effects, the Town believes it is in its best interest to replace or reline such main to minimize staff time in tapping and maintaining such lines.

- Goal: Replace domestic water main in 16<sup>th</sup> Street from Main Street to Grand Avenue. This main is a 4” diameter, undersized to meet demand and fire flow; this is a 2029 improvement with a proposed cost of \$77,963 in 2019 dollars.
- Goal: Replace ductile iron domestic water main throughout Town (Lyon PUD, N. 7<sup>th</sup> Street from Main Street to Eagle’s View, Flying Eagle PUD, transmission line underneath Interstate-70). These are phased 10-20 year improvements with proposed costs of \$1,295,000. The Town will replace the water main in Pioneer Drive in 2019, with an overall cost of \$270,474, 70% of which is a FMLD grant.
- Goal: Install new domestic water main to link to N. 8<sup>th</sup> Street from Grand Avenue to Ballard Avenue to aid in transmission; this is a 2033 improvement with a proposed cost of \$67,000 in 2019 dollars.
- Goal: Replace 4” domestic water main in N. 13<sup>th</sup> Street and Home Avenue south of Grand Avenue; this is a 2035 improvement with a proposed cost of \$49,000 in 2019 dollars.

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Goal: Replace 4” domestic water main on N. 12<sup>th</sup> Street, from Ballard Avenue to Linda Avenue, to a 6” to 8” main to aid with pressure, fire flow, and serviceability; this is a 2036 improvement with a proposed cost of \$156,000 in 2019 dollars.

### Domestic Water Pump Stations

The Town has two domestic water pump stations: one is located north of Orchard Avenue on N. 16<sup>th</sup> Street, and the other is located at the Eagle’s View domestic water tank.

Goal: Determine alternate locations for pump stations.

Goal: Establish an inventory system to exchange pumps in case of failure.

### Domestic Water Storage

SCADA - The Town, through a Supervisory Control and Data Acquisition System (SCADA), monitors and records data as to levels in storage tanks and alerts staff regarding poorly/non-functioning pumps. The Town has not updated this system regularly and is facing a fairly substantial upgrade to meet today’s technology. The system is functioning at this time, but future improvements should be phased to bring the Town more in line with technological standards of the industry, and to deliver a better value to the citizens; this is a proposed 20-year improvement at a cost of \$90,000 in 2019 dollars.

Security – Neither the Sunrise water storage tank, nor the N. Eagle’s View water storage tank is fenced. The Sunrise fencing project is slated for 2019 construction, at a cost of \$9,722. The N. Eagle’s View fencing project is slated for 2021 construction, at a cost of \$10,000 in 2019 dollars.

### Domestic Water Tank Sites:

Tank Address	Year Built	Capacity (Gallons)	Diameter (ft)	Height (ft)	Bottom Elevation	Subdivision	Status
574 Eagles Nest Drive	1987	800,000 gallons	77.5 feet	24 feet	5,666 feet	N. of Eagle’s View	Refurbished 2017 (sandblasted and painted)
240 E. Vista Drive	2009	600,000 gallons	68 feet	24 feet	5,828 feet	Sunrise Subdivision	Cleaned in 2018
240 E. Vista Drive	1987	150,000 gallons	34 feet	24 feet	5,826 feet	Sunrise Subdivision	Cleaned in 2018
1234 Standing Deer Drive	1999	250,000 gallons	43.5 feet	24 feet	5,869 feet	Mesa View Subdivision	Cleaned in 2018
500 W. River Frontage Road	2005	100,000 gallons				Water Treatment Plant	Cleaned in 2016
Totals		1,800,000 gallons					~ 5 day storage

## Water/Wastewater/Irrigation Master Plan 2019

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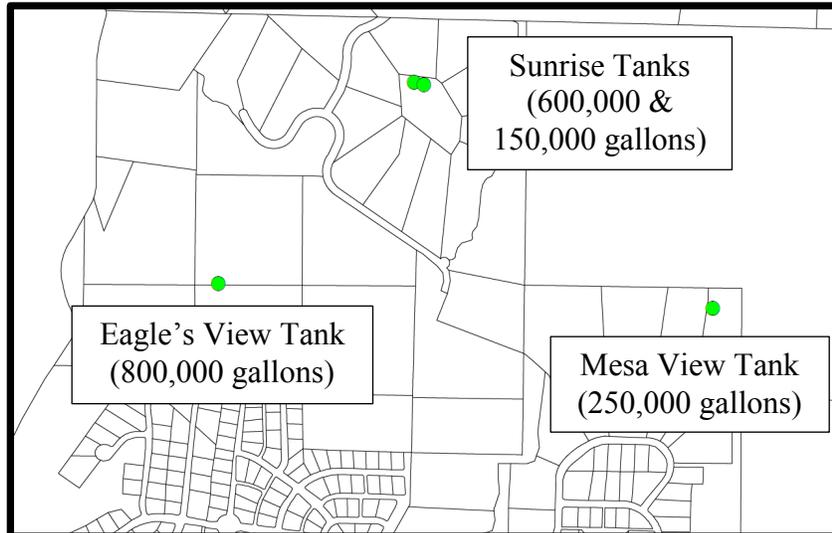
Future Storage Tank Sites – The Town has two pressure zones at this time, based on the location of existing domestic water tanks. The lower pressure zone is served by the main 800,000 gallon domestic water tank at 574 Eagles Nest Drive. The upper pressure zone is served by the Sunrise tanks (240 E. Vista) and the Mesa View tank (1234 Standing Deer Dr.).

Goal: Use water modeling to determine if future growth would require higher elevation tanks and/or additional storage at the lower or upper pressure zones; this improvement is scheduled for 2033 at a proposed cost of \$20,000 in 2019 dollars.

Goal: Determine if the Town could partner with a farmer(s) in the area to store Harvey Gap water in case of an event on the Colorado River.

Goal: Purchase a site for a future domestic water storage tank in 2034 at a proposed cost of \$25,000 in 2019 dollars.

Goal: Install an 800,000 gallon domestic water storage tank in 2037 at a proposed cost of \$750,000 in 2019 dollars.



## Water/Wastewater/Irrigation Master Plan 2019

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### Domestic Bulk Water

The Town has three bulk water facilities: one is located on S. 7<sup>th</sup> Street and two are located on Front Street in the 500 block. The S. 7<sup>th</sup> Street bulk water station is for residential out-of-town customers only, as the two stations on Front Street are for commercial vehicles or those residential customers that fill a tank exceeding 500 gallons. In 2018, the Town upgraded the S. 7<sup>th</sup> Street bulk water station with a new sanitary arm, bulk water building, and money machine. Historically, the Town has charged very little for county residents to buy this water, but with the recent upgrades, the Town doubled the fee to \$10/1,000 gallons. The Town served over 8 million gallons of water to non-community members and out-of-area businesses in 2017.

Goal: The Town should improve the metering system and money handling devices at the S. 7<sup>th</sup> Street bulk water station; this improvement is a 3-year improvement with a proposed cost of \$10,000 in 2019 dollars.

### Wastewater Treatment

In 2005, the Town constructed the Wastewater Treatment Plant (WWTP), a .75 million gallons per day (MGD) plant that utilizes activated sludge (aero-mod). The lagoon side of the WWTP is at 30% capacity and the headworks (building) is at 15% capacity currently. The WWTP can easily expand to double its capacity by simply adding another lagoon for a total build-out capacity of 1.5 MGD.

Goal: The Town should install a pulley/rail system to assist in moving blowers in and out in a more efficient and safe manner; this improvement should be completed by 2021 at a proposed cost of \$50,000 in 2019 dollars.

Goal: The Town should investigate and institute a means of reducing the amount of sludge that is landfilled each year, to be both fiscally and environmentally responsible; a solution might involve the decrease in electricity costs, as well, including innovations to the existing belt press and the de-watering process; this is a 2021-2022 improvement, with a projected cost of \$200,000 in 2019 dollars.

Goal: The Town should plan for expansion of the WWTP when capacity is 80%; this engineering project is a 2035 project with a proposed cost of \$150,000 in 2019 dollars.

Goal: The Town should expand the WWTP (doubling capacity to 1.5 MGD), including installation of another similarly sized lagoon, but no building

## Water/Wastewater/Irrigation Master Plan 2019

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improvements; this improvement should be completed within 20 years at a proposed cost of \$1,000,000 in 2019 dollars.

Goal: The Town will need to replace its WWTP blowers by 2024 at a proposed cost of \$21,000, and in 2032 and 2038, each at a proposed cost of \$8,000 in 2019 dollars.

### Wastewater Lift Stations

The Town acts as the operator on both of the lift stations in Ferguson Crossing, although the owners of these units are responsible for any maintenance to the units.

Goal: The Town should work with the developer of Ferguson Crossing Planned Unit Development to provide a safer means of extracting the lift station pump from the wastewater (i.e. pipe to wet wells); a developer obligation includes significantly upgrading the pumps, and therefore is not budgeted.

Goal: The Town should ensure that back-up pumps are functioning correctly, and might be wise to keep these types of pumps in inventory; this is a 2021 project with a projected cost of \$20,000 in 2019 dollars, likely reimbursable by developer.

Goal: Upon development of several parcels in Ferguson Crossing, the Town should ensure the decommissioning and dismantling of the Holiday Inn Express lift station; this is a developer obligation and therefore is not a budgeted item.

### Wastewater Collection

Goal: Replace the wastewater main south of roundabout between the convenience store (SE corner) and the vacant property (SW corner); this improvement is slated as a 2020 improvement with a \$60,000 cost in 2019 dollars.

Goal: Replace the wastewater main by pedestrian underpass east of S. 16<sup>th</sup> Street; this improvement is necessary as a result of poor compaction and underlayment, causing a 'belly' in the line that requires the line to be 50% full to flow. This is a 2020 improvement with a proposed cost of \$330,000 in 2019 dollars.

Goal: Identify all remaining clay wastewater mains; this study is proposed for 2020 at a proposed cost of \$5,000 in 2019 dollars;

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Goal: Replace or reline identified clay wastewater mains in a phased manner; this 5,307 lineal foot project will be phased over 15-20 years, with a proposed cost of \$239,830 in 2019 dollars.

Goal: Determine areas adjacent to developable lands that would benefit from upsizing of wastewater mains; this is an inclusive developer cost as lands are proposed for annexation.

Goal: Replace all brick wastewater manholes throughout town; these phased replacements are slated between 15-20 years, with a proposed cost of \$84,000 in 2019 dollars.

### Irrigation Water Supply

The Town has at times accepted less than desirable irrigation rights. This, coupled with the Town's allowance of over-irrigation on residential lots throughout the Town, will lead to practical difficulties delivering irrigation water to the existing platted lots without purchasing additional rights from Ware and Hinds, Farmer's Irrigation, Grand River Ditch, etc.

Goal: Purchase senior irrigation shares that supplement the Town's existing portfolio, to hedge against Cameo call; this task should occur annually (\$5,000/yr), at a proposed cost of \$100,000 in 2019 dollars.

### Irrigation Distribution System

The Town's irrigation system is mainly composed of 2" and 4" PVC (some locations of 6" and 8" irrigation mains) a few feet below grade, throughout the town, installed in 1995.

Goal: The Town should implement means to utilizing the Town's entire complement of water rights, which may include further storage devices and/or additional mains.

Goal: The Town should look into incentivizing property owners for using xeric species in their landscaping.

Goal: The Town should review the irrigation system improvement fee (tap) on an annual basis, or more often as necessary.

# Water/Wastewater/Irrigation Master Plan 2019

## Irrigation Storage

Tank Address	Year Built	Capacity (Gallons)	Dimensions/Diameter (ft)	Height (ft)	Pressure Zone	Status
192 S. Golden Drive	2018	57,000 gallons	47' x 18'	9'	Upper Zone	New; will cover in 2019
North Eagle's View	1997	108,000 gallons	60' x 30'	8'	Upper Zone	Reinforced concrete tank; will cover in 2019
1244 Standing Deer Drive	1999	55,000 gallons	28'	12'	Upper Zone	Needs to be cleaned
628 Skyline Drive	2009	265,000 gallons	50'	18'	Lower Zone	Needs to be cleaned
Total		485,000 gallons				

Goal: Install additional 250,000 gallon tank at a higher elevation to accommodate future subdivisions; this would be a developer obligation and therefore is not a budgeted item.

Goal: Install additional 250,000 gallon tank north of the Eagle's View Subdivision irrigation tank, to supply extra storage for those lots not yet built; this improvement is proposed in 2037 at a cost of \$300,000 in 2019 dollars.

## Irrigation Pump Stations

<u>Location</u>	<u>Capacity</u>	<u>Source of Irrigation Water</u>
Tara Park	250 gpm	Grand River Ditch
Willow (5 <sup>th</sup> & Ballard)	400 gpm	Grand River Ditch
Orchard (10 <sup>th</sup> & Orchard)	350 gpm	Grand River Ditch
Mesa View	50 gpm	Giacinta
Eagle's View	100 gpm	Silt Pump Canal
Davis Point	150-480 gpm	Ware & Hinds Ditch
Booster (Behind Shop)	100 gpm	EVS Supplemental
16 <sup>th</sup> & Em Avenue	250 gpm	MVS Supplemental

Goal: The Town should install back-up pump stations to assist when pumps are non-functioning; this improvement would be phased over the next 20 years at a cost of \$66,000 in 2019 dollars.

Goal: The Town should have extra pumps in inventory so that emergency repairs are lessened; this improvement would be phased over the next 20 years at a cost of \$42,000 in 2019 dollars.

## 3. Contingency Plan

What if...

### 1) Water Plant & Distribution System

#### Problems & Contingency

#### a) Power Outage at Water Plant

Electrical power outage could occur as a result of an accident on Interstate-70 or River Frontage Road, Xcel Energy's plant or equipment failure, or a problem with the Town's service connection to the Xcel Energy power grid. The Town has no generator on the WTP currently, but as the Town has two days' storage in the water tanks in non-summer months, the situation is not problematic until power outage extends two days or unless such outage were to occur in the summer months. After WTP shuts down, an operator must manually restart it. Consequently, staff should implement the following:

- i) Weekly maintenance of existing 5,000 horsepower diesel-powered generator to ensure operability;
- ii) Rental of another 5,000 horsepower diesel-powered generator for emergency; &
- iii) Investigate a relationship with Holy Cross Electric in the case Xcel Energy cannot provide power for extended time period.

#### b) Water Plant Electronic Components' Failure

The Town's WTP manufacturer (US Filter) is no longer in business, leaving the Town with few options in the event of an electronic panel or component failure. Many of the components on the WTP are 'Alan Bradley' parts and the Town must either contact a third party to produce a solution to the problem or hope that there is an archived part somewhere within the United States or Australia, where the original manufacturer was located.

- i) With the Town's replacement of the microfiltration skids in the next few years, the Town will make progress replacing some of the antiquated equipment;

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- ii) The Town should contract with professionals that can step in to solve complex problems at a moment's notice, such as electricians, computer specialists, and electronic engineers.
- c) SCADA System is not communicating with Water Plant

The Town's SCADA system is outdated and could fail, causing a problem for staff in determining the level of potable water in each tank.

- i) The Town should prepare a list of SCADA vendors for its use in an emergency;
- ii) The Town should begin immediately replacing the oldest equipment, as well as stocking replacement parts;
- d) Town cannot use the Colorado River Water

There likely will not be more than a couple hours' notice of an upstream pollution event, and it is critical the Town has raw water options in this case.

- i) The Town should immediately drill (or use) an additional well adjacent to the Colorado River's edge, in order to utilize in the event that a small pollution event would make impossible the Town's utilization of direct Colorado River water;
- ii) Since the existing and any future well adjacent to the Colorado River would still be under the influence of the Colorado River, the Town should look to immediately secure water contracts from other water sources, such as Harvey Gap Reservoir and Ware and Hinds Ditch (East Elk Creek water), or other identified water source;
- iii) The Town should also perform geotechnical investigations regarding the drilling of wells not under the influence of the Colorado River, where the Town can simply set up a chlorination chamber and deliver treated water to tanks;
- iv) The Town should investigate drilling a well for a small water treatment plant (chlorination) at a higher elevation;
- v) Upon a catastrophic event, the Town could restrict water to businesses and bulk water facilities first, and residences, if necessary.

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### e) Water System is Breached

The state of Colorado and the federal government have long recommended water providers safeguard their water supplies (intakes), their water plants, their distribution systems, and their water storage tanks. The Town has a secure entry from the access road to the WTP and WWTP.

- i) The Town should install tall fences with barb-wire tops and a secure gate around each tank's perimeter space (currently only one tank has a perimeter fence);
- ii) The Town should install motion-activated flood lights on each fence;
- iii) The Town should install motion-activated video cameras that send an alarm to Town personnel.

### f) Water Transmission Line in 7<sup>th</sup> Street Breaks or is Otherwise Unusable

The Town has a main water transmission line from River Frontage Road, under Interstate-70, the Union Pacific Railroad, and State Highway 6. This ductile iron pipe is scheduled for replacement in 2030 with a proposed cost of \$600,000.

- i) In case of failure of this 10-inch line, the Town would perform an emergency repair, while diverting water to the Town's secondary water line through Silt Trade Center; &
- ii) It might be necessary to institute potable water restrictions during this emergency repair.

### g) Microfiltration skid fails or is inoperable

The Town intends to add a microfiltration skid in 2024, which would lessen the problem in the event that another skid failed. Additionally, the Town intends to replace each of the two existing skids over the next fifteen years. In this manner, the newly introduced technology should alleviate many of the existing problems at the WTP.

- i) Prior to 2020, if the Town were to lose one of the two existing microfiltration skids, it would accelerate the purchase of the 3<sup>rd</sup> skid.
- ii) After 2020, with three skids online, the Town would simply treat the raw water through the existing functioning skids.

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- h) Alum or chlorine is in short supply
  - i) As the Town has 6-8 month supply of both alum and chlorine, the Town should have enough time to order additional pallets of each;
  - ii) The Town could convert the WTP to a liquid or gas chlorine delivery, if absolutely necessary.
  
- i) Domestic pump station is non-functioning
  - i) Each of the two existing domestic pump stations has three pumps (1 lead, 1 lag, and 1 back-up). If one of the three pumps within a pump station fails, the Town can divert the load until the non-functioning pump is repaired or replaced;
  - ii) If one entire pump station fails (3 pump failure), the Town would institute water restrictions until it could repair the pumps, as the Town would need to ensure fire flow (fire-fighting pressure in hydrants).
  
- j) Extension of water main from eastern boundary of Town to Coal Ridge High School (CRHS)

The Town has three water main interceptors that transport water from the water plant, along River Frontage Road, and these interceptors are south of CRHS, south of Silt Trade Center (STC), and south of 8<sup>th</sup> Street), perpendicular to Interstate-70, River Frontage Road, and the Union Pacific Railroad. Should either the 8<sup>th</sup> Street or STC interceptor become unusable, the Town would necessarily take one out of commission to repair. However, should the Coal Ridge High School interceptor need repairs, the Town could not deliver the potable water to the school in another fashion.

- i) The Town could consider installing a water main from the eastern edge of Town, immediately north and adjacent to State Highway 6, to complete the water ‘loop’ to the school;
- ii) The Town could consider installing a water main from a domestic water tank to the CRHS.

## Water/Wastewater/Irrigation Master Plan 2019

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### 2) Wastewater Plant and Collection System

#### Problems and Contingency

##### a) Power Outage

The Town has a 5,000 horsepower diesel-powered generator to implement if the power is out for an extended time.

- i) Continue to test the generator at least once a month to determine worthiness;
- ii) Purchase another 5,000 horsepower diesel-powered generator for inventory; &
- iii) Limit domestic water usage until plant can become operational.

##### b) Wastewater Lift Stations are Non-Functioning

The Town monitors two private wastewater lift stations, the Holiday Inn Express Lift Station and the Ferguson Crossing Regional Lift Station. Each of these property owners is responsible for the maintenance and replacement of their own lift station, and as each lift station has redundancy, there should not be an issue with taking one out of service temporarily to repair or replace.

- i) If an owner of a private lift station did not repair or replace pumps as needed, the Town might do so in their stead and charge back for any cost incurred by the Town;
- ii) The Town could resort to turning off the water to such commercial areas, until owner repaired or replaced such pump(s).

### 3) Irrigation System

#### Problems and Contingency

##### a) Power Outage

- i) It is not feasible to put generators on each pump station to circumvent power outage issues, and irrigation will thus be curtailed in the event of such an outage that lasts longer than the capacity in the Town's irrigation tanks;

## Water/Wastewater/Irrigation Master Plan 2019

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- ii) In the event that the irrigation capacity is diminished, the Town should deliver to citizens timely information so as to minimize private irrigation pump burn-out;
  - iii) In the event that irrigation water is not available to its citizens, the Town should be particularly cognizant of the inappropriate use of potable water for irrigation, as the WTP is not designed to deliver this volume of water for consumptive use; &
  - iv) All departments should work collectively to educate and advise citizens of the inappropriate use of potable water for irrigation, and if necessary, issue stern penalties for such misuse, as the Town must always maintain the necessary amount and pressure of potable water in its distribution system for fire-fighting.
- b) Water not available in specific ditch (de-mossing, shortage, etc.)
- i) The Town has historically utilized water from all water sources it has rights to, and in times of de-mossing or other issue limiting water in a specific ditch, the Town will fill irrigation tanks using whatever method at its disposal; &
  - ii) The Town could alleviate this problem by installing more irrigation pump stations on the Ware and Hinds Ditch and the Cactus Valley Ditch.
- c) Call on Colorado River for Consumptive Uses
- i) Much of the western United States has been in a drought condition for the last decade or longer, and efforts are currently underway to minimize problems if the drought continues, including voluntary plantings of xeric species, voluntary decrease in usage of irrigation water, and decrease in non-drought tolerant grass species;
  - ii) A call on the Colorado River has greater implications for the Town than a decrease in irrigation water, as the Town receives most of its irrigation and potable water from shares that use the Colorado River for delivery. The Town, through its water attorney, shall participate in regional meetings that contribute to a comprehensive plan to minimize the effect on citizens with respect to potable and non-potable water;

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- iii) The Town, in the event of a call on Colorado River, would necessarily restrict irrigation on private and public properties, but may also restrict potable water usage to only highest priority uses.
  
- d) Pump station fails
  - i) As each of the Town's irrigation pump stations have back-up pumps in inventory or adjacent to main pumps, the Town remains operational if one pump fails;
  - ii) The Town should support its inventory planning for pumps and pump station components to minimize the public's discomfort in the case of a pump failure or a pump station failure;
  - iii) The Town has historically been successful reallocating water to areas of need, and future operations will scrutinize better, more efficient methods of filling all irrigation tanks in the event of a pump station failure.

**4. Capital Improvement Program**

**See Appendix A**

**5. User Fee Schedule**

**See Appendix B**

**6. Operations and Maintenance**

**See Appendix C**

**7. Financing of Capital Improvements**

**a) Monthly Fees**

The Town derives a large portion of its capital improvements budget from monthly water, wastewater, and irrigation fees. The Town budgets each year for capital improvements, annual operations and maintenance of the potable water system, based on projected revenues and grant funding. The Town has increased water, wastewater, and irrigation monthly fees to its citizens in each of the last fourteen (14) years, since the last master plan update for these services. The purpose of the increase in monthly fees is an effort by the Town to keep pace with inflation, as well as the increasing costs for labor, insurances, electricity, and replacements of capital items.

**b) System Improvement (Tap) Fees**

The Town intends that System Improvement (Tap) Fees provide a viable method to budget for capital improvements, as tap fees have historically represented a single user's new impact to the Water/Wastewater/Irrigation systems. In 2005, the Town was in the height of a good economy and building season, and had been since 1997. The 2005 master plan contemplated an average of forty-eight (48) EQRs of impact each year, meaning that the Town, in those years, budgeted forty-eight (48) EQRs in revenue (system improvement (tap) fees). This presented a practical difficulty in 2007, when the economy began to decline. The Town has not recovered to pre-Great Recession averages, with a unit high of twelve (12) single-family units in 2018. However, the Town should budget conservatively for

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the number of taps based on the economy and proposed projects, and schedule as many capital improvements each year, as possible.

### c) Upper Pressure Overlay Zone

The Town implemented the Upper Pressure Overlay Zone surcharge by ordinance in 2003, as a means for the Town to plan for and collect additional fees for construction of pumping stations, potable water storage facilities and telemetry systems, to serve those properties that, because of continuing development in the Town north of the Colorado River, will be inadequately served by existing lower zone facilities, both in terms of quantity and/or pressure of water delivered and the ability of the system to deliver potable water to each household/business by gravity. The lands subject to this overlay district include those above an elevation of 5,560 feet mean sea level and below 5,760 feet mean sea level, within the Town north of the Colorado River, as shown on a United States Geological Survey map. The Town has historically used the Upper Pressure Overlay Zone generated revenue to build the Sunrise Tank and the 16<sup>th</sup> Street pump station. Future expenditures based on this revenue line item should be based solely on infrastructure needed for this zone, and not on operations or maintenance of existing infrastructure.

### d) Special District

TABOR and the Gallagher amendments have severely restricted the amount of money available for infrastructure in certain areas of Town. In some cases, a Town (& County) may approve a special district, which is a political subdivision, approved and registered by the state of Colorado, that can build and maintain infrastructure, as well as provide services, within a specific geographic area. A special district is initially approved by the property owners within that district by a vote conducted according to state law, whereby the property owners agree to tax themselves for construction, maintenance, and operation of the services that district provides. The Town has no approved special districts (for commercial or residential development) at this time, but it may be a tool for specific areas to finance much needed improvements, including River Frontage Road, Interstate-70 interchange, and State Highway 6 (Main Street) improvements.

### e) Bonding

The issuance of government bonds by a municipality (through a bonding agent) may occur when a municipality has a stream of income (monthly fees and system improvement fees, property taxes, sales taxes) but lacks the capital funds to provide for needed infrastructure improvements. In 2002, the Town bonded for a new water plant, wastewater plant, and First Street Improvements (wastewater,

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trail, and street). The Town refinanced these bonds in 2011 to obtain a better interest rate, and the Town will retire these bonds in 2026. It may be necessary based on the Town's Capital Improvement Plan to bond in the future for needed replacements and expansions of infrastructure, but the Town should make every possible effort to annually allocate for capital improvements.

### f) Grants

The Town has been successful obtaining grants for water, wastewater, and irrigation infrastructure. The most generous grantor (over \$2.5M in water, wastewater, irrigation improvements, alone) in the last ten (10) years is the Garfield County Federal Mineral Lease District, which reviews and approves grant requests for infrastructure, projects, and services impacted by the extraction of natural resources. Other grantors include the Department of Local Affairs, Garfield County, and the Colorado Department of Public Health & Environment. The Town will diligently pursue all grant opportunities available in future.

## 8. References

Fawell, J. (2002). Asbestos Cement Drinking Water Pipes and Possible Health Risks Review for DWI. Wiltshire, UK: *FaberMaunsell LTD*. Retrieved from [http://dwi.defra.gov.uk/research/completed-research/reports/DWI70\\_2\\_135\\_asbestos%20cement%20pipes.pdf](http://dwi.defra.gov.uk/research/completed-research/reports/DWI70_2_135_asbestos%20cement%20pipes.pdf)

*World Health Organization (2003)*. Asbestos in Drinking-Water, 2<sup>nd</sup> Ed. Vol. 2. Retrieved from [http://www.who.int/water\\_sanitation\\_health/dwq/asbestos.pdf](http://www.who.int/water_sanitation_health/dwq/asbestos.pdf)

**Capital Improvement Water**

<b>Water Supply/Water Treatment</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>
Drill one well at WTP		5,000																		
Investigate drilling wells in Town									15,000											
Water rights/Buy Farmer's Irrigation	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Install plate settler/sand filtration unit					400,000															
Add high production MF unit						350,000					350,000									350,000
<b>Totals</b>	<b>5,000</b>	<b>10,000</b>	<b>5,000</b>	<b>5,000</b>	<b>405,000</b>	<b>355,000</b>	<b>5,000</b>	<b>5,000</b>	<b>20,000</b>	<b>5,000</b>	<b>355,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>355,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>
<b>Water Transmission/Distribution</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>
Replace Front St. & S. 8th St. main	328,015																			
Replace valve clusters in Tara PUD	15,000																			
Grand Avenue main & valve project							374,638			355,754				385,733			302,104			331,707
Replace-reline 14" asbestos cement												50,000	200,000	200,000	300,000					
Replace main in N. 16th to Grand Ave											77,963									
Replace ductile iron FEPUD, LRPUD	270,474							300,000					350,000							375,000
Replace ductile iron transmission												600,000								
Install water main link N. 8th to Grand															67,000					
Replace N. 13th St. Home Ave main																				49,000
Replace N. 12th St. (Ballard to Linda)																				156,000
<b>Totals</b>	<b>613,489</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>374,638</b>	<b>300,000</b>	<b>0</b>	<b>355,754</b>	<b>77,963</b>	<b>650,000</b>	<b>550,000</b>	<b>585,733</b>	<b>367,000</b>	<b>0</b>	<b>351,104</b>	<b>156,000</b>	<b>0</b>	<b>706,707</b>
<b>Storage, SCADA, Bulk Water</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>
Upgrade SCADA system								25,000						30,000						35,000
Investigate new domestic tank															20,000					
Purchase land for new tank																25,000				
Install new domestic tank																				750,000
Bulk Water metering/payment			10,000																	
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>10,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>25,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30,000</b>	<b>20,000</b>	<b>25,000</b>	<b>0</b>	<b>35,000</b>	<b>750,000</b>	<b>0</b>
<b>Fire Hydrants</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>
Hydrant Grand (Kim & Sheryl)																				
Hydrant at Grand Ave & 12th Street	1,500																			
Hydrant at Grand Ave & 8th Street	1,500																			
Hydrant on N. 4th Street	1,500																			
Replacement/Additional hydrants		4,500	4,500	4,500	4,500	3,500	2,000	2,000	2,000	2,000	2,000	2,500	2,500	2,500	2,500	2,500	3,000	3,000	3,000	3,000
<b>Totals</b>	<b>4,500</b>	<b>4,500</b>	<b>4,500</b>	<b>4,500</b>	<b>4,500</b>	<b>3,500</b>	<b>2,000</b>	<b>2,000</b>	<b>2,000</b>	<b>2,000</b>	<b>2,000</b>	<b>2,500</b>	<b>2,500</b>	<b>2,500</b>	<b>2,500</b>	<b>2,500</b>	<b>3,000</b>	<b>3,000</b>	<b>3,000</b>	<b>3,000</b>
<b>Grand Totals CIP Water</b>	<b>622,989</b>	<b>14,500</b>	<b>19,500</b>	<b>9,500</b>	<b>409,500</b>	<b>358,500</b>	<b>381,638</b>	<b>332,000</b>	<b>22,000</b>	<b>362,754</b>	<b>434,963</b>	<b>657,500</b>	<b>557,500</b>	<b>623,233</b>	<b>394,500</b>	<b>32,500</b>	<b>709,104</b>	<b>199,000</b>	<b>758,000</b>	<b>714,707</b>

**Capital Improvement WW**

Wastewater Treatment	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Pulley/rail system on blowers			50,000																	
Investigate sludge/landfill options			50,000																	
Install sludge reduction/other				150,000																
Replace blowers at WWTP						21,000								8,000						8,000
Expansion of WWTP (engineering)																	150,000			
Expand WWTP																				1,000,000
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>100,000</b>	<b>150,000</b>	<b>0</b>	<b>21,000</b>	<b>0</b>	<b>8,000</b>	<b>0</b>	<b>0</b>	<b>150,000</b>	<b>0</b>	<b>0</b>	<b>1,008,000</b>						

Wastewater Lift Stations	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Lift Station Pump Extraction	Dev Cost																			
Temp lift station shut-down	Dev Cost																			
Inventory lift station pumps	Dev Cost		20,000																	
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>20,000</b>	<b>0</b>																

Wastewater Collection	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Replace WW main 9th St.		60,000																		
Replace WW main by 16th St.		330,000																		
Identify all clay WW mains		5,000																		
Replace/reline clay WW mains						50,000			50,000			50,000			50,000				39,830	
Replace brick WW manholes		3,000	3,000	3,000	3,000	3,000	4,000	4,000	4,000	4,000	4,000	5,000	5,000	5,000	5,000	5,000	6,000	6,000	6,000	6,000
<b>Totals</b>	<b>0</b>	<b>398,000</b>	<b>3,000</b>	<b>3,000</b>	<b>3,000</b>	<b>53,000</b>	<b>4,000</b>	<b>4,000</b>	<b>54,000</b>	<b>4,000</b>	<b>4,000</b>	<b>55,000</b>	<b>5,000</b>	<b>5,000</b>	<b>55,000</b>	<b>5,000</b>	<b>6,000</b>	<b>45,830</b>	<b>6,000</b>	<b>6,000</b>
<b>Capital Totals Wastewater</b>	<b>0</b>	<b>398,000</b>	<b>123,000</b>	<b>153,000</b>	<b>3,000</b>	<b>74,000</b>	<b>4,000</b>	<b>4,000</b>	<b>54,000</b>	<b>4,000</b>	<b>4,000</b>	<b>55,000</b>	<b>5,000</b>	<b>13,000</b>	<b>55,000</b>	<b>5,000</b>	<b>156,000</b>	<b>45,830</b>	<b>6,000</b>	<b>1,014,000</b>

W-WW Capital Totals	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
	622,989	412,500	243,000	162,500	412,500	432,500	385,638	336,000	76,000	366,754	438,963	712,500	562,500	636,233	449,500	37,500	865,104	244,830	764,000	1,728,707

Monetary Considerations	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Beg. Fund Balance	2,541,015	1,901,416	1,792,712	1,726,758	1,722,249	1,397,717	1,166,141	1,040,143	1,077,455	1,765,885	1,913,001	2,000,760	1,682,845	1,710,626	1,717,002	2,250,694	3,675,620	3,716,422	5,045,232	5,437,180
Restricted Fund Balance	591,554	591,554	591,554	591,554	591,554	591,554	591,554	591,554	0	0	0	0	0	0	0	0	0	0	0	0
Unrestricted Fund Balance	1,949,461	1,309,862	1,201,158	1,135,204	1,130,695	806,163	574,587	448,589	1,077,455	1,765,885	1,913,001	2,000,760	1,682,845	1,710,626	1,717,002	2,250,694	3,675,620	3,716,422	5,045,232	5,437,180
Projected Revenue	1,964,727	2,066,908	2,179,491	2,297,714	2,408,223	2,527,501	2,656,015	2,793,246	2,937,001	3,091,713	3,243,226	3,402,073	3,568,268	3,758,944	3,945,586	4,139,858	4,339,289	4,578,648	4,804,136	5,037,625
Grants Received	339,333																			
Grant Match	(259,156)																			
Subtotal Available Funds	3,994,365	3,376,770	3,380,649	3,432,918	3,538,918	3,333,664	3,230,602	3,241,835	4,014,456	4,857,598	5,156,227	5,402,833	5,251,113	5,469,570	5,662,588	6,390,552	8,014,909	8,295,070	9,849,368	10,474,805
Capital/O &M	2,943,659	2,175,611	2,245,445	2,302,223	2,732,755	2,759,078	2,782,013	2,755,933	2,248,571	2,944,597	3,155,467	3,719,988	3,540,487	3,752,568	3,411,895	2,714,932	4,298,488	3,249,838	4,412,188	4,478,521
Revenues +/- Expenditures	(639,599)	(108,703)	(65,954)	(4,509)	(324,532)	(231,576)	(125,998)	37,312	688,430	147,117	87,759	(317,915)	27,780	6,377	533,691	1,424,927	40,802	1,328,810	391,948	559,104
<b>Ending Fund Balance</b>	<b>1,901,416</b>	<b>1,792,712</b>	<b>1,726,758</b>	<b>1,722,249</b>	<b>1,397,717</b>	<b>1,166,141</b>	<b>1,040,143</b>	<b>1,077,455</b>	<b>1,765,885</b>	<b>1,913,001</b>	<b>2,000,760</b>	<b>1,682,845</b>	<b>1,710,626</b>	<b>1,717,002</b>	<b>2,250,694</b>	<b>3,675,620</b>	<b>3,716,422</b>	<b>5,045,232</b>	<b>5,437,180</b>	<b>5,996,284</b>

**CIP Irrigation**

<b>Irrigation Water Supply</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>	
Obtain new irrigation water rights		15,000	15,000	15,000	15,000	10,000	10,000	15,000	15,000	15,000	20,000	25,000	25,000	25,000	25,000	25,000	30,000	30,000	30,000	30,000	
<b>Totals</b>	0	15,000	15,000	15,000	15,000	10,000	10,000	15,000	15,000	15,000	20,000	25,000	25,000	25,000	25,000	25,000	30,000	30,000	30,000	30,000	
<b>Irrigation Water Storage</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>	
Cover existing Town irrigation tanks	30,000																				
250,000 G tank at upper elevation						DEV COST															
250,000 G tank at EVSD or similar																				300,000	
<b>Totals</b>	30,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	300,000	0
<b>Irrigation Pump Stations</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>	
Additional pump stations - Cactus				10,000					10,000		11,000				11,000					12,000	12,000
Inventory pumps emergency repairs				10,000						10,000			11,000				11,000				
<b>Totals</b>	0	0	0	20,000	0	0	0	0	10,000	10,000	11,000	0	11,000	0	11,000	0	11,000	0	12,000	12,000	
<b>Irrigation Distribution System</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>	
Expand system to use water rights		100,000																			
Xeric Plant Incentive												20,000	20,000	20,000	20,000	20,000	25,000	25,000	25,000	25,000	
Irrigation Fee Study	5,000			5,000				5,000				5,000				5,000				5,000	
<b>Totals</b>	5,000	100,000	0	5,000	0	0	0	5,000	0	0	0	25,000	20,000	20,000	20,000	25,000	25,000	25,000	25,000	30,000	
<b>Irrigation Capital Totals</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>	
<b>Irrigation Capital Totals</b>	35,000	115,000	15,000	40,000	15,000	10,000	10,000	20,000	25,000	25,000	31,000	50,000	56,000	45,000	56,000	50,000	66,000	55,000	367,000	72,000	
<b>Monetary Considerations</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>	
Beg. Fund Balance	497,192	432,342	292,356	156,581	25,616	8,089	2,501	4,387	4,315	7,885	20,734	37,533	45,995	59,953	101,313	144,945	207,708	269,510	358,413	152,483	
Restricted Fund Balance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Unrestricted Fund Balance	497,192	432,342	292,356	156,581	25,616	8,089	2,501	4,387	4,315	7,885	20,734	37,533	45,995	59,953	101,313	144,945	207,708	269,510	358,413	152,483	
Projected Revenue	236,488	249,343	265,233	282,073	297,238	313,171	329,908	347,490	365,959	385,359	405,735	427,136	449,693	477,486	502,492	527,709	555,196	584,120	614,492	646,385	
Grants Received																					
Subtotal Available Funds	733,680	681,685	557,589	438,655	322,855	321,260	332,409	351,877	370,274	393,244	426,469	464,669	495,688	537,439	603,805	672,654	762,904	853,630	972,905	798,868	
Capital/Operations and Maintenance	301,338	389,328	401,008	413,038	314,766	318,759	328,022	347,562	362,389	372,511	388,936	418,674	435,734	436,126	458,860	464,946	493,394	495,216	820,423	539,025	
Revenues Over/Under Expenditures	(64,850)	(139,986)	(135,775)	(130,965)	(17,527)	(5,588)	1,886	(72)	3,570	12,848	16,799	8,462	13,959	41,360	43,632	62,763	61,802	88,904	(205,931)	107,360	
<b>Ending Fund Balance</b>	<b>432,342</b>	<b>292,356</b>	<b>156,581</b>	<b>25,616</b>	<b>8,089</b>	<b>2,501</b>	<b>4,387</b>	<b>4,315</b>	<b>7,885</b>	<b>20,734</b>	<b>37,533</b>	<b>45,995</b>	<b>59,953</b>	<b>101,313</b>	<b>144,945</b>	<b>207,708</b>	<b>269,510</b>	<b>358,413</b>	<b>152,483</b>	<b>259,842</b>	

**ADMINISTRATION  
WATER/WASTEWATER**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
PAYROLL	267,398	272,600	280,778	289,201	297,877	306,814	316,018	325,499	335,264	345,322	355,681
PAYROLL TAXES	21,400	33,150	34,145	35,169	36,224	37,311	38,430	39,583	40,770	41,993	43,253
RETIREMENT PLAN	10,725	14,950	15,399	15,860	16,336	16,826	17,331	17,851	18,387	18,938	19,506
INSURANCE	58,350	68,500	70,555	72,672	74,852	77,097	79,410	81,793	84,246	86,774	89,377
TRAINING/REGISTRATIONS	750	1,500	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900	1,957
TRAVEL & MEALS	500	500	515	530	546	563	580	597	615	633	652
AUDIT EXPENSE	3,500	3,500	3,605	3,713	3,825	3,939	4,057	4,179	4,305	4,434	4,567
BANK SERVICE CHARGES	50	50	52	53	55	56	58	60	61	63	65
CONTRACT SERVICE	4,500	4,500	4,635	4,774	4,917	5,065	5,217	5,373	5,534	5,700	5,871
LEGAL FEES	6,000	6,000	6,180	6,365	6,556	6,753	6,956	7,164	7,379	7,601	7,829
ENGINEERING FEES	2,000	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534	2,610
WATER RIGHTS/ENGINEERING	3,500	3,500	3,605	3,713	3,825	3,939	4,057	4,179	4,305	4,434	4,567
VEHICLE - REPAIRS	1,500	1,500	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900	1,957
CELL PHONE	3,900	3,900	4,017	4,138	4,262	4,389	4,521	4,657	4,797	4,940	5,089
POSTAGE	6,900	6,900	7,107	7,320	7,540	7,766	7,999	8,239	8,486	8,741	9,003
ADMIN FEE - GENERAL	17,820	94,516	97,351	100,272	103,280	106,379	109,570	112,857	116,243	119,730	123,322
HR CONSULTANT	500	500	515	530	546	563	580	597	615	633	652
ADVERTISING	250	250	258	265	273	281	290	299	307	317	326
RECORDING OF LIENS	300	300	309	318	328	338	348	358	369	380	391
WORKER'S COMP	14,500	14,500	14,935	15,383	15,845	16,320	16,809	17,314	17,833	18,368	18,919
INSURANCE/CIRSA	19,130	20,289	20,898	21,525	22,170	22,835	23,521	24,226	24,953	25,701	26,473
DUES/MEMBERSHIPS/SUBSCRIPTIONS	350	350	361	371	382	394	406	418	430	443	457
DITCH ASSESSMENT	100	100	103	106	109	113	116	119	123	127	130
SUPPLIES - OPERATING	2,000	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534	2,610
VEHICLE - FUEL	5,000	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524
WEED CONTROL	100	100	103	106	109	113	116	119	123	127	130
SMALL TOOLS & SUPPLIES	750	750	773	796	820	844	869	896	922	950	979
CAPITAL/CASH PURCHASES	5,000	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524
CREDIT CARD FEE	3,500	3,500	3,605	3,713	3,825	3,939	4,057	4,179	4,305	4,434	4,567
TRANSFER TO IRRIGATION FUND	49,170	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>509,443</b>	<b>570,205</b>	<b>587,311</b>	<b>604,930</b>	<b>623,078</b>	<b>641,771</b>	<b>661,024</b>	<b>680,855</b>	<b>701,280</b>	<b>722,319</b>	<b>743,988</b>

**OPERATIONS & MAINTENANCE**

**WATER**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
PAYROLL	101,340	93,600	96,408	99,300	102,279	105,348	108,508	111,763	115,116	118,570	122,127
PAYROLL TAXES	8,110	10,300	10,609	10,927	11,255	11,593	11,941	12,299	12,668	13,048	13,439
RETIREMENT PLAN	4,055	5,100	5,253	5,411	5,573	5,740	5,912	6,090	6,272	6,461	6,654
INSURANCE	24,150	25,300	26,059	26,841	27,646	28,475	29,330	30,210	31,116	32,049	33,011
TRAINING/REGISTRATIONS	750	1,500	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900	1,957
CONTRACT SERVICE	1,000	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534	2,610
TESTING AND PERMITS	4,000	4,000	4,120	4,244	4,371	4,502	4,637	4,776	4,919	5,067	5,219
LEGAL FEES	1,000	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305
ENGINEER FEES	5,000	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524
REPAIRS & MAINTENANCE/WATER PLANT	30,000	50,000	51,500	53,045	54,636	56,275	57,964	59,703	61,494	63,339	65,239
REPAIRS & MAINTENANCE/DISTRIBUTION SYS	60,000	75,000	77,250	79,568	81,955	84,413	86,946	89,554	92,241	95,008	97,858
REPAIRS & MAINTENANCE/BULK WATER	5,000	10,000	10,300	10,609	10,927	11,255	11,593	11,941	12,299	12,668	13,048
TELEPHONE EXPENSE	2,700	1,358	1,399	1,441	1,484	1,528	1,574	1,622	1,670	1,720	1,772
UTILITIES	54,000	54,000	55,620	57,289	59,007	60,777	62,601	64,479	66,413	68,406	70,458
DUES/MEMBERSHIPS/SUBSCRIPTIONS	1,000	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305
SUPPLIES - MAINTENANCE/DISTRIBUTION SYS	1,000	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305
SUPPLIES - OPERATING/DISTRIBUTION SYS	10,000	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,448	19,002	19,572
SUPPLIES - OPERATING/WATER PLANT	1,500	1,500	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900	1,957
SUPPLIES - LAB	6,000	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534	2,610
CHEMICALS - WATER PLANT	21,000	25,000	25,750	26,523	27,318	28,138	28,982	29,851	30,747	31,669	32,619
SMALL TOOLS & SUPPLIES/LAB	500	500	515	530	546	563	580	597	615	633	652
SMALL TOOLS & SUPPLIES	2,000	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305
CAPITAL/CASH PURCHASES	100,000	622,989	14,500	19,500	9,500	409,500	358,500	381,638	332,000	22,000	362,754
CAPITAL LEASE/BACKHOE	4,930	4,930	5,078	5,230	5,387	5,549	5,715	5,887	6,063	6,245	6,433
DEBT SERVICE - PRINCIPAL	150,000	162,500	167,375	172,396	177,568	182,895	188,382	194,033	199,855	205,850	212,026
DEBT SERVICE - INTEREST	77,835	7,219	7,436	7,659	7,888	8,125	8,369	8,620	8,878	9,145	9,419
<b>TOTAL</b>	<b>676,870</b>	<b>1,182,796</b>	<b>591,101</b>	<b>613,399</b>	<b>621,216</b>	<b>1,039,568</b>	<b>1,007,470</b>	<b>1,037,694</b>	<b>1,020,492</b>	<b>731,147</b>	<b>1,093,175</b>

**OPERATIONS & MAINTENANCE  
WASTEWATER**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
PAYROLL	101,340	93,600	96,408	99,300	102,279	105,348	108,508	111,763	115,116	118,570	122,127
PAYROLL TAXES	8,110	10,300	10,609	10,927	11,255	11,593	11,941	12,299	12,668	13,048	13,439
RETIREMENT PLAN	4,055	5,100	5,253	5,411	5,573	5,740	5,912	6,090	6,272	6,461	6,654
INSURANCE	24,150	25,300	26,059	26,841	27,646	28,475	29,330	30,210	31,116	32,049	33,011
TRAVEL/REGISTRATIONS	500	1,500	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900	1,957
TRAVEL/MEALS	400	500	515	530	546	563	580	597	615	633	652
CONTRACT SERVICE	1,500	1,500	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900	1,957
TESTING & PERMITS	4,500	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524
ENGINEER FEES	100	100	103	106	109	113	116	119	123	127	130
REPAIRS & MAINTENANCE/WASTEWATER TRMT PLANT	40,000	40,000	41,200	42,436	43,709	45,020	46,371	47,762	49,195	50,671	52,191
REPAIRS & MAINTENANCE/COLLECTION SYS	20,000	25,000	25,750	26,523	27,318	28,138	28,982	29,851	30,747	31,669	32,619
EQUIPMENT RENTAL	200	200	206	212	219	225	232	239	246	253	261
TELEPHONE EXPENSE	2,200	2,200	2,266	2,334	2,404	2,476	2,550	2,627	2,706	2,787	2,871
UTILITIES	53,000	53,000	54,590	56,228	57,915	59,652	61,442	63,285	65,183	67,139	69,153
SLUDGE REMOVAL	50,000	50,000	51,500	53,045	54,636	56,275	57,964	59,703	61,494	63,339	65,239
SUPPLIES - MAINTENANCE/COLLECTION	250	250	258	265	273	281	290	299	307	317	326
SUPPLIES - OPERATIONS/WASTEWATER TRMT PLANT	1,500	1,500	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900	1,957
SUPPLIES - LAB	3,500	3,500	3,605	3,713	3,825	3,939	4,057	4,179	4,305	4,434	4,567
CHEMICALS - WASTEWATER TREATMENT PLANT	11,000	11,000	11,330	11,670	12,020	12,381	12,752	13,135	13,529	13,934	14,353
MISCELLANEOUS	1,500	1,500	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900	1,957
SMALL TOOLS & SUPPLIES/LAB	1,500	1,500	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900	1,957
CAPITAL/CASH PURCHASES	100,000	622,989	412,500	243,000	162,500	412,500	432,500	385,638	336,000	76,000	366,754
WETLANDS	100	100	103	106	109	113	116	119	123	127	130
DEBT SERVICE - PRINCIPAL	150,000	162,500	167,375	172,396	177,568	182,895	188,382	194,033	199,855	205,850	212,026
DEBT SERVICE - INTEREST	77,835	72,519	74,695	76,935	79,243	81,621	84,069	86,591	89,189	91,865	94,621
<b>TOTAL</b>	<b>657,240</b>	<b>1,190,658</b>	<b>997,199</b>	<b>1,027,115</b>	<b>1,057,928</b>	<b>1,051,416</b>	<b>1,090,584</b>	<b>1,063,464</b>	<b>1,034,161</b>	<b>795,106</b>	<b>1,107,433</b>

**OPERATIONS & MAINTENANCE**

**IRRIGATION**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
PAYROLL	109,130	118,400	121,952	125,611	129,379	133,260	137,258	141,376	145,617	149,986	154,485
PAYROLL TAXES	9,095	13,300	13,699	14,110	14,533	14,969	15,418	15,881	16,357	16,848	17,353
RETIREMENT PLAN	4,548	5,900	6,077	6,259	6,447	6,641	6,840	7,045	7,256	7,474	7,698
INSURANCE	22,750	27,050	27,862	28,697	29,558	30,445	31,358	32,299	33,268	34,266	35,294
AUDIT EXPENSE	3,500	3,500	3,605	3,713	3,825	3,939	4,057	4,179	4,305	4,434	4,567
LEGAL FEES	100	100	103	106	109	113	116	119	123	127	130
ENGINEER FEES	200	0	0	0	0	0	0	0	0	0	0
REPAIRS & MAINTENANCE	10,000	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,448	19,002	19,572
REPAIRS - VEHICLE	1,000	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305
CELL PHONE	850	850	876	902	929	957	985	1,015	1,045	1,077	1,109
UTILITIES	16,000	20,000	20,600	21,218	21,855	22,510	23,185	23,881	24,597	25,335	26,095
POSTAGE	1,100	1,100	1,133	1,167	1,202	1,238	1,275	1,313	1,353	1,393	1,435
ADMINISTRATIVE FEE	8,360	11,940	12,298	12,667	13,047	13,439	13,842	14,257	14,685	15,125	15,579
HR CONSULTANT	200	200	206	212	219	225	232	239	246	253	261
WORKERS' COMPENSATION INSURANCE	4,100	4,100	4,223	4,350	4,480	4,615	4,753	4,896	5,042	5,194	5,350
INSURANCE/CIRSA	11,645	11,468	11,812	12,166	12,531	12,907	13,295	13,693	14,104	14,527	14,963
ASSESSMENTS - DITCH	7,500	9,000	9,270	9,548	9,835	10,130	10,433	10,746	11,069	11,401	11,743
VEHICLE - FUEL	1,000	1,500	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900	1,957
SMALL TOOLS & SUPPLIES	1,000	1,500	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900	1,957
CAPITAL/CASH PURCHASES	0	0	0	0	0	0	0	0	0	0	0
CAPITAL LEASE/BACKHOE	4,930	4,930	5,078	5,230	5,387	5,549	5,715	5,887	6,063	6,245	6,433
CAPITAL/SYSTEM IMPROVEMENTS	247,300	35,000	115,000	15,000	40,000	15,000	10,000	10,000	20,000	25,000	25,000
CAPITAL/WATER RIGHTS	1,500	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,448	19,002	19,572
MISCELLANEOUS	500	500	515	530	546	563	580	597	615	633	652
<b>TOTAL</b>	<b>466,308</b>	<b>301,338</b>	<b>389,328</b>	<b>401,008</b>	<b>413,038</b>	<b>314,766</b>	<b>318,759</b>	<b>328,022</b>	<b>347,562</b>	<b>362,389</b>	<b>372,511</b>

**ADMINISTRATION  
WATER/WASTEWATER**

	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
PAYROLL	366,352	377,342	388,662	400,322	412,332	424,702	437,443	450,566	464,083	478,006
PAYROLL TAXES	44,551	45,887	47,264	48,682	50,142	51,647	53,196	54,792	56,436	58,129
RETIREMENT PLAN	20,092	20,694	21,315	21,955	22,613	23,292	23,990	24,710	25,451	26,215
INSURANCE	92,058	94,820	97,665	100,595	103,612	106,721	109,922	113,220	116,617	120,115
TRAINING/REGISTRATIONS	2,016	2,076	2,139	2,203	2,269	2,337	2,407	2,479	2,554	2,630
TRAVEL & MEALS	672	692	713	734	756	779	802	826	851	877
AUDIT EXPENSE	4,704	4,845	4,990	5,140	5,294	5,453	5,616	5,785	5,959	6,137
BANK SERVICE CHARGES	67	69	71	73	76	78	80	83	85	88
CONTRACT SERVICE	6,048	6,229	6,416	6,608	6,807	7,011	7,221	7,438	7,661	7,891
LEGAL FEES	8,063	8,305	8,555	8,811	9,076	9,348	9,628	9,917	10,215	10,521
ENGINEERING FEES	2,688	2,768	2,852	2,937	3,025	3,116	3,209	3,306	3,405	3,507
WATER RIGHTS/ENGINEERING	4,704	4,845	4,990	5,140	5,294	5,453	5,616	5,785	5,959	6,137
VEHICLE - REPAIRS	2,016	2,076	2,139	2,203	2,269	2,337	2,407	2,479	2,554	2,630
CELL PHONE	5,241	5,399	5,560	5,727	5,899	6,076	6,258	6,446	6,639	6,839
POSTAGE	9,273	9,551	9,838	10,133	10,437	10,750	11,072	11,405	11,747	12,099
ADMIN FEE - GENERAL	127,022	130,832	134,757	138,800	142,964	147,253	151,670	156,221	160,907	165,734
HR CONSULTANT	672	692	713	734	756	779	802	826	851	877
ADVERTISING	336	346	356	367	378	389	401	413	426	438
RECORDING OF LIENS	403	415	428	441	454	467	481	496	511	526
WORKER'S COMP	19,487	20,071	20,674	21,294	21,933	22,591	23,268	23,966	24,685	25,426
INSURANCE/CIRSA	27,267	28,085	28,927	29,795	30,689	31,610	32,558	33,535	34,541	35,577
DUES/MEMBERSHIPS/SUBSCRIPTIONS	470	484	499	514	529	545	562	578	596	614
DITCH ASSESSMENT	134	138	143	147	151	156	160	165	170	175
SUPPLIES - OPERATING	2,688	2,768	2,852	2,937	3,025	3,116	3,209	3,306	3,405	3,507
VEHICLE - FUEL	6,720	6,921	7,129	7,343	7,563	7,790	8,024	8,264	8,512	8,768
WEED CONTROL	134	138	143	147	151	156	160	165	170	175
SMALL TOOLS & SUPPLIES	1,008	1,038	1,069	1,101	1,134	1,168	1,204	1,240	1,277	1,315
CAPITAL/CASH PURCHASES	6,720	6,921	7,129	7,343	7,563	7,790	8,024	8,264	8,512	8,768
CREDIT CARD FEE	4,704	4,845	4,990	5,140	5,294	5,453	5,616	5,785	5,959	6,137
TRANSFER TO IRRIGATION FUND	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>766,308</b>	<b>789,297</b>	<b>812,976</b>	<b>837,365</b>	<b>862,486</b>	<b>888,361</b>	<b>915,012</b>	<b>942,462</b>	<b>970,736</b>	<b>999,858</b>

**OPERATIONS & MAINTENANCE**

**WATER**

	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
PAYROLL	125,791	129,564	133,451	137,455	141,578	145,826	150,201	154,707	159,348	164,128
PAYROLL TAXES	13,842	14,258	14,685	15,126	15,580	16,047	16,528	17,024	17,535	18,061
RETIREMENT PLAN	6,854	7,060	7,271	7,490	7,714	7,946	8,184	8,430	8,682	8,943
INSURANCE	34,001	35,021	36,072	37,154	38,269	39,417	40,599	41,817	43,072	44,364
TRAINING/REGISTRATIONS	2,016	2,076	2,139	2,203	2,269	2,337	2,407	2,479	2,554	2,630
CONTRACT SERVICE	2,688	2,768	2,852	2,937	3,025	3,116	3,209	3,306	3,405	3,507
TESTING AND PERMITS	5,376	5,537	5,703	5,874	6,050	6,232	6,419	6,611	6,810	7,014
LEGAL FEES	1,344	1,384	1,426	1,469	1,513	1,558	1,605	1,653	1,702	1,754
ENGINEER FEES	6,720	6,921	7,129	7,343	7,563	7,790	8,024	8,264	8,512	8,768
REPAIRS & MAINTENANCE/WATER PLANT	67,196	69,212	71,288	73,427	75,629	77,898	80,235	82,642	85,122	87,675
REPAIRS & MAINTENANCE/DISTRIBUTION SYS	100,794	103,818	106,932	110,140	113,444	116,848	120,353	123,964	127,682	131,513
REPAIRS & MAINTENANCE/BULK WATER	13,439	13,842	14,258	14,685	15,126	15,580	16,047	16,528	17,024	17,535
TELEPHONE EXPENSE	1,825	1,880	1,936	1,994	2,054	2,116	2,179	2,245	2,312	2,381
UTILITIES	72,571	74,749	76,991	79,301	81,680	84,130	86,654	89,254	91,931	94,689
DUES/MEMBERSHIPS/SUBSCRIPTIONS	1,344	1,384	1,426	1,469	1,513	1,558	1,605	1,653	1,702	1,754
SUPPLIES - MAINTENANCE/DISTRIBUTION SYS	1,344	1,384	1,426	1,469	1,513	1,558	1,605	1,653	1,702	1,754
SUPPLIES - OPERATING/DISTRIBUTION SYS	20,159	20,764	21,386	22,028	22,689	23,370	24,071	24,793	25,536	26,303
SUPPLIES - OPERATING/WATER PLANT	2,016	2,076	2,139	2,203	2,269	2,337	2,407	2,479	2,554	2,630
SUPPLIES - LAB	2,688	2,768	2,852	2,937	3,025	3,116	3,209	3,306	3,405	3,507
CHEMICALS - WATER PLANT	33,598	34,606	35,644	36,713	37,815	38,949	40,118	41,321	42,561	43,838
SMALL TOOLS & SUPPLIES/LAB	672	692	713	734	756	779	802	826	851	877
SMALL TOOLS & SUPPLIES	1,344	1,384	1,426	1,469	1,513	1,558	1,605	1,653	1,702	1,754
CAPITAL/CASH PURCHASES	434,963	657,500	557,500	623,233	394,500	32,500	709,104	199,000	758,000	714,707
CAPITAL LEASE/BACKHOE	6,626	6,824	7,029	7,240	7,457	7,681	7,911	8,149	8,393	8,645
DEBT SERVICE - PRINCIPAL	218,386	224,938	231,686	238,637	245,796	253,170	260,765	268,588	276,645	284,945
DEBT SERVICE - INTEREST	9,702	9,993	10,293	10,601	10,919	11,247	11,584	11,932	12,290	12,659
<b>TOTAL</b>	<b>1,187,297</b>	<b>1,432,404</b>	<b>1,355,651</b>	<b>1,445,328</b>	<b>1,241,258</b>	<b>904,661</b>	<b>1,607,430</b>	<b>1,124,276</b>	<b>1,711,034</b>	1,696,332

**OPERATIONS & MAINTENANCE  
WASTEWATER**

	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
PAYROLL	125,791	129,564	133,451	137,455	141,578	145,826	150,201	154,707	159,348	164,128
PAYROLL TAXES	13,842	14,258	14,685	15,126	15,580	16,047	16,528	17,024	17,535	18,061
RETIREMENT PLAN	6,854	7,060	7,271	7,490	7,714	7,946	8,184	8,430	8,682	8,943
INSURANCE	34,001	35,021	36,072	37,154	38,269	39,417	40,599	41,817	43,072	44,364
TRAVEL/REGISTRATIONS	2,016	2,076	2,139	2,203	2,269	2,337	2,407	2,479	2,554	2,630
TRAVEL/MEALS	672	692	713	734	756	779	802	826	851	877
CONTRACT SERVICE	2,016	2,076	2,139	2,203	2,269	2,337	2,407	2,479	2,554	2,630
TESTING & PERMITS	6,720	6,921	7,129	7,343	7,563	7,790	8,024	8,264	8,512	8,768
ENGINEER FEES	134	138	143	147	151	156	160	165	170	175
REPAIRS & MAINTENANCE/WASTEWATER TRMT PLANT	53,757	55,369	57,030	58,741	60,504	62,319	64,188	66,114	68,097	70,140
REPAIRS & MAINTENANCE/COLLECTION SYS	33,598	34,606	35,644	36,713	37,815	38,949	40,118	41,321	42,561	43,838
EQUIPMENT RENTAL	269	277	285	294	303	312	321	331	340	351
TELEPHONE EXPENSE	2,957	3,045	3,137	3,231	3,328	3,428	3,530	3,636	3,745	3,858
UTILITIES	71,228	73,364	75,565	77,832	80,167	82,572	85,049	87,601	90,229	92,936
SLUDGE REMOVAL	67,196	69,212	71,288	73,427	75,629	77,898	80,235	82,642	85,122	87,675
SUPPLIES - MAINTENANCE/COLLECTION	336	346	356	367	378	389	401	413	426	438
SUPPLIES - OPERATIONS/WASTEWATER TRMT PLANT	2,016	2,076	2,139	2,203	2,269	2,337	2,407	2,479	2,554	2,630
SUPPLIES - LAB	4,704	4,845	4,990	5,140	5,294	5,453	5,616	5,785	5,959	6,137
CHEMICALS - WASTEWATER TREATMENT PLANT	14,783	15,227	15,683	16,154	16,638	17,138	17,652	18,181	18,727	19,289
MISCELLANEOUS	2,016	2,076	2,139	2,203	2,269	2,337	2,407	2,479	2,554	2,630
SMALL TOOLS & SUPPLIES/LAB	2,016	2,076	2,139	2,203	2,269	2,337	2,407	2,479	2,554	2,630
CAPITAL/CASH PURCHASES	438,963	712,500	562,500	636,233	449,500	37,500	865,104	244,830	764,000	1,728,707
WETLANDS	134	138	143	147	151	156	160	165	170	175
DEBT SERVICE - PRINCIPAL	218,386	224,938	231,686	238,637	245,796	253,170	260,765	268,588	276,645	284,945
DEBT SERVICE - INTEREST	97,459	100,383	103,395	106,497	109,691	112,982	116,372	119,863	123,459	127,163
<b>TOTAL</b>	<b>1,201,863</b>	<b>1,498,287</b>	<b>1,371,860</b>	<b>1,469,874</b>	<b>1,308,150</b>	<b>921,910</b>	<b>1,776,046</b>	<b>1,183,100</b>	<b>1,730,418</b>	<b>1,782,331</b>

**OPERATIONS & MAINTENANCE  
IRRIGATION**

	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
PAYROLL	159,120	163,893	168,810	173,874	179,091	184,463	189,997	195,697	201,568	207,615
PAYROLL TAXES	17,874	18,410	18,963	19,531	20,117	20,721	21,343	21,983	22,642	23,322
RETIREMENT PLAN	7,929	8,167	8,412	8,664	8,924	9,192	9,468	9,752	10,044	10,346
INSURANCE	36,353	37,444	38,567	39,724	40,916	42,143	43,407	44,710	46,051	47,432
AUDIT EXPENSE	4,704	4,845	4,990	5,140	5,294	5,453	5,616	5,785	5,959	6,137
LEGAL FEES	134	138	143	147	151	156	160	165	170	175
ENGINEER FEES	0	0	0	0	0	0	0	0	0	0
REPAIRS & MAINTENANCE	20,159	20,764	21,386	22,028	22,689	23,370	24,071	24,793	25,536	26,303
REPAIRS - VEHICLE	1,344	1,384	1,426	1,469	1,513	1,558	1,605	1,653	1,702	1,754
CELL PHONE	1,142	1,177	1,212	1,248	1,286	1,324	1,364	1,405	1,447	1,490
UTILITIES	26,878	27,685	28,515	29,371	30,252	31,159	32,094	33,057	34,049	35,070
POSTAGE	1,478	1,523	1,568	1,615	1,664	1,714	1,765	1,818	1,873	1,929
ADMINISTRATIVE FEE	16,046	16,528	17,024	17,534	18,060	18,602	19,160	19,735	20,327	20,937
HR CONSULTANT	269	277	285	294	303	312	321	331	340	351
WORKERS' COMPENSATION INSURANCE	5,510	5,675	5,846	6,021	6,202	6,388	6,579	6,777	6,980	7,189
INSURANCE/CIRSA	15,412	15,874	16,351	16,841	17,346	17,867	18,403	18,955	19,524	20,109
ASSESSMENTS - DITCH	12,095	12,458	12,832	13,217	13,613	14,022	14,442	14,876	15,322	15,782
VEHICLE - FUEL	2,016	2,076	2,139	2,203	2,269	2,337	2,407	2,479	2,554	2,630
SMALL TOOLS & SUPPLIES	2,016	2,076	2,139	2,203	2,269	2,337	2,407	2,479	2,554	2,630
CAPITAL/CASH PURCHASES	0	0	0	0	0	0	0	0	0	0
CAPITAL LEASE/BACKHOE	6,626	6,824	7,029	7,240	7,457	7,681	7,911	8,149	8,393	8,645
CAPITAL/SYSTEM IMPROVEMENTS	31,000	50,000	56,000	45,000	56,000	50,000	66,000	55,000	367,000	72,000
CAPITAL/WATER RIGHTS	20,159	20,764	21,386	22,028	22,689	23,370	24,071	24,793	25,536	26,303
MISCELLANEOUS	672	692	713	734	756	779	802	826	851	877
<b>TOTAL</b>	<b>388,936</b>	<b>418,674</b>	<b>435,734</b>	<b>436,126</b>	<b>458,860</b>	<b>464,946</b>	<b>493,394</b>	<b>495,216</b>	<b>820,423</b>	<b>539,025</b>

**USER FEE SCHEDULE**

WATER	2018			2019			2020			2021			2022		
	NUMBER OF EQRs	RATE/MONTH 2,000 GALLONS	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 2,000 GALLONS	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 2,000 GALLONS	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 2,000 GALLONS	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 2,000 GALLONS	ANNUAL REVENUE
RESIDENTIAL SENIOR	121	19.93	28,938	123	20.53	30,403	126	21.14	31,941	130	21.78	33,886	132	22.43	35,601
RESIDENTIAL REGULAR	971	39.86	464,449	990	41.06	487,950	1,010	42.29	512,640	1,030	43.56	538,580	1,051	44.86	565,832
RESIDENTIAL STAND-BY	48	19.93	11,480	49	20.53	12,061	50	21.14	12,671	51	21.78	13,312	52	22.43	13,986
RESIDENTIAL NC - PRIOR TO CO	14	0.00	0	14	0.00	0	15	0.00	0	15	0.00	0	15	0.00	0
RESIDENTIAL IHM	13	63.78	9,950	17	65.69	13,401	21	67.66	17,051	25	69.69	20,908	29	71.78	24,981
IRRIGATION IHM OPEN SPACE	8	39.86	3,937	8	41.06	4,055	16	42.29	8,353	16	43.56	8,603	16	44.86	8,861
RESIDENTIAL OOT	13	79.72	12,436	13	82.11	12,809	13	84.57	13,194	13	87.11	13,590	13	89.73	13,997
RESIDENTIAL OOT SENIOR	3	39.86	1,435	4	41.06	1,971	5	42.29	2,537	6	43.56	3,136	7	44.86	3,768
RESIDENCE + ADU	17	60.58	12,358	17	62.40	12,984	18	64.27	13,641	18	66.20	14,331	18	68.18	15,056
RESIDENTIAL APT/CONDO	21	39.86	10,140	22	41.06	10,653	22	42.29	11,193	22	43.56	11,759	23	44.86	12,354
CHURCH	2	39.86	957	2	41.06	1,005	2	42.29	1,056	2	43.56	1,120	2	44.86	1,177
NONPROFIT	1	39.86	478	1	41.06	503	1	42.29	528	1	43.56	555	1	44.86	583
GOVERNMENT	7	0.00	0	7	0.00	0	7	0.00	0	7	0.00	0	8	0.00	0
COMMERCIAL	168	39.86	80,276	171	41.06	84,338	175	42.29	88,606	178	43.56	93,089	182	44.86	97,800
COMMERCIAL STAND-BY	3	19.93	634	3	20.53	653	3	21.14	672	3	21.78	693	3	22.43	713
<b>SUBTOTAL</b>	<b>1410</b>		<b>637,468</b>	<b>1,442</b>		<b>672,785</b>	<b>1,483</b>		<b>714,082</b>	<b>1,518</b>		<b>753,561</b>	<b>1,552</b>		<b>794,709</b>
BULK WATER S. 7TH STREET	128	20.00	30,720	131	22.00	34,468	133	24.00	38,353	136	26.00	42,380	139	28.00	46,553
BULK WATER FRONT ST	92	24.00	26,568	94	26.00	29,358	96	28.00	32,248	98	30.00	35,243	100	32.00	38,344
<b>SUBTOTAL</b>	<b>1630</b>		<b>694,756</b>	<b>1,667</b>		<b>736,611</b>	<b>1,713</b>		<b>784,684</b>	<b>1,752</b>		<b>831,185</b>	<b>1,791</b>		<b>879,606</b>
LATE PAYMENTS/OVERAGES			47,468			48,417			49,386			50,373			51,381
<b>SUBTOTAL</b>	<b>1630</b>		<b>742,224</b>	<b>1,667</b>		<b>785,028</b>	<b>1,713</b>		<b>834,069</b>	<b>1,752</b>		<b>881,558</b>	<b>1,791</b>		<b>930,987</b>
WATER SYSTEM IMP (TAP)	18	5835.98	104,347	18	5835.98	106,434	19	5835.98	108,563	19	5835.98	110,734	19	5835.98	112,949
<b>TOTAL</b>	<b>1,648</b>		<b>846,571</b>	<b>1,685</b>		<b>891,462</b>	<b>1,731</b>		<b>942,632</b>	<b>1,771</b>		<b>992,292</b>	<b>1,810</b>		<b>1,043,936</b>

**USER FEE SCHEDULE**

WASTEWATER	2018			2019			2020			2021			2022		
	NUMBER OF EQRs	RATE/MONTH 6,000 GALLONS	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 6,000 GALLONS	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 6,000 GALLONS	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 6,000 GALLONS	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 6,000 GALLONS	ANNUAL REVENUE
RESIDENTIAL SENIOR	121	27.16	39,436	123	27.97	41,432	126	28.81	43,528	130	29.68	46,179	134	30.57	48,991
RESIDENTIAL REGULAR	971	54.21	631,655	990	55.84	663,617	1,010	57.51	697,196	1,041	59.24	739,655	1,072	61.01	784,700
RESIDENTIAL STAND-BY	48	27.16	15,644	49	27.97	16,436	50	28.81	17,267	51	29.68	18,319	53	30.57	19,435
RESIDENTIAL NC- PRIOR TO CO	14	0.00	0	14	0.00	0	15	0.00	0	15	0.00	0	15	0.00	0
RESIDENTIAL IHM	13	54.21	8,457	17	55.84	11,391	21	57.51	14,493	25	59.24	17,771	29	61.01	21,233
RESIDENCE + ADU	17	86.74	17,695	17	89.34	18,590	18	92.02	19,531	18	94.78	20,720	19	97.63	21,982
RESIDENTIAL APT/CONDO	21	54.21	13,791	22	55.84	14,489	22	57.51	15,222	23	59.24	16,149	23	61.01	17,132
CHURCH	2	54.21	1,301	2	55.84	1,367	2	57.51	1,436	2	59.24	1,523	2	61.01	1,616
NONPROFIT	1	54.21	651	1	55.84	683	1	57.51	718	1	59.24	762	1	61.01	808
GOVERNMENT	7	0.00	0	7	0.00	0	7	0.00	0	8	0.00	0	8	0.00	0
COMMERCIAL	168	54.21	109,177	171	55.84	114,701	175	57.51	120,505	180	59.24	127,844	185	61.01	135,629
COMMERCIAL STAND-BY	3	27.16	864	3	27.97	890	3	28.81	916	3	29.68	944	3	30.57	972
<b>SUBTOTAL</b>	<b>1386</b>		<b>838,670</b>	<b>1,417</b>		<b>883,595</b>	<b>1,449</b>		<b>930,812</b>	<b>1,496</b>		<b>989,866</b>	<b>1,544</b>		<b>1,052,499</b>
LATE PAYMENTS			80,903			82,521			84,171			85,855			87,572
<b>SUBTOTAL</b>	<b>1,386</b>		<b>919,573</b>	<b>1,417</b>		<b>966,116</b>	<b>1,449</b>		<b>1,014,984</b>	<b>1,496</b>		<b>1,075,721</b>	<b>1,544</b>		<b>1,140,071</b>
WW SYSTEM IMP (TAP)	18	5835.98	108,846	18	5835.98	107,149	19	5835.98	109,292	19	5835.98	111,477	19	5835.98	113,707
<b>TOTAL</b>	<b>1,404</b>		<b>1,028,419</b>	<b>1,435</b>		<b>1,073,265</b>	<b>1,468</b>		<b>1,124,276</b>	<b>1,515</b>		<b>1,187,199</b>	<b>1,563</b>		<b>1,253,778</b>

USER FEE SCHEDULE WATER	2023			2024			2025			2026			2027		
	NUMBER OF EQRs	RATE/MONTH 2,000 GALLONS	ANNUAL REVENUE												
RESIDENTIAL SENIOR	135	23.10	37,402	138	23.80	39,295	140	24.51	41,283	143	25.25	43,372	146	26.00	45,567
RESIDENTIAL REGULAR	1,072	46.21	594,463	1,094	47.59	624,543	1,115	49.02	656,145	1,138	50.49	689,345	1,160	52.01	724,226
RESIDENTIAL STAND-BY	53	23.10	14,693	54	23.80	15,437	55	24.51	16,218	56	25.25	17,038	57	26.00	17,901
RESIDENTIAL NC - PRIOR TO CO	15	0.00	0	16	0.00	0	16	0.00	0	16	0.00	0	17	0.00	0
RESIDENTIAL IHM	33	73.94	29,280	37	76.16	33,814	41	78.44	38,593	45	80.79	43,629	49	83.22	48,932
IRRIGATION IHM OPEN SPACE	16	46.21	9,127	16	47.59	9,401	16	49.02	9,683	16	50.49	9,973	16	52.01	10,273
RESIDENTIAL OOT	13	92.42	14,417	13	95.19	14,850	13	98.05	15,295	13	100.99	15,754	13	104.02	16,227
RESIDENTIAL OOT SENIOR	8	46.21	4,436	9	47.59	5,140	10	49.02	5,883	11	50.49	6,665	12	52.01	7,489
RESIDENCE + ADU	19	70.23	15,818	19	72.34	16,618	20	74.51	17,459	20	76.74	18,343	20	79.04	19,271
RESIDENTIAL APT/CONDO	23	46.21	12,979	24	47.59	13,636	24	49.02	14,326	25	50.49	15,051	25	52.01	15,812
CHURCH	2	46.21	1,236	2	47.59	1,299	2	49.02	1,365	2	50.49	1,434	2	52.01	1,506
NONPROFIT	1	46.21	612	1	47.59	643	1	49.02	676	1	50.49	710	1	52.01	753
GOVERNMENT	8	0.00	0	8	0.00	0	8	0.00	0	8	0.00	0	8	0.00	0
COMMERCIAL	185	46.21	102,748	189	47.59	107,947	193	49.02	113,410	197	50.49	119,148	201	52.01	125,177
COMMERCIAL STAND-BY	3	23.10	735	3	23.80	757	3	24.51	779	3	25.25	803	3	26.00	827
<b>SUBTOTAL</b>	<b>1,587</b>		<b>837,947</b>	<b>1,622</b>		<b>883,379</b>	<b>1,658</b>		<b>931,114</b>	<b>1,695</b>		<b>981,265</b>	<b>1,732</b>		<b>1,033,961</b>
BULK WATER S. 7TH STREET	141	28.00	47,484	144	30.00	51,894	147	34.00	59,989	150	38.00	68,387	153	42.00	77,098
BULK WATER FRONT ST	102	34.00	41,555	104	36.00	44,880	106	38.00	48,321	108	42.00	54,475	110	46.00	60,857
<b>SUBTOTAL</b>	<b>1,830</b>		<b>926,987</b>	<b>1,870</b>		<b>980,152</b>	<b>1,911</b>		<b>1,039,423</b>	<b>1,953</b>		<b>1,104,128</b>	<b>1,995</b>		<b>1,171,915</b>
LATE PAYMENTS			52,409			53,457			54,526			55,616			56,729
<b>SUBTOTAL</b>	<b>1,830</b>		<b>979,395</b>	<b>1,870</b>		<b>1,033,609</b>	<b>1,911</b>		<b>1,093,949</b>	<b>1,953</b>		<b>1,159,744</b>	<b>1,995</b>		<b>1,228,644</b>
WATER SYSTEM IMP (TAP)	20	5835.98	115,208	20	5835.98	117,512	21	5835.98	119,862	21	5835.98	122,260	21	5835.98	124,705
<b>TOTAL</b>	<b>1,850</b>		<b>1,094,603</b>	<b>1,891</b>		<b>1,151,121</b>	<b>1,932</b>		<b>1,213,811</b>	<b>1,974</b>		<b>1,282,004</b>	<b>2,016</b>		<b>1,353,348</b>

WASTEWATER	2023			2024			2025			2026			2027		
	NUMBER OF EQRs	RATE/MONTH 6,000 GALLONS	ANNUAL REVENUE												
RESIDENTIAL SENIOR	136	31.49	51,470	139	32.43	54,075	142	33.40	56,811	145	34.41	59,686	147	35.44	62,706
RESIDENTIAL REGULAR	1,093	62.84	824,406	1,115	64.73	866,121	1,137	66.67	909,946	1,160	68.67	955,990	1,183	70.73	1,004,363
RESIDENTIAL STAND-BY	54	31.49	20,418	55	32.43	21,451	56	33.40	22,537	57	34.41	23,677	58	35.44	24,875
RESIDENTIAL NC- PRIOR TO CO	16	0.00	0	16	0.00	0	16	0.00	0	17	0.00	0	17	0.00	0
RESIDENTIAL IHM	33	62.84	24,886	37	64.73	28,740	41	66.67	32,802	45	68.67	37,083	49	70.73	41,590
RESIDENCE + ADU	19	100.56	23,095	20	103.57	24,263	20	106.68	25,491	20	109.88	26,781	21	113.18	28,136
RESIDENTIAL APT/CONDO	24	62.84	17,999	24	64.73	18,910	25	66.67	19,867	25	68.67	20,872	26	70.73	21,928
CHURCH	2	62.84	1,698	2	64.73	1,784	2	66.67	1,874	2	68.67	1,969	2	70.73	2,069
NONPROFIT	1	62.84	849	1	64.73	892	1	66.67	937	1	68.67	985	1	70.73	1,034
GOVERNMENT	8	0.00	0	8	0.00	0	8	0.00	0	8	0.00	0	9	0.00	0
COMMERCIAL	189	62.84	142,492	193	64.73	149,702	197	66.67	157,277	201	68.67	165,236	205	70.73	173,596
COMMERCIAL STAND-BY	3	31.49	1,001	3	32.43	1,031	3	33.40	1,062	3	34.41	1,094	3	35.44	1,127
<b>SUBTOTAL</b>	<b>1,578</b>		<b>1,108,315</b>	<b>1,613</b>		<b>1,166,969</b>	<b>1,648</b>		<b>1,228,605</b>	<b>1,684</b>		<b>1,293,371</b>	<b>1,721</b>		<b>1,361,424</b>
LATE PAYMENTS			89,323			91,110			92,932			94,791			96,687
<b>SUBTOTAL</b>	<b>1,578</b>		<b>1,197,638</b>	<b>1,613</b>		<b>1,258,079</b>	<b>1,648</b>		<b>1,321,537</b>	<b>1,684</b>		<b>1,388,162</b>	<b>1,721</b>		<b>1,458,111</b>
WW SYSTEM IMP (TAP)	20	5835.98	115,981	20	5835.98	118,301	21	5835.98	120,667	21	5835.98	123,080	22	5835.98	125,542
<b>TOTAL</b>	<b>1,598</b>		<b>1,313,620</b>	<b>1,633</b>		<b>1,376,380</b>	<b>1,669</b>		<b>1,442,204</b>	<b>1,706</b>		<b>1,511,242</b>	<b>1,743</b>		<b>1,583,653</b>

USER FEE SCHEDULE WATER	2028			2029			2030			2031			2032		
	NUMBER OF EQRs	RATE/MONTH 2,000 GALLONS	ANNUAL REVENUE												
RESIDENTIAL SENIOR	149	26.78	47,872	152	27.59	50,295	155	28.42	52,840	158	29.27	55,513	161	30.15	58,322
RESIDENTIAL REGULAR	1,184	53.57	760,872	1,207	55.18	799,372	1,231	56.83	839,821	1,256	58.54	882,316	1,281	60.29	926,961
RESIDENTIAL STAND-BY	59	26.78	18,806	60	27.59	19,758	61	28.42	20,758	62	29.27	21,808	63	30.15	22,911
RESIDENTIAL NC - PRIOR TO CO	17	0.00	0	17	0.00	0	18	0.00	0	18	0.00	0	18	0.00	0
RESIDENTIAL IHM	53	85.71	54,515	57	88.29	60,388	61	90.94	66,564	65	93.66	73,057	69	96.47	79,880
IRRIGATION IHM OPEN SPACE	33	53.57	21,162	33	55.18	21,797	33	56.83	22,450	33	58.54	23,124	33	60.29	23,818
RESIDENTIAL OOT	13	107.14	16,713	13	110.35	17,215	13	113.66	17,731	13	117.07	18,263	13	120.58	18,811
RESIDENTIAL OOT SENIOR	13	53.57	8,357	14	55.18	9,269	15	56.83	10,230	16	58.54	11,239	17	60.29	12,300
RESIDENCE + ADU	21	81.41	20,246	21	83.86	21,270	22	86.37	22,609	22	88.96	23,753	23	91.63	24,955
RESIDENTIAL APT/CONDO	26	53.57	16,612	27	55.18	17,624	27	56.83	18,516	28	58.54	19,453	28	60.29	20,437
CHURCH	2	53.57	1,583	3	55.18	1,663	3	56.83	1,747	3	58.54	1,835	3	60.29	1,928
NONPROFIT	1	53.57	791	1	55.18	831	1	56.83	873	1	58.54	918	1	60.29	964
GOVERNMENT	9	0.00	0	9	0.00	0	9	0.00	0	9	0.00	0	9	0.00	0
COMMERCIAL	205	53.57	131,511	209	55.18	138,165	213	56.83	145,157	217	58.54	152,502	221	60.29	160,218
COMMERCIAL STAND-BY	3	26.78	852	3	27.59	877	3	28.42	904	3	29.27	931	3	30.15	959
<b>SUBTOTAL</b>	<b>1,786</b>		<b>1,099,892</b>	<b>1,825</b>		<b>1,158,525</b>	<b>1,864</b>		<b>1,220,199</b>	<b>1,904</b>		<b>1,284,711</b>	<b>1,944</b>		<b>1,352,463</b>
BULK WATER S. 7TH STREET	156	44.00	82,385	159	46.00	87,852	162	48.00	93,505	166	50.00	99,349	169	52.00	105,389
BULK WATER FRONT ST	112	48.00	64,772	115	50.00	68,821	117	52.00	73,005	119	54.00	77,329	122	56.00	81,797
<b>SUBTOTAL</b>	<b>2,055</b>		<b>1,247,049</b>	<b>2,099</b>		<b>1,315,197</b>	<b>2,143</b>		<b>1,386,709</b>	<b>2,189</b>		<b>1,461,389</b>	<b>2,235</b>		<b>1,539,650</b>
LATE PAYMENTS			57,863			59,020			60,201			61,405			62,633
<b>SUBTOTAL</b>	<b>2,055</b>		<b>1,304,912</b>	<b>2,099</b>		<b>1,374,218</b>	<b>2,143</b>		<b>1,446,910</b>	<b>2,189</b>		<b>1,522,794</b>	<b>2,235</b>		<b>1,602,283</b>
WATER SYSTEM IMP (TAP)	22	5835.98	127,199	22	5835.98	129,743	23	5835.98	132,338	23	5835.98	134,984	24	5835.98	137,684
<b>TOTAL</b>	<b>2,076</b>		<b>1,432,111</b>	<b>2,121</b>		<b>1,503,960</b>	<b>2,166</b>		<b>1,579,248</b>	<b>2,212</b>		<b>1,657,779</b>	<b>2,259</b>		<b>1,739,967</b>

WASTEWATER	2028			2029			2030			2031			2032		
	NUMBER OF EQRs	RATE/MONTH 6,000 GALLONS	ANNUAL REVENUE												
RESIDENTIAL SENIOR	150	36.50	65,879	153	37.60	69,212	156	38.72	72,714	160	39.89	76,394	164	41.08	81,046
RESIDENTIAL REGULAR	1,207	72.85	1,055,183	1,231	75.04	1,108,576	1,256	77.29	1,164,670	1,281	79.61	1,223,602	1,319	82.00	1,298,119
RESIDENTIAL STAND-BY	60	36.50	26,134	61	37.60	27,456	62	38.72	28,845	63	39.89	30,305	65	41.08	32,150
RESIDENTIAL NC- PRIOR TO CO	17	0.00	0	18	0.00	0	18	0.00	0	18	0.00	0	19	0.00	0
RESIDENTIAL IHM	53	72.85	46,335	57	75.04	51,327	61	77.29	56,577	65	79.61	62,095	69	82.00	67,894
RESIDENCE + ADU	21	116.57	29,560	22	120.07	31,055	22	123.67	32,627	22	127.38	34,278	23	131.20	36,365
RESIDENTIAL APT/CONDO	26	72.85	23,038	27	75.04	24,204	27	77.29	25,428	28	79.61	26,715	29	82.00	28,342
CHURCH	2	72.85	2,173	3	75.04	2,283	3	77.29	2,399	3	79.61	2,520	3	82.00	2,674
NONPROFIT	1	72.85	1,087	1	75.04	1,142	1	77.29	1,199	1	79.61	1,275	1	82.00	1,353
GOVERNMENT	9	0.00	0	9	0.00	0	9	0.00	0	9	0.00	0	10	0.00	0
COMMERCIAL	209	72.85	182,380	213	75.04	191,609	217	77.29	201,304	221	79.61	211,490	228	82.00	224,370
COMMERCIAL STAND-BY	3	36.50	1,161	3	37.60	1,196	3	38.72	1,231	3	39.89	1,268	3	41.08	1,306
<b>SUBTOTAL</b>	<b>1,759</b>		<b>1,432,929</b>	<b>1,797</b>		<b>1,508,059</b>	<b>1,835</b>		<b>1,586,995</b>	<b>1,875</b>		<b>1,669,942</b>	<b>1,933</b>		<b>1,773,620</b>
LATE PAYMENTS			98,620			100,593			102,605			104,657			106,750
<b>SUBTOTAL</b>	<b>1,759</b>		<b>1,531,550</b>	<b>1,797</b>		<b>1,608,652</b>	<b>1,835</b>		<b>1,689,600</b>	<b>1,875</b>		<b>1,774,599</b>	<b>1,933</b>		<b>1,880,369</b>
WW SYSTEM IMP (TAP)	22	5835.98	128,052	22	5835.98	130,614	23	5835.98	133,226	23	5835.98	135,890	24	5835.98	138,608
<b>TOTAL</b>	<b>1,781</b>		<b>1,659,602</b>	<b>1,819</b>		<b>1,739,265</b>	<b>1,858</b>		<b>1,822,825</b>	<b>1,898</b>		<b>1,910,489</b>	<b>1,957</b>		<b>2,018,977</b>

USER FEE SCHEDULE WATER	2033			2034			2035			2036			2037		
	NUMBER OF EQRs	RATE/MONTH 2,000 GALLONS	ANNUAL REVENUE												
RESIDENTIAL SENIOR	164	31.05	61,273	168	31.98	64,374	171	32.94	67,631	175	33.93	71,053	178	34.95	74,649
RESIDENTIAL REGULAR	1,307	62.10	973,865	1,333	63.96	1,023,142	1,360	65.88	1,074,913	1,387	67.86	1,129,304	1,415	69.89	1,186,447
RESIDENTIAL STAND-BY	65	31.05	24,071	66	31.98	25,289	67	32.94	26,568	69	33.93	27,913	70	34.95	29,325
RESIDENTIAL NC - PRIOR TO CO	19	0.00	0	19	0.00	0	20	0.00	0	20	0.00	0	20	0.00	0
RESIDENTIAL IHM	73	99.37	87,046	74	102.35	91,450	78	105.42	99,254	82	108.58	107,443	86	111.84	116,035
IRRIGATION IHM OPEN SPACE	33	62.10	24,532	34	63.96	25,774	34	65.88	26,547	34	67.86	27,343	34	69.89	28,163
RESIDENTIAL OOT	13	124.20	19,375	13	127.93	20,356	13	131.77	20,555	13	135.72	21,172	13	139.79	21,807
RESIDENTIAL OOT SENIOR	17	62.10	12,669	17	63.96	13,310	20	65.88	15,812	21	67.86	17,100	22	69.89	18,452
RESIDENCE + ADU	23	94.38	26,475	24	97.21	27,815	24	100.13	29,222	25	103.13	30,701	25	106.23	32,254
RESIDENTIAL APT/CONDO	29	62.10	21,682	30	63.96	22,779	30	65.88	23,931	31	67.86	25,142	31	69.89	26,414
CHURCH	3	62.10	2,045	3	63.96	2,149	3	65.88	2,258	3	67.86	2,372	3	69.89	2,492
NONPROFIT	1	62.10	1,023	1	63.96	1,074	1	65.88	1,129	1	67.86	1,186	1	69.89	1,246
GOVERNMENT	10	0.00	0	10	0.00	0	10	0.00	0	10	0.00	0	10	0.00	0
COMMERCIAL	228	62.10	169,975	233	63.96	178,576	237	65.88	187,612	242	67.86	197,105	247	69.89	207,079
COMMERCIAL STAND-BY	3	31.05	987	3	31.98	1,037	3	32.94	1,048	3	33.93	1,079	3	34.95	1,111
<b>SUBTOTAL</b>	<b>1,987</b>		<b>1,425,018</b>	<b>2,027</b>		<b>1,497,124</b>	<b>2,071</b>		<b>1,576,480</b>	<b>2,115</b>		<b>1,658,914</b>	<b>2,159</b>		<b>1,745,475</b>
BULK WATER S. 7TH STREET	174	54.00	112,726	177	58.00	123,498	181	60.00	130,311	223	62.00	165,626	229	64.00	176,098
BULK WATER FRONT ST	125	58.00	87,260	128	62.00	95,143	130	64.00	100,177	133	66.00	105,374	137	68.00	111,824
<b>SUBTOTAL</b>	<b>4,274</b>		<b>1,625,005</b>	<b>2,333</b>		<b>1,715,766</b>	<b>2,383</b>		<b>1,806,968</b>	<b>2,470</b>		<b>1,929,913</b>	<b>2,525</b>		<b>2,033,396</b>
LATE PAYMENTS			63,886			65,163			66,467			67,796			69,152
<b>TOTAL</b>	<b>4,274</b>		<b>1,688,890</b>	<b>2,333</b>		<b>1,780,929</b>	<b>2,383</b>		<b>1,873,435</b>	<b>2,470</b>		<b>1,997,709</b>	<b>2,525</b>		<b>2,102,548</b>
WATER SYSTEM IMP (TAP)	24	5,835.98	140,438	25	5835.98	143,247	25	5835.98	146,111	26	5835.98	149,034	26	5835.98	152,014
<b>TOTAL</b>	<b>4,298</b>		<b>1,829,328</b>	<b>2,357</b>		<b>1,924,175</b>	<b>2,408</b>		<b>2,019,547</b>	<b>2,496</b>		<b>2,146,743</b>	<b>2,551</b>		<b>2,254,562</b>

WASTEWATER	2033			2034			2035			2036			2037		
	NUMBER OF EQRs	RATE/MONTH 6,000 GALLONS	ANNUAL REVENUE												
RESIDENTIAL SENIOR	168	42.31	85,147	171	43.58	89,455	174	44.89	93,982	178	46.24	98,737	182	47.63	103,733
RESIDENTIAL REGULAR	1,346	84.46	1,363,804	1,373	86.99	1,432,813	1,400	89.60	1,505,313	1,428	92.29	1,581,482	1,457	95.06	1,661,505
RESIDENTIAL STAND-BY	67	42.31	33,777	68	43.58	35,486	69	44.89	37,282	71	46.24	39,168	72	47.63	41,150
RESIDENTIAL NC- PRIOR TO CO	19	0.00	0	20	0.00	0	20	0.00	0	21	0.00	0	21	0.00	0
RESIDENTIAL IHM	73	84.46	73,985	74	86.99	77,728	78	89.60	84,361	82	92.29	91,322	86	95.06	98,624
RESIDENCE + ADU	24	135.14	38,205	24	139.19	40,138	25	143.37	42,169	25	147.67	44,303	26	152.10	46,545
RESIDENTIAL APT/CONDO	29	84.46	29,776	30	86.99	31,283	31	89.60	32,866	31	92.29	34,529	32	95.06	36,276
CHURCH	3	84.46	2,809	3	86.99	2,951	3	89.60	3,101	3	92.29	3,257	3	95.06	3,422
NONPROFIT	1	84.46	1,421	1	86.99	1,493	1	89.60	1,569	1	92.29	1,648	2	95.06	1,731
GOVERNMENT	10	0.00	0	10	0.00	0	10	0.00	0	10	0.00	0	11	0.00	0
COMMERCIAL	233	84.46	235,723	237	86.99	247,651	242	89.60	260,182	247	92.29	273,347	252	95.06	287,179
COMMERCIAL STAND-BY	3	42.31	1,346	3	43.58	1,414	3	44.89	1,428	3	46.24	1,470	3	47.63	1,514
<b>SUBTOTAL</b>	<b>1,974</b>		<b>1,865,993</b>	<b>2,014</b>		<b>1,960,412</b>	<b>2,056</b>		<b>2,062,251</b>	<b>2,100</b>		<b>2,169,264</b>	<b>2,144</b>		<b>2,281,680</b>
LATE PAYMENTS			108,885			111,062			113,284			115,549			117,860
<b>SUBTOTAL</b>	<b>1,974</b>		<b>1,974,878</b>	<b>2,014</b>		<b>2,071,475</b>	<b>2,056</b>		<b>2,175,535</b>	<b>2,100</b>		<b>2,284,813</b>	<b>2,144</b>		<b>2,399,540</b>
WW SYSTEM IMP (TAP)	24	5835.98	141,380	25	5835.98	144,208	25	5835.98	144,208	25	5835.98	147,092	26	5835.98	150,034
<b>TOTAL</b>	<b>1,999</b>		<b>2,116,258</b>	<b>2,039</b>		<b>2,215,683</b>	<b>2,081</b>		<b>2,319,743</b>	<b>2,125</b>		<b>2,431,905</b>	<b>2,170</b>		<b>2,549,574</b>

USER FEE SCHEDULE WATER	2038		
	NUMBER OF EQRs	RATE/MONTH 2,000 GALLONS	ANNUAL REVENUE
RESIDENTIAL SENIOR	182	36.00	78,426
RESIDENTIAL REGULAR	1,443	71.99	1,246,481
RESIDENTIAL STAND-BY	71	36.00	30,809
RESIDENTIAL NC - PRIOR TO CO	21	0.00	0
RESIDENTIAL IHM	90	115.19	125,045
IRRIGATION IHM OPEN SPACE	34	71.99	29,008
RESIDENTIAL OOT	13	143.98	22,461
RESIDENTIAL OOT SENIOR	23	71.99	19,870
RESIDENCE + ADU	26	109.41	33,886
RESIDENTIAL APT/CONDO	32	71.99	27,751
CHURCH	3	71.99	2,618
NONPROFIT	2	71.99	1,309
GOVERNMENT	11	0.00	0
COMMERCIAL	252	71.99	217,557
COMMERCIAL STAND-BY	3	36.00	1,145
<b>SUBTOTAL</b>	<b>2,204</b>		<b>1,836,366</b>
BULK WATER S. 7TH STREET	234	66.00	185,233
BULK WATER FRONT ST	140	70.00	117,415
<b>SUBTOTAL</b>	<b>2,578</b>		<b>2,139,014</b>
LATE PAYMENTS			70,535
<b>TOTAL</b>	<b>2,578</b>		<b>2,209,549</b>
WATER SYSTEM IMP (TAP)	27	5835.98	155,055
<b>TOTAL</b>	<b>2,604</b>		<b>2,364,603</b>

WASTEWATER	2038		
	NUMBER OF EQRs	RATE/MONTH 6,000 GALLONS	ANNUAL REVENUE
RESIDENTIAL SENIOR	185	49.05	108,982
RESIDENTIAL REGULAR	1,486	97.91	1,745,577
RESIDENTIAL STAND-BY	73	49.05	43,233
RESIDENTIAL NC- PRIOR TO CO	21	0.00	0
RESIDENTIAL IHM	90	97.91	106,282
RESIDENCE + ADU	26	156.66	48,900
RESIDENTIAL APT/CONDO	32	97.91	38,111
CHURCH	3	97.91	3,595
NONPROFIT	2	97.91	1,819
GOVERNMENT	11	0.00	0
COMMERCIAL	257	97.91	301,710
COMMERCIAL STAND-BY	3	49.05	1,560
<b>SUBTOTAL</b>	<b>2,189</b>		<b>2,399,769</b>
LATE PAYMENTS			120,218
<b>SUBTOTAL</b>	<b>2,189</b>		<b>2,519,987</b>
WATER SYSTEM IMP (TAP)	26	5835.98	153,035
<b>TOTAL</b>	<b>2,216</b>		<b>2,673,022</b>

**USER FEE SCHEDULE**

IRRIGATION	2018			2019			2020			2021			2022		
	NUMBER OF EQRs	RATE/MONTH 3,500 SQ. FT.	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 3,500 SQ. FT.	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 3,500 SQ. FT.	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 3,500 SQ. FT.	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 3,500 SQ. FT.	ANNUAL REVENUE
IRRIGATION >700 <799	18	7.71	139	18	7.94	1,750	19	8.18	1,838	19	8.42	1,950	20	8.68	2,069
IRRIGATION > 800 <3,500 SF	13	15.43	2,407	13	15.89	2,529	14	16.37	2,657	14	16.86	2,819	14	17.37	2,990
IRRIGATION >3,500 < 3,999	753	17.63	159,305	768	18.16	167,365	783	18.70	175,834	807	19.26	186,542	831	19.84	197,903
IRRIGATION > 4,000 < 4,499	48	19.99	11,514	49	20.59	12,097	50	21.21	12,709	51	21.84	13,483	53	22.50	14,304
IRRIGATION > 4,500 < 4,999	37	22.46	9,972	38	23.13	10,477	38	23.83	11,007	40	24.54	11,677	41	25.28	12,388
IRRIGATION > 5,000 < 5,499	26	25.05	7,816	30	25.80	9,289	34	26.58	10,843	38	27.37	12,482	42	28.19	14,210
IRRIGATION > 5,500 < 5,999	20	27.77	6,665	20	28.60	7,002	21	29.46	7,356	21	30.35	7,804	22	31.26	8,280
IRRIGATION > 6,000 < 6,499	16	30.60	5,875	16	31.52	6,172	17	32.46	6,485	17	33.44	6,880	18	34.44	7,299
IRRIGATION > 6,500 < 6,999	8	33.57	3,223	8	34.58	3,386	8	35.61	3,557	9	36.68	3,774	9	37.78	4,004
IRRIGATION > 7,000 < 7,999	8	36.65	3,518	8	37.75	3,696	8	38.88	3,883	9	40.05	4,120	9	41.25	4,371
IRRIGATION > 8,000 < 8,999	7	42.83	3,598	7	44.11	3,780	7	45.44	3,971	8	46.80	4,213	8	48.21	4,469
IRRIGATION > 9,000 < 9,999	6	48.99	3,527	6	50.46	3,706	6	51.97	3,893	6	53.53	4,130	7	55.14	4,382
IRRIGATION > 10,000	4	55.16	2,648	3	56.81	1,807	3	58.52	1,861	3	60.27	1,917	3	62.08	1,974
<b>SUBTOTAL</b>	<b>964</b>		<b>220,206</b>	<b>967</b>		<b>231,306</b>	<b>990</b>		<b>244,057</b>	<b>1,022</b>		<b>259,841</b>	<b>1,056</b>		<b>276,574</b>
IRRIGATION SYSTEM IMP (TAP)	12	410.79	5,081	13	410.79	5,182	13	410.79	5,286	13	410.79	5,392	13	410.79	5,499
<b>SUBTOTAL</b>			<b>225,287</b>			<b>236,488</b>			<b>249,343</b>			<b>265,233</b>			<b>282,073</b>
TRANSFER FROM W/WW			45,072												
<b>TOTAL</b>	<b>976</b>		<b>270,359</b>	<b>980</b>		<b>236,488</b>	<b>1,003</b>		<b>249,343</b>	<b>1,035</b>		<b>265,233</b>	<b>1,056</b>		<b>282,073</b>

USER FEE SCHEDULE IRRIGATION	2023			2024			2025			2026			2027		
	NUMBER OF EQRs	RATE/MONTH 3,500 SQ. FT.	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 3,500 SQ. FT.	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 3,500 SQ. FT.	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 3,500 SQ. FT.	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 3,500 SQ. FT.	ANNUAL REVENUE
IRRIGATION >700 <799	20	8.94	2,174	21	9.21	2,284	21	9.48	2,399	22	9.77	2,520	22	10.06	2,648
IRRIGATION > 800 <3,500 SF	15	17.89	3,142	15	18.42	3,301	15	18.98	3,468	16	19.55	3,643	16	20.13	3,827
IRRIGATION >3,500 < 3,999	848	20.44	207,917	865	21.05	218,437	882	21.68	229,490	900	22.33	241,103	918	23.00	253,302
IRRIGATION > 4,000 < 4,499	54	23.17	15,028	55	23.87	15,788	56	24.59	16,587	57	25.32	17,426	58	26.08	18,308
IRRIGATION > 4,500 < 4,999	42	26.04	13,015	42	26.82	13,674	43	27.62	14,366	44	28.45	15,093	45	29.31	15,856
IRRIGATION > 5,000 < 5,499	46	29.04	16,030	50	29.91	17,947	54	30.81	19,964	58	31.73	22,086	62	32.68	24,317
IRRIGATION > 5,500 < 5,999	23	32.19	8,699	23	33.16	9,139	23	34.15	9,601	24	35.18	10,087	24	36.23	10,597
IRRIGATION > 6,000 < 6,499	18	35.47	7,668	18	36.54	8,056	19	37.63	8,464	19	38.76	8,892	19	39.93	9,342
IRRIGATION > 6,500 < 6,999	9	38.92	4,206	9	40.08	4,419	9	41.29	4,643	10	42.53	4,877	10	43.80	5,124
IRRIGATION > 7,000 < 7,999	9	42.49	4,592	9	43.76	4,824	9	45.07	5,069	10	46.43	5,325	10	47.82	5,594
IRRIGATION > 8,000 < 8,999	8	49.65	4,696	8	51.14	4,933	8	52.68	5,183	8	54.26	5,445	9	55.88	5,721
IRRIGATION > 9,000 < 9,999	7	56.79	4,604	7	58.50	4,837	7	60.25	5,081	7	62.06	5,338	7	63.92	5,609
IRRIGATION > 10,000	3	63.95	2,033	3	65.86	2,094	3	67.84	2,157	3	69.88	2,222	3	71.97	2,289
<b>SUBTOTAL</b>	<b>1,080</b>		<b>291,629</b>	<b>1,105</b>		<b>307,449</b>	<b>1,130</b>		<b>324,072</b>	<b>1,155</b>		<b>341,537</b>	<b>1,181</b>		<b>359,887</b>
IRRIGATION SYSTEM IMP (TAP)	14	410.79	5,609	14	410.79	5,722	14	410.79	5,836	14	410.79	5,953	15	410.79	6,072
<b>SUBTOTAL</b>			<b>297,238</b>			<b>313,171</b>			<b>329,908</b>			<b>347,490</b>			<b>365,959</b>
TRANSFER FROM W/WW															
<b>TOTAL</b>	<b>1,080</b>		<b>297,238</b>	<b>1,105</b>		<b>313,171</b>	<b>1,130</b>		<b>329,908</b>	<b>1,155</b>		<b>347,490</b>	<b>1,181</b>		<b>365,959</b>

USER FEE SCHEDULE IRRIGATION	2028			2029			2030			2031			2032		
	NUMBER OF EQRs	RATE/MONTH 3,500 SQ. FT.	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 3,500 SQ. FT.	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 3,500 SQ. FT.	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 3,500 SQ. FT.	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 3,500 SQ. FT.	ANNUAL REVENUE
IRRIGATION >700 <799	22	10.36	2,782	23	10.67	2,923	23	10.99	3,071	24	11.32	3,226	24	11.66	3,422
IRRIGATION > 800 <3,500 SF	16	20.74	4,021	16	21.36	4,225	17	22.00	4,438	17	22.66	4,663	18	23.34	4,947
IRRIGATION >3,500 < 3,999	936	23.69	266,119	955	24.40	279,585	974	25.14	293,732	993	25.89	308,595	1,023	26.67	327,388
IRRIGATION > 4,000 < 4,499	60	26.86	19,235	61	27.67	20,208	62	28.50	21,230	63	29.36	22,305	65	30.24	23,663
IRRIGATION > 4,500 < 4,999	46	30.18	16,659	47	31.09	17,502	48	32.02	18,387	49	32.98	19,318	50	33.97	20,494
IRRIGATION > 5,000 < 5,499	66	33.67	26,663	70	34.68	29,127	74	35.72	31,715	78	36.79	34,432	82	37.89	37,284
IRRIGATION > 5,500 < 5,999	25	37.32	11,134	25	38.44	11,697	26	39.59	12,289	26	40.78	12,911	27	42.00	13,697
IRRIGATION > 6,000 < 6,499	20	41.12	9,815	20	42.36	10,311	21	43.63	10,833	21	44.94	11,381	22	46.29	12,074
IRRIGATION > 6,500 < 6,999	10	45.12	5,384	10	46.47	5,656	10	47.86	5,942	11	49.30	6,243	11	50.78	6,623
IRRIGATION > 7,000 < 7,999	10	49.25	5,878	10	50.73	6,175	10	52.25	6,487	11	53.82	6,896	11	55.44	7,316
IRRIGATION > 8,000 < 8,999	9	57.56	6,010	9	59.29	6,314	9	61.07	6,634	9	62.90	6,969	10	64.78	7,394
IRRIGATION > 9,000 < 9,999	7	65.84	5,892	8	67.81	6,190	8	69.85	6,504	8	71.94	6,833	8	74.10	7,249
IRRIGATION > 10,000	3	74.13	2,357	3	76.35	2,428	3	78.64	2,501	3	81.00	2,576	3	83.43	2,653
<b>SUBTOTAL</b>	<b>1,207</b>		<b>379,165</b>	<b>1,234</b>		<b>399,418</b>	<b>1,261</b>		<b>420,693</b>	<b>1,289</b>		<b>443,121</b>	<b>1,329</b>		<b>470,782</b>
IRRIGATION SYSTEM IMP (TAP)	15	410.79	6,193	15	410.79	6,317	16	410.79	6,443	16	410.79	6,572	16	410.79	6,704
<b>SUBTOTAL</b>			<b>385,359</b>			<b>405,735</b>			<b>427,136</b>			<b>449,693</b>			<b>477,486</b>
TRANSFER FROM W/WW															
<b>TOTAL</b>	<b>1,207</b>		<b>385,359</b>	<b>1,234</b>		<b>405,735</b>	<b>1,261</b>		<b>427,136</b>	<b>1,289</b>		<b>449,693</b>	<b>1,329</b>		<b>477,486</b>

USER FEE SCHEDULE IRRIGATION	2033			2034			2035			2036			2037		
	NUMBER OF EQRs	RATE/MONTH 3,500 SQ. FT.	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 3,500 SQ. FT.	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 3,500 SQ. FT.	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 3,500 SQ. FT.	ANNUAL REVENUE	NUMBER OF EQRs	RATE/MONTH 3,500 SQ. FT.	ANNUAL REVENUE
IRRIGATION >700 <799	25	12.01	3,596	25	12.37	3,778	26	12.74	3,969	26	13.13	4,170	27	13.52	4,381
IRRIGATION > 800 <3,500 SF	18	24.04	5,197	18	24.76	5,460	19	25.50	5,736	19	26.27	6,027	20	27.06	6,332
IRRIGATION >3,500 < 3,999	1,044	27.47	343,954	1,064	28.29	361,358	1,086	29.14	379,643	1,107	30.01	398,853	1,130	30.91	419,035
IRRIGATION > 4,000 < 4,499	67	31.14	24,860	68	32.08	26,118	69	33.04	27,440	71	34.03	28,828	72	35.05	30,287
IRRIGATION > 4,500 < 4,999	51	34.99	21,531	52	36.04	22,621	53	37.12	23,765	54	38.24	24,968	56	39.38	26,231
IRRIGATION > 5,000 < 5,499	86	39.03	40,276	88	40.20	42,314	92	41.40	45,571	96	42.65	48,985	100	43.93	52,563
IRRIGATION > 5,500 < 5,999	28	43.26	14,390	28	44.56	15,118	29	45.90	15,883	29	47.28	16,687	30	48.69	17,531
IRRIGATION > 6,000 < 6,499	22	47.67	12,685	23	49.10	13,327	23	50.58	14,001	24	52.09	14,710	24	53.66	15,454
IRRIGATION > 6,500 < 6,999	11	52.30	6,958	11	53.87	7,310	12	55.49	7,680	12	57.15	8,069	12	58.87	8,477
IRRIGATION > 7,000 < 7,999	11	57.10	7,686	11	58.81	8,075	12	60.58	8,483	12	62.39	8,913	12	64.27	9,364
IRRIGATION > 8,000 < 8,999	10	66.73	7,768	10	68.73	8,161	10	70.79	8,574	10	72.92	9,008	11	75.10	9,463
IRRIGATION > 9,000 < 9,999	8	76.32	7,616	8	78.61	8,001	9	80.97	8,406	9	83.40	8,831	9	85.90	9,278
IRRIGATION > 10,000	3	85.94	2,733	3	88.52	2,871	3	91.17	2,899	3	93.91	2,986	3	96.72	3,076
<b>SUBTOTAL</b>	<b>1,358</b>		<b>495,654</b>	<b>1,385</b>		<b>520,734</b>	<b>1,415</b>		<b>548,082</b>	<b>1,446</b>		<b>576,864</b>	<b>1,477</b>		<b>607,091</b>
IRRIGATION SYSTEM IMP (TAP)	17	410.79	6,838	17	410.79	6,975	17	410.79	7,114	18	410.79	7,256	18	410.79	7,402
<b>SUBTOTAL</b>			<b>502,492</b>			<b>527,709</b>			<b>555,196</b>			<b>584,120</b>			<b>614,492</b>
TRANSFER FROM W/WW															
<b>TOTAL</b>	<b>1,358</b>		<b>502,492</b>	<b>1,385</b>		<b>527,709</b>	<b>1,415</b>		<b>555,196</b>	<b>1,446</b>		<b>584,120</b>	<b>1,477</b>		<b>614,492</b>

2038			
USER FEE SCHEDULE	NUMBER	RATE/MONTH	ANNUAL
IRRIGATION	OF EQRs	3,500 SQ. FT.	REVENUE
IRRIGATION >700 <799	28	13.93	4,602
IRRIGATION > 800 <3,500 SF	20	27.87	6,652
IRRIGATION >3,500 < 3,999	1,152	31.84	440,238
IRRIGATION > 4,000 < 4,499	73	36.10	31,820
IRRIGATION > 4,500 < 4,999	57	40.57	27,558
IRRIGATION > 5,000 < 5,499	104	45.24	56,311
IRRIGATION > 5,500 < 5,999	31	50.16	18,418
IRRIGATION > 6,000 < 6,499	24	55.27	16,236
IRRIGATION > 6,500 < 6,999	12	60.63	8,906
IRRIGATION > 7,000 < 7,999	12	66.19	9,837
IRRIGATION > 8,000 < 8,999	11	77.36	9,942
IRRIGATION > 9,000 < 9,999	9	88.48	9,748
IRRIGATION > 10,000	3	99.63	3,168
<b>SUBTOTAL</b>	<b>1,508</b>		<b>638,835</b>
IRRIGATION SYSTEM IMP (TAP)	18	410.79	7,550
<b>SUBTOTAL</b>			<b>646,385</b>
TRANSFER FROM W/WW			
<b>TOTAL</b>	<b>1,508</b>		<b>646,385</b>