

# FLORIDA RURAL WATER ASSOCIATION

2970 WELLINGTON CIRCLE • TALLAHASSEE, FL 32309-7813  
(850) 668-2746

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**EMAIL**  
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October 20, 2025

Mr. John Rittenhouse  
General Manager  
Cedar Key Water and Sewer District

Mr. Rittenhouse,

The Florida Rural Water Association (FRWA) is pleased to submit the Wastewater System Asset Management and Fiscal Sustainability (AMFS) plan to the Cedar Key Water and Sewer District. FRWA prepared this Plan for the District in partnership with the FDEP Clean Water State Revolving Fund (CWSRF) Program to identify your wastewater system's most urgent and critical needs.

Water and wastewater systems represent critical infrastructure designed to protect the public health and the environment. This report assesses the current conditions of your wastewater fixed capital assets (e.g., wastewater treatment plant, collection system, manholes), and more importantly provides recommendations, procedures, and tools to assist with long range asset protection and wastewater utility reinvestment. FRWA will be available to support the District's AMFS plan recommendations and implementation.

The following report is considered a living document with tools for your use which must be updated at least annually by the District's utility management. FRWA will provide electronic copies for your use and future modification and will remain available to assist in updating and revising the AMFS plan.

As a valued FRWA member, it is our goal to help make the most effective and efficient use of your limited resources. This tool is an unbiased, impartial, independent review and is solely intended for achievement of wastewater system fiscal sustainability and maintaining your valuable utility assets. Florida Rural Water Association has enjoyed serving you and wishes your system the best in all its future endeavors.

Sincerely,  
George Glover  
FRWA Utility Asset Management Team

Copy: Eric Meyers, FDEP, CW State Revolving Fund  
Alicia Keeter, Florida Rural Water Association, Executive Director

# Cedar Key Water and Sewer District

## Waste Water Asset Management and Fiscal Sustainability Plan



Prepared for  
Cedar Key Water and Sewer District  
Permit FL0031216

Prepared by:  
FLORIDA RURAL WATER ASSOCIATION  
Asset Management Program

In partnership with  
Florida Department of Environmental Protection  
&  
Clean Water State Revolving Fund Program



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# Executive Summary

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## Asset Management Plan Defined

**Asset Management Plan (AMP)** - The International Infrastructure Management Manual defines an asset management plan as a “plan developed for the management of one or more infrastructure assets that combines multi-disciplinary management techniques (including technical and financial) over the life cycle of the asset in the most cost-effective manner to provide a specific level of service.”

Lowest life cycle cost refers to the best appropriate cost for rehabilitating, repairing, or replacing an asset. While the level of service is determined by the utility consisting of its staff, customers, board members and regulators. Asset management is implemented through an asset management program and includes a written asset management plan.

## Benefits of an AMP:

Implementing and maintaining an active Asset Management Plan will provide numerous benefits to the Utility and its Customers, such as:

- Prolonging asset life and aiding in rehabilitation/repair/replacement decisions through informed, efficient, and focused operations and maintenance.
- Increased operational efficiencies.
- Informed operational and management decisions.
- Increased knowledge of asset criticality.
- Meeting consumer demands with a focus on system sustainability and improved communication.
- Setting rates based on sound operational and financial planning.
- Budgeting by focusing on activities critical to sustained performance.
- Meeting system service expectations and regulatory requirements.
- Improving responses to emergencies.
- Improving security and safety of assets.
- Capital improvement projects that meet the true needs of the system and community.
- Provides an impartial unbiased report to help explain rate sufficiency to the community.

## State Revolving Fund Requirement:

An active Asset Management Plan (AMP) is a requirement for participation in the State Revolving Fund Program (SRF). Asset Management and Fiscal Sustainability (AMFS) program details are identified in Rulemaking Authority FS. Law Implemented 403.8532 (FS. History–New 4-7-98, Amended 8-10-98, 7-17-17) and Florida Administrative Code (FAC) 62-503.700(7). To be accepted for the interest rate adjustment and to be eligible for reimbursement, an asset management plan must be adopted by ordinance or resolution and written procedures must be in place to not only implement the plan, but to do so in a timely manner.

The plan must include each of the following:

- (a) Identification of all assets within the project sponsor's system.
- (b) An evaluation of the current age, condition, and anticipated useful life of each asset.
- (c) The current value of the assets.
- (d) The cost to operate and maintain all assets.
- (e) A capital improvement plan based on a survey of industry standards, life expectancy, life cycle analysis, and remaining useful life.
- (f) An analysis of funding needs.
- (g) An analysis of population growth and drinking water use projections, as applicable, for the sponsor's planning area, and a model, if applicable, for impact fees; commercial, industrial, and residential rate structures.
- (h) The establishment of an adequate funding rate structure.
- (i) A threshold rate set to ensure the proper operation of the utility and if the sponsor transfers any of the utility proceeds to other funds, the rates must be set higher than the threshold rate to facilitate the transfer and proper operation of the utility.
- (j) A plan to preserve the assets; renewal, replacement, and repair of the assets, as necessary; and a risk-benefit analysis to determine the optimum renewal or replacement time.

### **AMP Development Stakeholders:**

The development of this AMFS plan involved the collective efforts of the District's Management and Staff, the Florida Department of Environmental Protection State Revolving Fund (FDEP-SRF), and the Florida Rural Water Association (FRWA). Resources included Engineers (technical and financial), Certified Operators (operation and maintenance), Rate Sufficiency Analysts and utility staff with first-hand experience with the system.

### **Critical Assets and Priority Action List:**

Based on Critical Assets and Process that were found to need Capital and/or Operational funding and the State requirements for participation in the State Revolving Fund Program (SRF), a Priority Action List was developed to help the District prioritize action items and establish target dates for timely completion. The Priority Action List is found on the following page.

Cedar Key Water and Sewer District			
Wastewater System Priority Action List			
Action Items	Target Date(s)	Cost Estimate	Responsible Parties
Adopt the WWAMFSP by Resolution	60 Days From Receipt of Final Plan	No Cost	CKWSD Board of Commissioners
Train Staff and begin using RevPlan	90 Days After Adoption	Free From FRWA	General Manager
Train Staff and begin using an AMFS tool (Diamond Maps or similar)	90 Days After Adoption	Minimal	General Manager
Continue working as a member of the Waccasassa Water and Wastewater Cooperative toward a more permanent and reliable source of raw water and a more permanent and reliable source point to discharge wastewater off of Cedar Key Island	On-Going	TBD	CKWSD Board of Commissioners, General Manager
Continue the Sewer Lift Station Rehabilitation Project to replace all seventeen of the sewer lift stations on Cedar Key Island	FY2026	\$1,500,000	CKWSD Board of Commissioners, General Manager
Smoke Test the collection system	90 Days After Adoption	Minimal	General Manager
Repair any leaks identified by smoke testing, start installing inflow shields on low lying manholes	Within 120 days after Adoption	\$27,000	General Manager, Superintendent
Locate, assess for condition and map any missing or unknown condition manholes	Within 180 days after Adoption	Minimal	General Manager, Superintendent
Update all new lift station construction in Diamond Maps	Within one Year after adoption	Minimal	General Manager, Superintendent
Develop/Implement a Collection System Operation and Maintenance Plan	Within one Year after adoption	TBD	General Manager, Superintendent
Conduct an Energy Audit every two years	On-Going	Free from FRWA	General Manager, Superintendent
Conduct Rate Sufficiency Study and Adjust Rate Structure as Needed	Annually	Free from FRWA	General Manager
Update Diamond Maps	Annually	No Cost	General Manager, Superintendent
Update/Revise the WWAMFSP	Annually	Minimal	General Manager, Superintendent
Update/Revise RevPlan	Annually	Minimal	General Manager

**\* As a member of the Florida Rural Water Association, FRWA is able to assist the Cedar Key Water and Sewer District with this Service.**

## Fiscal Strategy and AMP Process Recommendations:

Based on this asset management and fiscal sustainability study, broad **recommendations** relating to the Asset Management Planning Process over the next five years found in the Priority Action List are as follows:

1. Adopt this Asset Management and Fiscal Sustainability Plan (AMFS) study in the form of a Resolution. Appendix A contains a sample AMFS Resolution for CKWSD.
2. Engage a Florida Registered Engineer to support the Utility in review, funding, planning, design, permitting, and construction of critical capital and operational action items as recommended in this AMFS study.
3. Make funding applications to the following programs/agencies in support of Utility System Upgrades/Improvements as recommended by this AMFS study. A synopsis of utility funding programs can be found at the following link: <http://www.frwa.net/funding.html>
  - a. FDEP-State Revolving Fund (SRF)
  - b. Regional Water Management District
  - c. Florida Department of Economic Opportunity Community Development Block Grant (CDBG)
  - d. USDA Rural Development Direct Loan/Grant (USDA RD)
  - e. FDEO Rural Infrastructure Fund Grant (RIF)
  - f. Local Funding Initiative Requests
4. Evaluate and Adopt a Utility rate structure that will ensure rate sufficiency as necessary to implement capital improvements.
5. Begin using Diamond Maps or another CMMS of your choice for Asset Management Planning (AMP) and Computerized Maintenance Management System.
6. Continue to build your asset management program by:
  - a. Collecting critical field data and attributes on any new or remaining assets.
  - b. Improving processes which provide cost savings and improved service.
  - c. Implementing a checklist of routine maintenance measures.
  - d. Benchmarking critical processes annually.
  - e. Developing policies that will support funding improvements.
  - f. Developing manuals, standard operating procedures, and guidelines for critical processes.
  - g. Identifying responsible persons to implement processes to protect critical assets.
  - h. Attending asset management training annually.

## 1. Introduction

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In accordance with FDEP Rule 62-503.700(7), F.A.C., State Revolving Fund (SRF) recipients are encouraged to implement an asset management plan to promote utility system long-term sustainability. To be accepted for the **financing rate adjustment and to be eligible for principal forgiveness/reimbursement**, an asset management plan must:

1. Be adopted by Ordinance or Resolution.
2. Have written procedures in place to implement the plan.
3. Be implemented in a timely manner.

The plan must include each of the following:

- a. Identification of all assets within the project sponsor's (utility) system.
- b. An evaluation of utility system assets' current age, condition and anticipated useful life of each asset.
- c. Current value of utility system assets.
- d. Operation and maintenance cost of all utility system assets.
- e. A Capital Improvement Program Plan (CIPP) based on a survey of industry standards, life expectancy, life cycle analysis and remaining useful life.
- f. An analysis of funding needs.
- g. The establishment of an adequate funding rate structure.
- h. An asset preservation plan to include renewal, replacement, repair as necessary and a risk assesment to identify risks and consequences of failure as it pertains to replacement.
- i. An analysis of population growth and wastewater treatment demand projections for the utility's planning area and an impact fee model, if applicable, for commercial, industrial and residential rate structures.
- j. A threshold rate set to ensure proper wastewater system operation and maintenance. If the potential exists for the project sponsor to transfer any of the system proceeds to other funds, rates must be set higher than the threshold rate to facilitate the transfer and maintain proper operation of the system.

Fiscal Sustainability represents the accounting and financial planning process needed for proper management of system assets. It assists in determining such things as:

1. Asset maintenance, repair, or replacement cost.
2. Accurate and timely capital improvement project budgeting.
3. Forecasting near and long-term capital improvement needs.
4. Whether the system is equipped for projected growth.
5. Adequate reserves exist to address emergency operations.

Fiscal sustainability analysis requires a thorough understanding of the system's assets' current condition and needs. Therefore, fiscal sustainability follows asset management and is improved by sound asset management. Conversely, asset management requires a healthy fiscal outlook, since servicing and care of current assets is not free. Timely expenditures for proper servicing and care of current assets are relatively small when compared to repair and replacement expenditures that inevitably occur with component failure due to neglect.

Having a solid AMFS plan in place will benefit the system in determining which assets are to be insured and for what amount, and to more effectively and efficiently identify its capital improvement needs and solutions. Additionally, the State Revolving Fund (SRF) requires a system to adopt and implement an AMFS plan to qualify for loan interest rate reduction if funding is sought. An AMFS helps a system more effectively and efficiently identify its capital improvement needs and solutions.

This AMFSP's intended approach is to assist the District with conducting a basic inventory and condition assessment of its current assets. It is expected that the District will periodically re-evaluate the condition of its assets, at least annually, to determine asset remaining useful life. A reminder can be established for staff that a given component is nearing time for servicing, repair, or replacement. Furthermore, major capital improvement needs can be reassessed periodically as they are met or resolved.

In short, this plan is not designed to be set in stone, but is intended to be a living, dynamic, evolving document. It is recommended that the District conduct at least an annual plan review and revise it as necessary throughout the year, resulting in a practical and useful tool for staff.

## 2. Asset Management Plan

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### Components of Asset Management:

Asset Management can be described as ‘a process for maintaining a desired level of customer service at the best appropriate cost’. Within that statement, ‘a desired level of service’ is simply what the utility wants their assets to provide. ‘Best appropriate cost’ is the lowest cost for an asset throughout its life. The goal is providing safe, reliable service while at the same time being conscious of the costs involved both short and long term.

Asset Management includes building an inventory of the utility’s assets, developing and implementing a program that schedules and tracks all maintenance tasks, generally through work orders, and developing a set of financial controls that will help manage budgeted and actual annual expenses and revenue. By performing these tasks, targeting the system’s future needs will be much easier.

Asset Management provides documentation that helps the utility understand the assets they have, how long these assets will last, and how much it will cost to maintain or replace these assets. The Plan also provides financial projections which show the utility whether rates and other revenue mechanisms are sufficient to supply the utility’s future needs, 5, 10, even 20 years ahead.

Asset Management is made up of five core questions:

1. What is the current status and condition of the utility’s assets?
2. What is Level of Service (LOS) required?
3. What assets are considered critical to meeting the required LOS?
4. What are the utility’s Capital Improvement Program Plan (CIPP), Operations and Maintenance Plan (O&M), and asset’s Minimum Life Cycle Cost strategies?
5. What is the utility’s long term financial strategy?

The purpose of an Asset Management and Fiscal Sustainability plan is to help the utility operate and maintain their system in the most effective and financially sound manner. An AMFS plan is a living document and is not intended to sit on a shelf. It must be maintained, updated, and modified as conditions and situations change. Experience will help the utility fine tune the plan through the years.

### Implementation:

Information has been entered into Diamond Maps; a cloud based geographical information system (GIS). FRWA, in partnership with FDEP, has contracted with Diamond Maps to develop Asset Management software specifically for small systems at an affordable cost. Continuing with Diamond Maps will cost about \$20 per month for a single license, or as many licenses as necessary at the rates listed on the following page.

The software is easy to use, as it is set up for small communities and for water/wastewater systems. Since the District has approximately 1,019 connections, the cost would be around \$30 per month for unlimited users.

Diamond Maps	
Meter Count	Unlimited-Use Subscription
250	\$15 Per Month
500	\$20 Per Month
1,000	\$30 Per Month
2,000	\$45 Per Month
3,000	\$60 Per Month
4,000	\$75 Per Month
5,000	\$90 Per Month
10,000	\$165 Per Month

Diamond Maps can be explored at <http://diamondmaps.com>.

Having an asset management tool to keep data current is essential for tracking the utility’s assets into the future, to assist with planning and funding for asset rehabilitation or replacement, to schedule and track asset maintenance by issuing work orders and assigning tasks to personnel who will perform the work and update in the system.

In addition to the CMMS tool, Diamond Maps, the Florida Rural Water Association (FRWA) has partnered with the Florida Department of Environmental Protection (FDEP) State Revolving Loan (SRF) program and Raftelis Financial Consultants to create an online financial tracking and revenue sufficiency modeling tool, RevPlan.

RevPlan is designed to enhance asset and financial management for small/medium Florida water and wastewater utilities. It provides a free-to-member online tool to achieve financial resiliency, and to maintain utility assets for long-term sustainability. Additionally, RevPlan is programmed to populate asset information directly from Diamond Maps.

By inputting your accurate budgetary, operation and maintenance costs, capital improvement plan costs, existing asset and funding information, this tool assists the user in identifying any rate adjustments and/or external funding necessary to meet the utility finance requirements, and the impact rate increases/borrowing may have on customers.

There are a few important elements of a successful RevPlan outcome:

- The tool is only as accurate as the information used.
- One person should be assigned the task of annual RevPlan updates.
- Updating asset information in Diamond Maps is essential.

FRWA staff have entered a preliminary model into RevPlan to help the utility get started. The assets collected along with financial information provided by the system were entered to create the model. Each year (or as projects come about) the system is encouraged to update RevPlan and use it to help understand the impacts of future projects and rate increases. Details of the model are located in the financial section of the Plan.

### Level of Service (LOS):

As a provider of wastewater services, a utility must decide what Level of Service (LOS) is required for its customers. When setting these goals, most importantly, the utility must decide the level of service it will provide. Ideally, these goals would be conveyed to the utility's customers via a 'Level of Service Agreement.' This document demonstrates the utility's accountability in meeting the customer's needs and its commitment to doing so. Below are four key elements regarding LOS:

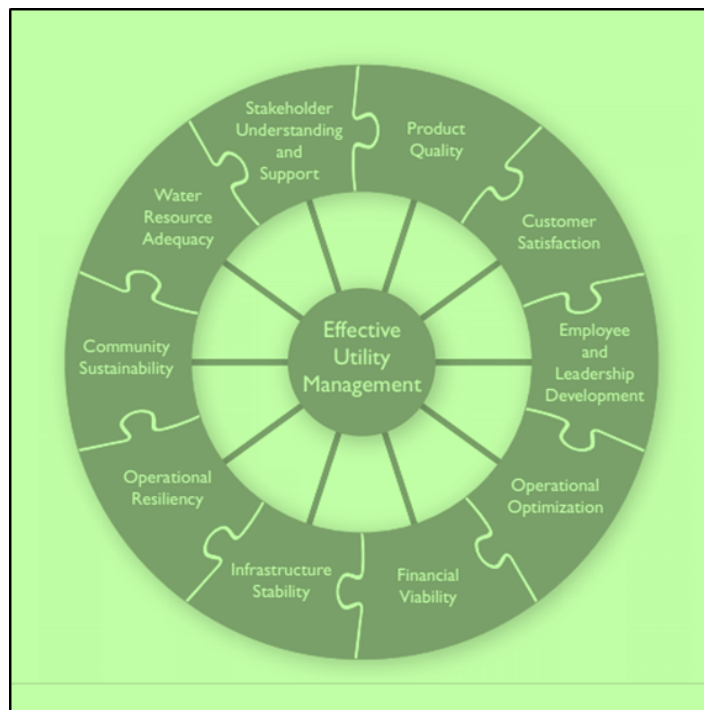
1. Provide safe and reliable service while meeting regulatory requirements.
2. Budget improvement projects focused on assets critical to sustained performance based on sound operational and financial planning.
3. Maintain realistic rates and adjust as necessary to ensure adequate revenue reserves for targeted asset improvement.
4. Ensure long-term system resilience and sustainability.

Targets must be set for individual parameters. Metrics should be created to help the utility direct efforts and resources toward predetermined goals. The established goals must include consideration of costs, budgets, rates, service levels, and level of risk. These goals are set in an agreement between the utility and its customers.

In 2008, a unique coalition representing the "Collaborating Organizations," which include the U.S. Environmental Protection Agency and a growing number of major water sector associations, supported an approach developed by water sector leaders for water utility management. This approach can be used by the wastewater sector as well and is based around the Ten Attributes of an Effectively Managed Utility and Five Keys to Management Success—known as Effective Utility Management (EUM). These Attributes provide a clear set of reference points and are intended to help utilities maintain a balanced focus on all important operational areas rather than reactively moving from one problem to the next or focusing on the "problem of the day."

The Ten Attributes of an Effectively Managed Utility provide useful and concise goals for utility managers seeking to improve organization-wide performance. The Attributes describe desired outcomes that are applicable to all water and wastewater utilities. They comprise a comprehensive framework related to operations, infrastructure, customer satisfaction, community sustainability, natural resource stewardship, and financial performance.

Water and wastewater utilities can use the Attributes to select priorities for improvement, based on each organization's strategic objectives and the needs of the community it serves. The Attributes are not presented in a particular order but rather can be viewed as a set of opportunities for improving utility management and operations.



To begin, the utility will assess current conditions by ranking the importance of each Attribute to the utility, based on the utility's vision, goals, and specific needs. The ranking should reflect the interests and considerations of all stakeholders (managers, staff, customers, regulators, elected officials, community interests, and others).

Once you have chosen to improve one or more Attributes, the next step is to develop and implement a plan for making the desired improvements. Improvement plans support the implementation of effective practices in your chosen attribute area(s). An effective improvement plan will:

1. **Set Near- and Long-term Goals:** Set goals as part of the improvement plan to help define what is being worked toward. Near- and long-term goals for the utility should be linked to the strategic business plan, asset management plan, and financial plan. Goals should also be "SMART."
  - **S – Specific:** What exactly will be achieved? Make the goals specific and well defined. Each goal should be clear to anyone with even a basic knowledge of the utility.

- **M – Measurable:** Can you measure whether you are achieving the objective? You must be able to tell how close you are to achieving the goal. You must also be able to determine when success is achieved.
  - **A – Assignable and Attainable:** Can you specify who is responsible for each segment of the objective? Is the goal attainable? Setting a goal to have zero sewer overflows is great, but perhaps unrealistic, knowing operators do not have control over when and where overflows happen in systems. A better choice might be to set a goal that states the utility will undertake an extraneous flow reduction project to reduce the impact of illegal storm connections.
  - **R – Realistic:** Do you have the capacity, funding, and other resources available? The staff and resources of the utility must be considered when setting goals. Available personnel, equipment, materials, funds, and time play a role in setting realistic targets.
  - **T – Time-Based:** What is the timeframe for achieving the objective? There must be a deadline for reaching the goal. Adequate time must be included to meet the target. However, too much time can lead to apathy and negatively affect the utility's performance.
2. Identify Effective Practices: Each Attribute area for improvement will be supported by effective practices implemented by the utility. A substantial number of water sector resources exist that detail effective utility practices for each of the Attributes.
  3. Identify Resources Available and Resources Needed: For each practice/activity to be implemented as part of the improvement plan, identify resources (financial, informational, staff, or other) that exist on-hand, and those that are needed, to support implementation.
  4. Identify Challenges: For the overall improvement plan and for specific practices/activities to be implemented, identify key challenges that will need to be addressed.
  5. Assign Roles and Responsibilities: For each improvement action, identify roles and responsibilities for bringing the implementation to completion.
  6. Define a Timeline: Establish start date, milestones, and a completion target for each activity/improvement action.
  7. Establish Measures: Establish at least one (or more) measure of performance for items to be implemented under the improvement plan.

More information and resources on Effective Utility Management (EUM) can be found at [www.WaterEUM.org](http://www.WaterEUM.org).

The idea is to set goals and meet them. Reaching the goals should not be overly easy. Effort should be involved. The goals should target areas where a need exists. If the bar is set too low, the process is pointless. Most importantly, the utility must decide the level of service it will provide.

CKWSD, through the hard work of its certified water and wastewater operators, is proud its drinking water exceeds mandated purity levels established by the Florida Department of Environmental Protection (FDEP) and the wastewater treatment process meets all environmental safety standards set forth by FDEP. With above information in mind, CKWSD has established a set of Operations and Administrative Goals for the future of the water and wastewater utility.

#### Operations Goals;

Goal I: Continue working as a member of the Waccasassa Water and Wastewater Cooperative toward a more permanent and reliable source of raw water and a more permanent and reliable source point to discharge wastewater off of our island. This Cooperative (W3C), consists of the City of Bronson, the Town of Otter Creek, and CKWSD, was formed to strengthen the members' ability to find permanent water and wastewater supply solutions.

Goal II: Begin the construction phase of the Sewer Lift Station Rehabilitation Project to replace all 17 of the sewer lift stations on Cedar Key. The rehabilitation of these stations will upgrade our sewer distribution system, but will also provide hardening against future hurricane and storm surge damage.

Goal III: Replace all damaged water meters over the next three-year period, beginning with the replacement of 100 between October 1, 2024 and September 30, 2025. The remainder of the damaged water meters will be replaced in annual cycles.

Goal IV: Replace the four generators which supply emergency power to our water and wastewater system through a FEMA-BRIC grant. These generators continue to serve us well but they average an age of over 35 years and require expensive annual maintenance.

#### Administrative Goals;

Goal I: Monthly review of all financial records of CKWSD, audits, profit and loss statements, budget statements, balance sheets, bank account transactions.

Goal II: Ensure the General Manager is leading District staff in a manner and direction which reflects the mission of the Board of Commissioners.

Goal III: Continue the District's work to ensure all Open Meeting, Ethics, and Public Notifications rules are followed by the Board of Commissioners and District Staff.

### 3. System Description

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#### Cedar Key Water and Sewer District Overview:

Cedar Key Water and Sewer District (CKWSD) is an Independent Special District created under a Special Act on June 7, 1963, and provides water and sewer services to the Cedar Key islands in Levy County, Florida. The CKWSD Board of Commissioners are elected by the constituents of Cedar Key, Florida and the five members of the Board serve a two year terms. CKWSD serves 1,019 residential and commercial customers with 720 of those customers full-time residents. The District raises revenues by way of an ad valorem tax and charges for water and sewer services as authorized by its Charter. The existing wastewater collection system was placed into service in the late 1920s and early 1980s, while the wastewater treatment plant was built in 1992.

#### Form of Government:

The CKWSD Board is composed of five Board members. The CKWSD Boards is the legislative body of the District with the power to adopt Ordinances, Resolutions and regulations. The Chairman is recognized as the official head of the CKWSD for all ceremonial purposes, and by the courts for the purpose of serving civil process.

Cedar Key Water and Sewer District	
Board of Commissioners	
Michael Borelli	Commissioner/Chairman
Johnathan Ferguson	Commissioner
Leslie Sturmer	Commissioner
Sue Colson	Commissioner
Joe Hand	Commissioner

#### CKWSD Wastewater Staff:

The success of the Districts Utilities results from the diverse skills and unselfish contributions of their staff. FRWA appreciates the assistance of those employees that helped in the preparation of this Plan.

Cedar Key Water and Sewer District	
Staff	
John Rittenhouse	General Manager
Alicia Johns	Secretary/Billing Clerk
Gabe Doty	Superintendent
Billy Quinn	Assistant Superintendent
Nickolas Hensel	Operator

### System Overview:

The District’s wastewater system consists of approximately 6 miles of gravity collection lines, 204 manholes, 17 pump stations and a 0.180 million gallons per day (MGD) Annual Average Daily Flow (AADF) extended aeration Water Reclamation Facility, FL0167959. The WRF employs the processes of screening, grit removal, biological treatment, filtration and disinfection. Dechlorination is provided for the emergency discharge to Back Bayou, Outfall D-001. The facility produces reclaimed water for a restricted public access subsurface absorption field system, R-001. The permitted capacity for both R-001 and D-001 is 0.166 MGD. Biosolids are produced through aerobic digestion and are transported to a Biosolids Treatment Facility.

## 4. Current Asset Conditions

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### Water Reclamation Facility:

The Cedar Key Water Reclamation Facility (WRF) was designed as a 0.180 million gallons per day (MGD) Annual Average Daily Flow (AADF) extended aeration facility. The WRF employs the processes of screening, grit removal, biological treatment, filtration and disinfection. Dechlorination is provided for the emergency discharge to Back Bayou, Outfall D-001. The facility produces reclaimed water for a restricted public access subsurface absorption field system, R-001. The permitted capacity for both R-001 and D-001 is 0.166 MGD. Biosolids are produced through aerobic digestion and are transported to a Biosolids Treatment Facility.

Per the existing FDEP Operating Permit staffing for the WRF requires a Class C or higher operator 8 hours/day for 7 days/week. The lead/chief operator must be a Class C operator, or higher. However, based on the variance granted by FDEP (OGC File No. 02-1190, Final Order mailed on January 3, 2003) staffing is reduced to allow a Class C or higher operator 8 hours per day, 5 days per week, and one visit on each weekend day so long as the following conditions are met:

- The facility will no longer use the Part III reuse system (public access reuse system R-002). During daily discharge, for land application, all reclaimed water shall be conveyed to the existing subsurface drip irrigation system (Reuse System R-001).
- The current frequency and volume of discharge to Back Bayou through the emergency outfall shall not be exceeded as a result of the operation of the reuse system and/or the change to weekend utilization of the existing subsurface drip irrigation system.
- This variance is subject to termination should any violation of (a) and (b) above occur. Effluent from the WRF has been discharged solely to Reuse System R-001 throughout the current operating permit period. Reuse System R-002 was terminated in July 2013. The Cedar Key Water & Sewer District (CKWSD) has no plans to reactivate it. The WRF currently operates under Permit No. FL0031216 which was issued July 18, 2019 and will expire on July 17, 2024.

Over all the WRF is in average condition however CKWSD, a member of the Waccasassa Water and Wastewater Cooperative. The goal of the Waccasassa Water and Wastewater Cooperative is working toward a more permanent and reliable source of raw water and a more permanent and reliable source point to discharge wastewater off of Cedar Key Island. This Cooperative (W3C), consists of the City of Bronson, the Town of Otter Creek, and CKWSD.

### **Lift Stations:**

CKWSD has seventeen (17) lift stations throughout the system. Currently the construction phase of the Sewer Lift Station Rehabilitation Project to replace all seventeen (17) of the sewer lift stations on Cedar Key has begun. The rehabilitation of these stations will upgrade the sewer distribution system, but will also provide hardening against future hurricane and storm surge damage.

### **Manholes:**

FRWA located, inspected, and evaluated two-hundred and four (204) manholes throughout the system. Of those, FRWA was unable to locate and assess or access fifty-one (51) manholes shown on the system map because they were sealed shut, buried, paved over or located on private property. During the inspection, FRWA noted manholes that contained debris and needed cleaning, structural component deficiencies, and minor to moderate infiltration.

All of the manholes have an expected life cycle of 50 years or more with proper routine maintenance. Manholes serve as an important part of the collection system allowing cleaning,

inspection, connections, and repairs to the system. Manholes should be inspected at least every two to three years. Records of the inspections and any maintenance can then be updated into Diamond Maps to create a historic database and a good record of work that has been or needs to be done. The work order feature in Diamond Maps may be utilized for the task of creating an inspection and maintenance program.

Many of the manholes in the system will be nearing the end of their useful life around the same time period. When it comes to damaged or aging manholes, rehabilitation may be a cost-effective solution for many systems. Rather than replacing manholes, the system should explore rehabilitation processes that involve returning the structural integrity to the existing manhole without the purchase of an entirely new manhole.

During the course of the assessment, FRWA assessed 204 manholes. Of these:

- One Hundred and Eleven (111) were found to be in Average condition (54.4%).
- Eighty Nine (89) were found to be in Poor condition (43.6%).
- Four (4) were found to be in Very Poor condition (2%).

Manholes that are considered to be in poor condition when assessed will be found to have at least one of the following deficiencies: moderate to heavy corrosion, being sealed or buried, blockages, moderate cracks in the wall or chimney, infiltration of any amount, ring or lid deficiencies or mortar failure.

FRWA recommends that when manholes are found in “very poor”, “poor” or “unknown” condition, they should be located, opened, and inspected by staff to determine what rehabilitation measures may be necessary and work with an engineering firm to finalize a cost effectiveness analysis and recommendations for sewer system manhole improvements. Cost estimates for each manhole improvement can vary from a few hundred dollars to a few thousand dollars. Manholes requiring major rehabilitation may cost upwards of \$15,000 per manhole.

Worth noting are the manholes located on the main Island were installed in the late 1920’s. While some have been rehabilitated and relined, a large portion haven’t. Issues with ring and cover condition along with mortar lining showing signs of failure were common. FRWA recommends that the CKWSD continue its work with rehabilitating the manholes within the system.

### **Gravity and Force Mains:**

System Maps indicate there are approximately 7.8 miles of gravity sewer mains and an additional 2.2 miles of sewer force mains. The system consists of PVC lines, Clay and Ductile Iron pipes. During data collection, FRWA staff did not evaluate the condition of the sewer and force mains. For purposes of this Plan, sewer and force mains were assessed to be in average condition unless

otherwise noted by system staff. While additional assessment work will be necessary, it is likely the system includes mains that are in poor or failed condition.

As with the manholes, many of the gravity and force mains in the system will be nearing the end of their useful life around the same time period. With that in mind, the System should begin setting aside allocations for collection system renewal and replacement. FRWA encourages the System to begin budgeting for the construction practice of rehabilitation, relining or replacement of older or problematic lines.

### **Inflow and Infiltration:**

As systems age, inflow and infiltration become more of an issue with the collection system. Often the issue is left unaddressed simply because the problems lie underground and out of sight. Left unattended, inflow and infiltration can lead to higher flows at the treatment plant, increased treatment costs, increased wear and maintenance on equipment, and ultimately decreased life expectancy. In addition, a wastewater plant is not designed to treat ground or surface water. Too much fresh water can lead to adverse effects during the biological treatment process. The less inflow and infiltration sent to the lift stations and wastewater plant, the lower the treatment cost and wear on critical assets.

Often, where there is infiltration, there is also exfiltration. This means that untreated wastewater can “leak” out of the collection system and into the surrounding ground. This may lead to collapsed sewer mains or blockages due to the buildup of dirt/mud or sand producing backups and sanitary sewer overflows (SSOs).

It is recommended that CKWSD periodically conduct smoke testing throughout the system or at a minimum in critical or problematic areas to determine the need for improvements. While the System needs to purchase the liquid smoke, the smoke testing equipment can be borrowed from FRWA to help ease some of this cost. In addition to smoke testing, FRWA also recommends inspection and cleaning of the collection system. With the help of an engineering firm, CKWSD can begin to develop additional future capital repair projects that identify and record the location and severity of any defects. This is a results-driven approach which seeks to maximize the effectiveness of the investigation through total system maintenance along with inflow and infiltration removal. FRWA also recommends considering the purchase of additional Inflow shields to assist in low lying or flood prone areas of the system. Of the 204 manholes in the system, FRWA was able to identify 24 manholes (12%) that have these inflow shields. These dishes start at around \$150.00 and can be installed in phases by staff when funding is available.

**Estimated total cost to acquire and install approximately 180 inflow shields: \$27,000.**

## 5. Operations and Maintenance Strategies: (O&M)

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O&M consists of preventive and emergency/reactive maintenance. The strategy for O&M varies by the asset, criticality, condition, and operating history. All assets have a certain risk associated with their failure. This risk must be used as the basis for establishing a maintenance program to make sure that the utility addresses the highest risk assets. In addition, the maintenance program should address the level of service performance objectives to ensure that the utility is running at a level acceptable to the customer. Unexpected incidents could require changing the maintenance schedule for some assets. This is because corrective action must be taken in response to unexpected incidents, including those found during routine inspections and O&M activities. Utility staff will record condition assessments when maintenance is performed, at established intervals, or during scheduled inspections. As an asset is repaired or replaced, its condition will improve and therefore it can reduce the overall risk of the asset failing. This maintenance strategy should be revisited annually.

Two important considerations in planning O&M strategies are:

- Unplanned repairs should be held at 30% or less of annual maintenance activities.
- Unplanned maintenance in excess of 30% indicates a need to evaluate causes and adjust strategies.

### Staff Training:

Utility maintenance is quite unique. It can involve one or a combination of water system repairs, customer service issues, troubleshooting and repair, pump and motor repairs and other technical work. This skill set is not common. Training staff, whether they are new or long-term employees, is especially important. It is recommended that the System initiate or enhance their training program for its employees. In addition to technical training, safety training is also necessary. Treatment Plants and distribution/collection systems can be dangerous places to work. Electrical safety, troubleshooting panel boxes, trenching and shoring, and confined space entry are just a few of the topics that could benefit the System and its staff.

FRWA personnel can provide some of the training needed by District staff members. Training services that we offer to members are listed on our website <http://www.frwa.net> under the Training Tab.

There is no such thing as too much training. The more your staff knows, the more capable, safe, and professional they become. This enhanced sense of professionalism will improve the quality of overall service and accountability to the community.

## Preventive Maintenance:

Preventive maintenance is the day-to-day work necessary to keep assets operating properly, which includes the following:

1. Regular and ongoing annual tasks necessary to keep the assets at their required service level.
2. Day-to-day and general upkeep designed to keep the assets operating at the required levels of service.
3. Tasks that provide for the normal care and attention of the asset including repairs and minor replacements.
4. Performing the base level of preventative maintenance as defined in equipment owner's manuals.

These preventative maintenance guidelines are supplemented by industry accepted best management practices (BMPs).

Equipment must be maintained according to manufacturers' recommendations to achieve maximum return on investment. By simply following the manufacturer's suggested preventive maintenance the useful life of equipment can be increased two to three times when compared to "run till failure" mode of operation. Communities that have disregarded preventive maintenance practices can achieve positive returns from a relatively small additional investment. Deferred maintenance tasks that have not historically been performed due to inadequate funding or staffing must be programmed into future operating budgets. Proper funding provides staffing and supplies to achieve life expectancy projected by the manufacturer and engineer.

The Table on the following page is an example O&M Program for this system and is based on best management practices, manufacturers' recommended service intervals, staff experience, and other sources. *This schedule is only an example.* The true schedule must be created by District staff, based on their historical knowledge and information gleaned from the O&M Manuals and other sources.

Diamond Maps can be used to schedule maintenance tasks. Recurring items (e.g., annual flow meter calibrations or generator testing) can be set up in advance. In fact, all maintenance activities can be coordinated in Diamond Maps using its work order feature.

Cedar Key Water and Sewer District			
SAMPLE O&M PROGRAM			
Task Name	Frequency	Task Name	Frequency
Visually Inspect Lift Stations for Damage or Tampering	Per Visit	Respond to any complaints	As they occur
Ensure proper operation of equipment (note any issues)	Per Visit	Decommission unnecessary equipment	As they occur
Calibrate all meters and necessary equipment	Per Visit	Perform P/M on pumps and motors	Manufacturer Recommendation
Check lift stations per DEP requirements	Per Visit	Perform P/M at lift stations and on safety equipment	Manufacturer Recommendation
Complete all log work	Per Visit	Exercise valves in system and at lift stations	Annually
Collect all samples	As required by permit	Inspect any storage tanks	Annually
Perform general housekeeping	Weekly	Calibrate meters and backflows	Annually
Exercise generators	Monthly	Inspect manholes	Annually
Confirm submittal of monthly reports	Monthly	Update AMFSP	Annually

Performing the work is important. Tracking the work is also important. Being able to easily check when specific maintenance tasks were performed or are scheduled will make a utility run more efficiently and prolong the life of critical equipment.

**Best Management Practices (BMP):**

Utility owners, managers, and operators are expected to be responsible stewards of the system. Every decision must be based on sound judgment. Using Best Management Practices (BMPs) is an excellent tool and philosophy to implement. BMPs can be described as utilizing methods or techniques found to be the most effective and practical means in achieving an objective while making optimum use of the utility’s resources.

**Proactive vs Reactive Maintenance:**

Reactive maintenance is often carried out by customer requests or sudden asset failures. Required service and maintenance to fix the customer’s issue(s) or asset failure is identified by staff inspection and corrective action is then taken. Reactive maintenance is sometimes performed under emergency conditions, such as a lift station failing causing a sewer backup. As mentioned above, if your system is responding to and performing reactive/emergency

maintenance more than 30% of the time, you will need to adjust your maintenance schedules and increase proactive maintenance schedules.

Proactive maintenance consists of preventive and predictive maintenance. Preventive maintenance includes scheduled tasks to keep equipment operable. Predictive maintenance tasks try to determine potential failure points. An example of predictive maintenance is infrared analysis of electrical connections. Using special equipment, a technician can “see” loose or corroded connections that would be invisible to the naked eye. This allows the utility to “predict” and correct a potential problem early. Assets are monitored frequently, and routine maintenance is performed to increase asset longevity and prevent failure.

Upon adoption of this FSAMP plan, the FRWA Utility Asset Management team will upload CKWSD’s asset data definition files into “Diamond Maps” described in Section 2 and will populate the field data. The appropriate System personnel will be trained in Diamond Maps functionality and can immediately begin using it for scheduling and tracking system asset routine and preventive maintenance.

## 6. Capital Improvement Plan

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A Capital Improvement Plan is a multi-year financial planning tool that looks to the future to forecast the District’s asset needs. It encourages the system and the community to forecast not only what expenditures they intend and expect to make, but also to identify potential funding sources in order to more properly plan for the acquisition of the asset. The CIP is designed to be a flexible planning tool and is updated and revised on an annual basis.

Capital improvement projects generally create new assets that previously did not exist or upgrades or improves an existing component’s capacity. These projects are the consequence of growth, environmental needs, or regulatory requirements. Included in a CIP are typically:

1. Any expenditure that purchases or creates a new asset or in any way improves an asset beyond its original design capacity.
2. Any upgrades that increase asset capacity.
3. Any construction designed to produce an improvement in an asset’s standard operation beyond its present ability.

Capital improvement projects will populate this list. Renewal expenditure does not increase the asset's design capacity, but restores an existing asset to its original capacity, such as:

1. Any activities that do not increase the capacity of the asset. (i.e., activities that do not

upgrade and enhance the asset but merely restore them to their original size, condition, and capacity, for example, rebuilding an existing pump).

2. Any rehabilitation involving improvements and realignment or anything that restores the assets to a new or fresh condition (e.g., distribution main repair or hydrant replacement).

In making renewal decisions, the utility considers several categories other than the normally recognized physical failure or breakage. Such renewal decisions include the following:

1. Structural
2. Capacity
3. Level of service failures
4. Outdated functionality
5. Cost or economic impact

The utility staff and management typically know of potential assets that need to be repaired or rehabilitated. Reminders in the Diamond Maps task calendar let the staff members know when the condition of an asset begins to decline according to the manufacturer's life cycle recommendations. The utility staff members can take these reminders and recommendations into account. Because the anticipated needs of the utility will change each year, the CIP is updated annually to reflect those changes.

It is recommended that District develop a more comprehensive CIP for their system and continue their work in planning and identifying specific asset improvement projects. Asset recommendations from this Plan can be incorporated into the process of developing and approving a Capital Improvement Plan as part of the annual budget process.

Cedar Key Water and Sewer District						
CIP Schedule FY2026						
Description	Funding Source	2025	2026	2027	2028	2029
FEMA Eng Fees	Water Revenues	\$38,500	\$24,000	\$0	\$0	\$0
FEMA Eng Fees	Wastewater Revenues	\$38,500	\$24,000			
Backhoe Purchase	Grant	\$0	\$98,000	\$0	\$0	\$0
Backhoe Purchase	Wastewater Revenues	\$17,600				
Backhoe Purchase	Water Revenues	\$17,600				
WW Project Engineering-Planning	Grant	\$500,000	\$0	\$0	\$0	\$0
WW Project Construction	Grant	\$1,000,000	\$0	\$0	\$0	\$0
4 Replacement Generators	Grant	\$0	\$1,000,000	\$0	\$0	\$0
Storm Repairs	Water Revenues	\$20,000	\$12,500	\$0	\$0	\$0
Storm Repairs	Wastewater Revenues	\$20,000	\$12,500	\$0	\$0	\$0
Water Asset Management Reserve	Water Revenues	\$0	\$0	\$106,100	\$106,100	\$106,100
Wastewater Asset Management Reserve	Wastewater Revenues	\$0	\$0	\$78,900	\$78,900	\$78,900
Sorted by	Funding Source	2026	2027	2028	2029	
	Water Revenues	\$76,100	\$36,500	\$106,100	\$106,100	\$106,100
	Wastewater Revenues	\$76,100	\$36,500	\$78,900	\$78,900	\$78,900
	Grant	\$1,500,000	\$1,098,000	\$0	\$0	\$0
	<b>Total</b>	<b>\$1,652,200</b>	<b>\$1,171,000</b>	<b>\$185,000</b>	<b>\$185,000</b>	<b>\$185,000</b>

When completed, a more comprehensive CIP will identify the repair and maintenance projects identified in the Priority Action List, the proposed capital projects identified in the Plan, the fiscal year in which the project is proposed, the five-year annual maintenance budget of the System and the revenue that would be generated from the proposed change recommended in the rate schedule.

## 7. Financial

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### **Budget/Financial Sufficiency:**

In order for an Asset Management Plan to be effectively put into action, it must be integrated with financial planning and long-term budgeting. The development of a comprehensive financial plan will allow the District to identify the financial resources required for sustainable asset management based on existing asset inventories, desired levels of service, and projected growth requirements.

This report, with the assistance of RevPlan, helps develop such a financial plan by presenting scenarios for consideration and culminating with final recommendations.

The assets collected, along with financial information provided by the system, was entered into RevPlan to create a preliminary financial sufficiency model for the System. The District should update RevPlan each year and use it to help understand the impacts of future projects and rate increases. The System will then have the ability to modify the rate structure to determine which proposed rate scenarios may support current and upcoming debt and expenses. Members of FRWA staff are available to assist the System with RevPlan and updating financial models.

## Asset Statistics:

The table below summarizes the asset information collected for CKWSD.

Cedar Key Water and Sewer District	
Wastewater System Replacement Costs	
Total Replacement Cost of System	\$7,606,505.49
Percent of Assets Needing Replacement	19.24%
Cost of Replacing All Assets Needing Replacement	\$1,463,779.95
Annual Replacement Cost of System	\$147,356.50

Please note that the \$7.6 million dollar replacement cost of the wastewater system documented above, along with the annual replacement cost of \$147,356 for the system is low. These figures do not include certain assets such as large equipment and certain property improvements along with other operational items normally associated with maintaining a utility system. As a result, any proposed rate adjustments suggested by FRWA should be considered a minimum or a starting point for review and consideration by the System.

## Reserves:

Aging infrastructure is one of the most critical issues facing the wastewater-resources industry. With aging infrastructure of any kind comes increased probability of unplanned failure. Not only are emergency repairs unexpected, but given the nature of an unexpected event, repair costs can be higher than normal maintenance.

Maintaining adequate operating reserves enhance a system's ability to manage potential risks, provides the ability to manage fluctuations in revenue, and the ability to meet working capital needs. Operating reserves are also important when facing fiscal emergencies that can result from emergency repairs, droughts, natural disasters, and unforeseen economic influences.

While there is not a one size fits all approach to building reserves, FRWA cautions utilities about dropping below 90 days and encourages them to work towards a balance of cash on hand equal to or greater than 270 days of the current year's O&M budget. Cash reserves are essential to ensure a utility's long-term financial sustainability and resiliency. Each utility system has its own

unique circumstances and considerations that should be factored into the selection of the types of reserves and corresponding policies that best meet its needs and objectives.

**Rates:**

A ‘rule of thumb’ FRWA subscribes to regarding rates is that base charges pay for fixed expenses and usage charges fund the variable expenses. Rates should generate sufficient revenue to cover the full cost of operating a wastewater system. When rates are set to cover the full cost of collection and treatment, wastewater systems are more likely to have financial stability and security.

The current wastewater rate structure is as follows:

Cedar Key Water and Sewer District	
Wastewater Rates	
Small Users Base Rate	\$32.55
0 to 3,000 Gallons	\$2.67 per 1,000 Gallons
3,001 to 6,000 Gallons	\$5.39 per 1,000 Gallons
6,001 to 9,000 Gallons	\$7.84 per 1,000 Gallons
9,001 Gallons or More	\$10.26 Per 1,000 Gallons
Large Users Base Rate	\$67.92
0 to 3,000 Gallons	\$2.67 per 1,000 Gallons
3,001 to 6,000 Gallons	\$5.39 per 1,000 Gallons
6,001 to 9,000 Gallons	\$7.84 per 1,000 Gallons
9,001 Gallons or More	\$10.26 Per 1,000 Gallons

Current wastewater rate sufficiency

Cedar Key Water and Sewer District					
Wastewater Revenue Requirements Fiscal Year 2026					
	2025	2026	2027	2028	2029
Revenue Requirements:					
Operating Expenses	\$658,800	\$671,100	\$691,300	\$712,000	\$733,400
Debt Service		\$0	\$0	\$0	\$0
Other Expenses/Transfers	\$28,500	\$25,500	\$26,300	\$27,100	\$27,900
Capital Expenditures	\$76,100	\$36,500	\$78,900	\$78,900	\$78,900
Gross Revenue Requirements	\$763,400	\$733,100	\$796,500	\$818,000	\$840,200
Less: Other Revenue	\$216,400	\$216,300	\$216,300	\$216,300	\$216,300
Net Revenue Requirements	\$547,000	\$516,800	\$580,200	\$601,700	\$623,900
Existing Rate Sufficiency:					
Revenue from Existing Rates	\$493,000	\$493,000	\$493,000	\$493,000	\$493,000
Revenue Surplus/(Deficiency)	-\$54,000	-\$23,800	-\$87,200	-\$108,700	-\$130,900

As shown in the above table the current wastewater rates without an increase will not support the current nor future needs of the system.

Proposed Scenario:

The following Scenario will adequately fund the wastewater system, however a 5% increase to the base and usage rates in 2026 then followed by 15% in 2027, 7% in 2028 and 3% thereafter at each customer class.

Cedar Key Water and Sewer District					
Wastewater Revenue Requirements Fiscal Year 2026					
	2025	2026	2027	2028	2029
Revenue Requirements:					
Operating Expenses	\$658,800	\$671,100	\$691,300	\$712,000	\$733,400
Debt Service		\$0	\$0	\$0	\$0
Other Expenses/Transfers	\$28,500	\$25,500	\$26,300	\$27,100	\$27,900
Capital Expenditures	\$76,100	\$36,500	\$78,900	\$78,900	\$78,900
Gross Revenue Requirements	\$763,400	\$733,100	\$796,500	\$818,000	\$840,200
Less: Other Revenue	\$216,400	\$216,300	\$216,300	\$216,300	\$216,300
<b>Net Revenue Requirements</b>	<b>\$547,000</b>	<b>\$516,800</b>	<b>\$580,200</b>	<b>\$601,700</b>	<b>\$623,900</b>
Proposed Rate Sufficiency:					
Revenue from Proposed Rates	\$493,000	\$516,500	\$594,000	\$635,600	\$654,600
Increase in Revenue		\$23,500	\$101,000	\$142,600	\$161,600
Current Year %					
All Customer Classes					
Base Charges	0%	5%	15%	7%	3%
Usage Charges	0%	5%	15%	7%	3%
Revenue Surplus/(Deficiency)	-\$54,000	-\$300	\$13,800	\$33,900	\$30,700

### Rate Recommendation

Based on the preliminary financial sufficiency model developed by RevPlan, FRWA recommends that the District pursue rates more in line with the Proposed Scenario. In addition, FRWA encourages the District to review RevPlan, growth projections, and Consumer Price Index (CPI) changes at least annually to determine if additional rate increases are needed as well as to pursue aggressively alternative revenue funding sources for the future capital projects identified in the Capital Improvements Plan.

Proposed Wastewater Rate Schedule

Cedar Key Water and Sewer District Proposed Wastewater Rate Schedule					
	2025	2026	2027	2028	2029
<b>Wastewater</b>					
<b>Small User</b>					
Base Charges Inside City					
5/8-inch	\$31.00	\$32.55	\$37.43	\$40.05	\$41.25
Usage Charges Inside City (per 1000 gallons)					
0 to 3,000 gallons	\$2.54	\$2.67	\$3.07	\$3.29	\$3.38
3,001 to 6,000 gallons	\$5.13	\$5.39	\$6.20	\$6.63	\$6.83
6,001 to 9,000 gallons	\$7.47	\$7.84	\$9.02	\$9.65	\$9.94
9,001 gallons or more	\$9.77	\$10.26	\$11.80	\$12.62	\$13.00
<b>Large User</b>					
Base Charges Inside City					
5/8-inch	\$67.92	\$67.92	\$78.11	\$83.58	\$86.08
Usage Charges Inside City (per 1000 gallons)					
0 to 3,000 gallons	\$2.54	\$2.67	\$3.07	\$3.29	\$3.38
3,001 to 6,000 gallons	\$5.13	\$5.39	\$6.20	\$6.63	\$6.83
6,001 to 9,000 gallons	\$7.47	\$7.84	\$9.02	\$9.65	\$9.94
9,001 gallons or more	\$9.77	\$10.26	\$11.80	\$12.62	\$13.00

### Existing Rate vs. Proposed Rate Sufficiency

Cedar Key Water and Sewer District					
Wastewater Revenue Requirements Fiscal Year 2026					
	2025	2026	2027	2028	2029
Revenue Requirements:					
Operating Expenses	\$658,800	\$671,100	\$691,300	\$712,000	\$733,400
Debt Service		\$0	\$0	\$0	\$0
Other Expenses/Transfers	\$28,500	\$25,500	\$26,300	\$27,100	\$27,900
Capital Expenditures	\$76,100	\$36,500	\$78,900	\$78,900	\$78,900
Gross Revenue Requirements	\$763,400	\$733,100	\$796,500	\$818,000	\$840,200
Less: Other Revenue	\$216,400	\$216,300	\$216,300	\$216,300	\$216,300
<b>Net Revenue Requirements</b>	<b>\$547,000</b>	<b>\$516,800</b>	<b>\$580,200</b>	<b>\$601,700</b>	<b>\$623,900</b>
Existing Rate Sufficiency:					
Revenue from Existing Rates	\$493,000	\$493,000	\$493,000	\$493,000	\$493,000
<b>Revenue Surplus/(Deficiency)</b>	<b>-\$54,000</b>	<b>-\$23,800</b>	<b>-\$87,200</b>	<b>-\$108,700</b>	<b>-\$130,900</b>
Proposed Rate Sufficiency:					
Revenue from Proposed Rates	\$493,000	\$516,500	\$594,000	\$635,600	\$654,600
Increase in Revenue		\$23,500	\$101,000	\$142,600	\$161,600
<b>Revenue Surplus/(Deficiency)</b>	<b>-\$54,000</b>	<b>-\$300</b>	<b>\$13,800</b>	<b>\$33,900</b>	<b>\$30,700</b>

### Typical Small User Monthly Bill for 5,000 Gallons

Cedar Key Water and Sewer District					
Typical Monthly Bill, Small User Inside City, 5,000 Gallons					
	2025	2026	2027	2028	2029
<b>Wastewater</b>					
Base Charge	\$31.00	\$32.55	\$37.43	\$40.05	\$41.25
Usage Charge, 5,000 Gallons	\$17.88	\$18.79	\$21.61	\$23.12	\$23.81
<b>Wastewater Total</b>	<b>\$48.88</b>	<b>\$51.34</b>	<b>\$59.04</b>	<b>\$63.17</b>	<b>\$65.06</b>

# Energy Conservation

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## Energy Conservation and Cost Savings

Energy costs often make up twenty-five to thirty percent of a utility's total operation and maintenance costs. They also represent the largest controllable cost of providing water and wastewater services. EPA's "Ensuring a Sustainable Future: An Energy Management Guidebook for Wastewater and Water Utilities" provides details to support utilities in energy management and cost reduction by using the steps described in this guidebook. The Guidebook takes utilities through a series of steps to analyze their current energy usage, use energy audits to identify ways to improve efficiency and measure the effectiveness of energy projects.

## Energy Conservation Measures

CKWSD should ensure all assets, not just those connected to a power source, are evaluated for energy efficiency. It is highly recommended that staff conduct an energy assessment or audit. The following are common energy management initiatives the System should implement going forward:

1. Load management
2. Replace weather-stripping and insulation on buildings.
3. Installation of insulated metal roofing over energy inefficient shingle roofing
4. On-demand water heaters
5. Variable frequency driven pumps and electrical equipment
6. Energy efficient infrastructure
7. LED lighting
8. Meg electric motors
9. MCC electrical lug thermal investigation
10. Flag underperforming assets for rehabilitation or replacement

The above 10 energy saving initiatives are just a start and most can be accomplished in-house. A more comprehensive energy audit, conducted by an energy consultant/professional, is recommended to evaluate how much energy is consumed system-wide and identify measures that can be taken to utilize energy more efficiently.

With the cost of electricity rising, the reduction of energy use should be a priority for municipalities. A key deliverable of an energy audit is a thorough analysis of the effect of overdesign on energy efficiency. Plants are designed to perform at maximum flow and loading conditions. Unfortunately, most plants are not efficient in average conditions. Aging infrastructure is another source of inefficient usage of energy in WWTPs across the country. The justification for addressing aging infrastructure related to energy waste is also included in the energy audit process.

The table on the following page provides typical water and wastewater high-use energy operations and associated potential energy saving measures.

High Energy Operations	Energy Saving Measures
Lighting	<ul style="list-style-type: none"> <li>Motion Sensors</li> <li>T5 low and high bay fixtures</li> <li>Pulse start metal halide</li> <li>Indirect fluorescent</li> <li>Super-efficient T8s</li> <li>Comprehensive control for large buildings</li> </ul>
Heating, Ventilation, Air Conditioning (HVAC)	<ul style="list-style-type: none"> <li>Water source heat pumps</li> <li>Prescriptive incentives for remote telemetry</li> <li>Custom incentives for larger units</li> <li>occupancy controls</li> </ul>

## Energy Audit Approach

An energy audit is intended to evaluate how much energy is consumed and identify measures that can be taken to utilize energy more efficiently. The primary goal is reducing power consumption and cost through physical and operational changes. Each system will have unique opportunities to reduce energy use or cost depending on system specific changes and opportunities within the power provider's rate schedules. An audit of an individual treatment plant is an attempt to pinpoint wasted or unneeded facility energy consumption. It is recommended that an energy audit be carried out every two to three years to analyze a return on investment.

A wastewater system energy audit approach checklist for pumps and motors, similar to the one below, can be a useful tool to identify areas of potential concern and to develop a plan of action to resolve them.

Energy Audit Approach		
Minimum Equipment Information to Gather	Additional Information to Gather	Conditions to Consider
Pump Style	Pump manufacturer's pump curves	Maintenance records
Number of Pump Stages	Actual pump curve	Consistently throttled valves
Pump and Motor Speed	Power factor	Excessive noise or vibrations
Pump Rated Head (name plate)	Load profile	Evidence of wear or cavitation on pump impellers or pump bearings
Motor rated power and voltage (name plate)	Analysis of variable frequency drives (vfd's) if present	Out-of-alignment conditions
Rated and actual pump discharge	Pipe sizes	Significant flow rate/pressure variations
Operation schedules	Motor current	Active by-pass piping
	Discharge pressure	Restrictions in pipes or pumps
	Water level (source)	Restrictive/leaking pump shaft packing
	Pump suction pressure	

Several grants and loans are available to systems for completing such projects. A list of common funding sources is found in Section 9 of this Plan.

Please know that FRWA offers Energy Assessments to our members and SRF recipients that are participating in the AMFSP program. It is recommended that audits be completed every two to three years. For future energy assessments, please contact your local Circuit Rider or the FRWA office to participate.

## 9. Conclusions

### General:

Our conclusions are based on our observations during the data collection procedure, discussions with District staff, regulatory inspection data, and our experience related to similar assets.

Areas needing attention are detailed in [Section 4](#) and include:

**Water Reclamation Facility:** Continue working with the W3C to relocate the WRF

**Lift Stations:** Continue the Sewer Lift Station Rehabilitation Project to replace all seventeen (17) of the sewer lift stations

**Manholes:** Any Manholes in “poor” or “failed” condition should be located, opened, and inspected by staff to determine what rehabilitation measures are necessary. Work with an engineering firm to finalize a cost effectiveness analysis and recommendation for sewer system manhole improvements.

**Sewer Mains:** Begin budgeting for the renewal and replacement of the collection system and the rehabilitation, relining or replacement of older lines. Conduct smoke testing of the system to identify critical or problematic areas of the collection system. Begin the practice of inspecting and cleaning the collection system. Develop additional future capital repair projects that identify and record the location and severity of any defects.

#### **Other Areas:**

- An Asset Management Planning (AMP) and Computerized Maintenance Management System (CMMS) program must be implemented to maintain assets efficiently and effectively.
- Staff training in maintenance, safety, and use of the AMP/CMMS tool must be completed.
- Rates must be modified and monitored to ensure adequate funding for operations and system improvements.
- An audit of Energy Saving initiatives is recommended every two to three years. Even small changes in energy use can result in large savings.
- The Asset Management Plan must be adopted by Resolution or Ordinance. This demonstrates the utility’s commitment to the plan. After adoption, implementation of the AMP must occur.

### **Implementing this Asset Management and Fiscal Sustainability Plan:**

Implementing an Asset Management and Fiscal Sustainability Plan requires several items:

1. **Assign specific personnel** to oversee and perform the tasks of Asset Management.
2. **Develop and use a Computerized Maintenance Management System (CMMS) program.** The information provided in this FSAMP plan will give the utility a good starting point to begin. Properly maintaining assets will ensure their useful life is extended and will ultimately save money. Asset maintenance tasks are scheduled and tracked, new assets are captured, and assets removed from service are retired properly using CMMS. Transitioning from reactive to preventive and predictive maintenance philosophies will net potentially large savings for the utility. Diamond Maps is one example among many options that are available. FRWA can help with set up and implementation.
3. **Develop specific Level of Service items.** Create a Level of Service (LOS) Agreement and inform customers of the Utility’s commitment to providing the stated LOS. Successes can be shared with customers. This can dramatically improve customer relations. This also gives utility employees goals to strive for and can positively impact morale. We have included a draft LOS list in [Section 2 – Level of Service](#).
4. **Develop specific Change Out/Repair/Replacement Programs.** The System budgets for Repair and Replacement and should continue to evaluate the system to adjust the annual budgeted amounts

accordingly. An example includes budgeting for a certain number of stepped system refurbishments each year.

5. **Modify the existing rate structure.** Continue to make sure adequate funds are available to properly operate and maintain the facilities. Rate increases, when required, can be accomplished in a stepped fashion rather than an ‘all now’ approach to lessen the resulting customer impact.
6. **Explore financial assistance options.** Financial assistance is especially useful in the beginning stages of Asset Management since budget shortfalls likely exist and high-cost items may be needed quickly. For a table of common funding sources, see [Funding Sources for Water and Wastewater Systems](#).
7. **Revisit the AMFS plan annually.** An Asset Management Plan is a living document. It can be revised at any time but must be revisited and evaluated at least once each year. Common updates or revisions include:
  - Changes to your asset management team.
  - Updates to the asset inventory.
  - Updates to asset condition and criticality ranking charts.
  - Updates to asset condition and criticality assessment procedures.
  - Updates to operation and maintenance activities.
  - Changes to financial strategies and long-term funding plans.

The annual review should begin by asking yourself:

***“What changes have occurred since our last AMFS plan update?”***

### **Funding Sources for Water and Wastewater Systems**

Below is a table of common funding sources, including web links and contact information. All systems should be making the effort to secure funding, which can be in the form of low or no interest loans, grants, or a combination of both.

Agency/Program	Website	Contact
FDEP Drinking Water State Revolving Fund Program (FDEP)	<a href="https://floridadep.gov/wra/srf/content/dwsrf-program">https://floridadep.gov/wra/srf/content/dwsrf-program</a>	Eric Meyers eric.meyers@dep.state.fl.us (850) 245-2969
FDEP Clean Water State Revolving Fund Program (CWSRF)	<a href="https://floridadep.gov/wra/srf/content/cwsrf-program">https://floridadep.gov/wra/srf/content/cwsrf-program</a>	Catherine Murry catherine.M.Murry@floridadep.gov (850) 245-2913
USDA Rural Development-Water and Wastewater Direct Loan Grants	<a href="https://www.rd.usda.gov/programs-services/rural-economic-development-loan-grant-program">https://www.rd.usda.gov/programs-services/rural-economic-development-loan-grant-program</a> <a href="https://www.rd.usda.gov/programs-services/water-waste-disposal-loan-grant-program">https://www.rd.usda.gov/programs-services/water-waste-disposal-loan-grant-program</a>	Jeanie Isler jeanie.isler@fl.usda.gov (352) 338-3440
Economic Development Administration-	<a href="https://www.eda.gov/resources/economic-fund/">https://www.eda.gov/resources/economic-fund/</a>	Greg Vaday
National Rural Water Association-Revolving Loan Fund	<a href="https://nrwa.org/initiatives/revolving-loan-fund/">https://nrwa.org/initiatives/revolving-loan-fund/</a>	Alicia Keeter Alicia@frwa.net (850) 668-2746
Florida Commerce-Florida Small Cities Community Development Block Grant Program	<a href="https://www.floridajobs.org/community-planning-and-development/assistance-for-governments-and-organizations/florida-small-cities-community-development-block-grant-program">https://www.floridajobs.org/community-planning-and-development/assistance-for-governments-and-organizations/florida-small-cities-community-development-block-grant-program</a>	For more information email CDBG@Commerce.fl.gov

## Closing:

This Asset Management and Fiscal Sustainability plan is presented to the Cedar Key Water and Sewer District for consideration and final adoption. Its creation would not be possible without the cooperation of the System staff and the Florida Department of Environmental Protection State Revolving Fund (FDEP-SRF).

As a valued FRWA member, it is our goal to help make the most effective and efficient use of your limited resources. The Asset Management and Fiscal Sustainability Plan is an unbiased, impartial, independent review and is solely intended for achievement of wastewater system fiscal sustainability and maintaining your valuable utility assets. The Florida Rural Water Association has enjoyed serving you and will happily assist the District with any future projects to ensure your Asset Management Plan is a success.

## APPENDIX A: Sample Resolution

### RESOLUTION NO. 2025-\_\_\_\_\_

**A RESOLUTION OF THE CEDAR KEY WATER AND SEWER DISTRICT, APPROVING THE CEDAR KEY WATER AND SEWER DISTRICT WASTEWATER ASSET MANAGEMENT AND FISCAL SUSTAINABILITY PLAN; AUTHORIZING THE GENERAL MANAGER TO TAKE ALL ACTIONS NECESSARY TO EFFECTUATE THE INTENT OF THIS RESOLUTION; PROVIDING FOR AN EFFECTIVE DATE.**

**WHEREAS**, Florida Statutes provides financial assistance to local government agencies to finance construction of the municipal utility system improvements; and

**WHEREAS**, the Florida Department of Environmental Protection State Revolving Fund (SRF) has designated the CKWSD Utility System Improvements identified in the Wastewater Asset Management and Fiscal Sustainability Plan, as potentially eligible for available funding; and

**WHEREAS**, as a condition of obtaining funding from the SRF, the System is required to implement an Asset Management and Fiscal Sustainability Plan for the System's Utility System Improvements; and

**WHEREAS**, the Cedar Key Water and Sewer District Board of Commissioners has determined that approval of the attached Wastewater Asset Management and Fiscal Sustainability Plan for the proposed improvements, in order to obtain necessary funding in accordance with SRF guidelines, is in the best interest of the District.

**NOW, THEREFORE, BE IT RESOLVED BY THE CEDAR KEY WATER AND SEWER DISTRICT BOARD OF COMMISSIONERS** the following:

**Section 1.** That the Board of Commissioners hereby approves the Cedar Key Water and Sewer District Wastewater Asset Management and Fiscal Sustainability Plan dated \_\_\_\_\_, attached hereto and incorporated by reference as a part of this Resolution.

**Section 2.** That the General Manager is authorized to take all actions necessary to effectuate the intent of this Resolution and to implement the Wastewater Asset Management and Fiscal Sustainability Plan in accordance with applicable Florida law and Cedar Key Water and Sewer District Board of Commissioners direction in order to obtain funding from the SRF.

**Section 3.** That the Cedar Key Water and Sewer District Board of Commissioners will annually evaluate existing rates to determine the need for any increase and will increase rates in accordance with the financial recommendation found in the Wastewater Asset Management and Fiscal Sustainability Plan or in proportion to the District's needs as determined by the Board of Commissioners in its discretion.

**Section 4.** That this Resolution shall become effective immediately upon its adoption.

**PASSED AND ADOPTED** on this \_\_\_\_\_ day of \_\_\_\_\_, 2025.

**Cedar Key Water and Sewer District**

\_\_\_\_\_  
Michael Borelli, Chairman

**ATTEST:**

\_\_\_\_\_

**APPROVED AS TO FORM:**

\_\_\_\_\_  
District Attorney

## APPENDIX B: Master Asset List

Cedar Key Water and Sewer District Wastewater Master Asset List						
AutoName	Install Year	Design Life	Condition	Age EOL	COF	Replacement Cost
wwManH-1	1986	50	Poor	2036	Moderate	9525
wwManH-2	1982	50	Poor	2032	Moderate	3525
wwManH-3	1900	50	Poor	1950	Moderate	10700
wwManH-4	1982	50	Poor	2032	Moderate	9165
wwManH-5	1900	50	Poor	1950	Moderate	8625
wwManH-6	1900	50	Poor	1950	Moderate	4313
wwManH-7	1900	50	Average	1950	Moderate	3500
wwManH-8	1983	50	Average	2033	Moderate	24500
wwManH-9	1983	50	Poor	2033	Moderate	9000
wwManH-10	1983	50	Poor	2033	Moderate	9000
wwManH-11	1983	50	Poor	2033	Moderate	9000
wwManH-12	1983	50	Poor	2033	Moderate	9000
wwManH-13	1983	50	Poor	2033	Moderate	9000
wwManH-14	1983	50	Average	2033	Moderate	12750
wwManH-15	1982	50	Average	2032	Moderate	18331
wwManH-16	1983	50	Average	2033	Moderate	13119
wwManH-17	1982	50	Average	2032	Moderate	23000
wwManH-18	1982	50	Average	2032	Moderate	23700
wwManH-19	1982	50	Average	2032	Moderate	15800
wwManH-20	1982	50	Average	2032	Moderate	27000
wwManH-21	1983	50	Average	2033	Moderate	10600
wwManH-22	1983	50	Average	2033	Moderate	5570
wwManH-23	1982	50	Average	2032	Moderate	15815
wwManH-24	1983	50	Average	2033	Moderate	13658
wwManH-25	1983	50	Average	2033	Moderate	17250
wwManH-26	1982	50	Average	2032	Moderate	9345
wwManH-27	1982	50	Poor	2032	Moderate	9000
wwManH-28	1982	50	Average	2032	Moderate	13838
wwManH-29	1982	50	Poor	2032	Moderate	9000
wwManH-30	1982	50	Average	2032	Moderate	13800
wwManH-31	1982	50	Average	2032	Moderate	9345
wwManH-32	1982	50	Average	2032	Moderate	19400
wwManH-33	1982	50	Average	2032	Moderate	18300
wwManH-34	1982	50	Average	2032	Moderate	17250
wwManH-35	1982	50	Average	2032	Moderate	11150
wwManH-36	1982	50	Poor	2032	Moderate	17253
wwManH-37	1982	50	Poor	2032	Moderate	12400
wwManH-38	1982	50	Poor	2032	Moderate	12940
wwManH-39	1982	50	Poor	2032	Moderate	9884
wwManH-40	1982	50	Average	2032	Moderate	11322
wwManH-41	1983	50	Average	2033	Moderate	12940
wwManH-42	1983	50	Average	2033	Moderate	10600
wwManH-43	1983	50	Average	2033	Moderate	3500
wwManH-44	1983	50	Average	2033	Moderate	7188
wwManH-45	1983	50	Average	2033	Moderate	10064
wwManH-46	1983	50	Average	2033	Moderate	7188
wwManH-47	1983	50	Average	2033	Moderate	9750

Cedar Key Water and Sewer District  
Wastewater Master Asset List

AutoName	Install Year	Design Life	Condition	Age EOL	COF	Replacement Cost
wwManH-48	1983	50	Average	2033	Moderate	15276
wwManH-49	1983	50	Average	2033	Moderate	9345
wwManH-50	1983	50	Average	2033	Moderate	8626
wwManH-51	1983	50	Average	2033	Moderate	21566
wwManH-52	1983	50	Average	2033	Moderate	7548
wwManH-53	1983	50	Average	2033	Moderate	9165
wwManH-54	1983	50	Average	2033	Moderate	13119
wwManH-55	1983	50	Average	2033	Moderate	20668
wwManH-56	1993	50	Average	2043	Moderate	14377
wwManH-57	1983	50	Very Poor	2033	Moderate	17972
wwManH-58	1983	50	Poor	2033	Moderate	18331
wwManH-59	1983	50	Average	2033	Moderate	13658
wwManH-60	1983	50	Average	2033	Moderate	14737
wwManH-61	1983	50	Average	2033	Moderate	8626
wwManH-62	1983	50	Average	2033	Moderate	14377
wwManH-63	1983	50	Average	2033	Moderate	12940
wwManH-64	1983	50	Poor	2033	Moderate	15456
wwManH-65	1983	50	Poor	2033	Moderate	9000
wwManH-66	1983	50	Poor	2033	Moderate	12940
wwManH-67	1993	50	Average	2043	Moderate	17253
wwManH-68	1993	50	Average	2043	Moderate	13479
wwManH-69	1993	50	Average	2043	Moderate	16174
wwManH-70	1983	50	Average	2033	Moderate	13119
wwManH-71	1983	50	Average	2033	Moderate	12940
wwManH-72	1928	50	Poor	1978	Moderate	7188
wwManH-73	1928	50	Average	1978	Moderate	8986
wwManH-74	1928	50	Poor	1978	Moderate	10783
wwManH-75	1928	50	Poor	1978	Moderate	3500
wwManH-76	1928	50	Average	1978	Moderate	18870
wwManH-77	1928	50	Poor	1978	Moderate	8626
wwManH-78	1928	50	Average	1978	Moderate	7188
wwManH-79	1928	50	Poor	1978	Moderate	7188
wwManH-80	1928	50	Poor	1978	Moderate	7188
wwManH-81	2000	50	Average	2050	Moderate	5930
wwManH-82	1928	50	Poor	1978	Moderate	16174
wwManH-83	1928	50	Average	1978	Moderate	16174
wwManH-84	2000	50	Average	2050	Moderate	8626
wwManH-85	1928	50	Poor	1978	Moderate	7188
wwManH-87	1928	50	Poor	1978	Moderate	7368
wwManH-88	1928	50	Average	1978	Moderate	5751
wwManH-89	1928	50	Poor	1978	Moderate	7000
wwManH-90	1928	50	Poor	1978	Moderate	7000
wwManH-92	1928	50	Average	1978	Moderate	8800
wwManH-93	1928	50	Average	1978	Moderate	20300
wwManH-94	1928	50	Very Poor	1978	Moderate	13300
wwManH-95	1928	50	Average	1978	Moderate	12400
wwManH-96	1928	50	Average	1978	Moderate	5751

Cedar Key Water and Sewer District  
Wastewater Master Asset List

AutoName	Install Year	Design Life	Condition	Age EOL	COF	Replacement Cost
wwManH-97	1928	50	Average	1978	Moderate	5930
wwManH-98	1928	50	Average	1978	Moderate	13119
wwManH-99	1928	50	Good	1978	Moderate	10423
wwManH-100	1928	50	Poor	1978	Moderate	10423
wwManH-101	1928	50	Poor	1978	Moderate	9000
wwManH-102	1928	50	Average	1978	Moderate	13300
wwManH-103	1928	50	Average	1978	Moderate	19770
wwManH-104	1983	50	Poor	2033	Moderate	12940
wwManH-105	1983	50	Average	2033	Moderate	12040
wwManH-106	1983	50	Poor	2033	Moderate	12940
wwManH-107	1928	50	Average	1978	Moderate	5930
wwManH-108	1928	50	Poor	1978	Moderate	17792
wwManH-109	1928	50	Average	1978	Moderate	19949
wwManH-110	1983	50	Average	2033	Moderate	13749
wwManH-111	1982	50	Average	2032	Moderate	20668
wwManH-112	1982	50	Average	2032	Moderate	12400
wwManH-113	1928	50	Poor	1978	Moderate	17792
wwManH-114	1926	50	Average	1976	Moderate	9345
wwManH-115	1926	50	Average	1976	Moderate	13658
wwManH-116	1926	50	Average	1976	Moderate	8986
wwManH-117	1926	50	Poor	1976	Moderate	9000
wwManH-118	1982	50	Poor	2032	Moderate	4313
wwManH-119	1900	50	Poor	1950	Moderate	12760
wwManH-120	1983	50	Average	2033	Moderate	13479
wwManH-121	1990	50	Average	2040	Moderate	17433
wwManH-122	1983	50	Average	2033	Moderate	9165
wwManH-123	1982	50	Poor	2032	Moderate	9000
wwManH-124	1982	50	Poor	2032	Moderate	9000
wwManH-125	1982	50	Average	2032	Moderate	9346
wwManH-126	1993	50	Average	2043	Moderate	8626
wwManH-127	1993	50	Average	2043	Moderate	5751
wwManH-128	1993	50	Poor	2043	Moderate	9000
wwManH-129	1982	50	Poor	2032	Moderate	9000
wwManH-130	1982	50	Poor	2032	Moderate	9000
wwManH-131	1982	50	Poor	2032	Moderate	9000
wwManH-132	1982	50	Poor	2032	Moderate	9000
wwManH-133	1982	50	Poor	2032	Moderate	9000
wwManH-134	1982	50	Poor	2032	Moderate	9000
wwManH-135	1982	50	Poor	2032	Moderate	9000
wwManH-136	1982	50	Average	2032	Moderate	17433
wwManH-137	1982	50	Poor	2032	Moderate	9000
wwManH-138	1982	50	Poor	2032	Moderate	9000
wwManH-139	1982	50	Poor	2032	Moderate	9000
wwManH-140	1982	50	Poor	2032	Moderate	9000
wwManH-141	1982	50	Poor	2032	Moderate	12940
wwManH-142	1982	50	Poor	2032	Moderate	9000
wwManH-143	1982	50	Poor	2032	Moderate	9000

**Cedar Key Water and Sewer District  
Wastewater Master Asset List**

AutoName	Install Year	Design Life	Condition	Age EOL	COF	Replacement Cost
wwManH-144	1983	50	Average	2033	Moderate	7728
wwManH-145	1983	50	Poor	2033	Moderate	9000
wwManH-146	1983	50	Poor	2033	Moderate	9000
wwManH-147	1983	50	Average	2033	Moderate	9165
wwManH-148	1983	50	Average	2033	Moderate	12940
wwManH-149	1983	50	Average	2033	Moderate	7548
wwManH-150	1983	50	Average	2033	Moderate	7728
wwManH-151	1983	50	Poor	2033	Moderate	9000
wwManH-152	1983	50	Average	2033	Moderate	15456
wwManH-153	1983	50	Poor	2033	Moderate	9000
wwManH-154	1983	50	Poor	2033	Moderate	9000
wwManH-155	1993	50	Average	2043	Moderate	14377
wwManH-156	1993	50	Poor	2043	Moderate	9000
wwManH-157	1993	50	Poor	2043	Moderate	9000
wwManH-158	1993	50	Poor	2043	Moderate	9000
wwManH-159	1993	50	Poor	2043	Moderate	9000
wwManH-160	1993	50	Poor	2043	Moderate	9000
wwManH-161	1993	50	Poor	2043	Moderate	9000
wwManH-162	1993	50	Average	2043	Moderate	7907
wwManH-163	1993	50	Poor	2043	Moderate	9000
wwManH-164	1983	50	Poor	2033	Moderate	12580
wwManH-165	1928	50	Average	1978	Moderate	10064
wwManH-166	1928	50	Poor	1978	Moderate	9000
wwManH-167	1928	50	Poor	1978	Moderate	9000
wwManH-168	1928	50	Poor	1978	Moderate	9000
wwManH-169	1928	50	Poor	1978	Moderate	7368
wwManH-170	1928	50	Poor	1978	Moderate	9000
wwManH-171	1928	50	Poor	1978	Moderate	9000
wwManH-172	1983	50	Average	2033	Moderate	28216
wwManH-173	1983	50	Poor	2033	Moderate	9000
wwManH-174	1983	50	Poor	2033	Moderate	9000
wwManH-175	1983	50	Average	2033	Moderate	12041
wwManH-176	1983	50	Poor	2033	Moderate	9000
wwManH-177	1983	50	Poor	2033	Moderate	9000
wwManH-178	1926	50	Average	1976	Moderate	13658
wwManH-179	1928	50	Very Poor	1978	Moderate	16174
wwManH-180	1928	50	Poor	1978	Moderate	9000
wwManH-181	1983	50	Average	2033	Moderate	12221
wwManH-182	1983	50	Average	2033	Moderate	8626
wwManH-183	1983	50	Average	2033	Moderate	12221
wwManH-184	1983	50	Average	2033	Moderate	17253
wwManH-185	1983	50	Poor	2033	Moderate	12041
wwManH-186	1982	50	Average	2032	Moderate	13479
wwManH-187	1982	50	Poor	2032	Moderate	9000
wwManH-188	1982	50	Poor	2032	Moderate	9000
wwManH-189	1983	50	Average	2033	Major	15456
wwManH-190	1983	50	Average	2033	Moderate	8226

Cedar Key Water and Sewer District

Wastewater Master Asset List

AutoName	Install Year	Design Life	Condition	Age EOL	COF	Replacement Cost
wwManH-191	1983	50	Average	2033	Major	8087
wwManH-192	1983	50	Poor	2033	Major	9000
wwManH-193	1983	50	Average	2033	Major	9000
wwManH-194	1982	50	Average	2032	Major	9000
wwManH-195	1983	50	Average	2033	Major	9000
wwManH-196	1983	50	Average	2033	Major	9000
wwManH-197	1983	50	Average	2033	Major	9000
wwManH-198	1900	50	Poor	1950	Major	9000
wwManH-199	1982	50	Poor	2032	Major	9705
wwManH-200	1928	50	Average	1978	Major	6290
wwManH-202	1982	50	Very Poor	2032	Moderate	7548
wwManH-203	1983	50	Average	2033	Moderate	10064
wwManH-204	1928	50	Average	1978	Moderate	4672
wwManH-205	1928	50	Average	1978	Moderate	15096
wwManH-206	1993	50	Poor	2043	Moderate	9525
wwManH-207	1982	50	Average	2032	Moderate	14018

**Cedar Key Water and Sewer District**  
**Wastewater Master Asset List**

Asset Name	Install Year	Design Life	Condition	Age EOL	COF	Replacement Cost
Static screen	1990	25	Average	2033	Moderate	50000
Aerator	1990	25	Average	2033	Moderate	5000
Aerator	1990	25	Average	2033	Moderate	5000
Aerator	1990	25	Average	2032	Moderate	5000
Aerator	1990	25	Average	2033	Moderate	5000
Blower	2020	25	Good	2033	Moderate	10000
Gravity Filters	1990	25	Average	2033	Moderate	50000
Gravity Filter	1990	25	Average	1950	Moderate	50000
Blower	1990	25	Average	2032	Moderate	5000
Blower	1990	25	Average	1978	Moderate	5000
LS2 wetwell	1990	25	Average	2038	Moderate	14130
Ls1 wetwell	1990	25	Poor	2033	Moderate	14000
Ls8 wetwell	1990	25	Average	2038	Moderate	5500
	1990	25	Excellent	2048	Moderate	15000
	2000	25	Excellent	2048	Moderate	15000
Ls11 wetwell	1990	25	Poor	2033	Moderate	5500
Ls12 wetwell	1983	25	Poor	2033	Moderate	5500
LS13 wetwell	1982	25	Poor	2040	Moderate	5500
Ls13 wetwell	1982	25	Very Poor	2030	Moderate	5500
Ls15 wetwell	1983	25	Average	2038	Moderate	15000
	2023	25	Average	2038	Moderate	23550
Ls4 wetwell	2000	25	Poor	2033	Moderate	15550
Ls17 wetwell	1990	25	Poor	2033	Moderate	14000
Ls5 wetwell	1990	25	Poor	2033	Moderate	23550
	1990	25	Excellent	2048	Moderate	15550
Ls5 wetwell	1990	25	Poor	2033	Moderate	23550
	2024	25	Excellent	2048	Moderate	23500
Aeration Tank	1990	50	Average	2050	Moderate	419500
Aeration	1990	50	Average	2050	Moderate	419500
Clarifier	1990	50	Average	2050	Moderate	250000
Clarifier	1990	50	Average	2050	Moderate	250000
CCC	1990	50	Average	2050	Moderate	30730
CCC	1990	50	Average	2050	Moderate	30730
Digester	1990	50	Average	2050	Moderate	115000
Blower motor	2020	20	Good	2039	Moderate	7500
Blower Motor	1990	20	Average	2035	Moderate	7500
Blower Motor	1990	20	Average	2035	Moderate	7500

**Cedar Key Water and Sewer District  
Wastewater Master Asset List**

Asset Name	Install Year	Design Life	Condition	Age EOL	COF	Replacement Cost
Ls2 pump 1	1999	20	Average	2035	Moderate	20000
Ls2 pump2	1999	20	Average	2035	Moderate	20000
Ls8 pump 1	1992	20	Poor	2031	Moderate	2000
Ls8 pump2	1992	20	Poor	2031	Moderate	2000
Ls11 pump1	1982	20	Failed	2025	Moderate	2000
Ls11 pump2	1982	20	Failed	2025	Moderate	2000
Ls12 pump1	2022	20	Poor	2031	Moderate	2000
Ls12 pump2	2022	20	Failed	2025	Moderate	2000
Ls13 pump 1	1982	20	Failed	2025	Moderate	2000
Ls13 pump2	2025	20	Excellent	2043	Moderate	2000
Ls13 pump1	1982	20	Failed	2025	Moderate	2000
Ls13 pump2	2020	20	Poor	2031	Moderate	2000
Ls10 pump 2	2023	20	Good	2039	Moderate	20000
Pump 1	2023	20	Average	2035	Moderate	20000
Ls10 pump2	2023	20	Good	2039	Moderate	20000
Pump 1	2023	20	Average	2035	Moderate	20000
Pump 2	2023	20	Average	2035	Moderate	20000
Ls4 pump1	2022	20	Poor	2031	Moderate	2000
Ls4 pump2	2022	20	Poor	2031	Moderate	2000
Ls17 pump1	1995	20	Poor	2031	Moderate	2000
Ls17 pump2	1995	20	Failed	2025	Moderate	2000
Ls5 pump2	2024	20	Good	2039	Moderate	2000
Ls5 pumo1	2011	20	Average	2035	Moderate	2000
Ls5 pump 1	2024	20	Average	2035	Moderate	2000

**Cedar Key Water and Sewer District  
Wastewater Master Asset List**

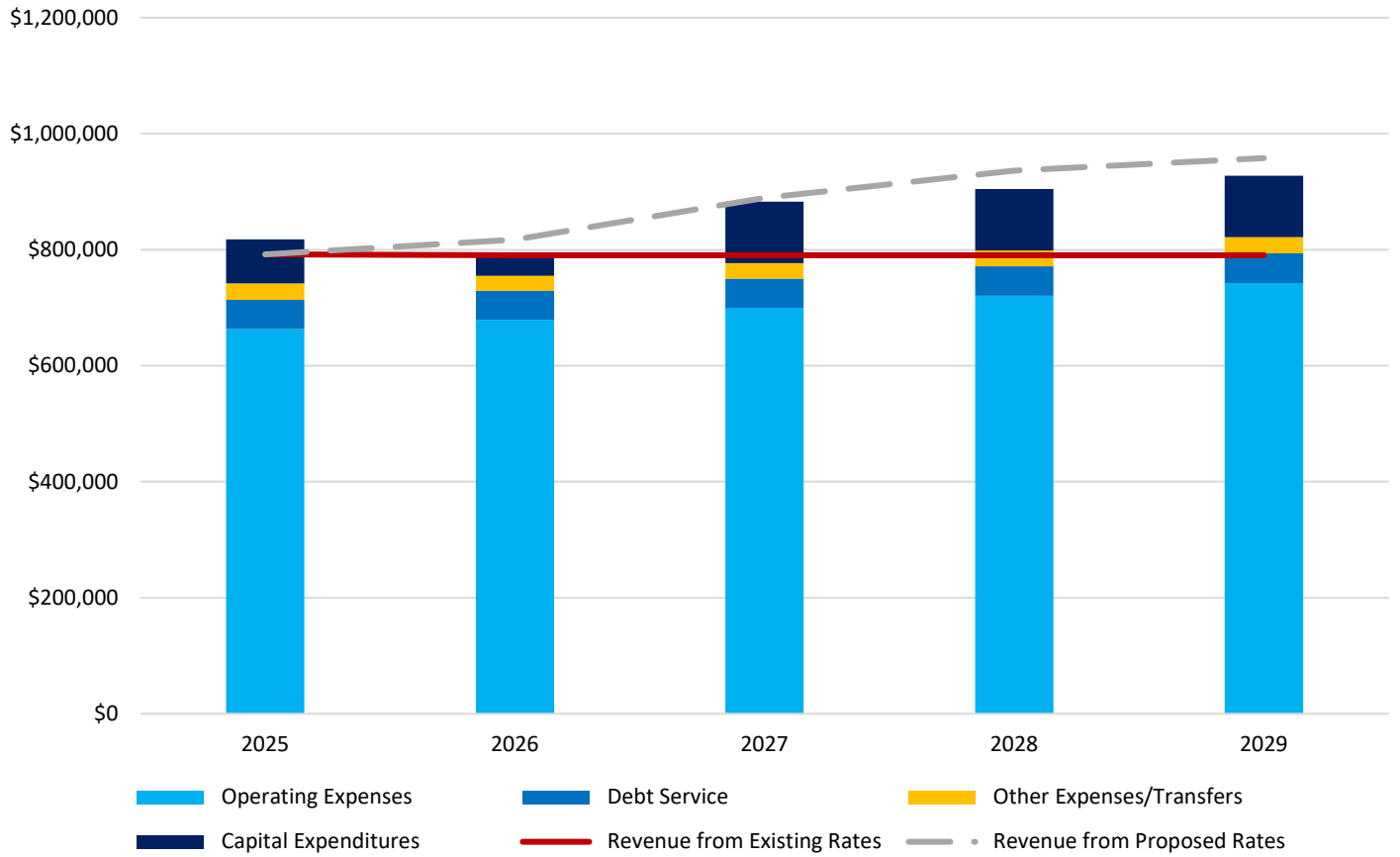
Asset Name	Install Year	Design Life	Condition	Age EOL	COF	Replacement Cost
wElec-2	1975	20	Average	2035	Moderate	90000
wElec-3	2025	20	Excellent	2043	Moderate	5000
wElec-4	2000	20	Good	2039	Moderate	5000
wElec-5	1992	20	Poor	2031	Moderate	5000
wElec-6	1982	20	Failed	2025	Moderate	2500
wElec-7	1982	20	Very Poor	2027	Moderate	5000
wElec-8	1982	20	Very Poor	2027	Moderate	5000
wElec-9	1982	20	Very Poor	2027	Moderate	5000
wElec-10	2023	20	Good	2039	Moderate	5000
wElec-11	2023	20	Good	2039	Moderate	5000
wElec-12	2000	20	Average	2035	Moderate	5000
wElec-13	1983	20	Poor	2031	Moderate	5000
wElec-14	1982	20	Poor	2031	Moderate	5000
wElec-15	2024	20	Average	2035	Moderate	5000
wElec-16	1990	20	Average	2035	Moderate	5000

# APPENDIX C: RevPlan

Cedar Key Water and Sewer District  
 Cedar Key FY2026  
 Fiscal Year: 2026  
 Water Revenue Requirements

	2025	2026	2027	2028	2029
<b>Revenue Requirements:</b>					
Operating Expenses	\$663,600	\$679,300	\$699,700	\$720,700	\$742,300
Debt Service	\$49,900	\$50,300	\$50,700	\$51,000	\$51,300
Other Expenses/Transfers	\$28,500	\$25,500	\$26,300	\$27,100	\$27,900
Capital Expenditures	\$76,100	\$36,500	\$106,100	\$106,100	\$106,100
Gross Revenue Requirements	\$818,100	\$791,600	\$882,800	\$904,900	\$927,600
Less: Other Revenue	\$220,200	\$218,700	\$218,700	\$218,700	\$218,700
Net Revenue Requirements	\$597,900	\$572,900	\$664,100	\$686,200	\$708,900
<b>Existing Rate Sufficiency:</b>					
Revenue from Existing Rates	\$571,800	\$571,800	\$571,800	\$571,800	\$571,800
Revenue Surplus/(Deficiency)	-\$26,100	-\$1,100	-\$92,300	-\$114,400	-\$137,100
<b>Proposed Rate Sufficiency:</b>					
Revenue from Proposed Rates	\$571,800	\$598,900	\$670,800	\$717,800	\$739,300
Increase in Revenue	\$0	\$27,100	\$99,000	\$146,000	\$167,500
<b>Cumulative %</b>					
All Customer Classes					
Base Charges	0.00%	5.00%	17.60%	25.83%	29.61%
Usage Charges	0.00%	5.00%	17.60%	25.83%	29.61%
<b>Current Year %</b>					
All Customer Classes					
Base Charges	0%	5%	12%	7%	3%
Usage Charges	0%	5%	12%	7%	3%
<b>Revenue Surplus/(Deficiency)</b>	<b>-\$26,100</b>	<b>\$26,000</b>	<b>\$6,700</b>	<b>\$31,600</b>	<b>\$30,400</b>

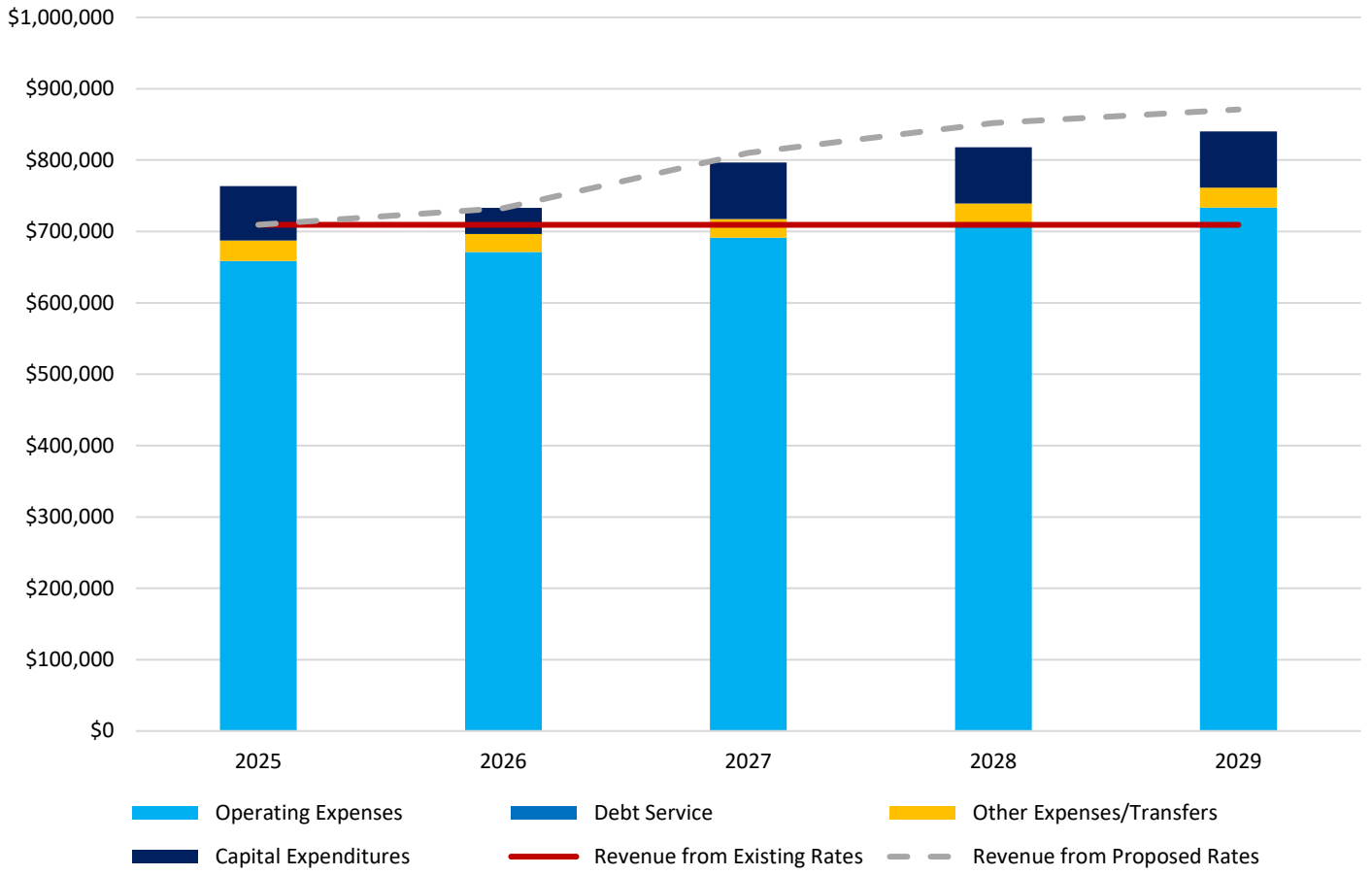
## Water Revenue Requirements



**Cedar Key Water and Sewer District**  
**Cedar Key FY2026**  
**Fiscal Year: 2026**  
**Wastewater Revenue Requirements**

	2025	2026	2027	2028	2029
Revenue Requirements:					
Operating Expenses	\$658,800	\$671,100	\$691,300	\$712,000	\$733,400
Debt Service		\$0	\$0	\$0	\$0
Other Expenses/Transfers	\$28,500	\$25,500	\$26,300	\$27,100	\$27,900
Capital Expenditures	\$76,100	\$36,500	\$78,900	\$78,900	\$78,900
Gross Revenue Requirements	\$763,400	\$733,100	\$796,500	\$818,000	\$840,200
Less: Other Revenue	\$216,400	\$216,300	\$216,300	\$216,300	\$216,300
Net Revenue Requirements	\$547,000	\$516,800	\$580,200	\$601,700	\$623,900
Existing Rate Sufficiency:					
Revenue from Existing Rates	\$493,000	\$493,000	\$493,000	\$493,000	\$493,000
Revenue Surplus/(Deficiency)	-\$54,000	-\$23,800	-\$87,200	-\$108,700	-\$130,900
Proposed Rate Sufficiency:					
Revenue from Proposed Rates	\$493,000	\$516,500	\$594,000	\$635,600	\$654,600
Increase in Revenue		\$23,500	\$101,000	\$142,600	\$161,600
Cumulative %					
All Customer Classes					
Base Charges	0.00%	5.00%	20.75%	29.20%	33.08%
Usage Charges	0.00%	5.00%	20.75%	29.20%	33.08%
Current Year %					
All Customer Classes					
Base Charges	0%	5%	15%	7%	3%
Usage Charges	0%	5%	15%	7%	3%
Revenue Surplus/(Deficiency)	-\$54,000	-\$300	\$13,800	\$33,900	\$30,700

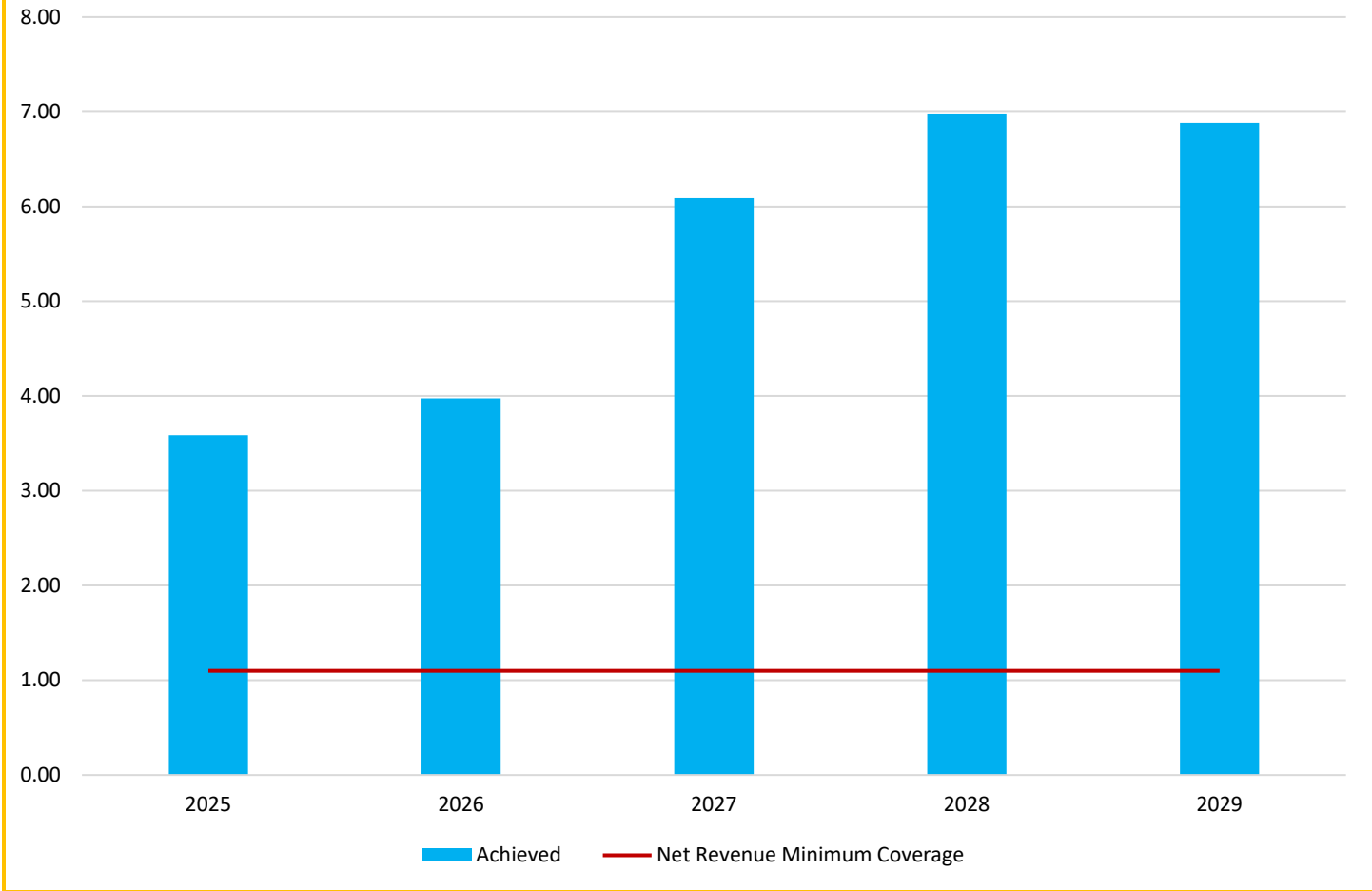
## Wastewater Revenue Requirements



Cedar Key Water and Sewer District  
Cedar Key FY2026  
Fiscal Year: 2026  
Debt Service Coverage

	2025	2026	2027	2028	2029
<b>Revenue:</b>					
Revenue from Proposed Drinking Water Rates	\$571,800	\$598,900	\$670,800	\$717,800	\$739,300
Revenue from Proposed Wastewater Rates	\$493,000	\$516,500	\$594,000	\$635,600	\$654,600
Subtotal - Rate Revenue	\$1,064,800	\$1,115,400	\$1,264,800	\$1,353,400	\$1,393,900
Miscellaneous Revenue - Drinking Water	\$220,200	\$218,700	\$218,700	\$218,700	\$218,700
Miscellaneous Revenue - Wastewater	\$216,400	\$216,300	\$216,300	\$216,300	\$216,300
Total Revenue	\$1,501,400	\$1,550,400	\$1,699,800	\$1,788,400	\$1,828,900
<b>Operating Expenses:</b>					
Drinking Water	\$663,600	\$679,300	\$699,700	\$720,700	\$742,300
Wastewater	\$658,800	\$671,100	\$691,300	\$712,000	\$733,400
Total Operating Expenses	\$1,322,400	\$1,350,400	\$1,391,000	\$1,432,700	\$1,475,700
Net Revenue	\$179,000	\$200,000	\$308,800	\$355,700	\$353,200
<b>Debt Service:</b>					
Drinking Water	\$49,900	\$50,300	\$50,700	\$51,000	\$51,300
Wastewater	\$0	\$0	\$0	\$0	\$0
Total Debt Service	\$49,900	\$50,300	\$50,700	\$51,000	\$51,300
Debt Service Coverage	3.59	3.98	6.09	6.97	6.88
Net Revenue Less Debt Service	\$129,100	\$149,700	\$258,100	\$304,700	\$301,900
<b>Capital Expenditures:</b>					
Drinking Water	\$76,100	\$36,500	\$106,100	\$106,100	\$106,100
Wastewater	\$76,100	\$36,500	\$78,900	\$78,900	\$78,900
Total Capital Expenditures	\$152,200	\$73,000	\$185,000	\$185,000	\$185,000
<b>Other Expenses/Transfers:</b>					
Drinking Water	\$28,500	\$25,500	\$26,300	\$27,100	\$27,900
Wastewater	\$28,500	\$25,500	\$26,300	\$27,100	\$27,900
Total Other Expenses/Transfers	\$57,000	\$51,000	\$52,600	\$54,200	\$55,800
<b>Revenue Surplus/(Deficiency)</b>	<b>-\$80,100</b>	<b>\$25,700</b>	<b>\$20,500</b>	<b>\$65,500</b>	<b>\$61,100</b>

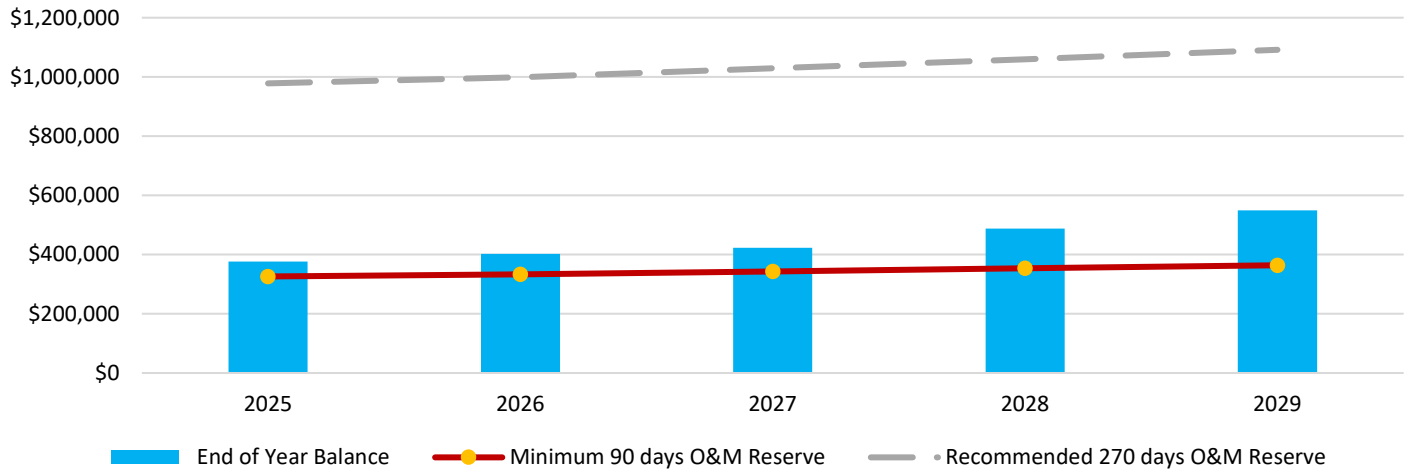
### Debt Service Coverage Graph



**Cedar Key Water and Sewer District  
Cedar Key FY2026  
Fiscal Year: 2026  
Unrestricted Fund Balance**

	2025	2026	2027	2028	2029
<b>Utility Reserve Funds:</b>					
Beginning of Year Balance	\$456,600	\$376,500	\$402,200	\$422,700	\$488,200
Addition to Current Year	-\$80,100	\$25,700	\$20,500	\$65,500	\$61,100
End of Year Balance	\$376,500	\$402,200	\$422,700	\$488,200	\$549,300
<b>Days of Cash on Hand</b>	<b>104</b>	<b>109</b>	<b>111</b>	<b>124</b>	<b>136</b>
	2025	2026	2027	2028	2029
DW O&M Expense	\$663,600	\$679,300	\$699,700	\$720,700	\$742,300
WW O&M Expense	\$658,800	\$671,100	\$691,300	\$712,000	\$733,400
Total O&M Expense	\$1,322,400	\$1,350,400	\$1,391,000	\$1,432,700	\$1,475,700
Daily O&M Expense	\$3,623	\$3,700	\$3,811	\$3,925	\$4,043
Minimum 90 days O&M Reserve	\$326,071	\$332,975	\$342,986	\$353,268	\$363,871
Recommended 270 days O&M Reserve	\$978,214	\$998,926	\$1,028,959	\$1,059,805	\$1,091,614

### Unrestricted Fund Balance



**Cedar Key Water and Sewer District**  
**Cedar Key FY2026**  
**Fiscal Year: 2026**  
**CIP Schedule**

Description	Funding Source	2025	2026	2027	2028	2029
FEMA Eng Fees	Water Revenues	\$38,500	\$24,000	\$0	\$0	\$0
FEMA Eng Fees	Wastewater Revenues	\$38,500	\$24,000			
Backhoe Purchase	Grant	\$0	\$98,000	\$0	\$0	\$0
Backhoe Purchase	Wastewater Revenues	\$17,600				
Backhoe Purchase	Water Revenues	\$17,600				
WW Project Engineering-Planning	Grant	\$500,000	\$0	\$0	\$0	\$0
WW Project Construction	Grant	\$1,000,000	\$0	\$0	\$0	\$0
4 Replacement Generators	Grant	\$0	\$1,000,000	\$0	\$0	\$0
Storm Repairs	Water Revenues	\$20,000	\$12,500	\$0	\$0	\$0
Storm Repairs	Wastewater Revenues	\$20,000	\$12,500	\$0	\$0	\$0
Water Asset Management Reserve	Water Revenues	\$0	\$0	\$106,100	\$106,100	\$106,100
Wastewater Asset Management Reserve	Wastewater Revenues	\$0	\$0	\$78,900	\$78,900	\$78,900
	<b>Sorted by Funding Source</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>
	Water Revenues	\$76,100	\$36,500	\$106,100	\$106,100	\$106,100
	Wastewater Revenues	\$76,100	\$36,500	\$78,900	\$78,900	\$78,900
	Grant	\$1,500,000	\$1,098,000	\$0	\$0	\$0
	<b>Total</b>	<b>\$1,652,200</b>	<b>\$1,171,000</b>	<b>\$185,000</b>	<b>\$185,000</b>	<b>\$185,000</b>

Cedar Key Water and Sewer District  
 Cedar Key FY2026  
 Fiscal Year: 2026  
 Debt Service Schedule

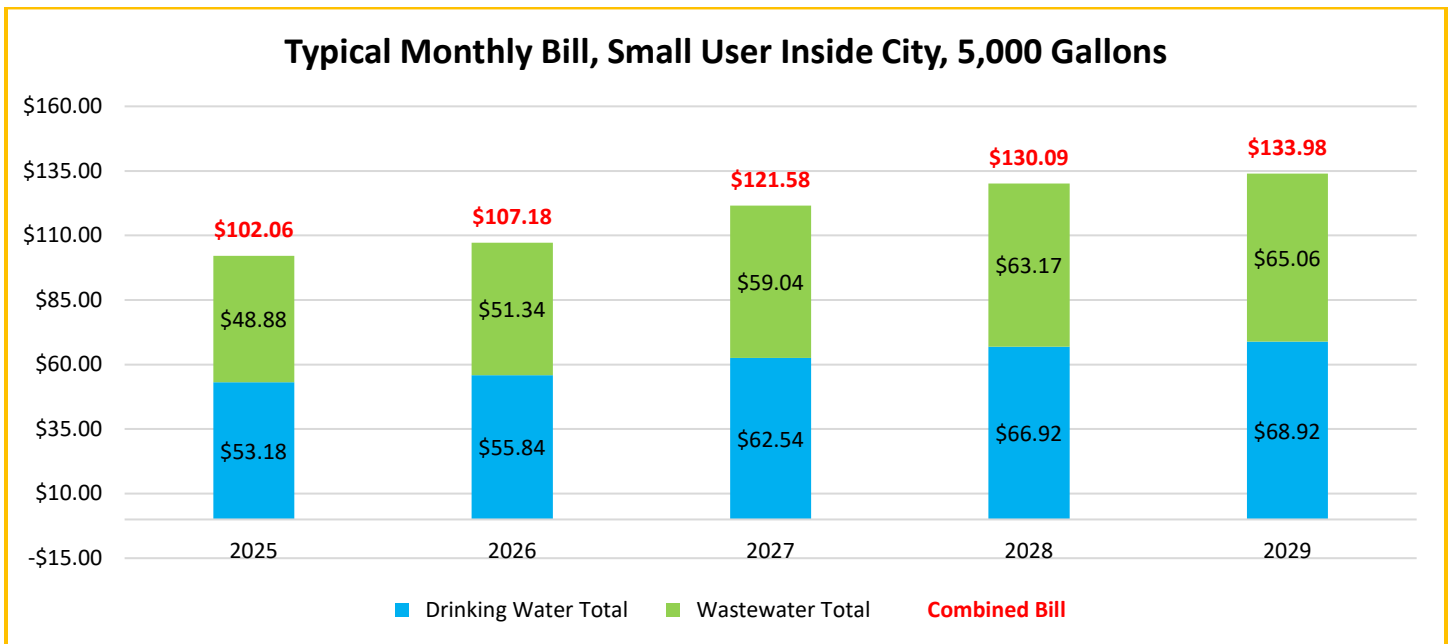
Debt	2025	2026	2027	2028	2029	2030	2031	2032
<b>Existing Debts:</b>								
WS Imp Bond	\$49,900	\$50,300	\$50,700	\$51,000	\$51,300	\$52,700	\$52,700	\$52,700
<b>Anticipated Debts:</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$49,900</b>	<b>\$50,300</b>	<b>\$50,700</b>	<b>\$51,000</b>	<b>\$51,300</b>	<b>\$52,700</b>	<b>\$52,700</b>	<b>\$52,700</b>

Cedar Key Water and Sewer District  
 Cedar Key FY2026  
 Fiscal Year: 2026  
 Operating Expense Projection

Fund Name	Type of Expense	Cost Allocation	Description	Historical 2025	Budget 2026	Escalation Factor	2027	2028	2029	2030
510.01	Personnel	50% Water 50% Wastewater	salaries	\$310,000	\$310,000	CPI	\$319,300	\$328,900	\$338,700	\$348,900
510.02	Personnel	50% Water 50% Wastewater	social security/medicare	\$25,000	\$26,200	CPI	\$27,000	\$27,800	\$28,700	\$29,500
510.03	Personnel	50% Water 50% Wastewater	retirement	\$35,000	\$30,000	CPI	\$30,900	\$31,800	\$32,800	\$33,800
510.04	Personnel	50% Water 50% Wastewater	health,dental&life ins	\$70,000	\$65,000	CPI	\$67,000	\$69,000	\$71,000	\$73,200
510.05	Personnel	50% Water 50% Wastewater	workers comp.	\$6,000	\$6,000	CPI	\$6,200	\$6,400	\$6,600	\$6,800
510.07	Personnel	50% Water 50% Wastewater	uniform service	\$3,900	\$4,000	CPI	\$4,100	\$4,200	\$4,400	\$4,500
520.01	O&M	50% Water 50% Wastewater	office supplies	\$3,000	\$3,200	CPI	\$3,200	\$3,300	\$3,400	\$3,500
520.02	O&M	50% Water 50% Wastewater	postage& shipping	\$8,000	\$8,400	CPI	\$8,700	\$8,900	\$9,200	\$9,500
520.03	O&M	50% Water 50% Wastewater	copier,computer,billing	\$5,000	\$5,200	CPI	\$5,400	\$5,600	\$5,700	\$5,900
520.04	O&M	50% Water 50% Wastewater	printing and copying	\$2,500	\$2,600	CPI	\$2,700	\$2,800	\$2,900	\$3,000
520.07	O&M	50% Water 50% Wastewater	bank service charge	\$0	\$0	CPI	\$0	\$0	\$0	\$0
520.1	O&M	50% Water 50% Wastewater	rents	\$1,800	\$1,900	CPI	\$1,900	\$2,000	\$2,100	\$2,100
530.01	O&M	50% Water 50% Wastewater	fuel for equipment	\$9,000	\$9,400	CPI	\$9,700	\$10,000	\$10,300	\$10,600
530.02	O&M	50% Water 50% Wastewater	solid waste disposal	\$2,000	\$2,000	CPI	\$2,100	\$2,100	\$2,200	\$2,300
530.03	O&M	50% Water 50% Wastewater	telephone	\$12,000	\$12,600	CPI	\$13,000	\$13,400	\$13,800	\$14,200
540.01	Professional Services	50% Water 50% Wastewater	audit & accounting	\$35,000	\$36,800	CPI	\$37,900	\$39,000	\$40,200	\$41,400
540.02	Professional Services	50% Water 50% Wastewater	management/legal	\$35,000	\$40,000	CPI	\$41,200	\$42,400	\$43,700	\$45,000
540.03	Professional Services	50% Water 50% Wastewater	property appaiser fees	\$7,500	\$7,500	CPI	\$7,700	\$8,000	\$8,200	\$8,400
540.05	Professional Services	50% Water 50% Wastewater	tax collector fees	\$9,500	\$9,500	CPI	\$9,800	\$10,100	\$10,400	\$10,700
550.01	Maintenance	50% Water 50% Wastewater	vehicle	\$3,400	\$3,400	CPI	\$3,500	\$3,600	\$3,700	\$3,800
550.02	Maintenance	50% Water 50% Wastewater	equipment and tools	\$3,000	\$3,000	CPI	\$3,100	\$3,200	\$3,300	\$3,400
550.03	Maintenance	50% Water 50% Wastewater	building	\$5,000	\$5,000	CPI	\$5,200	\$5,300	\$5,500	\$5,600
550.04	Maintenance	50% Water 50% Wastewater	supplies	\$1,500	\$2,500	CPI	\$2,600	\$2,700	\$2,700	\$2,800
560.01	O&M	50% Water 50% Wastewater	Property/Liability Ins.	\$140,000	\$150,000	CPI	\$154,500	\$159,100	\$163,900	\$168,800
560.03	Other	50% Water 50% Wastewater	continuing education	\$2,500	\$2,500	CPI	\$2,600	\$2,700	\$2,700	\$2,800
560.04	Other	50% Water 50% Wastewater	annual fees and dues	\$12,000	\$12,000	CPI	\$12,400	\$12,700	\$13,100	\$13,500
560.05	Other	50% Water 50% Wastewater	ads and publications	\$6,000	\$5,000	CPI	\$5,200	\$5,300	\$5,500	\$5,600
560.06	Other	50% Water 50% Wastewater	miscellaneous-other	\$10,000	\$5,000	CPI	\$5,200	\$5,300	\$5,500	\$5,600
560.07	Other	50% Water 50% Wastewater	contingency-Other	\$25,000	\$25,000	CPI	\$25,800	\$26,500	\$27,300	\$28,100
610.01	O&M	100% Water	chemicals	\$122,000	\$100,000	CPI	\$103,000	\$106,100	\$109,300	\$112,600
610.02	O&M	100% Water	miex resin	\$22,000	\$25,000	CPI	\$25,800	\$26,500	\$27,300	\$28,100
610	O&M	100% Water	chemicals & filters-other	\$13,500	\$15,000	CPI	\$15,400	\$15,900	\$16,400	\$16,900
620.01	O&M	100% Water	in house lab	\$2,000	\$1,000	CPI	\$1,000	\$1,100	\$1,100	\$1,100
620.02	O&M	100% Water	outside lab	\$2,000	\$2,200	CPI	\$2,300	\$2,300	\$2,400	\$2,500
640.01	Maintenance	100% Water	pipng and distribtion	\$15,000	\$15,000	CPI	\$15,400	\$15,900	\$16,400	\$16,900
640.02	Maintenance	100% Water	equipment	\$15,000	\$15,000	CPI	\$15,400	\$15,900	\$16,400	\$16,900
640.03	Maintenance	100% Water	building & grounds	\$5,000	\$5,000	CPI	\$5,200	\$5,300	\$5,500	\$5,600
640.04	Maintenance	100% Water	water tower maintenance	\$20,000	\$22,000	CPI	\$22,700	\$23,300	\$24,000	\$24,800
640.05	Maintenance	100% Water	generators annual maintenance	\$2,000	\$2,000	CPI	\$2,100	\$2,100	\$2,200	\$2,300
Fund Name	Type of Expense	Cost Allocation	Description	Historical 2025	Budget 2026	Escalation Factor	2027	2028	2029	2030
640.06	Maintenance	100% Water	water plant maintenance	\$7,500	\$7,500	CPI	\$7,700	\$8,000	\$8,200	\$8,400
640.07	Maintenance	100% Water	water meter replacement	\$15,000	\$15,000	CPI	\$15,400	\$15,900	\$16,400	\$16,900
650.01	O&M	100% Water	electric	\$25,000	\$26,000	CPI	\$26,800	\$27,600	\$28,400	\$29,300
650.02	O&M	100% Water	propane	\$1,000	\$1,000	CPI	\$1,000	\$1,100	\$1,100	\$1,100
650.03	O&M	100% Water	telephone	\$5,000	\$5,500	CPI	\$5,700	\$5,800	\$6,000	\$6,200
670.04	O&M	100% Water	new vehicle	\$0	\$0	CPI	\$0	\$0	\$0	\$0
685	O&M	100% Water	contingency-water	\$25,000	\$50,000	CPI	\$51,500	\$53,000	\$54,600	\$56,300
710.01	O&M	100% Wastewater	chemicals	\$30,000	\$35,000	CPI	\$36,000	\$37,100	\$38,200	\$39,400
720.01	O&M	100% Wastewater	in house lab	\$300	\$1,000	CPI	\$1,000	\$1,100	\$1,100	\$1,100
720.02	O&M	100% Wastewater	outside lab	\$15,000	\$20,000	CPI	\$20,600	\$21,200	\$21,900	\$22,500
730.01	O&M	100% Wastewater	permits	\$1,000	\$1,000	CPI	\$1,000	\$1,100	\$1,100	\$1,100
730.02	O&M	100% Wastewater	biosolids hauling	\$80,000	\$65,000	CPI	\$67,000	\$69,000	\$71,000	\$73,200
740.01	Maintenance	100% Wastewater	pipng & distribution	\$30,000	\$30,000	CPI	\$30,900	\$31,800	\$32,800	\$33,800
740.02	Maintenance	100% Wastewater	equipment	\$34,000	\$34,000	CPI	\$35,000	\$36,100	\$37,200	\$38,300
740.03	Maintenance	100% Wastewater	building and grounds	\$21,000	\$21,000	CPI	\$21,600	\$22,300	\$22,900	\$23,600
740.04	Maintenance	100% Wastewater	generators-maintenance	\$15,000	\$5,000	CPI	\$5,200	\$5,300	\$5,500	\$5,600
750.01	O&M	100% Wastewater	electric	\$33,000	\$22,000	CPI	\$22,700	\$23,300	\$24,000	\$24,800
750.02	O&M	100% Wastewater	propane	\$1,800	\$7,500	CPI	\$7,700	\$8,000	\$8,200	\$8,400
760.01	Professional Services	100% Wastewater	professional fees-wwtp	\$0	\$0	CPI	\$0	\$0	\$0	\$0
760.02	O&M	100% Wastewater	contingency-sewer	\$25,000	\$50,000	CPI	\$51,500	\$53,000	\$54,600	\$56,300
560.02	Other	50% Water 50% Wastewater	Election Expenses	\$1,500	\$1,500	CPI	\$1,500	\$1,600	\$1,600	\$1,700
720.03	O&M	100% Wastewater	Instrument Maintenance	\$6,200	\$7,500	CPI	\$7,700	\$8,000	\$8,200	\$8,400
			<b>Total</b>	<b>\$1,379,400</b>	<b>\$1,401,400</b>		<b>\$1,443,700</b>	<b>\$1,486,800</b>	<b>\$1,531,500</b>	<b>\$1,577,400</b>
			Drinking Water Total	\$692,050	\$704,800		\$726,100	\$747,650	\$770,250	\$793,400
			Wastewater Total	\$687,350	\$696,600		\$717,600	\$739,150	\$761,250	\$784,000

Cedar Key Water and Sewer District  
 Cedar Key FY2026  
 Fiscal Year: 2026  
 Typical Monthly Bill, Small User Inside City, 5,000 Gallons

	2025	2026	2027	2028	2029
<b>Drinking Water</b>					
Base Charge	\$32.00	\$33.60	\$37.63	\$40.27	\$41.47
Usage Charge, 5,000 Gallons	\$21.18	\$22.24	\$24.91	\$26.65	\$27.45
Drinking Water Total	\$53.18	\$55.84	\$62.54	\$66.92	\$68.92
<b>Wastewater</b>					
Base Charge	\$31.00	\$32.55	\$37.43	\$40.05	\$41.25
Usage Charge, 5,000 Gallons	\$17.88	\$18.79	\$21.61	\$23.12	\$23.81
Wastewater Total	\$48.88	\$51.34	\$59.04	\$63.17	\$65.06
<b>Combined Bill</b>	<b>\$102.06</b>	<b>\$107.18</b>	<b>\$121.58</b>	<b>\$130.09</b>	<b>\$133.98</b>



Cedar Key Water and Sewer District  
 Cedar Key FY2026  
 Fiscal Year: 2026  
 Rate Schedule

	2025	2026	2027	2028	2029
<b>Drinking Water</b>					
<b>Small User</b>					
Base Charges Inside City					
5/8-inch	\$32.00	\$33.60	\$37.63	\$40.27	\$41.47
Usage Charges Inside City (per 1000 gallons)					
0 to 3,000 gallons	\$3.14	\$3.30	\$3.70	\$3.95	\$4.07
3,001 to 6,000 gallons	\$5.88	\$6.17	\$6.91	\$7.39	\$7.62
6,001 to 9,000 gallons	\$8.30	\$8.72	\$9.77	\$10.45	\$10.76
9,001 gallons or more	\$10.73	\$11.27	\$2.62	\$13.51	\$13.91
<b>Large User</b>					
Base Charges Inside City					
5/8-inch	\$70.35	\$70.35	\$78.79	\$84.31	\$86.80
Usage Charges Inside City (per 1000 gallons)					
0 to 3,000 gallons	\$3.14	\$3.30	\$3.70	\$3.95	\$4.07
3,001 to 6,000 gallons	\$5.88	\$6.17	\$6.91	\$7.39	\$7.62
6,001 to 9,000 gallons	\$8.30	\$8.72	\$9.77	\$10.45	\$10.76
9,001 gallons or more	\$10.73	\$11.27	\$2.62	\$13.51	\$13.91
<b>City Park</b>					
Base Charges Inside City					
5/8-inch	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Usage Charges Inside City (per 1000 gallons)					
0 gallons or more	\$3.14	\$3.30	\$3.70	\$3.95	\$4.07
	2025	2026	2027	2028	2029
<b>Wastewater</b>					
<b>Small User</b>					
Base Charges Inside City					
5/8-inch	\$31.00	\$32.55	\$37.43	\$40.05	\$41.25
Usage Charges Inside City (per 1000 gallons)					
0 to 3,000 gallons	\$2.54	\$2.67	\$3.07	\$3.29	\$3.38
3,001 to 6,000 gallons	\$5.13	\$5.39	\$6.20	\$6.63	\$6.83
6,001 to 9,000 gallons	\$7.47	\$7.84	\$9.02	\$9.65	\$9.94
9,001 gallons or more	\$9.77	\$10.26	\$11.80	\$12.62	\$13.00
<b>Large User</b>					
Base Charges Inside City					
5/8-inch	\$67.92	\$67.92	\$78.11	\$83.58	\$86.08
Usage Charges Inside City (per 1000 gallons)					
0 to 3,000 gallons	\$2.54	\$2.67	\$3.07	\$3.29	\$3.38
3,001 to 6,000 gallons	\$5.13	\$5.39	\$6.20	\$6.63	\$6.83
6,001 to 9,000 gallons	\$7.47	\$7.84	\$9.02	\$9.65	\$9.94
9,001 gallons or more	\$9.77	\$10.26	\$11.80	\$12.62	\$13.00

Cedar Key Water and Sewer District  
 Cedar Key FY2026  
 Fiscal Year: 2026  
 Rate Revenue, Existing Rates for Fiscal Year 2026

Base Charge Revenues	Meter Sizes	Base Charge	Number of Connections	Annual Revenue
<b>Drinking Water</b>				
<b>Small User</b>				
Base Charges Inside City	5/8-inch	\$33.60	979.00	\$394,732.80
<b>Large User</b>				
Base Charges Inside City	5/8-inch	\$70.35	37.00	\$31,235.40
<b>City Park</b>				
Base Charges Inside City	5/8-inch	\$0.00	1.00	\$0.00
Subtotal				\$425,968.20
<b>Wastewater</b>				
<b>Small User</b>				
Base Charges Inside City	5/8-inch	\$32.55	927.00	\$362,086.20
<b>Large User</b>				
Base Charges Inside City	5/8-inch	\$67.92	30.00	\$24,451.20
Subtotal				\$386,537.40
<b>Total</b>				<b>\$812,505.60</b>

Usage Charge Revenues	Gallon Range	Rate per Thousand Gallons	Monthly Water Sold (kgal)	Annual Revenue
<b>Drinking Water</b>				
<b>Small User</b>				
Usage Charges Inside City				
Block 1	0 to 3,000 gallons	\$3.30	2,023.42	\$80,127.30
Block 2	3,001 to 6,000 gallons	\$6.17	0.00	\$0.00
Block 3	6,001 to 9,000 gallons	\$8.72	0.00	\$0.00
Block 4	9,001 gallons or more	\$11.27	0.00	\$0.00
<b>Large User</b>				
Usage Charges Inside City				
Block 1	0 to 3,000 gallons	\$3.30	111.00	\$4,395.60
Block 2	3,001 to 6,000 gallons	\$6.17	111.00	\$8,218.44
Block 3	6,001 to 9,000 gallons	\$8.72	111.00	\$11,615.04
Block 4	9,001 gallons or more	\$11.27	475.00	\$64,239.00
<b>City Park</b>				
Usage Charges Inside City				
Block 1	0 gallons or more	\$3.30	110.50	\$4,375.80
Subtotal				\$172,971.18

<b>Wastewater</b>				
<b>Small User</b>				
Usage Charges Inside City				
Block 1	0 to 3,000 gallons	\$2.67	1,891.42	\$60,600.99
Block 2	3,001 to 6,000 gallons	\$5.39	0.00	\$0.00
Block 3	6,001 to 9,000 gallons	\$7.84	0.00	\$0.00
Block 4	9,001 gallons or more	\$10.26	0.00	\$0.00
<b>Large User</b>				
Usage Charges Inside City				
Block 1	0 to 3,000 gallons	\$2.67	90.00	\$2,883.60
Block 2	3,001 to 6,000 gallons	\$5.39	90.00	\$5,821.20
Block 3	6,001 to 9,000 gallons	\$7.84	90.00	\$8,467.20
Block 4	9,001 gallons or more	\$10.26	423.92	\$52,192.62
Subtotal				\$129,965.61
<b>Total</b>				<b>\$302,936.79</b>

Combined Revenues				Annual Revenue
<b>Drinking Water</b>				
Base Charge Revenue				\$425,968.20
Usage Charge Revenue				\$172,971.18
Other Revenue				\$218,683.00
Subtotal				\$817,622.38
<b>Wastewater</b>				
Base Charge Revenue				\$386,537.40
Usage Charge Revenue				\$129,965.61
Other Revenue				\$216,283.00
Subtotal				\$732,786.01
<b>Total</b>				<b>\$1,550,408.39</b>

**Cedar Key Water and Sewer District**  
**Cedar Key FY2026**  
**Fiscal Year: 2026**  
**System Summary**

System Statistic	Value
Number of Water Meters	1,016
Number of Wastewater Connections	957
Water Production (gallons/day)	125,162.00
Wastewater Treatment (gallons/day)	99,066.00

**Cedar Key Water and Sewer District**  
**Cedar Key FY2026**  
**Fiscal Year: 2026**  
**Capital Financing Plan**

	Allocation	Fiscal Year 2024	Fiscal Year 2025
(a) Operating Revenues			
Drinking Water Rate Revenues	100% Water	\$542,975.31	\$537,391.22
Wastewater Rate Revenues	100% Wastewater	\$430,621.78	\$440,630.11
Subtotal		\$973,597.09	\$978,021.33
(b) Interest Income	50% Water 50% Wastewater	\$0.00	\$7,150.00
(c) Other Incomes			
Other Operating Revenues	50% Water 50% Wastewater	\$303,715.00	\$0.00
Investment income	50% Water 50% Wastewater	\$9,330.00	\$0.00
315-Ad valorem taxes	50% Water 50% Wastewater	\$376,430.00	\$417,765.35
Operating Grant	50% Water 50% Wastewater	\$209,668.00	\$0.00
325-Penalties	50% Water 50% Wastewater	\$0.00	\$6,200.00
335-New Meter Charges	100% Water	\$0.00	\$1,056.00
350-Misc Income	50% Water 50% Wastewater	\$0.00	\$58,000.00
365-Meter Installation Fee	50% Water 50% Wastewater	\$0.00	\$800.00
333- Other Miscellaneous	50% Water 50% Wastewater	\$0.00	\$1,772.15
340-Rental Income	50% Water 50% Wastewater	\$0.00	\$24,920.00
341-City Portion of Leases	50% Water 50% Wastewater	\$0.00	\$9,227.76
370-Water charge New Connection	100% Water	\$0.00	\$8,000.00
371-Sewer Charge New Connection	100% Wastewater	\$0.00	\$16,000.00
(d) Total Revenues		\$1,872,740.09	\$1,528,912.59
(e) Operating Expenses (excluding interest on debt, depreciation, and other non-cash items)	50% Water 50% Wastewater	\$1,575,018.00	\$980,685.48
(f) Net Revenues (f = d – e)		\$297,722.09	\$548,227.11