DRAFT CLEAN WATER ASSET MANAGEMENT PLAN

Mascotte Public Services

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COMMITMENT & INTEGRITY DRIVE RESULTS

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City of Mascotte, FL
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EXECUTIVE SUMMARY

This Asset Management Plan (AMP) identifies and evaluates the existing wastewater system critical assets. This evaluation has been used to identify future capital improvement projects for both horizontal and vertical assets. AMP's are a beneficial tool to have and maintain because it increases knowledge of the criticality of each asset and can help the City make informed, proactive decisions about their assets.

The AMP focuses on the critical assets in the City's system, specifically those with the highest risk needing rehabilitation or replacement within the next five years. Risk is a metric that uses Likelihood of Failure (LoF) and Consequence of Failure (CoF) to identify how critical an asset is to the system. LoF measures the condition, performance, reliability, and redundancy of each asset to identify the potential for a failure. CoF represents the combination of direct and indirect impact on the vicinity and the community due to potential asset failure. Combining the consequence and likelihood of failure to determine an overall risk value for each asset allows the City to prioritize the focus of repair, replacement, and monitoring activities.

The critical assets have been established for both the horizontal system and vertical system as provided in Table ES-1 below, as well as the estimated replacement cost of each asset.

Table ES-1:Critical Assets

Location/Facility	Asset Name	Replacement Cost (2021 Dollars)
Horizontal Assets		
SR-50 (West Myers Blvd)	FM-01	$2,353,000
Vertical Assets		
LS 1 - Groveland Lift Station	Pump 01	$67,000
LS 1 - Groveland Lift Station	Pump 02	$67,000
LS 1 - Groveland Lift Station	Wet Well	$100,000
LS 1 - Groveland Lift Station	Pump Control Panel	$10,000
LS 1 - Groveland Lift Station	SCADA System	$29,000

Following the risk assessment, assets were evaluated to identify any rehabilitation or replacement required over the next five years that should be included in capital improvement projects. Due to the recent installation of the assets (2015), and the lack of reported operational issues, there are currently no recommended rehabilitation or replacement projects. Based on the estimated useful life, the first assets that may need rehabilitation or replacement beyond the next five years are the submersible pumps, the pump control panel, and the SCADA system. These assets are estimated to have a remaining life of approximately 9 years and should be re-evaluated and reviewed in 2026 (5 years before the end of their useful life).

Operationally, the City contracts out preventative maintenance of the pump stations to Utility Repair Experts (URE). It is recommended that the City continue to work with URE to complete inspections monthly and maintenance as necessary, optimizing the life of the wastewater assets.

As capital improvement plans are formed in the future to address aging or failing assets, funding infrastructure projects can be done utilizing a combination of local funds, grants, and/or state and federal loan programs. The following resources may be potential funding sources for some of the recommended CIP projects:

- EPA Federal and State Clean Water State Revolving Loan Fund (CWSRF)
- Small Community Wastewater Construction Grant Programs (Under CWSRF)
- US Department of Agriculture (USDA) Rural Development (RD) Water and Waste Disposal Loan and Grant Program
- Community Development Block Grants

In order to make this AMP useful and effective, several next steps should be taken:

- **Staff Training (next 2-3 months)** – The City should provide staff with an overview about the goals and objectives of the AMP.
- **Maintenance Program Updates (on-going)** – The City should assess their current maintenance programs to ensure that routine and critical maintenance is performed so that assets that are considered most critical to the process are in good working order and performing according to function.
- **Review and Revise the AMP Annually (on-going) –** This AMP is intended to act as a living document. The City should assess their current maintenance programs to ensure that routine and critical maintenance is performed so that assets that have been identified in this plan as critical are in good working order and performing according to function. As conditions and LoF change, these changes should be updated and reflected in the AMP to continue to proactively drive capital improvement planning.

1. INTRODUCTION

1.1 Best Practices

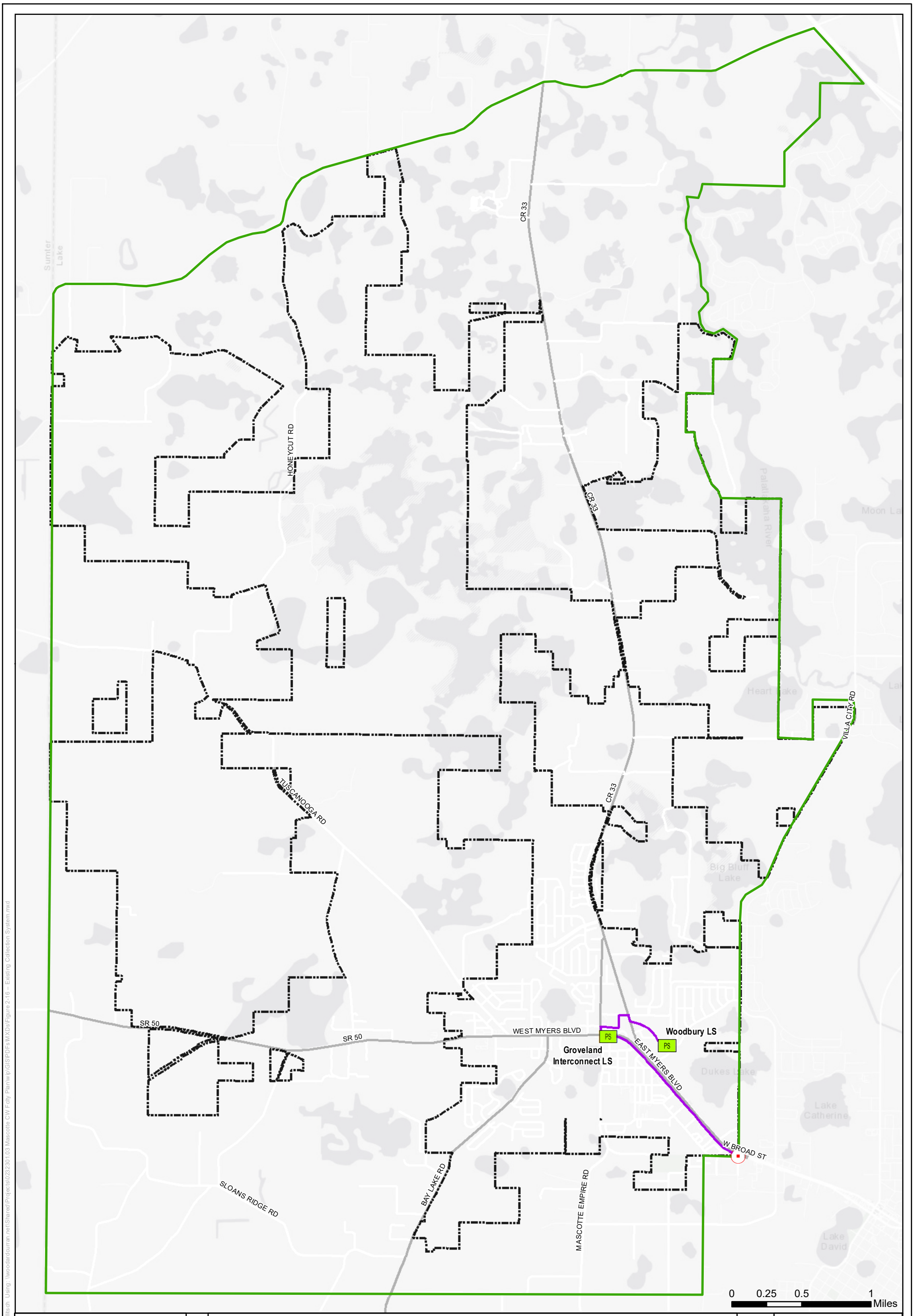
This Asset Management Plan will be in alignment with the US Environmental Protection Agency's guidelines entitled "*Asset Management: A Best Practice Guide",* and the Florida Administrative Code (FAC) 62-503.700(7) and will include the following elements:

1. An inventory of all critical assets within the local Government's system;
2. An evaluation of the current age, condition, and anticipated useful life of each critical asset;
3. The current value of the critical assets;
4. A cost to operate and maintain critical assets;
5. A capital improvement plan (CIP) based on a survey of industry standards, life expectancy, life cycle analysis, and remaining useful life;
6. An analysis of funding needs;
7. An analysis of population growth and water treatment projections, as applicable, for the sponsor's planning area, and a model, if applicable, for impact fees; commercial, industrial, and residential rate structures; industrial pretreatment fees and parameters;
8. The establishment of an adequate funding rate structure;
9. A threshold rate set to ensure the proper operation of the utility (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);
10. A plan to preserve the critical assets, as well as the renewal, replacement and repair of the critical assets as necessary (such plan should incorporate a risk benefit analysis to determine the optimum renewal or replacement time); and
11. Evaluation of water and energy conservation efforts and a certification the assistance recipient will be implementing water and energy conservation efforts as part of the plan.

1.2 City of Mascotte Background

The City of Mascotte (City), located in Lake County, Florida, sits directly west of the City of Groveland on State Road 50 in Lake County, Florida. The City's wastewater system is comprised of an inactive dry sewer and two lift stations, servicing three commercial users and a small housing development. An Interlocal Agreement is in place with the City of Groveland to accept and treat up to 250,000 gpd of wastewater though the current usage is approximately 1,400 gpd. The interconnection where the City of Mascotte's wastewater ties into the City of Groveland is located on the northwest side of the intersection of Groveland Farms Rd and State Route 33. The existing collection system is shown in Figure 1-1.

The City contracts out preventative maintenance of the one lift station to a private firm, Utility Repair Experts. Under this contract, routine monthly inspection and maintenance is provided for the lift station, followed by a detailed report



Existing Collection System

City of Mascotte

Figure 1-1

Legend

- Future Planning Area City Zoning
- Mascotte City Limits
- Groveland Interconnection
- PS — Existing Lift Station
- Existing Sanitary Sewer Force Main

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Project #: 0232301.03
Map Created: August 2021

recommending any necessary repairs. City staff is responsible for managing these repairs and any other issues that may arise at the lift stations.

1.3 Population Growth and Demand Projections

The population of Mascotte is concentrated in rural areas; 79% of the population of Mascotte lives in an urban area and 21% reside in areas that are considered rural. Urban areas are defined as locations of population densities greater than 2,500 inhabitants per square mile. All territory outside urban places, regardless of population density, are considered rural. Mascotte does not have a large transient population like many other areas within Florida, as most residents live there year-round. According to the U.S. Census American Community Survey (ACS) which is updated annually, it is calculated that 78.0% of houses are owner-occupied. Current census data is summarized in Table 1-1.

Table 1-1: Census Data Summary

Population, April 1st, 2010	5,089
Land Area in square miles, 2010	11.38
Owner-occupied housing unit rate 2015-2019	78.0%
Households, 2015-2019	1,669
Persons per household, 2015-2019	3.43
Median household income (in 2019 dollars) 2015-2019	$43,544
Persons in poverty, percent	26.5%

Data from United States Census Bureau

The population projection for 2021-2041 is based on population projections from the University of Florida Shimberg Center for Affordable Housing, Bureau of Economic and Business Research (BEBR), and the U.S. Census ACS. Since population projection BEBR data is only available at the county level, the high projected growth rates for Lake County were evaluated against the BEBR 2020 estimate for Mascotte of 6,447 and the projected population based on future developments. More specifically, when completing the population projection, the City analyzed all developments with approved and pending Developer Agreements, as well as those with Developer Agreements in progress. Table 1-2 reflects the City's population projections for 2021 to 2041.

Table 1-2: Population Projections per Lake County High Growth

Projection	2021	2026	2031	2036	2041	% Growth Rate (over 20 years)
Lake County High Growth Population Projections[1]	384,400	440,400	496,700	546,800	593,400	2.2%
Mascotte Approved Development Growth Population Projection[2]	6,447	8,824	12,408	14,439	14,785	4.2%
Mascotte Full Buildout Growth Population Projection[3]	6,447	10,556	16,884	23,511	26,602	7.3%

1. Data from University of Florida Shimberg Center for Affordable Housing, Bureau of Economic and Business Research
2. Based on growth realized from Approved Developments. Population projection based on planned residential developments expected to be constructed by 2041. See City of Mascotte 2021 Clean Water Facilities Plan for more detail. Populations estimated based on 3.43 persons per household.
3. Based on growth realized from Proposed, Pending and Approved Developments. Population projection based on planned residential developments expected to be constructed by 2041. See City of Mascotte 2021 Clean Water Facilities Plan for more detail. Populations estimated based on 3.43 persons per household.

Further detailed discussion on population projections and demand is discussed in the City of Mascotte 2021 Clean Water Facilities Plan.

2. STUDY OBJECTIVES AND METHODOLOGY

This Asset Management Plan (AMP) is designed to catalog and perform an evaluation of the wastewater system critical assets and plan future capital improvement projects for both horizontal and vertical assets. An AMP allows the City to inventory and assess their critical assets based on condition and performances to further plan for maintaining, repairing, and/or replacing those assets as well as plan for future funding. The plan also provides a systemic cost and value of the critical assets in the wastewater system.

Record drawings, historical reports, studies, and conversations with City staff were used to determine and update basic asset information including age, size, material, capacity, performance, and current condition of the assets, where available. An inventory of assets was prepared and updated to reflect the existing asset information and any known problem areas within the wastewater system.

The available asset data, including location, material useful life, equipment useful life and level of services, were used to perform a criticality analysis. Through analysis of the existing system and discussions with City staff, the assets with the highest consequence of failure (CoF) were evaluated, considering factors such as their importance in the functioning of the system, impact on permit compliance or safety, asset location and number of customers served. The likelihood of failure (LoF) was reviewed for potential for failure given existing conditions and establish which of the most consequential and critical assets were most in need of repair or replacement. This analysis in addition to annualized line item cost estimates aided in the development of short-term system improvements and budget planning.

3. LEVEL OF SERVICE GOALS

Level of service (LOS) goals help utilities form a baseline to determine if they are focusing on the appropriate practices, renewal levels, and rates within their system. These goals are specific, measurable service standards, often in addition to those required by regulation, that help set overall service objectives and metrics which can then be used to monitor progress.

The City is focused on providing services that meet or exceed customer expectations while also maintaining high environmental standards and consistent compliance. Currently, the main LOS goals for the City are related to maintaining 100% regulatory compliance of their wastewater system and providing system integrity. As the City grows and updates their infrastructure, additional LOS goals could be useful for tracking overall performance, condition, and risk within the system, and should be added as the system drivers evolve.

The *2017 AWWA Utility Benchmarking: Performance Management for Water and Wastewater* identifies several useful LOS goals and metrics for wastewater utilities specifically that are nationally recognized. Table 3-1 summarizes LOS metrics and benchmarks that will serve as a starting point for the City in considering their LOS goals. The table also provides the National Benchmark (i.e., the median value of all reporting utilities related to that particular metric) as a guideline and comparison.

Table 3-1: Level of Service Metrics

Area	Metric	National Benchmark(1)
Organizational Development		
Health and Safety	Employee Health and Safety Severity Rate[2]	13.1%
Business Operations		
System Inspection	System Inspection (% of total network)	9.0%
Wastewater Operations		
Regulatory Compliance	% Compliance	100%
Collection system integrity	Failures/100 mi of pipe	3.3
O&M Costs for Wastewater Services	$/account	$355

(1) Median benchmark values from *2017 AWWA Utility Benchmarking: Performance Management for Water and Wastewater*.
(2) 200,000 x total days away from work/ total hours worked by all employees

4. CRITICAL ASSET IDENTIFICATION

4.1 Methodology

To identify the critical assets in the system, the overall risk of the asset must be considered. Risk is a metric that illustrates how critical an asset is to the system as a whole and is a critical component for effective system management. A total risk assessment considers the consequence of failure (CoF) and likelihood of failure (LoF) as shown in the equation below:

$$Total\ Risk = CoF\ x\ LoF$$

CoF is a numerical representation that is the combination of direct and indirect impact on the vicinity and the community due to potential asset failure. Assets with higher CoF scores are considered to be the most critical components of the City's wastewater system. LoF is a numerical representation that denotes the probability of failure based upon an asset's physical condition. The LoF for an asset may be determined via inspection or may be estimated based upon engineering judgement (i.e., based upon residual age or material, etc.).

A total risk assessment considers both the CoF and LoF of a given asset to evaluate how critical an asset is to the system. Combining the consequence and likelihood of failure to determine an overall risk value for each asset allows the City to prioritize the focus of repair, replacement, and monitoring activities. Both CoF and LoF are discussed in more detail in the following sections.

4.2 Consequence of Failure (CoF)

CoF scoring is used for the following actions:

- Prioritize assets for inspection and maintenance to develop predictive maintenance procedures
- Prioritize assets for rehabilitation or replacement

The CoF is related to an asset's function, role, and location and is not subject to change based on condition. Failure of an asset results in the inability to convey or treat flow through the system. Table 4-1 outlines the general guidelines for assigning the CoF scores to wastewater assets.

Table 4-1: CoF Scoring Guidelines

5 (Very High)	4 (High)	3 (Moderate)	2 (Low)	1 (Very Low)
Major consequence. No redundancy or workaround, certain & immediate impact to permit compliance, safety, or other systems within the time it would take to repair the asset. Loss of service and high cost of failure.	High Consequence. Limited redundancy, work-around/repair more expensive/challenging. Likely/short term impact to permit compliance or safety. Higher cost of failure vs. addressing it now.	Medium consequence. Full redundancy but high criticality, or limited redundancy but work-around available. Possible/eventual impact to permit compliance or safety. Higher cost of failure vs. addressing it now.	Low consequence. Full redundancy, simple repair, or could live without. Minimal operational & cost impacts. No impact to permit compliance, safety, or other systems.	No consequence. Full redundancy and/or no impact.

4.3 Likelihood of Failure (LoF)

The Likelihood of Failure (LoF) of an asset is a measure of the condition, performance, reliability and redundancy of each asset and attempts to identify the potential for a failure. These factors are important and must be considered together. An asset in good condition may still have a high likelihood of failure if it cannot perform as intended. For example, a sewer pipe that is in good condition may have a higher LoF rating if it is undersized for the flow it needs to convey. In this scenario, both condition and capacity would be considered risk parameters contributing to the asset's overall LoF.

Asset age, or remaining useful life, also contributes to the assets LoF score. To determine the typical expected useful life of each asset, Woodard & Curran (W&C) utilized the Florida Administrative Code Water and Wastewater Utility Rules, Section 25.D25, 25-30.140(2)(a). Expected useful life values were selected for the assets categorized under Class C, "small utility".

The LoF for an asset may be determined via inspection or may be estimated based upon engineering judgement (i.e., based upon remaining useful life or material, etc.). LoF scoring is used for the following actions:

- Assess structural or operational condition of an asset.
- Prioritize assets for rehabilitation or replacement.

4.3.1 Horizontal Asset LoF Scoring Guidelines

Table 4-2 outlines the general guidelines for assigning the LoF scores to horizontal wastewater assets based on remaining useful life and functionality. These guidelines, in combination with discussions with the City and W&C's expertise were used to assign the LoF values for each asset. These scores are presented in Appendix A.

Table 4-2: Horizontal Asset Guidelines for LoF Scores

5 (Very High)	4 (High)	3 (Moderate)	2 (Low)	1 (Very Low)
Not functional – requires major repair, rebuild or replacement to operate properly. Beyond useful life.	Operable, but does not function as needed for current operating conditions. At or nearing end of useful life.	Functions as needed for current operating conditions, ½ – ¾ life expended.	Fully functional for current operating conditions, ¼ – ½ life expended.	Fully functional as designed, < ¼ life expended.

4.3.2 Vertical Asset LoF Scoring Guidelines

Table 4-3 outlines the general guidelines for assigning the LoF scores to vertical wastewater assets based on remaining useful life and functionality. These guidelines, in combination with discussions with the City and W&C's expertise were used to assign the LoF values for each asset. These scores are presented in Appendix A.

Table 4-3: Vertical Asset Guidelines for LoF Scores

5 (Very High)	4 (High)	3 (Moderate)	2 (Low)	1 (Very Low)
Failed/out of service/does not exist/impact being felt now.	Poor Condition/End of life (failure likely within 5 years). Significant deterioration – major repair required, requires excessive maintenance or insufficient capacity for current process. Rehabilitation unlikely.	Fair condition. Some life (5 to 10 years) remaining, requires moderate maintenance, approaching capacity issues.	Good Condition. Significant life (10-15 years) remaining. Minor defects, only preventative maintenance or minor corrective maintenance required.	New or nearly so. Full life (15-20 years) remaining, reliable, and sufficient capacity for current and design process needs.

4.4 Critical Assets

A risk matrix is a graphical representation of the risk scores which can be used to identify the appropriate attention to be paid to an asset. The risk matrix typically shows all the assets in the analysis with the LoF on the X-axis and the CoF on the Y-axis as shown in Figure 4-1. An asset's location on the matrix provides information about how to manage the asset[1], also referred to as the asset's "Action Level."

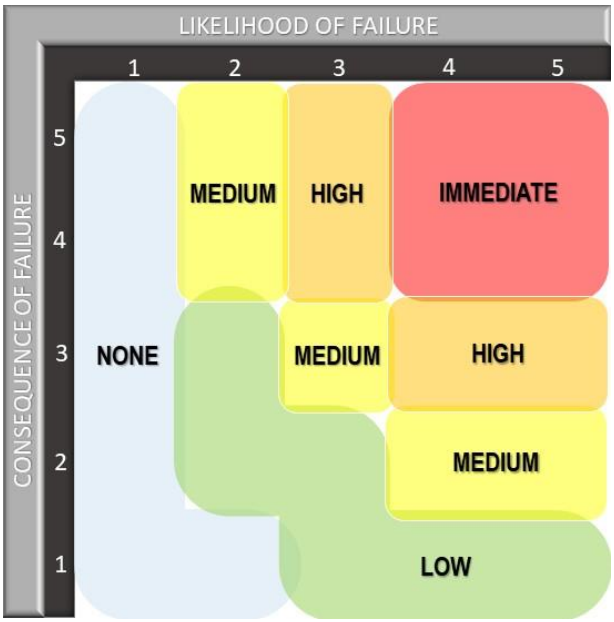

Figure 4-1: Risk Matrix – Asset Action Level

This Asset Management Plan focuses on the critical assets in the City's system, specifically those with the highest risk needing rehabilitation or replacement within the next five years. These include assets that fall in the High or Immediate Action Levels, defined below:

- **High** – Assets within this action level have high CoF and LoF values and should be considered a high priority for renewal or replacement. They have been identified as being in poor physical condition as well as providing a critical function within the system.
- **Immediate** – Assets that fall within this action level have the highest values for CoF and LoF, and therefore are considered highly critical to the system and likely to fail in the near future. These assets should be given individual attention to determine a schedule for expedited renewal or replacement.

Record drawings, historical reports, studies, and conversations with City staff were used to establish basic asset information including age, size, material, capacity, performance, and current condition of the assets. Critical assets in

[1] NACWA, AMWA, WEF, 2007. Implementing Asset Management: A Practical Guide. ISBN 978-1-57278-238-9

the system were identified as those with medium, high, or very high consequence (CoF scores of 3, 4, or 5 on the risk matrix). These assets have either limited or no redundancy, would result in a loss of service, and will have a short-term or immediate impact to permit compliance, safety, or other systems if they were to fail. Asset failure would have a high cost versus addressing proactively.

Based on these criteria, all City assets were evaluated and reviewed with City staff to establish the assets with CoF scores of 3 or higher. When the condition of these assets have a high likelihood of failure, they fall within the High or Immediate risk action, thus deemed a critical asset.

The critical assets have been established for both the horizontal system and vertical system as provided in Table 4-4 below, as well as the estimated replacement cost of each asset.

Table 4-4: Critical Assets

Location/Facility	Asset Name	Replacement Cost (2021 Dollars)
Horizontal Assets		
SR-50 (West Myers Blvd)	FM-01	$2,353,000
Vertical Assets		
LS 1 - Groveland Lift Station	Pump 01	$67,000
LS 1 - Groveland Lift Station	Pump 02	$67,000
LS 1 - Groveland Lift Station	Wet Well	$100,000
LS 1 - Groveland Lift Station	Pump Control Panel	$10,000
LS 1 - Groveland Lift Station	SCADA System	$29,000

The only critical horizontal asset in the wastewater system is the one force main that connects to the City of Groveland, conveying all Mascotte's wastewater flows. All the critical vertical assets are related to the Groveland Lift Station since this is the only facility that pumps wastewater to be treated in Groveland.

5. ASSET EVALUATION

5.1 Condition Summary

The City of Mascotte has two main critical wastewater assets: the force main that runs from the Groveland LS along SR-50 to the Groveland Interconnection, and the Groveland Lift Station. There are five components of the lift station categorized as critical, denoted in Section 4.4. The following sections summarize the asset evaluations and needs for repair or replacement within the next five years. See Appendix A for the complete list of critical assets with attributes and associated risk action levels.

5.1.1 Horizontal Asset Needs

The only horizontal asset in the wastewater system is the force main that runs from the Groveland Lift Station to the Mascotte-Groveland interconnection. This main is HDPE and was installed in 2015 with no noted operational issues. As a result, the force main has a low likelihood of failure (LoF = 1) and subsequently there are no recommendations for repair for horizontal wastewater system assets.

5.1.2 Vertical Asset Needs

All of the vertical assets are located at LS 1 – The Groveland Lift Station. This lift station was installed in 2015 and City staff have indicated no operational issues with any of the components. Monthly routine maintenance is performed at the lift station through contracted services to ensure the station is functioning normally. All assets have an LoF of 1 and have no recommendations for repair or replacement.

5.2 Operations and Maintenance

The annual operations and maintenance (O&M) costs from 2019/2020, as provided by the City, for the assets in the clean water system are summarized in Table 5-1. This budget ensures the City's ability to successfully maintain and operate the system.

Table 5-1: Annual O&M Budget

O&M Budget Categories	Annual O&M Spending[1]
Labor	$261,200
Utilities	$600
R&M	$4,000
Office Supplies	$100
Safety, Training & Misc.	$2,000
Other Operating Costs	$200
Total	**$268,100**

1. Based on O&M costs from the City 2019-2020 budget

5.3 Energy Conservation and Cost Savings

W&C recommends that the City evaluate its current wastewater assets to identify areas where energy saving measures can easily be implemented. For example, when lightbulbs need to be replaced, they should be replaced with high efficiency LED bulbs. Larger energy conservation projects should be considered during future upgrades and could include energy saving measures such as using VFDs for pumps and electrical equipment.

6. CAPITAL IMPROVEMENT PLAN

6.1 Capital Improvement Plan Recommendations

The purpose of a Capital Improvement Plan (CIP) is to identify assets within the wastewater system that need rehabilitation or replacement within the next five years. The CIP focuses on removing the greatest risks to the system by prioritizing assets identified as high risk. Due to the limited number of wastewater assets, recent installation of these assets in 2015 and no reported operational issues, there are currently no rehabilitation or replacement projects recommended over the next five years.

6.1.1 Cost Estimate

Since there are no capital improvement projects recommended for the next five years, there are no necessary budgeted costs. Nevertheless, the critical assets identified in this plan should be frequently monitored and routinely maintained in order to proactively capture any issues.

Based on the estimated useful life, the first assets that may need rehabilitation or replacement are the submersible pumps, the pump control panel, and the SCADA system. These assets are estimated to have a remaining life of approximately 9 years and should be re-evaluated and reviewed in 2026 (5 years before the end of their useful life). The estimated replacement costs for these assets are included in Table 4-4.

6.2 Operation and Maintenance Recommendations

In 2014, a preventative maintenance program was established by Utility Repair Experts (URE) for the Groveland Lift Station and Electrical Panel. The goal of the plan is to identify and mitigate early-stage/small problems before they escalate into costly emergency repairs. The plan is broken into two parts: visual inspection of the wet well and pumps, and visual inspection of panel. These inspections are preformed monthly, and a detailed list of components that are inspected can be found in the O&M documents. W&C recommends that the City continue to work with URE to complete inspections monthly and maintenance as necessary, optimizing the life of the wastewater assets.

7. FUNDING

7.1.1 Funding Sources

Funding infrastructure projects can be done utilizing a combination of local funds, grants, and/or state and federal loan programs. The following resources may be potential funding sources for some of the recommended CIP projects:

- **EPA Federal and State Clean Water State Revolving Loan Fund (CWSRF):** The CWSRF program administers low-interest loans for planning, designing, and constructing wastewater infrastructure projects. The loan terms include a 20-year amortization, and applications are accepted year round.
    - **Small Community Wastewater Construction Grant Programs:** This program works with the CWSRF program to award grants to small communities with a population of 10,000 or less, and a per capita income (PCI) less that the state of Florida average PCI. To receive grant funds all projects must also receive a CWSRF loan. Grants can range from 70 – 90% of the CWSRF loan, and is determined by the sponsor's affordability index.

  Additional information about the CWSRF and Small Community Wastewater Construction Grant Programs can be found at: https://floridadep.gov/wra/srf/content/cwsrf-program

- **US Department of Agriculture (USDA) Rural Development (RD) Water and Waste Disposal Loan and Grant Program:** This program provides funding for clean and reliable drinking water systems, sanitary sewage disposal, sanitary solid waste disposal and stormwater drainage to households and businesses in eligible rural areas. The City of Mascotte meets the eligibility criteria because its current population is less than 10,000. Examples of eligible wastewater projects include the acquisition, construction, or improvement of sewer collection, transmission, treatment, and disposal systems. Funding may also be available for legal and engineering fees, land acquisition, water and land rights, permits, equipment, start-up operations and maintenance, interest incurred during construction, and other costs determined to be necessary for the completion of the project. The loans are intended to be long-term, low-interest loans with up to a 40 year payback period (based on the useful life of the facilities being financed), with fixed interest rates based on project need and median household income of the area being served. Additional information about the USDA RD Loan and Grant Program can be found at: https://www.rd.usda.gov/programs-services/water-waste-disposal-loan-grant-program

- **Community Development Block Grants:** This program is nationally managed by the U.S. Department of Housing and Urban Development (HUD), and locally administered by the Florida Department of Economic Opportunity. The CDBG provides grants for long-term repair, construction, or purchasing of public infrastructure, including water and sewer systems. Criteria is in place for entitlement of funds, which is largely population based. For example, the Small Cities section of the CDBG program focuses on cities with a population of less than 50,000. Additional information about the CDBG program can be found at: https://floridajobs.org/community-planning-and-development/assistance-for-governments-and-organizations/community-development-block-grant-program

7.1.2 Rate Sufficiency Study

A rate sufficiency study has been conducted as a part of the City of Mascotte 2021 Clean Water Facilities Plan. Further detailed discussion and review of rates and affordability can be found in that report.

8. IMPLEMENTATION

This plan provides the City with a snapshot of the current inventory of critical assets as well as a plan for maintaining its current level of service to its customers. In order to make this AMP useful and effective, several next steps should be taken:

- **Staff Training (Next 2-3 months)** – The City should provide staff with an overview about the goals and objectives of the AMP.
- **Maintenance Program Updates (on-going)** – The City should assess their current maintenance programs to ensure that routine and critical maintenance is performed so that assets that are considered most critical to the process are in good working order and performing according to function.
- **Review and Revise the AMP Annually (on-going) –** This AMP is intended to act as a living document. The City should assess their current maintenance programs to ensure that routine and critical maintenance is performed so that assets that have been identified in this plan as critical are in good working order and performing according to function. As conditions and LoF change, these changes should be updated and reflected in the AMP to continue to proactively drive capital improvement planning.

APPENDIX A: FULL LIST OF CRITICAL ASSETS AND EVALUATION SCORES

Appendix A

Asset Name	Current Age	FDEP Anticipated Life	Remaining Useful Life	Replacement Cost (2021 Dollars)	Remaining Value	COF Score	LOF Score	Risk Score (COF x LOF)	Risk Action Level
Horizontal Assets									
Force Main 01 (SR-50)	6	40	34	$2,353,000	$2,001,000	4	1	4	Low
Vertical Assets									
SCADA System Groveland Lift Station	6	15	9	$30,000	$18,000	3	3	9	Medium
Pump 01 Groveland Lift Station	6	15	9	$67,000	$41,000	3	1	3	Low
Pump 02 Groveland Lift Station	6	15	9	$67,000	$41,000	3	1	3	Low
Wet Well Groveland Lift Station	6	25	19	$100,000	$76,000	5	1	5	Low
Pump Control Panel Groveland Lift Station	6	15	9	$10,000	$6,000	3	1	3	Low