RESOLUTION NO. 2025-411

A RESOLUTION OF THE CITY OF PARKER, APPROVING THE CITY OF PARKER WASTEWATER ASSET MANAGEMENT AND FISCAL SUSTAINABILITY PLAN; AUTHORIZING THE MAYOR AND PUBLIC WORKS DIRECTOR 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 City of Parker 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 City Council of the City of Parker 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 City.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Parker, Bay County, Florida, as follows:

1. That the City Council hereby approves the City of Parker Wastewater Asset Management and Fiscal Sustainability Plan dated June 17, 2025, attached hereto and incorporated by reference as a part of this Resolution.

2. That the Mayor and Public Works Director are 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 City Council direction in order to obtain funding from the SRF.

3. That the City Council 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 City's needs as determined by the City Council in its discretion.

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

PASSED, APPROVED AND ADOPTED by the City Council of the City of Parker, Bay County, Florida, on this 17th day of June, 2025.

City of Parker, Florida

Andrew Kelly, Mayor

ATTEST:

Ingrid Bundy, City Clerk

Examined and approved by me, this 17th day of June, 2025.

Andrew Kelly, Mayor

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June 17, 2025

Mayor Andrew Kelly
City of Parker
1001 West Park Street
Parker, FL 32404

Dear Mayor Kelly:

The Florida Rural Water Association (FRWA) is pleased to submit the Wastewater System Asset Management and Fiscal Sustainability (AMFS) plan to the City of Parker. FRWA prepared this Plan for the City 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 City'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 City'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,
Ron Nalley
FRWA Utility Asset Management Team

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

City of Parker
Wastewater Asset Management and Fiscal Sustainability Plan

Prepared for:

City of Parker
PERMIT NUMBER: FLSS0A364

Prepared By:

FLORIDA RURAL WATER ASSOCIATION
Utility Asset Management Program

In Partnership With:

Florida Department of Environmental Protection and
Clean Water State Revolving Fund Program

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Executive Summary

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 City 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:

The Table below contains a listing of the City of Parker's Critical Assets and Processes that were found to need Capital and/or Operational funding to operate as designed and within Regulatory Compliance. Please see Section 4 for a detailed description of the asset improvements listed below.

City of Parker Critical Assets List				
Name	**Installed**	**Design Life**	**Condition**	**Consequence Of Failure**
LS P-1 Dry Well	1983	100	Poor	Moderate
LS P-16 Dry Well	1980	100	Poor	Moderate
Manhole (1)	1983	50	Failed	Moderate
Manholes (76)	Varies	50	Poor	Moderate
LS P-15 Bypass Valve	1980	25	Poor	Moderate
LS P-6 Bypass Valve	1980	25	Poor	Moderate

Based on the list of 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 Plan was developed to help the system prioritize action items and establish target dates for timely completion. The Priority Action Plan is found on the following page.

City of Parker Priority Action List				
Action Item	**Target Date(s)**	**Cost Type**	**Cost**	**Responsible Party or Parties**
1. Pass Resolution Adopting AMFS Plan and Rate Schedule	Within 60 Days from Receipt of Final Plan	Administrative	No Cost	City Council and City Clerk
2. Rehabilitate/Replace Failed Condition Manhole	Within 60 Days after Adoption	Capital	Cost variable depending on Professional Services Scope of Work	Public Works Director or Designee
3. Determine Level of Service (LOS) Attributes, Goals, Targets, and Metrics and Prepare LOS Agreement	90 Days after Adoption	Planning	No Cost	City Council, City Clerk, Utility Staff and Public
4. Train Staff and Continue Using AMFS Tools (Diamond Maps)	90 Days After Adoption	Administrative	Annual Cost - $540 + Local Service Provider; Training - No Cost*	City Clerk, Public Works Director, or Designee
5. Train Staff and Complete Current Year RevPlan Model	90 Days After Adoption	Administrative	No Cost*	City Clerk, Finance Director or Designee
6. Develop Operation and Maintenance Program and Procedures	Within One (1) Year After Adoption	Planning	No Cost*	Public Works Director or Designee
7. Develop Change Out/Repair and Replacement Program for Critical Assets	Within One (1) Year After Adoption	Planning	No Cost*	Public Works Director or Designee

City of Parker Priority Action List				
Action Item	**Target Date(s)**	**Cost Type**	**Cost**	**Responsible Party or Parties**
8. Locate, Map and Assess Manholes in Unknown Condition	Within One (1) Year After Adoption	Operational	No Cost*	Public Works Director or Designee
9. Install Variable Frequency Drives as recommended in the 2024 Energy Audit	FY 2026	Operational	Est. $7,750	Public Works Director or Designee
10. Engage a Registered Engineer To Review, Plan, Design, Permit, and Construct Collection Improvements and Lift Station Improvements.	On-going Beginning in FY 2026	Capital	Professional Service and Construction Cost based on Project Scope	City Clerk and Public Works Director
11. Explore Financial Assistance Programs	On-going Beginning in FY 2026	Administrative	No Cost	City Manager and Finance Director
12. Rehabilitate/Replace Poor Condition Manholes	On-going Beginning in FY 2026	Capital	Estimated $15,000/manhole Cost variable depending on Professional Services Scope of Work	Engineer, Public Works Director, or Designee

City of Parker Priority Action List				
Action Item	**Target Date(s)**	**Cost Type**	**Cost**	**Responsible Party or Parties**
13. Rehabilitate/Repair/Replace Lift Station Assets in Poor Condition and those Nearing the End of Useful Life.	On-going Beginning in FY 2026	Capital	Professional Service and Construction Cost will vary based on Project Scope for each Lift Station	Engineer and Public Works Director
14. Conduct Smoke Testing and Camera Assessments	On-going Beginning in FY 2026	Planning	$1,000* for Smoke Testing Cost will vary depending on scope for camera assessments.	Public Works Director or Designee and Staff
15. Install Inflow Shields in Collection System	On-going beginning in FY 2026	Capital	Starting at $150 per inflow shield. Total Estimated Cost $22,050.	Public Works Director or Designee and Staff
16. Perform Scheduled Preventive Maintenance Activities at Manholes and Lift Stations	On-going Beginning in FY 2026	Operational	Minimal Operational Costs if Performed by System	Public Works Director or Designee and Staff
17. Document Sewer Line Condition and Develop Replacement Strategy	On-going Beginning in FY 2027	Planning	No Cost	Public Works Director or Designee and Staff

City of Parker
Priority Action List

Action Item	Target Date(s)	Cost Type	Cost	Responsible Party or Parties
18. Construct New Lift Station in Cheri Lane area.	FY 2028	Capital	Est. $850,000 Professional Service and Construction Cost will vary based on Project Location and Project Scope	City Council, Engineer and Public Works Director
19. Relocate Mains along the shoreline of East Bay further inland.	FY 2030	Capital	Professional Service and Construction Cost will vary based on Project Location and Project Scope	City Council, Engineer and Public Works Director
18. Conduct Rate Sufficiency Study and Adjust Rate Structure as Needed with RevPlan	Annually	Planning	No Cost	City Clerk and Finance Staff
19. Implement Annual Asset Replacement Program	Annually	Operational/Capital	Cost will Vary Based on Asset Replacement Program and Strategy	City Council, City Clerk, Public Works Director, and Staff
20. Revise AMFS Plan and RevPlan Model	Annually	Administrative	No Cost	City Council, City Clerk, Public Works Director, and Staff
21. Update Energy Audit	Every 2 to 3 Years	Administrative	No Cost	Public Works Director or Designee

*** As a member of the Florida Rural Water Association, FRWA is able to assist the City of Parker with this Service.**

Fiscal Strategy and AMP Process Recommendations:

Based on this asset management and fiscal sustainability study, **specific recommendations** related to capital expenditures and operating expenditure over the next five years, found in the Preliminary 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 the City of Parker.

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 Commerce 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

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 forgiveneness/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 utilitys' 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. <u>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.</u>

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 City of Parker with conducting a basic inventory and condition assessment of its current assets. It is expected that the City 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 City 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

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 $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 City of Parker has approximately 2,279 connections, the cost would be around $45 per month for unlimited users.

Meter Count	Unlimited Use Subscription
250	$15/month
500	$20/month
1,000	$30/month
2,000	$45/month
3,000	$60/month
4,000	$75/month
5,000	$90/month
10,000	$165/month

Diamond Maps can be explored at http://diamondmaps.com. Since the City of Parker uses Diamond Maps as their asset management tool, it will be easy to move the data collected by FRWA to the system's account.

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.

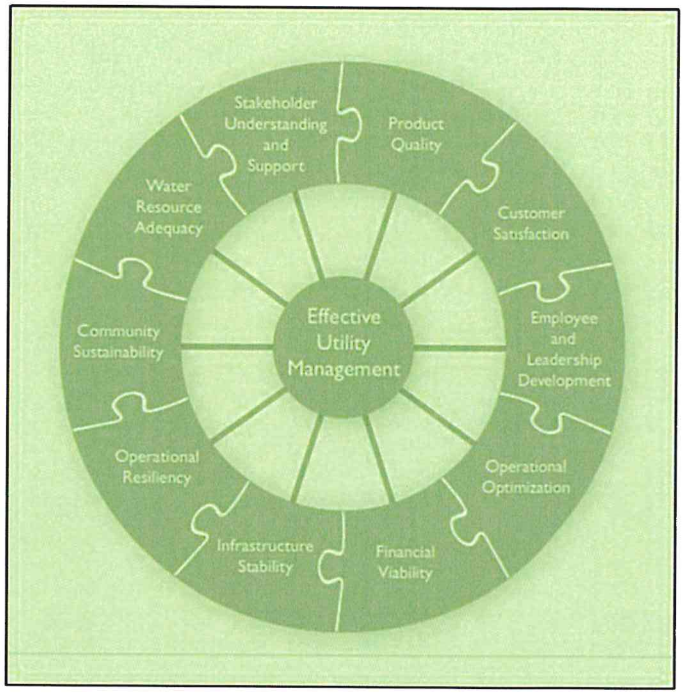
3. Maintain realistic rates and adjust as necessary to ensure adequate revenue reserves for targeted asset improvement.

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.

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.

The table below shows examples of what might be included as Level of Service goals. The LOS items for the City of Parker must be specific to the system and ideally 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 do so.

City of Parker Wastewater (WW) Level of Service Goals Examples

Attribute and Service Area	Goal	Performance Targets	Timeframe/ Reporting
Service Delivery - Health, Safety and Security	Reduce the number and duration of sewer overflows.	Provide employees with training necessary to be proactive in system maintenance and to make emergency system repairs rapidly and efficiently.	Annual report to Council. Monthly report to Public Works Director
Infrastructure Stability - Asset Preservation and Condition	Improve system wide preventive maintenance (PM)	Develop a comprehensive Preventive Maintenance weekly schedule for equipment and system components and complete all preventative maintenance tasks as scheduled.	Weekly report to Public Works Director and Annual report to City Council
Infrastructure Stability - Asset Preservation and Condition	Establish a Predictive Maintenance Schedule (PdMS)	Develop a weekly PdMS to continuously monitor equipment for signs of unexpected problems. Adjust the PdMS as needed.	Weekly report to Public Works Director and Annual report to City Council
Infrastructure Stability - Asset Preservation and Condition	Develop an Asset Replacement Strategy	Develop an asset replacement strategy to be updated at least annually, including financing options.	Annual report to City Council
Financial Viability - Service Quality and Cost	Assure that the utility is financially self-sustaining.	Perform an annual utilities rate analysis and make any needed rate adjustments every three to five years.	Annual Report to City Clerk and Council
Financial Viability – Service Quality and Cost	Enact automatic inflationary rate adjustments	Annual evaluation of the adequacy of inflationary rate adjustments.	Annual report to City Clerk and Council
Financial Viability - Service Quality and Cost	Minimize Life of Asset Ownership costs	Bi-annual evaluation of unexpected equipment repairs compared to the Preventive Maintenance Schedule (PMS). Adjust the PMS if warranted.	Biannual report to Public Works Director and Annual report to City Clerk
Infrastructure Stability - Conservation, Compliance, Enhancement	Improve reliability of the collection system	Annual evaluation of the collection system, including piping, manholes, and lift stations. Develop a long-range plan for replacements and improvements with timelines and funding options.	Annual report to Public Works Director and City Council
Infrastructure Stability - Asset Preservation and Condition	Identify Inflow and Infiltration	Smoke test specific sections of the collection system	Annual report to Public Works Director and City Council

3. System Description

City of Parker Overview:

The City of Parker is nestled between St. Andrew Bay and Martin Lake. Its southern limit borders Tyndall Air Force Base. Founded in the early 1800's, the City of Parker today encompasses two square miles with approximately twelve miles of bay coastline. The first known description of the Parker area appeared in "A View of West Florida." This journal contained the first American survey of the St. Andrews Bay area and identified a place called "Loftin" on the east bank of St. Andrews Bay. William M. Loftin, was one of two men generally credited with the original settlement of Parker. He first visited the area in 1818 as a member of Andrew Jackson's military expedition and finally settled in Parker about 1830. Mr. Loftin went into the land development business with Joseph M. White and Henry Riviere, and they steadily purchased land in the East Bay region while trying to develop the St. Andrews Bay area. Their intent was to develop the Parker area and call it "Austerlitz." The exact boundaries for the City of Austerlitz were not known, but they are thought to have included the areas of Springfield, Parker, Callaway, Cedar Grove and possibly Lynn Haven. The name Austerlitz remained for half a century and was attributed to William Loftin and Peter Parker. It should be noted that Peter Parker had no bearing on the city's current name. When William Loftin died in 1838 at the age of 53, he left behind 4 sons and 2 daughters. One daughter, Annie, married Peter Ferdinand Parker, who did in fact become one of the community's founders. The City of Parker with its current boundaries was incorporated in 1967.

Based on the latest demographic data, the City of Parker serves approximately 4,358 people residing in approximately 1,823 housing units. The average household size is 2.4. The median income per household is $68,043 with approximately 9.91% of people living below the poverty line. The service area has experienced stable growth pertaining mostly to new commercial and residential developments.

The existing wastewater collection system was placed into service in the late 1960s and early 1970s.

Form of Government:

The Parker City Council is composed of a Mayor, Mayor Pro-Tem and three Council members who are elected. The City Council is the legislative body of the City with the power to adopt Ordinances, Resolutions and regulations. The Mayor is elected at large for a two-year term and is recognized as the official head of the City for all ceremonial purposes, and by the courts for the purpose of serving civil process. All Council members are elected as non-partisan, at large and for a term of four years.

City of Parker Council Members	
Andrew Kelly	Mayor
Tony Barrow	Mayor Pro-Tem
Katy Barrett	Council Member
Ron Chaple	Council Member
John Haney	Council Member

City Wastewater Staff:

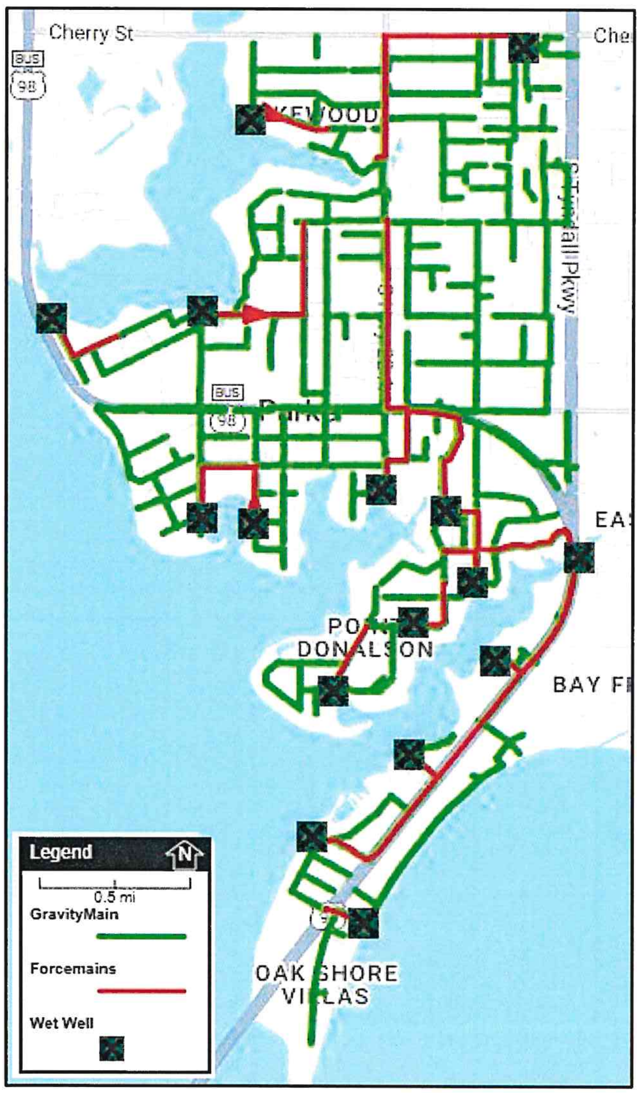
The success of the City of Parker Utilities Department results from the partnerships among its divisions and the diverse skills and unselfish contributions of their respective staff. The City of Parker Wastewater Utilities Department is staffed with six full-time employees. FRWA appreciates the assistance of those employees that helped in the preparation of this Plan.

Name	Department
Tony Summerlin	Public Works Director
Taylor Jeffreys	Administrative Assistant
Bryan Hall	Utilities Worker
Steven Dinse	Utilities Worker
Kabrin Hayslip	Mechanic

System Overview:

The City's wastewater system consists of approximately 28.1 miles of gravity collection lines and 6.2 miles of force main lines to 16 pump stations and a master pump station to the Bay County operated Military Point Regional Wastewater Treatment Facility, FL0167959. An interlocal agreement between Bay County and Parker dated September 24, 1996, reserves treatment capacity of 0.719 MGD for the City of Parker's raw wastewater. While Parker maintains the wastewater collection system, the pump stations are maintained and operated by Bay County under the interlocal agreement. Based on Bay County's DMRs, Parker's average monthly gallons of daily flow over the past two years total approximately 0.225 MGD or 30% of its reserved treatment capacity.

City of Parker
Wastewater Collection System



4. Current Asset Conditions

Lift Stations:

Parker has sixteen (16) lift stations throughout the system. Overall, the lift stations are considered to be in average to good condition. Debris and grease build-up on rails and at wet well base, moderate corrosion on piping, thinning concrete walls, and minor rusting on valves at some of the dry wells were noted at many of the lift stations throughout the system. All the lift stations have backup generators.

Asset Name	Condition	Reported Issue
Lift Station P-1 Dry Well	Poor	Water pooled in dry well. Repair drain.
Lift Station P-6 Bypass Valve	Poor	Buried. Unable to operate.
Lift Station P-15 Bypass Valve	Poor	Buried. Unable to operate.
Lift Station P-16 Dry Well	Poor	Repair gauges. Rework flooring to drain properly.

FRWA encourages Parker to begin budgeting an annual allocation for the maintenance, rehabilitation, and relining or replacement of the lift stations. Dry wells should be repaired to ensure that they are draining properly, and all buried bypass valves should be dug out to allow operation during maintenance activities or emergencies. Around 80% of the pumps at the lift stations have reached or are near reaching in the end of their useful lives and should be phased out and replaced. In addition, consideration should be given to installing a new lift station in the Cheri Lane area, preventing the need to transfer wastewater from the northeast section of the City across Boat Race Road only to be pumped back across from a south side lift station.

Manholes:

FRWA located, inspected, and evaluated five-hundred and eight-nine (589) manholes throughout the system. Of those, FRWA was unable to locate and assess or access twenty-two (22) manholes shown on the system map because they were buried, paved over or located on private property. The majority of manholes assessed were in average condition. 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 589 manholes. Of these:

- Five Hundred and Twelve (512) manholes were found to be in Average condition (87%).
- Seventy-six (76) manholes were found to be in Poor condition (13%).
- One (1) manhole was found to be in Failed condition (less than 1%).

Manhole ID	Condition	Install Year	Reported Issue	Coordinates
wwManH-434	Failed	1983	In process of being repaired. Consider relocating due to rising water. Inundated. Unable to assess.	30.1173376 -85.5942289
wwManH-521	Poor	1983	Needs cleaning and reassessment. Full of sewer. Needs rehab and lining. Lid needs sealing.	30.1402679 -85.6005663
wwManH-7	Poor	1983	Rain pan stuck.	30.1109653 -85.6020141
wwManH-28	Poor	1983	Needs liner.	30.1155374 -85.5983718
wwManH-37	Poor	1983	Needs liner. Needs cleaning.	30.1243682 -85.5953864
wwManH-53	Poor	1983	Check with system.	30.143699 -85.5994418
wwManH-81	Poor	1983	Replace inflow shield. Liner has failed and needs replaced. Needs cleaning or base reworked.	30.1383581 -85.6021708
wwManH-82	Poor	1983	Requires rehab.	30.1393235 -85.602149
wwManH-83	Poor	1983	Heavy hydrogen sulfide. Thinning concrete. Candidate for rehab.	30.1392435 -85.6009379
wwManH-84	Poor	1983	Hydrogen sulfide damage. Inflow dish damaged.	30.1395096 -85.6001291
wwManH-95	Poor	1983	Root intrusion around ring. Minor infiltration.	30.1369603 -85.6042304
wwManH-99	Poor	1983	Liner failed. Rehab and replace liner.	30.1383482 -85.6031874
wwManH-117	Poor	1983	Heavy hydrogen sulfide wear on chimney and walls. May have some exfiltration at base near outlet. Existing liner has failed. Requires rehab and new liner.	30.133878 -85.6116137
wwManH-137	Poor	1983	Paved over. Unable to open and assess. Location marked.	30.1310277 -85.6006357
wwManH-142	Poor	1983	Buried. Dig out and assessed.	30.1310069 -85.5922614
wwManH-143	Poor	1983	Candidate for rehab. Needs liner.	30.1384408 -85.5995801
wwManH-154	Poor	1983	Needs rehab and new liner.	30.140864 -85.5996091
wwManH-155	Poor	1983	Needs rehab and liner.	30.1419885 -85.5996061

Manhole ID	Condition	Install Year	Reported Issue	Coordinates
wwManH-159	Poor	1983	Needs cleaning. Needs rehab and liner.	30.1419732 -85.6021522
wwManH-185	Poor	1983	Buried. Unable to locate and assess.	30.1299272 -85.5976948
wwManH-187	Poor	1983	Check with system.	30.1308153 -85.596322
wwManH-188	Poor	1983	Check with system.	30.1301053 -85.5961977
wwManH-191	Poor	1983	Needs cleaning.	30.1280911 -85.5969483
wwManH-199	Poor	1983	Needs cleaning. Chimney offset. Root intrusion.	30.1227031 -85.5917483
wwManH-201	Poor	1983	Needs liner.	30.1214236 -85.5928468
wwManH-204	Poor	1983	Buried. Unable to locate.	30.1217944 -85.5933683
wwManH-270	Poor	1983	Concrete wearing thin. Candidate for liner.	30.1289053 -85.6031143
wwManH-285	Poor	1983	Needs liner.	30.1292262 -85.5985266
wwManH-342	Poor	1983	Needs cleaning and liner.	30.1419967 -85.591957
wwManH-347	Poor	1983	Poor all around. Needs liner. Candidate for rehab.	30.1451027 -85.5932213
wwManH-370	Poor	1983	Rain pan is stuck.	30.1252561 -85.5953996
wwManH-372	Poor	1983	Liner failed, clean and rehab.	30.1256271 -85.5969146
wwManH-373	Poor	1983	Needs liner.	30.1263428 -85.5972963
wwManH-374	Poor	1983	Liner failed	30.1268414 -85.5971654
wwManH-375	Poor	1983	Candidate for rehab.	30.1271053 -85.5968512
wwManH-389	Poor	1983	Liner failed.	30.1243926 -85.5968545
wwManH-415	Poor	1983	Needs cleaning.	30.1227047 -85.6003234
wwManH-421	Poor	1983	Needs cleaning.	30.1268418 -85.5927087
wwManH-423	Poor	1983	Rain pan stuck.	30.1268055 -85.5940047
wwManH-426	Poor	1983	Moderate infiltration at western wall.	30.1305698 -85.5954039
wwManH-429	Poor	1983	Needs liner.	30.1186096 -85.5945263
wwManH-431	Poor	1983	Buried. Unable to locate and assess.	30.1185113 -85.5932936
wwManH-435	Poor	1983	Needs rehab and liner.	30.1168504 -85.595164
wwManH-437	Poor	1983	Unable to locate. Dig out and assess.	30.1162954 -85.5958128
wwManH-438	Poor	1983	Buried.	30.1157703 -85.5964989
wwManH-439	Poor	1983	Buried.	30.1152384 -85.5970813
wwManH-440	Poor	1983	Buried.	30.1148405 -85.5974599
wwManH-442	Poor	1983	Buried. Unable to open and assess.	30.1134756 -85.5987014
wwManH-444	Poor	1983	Buried. Unable to open and assess.	30.1119248 -85.5998428
wwManH-447	Poor	1983	Located on private property behind fence. Unable to open and assess.	30.1107329 -85.6013612
wwManH-450	Poor	1983	Sealed shut. Unable to open and assess.	30.1174887 -85.5989272
wwManH-452	Poor	1983	Needs new liner.	30.1149064 -85.59896
wwManH-458	Poor	1983	Buried. Unable to locate and assess.	30.1180651 -85.5971858
wwManH-459	Poor	1983	Liner failing.	30.1263607 -85.5913897
wwManH-464	Poor	1983	Needs liner.	30.1288475 -85.5923107
wwManH-471	Poor	1983	Root intrusion. Needs cleaning. Rehab liner.	30.1361826 -85.5953826
wwManH-476	Poor	1983	Needs cleaning.	30.1190474 -85.5952924

Manhole ID	Condition	Install Year	Reported Issue	Coordinates
wwManH-479	Poor	1983	On private property. Unable to open and assess.	30.1437655 -85.5950276
wwManH-481	Poor	1983	On private property. Unable to open and assess. Needs rain pan.	30.1420004 -85.5950416
wwManH-496	Poor	1983	On private property. Unable to open and assess.	30.1428799 -85.5950409
wwManH-499	Poor	1983	Needs cleaning. Infiltration on north wall. Needs rehab and liner.	30.144865 -85.5913495
wwManH-501	Poor	1983	Needs cleaning and liner. Located in wet well.	30.1448944 -85.5932117
wwManH-502	Poor	1983	Unable to locate. May be in back yard behind fence.	30.1448781 -85.5932525
wwManH-508	Poor	1983	On private property. Unable to open and assess.	30.1437705 -85.5937458
wwManH-511	Poor	1983	Wood fence on top of manhole. Unable to open and assess.	30.1419889 -85.5937682
wwManH-512	Poor	1983	Root intrusion.	30.1206875 -85.5991454
wwManH-522	Poor	1983	Needs rehab and liner.	30.1404098 -85.6008572
wwManH-542	Poor	1983	Located, but buried. Needs to be dug out and raised.	30.1395345 -85.5994445
wwManH-543	Poor	1983	Needs cleaning. Wall deteriorating. Candidate for rehab and liner.	30.1442376 -85.599604
wwManH-544	Poor	1983	Candidate for rehab and liner.	30.1435804 -85.5996075
wwManH-545	Poor	1983	Needs rehab and liner. Walls in very poor shape. Hole in inflow shield.	30.142356 -85.5996008
wwManH-546	Poor	1983	Need rehab and liner.	30.1405242 -85.5996758
wwManH-554	Poor	1983	Buried. Unable to open and assess.	30.1300743 -85.5940229
wwManH-562	Poor	1983	Hole in inflow shield. Needs rehab and liner. Needs cleaning.	30.1409137 -85.6012683
wwManH-564	Poor	1983	Buried. Unable to locate and assess.	30.1309422 -85.5913355
wwManH-578	Poor	1983	Buried. Unable to locate and assess.	30.1212518 -85.594539
wwManH-586	Poor	1993	Liner failed. Needs rehab and new liner. Some infiltration and exfiltration noted at base. Lid doesn't seal.	30.142248 -85.5996291

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 "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.

In December, the City started rehab and lining work on approximately 150 manholes and three lift station wet wells through the use of a Community Development Block Grant. The $763,000 grant was used to line many of the poor condition manholes found during this assessment in the northern section of the City.

Worth noting are the manholes located near Lift Stations and along South Highway 22A. The manholes in these areas are showing signs of higher levels of hydrogen sulfide gas resulting in moderate to heavy corrosion of the manhole ring, chimney, and walls. Because it is estimated that hydrogen sulfide corrosion can remove one inch of concrete thickness in a ten-year period, it is recommended that the System begin moving forward with consideration of what rehabilitation measures are necessary to repair or replace these manholes.

In addition, while conducting assessments, the System experienced an unfortunate maintenance event when a manhole and section of piping was washed out and inundated by seawater during an unusually high tide along East Bay. Due to the effects of climate change, the environmental sensitivity of the area, the current shoreline manhole conditions, and that these events may begin happening more frequently, consideration should be given to moving the mains along the shoreline further inland or perhaps reversing the direction of flow from existing structures along the bay to an existing main along Tyndall Parkway. While expensive, this may be a more cost-beneficial solution over the long-term life of maintaining and repairing the assets in this area.

Gravity and Force Mains:

System Maps indicate there are approximately 28.1 miles of gravity sewer mains and an additional 6.2 miles of sewer force mains. The system consists of PVC lines 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, and in Parker's case, the less you have to pay for disposal through the County.

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 Parker 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, Parker 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 589 manholes in the system, FRWA was able to identify 442 manholes (75%) 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 147 inflow shields: $22,050.

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

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 Parker 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.

Table 5.A on the following page is a sample 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 Parker 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.

Table 5.B on the following page is a sample of work orders that are specific to Parker.

Table 5.A: Sample O&M Program. (This schedule is only an example.)

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 vales 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 Generator	Monthly	Inspect manholes	Annually
Confirm submittal of monthly reports	Monthly	Update FSAMP	Annually

Table 5.B: Sample Work Orders – Diamond Maps.

WO#	Status	Description	Date Planned	Recurring	Date Started	Date Completed
W1042	Planned	Repair drain in dry well.	4/24/2025			
W1043	Planned	Repair gauges and drain in dry well.	4/24/2025			
W1044	Planned	Dig out operating nut on bypass valve.	4/24/2025			
W1045	Planned	Dig out operating nut on bypass valve.	4/24/2025			
W1046	Planned	Dig out manhole and assess.	4/24/2025			
W1047	Planned	Locate, dig out and assess manhole.	4/24/2025			
W1048	Planned	Clean. Reset ring and remove roots.	4/24/2025			
W1049	Planned	Dig out and assess manhole.	4/24/2025			
W1050	Planned	Repair and reline manhole.	4/24/2025			
W1051	Planned	Install inflow shield.	4/24/2025			
W1052	Planned	Rehab and line manhole.	4/24/2025			
W1053	Planned	Clean. Remove roots. Add liner.	4/24/2025			
REC1054	Planned	Exercise generator on full load.	4/24/2025			

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 AMFSP plan, the FRWA Utility Asset Management team will upload Parker'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

A Capital Improvement Plan is a multi-year financial planning tool that looks to the future to forecast the City'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 Parker 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.

City of Parker
Strategic Capital 5 Year Plan

Sewers	1	Manholes - Grant	148 Storm stoppers and manhole lining	Prevent infiltration and inflow	$763,454.26		
	2	Manholes	Manhole lining/P14 Liner failure	Prevent infiltration and inflow/360 manholes estimated left to line		Manholes	$125,000.00
	3	Equipment - Finance	Sewer Jet trailer/ Truck	Maintain lines in remote areas/ 1 ton utility truck			
	4	City Sewer	SRF Loan/Grant	Financed for 20 years ends September 2040	$363,388.84		
	5	Liftstations	Communications-Lift Stations	Notification there is a problem with Liftstations			
	6	Equipment	Sewer Camera Trailer	Find storm and sewer pipe issues	$125,000.00		
	7	11th St & Alexander	Manhole sinking	Prevent infiltration and inflow		Manhole	$40,000.00
	8	Equipment	Lift Station Pump Replacement	Pumps are over 40 years old			
	9	Equipment	New Lift Station-Melendy	Growth and volume	$850,000.00		

Planned Expenditure by Year

Sewers	1						$763,454.26
	2	$35,000.00	$35,000.00	$35,000.00	$35,000.00	$35,000.00	$175,000.00
	3	$60,000.00		$50,000.00			$110,000.00
	4	$22,166.56	$22,166.56	$22,166.56	$22,166.56	$22,166.56	$110,832.80
	5	$10,000.00	$10,000.00	$10,000.00	$10,000.00		$40,000.00
	6	$125,000.00					$125,000.00
	7						$0.00
	8	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$150,000.00
	9						

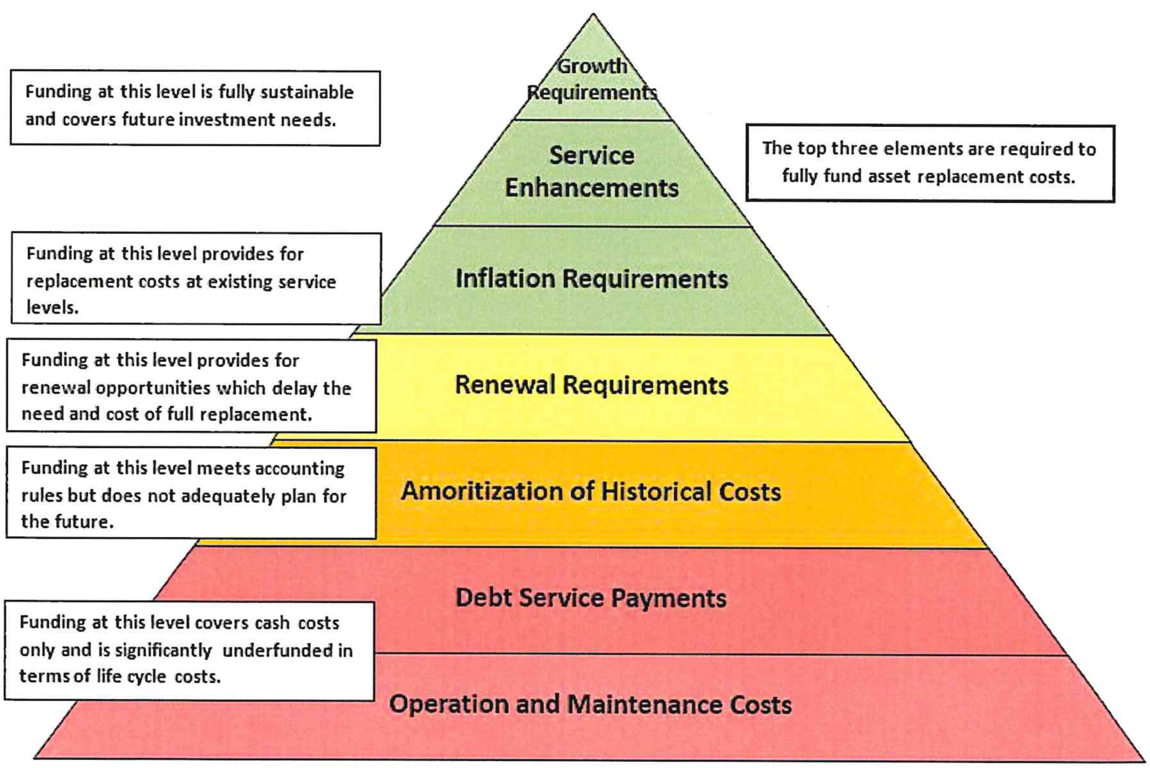
When completed, a more comprehensive CIP will identify the repair and maintenance projects identified in the Priority Action List, the proposed capital projects identified in the Plan, the fiscal year in which the project is proposed, the five-year annual maintenance budget of the System and the revenue that would be generated from the proposed change recommended in the rate schedule. As the rates are more firmly established, the System's annual Capital Requirement identified in RevPlan of $491,753, begins to build a cash reserve, allows for the completion of capital projects, and generates sufficient revenue to cover the full cost of operating a wastewater system.

7. Financial

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 City of Parker to identify the financial resources required for sustainable asset management based on existing asset inventories, desired levels of service, and projected growth requirements.

The pyramid below depicts the various cost elements and resulting funding levels that should be incorporated into Asset Plans that are based on best practices.



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

The City of Parker has been using RevPlan for several years. In conjunction with the completion of the Asset Management Plan, Parker will be completing their own RevPlan models to coincide with their new budget year. The assets collected, along with financial information provided by the system, will be entered into RevPlan to create a preliminary financial sufficiency model for the System. The City will 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 the City of Parker.

City of Parker Wastewater System	
Total Replacement Cost of Wastewater System	$25,042,280
Percent of Wastewater Assets Needing Replacement	5.14%
Cost of Replacing All Wastewater Assets Needing Replacement	$1,287,506
Annual Replacement Cost of Wastewater System	$491,753

Please note that the $25 million dollar replacement cost of the wastewater system documented above, along with the annual replacement cost of $491,753 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.

Based on the findings of the Asset Management Plan, it is important for the City of Parker to start setting aside reserves for the replacement of its assets, to make sure that the base charge is adequately covering operational expenditures and that any usage charges are sufficient to fund a capital improvement program.

Reserves:

Reserve balances for utility systems are funds set aside for a specific cash flow requirement, financial need, project, task, or legal covenant. All types of reserves can play a significant role in addressing current and future challenges facing utility systems, such as demand volatility, water supply costs, large capital requirements, asset replacements, natural disasters and potential liabilities from system failures associated with aged infrastructure. All utilities should establish formal financial policies relative to reserves. Such policies should articulate how these balances are established, their use, and how the adequacy of each respective reserve fund balance is determined. Once reserve targets are established, they should be reviewed annually during the budgeting process.

At Parker, the unrestricted cash available at end of FY 2023 was $4,925,589, with annual operating expenses (without depreciation) of approximately $1,708,855 in FY 2023 giving the System 1,052 days of cash on hand.

For planning purposes and without a stated reserve policy from the System, FRWA builds the financial model by increasing the annual unrestricted reserve funding to 270 days of the current year operation and maintenance budget. 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. 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 residential and commercial rate structure is as follows:

City of Parker Wastewater Base Rates	
Residential	**Commercial**
$ 36.60	$ 36.60

City of Parker Usage Rates	
Residential (per 1,000 gallons)	**Commercial (per 1,000 gallons)**
$ 11.56	$ 11.65

Proposed Scenario:

The City will develop a final proposed Scenario during their budget process and show the rate adjustments necessary to adequately fund the wastewater system.

Once established, the rate increases will need to satisfy:

- The existing operational expenses.
- The existing debt service requirements.
- The annual replacement costs for the system and future capital improvement costs.
- The new operating expenses (assets in failed or poor condition) detailed in Section 4 of this plan.
- The future debt needed to adequately replace and sustain the assets of the system.
- The annual reserve requirements.
- The need to preserve the existing amount of funds in retained earnings.

8. Energy Conservation

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

The City of Parker 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 Using Operations	Energy Saving Measures	
Lighting	• Motion sensors • Pulse start metal halide • Super-efficient T8s	• T5 low and high bay fixtures • Indirect fluorescent • Comprehensive control for large buildings
Heating, Ventilation, Air Conditioning (HVAC)	• Water source heat pumps • Custom incentives for larger units • Occupancy controls	• Prescriptive incentives for remote telemetry units • Low volume fume hood • Heat pump for generator oil sump

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.

Minimum Equipment Information to Gather	Additional Equipment Information to Gather	Conditions to Consider
• Pump style • Number of pump stages • Pump and motor speed(s) • Pump rated head (name plate) • Motor rated power and voltage (name plate) • Full load amps • Rated and actual pump discharge • Operation schedules	• Pump manufacturer's pump curves • Actual pump curve • Power factor • Load profile • Analysis of variable frequency drives (vfd's) if present • Pipe sizes • Water level (source) • Motor current • Pump suction pressure • Discharge pressure	• Maintenance records • Consistently throttled values • Excessive noise or vibrations • Buildup of sand and/or grit • Evidence of wear or cavitation on pump, impellers, or pump bearings. • Out-of-alignment conditions • Significant flow rate/ pressure variations • Active bypass piping • Restrictions in pipes or pumps • Restrictive/leaking pump shaft packing

In late 2024, an Energy Assessment was conducted by FRWA staff at the System's lift stations. It is recommended that the following energy management initiatives be implemented by the City of Parker.

With an investment of $7,750 in Variable Frequency Drives (VFDs), depending upon the highly variable cost of procuring the needed equipment, it could potentially save the City of Parker approximately $4,772 annually against its wastewater collection system total expenditures as detailed in the table below:

Energy Audit Cost Summary					
Purchase Item	**Estimated Cost**	**Estimated Annual Savings**	**Estimated Payback Period**	**Estimated VFD Horsepower**	**Service Life (Years)**
VFD for LS P-14	$ 2,750	$ 3,940	0.7 Years	19.6 HP	20
VFD for LS P-12	$ 3,500	$ 604	5.8 Years	30 HP	20
VFD for LS P-13	$ 1,500	$ 228	6.6 Years	7.5 HP	10
Total	**$ 7,750**	**$ 4,772**			

FRWA has Variable Frequency Drives available for loan or potentially for gifting to systems so that our members may acquire some hard data regarding the energy savings benefits of using VFDs. Please contact the FRWA office for additional information.

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 the City of Parker staff, regulatory inspection data, and our experience related to similar assets.

Areas needing attention are detailed in Section 4 and include:

Lift Stations: Overall, the lift stations are considered to be in average to good condition. FRWA encourages Parker to begin budgeting an annual allocation for the scheduled maintenance, rehabilitation, and relining or replacement of the lift stations and related equipment. Dry wells and buried bypass valves should be repaired. Consideration should also be given to installing a new lift station in the Cheri Lane area, preventing the need to transfer wastewater from the northeast section of the City across Boat Race Road only to be pumped back across from a south side lift station.

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. Repair and/or line manholes in poor or failed condition paying particular attention to the manholes located near the lift stations, along South Highway 22A, and along East Bay. Consider the purchase of additional inflow shields. In addition, due to a number of reasons outlined in Section 4, consideration should be given to moving the mains along the shoreline along East Bay further inland or perhaps reversing the direction of flow from existing structures along the bay to an existing main along Tyndall Parkway.

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 AMFSP 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 (DWSRF)	https://floridadep.gov/wra/srf/content/dwsrf-program	Eric Meyers eric.v.meyers@FloridaDEP.gov 850-245-2991
FDEP Clean Water State Revolving Fund Loan Program (CWSRF)	https://floridadep.gov/wra/srf/content/cwsrf-program	Eric Meyers eric.v.meyers@FloridaDEP.gov 850-245-2991
USDA Rural Development- Water and Wastewater Direct Loans and Grants	https://www.rd.usda.gov/programs-services/rural-economic-development-loan-grant-program https://www.rd.usda.gov/programs-services/water-waste-disposal-loan-grant-program	Jeanie Isler pamela.isler@usda.gov 352-338-3440
Economic Development Administration- Public Works and Economic Adjustment Assistance Programs	https://www.eda.gov/resources/economic-development-directory/states/fl.htm https://www.grants.gov/web/grants/view-opportunity.html?oppId=294771	Greg Vaday gvaday@eda.doc.gov 404-730-3009
National Rural Water Association- Revolving Loan Fund	https://nrwa.org/initiatives/revolving-loan-fund/	Alicia Keeter Alicia@frwa.net 850-668-2746
Florida Department of Commerce - Florida Small Cities Community Development Block Grant Program	http://www.floridajobs.org/community-planning-and-development/assistance-for-governments-and-organizations/florida-small-cities-community-development-block-grant-program	Shauita Jackson shauita.jackson@deo.myflorida.com 850-717-8416
Northwest Florida Water Management System - Cooperative Funding Initiative (CFI)	https://www.nwfwater.com/Water-Resources/Funding-Programs	Christina Coger Christina.Coger@nwfwater.com 850-539-5999

Closing:

This Asset Management and Fiscal Sustainability plan is presented to the City of Parker 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 City of Parker with any future projects to ensure your Asset Management Plan is a success.

APPENDIX A: Sample Resolution

RESOLUTION NO. 2025-____________

A RESOLUTION OF THE CITY OF PARKER, APPROVING THE CITY OF PARKER WASTEWATER ASSET MANAGEMENT AND FISCAL SUSTAINABILITY PLAN; AUTHORIZING THE MAYOR AND PUBLIC WORKS DIRECTOR 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 City of Parker 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 City Council of the City of Parker 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 City.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY OF PARKER CITY COUNCIL the following:

Section 1. That the City Council hereby approves the City of Parker Wastewater Asset Management and Fiscal Sustainability Plan dated ________________, attached hereto and incorporated by reference as a part of this Resolution.

Section 2. That the Mayor and Public Works Director are 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 City Council direction in order to obtain funding from the SRF.

Section 3. That the City Council 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 City's needs as determined by the City Council in its discretion.

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

PASSED AND ADOPTED on this________ day of_____________, 2025.

City of Parker

____
Andrew Kelly, Mayor

ATTEST:

____
Ingrid Bundy, City Clerk

APPROVED AS TO FORM:

____
City Attorney

APPENDIX B: Master Asset List

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Buildings						
LS P-10 Shed	1999	50	5000	Average	Moderate	2050
LS P-11 Shed	1999	50	5000	Average	Moderate	2050
LS P-15 Shed	1999	50	5000	Average	Moderate	2050
LS P-1 Shed	1999	50	5000	Average	Moderate	2050
LS P-16 Shed	1999	50	5000	Average	Moderate	2050
LS P-12 Shed	1999	50	2500	Average	Moderate	2050
LS P-4 Shed	1999	50	5000	Average	Moderate	2050
LS P-6 Shed	1999	50	5000	Average	Moderate	2050
LS P-7 Shed	1999	50	5000	Average	Moderate	2050
LS P-14 Shed	1999	50	5000	Average	Moderate	2050
LS P-3 Shed	1999	50	5000	Average	Moderate	2050
LS P-8 Shed	1999	50	5000	Average	Moderate	2050
LS P-9 Shed	1999	50	5000	Average	Moderate	2050
LS P-13 Shed	1999	50	5000	Average	Moderate	2050
LS P-5 Shed	1999	50	5000	Average	Moderate	2050
Control Valves						
LS P-15 Check Valve 1	1980	25	2500	Average	Moderate	2035
LS P-15 Check Valve 2	1980	25	2500	Average	Moderate	2035
LS P-11 Check Valve 2	1980	25	2500	Average	Moderate	2035
LS P-11 Check Valve 1	1980	25	2500	Average	Moderate	2035

MASTER ASSET LIST						
Name	**Installed**	**Design Life**	**Replacement Cost**	**Condition**	**Consequence of Failure**	**EOL**
LS P-10 Check Valve 1	1983	25	2500	Average	Moderate	2035
LS P-10 Check Valve 2	1983	25	2500	Average	Moderate	2035
LS P-9 Check Valve 1	1980	25	2500	Average	Moderate	2035
LS P-9 Check Valve 2	1980	25	2500	Average	Moderate	2035
LS P-8 Check Valve 1	1980	25	2500	Average	Moderate	2035
LS P-8 Check Valve 2	1980	25	2500	Average	Moderate	2035
LS P-3 Check Valve 2	1980	25	2500	Average	Moderate	2035
LS P-3 Check Valve 1	1980	25	2500	Average	Moderate	2035
LS P-7 Check Valve 2	1980	25	2500	Average	Moderate	2035
LS P-7 Check Valve 1	1980	25	2500	Average	Moderate	2035
LS P-6 Check Valve 2	1980	25	2500	Average	Moderate	2035
LS P-6 Check Valve 1	1980	25	2500	Average	Moderate	2035
LS P-14 Check Valve 1	1980	25	2500	Average	Moderate	2035
LS P-14 Check Valve 2	1980	25	2500	Average	Moderate	2035
LS P-16 Check Valve 2	2018	25	2500	Average	Moderate	2035
LS P-16 Check Valve 1	2018	25	2500	Average	Moderate	2035
LS P-17 Check Valve 1	2018	25	3500	Average	Moderate	2035
LS P-17 Check Valve 2	2018	25	3500	Average	Moderate	2035
LS P-12 Check Valve 2	1980	25	2500	Average	Moderate	2035
LS P-12 Check Valve 1	1980	25	2500	Average	Moderate	2035
LS P-13 Check Valve 2	1980	25	2500	Average	Moderate	2035
LS P-13 Check Valve 1	1980	25	2500	Average	Moderate	2035
LS P-5 Check Valve 1	1980	25	2500	Average	Moderate	2035
LS P-5 Check Valve 2	1980	25	2500	Average	Moderate	2035

MASTER ASSET LIST						
Name	**Installed**	**Design Life**	**Replacement Cost**	**Condition**	**Consequence of Failure**	**EOL**
LS P-4 Check Valve 1	1980	25	2500	Average	Moderate	2035
LS P-4 Check Valve 2	1980	25	2500	Average	Moderate	2035
LS P-1 Check Valve 1	1980	25	2500	Average	Moderate	2035
LS P-1 Check Valve 2	1980	25	2500	Average	Moderate	2035
Force Main Blowoff	2020	25	3000	Average	Moderate	2037
LS P-12 Air Release Valve 1	1980	25	1000	Average	Moderate	2037
LS P-12 Air Release Valve 2	1980	25	1000	Average	Moderate	2037
Dry Wells						
LS P-15 Dry Well	1980	100	15000	Average	Moderate	2073
LS P-11 Dry Well	1980	100	15000	Average	Moderate	2073
LS P-10 Dry Well	1983	100	15000	Average	Moderate	2073
LS P-9 Dry Well	1980	100	15000	Average	Moderate	2073
LS P-8 Dry Well	1980	100	15000	Average	Moderate	2073
LS P-3 Dry Well	1983	100	15000	Average	Moderate	2073
LS P-7 Dry Well	1980	100	15000	Average	Moderate	2073
LS P-6 Dry Well	1980	100	15000	Average	Moderate	2073
LS P-14 Dry Well	1980	100	15000	Average	Moderate	2073
LS P-17 Dry Well	1980	100	15000	Average	Moderate	2073
LS P-12 Dry Well 1	1980	100	15000	Average	Moderate	2073
LS P-12 Dry Well 2	1980	100	15000	Average	Moderate	2073
LS P-13 Dry Well 2	1980	100	15000	Average	Moderate	2073
LS P-13 Dry Well 1	1980	100	15000	Average	Moderate	2073
LS P-5 Dry Well	1980	100	15000	Average	Moderate	2073
LS P-4 Dry Well	1980	100	15000	Average	Moderate	2073

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
LS P-1 Dry Well	1983	100	15000	Poor	Moderate	2053
LS P-16 Dry Well	1980	100	15000	Poor	Moderate	2053
Electrical Equipment						
LS P-14 Generator	2021	30	23000	Average	Moderate	2034
LS P-17 Generator	2018	30	30000	Average	Moderate	2034
LS P-12 Generator	2013	30	30000	Average	Moderate	2034
LS P-13 Generator	2013	30	30000	Average	Moderate	2034
LS P-8 Control Panel	1983	20	5000	Average	Moderate	2030
LS P-3 Control Panel	1983	20	5000	Average	Moderate	2030
LS P-9 Control Panel	1983	20	5000	Average	Moderate	2030
LS P-10 Control Panel	1983	20	5000	Average	Moderate	2030
LS P-11 Control Panel	1999	20	5000	Average	Moderate	2030
LS P-15 Control Panel	1999	20	5000	Average	Moderate	2030
LS P-1 Control Panel	1999	20	5000	Average	Moderate	2030
LS P-4 Control Panel	1999	20	5000	Average	Moderate	2030
LS P-14 Control Panel	1983	20	5000	Average	Moderate	2030
LS P-6 Control Panel	1999	20	5000	Average	Moderate	2030
LS P-7 Control Panel	2016	20	7500	Average	Moderate	2030
LS P-16 Control Panel	1983	20	5000	Average	Moderate	2030
LS P-17 Control Panel	2018	20	7500	Average	Moderate	2030
LS P-12 Control Panel	2013	20	5000	Average	Moderate	2030
LS P-13 Control Panel	2013	20	5000	Average	Moderate	2030
LS P-5 Control Panel	1999	20	5000	Average	Moderate	2030
LS P-1 Generator	2021	30	16000	Average	Moderate	2038

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
LS P-1 Transfer Switch	2021	20	4000	Average	Moderate	2033
LS P-15 Generator	2021	30	16000	Average	Moderate	2038
LS P-15 Transfer Switch	2021	20	4000	Average	Moderate	2033
LS P-11 Generator	2021	30	20000	Average	Moderate	2038
LS P-11 Transfer Switch	2021	20	4000	Average	Moderate	2033
LS P-10 Generator	2021	30	15500	Average	Moderate	2038
LS P-10 Transfer Switch	2021	20	4000	Average	Moderate	2033
LS P-9 Generator	2021	30	16500	Average	Moderate	2038
LS P-9 Transfer Switch	2021	20	4000	Average	Moderate	2033
LS P-8 Generator	2021	30	16500	Average	Moderate	2038
LS P-8 Transfer Switch	2021	20	4000	Average	Moderate	2033
LS P-3 Generator	2021	30	21000	Average	Moderate	2038
LS P-3 Transfer Switch	2021	20	4000	Average	Moderate	2033
LS P-7 Generator	2021	30	16000	Average	Moderate	2038
LS P-7 Transfer Switch	2021	20	4000	Average	Moderate	2033
LS P-6 Generator	2021	30	16000	Average	Moderate	2038
LS P-6 Transfer Switch	2021	20	4000	Average	Moderate	2033
LS P-14 Transfer Switch	2021	20	4000	Average	Moderate	2033
LS P-16 Generator	2021	30	20000	Average	Moderate	2038
LS P-16 Transfer Switch	2021	20	4000	Average	Moderate	2033
LS P-17 Transfer Switch	2018	20	4000	Average	Moderate	2033
LS P-12 Transfer Switch	2013	20	4000	Average	Moderate	2033
LS P-13 Transfer Switch	2013	20	4000	Average	Moderate	2033
LS P-5 Generator	2021	30	15500	Average	Moderate	2038

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
LS P-5 Transfer Switch	2021	20	4000	Average	Moderate	2033
LS P-4 Generator	2021	30	16000	Average	Moderate	2038
LS P-4 Transfer Switch	2021	20	4000	Average	Moderate	2033
LS P-10 Utility Service	1983	20	500	Average	Moderate	2035
LS P-10 Disconnect Switch	1983	20	2000	Average	Moderate	2035
LS P-11 Utility Service	1980	20	500	Average	Moderate	2035
LS P-11 Disconnect Switch	1980	20	2000	Average	Moderate	2035
LS P-15 Disconnect Switch	1999	20	2000	Average	Moderate	2035
LS P-15 Utility Service	1980	20	500	Average	Moderate	2035
LS P-1 Disconnect Switch	1999	20	2000	Average	Moderate	2035
LS P-1 Utility Supply	1999	20	500	Average	Moderate	2035
LS P-16 Disconnect Switch	1999	20	2000	Average	Moderate	2035
LS P-16 Utility Service	1983	20	500	Average	Moderate	2035
LS P-17 Utility Service	2018	20	500	Average	Moderate	2035
LS P-17 Disconnect Switch	2018	20	2000	Average	Moderate	2035
LS P-12 Utility Service	1980	20	500	Average	Moderate	2035
LS P-12 Disconnect Switch	1999	20	2000	Average	Moderate	2035
LS P-13 Disconnect Switch	1999	20	2000	Average	Moderate	2035
LS P-13 Utility Service	1999	20	500	Average	Moderate	2035
LS P-5 Utility Service	1999	20	500	Average	Moderate	2035
LS P-5 Disconnect Switch	1999	20	2000	Average	Moderate	2035
LS P-4 Disconnect Switch	1999	20	2000	Average	Moderate	2035
LS P-4 Utility Service	1980	20	500	Average	Moderate	2035
LS P-6 Disconnect Switch	1999	20	2000	Average	Moderate	2035

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
LS P-6 Utility Service	1980	20	500	Average	Moderate	2035
LS P-7 Utility Service	1980	20	500	Average	Moderate	2035
LS P-7 Disconnect Switch	1999	20	2000	Average	Moderate	2035
LS P-14 Disconnect Switch	1999	20	2000	Average	Moderate	2035
LS P-14 Utility Service	1980	20	500	Average	Moderate	2035
LS P-3 Disconnect Switch	1999	20	2000	Average	Moderate	2035
LS P-3 Utility Service	1980	20	500	Average	Moderate	2035
LS P-8 Disconnect Switch	1999	20	2000	Average	Moderate	2035
LS P-8 Utility Service	1980	20	500	Average	Moderate	2035
LS P-9 Disconnect Switch	1999	20	2000	Average	Moderate	2035
LS P-9 Utility Service	1980	20	500	Average	Moderate	2035
Force Mains						
Force Main	1983	50	140000	Average	Major	2049
Force Main	1983	50	28000	Average	Major	2049
Force Main	1983	50	33000	Average	Major	2049
Force Main	1983	50	30000	Average	Major	2049
Force Main	1983	50	46000	Average	Major	2049
Force Main	1983	50	25000	Average	Major	2049
Force Main	1983	50	113000	Average	Major	2049
Force Main	1983	50	83000	Average	Major	2049
Force Main	1983	50	39000	Average	Major	2049
Force Main	1983	50	39000	Average	Major	2049
Force Main	1983	50	54000	Average	Major	2049
Force Main	1983	50	58000	Average	Major	2049

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Force Main	1983	50	22000	Average	Major	2049
Force Main	1983	50	142000	Average	Major	2049
Force Main	1983	50	268000	Average	Major	2049
Force Main	1983	50	163000	Average	Major	2049
Force Main	1983	50	23000	Average	Major	2049
Force Main	1983	50	15000	Average	Major	2049
Force Main	1983	50	313000	Average	Major	2049
Force Main	1983	50	6000	Average	Major	2049
Force Main	1983	50	24000	Average	Major	2048
Force Main	1983	50	179000	Average	Major	2048
Gravity Mains						
Gravity Main	1983	50	2000	Average	Moderate	2049
Gravity Main	1983	50	9000	Average	Moderate	2049
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	13000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	10000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	9000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	11000	Average	Moderate	2049
Gravity Main	1983	50	13000	Average	Moderate	2049
Gravity Main	1983	50	3000	Average	Moderate	2049
Gravity Main	1983	50	8000	Average	Moderate	2049
Gravity Main	1983	50	10000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	10000	Average	Moderate	2049
Gravity Main	1983	50	9000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049
Gravity Main	1983	50	13000	Average	Moderate	2049
Gravity Main	1983	50	2000	Average	Moderate	2049
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	24000	Average	Moderate	2049
Gravity Main	1983	50	13000	Average	Moderate	2049
Gravity Main	1983	50	10000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	13000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	24000	Average	Moderate	2049
Gravity Main	1983	50	5000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	10000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	24000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	3000	Average	Moderate	2049
Gravity Main	1983	50	2000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	10000	Average	Moderate	2049
Gravity Main	1983	50	9000	Average	Moderate	2049
Gravity Main	1983	50	1000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	12000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	8000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	8000	Average	Moderate	2049
Gravity Main	1983	50	13000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	13000	Average	Moderate	2049
Gravity Main	1983	50	7000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	7000	Average	Moderate	2049
Gravity Main	1983	50	11000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	3000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	7000	Average	Moderate	2049
Gravity Main	1983	50	9000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	37000	Average	Moderate	2049
Gravity Main	1983	50	33000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	3000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	9000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	5000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049
Gravity Main	1983	50	9000	Average	Moderate	2049
Gravity Main	1983	50	36000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	3000	Average	Moderate	2049
Gravity Main	1983	50	29000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	30000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	6000	Average	Moderate	2049
Gravity Main	1983	50	31000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	9000	Average	Moderate	2049
Gravity Main	1983	50	9000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049

MASTER ASSET LIST						
Name	**Installed**	**Design Life**	**Replacement Cost**	**Condition**	**Consequence of Failure**	**EOL**
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	7000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	26000	Average	Moderate	2049
Gravity Main	1983	50	26000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	26000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	11000	Average	Moderate	2049
Gravity Main	1983	50	10000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	24000	Average	Moderate	2049
Gravity Main	1983	50	11000	Average	Moderate	2049
Gravity Main	1983	50	27000	Average	Moderate	2049

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	13000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	26000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	6000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	3000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	26000	Average	Moderate	2049
Gravity Main	1983	50	3000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	26000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	26000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	26000	Average	Moderate	2049
Gravity Main	1983	50	24000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	8000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	47000	Average	Moderate	2049
Gravity Main	1983	50	9000	Average	Moderate	2049
Gravity Main	1983	50	7000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	13000	Average	Moderate	2049
Gravity Main	1983	50	7000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	5000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	13000	Average	Moderate	2049
Gravity Main	1983	50	9000	Average	Moderate	2049
Gravity Main	1983	50	11000	Average	Moderate	2049
Gravity Main	1983	50	10000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	26000	Average	Moderate	2049

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	3000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	13000	Average	Moderate	2049
Gravity Main	1983	50	3000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	13000	Average	Moderate	2049
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	11000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049
Gravity Main	1983	50	9000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	13000	Average	Moderate	2049
Gravity Main	1983	50	9000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	46000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	10000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	7000	Average	Moderate	2049
Gravity Main	1983	50	24000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	10000	Average	Moderate	2049
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	3000	Average	Moderate	2049
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	7000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049
Gravity Main	1983	50	3000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	27000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	13000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049
Gravity Main	1983	50	26000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	26000	Average	Moderate	2049
Gravity Main	1983	50	26000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	24000	Average	Moderate	2049
Gravity Main	1983	50	24000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	10000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	8000	Average	Moderate	2049
Gravity Main	1983	50	7000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	24000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	24000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	10000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	24000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	24000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	2000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	2000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	3000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	9000	Average	Moderate	2049
Gravity Main	1983	50	6000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049
Gravity Main	1983	50	24000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	10000	Average	Moderate	2049
Gravity Main	1983	50	11000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	5000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	7000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	11000	Average	Moderate	2049
Gravity Main	1983	50	24000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	10000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	8000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	10000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	11000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	7000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	26000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	5000	Average	Moderate	2049
Gravity Main	1983	50	13000	Average	Moderate	2049
Gravity Main	1983	50	9000	Average	Moderate	2049
Gravity Main	1983	50	32000	Average	Moderate	2049
Gravity Main	1983	50	5000	Average	Moderate	2049
Gravity Main	1983	50	5000	Average	Moderate	2049
Gravity Main	1983	50	26000	Average	Moderate	2049
Gravity Main	1983	50	27000	Average	Moderate	2049
Gravity Main	1983	50	24000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	9000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	24000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	3000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	11000	Average	Moderate	2049
Gravity Main	1983	50	21000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	7000	Average	Moderate	2049
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	19000	Average	Moderate	2049
Gravity Main	1983	50	24000	Average	Moderate	2049
Gravity Main	1983	50	34000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	3000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	10000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049
Gravity Main	1983	50	5000	Average	Moderate	2049
Gravity Main	1983	50	7000	Average	Moderate	2049
Gravity Main	1983	50	7000	Average	Moderate	2049
Gravity Main	1983	50	6000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	10000	Average	Moderate	2049
Gravity Main	1983	50	6000	Average	Moderate	2049
Gravity Main	1983	50	17000	Average	Moderate	2049
Gravity Main	1983	50	2000	Average	Moderate	2049
Gravity Main	1983	50	1000	Average	Moderate	2049
Gravity Main	1983	50	10000	Average	Moderate	2049
Gravity Main	1983	50	7000	Average	Moderate	2049
Gravity Main	1983	50	8000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	26000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	1000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	9000	Average	Moderate	2049
Gravity Main	1983	50	6000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	3000	Average	Moderate	2049
Gravity Main	1983	50	2000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	16000	Average	Moderate	2049
Gravity Main	1983	50	11000	Average	Moderate	2049
Gravity Main	1983	50	15000	Average	Moderate	2049
Gravity Main	1983	50	13000	Average	Moderate	2049
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	7000	Average	Moderate	2049
Gravity Main	1983	50	3000	Average	Moderate	2049
Gravity Main	1983	50	23000	Average	Moderate	2049
Gravity Main	1983	50	3000	Average	Moderate	2049
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	22000	Average	Moderate	2049
Gravity Main	1983	50	13000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	9000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Gravity Main	1983	50	14000	Average	Moderate	2049
Gravity Main	1983	50	13000	Average	Moderate	2049
Gravity Main	1983	50	10000	Average	Moderate	2049
Gravity Main	1983	50	18000	Average	Moderate	2049
Gravity Main	1983	50	25000	Average	Moderate	2049
Gravity Main	1983	50	24000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	6000	Average	Moderate	2049
Gravity Main	1983	50	3000	Average	Moderate	2049
Gravity Main	1983	50	12000	Average	Moderate	2049
Gravity Main	1983	50	4000	Average	Moderate	2049
Gravity Main	1983	50	10000	Average	Moderate	2049
Gravity Main	1983	50	20000	Average	Moderate	2049
Gravity Main	1983	50	9000	Average	Moderate	2049
Gravity Main	1983	50	7000	Average	Moderate	2049
Gravity Main	1983	50	35000	Average	Moderate	2049
Gravity Main	1983	50	24000	Average	Moderate	2049
Instuments and Controls						
LS P-11 SCADA System	1999	20	3000	Average	Moderate	2035
LS P-3 SCADA System	1999	20	3000	Average	Moderate	2035
LS P-7 SCADA System	1999	20	3000	Average	Moderate	2035
LS P-8 SCADA System	1999	20	3000	Average	Moderate	2035
LS P-12 SCADA System	1999	20	3000	Average	Moderate	2035
LS P-13 SCADA System	1999	20	3000	Average	Moderate	2035

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
LS P-17 SCADA System	1999	20	3000	Average	Moderate	2035
LS P-14 SCADA System	1999	20	3000	Average	Moderate	2035
Manholes						
Manhole	1983	50	21000	Average	Moderate	2049
Manhole	1983	50	22000	Average	Moderate	2049
Manhole	1983	50	24000	Average	Moderate	2049
Manhole	1983	50	9000	Average	Moderate	2049
Manhole	1983	50	26000	Average	Moderate	2049
Manhole	1983	50	28000	Average	Moderate	2049
Manhole	1983	50	32000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	26000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	20000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	20000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	29000	Average	Moderate	2049
Manhole	1983	50	29000	Average	Moderate	2049
Manhole	1983	50	30000	Average	Moderate	2049
Manhole	1983	50	29000	Average	Moderate	2049
Manhole	1983	50	20000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	24000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	22000	Average	Moderate	2049
Manhole	1983	50	31000	Average	Moderate	2049
Manhole	1983	50	33000	Average	Moderate	2049
Manhole	1983	50	26000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	19000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	19000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	9000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	19000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	22000	Average	Moderate	2049
Manhole	1983	50	19000	Average	Moderate	2049
Manhole	1983	50	24000	Average	Moderate	2049
Manhole	1983	50	27000	Average	Moderate	2049
Manhole	1983	50	29000	Average	Moderate	2049
Manhole	1983	50	31000	Average	Moderate	2049
Manhole	1983	50	25000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	23000	Average	Moderate	2049

MASTER ASSET LIST						
Name	**Installed**	**Design Life**	**Replacement Cost**	**Condition**	**Consequence of Failure**	**EOL**
Manhole	1983	50	21000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	31000	Average	Moderate	2049
Manhole	1983	50	25000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	22000	Average	Moderate	2049
Manhole	1983	50	30000	Average	Moderate	2049
Manhole	1983	50	31000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	32000	Average	Moderate	2049
Manhole	1983	50	32000	Average	Moderate	2049
Manhole	1983	50	28000	Average	Moderate	2049
Manhole	1983	50	29000	Average	Moderate	2049
Manhole	1983	50	24000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	20000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	19000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	8000	Average	Moderate	2049
Manhole	1983	50	19000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	29000	Average	Moderate	2049
Manhole	1983	50	24000	Average	Moderate	2048
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	26000	Average	Moderate	2049
Manhole	1983	50	26000	Average	Moderate	2049
Manhole	1983	50	20000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	9000	Average	Moderate	2049

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	9000	Average	Moderate	2049
Manhole	1983	50	20000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	22000	Average	Moderate	2049
Manhole	1983	50	22000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	23000	Average	Moderate	2049
Manhole	1983	50	24000	Average	Moderate	2049
Manhole	1983	50	25000	Average	Moderate	2049
Manhole	1983	50	24000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	22000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	20000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	20000	Average	Moderate	2049
Manhole	1983	50	19000	Average	Moderate	2049
Manhole	1983	50	19000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	20000	Average	Moderate	2049
Manhole	1983	50	22000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	19000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049

MASTER ASSET LIST						
Name	**Installed**	**Design Life**	**Replacement Cost**	**Condition**	**Consequence of Failure**	**EOL**
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2048
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	9000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	21000	Average	Moderate	2049
Manhole	1983	50	24000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	22000	Average	Moderate	2049
Manhole	1983	50	31000	Average	Moderate	2049
Manhole	1983	50	26000	Average	Moderate	2049
Manhole	1983	50	23000	Average	Moderate	2049
Manhole	1983	50	22000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	26000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	28000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	5000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	23000	Average	Moderate	2048
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	19000	Average	Moderate	2049
Manhole	1983	50	20000	Average	Moderate	2049
Manhole	1983	50	24000	Average	Moderate	2048
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	24000	Average	Moderate	2049
Manhole	1983	50	21000	Average	Moderate	2048
Manhole	1983	50	20000	Average	Moderate	2048
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	20000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	9000	Average	Moderate	2049
Manhole	1983	50	7000	Average	Moderate	2049
Manhole	1983	50	29000	Average	Moderate	2049
Manhole	1983	50	32000	Average	Moderate	2049
Manhole	1983	50	37000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	9000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	9000	Average	Moderate	2049
Manhole	1983	50	7000	Average	Moderate	2049
Manhole	1983	50	6000	Average	Moderate	2049
Manhole	1983	50	8000	Average	Moderate	2049
Manhole	1983	50	9000	Average	Moderate	2049
Manhole	1983	50	9000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	8000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	7000	Average	Moderate	2049
Manhole	1983	50	6000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	23000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	20000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	28000	Average	Moderate	2049
Manhole	1983	50	9000	Average	Moderate	2049
Manhole	1983	50	31000	Average	Moderate	2049
Manhole	1983	50	32000	Average	Moderate	2049
Manhole	1983	50	19000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	9000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	23000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	20000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	24000	Average	Moderate	2049
Manhole	1983	50	20000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	21000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	19000	Average	Moderate	2049
Manhole	1983	50	32000	Average	Moderate	2049
Manhole	1983	50	26000	Average	Moderate	2049
Manhole	1983	50	26000	Average	Moderate	2049
Manhole	1983	50	19000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	20000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	8000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	28000	Average	Moderate	2049
Manhole	1983	50	22000	Average	Moderate	2049
Manhole	1983	50	23000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	27000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	22000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	9000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	23000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	2023	50	16000	Average	Moderate	2048
Manhole	1983	50	12000	Average	Moderate	2048
Manhole	1983	50	22000	Average	Moderate	2048
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	31000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	23000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	8000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	30000	Average	Moderate	2049
Manhole	1983	50	23000	Average	Moderate	2049
Manhole	1983	50	26000	Average	Moderate	2049
Manhole	1983	50	30000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	28000	Average	Moderate	2049
Manhole	1983	50	17000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	6000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	9000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	6000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	8000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	30000	Average	Moderate	2049

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	19000	Average	Moderate	2049
Manhole	1983	50	24000	Average	Moderate	2048
Manhole	1983	50	18000	Average	Moderate	2048
Manhole	1983	50	9000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	12000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	9000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	23000	Average	Moderate	2048
Manhole	1983	50	21000	Average	Moderate	2048
Manhole	1983	50	19000	Average	Moderate	2049
Manhole	1983	50	22000	Average	Moderate	2048
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	25000	Average	Moderate	2049
Manhole	1983	50	23000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	9000	Average	Moderate	2049
Manhole	1983	50	10000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	13000	Average	Moderate	2048
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	22000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	2023	50	14000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	14000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	20000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	26000	Average	Moderate	2049
Manhole	1983	50	19000	Average	Moderate	2048
Manhole	1983	50	15000	Average	Moderate	2048
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	22000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	16000	Average	Moderate	2049
Manhole	1983	50	26000	Average	Moderate	2048
Manhole	1983	50	7000	Average	Moderate	2049

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	27000	Average	Moderate	2048
Manhole	1983	50	8000	Average	Moderate	2050
Manhole	1983	50	15000	Average	Moderate	2050
Manhole	1983	50	19000	Average	Moderate	2049
Manhole	1983	50	30000	Average	Moderate	2050
Manhole	1983	50	15000	Average	Moderate	2049
Manhole	1983	50	18000	Average	Moderate	2049
Manhole	1983	50	30000	Average	Moderate	2049
Manhole	1968	50	13000	Average	Moderate	2049
Manhole	1983	50	11000	Average	Moderate	2049
Manhole	1983	50	13000	Average	Moderate	2049
Manhole	1983	50	16000	Failed	Moderate	2024
Manhole	1983	50	13000	Poor	Moderate	2059
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	18000	Poor	Moderate	2039
Manhole	1983	50	21000	Poor	Moderate	2039
Manhole	1983	50	15000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	12000	Poor	Moderate	2039
Manhole	1983	50	11000	Poor	Moderate	2039
Manhole	1983	50	13000	Poor	Moderate	2039
Manhole	1983	50	14000	Poor	Moderate	2039
Manhole	1983	50	13000	Poor	Moderate	2039
Manhole	1983	50	12000	Poor	Moderate	2039

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	13000	Poor	Moderate	2039
Manhole	1983	50	11000	Poor	Moderate	2039
Manhole	1983	50	25000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	10000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	23000	Poor	Moderate	2039
Manhole	1983	50	25000	Poor	Moderate	2039
Manhole	1983	50	27000	Poor	Moderate	2039
Manhole	1983	50	23000	Poor	Moderate	2039
Manhole	1983	50	19000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	17000	Poor	Moderate	2039
Manhole	1983	50	29000	Poor	Moderate	2039
Manhole	1983	50	10000	Poor	Moderate	2039
Manhole	1983	50	36000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	17000	Poor	Moderate	2039
Manhole	1983	50	18000	Poor	Moderate	2039
Manhole	1983	50	15000	Poor	Moderate	2039
Manhole	1983	50	15000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	18000	Poor	Moderate	2039

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	18000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	23000	Poor	Moderate	2039
Manhole	1983	50	19000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	15000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	17000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	19000	Poor	Moderate	2039
Manhole	1983	50	20000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2038
Manhole	1983	50	13000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	9000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	30000	Poor	Moderate	2039

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
Manhole	1983	50	25000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	10000	Poor	Moderate	2039
Manhole	1983	50	15000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	15000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	18000	Poor	Moderate	2039
Manhole	1983	50	19000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	20000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1983	50	16000	Poor	Moderate	2039
Manhole	1993	50	17000	Poor	Moderate	2039
Pumps						
LS P-8 Pump 1	1999	20	3000	Average	Moderate	2029
LS P-8 Pump 2	1999	20	3000	Average	Moderate	2029
LS P-3 Pump 1	1999	20	12000	Average	Moderate	2029
LS P-3 Pump 2	1999	20	12000	Average	Moderate	2029
LS P-9 Pump 1	1999	20	4000	Average	Moderate	2029
LS P-9 Pump 2	1999	20	4000	Average	Moderate	2029
LS P-10 Pump 1	1999	20	4000	Average	Moderate	2029

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
LS P-10 Pump 2	1999	20	4000	Average	Moderate	2029
LS P-11 Pump 1	1999	20	12000	Average	Moderate	2029
LS P-11 Pump 2	1999	20	12000	Average	Moderate	2029
LS P-15 Pump 1	1999	20	3000	Average	Moderate	2029
LS P-15 Pump 2	1999	20	3000	Average	Moderate	2029
LS P-1 Pump 1	1999	20	7000	Average	Moderate	2029
LS P-1 Pump 2	1999	20	7000	Average	Moderate	2029
LS P-4 Pump 1	1999	20	7000	Average	Moderate	2029
LS P-4 Pump 2	1999	20	7000	Average	Moderate	2029
LS P-14 Pump 1	1983	20	15000	Average	Moderate	2029
LS P-14 Pump 2	2022	20	15000	Average	Moderate	2029
LS P-6 Pump 1	1999	20	4000	Average	Moderate	2029
LS P-6 Pump 2	1999	20	4000	Average	Moderate	2029
LS P-7 Pump 1	1999	20	3000	Average	Moderate	2029
LS P-7 Pump 2	1999	20	3000	Average	Moderate	2029
LS P-16 Pump 1	1998	20	12000	Average	Moderate	2029
LS P-16 Pump 2	1998	20	5000	Average	Moderate	2029
LS P-17 Pump 1	2018	20	12000	Average	Moderate	2029
LS P-17 Pump 2	2018	20	12000	Average	Moderate	2029
LS P-12 Pump1	2013	20	18000	Average	Moderate	2029
LS P-12 Pump 2	2013	20	18000	Average	Moderate	2029
LS P-13 Pump 1	2013	20	7000	Average	Moderate	2029
LS P-13 Pump 2	2013	20	7000	Average	Moderate	2029
LS P-5 Pump 1	1999	20	4000	Average	Moderate	2029

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
LS P-5 Pump 2	1999	20	4000	Average	Moderate	2029
Security Equipment						
LS P-1 Fencing	1999	20	3000	Average	Moderate	2035
LS P-15 Fencing	1999	20	3000	Average	Moderate	2035
LS P-11 Fencing	1999	20	2000	Average	Moderate	2035
LS P-10 Fencing	1999	20	2500	Average	Moderate	2035
LS P-16 Fencing	1999	20	2000	Average	Moderate	2035
LS P-12 Fencing	2018	20	2500	Average	Moderate	2035
LS P-13 Fencing	1999	20	2500	Average	Moderate	2035
LS P-5 Fencing	1999	20	2000	Average	Moderate	2035
LS P-4 Fencing	1999	20	3000	Average	Moderate	2035
LS P-6 Fencing	1999	20	2000	Average	Moderate	2035
LS P-7 Fencing	1999	20	2000	Average	Moderate	2035
LS P-14 Fencing	1999	20	2500	Average	Moderate	2035
LS P-3 Fencing	1999	20	3000	Average	Moderate	2035
LS P-8 Fencing	1999	20	2500	Average	Moderate	2035
LS P-9 Fencing	1999	20	2000	Average	Moderate	2035
System Valves						
LS P-10 Valve 1	1983	25	800	Average	Moderate	2035
LS P-10 Valve 2	1983	25	800	Average	Moderate	2035
LS P-11 Valve 1	1980	25	800	Average	Moderate	2035
LS P-11 Valve 2	1980	25	800	Average	Moderate	2035
LS P-15 Valve 2	1980	25	800	Average	Moderate	2035

MASTER ASSET LIST

Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
LS P-15 Valve 1	1980	25	800	Average	Moderate	2035
LS P-1 Valve 1	1980	25	800	Average	Moderate	2035
LS P-1 Bypass Valve	1980	25	800	Average	Moderate	2035
LS P-1 Valve 2	1980	25	800	Average	Moderate	2035
LS P-16 Valve 1	2018	25	800	Average	Moderate	2035
LS P-16 Valve 2	2018	25	800	Average	Moderate	2035
LS P-16 Bypass Valve	2018	25	800	Average	Moderate	2035
LS P-17 Valve 2	2018	25	1200	Average	Moderate	2035
LS P-17 Valve 1	2018	25	1200	Average	Moderate	2035
LS P-17 Bypass Valve	2018	25	1200	Average	Moderate	2035
LS P-12 Bypass Valve	1980	25	800	Average	Moderate	2035
LS P-12 Valve 1	1980	25	800	Average	Moderate	2035
LS P-12 Valve 2	1980	25	800	Average	Moderate	2035
LS P-13 Bypass Valve	1980	25	800	Average	Moderate	2035
LS P-13 Valve 1	1980	25	800	Average	Moderate	2035
LS P-13 Valve 2	1980	25	800	Average	Moderate	2035
LS P-5 Bypass Valve	1980	25	800	Average	Moderate	2035
LS P-5 Valve 1	1980	25	800	Average	Moderate	2035
LS P-5 Valve 2	1980	25	800	Average	Moderate	2035
LS P-4 Bypass Valve	1980	25	800	Average	Moderate	2035
LS P-4 Valve 1	1980	25	800	Average	Moderate	2035
LS P-4 Valve 2	1980	25	800	Average	Moderate	2035
LS P--6 Valve 1	1980	25	800	Average	Moderate	2035
LS P-6 Valve 2	1980	25	800	Average	Moderate	2035

MASTER ASSET LIST						
Name	**Installed**	**Design Life**	**Replacement Cost**	**Condition**	**Consequence of Failure**	**EOL**
LS P-7 Valve 1	1980	25	800	Average	Moderate	2035
LS P-7 Valve 2	1980	25	800	Average	Moderate	2035
LS P-7 Bypass Valve	1980	25	800	Average	Moderate	2035
LS P-14 Valve 1	1980	25	800	Average	Moderate	2035
LS P-14 Bypass Valve 1	1980	25	800	Average	Moderate	2035
LS P-14 Valve 2	1980	25	800	Average	Moderate	2035
LS P-14 Bypass Valve 3	1992	25	1200	Average	Moderate	2035
LS P-14 Bypass Valve 2	2020	25	1200	Average	Moderate	2037
LS P-3 Valve 1	1980	25	800	Average	Moderate	2035
LS P-3 Bypass Valve	1980	25	800	Average	Moderate	2035
LS P-3 Valve 2	1980	25	800	Average	Moderate	2035
LS P-8 Valve 1	1980	25	800	Average	Moderate	2035
LS P-8 Valve 2	1980	25	800	Average	Moderate	2035
LS P-8 Bypass Valve	1980	25	800	Average	Moderate	2035
LS P-9 Valve 1	1980	25	800	Average	Moderate	2035
LS P-9 Valve 2	1980	25	800	Average	Moderate	2035
LS P-10 Bypass Valve	1983	25	800	Average	Moderate	2037
LS P-15 Bypass Valve	1980	25	800	Poor	Moderate	2030
LS P-6 Bypass Valve	1980	25	800	Poor	Moderate	2030
Wet Wells						
LS P-1 Wet Well	1980	100	250000	Average	Major	2073
LS P-15 Wet Well	1980	100	130000	Average	Major	2073
LS P-11 Wet Well	1980	100	170000	Average	Major	2073
LS P-10 Wet Well	1983	100	150000	Average	Major	2073

MASTER ASSET LIST						
Name	Installed	Design Life	Replacement Cost	Condition	Consequence of Failure	EOL
LS P-9 Wet Well	1980	100	190000	Average	Major	2073
LS P-8 Wet Well	1980	100	200000	Average	Major	2073
LS P-3 Wet Well	1983	100	210000	Average	Major	2073
LS P-7 Wet Well	1980	100	160000	Average	Major	2073
LS P-6 Wet Well	1980	100	190000	Average	Major	2073
LS P-14 Wet Well	1980	100	200000	Average	Major	2073
LS P-16 Wet Well	1980	100	160000	Average	Major	2073
LS P-17 Wet Well	1980	100	140000	Average	Major	2073
LS P-12 Wet Well	1980	100	190000	Average	Major	2073
LS P-13 Wet Well	1980	100	220000	Average	Major	2073
LS P-5 Wet Well	1980	100	150000	Average	Major	2073
LS P-4 Wet Well	1980	100	170000	Average	Major	2073