Asset Management & Sustainability Plan
Developed by Florida Department of Environmental Protection and Florida Rural Water Association.

What Is Asset Management?
- The evaluation and report known by the term “Fiscal Sustainability” and “Asset Management” is a new EPA Requirement of the CWSRF Program. FDEP is partnering with FRWA to carry out this important program.
- The essence of the Fiscal Sustainability program is to prepare a plan for each qualifying system upon request from the CWSRF Program and includes:
  - Inventory of Critical Assets that are a part of the treatment works;
  - Evaluation of the condition and performance of inventoried assets or asset groupings;
  - Plan for maintaining, repairing, and, as necessary, replacing the treatment works, and a plan for funding such activities; and
  - Certification that the system has been evaluated and will be implementing water and energy conservation efforts as part of the plan.

What are some of the benefits to an AMP
- Benefits include:
  - Reduced State Revolving Fund Loan Rates – saving City & Town money.
  - All evaluation / report efforts are paid for by the Clean Water State Revolving Fund (CWSRF) Program.
  - The report will identify the most urgent / critical needs.
  - Have you ever wondered, with all the demands placed on the City, where to start?
  - This report will help you decide the best way to proceed.
  - FRWA is an unbiased third party with City & Towns best interests at heart.
  - FRWA employees care that you get the biggest bang for your buck.
  - The report will include an action plan for maintaining, repairing, and replacing (if needed) the Wastewater System & Plant.
  - We will outline a plan for funding these activities.
  - FRWA will assist in preparing a Request For Inclusion (RFI) for the CWSRF which can be shared with other funders, as you deem best.
  - Report is more readily accepted by the State Revolving Fund and other funding agencies – USDA Rural Development, CDBG, etc.
Other Benefits Of Sustainability And System Ratings

- Projects are set to meet sustainable goals
- Good Public Relations
- Design team uses guidelines set by owners sustainability goals
- Saves money, more efficient method of construction execution
- Ensures tax dollars are spent wisely

How Much Does This Plan Cost My Community System & How much Of My Time Will It Take For The Survey

- All evaluation/report efforts are paid for by the Clean Water State Revolving Fund (CWSRF) Program.
- The typical time required by your staff is approximately (8-24) hours.
- Most of the time spent is in the collection system, assisting in manhole and lift station evaluations.
- Typically only one man is required at both the collection and wastewater facility.
- The person assisting needs to be knowledgeable in that area.

What Rating Method Is Used For Developing A Sustainability Plan

- FRWA utilizes the National Association Of Sewer Service Companies (NASSCO) rating system of (0-5) condition numeric rating
- The rating of “0” would indicate Non Existent / Abandoned / No Longer Exist
- (1) Excellent - Physical sound - Likely No Rehabilitation for 20 years.
- (2) Good - Acceptable condition - minimal short term failure risk, but potential for deterioration in long term.
- (3) Fair - Significant deterioration failure unlikely within 5 years likely major rehabilitation within 10 years
- (4) Poor - Failure likely in short term - need to rehabilitate or replace within 5 years, barely serviceable
- (5) Very Poor - Failure imminent - Need to rehabilitate or replace - Risk to service and risk to employee safety
Is There Any Other Rating Used? Yes! Defined As Critical Rating

- (0) Asset not needed for current operations, abandoned, standby, no longer used
- (1) Non Critical - Asset not essential to maintain customer service or regulatory compliance
- (2) Low Impact - Service interruption only short term, little impact to small number of customers, little chance of regulatory non-compliance
- (3) Critical - Service interruption has substantial impact on customer service, chance of negative environmental impact, asset risks to operators
- (4) Very Critical - Interruption has serious impact on customer service, high risk of dangerous conditions to operators and major health/safety risk
- (5) Must Have - High Risk, Catastrophic event, major customer service & environmental impact, likely regulatory enforcement

Components Of Asset Management And Sustainability Plan

- Self Assessment Field Evaluation & Inspection Checklist
- Energy Audit Survey
- Current Operations & Maintenance
- Conditions, Record Keeping, Violations, Operator Process Knowledge
- Safety, Training
- Mapping
- Financial: Rate Structures, Audits, Budgets, Specifically Operating Supply, Maintenance, and Capital Improvements Plan

Why Should I Choose To Develop An Asset Management Plan

- Developing an asset management plan will assist in securing good relationship with State and Federal Governmental Grant and Loan Funding Programs
- Developing a plan will assist with annual operating and capital budgeting
- The plan will become a living document which utilities will utilize as an ongoing process to assist in identifying budget needs
- Developing a plan will allow citizens know the utility is proactive in maintaining the utility assets
- Proactive plan development and implementation will extend the life expectancy of the system as well as save customer dollars
What Is The Typical Life Expectancy Of Most Treatment Critical & Non Critical Asset

- Electrical: 15-20 years
- Manholes: 20-50 years
- HVAC: 20 years
- Pump Station: 40-50 years
- WWTP: 50 years
- Gravity Sewer (pvc): 80-100 years

Most collection systems and facilities were originally built in the 1970's when the Clean Water Act was established.

When Is The Best Time To Start An Asset Management Plan

- The best time to start a plan is now.
- Prior to unexpected catastrophic failures.
- No need to wait for a new budget to perform your own initial surveys.

Where can I get the initial survey documents?

- Some survey forms to assist the utility can be found on the FRWA Web site.

FRWA: Asset Management Resources

- Energy Efficiency Assessment for Small Wastewater Systems
  (Adapted from NYSDER's FOCUS on Municipal Water and Wastewater Programs)
- FIELD EVALUATION & INSPECTION FORMS for Operation & Maintenance
  Performance Reports for Domestic Wastewater Treatment Facilities
  (This form is modified by FRWA using the Florida Department of Environmental Regulation Form, July 1992.)
If Your Office Looks like this And Record Are kept like this

How Do I know If I Need Plan ?
When this is your back up

And this is your on line blower
Another Facility Back Up

If Your Final Effluent Is Growing Weeds

Or walk ways look like this
Catwalk Cracking
And your plant walls are damaged

“Every Picture Tells a Story”

or manholes are like this (surcharged brick manhole)
If you wonder where the excessive water is coming from

Broken manhole Ring

If this is your collection system
If your roads look like this

And the manhole looks like this

Or your lift station wet wells look like this
Or Like This
(Severe Corrosion from Hydrogen Sulfide Gas)

Or when your budget only allows for this type of repair

“GPS Anyone? ”
Or if your system has severe issues with H₂S in lift station

Or if your equipment operates like this grit removal system

If your solids handling is like this
Or Solids Handling Like This

“Smoke From The Panel”
“ Fire In My Eyes”

Or If your safety plan allows this electrical exposed wiring
Or Your Safety Plans Allows For This Type Of Wiring

Need For Rating Systems

- Rating a system provides practical measures in sustaining a systems assets
- Rating makes it easier to assess, manage, and improve conditions of infrastructure
- Rating benefits when identifying specific strategies, such as improving construction projects by aligning all needs in a format that is acceptably used
- Allows Maintenance to Prioritize needed maintenance and repairs

Conclusion

- The Asset Management program provides for an outside entity with an unbiased opinion to assist your utility in establishing the program on a needs basis.
- An outside entity allows for “second eye” that will see things that otherwise may be overlooked during course of daily operations.
- Asset management is not just a plan but also a “safety net” for the employees.
- Asset management can reduce your utility insurance liability rates.