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**Asset Management Plan Template**

State Water Infrastructure Grant Program

Tennessee Department of Environment & Conservation | December 2024

**Asset Management Plan Template**

* **Grantee Name:** [Insert Name of Grantee]
* **System Name:** [Insert Name of Drinking Water System]
* **Permit Number(s)** [Insert PWSID, NPDES, SOP, or MS4’s covered]
* **Submission Date:** [Insert Date]
* **Contact Information:**
	+ Name: [Insert Contact Name]
	+ Title: [Insert Title]
	+ Phone: [Insert Phone Number]
	+ Email: [Insert Email Address]

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**Executive Summary**

* Brief overview of the AMP objectives, scope, and purpose.
* Summary of how the plan aligns with TDEC’s requirements and EPA’s asset management principles.
* Key highlights include funding needs, priority projects, and improvement goals.
* Include a table of major asset categories, critical needs, and planned investments.

**Current State of Assets**

## *Asset Inventory*

Provide a comprehensive inventory of all assets, including:

* Asset ID
* Asset Category
* Size
* Material
* Installation Date
* Location (Longitude and Latitude)
* Condition Rating (1-5)
* Estimated Remaining Life
* Maintenance History

Provide Asset description summary and evaluation of the system.

## *Data Gaps and Improvement Strategy*

* Identify missing data in the asset inventory.
* Provide strategies to address data gaps, including:
	+ Proposed timelines
	+ Required resources, such as staff, funding, or technology upgrades
	+ Interim measures to manage assets with incomplete data

## *Asset Mapping*

* Attach or reference GIS-based maps that identify:
	+ Locations of all system assets
	+ Critical infrastructure
	+ Areas of known or anticipated vulnerabilities

## *Operations*

* Organizational Structure
* Operation and Maintenance Program Description
* Daily Operations Standard Operating Procedures

**Level of Service (LOS)**

## *LOS Definitions*

* Describe the system’s LOS goals, including:
	+ Customer expectations (e.g., water quality, pressure, reliability)
	+ Regulatory requirements (e.g., Safe Drinking Water Act compliance)
	+ Physical performance metrics (e.g., capacity, flow rates)
	+ Environmental and sustainability goals (e.g., energy efficiency, reduced water loss)

## *Performance Metrics*

* Establish measurable LOS indicators, such as:
	+ Indicator
	+ Baseline Value
	+ Target Value
	+ Measurement Frequency
	+ Any Notes

**Critical Assets**

## *Asset Criticality Analysis*

* Assign **Likelihood of Failure (LOF)** and **Consequence of Failure (COF)** scores for each asset.
* Provide a criticality ranking based on:
	+ Asset ID
	+ LOF Score
	+ COF score
	+ Criticality Ranking
	+ Population Impacted
	+ Environmental Consequences
	+ Replacement Cost

## *Failure Analysis*

* Include risk assessments for high-criticality assets.
* Summarize known failure histories and conditions.
* Identify mitigation strategies, such as increased maintenance, inspections, or replacements.

**Capital Improvement Plan (CIP)**

## *Prioritized Projects*

* List projects in priority order with:
	+ Project Name
	+ Project Description
	+ Justification
	+ Estimated Cost
	+ Funding Source(s)
	+ Start Date
	+ Completion Date
	+ LOS Goal Alignment

## *Project Benefits*

* Describe the benefits of each project:
	+ Project Name
	+ Project Benefit Description
	+ Impact on Reliability
	+ Water Loss Reduction
	+ Compliance Improvements

**Long-Term Funding Plan**

## *Financial Planning*

* Summarize current and projected operating costs.
* Provide a breakdown of fixed and variable costs.
* Describe revenue sources, including:
	+ Revenue Source
	+ Annual Revenue ($)
	+ Fixed Costs ($)
	+ Variable Costs ($)
	+ Reserve Contributions ($)
	+ Debt Service ($)
	+ Any Additional Notes

## *Rate Evaluations*

* Provide an annual rate evaluation plan to ensure sustainability.
* Explain how rates cover for each year:
	+ Rate ($/Customer)
	+ Operating Expenses Coverage
	+ Reserve Fund Contribution
	+ Debt Service Coverage

**Supporting Documentation**

## *Appendices*

* Include additional relevant documents, such as:
	+ GIS / Digital maps
	+ Asset inventory tables
		- [Drinking Water Inventory Table](https://www.tn.gov/content/dam/tn/environment/arp/documents/amp-workbook/arp_dw-amp-workbook-v1.1.1.xlsm)
		- [Wastewater Inventory Table](https://www.tn.gov/content/dam/tn/environment/arp/documents/amp-workbook/arp_ww-amp-workbook-v1.1.1.xlsm)
		- [Stormwater Inventory Table](https://www.tn.gov/content/dam/tn/environment/arp/documents/amp-workbook/arp_sw-amp-workbook-v1.1.1.xlsm)
	+ Historical performance data
	+ Previous inspection reports
	+ Condition assessment methodologies
	+ Written Procedures:
		- Security, including Cybersecurity
		- Calculating user rates
		- Billing system description
		- User ordinances
		- Training
		- Purchasing Policies

**Certification and Approval**

## *Certification Statement*

* Include a signed statement certifying the accuracy of the AMP: “I certify that the information provided in this Asset Management Plan is true and accurate to the best of my knowledge.”
* Signature:
	+ Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	+ Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	+ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Notes for Grantees:**

* Ensure all sections are completed and supported with evidence.
* Use plain language and clear visuals (e.g., tables, charts, GIS maps) to enhance readability.
* Submit the completed AMP electronically and as a hard copy to TDEC.
* For further guidance, consult the EPA’s "Asset Management for Water and Wastewater Utilities" resources and TDEC’s specific AMP requirements.