# Wastewater and Drinking Water Asset Management Incentive Program

# **Guidelines and Application**



State of Delaware DNREC / Office of the Secretary / Environmental Finance and DHSS/Division of Public Health /ODW

## Delaware Water Infrastructure Advisory Council

April 2015

Revised June 2015, November 2017, March 2022, January 2023

#### **GENERAL INFORMATION**

Wastewater (WW) and Drinking Water (DW) Asset Management Incentive Program participants can receive funding to develop and implement asset management plans for their facilities. The program will be funded from the respective Non-Federal Administrative Accounts for the Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF) Programs. To receive financial incentives municipal governments must sign a five-year agreement with DNREC/DHSS. The agreement will require the development and implementation of system-wide Asset Management Plans for wastewater and/or drinking water utilities.

Financial incentives for the program include the following:

 Up to \$100,000 No Match Required Grant per municipality to develop and implement an Asset Management Program (up to \$200,000 for wastewater and drinking water)

An initial asset management plan must be submitted by municipality no later than the end of the second year after signing agreement. Annual updates of the plan are required throughout the 5-year grant period.

Municipalities may contract with consulting firms using their own procurement procedures; however, the scope of work must be approved by DNREC/DHSS prior to solicitation. DNREC will coordinate drinking water application reviews, approvals, and implementation with DHSS.

#### FUNDING LIMITATIONS, PRIORITY, AND APPROVAL

Only Delaware public wastewater and drinking water utilities are eligible to participate in the Asset Management Incentive Program. Each fiscal year the Water Infrastructure Advisory Council (WIAC) will set aside a certain amount from the CWSRF and DWSRF Non-Federal Administrative Accounts to fund the program for the fiscal year. Funds will be allotted each year until that allocation is exhausted.

A brief overview of each application that meets the requirements herein will be reviewed by staff and presented to the WIAC as information. The Secretaries of DNREC and DHSS have final approval authority for approval of funds from the SRF Non-Federal Administrative Accounts.

#### **SUBMISSION DATES**

Applications will be solicited following the allocation of funds for a state fiscal year. Applications may be submitted on a first come, first served basis and long as funding remains. Following the receipt of an application, the DNREC will coordinate as appropriate with DHSS to set up a meeting with the public wastewater and/or drinking water utility, to include the principal participants (including authorizing representative) and consultant engineers working with the utility. Scope of work for

consultant engineers must be approved prior to entering into contract agreements (or task orders). Municipalities performing the work using their own engineering staff will be subject to SRF force account procedures.

#### **ROLE OF THE PROJECT MANAGER**

A DNREC and/or DHSS Project Manager (PM) will be assigned to each wastewater or drinking water utility participating in the program. The role of the PM is to review the implementation plans, plan development budgets, asset management plans and the reimbursement requests. The PM will also request periodic status reports from those doing the work and shall attend planning meetings. Reimbursements will not be made until the assigned PM has approved the work completed.

#### PLAN DEVELOPMENT AND IMPLEMENTATION

Asset Management is maintaining a desired level of service for what you want your assets to provide at the lowest life cycle cost. Lowest life cycle cost refers to the best appropriate cost for rehabilitating, repairing or replacing an asset. Asset management is implemented through an asset management program and typically includes a written asset management plan.

<u>Asset management is centered on a framework of five core questions</u>, which provide the foundation for many asset management best practices. The Plan must be consistent with the five core questions listed below:

- 1. Current State of Assets What is the current state of my assets?
  - a. You should ask:
    - i. What do I own?
    - ii. Where is it?
    - iii. What is its condition?
    - iv. What is its useful life?
    - v. What is its value?
  - b. Best practices include:
    - i. Preparing an asset inventory and system map.
    - ii. Developing a condition assessment and rating system.
    - iii. Assessing remaining useful life by consulting projected-useful-life tables or decay curves.
    - iv. Determining asset values and replacement costs.
- 2. Level of Service What is my required "sustainable" level of service?
  - a. You should ask:
    - i. What level of service do my stakeholders and customers demand?
    - ii. What do the regulators require?
    - iii. What is my actual performance?
    - iv. What are the physical capabilities of my assets?
  - b. Best practices include:

- i. Analyzing current and anticipated customer demand and satisfaction with the system.
- ii. Understanding current and anticipated regulatory requirements.
- iii. Writing and communicating to the public a level of service "agreement" that describes your system's performance targets.
- iv. Using level of service standards to track system performance over time.
- 3. Critical Assets Which assets are critical to sustained performance?
  - a. You should ask:
    - i. How can assets fail?
    - ii. How do assets fail?
    - iii. What are the likelihoods (probabilities) and consequences of asset failure?
    - iv. What does it cost to repair the asset?
    - v. What are the other costs (social, environmental, etc.) that are associated with asset failure?
  - b. Best practices include:
    - i. Listing assets according to how critical they are to system operations.
    - ii. Conducting a failure analysis (root cause analysis, failure mode analysis).
    - iii. Determining the probability of failure and listing assets by failure type.
    - iv. Analyzing failure risk and consequences.
    - v. Using asset decay curves.
    - vi. Reviewing and updating your system's vulnerability assessment (if your system has one).
- 4. Minimum Life Cycle Cost What are my minimum life-cycle costs?
  - a. You should ask:
    - i. What alternative strategies exist for managing O&M, personnel, and capital budget accounts?
    - ii. What strategies are the most feasible for my organization?
    - iii. What are the costs of rehabilitation, repair, and replacement for critical assets?
  - b. Best practices include:
    - i. Moving from reactive maintenance to predictive maintenance.
    - ii. Knowing the costs and benefits of rehabilitation versus replacement.
    - iii. Looking at lifecycle costs, especially for critical assets.
    - iv. Deploying resources based on asset conditions.
    - v. Analyzing the causes of asset failure to develop specific response plans.
- 5. Long Term Funding Plan What is my best long-term funding strategy?
  - a. You should ask:
    - i. Do we have enough funding to maintain our assets for our required level of service?
    - ii. Is our rate structure sustainable for our system's long-term needs?
  - b. Some strategies to consider:
    - i. Revising the rate structure.
    - ii. Funding a dedicated reserve from current revenues (i.e., creating an asset annuity).
    - iii. Financing asset rehabilitation, repair, and replacement through borrowing or other financial assistance.

- <u>Implementing Asset Management: Follow-up and Continuing Steps:</u> **Plan**: Five core questions framework (short-term), revise asset management plan (long-term).
  - 2. **Do:** Implement asset management program.
  - Check: Evaluate progress, changing factors and new best practices.
    Act: Take action based on review results.

#### **INSTRUCTIONS**

#### <u>NOTE: IF SUBMITTING FOR BOTH WASTEWATER AND DRINKING WATER – YOU</u> <u>MUST FILL OUT TWO SEPARATE APPLICATIONS</u>

#### Application Cover Sheet and Check List: Self Explanatory

- The wastewater and/or drinking water utility must submit a resolution adopted by the utility's governing body approving the development and implementation of the Asset Management Planning Process.

#### **Information Sheet:** Self Explanatory

**Scope of Work Document:** This document should be no longer than two or three pages and address <u>*all*</u> of the following items:

- 1. A description of the Asset Management Plan to be implemented.
- 2. Planning period (no less than 5 years).
- 3. Date of the most recent facilities plan or relevant planning documents.
- 4. Deliverables associated: Asset Management Plans, Implementation Plans and dates for the deliverables.

#### **Plan Budget:**

- Provide a detailed Annualized Plan Development Budget.

#### **Submission of Applications**

Applications should be sent to:

DNREC/OTS/Environmental Finance at dnrec\_ef\_applications@delaware.gov.

### **Application Cover Sheet and Check List**

Wastewater or Drinking Water Utility Name:

Date of Application:

### **Check List for Application Materials**

Cover Sheet and Checklist
 Asset Management Incentive Program Application
 Approval Resolution (attach to application)
 Letter(s) to the Regional Wastewater Facility (attach to application), if applicable
 Scope of Work Document (attach to application)
 Annual Project Budget (attach to application)

### **Asset Management Incentive Program Application**

#### **<u>Utility Contact Information:</u>**

- Contact Name:
- Contact Phone:
- Contact Email:

#### **Consultant Contact Information:**

- Consulting Firm:
- Contact Name:
- Contact Phone:
- Contact Email:

#### Asset Management Plan Description and Dates:

Project Description (1 or 2 sentences)

Plan State Date:

Plan Completion Date:

#### **Implementation Budget Summary:**

- Estimated Total Project Cost:
- Funding Amount Requested:

Name of Authorizing Representative:

Signature of Authorizing Representative

Date