

## Drinking Water State Revolving Fund (DWSRF)

### DWSRF Guidance Document Number 26 Asset Management Plan Criteria

#### Asset Management Plan Criteria

The Drinking Water and Groundwater Protection (DWGWP) and Facilities Engineering (FED) Divisions have outlined below the minimum requirements to be eligible for loan forgiveness and additional Project Priority List priority points for the development of an Asset Management Plan (AMP). This guidance document applies to Public Community water system (PCWSs).

#### 1. Asset Management Training

Any water system seeking forgiveness from the DWSRF shall be required to have at least one member of the water system's governing body and one water system operator complete an Asset Management Training Course. The members must show proof of attendance at a classroom course or participation in an online course within the past five years. Please contact the DWGWP for training options.

#### 2. Level of Service Agreement

Level of Service Agreement complete with goals (3 internal and 3 external) and performance measures to determine if goals are being met. The goals should be specific, measurable, achievable, relevant, and time bound. **Meeting federal and state drinking water requirements 100% of the time must be a goal for all systems.**

#### 3. Asset Inventory and Condition Assessment

The inventory must include all the system's water sources, pumping facilities, treatment facilities, storage facilities (raw and finished), and distribution system assets (e.g., distribution mains, valves, and hydrants) with a replacement cost of \$1,000 or greater, or that are essential to meeting the federal and state drinking water requirements. For each asset, the inventory must include the following:

- Identification number (i.e., unique number assigned to the asset)
- Asset category (e.g., "pump")
- Asset type (e.g., "raw water pump")
- Location (e.g., street name and/or address, GPS coordinates, E-911, parcel ID, name of the building)
- Asset model, make, serial number (if applicable), etc.
- Permanent capacity information (e.g., size, length, horsepower, pipe material, etc.)
- Condition
- Estimated remaining useful life
- Estimated replacement cost (purchase, installation costs., etc.)
- Notes related to basis for condition ranking; useful life and replacement cost estimates.
- Photo (if possible)

#### 4. Map

The map must include all distribution mains, hydrants, valves (i.e., horizontal assets) that were included in the asset inventory. Locations of pumping facilities, storage facilities, treatment facilities, and sources must be included. The maps must also include: size of mains, interconnections with

## Drinking Water State Revolving Fund (DWSRF)

other systems, and pressure zone boundaries (indicating operating minimum and maximum in each zone. Preferably the map would also include a layer with topography.

### **5. Life Cycle Cost Analyses**

An approvable Asset Management Plan must include a system to track expenditures on existing assets and/or estimate the future costs of owning an asset. This requirement can be satisfied by estimating future costs (purchase, installation, operating, and disposal) of priority assets and developing policies on tracking and tying work orders to specific assets.

### **6. Risk Assessment and Identification of Priority Assets**

An approvable Asset Management Plan must have the following for each asset in the inventory: Consequence of Failure (COF), Probability of Failure (POF), overall risk assessment, and identification of priority assets. The system's highest risk assets should be considered the greatest priorities.

### **7. Risk and Life Cycle Cost Reduction Measures**

Risk and life cycle cost reduction measures must include the priority assets identified in the risk assessment. An approvable plan would include: Operation and Maintenance schedules (monthly, quarterly, semi-annual, yearly, etc. tasks grouped by asset type – e.g., valve condition assessment and maintenance program or flushing program); Repair/Rehabilitate/Replacement schedules; Short-term Replacement Table (assets with an estimated remaining useful life of 10 years or less); and a Capital Improvement Plan (5-10 years out) to replace priority assets. Preferably, the measures would also include: Capital Needs Study (20+ years out); review and update of system policies, ordinances and bylaws.

### **8. Funding Strategy**

Develop the following to address funding of the risk and life cycle cost reduction measures (accounting for O&M, short-term replacements, and Capital Improvement Plan (CIP) for priority assets, etc.): 5-year Budget and analysis of funding sources (including, but not limited to: rates, revenues, bonds, loans, reserves for projects identified in the CIP); and long-term funding options.

### **9. Asset Management Team**

An approvable Asset Management Plan must include a list of staff that will be involved in the Asset Management Program, what their roles will be, and their qualifications (e.g., occupation, experience, etc.). The frequency that the team will meet to review and update the plan must also be included (e.g., annually).

# Drinking Water State Revolving Fund (DWSRF)

Drafted by: Ashley Lucht, DWSRF Project Lead

Approved by: Terisa Thomas, WIFP Supervisor

Approved by: Eric Blatt, FED Division Director

Last revised 6/11/2018