

Drinking Water State Revolving Fund (DWSRF)

DWSRF Guidance Document Number 26 Asset Management Plan Criteria

The Drinking Water and Groundwater Protection Division (DWGPD) and Water Investment Division (WID) have outlined below the minimum requirements to be eligible for loan forgiveness and for additional Project Priority List points for the development of an Asset Management Plan (AMP). This guidance applies to Public Community Water Systems.

1. Asset Management Training

Any water system seeking AMP loan 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 a DWGPD approved Asset Management Training Course. Please contact the [DWGPD](#) for training options.

2. Level of Service Agreement

A Level of Service Agreement is required, with a minimum of 3 internal and 3 external goals, and performance measures to determine if goals are being met. The goals should be specific, measurable, achievable, relevant, and time bound (SMART). In addition to 3 internal and external goals, **meeting federal and state drinking water requirements 100% of the time must be a goal for all systems.** A Mission Statement for the water system is to be included with the Level of Service Agreement. A mission statement is a short statement that declares the purpose of an organization, overall goals, and how best to serve their customers.

3. Asset Inventory and Condition Assessment

The inventory must include all of the water system's 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, disposal, etc.)
- Additional notes
- Photo (if possible)

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4. Map(s)

Map(s) must include all water system facilities clearly labeled. This includes any 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 other systems, and pressure zone boundaries (indicating operating minimum and maximum in each zone).

5. Life Cycle Cost Analyses

An approvable AMP 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. **Please note, including only Replacement Costs does not satisfy this requirement.**

6. Risk Assessment and Identification of Priority Assets

An approvable AMP 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. Risk is commonly calculated as $(COF) \times (POF) \times (Redundancy\ Factor) = Risk$. The water 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 maintenance 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 5–10 year Capital Improvement Plan (CIP) to replace priority assets. Preferably, the measures would also include a Capital Needs Study (20+ years).

8. Funding Strategy

Develop the following to address funding of the water system (accounting for O&M, short-term replacements, and 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. Preferably, the 5-year Budget will include system income to expense analysis.

9. Asset Management Team

An approvable AMP must include a list of staff that will be involved in the Asset Management Program listing their roles, who's responsible for updating the plan's individual components, and the frequency that the team will meet to review and update the plan (e.g., annually).

Water Infrastructure

FINANCING PROGRAMS

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