



ATTRIBUTES & ACTIVITIES

Information on the *Attributes*, including the *Keys to Management Success* and a list of potential performance measures is found in the [EUM Primer](#).

The *Primer* provides guidance on assessment processes applicants can use based on the *Attributes* and also includes a list of potential performance measures organized around each of the *Attributes*. Applicants do not have to choose performance measures from the list contained in the *Primer*; however, the list serves as a useful reference point for consideration. The *Primer* also describes a process that applicants can use to assess their existing programs and how well they address the ten *Attributes*.

The Ten Attributes of Effectively Managed Water Sector Utilities

- **Product Quality (Required)**

Produces treated effluent, and process residuals, at all facilities operated, in full compliance with regulatory requirements and consistent with customer, public health, and ecological needs.

Please Note:

To receive recognition, Product Quality must be demonstrated by the utility's receipt of NACWA Silver, Gold, or Platinum *Peak Performance Awards* **for all of its facilities**, for the immediate year prior to the application year. (i.e. 2015 compliance for 2016 applications). **Please list all facilities and the *Peak Performance* level they applied for. If existing facilities are offline, please make note and provide the year they went offline. *All facilities must receive either a Silver, Gold, or Platinum *Peak Performance Award*.** (An Excel spreadsheet listing all facilities and the expected level of recognition or facility status is preferred.)

- **Financial Viability (Required)**

Understands the full life-cycle cost of the utility and establishes and maintains an effective balance between long-term debt, asset values, operations and maintenance expenditures, and operating revenues. Establishes predictable rates—consistent with community expectations and acceptability – adequate to recover costs, provide for reserves, maintain support from bond rating agencies, and plan and invest for future needs.

Please Note:

To receive recognition, Financial Viability must be demonstrated by

1. The practice of long-range financial planning;
2. The adoption of financial policies;
3. The establishment of financial performance metrics tied to financial policies; and
4. The inclusion of metrics and utility performance for fiscal years 2015, 2014, and 2013.

- **Customer Satisfaction**
Provides reliable, responsive, and affordable services in line with explicit, customer-accepted service levels. Receives timely customer feedback to maintain responsiveness to customer needs and emergencies.
- **Employee and Leadership Development**
Recruits and retains a workforce that is competent, motivated, adaptive, and safe-working. Establishes a participatory, collaborative organization dedicated to continual learning and improvement. Ensures employee institutional knowledge is retained and improved upon over time. Provides a focus on and emphasizes opportunities for professional and leadership development and strives to create an integrated and well-coordinated senior leadership team.
- **Operational Optimization**
Ensures ongoing, timely, cost-effective, reliable, and sustainable performance improvements in all facets of its operations. Minimizes resource use, loss, and impacts from day-to-day operations. Maintains awareness of information and operational technology developments to anticipate and support timely adoption of improvements.
- **Infrastructure Stability**
Understands the condition of and costs associated with critical infrastructure assets. Maintains and enhances the condition of all assets over the long-term at the lowest possible life-cycle cost and acceptable risk consistent with customer, community, and regulator-supported service levels, and consistent with anticipated growth and system reliability goals. Assures asset repair, rehabilitation, and replacement efforts are coordinated within the community to minimize disruptions and other negative consequences.
- **Operational Resiliency**
Ensures utility leadership and staff work together to anticipate and avoid problems. Proactively identifies, assesses, establishes tolerance levels for, and effectively manages a full range of business risks (including legal, regulatory, financial, environmental, safety, security, and natural disaster-related) in a proactive way consistent with industry trends and system reliability goals.
- **Community Sustainability**
Is explicitly cognizant of and attentive to the impacts its decisions have on current and long-term future community and watershed health and welfare. Manages operations, infrastructure, and investments to protect, restore, and enhance the natural environment; efficiently use water and energy resources; promote economic vitality; and engender overall community improvement. Explicitly considers a variety of pollution prevention, watershed, and source water protection approaches as part of an overall strategy to maintain and enhance ecological and community sustainability.
- **Water Resource Adequacy**
Ensures water availability consistent with current and future customer needs through long-term resource supply and demand analysis, conservation, and public education. Explicitly considers its role in water availability and manages operations to provide for long-term aquifer and surface water sustainability and replenishment.

- **Stakeholder Understanding and Support**
Engenders understanding and support from oversight bodies, community and watershed interests, and regulatory bodies for service levels, rate structures, operating budgets, capital improvement programs, and risk management decisions. Actively involves stakeholders in the decisions that will affect them.

Resource Efficiency & Protection Activities

- **Energy Management/Efficiency:**
Organization has conducted an assessment(s) of current energy usage and is implementing changes to reduce energy consumption or to replace fossil fuel energy with energy produced from renewable resources. Please describe organization's energy management program, metrics used to measure performance and actual performance for as far back as data is available.

Resources: [EPA's Energy Management Guidelines for Wastewater and Water Utilities](#), including the use of [EPA's Energy Benchmarking](#) tool.

Other resource documents include:

[Opportunities for and Benefits of Combined Heat and Power at Wastewater Treatment Facilities](#) (EPA-430-R-07-003; April 2007)

[Water and Energy: Leveraging Voluntary Programs to Save Both Water and Energy](#) (March 2008)

[Water and Wastewater Energy Best Practice Guidebook](#) (2016)

- **Water Resources Recycling & Stormwater Management**
The organization has adopted and is implementing a water reuse or a stormwater program that includes active and successful water recycling, reuse, or reclamation operations that treat wastewater, or has adopted practices that prevent/reduce stormwater flow into a combined system, or divert runoff to be used for beneficial purposes (e.g. agricultural and landscape irrigation, industrial processes, toilet flushing, and/or ground water basin replenishment); refer to "[Guidelines for Water Reuse](#)," EPA-625-R-04-108, September 2004.
- **Pretreatment**
Organization has adopted and implemented an approved Pretreatment Program as described in 40 CFR 403. Please describe organization's pretreatment program including number of permitted dischargers and percentage of compliance among permittees. Please include a description of any local recognition programs for dischargers included in the pretreatment program and the number of enforcement actions and fines/penalties assessed over past 3 years.
- **Biosolids/Septage/Residuals Management**
Organization manages biosolids to control costs, produce products for beneficial reuse (including energy) and minimize net environmental impact. Biosolids program includes appropriate risk management in long term planning. Please describe biosolids management program including the percentage (by total weight) of biosolids reused and the percentage used as a renewable fuel source for the previous 3 fiscal years. For example:
 - Innovative reuse activities focused on soil improvement and productivity (e.g., revegetating/restoring/reclaiming mine sites and spoils piles, construction sites, and other highly disturbed or contaminated areas, including industrial Superfund and Brownfields sites).

- Conversion to high value products (e.g., Class A/EQ-quality soil amendments or fertilizers, fuel sources comparable to powdered coal or low grade oil, etc.)
- Effective management of treatment operations leading to overcoming serious odors/acceptance problems, significant energy production, recovery of useful products, etc.
- Effective and open communication with and involvement of stakeholders and active dialog with the public on issues of concern regarding biosolids/septage/residuals management.

- **Climate Change Adaptation or Mitigation**

Organization has assessed vulnerability to impacts of climate change and is including these impacts in planning and budgeting. Please describe how assessment was made and updated and how results of assessment are included in planning and budgeting, and provide information on any planned designed or constructed projects that address the issue. For example:

- Entity has assessed the organization's vulnerability to impacts of climate change in order to plan for needed adaptation. For additional information, see Feature 4 of [EPA's 10 Features of an Active and Effective Protective Program](#).
- A drought management plan, including a water efficiency program as described under the water efficiency section above has been developed and includes 50-year sustainable yield and demand analyses.
- The implementation of adaptation strategies into capital planning and budgeting processes (e.g., relocation or hardening of facility, redesigning systems, and adopting stormwater strategies that include green infrastructure solutions and account for more extreme fluctuations in precipitation).
- Entity is collecting gases as an energy source for either the facility and/or local community (e.g., capturing methane from a bioreactive landfill; or scrubbing and converting anaerobic digester biogas to fuel local city transit fleet).
- Entity had enacted community outreach information programs to address: water supply issues; climate change; and/or linking water use to energy use and greenhouse gas emissions. See <http://www.epa.gov/climate-change-water-sector>.

- **Water Quality Protection on a Watershed Basis**

Organization has employed a watershed-based approach to achieve an NPDES compliance, environmental enhancement or environmental restoration goal. Examples include, but are not limited to:

- Riparian reforestation to enhance pollution mitigation functions.
- Stream channel restoration for increased hydrologic stability.
- Critical land acquisitions (e.g., conservation easements, purchases).

- Holistic, integrated protection approach to manage significant potential sources of contaminants in the watershed that improves surface water quality and avoids transferring pollutants from one resource to another.
- Integrated program to address wet weather issues, including such sources as regulated stormwater, unregulated runoff (nonpoint sources), CSOs, SSOs, peak flow at POTWs, source water protection.
- Green infrastructure to enhance infiltration, evapotranspiration, or capture and reuse of stormwater.
- Prioritization of cost-effective activities that support surface water protection.
- Watershed permitting strategy for multiple facilities.
- Active nutrient water quality trading under a watershed-based permit