

## **Sustainable Water Leadership Program**

### **Application: Recognition of Sustainable Water Systems**

#### **Purpose of the Sustainable Water Leadership Program**

This application is for recognition and is open to those entities described in the 'Eligibility' section below. EPA is implementing this program to recognize applicants that have made a commitment to sustainable management approaches that promote resource efficiency and protection. Organizations applying for recognition will be evaluated on the basis of the criteria described in this application but will not compete directly with other applicants for recognition.

The public reporting and recordkeeping burden for this collection of information is estimated to average 20 hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed application to this address.

#### **I. Eligibility**

- A. Applicants are limited to: publicly or privately owned wastewater treatment plants or systems, community drinking water systems, managed decentralized treatment systems (public or private), and municipally-owned stormwater systems
- B. Applicants must be in compliance with applicable Federal, State, Tribal and local water quality requirements for one year and have a satisfactory record with respect to environmental quality.

**Indicate the type of facility (check all that apply):**

- Publicly or privately owned wastewater treatment plant or system
- Community drinking water system
- Municipally-owned stormwater system
- Managed decentralized treatment system

**Indicate the organization size:**

- Large** (wastewater utility designed to discharge 1 million gallons per day (MGD) or more; drinking water utility designed to serve at least 10,000 people; and municipally-owned storm sewer system designed to serve 100,000 people or more)
- Small** (wastewater utility designed to discharge less than 1 MGD; drinking water utility designed to serve fewer than 10,000 people; municipally-owned storm sewer system designed to serve less than 100,000 people; and managed decentralized system)

*Note: Combined systems meeting either of the criteria for “Large” systems above will be considered large systems for the purposes of this recognition program.*

**II. Application Requirements**

All applicants must submit a written narrative of the activities the organization (or other entity described in the **Eligibility** section) is implementing. Applicant may describe past activities, but the written narrative must illustrate how those activities impact current accomplishments (within the past 12 months). The narrative must not exceed 5000 words (approximately 10 pages of single-spaced, 12-point text).

This application consists of two sections; Effective Utility Management, and Resource Efficiency and Protection. (IV - sections A & B) For your application to be complete, both sections must be addressed according to the section specific directions. Please read each section carefully to ensure all requirements are fully understood. For questions or assistance with the application, please visit the SWLP program website for helpful resources. <http://www.epa.gov/owm/mtb/intnet.htm>

**III Contact Information**

**A. Applicant Information**

Organization Name: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_

National Pollutant Discharge Elimination System (NPDES) Permit or Public Water Supply Identification Number(s) (as applicable): \_\_\_\_\_

Facility Manager Name and Title: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

Secondary Contact Name: \_\_\_\_\_

Phone and E-mail: \_\_\_\_\_

## B Project Partner Information (Optional)

You may wish to list your project partner organizations whose help and assistance may have been important to the success of your programs or activities cited in your application. However, this list of project partners will not increase your eligibility nor will it be used in the actual evaluation of your application.

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## IV. Recognition Application Sections

### A. Effective Utility Management

Prepare a written narrative of the types of management practices the applicant conducts or has conducted that demonstrate Effective Utility Management (EUM) based on the 10 Attributes of Effectively Managed Utilities. (May 2007) Background information on the attributes, including the Keys to Management Success and a list of potential performance measures is found in the EUM Primer, Appendix C. The Primer provides guidance on assessment processes and a list of potential performance measures related to each of the Attributes. Applicants may use the performance measures contained in the Primer 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 10 attributes. To view the Primer or learn more about EUM please visit: [http://www.epa.gov/waterinfrastructure/pdfs/tools\\_si\\_watereum\\_primerforeffectivetiilities.pdf](http://www.epa.gov/waterinfrastructure/pdfs/tools_si_watereum_primerforeffectivetiilities.pdf).

In developing the narrative under this category, describe the following: (1) How the applicant's current management program addresses the selected attributes and how the applicant assessed its operations before selecting these attributes; (2) the specific performance measures the applicant is using to track improvements in the selected attribute areas; (3) how the applicant evaluates performance based on these measures and makes any necessary changes based on this evaluation; and (4) subsequent changes or improvements to the operation that increases current or future performance.

Drinking water facilities may be more familiar with the Capacity Development Program based on 1996 Safe Drinking Water Act (SDWA) Amendments than the EUM. These organizations are strongly encouraged to apply and will be equally eligible for recognition. While some differences in terminology exist, the technical, managerial, and financial (TMF) elements of Capacity Development correspond very closely to the attributes of EUM. Applicants may refer to TMF elements in their narrative statements, but must refer back to the corresponding EUM category for review purposes. Please visit the SWLP website for helpful resources to assist in matching the elements of TMF and the attributes of EUM. If TMF elements are utilized, the response requirements of the application do not change. For more information on the Capacity Development Program, please visit <http://www.epa.gov/safewater/smallsystems/basicinformation.html>.

Requirements for large organizations:

- Demonstrate **6** of the 10 *Attributes of Effectively Managed Utilities* under the Effective Utility Management category.

Requirements for small organizations:

- Demonstrate **4** of the 10 *Attributes of Effectively Managed Utilities* under the Effective Utility Management category.

The applicant should select attributes that their organization can most effectively demonstrate. Please only address the number of attributes required even if your organization is able to demonstrate more.

**Effective Utility Management**

Entity is managing its operation and infrastructure based on the Attributes of Effectively Managed Utilities, Keys to Management Success, and Utility Performance measures endorsed by EPA and six major water and wastewater associations.

Descriptions of the Attributes are below. Please check which attributes you are describing.

- **Product Quality:** Produces potable water, treated effluent, and process residuals in full compliance with regulatory and reliability requirements and consistent with customer, public health, and ecological needs.
- **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.
- **Financial Viability:** 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.
- **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. For additional information, see EPA's "10 Features of an Active and Effective Protective Program" located at:  
<http://cfpub.epa.gov/safewater/watersecurity/features.cfm>.

- o **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.
- o **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.
- o **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.

**B. Resource Efficiency and Protection**

To be recognized, the applicant must demonstrate implementation of activities in the appropriate number of categories below. Where appropriate, identify changes or improvements to the operation that increases current or future performance. Place an X in the appropriate box(s) to indicate the applicant's selection for the other activities of choice. The applicant should select the box(s) for the area in which the organization can demonstrate the greatest success.

- **Large organizations:** demonstrate activities in 3 boxes in this category
- **Small organizations:** demonstrate activities in 2 boxes in this category

Note: Because of the breadth of activities under the category of *Ground Water and Surface Water Protection on a Watershed Basis* this box counts as two boxes. For example, to complete this section (B), a small organization would not need to demonstrate additional activities, and a large organization would only need to demonstrate one additional selection.

**Water Efficiency**

- The organization has adopted and is implementing a Water Efficiency/Water Conservation Program or a Stormwater Program that has at least three of the following elements in place (for additional detail see *EPA's Water Conservation Plan Guidelines*, EPA-832-D-98-001, August, 1998; online at <http://www.epa.gov/watersense/pubs/guide.htm>):

- Joining, and actively participating in EPA's WaterSense Program as a Promotional Partner
- Water metering measures including, but not limited to: source-water metering, service connection metering and reading, public use metering (e.g., parks), meter accuracy analyses, and meter repair/replacement
- Active water system audit program(s). Activities may include: analysis of impervious surface; leak detection and repair; loss-prevention program; large-volume user and landscape audits; and/or analysis of non-accounted for water (e.g. using the IWA/AWWA water audit method at [www.awwa.org/Resources/WaterLossControl.cfm?ItemNumber=48055](http://www.awwa.org/Resources/WaterLossControl.cfm?ItemNumber=48055));

- The entity has conservation rate structures in place.
- Active outreach program such as: understandable and informative utility bills, prompt public violation notifications, school activities, public education/workshops, “downspout disconnect” programs, or establishment of advisory committees
- Promoting new technologies and implementing rebate/voucher/incentive programs
- Retrofit program(s) and kits are available and are being targeted and distributed
- The entity has active conservation programs for commercial, industrial, and institutional facilities (e.g. a rewards program for users that significantly conserve or reuse water or reduce runoff)
- Active and successful water recycling, reuse, or reclamation operations that treat wastewater 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; online at <http://www.epa.gov/nrmrl/pubs/625r04108/625r04108.pdf>).

### **Pretreatment**

- Facility has adopted and is implementing an approved Pretreatment Program Plan, as described in 40 CFR 403. An applicant under this category should include at least two of the following achievements.
  - Pretreatment programs or pollutant strategies in place that address existing and emerging pollutants or sources with demonstrated environmental and/or staff resource benefits. (Examples could include: fats, oils, and greases (FOG) programs with food services industries that demonstrate decreases in sanitary sewer overflows and reductions in staff response resources; dental amalgam separation programs; or expired pharmaceutical collection programs with health services industries.)
  - Production of high quality biosolids meeting limits in Tables 1 and 3 of 40 CFR 503.13 attributable to pollutant control programs with industrial users.
  - Participation in state or local incentive or recognition programs to encourage zero discharge for categorical industrial users (CIUs) and non-categorical significant industrial users (SIUs)

### **Decentralized Systems**

- Organization has an actively managed decentralized treatment system in place that is implementing at least six of the following activities (for additional detail see *EPA’s Voluntary National Guidelines for Management of Onsite and Clustered (Decentralized) Wastewater Treatment Systems*, EPA 832-B-03-001, March 2003; online at [http://www.epa.gov/owm/septic/pubs/septic\\_guidelines.pdf](http://www.epa.gov/owm/septic/pubs/septic_guidelines.pdf)):
  - Maintain an inventory of all systems within the service area
  - Conduct public education efforts to inform owners of plans and actions to be taken
  - Employ trained and certified system installers, operators and haulers
  - Employ subsurface treatment options based on a soil evaluation by a licensed soil evaluator
  - Conduct regular inspections and/or monitoring
  - Dispose of residuals in accordance with regulatory requirements
  - Utilize specific and measurable performance requirements along with compliance monitoring
  - Require system inspection prior to sale of property
  - Send maintenance reminders to owners at regular intervals
  - Utilize a responsible management entity (RME) with legal authority to implement its management practices

### **Biosolids / Septage / Residuals Management**

- Facility has a certified environmental management system (EMS) under the National Biosolids Partnership (NBP) ([www.biosolids.org](http://www.biosolids.org)) or has undertaken significant activities to address biosolids/septage/residuals management utilizing the principles and practices described in the NBP EMS Program *Manual of Good Practice* at: [www.biosolids.org/ems\\_main.asp?sectionid=48&pageid=189&pagename=Manual%20of%20Good%20Practice](http://www.biosolids.org/ems_main.asp?sectionid=48&pageid=189&pagename=Manual%20of%20Good%20Practice) in two or more of the following areas:
- 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.

### **Energy Management**

- Facility has conducted an energy audit and is implementing changes in process(es), procedures and/or equipment to reduce energy consumption by at least 20%, or produce 50% or more of its energy needs by sustainable power either onsite (e.g., by CHP using biogas from anaerobic digestion, etc.) or by alternatives energy production technologies (e.g., solar, wind, geothermal) to decrease purchase and use of energy derived from non-renewable fossil fuels, consistent with the steps described in EPA's *Energy Management Guidelines for Wastewater and Water Utilities*, located at [http://www.epa.gov/waterinfrastructure/bettermanagement\\_energy.html](http://www.epa.gov/waterinfrastructure/bettermanagement_energy.html), including the use of EPA's *Energy Benchmarking* tool located at [www.energystar.gov/benchmark](http://www.energystar.gov/benchmark). Other resource documents include:
- "Opportunities for and Benefits of Combined Heat and Power at Wastewater Treatment Facilities" (EPA-430-R-07-003; April 2007) at: [www.epa.gov/chp/documents/chp\\_wwtf\\_opportunities.pdf](http://www.epa.gov/chp/documents/chp_wwtf_opportunities.pdf)
  - "Water and Energy: Leveraging Voluntary Programs to Save Both Water and Energy" (March 2008) at: [www.energystar.gov/ia/partners/publications/pubdocs/Final%20Report%20Mar%202008.pdf](http://www.energystar.gov/ia/partners/publications/pubdocs/Final%20Report%20Mar%202008.pdf)
  - "Water and Wastewater Energy Best Practice Guidebook" (2006) at: [www.werf.org/AM/Template.cfm?Section=Home&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=10245](http://www.werf.org/AM/Template.cfm?Section=Home&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=10245)

### **Climate Change Adaptation or Mitigation**

- Facility is actively adapting to the effects of climate change or taking actions to mitigate these effects. 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" located at: <http://cfpub.epa.gov/safewater/watersecurity/features.cfm>.
  - 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 has 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/ow/climatechange>.
- Entity has adopted Water Environment Research Foundation's (WERF's) Roadmap to Sustainability, with goals and milestones for 100% energy self-sustainability by 2040 (final document in development; reference to be provided).

**Ground Water and Surface Water Protection on a Watershed Basis (counts as 2 boxes under section B. All four components must be addressed)**

**Engage With Local or Regional Partners**

Facility has engaged local or regional partners to jointly take action to protect source water/watershed.

Examples include:

- Applicant participates in or manages a committee made up of key stakeholders in land use decisions in the delineated area (watershed or wellhead protection area).
- The committee engages with local officials on land-use planning and land-use management, environmental regulations, review of site designs for residential, commercial, and industrial development within source water/watershed areas, works with relevant Federal and state government program managers.
- Meetings are held several times a year and recommendations are made to key decision makers who have jurisdictional authority over source water/watershed areas.

**Characterize the Watershed**

Facility has in place goals, priorities and strategies based on an analysis of the watershed. Describe how data analysis is conducted and documented to identify current and future infrastructure, watershed, water quality, and water quantity issues.

Examples include:

- Uses the state-developed or locally modified source water assessments as a basis for analyzing prevalence of current drinking water contaminants of concern and/or prevalence of current sources of those contaminants.
- Uses data, mapping and surveying to evaluate the hydrologic system and to evaluate water and wastewater infrastructure needs, including, for example, "build-out" analyses showing effects of long-term development trends; has determined susceptibility of waters to pollution from point and nonpoint sources of contamination; has projected changes in hydrologic cycles due to climate change, etc.
- Has undertaken an integrated evaluation or analysis of wet weather problems tied to receiving water integrity
- Evaluates multimedia effects of industrial sites within a municipality (pretreatment, stormwater, and air emissions from industrial facilities).



- Identifies goals, strategies and, where possible, measurable objectives as a result of analysis.  
Examples of metrics include:
  - Reducing flow rates in existing storm sewer systems by 50% by 2015, resulting in decreased sedimentation and improved aquatic habitat.
  - Removal of 50 acres of asphalt and replacing it with pervious surface by 2015, and in increments thereafter, to achieve at least 90% effective permeability in the plan area.
  - All new construction will conform to LID principles by 2012 and will retain and filter a rainfall volume equal to a 10-year storm frequency event without discharge to the municipal storm sewer system.
  - Substantially reduce the risk of drinking water contaminants from identified sources (e.g. on-site decentralized systems) in drinking water source areas thereby decreasing the need for utilities to invest in treatment technologies.

### **Actively Implement the Watershed Plan**

Describe the institutional frameworks that are in place and how the watershed plan is being implemented by the applicant.

Examples include:

- Riparian reforestation to enhance pollutant mitigation functions.
- Stream channel restoration for increased hydrologic stability.
- Critical land acquisitions (e.g., conservation easements, purchases).
- Formal and informal agreements that include sources and leveraging of funding.
- A holistic, integrated protection approach implemented to manage significant potential sources of contaminants in the watershed that covers both ground water and surface water sources of drinking water and avoids transferring pollutants from one resource to another.
- Community has developed an 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.
- Codes and ordinances with green infrastructure performance standards have been adopted (e.g., infiltration, evapotranspiration, capture and reuse of stormwater); a site plan review process is active; inspection, tracking and enforcement procedure are in place.
- Ordinances are protective of public drinking water supplies and source water protection areas.
- Prioritization of cost-effective activities which support source water protection.
- Applicant is implementing a watershed-based permit under a watershed permitting strategy, where applicable.
- Active nutrient water quality trading is being implemented under a watershed-based permit.

### **Use an Adaptive Management Process to Document Results**

Progress is monitored and environmental improvements are documented, and data supports a formal adaptive management process. Document and summarize your analytical approach to evaluating the effectiveness of actions. Describe, as applicable, how results are being monitored; time frames for re-evaluation and adjustment; uncertainties and research needs, and how the project contributes to filling those needs; how data has been collected and used to modify plans; quality standards for applying new information; and/or process to ensure transparency to stakeholders and the public.

Examples include:

- Sustainable infrastructure measures that are used to document project benefits, such as anticipated or actual capital cost-avoidance.

- An evaluation strategy is in place that uses environmental metrics demonstrating environmental improvement or protection to determine whether the land-use policies/watershed plan is effective in reducing the risks to the source water/watershed.
- Has established a process for reviewing the results of the evaluation strategy, for communicating these results to local officials, and for adjusting source water/watershed protection measures as needed to better meet program goals.
- Provides examples of how the program has adapted to information from the evaluation program.
- Documents improvements based on established targets and goals.

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**V. Certification Statement**

I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons directly involved in gathering and evaluating the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I further certify that the applicant organization is in compliance with applicable Federal, State, Tribal, and local water quality requirements, has been for the past 12 months and has a satisfactory record with respect to environmental quality.

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

\_\_\_\_\_/\_\_\_\_\_  
Signature of Facility Management Representative Date

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## **VI. Application Submittal Instructions**

EPA requests that all completed applications be electronically submitted and must be completely filled out. These applications must be submitted using only one submission method, and must be sent in its entirety. Multiple submissions or sections of the application received piece meal will not be reviewed.

In addition to the written narrative, applicants may also submit up to three electronic photos (in jpg format) with descriptive captions of activities or facilities related to the main achievements of the application. These photos may be used for publicizing recognition winners.

Note: photos will not be reviewed for purposes of determining whether criteria have been met – only the written narrative will be reviewed. If you plan to include pictures but are not submitting your application electronically, please include the pictures along with your mailed application.

Applicants that are unable to submit electronically, may produce the application on double-sided recycled paper, and submit the complete application to the Sustainable Water Leadership Program Coordinator by [date pending]:

Sustainable Water Leadership Program  
United States Environmental Protection Agency  
Office of Water  
MC 4204M  
1200 Pennsylvania Avenue NW  
Washington, DC 20460  
(202) 564 1997  
[SWLP@epa.gov](mailto:SWLP@epa.gov)