

Public Notice

Request for Expressions of Interest

Performance-Based Acquisition

Of Water Savings

Bureau of Customer Services
Bureau of Environmental Planning and Assessment

July 11, 2007



www.nyc.gov/dep

Abbreviations and Acronyms Used in this Document

CSO	-	Combined sewer overflow
DEP	-	New York City Department of Environmental Protection
GPD	-	Gallons per day
MGD	-	Million gallons per day
RFEI	-	Request for Expressions of Interest

Purpose of this RFEI

1. Propose a system for soliciting; evaluating and funding large-scale water efficiency projects for commercial-industrial, large residential and mixed-use buildings, outdoor water use and water reuse projects.
2. Solicit comments on that proposed system.
3. Encourage businesses and non-profit organizations to consider projects to be submitted for a bid for water savings projects to occur initially in 2008 or 2009 and to continue if response and results are acceptable. This document is not a request or solicitation of proposals. A program to solicit actual project proposals will follow in 2008 or 2009 if DEP finds there is sufficient interest through this RFEI.

Specific Issues for Which DEP Would Like Comments

1. What changes would you make to the proposed scoring system?
2. What type of projects would you consider proposing under this program?

Readers are welcome to submit comments on any aspect of the proposed project.

Background: Why the City Needs to Further Reduce Water Use and Wastewater Flow

New York City has made great progress in reducing water use with consumption dropping from 1,400 – 1,450 MGD to 1,100 – 1,150 MGD today. Corresponding reductions in wastewater flow have occurred in almost all of the city's wastewater plants, increasing effective wastewater system dry and wet weather capacity and maintaining plants within dry weather flow permit requirements.

Additional reductions in water use are required to meet several goals:

1. Replacement or repair of major components of the water supply system, including repair of a leak in the Delaware Aqueduct, will require withdrawing some portions of the water supply system from service for extended periods of time. This goal requires adding sources of water supply, reducing demand, or both. Alternate conveyance of existing water supply also allows for the inspection, maintenance, and repair of critical water supply infrastructure.
2. The city has set a goal of a 5% reduction in demand over the next five years, even with increasing population.
3. Wastewater flows to the East River wastewater plants must be retained at or below current levels to meet nitrogen removal goals.
4. Water conservation and reuse can provide additional combined sewer capacity for stormwater flows, thus avoiding or reducing CSO's.

Non-fixture Water Savings

DEP will have new incentive programs aimed at replacement of toilets, urinals and residential clothes washers during the period 2008-2011. Water savings can come from many sources other than replacement of fixtures and the purpose of this proposed project is to establish a system of incentives for those sources of savings. The projects in New York City or upstate communities that might be funded under the planned program include but are not limited to:

- Replacement of once-through, water-cooled refrigeration or ice-making equipment in food-related businesses with Energy Star-rated air-cooled equipment
- Equipment replacement or water reuse in large commercial laundries
- Replacement of once-through water-cooled X-ray and laser equipment with air-cooled equipment
- Use of Con Edison steam condensate for toilet/urinal flushing, cooling tower makeup water or other non-potable purposes
- Evaporative cooling tower controls which increase the tower's cycles of concentration, or other cooling tower modifications that result in significant water savings
- Industrial process changes that save water
- Water reuse systems in existing or new construction
- Conversion of a golf course or other landscaped area from utility water to ground water with an accompanying installation of climate-based smart irrigation controls

- Storm water reuse for non-potable purposes
- Repiping or other major plumbing renovations in high-use apartment buildings with major leakage problems.

The Proposed Guidelines and Scoring System

1. The project must provide permanent potable water savings of at least 1,000 gpd. If savings vary significantly through a year, the average must be 1,000 gpd.
2. The savings must be delivered no later than 2014. Projects already installed, under construction or filed do not qualify.
3. Certainty of long-term savings must be documented or shown.
4. The proposed water saving technology or product must be a proven technology/product, or the application must include supporting documentation from non-financially interested parties.
5. Proposals must include a Bid Price in the form of \$/gpd savings. For example, if a project saves 1,000 gpd and the Proposer submits a Bid Price of \$15/gpd then the potential grant would be \$15,000.
6. The project must be for true capital improvement and not a change in maintenance or operational procedures. Funding will not be provided for operational changes.
7. Projects with the lowest \$/gpd and greatest savings will receive preference. Project \$/gpd must be below DEP avoided cost of new supply. (See FAQ #1)
8. For scoring purposes, a separate Score Price will be calculated. If a project provides DEP with only potable water savings its Bid Price shall be multiplied by some factor over 1.0 to arrive at its Score Price. If a project provides DEP with both potable water and wastewater savings but is not located in a DEP wastewater drainage area that will provide CSO benefits or flows to the East River/Long Island Sound, the Bid Price shall be multiplied by another factor over 1.0 to arrive at a Score Price. Proposals from DEP exempt customers shall have their Bid Price multiplied by 0.75, or some other factor to arrive at their score price. Projects with greater savings will be appropriately weighted.
9. Proposals will be scored according to their Score Price and grants will potentially be awarded in order of Score Price from lowest to highest until funds are depleted. Additional funds may be added if the potential volume of water savings is great enough and prices are sufficiently cost-effective.
10. Projects that can be combined with energy saving rebates will be provided some preference. Please refer to www.getenergysmart for information on NYSERDA programs.

11. Projects within New York City which involve replacement of toilets or urinals do not qualify. DEP has other programs to acquire these savings. One exception is the replacement of back-outlet gravity flush fixtures installed in slab construction where only back-outlet pressurized-tank fixtures will perform properly. Fixture replacement projects for large end-users from systems supplied with water from DEP on a wholesale basis can qualify since DEP fixture incentive programs are not available outside of New York.
12. Properties within New York City must be current on their water/sewer accounts
13. If a business has multiple properties, the combined properties may be used to reach the threshold savings amount.
14. Applicant must agree to inspection of properties.
15. For the initial pilot project, DEP will provide a grant of \$5,000 to each proposer among the first 50 who requires a professional engineering analysis for their proposal and \$1,000 to each proposer whose proposal is based on simple calculation assumptions to estimate savings. Proposers with water reuse projects which can qualify for the Comprehensive Water Reuse Program rate are urged to submit the analysis required for that application for this program as well so the analysis can serve two purposes.

Fixture Replacement Projects North of New York City

1. Projects must save at least 1,000 gpd in a building.
2. To simplify savings estimates for proposals, the following assumptions shall be used:
 - a. Replacement of nominal 5 gallon-per-flush commercial fixtures with 1.6 gpf fixtures equipped with "Uppercut" dual-flush valve: 28.8 gpd; with HET commercial fixtures: 30 gpd
 - b. Replacement of nominal 3.5 gpf urinals with 0.5 gpf urinals: 24 gpd; with one-pint per flush urinals: 26 gpd, with non-flush urinals: 28 gpd
 - c. Replacement of 8-10 year old top-load clothes washers with new front-load washers with a Water Factor of 6.0 or less in apartment buildings or dormitories: 100 gpd; in stand-alone coin-operated laundries: 120 gpd.

Measurement and Verification of Savings

If the process or end use being modified is the dominant water use in a building, DEP may use the entire premises meter to monitor water use. If the meter in a New York City property needs to be replaced that work will be performed by a DEP Contractor at DEP's expense, unless the owner within New York City would prefer to have the meter replacement performed by its own licensed plumber under the Reimbursable Metering Program. Projects outside of New York City are responsible for their own metering which shall be by a DEP-approved meter either less than five years old or less than ten years old which has had an accuracy test performed in the last five years. Any building in New York City with an entire premises meter that is not AMR-compatible must replace its meter and install an AMR transmitter before a proposal will be accepted.

All applicants in New York City must allow the installation of AMR transmitters on their water meters before a proposal will be accepted.

If a submeter for an end use being modified is required, DEP shall perform that work unless the owner prefers to have their own licensed plumber install the submeter under RMP. Projects from outside of DEP's retail service area are responsible for their own submetering or proper metering.

50% of incentive monies will be presented at the start of construction and 50% after the measure is commissioned and savings have been verified. Parties are encouraged to suggest measures to insure the long-term viability of savings.

For projects located north of New York City, DEP may need to confirm that savings will accrue to the city's system and not to other interconnected supplies for an "upstate" customer. Comments on this specific issue are invited. Projects located north of New York City must be metered to DEP's satisfaction. If meter replacements are required for such projects they shall be at the expense of the end user or their water utility.

Frequently-Asked Questions

1. **How do I know if my bid is competitive?** The first thing you should consider is if the project is cost-effective for you, considering the water savings you will achieve the cost and the possible grant from DEP. The second thing to consider is the range of prices DEP pays for water savings and supplies. DEP's fixture incentive programs have a "cost of conserved water" between \$2 and \$5/gpd. A few programs are closer to \$10 and if we proceed with an incentive for private homes clothes washers that will be considered somewhat marginal at over \$20/gpd. The

supply options that DEP is likely to consider are under \$20/gpd, although some of these have added operation costs. So, if you have to bid over \$20/gpd that does not mean the project does not deserve to be bid, but it does mean it may be marginal. The third consideration is what other Proposers will bid.

2. **Would DEP co-fund a municipal or utility mass fixture replacement program north of the city?**

The issue would depend upon the design and financial commitment of the sponsor. The incentive would have to be sufficiently high to minimize “free riders” and would need to have sufficient controls.

Submission of Comments

Comments must be in written form and can be submitted by mail or email.

Submissions shall be directed to:

Anitra Singh
Bureau of Customer and Conservation Services
New York City Department of Environmental Protection
59-17 Junction Blvd – 1st Floor Conservation/Metering
Flushing, NY 11373

asingh@dep.nyc.gov

Comments are due by October 1, 2007.