New York City’s
Water Challenge to Restaurants

In Partnership with
Welcome

Che Flowers
Water Challenge Coordinator | NYC DEP
NYC Water Challenge to Restaurants Program

Agenda

- Introduction / Water Challenge Recap
- Evaluating Progress
- Recognizing Achievement
- Watershed Agricultural Council
The New York City Water Challenge programs help Non-Residential water users identify and achieve long-term water savings.

The NYC Water Challenge to Restaurants works with Challenge participants to reduce their water intensity per square foot by 5% (benchmark against 2014 water use).

Lessons learned can be found at:
http://www.nyc.gov/dep/conservation/restaurants
The approach of the New York City Water Challenge to Restaurants follows the Water Management framework outlined by the US EPA’s WaterSense® program:

- Step 1: Making a Commitment
- Step 2: Assessing Facility Water Use
- Step 3: Setting and Communicating Goals
- Step 4: Creating a Water Conservation Plan
- Step 5: Implementing the Water Conservation Plan
- Step 6: Evaluating Progress
- Step 7: Recognizing Achievement
Evaluating Progress and Recognizing Achievements

Tara O’Hare,
EPA WaterSense Program
Water and Energy Management Planning

Follow steps of ENERGY STAR Guidelines for Energy Management
Evaluate Progress

- Assess whether your facility is on track
  - Review water bills and meter/submeter readings to verify savings
  - Continue to track water usage using ENERGY STAR Portfolio Manager
- Review and revise action plan at least annually
- Re-assess the facility every four years to develop an updated water balance and identify new water management goals and savings opportunities
Evaluate water and energy performance data regularly to:

- Compare current performance to established goals
- Review the action plan to understand what worked well and what didn’t to identify best practices
- Demonstrate and promote the success of the water management program
- Make informed decisions about future water and energy projects
- Reward individuals and teams for accomplishments
- Document additional savings opportunities along with non-quantifiable benefits that can be used for future initiatives
Measure Results

- Gather tracking data from all sources
  - Organize reports and data from tracking and monitoring efforts including Portfolio Manager and utility bills
  - Review water and energy use data along with cost data (capital and operating expenses)
  - Review water bills and meter and submeter readings to verify that expected water savings are achieved
  - Compare water use to baselines and against established goals for environmental performance and financial savings
  - Compare water and energy performance to peers and competitors whenever possible
Water management plans are **living documents** that should be reviewed and updated on a regular basis.

Key steps in the review include:

- Get feedback – ask for feedback and ideas on the plan from the water management team, implementation staff, and other depts.
- Gauge awareness – assess changes in employee and organizational awareness of water issues.
- Identify critical factors – identify factors that contributed to surpassing or missing targets.
- Quantify side benefits – identify and quantify side benefits from water management activities wherever possible (i.e. productivity improvement, impact on sales, reduced operation and maintenance expenses, or better public/community relations).
Advantages of Reviewing Plans

- Action plan review involves a commitment of resources, but also has many advantages:
  - Creates insight for new options and future projects (technologies, practices, and programs)
  - Avoids repeating failures by identifying activities that were not as effective
  - Assesses the usefulness of the tracking system and other administrative tools to ensure better management and evaluation
  - Provides staff the opportunity to contribute to and understand the process of water management
  - Develops specific success stories and financial results to communicate to stakeholders inside and outside the organization
Recognizing Achievements

- Providing and seeking recognition for water and energy management achievements is proven to sustain momentum and support for your program.

- Recognizing those that helped the organization achieve the results motivates staff and employees and brings positive exposure to the water management program.

- Receiving recognition from outside sources validates the importance of water and energy management programs to both internal and external stakeholders, and provides positive exposure for the organization.

  - From government agencies (i.e. EPA, NYC DEP), the media, and other third parties like the Green Restaurants Association or building certifications like LEED.
Provide Internal Recognition

- Recognition can strengthen the morale of everyone involved in water management which can help motivate them through increased job satisfaction
- Recognition levels can include individuals, teams, or entire facilities
- Achievements to recognize can include:
  - Offering the best water savings ideas
  - Achieving the greatest water use reduction
  - Increasing dollar savings by X amount
- Forms of recognition include:
  - formal acknowledgements and certificates
  - salary increases and cash bonuses
  - or simple forms of appreciation like water program shirts, reusable water bottles, or coffee mugs
Provide Internal Recognition

- Elevate the importance by asking a senior manager to present the recognition
- Recognize achievements at an awards ceremony or an informal gathering like an ice cream social
- Stop to celebrate accomplishments on a regular basis (i.e. quarterly or annually) to increase employee appreciation
- Use progress and savings in personnel performance evaluations to measure against goals – could feed into monetary rewards
Recognize Achievements

• Explore opportunities for external recognition or awards
  - Post progress online on websites and social media
  - Include achievements in annual sustainability reports
  - Meet widely recognized standards of performance like LEED
  - Participate in ENERGY STAR’s National Building Competition, DOE’s Better Buildings Challenge, TripAdvisor’s GreenLeaders program, etc.
Recognizing Achievements
From NYC Water Challenge Participants

Che Flowers
Water Challenge Coordinator
<table>
<thead>
<tr>
<th>Steps</th>
<th>Opportunities</th>
<th>Areas</th>
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<tbody>
<tr>
<td>• Benchmark water bills</td>
<td>• Retrofits</td>
<td>• Building</td>
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<tr>
<td>• Audit facility water use</td>
<td>• Replacements</td>
<td>• Kitchen &amp; Appliances</td>
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<td>• Create Water Conservation Plan</td>
<td>• Maintenance</td>
<td>• Restroom</td>
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<td>• Implement Water Conservation Plan</td>
<td>• Employee Engagement</td>
<td>• Coolers</td>
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<td>• Engage staff</td>
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Lupa Osteria Romana

Project Summary

- Benchmark water use
- Water Conservation Plan
- Register for DEP leak detection program
- Strategy: implement low costs retrofits
  - Suggested - Low-flow aerators

Highlights

Consumed 2.6M gal in 2014
Saved 83,000 gal in 2015
$aved 6% off water costs

Monthly Water Consumption (gal)

Style Small Italian Eatery
Service 11:30 am – 11:00pm
Size 3,500 sq ft

Apr May Jun Jul Aug Sep Oct Nov Avg
Project Summary

- Benchmark water use
- Water Conservation Plan
- Strategy: implement low costs retrofits
  - Suggested - Low-flow aerators
  - Suggested - Flushometer Valves
  - Suggested - Strip curtains in walk-in coolers

Highlights

Consumed: 1.2M gal in 2014
Saved: 45,000 gal in 2015
$aved: 11% off water costs

Style: French & Italian Bistro
Service: 11:00 am – 11:00pm
Size: 2,500 sq ft
*whole building

Monthly Water Consumption (gal)

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<thead>
<tr>
<th>Month</th>
<th>2014</th>
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Project Summary

- Benchmark water use
- Implement Water Conservation Plan
- Strategy: strengthen maintenance schedule
- Water Cooled Cooling Equipment
  - Gaskets
  - Door hinges
  - Strip Curtains
  - Auto-closer
  - Compressor maintenance
  - Pass-through flow rate

Highlights

- **Consumed**: 1.8M gal in 2014
- **Saved**: 139,000 gal in 2015
- **$aved**: 18% off water costs

Monthly Water Consumption (gal)

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Style: Farm-to-table Americana

Service: 5:00pm – 11:00pm

Size: 4,500 sq ft
Project Summary

- **Strategy:** strengthen maintenance schedule
- Water Cooled Cooling Equipment
- Water Cooled HVAC Equipment
- Adjust water cooling tower gauges

**Highlights**

- **Consumed:** 1.9M gal in 2014
- **Saved:** 240,000 gal in 2015
- **$aved:** 20% off water costs

**Monthly Water Consumption**

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**Style:** Inventive Americana

**Service:** 5:00pm – 11:00pm

**Size:** 4,500 sq ft
Macelleria

Style  Farm-to-table Americana
Service  5:00pm – 11:00pm
Size  4,500 sq ft

Project Summary
• Benchmark and analyze water use
• Audit facility water use
• Water Conservation Plan
• Strategy: Staff engagement campaign & facility retrofits and replacements
  • Employee leak detection program
  • Retrofit bar, kitchen and prep sinks
  • Retro-commission walk-in coolers and ice machines
  • Replace water cooled HVAC equipment

Highlights
Consumed  2.8M gal in 2014
Saved  317,000 gal in 2015
$aved  17% off water costs

Monthly Water Consumption (gal)

- 2014
- 2015

Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Avg
Russo’s on the Bay

Project Summary
- Benchmark and analyze water use
- Water Conservation Plan
- Strategy: strengthen maintenance schedule and staff engagement campaign
  - Employee Engagement
  - Irrigation Management
  - Retrofit bar, prep, and bathroom sinks
  - Replace one 600lb ice machine

Highlights
- Consumed: 1.7M gal in 2014
- Saved: 75,000 gal in 2015
- Saved: 6% of costs

Monthly Water Consumption (gal)

- Dec 2014
- Jan 2014
- Feb 2014
- Mar 2014
- Apr 2014
- May 2014
- Jun 2014
- Jul 2014
- Aug 2014
- Sep 2014
- Oct 2014
- Nov 2014
- Avg

Style: Large events catering
Service: 10:00 am – 9:00 pm
Size: 100,000 sq ft
<table>
<thead>
<tr>
<th>Savings Opportunities Identified</th>
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<tbody>
<tr>
<td>Replace Restroom Faucet</td>
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<td>Replace Restroom Toilet</td>
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<td>Replace Kitchen Appliance Faucet</td>
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<td>Replace Sanitation Dish Machine</td>
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## Lessons Learned

**Steps**

- Benchmark water bills
- Audit facility water use
- Identify and prioritize opportunities based on benchmark and audit.
- Create Water Conservation Plan
- Contextualize plan within the restaurant’s overall goals
- Implement Water Conservation Plan
- Engage staff

**Opportunities**

- Retrofits
- Replacements
- Look for rebates and calculate savings
- Maintenance
- Codify your maintenance schedule and set reminders
- Employee Engagement
- The best leak detection there is!
Watershed Agricultural Council:
Pure Catskills & Lucky Dog Local Food Hub

Kristan Morley & Sonia Janiszewski
Kristan Morley
Watershed Agricultural Council
Farm to Market Manager

Sonia Janiszewski
Lucky Dog Local Food Hub
Program Manager, CADE
**Pure Catskills** is a regional, buy local campaign developed by the Watershed Agricultural Council to improve the economic viability of the local community, sustain the working landscapes of the Catskills and preserve water quality in the NYC watershed region.

Pure Catskills represents nearly 300 diverse farm and forest-based businesses, restaurants, local artisans, accommodations and other non-profit organizations throughout Delaware, Greene, Otsego, Schoharie, Sullivan and Ulster Counties in New York State.
You want it. We have it.
Lucky Dog will get it there.

The Lucky Dog Local Food Hub is a grassroots, farmer-driven and source-identified aggregator and transporter of foods raised, grown and processed in the Catskills region of New York State.
Small- to mid-sized farms producing high-quality, high-value products in the NYC Watershed
The Products

Source-identified cheeses, yogurt, kefir, butter, milk (cows’ and goats’), sugars, eggs, produce, fruits, berries, poultry, lamb, beef, pork, sausage, pasta, pickles and much more...
Restaurants, retailers, CSAs and buying clubs seeking sustainably grown products and direct-to-farm relationships
Buyer Process

Thursday
Receive the catalog of available products

Friday
Place your order for TUESDAY delivery

Tuesday
Place your order for THURS./FRI. deliveries & pick-ups
Hub Success Indicators: Buyers

1. Know your MISSION
2. Establish the PRICE you are able to pay
3. Maximize use of SEASONAL products
4. Build RELATIONSHIPS with feedback
The Lucky Dog Local Food Hub is made possible by the tireless efforts of Lucky Dog Organic Farm with administrative support from the Center for Agricultural Development and Entrepreneurship (CADE), and funding support from the Watershed Agricultural Council’s Pure Catskills program. Federal funds for this project were awarded under the Local Food Promotion Program of the Agricultural Marketing Service, U.S. Department of Agriculture.
Thank You.
For more information contact the NYC Water Challenge to Restaurants [here](#).