



# New York City's Water Challenge to Restaurants

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In Partnership with



NEW YORK  
STATE  
RESTAURANT  
ASSOCIATION



The City of New York  
Mayor Bill de Blasio





# Welcome

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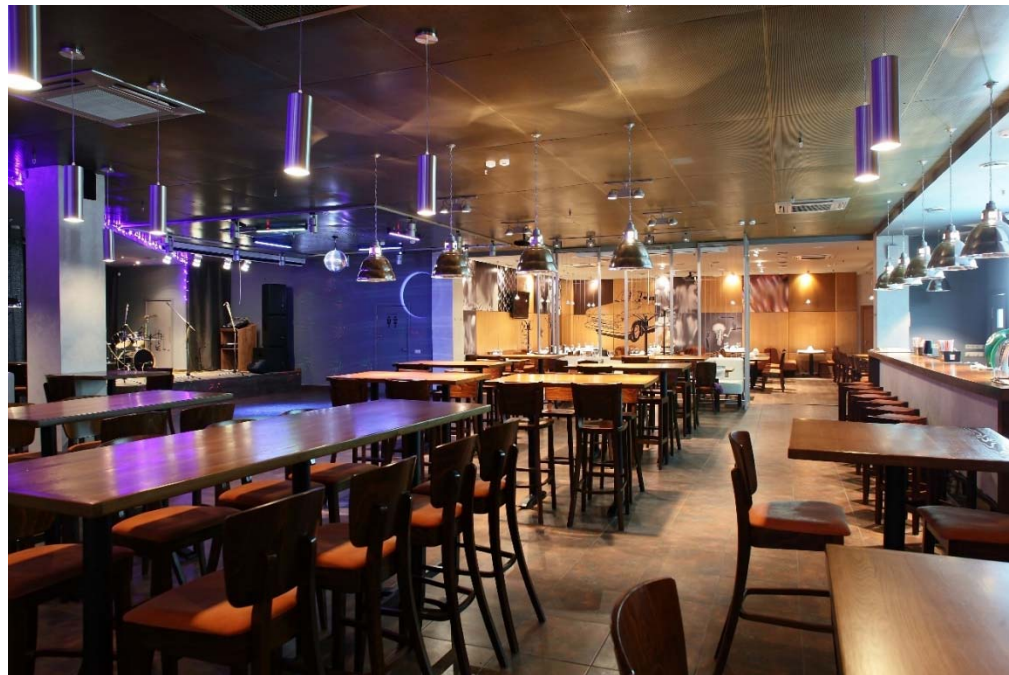
Che Flowers  
Water Challenge Coordinator | NYC DEP

# NYC Water Challenge to Restaurants Program



## Agenda

- ❖ Introduction / Water Challenge Recap
- ❖ Evaluating Progress
- ❖ Recognizing Achievement
- ❖ Watershed Agricultural Council



# NYC Water Challenge to Restaurants Program



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>

# NYC Water Challenge to Restaurants Program



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



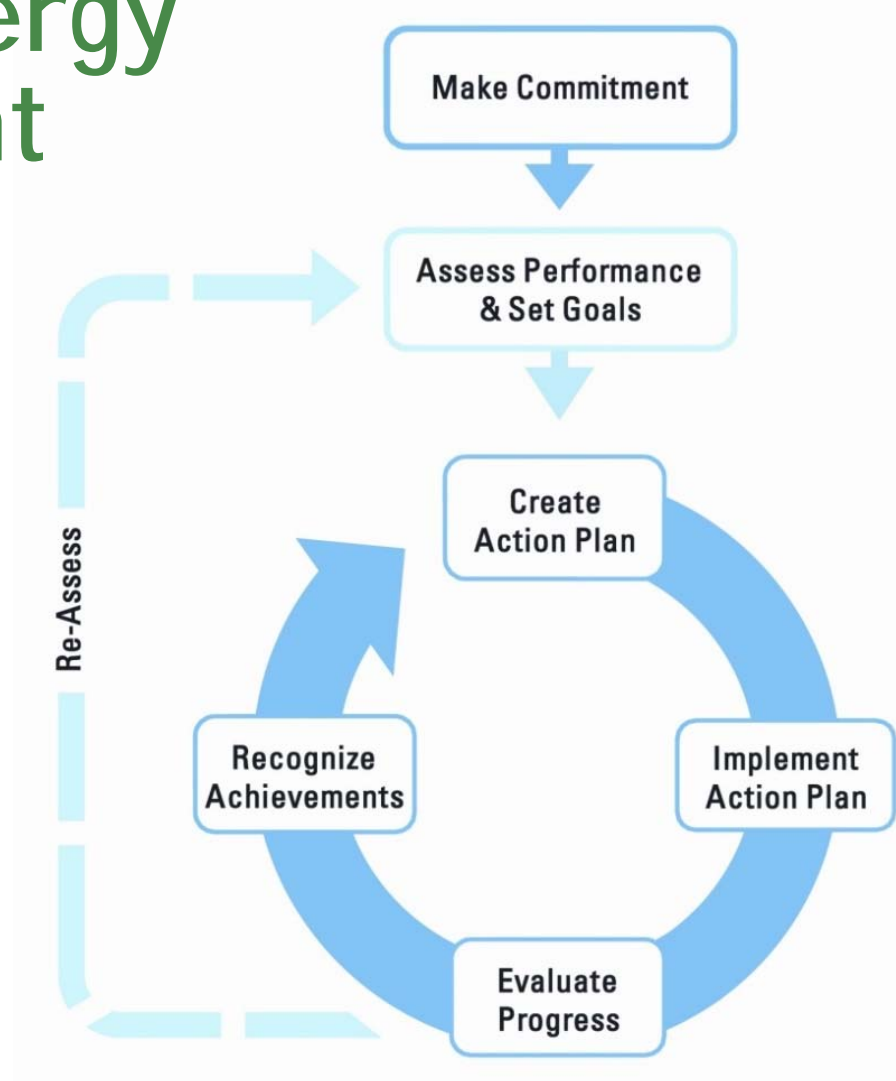
# Evaluating Progress and Recognizing Achievements

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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 Progress

- ❖ 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

# Review Action Plan

- ❖ 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

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Che Flowers  
Water Challenge Coordinator

## Steps

- Benchmark water bills
- Audit facility water use
- Create Water Conservation Plan
- Implement Water Conservation Plan
- Engage staff

## Opportunities

- Retrofits
- Replacements
- Maintenance
- Employee Engagement

## Areas

- Building
- Kitchen & Appliances
- Restroom
- Coolers

# Lupa Osteria Romana



Style Small Italian Eatery

Service 11:30 am – 11:00pm

Size 3,500 sq ft

## Project Summary

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

## Highlights

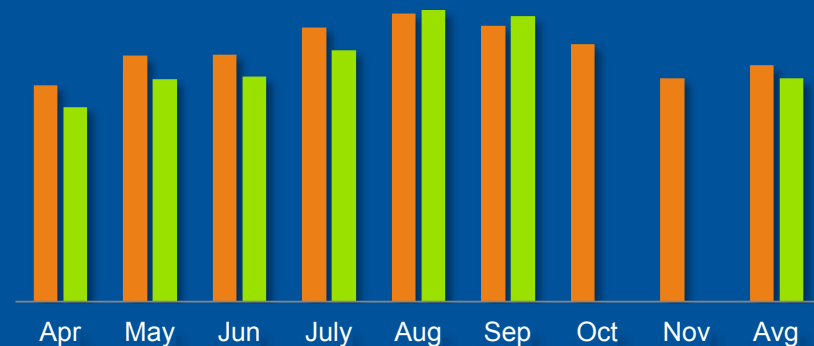
**Consumed** 2.6M gal in 2014

**Saved** 83,000 gal in 2015

**\$aved** 6% off water costs

## Monthly Water Consumption (gal)

2014 2015



# Landmarc Tribeca



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

## Project Summary

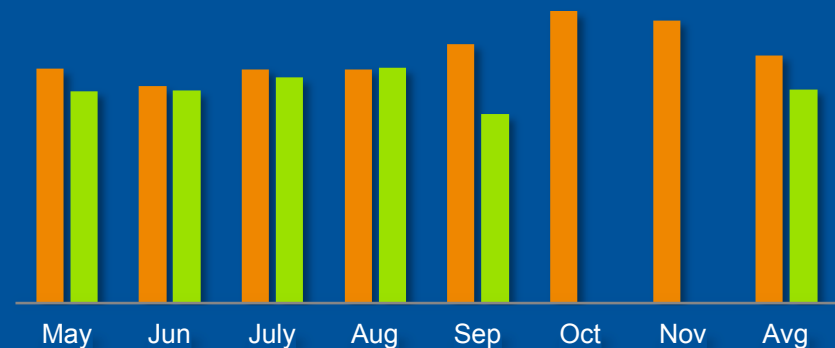
- Benchmark water use
- Water Conservation Plan
- Strategy: implement low costs retrofits
  - Suggested - Low-flow aerators
  - Suggested - Flushometer Valves
  - Suggested - Strip curtains in walk-in coolers

## Highlights

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

## Monthly Water Consumption (gal)

2014 2015





Style Farm-to-table Americana

Service 5:00pm – 11:00pm

Size 4,500 sq ft

## 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

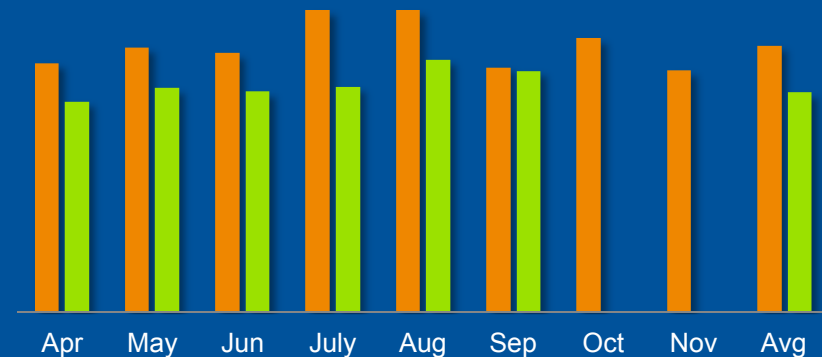
**Consumed** 1.8M gal in 2014

**Saved** 139,000 gal in 2015

**\$aved** 18% off water costs

## Monthly Water Consumption (gal)

■ 2014 ■ 2015



# Perilla



Style Inventive 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

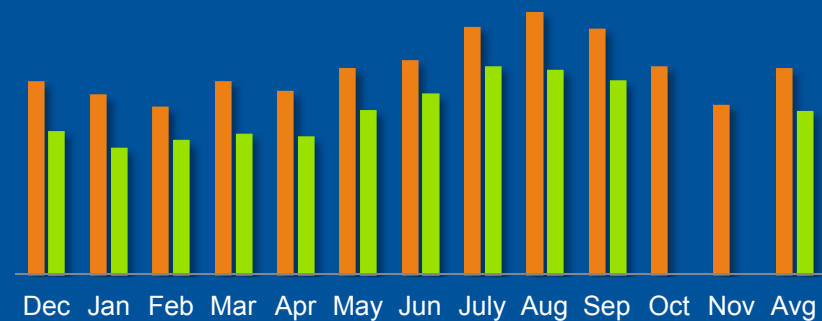
**Consumed** 1.9M gal in 2014

**Saved** 240,000 gal in 2015

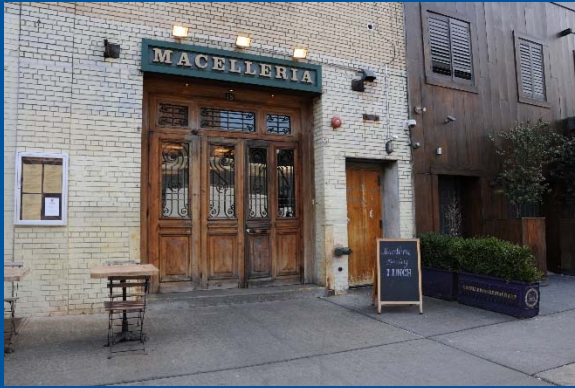
**\$aved** 20% off water costs

## Monthly Water Consumption (gal)

■ 2014 ■ 2015



# 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

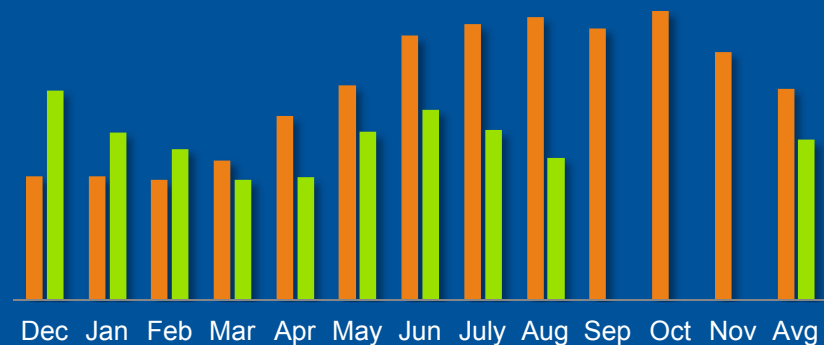
**Consumed** 2.8M gal in 2014

**Saved** 317,000 gal in 2015

**\$aved** 17% off water costs

## Monthly Water Consumption (gal)

■ 2014 ■ 2015



# Russo's on the Bay



Style Large events catering

Service 10:00 am – 9:00 pm

Size 100,000 sq ft

## 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

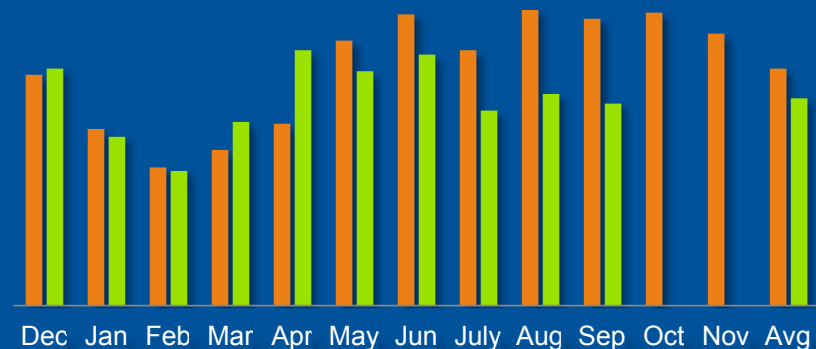
**Consumed** 1.7M gal in 2014

**Saved** 75,000 gal in 2015

**\$aved** 6% of costs

## Monthly Water Consumption (gal)

■ 2014 ■ 2015





# Savings Opportunities Identified



Replace Restroom Faucet	Replace Restroom Shower Head	Replace Cooking Appliance Steam Cooker	Replace Cooking Appliance Steam Kettle	Retrofit Cooking Appliance Steam Kettle	Retrofit Cooking Appliance Wok-Stove	Retrofit Kitchen Appliance Dipper Well
Replace Restroom Toilet	Replace Restroom Urinal	Replace Cooking Appliance Wok-Stove		Retrofit Kitchen Appliance Faucet	Retrofit Kitchen Appliance Non-Fill Prep Sink	Retrofit Landscaping Landscaping
Replace Kitchen Appliance Faucet	Replace Kitchen Appliance Pre-Rinse Spray Nozzle	Replace General Garden Hose		Retrofit Restroom Faucet	Retrofit Restroom Toilet	Retrofit Refrigeration Ice Machine
Replace Sanitation Dish Machine	Replace Sanitation Washing Machine	Replace Refrigeration Ice Machine		Maintenance Refrigeration Walk-in-Cooler		Maintenance Ventilation HVAC
				Maintenance Sanitation Dish Machine		Maintenance Water Heater Water Heater

# 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

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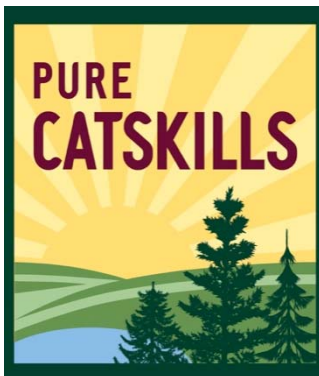
Kristan Morley & Sonia Janiszewski



**Kristan Morley**  
Watershed  
Agricultural Council  
  
*Farm to Market  
Manager*



**Sonia Janiszewski**  
Lucky Dog Local  
Food Hub  
  
*Program Manager,  
CADE*



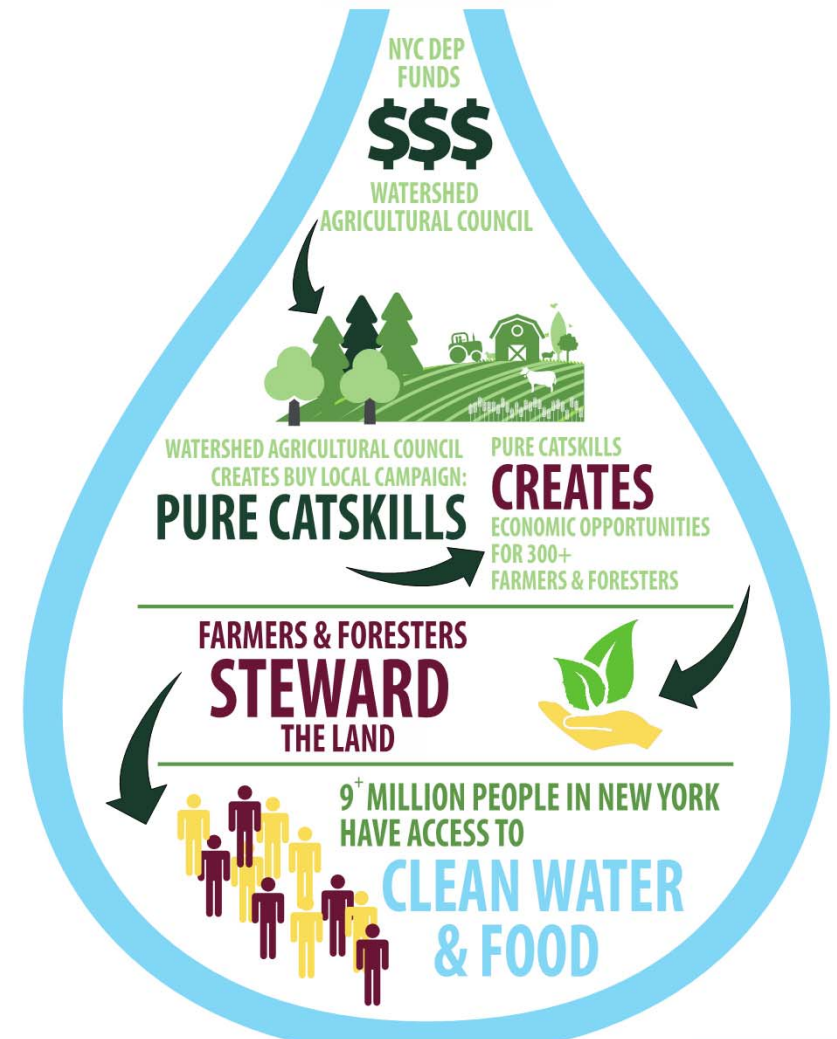
Watershed Agricultural Council



**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.

# WHY BUY PURE CATSKILLS



# About The Hub

**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.



# The Farmers



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...



# The Buyers



Restaurants,  
retailers, CSAs and  
buying clubs seeking  
sustainably grown  
products and direct-  
to-farm relationships

# Buyer Process



# Hub Success Indicators: Buyers

Know your  
MISSION

Establish the  
PRICE you are  
able to pay

Maximize use  
of SEASONAL  
products

Build  
RELATIONSHIPS  
with feedback

# Thank you!

*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.*





# Open Discussion

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# Acknowledgements



Thank You.

For more information contact the NYC Water Challenge to Restaurants [here](#).