



## Introducing WaterSense®

**Tara O'Hare, WaterSense Program  
U.S. Environmental Protection Agency**

**Katie Barnett, Division of Water Supply  
New Jersey Department of Environmental Protection**

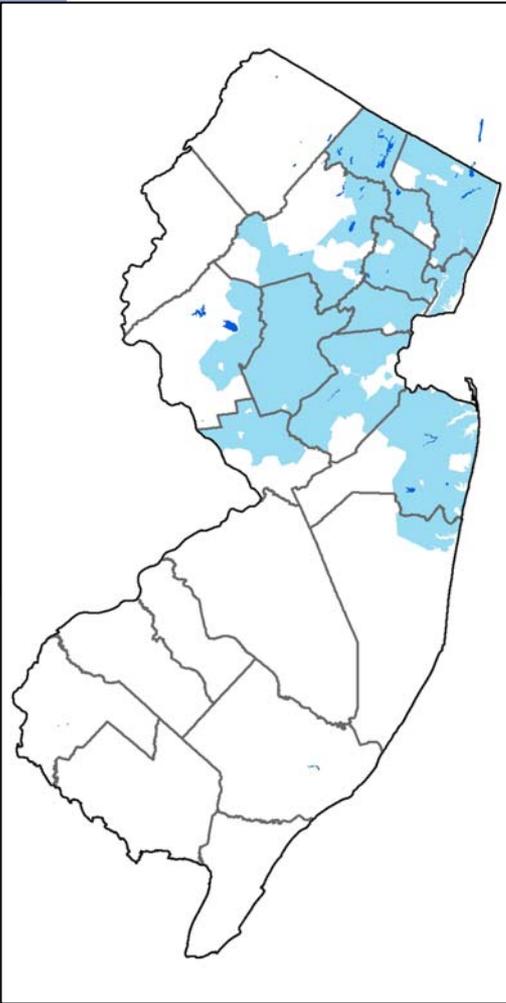


# Agenda

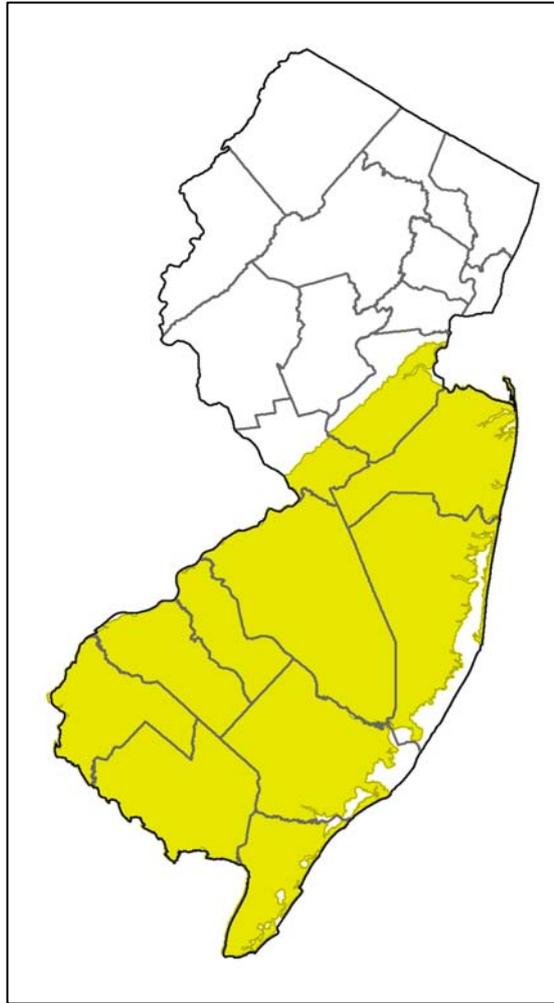
- **Welcome**
- **The New Jersey Water Supply Story**
- **The Need for Water Conservation**
- **Get to Know WaterSense**
- **Partner Resources and Responsibilities**
- **Partner Collaboration**
- **New Jersey Specific Case Studies**
- **Infusion of EPA's WaterSense into NJ Programs**
- **Close**

# Sources of Water in New Jersey

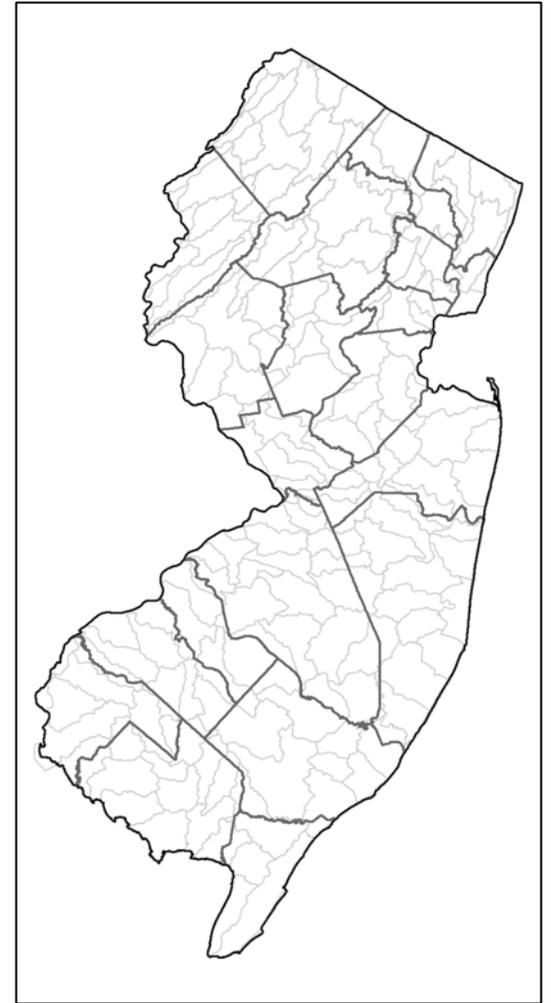
Reservoirs



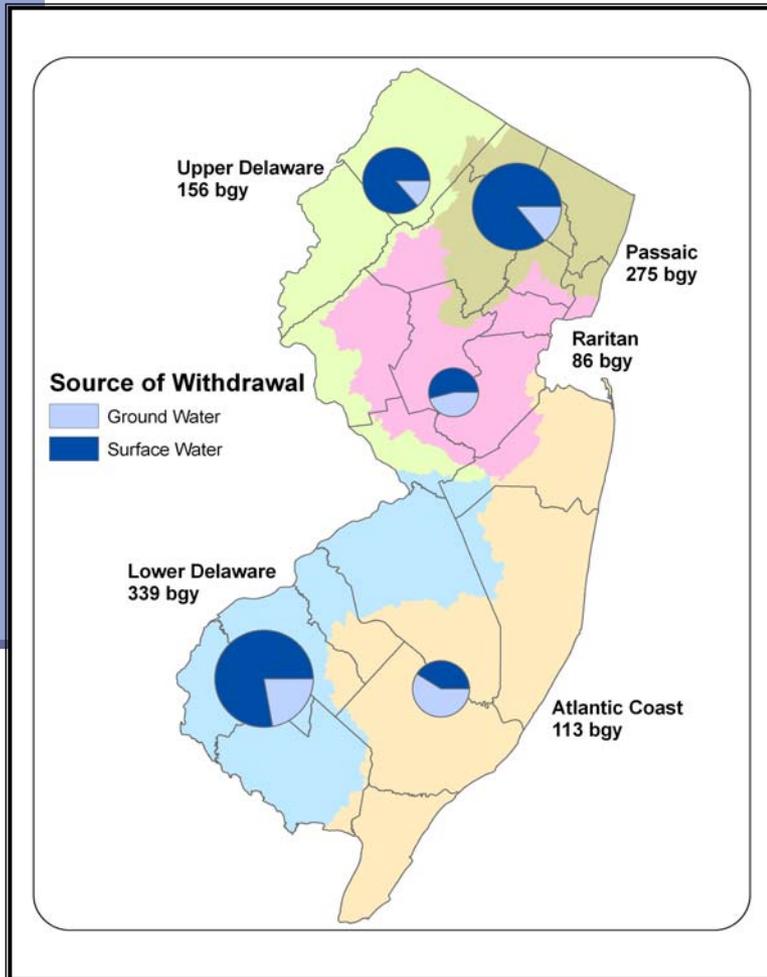
Confined Aquifers



Unconfined Aquifers



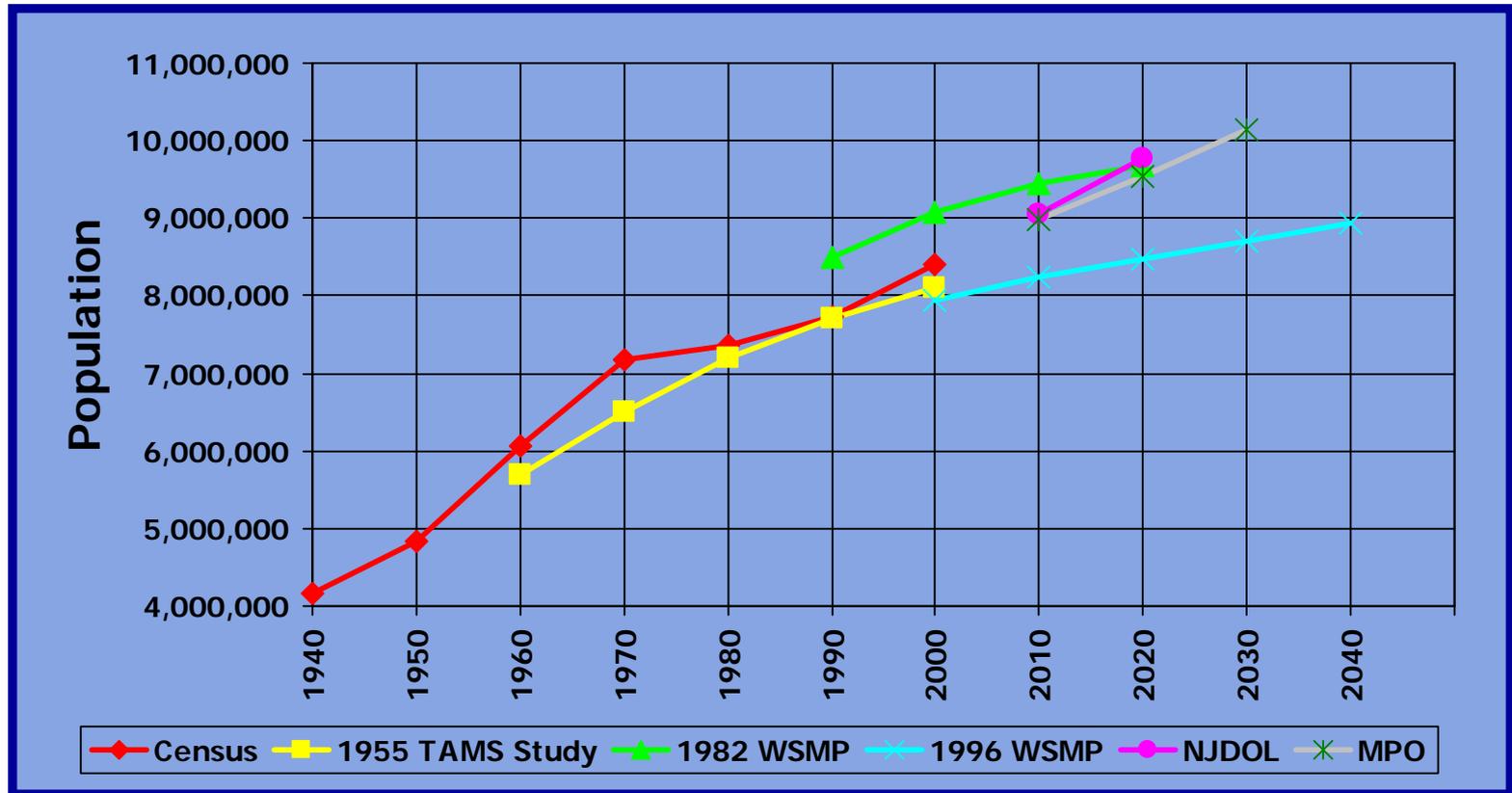
# New Jersey Water Sources



- Statewide Water Withdrawals
  - 75% Surface Water (reservoirs/streams/river)
  - 25% Ground Water (aquifers)
- Sources of Potable Supplies
  - 90% Public Water Systems
  - 10% Private, Individual Wells

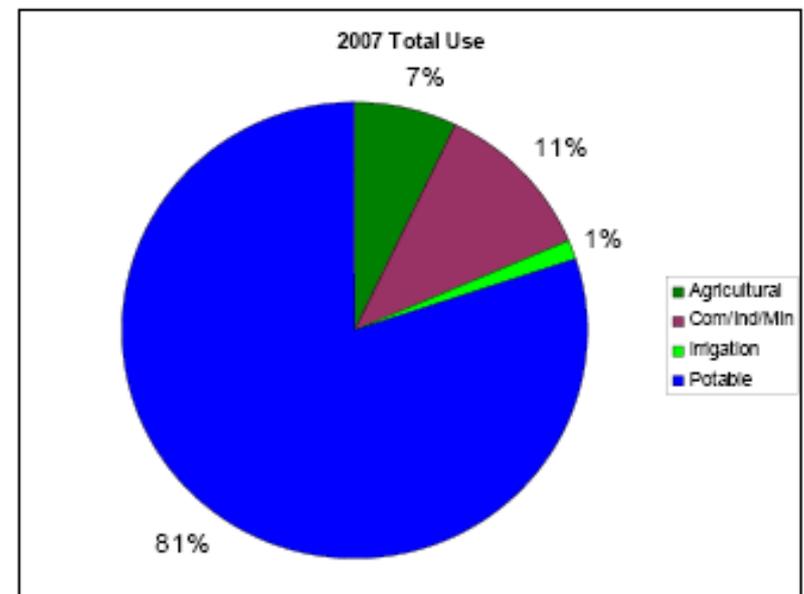
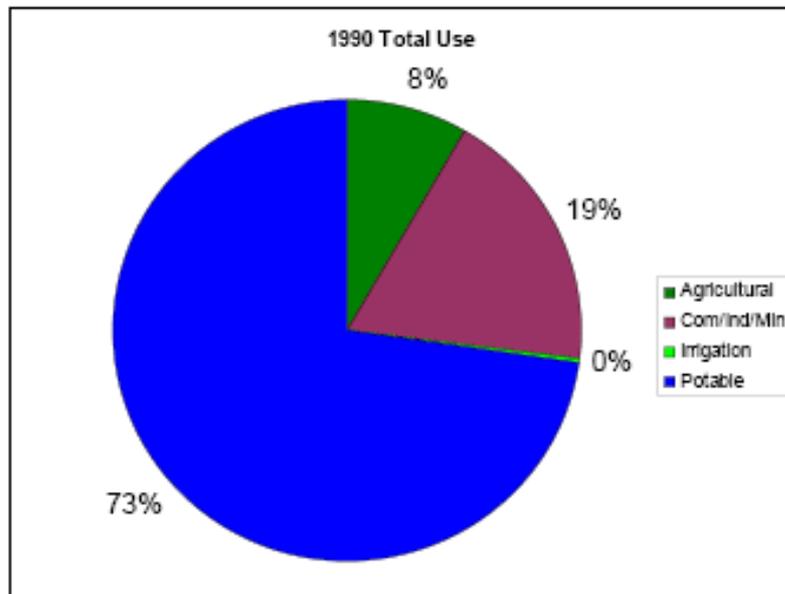
# The Need for Water Conservation: The “Water Rich” Fallacy

Despite an average 44 inches of rainfall annually, NJ is vulnerable to water supply shortages. Especially, when considering that NJ is the most densely populated State in the US (and still growing)!!



# The Need for Water Conservation: A Growing Potable Water Use Sector

With an increased population, NJ is seeing an increase in potable water use.



- Nearly 1 TRILLION gallons of water are used per year in New Jersey:
  - This equates to 2.6 BILLION gallons per day statewide on average.

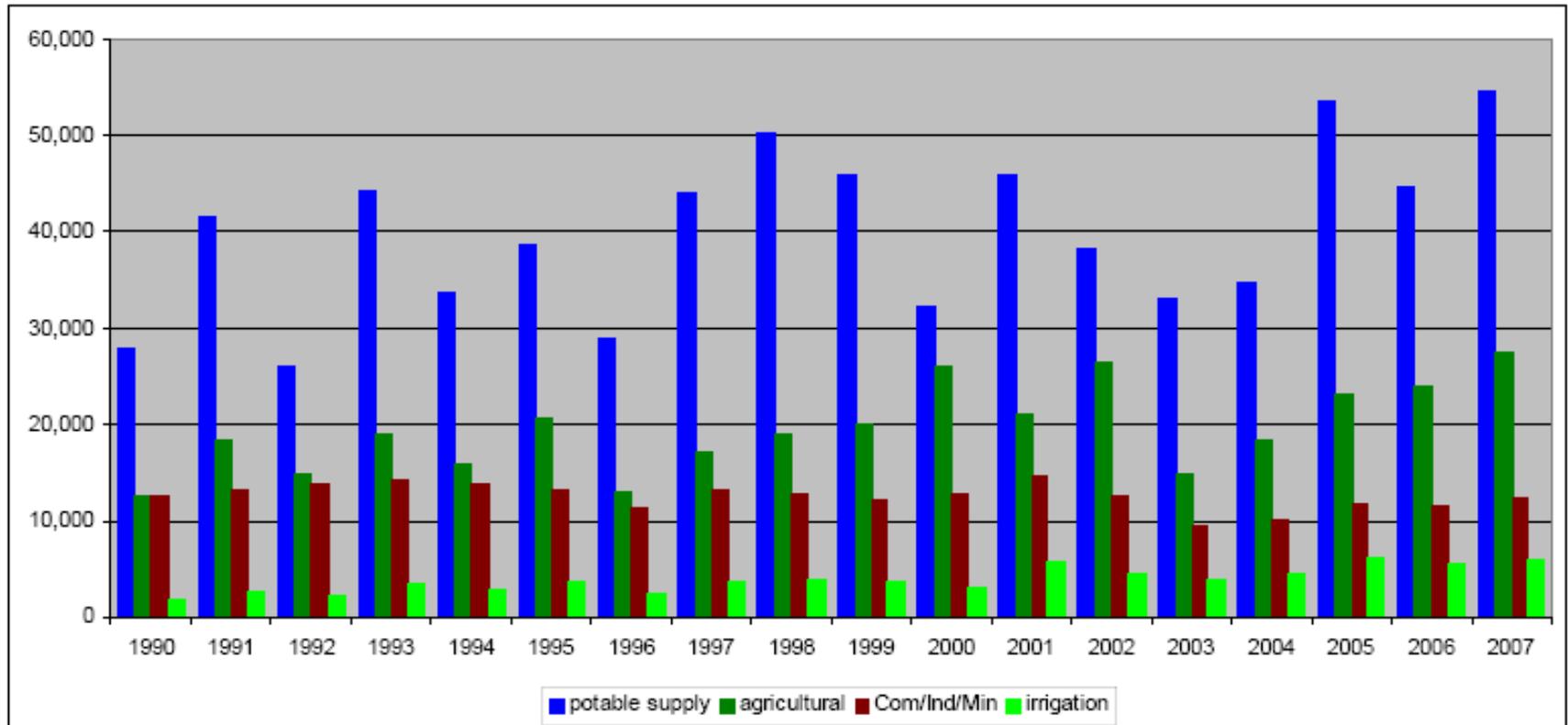
# The Need for Water Conservation:

## A Growing Thirst for Water

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- Over 75% of the State's water use is for potable water supplies (not including power generation);
- Per Capita water use ranges from 80 to 230 gallons per capita day & is still on the rise (average ~ 100);
- Summer time water use has continually stressed water systems resulting in expensive water supply and infrastructure upgrades.

# The Need for Water Conservation: Consumptive Use on the Rise





# What Is WaterSense?



- Voluntary partnership and labeling program launched by EPA in 2006
- Simple way for consumers to identify products that use 20% less water and perform well



# What's Special About WaterSense?



- A label with integrity
  - Third-party tested and certified
  - Backed by the credibility of EPA
- Smart use of resources
  - EPA provides national standardization and outreach for water-efficiency
  - Manufacturers absorb product research, testing, and branding costs
  - Licensed certifying bodies certify the products and police the label's use



# WaterSense Labeled Fixtures

- Toilets
  - 430+ labeled models
- Faucets and faucet accessories
  - 1,500+ labeled models
- Urinals
  - Final specification released in October 2009
- Find Products
  - [www.epa.gov/watersense/products/index.html](http://www.epa.gov/watersense/products/index.html)





# Schedule for Evaluating WaterSense Products

	<i>Complete</i>	<i>2010/2011</i>	<i>2011 and Beyond</i>
<i>Irrigation</i>	<i>Professional Certification Programs</i>	<i>Irrigation Controllers Moisture Sensors Drip/Micro Technology</i>	<i>Irrigation Sprinklers</i>
<i>Residential Plumbing</i>	<i>Toilets Faucets</i>	<i>Showerheads Water Softening Systems</i>	<i>Water Treatment Systems</i>
<i>Commercial Plumbing</i>	<i>Urinals</i>	<i>Pre-rinse Spray Valves</i>	<i>Flushometer Valve Toilets Food Disposals</i>
<i>Other</i>	<i>New Homes</i>		<i>Autoclaves Glassware Washers Additional Professional Certifications</i>



# WaterSense New Homes Program

- Voluntary program that promotes water efficiency of single-family new homes—both indoors and outdoors
- WaterSense labeled new homes will:
  - Reduce water use in single-family new homes by 20%
  - Educate homeowners about continuing water-efficient behaviors
  - Encourage community infrastructure savings



# WaterSense New Homes Program

- First national new home labeling program for water efficiency
- Works with other green building programs - homes can receive multiple certifications
  - ENERGY STAR®, LEED, NAHB, EarthCraft, etc.
- Inspected & certified by independent third parties
- Recoup initial investment in as little as six years
- Applicable to new single-family homes or townhomes, 3 stories or less



# WaterSense New Homes Specification

- **Indoor**
  - Service pressure
  - Plumbing fixtures
  - Hot water distribution
  - Appliances (if installed)
  - Other equipment (if installed)
- **Outdoor**
  - Landscape design
  - Irrigation (if installed)
- **Homeowner Education**
  - Homeowner's manual





# How the Program Works

Builder partners with EPA and commits to labeling



Home inspected for criteria and any issues addressed



Label certificate issued by licensed certification provider



Builder advertises using builder promotional mark



# In the Pipeline

- Final showerhead specification
  - Completes the residential bathroom product suite
  - Products on shelves in next few months
- Potential Commercial and Institutional program
  - Comments on initial white paper still being accepted
  - Program would focus on hospitality, education, restaurants, office buildings, or hospitals

[http://www.epa.gov/watersense/partners/commercial\\_institutional.html](http://www.epa.gov/watersense/partners/commercial_institutional.html)



# Partner Resources



# Strength in Partnerships

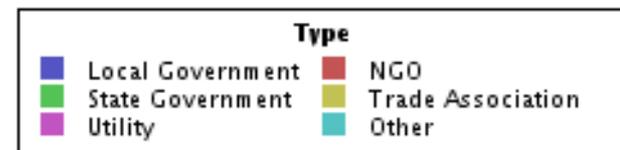
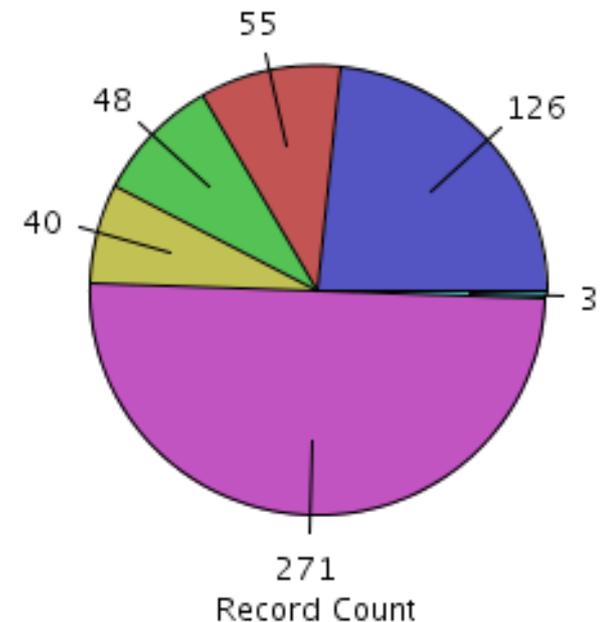
- **EPA** creates specifications with stakeholders
- **Manufacturers** design and create products
- **Certification bodies** test and label products
- **Retailers/Distributors** get products on shelves
- **Promotional partners** spread the word
  - Utilities, State and Local Governments, Nonprofit Organizations
- **Irrigation partners** work with homeowners



# WaterSense Partners

- 540 Promotional Partners
- 135 Retailers/Distributors
- 122 Manufacturers
- 4 Certifying Organizations
- 872 Irrigation Partners
  
- 4 Builder Partners!!!
- 2 Provider Partners!!!

WaterSense Organizational Partners







# WaterSense Partners in NJ

NJ has 52 WaterSense partners!

- 34 Irrigation Partners
- 8 Promotional Partners
- 7 Manufacturers
- 3 Retailer/Distributors



# WaterSense Partners in NJ

- American Standard
- American Water
- Contrac
- Foremost Groups
- Middlesex Water Company
- NJ Board of Public Utilities
- NJ DEP
- NJ State League of Master Plumbers
- Niagara Conservation Corp.
- Porcher
- Quality Bath
- Red Sands Foundation
- SFA Saniflow
- So. NJ Resource Conservation and Development Council
- United Water
- Weinstein Supply Corp.



# Benefits of Participation

- National specifications for water-efficient products and services
- Membership in a network of water efficiency experts
  - Learn new strategies
  - Collaborate with other types of partners
- Participate in national campaigns
- Recognition from EPA as a water efficiency leader



# Conserve Resources

The cheapest gallon of water may be the one you never have to provide.

- Reduces in-house research and outreach needs
- Access to materials, templates, and logo or label
- Tools for promoting WaterSense labeled products, certification programs, and practices



# National News Coverage

- Features in media outlets
  - CNN
  - Today Show
  - Good Morning America
  - National Geographic
  - USA Today
  - Newsweek
- \$16 million in advertising value
- More than 1.2 billion “impressions.”

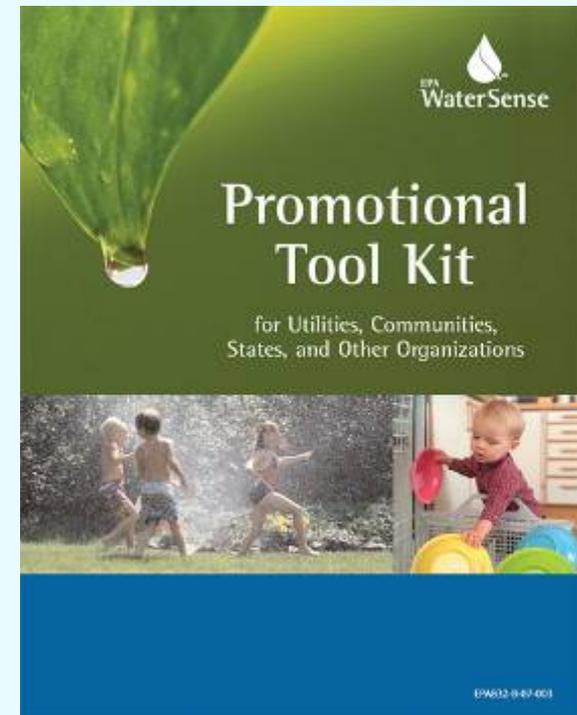




# WaterSense Tools & Resources— Promotional Tool Kit

## Promotional Partners Tool Kit

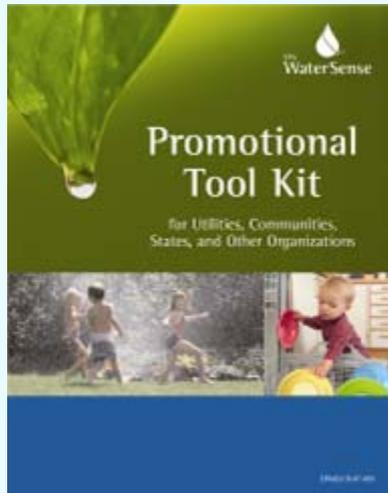
- *Audience:* Utilities, Communities, Water Districts, NGOs, Trade Associations
- General WaterSense marketing materials, fact sheets, media outreach, water bill stuffers





# Sample Partner Resources

## ■ Tool Kits



IMAGINE  
YOUR KIDS  
RUNNING  
THROUGH THE  
WATER SPRINKLER.  
MINUS THE WATER.



It's a fact: the average person unknowingly wastes up to 30 gallons of water every day. But there is something we can do: just practice simple water-saving actions, and that will go a long way in ensuring an adequate water (and sprinkler) supply to the future. Like to learn more? Visit [www.epa.gov/watersense](http://www.epa.gov/watersense).



### Want to Cut Your Water Bill by 10 percent?

Older toilets can use 75 to 80 percent more water per flush than new high-efficiency models. Leaky faucets can waste more than 2,700 gallons of water per year.

Don't let your water and money go down the drain! Look for products with EPA's WaterSense™ label and start saving today!

WaterSense is a voluntary public-private partnership program sponsored by the U.S. Environmental Protection Agency. Its mission is to protect the future of our nation's water supply by promoting and enhancing the market for water-efficient products and services. Learn more by visiting the WaterSense Web site at [www.epa.gov/watersense](http://www.epa.gov/watersense).



Your logo here

- Bill stuffer, magnet, and water bottle templates

## ■ PSAs





# WaterSense Tools & Resources— Labeling & Sales Tool Kits

## Labeling Tool Kit

- *Audience:* Manufacturers, Certifying Organizations
- Marketing/branding materials, training, fact sheets, point-of-purchase displays



## Sales Tool Kit

- *Audience:* Retailers, Distributors
- Marketing/branding materials, in-store promotional materials, advertising concepts, fact sheets, training and informational materials for sales staff





# WaterSense Kids Web Site

- Includes:
  - Why save water
  - Simple ways to save water
  - Test Your WaterSense game for kids
  - Where to find water-saving products
  - Teacher's curriculum

EPA WaterSense  
**KIDS**

HOME

WHY SAVE WATER

SIMPLE WAYS TO SAVE WATER

GAME

PARENTS: Find Water-Saving Products

**THIRSTY FOR KNOWLEDGE?**

**LET'S LEARN ABOUT WATER!**

Do you know how much water a family of four uses every day in the United States? Not 50 gallons, not 100 gallons, but 400 gallons! You could take up to 10 baths with that much water—but who would want to do that? Fortunately, there are many things we can do to save.

EPA WaterSense



# Partner Communications

- Partner Forum
  - Quarterly webcast conference call for partners
- *Partner Pipeline*
  - Quarterly eBulletin with partner-specific information
- *The WaterSense Current*
  - Quarterly newsletter for the public and your constituents
- Other
  - Partner recognition
  - Specification announcements
  - Conferences, news publications, etc.



# Partner Responsibilities



## What Do Partners Do?

- Promote indoor and outdoor water efficiency and WaterSense labeled products and programs
- Participate in national outreach campaigns and quarterly partner forums
- Submit brief annual update on water-efficiency activities
- Submit award application (Optional)



# Annual Reporting Process

- Annual reporting forms are required from promotional, retail/distributor, and manufacturer partners.
- The forms:
  - Provide opportunity to give feedback
  - Drive direction of the program
  - Help in measuring results
  - Requirement for submitting an awards application
- Annual reporting forms are available at:  
[www.epa.gov/watersense/partners/annual\\_reporting.html](http://www.epa.gov/watersense/partners/annual_reporting.html)



# WaterSense Partner of the Year Awards

Congratulations!



To the 2009 WaterSense®  
Partners of the Year

Recognize WaterSense partners who:

- Help advance the overall mission of WaterSense
- Increase WaterSense brand awareness in a measurable way
- Demonstrate overall excellence in the water-efficiency arena
- [www.epa.gov/watersense/partners/watersense\\_awards.html](http://www.epa.gov/watersense/partners/watersense_awards.html)



# Past Partners of the Year

- **Manufacturer**
  - Kohler (2008, 2009)
- **Retailer/Distributor**
  - Ferguson (2008)
  - Lowe's Companies, Inc. (2009)
- **Irrigation Partner**
  - Tim Malooly (2008)
  - Brian Vinchesi (2009)
- **Promotional Partner**
  - The Saving Water Partnership, Washington (2008)
  - Cobb County Water System, Georgia (2009)
  - James City Service Authority, Virginia (2009)





## Partner Collaboration



## Example #1: Fix a Leak Week



- Week to remind Americans to check their homes and irrigation systems for leaks
- WaterSense partners promoted event across the country March 16–20, 2009
- National pledge on WaterSense Web site



# Results

- Demonstration project kickoff event in Phoenix, AZ
- More than 175 media hits
  - Reaching more than 100 million readers
  - Ad value of at least \$75,000+
- 488 pledges in 36 states
- 2010 Fix a Leak Week scheduled for March 15-21





## Example #2: Greater Gallatin Toilet Trade Out (G2T2)

- The players:
  - City of Bozeman, Montana
  - Kohler Co.
  - Ferguson Enterprises
  - A local citizen, plumbers, and state representative
- The gameplan:
  - Educate citizens
  - Provide discounted WaterSense labeled toilets





# Results

- 312 rebate applicants
  - About 3 percent of city accounts
- 875 WaterSense labeled toilets installed
- Estimated water savings of 3 to 3.5 million gallons per year
- Success due to the broad-based partner collaboration

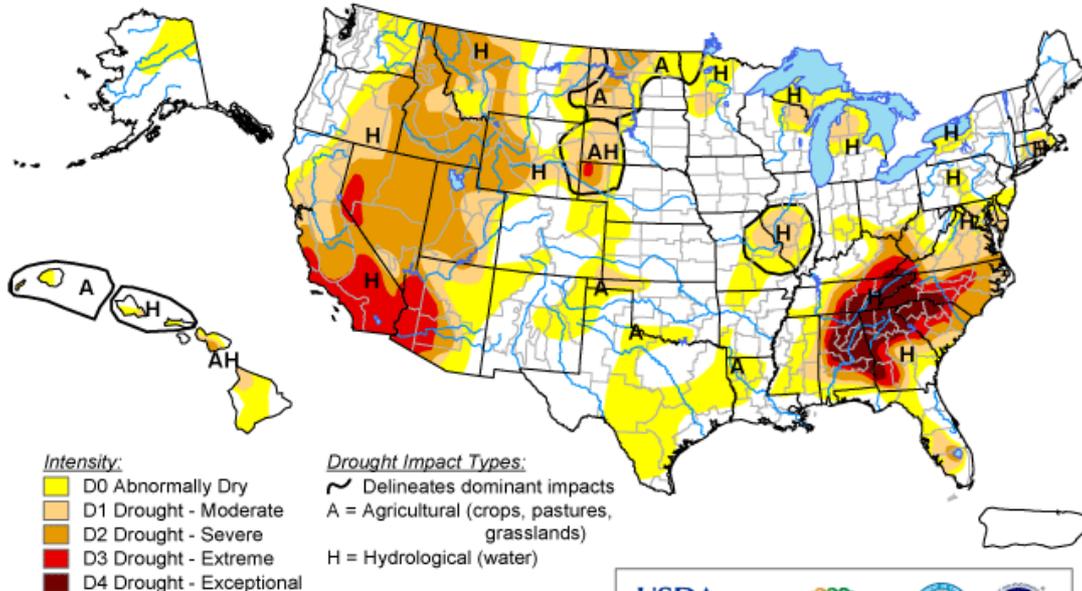




# Example #3: Georgia Sales Tax Holiday

## U.S. Drought Monitor

November 13, 2007  
Valid 7 a.m. EST



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://drought.unl.edu/dm>



Released Thursday, November 15, 2007  
Author: Douglas Le Comte, CPC/NOAA

## Driving Factors

- Drought in 2007–2008 in the Southeast
- Tough economic climate



# Coverage and Results

- 100 print, online, and radio broadcasts statewide
- 127 television broadcast segments
- More than 250 rebates
- Potential water savings - 4 million gallons per year
- Increased local availability of WaterSense labeled products



TheAtlanta  
Journal-  
Constitution

# Case Studies to Curtail Potable Water Waste

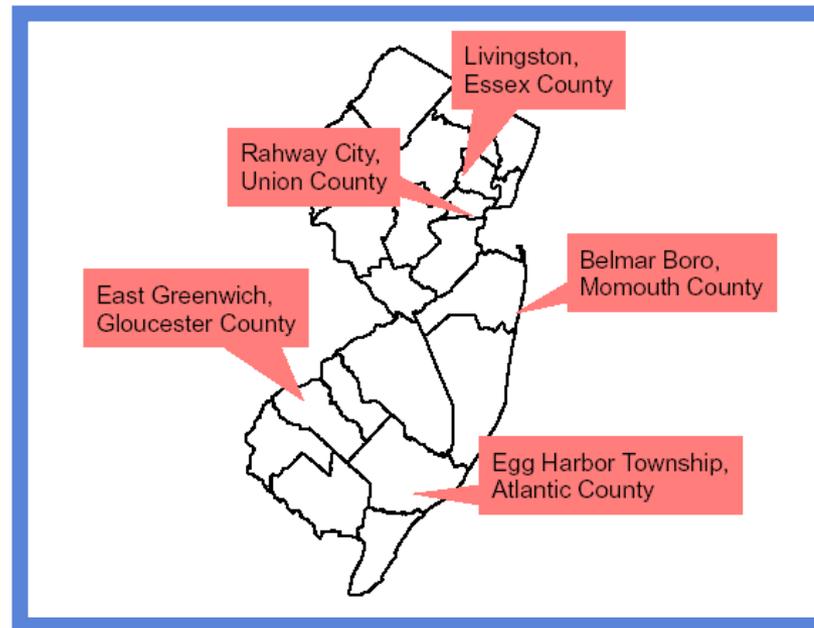
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**NEW JERSEY**  
**WATER SAVERS**

The logo for New Jersey Water Savers features the words "NEW JERSEY" in a green, sans-serif font on the top line. Below it, the words "WATER SAVERS" are in a blue, sans-serif font. The letter "A" in "WATER" is replaced by a blue water droplet icon.

# Pilot Program Study Areas

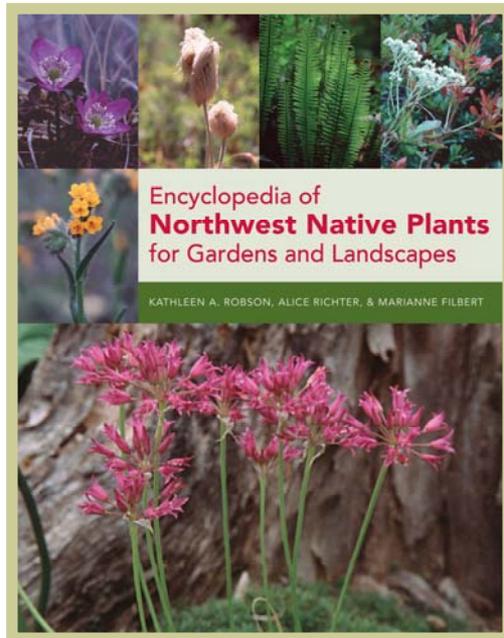
- The water conservation program is being implemented and studied in five municipalities from across the state:



# Pilot Program Projects:

## Outdoor Demonstration Projects

- Rain gardens, native plant gardens, lawn retrofits, SMART irrigation systems



# Pilot Program Projects:

## Rain Barrel Programs

- One Barrel at a Time Artist Co-op
- Build A Rain Barrel Workshops



# Pilot Program Projects:

## Indoor retrofits in public buildings

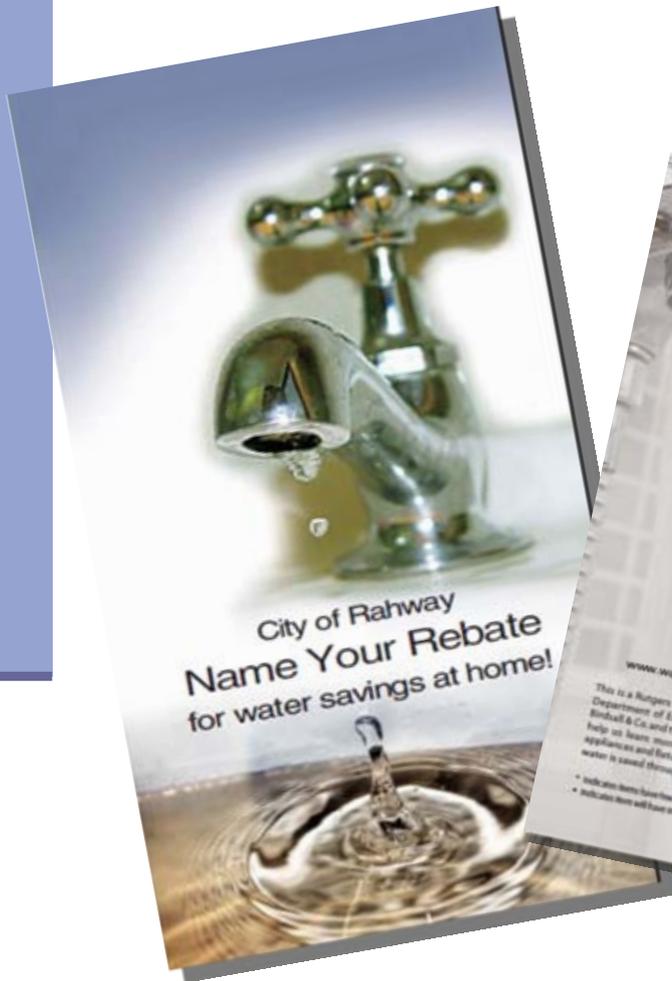
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- Retrofit lavatories in schools in Belmar, East Greenwich & Livingston
- American Standard donated 1.28 gpf toilets, pint and/or waterless urinals, 0.5 gpm faucets & sinks

The logo for American Standard, featuring the words "American Standard" in a blue, cursive script font, enclosed within a thin, light green rectangular border.

*American  
Standard*

# Pilot Program Projects: 'Name Your Rebate' Pro



### What is saving water worth to you?

The Name Your Rebate program is designed to allow you to bid on the price you are willing to pay for products that save water.

**This program is a one-time-only offer to the City of Rahway residents and allows those selected to:**

- Purchase top-of-the-line household products at a reduced rate;
- Save money on water, sewer and electric bills; and
- Help conserve New Jersey's precious water supply.

It's easy to save money and water! Just go to the list of appliances and fixtures (see [www.water.rutgers.edu](http://www.water.rutgers.edu)) and let us know the amount you'd like to receive if you were in the market for any of these items. If your bid is selected, you will be notified by March 31, 2010.

For more information visit: [www.water.rutgers.edu](http://www.water.rutgers.edu) or call (732) 396-5274.

This is a Rutgers University pilot program funded by the New Jersey Department of Environmental Protection, American Standard, W.A. Bondell & Co. and the Home Depot. This rebate program is designed to help us learn more about how much people are willing to pay for appliances and fixtures that conserve water and ultimately how much water is saved through the use of these appliances and fixtures.

\* Indicates items have free delivery  
\*\* Indicates items will have instant rebate. All other items will be mailed to residents.

### Name Your Rebate Application

To bid on a rebate for the listed water-saving item, complete this form and mail it by March 1, 2010 to Michele Bakary, Rutgers Cooperative Extension, 42 Blue Ave., New Brunswick, NJ 08902.

If you have any questions, please call the Rahway Name Your Rebate hotline at (732) 396-5274 or e-mail Michele Bakary at [mbakary@njrc.rutgers.edu](mailto:mbakary@njrc.rutgers.edu)

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
E-mail: \_\_\_\_\_

**INSTRUCTIONS:**  
Check off the amount you would like to receive as your rebate, if selected in the program. You can bid on more than one item.

**TERMS & CONDITIONS:**  
Help us determine if these water conserving devices make a difference. Please check here to allow Rutgers to review your household water use, as provided by your water company.  
 Fax only

<p>American Standard Cadet 3 Flush Valve Toilet - round bowl Save up to 12,110 gallons and an average of 148 per year</p> <p>Full Price: \$140 + tax</p> <p>1% ... 10% ... 20% ... 40% ... Other %</p>	<p>American Standard Cadet 4" Single Handle Bath Faucet Save up to 12,140 gallons and an average of 152 per year</p> <p>Full Price: \$46.95 + tax</p> <p>1% ... 10% ... 20% ... 40% ... Other %</p>
<p>American Standard Cadet 3 Flush Valve Toilet - elongated bowl Save up to 12,110 gallons and an average of 148 per year</p> <p>Full Price: \$140 + tax</p> <p>1% ... 10% ... 20% ... 40% ... Other %</p>	<p>American Standard Whitfield 4" Bath Faucet Save up to 12,140 gallons and an average of 152 per year</p> <p>Full Price: \$48 + tax</p> <p>1% ... 10% ... 20% ... 40% ... Other %</p>
<p>Gorham Avalonite Toilet - round bowl ** Save up to 12,110 gallons and an average of 148 per year</p> <p>Full Price: \$203 + tax</p> <p>1% ... 10% ... 20% ... 40% ... Other %</p>	<p>American Standard Williamsburg 8" Bath Faucet Save up to 12,140 gallons and an average of 152 per year</p> <p>Full Price: \$85 + tax</p> <p>1% ... 10% ... 20% ... 40% ... Other %</p>
<p>Toto Drake II Toilet - elongated bowl ** Save up to 12,110 gallons and an average of 148 per year</p> <p>Full Price: \$230 + tax</p> <p>1% ... 10% ... 20% ... 40% ... Other %</p>	<p>Moen Flagstone One Handle Kitchen Faucet w/ Sprayer ** Save up to 12,140 gallons and an average of 152 per year</p> <p>Full Price: \$46.75 + tax</p> <p>1% ... 10% ... 20% ... 40% ... Other %</p>
<p>Hansgrohe Cromo E 75 EcoAIR Showerhead ** Save up to 12,827 gallons and an average of 154 per year</p> <p>Full Price: \$24 + tax</p> <p>1% ... 10% ... 20% ... 40% ... Other %</p>	<p>EG Electronics 4D-Cu PL Large Capacity Front Load Washer Model # LGWDC1000W Save up to 6,426 gallons and an average of 238 per year</p> <p>Full Price: \$288 + tax</p> <p>1% ... 10% ... 20% ... 40% ... Other %</p>

# Pilot Program Projects:

## Water Wise New Home by Doebley Construction

### Followed EPA WaterSense Draft Specifications for New Homes

#### Home Features:

- WaterSense certified toilets and bath faucets,
- EnergyStar washer & dishwasher,
- Recirculator,
- Smart irrigation system installed by a WaterSense licensed contractor,
- Low water using turf and gardens designed by a NJ MasterGardener



**Upgrade Costs Total- \$ 6551.98**

# Pilot Program Projects: Education in the Schools

## Heritage Middle School Courtyard SUSTAINABLE WATER USE

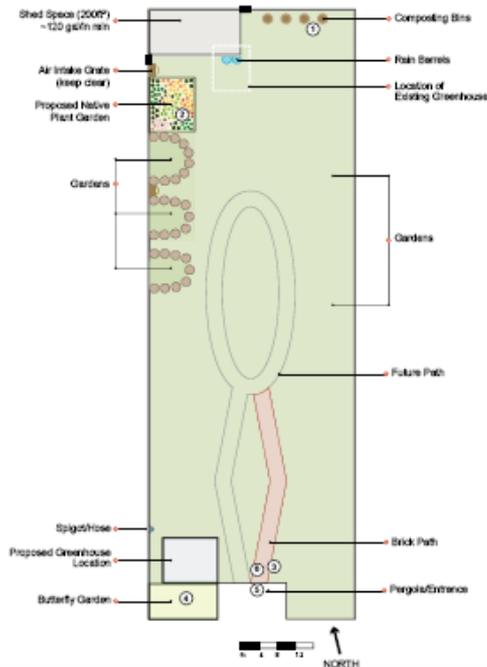


COURTYARD LOCATION

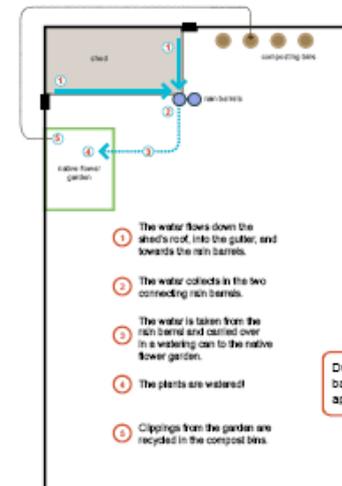
This project is a collaboration between the New Jersey Department of Environmental Protection, Rutgers Cooperative Extension and the Heritage Middle School Garden Club. With a grant from the US Environmental Protection Agency and the NJ Department of Environmental Protection, we will construct a rain barrel and a native plants demonstration garden to educate the public about sustainable water use. This project will not only benefit the students of Heritage Middle School by beautifying their courtyard garden, providing a great hands-on learning experience and creating necessary storage for gardening supplies; it will also promote water conservation and foster a better understanding of sustainable practices for the residents of Livingston. We are proud to announce that Livingston is one of five towns involved in the Rutgers Water Resources Program and N.J.D.E.P. Water Conservation Pilot Program which supports sustainable water use in the state of New Jersey. By participating in this Pilot Program, Livingston becomes an environmentally conscious role model for all of New Jersey.



### SITE PLAN



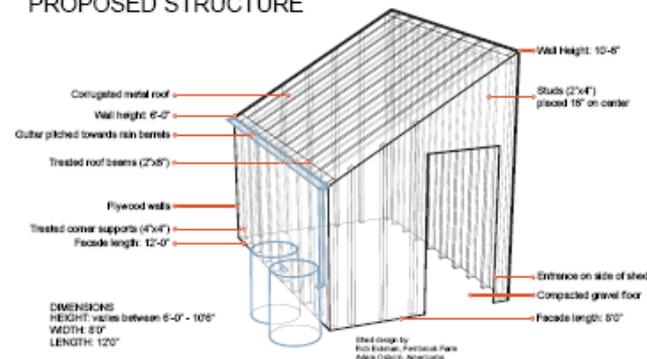
### THE WATER COLLECTION PROCESS



- 1 The water flows down the shed's roof, into the gutter, and towards the rain barrels.
- 2 The water collects in the two connecting rain barrels.
- 3 The water is taken from the rain barrel and carried over in a watering can to the native flower garden.
- 4 The plants are watered.
- 5 Clippings from the garden are recycled in the compost bins.

During a 1" rain storm, each rain barrel can collect and store approximately 60 gallons of water.

### PROPOSED STRUCTURE



**NEW JERSEY  
WATER SAVERS**

a collaborative partnership between:

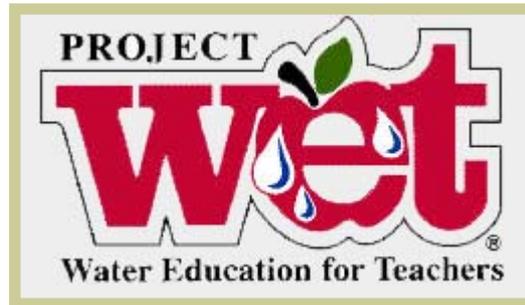


**RUTGERS**  
UNIVERSITY

# Pilot Program Projects:

## Education in the Schools Continued

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# Pilot Program Projects:

## Water Champions Project

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- Mini Service Learning Project with Rahway Schools, NJ Watershed Ambassadors, & EPA Region 2
- Goal- Educate high school youth about WaterSense & water efficiency and mobilize them to educate the community about WaterSense.

# Pilot Program Projects: Education & Outreach in the Community

- Participation in Community Events
- Monthly Give-A-Ways



# Infusion of EPA's WaterSense into NJ's Programs

- Promotion & use of WaterSense products & services;



When the future of your water supply is on the line...

Answer the call with WaterSense.

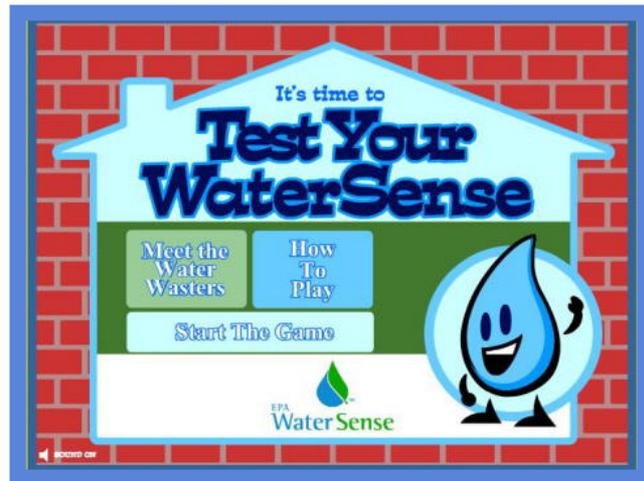
A young boy with dark skin and curly hair, wearing a white polo shirt with green stripes, is shown in profile drinking water from a clear glass. The background is a plain, light color.

EPA WaterSense

[www.epa.gov/watersense](http://www.epa.gov/watersense) ■ (866) WTR-SENS (987-7367) ■ [watersense@epa.gov](mailto:watersense@epa.gov)

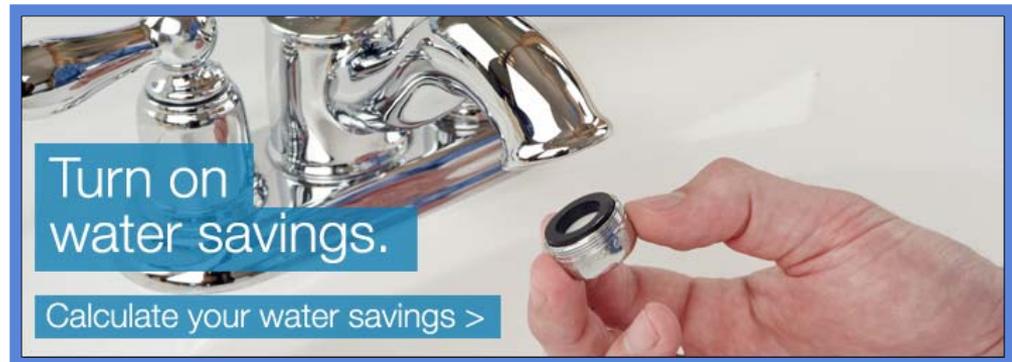
- Use of water conservation graphic art

# Infusion of EPA's WaterSense into NJ's Programs



- Incorporation of water conservation kids curriculum in our school programs.

- Use of WaterSense Website & Features





## What Can You Do?

- Become a WaterSense partner
  - [www.epa.gov/watersense/partners/join/index.htm](http://www.epa.gov/watersense/partners/join/index.htm)
- Educate your customers about WaterSense
- Promote WaterSense labeled products
- Recruit new WaterSense partners
  - Irrigation professionals and builders
  - Promotional partners, retailers, manufacturers
- Help launch new homes program locally
- Comment on potential commercial program



## More Information

- WaterSense Information
  - Web site: [www.epa.gov/watersense](http://www.epa.gov/watersense)
  - E-mail: [watersense@epa.gov](mailto:watersense@epa.gov)
  - **Toll-free Helpline:**  
**(866) WTR-SENS (987-7367)**
- New Jersey Conservation Program Information
  - [Katie.barnett@dep.state.nj.us](mailto:Katie.barnett@dep.state.nj.us)
  - 609-633-0764

