

Green Hospitality & Tourism Workshop

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Water Conservation Measures for Restaurants

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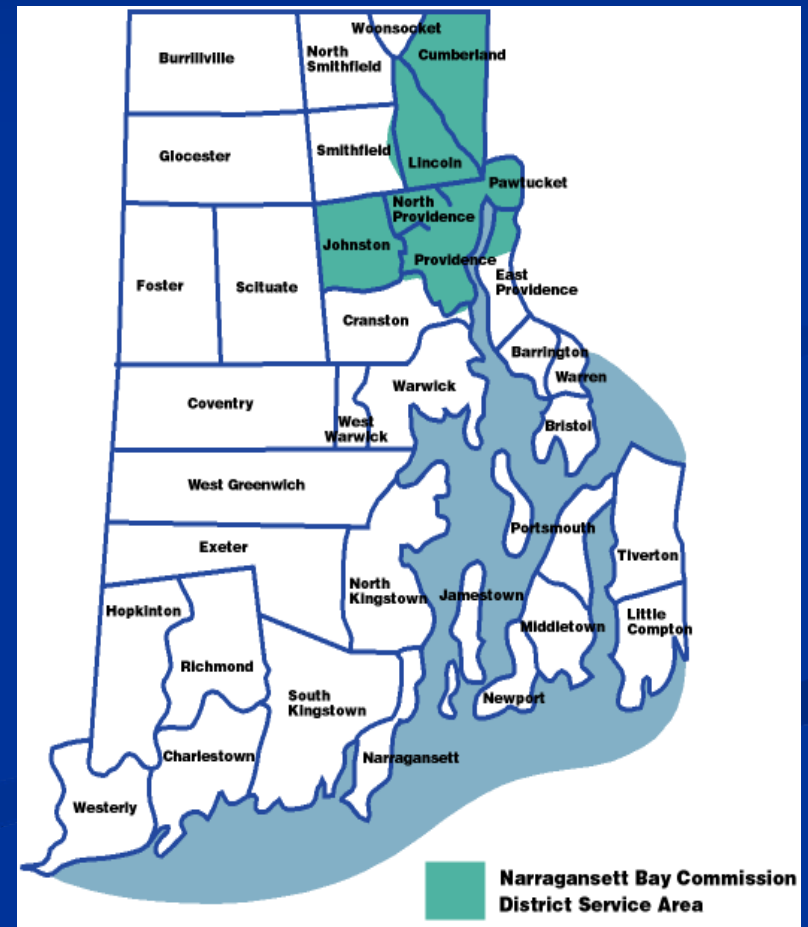
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The Narragansett Bay Commission



The Narragansett Bay Commission Service District Area

- 10 Cities/Towns
- 360,000 People
- 8,000 Businesses
- Sanitary Wastewater
- Industrial Wastewater
- Stormwater Runoff



The Narragansett Bay Commission - NBC



Field's Point - 40 MGD

- 8 % Industrial Flow
- 720 Permitted Users
- 108 SIUs



Bucklin Point - 20 MGD

- 11 % Industrial Flow
- 415 Permitted Users
- 59 SIUs

Other WWTFs in RI

Bristol

Burrillville

Cranston

East Greenwich

East Providence

Jamestown

Scarborough

New Shoreham



Newport

Quonset Point

Smithfield

South Kingstown

Warren

Warwick

West Warwick

Westerly

Woonsocket



Cost of Water Use

- Incoming Water Use Fees - billed by Local Water Authority
- Outgoing Wastewater Discharge Fee – billed by Local Sewer Authority
 - NBC commercial customer bills consist of Fixed Annual Fees plus Consumption Fees
 - Fixed Annual Sewer Use Fee is based on the *size of water meter:* Ranging from 5/8” to 10”
 - Consumption Fees are based on incoming meter readings
- Energy Use Fee to Heating Water – billed by Energy Company (Gas, Electric, Fuel Oil)

Water Meters

- Meter readings are in either:
 - Cubic feet (CF)
 - Hundred Cubic Feet (HCF),
 - or Gallons

(1 HCF = 750 gallons)



Ways to Conserve Water & Save Money

- Install low-flow faucets, toilets, & automatic shut offs.
- Check equipment & pipes for leaks.
- Check your meter for unusual activity during “down hours.”
- Contact NBC for a free Water Audit.



Additional Water Conservation Measures

Employee & Customer Awareness

- Provide table signs urging water conservation,
- Post similar signs in employee and customer restrooms,
- Assign an employee or group to monitor water use and waste generation,
- Keep all staff members informed about water conservation and related practices.

Conservation Measures cont.

Building Maintenance

- Keep hot water pipes insulated,
- Replace old appliances with newer water - saving models,
- Replace wet/steam carpet cleaning methods with dry powder methods,
- Switch window cleaning schedule from periodic to an on-call basis,
- **REPAIR** leaking faucets and running toilets!
 - One leaky toilet can waste >50 gallons of water/day...
 - One dripping faucet can waste 75 – 1,000 gallons of water/week...

Conservation Measures cont.

Kitchen Area

- Avoid using running water to melt ice or thaw frozen foods,
- Purchase new, water-conserving ice makers,
- Turn all dishwashers off when not in use – wash only full loads,
- Replace the spray heads in dishwashers to reduce amount of water flow,
- Rinse utensils and dishes in a hot water basin instead of running water.

Conservation Measures cont.

Bar/Reception Area

- Avoid using running water to melt ice in the sink strainers,
- Installation of automatic shut-off faucets for the bar sink should be strongly considered.

Conservation Measures cont.

■ *Restaurant Exterior*

- Only water lawn & garden areas when needed,
 - One inch of water/week is usually enough to sustain established lawns.
 - Install timed sprinkler systems.
- Strongly consider capturing roof run-off for reuse!
 - **Rain Barrels** and industrial-sized **Rain Cisterns**.

Rain Barrels



Avg. cost: \$200

Cisterns

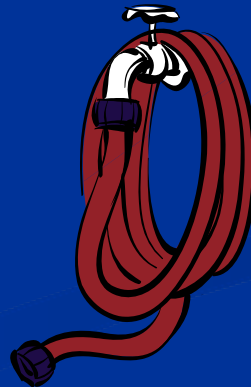


Avg. cost: Varies depending on type of material and holding capacity.

One inch of rain falling on a 1,000 ft² roof yields about 600 gallons of re-useable water...

NBC's Water Audit Program

- Free, on-site, non-regulatory, & voluntary service for commercial & industrial users.
- Receive an accurate profile of your business's water consumption and get recommendations that may reduce your water use fees, sewer use fees, and energy costs.



Questions?



Customer Service Department – 461-8848
Environmental, Safety & Technical Assistance
Section – ext. 418