Water: Too Much or Too Little?
What you can do to protect & conserve

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Presentation Topics

- Water - Too Much, Too Little?
- Private Well Water Protection
- Septic System Maintenance
- Stormwater Runoff
- Water Conservation

Resources: Riclimatechange.org
Background

- The Northeast has experienced greater increase in extreme precipitation events – very wet and very dry
- Increase severity of storms & heat waves
- Droughts may be more intense
- Coastal & river flooding
- Public health, agriculture, transportation, communications & energy systems face climate change-related challenges

Heavy Downpours Increasing

Percent increase from 1958 to 2012 in the amount of precipitation falling in very heavy events.

Very Heavy Precipitation is defined as the heaviest 1% of all daily events from 1958-2012.

Source: Kenneth Kunkel, Cooperative Institute for Climate and Satellites, North Carolina State University and NOAA NCDC
A Watershed – rich in water resources
A Watershed – rich in water resources

Groundwater resources
Photo credit: Laurel Street at Potter Hill Dam. Danielle R. Aube, 3_31_2010
We Can Do It!
Summary from 1\textsuperscript{st} lecture

• Preserve & restore integrity of natural areas in the watershed
• Be prepared
• Get out of low-lying areas
Invest in Water Quality

At Home
Invest in Water Quality

In Our Communities
Private Well Protection

- Regular Testing
- Proper maintenance, construction & siting

Resource: riwelltesting.org
Well Water Protection

Learn:

- Where the well is located on your property.
- What is going on around the well.
- What type of well you have.
- What the water test results mean.
When to test

- Follow the Well Testing Schedule
- If the well flooded – disinfect, then test
- If you notice a change in the taste, color, or smell

Resource: riwelltesting.org
Maintenance Issues

- Wellhead is at least 18” above the ground.
- Well cap is on tight and sealed.
- Well casing is grouted and water tight.
- Well is located away from potential pollution sources.
- Work on well should be done by a registered well driller/pump installer.
- Keep stormwater runoff away from your well.
Minimum Distances from Potential Sources of Pollution

- **Sewer Line**: 50 feet
- **Road Surface**: 100 feet
- **Septic Tank**: 75 feet
- **Septic System Drainfield**: 100 feet
- **Animals**: 100 feet

**Septic Tank**
How can a septic system affect **groundwater** and **well water** quality?

**Septic system discharge = groundwater recharge**

- Septic system wastewater
- Water table
Septic System Maintenance

- Have system inspected and pumped as needed
- Only household wastewater down the drain

Watershed Communities with Wastewater Management Program
- Charlestown
- Exeter
- Hopkinton
- North Kingstown
- Richmond
- South Kingstown

Resources: [www.uri.edu/ce/wq/OWT/Factsheets](http://www.uri.edu/ce/wq/OWT/Factsheets)  
Stormwater Solutions

✓ Protects & conserves water resources
✓ Is your yard a sponge?

Rain barrel

Resource: ristormwatersolutions.org

Rain garden
CE Outreach Center
web.uri.edu/ceoc/
Water Conservation

- Saves Money
- Saves Energy
- Reduces Pollution
- Helps to Reduce Effects of Drought

Resource: riwelltesting.org
Outdoor Water Conservation

✓ **Fescue** to the Rescue
  ✓ Requires less water, fertilizer & pesticides
  ✓ Drought tolerant

✓ Mow high – 2 to 3 inches
✓ Use a rain gauge – 1” per week is rule of thumb
✓ Slow, deep waterings are best
✓ Use drought tolerant plants
✓ Mulch, add compost

Resource: web.uri.edu/safewater
Indoor Water Conservation

• Your turn – what are your indoor water conservation practices?

• Check and fix leaks

• Install water conservation fixtures and appliances

Resource: riwelltesting.org
Stay Involved / Get Involved

✓ Volunteer
  • Water Quality monitors are eyes & ears of the watershed
  • Data identify problems & high quality resources that afford protection
  • Connect with your community’s stormwater program

✓ Support efforts to preserve and restore integrity of natural areas in the watershed

✓ Invest in Water Quality

✓ Your Thoughts & Suggestions
Thank you!