

# CLEAN BUSINESS IN A WATERSHED

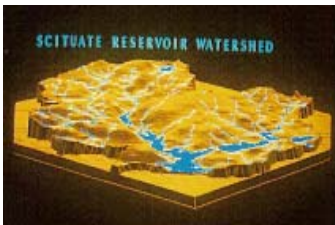


## The Scituate Reservoir Watershed Education Program

### Passing On Clean Water

Northern RI  
Conservation District  
17 Smith Avenue  
Greenville, RI 02828  
(phone) 401-949-1480  
[www.landwaterconnection.org](http://www.landwaterconnection.org)

Providence Water  
552 Academy Avenue  
Providence, RI 02908  
(phone) 401-521-6300  
[www.provwater.com](http://www.provwater.com)



Above is a 3-D image of the Scituate Reservoir Watershed.

Portions of Foster, Gloucester, Johnston and Scituate comprise this land area.

The Scituate Reservoir, lying in the lowest part of this land area, catches all water flowing over this watershed.

The Scituate Reservoir is a major source of drinking water in Rhode Island.

### Contents:

March Issue, *Volume 9*: What is stormwater?

July Issue, *Volume 10*: Sugrue Engineering, Northland Seamless Gutters and Scituate Animal Hospital demonstrate how to actively minimize stormwater in Scituate Village

This Issue, *Volume 11*: Famous Pizza and Bentley's Tavern demonstrate how to actively minimize stormwater in Scituate Village

## Managing Stormwater is cost-effective

In Volume 9 of Clean Business, you learned that stormwater is one way that pollution finds its way into water bodies faster and in larger quantities than in a normal situation. Volume 10 discussed techniques that a few businesses in Scituate Village have incorporated to minimize stormwater, while decreasing landscaping and lawn maintenance costs. A total of five businesses located on the Southeast corner of Hartford and Greenville Pikes agreed to participate in an outreach program aimed at educating property owners about the cost of stormwater. This bulletin highlights the stormwater management techniques incorporated by the remaining two businesses, each owned and operated by Rick Lang. Page 2 (back) shares a few other innovative ideas for minimizing the effects of stormwater.

[The full story of Scituate Village Stormwater Mgt can be viewed on the NRICD website, at [www.nricd.org/landwaterconnection/stormwater.htm](http://www.nricd.org/landwaterconnection/stormwater.htm) ]



## Businesses profit by engaging techniques to minimize stormwater

### Famous Pizza & Bentley's Tavern

[Restaurants located at 92 Hartford Pike, North Scituate]

These two restaurants, owned and operated by Rick Lang, are distribution locations for literature on nonpoint source pollution reduction, well water testing and rain gardens. Additionally, Famous Pizza has installed a poop scooping station for customers to use.

### *What is nonpoint source pollution reduction?*

Reducing nonpoint source pollution means using easy and thoughtful methods to minimize or alleviate pollution from daily, human activities. Examples would be properly cleaning up and disposing of automotive fluids instead of disposing of them in storm drains or driveways; picking up pet waste; using proper amounts of pesticides and fertilizers for a given area and even using natural/organic alternatives; and washing cars in grassy areas rather than on pavement, using phosphate-free, nontoxic soaps or using a car wash where the water is contained and recycled.

### *How will reducing nonpoint source pollution profit my business?*

> *Save Money!* Most techniques that minimize nonpoint source pollution are natural, cheaper, and require much less maintenance.

## REMEMBER : There are two methods for minimizing stormwater:

1. Limiting amounts of stormwater created = *finding alternatives for impervious surfaces*
2. Limiting pollutants loading into the stormwater = *minimizing nonpoint source pollution*

### Make an Impact by Taking Action

You can participate in stormwater management by implementing one of the following: “10 Things You Can Do to Prevent Stormwater Runoff Pollution”

([www.epa.gov/npdes/pubs/nps\\_month\\_bookmark.pdf](http://www.epa.gov/npdes/pubs/nps_month_bookmark.pdf)):

1. Use fertilizers sparingly and sweep up driveways, sidewalks, and gutters.
2. Never dump anything down storm drains or in streams
3. Vegetate bare spots in your yard
4. Compost yard waste
5. Use least toxic pesticides, follow labels, and learn how to prevent pest problems
6. Direct downspouts away from paved surfaces; consider a rain garden to capture runoff  
(Directing downspouts and pavement runoff away from wells will minimize drinking water pollution)
7. Take your car to the car wash instead of washing it in the driveway
8. Check your car for leaks and recycle your motor oil
9. Pick up after your pet
10. Have your septic tank pumped and system inspected regularly



[www.raingardens.org](http://www.raingardens.org)



<http://www.uri.edu/ce/healthylandscapes/raingarden.htm>

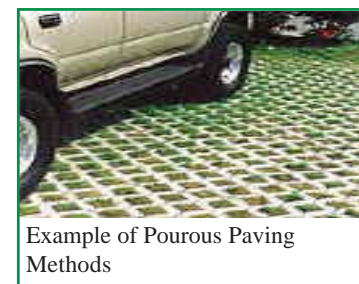
### INNOVATIVE WAYS TO MINIMIZE STORMWATER

Being conscious of where nonpoint source pollution is coming from will allow property owners to make preventative decisions and can significantly decrease the detrimental affects of stormwater. In addition to the above steps for stormwater management, you can incorporate innovative designs like rain gardens, green rooftops, or porous pavements into your property. Once implemented, each mechanism helps alleviate flooding and therefore minimize drinking water pollution.

A “**rain garden**” is a man-made depression created as a landscape tool to improve water quality. A rain garden is purposely situated in the landscape to catch stormwater runoff from parking lots, driveways, and roofs. The stormwater is collected and stored in the rain garden; permitting it to be filtered and slowly absorbed by the soil. A nutrient removal or “filtering” process takes place as the water comes in contact with the soil and the roots of the trees, shrubs and vegetation. This process naturally improves water quality. The first flush of rain water is ponded in the depression of the rain garden, and contains the highest concentration of materials washed off impervious surfaces such as roofs, roads, and parking lots. Visit NRICD’s website (<http://www.nricd.org/landwaterconnection/stormwater.htm>) to learn more about rain gardens.



[www.greenroofs.org](http://www.greenroofs.org)



Example of Porous Paving Methods

Green rooftops and porous driveways are two other mechanisms for slowing the flow of stormwater, allowing time for increased infiltration. Porous driveways can be as simple as putting gravel in the driveway instead of asphalt, or replacing walkways with cobblestones that are logically spaced to allow for soil between. **Porous pavers** present a surface with “holes” which can be filled with vegetation or aggregate. Porous/permeable pavers provide the same advantages as traditional concrete pavers, including resistance to heavy loads, flexibility of repair, low maintenance, exceptional durability, and high quality. **Green rooftops** are an ancient Mesopotamian solution to urban runoff. A green roof – also known as a vegetated roof – is a lightweight, engineered roofing system that allows for the propagation of rooftop vegetation while protecting the integrity of the underlying roof. Green roofs provide important environmental and human health benefits including ameliorating the urban heat island effect, lowering energy expenditures, purifying the air, and reducing stormwater runoff.