

## Resources

**Winooski Natural Resources Conservation District Rain Barrel / Garden Info**  
[vacd.org/winooski/winooski\\_rainbarrels.shtml](http://vacd.org/winooski/winooski_rainbarrels.shtml)  
[vacd.org/winooski/winooski\\_raingarden.shtml](http://vacd.org/winooski/winooski_raingarden.shtml)

**South Burlington Low Impact Development (LID) Manual**  
[www.sburlstormwater.com/lid.pdf](http://www.sburlstormwater.com/lid.pdf)

**Smart Water Ways - info on stormwater in Chittenden County:**  
<http://www.smartwaterways.org/>

**VT DEC's Small Sites Guide For Stormwater Management**  
[http://www.anr.state.vt.us/dec/waterq/stormwater/docs/swimpairedwatersheds/sw\\_rda\\_small\\_sites\\_guide.pdf](http://www.anr.state.vt.us/dec/waterq/stormwater/docs/swimpairedwatersheds/sw_rda_small_sites_guide.pdf)

**Mid-America Regional Council Environmental Programs Downspout Redirection Instructions**  
[www.marc.org/Environment/Water/downspout.htm](http://www.marc.org/Environment/Water/downspout.htm)

**Urban Design Tools for Low Impact Development**  
[www.lid-stormwater.net](http://www.lid-stormwater.net)

**National Low Impact Development (LID) Atlas**  
<http://clear.uconn.edu/tools/lidmap/>

### For more information

To find out more about runoff in the Lake Champlain Basin, including details on each of these featured home improvements, visit the Lake Champlain Basin website's stormwater page:  
[www.lcbp.org/stormwater](http://www.lcbp.org/stormwater)



**South Burlington**  
Stormwater Services

### About SBSS

South Burlington Stormwater Services, Vermont's first stormwater utility, provides ongoing stormwater system maintenance, upgrades, and technical support for property owners.

The Utility manages stormwater in a cost-effective way for all residential and business property owners.

For more information about South Burlington Stormwater Services please visit:

[www.sburlstormwater.com](http://www.sburlstormwater.com)



These materials were developed in conjunction with the Lake Champlain Basin Program.

For more information, visit

[LCBP.org](http://LCBP.org)

# Reducing Stormwater Runoff From Your Home

The Lake Champlain watershed typically receives 35 inches of rain annually but we rarely think about where the rain goes and its impact on our environment.



**Look inside to see some simple tips to reduce your home's impact on our lake...**

# The Facts:

- **One acre of developed land** typically sends as much phosphorus to the lake as **three acres of agricultural land**
- During a heavy rainfall, one downspout can drain as much as **12 gallons of water per minute**
- For **as little as \$30 or less**, you can greatly reduce your home's impact on the lake

## Why Runoff is a Problem



When rain falls on towns and cities, it flows off hard or “impervious” surfaces like roofs, driveways, and sidewalks into the storm drain system instead of soaking into the ground. This increased volume of runoff called “stormwater” can cause stream bank

erosion and water pollution.

In the City of South Burlington, one in three homes has a downspout, or vertical pipe for carrying rainwater from a gutter to ground level, that empties into the City’s storm drain system. Redirecting your downspout is an easy first step toward reducing the impact your home has on our waterways.

# Some simple ways to reduce runoff from your home

## Downspout Redirection

Redirecting roof runoff can be as simple as adding a downspout extension. These are plastic (PVC) or metal extensions that attach to the bottom of your existing downspout and direct runoff to your lawn. The extension should carry your roof runoff at least three to five feet away from your home to prevent any water damage to your home or foundation. Keep in mind that not all sites are well suited for simple redirection. If your lawn is small compared to your roof, or if the slope of your lawn is too steep, consider installing a rain barrel or a rain garden instead.



Top: Example of a downspout extension

Middle: Rain garden illustration courtesy RainGardens.org



Bottom: Example of a rain barrel, courtesy [www.innercityfarmer.com](http://www.innercityfarmer.com)

## Rain Barrel

Installing a rain barrel or series of rain barrels at the end of your downspouts allows you to store rain water for later use. Stored water can be used for watering your lawn or garden, or washing cars and will save money on your water bill. A pre-made rain barrel can cost as little as \$60 or you can make your own for less.

Rain barrels are covered with a mesh screen so they don’t become mosquito habitat and are available at local hardware and garden supply stores.

## Rain Garden

Rain gardens can range in size from small, simple gardens for the average homeowner to large, complex bioretention gardens. Rain gardens absorb 30% more water than the equivalent area of a typical lawn, and the root systems of the plants and layers of porous soil provide even more capacity to filter pollutants. Redirecting a downspout to a rain garden will not only help reduce flooding and pollution, but will also attract birds and pollinating insects, adding to the biodiversity in your neighborhood.