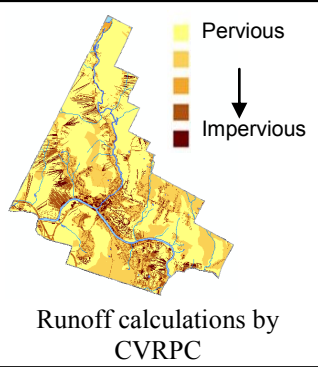




As more land is developed, the area of impervious surfaces and amount stormwater runoff increases. Rapid, unplanned urbanization can have negative impacts on water resources which can increase flooding events. The volume and intensity of stormwater runoff can over burden existing drainage infrastructure such as in Barre City in the summer of 2007.



Photo by John Wallace Brocken, Times Argus



During an average rain event, the volume of runoff from impervious surfaces in Barre Town, Barre City, Berlin & Montpelier totals approx. 409 acre feet of water. To put this into perspective, the amount of runoff would fill 76 chain-size drugstores! Imagine the effects of

multiple rain storms within one season. Future development will only compound the problem.

Overall, LID infiltration and filtration practices can reduce the likelihood of flooding downstream thereby decreasing damages to property and infrastructure.



## Low Impact Development

Central Vermont Regional Planning Commission  
29 Main Street • Suite 4 • Montpelier • Vermont 05602  
802.229.0389 • [www.centralvtplanning.org](http://www.centralvtplanning.org)

*For more information check out:*

#### Vermont Manuals

- \* VT Small Sites Guide for Stormwater Management  
[www.anr.state.vt.us/dec//waterq/stormwater.htm](http://www.anr.state.vt.us/dec//waterq/stormwater.htm)
- \* South Burlington LID Manual  
[www.sburlstormwater.com](http://www.sburlstormwater.com)
- \* VT Rain Garden Manual Absorbing the Storm  
[www.vacd.org/~winooski/winooski\\_raingarden.shtml](http://www.vacd.org/~winooski/winooski_raingarden.shtml)

#### New England based web resources

- \* UNH Stormwater Center (Research and resources)  
[www.unh.edu/erg/cstev/index.htm](http://www.unh.edu/erg/cstev/index.htm)
- \* LID Manual for Maine Communities  
[www.maine.gov/dep/blwq/docwatershed/materials/LID\\_guidance/index.htm](http://www.maine.gov/dep/blwq/docwatershed/materials/LID_guidance/index.htm)
- \* Jordan Cove Urban Watershed Project (case study illustrating the benefits of LID in a New England residential subdivision.) [www.jordancove.uconn.edu](http://www.jordancove.uconn.edu)

#### Vermont Organizations

- \* VT DEC Stormwater Section (State office tasked with technical assistance and regulatory oversight)  
[www.anr.state.vt.us/dec//waterq/stormwater.htm](http://www.anr.state.vt.us/dec//waterq/stormwater.htm)
- \* NEMO Network & Lake Champlain Sea Grant (research-based educational outreach programs that emphasize natural resource-based land use planning and better site design) [nemonet.uconn.edu/index.htm](http://nemonet.uconn.edu/index.htm) & [www.uvm.edu/~seagrnt/](http://www.uvm.edu/~seagrnt/)
- \* VLCT Stormwater Program (model and sample regulations, stormwater compliance and planning tools)  
[www.vlct.org/municipalassistancecenter/waterqualityplanning/](http://www.vlct.org/municipalassistancecenter/waterqualityplanning/)
- \* Friends of the Winooski River (Winooski Watershed organization) [www.winooskiriver.org](http://www.winooskiriver.org)
- \* Winooski Natural Resources Conservation District (Conservation assistance and public awareness)  
[www.vacd.org/~winooski/](http://www.vacd.org/~winooski/)

## **Low Impact Development**



- o Bioretention
- o Vegetated Buffer
- o Infiltration basin or trench
- o Porous Pavement
- o Rain Garden
- o Tree wells
- o Vegetated Swale
- o Green Roof
- o Rain Barrel or Cistern
- o Underground Storage