

What is STORMWATER (and why should I care about it)?

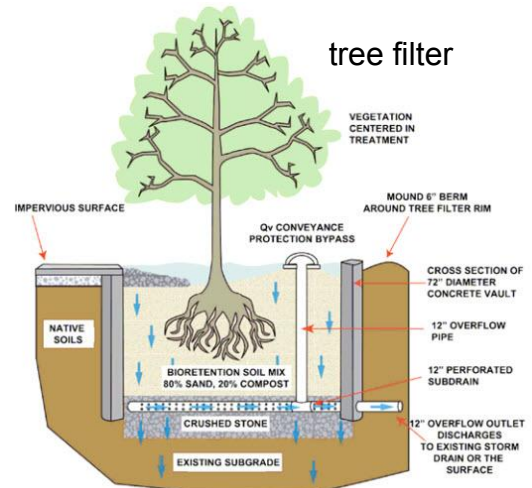
Stormwater is any precipitation that runs over the land surface and does not infiltrate the ground. Runoff that picks up sediments, nutrients, chemicals and pathogens pollutes surface waters. It has been estimated that 83% of the surface water quality impairments in New Hampshire are caused by stormwater¹. The easiest and most effective way to prevent stormwater pollution is to capture it early and infiltrate it into the ground before it has had the opportunity to pick up sediments, chemicals and nutrients from exposed earth and lawns, hydrocarbons from driveways and roads and pathogens from animal waste and . It is much more inexpensive to capture and infiltrate clean runoff than it is to treat polluted stormwater.

We, in Belmont, are fortunate to sit at the very top of our watershed and don't experience the accumulated pollution from upstream that some at the bottom of the watershed do – think Great Bay or Chesapeake Bay. But even here, [Lake Winnisquam](#) and [Silver Lake](#) are on the state and federal “impaired waters” list for some functions such as aquatic life, fish consumption (mercury), recreation (cyanobacteria) and turbidity.

“[Low Impact Development](#)” (LID) for residential and commercial planning and design is a systematic method of managing runoff at the earliest opportunity in order to keep it clean. Rather than capturing stormwater in a curbed road and catchbasins and piping it to a detention pond, or right to a stream or lake, LID uses a number of different elements to keep runoff from becoming stormwater. Practices such as Pervious Pavement, Bio-Retention Swales and Ponds, and Gravel Wetlands capture runoff, especially in the early part of a storm to capture the “first flush” as pollutants are picked up, treated and infiltrated into the ground. Simple devices like [Tree Filters](#) and [Rain Gardens](#) between rows of vehicles in parking lots can easily capture and treat a great deal of the runoff that would normally travel unimpeded to surface water.

A Rain Garden is a simple bio-retention device that any homeowner can build to increase infiltration to groundwater and reduce pollution from stormwater from their property. Planted with native plants, a rain garden is not only attractive, but can attract songbirds and butterflies.

Another easy to implement device for a homeowner is a [Rain Barrel](#), a simple vessel to capture the relatively clean runoff from a roof and storing it to water gardens and lawns.



¹ [Low Impact Development – What it is and why it is important](#); James Houle, CPSWQ, Robert Rosen, PE, PhD, Thomas Ballestero PE PhD PH CGWP PG, Tim Puls, The University of New Hampshire Stormwater Center, 12/16/2011