

What is Low Impact Development? it is...

Thinking Outside The Pipe

Traditional methods for stormwater management involve lots of pipes & paving - concrete, metal, plastic, you name it, treating rain water like it is a **toxic substance**, removing it from residential and commercial property as fast as possible. →

These methods allow little to no infiltration of stormwater, which reduces **nonpoint source pollution** before it reaches our rivers, streams, lakes, and groundwater and slows down the speed of the stormwater, reducing flash floods.



Low Impact Development (LID) mimics nature in its design and construction.

The main components?

← Temporary retention and **infiltration**. The overall goal = reduce runoff, since stormwater runoff is one of the major causes of water pollution. LID techniques trap water on-site, helping it to infiltrate into the ground, cleaning the water *and* replenishing ground water and local streams, lakes and wetlands.

Types of Low Impact Development

Best Management Practices (BMPs):

- ◆ Rain Gardens
- ◆ Vegetated Swales
- ◆ Recessed Street & Parking Lot Islands
- ◆ Pervious Pavement →
- ◆ Green Roofs
- ◆ Rain Barrels & Cisterns
- ◆ Preserved or Constructed Wetlands
- ◆ Shared Driveways & Parking Areas
- ◆ Narrow Street Widths



over for how it works! ➤

How Does Low Impact Development Work?

Low Impact Development Best Management Practices (BMPs) work in a variety of ways:
Reduction in Impervious Surface 💧 Retention & Reuse 💧 Infiltration



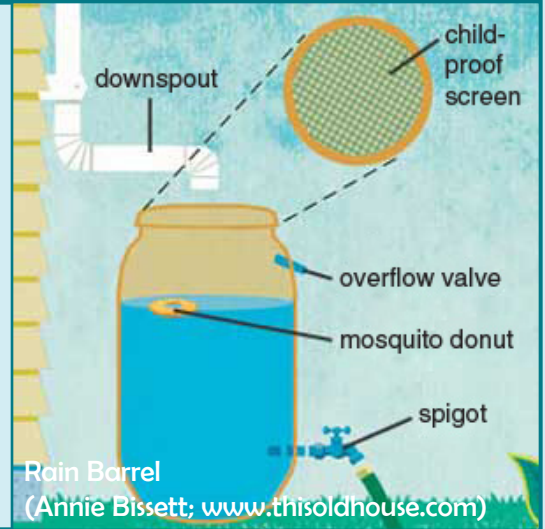
Porous pavement (www.concretedecor.net)

Reduction in Impervious Surface

An impervious surface is any surface that can not be penetrated by stormwater. Simple things like reducing parking lot sizes and road widths, sharing driveways with a neighbor, or investing in porous pavement are all ways to reduce impervious surface, allowing more stormwater to be handled by the natural environment as opposed to municipal stormwater systems and taxpayers.

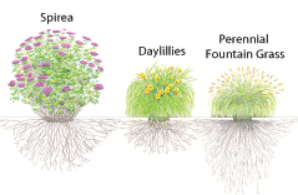
Retention & Reuse

Other types of BMPs are all about storing stormwater on-site - rain barrels and cisterns, constructed wetlands and retention ponds all capture stormwater, vastly reducing runoff. This captured water can be reused as a source of irrigation - for a sprinkler system, watering a garden, or even reused inside the home as "gray water" in things like toilets and dishwashers, saving the homeowner on their utility bills.

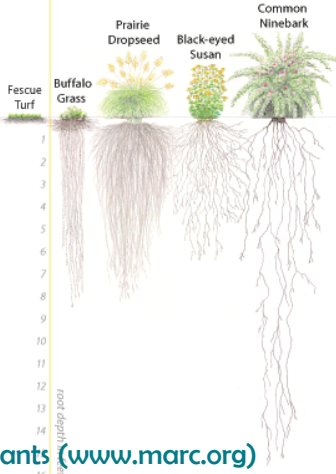


Rain Barrel
(Annie Bissett; www.thisoldhouse.com)

Non-Natives



Natives



The benefits of native plants (www.marc.org)

Infiltration

BMP's such as rain gardens and vegetated swales are designed to mimic the way nature handles stormwater - temporary detention and infiltration. By utilizing creative landscaping with native plants (and their extensive root systems!) and the natural contours of a property, stormwater can collect in a depression planted with deep-rooted plants and slowly infiltrate into the ground, replenishing supplies & reducing runoff.