What you can do as a Developer

U.S. EPA | STORMWATER OUTREACH AT EPA NEW ENGLAND

Credit: South Burlington Stormwater Utility

STORMWATER *is a leading cause of poor water quality. Rain or melted snow runs down driveways, sidewalks and streets carrying oil, dirt and other pollutants into nearby waterways. Polluted runoff, which can cause erosion and flooding, runs into waterways and degrades plants, fish, shellfish and other wildlife. In water used for recreation, the runoff can lead to illness, and people who eat contaminated fish can also become sick. Untreated stormwater can also contaminate drinking water sources.*

INTRO:

Development has sprawled across New England over the past few decades, consuming farms and forests two times as fast as the population is growing. Past developnment practices have created more roads, driveways and roofs so that water that used to seep into the ground now runs across pavement, picking up chemicals and pollutants. This stormwater then flows into nearby waterways, both polluting them and scouring their banks. Local zoning often unintentionally encourages sprawl, but this is beginning to change. Some developers are leading the way with better – and often cheaper – ways to develop. Here are some of their practices:

USE INNOVATIVE DEVELOPMENT PRACTICES:

Select your site wisely — Developing in an already-developed area can lower infrastructure costs because sewer, water, utilities and roads may be available.

Choose the areas of your site to develop carefully — You can avoid putting the development where it will have an effect on important natural resources. In addition, you can cluster buildings and leave at least half of the property undeveloped so that it can handle rainwater through natural resources. This will reduce costs and add to open space.

Use Low Impact Development (LID) practices — Roads, parking lots and other non-porous areas are the largest contributors to stormwater runoff. Generally the less porous the area, the worse the condition of nearby waterways. Low Impact Development allows developed land to handle rain more like how it was handled before the site was developed. The goal is to mimic a site's predevelopment hydrology by infiltrating, filtering, storing, evaporating and detaining stormwater runoff.

Address barriers early — Developers interested in LID are often concerned about cost, cold weather, drinking water and public safety. Many of these concerns need not represent barriers:

- ***Costs —*** An EPA study found grading, landscaping, paving and infrastructure costs were lower for LID than conventional development. These low-impact development techniques can also eliminate or reduce the size of stormwater systems, leaving more open space for buildable lots.

- ***Cold weather —*** Most LID stormwater approaches monitored by the University of New Hampshire Stormwater Center worked well year-round. Porous pavement in particular was found to be especially effective in winter.

- ***Drinking water —*** The UNH Stormwater Center found that filtering stormwater through infiltration practices removes pollution, and on occasion, can reduce contaminant levels beyond requirements. Furthermore, infiltration replenishes groundwater for future use. In certain areas, including those where groundwater is a source of drinking water or those identified as sensitive groundwater areas, infiltration without treating the water first may not be appropriate. In some cases, stormwater infiltration may be regulated as well under the Safe Drinking Water Act. Developers should contact state or regional authorities before they use infiltration practices.

- ***Public safety —*** Studies have shown narrower streets can provide ample access, parking and circulation for residents and emergency vehicles. Some studies have shown that narrower streets are associated with less traffic, slower speeds and fewer accidents.

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