

2.8 Implement Low Impact Development

5 – 50 Points

Action Updates

This action has been revised for the **2019 certification cycle**. A version of this action from the prior program year is [available for comparison](#). Edits are highlighted in yellow.

Objective

Inspire low impact development (LID) projects in your community.

What to Do

The more you do, the more points you earn.

Education Projects (Up to 15 points)

1. Develop/distribute educational materials on LID practices and their benefits, through the town website or other means. **(5 points)**

Submit: A PDF of the educational materials that have been posted and/or distributed.

2. Host an educational event on storm-water issues and LID. **(5 points)**

Submit: The event notice/poster.

3. Develop/distribute educational materials on LID practices for developers and contractors to be distributed at the outset of the permitting process. **(5 points)**

Submit: Copies of the educational materials developed. Describe the distribution plan.

Planning, Regulation and Policy Projects (Up to 10 points)

1. Include a section on the importance of stormwater management and support of LID solutions in your Plan of Conservation and Development (POCD). **(5 points)**

Submit: A copy of your officially adopted POCD, please note the relevant section(s).

2. Encourage and promote Low Impact Development in your regulations (such as, zoning, subdivision, road ordinances). **(5 points)**

Submit: A copy of the regulation(s) formally adopted by your governing body that encourage or promote Low Impact Development. Please note the relevant section(s) of each regulation included.

Implementation Projects (Up to 25 points)

1. Develop and implement a LID demonstration project, with signage, in a high-visibility location (such project could be on municipally owned property or on a collaborating private parcel). **(5 points)**

Submit: Photos and a brief description of the demonstration project with accompanying signage.

2. Develop a long-term maintenance plan for LID installations on municipal property. **(5 points)**

Submit: The maintenance plan and evidence of adoption by Department of Public Works or other appropriate town body.

3. Demonstrate that you have an active LID implementation plan or strategy. **(10 points)**

Submit: Describe the strategy, implementation process, and goals.

4. Establish a program to incentivize homeowners to implement low impact development (LID) practices on private property. Examples might include reduced cost rain barrels, reduced cost rain-garden plantings, etc. **(5 points)**

Submit: A copy of the program announcement and program description and website, if applicable. Additionally, you must include the number of LID practices installed.

Credit for Past Action

- Education Projects: Action must have been completed within 12-months of application submission.
- Planning, Regulation, and Policy Projects: Actions completed in 2012 and onward may be considered. Regulation review and revision may be considered prior to 2012.
- Demonstration Projects: Actions completed in 2012 and onward may be considered.

Potential Municipal and Community Collaborators

Staff from the planning department, public works, engineering, and board of selectmen or mayor's office could be helpful in implementing this action.

In addition, the planning and zoning commission, homeowners, and business owners could help implement this action.

Funding

For a complete listing of potential funding opportunities to assist with implementing Sustainable CT Actions, please visit the [Sustainable CT Grants Portal](#), which is searchable by Action. Please also visit the [Sustainable CT Resources for Certification](#) page for opportunities for technical assistance and other supports.

- [Urban Act Grant Program](#)
- [Municipal Grant Program \(MGP\)](#)
- [CHEJ Small Grants Program](#)

Resources

Toolkits, Calculators, Guidance Documents

- UConn, Center for Land Use Education and Research (CLEAR), "[the State of Low Impact Development in Connecticut](#)"
- UConn, Center for Land Use Education and Research (CLEAR), "[UConn Green Infrastructure Virtual Tour](#)"
- CT Department of Energy and Environmental Protection, "[2004 Connecticut Stormwater Quality Manual](#)"
- Trinkaus Engineering, LCC, "[Morris Low Impact Sustainable Development and Stormwater Management Design Manual](#)"
- US Global Change Research Program, "[National Climate Assessment, Northeast Chapter](#)"
- American Society of Landscape Architects, "[Green Infrastructure](#)"
- US Environmental Protection Agency, "[Benefits of Green Infrastructure](#)"
- Georgetown Climate Center, "[Green Infrastructure Toolkit](#)"
- National Oceanic and Atmospheric Administration, Habitat Conservation, "[Living Shorelines](#)"
- US Environmental Protection Agency, [Green Infrastructure Wizard](#)

- [Living Shorelines Academy](#)
- CT Department of Energy and Environmental Protection, "[Municipal Outreach for Green Infrastructure and Low Impact Development](#)"
- Connecticut River Coastal Conservation District & North Central Conservation District, "[How to Create a Streamside Buffer Garden](#)"

Organizations and Relevant Programs

- [Center for Watershed Protection](#)
- US Environmental Protection Agency, "[National Pollutant Discharge Elimination System \(NPDES\)](#)"
- [Connecticut Sea Grant](#)
- [Connecticut Institute for Resilience and Climate Adaptation](#)
- [University of Connecticut Center for Land Use Education and Research \(CLEAR\)](#)
- [CT Nonpoint Education for Municipal Officials \(CT NEMO\)](#)
- [Connecticut Conservation Districts](#)

Why This Matters

According to the nonprofit, Center for Watershed Protection, "as much as 65% of the total impervious cover over America's landscape consists of streets, parking lots, and driveways –what center staff refer to as "habitat for cars."

Rainwater hitting these surfaces does not penetrate and ends up flowing directly into streams and rivers. When water does not have a chance to penetrate the aquifer before arriving at streams, a host of issues arise–polluted water enters streams, the water is too hot from being on the pavement, streams fed by groundwater dry up, and the wetlands fed by springs dry up. All of this is very disruptive to wildlife, and nature in general.

Roadway and parking surface pollutants come from automobiles, and building and construction waste. Pavement collects nitrogen oxides from car exhaust, rubber particles from tires, debris from brake systems, phosphates from residential and agricultural fertilizers, and dozens of other pollutants, all of which get washed directly into streams and rivers before being cleansed by microbes filtered by soil.

To handle the volume of stormwater running off large impervious areas, communities install catch basins, piping, and culverts. These stormwater management systems are expensive to install and maintain. If not properly maintained, areas flood.

Flooding and pollution affect both environmental and economic sustainability by making activities like swimming, fishing or shell-fishing unappealing at best, dangerous or impossible at worst.

Benefits

One successful strategy to reduce urban runoff that has emerged in the past 20 years is the use of low impact development (LID) practices, also know as green infrastructure. LID practices include green roofs, pervious pavements, rain gardens, bioretention cells, and roadside bioswales.

Also, LID practices:

- Allow rainfall to seep into the ground, which
 - Reduces the runoff that enters the stormwater system, and thereby
 - Reduces flooding
- Improve water quality by allowing the natural soil to filter and reduce pollutants, and
- Reduce "heat island" effects in urban communities.

CT Success Stories

- [2018 New Haven - LID development and Education](#)
- Meriden, CT: [Meriden Green](#)