



Low Impact Development Site Planning and Design Techniques: A Municipal Self-Assessment

What is the Self-Assessment?

The self-assessment contains questions covering a variety of topics related to low impact development (LID). These topics range from open space and land disturbance to impervious surfaces and soil erosion control. Working through the assessment allows **an in-depth review of the local regulations that shape development in your community** and a comparison to LID benchmark techniques and practices. The intent is to identify which LID techniques are in place and which techniques could be improved or employed.

Why Are We Being Asked to Complete the Self-Assessment?

An “Ordinance Checklist for LID” was provided to municipalities in the 2011 *RI LID Guidance Manual* (Appendix A). This year we’ve updated and redesigned it, with many new questions taken from guidance provided by the EPA and the Center for Watershed Protection. ***The self-assessment provides a comprehensive set of possible planning and design techniques for your consideration, though we recognize that not all of them will be possible for every municipality.***

Since the 2011 *RI LID Guidance Manual* was provided, RIDEM finds that the number of stormwater permit applications with minimal LID still exceeds those with proper LID design. As water quality impairments from stormwater runoff continue to increase throughout the state, the need for better development practices is evident.

Although developers and municipalities are required to apply LID stormwater practices*, local ordinances often either prevent the use of LID designs or favor conventional practices. **Implementing LID falls strictly under municipal land-use jurisdiction.** RIDEM does not have the authority to override local land development regulations but focuses on standards for the design of engineered stormwater structures. It is critical that municipalities adopt LID site design techniques.

*The Cleaner Bay Act of 2007 calls for non-structural LID practices and techniques for the State Stormwater Rules. Standard 1 of the Stormwater Rules calls for LID to the maximum extent practicable (MEP). The RIPDES MS4 Permit supports the use and incorporation of LID in local regulations. MS4s are supposed to demonstrate how their program is consistent with the State Stormwater Rules and how the program will be specifically tailored for the local community. (MS4 GP IV. B. 5. b)

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How Should I Complete the Self-Assessment?

Ideally, the assessment should be completed by your municipality's planner, with significant input from staff in other departments, such as the Department of Public Works, Engineering, and Building. Involving multiple people in the assessment will enhance the opportunity it provides for your municipality to truly consider new planning and design techniques. Our suggested approach is:

1. Gather all the development rules in your municipality.
2. Identify the local authorities who administer the rules.
3. Work through the self-assessment with a team of staff.
4. Determine which LID techniques may be improved or employed in your municipality.

Plan to spend a significant amount of time to complete all the questions on the self-assessment and to discuss and consider which LID techniques are appropriate to adopt. The assessment includes descriptions of how each technique contributes to reducing runoff and/or improving water quality. **Download the Self-Assessment:** <http://www.dem.ri.gov/programs/water/permits/ripdes/stormwater/stormwater-manual.php>

How Does the Self-Assessment Benefit My Municipality?

The value of the self-assessment lies in not only helping municipalities evaluate their current planning and design practices but also in **adopting better practices that have multiple community benefits beyond improving stormwater management**. For example, improved land use strategies contribute to community resiliency and can help mitigate impacts from climate change. For more information see the [PREP-RI Stormwater Training Module](#) and the [RI Stormwater Design Manual](#), Chapter 4, LID Site Planning and Design Strategies.

The long-range goal of the assessment is to help your municipality become a greener, more attractive, and more livable community, while helping protect and restore the quality of our local waters.

Once the assessment is complete, we recommend taking a summary of the findings to the Planning Board, along with suggestions for new ordinances and revisions to existing ordinances.

Remind Me About LID



This example of LID shows reduced roadway width and green infrastructure incorporated into the median and sidewalks.

LID is a site planning and design strategy to reduce runoff, mimic predevelopment hydrology, and take advantage of natural treatment processes in soil and vegetation. LID is required because it is far more effective in protecting water quality than engineered stormwater structures alone.

Specifically, LID seeks to:

- Avoid impacts to the natural drainage areas by preserving and protecting as much of the natural site condition as possible,
- Reduce increased runoff by minimizing impervious cover (pavement, roof, etc.), and
- Manage impacts by treating runoff close to the point where it is generated, using small-scale, vegetated systems throughout the site, rather than in large, centralized, and costly drainage systems.