

Greening Your Community

Cost-effective LID solutions



conserve



restore



protect



save money

#4

Fact Sheet #4: LID in Local Zoning and Regulations

Making Regulations Reflect Priorities

Local conservation lands and green infrastructure are important assets for communities, including environmental, economic, health, and social benefits.

However, many communities' plans and land-use rules unintentionally encourage sprawling development that comes with many costs. Whether it's an outdated open space plan that doesn't prioritize conservation needs or bylaws that require large lots, wide roads, and big, water intensive lawns, there are lots of opportunities to revise regulations and guide development in a more sustainable direction.



*A shared driveway and mature trees
in Plymouth, MA*

What are Green Infrastructure (GI) and Low Impact Development (LID)?

Green Infrastructure (GI) includes both natural features such as forests and wetlands as well as engineered landscapes that mimic these natural processes like a rain garden.

Low Impact Development (LID) works to preserve the natural landscape and minimize impervious surfaces to keep stormwater close to the source and use it as a resource rather than a waste product.

Together, LID and GI not only manage stormwater and improve groundwater supplies, but also offer many free ecosystem services including cleaner air and water, flood control, shade and energy savings, recreational opportunities, and enhanced property values and quality of life.

Preserving our existing GI is our first line of defense against climate impacts such as increased storm intensities as well as achieving long-term cost savings.

Planning Ahead for the Community You Want to Have



Local land-use regulations have the ability to make or break communities' ability to enhance conservation and incorporate LID techniques described in previous fact sheets. You get what you zone for— what will your community look like if fully built out in accordance with the local rules as they currently stand?

It's important to periodically review and update local plans and rules and determine how they work together, and whether they encourage or discourage smart growth. By analyzing and updating local plans and land use rules such as zoning, subdivision rules and regulations, site plan review, and stormwater regulations, communities can ensure that development is consistent with local goals and values. This fact sheet will review how to get started and prioritize.

Let's Coordinate: Master Plan, Open Space, and Bylaws

Master plans, open space plans, and land use regulations should coordinate with one another to reflect the community's goals. Together, these create local priorities for both development and conservation, and define a municipality's future character and economy. In order to prioritize and encourage sustainable growth, the local regulations must be consistent with one another to achieve the desired goals.

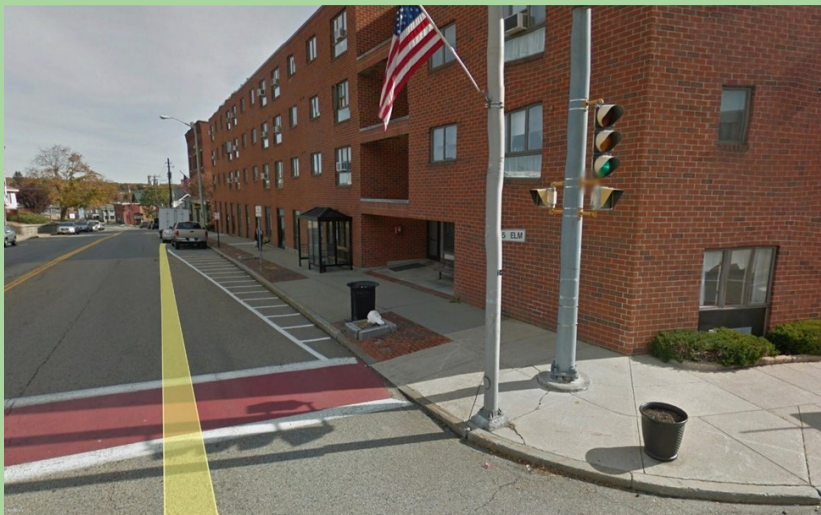
For instance, if a stormwater bylaw requires LID, but zoning requires large lots with strict dimensional standards and the subdivision regulations require wide streets and curbing running along throughout—there isn't much LID that can be done. The rules essentially require a developer to clear and grade all available upland and create extensive impervious surfaces with centralized, piped stormwater drainage. If your community has a modern Master Space plan that identifies sustainable development with LID and land protection as goals, but local regulations don't allow that type of development to happen, the plan will never be achieved.

Can Your Bylaws Do This?

Below is a typical Main Street intersection in a Massachusetts mill town. The top image shows what the street looks like in 2016.

The bottom image is the redesigned Main Street intersection that incorporates bioretention bump-out areas and street trees to capture and filter stormwater and enhance aesthetics. These also improved pedestrian safety by reducing the walking distance and improving sight lines, without altering existing parking or bus stops.

Which version would your local rules support?



Weston & Sampson

What Do Your Regulations and Zoning Encourage?

Low Impact Development techniques are broad in range and design and should be incorporated within a variety of local bylaws and regulations, including: Zoning Bylaw, Subdivision Rules and Regulations, and Site Plan Review in addition to any Stormwater or LID Bylaw.

Check out the chart to the right and compare these best practices to your own local plans and regulations.

Additional Local Options

State laws and regulations provide a minimum framework. Your municipality has the authority to do more. Here are a couple of examples:

Wetlands Bylaw

The state wetlands regulations provide limited review in buffer zones. More than half of all communities have adopted local bylaws to protect buffer zones, set development back away from the edge of wetlands and waterways, or otherwise enhance local protections.

Community Preservation Act

This provides additional funding from a combination of local and state sources for open space protection, historic preservation, and affordable housing.

Planning Document	What does it do?	What should I look for?	How do I change it?
Master Plan (MP)	Comprehensive guiding document that sets community goals	<ul style="list-style-type: none"> • Current, reflects changing priorities? • Prioritizes sustainable development? • Defines specific measures to retain local community character & values? 	Planning Board often with assistance of a special Master Planning Committee
Open Space and Recreation Plan (OSRP)	Identifies local natural resource and recreation priorities and plans for protection and management	<ul style="list-style-type: none"> • Current, reflects current parcel status, priorities? • Allows variety of OS uses: recreation, conservation? • Considers land and water resources? • Consider local context of existing OS? 	Conservation Commission, often with assistance of a special OS Committee. Must meet state guidelines
Zoning Bylaw/ Ordinance	Determines how parcels may be used and sets dimensional requirements	<ul style="list-style-type: none"> • Focuses development near existing infrastructure, away from natural resources? • Allows flexible dimensional requirements? • Prioritizes protection of natural features? • Limits clearing/grading, impervious areas? • Requires LID features? 	Adoption and revision requires approval through Town Meeting (TM) or City Council
Open Space Residential Design (OSRD)	Type of conservation development that maximizes protection of natural resources	<ul style="list-style-type: none"> • Allowed by right (not by special permit)? • Requires ≥ 50% of open space protection on a parcel? • References priority areas from local MP/OSRP? • Connects OS within and on adjoining parcels? • Allow flexible dimensional requirements? • Requires LID features? 	Adoption/revision requires approval through TM/City Council
Site Plan Review	Reviews development design for consistency with local standards	<ul style="list-style-type: none"> • Limits clearing/grading, impervious areas? • Requires LID features? • Allows easy siting of LID features, including near roadways and in parking islands? 	Adoption requires approval through TM/City Council
Stormwater or LID Bylaw	Reduces stormwater pollution and/or specifically encourages LID	<ul style="list-style-type: none"> • Requires LID features? • Discourages curbing and limits impervious areas? • Prohibits topsoil removal? • Limits clearing/grading? 	Adoption requires approval through TM/City Council
Subdivision Rules and Regulations	Govern how a parcel of land is subdivided in a development	<ul style="list-style-type: none"> • Limits clearing/grading, impervious areas? • Requires protection of existing landscape? • Limits impervious areas? • Requires revegetation with native plants? • Requires LID? • Allows narrow roads, no curbing? 	Planning Board has administrative authority

Working Together is Key

When it comes to allowing low impact and conservation development, coordination among local boards is key. By working together, the community can ensure the permit application and review requirements are clear to developers and bylaws don't conflict with one another when one encourages a practice but another makes it difficult.

Through interdepartmental cooperation, communities can create an efficient system that reduces the burden on local officials, lets developers understand exactly what the community is looking for, and encourages projects that prioritize local character and natural assets.

Analyze & Act

Taking time out of our busy schedules to prioritize long-term planning can be tough. But time is well spent updating outdated plans, bylaws and regulations since these are so vital in determining your community's future.

After identifying potential updates to improve cohesion within regulations and encourage smart development, the next—and critical—step is to determine which changes are most feasible for your community and make a plan of action. What changes have political support? What changes are more easily made administratively and what's the long-term strategy for changes that require Town Meeting approval? Who can be community champions and who are potential partners in making these changes understood and accepted? What resources or outreach tools do you need to help you achieve success?

Your Community's Future Needs You

You can play an active role in shaping the future of your community. One person can make a huge difference, especially at the local level. Most local boards are made up of citizen volunteers. Whether it's joining the conservation commission, planning board, master planning committee, or beautification committee, your community can use your energy and skills!

By joining a board, attending meetings, or otherwise staying involved in the local process, you can directly make a positive difference to create a safe, healthy, and sustainable community for yourself and future generations.



Trish Garrigan



Horsley Witten Group

Clockwise from top left: Narrow roads in Devens, MA; pervious pavers and rain gardens in MetroWest Boston; permeable pavement; clustered homes in Concord Riverwalk. These are all governed by local zoning bylaws and subdivision rules and regulations. What do your bylaws allow?

Learn More

See our website for more information, including guidance, tools, and document references:
www.massaudubon.org/shapingthefuture or www.masaudubon.org/LIDCost



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