

# *Open Space Residential Design/ Natural Resource Protection Zoning*

*Current best practices in zoning*

Ashby

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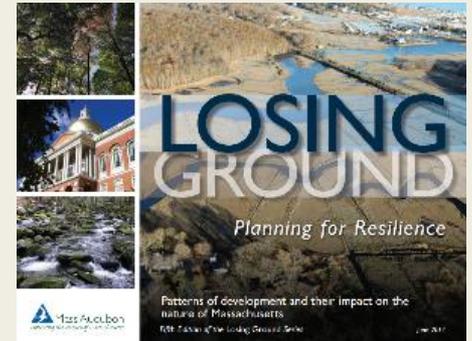
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# Shaping The Future of Your Community Program

Created in 2009 to implement Losing Ground recommendations

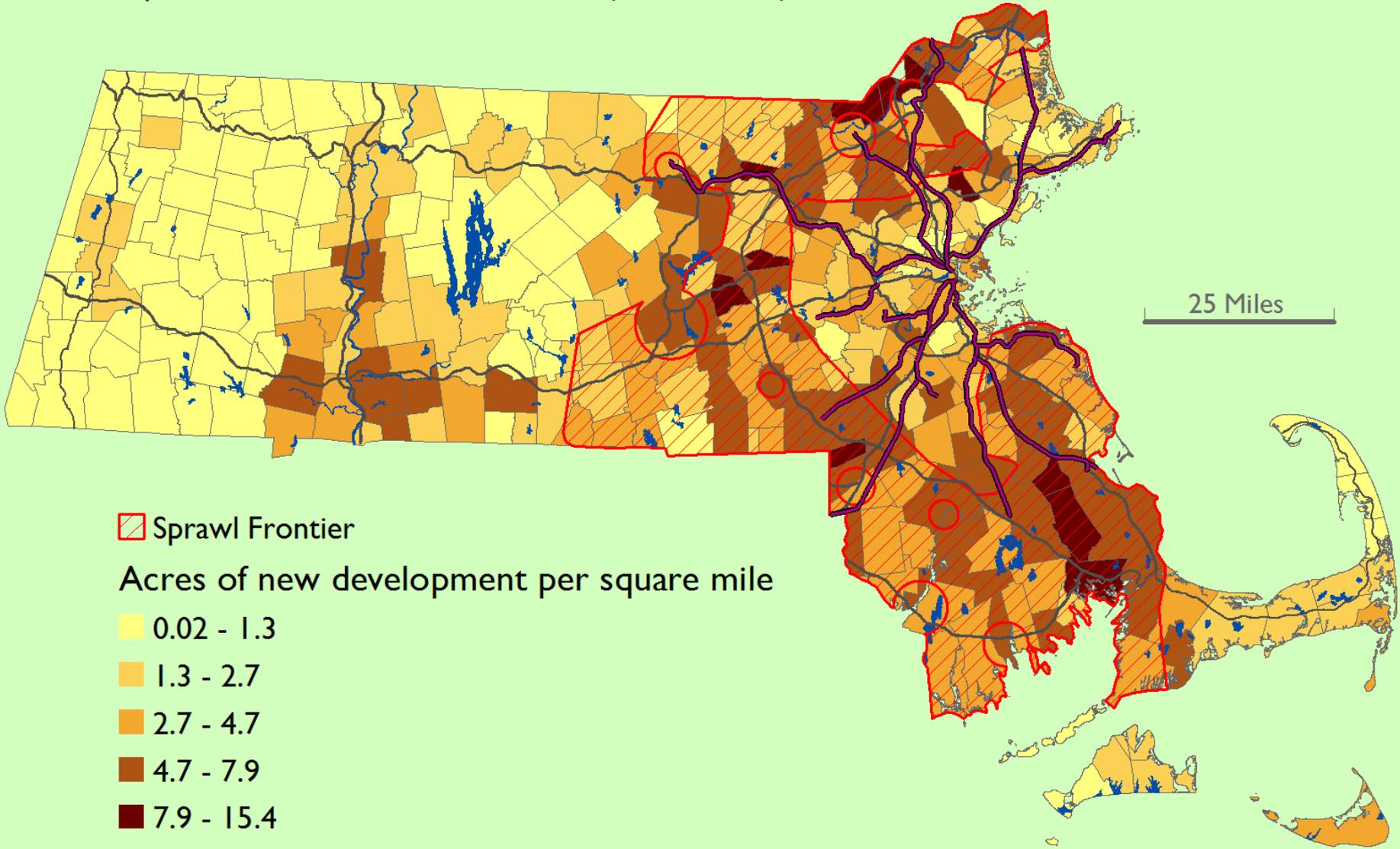
Assists communities in charting a more **sustainable future** through customized community workshops and direct assistance



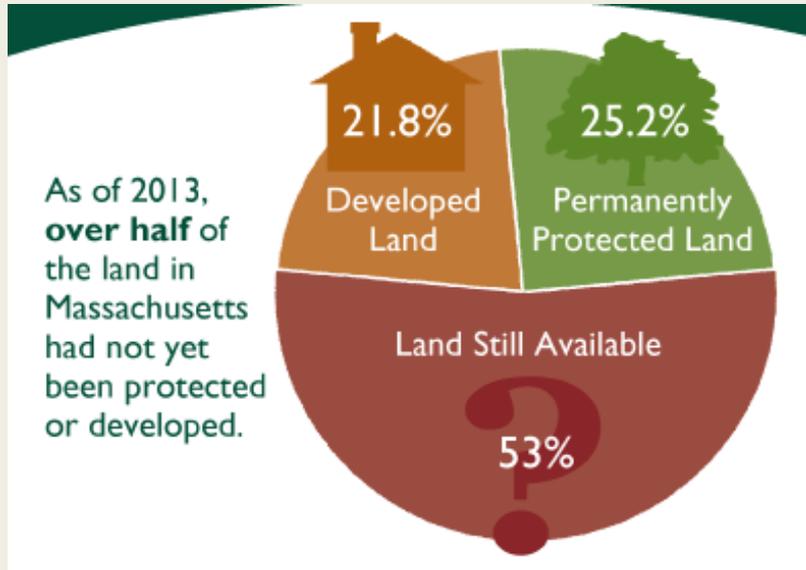
Shaping  
the Future  
of Your  
Community

# New Development Trends

Development Rates in Massachusetts (2005-2013)



# Losing Ground



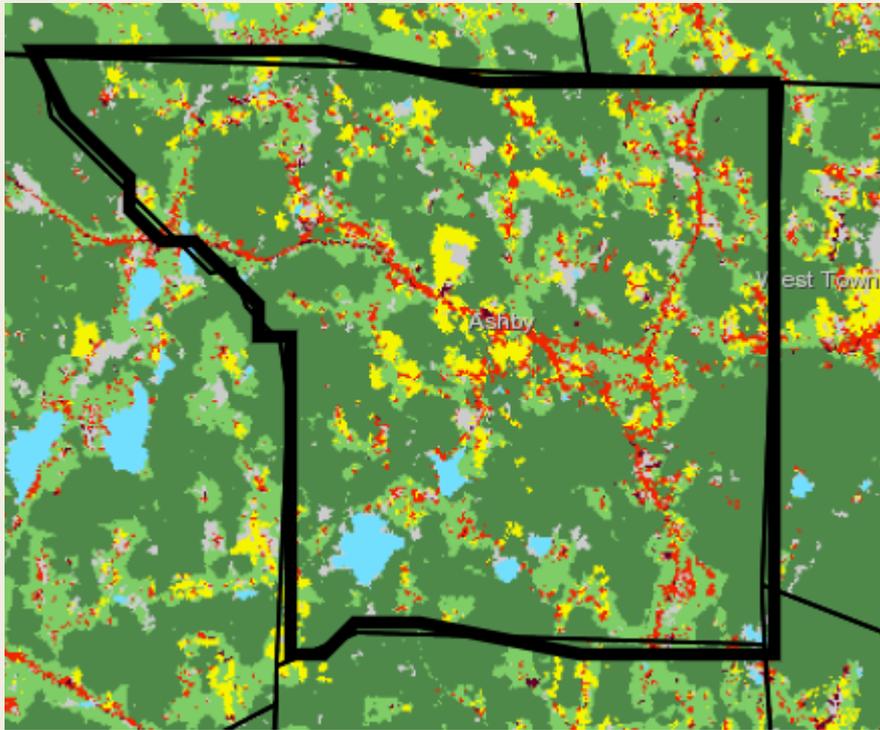
## Planning for the Future



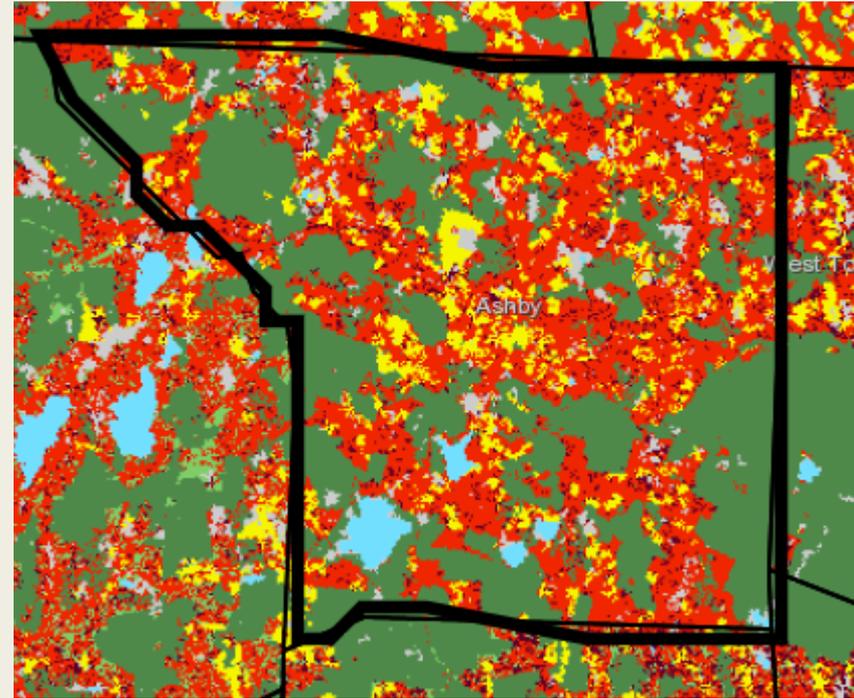
of the remaining unprotected land is of **high conservation value.**  
*(BioMap 2)*

As development pressures increase, we can plan our land use for both a **strong economy** and a **safe, healthy environment.**

# New England Landscape Futures



“Connected Communities” 2060



“Growing Global” 2060



[www.newenglandlandscapes.org](http://www.newenglandlandscapes.org)

# Natural Lands for Resiliency and Values

- Carbon sequestration
- Clean Water
- Flood prevention
- Habitat
- Tourism
- Recreation
- Health
- Property Values
- Quality of Life

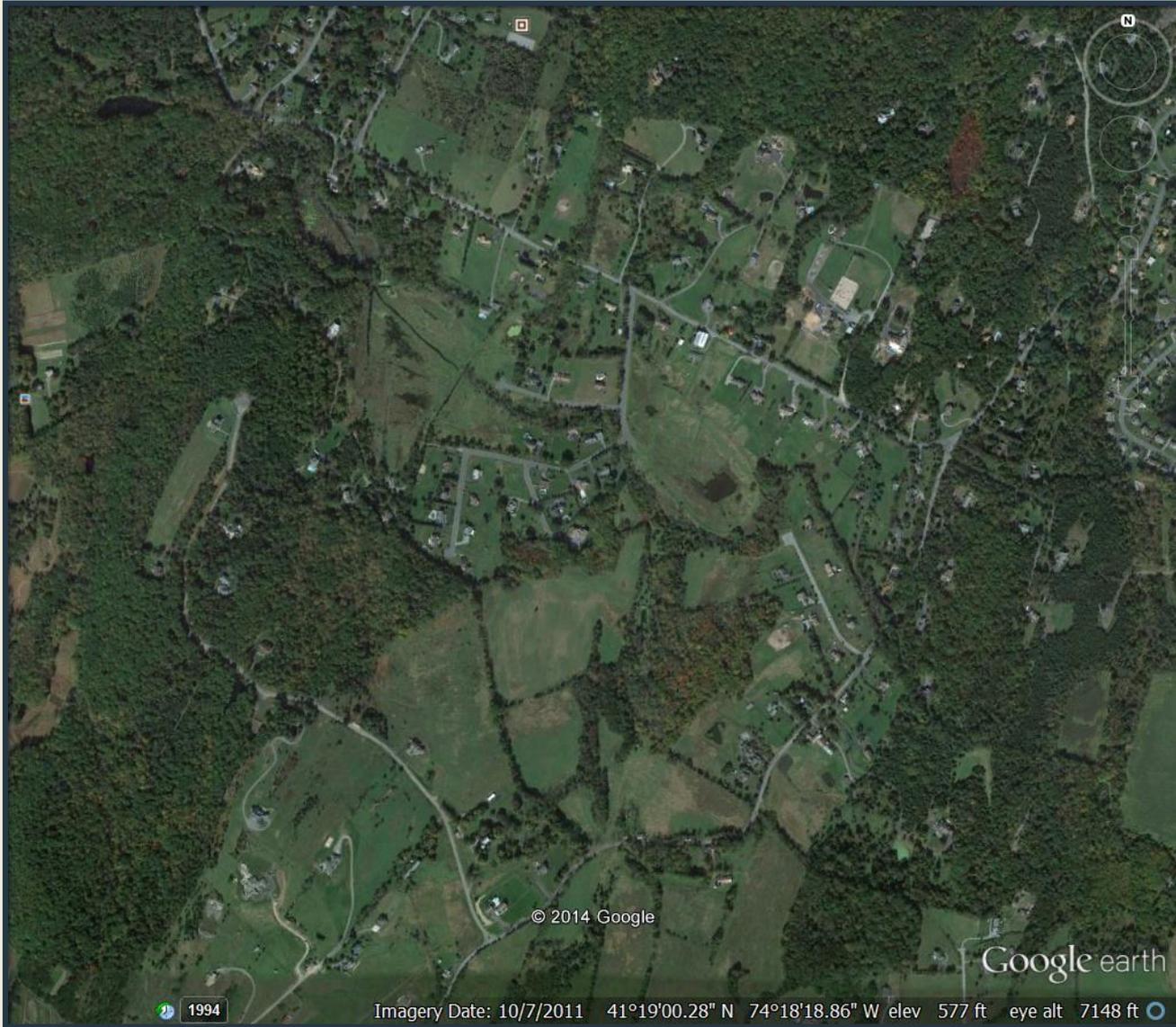




Jeff Lacy, Rural Planning Associates

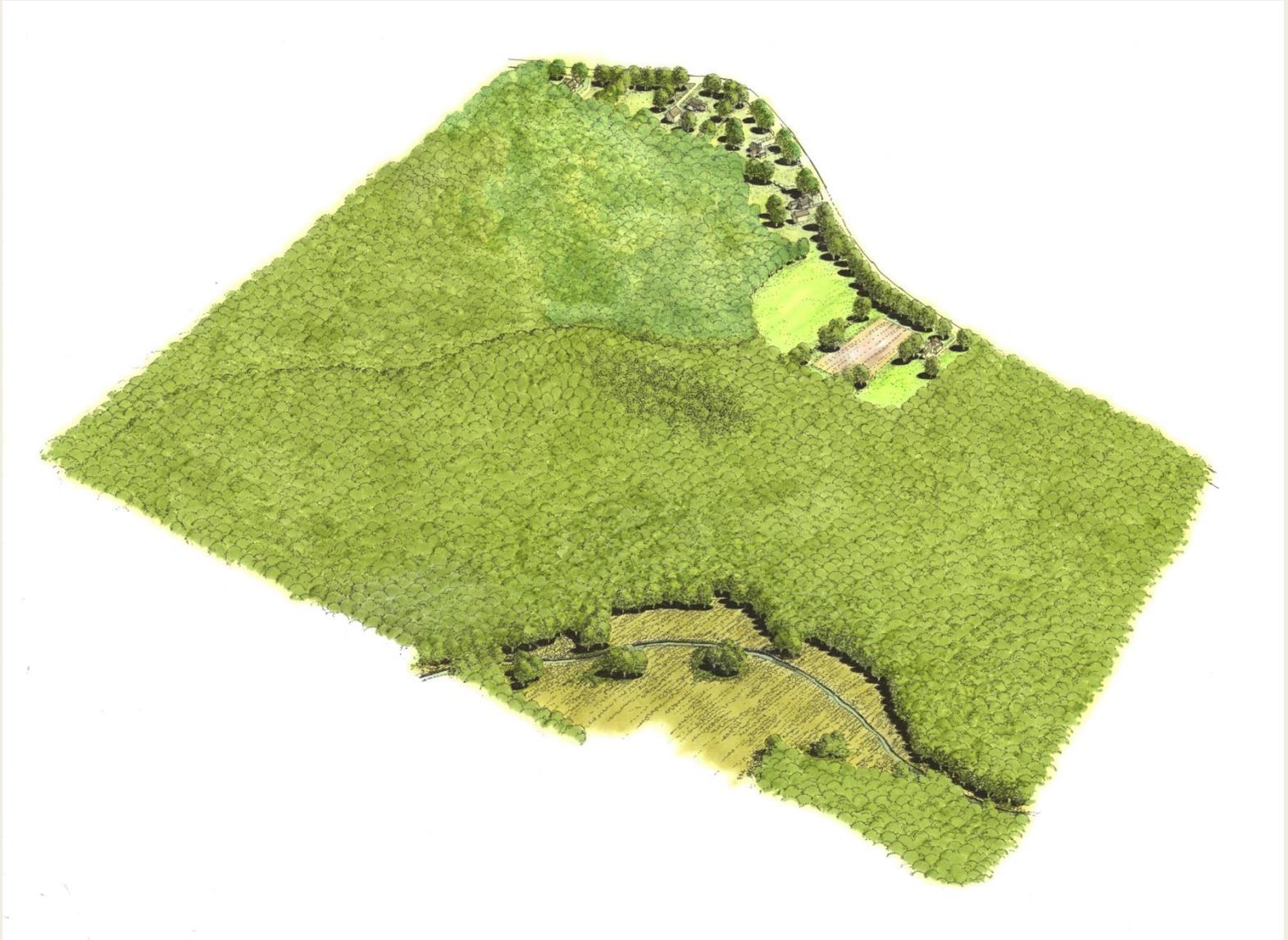


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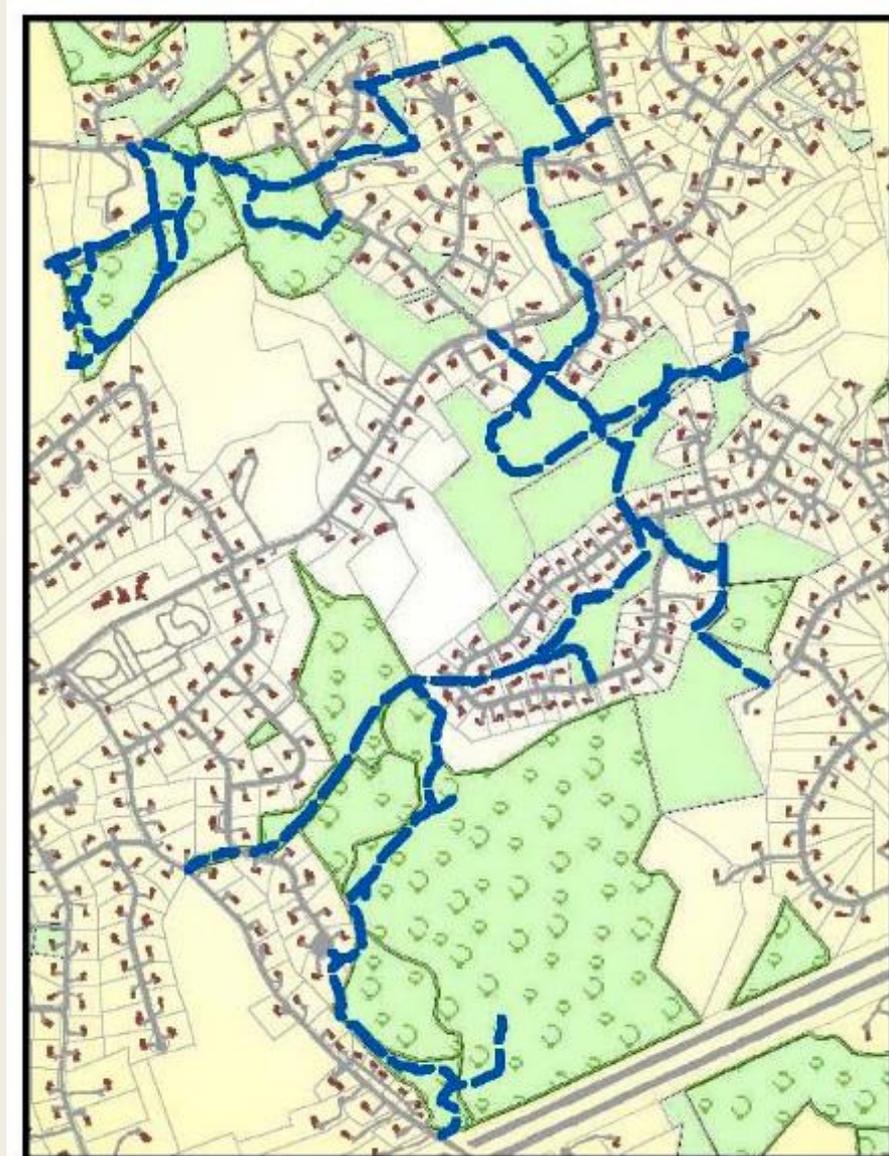
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## Case Study: Westford

48 Subdivisions since 1978

1,743 acres of protected land

13 miles of public hiking trails



## Benefits of Reducing Sprawl & Protecting Natural Infrastructure

- Lower infrastructure costs, municipal maintenance, and regulatory compliance costs
- Reduced clearing and grading
- Protect water supplies
- Prevent flood damage, protect flood prone areas
- Protect forests and farmlands
- Provide open space and trails for people and nature
- Support high quality of life and property values

# Open Space/Natural Resource Zoning vs. Conventional Zoning

1. Identify Conservation Areas

2. Locate House Sites

3. Align Roads & Trails

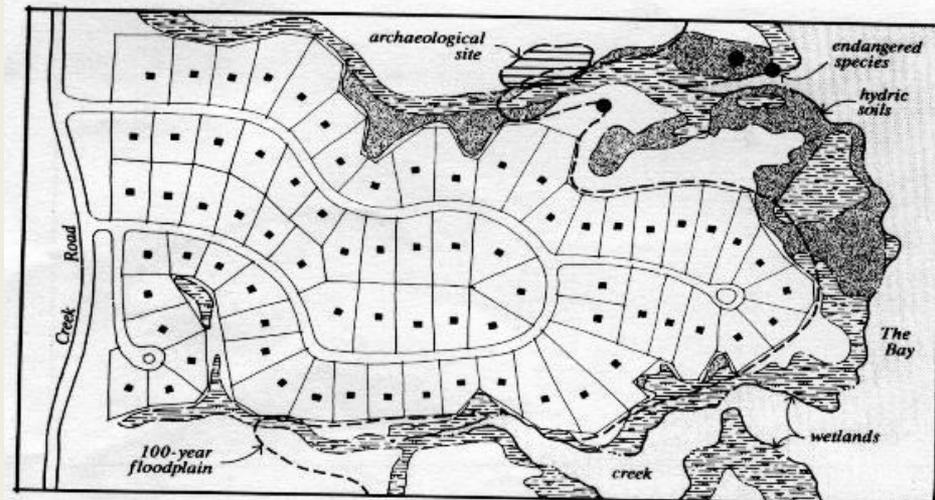
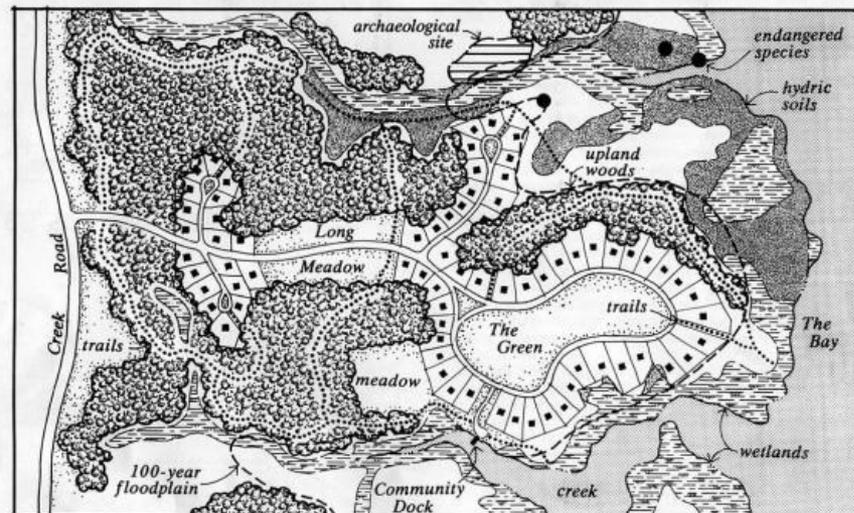
4. Draw the Lot Lines

1. Align Roads

2. Draw the Lot Lines

3. Locate House Sites

4. Open Space?



# Key Provisions – Best Practices

## Problems with Common Current Practices: Cluster or older Open Space Design:

- Special Permit Required – Discretionary
- Process often cumbersome, long, & expensive
- Large parcel size requirements
- Insufficient amount of land protected
- Less than ideal land conservation
- Dimensional standards inhibit use

## MA Model Bylaw – Natural Resource Protection Zoning

- By Right/Mandatory
- Formulaic and quick
- No minimum lot size, option for ANRs
- [60%] of land area protected
- Strategic protection via Conservation Analysis & Findings
- Flexible Design Standards – lot size, frontage, setbacks, roads, etc.

# Smart Growth / Smart Energy



## Toolkit



HOW TO USE THIS TOOLKIT

INTRODUCTION

STATE POLICIES AND INITIATIVES



## Traditional Neighborhood Development (TND)

Modules

Case Studies

Slideshows

Model Bylaws

Links

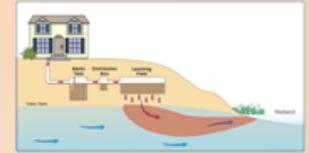
**In Brief:** TND, also known as "new urbanism", "neo-traditional" or village-style development, includes a variety of housing types, a mix of land uses, an active center, a walkable design, and often a transit option within a compact neighborhood scale area either as infill in an existing developed area or as a district scale project.

### The Problem

**Traditional Neighborhood Development** seeks to remedy the most pressing problems associated with recent suburban expansion - low-density, auto-oriented development, single-use developments lacking in context and distinction as a unique community.

## Wastewater Alternatives

Achieving higher density development in areas without public water or sewer service presents unique challenges. However, there are a number of technological and regulatory opportunities to address these challenges including shared systems (multiple homes on one septic system), innovative and alternative septic systems, and small sewage treatment plants.



Typical Title 5 Septic System



Shared Wastewater System

Massachusetts Smart Growth Toolkit



## Low Impact Development (LID)

Two main principles of LID:  
**Better Site Design and Best Management Practices**



**What is better site design?**

A Set of Tools Designed To:

- Reduce Impervious Cover
- Promote Conservation of Natural Areas
- Promote the Diffusion of Stormwater Runoff
- Encourage Effective Stormwater Management and Treatment

Massachusetts Smart Growth Toolkit



[http://www.mass.gov/envir/smart\\_growth\\_toolkit/](http://www.mass.gov/envir/smart_growth_toolkit/)

Website that is user friendly, comprehensive, and MA focused

Integrated materials on each smart growth technique to promote understanding and local passage of new zoning bylaws

Case studies show real world implementation, many in Massachusetts communities

# Bylaw Review Tool

Factors	Conventional	Better	Best	Community's Zoning	Community's Subdivision Rules & Regulations	Community's Site Plan Review	Community's Stormwater/LID Bylaw/Regulations
<b>GOAL 1: PROTECT NATURAL RESOURCES AND OPEN SPACE</b>							
Soils managed for revegetation	Not addressed	Limitations on removal from site, and/or requirements for stabilization and revegetation	Prohibit removal of topsoil from site. Require rototilling and other prep of soils compacted during construction	(Not applicable)			
Limit clearing, lawn size, require retention or planting of native vegetation/naturalized areas	Not addressed or general qualitative statement not tied to other design standards	Encourage minimization of clearing/ grubbing	Require minimization of clearing/grubbing with specific standards				
Require native vegetation and trees	Require or recommend invasives	Not addressed, or mixture of required plantings of native and nonnative	Require at least 75% native plantings				
<b>GOAL 2: PROMOTE EFFICIENT, COMPACT DEVELOPMENT PATTERNS AND INFILL</b>							
Lot size	Required minimum lot sizes	OSRD/NRPZ preferred. Special permit with incentives to utilize	Flexible with OSRD/NRPZ by right, preferred option				



## OUR CONSERVATION WORK

Wildlife Research & Conservation

Land Conservation

Ecological Management

Education & Community Outreach

Climate Change

Advocacy

Advocacy News & Events

Priority Legislation

Protecting Land & Wildlife

Ocean Management

Climate Change

### Version 2.0 just released - Mapping and Prioritizing Parcels for Resilience Project



Mass Audubon, in partnership with The Nature Conservancy and LandVest, developed [Mapping and Prioritizing Parcels for Resilience \(MAPPR\)](#) to allow Massachusetts conservationists to rapidly identify specific parcels that, if protected, could contribute the most to achieving land protection goals.

#### Resources

[MAPPR Tool 2.0](#)

[Resources](#)

# Questions?

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[www.massaudubon.org/shapingthefuture](http://www.massaudubon.org/shapingthefuture)

