
UPDATING GREENFIELD'S OPEN SPACE/CLUSTER DEVELOPMENT ORDINANCE

JOINT HEARING OF THE GREENFIELD PLANNING BOARD & ECONOMIC DEVELOPMENT COMMITTEE

SEPTEMBER 5, 2024



AGENDA



Photo by Allison Bell

- Watershed-Scale Zoning Project Background
- Purpose of Open Space Cluster Development (OSCD)
- Greenfield's Current OSCD Ordinance
- Proposed updates to OSCD Ordinance

FRCOG'S WATERSHED-SCALE ZONING PROJECT



- A **watershed** is the land near rivers and streams that “sheds water.” This water flows into nearby water bodies—in Greenfield we have the Green River watershed and the larger Deerfield River basin.
- A watershed is also a critical ecological system, supporting all the life in that area.
- There is a **direct connection** between watershed health and climate resiliency and how **land in a watershed** was used in the **past, currently and in the future**.

FRCOG'S WATERSHED-SCALE ZONING PROJECT

- Improve/protect water quality
- Reduce **flooding** and **fluvial (river-related) erosion** damages
- Restore/protect wildlife habitat
- Increase climate resiliency



Photo by Allison Bell

FRCOG'S WATERSHED-SCALE ZONING PROJECT

Deerfield River Watershed Regulatory Review

Figure 1: Summary of Zoning Regulations in Watershed Communities that Address Water Quality Impacts

	Ashfield	Barnardston	Buckland	Charlemont	Colrain	Conway	Deerfield	Greenfield	Hawley	Heath	Leyden	Monroe	Rowe	Shelburne
Development in Floodplains	Not Addressed / Minimally Addressed in Regulations	Partially Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Partially Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations
Stormwater Management	Partially Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Fully Addressed in Regulations	Partially Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Fully Addressed in Regulations	Partially Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Partially Addressed in Regulations
Erosion / Sedimentation	Partially Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Fully Addressed in Regulations	Fully Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations
Impervious Cover	Not Addressed / Minimally Addressed in Regulations	Partially Addressed in Regulations	Fully Addressed in Regulations	Fully Addressed in Regulations	Fully Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Fully Addressed in Regulations	Fully Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Partially Addressed in Regulations	Fully Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations
Cluster / OSRD / NRPZ	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Fully Addressed in Regulations	Partially Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Fully Addressed in Regulations
Water Supply Protection	Not Addressed / Minimally Addressed in Regulations	Fully Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Fully Addressed in Regulations	Fully Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Fully Addressed in Regulations	Fully Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations
Parking	Not Addressed / Minimally Addressed in Regulations	Fully Addressed in Regulations	Fully Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Partially Addressed in Regulations	Fully Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Partially Addressed in Regulations
Common Driveways	Fully Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Fully Addressed in Regulations	Fully Addressed in Regulations	Fully Addressed in Regulations	Fully Addressed in Regulations	Fully Addressed in Regulations	Fully Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations
Site Plan Review	Not Addressed / Minimally Addressed in Regulations	Fully Addressed in Regulations	Fully Addressed in Regulations	Fully Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Fully Addressed in Regulations	Fully Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Fully Addressed in Regulations	Fully Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Partially Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations
Vegetation / Trees	Partially Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Partially Addressed in Regulations	Fully Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations	Partially Addressed in Regulations
Large-Scale PV	Partially Addressed in Regulations	Partially Addressed in Regulations	Fully Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Partially Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Partially Addressed in Regulations	Fully Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Fully Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Not Addressed / Minimally Addressed in Regulations	Partially Addressed in Regulations	Fully Addressed in Regulations

- Regulatory review of Zoning Bylaws and Ordinances completed for communities in the Deerfield River Watershed, completed as a part of the *Watershed-Based Plan to Maintain the Health and Improve the Resiliency of the Deerfield Watershed*
- Updating and aligning land use regulations can help reduce pollutant loadings to waterbodies from new development and redevelopment projects.



POTENTIAL UPDATES TO GREENFIELD'S ZONING ORDINANCE

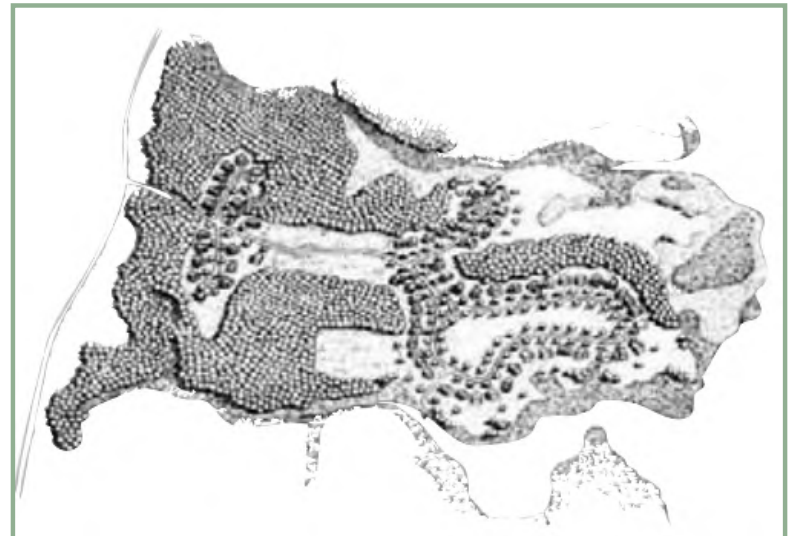
- Open Space Cluster Development Ordinance
- Conducting a mapping analysis to find opportunities that would allow for infill/redevelopment/adaptive reuse
- Strategies to preserve and protect agricultural land

PURPOSE OF OPEN SPACE CLUSTER DEVELOPMENT

- Used to regulate new subdivisions of land in a manner that maximizes the protection of natural resources (wetlands, forests, agricultural lands, open space) while providing for new construction



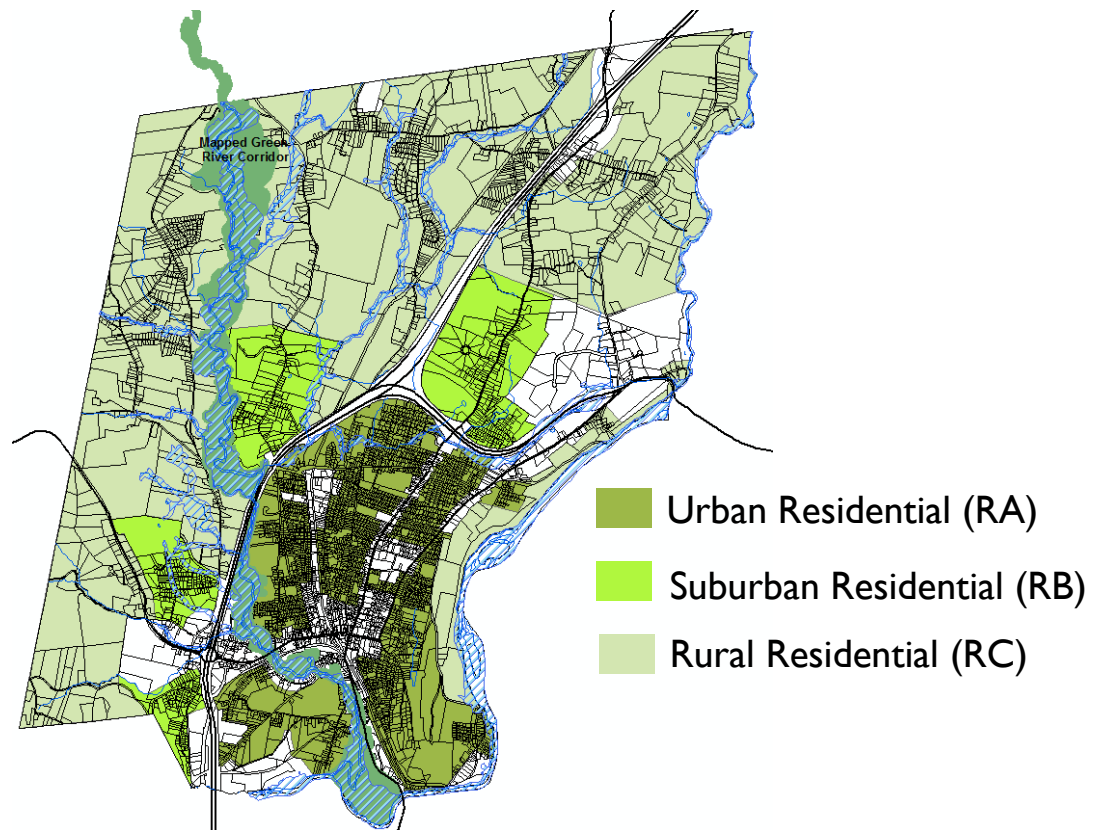
Traditional Subdivision



Open Space Design

GREENFIELD'S CURRENT OSCD ORDINANCE

- OSCDs are allowed in the RA, RB, and RC Zoning Districts, subject to site plan review by the Planning Board
- Permitted uses include single-family, two-family, and/or multifamily dwellings (which cannot exceed 30% of the total number of dwelling units in mixed use developments)
- Minimum lot size per unit can be reduced to the minimum lot area requirement of the Residential A District (8,000 sq. ft.)



OPPORTUNITIES TO REVISE AND UPDATE THE OSCD

1. Increased the amount of required protected open space in the Rural Residential Zoning District (RC) from 25% to **50%**

Shelburne's Open Space Development Zoning Bylaw requires 50% of the parcel be conserved as open space. The minimum parcel size that can be used is 6 acres.

Leyden's Natural Resource Protection Zoning Bylaw requires 80% of the parcel to be permanently conserved.

Sunderland's Flexible Development Zoning requires 40% of the parcel to be permanently conserved.

MassAudubon suggests requiring 50% as the minimum amount of protected open space as a part of their guide for implementing LID techniques.



OPPORTUNITIES TO REVISE AND UPDATE THE OSCD

2. Changed the calculation for the maximum initial number of dwelling units permitted so as to not penalize developers for the features of the parcel

To determine net acreage, subtract the following from the total (gross acreage of the site):

- Ten percent (10%) ~~One hundred percent (100%)~~ of the acreage of land with slopes of 20% or greater;
- Ten percent (10%) ~~The total acreage~~ of land subject to easements or restrictions prohibiting development, lakes, ponds, vernal pools, 100-year floodplains as most recently delineated by FEMA, Zone I and A around public water supplies, and all wetlands as defined in Chapter 131, Section 40 of the General Laws and any state or local regulations adopted there under, as delineated by an accredited wetlands specialist and approved by the Conservation Commission; and
- Ten percent (10%) of the remaining acreage after the areas of A and B are removed to account for subdivision roads and infrastructure

OPPORTUNITIES TO REVISE AND UPDATE THE OSCD

3. Created density bonuses to maximize protected open space, or provide incentives to create more affordable housing, energy efficient homes, or protect contiguous tracts of forest, etc.

Sunderland has a point system: depending on the number of points the development earns, the higher the building lot bonus (up to 40%). Example criteria are on the right.

Developer would need 40 points to get a 10% building lot bonus.

Examples from Sunderland:

- Sale of protected farmland to a farmer, or a lease of the farmland to a farmer for five or more years, or the creation of resources to provide for a community farm or gardens = 10 points
- Protected forestland with a binding arrangement to ensure the forest is managed with a “green certification” by the Forest Stewardship Council = 10 points
- A plan that protects land of least 5 acres in a tract that is contiguous to already protected open space = 5 points
- Implementation of a significant ecological project = 15 points

OPPORTUNITIES TO REVISE AND UPDATE THE OSCD

Design Feature	Unit Bonus
OSCD protects 10% above the minimum requirement for the District	10%
OSCD protects 15% above the minimum requirement for the District	5% for each additional 5% protected
OSCD protects 20 or more contiguous acres	10%
OSCD protects land contiguous to an already protected area outside the OSCD parcel so as to increase the practical area of working agricultural land, forest, or wildlife habitat in the already protected area by 25%	10%
OSCD allocates more than 30% of the allowed lots for two-family, three-family, or multi-family homes	10%
OSCD contains units that have a maximum HERS rating of 0 (Net-Zero Energy homes)	10% bonus if 20% or more of the units meet this standard
OSCD design orients all homes for future rooftop solar PV installations	5%
OSCD design includes the installation of solar PV on all rooftops	10%
OSCD contains dwelling units that can be counted towards Greenfield's 10% affordable housing requirement set by Chapter 40B	10% bonus if 20% or more of the units meet this standard
OSCD contains dwelling units designated as affordable senior housing (55+)	5% if at least 10% of the units meet this standard
All homes in the OSCD include water collection for irrigation	5%
OSCD design includes recreational opportunities for the public by providing access to walking trails or other passive forms of recreation	5%
OSCD protects mature trees in the development area	5%

OPPORTUNITIES TO REVISE AND UPDATE THE OSCD

4. Added a Conservation Analysis and Findings section to the subdivision regulations so that the Planning Board/Conservation Commission can work with the developer to identify priority conservation areas

(3) The Planning Board, in consultation with the Conservation Commission shall study the conservation analysis, may conduct field visits, **and shall formally determine which land should be preserved and where development may be located.** As part of its decision the Planning Board shall make written findings supporting its determination (the "Conservation Findings"). **These findings must provide a viable location for the number of units permitted by the Open Space/Cluster Development Bylaw.** Once the Potentially Developable Area has been determined the applicant shall layout the components of the subdivision within that area including the primary and any secondary roads, rights of way, trails, sidewalks, and other infrastructure as well as lot lines.

QUESTIONS?



Photo by Allison Bell