Booklet #4

January 29, 2019

RIDGEFIELD

CONSERVATION STRATEGIES BRIEFING BOOKLET

Overview

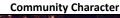
This "briefing booklet" has been prepared as part of the process of preparing an update to the Plan of Conservation and Development (POCD) for Ridgefield.

This booklet is intended to familiarize members of the Planning and Zoning Commission and others with existing and potential future strategies related to:

- promoting community character,
- preserving open space, and

Community Character

protecting natural resources.





Open Space



Natural Resources



""[Nothing] compares in importance with the ... task of leaving this land even a better land for our descendants."

> **Theodore Roosevelt American President**

Importance Of Character

In a 2018 survey conducted as part of preparing this POCD, participants identified community character as an attribute which:

- was the primary factor in attracting about onethird of respondents to Ridgefield (and a secondary factor for many more people),
- about two-thirds of respondents indicated was the thing they liked most about Ridgefield, and
- was identified by respondents as an important priority for the POCD.

The 2002 Image and Physical Character Study found that "most people moved to Ridgefield because of the commutable location, affordability, and the sense of community that is projected upon visiting the town."

Promote Community Character

2010 POCD GOAL STATEMENT

Preserve and encourage those features that contribute to Ridgefield's character.

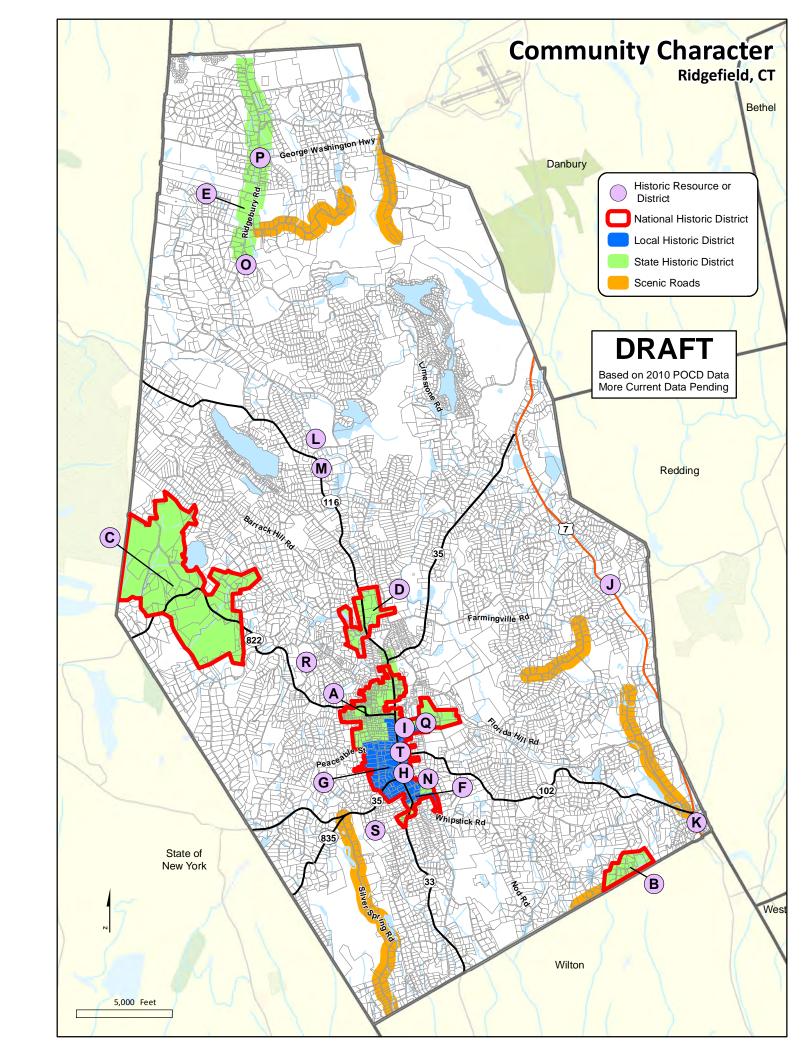
Community character is important to Ridgefield residents. In many surveys over the years (see sidebar), residents have indicated that community character is a large part of what attracted them to Ridgefield and a large contributor to their quality of life today.

For the POCD, the concept of "community character" includes attributes that contribute to a positive perception and distinctive impression of Ridgefield. This includes "physical" characteristics as well as "social/cultural" characteristics.

Ridgefield intends to seek to maximize the following types of things that have a **positive** correlation to people's perception of community character:

Natural Resources / Open Space / Scenic Resources	 Water features / wetland areas Landform / hillsides Preserved open space / undeveloped land Scenic views / scenic areas / scenic roads Significant trees / street trees / tree canopies
Place-making / Streetscape / Building Design	 Identifiable places with a "sense of place" Building design that reinforces "sense of place" Strong gateways / Intuitive way-finding Pedestrian-friendliness Appropriate landscaping / lighting / noise / signs Public art
Destinations	 Unique places (Ridgefield Playhouse, Aldrich Museum) Unique restaurants / retailers / services Greenway trails / connections Unique festivals / events Attractive community facilities / services
Other	 Historic resources People / organizations / traditions Positive reputation Cleanliness / maintenance / safety Community image / reputation / perception

The map on the facing page shows the location of some of these resources and features in Ridgefield.

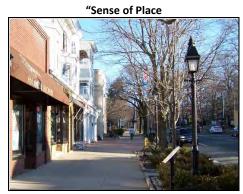


Some Components of Ridgefield's Physical Character

















Some Components of Ridgefield's Social / Cultural Character





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Visual Arts



Famous Artists



Prospector Theater



Local Events



Theater Barn



Local Events



Registers of Historic Places

The National Register of Historic Places (NRHP) identifies resources significant in the history of the nation.

The State Register of Historic Places (SRHP) identifies resources significant in the history of the state.

These designations are not regulatory in nature and only directly affect activities involving federal and/or state funding. The Register designations may prevent unreasonable destruction of important historic resources. Property owners may be eligible for tax benefits for improvements to these resources.

The designations may be for districts (areas containing multiple properties) or for individual properties.

Local Historic Districts

A local historic district is regulatory in nature and regulates exterior changes in view from a public street.

Ridgefield has two local historic districts where activities are overseen by the Historic District Commission.

Physical Character - Historic Resources

Historic buildings and sites make a major contribution to overall community character. Whether due to the visual appearance or whether they harken back to earlier times, historic resources provide a connection to Ridgefield's past and provide a context for the community.

Ridgefield is home to a number of recognized historic resources, as shown on the map and in the following table (the letter corresponds with the location of the resource on map).

"Rec	ognition" District	NRHP	SRHP	Local
A.	Ridgefield Center Historic District			
В.	Weir Farm Historic District			
C.	West Mountain Historic District			
D.	Titicus Hill Historic District			
E.	Ridgebury Historic District			
"Reg	ulatory" Districts	NRHP	SRHP	Local
F.	Ridgefield Historic District #1			
G.	Ridgefield Historic District #2			
Individual Property Listings		NRHP	SRHP	Local
Н.	Keeler Tavern			
I.	Governor Lounsbury House ("Grovelawn")			
J.	Fulling Mill / Woolen Mill Archeological Site			
K.	Branchville Railroad Tenement			
L.	Thomas Hyatt House			
M.	Lewis June House			
N.	Benedict House and Shop			
0.	Rochambeau March Route			
P.	Ridgebury Congregational Church	To Be Confirmed		
Q.	Old Ridgefield Playhouse	To Be Confirmed		
R.	Frederic Remington House *	-		
S.	Stephen Olmstead House			
T.	Thomas Hawley House			
	Peter Parley Schoolhouse			
	Cass Gilbert Fountain			

* The Frederic Remington House is also a National Historic Landmark.

The best way to protect historic resources is ownership or stewardship by a sensitive owner. The Town should continue to encourage sensitive and appropriate maintenance of historic buildings.

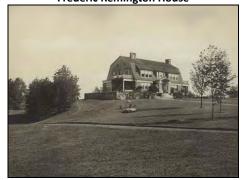
To help preserve historic buildings, the Zoning Regulations (ZR) allow some flexibility for certain dimensional requirements (ZR Section 8.5) and allow adaptive reuse along Route 7 (ZR Section 3.2.C.6). This could be extended to other parts of Ridgefield, as appropriate.

Some communities offer tax incentives or additional zoning relief to owners of historic buildings. The Town should continue to consider options for retaining and increasing the reuse of historic buildings.

In some situations, the above strategies may not be enough to preserve a historic resource. Some communities have adopted a Demolition Delay ordinance (Ridgefield has not) and this can provide a waiting period before demolition in order for the community to explore alternatives.

Finally, the continued promotion of Ridgefield's historic resources is important. Appreciation of local historic resources can lead to greater support for protection efforts.

Frederic Remington House



Thomas Hawley House



Keeler Tavern



"Grovelawn"



Helpful Organizations

- Historic District Commission
- The Ridgefield Historical Society – a local organization established in 2001 whose mission includes identifying "historic sites and structures to promote their preservation and restoration."
- Keeler Tavern Preservation Society
- The Town Historian
- Architectural Advisory Committee

Helpful Publications

- <u>Ridgefield Historic Architectural Resources Survey</u> a document completed in 1979 and updated in 2006 with a supporting computer database.
- About Ridgefield What We Were – What We Are - a 2002 publication by the Ridgefield Design Council which provides information about styles of architecture and historic neighborhoods in Ridgefield.

Scenic Roads

The Board of Selectmen has designated seven local scenic roads:

- Pelham Lane
- Florida Road
- Silver Spring Road
- · Old Branchville Road
- Neds Mountain Road
- Lounsbury Road
- Pine Mountain Road

PA-490 Criteria

The following are included in the open space land classification:

- Unimproved contiguous parcels of land, excluding house lots, held in single-unit ownership which consists of at least the minimum lot size required for the zoning district within which the premises are located as designated on the latest official zoning map.
- 2. All validated wetlands, excluding house lots,...

The following are excluded from open space land classification:

- Any land containing improvements such as but not limited to swimming pools, tennis courts, buildings, and septic systems,
- Any land legally subdivided into residential lots, and
- Any land zoned for nonresidential uses with the exception of validated wetlands.

Physical Character - Community Design / Architectural Review

Building architecture significantly contributes to overall community character in Ridgefield. Over the years, Ridgefield has demonstrated the ability to blend new buildings into the historic architecture and landscapes.

Much of the credit for this goes to the Architectural Advisory Committee (AAC) which reviews certain development projects as provided in Section 8.3 of the Zoning Regulations. The AAC should continue to ensure that building scale, design and materials are compatible with neighboring buildings, especially in Ridgefield Center.

Physical Character - Scenic Resources / Features

Ridgefield contains many scenic resources and features:

- ridgelines and hillsides,
- scenic views and vistas,
- scenic roads, and
- stone walls, barns and similar features.

The Town should seek to preserve these scenic resources and features and other aspects of Ridgefield's rich heritage. Should proposed development impact the integrity of scenic resources or features, the Town should work with property owners to retain the scenic aspects.

Physical Character - Vegetation

In addition to significant individual trees, mature vegetation in Ridgefield is an important aspect of community character. The preservation of trees (both notable trees and maintain as much vegetation) should be encouraged, especially along roadways.

Physical Character - Undeveloped Land (PA-490)

Some properties in Ridgefield participate in the use assessment program (commonly known as "Public Act 490") and this allows property meeting defined criteria (such as farm or forest use) to receive a reduced assessment. This helps preserve undeveloped property which provides character benefits to the whole community. While the State established criteria for farm and forest designations, the Town sets the criteria for the "open space" designation. This POCD recommends that the existing open space assessment policy (see sidebar) be continued.

Social/Cultural Character - Local Recognition / Branding

Ridgefield is considered a special place by its residents (and by residents of other communities as well). *Connecticut Magazine* continues to rank Ridgefield as one of the best Connecticut communities in which to live.

Ridgefield has a number of facilities, programs, and events that enhance community character and build community recognition and community spirit. Ridgefield has also developed a reputation as a "cultural destination" and a bit of a "foodie vibe" (Ridgefield Playhouse, Aldrich Museum, community concerts, street festivals, local restaurants, This recognition enhances Ridgefield's overall sense of community pride and spirit (and property values).

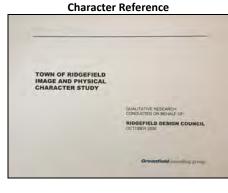
Ridgefield should seek to strengthen this recognition.

Social/Cultural Character - Volunteer Contributions

Many volunteer organizations and committees work to support community activities and maintain Ridgefield's quality of life. Volunteers also serve on municipal boards and commissions. These contributions support the overall social/cultural character of the community and help make Ridgefield the place that it is today.

Character Reference

A Statement Design Design of Multiples Control of M



Legend

On this page (and similar pages in the POCD, the bold text (with a letter designation) identifies a potential POCD "strategy" intended to provide overall direction.

The black text in the tables are "policies" which provide general guidance for local actions. Policies are generally on-going and may never be considered "implemented.

The red text in the tables are "action steps" which outline specific tasks which can be taken to implement POCD strategies.

Do these policies and action steps make sense for Ridgefield?

Are there any policies or action steps you feel should be added?

Possible Strategies For 2020 POCD

A. Maintain And Enhance Overall Character

- 1. Seek to maintain or enhance those characteristics which have a positive correlation to people's perception of community character:
 - a. Natural Resources / Open Space / Scenic Resources
 - b. Place-making / Streetscape / Building Design
 - c. Destinations
 - d. Community events / organizations
- Continue to use the Architectural Advisory Committee to ensure that building scale, design and materials are compatible with neighboring buildings, especially in Ridgefield Center.
- 3. Continue to promote public art as a way to help enhance community character.
- 4. Minimize lighting impacts on the overall environment (light pollution).

B. Continue To Protect Historic Resources

- 1. Encourage efforts to identify and preserve historic and archeologic resources.
- 2. Encourage "sensitive stewardship" of historic resources owned by private persons in order to preserve and maintain them.
 - a. Consider additional incentives, such as historic tax credits, to encourage preservation of privately owned historic buildings
- 3. Continue to encourage the adaptive re-use of historic structures along Route 7, where appropriate, if that will help in the preservation of such structures.
 - a. Consider expanding adaptive reuse to areas in Town.
- 4. Discourage the demolition or destruction of historic resources.
 - a. Adopt a demolition delay ordinance to allow time for identification, review, and preservation of significant historic resources.
- 5. Support establishment of local historic districts that are supported by a majority of the affected properties.
- 6. Continue to encourage awareness of local historic resources through:
 - collection and maintenance of historic information, and
 - b. educational activities that highlight Ridgefield's historic resources.

C. Maintain and Enhance Scenic Features

- 1. Continue to protect visually distinctive landscapes, high quality views, and other scenic features.
- 2. Maintain the character of designated scenic roads and seek to designate other scenic roads in the future.
- 3. Evaluate any proposed Town or State road widening projects with an eye towards balancing roadway needs with the desire to maintain or enhance scenic characteristics (i.e. "context sensitivity").
- 4. Encourage the preservation, maintenance, and planting of trees for their visual and scenic benefits.
- 5. Continue to seek an appropriate balance between utility pruning for reliability and scenic tree canopies.
- 6. Continue to use the PA-490 assessment program to help preserve farms, forests, and properties meeting the "open space" assessment criteria.

Do these policies and action steps make sense for Ridgefield?

Are there any policies or action steps you feel should be added?

D. Promote Community Spirit

- 1. Continue to encourage local recognition.
- 2. Continue to encourage volunteer contributions.
- 3. Continue to encourage community-wide events and activities.

Community Recognition



Community Spirit



Open Space And Character

Part of Ridgefield's community character comes from the abundance of open spaces that preserve significant landscapes and provide an environmental context to the developed areas.

In addition, these areas enhance the quality of life of residents by providing opportunities for informal recreation (i.e. walking, jogging, skating, biking).

These benefits enhance local property values and the marketability of the community.

Importance Of Open Space

In a 2018 survey conducted as part of preparing this POCD, participants identified open space as the highest priority topic for consideration in the POCD.

Preserve Open Space

2010 POCD GOAL STATEMENT Preserve open space to protect natural resources, enhance character and provide passive recreation opportunities

Open space is a key contributor to Ridgefield's overall character and its preservation and protection is important to Ridgefield residents. Open space preservation helps:

- conserve important natural resources and habitats and protect the health of the environment,
- protect community character,
- provide fiscal and economic benefits, and
- shape development patterns.

Ridgefield has made tremendous progress over the years preserving land as open space. The map on the facing page shows the location of open space parcels in Ridgefield as complied by the Conservation Commission. A listing of the specific sites is on the page following the map.

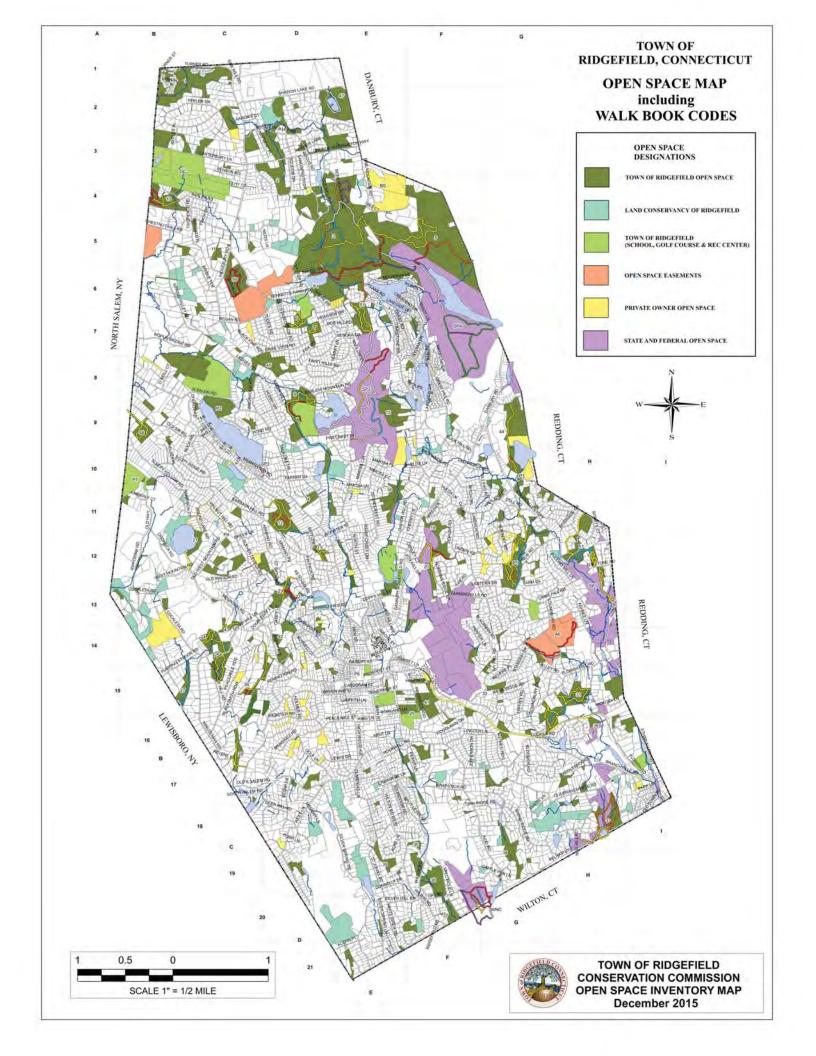
As can be seen from the map, Ridgefield is fortunate to have a number of properties within its open space inventory. Overall, 5,793 acres (about 26 percent of Ridgefield's land area) is considered to be open space. Efforts are underway to integrate the open space inventory into the Town's GIS database so that this information can be readily tracked and managed in the future.

Trails can also be key open space amenities. For example, the Ives Trail and the Rail Trail are important amenities. The Norwalk River Valley Trail (which will through Ridgefield) is part of a trail intended to extend from Norwalk to Danbury and tie many open space areas together.



Open Space





Map of Ridgefield Open Spaces

Ridgefield Open Space Areas		Acres		Open Spaces Without Trails		
	1	<i>e</i> ,	94			
3	P1	Hemlock Hills/Lake Windwing	504	32	The Knolls	7
	5	Pine Mountain	313	35	Old Spectacle Lane	4
6	7	Peterson Gorge & Ridgebury Slope	30		Ivy Hill	20
	9	Kiah's Brook /Titicus Preserve	53		Limestone Preserve	58
	10	Sarah Bishop	39		Lynch Brook Lane	24
	11	Berthier Equestrian Trail	11		Nod Road	25
		Levy Park	46	2	Scodon	35
	13	Barrack Hill Refuge	9		Stonecrest	34
17	18	Bobby's Court & Topstone Preserve	43		Ridgebury Woods	88
19	20	John Soluri Preserve	46		Additional Open Space	470
22	23	Marjoy Pond & Casey Lane	45			
	24	West Mountain Refuge: Reed	27		Other Areas: Schools	
	25	West Mountain Refuge: McManus	28		Ridgebury Elementary School	20
	26	Blacksmith Ridge	15		Ridgefield High School	78
	27	Colonial Heights	19		Scotland Elementary School	64
	28	Peaceable Refuge	16		Farmingville Elementary School	12
	29	East Ridge Preserve	3		Veterans Park Elementary School	12
	31	Florida Refuge	63		East Ridge Middle School	14
36	37	Spectacle Swamp/Silvermine Ridge	50		Branchville Elementary School	12
	39	Whitbeck Preserve	5		Zianen ine Zienienazy zeneer	
	41	Prospect Ridge Recreational Area	34		Other Town Owned Open Space	
	42	Remington Woods	26		Boys Club	8
	43	West Mountain Wetland Walk	9		Cemeteries (13)	10
	44	Laurelwood/ Great Pond Area	65		Community Center	5
	45	Old Stagecoach/Ledges	38		Ridgefield Recreation Center	48
	46	Brewster Farm	108		Prospect Ridge	34
	47	Shadow Lake	59		Prospect Ridge	34
	48	Old Sib	21			
	50	McKeon Farm	43		Drivetaly Owned Onen Space	
					Privately Owned Open Space	
	51	Knapp Preserve	26		(Usually not open to the public)	(52
D. 1	O 1 1	LD 1			Land Conservancy of Ridgefield	653
Ridg		l Parks			Aquarion Water Co	71
	P2	Richardson Park	29		Connecticut Light & Power	25
	P5	Aldrich Park	65		Boy Scouts of America	52
	P6	Ballard Park	5		Great Pond Club	33
	GC	Golf Course	180		Silver Spring Country Club	296
	P3	Martin Park	20		Private Cemeteries	19
	P4	Sachem Hill Field	4		Homeowner Association	594
	P7	Sturges Park	49			
~					C3 80	
State	& F	ederal Open Space Areas				
	SP1	Norwalk River Environmental Study Area	9		Existing Open Space Areas	
	SP2	Seth Low Pierrepont State Park	304		Town of Ridgefield	2934
	SP3	Lake Mamanasco Boat Launch	2		State of Connecticut	1427
	SP4	Bennetts Pond State Park	460		United States of America	37
33	WF	Weir Farm & Nod Hill Refuge	29		Land Conservancy of Ridgefield	653
V	VNC	Woodcock Nature Center	146		(includes some easements)	
		Norwalk River Flood Control	532		Boy Scouts	52
		Great Swamp Section	349		Homeowners Associations	594
		Miller's Pond Section	120		Aquarion and CL&P	96
		Spectacle Brook Section (Includes	63			
		Woodcock Nature Center)			TOTAL	5793

The Town has long had a goal to preserve at least 30 percent of the total acreage of the Town as open space (about 7,600 acres). While the 2015 Open Space Inventory suggests that Ridgefield would need another 1,800 acres to reach this goal, the documentation of open space easements and other preservation efforts may reveal that Ridgefield is closer than might first appear.

Regardless of the percentage, open space priorities in Ridgefield include:

- protecting important natural resources:
 - protecting water quality,
 - preserving waterways and surrounding wetlands and floodplains,
 - o large parcels providing "forest-interior" habitats,
 - o protecting unique and significant natural features including critical or threatened habitats.
- creating a meaningful open space system that interconnects trails, supports wildlife habitat and corridors, preserves community character, and contributes to an enhanced quality of life for residents and visitors, and
- protecting overall community character and scenic resources such as ridges, rivers, ponds, forests, marshes, bogs, vernal pools, and waterfalls.

Ridgefield should continue to use available tools to accomplish these goals:

- donation of conservation easements,
- purchase of lands / easements by the Land Trust and/or the Town,
- dedication of land at the time of development (though mandatory setasides as in the Subdivision Regulations or Zoning Regulations or as mitigation to preserve important resources), and/or
- grant programs / partnerships with conservation organizations.





Open Space Trail



Open Space Comparison

Although there is no statewide database comparing the amount of open space in Connecticut municipalities, "The Patch" newspapers around the state consulted local sources in 2014 and reported the amount of open space within ranges.

Within Fairfield County, the categories were as follows:

More Than 30% Open Space

Easton Redding

21-30% Open Space

(none identified))

16-21% Open Space

Bethel

Danbury

Fairfield

Monroe

New Fairfield

Ridgefield

Shelton

Trumbull

Weston

Wilton

Less Than 15% Open Space

Bridgeport

Brookfield

Greenwich

Sherman

Milford

Newtown

New Canaan

Norwalk

Stratford

Westport

Data Not Collected

Darien

Stamford

It is not clear that this information is useful since Ridgefield had more than 21% open space in 2014.

Do these policies and action steps make sense for Ridgefield?

Are there any policies or action steps you feel should be added?

Possible Strategies For 2020 POCD

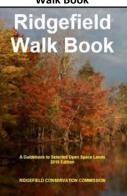
A. Continue To Preserve Open Space

- 1. Continue efforts to preserve 30 percent of Ridgefield as protected open space.
- 2. Continue to acquire open space in order to preserve and protect important natural resources including:
 - waterways and surrounding wetlands and floodplains),
 - existing and potential public drinking water supplies,
 - significant natural features including critical or threatened habitats.
 - a. Explore the potential to extend trails and make other improvements to expose people to the ecosystem of the Great Swamp.
- 3. Continue to acquire open space in order to help create a meaningful system that:
 - ties open space and recreational areas into an integrated greenway system,
 - supports wildlife habitat and corridors, and
 - enhances community character and enhances quality of life.
- 4. Establish a series of trails as a key element in connecting open space and recreation areas into an integrated system.
 - a. Focus efforts on extending and enhancing the Sugar Hollow Greenway and the Norwalk River Valley Trail.
- 5. Preserve old railways, trolley lines, logging roads, driftways, and other rustic byways as open space trails, where appropriate.
- 6. Continue to acquire open space in order to protect overall community character and scenic resources such as ridges, rivers, ponds, forests, marshes, bogs, vernal pools, and waterfalls.

Greenway Trail



Walk Book



Boardwalk



B. Enhance Open Space Preservation

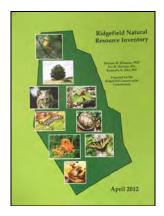
- 1. Update and maintain the open space inventory.
 - a. To facilitate overall open space planning, integrate the open space inventory into the Town's GIS system.
- 2. Maintain and improve land use regulations addressing open space preservation.
 - a. Review the open space set-aside requirement in Section 4-24 of the Subdivision Regulations (some communities require more than the 10% set-aside).
 - b. Maintain the fee-in-lieu of open space provision in Section 4-25 of the Subdivision Regulations to discourage the preservation of random pockets of open space that exist simply because a given parcel was subdivided.
 - c. Review the Planned Residential Development section of the Zoning Regulations (Section 4.1) to consider ways to encourage more flexible residential development patterns which can preserve important resources.
- 3. Use "fee-in-lieu-of-open-space" funds for strategic acquisitions that meet open space goals.
- 4. Explore additional funding options / opportunities such as:
 - a. setting aside a certain amount annually in the Town's budget, and
 - b. seeking grants.
- 5. Continue to encourage the use of conservation easements, both donated and acquired, as an important tool in open space preservation.
- 6. Continue to support the efforts of the Conservation Commission and the Land Trust as the primary stewards of open space properties in Ridgefield.
- 7. Continue to provide information on open space parcels and trails (such as the "Walk Book") and sponsor events on town open spaces.
- 8. Where feasible, improve accessibility to open space for all ages and physical abilities.
- 9. Continue to seek opportunities to partner with other organizations (such as the Ridgefield Land Trust) to protect open space.

Do these policies and action steps make sense for Ridgefield?

Are there any policies or action steps you feel should be added?

Natural Resources Inventory

The 2012 Natural Resources Inventory is herby incorporated into this POCD for its inventory of natural resources in Ridgefield.



Natural Diversity Database

The Connecticut Department of Energy and Environmental Protection (CT-DEEP) maintains a Natural Diversity Database (NDDB) in order to help public agencies protect important resources such as. known locations of:

- endangered species,
- threatened species,
- species of special concern,
- significant natural communities,
- scenic areas, and/or
- unique natural assets (waterfalls, caves, etc.)..

In some cases, the exact locations are masked to protect sensitive species from collection or disturbance.

Protect Natural Resources

2010 POCD GOAL STATEMENT

Continue to preserve and protect important natural resources.

Protecting natural resources is important in Ridgefield since doing so helps:

- promote overall environmental health,
- preserve environmental functions,
- enhance community character, and
- enhance the overall quality of life.

The map on the facing page shows the location of some of the important natural resources in Ridgefield:

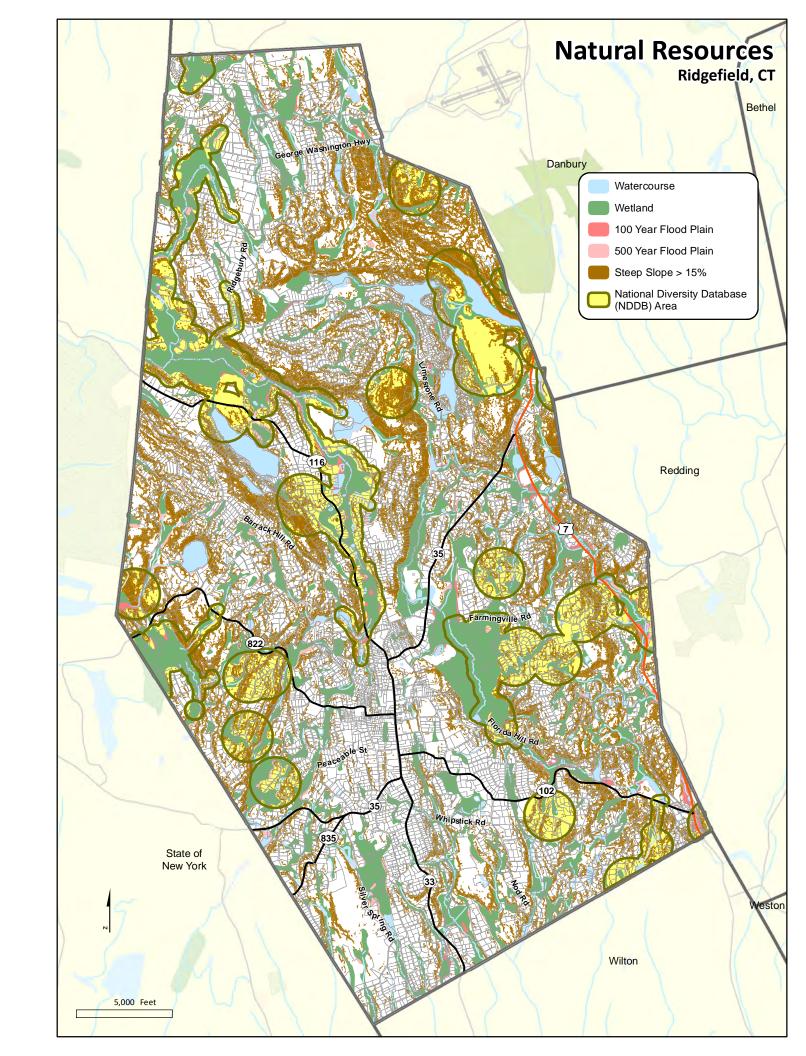
Water-Related Resources	 Watercourses Wetlands Aquifer protection areas (recharge areas of pumping wellfields) and areas of high ground water availability Floodplains
Land-Related Resources	Steep slopes (>15%)Hydrologic soil conditions
Biologic-Related Resources	 Plant and animal habitats / vernal pools Natural Diversity Database sites Unique or special habitat areas





Water Resource





Water-Related Resources

Rivers and Streams

- Norwalk River
- Silvermine River
- Titicus River
- Ridgefield Brook
- Cooper Pond Brook
- Spectacle Brook
- Saugatuck River
- Still River

Lakes and Ponds

- Mamanasco Lake
- Wataba Lake
- Fox Hill Lake
- Pierrepont Lake
- Round Lake
- Bennetts Pond
- Lake Windwing
- Great Pond
- Turtle Pond
- John's Pond
- Shadow Lake
- Weir Pond
- Little Pond

Swamps

- Great Swamp
- Pumping Station Swamp
- Silver Spring Swamp
- Titicus Swamp

Water-Related Resources

Protection of natural resources was highly ranked by participants in the community surveys conducted as part of this planning process. Within this context, preserving and protecting water quality may be the most important natural resource strategy in Ridgefield.

<u>Surface Water</u> - Surface water features (listed in the sidebar) are the most visible water-related resources. More significantly, Ridgefield is at the top of multiple watersheds and almost 14,000 acres of Ridgefield drains into public water supply reservoirs for the Town itself, along with Danbury, Norwalk, Wilton, New Canaan, Stamford, New York City, and other communities in Connecticut and New York. Ridgefield should continue to protect water resources and water quality.

<u>Wetlands</u> - Preservation of wetlands, swamps, and marshes is also very important since these features help maintain water quality, control flooding, help maintain the water table, and support biodiversity in Ridgefield. While oversight of these resources will transition to a new Commission in 2020, this overall strategy will remain important.

<u>Groundwater</u> - Although not as visible, groundwater is a significant natural resource since it stores significant amounts of water which maintains base flows in streams and rivers and can be a supply of water. Where there are significant deposits of sand and gravel, this groundwater storage can be a "stratified drift aquifer" which may be capable of supplying millions of gallons of water per day. Ridgefield should continue to administer the aquifer protection regulations (both State and local) to help protect groundwater quality.

<u>Floodplains</u> - Flooding along watercourses is a natural phenomenon associated with spring thaws and major storm events. Recognizing and respecting floodplain areas helps protect public safety and preserves this environmental function. This is expected to be even more important tin the future due to anticipated increases in the frequency and intensity of major storm events as a result of climate change.

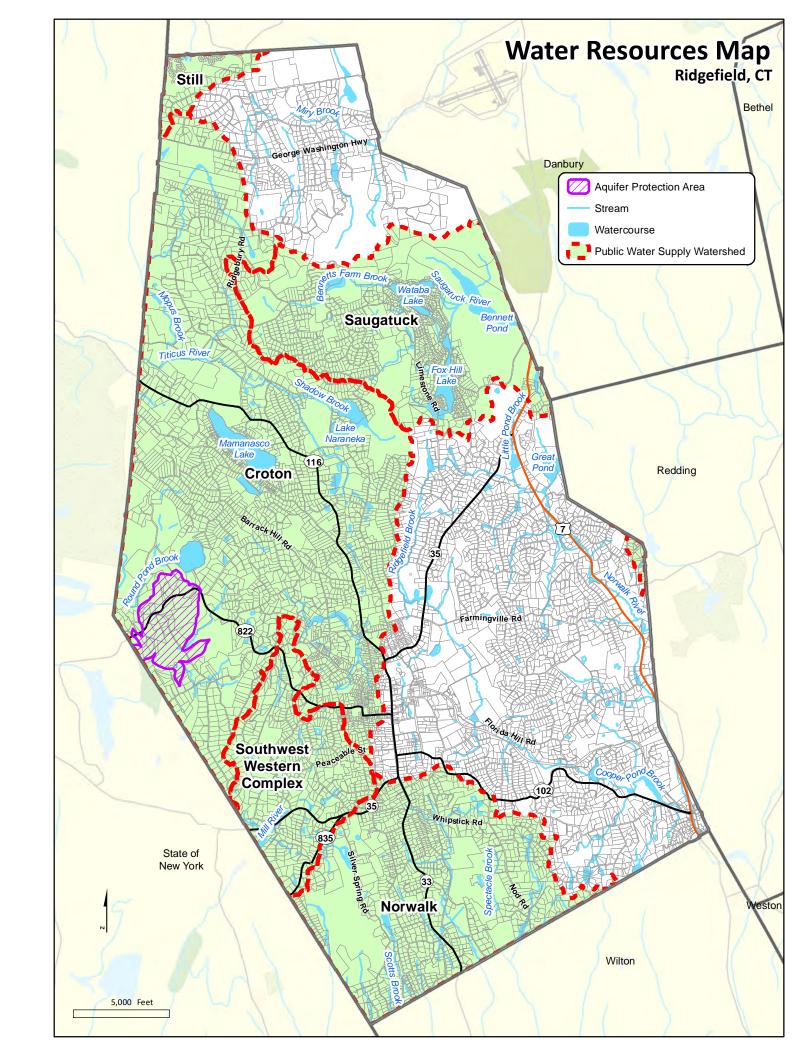




Water Resource



Nelson Gelfman



<u>Water Quality</u> - Protection of water quality (both surface water and groundwater) is particularly important to Ridgefield because much of the Town's drinking water (both public and private) comes from this supply.

Protection of water quality can occur by:

- Carefully managing activities in public water supply watersheds,
- Carefully managing activities in aquifer protection areas and areas of high groundwater availability,
- Reducing or eliminating erosion and sedimentation,
- Discouraging the use of chemical fertilizers and pesticides,
- Preserving wetland areas due to their important natural functions,
- Providing vegetated buffers (ideally of natural vegetation) along watercourses and waterbodies,
- Implementing "low impact development" (also known as "LID" and/or "green infrastructure") practices to address the quality of stormwater runoff and helping recharge groundwater supplies.

Case Study - Nutrient Loading

Ridgefield contains a number of lakes and these areas have long attracted residential development. However, this development can add significant nutrients to the lakes from septic systems and use of lawn fertilizers. Over time, these nutrients accelerate to eutrophication of the lakes.

Lake associations in Ridgefield (starting with the Mamanasco Lake Improvement Fund) have recognized this and have promoted strategies such as:

- preserving a vegetated buffer (100-foot) around the lake,
- · encouraging proper septic maintenance, and
- reducing the use of fertilizers.

These strategies should be continued and expanded since climate change may accelerate the eutrophication process even more.

Lake Mamanasco



Algae Bloom



Case Study - LID / "Green Infrastructure"

For many years, the overall approach to managing stormwater runoff was to try to capture it and discharge it as quickly as possible. There is now a realization that this approach diverted water from infiltrating into the ground (cutting off recharge of groundwater) and exacerbating flooding. Moreover, discharging untreated runoff directly to watercourses contributed to pollution.

In recent years, attention has turned to "low impact development" (LID) approaches to stormwater management where rainfall is managed and treated as close as possible to where the raindrop falls. Treatment practices include:

- using vegetation to remediate runoff quality,
- infiltrating rainfall, and
- detaining runoff so as to minimize downstream flooding.

Ridgefield has been implementing LID approaches (also referred to as "green infrastructure" because of its use of natural processes) and these efforts should continue and be enhanced over time.

Parking Lot Rain Garden



Rain Garden



Infiltration Basin



Pervious Pavement



Vernal Pools

Vernal pools fill a special niche in the environment. These small, seasonal waterbodies and the surrounding woodlands provide habitat for a variety of species (such as salamanders) that depend exclusively upon these temporary seasonal pools for their survival.

Vernal Pool Habitat



Land-Related Resources

Slopes steeper than 15 feet of rise over a 100 foot distance (called a 15% slope) pose constraints to development because of the challenges of providing road access and maintaining slope stability. These issues are even more pronounced on 25% slopes which present significant constraints to development due to the difficulty of building foundations and siting septic systems. For the above reasons, steep slopes should be protected from development and development pressure.

Certain soil types are better able to infiltrate rainfall and runoff and thus are better able to implement LID practices. The map on the facing page shows the hydrologic capacity of soils in Ridgefield according to the Natural Resource Conservation Service.

Biologic-Related Resources

Ridgefield contains numerous habitats for a variety of plants and animals. Overall, due to the significant amount of open space and undeveloped lands, Ridgefield contains a richness of flora and fauna.

Importantly, because of some of the unique natural features in Ridgefield, there are also several areas which have been documented as containing habitats of endangered, threatened, and/or special concern species. These habitat areas are recognized by the Department of Energy and Environmental Protection in a "Natural Diversity Database." The location of these areas in Ridgefield is illustrated on the Natural Resource Map. These unique natural features and habitats of endangered, threatened, and/or special concern species should be protected from development and development pressure.

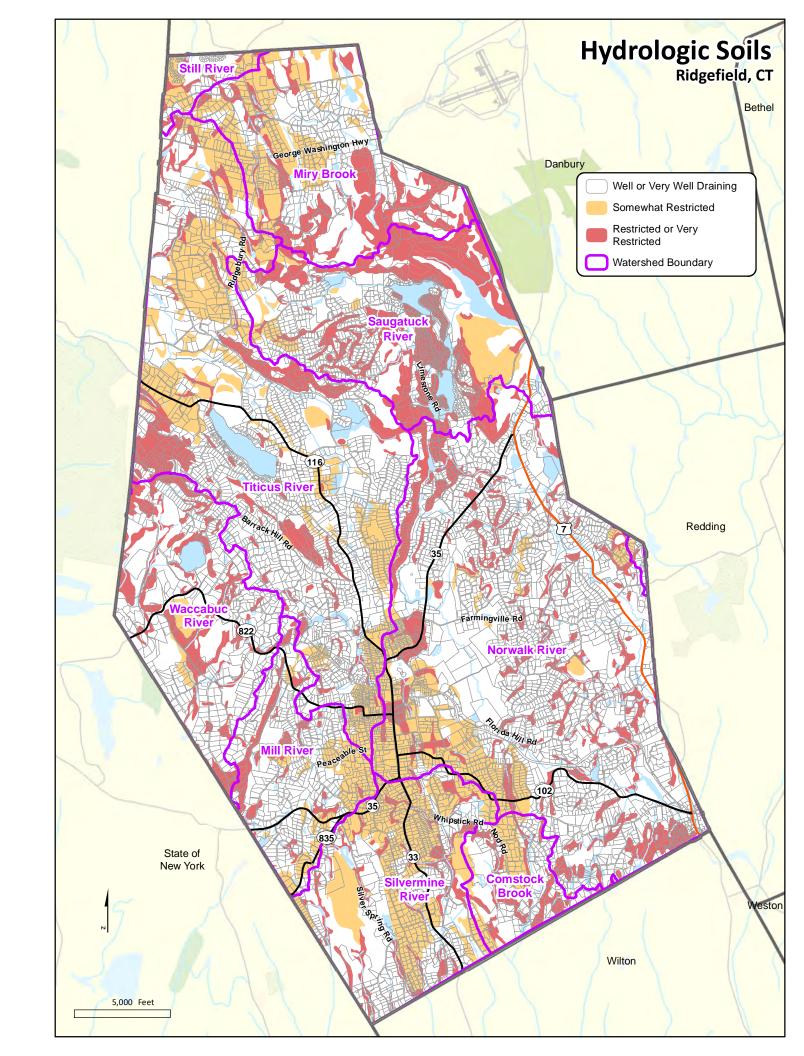
To maintain an appropriate plant portfolio, Ridgefield should require the use of native species (and remove invasive species and discourage or prohibit their future use) in Ridgefield.

Local Habitat



Nelson Gelfman





Do these policies and action steps make sense for Ridgefield?

Are there any policies or action steps you feel should be added?

Possible Strategies For 2020 POCD

A. Protect Water-Related Resources

- 1. Continue programs and efforts to maintain and improve water quality both surface water and groundwater.
 - a. Adopt and implement new "low impact development" / "green infrastructure" provisions in order to:
 - help comply with the provisions of the Town's "MS4" permit,
 - improve stormwater runoff quality,
 - address stormwater runoff quantity, and
 - help recharge groundwater supplies.
 - b. Investigate opportunities to reduce the amount of impervious coverage and/or increase the amount of pervious surfaces.
 - Consider adoption of a septic management ordinance, especially in lake watersheds.
 - d. Undertake education programs to:
 - · discourage the use of chemical fertilizers and pesticides, and
 - encourage the observance of water quality protection guidelines for all major lakes in Ridgefield.
- 2. Continue to manage land use activities in ways which will help protect public water supply sources in:
 - designated public water supply watersheds, and
 - designated aquifer protection areas.
 - a. Resolve who will be the "aquifer protection agency" in Ridgefield since the Town ordinance refers to "the members of the Planning and Zoning Commission in their capacity as the Inland Wetlands Board."
- 3. Continue efforts to:
 - protect watercourses / wetlands from development impacts.
 - preserve wetland areas due to their natural functions.
 - provide vegetated buffers (ideally of natural vegetation) along watercourses.
- 4. Continue to preserve and maintain natural floodplains and strictly control activities in floodplain areas.
- 5. Continue efforts to minimize erosion and the resulting sedimentation.
- 6. Continue to review and implement appropriate recommendations from watershed plans and studies.
- 7. Continue to support regional water quality protection efforts, such as those contained in the Norwalk River Action Plan and similar efforts.
- 8. Continue to educate residents about the importance of protecting water quality.

Possible Strategies For 2020 POCD (cont.)

Protect Important Natural Resources В.

- Continue to use the Natural Resources Inventory as a resource for helping guide overall land use planning and helping inform reviews of specific developments.
- 2. Continue to protect natural resources within Ridgefield through the dedication of open space areas.
 - Review the Planned Residential Development section of the Zoning Regulations (Section 4.1) to consider ways to expand its potential use to other areas of Ridgefield
- 3. Protect local plants and animals and their habitats, with an emphasis on minimizing habitat fragmentation.
- Continue to require the use of native species (and discourage invasive species) in Ridgefield.
- Continue to minimize the disturbance of steep slopes from development.
- Protect plant and animal habitats, especially vernal pools and those areas listed on the State's Natural Diversity Database.
- Encouraged landowners to protect vernal pools and the woodlands and watersheds surrounding them.
- Encourage the preservation, maintenance, and planting of trees for their environmental benefits (such as interception of rainfall, removal of CO₂, heat relief, habitat, and other benefits).
- Promote efforts to maintain and improve air quality such as reducing emissions from idling vehicles and promoting transit-oriented development.
- 10. Continue efforts to educate the public on such issues as how to protect wetlands, reducing pesticide use, and the use of native plants and trees in landscaping.

Do these policies and action steps make sense for Ridgefield?

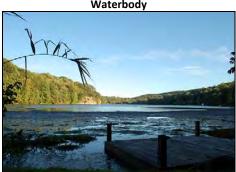
Are there any policies or action steps you feel should be added?





Nelson Gelfman

Waterbody



Notes & Comments

