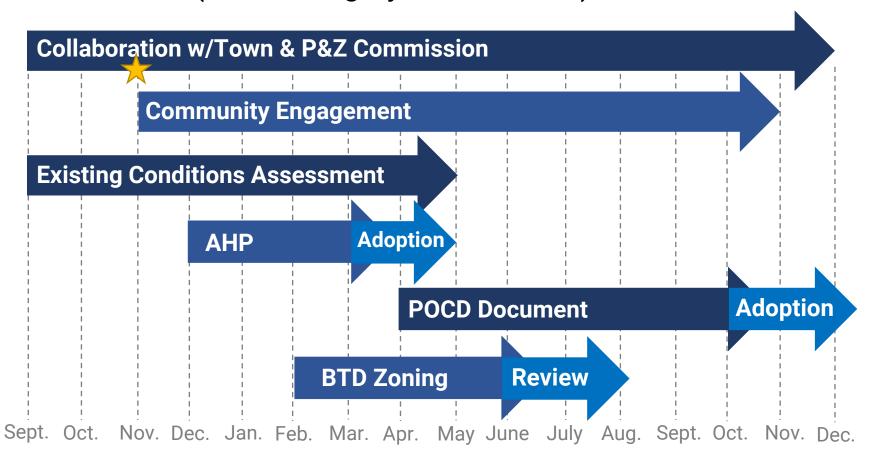


Agenda

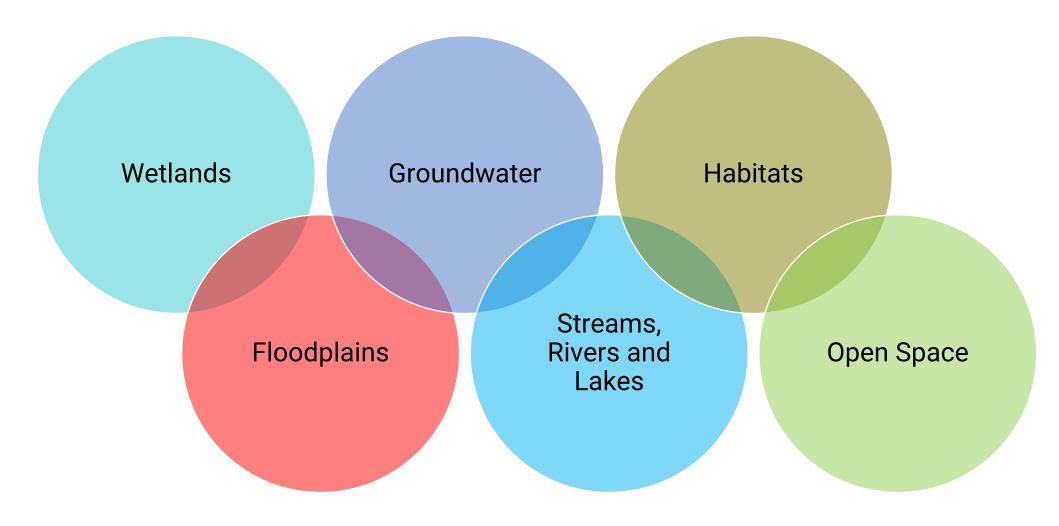
- 1. Review conservation, open space, and recreation resources
- 2. Discuss open space and conservation ideas
- 3. Discuss draft online survey
- 4. Draft vision statement
- 5. Next steps

Project Schedule

15 months (concluding by end of 2022)



Berlin's Environmental and Open Space Resources

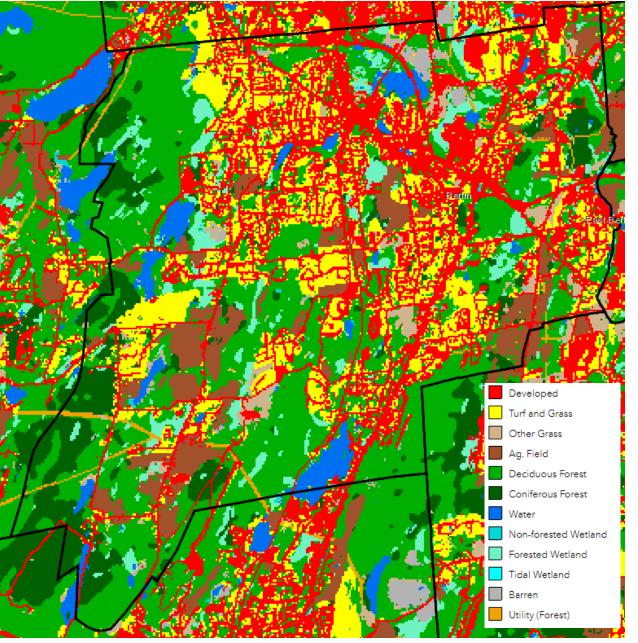


Management and Regulation of the Town's Open Space and Environmental Resources



2015 Land Cover

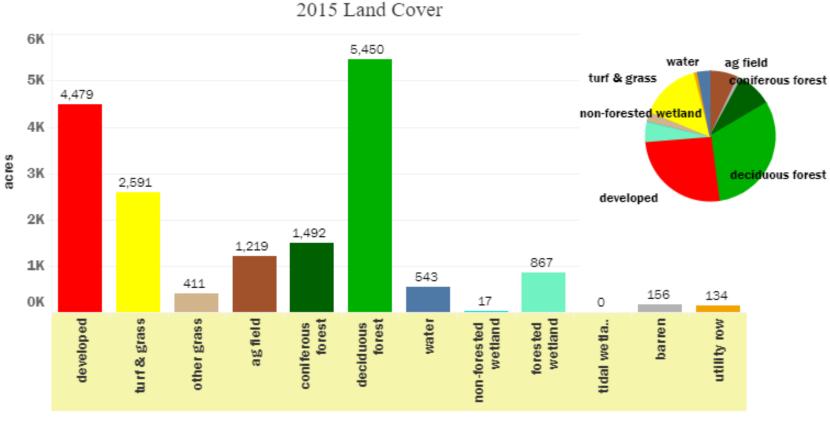
 Berlin's most prominent land cover is comprised of forest areas, both deciduous and coniferous.



Source: CT ECO/CLEAR

Berlin's Land Cover (2015)

- 40% of Berlin is covered by forests
- 25.8% of the land area is developed (buildings and pavement)

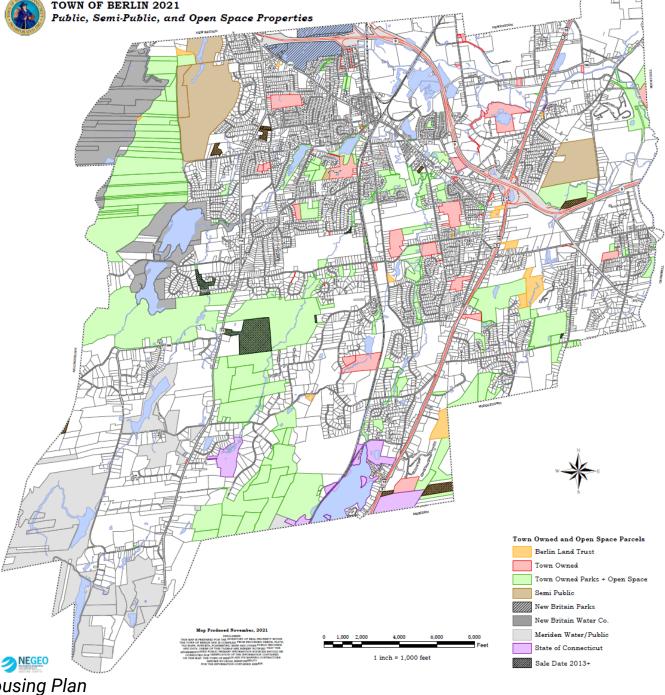


Source: CT ECO/CLEAR

Public and Open Space Parcels

There is a range of open space in Berlin:

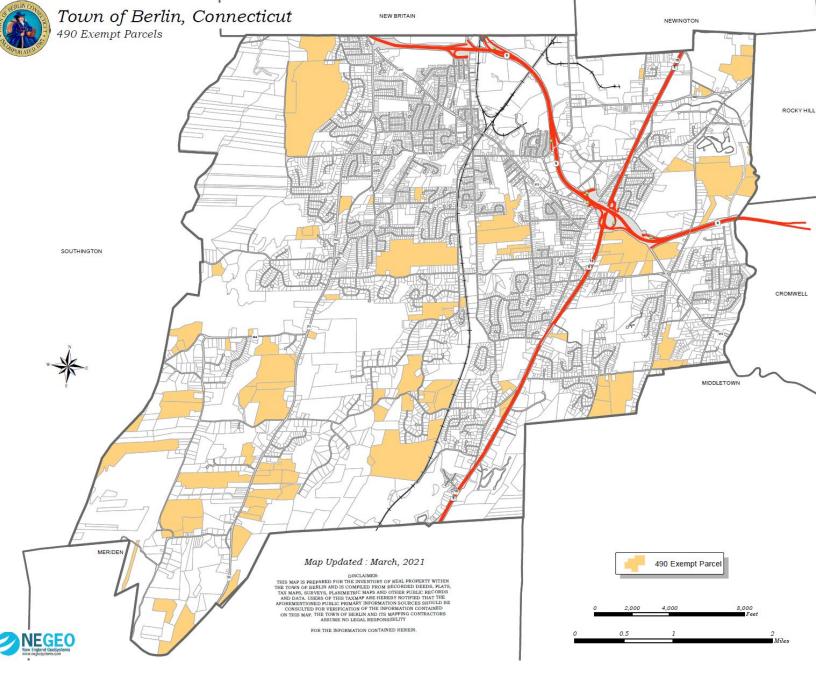
- Town-owned parcels
- Town-owned parks and open space
- Berlin Land Trust
 - 28 properties
- New Britain park properties
- New Britain water company land
- Meriden water company land
- State properties



490 Exempt Properties

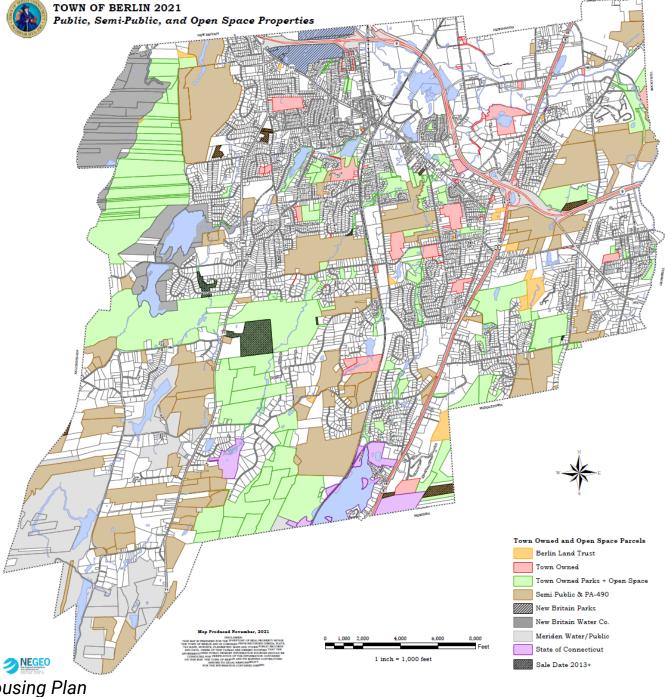
490 properties are properties that qualify for a reduced property tax rate as specified by CT Public Act 490. This includes:

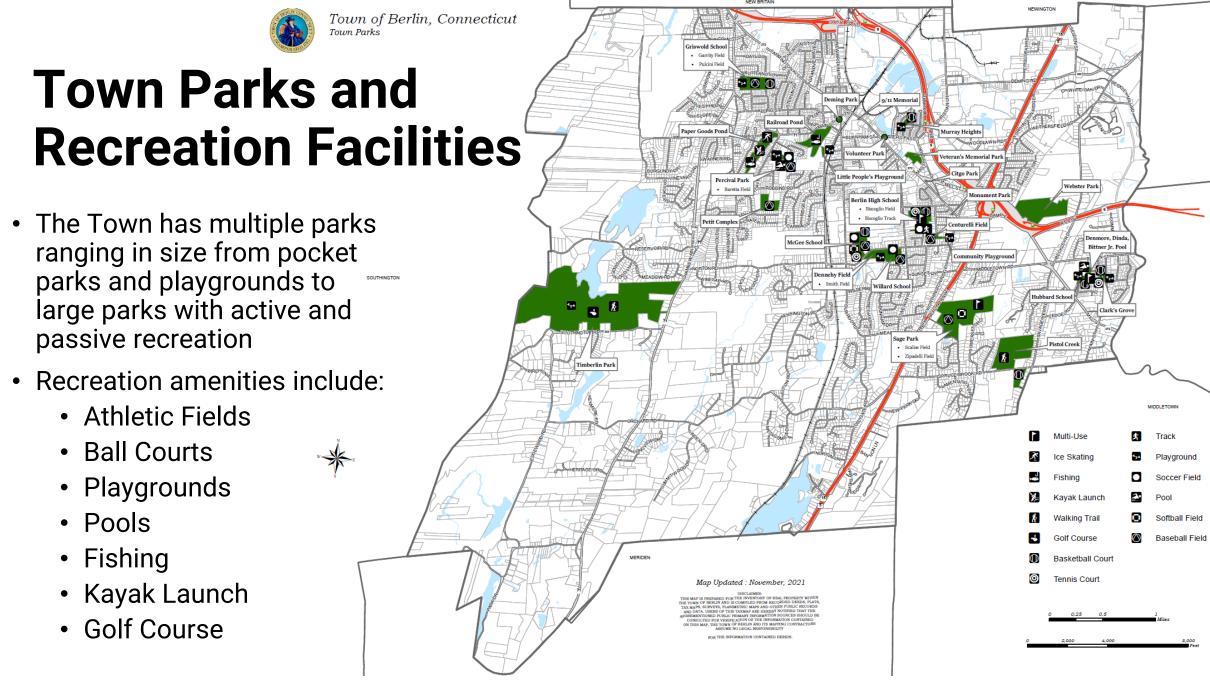
- Open space located within an area identified as a priority for conservation within the POCD
- Agricultural lands
- Forested lands of 25 acres or more



Public, Open Space, and PA 490 Parcels

Combined, public and open space parcels and PA 490 properties cover much of the Town's area.





Berlin's Parks and Open Space

- Parks
 - Bicentennial Park (210 acres)
 - Clark's Grove (2.8 acres)
 - Community/Worthington Ridge Grounds and Playground (6.1 acres)
 - Murray Heights Park (2.0 acres)
 - Paper Goods Pond Park (23.8 acres)
 - Percival Pool and Field complex (9.4 acres)
 - Sage Park (77 acres)
 - Timberlin Park (200 acres)

- School Grounds
 - Berlin High School (19.8 acres)
 - Griswold School (24.7 acres)
 - Hubbard School (7.8 acres)
 - McGee School (15.4 acres)
 - Willard School (19.7 acres)
- Athletic Fields (on Town Park or School Sites)
 - Centurelli Field
 - Dennehy Field and Smith Field
 - Garrity & Pulcini Baseball Field
 - Petit Complex

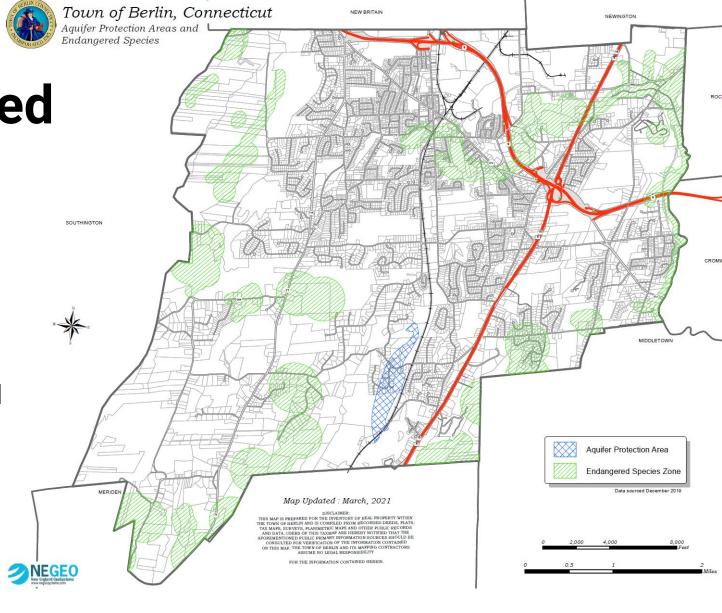
Berlin's Parks and Open Space

- Recreation Facilities
 - Demore, Dinda, Bittner Jr. Memorial Outdoor Pool with Tennis Courts (2.3 acres)
- Playgrounds
 - Friendship Place (0.2 acres)
 - Little People's Playground (2.3 acres)
- Pocket Parks
 - Citgo Park (0.3 acres)
 - Deming Park (0.2 acres)
 - Volunteer Park (0.3 acres)
 - Worthington Monument/Park (0.5 acres)

- Passive Open Space
 - Beckley Quarry
 - Bicentennial Park (210 acres)
 - Blue Hills Conservation Area
 - Hatchery Brook Conservation Area (183 acres)
 - Dorothy "Dot" Heffernan Memorial Park
 - Lamentation Mt State Park (47 acres)
 - Marjorie Moore Bird Sanctuary (0.4 acres)
 - Railroad Pond (23.0 acres)
 - Pistol Creek (77.0 acres)
 - Ragged Mountain Preserve (550 acres)
 - Treasure Field Park (5.0 acres)
 - Veterans Memorial Park (8.0 acres)

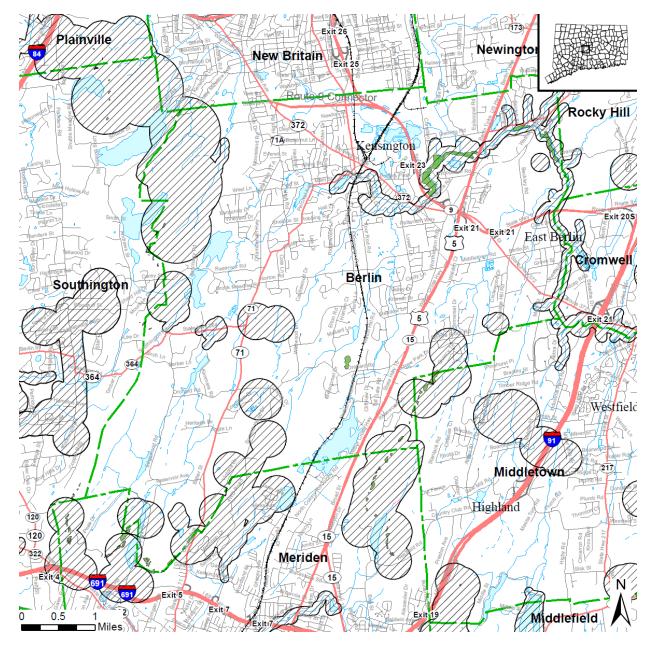
Aquifer Protection
Area and Endangered
Species Zones

- Berlin only has one aquifer protection area. It is located along Belcher Brook and spans Orchard Road.
- Other potential water supply resources are located at Bicentennial Park, Woodlawn Road, and City of Meriden parcel in South Kensington
- There are multiple endangered species habitat areas across the Town.



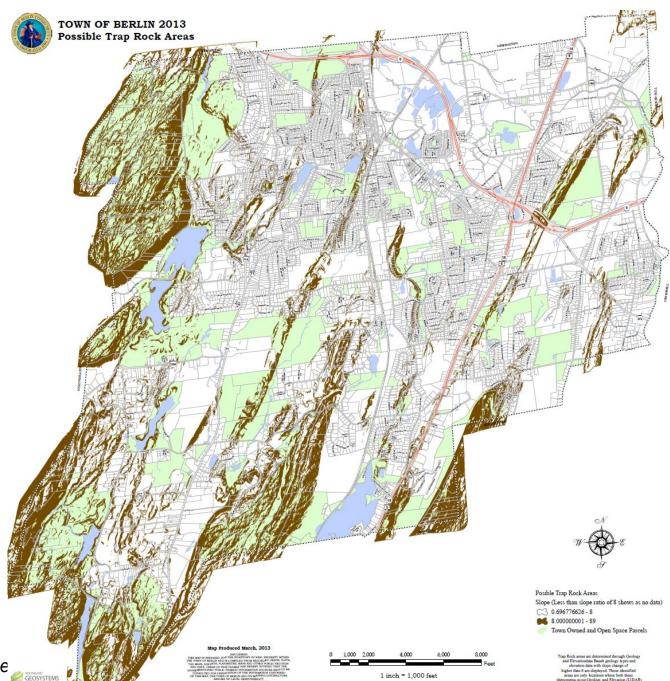
Natural Database Diversity Areas

- Natural Diversity Data Base areas represent approximate locations of endangered, threatened, and special concern species and significant natural communities in Connecticut.
- Exact locations are masked to protect sensitive species from collection and disturbance and to protect landowner's rights where species occur on private property.

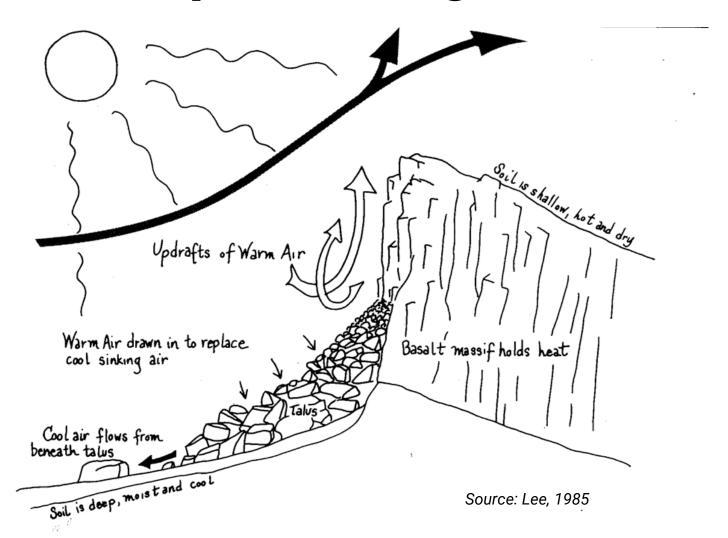


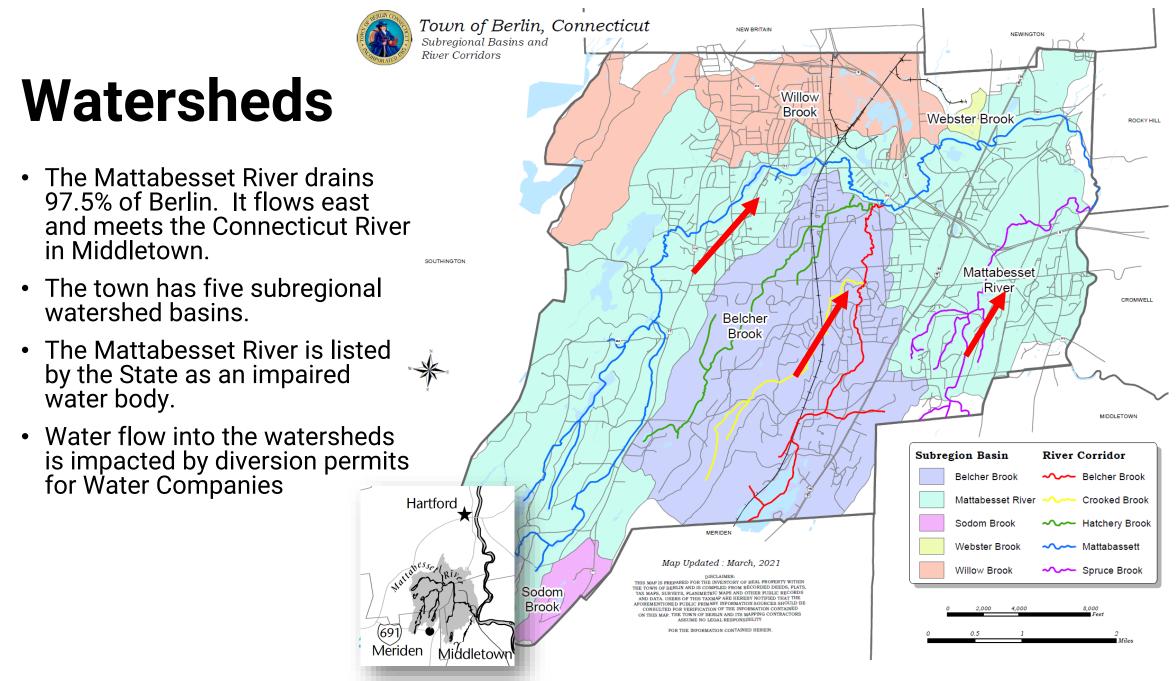
Ridgelines

- Berlin's ridgelines are oriented north/south and are heavily concentrated in the western and southern parts of town
- These ridgeline areas provide habitat for a wide range of species



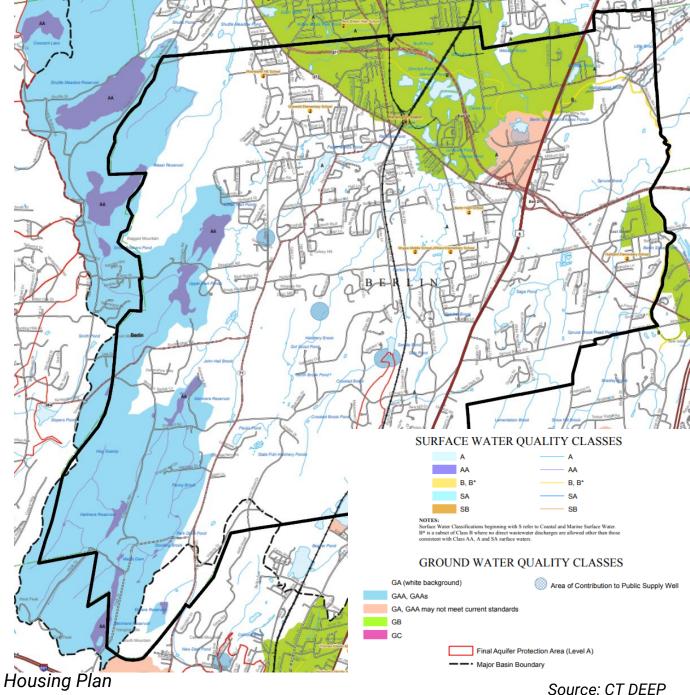
Function of Traprock Ridges





Water Quality

- Most of Berlin's surface waters that data is available for are high quality (class A or AA). Many small water bodies are not included in this inventory and assessment.
- Ground water quality high (Class GA or GAA) south of Route 372.
- Ground water north of Route 372 is rated as GB.



Surface Water Quality

AA

- Uniformly good to excellent, natural quality
- Public water supply, recreation, habitat, industrial supply, agricultural use
- Public water supply tributaries and reservoirs
- Wastewater Discharges: None other than clean water, drinking water treatment, dredging & dewatering

Α

- Uniformly good to excellent, natural quality
- Potential public water supply, recreation, habitat, industrial supply, agricultural use
- Generally all high quality streams and rivers, with no point wastewater discharges
- Wastewater Discharges:
 None other than clean water,
 drinking water treatment,
 dredging & dewatering

В

- Fishable and swimmable conditions, may be good to excellent quality
- Recreation, habitat, industrial supply, agricultural use
- Generally rivers and large streams, with point wastewater discharges
- Treated wastewater and above discharges

B*

 Currently not fully meeting goal of Class B

Source: CT DEEP

Ground Water Quality

GA

- Natural quality, or suitable for drinking
- Existing private supply, potential private or public supply, stream base flow, industrial & misc
- Area of private drinking water supply wells
- Wastewater Discharges: Domestic sewage, agriculture, water treatment, clean water discharges and certain waste of natural origin

GAA and **GAAs**

- Natural quality, or suitable for drinking
- Existing or potential public supply, stream base flow, industrial & misc
- Public drinking water supply well recharge (GAA), Public drinking water supply reservoir watershed (GAAs)
- Wastewater Discharges: Domestic sewage, agriculture, water treatment, clean water discharges

GB

- Assumed to have some degradation and not suitable for drinking without treatment
- Industrial & misc., nondrinking supply, stream base flow.
- Groundwater in urbanized areas, not used for drinking water supply
- Domestic sewage, agriculture, water treatment, clean water discharges & certain other biodegradable and soil treatable wastewaters

GA* and GAA*

- Water quality is threatened, or may be impaired
- Groundwater quality goal and designated use is Class GA or GAA, however there may be a known or potential impairment sources.

Source: CT DEEP

Stormwater Management

- The purpose of the MS4 (Municipal Separate Storm Sewer System) General Permit is to protect waters of the state from urban stormwater runoff through municipal separate storm sewer systems.
- MS4s located partially or entirely within an urbanized area (UA) that have at least 1,000 residents are subject to the requirements of the MS4 Permit and the SMP.

Stormwater Management Plan

Berlin, Connecticut GSM #000003 (Original issue date of June 23, 2014)

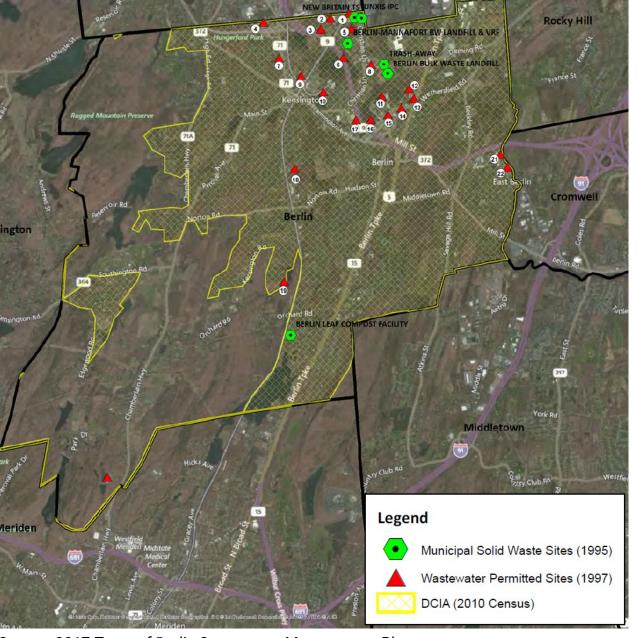
Issued for Public Comment April 1, 2017

Effective July 1, 2017



Directly Connected Impervious Area

 The Directly Connected Impervious Area (DCIA) is the impervious area from which stormwater runoff discharges directly to waters of the state or directly to a storm sewer system that discharges to waters of the state.

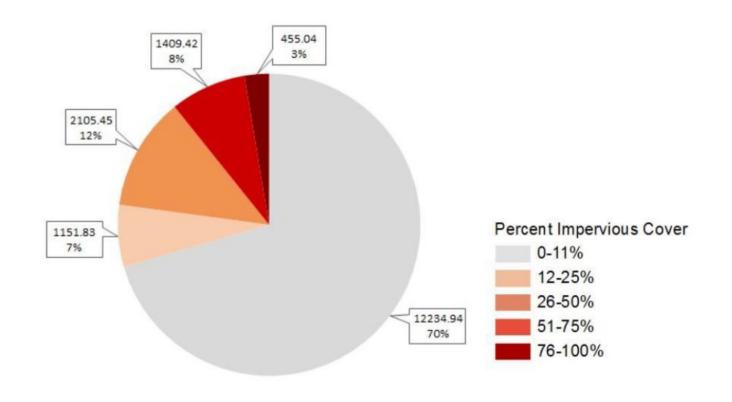


Source: 2017 Town of Berlin Stormwater Management Plan

Impervious Cover in Berlin

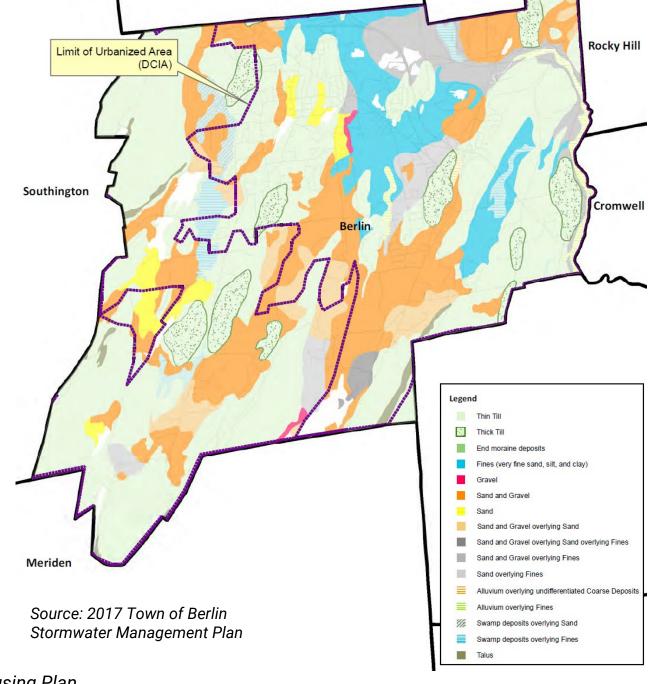
- 30% of Berlin has an impervious surface coverage of 12% or more.
- Research suggests aquatic life will be harmed when impervious cover within a watershed exceeds 12%.

Town Area (Acres) by % IC



Soils

- Berlin's soils are generally well drained although there are areas of silt and clay deposits (shown in blue).
- Well-drained soils are suitable for the use of infiltration-type stormwater management techniques.



Stormwater Management Plan

- Elements of the Plan (minimum control measures):
 - 1. Public Education and Outreach
 - 2. Public Involvement/Participation
 - 3. Illicit Discharge Detection and Elimination
 - 4. Construction Site Stormwater Runoff Control
 - Post-Construction Stormwater Management in New Development or Redevelopment
 - 6. Pollution Prevention/Good Housekeeping

Invasive Species in Connecticut

- Herbs
 - Garlic Mustard, Common Mugwort, etc.
- Vines
 - Mile-a-minute vine, Porcelain Berry etc.
- Shrubs
 - Japanese Barberry, Honeysuckles, etc.
- Trees
 - Norway Maple, Tree of Heaven, White Poplar, etc.
- Aquatic:
 - Milfoils, Zebra Mussels, etc.
- Insects:
 - Emerald Ash Borer, Wooly Adelgid, etc.
- Others:
 - Ash disease, Armillaria Root Rot, White Nose Syndrome, etc.

Potential Threats:

- Asian Longhorn Beetle
- Spotted Lantern Fly
- Beech Disease
- Lonestar tick and other ticks



Endangered, Threatened, and Species of Concern in Connecticut

- Mammals
 - Various bats
- Birds
 - · Hawks, owls, falcons, various songbirds, etc.
- Reptiles
 - Turtles (including box turtle) snakes, etc.
- Fish
- Amphibians
 - Salamanders
- Invertebrates
 - Dragonflies, butterflies & moths, beetles, mussels, etc.
- Plants
 - Various sedges, orchids, ferns, wildflowers, etc.



Preserve Farms

- Expand flexibility of farm use regulations
- Allow a house on a farming lots in the POD zone
- Use of Town parcels for agriculture.
 Haying has been allowed in some areas by license, but it is limited including by timing of haying after ground bird nesting season. There are also issues related to deed restriction on open space parcels bought in part with State DEEP open space funding.



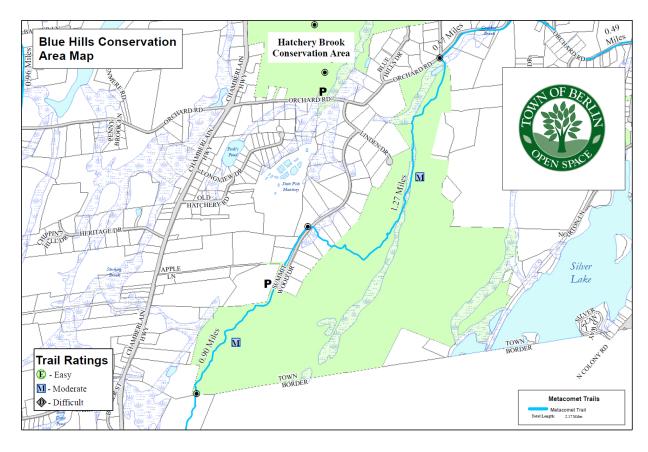
Expand ridgeline protection within zoning regulations. Potential attributes that can be regulated:

- Restrictions on tree removal for view creation;
- Landscaping requirements;
- Limitations on the size of trees that may be removed;
- Special review of environmental impacts;
- Density requirements related to slope gradient;
- Restrictions on colors and reflectivity;
- Height limitations;
- Buffers and setbacks;
- Vegetation and soil disturbance limitations;
- Coverage limits;
- Restrictions on exterior lighting;
- Clustering to avoid blocking scenic vistas;
- Requiring roads and walkways to parallel slope contours;

- Placement of utilities underground;
- Limitations on size and placement of vertical structures;
- Restrictions on rooftop heating and cooling equipment;
- Limitations on grading of slopes;



Consider deed restrictions on additional Town owned parcels, Blue Hills Conservation Area, Pistol Creek, parcels on Chamberlain Highway abutting Hatchery Brook Conservation area.



Install open space signage



Image Credit: Ashley Kus, The Berlin Citizen

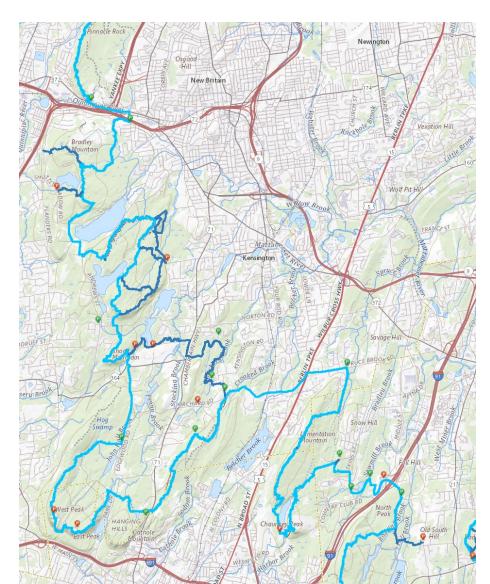
Site-Specific Improvements:

- Do added soil mixing at Kensington Orchards to achieve more complete utilization.
- Re-explore recreation facility opportunities at Silver Lake parcel owned by State of Connecticut.
- Expand proposed parking at Ragged/West Lane proposed as part of "The Preserve Project"
- Parking lot construction and barn removal on Orchard Road at Blue Hills Conservation Area.



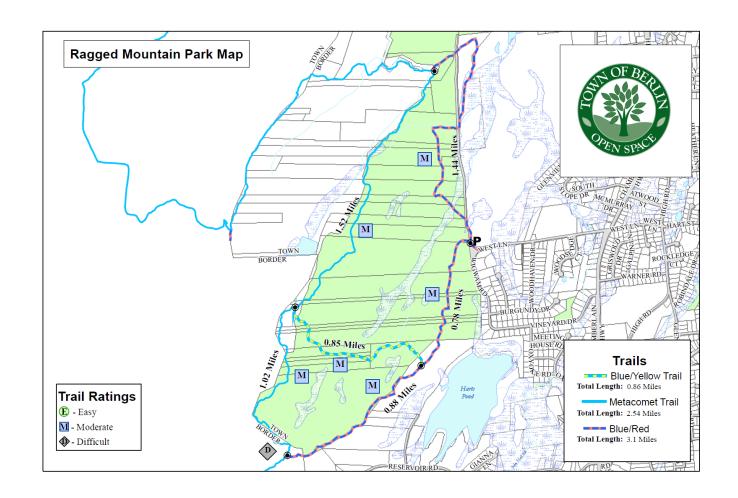
Blue Hills Conservation Area at Orchard Road

- Additional trail connections with existing land
 - Steepleview into Bicentennial
 - Kensington Road into Hatchery Brook Conservation area
 - Wigwam Road
 - North end of Cross Creek
- Trail connections requiring new land or easements
 - New Park to Lamentation Mtn
 - Eliminate Trail road walks, or reduce road walk on Edgewood, Orchard
 - Pistol Creek to Lamentation
 - New Britain Water Department or private property;
 Timberlin to Ragged Mountain
 - Meriden Water Company, help get trails off Edgewood Road
 - Route 9 ponds
 - Bridges, where else are they needed?



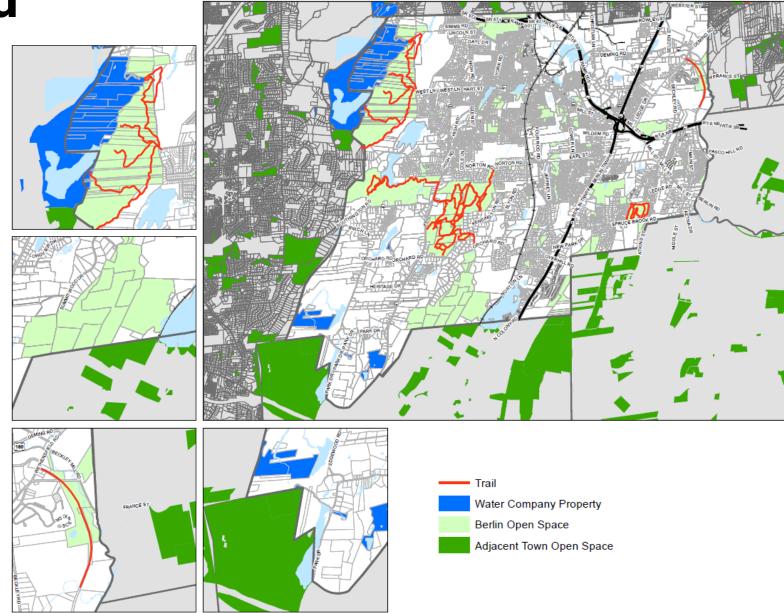
Protect and expand trails

 Ragged Mountain –Shuttle Meadow property



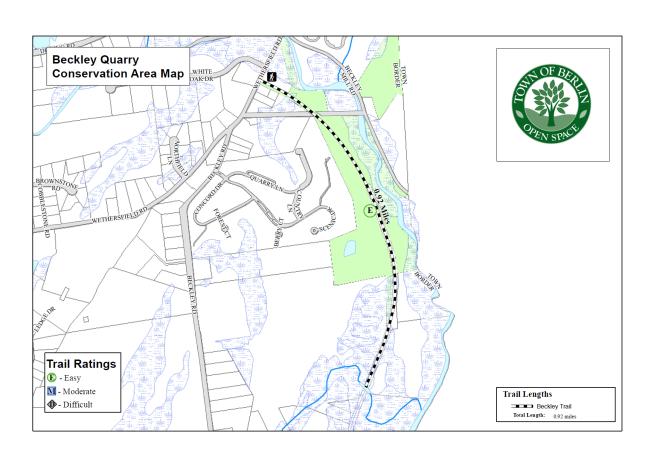
Improve open space connections at town borders

- Ragged Mountain and New Britain Water Company lands
- Pistol Creek to Lamentation
- Rocky Hill, Beckley Mill Road area



Beckley Quarry is near lots of housing, existing and planned. Should we consider improvements?

- Parking on White Oak
- Trail Improvement
- Better signage
- Coordination with Mattabesset District & Eversource to extend the trails
- Connection to nearby open space in Rocky Hill?



Other Ideas:

- Map and catalog open space easement areas.
- Town property acquisitions by fee or easement?

Open Space and Conservation progress since adoption of the 2013 POCD

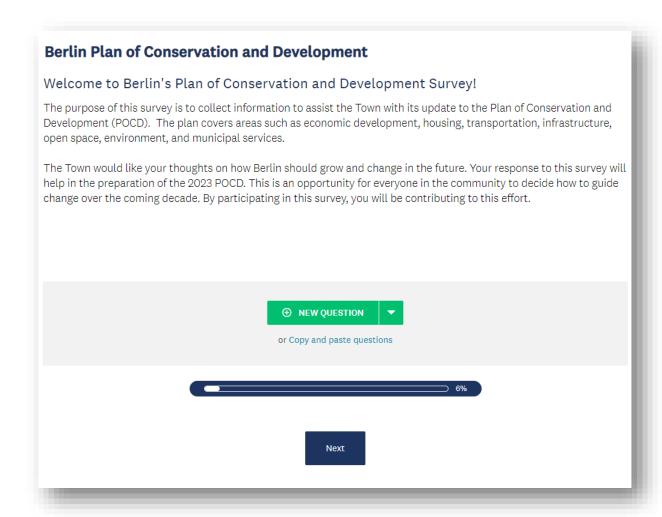
- 1. New farming provisions were added to the Zoning Regulations expanding farm related uses.
- 2. Chotkowski properties were acquired & soil management and restoration efforts completed.
- 3. Completed Metacomet Loop Trail
- 4. Relocated Metacomet Trail at Meriden line
- 5. Fishway was constructed at Railroad Pond
- 6. Bicentennial Trails were extended to Norton Road, including the completion of an Eagle Scout bridge
- 7. Sidewalks on Norton Road were extended to connect to Bicentennial Park
- 8. Parking was added at the Kensington Orchards & Chotkowski properties
- 9. Repaved some Pistol Creek Trails
- 10. Open space signage improvements were made
- 11. Berlin Land Trust Activities
 - Assisted Town to acquire Chotkowski properties
 - Acquired the Beckley Road Parcel contiguous to Webster Park
 - Conveyed tax sale parcels to the Land Trust, along streams and rear of Ferndale Plaza
 - Acquired Lamentation Mountain parcel on NET Trail, not in Berlin

Open Space and Conservation progress since adoption of the 2013 POCD

- 12. Improvements made at Community Garden
- 13. Trail system completed in Bicentennial/Hatchery Brook area
- 14. CFPA assisted the Town on many trail improvements
- 15. Continued youth involvement including Boy Scouts & High School (mountain bike races)
- 16. Tree trail completed at Bicentennial Park
- 17. Endangered species studies were done at Short Mountain and Hatchery Brook
- 18. CCSU students-built bridges; Sage Park and Timberlin
- 19. CFPA led student group removed tires from the pond at the end of Cross Creek twice
- 20. Bridges were constructed, Bicentennial, Ragged, Hatchery Brook replacement
- 21. New bridge was completed at rear of Town Hall to connect to Percival Field. Pathway improvements under consideration.
- 22. Study ongoing for open space multi-purpose use of Woodlawn Water Department parcel.
- 23. Concepts for Kensington Center TOD open space connections were done and a follow-up study is currently being conducted.
- 24. Created and updated open space story maps on Town website. Created open space trail maps in Avenza App.

Online Survey

 We need your feedback on the draft survey



Draft Vision Statement

Berlin is a community with a small-town feel founded in a rural and historically agrarian landscape that benefits from its location at the center of the state. The town has a rich history, strong community, and provides a peaceful atmosphere for its residents. Berlin will continue to grow, but in a sustainable manner and without compromising the town's natural resources or outgrowing its ability to provide high-quality services to its residents. Strong connections to the region and within town are highly valued by the community for all modes of travel. Berlin will balance growth against preservation of its historic landscape and village centers. The town's village centers, and farmland are important to the history and identity of Berlin; protecting and improving areas such as Kensington Center will remain a priority for the town.

Next Steps

- Launch Community engagement efforts
 - Develop press release and social media content
 - Launch online survey
 - Develop list of key stakeholders for interviews/focus group meetings
- Coordinate mapping with NEGEO
- Conduct cultural and historic resource research
- Continue collection of data for the Affordable Housing Plan

Recommended Meeting Topics through April 2022

- **December**: Cultural and Historic Resources
- January: Economic Development
- February: Housing and Affordable Housing
- March: Facilities and Infrastructure
- April: Mobility
- Discussion and updates on Community Engagement progress will be conducted at all meetings

Next Meeting

 Monday, December 20th at 5:30 pm

December 2021



Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	30	1	2	3	4
6	7	8	9	10	11
13	14	15	16	17	18
20	21	22	23	24	25
27	28	29	30	31	1
	29 6 13 20	29 30 6 7 13 14 20 21	29 30 1 6 7 8 13 14 15 20 21 22	29 30 1 2 6 7 8 9 13 14 15 16 20 21 22 23	29 30 1 2 3 6 7 8 9 10 13 14 15 16 17 20 21 22 23 24