



Department of  
**ENERGY & ENVIRONMENTAL PROTECTION**

## **Comprehensive Open Space Acquisition Strategy**

*2016-2020 Green Plan*

### *Section I. Green Plan Background & Purpose*

[www.ct.gov/deep/openspace](http://www.ct.gov/deep/openspace)  
[www.ct.gov/deep/greenplan](http://www.ct.gov/deep/greenplan)

## Table of Contents

Executive Summary .....	i
Table of Contents .....	iv
5-year Action Strategy to Achieve Connecticut’s Open Space Goal .....	1
Land Acquisition Priorities .....	6
A. Natural Waters & Drinking Water Resources.....	7
B. Areas Significant to the Coast.....	13
C. Natural Heritage Resources.....	17
D. Natural Resource-based Outdoor Recreation.....	21
Program Administration Priorities .....	24
1. Strategize Acquisitions for Climate Change Resiliency.....	25
2. Build Partnerships and Public Support for Open Space .....	27
3. Improve Open Space Data and Tools .....	36
4. Develop Strategies for Preserving in Perpetuity State-owned Lands of High Conservation Value.....	40
5. Optimize State Open Space Acquisition and Grant Program Operations.....	42
<b>I. Green Plan Background &amp; Purpose.....</b>	<b>46</b>
<b>A. Goals and Measures of Success.....</b>	<b>49</b>
<b>B. Consistency with State &amp; Local Plans of Conservation and Development.....</b>	<b>52</b>
<b>C. Recent Achievements in Connecticut Land Conservation .....</b>	<b>52</b>
<b>II. Land Protection Challenges .....</b>	<b>55</b>
A. Economic and Development Pressures .....	55
B. Land Transfer & Parcelization .....	56
C. Funding Availability.....	57
D. Stewardship of Protected Lands .....	61
E. Impacts by Climate Change.....	62
F. Data Needs for Open Space Planning .....	63
<b>III. Status of Connecticut Open Space.....</b>	<b>66</b>
A. Overall Open Space Goal.....	66
B. State-held Open Spaces .....	68
I. Parks & Forests.....	68
II. Wildlife Management and other Natural Heritage Areas.....	70
III. Other DEEP-owned Lands.....	73
IV. Open Space Held by Other State Agencies .....	74

C. Open Space Held by Land Conservation Partners .....	76
I. Municipalities .....	76
II. Non-profit Land Conservation Organizations.....	78
III. Water Utility Companies .....	80
D. Statewide Trails & Greenways.....	82
E. Federally-owned Open Space .....	85
I. U.S. Fish and Wildlife Service .....	85
II. U.S. National Park Service.....	87
III. U.S. Army Corps of Engineers .....	87
IV. Land Conservation Funding Programs in Connecticut.....	89
A. State Recreation and Natural Heritage Trust Program.....	90
I. Cooperators Provision of the Recreation and Natural Heritage Trust Program.....	94
B. State Open Space and Watershed Land Acquisition Grant Program .....	96
I. The Natural Heritage, Open Space and Land Acquisition Review Board .....	100
C. Federal Land Acquisition Funding Programs.....	101
I. Coastal and Estuarine Land Conservation Program .....	102
II. Long Island Sound Study Program .....	103
III. Highland Conservation Act Grant Program.....	104
IV. Land and Water Conservation Fund .....	105
V. Recreational Trails Program .....	106
D. Working Farm and Forest Programs .....	107
I. Forest Legacy Program.....	107
II. Natural Resources Conservation Service Programs.....	109
IV. Connecticut State Farmland Preservation Program.....	112
V. Purpose of, and Need for, Protected Open Space .....	113
A. Natural Heritage Resources.....	113
I. Freshwater and Inland Wetland Habitats.....	114
II. Coastal Habitats.....	117
III. Forested Upland Habitats.....	121
IV. Ridgeline & Declining Upland Habitats.....	125
B. Drinking Water Resources.....	130
C. Outdoor Recreational Resources .....	131
I. Outdoor Recreation Needs.....	133
D. Open Space in Urban Communities .....	136

E. Working Farmlands .....	138
VI. Identifying High Priority Lands for Conservation .....	141
1. Evaluate Existing Open Space using Geo-spatial Data.....	142
I. The Public Use and Benefit Land Registry .....	143
2. Apply State and Regional Decision Support Tools.....	147

## **I. Green Plan Background & Purpose**

Recognizing the threat of loss of environmental resources to changes in land use, in 1997 the General Assembly set an ambitious goal of protecting 21 percent of Connecticut's land by year 2023 for public open space<sup>16</sup>. With a total of 3,205,760 acres in Connecticut, 673,210 acres must be protected to meet this goal.

Progress has been made on acquiring land for open, but critically-important conservation and recreation lands remain at risk to being lost to development or conversion to other uses. DEEP and its conservation partners must evaluate remaining lands in Connecticut and prioritize the preservation or protection of the lands of highest conservation and recreation value.

The Legislature, when drafting the open space acquisition goals, set targets for the State, acting primarily through DEEP, and DEEP's conservation partners (municipalities, private non-profit land conservation organizations, and water companies whose lands are considered Class I and II water company lands):

- 10% (or 320,576 acres) is to be acquired and held by the State of Connecticut, and
- 11% (or 352,634 acres) is to be acquired and held by land conservation partners.

In order to protect natural heritage and recreation lands for future citizens of the State of Connecticut, DEEP and its partners must coordinate efforts. Certain lands may be best-suited for DEEP management and others may be best-suited for management by a conservation partner. Regardless of ownership, all parties must work together to protect the ecosystem and social benefits provided by open space.

---

<sup>16</sup> (CGS) Sec. 23-8b

While many groups and individuals support the acquisition and protection of open space, there is little clarity on what constitutes open space. The term “open space” is defined in Statute<sup>17</sup> in context of the tax abatement program commonly referred to as “PA-490.” For the purpose of implementing the conservation efforts outlined in the Green Plan, the following adaptation of the PA-490 definition of open space is provided:

#### OPEN SPACE

Any area of undeveloped or relatively natural land, including forest land, land designated as wetland under section 22a-30, and not excluding farm land, the preservation or restriction of the use of which would (A) maintain and enhance the conservation of natural or scenic resources, (B) protect natural streams or water supply, (C) promote conservation of soils, wetlands, beaches or tidal marshes, (D) enhance the value to the public of abutting or neighboring parks, forests, wildlife preserves, nature reservations or sanctuaries or other open spaces, (E) enhance public recreation opportunities, or (F) preserve historic sites.

Open space does not mean undeveloped natural land or land with an unofficial passive recreational use. For land to be termed “open space,” it must be preserved or protected for open space use. The Green Plan provides strategies for the preservation and the protection of open space. These terms are not used interchangeably in this plan.

#### PRESERVED OPEN SPACE

Any area of land that has been acquired and is used for open space purposes.

*Includes DEEP’s State Parks, State Forests, and Wildlife Areas, and Class I and II watershed lands*

#### PROTECTED OPEN SPACE

Any area of land with a restriction that would limit its use to open space.

*Includes lands subject to conservation restrictions, deed restrictions, or certain reserved rights.*

---

<sup>17</sup> (CGS) Sec. 12-107(b)(c)

When the State measures its success toward reaching the collective open space acquisition goals, only preserved or protected open space is measured. As of December 2015, DEEP held an estimated 257,616 acres, or about 80 percent, of the target for State open space acquisition. DEEP's land conservation partners held a conservatively estimated 243,714 acres, or about 69 percent, of the target for partner open space acquisition. This accounts for a total of 501,330 acres, or about 15 percent of Connecticut's land area held as open space. Overall, Connecticut is 74 percent of the way toward achieving its total open space preservation goal.

The Connecticut Comprehensive Open Space Acquisition Strategy (Green Plan) is a statewide planning document developed by DEEP in partnership with municipalities and numerous conservation organizations to guide land acquisitions towards achieving the state's open space goal. Considering the needs and issues facing the state's residents and environmental resources, the Green Plan:

- Discusses the purpose of, need for, and threats to land conservation in the state;
- Provides an estimate of the acres of land protected by the State and its partners;
- Discusses a system for increasing the accuracy of open space land data;
- Describes the highest priorities for acquisition of land identified to be in greatest need for immediate preservation and the general location of each priority;
- Provides timetables for the acquisition of land by the State and plans for management of such land; and
- Lists Connecticut open space resources to be used for acquisition and management of such land<sup>18</sup>.

The first Green Plan was prepared in 2001 and was last revised in 2007. Since 2007, two Public Acts<sup>19</sup> have expanded the scope of the Plan and require that it be updated every five years.

The Plan includes three new components that relate to protected open space in the state: the [Public Use and Benefit Land Registry](#), the identification of the State's highest priority potential

---

<sup>18</sup> (CGS) Sec. 23-8b

<sup>19</sup> P.A. Nos. [12-152](#) and [14-169](#)

acquisitions, and the establishment of a process to protect currently unprotected State-owned lands.

In updating the Green Plan, DEEP sought guidance and assistance from groups throughout the agency, other state agencies, and the State Natural Heritage, Open Space and Land Acquisition Review Board. DEEP also conducted outreach with regional councils of government, the land conservation community, and the general public (Appendix C). The result of this inclusive, interdisciplinary process is a land acquisition priority framework that is integrated with the ecological values and public use needs identified by key state stakeholders.

#### **A. Goals and Measures of Success**

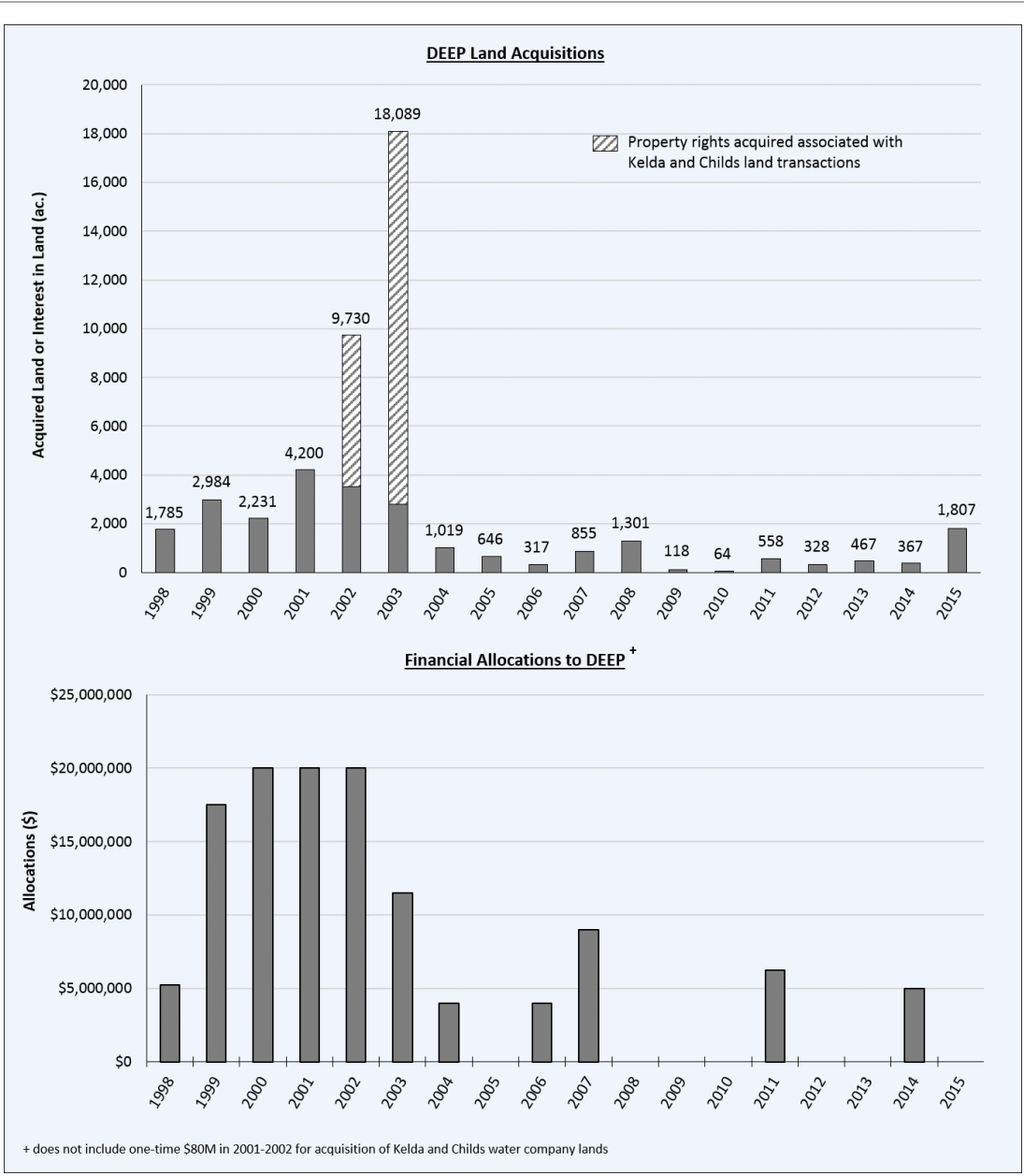
Through year 2020, the State and its land conservation partners should target to acquire a total 11,500 acres as open space: 5,550 acres (48 percent) to be acquired by DEEP and 5,950 acres (52 percent) to be acquired by its partners. Table 1 below lists the conservation focus areas in which DEEP and its partners should direct open space acquisition efforts, based on the highest priority lands detailed in the [5-year action strategy section](#) of this plan.

The acreage goals for conservation focus areas were derived by calculating the land needed to increase land holdings by a certain percentage, where current metrics are available. This percent increase relies on an understanding of the area of lands across the state that are either currently held in protective forms or that remain unprotected and undeveloped. DEEP used the current and best data available to set these acreage targets that comprise the total five-year acquisition goal.



<b>Table 1. Open space land acquisition or protection targets set for DEEP and its Partners through year 2020.</b>			
<b>Open Space Priority</b>	<b>Target Acres</b>	<b>DEEP Acquisitions (Acres)</b>	<b>Partner Acquisitions (Acres)</b>
Natural Waters & Drinking Water Resources	5,000	1,500	3,500
		<i>(30% of Total)</i>	<i>(70% of Total)</i>
Significant Coastal Areas	1,000	300	700
		<i>(30% of Total)</i>	<i>(70% of Total)</i>
Natural Heritage Resources	1,000	750	250
		<i>(75% of Total)</i>	<i>(25% of Total)</i>
Recreational Trails	2,000	500	1,500
		<i>(25% of Total)</i>	<i>(75% of Total)</i>
Other Recreation and Natural Resource Lands Held by DEEP	2,500	2,500	0
		<i>(100% of Total)</i>	
<b>Totals</b>	<b>11,500</b>	<b>5,550</b>	<b>5,950</b>

These acquisition targets set for DEEP and DEEP’s land acquisition partners are not ideal and do not keep the state on track to meeting its overall open space goal by 2023, but declining State, municipal and private resources and acquisitions rates show that they are a stretch but possibly attainable. DEEP has only acquired about 5,865 acres, or 651 acres each year, between 2007 and 2015 (Figure 1). The most acquisitions were made in 2001, the same year the statutory goal to protect 21 percent of the state was established and financial allocations to DEEP for land acquisition were at peak. With this new Green Plan, it is anticipated that efforts and outcomes will increase.



**Figure 1.** DEEP annual acquisitions for conservation (top) and State financial allocations (bottom) under the Recreation and Natural Heritage Trust Program since 1998. Acreage includes fee simple and conservation easement acquisitions.

## **B. Consistency with State & Local Plans of Conservation and Development**

The State's [Conservation and Development Policies Plan](#)<sup>20</sup> serves as a statement of the development, resource management, and public investment policies for Connecticut. The State Office of Policy and Management is required by statute to prepare this plan on conservation and development on a recurring five year cycle.

The efforts of DEEP and the Green Plan to acquire, preserve, and manage open space for clean waters, public health protection, resilient coastal resources, scenic highland areas, fish and wildlife habitat, universally-accessible outdoor public recreation areas, and other resources are consistent with the policies under the current Conservation and Development Policies Plan (Appendix D).

The Conservation and Development Policies Plan specifically calls on state agencies and municipalities to facilitate the expansion of open space through the acquisition of lands and implementation of open space priorities as defined in this Green Plan. To maintain consistency with the State's conservation priorities and increase the likelihood of being awarded a DEEP open space grant, municipalities and other land acquisition partners are encouraged to generate their plans of conservation and development guided by the Green Plan.

## **C. Recent Achievements in Connecticut Land Conservation**

A small selection of the successfully completed or on-going efforts by DEEP and its conservation partners since the Green Plan's last revision in 2007:

- With assistance from bond funding and funding from the [Community Investment Act](#), more than 18,800 acres were acquired or protected under DEEP's land acquisition and open space

---

<sup>20</sup> (CGS) Sec. 16a-24 through 16a-33

grant programs between 2007 and 2015 (Appendix A and B). These programs have moved the State and its partners closer to reaching their total open space goals.

Nearly 13,000 acres were protected under the State [Open Space and Watershed Land Acquisition Grant Program](#), which funded 201 projects in over 50 towns. Many of these grant awards funded the protection of open space located in or near more densely populated areas, thereby providing urban communities greater access to greenspaces.

- **2015:** After fifteen years of negotiations with the seller, DEEP partnered with The Trust for Public Land, The Nature Conservancy, the Town of Old Saybrook, and the Essex Land Trust, with contributions from other groups and private individuals, to successfully protect “The Preserve.” a nearly 1,000-acre coastal forest hosting key habitats and water resources that was once slated to be developed. The property now serves as new public, local open space. DEEP contributed \$1.4 million from its remaining [Land and Water Conservation Fund](#) balance to the total purchase price of about \$8.1 million.
- **2014:** The former Apple Orchard, LLC Property was donated to the State of Connecticut in memory of Dorothy and Bernard Schiro, further protected by a conservation easement held by the Connecticut Forest and Park Association. Now Auerfarm State Park Scenic Reserve, this 40-acre property located in Bloomfield abuts property owned by the local 4-H club. The Schiro family wished to see this valuable property with extensive views of the Hartford skyline preserved for the citizens of Connecticut. The property provides additional scenic greenspace and outdoor recreational opportunities within the greater Hartford area.
- **2013:** DEEP began partnering with the University of Connecticut to produce a publicly accessible GIS map layer of all projects funded to date under the State Open Space and Watershed Land Acquisition Grant Program. Currently undergoing quality assurance and control, this map layer will improve public access to over 30,000 acres of open spaces yet to be shown on any state-level mapping. This massive new dataset will assist future evaluation of open space protection by all.

- **2013:** DEEP worked with Eversource Energy (formerly Northeast Utilities) to extend a Memorandum of Understanding through year 2024 that gives DEEP, municipalities, and land trusts the right of first refusal to acquire parcels on “the Conservation List” should Eversource put them on the market for sale. The list consists of about 375 parcels in 90 municipalities totaling approximately 9,500 acres identified by DEEP as having high value for public recreation, natural resource conservation, and ecological preservation.

The MOU was extended as a part of the State’s settlement of the NU-NSTAR merger. The settlement also formed the [Eversource Land Trust](#), which in 2013 permanently protected 4 parcels totaling 987 acres from the Conservation List (Table 2).

<b>Table 2.</b> Conservation List lands protected by the NU Land Trust in 2013.		
<b>Property Name</b>	<b>Town</b>	<b>Acres</b>
Skiff Mountain	Sharon	800
Kings Island	Enfield	120
Hanover Road	Newtown	54
Bartlett Cove	Waterford	13
<b>Total Acres</b>		<b>987</b>

- **2011:** the State purchased from the Mason family an additional 454 acres adjacent to the 282-acre Belding Wildlife Management Area (WMA). Known as the Tankerhoosen WMA, this acquisition ensures the protection of much of the watershed and entire riparian zone for over 2.5 miles of the Tankerhoosen River. Funded in its entirety by the State [Recreation and Natural Heritage Trust Program](#), this property is one of the largest and most significant open space preservations in Connecticut history. It serves many purposes, including significant habitat for wild trout populations and other wildlife, a living classroom for students within the greater Hartford area, and year-round opportunities for outdoor recreation.
- DEEP continues to build on its list of federal, municipal, and private partners with which it leverages limited resources. For example, in 2008 the 308-acre Deluca Property in Cornwall was purchased for \$3.3 million and added to the Housatonic State Forest: \$492,750 from a federal [Highlands Conservation Act](#) grant, \$100,000 from the Cornwall Conservation Trust, and the remaining balance from the State Recreation and Natural Heritage Trust Program.