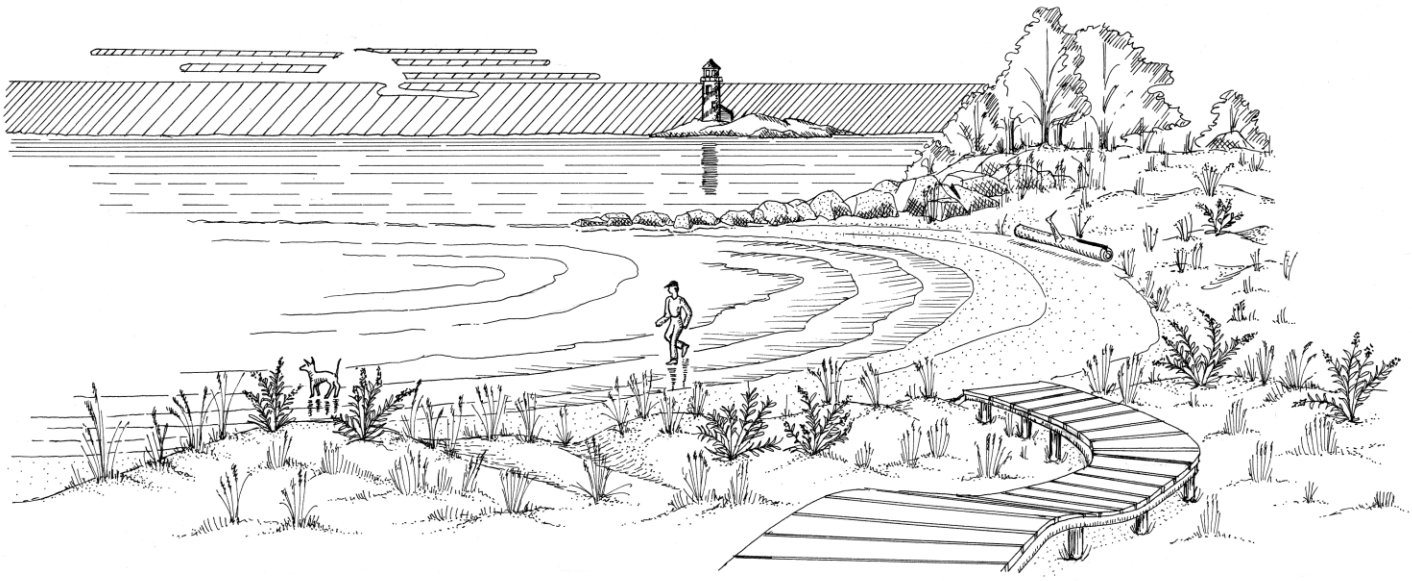
Draft
Connecticut Coastal and Estuarine Land Conservation Program Plan



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Certification and Approval

This certifies that the *Connecticut Coastal and Estuarine Land Conservation Program Plan* is consistent with the federally-approved *Connecticut Coastal Management Program* and is adopted by the Connecticut Department of Energy and Environmental Protection pursuant to the *Coastal and Estuarine Land Conservation Program Final Guidelines* (June 2003) issued by the National Ocean Service, National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management.

_____

Robert J. Klee, Commissioner
Connecticut Department of Energy and Environmental Protection

Date:_____

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Connecticut Coastal and Estuarine Land Conservation Program Plan

I. Introduction

A. Program Background

The national Coastal and Estuarine Land Conservation Program (CELCP) was established by the Department of Commerce, Justice, and State Appropriations Act of 2002. It directs the Secretary of Commerce, through the National Oceanic and Atmospheric Administration (NOAA), to administer a federal financial assistance program available to coastal states for coastal land acquisition. The purpose of CELCP is to "protect important coastal and estuarine areas that have significant conservation, recreation, ecological, historical, or aesthetic values, or that are threatened by conversion from their natural or recreational state to other uses, giving priority to lands which can be effectively managed and protected and that have significant ecological value[1]." Available program funds are administered through a competitive grant program by NOAA's Office of Ocean and Coastal Resource Management (OCRM) pursuant to the *Coastal and Estuarine Land Conservation Program Final Guidelines (2003).* [2] Prior to 2007, CELCP funds were directed by Congress through federal agency appropriation bills rather than through a NOAA-administered competitive state coastal land acquisition grant program. Beginning in fiscal year 2007, CELCP funds were awarded through a NOAA-administered competitive state grant program which is expected to continue in future federal funding cycles. Notices of CELCP federal funding opportunities are usually issued in early winter with proposals due in early spring.

In order to receive CELCP coastal land acquisition funding through the NOAA-administered competitive state grant program, coastal states are expected to:

- Develop a state CELCP plan for approval by NOAA-OCRM;
- Solicit land acquisition project proposals (which may include acquisition of conservation easements) from stakeholders (e.g., coastal municipalities, land trusts, regional planning agencies, state agencies) consistent with the conservation priorities outlined in its CELCP plan;
- Nominate its highest priority coastal land acquisition projects for review by a national project review selection committee;
- Successfully compete with other coastal state land acquisition project proposals pursuant to a national CELCP project review committee's scoring and ranking of land acquisition project proposals.

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[1] Public Law 107–77

[2] Unless otherwise defined here, the *Guidelines*' definitions apply to the terms used in Connecticut's Coastal and Estuarine Land Conservation Program Plan (CELCP Plan). The *Guidelines* may be accessed at http://coastalmanagement.noaa.gov/land/media/CELCPfinal02Guidelines.pdf .

B. Purpose

Connecticut's CELCP Plan describes the State's coastal land conservation needs and prioritizes the types of coastal land acquisition opportunities that can be nominated for federal CELCP grant financing assistance. The Plan outlines a process to promote partnerships with municipalities and land trusts to identify land acquisition opportunities that address Connecticut's priority conservation needs, which that the basis for Connecticut's CELCP Plan. In addition to identifying Connecticut's priority coastal land conservation needs, the Plan provides guidance for selecting coastal land acquisition projects for nomination to the national CELCP project selection competition.

In the past, coastal land acquisitions by the State of Connecticut were typically made on an ad hoc basis in response to acquisition opportunities offered to the Connecticut DEEP by landowners or others who became aware of properties being offered for sale. Although this approach to coastal land acquisition has resulted in successful acquisitions, important coastal land acquisition opportunities have been missed because they were not identified and acted upon early enough in the landowner's property disposition decision-making process. Connecticut's CELCP Plan offers a more proactive and strategic approach to coastal land acquisition based on:

- Priority coastal land conservation values identified in consultation with resource experts and land conservation interest groups;
- Land acquisition targets within areas where acquisition opportunities are most likely to address priority coastal land conservation needs;
- Cooperation with coastal land acquisition partners to identify possible coastal land acquisition opportunities that meet a priority coastal land conservation need;
- Strong working relationships with owners of high priority coastal conservation land who have been contacted in advance of NOAA CELCP Program funding announcements;
- Partnering with other land acquisition funding programs with objectives complementary to CELCP; and
- Land stewardship for newly acquired properties through partnerships with local land trusts and other land managers, especially if state or municipal agencies holding title to acquisitions do not have the resources to effectively manage acquired properties.

II. Coastal and Estuarine Land Protection Priorities

A. Connecticut's Coastal and Estuarine Planning Area

National CELCP Guidelines require coastal states to identify areas within which coastal land conservation values and potential coastal land conservation acquisition opportunities should be evaluated. This area, referred to as the coastal estuarine planning area, defines the broadest area in which to evaluate coastal land conservation values and potential coastal land acquisition opportunities (see Section II. B. for a description of Connecticut's priority coastal land conservation values). Connecticut has adopted a portion of its federally-approved coastal nonpoint source pollution management (CNPM) area as its Coastal and Estuarine Planning Area

(see Figure 1- Coastal and Estuarine Planning Area and Appendix 1 - Coastal and Estuarine Planning Area Municipalities) [3].

Three fundamental water quality protection planning factors used to define Connecticut's CNPM area are also appropriate for defining Connecticut's Coastal and Estuarine Planning Area. They include: (1) existing land uses likely to contribute pollutants of concern to Long Island Sound; (2) proximity of those uses to the Sound; and (3) existing condition of coastal waters, including areas with existing impaired uses as well as those that might be threatened by future development, particularly by land uses known to generate significant pollutant loads.

Connecticut's CNPM area was determined to be appropriate to ensure implementation of CZARA required management measures to restore and protect Connecticut's coastal and estuarine waters. The CNPM area includes the area containing all 13 classes of Connecticut's statutorily defined coastal resources (see Appendix 2 - Connecticut's Coastal Resources) and other coastal resources identified as a conservation priority through resource conservation planning initiatives (e.g., coastal forests identified through the LIS Stewardship Initiative). The national *CELCP Final Guidelines* provide that a state's coastal watershed is the maximum allowable Coastal and Estuarine Area. Connecticut's coastal watershed [4] includes a 4,600 square-mile area within Connecticut, as shown in Figure 2. Connecticut's Coastal and Estuarine Planning Area contains 2,073 square miles, or 45 percent of Connecticut's coastal watershed. Connecticut's Coastal and Estuarine Area therefore is a reasonable area within which to evaluate possible coastal land acquisition opportunities that address Connecticut's priority coastal land conservation needs.

[3] The CNPM area was developed pursuant to Section 6217 of Coastal Zone Act Reauthorization Amendments (CZARA) of 1990 [16 USC Section 1455] that required states with approved coastal management programs to develop coastal nonpoint source pollution control plans. This planning area was adopted in lieu of Connecticut's federally-recognized Coastal Zone Management Program's coastal area (defined by the boundaries of Connecticut 36 cities and towns containing coastal waters the limits of which are approximated by the coastal boundary line shown in Figure 1.) because it better identified those areas where conversions in land use could adversely affect coastal water quality or provide new water-dependent outdoor recreation opportunities along tidal watercourses 16 USC Section 1455

[4] Coastal watersheds are defined in NOAA's Coastal Boundary Review (1992) as the watershed area defined by the inland boundary of those USGS cataloguing units that contain the extent of tidal influence (i.e. head of tide).

Figure 1
Coastal and Estuarine Planning Area

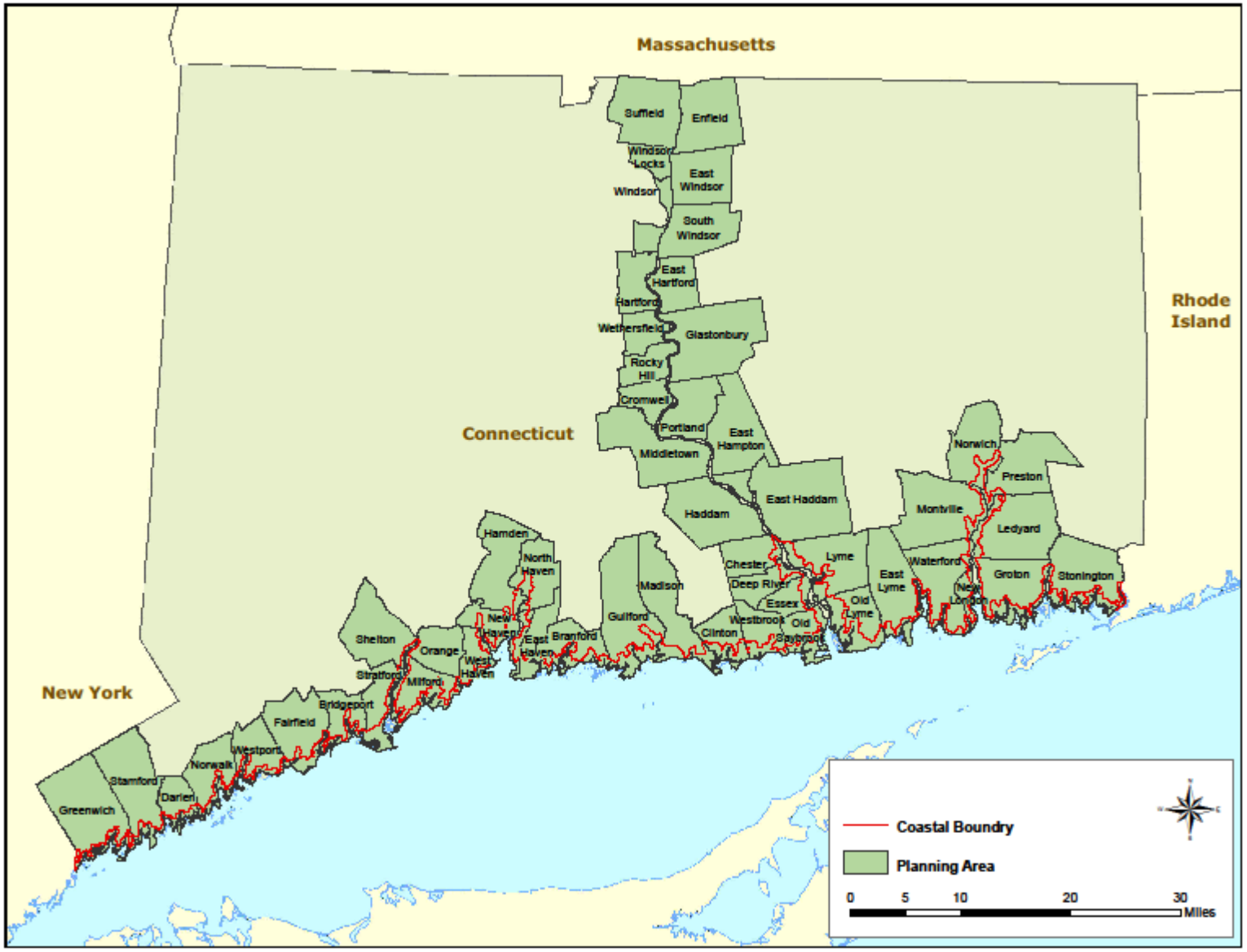
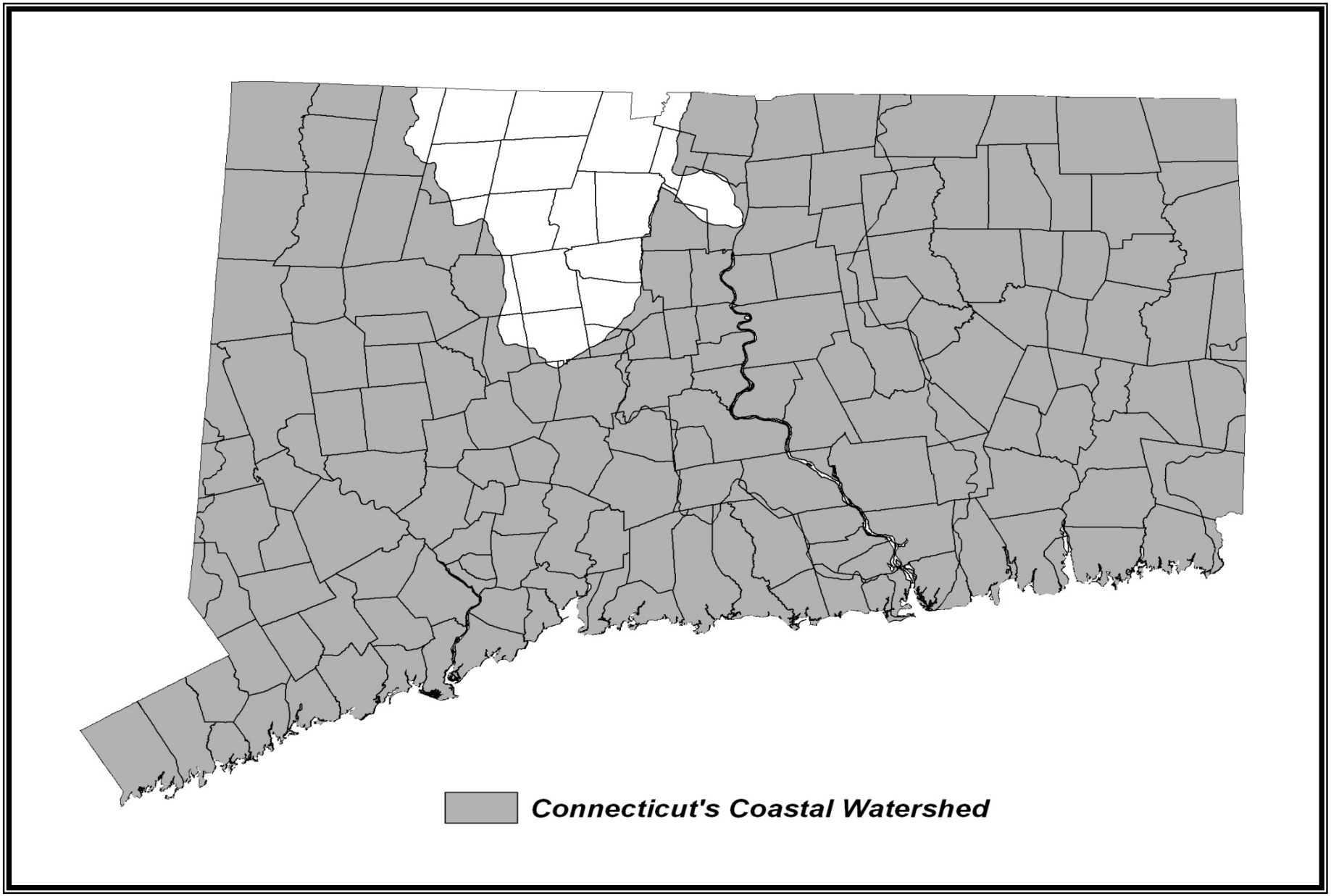


Figure 2
Connecticut's Coastal Watershed



B. Connecticut's Priority Coastal Land Conservation Values and Areas

B.1 Priority Coastal Land Conservation Values and Areas Defined

Connecticut's priority coastal land conservation values and areas are those that provide or are capable of providing: (1) Ecologically significant areas, especially unique, rare or representative LIS habitat and landscape types under- represented in Connecticut's system of protected open space; (2) coastal access recreation sites providing coastal resource-based outdoor recreation opportunities serving areas of significant unmet need; and (3) other areas of exceptional or unique ecological productivity or value and sites of significant cultural or historic heritage value. These conservation values, as further described below, serve as the basis for Connecticut's CELCP Plan and will be used to help identify the State's most critical coastal land conservation needs.

B.1.1 Ecologically Significant Areas

Connecticut's ecologically significant coastal areas are those areas: (1) typical or representative of Long Island Sound coastal systems; (2) providing outstanding examples of those coastal systems; or (3) providing rare species habitat or habitat for species warranting special management attention or greatest conservation need.

B.1.1.1 Coastal systems typical or representative of the Long Island Sound ecosystem

Preserving through acquisition the best of Connecticut's remaining unprotected largely intact representative coastal habitats or landscapes types is critical to sustaining the ecological services of core areas providing such benefits. Such conservation actions will also ensure that future generations will be able to study and understand Connecticut's coastal natural heritage as only remnants of many of these coastal systems remain today and new threats to these areas are expected. Emphasis will be placed on acquiring property containing coastal habitats or landscape types under-represented in Connecticut's system of existing protected open space (e.g., state and municipal parks, preserves, wildlife management areas or land in conservation ownership held for dedication conservation purposes). Table 1 provides a description of coastal systems, habitats, and landscapes typical or representative of Connecticut's Coastal and Estuarine Area and lists their conservation priority.

Table 1
Typical or Representative Coastal Systems of Long Island Sound[5]

Coastal Habitat/System/Landscape	Under-Represented in Existing System of Protected Open Space (✓)	Highest Conservation Priority (✓)
Barrier beach/dune[6]	✓	✓
Brackish/salt water tidal marsh*[7]		✓
Freshwater tidal marsh*	✓	✓
Rocky shorefronts		
Bluffs/escarpments (unarmored)	✓	✓
Estuarine embayments*		
Coves within estuarine embayments*		
Islands – Long Island Sound	✓	✓
Islands- riverine	✓	✓
Large unfragmented coastal forest**	✓	✓
Intertidal mud flats*		
Coastal area grasslands	✓	✓
Secondary dunes/back barrier sand flats***	✓	✓

[5] Not including subtidal resource systems (e.g., submerged aquatic vegetation, selfish beds, etc.) which are already held as State public trust land

[6] Beaches and dunes with significant biologic and/or flood control value designated as units of the Federal Coastal Barrier Resources System (CBRS) are a high conservation priority within this class (see general locations for CBRS units in Connecticut at http://www.fws.gov/cbra/Maps/Locator/CT.pdf then select corresponding Connecticut CBRS unit # of interest to access more detailed maps using the following link: http://www.fws.gov/cbra/Maps/CBRS/index.html

[7] Only upland areas adjacent to these resources capable of supporting marine transgression are considered a highest conservation priority resource area

* Refers only to undeveloped uplands adjacent these intertidal resource areas

** Coastal forests are characterized by a vegetation pattern influenced by a climate regime affected by the moderating effects of Long Island Sound that extends 5 to 7 miles inland of Long Island Sound. On well-drained soils, coastal hardwoods often with dense thickets of vines and shrub dominate. Coastal hardwoods are dominated by Red (*Quercus rubra*), White (*Quercus alba*) and especially Black Oak (*Quercus velutina*), Hickories, especially Mockernut (*Carya tomentosa*), Black Cherry (*Prunus serotina*), and Sassafras (*Sassafras albidum*),*) (Dowhan and Craig, 1976).* Coastal forests occurring on less well-drained soils, referred to as "moist coastal forests" are characterized by a predominance of less drought resistant trees, shrubs and vines.

*** Secondary dunes are those dunes landwards of primary dune systems. Back barrier sand flats are gently sloping sandy unvegetated or sparsely vegetated intertidal areas of coarse sediment on the inland side of barrier beaches.

B.1.1.2 Outstanding habitats and systems representative of Long Island Sound ecosystems

This class of ecologically significant areas includes those that provide outstanding examples of coastal systems because of their quality or scarcity in the regional landscape. Such areas offer the best examples of Connecticut's coastal landscapes, or are the last remaining examples of their kind, and therefore are a high priority conservation target, especially where they are part of a larger high conservation priority coastal system. Table 2 provides descriptions and examples of these systems.

Table 2
Outstanding Coastal Habitats or Systems

Habitat/Ecosystem/Landscape Type	Site Example
Undeveloped LIS islands	Duck Island (Westbrook)
Unditched tidal marsh*	Nells Island marsh (Milford)
Secondary dunes	Black Point Beach (East Lyme)
Riverine cove/embayment*	Poquetanuck Cove (Preston/Ledyard)
LIS cove/embayment*	Wequetequock Cove (Stonington)
Sand plain grassland	Lower Quinnipiac River grassland (North Haven)
Estuarine embayments with extraordinary aquatic habitat value* (e.g., shellfish/SAV)	Niantic River/Bay (East Lyme/Waterford)
Coastal forest	Barn Island WMA (Stonington)
Coastal grass land	Niering Natural Area Preserve (Waterford)
Traprock ridge	West Rock (New Haven/Hamden)
Colonial waterbird complex*	Falkner Island Guilford)
Sites of significant diadromous fish runs*	Head-of-tide Hammonassett River (Madison)

* Refers to adjacent upland riparian areas that buffer these water areas

B.1.1.3 Habitat for rare species or species requiring speial management attention

These sites provide habitat for species identified as: (a.) Rare by virtue of being listed as Federally or State-endangered, threatened or species of special concern[8]; (b.) Greatest Conservation Need (GCN) pursuant to *Connecticut's Comprehensive Wildlife Conservation Strategy*[9]*;* or (c.) rated "near-threatened" or greater according to the IUCN "Red List".[10] Conservation emphasis is placed on sites with multiple species or high concentrations of a single

[8] See State list at http://www.ct.gov/deep/cwp/view.asp?a=2702&q=323486&depNav_GID=1628&depNav=| and Federal list www.fws.gov/northeast/endangered/
[9] See Chapter 4 of CT CWCS at www.ct.gov/DEEP/cwp/view.asp?a=2723&q=329520&DEEPNav_GID=1719 Area)
[10] See International Union for the Conservation of Nature and Natural Resources (IUCN) Red-List at http://www.iucnredlist.org/

species. These sites are therefore a conservation priority and in some cases should be acquired to solely meet ecological conservation objectives rather than supporting multiple use objectives.

B.1.2 Coastal Recreation and Access

A hallmark of Connecticut's coastal management program is the enhancement of public access to coastal waters for coastal resource-based recreation. Areas capable of providing coastal access opportunities, particularly in areas underserved by existing recreational access and "distressed municipalities"[11] are a conservation priority[12]. Access opportunities range from sites providing visual access to coastal waters (e.g., scenic overlooks) to those providing direct physical access to coastal waters (e.g., boating access facilities) and include:

- Car-top boating not requiring trailered-launch facilities;
- Shore-based fishing crabbing, or recreational shell fishing access especially those sites identified as an acquisition priority through coastal access surveys;
- Passive recreation activities (e.g. hiking) in areas of significant or unique geologic or biologic interest or part of an existing or planned greenway, trail or linear park;
- Wildlife observation (particularly birding) access areas especially observation areas underserved by existing public access sites (e.g. Quinnipiac River marshes);
- Waterfowl hunting;
- Sandy beach areas providing access to saltwater bathing opportunities;
- Urban waterfront sites with coastal recreation value (e.g., waterfront 'pocket-parks' in high density residential neighborhoods) that meet a priority municipal recreation need (e.g., fishing access) as identified in a municipal plans of conservation and development or recreation plan

B.1.3 Other Areas of Significant Coastal Conservation Value

Other coastal resource values that meet a significant coastal land conservation need but are not identified above constitute an additional category of coastal conservation values and include:

- Significant foraging/nesting habitat for water birds, shorebirds, and migratory waterfowl, including uplands adjacent to these habitats that provide protective buffers[13];
- Sites identified as priority coastal resource restoration sites pursuant to the Long Island Sound Habitat Restoration Initiative[14] where public ownership is necessary to complete a proposed restoration project and for which funding has already been secured or is imminent;

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[11] Defined in Connecticut General Statutes Section 32-9p(b)

[12] Although coastal resource based outdoor recreation is a priority conservation value it should be noted that CELCP grants can only be used to fund land acquisition and cannot fund construction of recreation facilities.

[13] See locations of waterfowl concentration areas in Appendix _ for descriptions of these areas. Other areas not yet documented believed to serve as important habitat functions may qualify as priority acquisition areas.

[14] See Appendix 14 - LIS Habitat Restoration Sites Map. Restoration projects must include a detailed description of the proposed restoration plan and confirmation of a restoration funding source.

- Lands adjacent to, or significantly contributing to the quality of, coastal waters of exceptional quality or aquatic resource value (e.g., shellfish concentration areas and natural seed beds);
- Sites of statewide historic or cultural significance as confirmed by the Connecticut Office of the State Historic Preservation;
- Scenic areas visible from an area accessible to the general public (e.g., state or municipal parks, state highway, etc.) that significantly contribute to defining a local coastal landscape;
- Parcels adjacent to or in-holdings withinan existing CT DEEP or other regionally-significant protected open space which, if developed, would significantly diminish existing or potential plant or wildlife habitat or create public lands management problems;
- Inland wetlands with significant or rare ecological/habitat value (e.g., highly productive vernal pools, fens, bogs);
- Sites capable of providing connections for public access or habitat between existing protected open space parcels;
- Sites that can be documented as significantly contributing to watershed health especially by protecting coastal water quality.

B.2 Assessment of Need and Threats to Coastal Land Values:

B.2.1 The Need for Coastal Land Conservation

B.2.1.1 Context and obstacles to coastal land conservation

From Connecticut's earliest colonial period, Connecticut's shoreline communities have been principal centers of trade, commerce and transportation. Over 350 years of post-European settlement history along has resulted in the conversion of much of Connecticut's coastal area to uses that have adversely affected coastal land conservation values. For example, it is estimated that approximately 30 percent of Connecticut's tidal wetlands have been filled and up to 90 percent may have been ditched or otherwise altered through human activity[15]. It is within such context that Connecticut must develop coastal land strategies to conserve its most significant remaining unprotected coastal areas capable of supporting important ecological services and coastal resource based outdoor recreation opportunities.

Competition for use and development of Connecticut's coastal area continues to diminish Connecticut's priority land conservation values and result in lost conservation acquisition opportunities. Development, population densities, and land values within Connecticut's coastal

[15] *Tidal Marshes of Long Island* Sound, Bulletin No. 34, The Connecticut College Arboretum and U.S. Environmental Protection Agency, *Technical Support for Coastal Habitat Restoration*

area exceed statewide averages. Connecticut's Coastal and Estuarine Program Project Area[16] is highly urbanized [see Figures 3, 4a and 4b]. For example, 37 % of the Connecticut's population resides within the State's 36 coastal municipalities, which comprise only 19% of the State's land area[17]. Further, 34% of the area within Connecticut's CELCP Project Area and 51% of the area within Connecticut's coastal boundary[18] is classified as "developed" land cover compared to 23% statewide[19]. These population density and land development statistics indicate that there is a disproportionate need to address Connecticut's most significant remaining coastal land acquisition opportunities.

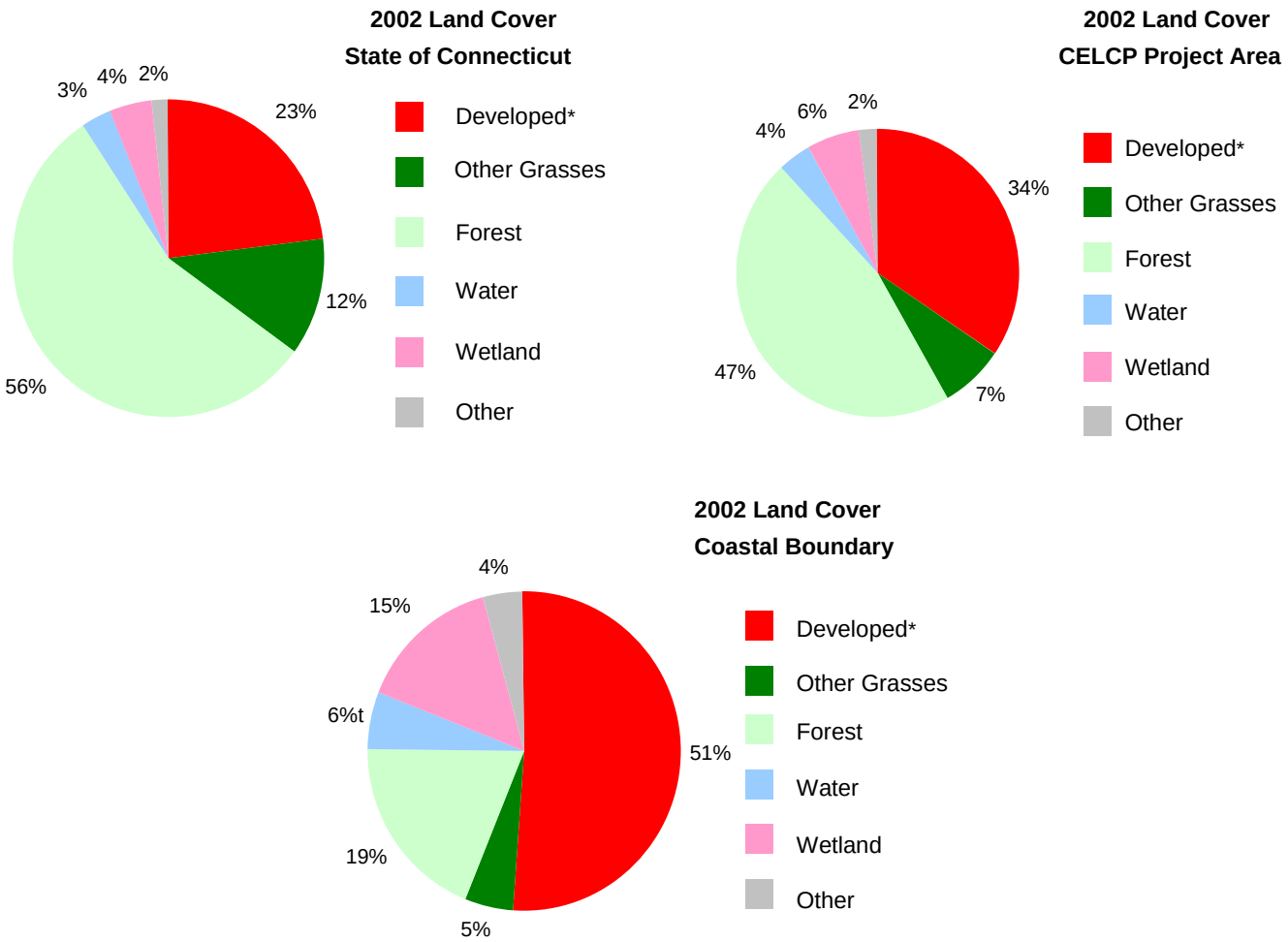
[16] Connecticut's Coastal and Estuarine Land Conservation Program Project Area is the area within the Coastal and Estuarine Planning Area that is most likely to include Connecticut's priority coastal conservation values and areas as shown in Figures 5 and 6.

[17] 2000 Census data provided Connecticut Office of Policy and Management

[18] Connecticut's coastal boundary is generally defined by a line 1000 feet inland of a coastal water body or tidal wetland, whichever is further inland.

[19] University of Connecticut Changing Landscape Project (2003)

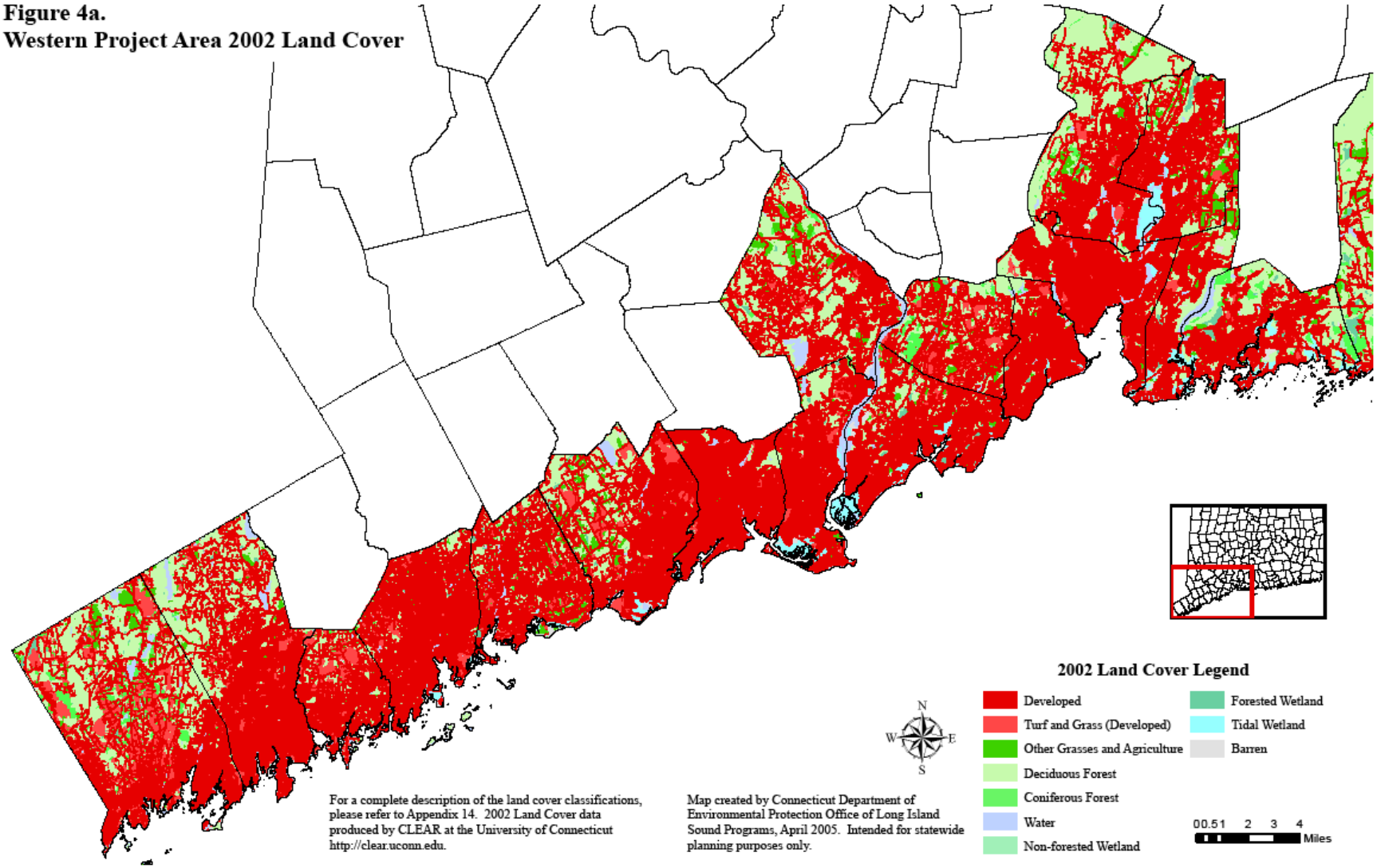
Figure 3
Connecticut Land Cover



* Developed land includes built areas containing impervious surface such as roads, parking lots, structures and maintained turf/grass (distinguished from the "other grasses" land cover) associated with commercial, industrial and residential uses

Source: University of Connecticut-CLEAR, *Coastal Area Land Cover Analysis Project*

Figure 4a.
Western Project Area 2002 Land Cover



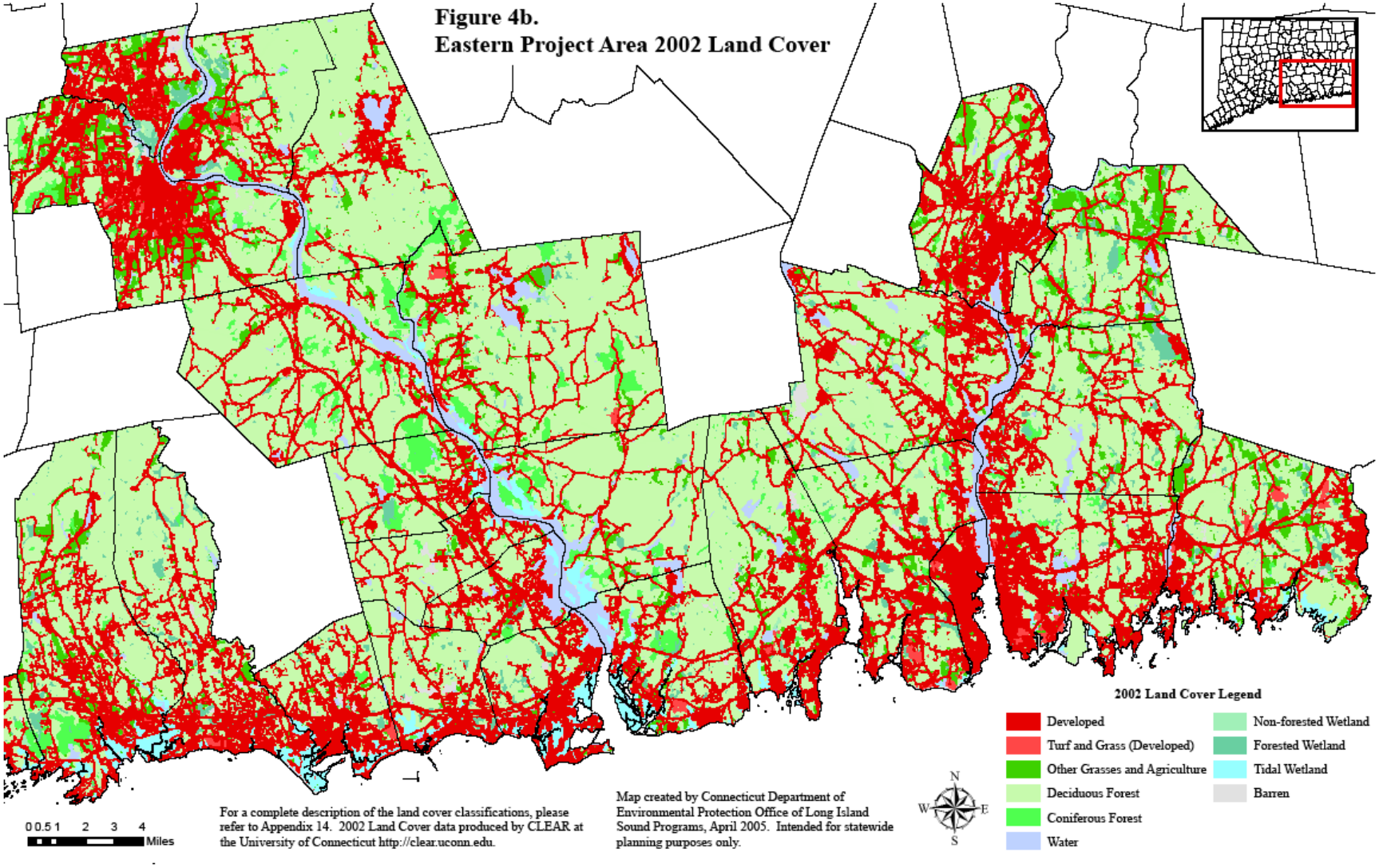


Figure 4b.
Eastern Project Area 2002 Land Cover
2002 Land Cover Legend
Developed
Turf and Grass (Developed)
Other Grasses and Agriculture
Deciduous Forest
Coniferous Forest
Water
Non-forested Wetland
Forested Wetland
Tidal Wetland
Barren
N
W
E
S
0 0.5 1 2 3 4
Miles
For a complete description of the land cover classifications, please refer to Appendix 14. 2002 Land Cover data produced by CLEAR at the University of Connecticut http://clear.uconn.edu.
Map created by Connecticut Department of Environmental Protection Office of Long Island Sound Programs, April 2005. Intended for statewide planning purposes only.

When interpreting the maps shown in Figures 4a and 4b, it is important to note that Connecticut coastal land cover is depicted at a statewide scale which is intended to show general patterns of coastal land cover at a moderate (i.e., 30 square meter) resolution[20]. These maps are not intended for site level coastal land acquisition planning. For example, although the Western Connecticut Project Area 2002 Land Cover Map indicates that much of the near shore area in Western Connecticut Project Area is developed, important conservation acquisition opportunities may still exist in this region. When such opportunities arise, they should be given special consideration if they advance priority conservation values identified in Section II. B. of this Plan. When land cover data is projected at a larger scale and combined with other parcel-scale land conservation data, land that may warrant protection through acquisition, particularly for coastal recreation purposes, may still be identified. However, it is expected that larger undeveloped parcels with significant ecological value are more likely to occur in the eastern Connecticut CELCP Project Area where land values are significantly lower than along the western Connecticut shoreline. It is therefore within this region that Connecticut will likely identify its best remaining coastal land conservation opportunities that may qualify for CELCP land acquisition funding assistance.

Table 3 compares the amount of land fronting on Connecticut coastal waters in conservation ownership with land not managed for conservation purposes or without conservation restrictions. The table, derived from data obtained through the Connecticut Shoreline Statistics Project, classifies Connecticut's shore by type of shoreline (e.g., direct Long Island Sound frontage, embayments, saltwater rivers, etc.) and ownership (i.e. protected vs. unprotected classes of ownership)[21]. Table 3 also describes the type of ownership for each of these classes of shoreline. These data indicate that 31per cent of Connecticut's total coastal shoreline (1,065 miles) is held in protective forms of ownership or subject to conservation restrictions. The State of Connecticut (almost entirely the Department of Energy and Environmental Protection) holds title to 13%t of the State's shoreline, or 140 miles of protected shorefront.

[20] See the University of Connecticut CLEAR project website <http://clear.uconn.edu/projects/landscape/v1/analysis/CALCAP/index.htm> for more on map scale data and resolution.

[21] The project defined coastal shoreline as any land fronting on tidal waters up to Connecticut's statutorily defined coastal boundary (Connecticut's coastal boundary generally extends 1,000 feet upland of the inland boundary of tidal waters with at least .5 parts per thousand of salt). For the purposes of these statistics, coastal shoreline is classified according to the following classes of coastal waterbodies they abut or a unique type of shoreline including: (1.) directly fronting on Long Island Sound; (2.) bays, harbors and coves; (3) major rivers including their tributaries; (4.) minor coastal rivers; (5.) islands in Long Island Sound; (6.) islands within rivers; and (7.) shoreline created through artificial fill (such as filled piers, groins or jetties).

Table 3
Connecticut Shoreline Statistics [1,2]

Ownership Class:	LIS Direct Miles[3]	B/H/C Miles[4]	Major River Miles[5]	Minor River Miles[6]	Island (LIS) Miles	Island (River) Miles	Artificial Fill Miles[7]	Total		Sandy Beach[8]	
								Miles	% of CT	Miles	% of CT
Protected: Public	**25**	**53**	**34**	**69**	**22**	**45**	**2**	**250**	***23***	**27**	***3***
Federal	0	12	2	2	6	0	0	22	***2***	1	***0***
State	9	13	26	45	2	44	1	140	***13***	9	***1***
Municipal	16	28	6	22	13	2	0	88	***8***	17	***2***
Protected: Private	**4**	**9**	**27**	**27**	**4**	**7**	**0**	**78**	***7***	**4**	***0***
Land Trusts	0	5	10	17	2	3	0	38	***4***	0	***0***
Utility	0	0	0	1	0	0	0	1	***0***	0	***0***
Churches	0	0	0	0	0	0	0	0	***0***	0	***0***
Private	3	4	12	7	2	4	0	33	***3***	2	***0***
Conserv Easement	1	0	4	1	0	0	0	6	***1***	1	***0***
Other	0	0	0	0	0	0	0	0	***0***	0	***0***
Total Protected	**29**	**62**	**61**	**96**	**26**	**52**	**2**	**328**	***31***	**31**	***3***
Unprotected	**84**	**157**	**160**	**227**	**60**	**24**	**25**	**737**	***69***	**57**	***5***
Total Shoreline	**113**	**219**	**221**	**323**	**86**	**77**	**27**	**1065**	***100***	**88**	***8***

[1] Protected shoreline is land, classified as protected open space, fronting on coastal waters, including rivers within Connecticut's coastal boundary. Protected open space is defined as land or an interest in land held for the permanent protection of: natural features of the state's landscape, essential habitat for endangered or threatened species, non facility-based outdoor recreation (does not include ballfields, cemeteries, school grounds, etc.), forestry and fishery activities, and other wildlife or natural resource conservation or preservation purposes.
[2] All measurements are rounded to the nearest tenth of a mile

[3] LIS Direct = Direct Long Island Sound frontage not including frontage on bays, harbors, coves, or the mouths of rivers, on Long Island Sound.
[4] B/H/C = Bay, harbor, cove frontage on Long Island Sound.
[5] Includes coastal (i.e. saltwater influenced) segments of the Housatonic, Connecticut Thames Rivers, and their tributaries up to Connecticut's statutorily defined coastal boundary. (For example, frontage on the Eight Mile River, a tributary to the Connecticut River was included in major river shoreline frontage.) Major river shoreline frontage includes coves within major rivers. Frontage on watercourses that originate in tidal wetlands were excluded from all shoreline frontage calculations.
[6] All coastal (i.e. saltwater influenced) rivers not classified as major rivers up to Connecticut's statutorily defined coastal boundary.
[7] Shoreline created through the placement of fill material in coastal waters that can be readily identified, such as artificial shoreline perpendicular to the course of the natural shoreline. This does not include existing transportation infrastructure such as railroad causeways.
[8] Sandy beach shoreline occurs within several shoreline types in this table, but is reported separately because it is a significant ecological and recreational resource in Connecticut.

Much of Connecticut's coastal area not protected through public or private non-profit land conservation organization ownership is already developed[22]. An assessment of the larger remaining undeveloped and unprotected parcels within 32 of Connecticut's 36 coastal municipalities indicates that only 78 undeveloped parcels greater than 25 acres exist within 1,000 feet of coastal waters (see Appendix 3-Coastal Land Assessment Methodology Results). Of these, approximately 50 may have significant conservation value warranting further investigation. These larger undeveloped parcels are also expected to be highly desirable for future residential development. Once such properties are acquired by developers, and particularly after municipal land use permits have been issued, it is difficult to acquire these properties for conservation purposes at prices approximating their pre-permit approval appraised values. Acquiring properties for conservation after ownership is transferred or is under option for sale to a developer accelerates the depletion of limited conservation acquisition resources.

The coastal real estate market for raw land in Connecticut is highly constrained. Very few undeveloped waterfront or near-waterfront properties on Long Island Sound, including coves, embayments and the mouth of major tributaries, are placed on the market each year. Those parcels that are offered tend to be less than 10 acres.

Seven coastal area properties greater than 10 acres with water or tidal marsh frontage within Connecticut's CELCP Project Area were acquired by CT DEEP for conservation purposes between 2001 and 2011 (see Table 4). These properties were acquired at acquisition prices ranging from $7,500/acre to $228,689/acre with a median value of $24,173/acre. Excluding the two lowest-value waterfront/marsh-front acquisitions that were largely undevelopable, the average cost of these acquisitions was $71,866/acre. The average cost of a CT DEEP non-coastal fee acquisition (i.e., not including conservation easement acquisitions) from 2005-2014 was $8,138/acre (73 properties). Such a differential in coastal versus inland parcel acquisition cost often makes it difficult to justify allocating limited state land acquisition funding for coastal land acquisition projects. Although average value of coastal land acquisitions were derived from a small sample of coastal acquisitions and cannot confidently be interpreted to represent 'typical' coastal area marsh or waterfront land values, compared to average acquisition costs for inland parcels, the cost of land acquisition along the coast is significantly greater than comparable inland parcels.

[22] "Developed" is defined as built areas typically associated with commercial, industrial and residential uses containing impervious surface such as roads, parking areas and structures and also includes maintained turf/grass.

Table 4
2001-2009 CT DEEP Coastal Project Area Land Acquisitions with Water/Marsh Frontage[23]

Property Name	Town	Purchase Date	Purchase Price ($)	Size (Acres)	$/Acre
Harkness State Park-Verkades Nursery	Waterford	2002	3,800,000	157.2	24,173
Clark Creek WMA-Camelot Cruise	Haddam	2003	1,350,000	17.4	77,586
Eagle Landing State Park - Camelot Cruises	Haddam	2003	2,790,000	12.2	228,689
Barn Island WMA-Manousus*	Stonington	2003	1,400,000	144.1	9,715
Barn Island WMA-Crowley 1	Stonington	2009	920,000	48.0	19,167
East River Marsh WMA*	Guilford	2010	360,000	48.0	7,500
Barn Island WMA-Crowley 2	Stonington	2011	1,512,500	17.0	94,531

* Acquisition contains significant constraints to development

As a result, the single greatest impediment to acquiring coastal land for conservation is the gap between available funding and the cost of such acquisitions. Nevertheless, another impediment to effective state coastal land acquisition has been the lack of a comprehensive evaluation of the most significant remaining potential coastal land acquisition opportunities based on identified coastal land conservation needs. Until recently, Connecticut used a more opportunistic approach to coastal land conservation relying on ad hoc acquisition decisions as coastal land acquisition were offered to CT DEEP. In the past, the Department did no pursue opportunities to acquire high conservation value lands not yet formally offered on the open real estate market. Such opportunities are often identified only after a property with significant conservation value is proposed for development or has already been sold to a developer.

Developers sometimes acquire open land to speculate of future increases in the property's value upon obtaining the necessary municipal land development approvals, irrespective of their plans to actually develop the property. At times, developers have attempted to enhance the potential value of such lands by proposing more intensive development than what is allowed "as-of-right" by municipal zoning regulations. In this scenario, a developer applies to a municipal zoning agency to re-zone the property or applies for a special use permit, or affordable housing development,[24] to develop the land beyond its existing permitted uses or densities to maximize the developer's potential return on investment. Such an investment includes costs associated with

[23] Does not include conservation acquisitions by others (e.g., municipalities) funded in part by CT DEEP'S Open Space and Watershed Protection Grant Program.
[24] See Connecticut General Statutes Sections 8-30g (et seq.) for description of how municipal zoning and affordable housing law generally places the burden of proof on municipal land use commissions denying an affordable housing permit application to demonstrate that a denial is necessary to' protect substantial public interests in health, safety or other matters which the commission may legally consider and such public interests clearly outweigh the need for affordable housing.'

identifying developable land, negotiating and executing the land acquisition, holding the property (e.g., cost to acquire an option, debt service, and real estate taxes), designing the development (e.g., engineering services) and obtaining permits to develop the property. Once these costs are incurred, the value of the property increases to reflect the uses allowed by "up-zoning" the property or upon issuance of development permits. At this point, the risk associated with developing the property declines (i.e., permits have been secured) and the price the developer will sell the property (e.g., to a builder or land conservation organization) will increase significantly, sometimes eliminating, or greatly reducing, opportunities to acquire it for conservation. The price of several recent DEEP coastal land acquisitions listed in Table 4 were affected by this land speculation process and other acquisition opportunities were forgone because they became 'unaffordable' or they were sold to other developers or builders. By identifying priority coastal land acquisition opportunities and negotiating land acquisition deals with landowners before they sell to developers or begin the development permitting process, DEEP and other coastal land conservation partners can more effectively use limited land conservation acquisition funds to conserve lands that meet Connecticut's coastal land conservation objectives.

B.2.1.2 Need for coastal recreation opportunities

There are approximately 300 public access sites providing a range of outdoor recreation opportunities along Connecticut's coastal shoreline. Of these sites, approximately 75 percent are either small municipally-owned (less than 10 acres) or privately-owned sites (less than 1 acre) open to the public access through public access easements or other enforceable municipal land use permit conditions. About 20 percent of the access sites are larger state-owned properties (e.g. State Parks), while relatively few (5 percent) properties are private non-profit land conservation organization holdings or a unit of the Stewart B. McKinney National Wildlife Refuge (NWR)[25]. However, the number of coastal sites is not an entirely accurate indicator of the extent of Connecticut's shoreline accessible to the general public. That is, the number of public access sites does not describe the miles or percent of Connecticut shoreline available for public use or degree to which Connecticut's shoreline is under protective ownership (for statistics describing Connecticut's shoreline ownership, see Table 3 Shoreline Ownership Statistics). Nor do these shoreline access statistics indicate the quality of shoreline recreation experience at public access sites or whether the sites can accommodate some of the most popular coastal recreational activities such as saltwater bathing, boating access, saltwater fishing, wildlife viewing).

Demand for many of the state's most popular coastal recreational activities along some part of the coast already exceed, and will likely continue to exceed, the capacity of existing coastal recreation areas to accommodate these uses. Opportunities for new public saltwater swimming beaches are limited because there are few significant lengths of sandy beach not already under public ownership or operated by a private beach association. These factors, and the proximity of several of the state's most densely populated metropolitan areas to the coastline, are expected to continue to generate significant demand for coastal recreation opportunities at Connecticut's shoreline state and municipal parks. Two of the state's four coastal parks with saltwater

[25] S.B. McKinney NWR is the only federal agency land generally available for public use.

swimming beaches periodically must turn away prospective patrons by mid-day on summer weekends when parking lots meet capacity. Similarly, municipally owned shoreline beach parks routinely operate near capacity during summer weekends. State boat-launching facilities on coastal and tidal waters are also consistently unable to meet the public's boating access needs on summer weekends. Of the 13 state-owned boat launch ramps located directly on Long Island Sound, four routinely turn away boaters on popular summer weekends due to parking space limitations (personal communication, DEEP Bureau of Outdoor Recreation, State Parks Field Operations Division).

Pursuant to a 2002 NOAA-OCRM national effectiveness study of state coastal public access programs, coastal states were encouraged to conduct needs assessments of coastal land conservation and public access enhancement priorities. In 2004 Connecticut distributed over 1,000 surveys to members of coastal recreation user groups and individuals with an interest in coastal recreation seeking to identify public access facilities needs and the recreation habits of saltwater anglers, waterfowl hunters, marine boaters and wildlife observation enthusiasts. The principal purpose of the survey was to assess whether existing coastal recreation facilities in Connecticut were meeting demand for these popular recreation activities and how these facilities could be managed to better meet user needs identified through the surveys.

Table 5
Demand for Coastal Public Access by Type of Activity

Recreational Activity	% Indicating Additional Access Needed	% Crossing Private Land to Access Shore
Wildlife Observation	81	N/A
Boating Access	83	N/A
Saltwater Angling	N/A	36

The survey responses are summarized in Table 5 by type of recreational activity[26]. The responses indicate a continued need to acquire sites capable of accommodating these coastal recreation activities.

[26] Saltwater swimming, a highly popular coastal recreation activity, was not included in the survey because existing information already confirms that demand for this activity exceeds the capacity of existing facilities to meet demand. Further, a lack of available sites to develop new salt water swimming facilities would make futile any investigation of new facilities, save the unlikely event that private beach clubs and associations with suitable sandy beach make their land available for acquisition.

B.2.2 Threats

B.2.2.1 Threats to Connecticut's coastal conservation values

Human disturbance, particularly through new residential development, is the principal threat to Connecticut's remaining unprotected coastal lands with significant ecological or outdoor recreation value. If such development is not managed through regulatory review processes to protect these resources to the maximum extent possible, the habitats and recreational uses they support are diminished, sometimes irretrievably. The following describes the principal threats to Connecticut's highest priority coastal conservation values and discusses strategies to identify and manage sites that support these values, principally through land acquisition.

B.2.2.2 Threats to ecological values

Human encroachment and land disturbance within the coastal area has resulted in the loss or degradation of essential estuarine and coastal habitats. The extirpation or population declines of several species of plants and animals within the coastal area, with the consequent biological diminution of the region, can be attributed to many factors. Historically, destruction of natural habitats through dredging, filling, ditching, and draining of wetlands was associated with the construction of transportation infrastructure. However, the enactment and improved administration of regulatory programs governing such activities since the late 1970s has greatly reduced the direct adverse effects of large scale infrastructure projects on coastal resources. Despite additional controls and conditions placed on permits for coastal area residential development and attendant ancillary shoreline structures (e.g., docks, piers, bulkheads etc.), cumulative and secondary impacts associated with such development often fragment habitat, diminishing its ability to support species of conservation concern (U.S. Fish and Wildlife Service, Northeast Coastal Areas Study and personal communication with DEEP-Geological and Natural History Survey staff). New threats to coastal resources, particularly threats to tidal marshes such as sea-level rise, also should be considered when identifying coastal land acquisition targets to preserve priority coastal land conservation values.

B.2.2.2.1 Foraging/nesting habitat for water birds, shorebirds, and waterfowl

Human disturbance associated with public recreational use of foraging and nesting habitat for water birds, shorebirds, and waterfowl can adversely affect these important bird habitats. In some coastal areas, repeated disturbances can result in abandonment or limited productivity of important habitats such as coastal mudflats and sandy beach nesting areas affecting, in some cases, species of continental or global conservation concern. Development along coastal, estuarine, and contributing upstream areas is believed to alter hydrologic regimes in essential habitats, such as tidal marshes, resulting in displacement of native plant species by invasive species and the degradation of water quality in shallow water habitats such as obstructed coves. Activities that disturb waterbird colonies in Long Island Sound during the nesting period (mid March to August), including significant pedestrian traffic, low flying aircraft, recreational vehicle use, boat landings and nearby boat traffic, can impair breeding success. Freedom from

human disturbance while early spring roosts are established and maintained may also be critical to colony use in the ensuing breeding season.

B.2.2.2.2 Undeveloped coastal islands/riparian areas/coastal forest

Undeveloped coastal resource areas including coastal islands, riparian habitats and coastal forests provide important ecological 'services' such as maintaining coastal water quality in estuarine embayments. As these areas are converted to support primarily residential use, the ecological services they provide are increasingly at risk. For example, residential development at waterfront and marshfront sites frequently results in further proposals for shoreline alterations such as flood and erosion control structures and docks exacerbating the adverse effects of the site's principal residential use. In particular, the development of off-shore islands adversely affects colonial waterbird and shorebird populations by reducing the number of limited feeding and resting areas that these areas provide and migrating populations depend upon to rest and feed. Off-shore islands and other marginally-developable sites, such as bluffs and escarpments, previously thought to be immune to significant development, are increasingly being evaluated as developable land as coastal property values increase. Island development generally requires significant land disturbance due to the need for docks, utility line extensions, and on-site sewage disposal systems that can adversely affect coastal resources. Removal or disturbance of vegetation and direct loss of habitat through development on coastal islands has a significant impact on colonial nesting water bird populations in Long Island Sound. Disturbance or elimination of vegetation and preferred wetland feeding areas may also affect birds nesting on islands. Introduction or attraction of mammalian predators, including pets attendant with residential development, into nesting areas is also detrimental to the colonial bird populations.

B.2.2.2.3 Undeveloped coves, estuarine embayments and tidal rivers

As indicated above, much of Connecticut's coastal area has already been developed and developed land cover is common along Connecticut's waterfront (see Figures 4a and 4b). The lack of undeveloped waterfront land directly fronting on the Sound has resulted in increased interest in developing land with frontage, views or access to waters on coves, estuarine embayments, tidal rivers and tidal marshes. These lands are believed to have potential for significant appreciation in value and marketability (personal communication, Chris Miner, Miner & Silverstein Appraisal Company), principally for residential development. Development of such parcels, particularly within riparian areas, can adversely affect the ecological value that coves, embayments and tidal rivers provide, particularly if the development is not properly sited and designed to maintain the property's ecological values. Some of these areas are valuable as nursery habitat for commercially and recreationally important fish species, and provide essential habitat for all or part of the life cycle of many forage species on which other fish species depend. Development activities that degrade the water quality of streams and ponds and wetlands that are part of these critical sub-estuary systems impair the biological integrity of Connecticut's coastal area as a whole.

B.2.2.2.4 Diadromous fish migration corridors

Diadromous fishes are species that migrate between freshwater and saltwater habitats and include such species as American eel, shad, and alewife. Some species migrate only short distances inland from Long Island Sound while others penetrate a great distance to the hills and mountains of interior Connecticut and New England. The streams, lakes, and ponds through which these species migrate are known as riverine migratory corridors. Modifications to these corridors—mostly by human development such as dams—have created barriers to migration and resulted in partial or complete extirpation of populations of diadromous species. The degree of extirpation varies depending upon the species involved, the habitat, and the nature of the development. The restoration of these populations is a high priority but cannot always be realized unless these physical barriers can be removed. Solutions, usually involving dam removal or fishway construction, can be complex when structures are owned by parties unwilling or simply not interested in cooperating to remove the barriers. Thus, the best approach is often for the site to be acquired by an interested party who will then participate in a partnership to provide a solution.

Lands critical to the effective management and restoration of diadromous fish are not limited to fish passage projects. Other locations critical to the well-being of these species are often located at the head-of-tide, the upstream terminus of saltwater penetration, or at a physical constriction in an estuarine embayment or river system. Physiological and behavioral activities in affected species often occur in these areas. Therefore, the protection of these key parcels through conservation acquisitions is sometimes the most appropriate management action for conserving diadromous fish runs (personal communication, Steve Gephard, CT DEEP- Supervising Fisheries Biologist).

B.2.2.2.5 Tidal wetland and associated upland buffer areas

Tidal wetlands are especially vulnerable to development activities that disrupt or reduce tidal exchange or disturb the wetland's adjacent upland areas (sometimes referred to as the riparian areas). Because there are few large undeveloped waterfront parcels available for residential development, residential developers are developing larger parcels with frontage on tidal marshes that provide views of marshes and open water for, placing these critical coastal resource areas increasingly at risk of secondary impacts from development (e.g., storwmater runoff discharges). Although Connecticut's Tidal Wetlands Act and Regulations provide significant protection from filling, excavation or other direct disturbance, these laws do not regulate development within upland areas adjacent to tidal wetlands that frequently generate indirect or secondary impacts to coastal resources. Further, some activities affecting tidal wetlands, such as the construction of docks, although regulated to avoid or minimize direct impacts, can pose potential indirect impacts such as habitat fragmentation and tidal wetland shading. Development within the upland vegetated buffer area also can result in unauthorized and often undetected minor encroachments into wetlands often associated with residential development activities such as construction of ancillary support structures (e.g., sheds, gazebos, etc.), landscape retaining walls and disposal of yard debris at the wetland edge. Other potential adverse impacts from such activities include

obstruction of culverts that provide tidal water exchange between tidal wetlands and tidal creeks and rivers and removal of the upland buffer areas vegetation diminishing the riparian area's effectiveness in filtering pollutants from stormwater prior to discharge to coastal waters and marshes. A more recently recognized threat to tidal wetlands is the accelerating rate of sea level rise in Long Island Sound. One forecast for the Northeast by the year 2100 predicts a 41 to 55 inch increase in mean sea-level by the end of the century under a 'rapid Greenland and West Antarctica ice-melt sea level rise' scenario. [27] Regardless of an absolute rate of sea level rise, increased rates of sea level rise will threaten tidal wetlands if upland areas adjacent to tidal marshes do not provide appropriate conditions to support the inland migration of these marshes. Accommodating this phenomena of 'marine transgression' will require support for management initiatives to identify potential tidal marsh refuge sites that is expected to be part of the first update to Connecticut's CELCP Plan. To view potential SLR inundation scenarios along Connecticut' coast, use NOAA's Sea Level Rise viewer at http://csc.noaa.gov/slr/viewer/ and select 'Connecticut' under the 'Zoom to State or Territory' tab in the upper right of this web page.

B.2.2.2.6 Estuarine embayments with extraordinary aquatic habitat value

Estuarine embayments with exceptional water quality, especially those supporting extraordinary aquatic habitats (such as productive shellfish beds), provide critical ecological values that are particularly vulnerable to degradation. For example, eelgrass beds and other submerged aquatic vegetation (SAV) are particularly sensitive to water quality degradation from development within local coastal drainage basins, especially if riparian areas are disturbed. Maintaining water quality, particularly water clarity for light penetration to SAV beds such as eelgrass, are critical to maintaining scallop and hard clam fisheries. Development within coastal forests draining to such embayments that contribute to estuarine water quality, particularly within riparian areas, often increases pollutant loads from stormwater runoff and creates on-site sewage disposal system discharges to groundwater. These discharges increase nitrogen loads and phytoplankton growth, thereby reducing water clarity light penetration within the water column that in turn adversely affects the health and abundance of SAV.

B.2.2.3 Threats to coastal recreational values

B.2.2.3.1 Car-top (e.g., kayak. paddleboard) boating access

As previously indicated, surveys of non-motorized boaters indicate there is significant unmet demand for car-top boating access facilities. Additional boating access for kayaks and paddleboards is especially needed within the lower Connecticut River region and areas where existing launch facilities are restricted to municipal residents, primarily along Connecticut's western Long Island Sound shoreline. Limited public land along and extensive development of Connecticut's Long Island Sound shoreline, and even its coves and popular 'back-water'

[27] New York City Panel on Climate Change (NPCCC). 2009. Climate Risk Information. PlaNYC. City of New York, NY.

paddling area such as those on the Connecticut, Quinnipiac and Thames Rivers, make it difficult to acquire land and develop new car-top launch facilities. Competition between paddle craft and motorized boats for parking and launch ramps at some State boat launches create user conflicts and facilities management problems. Other obstacles to car-top boating access is the lack of neighborhood support new launch facilities and the policy of some towns to limit use of their boat launches to town residents only or making access to town launches prohibitively expensive to non-residents.

B.2.2.3.2 Access for trailered boats and parking

Because launching trailered-boats requires sufficient water depths and space for trailer parking there are even more limited opportunities to acquire new sites well-suited to providing new trailered boat launch facilities. Neighborhood opposition to developing new or expanding existing boating facilities also contribute to preventing DEEP from providing new boating access facilities. This situation is even further exacerbated by the closing or conversion to residential uses of small-craft marinas that previously offered boat launching services to the public.

B.2.2.3.3 Shore-based fishing/crabbing/shell-fishing areas

A 2004 DEEP survey of shore-based marine anglers indicated that 36 percent of surveyed respondents cross private lands to access shore-based fishing areas. These informal fishing and crabbing access areas, used by the public through custom and the goodwill of the landowners, are being lost as coastal waterfront property is developed or sold to owners who prohibit public use of their shoreline property. Similarly, recreational shellfishing is threatened by shoreline access restrictions and shellfish bed closures due to water quality impairments. Such impairments are caused in part by polluted stormwater runoff discharged into recreational shellfish areas from upland development with inadequate stormwater quality management controls.

Further, many recreational saltwater anglers and shellfishers access waters by walking along the public trust area of the shore to reach a preferred fishing spot from an available public access point, such as a public road end. However as shorelines erode and sea level rises, the public's ability to pass within the public trust area waterward of the mean high water will be lost, particularly in regions of the coast where inland migration of the mean high water is restricted by shoreline flood and erosion control structures such as groins and seawalls.

B.2.2.3.4 Coastal greenways/trails

Due in large part to the highly developed nature of Connecticut's shoreline and the predominance of relatively small sized parcels (e.g., less than 10 acres), Connecticut has few long (e.g., over 1 mile) continuous public access trails near coastal waters. Within 1,000 feet of coastal waters, especially land fronting directly on Long Island Sound, assembling large numbers of small parcels to create continuous public trails is extremely challenging. The few remaining larger undeveloped parcels with potential to provide new or expand existing recreation trails, such as those along Niantic River in East Lyme, are often valued well beyond the budgets of local land conservation organizations to acquire these lands. However some communities within

highly developed shoreline areas, such as the Mill River in Stamford, are gradually creating shoreline trails or greenways along coastal waters by acquiring land with assistance from State and federal agencies, as it becomes available, or are requiring private dedications of public land to fill gaps within planned trail systems through the municipal coastal site plan review process.

C. CELCP Project Area and Focus Area Conservation Targets

In order to better identify potential coastal land acquisition opportunities that address Connecticut's coastal conservation goals, a more focused geographic analysis is needed than that which can practically accomplished using Connecticut's Coastal and Estuarine Planning Area (Figure 1). Therefore, two more planning sub-areas are proposed to help identify future CELCP acquisition projects. The first, referred to as Connecticut's CELCP *Project Area*, identifies an area that contains Connecticut's priority conservation values described in Section II. B. and is defined as the area within the 42 municipalities identified in Figure 6 not already developed (as defined in Figure 3 and shown in Figures 4a. and 4b) or held as 'protected open space' (as defined in footnote 1 in Table 3 on page 16.)[28]

The CELCP Project Area was then further distilled to identify unprotected coastal area land with attributes indicative of Connecticut's targeted priority coastal land conservation values. This was done using 'weighted' evaluation criteria (described in Table 6) to identify areas with potentially significant conservation value, referred to here as *'focus areas'*. The purpose of further refining the CELCP Project Area to *focus areas* is to concentrate limited financial and analytical resources to high-priority land acquisition opportunities likely to successfully compete in the highly selective national CELCP funding process. Because national CELCP competition guidelines assign priority to acquisition projects with significant *ecological value*, ecological-based evaluation criteria were used to identify potential 'focus areas.' This emphasis on using the ecologically-based project selection criteria described in Table 6 is not intended to discount the importance of acquiring coastal land that can support other land conservation objectives, such as natural resource based outdoor recreation. Rather, these criteria were selected because they reflect national CELCP program conservation priorities and because they are supported by relatively strong available geo-spatial data sets. As new state compatible geospatial data sets (e.g., shorebird breeding areas) become available, the criteria used to identify CELCP focus areas can be modified.

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[28] Three datasets were used to identify Connecticut's CELCP project area's 42 coastal municipalities. They include: (1.)The boundaries of Connecticut's 36 statutorily-defined coastal municipalities (defined in Connecticut General Statutes Section 22a-94); (2.) the boundaries of the 6 lower Connecticut River Valley municipalities that contain 'Ramsar wetland' core sites designated "wetlands of international importance" pursuant to Ramsar Convention on Wetlands (see Section II.D.7. for a description of the Ramsar Convention and the Connecticut River Estuary and Tidal Wetlands Complex Ramsar Convention nomination and Appendix 13-Connecticut River Ramsar Core Sites); and (3.) Connecticut's coastal eco-regions, as defined in the publication *Rare and Endangered Species of Connecticut and Their Habitats*, (shown in Figure 6 and further described in Appendix 5- *Rare and Endangered Species of Connecticut and their Habitats*, CT DEEP, 1976). Collectively, the 42 municipalities depicted in Figure 5 encompass 1,145 square miles, comprising 55 percent of Connecticut's Coastal and Estuarine Area (2,073 square miles) and 25 percent of Connecticut's coastal watershed (4,600 square miles).

Ten ecological-based criteria were used to develop a 'weighted-sum' scoring mechanism to refine the CELCP Project Area to identify more discrete coastal acquisition 'focus areas' still in non- protective forms of ownership. Using a spatial statistics algorithm, a clustering analysis was conducted to identify "hot-spots" representing concentrations of high ecological value warranting additional investigation as potential conservation acquisition targets. Each criterion was assigned a weighting-factor to reflect its perceived value relative to other criteria. As indicated in the following table, Connecticut places significant value on conserving large blocks of unfragmented coastal forest blocks and marsh advancement zones, particularly those proximate to areas of existing protected open space (POS). Note however, that other criteria not used to help identify focus area (e.g. shorebird foraging areas) were excluded from the analysis not because they are unimportant, but because insufficient geospatial data exist to use the criteria. As additional geo-spatial data for important ecological evaluation criteria not included in this analysis become available, the focus areas identified here will be modified.

Table 6
Evaluation Criteria to Identify Potential
'Focus Areas'

Criteria	Weight
Forest Blocks <100	***4***
Forest Blocks 100-250	***8***
Forest Blocks 250-500	***12***
Forest Blocks >500	***20***
Proximity to POS Property	***15***
Marsh Advancement Zones	***14***
Natural Diversity Database Areas (e.g. CT endangered or threatened species areas)	***10***
Migratory Waterfowl Concentration Areas	***6***
Critical GCN* Species Habitat	***10***
Land Use/Land Cover	***1***
Total	***100***

* Species of Greatest Conservation Need identified in *Connecticut's Comprehensive Wildlife Conservation Strategy*

In order to help 'score' the relative ecological value of potential *focus areas*, a grid dividing the Project Area into 500 foot by 500 foot cells was applied to the area. This grid size was selected to balance the size of the input data with the data processing capacity of the GIS tool used to conduct the analysis. Raw score values were determined for each cell within the CELCP Project Area based upon whether the area of the cell contained the ecological value described by each criterion listed in Table 6. These raw scores were used to develop a composite scoring index derived using a geo-processing model to aggregate area scores. The resulting scores represent the potential relative ecological value of specific locations within the CELCP Project Area using a spatial statistics algorithm. Each location within the Project Area was evaluated by applying the algorithm within each grid cell. By aggregating neighboring individual grid cell values with similar characteristics, the resulting data could more readily be interpreted at an appropriate

scale. In other words, the individual grid cell aggregation process identified ‘hot-spots’ representing areas of potentially significant conservation value. These areas are shown in the ‘hotter’ colors red, orange, yellow in Figure 7 below. Conversely, areas less likely to contain lands with high priority coastal conservation value are shown in the ‘cooler’ colors’ royal blue, aqua blue, green. We expect that additional investigation of coastal land conservation opportunities will be focused within areas identified as potential conservation ‘hot spots.’

Figure 5. Connecticut Coastal Eco-regions Relationship to the Coastal and Estuarine Planning Area

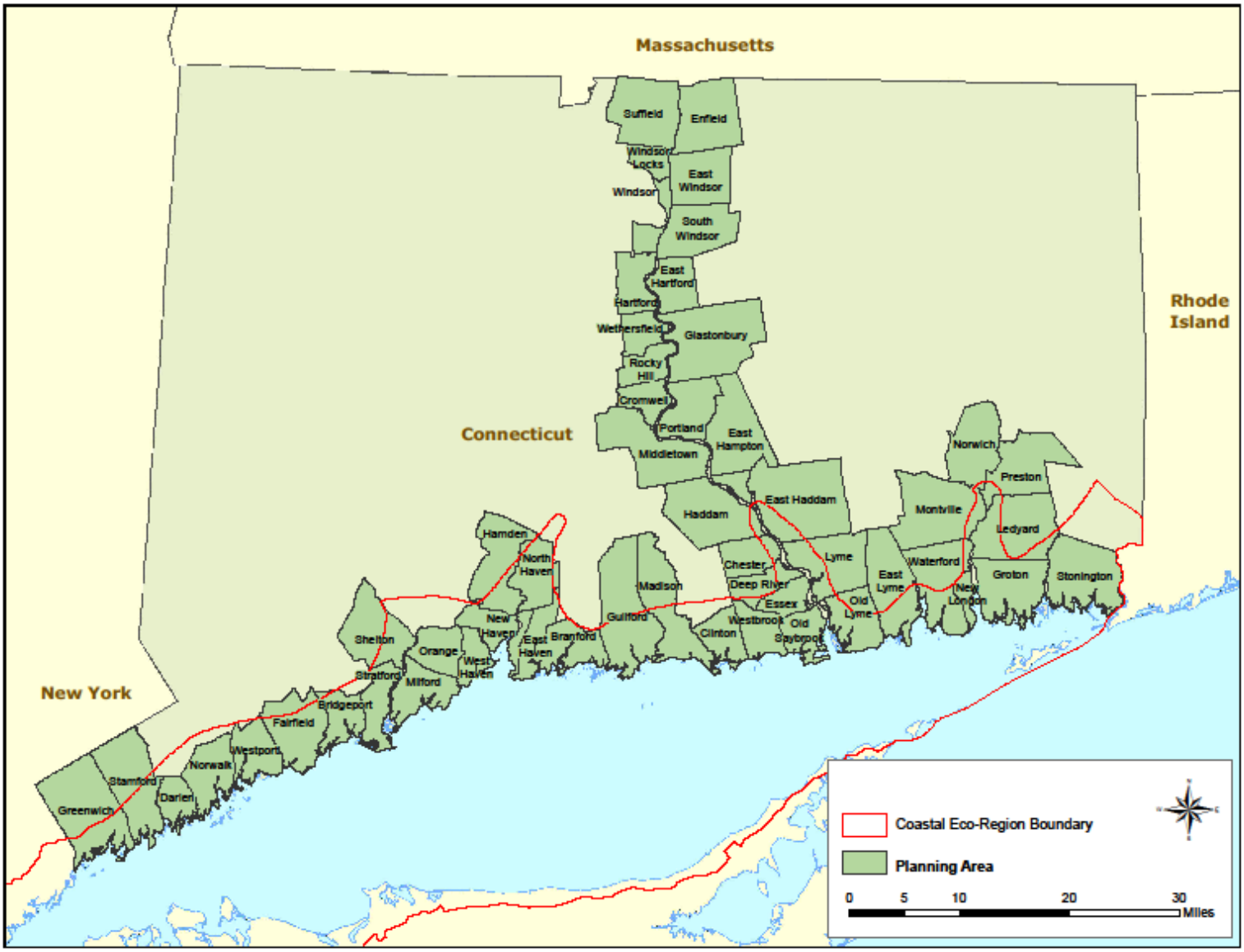
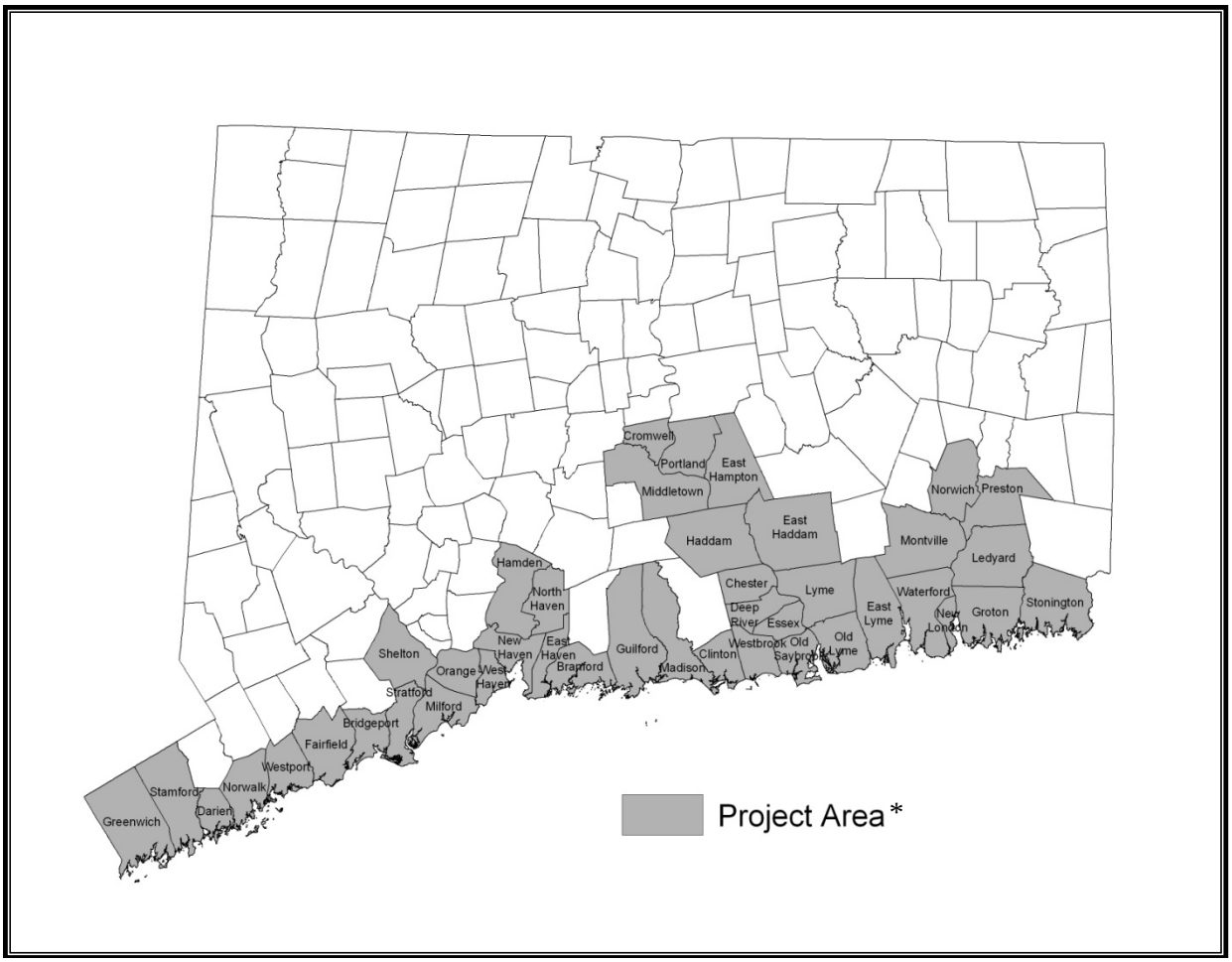
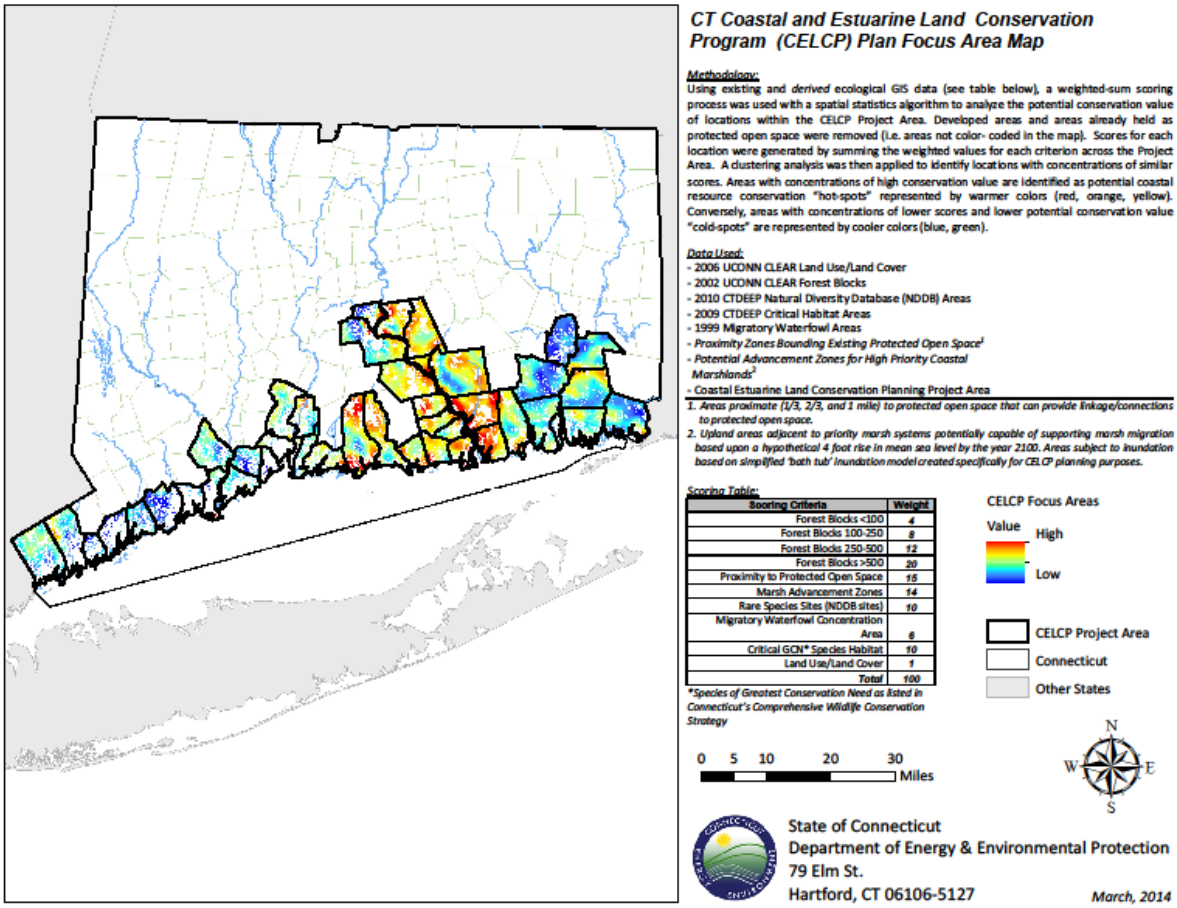


Figure 6. CELCP Project Area Municipalities



* See description of CELCP Project Area in Section II.C.

Figure 7. CELCP Focus Areas



Larger scale views of CELCP Focus Areas forthcoming at <www. >

D. Description of Existing Plans and Studies Incorporated into the CELCP Plan

The following resource conservation and management plans, surveys and studies were consulted when drafting Connecticut's CELCP Plan. The first set of documents (Section D.1) provided spatial information used to help define Connecticut's CELCP Project Area and may be used by project applicants and reviewers to determine the location of priority land conservation values. The second set of documents (Section D.2) more generally describe agency-wide conservation values relevant to this plan and can be consulted by CELCP conservation project proponents and reviewers to better understand Connecticut's priority land conservation values. All the plans, surveys and studies referred to are incorporated into this CELCP Plan by reference and will be consulted to identify potential land acquisition projects to the national CELCP project selection process.

D.1 Plans, Surveys, and Studies Containing Geographic Information within the Project Areas

D.1.1 Coastal Land Assessment Methodology (CLAM)

DEEP OLISP developed a coastal land acquisition planning tool called *Coastal Land Assessment Methodology* (CLAM) to identify priority coastal land acquisition opportunities. CLAM is a municipal tax parcel based computer model that uses a geographic information systems (GIS) application to perform simple spatial analyses. The model queries tax parcel and natural resource information to identify potential coastal land conservation opportunities based upon a parcel's size, land cover, presence of significant natural resources, and proximity to existing protected land. This land acquisition-planning tool is being used to identify coastal land acquisition opportunities (Appendix 3 provides a summary of the CLAM project's findings and how project data can be accessed).

D.1.2 Long Island Sound Stewardship Initiative

The LIS Stewardship Initiative (LISSI) is a program of the E.P.A.'s Long Island Sound Study office developed in response to the recommendations of the LIS Comprehensive Conservation and Management Plan to conserve the Sound's most significant ecological areas and increase public access to the Sound. The goals of the Long Island Sound Stewardship Initiative are to:

- Identify sites or site complexes with exceptional recreational and ecological value;
- Facilitate funding for permanent protection and stewardship of identified sites or complexes of sites;
- Provide site managers or owners with access to technical support and assistance for improved resource stewardship;
- Link related sites to promote landscape-scale planning for long-term ecological health and public enjoyment of the Sound;
- Collaborate with related public and private entities to protect open space, improve the ecological health of the Sound, and increase public access and recreational opportunities around the Sound; and

- Foster voluntary partnerships to leverage limited public funds available for open space protection, public access, management, and activities designed to maintain and enhance the ecological health of the Sound.

LISSI's Stewardship Work Group is coordinating efforts to identify areas with outstanding ecological and recreational resource value and to develop a strategies to protect and enhance them. The Work Group outlined a two-phase strategy to accomplish this objective. The first planning phase, is an inventory of ecological and recreational resources of Sound-wide importance, the most significant of which are designated as Stewardship areas that include specific sites or properties. As funding allows, more detailed resource inventories, management plans that identify resource threats and conservation opportunities are completed. The second phase focuses on implementation of on-the-ground stewardship actions to protect or enhance the public resource values these sites provide. Both phases of the process will be iterative requiring additional planning and implementation phases. An in-depth description of the Stewardship Initiative can be accessed using the EPA Long Island Sound Study Web site's Stewardship pages <http://longislandsoundstudy.net/issues-actions/stewardship/background/>.

D.1.3 Connecticut Coastal Recreation Access Survey

In 2004, CT DEEP's OLISP conducted a series of coastal recreation access and facilities needs surveys, the results of which are incorporated into the needs assessment section B.2 of this plan. The surveys gauged the public's coastal recreation needs and illuminated the public's coastal recreation habits and preferences and our understanding of the most popular types of coastal recreation activities. The recreational activities assessed by the access surveys included: (1) saltwater angling and waterfowl hunting; (2) wildlife observation; and (3) marine boating. Approximately 1,000 surveys were distributed to targeted recreational user groups or individuals with special knowledge or interest in these coastal recreation activities (the survey response rate was 39%). Geographic data compiled as part of the survey can be used to identify and prioritize coastal land acquisition opportunities and target coastal recreation facilities improvement funds. A summary of the survey results is included in Appendix 9.

D.1.4 Northeast Coastal Areas Study: Significant Coastal Habitats of Southern New England and Portions of Long Island, New York (NECAS)

Northeast Coastal Areas Study: Significant Coastal Habitats of Southern New England and Portions of Long Island, New York (Appendix 10) evaluated the quality of and threats to regionally significant fish and wildlife habitat in coastal and estuarine areas of southern New England and northern and eastern Long Island. The study contains an analysis of regionally significant habitat most in need of protection to preserve natural diversity in the coastal southern New England-New York bight eco-region. The study can be accessed at http://library.fws.gov/pubs5/necas/begin.htm .

D.1.5 RAMSAR Nomination: Connecticut River Estuary and Tidal Wetlands Complex

In 1994, the Connecticut River Estuary and Tidal River Wetlands Complex was designated "wetlands of international importance" pursuant to the Ramsar Convention on Wetlands (see

Appendix 11 for a map describing the complex). The Convention on Wetlands, signed in Ramsar, Iran in 1971, is an intergovernmental treaty that provides a framework for national action and international cooperation for the conservation and wise use of wetlands. Consistent with the Ramsar Convention, primary emphasis is placed upon wetlands but in several instances sites include subtidal areas, upland riparian areas and coastal zones adjacent to the wetlands. These areas represent the complex of wetlands and tidal waters that meet the criteria for designation as "wetlands of international importance" pursuant to the Ramsar Convention (see Appendix 12 Ramsar Criteria for Inclusion). Within the Connecticut River Estuary and Tidal River Wetlands Complex Ramsar designation area, there are 20 discrete major wetland complexes, or core sites, listed in the Ramsar nomination report (see Appendix 13 Ramsar Core Sites). These Ramsar-designated cores sites will be used to help identify high priority coastal land acquisition opportunities for possible nomination to the national CELCP project selection review process. A list of the Ramsar-designated core sites can be accessed at: http://library.fws.gov/pubs5/ramsar/web_link/sites.htm#Listper cent20ofper cent20Coreper cent20Sites and a map of the site locations at: http://library.fws.gov/pubs5/ramsar/web_link/images/map.htm

D.1.6 Long Island Sound Study Habitat Restoration Initiative

The Long Island Sound Study Habitat Restoration Initiative's list of potential habitat restoration sites is incorporated into this Plan (see Appendix 14 - Long Island Sound Habitat Restoration Sites) as a guide for identifying potential CELCP land acquisition sites. The Long Island Sound Study Habitat Restoration Initiative is a partnership of state, federal and non-governmental organizations working to restore habitats that support the Sound's living resources. The goals of the Initiative are to restore an additional 532 acres of tidal wetlands and 200 miles of fish riverine migratory corridors between 2015-2035.

A list of restoration sites in Connecticut can be obtained by reviewing the Habitat Restoration Database on the EPA Long Island Sound Study's Habitat Restoration web page at: http://lisshabitatrestoration.com/search.aspx and contacting the coastal resource restoration specialist at CT DEEP's Office of Long Island Sound Programs.

D.1.7 Connecticut's Comprehensive Wildlife Conservation Strategy

Connecticut's 2005 Comprehensive Wildlife Conservation Strategy (CCWCS) (Appendix 15) describes the State's 12 key habitat types, identifies species of "greatest conservation need" (GCN species), threats to these species, potential conservation actions to address identified threats and a plan implementation monitoring program to evaluate the effectiveness of conservation strategies. The most significant threats to Connecticut's GCN species habitats include: degradation, and fragmentation from development; changes in land use; and competition from non-native, invasive species. Other threats include insufficient scientific knowledge regarding wildlife and their habitats (distribution, abundance and condition); lack of landscape-level conservation plans; insufficient resources to maintain or enhance wildlife habitat; and public indifference toward conservation. Connecticut's CELCP Plan can contribute to the implementation of the CCWCS through acquisition of lands or interest in lands that provide key habitat for GCN species. Acquisition projects nominated for CELCP funding assistance should, if possible, describe how the acquisition will benefit GCN species and their key habitats

described in Chapter 4 of the CCWCS. The CCWCS is currently (January 2015) being updated, and is now referred to as Connecticut Wildlife Action Plan. For more on this effort see http://www.ct.gov/deep/cwp/view.asp?a=2723&q=329520&deepNav_GID=1719

D.2 Plans, Surveys, and Studies That Support CELCP Priority Lands and Values

D.2.1 Connecticut Statewide Comprehensive Outdoor Recreation Plan (SCORP) (2005-2010)

Connecticut's *Statewide Comprehensive Outdoor Recreation Plan*, or SCORP, (Appendix 6) identifies Connecticut's natural resource-based outdoor recreation needs and provides a blueprint for prioritizing federal and state resources to address the Plan's goals. Through the SCORP planning process, a survey of Connecticut residents was conducted to identify the most popular outdoor recreation activities. Among the top ten outdoor recr eation activities that Connecticut households participated in during 2004, "beach activities" (2nd) and "saltwater swimming" (4th) ranked among the most popular. The most commonly cited priority action suggested by survey respondents was to acquire additional open space. Properties that can accommodate water-based recreation such as swimming, boating and fishing, as well as trail-based activities, are identified as among the highest land acquisitions priorities. Other specific acquisition priorities include: private in-holdings within DEEP-owned lands, properties capable of supporting multiple recreational uses, and properties with joint ownership and management cost-sharing potential.

D.2.2 The Green Plan: Guiding Land Acquisition and Protection in Connecticut 2007-2012

The Green Plan: Guiding Land Acquisition and Protection in Connecticut 2007-2012 (see Appendix 7), is Connecticut's principal strategic plan for land acquisition and protection. The Plan is currently (Fall 2014) in the process of being comprehensively revised and updated. The Plan provides general guidance for State land acquisition program managers and is a tool for organizations that wish to cooperate with the State to address statewide land acquisition priorities. *The Green Plan* identifies multiple land conservation criteria to consider when prioritizing potential land conservation opportunities. These criteria are classified into the following four categories: (1) ecological values; (2) use needs; (3) location concerns and (4) general evaluation considerations. Individual criteria within these four categories are presented on pages 6-9 of the Plan.

One of the principal goals in the Green Plan is to conserve 21 percent of Connecticut's land area. This include 10 percent held as State-owned land with the balance held by municipalities, nonprofit land conservation organizations and water company lands held as Class I and Class II watershed lands. The State's two principal land conservation funding programs through which to accomplish the goals of the Green Plan are the Recreation and Natural Heritage Trust Program (RNHTP) and the Open Space and Watershed Land Acquisition Grant Program (Open Space Grant Program). The RNHTP is DEEP's primary program for acquiring land to expand the State's system of parks, forests, wildlife, and other DEEP managed lands and funds land acquisitions of statewide natural, recreational and cultural significance. Of special conservation interest are lands with unique landscape features such as rivers, ridgelines, rare natural communities, scenic qualities, historic significance, water access and connections to existing conservation land. The Open Space Grant Program provides financial assistance to

municipalities, nonprofit land conservation organizations and water companies to acquire land for many of the same purposes and to protect lands critical to protecting public water supplies but to be managed by the grantees.

The Green Plan includes in its list of acquisition and protection priorities several CELCP objectives including: protecting sensitive coastal resources; preserving exemplary coastal ecosystems, habitats or landscape; and enhancing coastal public access and other coastal recreational opportunities.

D.2.3 Connecticut Forest Resource Assessment and Strategy

The *Connecticut Forest Resource Assessment and Strategy* <*http://www.ct.gov/deep/cwp/view.asp?a=2697&q=454164&deepNav_GID=1631*> identifies the principal issues facing the long-term viability and health of Connecticut's forestlands and strategies actions to address and address these issues over the ten-year period (2010-2015). Many of the proposed *principles and actions* listed in the Strategy section of the document are consistent with and could be furthered by the CELCP Plan. They include: creating partnerships to accomplish planning objectives, need for improved long-term conservation planning, well-managed forests provide important public benefits including abundant high quality water resources, and protecting core forest areas from conversion to non-forest uses.

III. Implementation

A. Identification of State Lead Agency

The DEEP's Office of Long Island Sound Programs (OLISP) is the lead state agency responsible for preparing and overseeing implementation of Connecticut's CELCP plan in coordination with DEEP's Land Acquisition and Management (LAM) Division. DEEP-OLISP administers Connecticut's federally approved coastal management program and is responsible for ensuring that state agency actions are consistent with the program. DEEP-OLISP works in close coordination with DEEP divisions that manage coastal property to promote management activities that protect and restore coastal resources, and where appropriate, provide public recreation opportunities. DEEP-LAM is the agency's lead division for acquiring lands to be held under DEEP's custody and control. DEEP-LAM also assigns management responsibility to the appropriate DEEP division primarily responsible for managing newly acquired conservation land.

B. Agencies Eligible to Hold Title to Property

CELCP Final Guidelines require that title to property or other property interests acquired using CELCP funds be held by an eligible state agency or local government and that a permanent conservation restriction be placed on such property. Eligible agencies include DEEP and municipalities within Connecticut's Coastal and Estuarine Area (see Figure 1). CELCP grant

awards are typically awarded to DEEP although DEEP may sub-award CELCP grant funds to an eligible municipality if it is more appropriate for a municipality to hold title to property acquired through CELCP. NOAA may also make awards directly to the sub-recipient, with concurrence from DEEP, in order to expedite completion of projects awarded funding.

Other land conservation organizations such as land trusts ineligible to receive CELCP funding may serve as 'project cooperators' by committing the value of lands they own through a conservation easement if such land contributes to a proposed CELCP acquisition project's conservation value. By contributing the value of such lands, cooperating entities can assist eligible entities meet substantial CELCP matching funds requirements. Such organizations can also play a significant role in implementing Connecticut's CELCP Plan by identifying potential coastal land acquisition projects for nomination to the national project selection process. Upon acquisition of coastal land by an eligible entity, land trusts and other land ineligible organizations can continue to participate in the property's stewardship by managing lands acquired by others through CELCP. Locally-focused land acquisition identification and management roles may be particularly appropriate for land trusts or other land conservation organizations since they are often most aware of local land acquisition opportunities and best positioned to manage conservation lands.

C. Land Acquisition Project Nomination Process

C.1 Identifying Coastal Land Acquisition Projects

In order to generate potential acquisition projects that can successfully compete for land acquisition funding assistance through the national CELCP competition, CT DEEP will solicit project proposals using a two-phase solicitation process. Phase 1 will use CT DEEP's electronic newsletter *Sound Outlook* and other public outreach methods to describe national CELCP project evaluation criteria, Connecticut's priority conservation values and focus areas. The purpose of this informal 'notice' is to create a 'pool' of potential land conservation projects for nomination to the highly competitive national CELCP grant program competition. Following this notice, upon official announcement of a NOAA-sponsored national CECLP grant competition, CT DEEP will issue a more detailed request for proposals (RFP) nominations. This two-phase project solicitation process should help project develop proposals geared to state and national project selection criteria well in advance of formal notification of a CELCP funding announcement. Municipalities within Connecticut's Coastal and Project Area, regional planning agencies serving those municipalities and land conservation organizations registered with the Connecticut Land Conservation Council serving eligible municipalities will be notified of CELCP federal funding opportunities.

In the second phase, project proponents will be encouraged to provide a brief summary of project proposals to CT DEEP so that we can provide guidance on how to develop a complete and competitive CELCP project nomination. Responses to CELCP funding opportunity notices require detailed information describing a proposed project's consistency with Connecticut's CELCP Plan and national project evaluation review criteria.

C.2 Request for Proposal Response Review and Prioritization

C.2.1 Proposal Acceptance

Responses to CT DEEP's RFP project nominations to the national CELCP competition will be screened to determine if proposals are complete and eligible. Applicants submitting incomplete proposals will be provided a time-limited opportunity to provide all required information. For instance, projects that propose to vest title to property with an eligible municipality must include documentation demonstrating that the municipality or other participating organizations can provide required non-federal acquisition matching funds. Matching funds provided in part by DEEP's Open Space and Watershed Protection Grant Program must include a grant award letter documenting that awarded funds are being held in reserve as part of the required non-federal match. A demonstration of municipal sources of matching funds should include documentation that such funds have been encumbered by a municipal finance committee. Other sources of required match should provide a letter from the organization's governing body verifying that the funds have been encumbered and are being held in reserve for the acquisition.

C.2.2 Project Proposal Review and Ranking

Complete project proposals will be reviewed and ranked by Connecticut's CELCP Project Review Committee. The Committee will consist of representatives from the land trust community, municipal conservation commissions and CT DEEP. The committee will review proposals for consistency with the Plan according to a scoring system to be developed using the Connecticut Project Nomination Criteria in Table 6 as a guide. These criteria may be modified from year to year to reflect the current funding priorities of the CT DEEP and NOAA which will be provided as part of the RFP solicitation process. The Committee's interpretation of the criteria and their application to score project nominations will be guided by this Plan. The Project Review Committee will accept and review proposals outside the CELCP Project Area that are within the Coastal and Estuarine Area only if the Committee determines that the project directly responds to a priority coastal land conservation value described in Section II. B. of the Plan and that the project would be a competitive proposal according to the state and national CELCP project scoring process. For projects selected by the Committee for referral to the national CELCP competition, completed Project Nomination Forms will be reviewed according to the project selection criteria that states are required to consider when nominating project proposals (Table 7.).

Table 7
Draft Connecticut Project Nomination Evaluation Criteria[29]

Criteria	Maximum Potential Score
(1.) General Conservation Value/Project Readiness	
Size (10-50 acres; 50 -100 acres; 100-200 acres; >200 acres)	4
Leverages conservation of related parcel(s) of conservation value	2
Contains frontage on tidal waters or tidal marsh	3
Property can be readily managed/has a dedicated management funding source	2
Abuts existing protected open space/eliminates an 'in-holding'	4
Proximate to existing protected open space (proximity based on principal purpose of acquisition)	2
Reduces potential boundary management problems of abutting protected open space	1
Property does not require contaminant remediation per phase 1 environ. assessment	1
Project sponsor can provide required non-federal funding match	5
Advances a priority goal of a local watershed or area management plan	1
Demonstrated commitment of landowner to complete conservation sale	5
Significantly reduces potential to degrade an aquatic resource or habitat type dependent on high water quality (e.g., shellfish and eel grass beds)	2
Significantly contributes to the conservation of a larger landscape feature of statewide conservation signficance (e.g., traprock ridges)	2
Clearly describes how acquisition protects a CT CELCP Plan priority conservation value or area	3
Subtotal	*35*
(2.) Ecological Value	
Significantly contribute to the health/viability of a rare biological community (e.g., freshwater tidal marsh free of invasive plants, Atlantic white cedar swamp, etc.)	4
Includes exemplary LIS habitat/ecosystem type (e.g., barrier beach/dune) especially those under-represented in the State's existing system of protected open space	4
Includes outstanding LIS habitat/ecosystem type (e.g., unditched salt marsh)	5
Protects one or more of 12 key habitats described in *CT's Comprehensive Wildlife Conservation Strategy* (ftp://ftp.state.ct.us/pub/dep/wildlife/cwcs/CWCSCh4.pdf)	3
Provides rare species habitat	4
Provides habitat for GCN species described in *CT's Comprehensive Wildlife Conservation Strategy*	4
Provides area capable accommodating upland migration of an exemplary tidal wetland system	4
Provides habitat for species identified on the IUCN's "Red List" with a "threatened" ranking of near-threatened or greater[30]	2
Links wildlife travel or seed dispersal corridor between critical habitats	3

[29] Criteria weighting subject to change by Connecticut DEEP CELCP Project Nomination Committee
[30] See International Union for the Conservation of Nature and Natural Resources (IUCN) Red-List at http://www.iucnredlist.org/search/search-basic

Enhances an ecological value in at a LIS Stewardship site (see (http://longislandsoundstudy.net/issues-actions/stewardship/stewardship-areas-atlas/)	1
Within/adjacent to recognized or identified IBA or other important bird habitat	1
Protects large (>200 acres) unfragmented block of coastal forest	3
Protects upland adjacent to Ramsar-designated Wetlands of International Importance "core" sites (see http://training.fws.gov/library/pubs5/ramsar/web_link/sites.htm)	2
Subtotal	*40*
(3.) Recreational Value[31]	
Provides public access to coastal waters in a distressed municipality (as referenced in current list at http://www.ct.gov/ecd/cwp/view.asp?a=1105&q=251248)	3
Provides public access to coastal waters for boating, swimming, fishing, shellfishing or wildlife observation in an area underserved by existing public access	5
Enhances recreational use/enjoyment of a designated EPA LIS Stewardship site	4
Part of an existing or planned recreation trail or greenway near coastal waters	5
Demonstrated commitment of funds to improve or prepare the site for public use	*3*
Subtotal	*20*
(4.) Other Exceptional Site/Unique Area Value	
Facilitates restoration of a LIS Study Habitat Restoration Initiative site (see http://longislandsoundstudy.net/wp-content/uploads/2010/03/LISSHabMap021.pdf)	1
Preserves a State-recognized historic/cultural value	1
Preserves a unique geological feature	1
Protects an exceptional public scenic value (e.g., ridgeline,)	1
Other factors	1
Subtotal	*5*
Total score	100

[31] Acquisition nominations proposed to provide recreational access opportunities must demonstrate that access will be available to the general public, consistent with ecological values being protected, without regard to municipal residency requirements and include a commitment of funds to improve the site to support public use (e.g., parking, trails, etc.).

Table 8
National CELCP Project Selection Criteria

Criteria
(1) Protects important areas with significant ecological, recreation, historical, or aesthetic values and/or lands threatened by conversion from their natural or recreational state to other uses. Priority is given to those lands that can be effectively managed, have significant ecological value in need of protection, and can successfully leverage funds among participating entities
(2) Advances the goals, objectives, or implementation of Connecticut's CELCP Plan and regional or state watershed protection plans
(3) Is consistent with the Connecticut's Coastal Management Program
(4) Can be completed during the performance period (typically, 18 months)
(5) Qualifications of the applicant to successfully complete the project
(6) Description of project costs, including acquisition costs, matching funds, and any proposed indirect costs

IV. Inter-agency Coordination and Public Involvement

Connecticut's CELCP plan was developed in coordination with federal, state and municipal public agency officials and non-governmental organizations with expertise or special knowledge of coastal resource management issues. Members of the general public with an interest in coastal land conservation were also provided opportunities to offer their opinions on Connecticut's coastal land values and coastal land acquisition priorities. Public comment on the proposed Connecticut CELCP Plan was collected through a series of public meetings, interviews and surveys. Two public information meetings were held to review the proposed content of the Plan and to solicit public input on the coastal land conservation issues and priorities in Connecticut. In addition, opinion surveys were sent to 66 state and municipal agencies or non-governmental organizations with an interest in coastal land conservation issues. Seventeen governmental and non-governmental organizations responded with information on Connecticut's most significant land conservation needs. Survey responses are summarized in Appendix 18. Public opinion assessing needs for public access to Connecticut's shoreline for coastal recreation was also separately assessed through a series of public access surveys described in Section II. D. above.

Connecticut's draft CELCP Plan was posted on the CT DEEP Web site for public review and comment after OLISP issued a press announcing its availability and participated in a radio interview describing the Plan on Connecticut Public Radio. Notice of the draft Plan's availability was sent via e-mail to approximately 75 individuals who expressed interested in reviewing it and twelve individuals or representatives of interested organizations provided written comments. All written comments were considered and, where appropriate, incorporated into the final Plan.

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