



Community Renewable Energy Siting Tool (CREST) - GIS Data Layer Information

Pursuant to Section 5 of [Public Act 24-31](#), the Connecticut Department of Energy and Environmental Protection (DEEP) has developed a mapping tool that overlays siting-specific information that could be relevant to solar photovoltaic installations. This factsheet lists each layer included in the tool and has a description of the data included in the layer, including information about how the layer was developed, as applicable. This document also lists possible limitations with each layer and how each layer could be used. This tool should be used for informational purposes only and should not be interpreted as a decision from DEEP or any other federal, state, or local entity.

Layers have been grouped into the following topical categories: (1) water; (2) forestry and wildlife; (3) geography; (4) interconnection; (5) land use; and (6) demographics.

Questions or concerns about this mapping tool may be directed to DEEP.STEPS@ct.gov.

Water					
Layer	Description	Scale/ Resolution	Possible Limitations	Metadata Layer Link	Use of Layer
Groundwater Classification Polygon*	Groundwater means water flowing through earth materials beneath the ground surface. The Groundwater Quality Classification is a designation of the use of groundwater. The Ground Water Quality Classes are GA, GAA, GAAs, GB, and GC. Classes GAA and GA designate areas of existing or potential drinking water. All ground waters not otherwise classified are by default considered Class GA.	1:24,000 (1 in = 2,000 ft)	Spatial accuracy: Original maps were hand drawn at 1:50,000 scale. At this smaller scale than other layers at 1:24,000, it represents a broader area on the ground with less detail. Age of Data: Original maps from 1986 to 1997.	Ground Water Quality Classifications Polygon	This layer is best used to identify the use of groundwater for drinking purposes.
Aquifer Protection Areas*	Depicts the location of regulated aquifer protection areas. Includes all Preliminary (Level B) and Final (Level A) Aquifer Protection Areas designated by DEEP. These areas represent the land area contributing groundwater to active public water supply wells or well fields set in sand and gravel aquifers (stratified drift deposits) and that serve more than 1,000 people. Aquifer Protection Areas were delineated by the individual water utilities owning the well fields and submitted to DEEP for approval. The Preliminary designation indicates a general estimate of the area contributing groundwater to the well field. The Final area is based on detailed, site-specific modeling of groundwater.	1:24,000 (1 in = 2,000 ft)	Representation: Approximately 80 towns in Connecticut have Aquifer Protection Areas. Age of Data: The layer is based on information compiled from 1991 to the present. The layer depicts current conditions as of 11/20/2024.	Aquifer Protection Areas	Solar is not considered a regulated use under APA regulations; however, best management practices should be followed to limit water quality impacts. APA-regulated activities include storage, handling, or disposal of hazardous materials.
Surface Water Quality Classification Set*	This dataset includes water quality classification information for surface waters, based on the Water Quality Standards adopted February 2011, amended July 2023.	1:24,000 (1 in = 2,000 ft)	Scale and Age of Data: The Water Quality Standards are reviewed and revised roughly every three years. Each Surface Water Quality Classification is a line and polygon feature-based layer based on the Adopted Water Quality Classifications Map Sheets. The map sheets were hand-drawn at 1:50,000-scale in ink on Mylar, underprinted with a USGS topographic map base. The information was compiled by major drainage basin from 1986 to 1997 (Housatonic and Southwest Basins – updated March 1999, Connecticut and South Central Basins - February 1993, Thames and Southeast Basins - December 1986.)	https://cteco.uconn.edu/metadata/dep/document/waterqualityclass_surface_line_fgdc_plus.htm https://cteco.uconn.edu/metadata/dep/document/waterqualityclass_surface_line_fgdc_plus.htm	This layer is best used to identify the use of surface water through its designated classification

Water (continued)					
Layer	Description	Scale/ Resolution	Possible Limitations	Metadata Layer Link	Use of Layer
CT National Wetlands Inventory 2024**	Wetlands are identified using a biological definition of wetlands in accordance with state definitions of wetlands which may not be consistent with federal regulatory definitions of wetlands under the Clean Water Act or the latest definition of “Waters of the U.S.” (WOTUS).	1:24,000 or 1:25,000 scale topographic quadrangles	Representation: The data does not account for changes in the landscape that may occur after mapping. Coastlines on other base maps may not match. The data layers that comprise this map were not designed to stand alone. They were originally developed as topical overlays to the U.S. Geological Survey maps in 1:24,000 or 1:25,000 scale. Exclusions: US FWS data layer; certain wetland habitats were excluded from national mapping program because of limitations of aerial imagery (seagrasses, submerged aquatic vegetation, nearshore coastal waters); and certain farmed wetlands. Age of Data: 2024	https://documentst.ecosphere.fws.gov/wetlands/data/metadata/FWS_Wetlands.xml	These maps were not designed or intended to represent legal or regulatory products. They are best used as a guide that would need to be ground-truthed by a qualified professional.
Drinking Water Watersheds*	DPH assembled this dataset. More info coming soon.	More info coming soon.	More info coming soon.	Drinking Water Watersheds (DPH) - Overview	This layer is best used to identify the use of groundwater for drinking purposes.
Flood Hazard Zones*	The Federal Emergency Management Agency (FEMA) created the Flood Insurance Rate Map (FIRM) that displays Flood Hazard Areas’ location and attributes.	The layer was projected to Web Mercator Auxiliary Sphere, then the repair geometry geoprocessing tool was run on it. Its resolution was set to 0.0001 meter.	Representation: The data were aggregated into eight classes to produce the Esri Symbology field based on symbology provided by FEMA. All other layer attributes are derived from the National Flood Hazard Layer. To improve performance Flood Zone values "Area Not Included", "Open Water", "D", "NP", and No Data were removed from the layer. Areas with Flood Zone value "X" subtype "Area of Minimal Flood Hazard" were also removed. An imagery layer created from this dataset provides access to the full set of records in the National Flood Hazard Layer. Age of Data: December 18, 2024 version of the National Flood Hazard Layer feature class S_Fld_Haz_Ar. Updated annually.	FEMA Library: FIRM USA Flood Hazard Zones (FEMA) - Overview	These FEMA maps should be used to determine whether or not a proposed project location lies in a floodplain. There can be certain restricted activities within the 100-year and 500-year floodplain, particularly if state or federal funding is used.
Forestry & Wildlife					
Forestland Habitat Impact Map**	This is a spatial screening tool developed to help visualize areas of likely material effect to core forestland in response to Public Act 17-218. This tool utilizes a variety of GIS layers representing areas which would experience a disruption of core forestland processes (e.g., degradation of habitat by edge effect, impediments to organism migration, decreased water quality). Resources were ranked based on the degree of effect anticipated, and ranks were adjusted based on DEEP's confidence in the layer as both accurate and representative. Developed land use is defined as impervious surface, buildings, structures, roads, and turf grass. If a potential project area is confined to areas considered to be developed, it may be determined to not materially affect the core forestland in this area.	Compilation of 30m pixel raster layers. 30-meter resolution means that each pixel represents 30 x 30 meters on the ground.	Representation: The map layer may include areas that are already developed. Resolution and Age of Data: Sources of component data used to derive this layer: CLEAR Forest Fragmentation 2010) (http://clear.uconn.edu/projects/landscape/v2/forestfrag/measuring/core_explained.htm); Nature's Network HUC 6 (McGarigal K, Compton B, Plunkett EB, Deluca WV, and Grand J. 2017. Designing sustainable landscapes project. University of Massachusetts, Amherst. URL: www.umass.edu/landeco/research/dsl/dsl.html); High Quality Watersheds (DEEP, Bellucci, C.J, M.E. Becker, M. Beauchene, and L. Dunbar. 2013. Classifying the health of Connecticut streams using benthic macroinvertebrates with implications for water management. Environmental Management 51:1274-1283); Natural Diversity Database Element Occurrence Data (DEEP-Wildlife)	https://maps.cteco.uconn.edu/projects/landcover/ct_landcover/	This map layer should be used for informational purposes, as directed in the preparation of petitions to the Connecticut Siting Council or requests to DEEP for “No Material Effect” to core forest and is not meant to replace any statutory definition for core forest. The data is modeled and has not been ground-truthed. Screening with this map should not be used as a substitute for Natural Diversity Data Base or other site-specific reviews.

Forestry & Wildlife (continued)					
Layer	Description	Scale/ Resolution	Possible Limitations	Metadata Layer Link	Use of Layer
Natural Diversity Data Base**	This layer represents known locations, both historic and extant, of state and federal listed species. State listed species are those listed as Endangered, Threatened or Special Concern under the Connecticut Endangered Species Act. This dataset represents over 100 years’ worth of field observations, scientific collections, and publications. Sources include state biologists, university students and professors, conservation organizations, and private landowners.	1:24,000 (1 in = 2,000 ft)	Representation: The data were compiled from a variety of sources and in most cases do not represent a comprehensive or state-wide survey. Low accuracy reports of species at the town or county level have been excluded. Much of the state is privately owned and has not been surveyed. Unmapped areas may represent potential habitat that has not been adequately surveyed for all taxa. Exact locations are masked to protect sensitive species from collection and disturbance. This information does not include Natural Area Preserves, designated wetland areas, or wildlife concentration areas. Age of Data: The data is updated every 6 months, in June and December.	https://cteco.uconn.edu/metadatas/dep/document/natural_diversity_database_fgdc_plus.htm	Because of the limited attribute information and buffered locations, this dataset is not suitable for species distribution information or analysis. Use of this generalized product is limited to a pre-screening tool and follow up with the DEEP is required for more specific information. Some of the information used to define the Natural Diversity Data Base area boundaries is based on features appearing on or other information derived from 1:24,000-scale USGS topographic quadrangle maps. Consequently, use caution when displaying the Natural Diversity Data Base areas at map scales larger and more detailed than 1:24,000 scale (1 inch = 2,000 feet).
Critical Habitats	This layer depicts the location and distribution of selected Critical Habitats in the state of Connecticut. It is a subset of habitat-related vegetation associations, described in Connecticut's Natural Vegetation Classification. These habitats are known to host a number of rare species, including highly specialized invertebrates with very specific habitat associations. Some key habitats are broken into subtypes based on natural variations in plant species dominance and/or vegetation structure. These differences are apparent in the subtype names.	Best represented when viewed with high resolution imagery at scales between 1:2,000 to 1:12,000. Connecticut Critical Habitats is a polygon feature-based layer with a resolution of +/- 10 meters.	Representation: The Critical Habitats layer is not a comprehensive map of all critical habitat types in Connecticut. For some habitats, the distribution may not be complete since no state-wide exhaustive surveys have been conducted. Most critical habitat sites were not field visited and publicly available oblique imagery such as the Bing Maps web mapping service was used as a surrogate for field investigation. Age of Data: The Critical Habitats layer is the result of a 2007-2009 project to create habitat maps to be used in land use planning and natural resource protection.	https://cteco.uconn.edu/metadatas/dep/document/critical_habitat_poly_fgdc_plus.htm	The Critical Habitats map layer can serve to highlight ecologically significant areas and to target areas of species diversity. It is not a comprehensive map of all critical habitat types in Connecticut. It represents a subset of the key habitats of greatest conservation need. Caution is advised when using this information without field verifying the habitat delineation and characterization for accuracy.
Recognized Important Bird Areas	Audubon Connecticut delineates Important Bird Areas as essential habitat for one or more bird species of high priority. These areas may be discrete, public, private, or of any size. Sites can be designated as Wildlife Management Areas or Preserves but do not necessarily have a designation. Sites are scattered throughout the state and include urban centers and locations important to educational opportunities. Sites need to meet one or more of the following criteria: global concern species, regional concern species, CT listed species, concentrations of significant numbers of a species concentrate there (breeding or migration), or containing rare and unique habitats that are important for long-term research and monitoring projects.	Scale is variable due to different digitization methods incorporated and datasets used.	Age of Data: 2009-2010	https://ct.audubon.org/conservation/important-bird-areas	This map layer does not inform legal land use, is broadly applied, and is not viewed as identification of the only sites important to birds by Audubon Connecticut.

Forestry & Wildlife (continued)					
Layer	Description	Scale/ Resolution	Possible Limitations	Metadata Layer Link	Use of Layer
Grassland Habitat Sites Initiative	As part of the Grassland Habitat Conservation Initiative, DEEP conducted field surveys between 2006-2008 to assess grassland bird use and identify potential areas that would be suitable for expansion of grassland habitat. Property parcels were identified that met criteria indicating they currently supported grassland habitat or could be purchased and/or managed to support grassland habitat. Selection criteria included presence of grassland bird species, presence of state listed species, size of habitat patch, proximity to other parcels identified as grassland, and neighboring property ownership/management.	Scale is variable due to different digitization methods incorporated per municipality/ parcel vendor.	Representation: Lands suitable for grassland are also under intense development pressure and identified areas may no longer be suitable habitat. Age of Data: Data is from 2006-2008. Parcel layer is based on 2009 metadata.	Connecticut Grassland Habitat Conservation Initiative - October 2006	This map layer should be used for informational purposes.
Cold Water Supporting Drainage Basin	This data supports the latest information on cold water sites and supporting habitat in Connecticut rivers and streams. Cold water habitat was determined using available fish and water temperature data collected by the CT DEEP Monitoring and Assessment and Inland Fisheries Programs.	Scale is variable due to combining site sampling and referential basemaps.	Representation: Drainage basin-based cold-water sites. Age of Data: Data is from 1988-2019. The mapping application will be updated with new or updated information as it is collected and analyzed.	Cold Water Supporting Drainage Basin CT DEEP GIS Open Data Website	This data supports the latest information on cold water sites and supporting habitat in Connecticut rivers and streams.
Geography					
Soils -Inland Wetlands**	Soil Survey Geographic Database (SSURGO) depicts information on soil data. Connecticut defines inland wetlands based on soils: poorly drained, very poorly drained, alluvial, floodplain. Map units dominated by CT inland wetland soils may include non-wetland soils and onsite investigation is necessary.	Collected at scales ranging from 1:12,000 to 1:63,360, mostly at 1;12,000	Representation: Photographic or digital enlargement of these maps to scales greater than at which they were originally mapped can cause misinterpretation of the data. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale. Age of Data: 2025	https://deepmaps.ct.gov/datasets/CTDEEP::soils-inland-wetland/about	This map layer is useful as screening tool. It is not designed for use as a primary regulatory tool in permitting and siting decisions. Onsite investigation is necessary to confirm delineated soils.
Soils-Farmland Classification **	Soil Survey Geographic Database (SSURGO) contains information collected by the National Cooperative Soil Survey, specifying farmland classification, including prime farmland, farmland of statewide importance, and unique farmland. Farmland classification identifies the location and extent of the soils that are best suited to food, feed, fiber, and forage.	Collected at scales ranging from 1:12,000 to 1:63,360, mostly at 1;12,000	Representation: This is a digital soil survey and generally the most detailed level of soil geographic data developed by the National Cooperative Soil Survey. This information was prepared by digitizing maps, compiling information onto a planimetric correct base and digitizing, or by revising digitized maps using remotely sensed and other information. This data set is a digital soil survey and the most detailed level of soil geographic data developed by the NRCS. Age of Data: 2025	SSURGO Farmland Soils	This map layer is intended for natural resources planning and management. It can be used to determine the location of prime farmland for which a determination of “No Material Effect” can be sought from the CT Department of Agriculture.
Connecticut Steep Slopes	Feature Service presenting detailed steep slope areas in Connecticut. Steep slope layers are derived from a 10-foot and 2-foot per pixel DEM and represents Moderate (10%-15%), Steep (15%-20%), Very Steep (20%+) areas. Derived from the 2023 Digital Elevation Model.	10ft and 2ft per QL1 pixel LiDAR	Age of Data: 2023	Connecticut Steep Slope Areas CT Geodata Portal	This map layer can be used to determine suitable or potentially non-suitable locations for solar development based on the presence of moderate, steep, and very steep sloped areas.

Geography (continued)					
Layer	Description	Scale/ Resolution	Possible Limitations	Metadata Layer Link	Use of Layer
Slope 2023**	Elevation displayed as slope from 2 foot DEM derived from 2023 Connecticut statewide lidar collection. Slope is shown as degree and ranges from 0 to 90 degrees. Visit https://maps.cteco.uconn.edu/data/flight2023/ for more information.	2ft DEM derived from QL1 statewide LiDAR	Age of Data: 2023	CT 2023 Elevation - Slope CT Geodata Portal	This map layer can be used to evaluate slope for stormwater runoff purposes in preparation for the Construction Stormwater General Permit.
Interconnection					
UI Distributed Generating Hosting Capacity	Distributed Generation (DG), also known as Distributed Energy Resources (DER), involves a generator interconnected to the Electric Distribution System located on either the customer-side or grid-side of the electric meter. The generator produces energy from a variety of sources including but not limited to photovoltaic arrays (solar panels), wind turbines, co-generation units, and micro turbines.	Data digitized and/or ground-truthed by UI.	Representation: The results presented in this hosting capacity map provide the remaining DG capacity for the distribution circuits evaluated, specifically considering solar PV integration. The results are estimates of the remaining circuit section, feeder, and substation hosting capacity to help identify areas where solar can likely interconnect with minimal needs for system reinforcement. Note that this analysis was conducted under current configuration using most recent summer peak load data and prior to any planned infrastructure upgrades. Age of Data: Live updates.	Not available	The use of this map layer is for informational purposes. The map may not account for all factors that could impact interconnection, and it may not reflect actual present conditions. This map is not a substitute for the established customer interconnection application process .
UI Inter-connection - Feasibility	The hosting capacity map display is an estimate of the available residential distributed energy resources an area can host. It is representative of only one point in time and is for informational purposes only.	Data digitized and/or ground-truthed by UI.	Representation: The hosting capacity maps are updated from time to time but may not reflect the actual present conditions in a given area nor are they a substitute for United Illuminating’s interconnection process.	https://www.uinet.com/smartenergy/innovation/distributed_generation/hostingcapacity	The use of this map layer is for informational purposes. The map may not account for all factors that could impact interconnection, and it may not reflect actual present conditions. This map is not a substitute for the established customer interconnection application process .
Eversource Hosting Capacity	This map shows the capacity Eversource’s infrastructure can accommodate, with limited system upgrades, while still reliably and safely delivering electricity. This map details the hosting capacity by circuit in Eversource Energy’s service territory. Each circuit on the system is displayed with a color matching its remaining capacity. Clicking on a circuit will also provide more detail about the circuit, its remaining capacity, and related substation.	Data digitized and/or ground-truthed by Eversource.	Note: Capacity on the circuits and at substations can be increased through project funded upgrades. Small, limited size projects may still be supported without project funded upgrades. Age of Data: Updated 2024.	https://www.eversource.com/content/residential/about/doing-business-with-us/interconnections/connecticut/connecticut-hosting-capacity-map	The use of this map layer is for informational purposes. The map may not account for all factors that could impact interconnection, and it may not reflect actual present conditions. This map is not a substitute for the established customer interconnection application process .
U.S. Electric Power Transmission Lines	Depicts electric power transmission lines in the US. Transmission lines are the system of structures, wires, insulators, and associated hardware that carry electric energy from one point to another. High voltage lines are defined as 69kV to 765KV.	Unspecified	Age of Data: created 2021, updated 2024.	U.S. Electric Power Transmission Lines Climate Mapping for Resilience and Adaptation	The use of this map layer is for informational purposes and indicates where federally regulated transmission lines are located.
US Energy Atlas - Solar Resources	United States Global Horizontal Irradiance (GHI), or the amount of light energy that reaches the earth’s surface from the sun on a horizontal plane. From the National Solar Radiation Database (NSRDB) Physical Solar Model (PSM).	4 km pixels	Age of Data: Created and last updated: 9/9/2020.	U.S. Energy Atlas	This layer shows the estimated amount of terrestrial irradiance per unit area measured (4km) at a horizontal surface on Earth. The values represent the resource available for solar energy systems.

Land Use					
Layer	Description	Scale/ Resolution	Possible Limitations	Metadata Layer Link	Use of Layer
DEEP Property*	The DEEP Property layer is compiled from DEEP land records and contains DEEP facilities such as state forests, parks, and wildlife management areas, flood control areas, scenic preserves, natural areas, historic reserves, DEEP owned waterbodies, water access sites, and other miscellaneous properties. Generally, partial interests such as easements or development rights are not included in this layer.	Information was collected and mapped at various scales and levels of accuracy. Do not use at map scales larger and more detailed than 1:24,000 scale (1"=2,000 ft).	Representation: This map layer may contain some omissions and inaccuracies. Most parcel boundaries were created at 1:24,000 scale using the U.S. Geological Survey Topographic Quadrangle maps as a base and will not align accurately with features such as roads shown on aerial photography. Parcels for more recently acquired property are more accurately positioned because they were created using A-2 certified boundary survey maps with courses, distances, and accurate starting locations. Age of Data: Updated May 8, 2024.	Connecticut DEEP Property	This layer should not be used at map scales larger and more detailed than 1:24,000 scale or for determining legal boundaries.
Brownfield Inventory	This map layer displays brownfields, defined by CGS Section 32-760 , as “any abandoned or underutilized site where redevelopment, reuse or expansion has not occurred due to the presence or potential presence of pollution in the buildings, soil or groundwater that requires investigation or remediation before or in conjunction with the restoration, redevelopment, reuse and expansion of the property.”	Brownfield sites are geolocated with X,Y coordinates and geocoded based on street address.	Representation: Map information may contain erroneous entries and may not represent the current cleanup status. Data is currently under QA/QC review. Age of Data: 2025	Brownfields 2025	This map layer can be used to identify the known locations of brownfield sites for purposes of informing renewable energy generating projects.
Landfills*	This layer is comprised of a point layer feature of known solid waste landfill sites across CT, projection NAD 1983. Georeferencing attempted to place the point central to the known landfill. Future updates expect to produce a shapefile layer to outline extents of known landfills. Landfills identified from a legacy waste permit shapefile and available files and records.	Georeferenced compared to multiple reference layers.	Representation: Current data layer contains known and registered landfills, non-permitted solid waste landfills could/are expected to exist but not known to the Department.	Landfills_PFAS - Overview	This map layer should be used for informational purposes to identify the known locations of solid waste landfills for the purpose of informing renewable energy generating projects.
Building 2D Footprints	This dataset has all 2D building footprints within the State of Connecticut that are greater than 100 square feet in size. This data set is derived from the 2023 Lidar capture and was created by automated methods only and was not visually rendered. Consequently, some limited systematic errors occur where trees overhang buildings or when buildings are adjacent, such as in urban centers.	QL1 LiDAR	Age of Data: 2023	2023 Connecticut Buildings CT Geodata Portal	This map layer can be used to estimate available roof-space for potential solar development.
Impervious Surface Land Connecticut 2023	The dataset was developed from 2023 source imagery to provide a high-resolution, consistent geospatial representation of impervious land cover. The impervious surface component includes mapped features such as buildings, roads, driveways, parking areas, sidewalks, pavement, swimming pools, paved recreation surfaces, and bridges. Feature capture and attribution were performed according to defined class-specific interpretation and minimum mapping specifications.	The impervious layers are in raster and vector format. The raster layer is in image format with 1-foot pixels.	Representation: Unpaved driveways or parking areas are not included. Age of Data: 2023	Statewide Impervious 2012	The dataset is intended to support statewide mapping, infrastructure planning, land cover assessment, hydrologic and stormwater analysis, emergency management, and other GIS-based applications.

Land Use (continued)					
Layer	Description	Scale/ Resolution	Possible Limitations	Metadata Layer Link	Use of Layer
Farmland Preservation 2025**	CT Department of Agriculture preserves working lands by acquiring development rights to agricultural properties through two programs, ensuring that the land remains available only for agricultural use in perpetuity: the Farmland Preservation Program and the Community Farms Preservation Program. The main objective of the programs is to establish a food-and-fiber producing land resource base, consisting mainly of prime and important farmland soils, that will ensure local availability of fresh farm products and help agriculture to remain an important part of the state’s economy.	N/A	Age of Data: 2025	Farmland Preservation 2025 (DoAG) - Overview	This layer can be used as an exclusionary layer for potential solar development to ensure continued viability of agricultural land use.
Public Historic Districts	This layer contains boundary polygons associated with National Historic Landmark, National Register, State Register, and Local Historic Districts. The boundaries of the district polygons are both modified and unmodified pre-existing polygons provided by NPS and SHPO, as well as new, previously unmapped districts. For the previously unmapped districts, the boundaries were defined by any maps provided by the associated resource PDF. For resources that lacked a map, the boundaries were drawn based on point location.	N/A	Representation: The boundaries of these district polygons may not be reflective of the boundaries as interpreted by local governments. Age of Data: 2024	Public Historic Districts CT Geodata Portal	This map layer can be used to compare historic locations to other layers’ current parcel boundaries and delineations of modern structures.
Coastal Change Analysis Program (CCAP) Landcover 2016 1m	The NOAA Coastal Change Analysis Program (C-CAP) produces national standardized land cover and change products for the coastal regions of the U.S. The 2016 Connecticut C-CAP land cover includes 17 land cover classes, listing coastal intertidal areas, wetlands, and adjacent uplands with the goal of monitoring changes in these habitats.	These maps are developed utilizing high resolution, 1m pixels from National Agriculture Imagery Program (NAIP) imagery and other sources.	Representation: There is an "unclassified" class that may have been clouds or shadows. Age of Data: Summer 2016	Frequently Asked Questions: C-CAP High-Resolution Land Cover	This map layer can be used to track changes in the landscape through time.
CCAP Landcover Forest Canopy 2021 1 m	NOAA created this map, comprised of three separate data layers (forest, impervious, water) for their entire coastal area, about 25% of the country. CREST uses only the forest layer.	1m pixels	Representation: Pixels denoted as “1” indicates Canopy as defined by general definition, where as “2” indicates Canopy – Scrub/Shrub. Age of Data: 2021	Frequently Asked Questions: C-CAP High-Resolution Land Cover	This map can be used to track changes in forest canopy through time.
Large Scale Solar Photovoltaic Database	Sites included in this map layer generate over 1 MW. This map layer combines datasets from US Energy Information Administration, USEPA, and the National Renewable Energy Lab.	Digitized within 10 meters using high resolution aerial imagery.	Age of Data: Published 2024	U.S. Photovoltaic Database	This map layer can be used to locate solar facilities that generate over 1 MW or energy.

Land Use (continued)					
Layer	Description	Scale/ Resolution	Possible Limitations	Metadata Layer Link	Use of Layer
Solar Array Footprints 2023 (Cullerton et al., UConn)	This map layer is generated from UCONN graduate student research and includes solar installations in the state that are 0.1 hectare or larger	Solar arrays are classified using a deep learning algorithm (UNet) on Sentinel-2 satellite data (10m resolution) and manually edited for accuracy.	Representation: The change year was determined using a change detection algorithm and high-resolution imagery (such as Google Earth and PlanetScope), and land cover change was determined using the CT CLEAR land cover maps. Age of Data: Updated Sept. 14, 2023.	Cullerton et al., UCONN 2024	This map layer can be used to identify solar installations greater in size than 0.1 ha.
Shared Clean Energy Facilities - Utilities (SCEF)	CT DEEP’s SCEF Program was developed pursuant to Section 7(a)(1)(C) of Public Act 18-50, An Act Concerning Connecticut’s Energy Future, codified as Section 16-244z(a)(1)(C) of the General Statutes of Connecticut. The statewide SCEF Program seeks the deployment of new or incremental Class I renewable generation projects for a 20-year term. Eligible projects are chosen through a competitive bidding procurement process each year, for a total of 8 years. The first procurement occurred in 2020. With the passage of Public Act 22-14, the SCEF Program now allows projects ranging in size from 100 to 5,000 kilowatts (AC), starting in the Year 4 Procurement. Public Act 22-14 also increased the yearly program capacity from 25 megawatts to 50 megawatts. Most recently, Public Act 24-31 extended the SCEF Program from 6 years to 8 years.	SCEFs are geolocated with X,Y coordinates and geocoded based on street address.	Age of Data: Eversource data published in 2025 and United Illuminating data published 2024; updated annually.	Shared Clean Energy Facilities - Utilities - Overview	This map layer can be used to locate active and planned solar facilities supported by SCEF.
Non-residential Renewable Energy Solutions (NRES)	CT DEEP’s Non-residential Renewable Energy Solutions (NRES) Program is a statewide program that provides renewable energy tariffs to compensate non-residential owners of distributed energy resources like solar for the power their systems produce and provide to the electric grid. Launched in 2022, the NRES Program is a successor program to the Low Emission Renewable Energy Credit and Zero Emission Renewable Energy Credit (LREC/ZREC) and Virtual Net Metering (VNM) programs. The program is statutorily authorized to run for six (6) years and to select up to 110 MW of clean energy annually.	NRES projects are geolocated with X,Y coordinates and geocoded based on street address.	Age of Data: Published in 2025; updated annually.	Non-residential Renewable Energy Solutions - Utilities - Overview	This map layer can be used to locate active and planned solar facilities supported by NRES.
CSC Approved Solar Sites	This data layer represents parcels that were approved to host at least a portion of the land area utilized by solar projects approved by the Connecticut Siting Council. DEEP maintains the layer with planned quarterly updates. Not all parcels shown have built or operational sites. Please see the layer description for more details.	Scale is variable due to different digitization methods incorporated per municipality/ parcel vendor.	Age of Data: CAMA and Parcel layer geometry from 2025. Solar project information up to date as of July 1, 2026.	CSC Approved Solar Sites - Overview	This data layer, updated July 1, 2026, represents parcels that were approved by the Connecticut Siting Council (CSC) to host at least a portion of the land area utilized by solar projects. This layer is in response to Section 16(b) of Public Act 26-127, where full parcels will be used to calculate the percentage of land area covered by solar facilities.

Demographics					
Layer	Description	Scale/ Resolution	Possible Limitations	Metadata Layer Link	Use of Layer
Connecticut CAMA and Parcel Layer	This map layer contains statewide parcel-level geometry and Computer-Assisted Mass Appraisal (CAMA) data for parcels in the State of Connecticut, collected from all municipalities via the Councils of Government.	Scale is variable due to different digitization methods incorporated per municipality/parcel vendor.	Representation: This dataset was created by the GIS Office as required by CGS Ch. 61 Sec. 4d-90-92 . Included in this dataset are geometries for all 169 municipalities and attribution from the CAMA data for all but one municipality. Age of Data: 2025, updated April 9, 2026. Pursuant to CGS Ch. 96 Sec. 7-100l , each municipality is required to transmit a digital parcel file and an accompanying assessor’s database file (known as a CAMA report), to its respective regional council of governments (COG) by May 1 annually.	Connecticut CAMA and Parcel Layer CT Geodata Portal	This dataset is designed to make it easier for stakeholders and the GIS community to use and access parcel information as a geospatial dataset.
Environmental Justice Set 2025	This map layer is a combination of US Census Block Groups 2025 and DECD Distressed Municipalities 2025. Block groups in which the percentage of the population below 200% of the federal poverty level was greater than or equal to 30.0 were selected only those block groups outside of distressed municipalities were displayed.	The Census Bureau created the TIGER data base using raster-scanned images of the U.S. Geological Survey’s (USGS) 1:100,000-scale topographic maps as well as 1:24,000 USGS quadrangles. The spatial accuracy varies with the source materials used.	Representation: Environmental Justice Block Groups 2025 was created from Connecticut block group boundary data located in the Census Bureau's 2025 Block Group TIGER/Line Shapefiles. The poverty data used to determine which block groups qualified as EJ communities (see CGS Sec. 22a-20a) was based on the Census Bureau's 2024 ACS 5-year estimate. This poverty data was joined with the block group boundaries in ArcGISPro. A distressed municipality, as defined by CGS CH. 578 Sec. 32-9p(b) , and determined by the Connecticut Department of Economic and Community Development , includes municipalities that no longer meet the threshold requirements but are still in an eligibility grace period. Environmental Justice Distressed Municipalities 2025 was created from the Connecticut town boundary data located in the Census Bureau's 2025 TIGER/Line Shapefiles (County Subdivisions). Age of Data: EJ Distressed Municipalities will be annually updated when DECD produces its new list of distressed municipalities, usually in early Fall. All Census and ACS data used in the creation of these data are the latest available from the Census at time of calculation.	Environmental Justice 2025 Set GIS Open Data	This map data set can be used to determine the location of Environmental Justice Communities, Census Block Groups, and communities in which affecting facilities are located in Connecticut. More information about Environmental Justice in Connecticut is found on DEEP’s website .
2024 Coal Closure Energy Communities (NETL)	This dataset identifies U.S. census tracts and adjoining tracts that have had coal mine closures since 1999 or coal-fired electric generating unit retirements since 2009, thereby qualifying as energy communities. An electric generating unit is identified by its presence in the Department of Energy’s U.S. Energy Information Administration (EIA) Electric Generator Inventory data from Form EIA-860, supplemented with Monthly Electric Generator Inventory from EIA-860M. An electric generating unit is considered a retired coal-fired electric generating unit if it is classified as retired since December 31, 2009 and at the time was characterized as a coal-fired electric generating unit. Data from forms EIA-860 and EIA-860M provide listings of retirements. An electric generating unit is characterized as “coal-fired” based on the available data for past years.	None provided	Limitations: These spatial data and mapping tool may not be relied upon by taxpayers to substantiate a tax return position or for determining whether certain penalties apply and will not be used by the IRS for examination purposes. The mapping tool does not reflect the application of the law to a specific taxpayer’s situation, and the applicable Internal Revenue Code provisions ultimately control. Age of data: Dataset created June 7, 2024. The map showing the census tracts that have had coal mine closures since 1999 and census tracts directly adjoining to such census tracts is based on MSHA’s Mines dataset as of Feb. 7, 2023. Historical versions of MSHA’s Mines dataset are also used to identify mines that have ever had, since Dec. 31, 1999, a status of “Abandoned” or “Abandoned and Sealed.”	2024 Coal Closure Energy Communities (NETL) - Overview Additional information on energy communities and related tax credits, as well as links to these data resources and FAQs, can be accessed on the Interagency Working Group on Coal & Power Plant Communities & Economic Revitalization Energy Communities website . To access these data download these resources in shapefile, csv, and xlsx file formats from NETL’s Energy Data eXchange (EDX).	This map layer can be used to determine eligibility for the Energy Communities Bonus Tax Credit.

Demographics (continued)					
Layer	Description	Scale/ Resolution	Possible Limitations	Metadata Layer Link	Use of Layer
2024 MSAs/Non MSAs that are Energy Communities (NETL)	Metropolitan statistical areas (MSAs) and non-metropolitan statistical areas (non-MSAs) that are energy communities as of May 31, 2024, and until the release of the 2025 Annual Statistical Area Category and Coal Closure Category Update. These MSAs and non-MSAs have had, for at least one year since 2009, 0.17% or greater direct employment related to extraction, processing, transport, or storage of coal, oil, or natural gas (the fossil fuel employment (FFE) threshold) and have an unemployment rate for 2023 that is equal to or greater than the national average unemployment rate for 2023. These MSAs and non-MSAs that meet the 2023 unemployment rate requirement are energy communities as of May 31, 2024, and will maintain that status until the unemployment rates for 2024 become available and the 2025 Annual Statistical Area Category and Coal Closure Category Update is released.	None provided	Limitations: These spatial data and mapping tool may not be relied upon by taxpayers to substantiate a tax return position or for determining whether certain penalties apply and will not be used by the IRS for examination purposes. The mapping tool does not reflect the application of the law to a specific taxpayer’s situation, and the applicable Internal Revenue Code provisions ultimately control. Age of data: Dataset created June 7, 2024.	Links to these data resources, as well as FAQs regarding these data can be found on the Interagency Working Group on Coal & Power Plant Communities & Economic Revitalization Energy Communities website . To access these data, you can download these resources in shapefile, csv, and xlsx file formats from NETL's Energy Data eXchange (EDX).	This map layer can be used to determine eligibility for the Energy Communities Bonus Tax Credit.

* Regulatory Involvement associated with this layer.

** Permitting or approval associated with layer may be required by DEEP or DoAg.