



# FACT SHEET


## Information for Solar Developers *An Environmental Permitting Factsheet*



This Factsheet provides information on the types of permits that may be required and the timing and sequencing of those permits to developers who are proposing to install solar energy generating facilities. Pre-application permit assistance, where applicants can meet with permit program staff to discuss a specific project, is available. To request a pre-application meeting, please complete the [Pre-Application Questionnaire](#) and submit it to [DEEP.OPPD@ct.gov](mailto:DEEP.OPPD@ct.gov). This Factsheet should be used in conjunction with the DEEP Bureau of Energy

and Technology Policy's Integrated Resource Plan Renewable Siting Recommendations.

- I. **Natural Diversity Data Base (NDDB)** – At the outset of a project, it is necessary to determine if there are known occurrences of any state or federally-listed species within the impact area of the project site ([Section 26-306 of the Regulations of Connecticut State Agencies](#)). DEEP recommends conducting an initial site evaluation to assess the potential to support state-listed species. Developers will then need to determine if their project is an area with documented state-listed species; maps can be found at <https://portal.ct.gov/DEEP/Endangered-Species/Natural-Diversity-Data-Base-Maps>. If in a documented area, consultation with DEEP's NDDB staff will be required to agree upon impact-avoidance and protection measures. Protection measures will be included in a determination letter from DEEP; this letter must be included with filings for other state permit applications or general permit registrations. Material to prepare a Request for Review can be found at <https://portal.ct.gov/DEEP/Endangered-Species/Endangered-Species-ReviewData-Requests>. Please note, it typically takes NDDB staff 4 to 6 weeks to review and issue NDDB letters; however, if further survey work is needed, the process can take longer.
- II. **Wetlands** – Most commonly, regulation of impacts to inland wetlands and watercourses from energy generating facilities exceeding one megawatt in capacity falls under the jurisdiction of the Connecticut Siting Council. Regulation of water discharges to wetlands and watercourses (and other waters of the state), including stormwater, falls under the jurisdiction of DEEP (see III, below). For projects of less than one megawatt capacity, inland wetlands and watercourse regulatory jurisdiction, as well as the location and design of the project, fall under municipal review. Although local requirements vary between municipalities, typically an upland review area of 100-feet in width around any identified wetland or watercourse will fall under the review of the local wetland commission.



If siting a solar facility results in a direct discharge to wetlands that meet the definition of waters of the United States, a permit from the U.S. Army Corps of Engineers (USACE) is required. Coverage may be provided by the USACE Section 404 General Permit, or an Individual USACE permit may be required, depending on the disturbance. Additionally, such activities require a Section 401 Water Quality Certification (WQC) from DEEP. The typical processing time for the USACE permit approval is about 6 months, and the typical processing time for DEEP's 401 WQC is about 6 months to one year, depending on the complexity of the project site. More information about wetland permitting can be found at <https://www.epa.gov/cwa-404> and <https://portal.ct.gov/DEEP/Water/Wetlands/Connecticut-Wetlands>.

**III. Stormwater \*** - If the project involves disturbing an area greater than one acre during construction, the disturbance must comply with the terms and conditions of the DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. Projects between one and five acres can comply with this General Permit by adhering to local land use requirements for erosion and sedimentation control; the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended; and the Stormwater Quality Manual. Assuming there are applicable local requirements for project approval, no registration with DEEP is required. Eligible construction projects involving five or more acres of land disturbance and any project requiring Connecticut Siting Council approval must register for coverage under DEEP's General Permit. The typical processing time for the General Permit registration is between 60 and 90 days, depending on the size of the project and whether the project is locally approvable or if it is locally exempt because it falls within the jurisdiction of the Connecticut Siting Council, and will include a 15-day public notice period.

“Guidance Regarding Solar Arrays and the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities” can be found at [www.ct.gov/deep/stormwater](http://www.ct.gov/deep/stormwater). Determinations regarding natural resources and other permit requirements (NDDB, forestry, wetlands, dam safety, flood management, brownfield remediation, landfills, etc.), are typically required and inform the requirements for filing for a stormwater permit registration, and development of the requisite Stormwater Pollution Control Plan.

At any time, the Commissioner can determine that a discharge requires an individual permit under the National Pollutant Discharge Elimination System (NPDES) program and Connecticut's Water Pollution Control Act, typically for very large or more complex project sites with significant receptors adjacent to the site or nearby. Likewise, an applicant can elect to apply for an individual permit rather than seek coverage under the General Permit. Individual permit processing time can be longer, due to the individualized determinations that must be made as part of an individual permit application technical review.

- 
- IV. Dam Safety** - Prior to initiating the construction of any engineered stormwater control structures, the structures must be evaluated to determine if they will require a Dam Safety Construction Permit. A permit is required if measurable damage from the dam's failure could be caused downstream. A Dam Safety permit need determination would consider the presence of downstream buildings and infrastructure (e.g., roads, bridges, agricultural fields); and the depth, volume, and flowrate of water that would be released downstream to these buildings and infrastructure if a dam were to fail. If a proposed dam would not cause measurable damage, a Dam Safety Construction Permit may not be required. The DEEP Dam Safety Program may be contacted at [DEEP.DamSafety@ct.gov](mailto:DEEP.DamSafety@ct.gov). The typical processing time for this type of permit is about 3 months and will include a 30-day public comment period on any tentative determination to issue a permit. A Dam Safety permit approval, specifically as it pertains to retention basin configuration, is necessary prior to applying for a stormwater permit.
- V. Flood Management** – In the unlikely event that solar facilities are sited in flood zone areas, which is not recommended, the permits described in this paragraph may apply. Solar projects on state property or that receive state funding, including grants or loans, that are located in a floodplain will require a Flood Management Certification from DEEP or an exemption from such certification requirements. Information on Flood Management Certificates and exemptions can be found at <https://portal.ct.gov/DEEP/Permits-and-Licenses/Factsheets-Inland-Water/Flood-Management-Certification-Fact-Sheet>. If the project site is located within the 100-year coastal flood zone, [Public Act 18-82](#), An Act Concerning Climate Change and Resiliency, requires that residential and community structures in areas subject to coastal flooding be elevated two feet above the base flood elevation to account for projected sea level rise. Additionally, FEMA flood zone maps should be consulted to avoid construction in the 100-year flood zone and can be found at <https://msc.fema.gov/portal/home>.
- VI. Forestry** – The project should not be sited in a core forest, as defined in [Connecticut General Statutes section 16a-3k](#). DEEP strongly recommends using the Forestland Habitat Map (<https://www.arcgis.com/apps/webappviewer/index.html?id=7b81844bab634281b544c20bf2d7bfb8>) as a site selection screening tool to avoid siting solar facilities in forested areas. For projects sited within this Forestland Habitat Map, a 300-foot wetland buffer to protect core forest connectivity and function is typically preferred. If the project is greater than two megawatts and impacts core forest, a letter from the DEEP Bureau of Natural Resources indicating that the project will not have a material impact upon core forests will be necessary if the project is to be submitted to the Connecticut Siting Council as a Petition for a Declaratory Ruling rather than as an application for a Certificate of Environmental Compatibility and Public Need.

**VII. Brownfields** – Planning for siting a solar facility on brownfields can be done concurrently with the remediation, or clean up, of a contaminated site. Compliance with the [Remediation Standard Regulations, Section 22a-133k-1 through -3 of the Regulations of Connecticut State Agencies](#), is required and the land records should be consulted to determine whether any type of land use restriction exists as part of the site’s remedial outcome. There are various liability relief programs for municipalities and individuals seeking to remediate a brownfield site. More information about DEEP’s Brownfield Program can be found at <https://portal.ct.gov/DEEP/Remediation--Site-Clean-Up/Brownfields/Brownfields-in-Connecticut>. Specific information about siting solar on brownfields can be found at <https://portal.ct.gov/DEEP/Remediation--Site-Clean-Up/Clean-Energy-on-Brownfields/Siting-Clean-Energy-on-Brownfields>.

**VIII. Solid and Hazardous Waste Landfills** – For siting a solar energy generation facility on a closed landfill, an Authorization Application for Disruption of a Solid Waste Disposal Area and a written request to change a landfill's post-closure use is required ([Regulations of Connecticut State Agencies Section 22a-209-13\(d\)](#)). The disruption of the landfill for post-closure development requires the Commissioner’s approval prior to any disruption at an active, inactive, or closed solid waste disposal area ([Regulations of Connecticut State Agencies Section 22a-209-7\(u\)](#)). For certain hazardous waste landfills, it is also necessary to request a change in the Post-Closure Plan and ask the landfill permittee, operator, and owner to request a modification of the landfill's Post-Closure Permit ("Stewardship Permit"). The permittee must notify the Commissioner of the change in the Post-Closure Plan to determine the type of permit modification to be processed. Public notice of the modification to certain local and state government representatives and to persons on the facility mailing list is required within 90 days of the change in the Post-Closure Plan. A public comment period and public meeting may be required.

The Disruption Authorization and Post-Closure Use Guidance Document can be found at [https://portal.ct.gov/-/media/DEEP/Permits\\_and\\_Licenses/Waste\\_Permits/disruptguidpdf.pdf](https://portal.ct.gov/-/media/DEEP/Permits_and_Licenses/Waste_Permits/disruptguidpdf.pdf). The Disruption Authorization application form can be found at [https://portal.ct.gov/-/media/DEEP/Permits\\_and\\_Licenses/Waste\\_Permits/disruptapppdf.pdf](https://portal.ct.gov/-/media/DEEP/Permits_and_Licenses/Waste_Permits/disruptapppdf.pdf).

Additional requirements, including indemnification agreements and financial assurance in favor of the Commissioner, may apply to landfills at which DEEP is responsible for post-closure care (former CRR/MIRA facilities).

**IX. Other Considerations** – Application for placement of solar facilities on certain classes of agricultural soils is reviewed by the Connecticut Department of Agriculture, whose written finding of no material impact upon prime farmland soils or farmland soils of statewide significance is required for solar facilities that exceed two megawatts, if the project is to be submitted to the Connecticut Siting Council as a Petition for Declaratory Ruling rather than as an application for a Certificate of Environmental

Compatibility and Public Need, per Public Act 17-218. There are specific considerations made by the Department of Agriculture when siting solar on certain agricultural land in accordance with [PA 17-218](#).

- X. Siting Council** - The Connecticut Siting Council has jurisdiction over solar facilities greater than one megawatt. If the facility is less than one megawatt, local/municipal review is required. Information about the Connecticut Siting Council can be found at <https://portal.ct.gov/CSC> . A project may go to the Siting Council at any time during the permit process. Occasionally, comments from the Siting Council will necessitate changes in project design, and, therefore, permitting. Permit applications may be modified in process.

Additional links to DEEP's permit programs can be found at <https://portal.ct.gov/DEEP/Permits-and-Licenses/Permits-and-Licenses>.

---

\* At the time of publication, the Construction Stormwater General Permit is in the process of being reissued. For up-to-date information, please check: <https://portal.ct.gov/DEEP/Water-Regulating-and-Discharges/Stormwater/Construction-Stormwater-GP> .

*This fact sheet is intended for informational purposes only based on the information available as of the date of its publication and does not represent a formal jurisdictional determination by which DEEP or any other permitting authority referenced will be bound. Information contained in this fact sheet does not represent a comprehensive list of all permit requirements potentially applicable, which in most cases can only be determined on a site-specific basis. It is intended only to provide information on permits that may be required. Refer to the most current statutes, regulations, and public acts for specific language pertaining to each permit. It is your responsibility to comply with all applicable laws. Contact DEEP ([DEEP.CONCIERGE@ct.gov](mailto:DEEP.CONCIERGE@ct.gov)) with questions regarding a specific site or project.*

Rev. September 17, 2020



This Photo by Unknown Author is licensed under CC BY