

## Why avoiding wetlands is good for business!

Saturated soils are unpredictable for engineering a solar installation.

Wetland permits often come with conditions.

(Increasing the time and cost of construction)

There is uncertainty that your proposal of wetland impacts can be approved for a permit.



Wetland soils are sensitive and easily disturbed by equipment



Let us help you minimize costs and **avoid wetland violations.**

ANY solar development activity occurring within a protected wetland or its 50-ft. buffer requires a wetland permit.

## We can help you!

Laura Woods  
Environmental Technician  
Office: [Montpelier](tel:802.490.6100) 802.490.6100  
[laura.woods@state.vt.us](mailto:laura.woods@state.vt.us)  
Administration Assistant

### District Wetlands Ecologists

Julie Foley  
Office: [Springfield](tel:802.490.6175) 802.490.6175  
[julie.foley@state.vt.us](mailto:julie.foley@state.vt.us)  
Orange, Rutland, and Addison Counties

Danielle Owczarski  
Office: [Essex](tel:802.490.6176) 802.490.6176  
[danielle.owczarski@state.vt.us](mailto:danielle.owczarski@state.vt.us)  
Franklin and Grand Isle Counties

Shannon Morrison  
Office: [Montpelier](tel:802.490.6178) 802.490.6178  
[shannon.morrison@state.vt.us](mailto:shannon.morrison@state.vt.us)  
Washington, Lamoille, Caledonia, Essex  
and Orleans Counties

Rebecca Chalmers  
Office: [Springfield](tel:802.885.8851) 802.885.8851  
[rebecca.chalmers@state.vt.us](mailto:rebecca.chalmers@state.vt.us)  
Bennington, Windsor and Windham  
Counties

Tina Centofante  
Office: [Montpelier](tel:802.490.6202) 802.490.6202  
[tina.centofante@state.vt.us](mailto:tina.centofante@state.vt.us)  
Chittenden County

### Visit our website

for more information about:



- Protected wetlands
- Wetland consultant list
- Permitting process

[www.vtwaterquality.org/wetlands.htm](http://www.vtwaterquality.org/wetlands.htm)

## Keeping Solar Projects Wetland Friendly

Tips for identifying and protecting wetlands



Both solar energy & wetlands are needed to address climate change concerns, mitigation, and adaptation.

Wetlands are an important landscape resource, providing a variety of functions including flood resilience and natural carbon storage, helping to mitigate and adapt to climate change.



Wetlands



This might appear to be the perfect site for a solar project, but this is not just an open field. There is a wetland hidden in the taller grasses...  
*But how would you know?*

**Follow Steps 1, 2, 3**

**1. LOOK UP YOUR PROJECT AREA (★)**

Use the online Vermont State Wetlands Inventory (VSWI) Mapping Program. If hydric soils or mapped wetlands are near or in your project area, have a wetland scientist identify and define the wetland boundaries within your site so you can take steps to **avoid the wetland and buffer**.



- Mapped Hydric soils
- Class II VSWI mapped wetlands
- Delineated Wetlands -including previously unmapped areas (Class II based on criteria for significant wetlands)
- Mapped stream
- 50-ft Wetland Buffer-avoid activities within including tree clearing

The map above was generated using the VSWI wetlands viewer which presents mapped wetlands, hydric soils, & streams. Delineated wetlands from a field survey & buffer zones were added to provide a comprehensive overview of wetland resources on site, demonstrating that not all wetlands are mapped.

Use this tool to help you plan and design your project!  
<http://anrmaps.vermont.gov/websites/WetlandProjects/default.html>

**2. LOOK AT FIELD CONDITIONS**

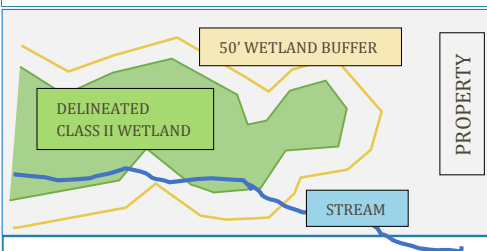
**Are water or wetland plants present?**

- Are there depressions, drainage patterns, a stream or standing water anywhere? If you dig a hole 12-18 inches deep, does it fill in with water or are the soils wet? Are there places you would not drive equipment because you might get stuck in the mud?
- Do you have a distinct change in vegetation or a change in growing conditions? Can you recognize wetland specific plants like cattails? Are there areas of bare ground due to standing water? Is corn growth stunted or is the area too wet to hay in the spring?

If you've answered yes to any of the above questions, a wetland scientist can help determine wetland boundaries and help identify if it is protected.

**3. GET A WETLAND DELINEATION**

Once you know where the wetland and buffer are, you can design your project to avoid them, including the placement of solar panels and access roads, and even selecting an alternative site if necessary. Call or meet State Wetlands Staff for site specific questions and review.



**Does the wetland on site meet the criteria to be considered significant and protected wetland under Vermont Wetland Rules?**

**Most unmapped wetlands are protected under the Vermont Wetland Rules.**

If you have an unmapped wetland, get it delineated and check whether it meets the criteria listed below, to determine if it is a protected wetland.

**STATE PROTECTED WETLANDS**

**The State protects all wetlands which are:**

- ~ Mapped wetlands
- ~ Connected to mapped wetlands
- ~ A half-acre or larger in size
- ~ Adjacent to a stream, lake, pond or river
- ~ Vernal pools
- ~ Special & unique areas; like bogs or fens

To complete the regulatory process for solar project permitting, you must demonstrate that you comply with the Vermont Wetland Rules.

Do this by submitting wetland locations and delineation information, and indicate the date your District Wetland Ecologist reviewed the project.

Wetland Permits can take up to **6 months** to be issued due to the complexity of protecting the resource while under construction.

**Avoid the wetland and buffer and you can start sooner!**

**CONTACT US** if you have a wetland on your site.  
(See back panel)

