



Wetland Training for Stormwater Professionals

Presented by Laura Lapierre
State of VT Wetlands Program Manager
May 3, 2021

Please mute when not speaking (*6 on phone). You may be muted by the host.
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Overview

- ☞ State jurisdictional wetlands and classification
- ☞ Wetland identification
- ☞ Project design
- ☞ Permitting
- ☞ Exemption – constructed features
- ☞ Allowed Use – Non-substantial expansion or modification
- ☞ Wetland Restoration



Wetlands Provide Functions and Values



Historically (settlement to 1980) Vermont has lost 35% of wetland area. Equivalent to the size of Grand Isle County.

Today Vermont is around 4% wetland

VT Wetland Classification

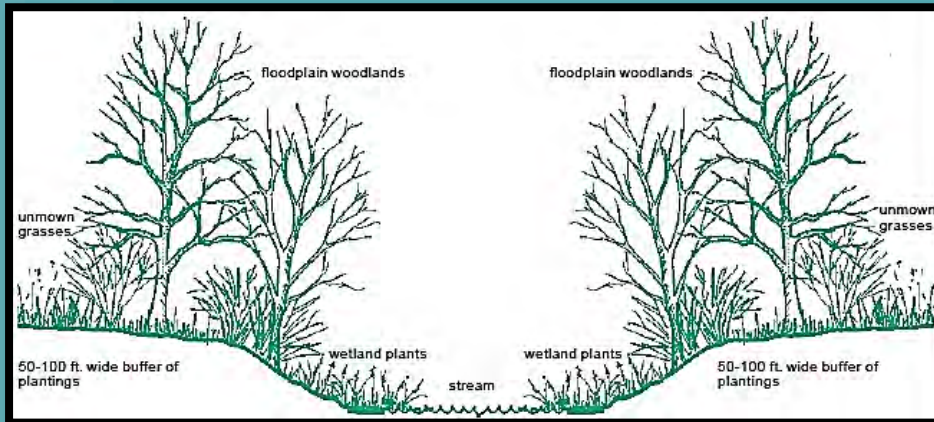
- Based on an evaluation of the extent to which the wetland provides functions and values:
 - Class I Wetland*: Exceptional or irreplaceable. Highest level of protection.



- Class II Wetland*: Significant. Protected. (many mapped)
- Class III Wetland*: Neither Class I or Class II wetland. No State protection.

Wetland Buffer Zone

Regulated zone of upland around a wetland which can provide protection to functions and values



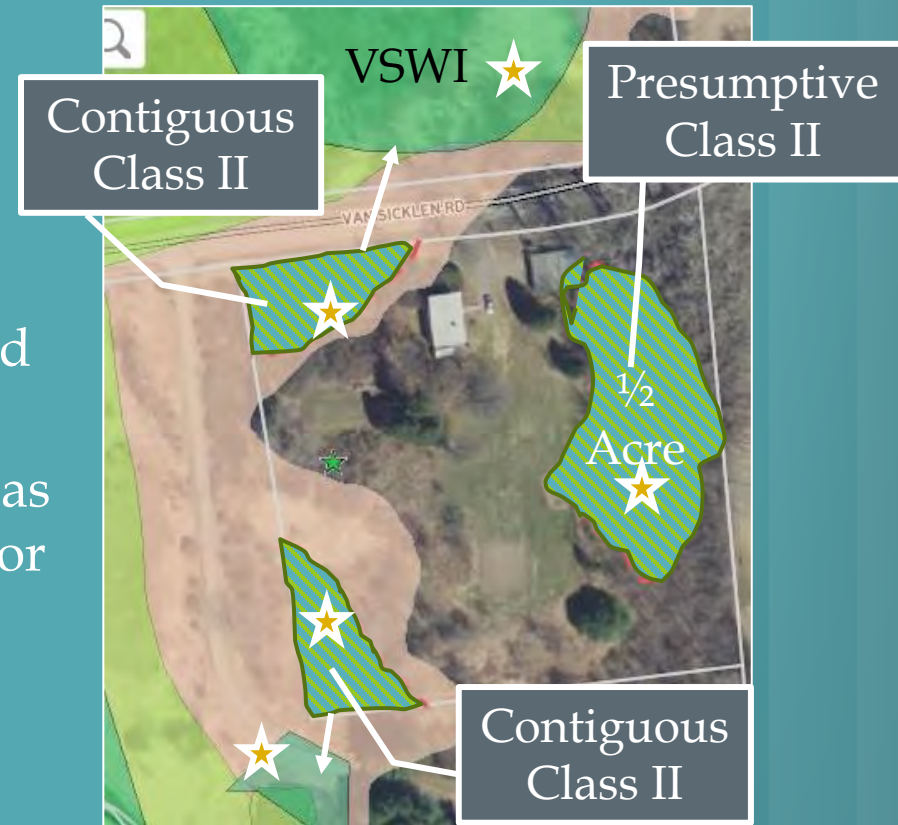
Width changes with state wetland classification:

Class I = 100-ft buffer or larger

Class II = 50-ft buffer

Presumed Jurisdictional Wetlands

- Any wetland on the VSWI map is Jurisdictional
- Any wetland contiguous or connected to the VSWI mapped wetland
- Any wetland the same type and size as what is on the VSWI maps (1/2 acre or larger)



- adjacent to a stream, lake, pond, or river (any size)
- vernal pools (any size)
- special and unique wetlands like bogs or fens (any size)

Preliminary Classifications

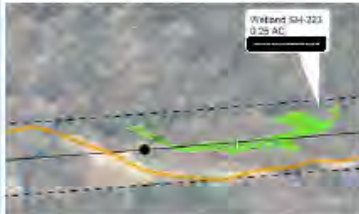
- ☞ District Ecologist may make an early call on classification
- ☞ If mapped Class II, need a formal determination to make Class III
- ☞ Classification can be reassessed again later

#2020-636 Wetland Classification Report

Wednesday, October 7, 2020 7:59 AM

[Please add this document to your land records for reference](#)

Wetland is Class II: Please be advised that I have confirmed that one or more wetlands on your property has characteristics that make it a Class II significant wetland. Class II significant wetlands and their 50 ft buffers are protected under the Vermont Wetland Rules (VWR). This report outlines the reasons for this decision, and serves as notice that any activity in the wetland or 50ft buffer zone may need a Vermont wetland permit before you start work. If you disagree with this decision you can petition for a formal wetland classification determination of Class III as outlined under the petition section of this report. The following table(s) document the reasons for this decision.

Wetland Name:	2020-636
Wetland Location:	Near the town borders of Sharon and Norwich within the VELCO K50 line right of way.
Desktop Review Only?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Site Visit Date:	September 28, 2020
People Present:	Laura Lapierre, Tim Follesbee, and Jason Smith
Wetland is Mapped:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Wetland is contiguous to Mapped wetland:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Wetland was found to meet the following presumption(s) of significance:	<input type="checkbox"/> Presumptions have not been assessed. Wetland meets classification by other means. <input type="checkbox"/> §4.6(a) over half an acre in size; <input type="checkbox"/> §4.6(b) contains woody vegetation and is adjacent to a stream, river, or open body of water; <input checked="" type="checkbox"/> §4.6(c) contains dense, persistent non-woody vegetation and is adjacent to a stream, river, or open body of water; <input type="checkbox"/> §4.6(d) is a vernal pool that provides amphibian breeding habitat; <input type="checkbox"/> §4.6(e) is a headwater wetland; <input type="checkbox"/> §4.6(f) adjacent to impaired waters and the impairment is related to wetland water quality functions; <input type="checkbox"/> §4.6(g) the wetland contains a species that appears in the NNHP database as rare, threatened, endangered or uncommon; or is a natural community type that is rare or uncommon; <input type="checkbox"/> §4.6(h) has been previously designated as a significant wetland.
Presumption Description:	Wetland is connected to a small stream channel which connects to a perennial stream within 30 feet of the wetland boundary. There are additional wetlands just off the ROW which also connects to the stream
VELCO's Map of wetland area:	

State Wetland Identification

- ☞ Must have all 3 parameters to call an area wetland, unless it is a problematic site.



Hydric Soils



Hydrophytic
Vegetation



Hydrology

Wetlands in developed landscapes



Planning

NEW Wetland Screening Tool:

<https://anrmaps.vermont.gov/websites/wetlandScreening/>

Wetland Inventory Maps:

<http://tiny.cc/wetlands>

Landowners Guide To Wetlands:

<https://dec.vermont.gov/watershed/wetlands/what/guide>

Hire a Wetland Consultant:

<https://dec.vermont.gov/watershed/wetlands/what/id/wetland-consultant-list>

Contact Wetlands Program Staff:

<https://dec.vermont.gov/watershed/wetlands/contact>

The actual boundaries of wetlands shall be determined in the field in accordance with the ACOE delineation methodology.



**Not All Protected Wetlands
Are Mapped**



Avoid and Minimize

Can you...

- Use SW disconnects and infiltration?
- Avoid redirecting water to/from a wetland?
- Cluster structures and access?
- Use conservation site design and nonstructural options?
- Place structures on another parcel with no wetlands?
- Expand existing structures on the upland side?
- Reduce project footprint?

Avoidance and Minimization Checklist:

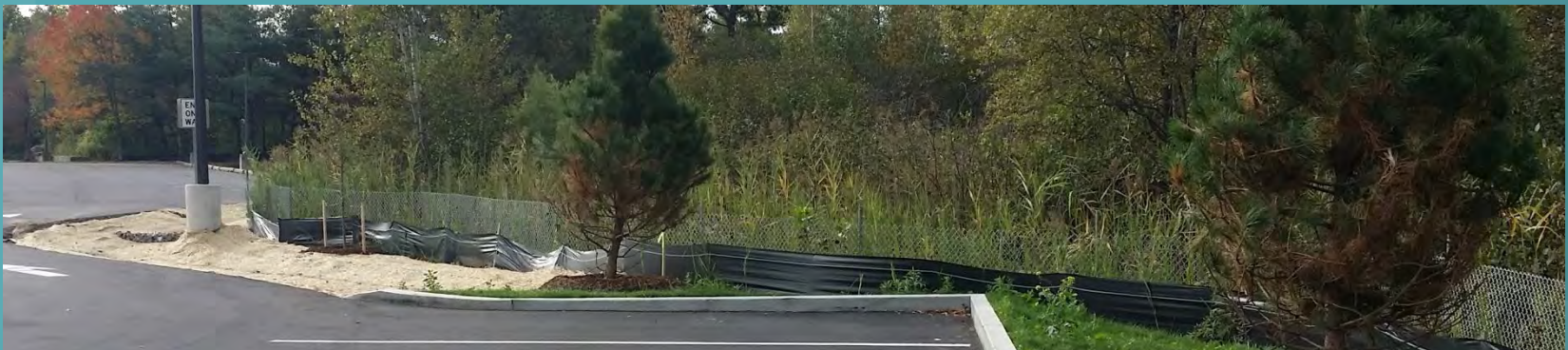
<https://dec.vermont.gov/sites/dec/files/wsm/wetlands/docs/WetlandAvoidanceAndMinimizationChecklist.pdf>

Minimize and Restore



Can you...

- Permanently demarcate the edge of disturbance?
- Plant native vegetation?
- Cease mowing of remaining wetland/buffer?



Stormwater Permitting Wetland Considerations

Vermont Stormwater Treatment Standards

- Design guidance allows for wetland avoidance

https://dec.vermont.gov/sites/dec/files/wsm/stormwater/docs/Permitinformation/2017%20VSM Rule and Design Guidance_04172017.pdf

Three Acre Permit Sites (§4.1C3g)

- Projects are not required to implement treatment/control practices that would require construction in areas of any wetland or its 50-foot buffer. Stormwater treatment standards must still be met for the site. This does not preclude the use of passive reforestation in these areas which may provide some stormwater credit.

https://dec.vermont.gov/sites/dec/files/wsm/stormwater/docs/2020_09_01%20Final%20GP%203-9050.pdf

Municipal Roads GP feasibility (§6.1)

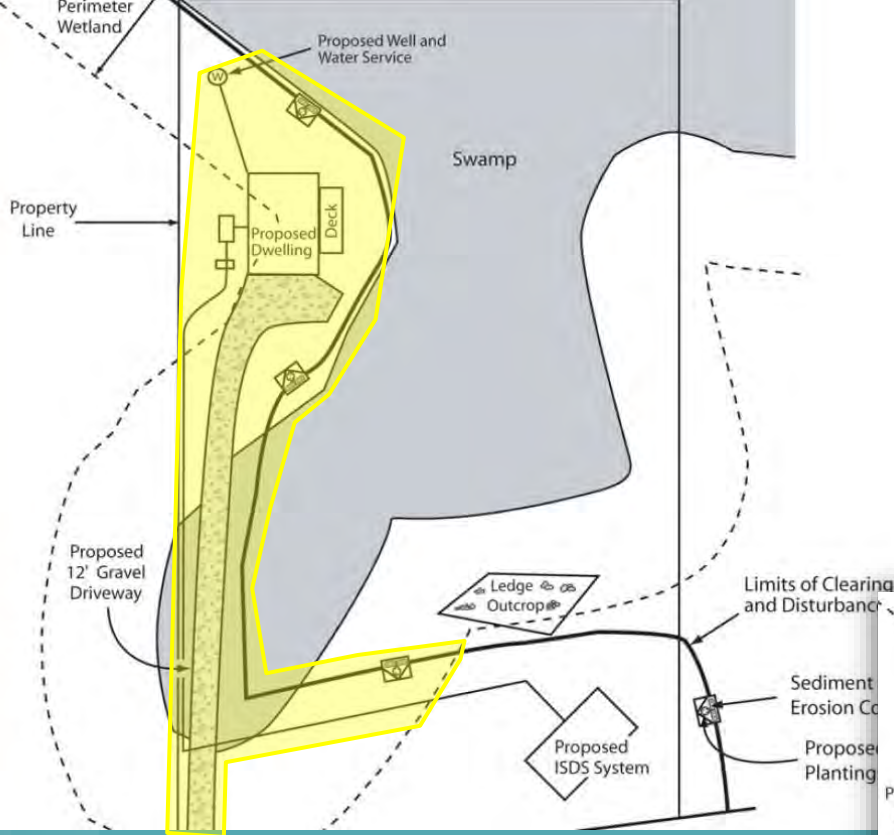
- MRGP practices which would trigger a wetlands permit are not required to be installed. MRGP does not require impacts to significant environmental resources.

https://dec.vermont.gov/sites/dec/files/wsm/stormwater/docs/Permitinformation/MunicipalRoads/sw_FinalMRGP.pdf

Who Needs a Permit?



- Activity occurs in a Class I or II wetland or buffer zone and is not considered an allowed use, or exempt:
 - Grading, filling, ditching or dredging
 - Removal of vegetation such as tree cutting or conversion
 - Construction of ponds, roads, buried utilities or other infrastructure

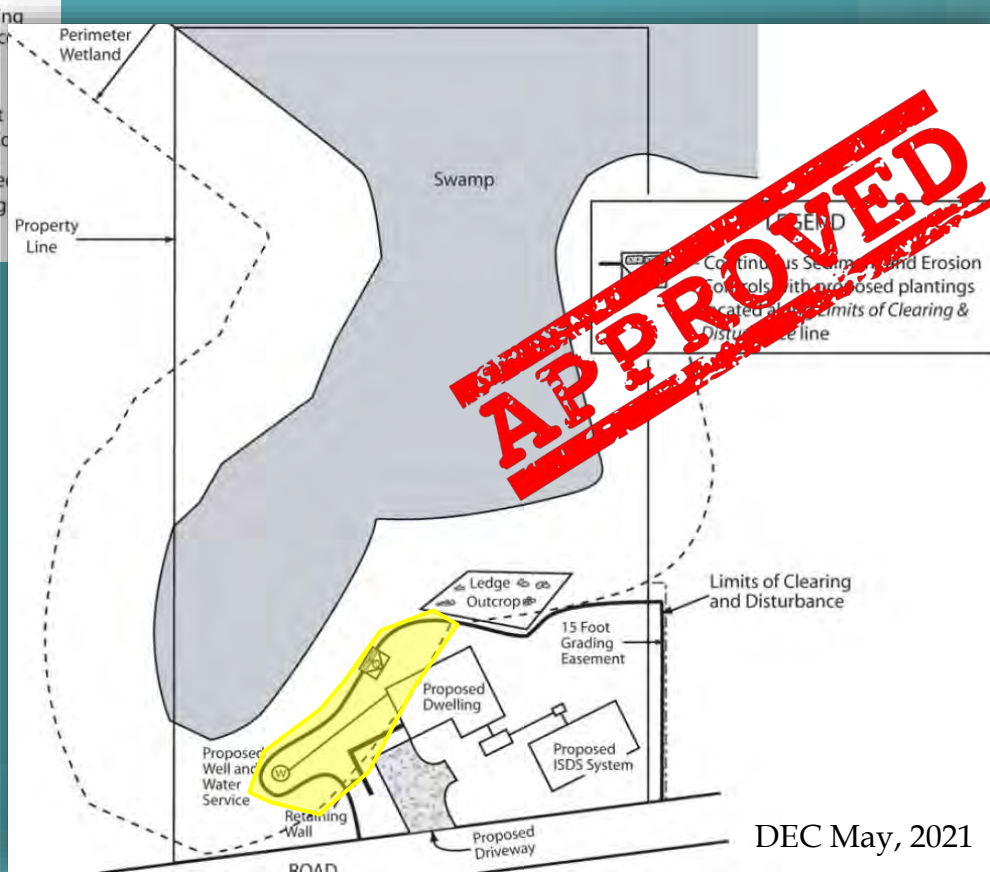


To receive a permit you must:

Avoid, Minimize, Restore, Compensate.

No undue adverse impact to wetland function or value.

 = Proposed Impact



Three permit types are available

1) 3-9025 General Permit:

https://dec.vermont.gov/sites/dec/files/documents/wl_VermontWetlandsGeneralPermit_03-9025_2018-10-03.pdf

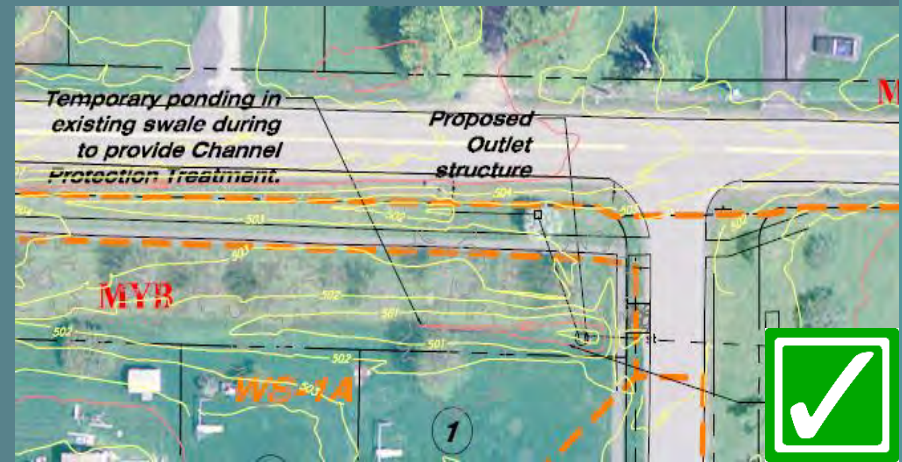
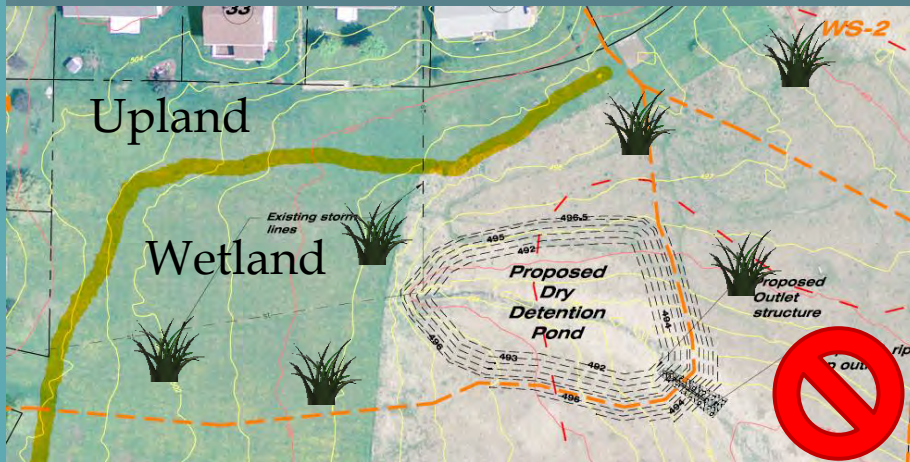
2) 3-9026 General Permit:

https://dec.vermont.gov/sites/dec/files/documents/Wetlands_NonReportingGeneralPermit_3-9026_Signed.pdf

3) Individual Permit

Examples

Flow restoration project proposed to create 12-hr detention for the 1-year storm by creating a dry pond in the wetland (~35,000sqft of impact) – changed to use an existing inlet culvert to create a modified swale BMP.



Flow restoration project proposed to hold back natural wetland waters by creating a berm in the wetland. Significant impact to wetland function and value and there were alternatives. Project idea abandoned.



Wetland General Permit 3-9026

Includes wetland permit coverage for all retrofit projects with Stormwater permit coverage (MS4, TS4, MRGP etc) which meet the following criteria:

- No more than 50 sqft of new impervious surface constructed within wetland or buffer zone
- Must be exclusively designed for existing impervious surfaces and associated land not new, expanded, or redeveloped impervious surfaces.
- Registration if ≤ 500 square feet of natural wetland or buffer, $\leq 2,000$ sqft managed wetland, $\leq 5,000$ sqft managed buffer totaling $\leq 5,000$ sqft impact.
OR: NOI if totaling $\leq 7,000$ sqft impact.
- See permit's limitations on coverage and BMP sections for other requirements for coverage.

“Managed”

Managed Areas are wetland and buffer areas where land use results in diminished function, including mowed lawns, mowed road shoulders, parking areas, roads, managed pasture, hay fields, and/or croplands.

“Natural”

Natural Areas are wetland and buffer areas that are naturally vegetated or minimally managed areas where the land use does not result in diminished function, including but not limited to natural areas, areas used for silviculture, and/or old fields.

Exempt: Stormwater Features Created in Upland

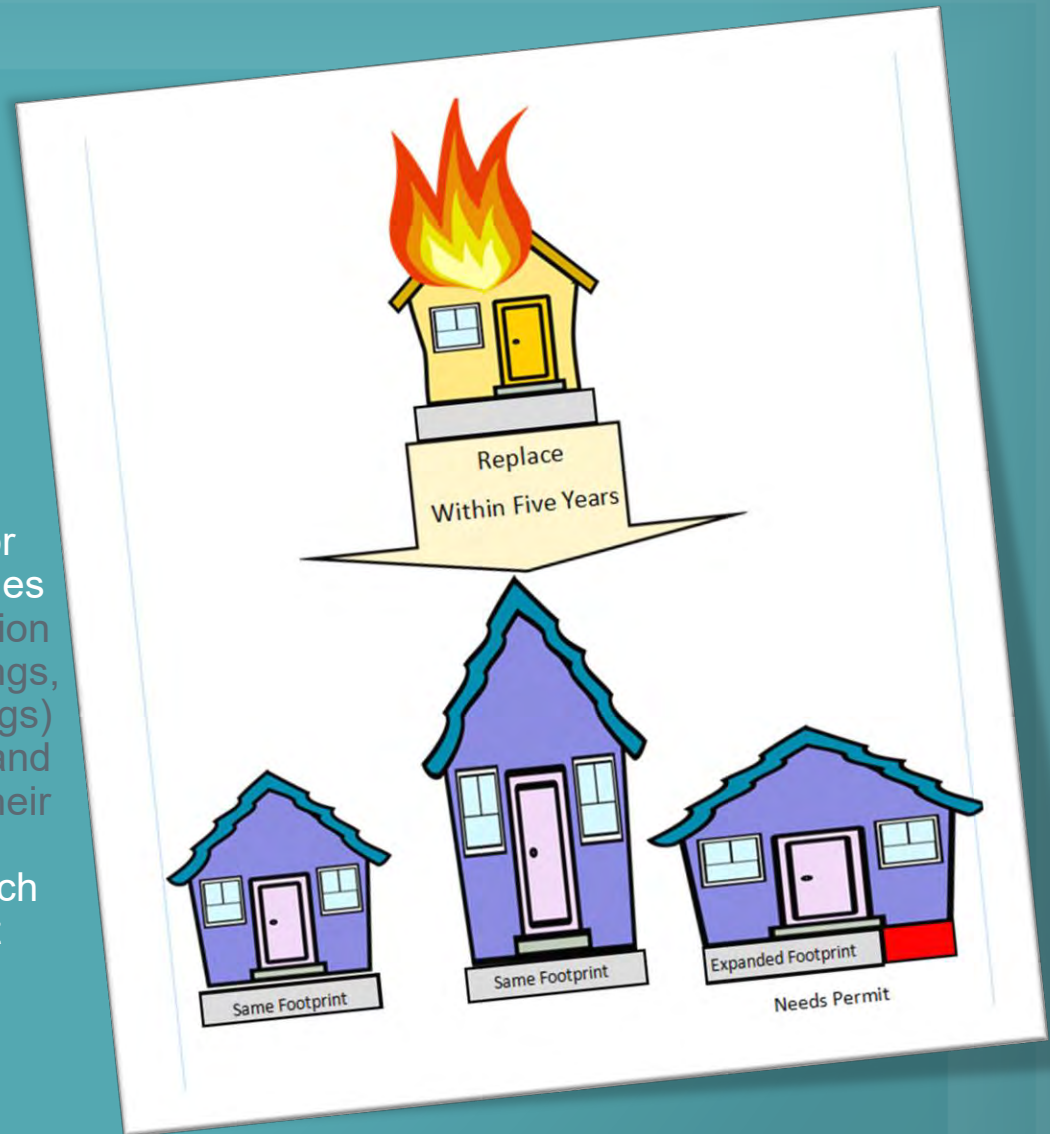


Constructed Feature Procedure:

<https://dec.vermont.gov/sites/dec/files/wsm/wetlands/docs/VWRConstructedFeatures2017.pdf>

Allowed Use 6.12: Existing Structures

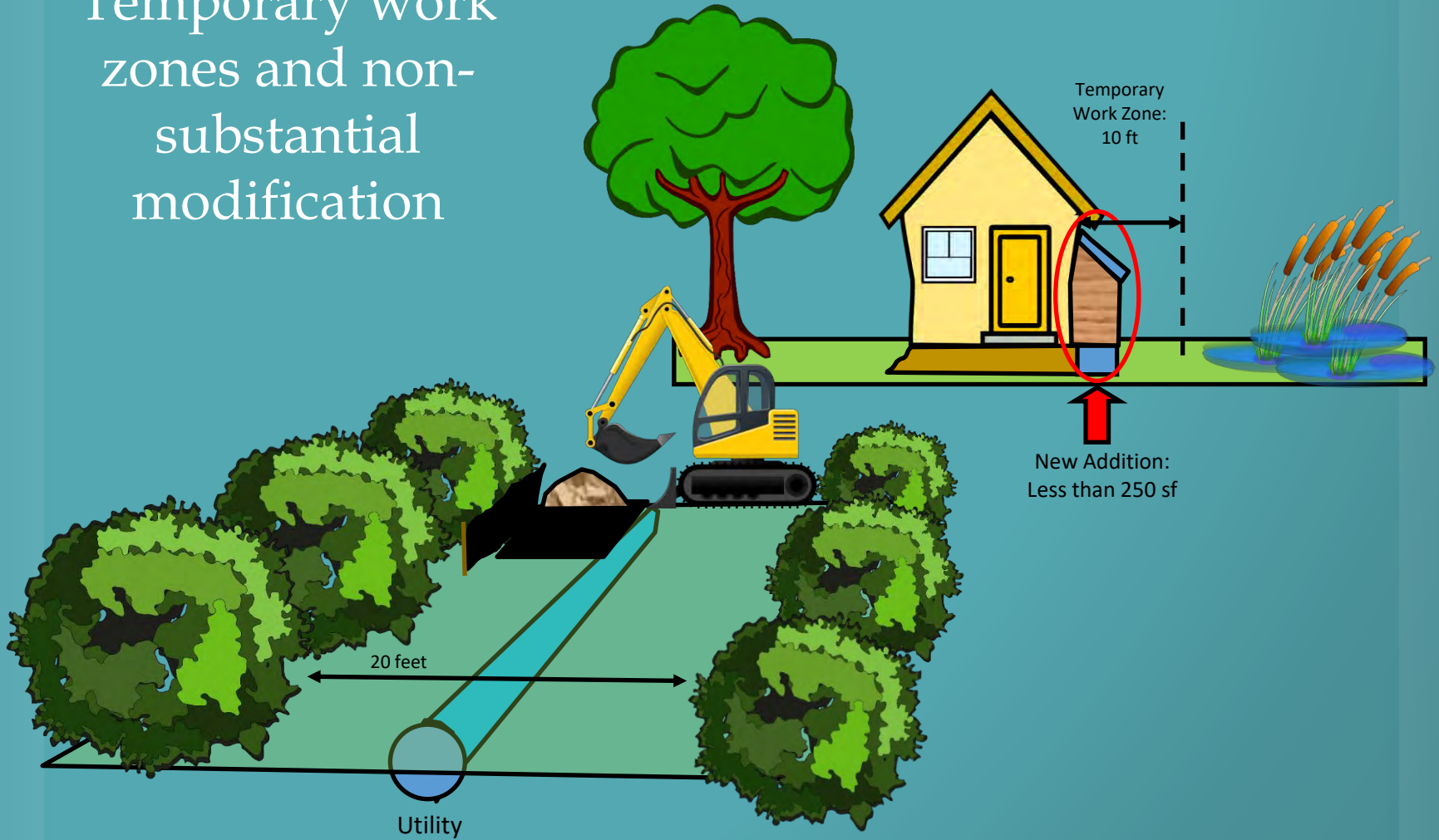
The maintenance, reconstruction, or routine repair of structures and facilities (including ski trails, public transportation facilities, bulkheads, docks, piers, pilings, paved areas, houses, or other buildings) in compliance with the Vermont Wetland Rules in existence as of the date of their construction or in existence as of February 23, 1990 or additions to such structures or facilities which do not involve substantial expansion or modification in a wetland or buffer.



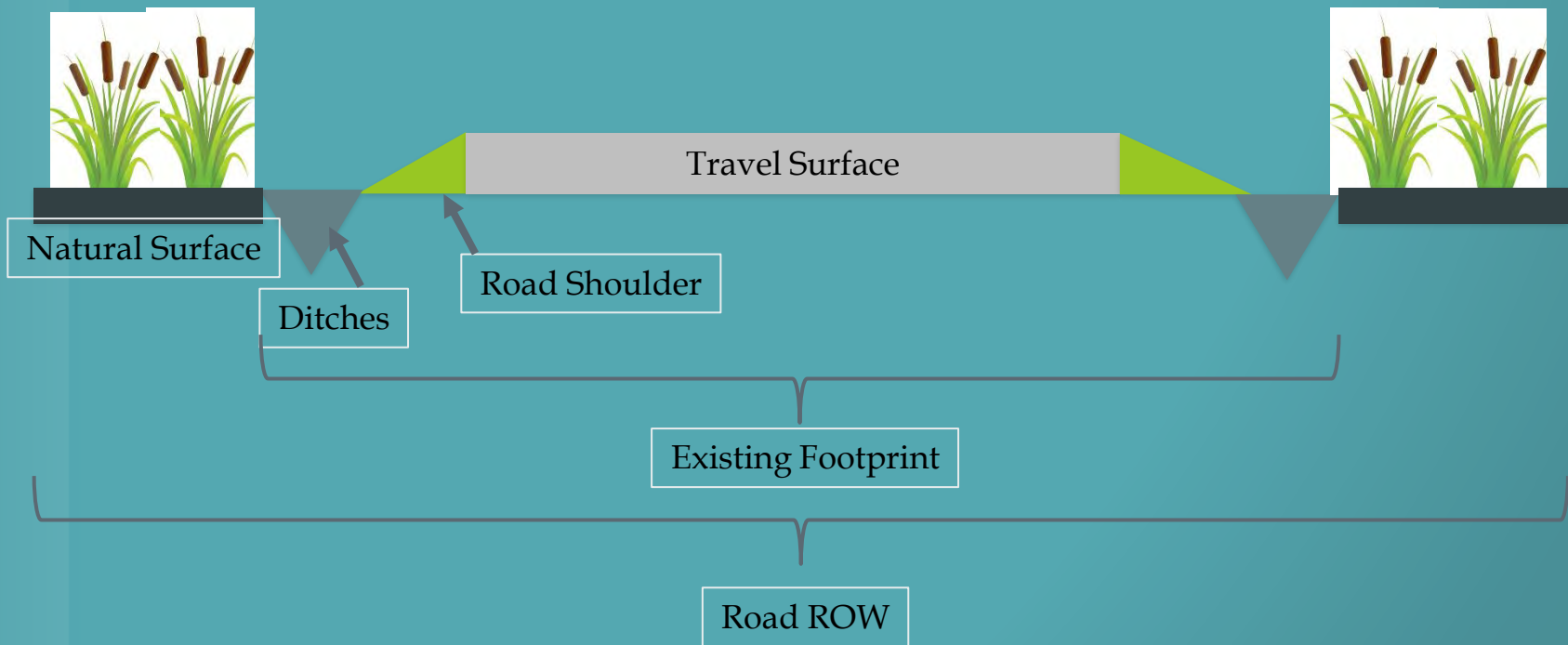
View the full guidance document:

https://dec.vermont.gov/sites/dec/files/wsm/wetlands/docs/VWR_6-12_AllowedUse_2020.pdf

6.12 Continued: Temporary work zones and non- substantial modification



Roads and Wetlands



Maintaining existing structures/infrastructure is an allowed use.
Substantially expanding the existing structure needs a permit.

Wetland Restoration

LAKE CHAMPLAIN BASIN WETLAND RESTORATION PLAN December 31, 2007



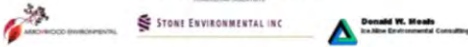
Prepared for
VERMONT AGENCY OF NATURAL RESOURCES
VERMONT DEPARTMENT
OF
FORESTS, PARKS AND RECREATION
LAKE CHAMPLAIN CLEAN AND CLEAR ACTION PLAN



Prepared by



PIONEER ENVIRONMENTAL ASSOCIATES, LLC
Stone Environmental Inc.



The Wetland Restoration Potential Layer (2017) is found in the Wetland Inventory Map under “Wetland Map”, “Watershed Protection”.

Learn more:

<https://dec.vermont.gov/watershed/wetlands/protect/restore>