

**Vermont Agency of Natural Resources  
Department of Environmental Conservation  
Watershed Management Division**

**General Wetland Determination  
Issued Pursuant to Section 8 of the Vermont Wetland Rules**

In the matter of:

**Determination of Wetland Classification**

Statewide, Vermont

File #: 2020-263

Pursuant to 10 V.S.A. § 905b(18)(B), the Secretary is authorized to identify wetlands that are so significant they merit protection, and reclassify wetlands, in general or on a case by case basis. The Secretary may, upon a petition or on his or her own motion, determine whether any wetland is a Class II wetland or a Class III wetland, pursuant to 10 V.S.A. § 914 and the Vermont Wetland Rules, Vt. Code R. 12 004 056 (VWR). The Secretary may establish the necessary width of a buffer zone of any Class II wetland as part of any wetland determination pursuant to the Rules.

As required under 10 V.S.A. § 914 and Section 8 of the VWR, this wetland determination is based on an evaluation of the functions and values of the subject wetlands as described in 10 V.S.A. § 905b(18)(A) and Section 5 of the VWR. Public notice of this wetland determination has been given in accordance with Section 8.3 of the VWR. In addition to the required notice, the Agency provided three public meetings and notices to various stakeholder organizations.

**Facts**

1. Under the current Wetland Rules, the wetland types described in Section 4.6 of the VWR are presumed to be significant unless determined otherwise by the Secretary. The Wetlands Program Staff have been evaluating whether wetlands meeting the characteristics set forth under section 4.6 of the VWR are significant in function or value since 2010. These evaluations have taken place throughout Vermont, both in the field and utilizing information through petitions, permit applications, and pre-application reviews. See the appendix 1 table which lists over 400 determination decisions, the functions and values found, and wetland characteristics associated with section 4.6 presumptive wetlands. Table 1 below summarizes the percent occurrences where wetlands meeting a 4.6 characteristic was found to be significant for each function and value listed in section 5 of the Vermont Wetland Rules.

**Table 1:** Frequency of functions and values that are significant in wetlands determined to be Class II (2013-2022).

VWR §	Function or Value	>0.5 Acres	Waterbody Connection	Vernal Pool	Headwater	Rare Species or Significant Natural Community
5.1	Flood Storage	89%	91%	86%	95%	92%
5.2	Water Protection	97%	97%	86%	100%	100%
5.3	Fish Habitat	34%	50%	0%	10%	25%
5.4	Wildlife Habitat	55%	57%	100%	5%	67%
5.5	Exemplary Natural Community	2%	1%	21%	0%	67%
5.6	RTE Species	1%	1%	21%	0%	58%
5.7	Education	2%	1%	0%	0%	17%
5.8	Recreation	6%	5%	0%	0%	33%
5.9	Open Space Aesthetics	6%	7%	0%	0%	17%
5.10.	Erosion Control	47%	76%	7%	29%	33%

2. The Wetlands Program has determined that certain wetland types currently described in Section 4.6 of the Rules are consistently found to be significant for one or more of the functions and values described in Section 5 of the VWR, and are therefore determined to be Class II. This General Determination evaluates the functions and values present in the wetland types described in Paragraph 5 of this section in support of the determination that wetlands meeting these characteristics are Class II, pursuant to 10 V.S.A. § 914.
3. Wetlands meeting the characteristics outlined below may be found throughout the State. Many are mapped on the Vermont Significant Wetlands Inventory (VSWI) map. Website <https://vtanr.maps.arcgis.com/apps/instant/nearby/index.html?appid=f862dbe013c54fc9be6fa7d26b8e1f2d> shows the general location of wetlands which have been identified throughout the Missisquoi Basin (NW Vermont) as meeting the listed characteristics through aerial interpretation. This map is available through the public comment period. Many of these wetlands are not currently mapped.
4. A subset of the wetlands meeting the listed characteristics are currently identified as a Class II wetland on the Vermont Significant Wetlands Inventory (VSWI) map. All of the wetlands meeting the characteristics meet one or more of the following presumption listed in VWR § 4.6: the wetland is of the same type and threshold size as those mapped on the VSWI maps or greater than 0.5 acres (VWR §4.6a); the wetland contains woody vegetation and is adjacent to a stream, river or open body of water (VWR §4.6b); the wetland contains dense, persistent non-woody vegetation and is adjacent to a stream, river or open body of water (VWR §4.6c); the wetland is a vernal pool that provides amphibian breeding habitat (VWR §4.6d); the wetland is a headwater wetland (VWR §4.6e); the wetland is adjacent to impaired waters and the impairment is related to wetland water quality functions (VWR §4.6f); 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 (VWR §4.6g); the wetland has been previously designated as a significant wetland (VWR §4.6h).
5. Wetlands found throughout Vermont which have the following characteristics are those under consideration for this general determination:
    - a. The wetland is of the same type and threshold size as those mapped on the VSWI maps: i.e.; open water (pond); emergent marsh; shrub swamp; forested swamp; wet meadow; beaver pond or beaver meadow; bog or fen; and greater than 0.5 acres.
    - b. The wetland contains dense, persistent non-woody vegetation or woody vegetation, and in either instance is adjacent to a stream, river or open body of water, and is over 2,500 square feet in size.
    - c. The wetland is a vernal pool that provides amphibian breeding habitat. Vernal pool is defined in §2.39 of the VWR as: a small wetland in a shallow natural depression that typically fills with water during the spring and/or fall and may dry during the summer. Vernal pools have no permanent inlet stream and no viable populations of fish. Vernal pools are typically sparsely vegetated with herbaceous plants and are shaded by trees from the surrounding upland forest. Many vernal pools provide critical breeding habitat for amphibians.
    - d. The wetland is a headwater wetland. Headwater wetland means a naturally occurring wetland that is above 2,500 feet in elevation and contributes to a stream (VWR §2.18).
    - e. The wetland contains a species that appears in the Vermont Natural Heritage Inventory (VNHI) database as rare, threatened, endangered or uncommon; or is an exemplary natural community as mapped by VNHI.
  6. The known locations of the above wetland categories which are not already displayed on the VSWI are displayed in on the interactive map at <https://vtanr.maps.arcgis.com/apps/instant/nearby/index.html?appid=f862dbe013c54fc9be6fa7d26b8e1f2d> during the public comment period for the Missisquoi basin only. The interactive map also includes wetland areas that are contiguous to VSWI mapping and therefore Class II in the Missisquoi basin. The VSWI will be updated with the noticed additional wetland areas, and the Wetlands Program will add additional new wetland locations of the above wetland categories as they are identified and as program capacity allows.

## **Findings**

As required by 10 V.S.A. § 914 and Section 8 of the VWR, this general wetland determination is based on an evaluation of the functions and values of the subject wetlands as described in Section 5 of the VWR. Section 5 provides that in evaluating whether a wetland is a Class II or a Class I wetland, the Secretary shall evaluate the functions that the categories of wetlands serve both as discrete wetlands and in conjunction with other wetlands by considering detailed functional

criteria. Consideration shall be given to the number of and extent to which protected functions and values are provided by a wetland or wetland complex.

1. Wetland which are of the same type and threshold size as those mapped on the VSWI maps: i.e.; open water (pond); emergent marsh; shrub swamp; forested swamp; wet meadow; beaver pond or beaver meadow; bog or fen; or greater than 0.5 acres provide significant function and value, in general. The significance of this wetland category is based on the Agency's individual wetland determinations for this category of wetland which included Agency field review, consultant dataforms, petitions, public comments, and desktop reviews (see Appendix 1). Wetlands which meet this category characteristically provide water storage for flood water and storm runoff as described in Section 5.1 of the VWR; and surface and groundwater protection (Section 5.2). Wetlands of this category commonly provide wildlife and migratory bird habitat (Section 5.4); and erosion control through binding and stabilizing the soil (Section 5.10). Wetlands of this category have been found to also provide fisheries habitat (Section 5.3); exemplary wetland natural community (Section 5.5); rare, threatened and endangered species habitat (Section 5.6); education and research in natural science (Section 5.7); recreational value and economic benefits (Section 5.8); and open space and aesthetics (Section 5.9).
2. Wetlands which contain woody vegetation or dense, persistent non-woody vegetation and in either instance are adjacent to a stream, river or open body of water and are over 2,500 square feet in size provide significant function or value, in general. "Adjacent" means adjoining in any part for any distance, or directly next to so as to provide for floodplain access, flood storage, cold water discharge, or filtering runoff before entering the stream. The significance of this wetland category is based on the Agency's individual wetland determinations for this category of wetland which included Agency field review, consultant dataforms, petitions, public comments, and desktop reviews (see Appendix 1). Wetlands which meet this category characteristically provide water storage for flood water and storm runoff as described in Section 5.1 of the VWR; surface and groundwater protection (Section 5.2) and erosion control through binding and stabilizing the soil (Section 5.10). Wetlands of this category also commonly provide fisheries habitat (Section 5.3); wildlife and migratory bird habitat (Section 5.4). Wetlands of this category have been found to also provide exemplary wetland natural community (Section 5.5); rare, threatened and endangered species habitat (Section 5.6); education and research in natural science (Section 5.7); recreational value and economic benefits (Section 5.8); and open space and aesthetics (Section 5.9).
3. Wetlands which are or contain vernal pools that provides amphibian breeding habitat provide significant function or value, in general. The significance of this wetland category is based on the Agency's individual wetland determinations for this category of wetland which included Agency field review, consultant dataforms, petitions, public comments, and desktop reviews (see Appendix 1). Wetlands which meet this category characteristically provide wildlife and migratory bird habitat as described in Section 5.4. Wetlands that are or contain vernal pools commonly

- provide water storage for flood water and storm runoff (Section 5.1) of the VWR; and surface and groundwater protection (Section 5.2). Wetlands of this category have been found to also provide exemplary wetland natural community (Section 5.5); rare, threatened and endangered species habitat (Section 5.6); and erosion control through binding and stabilizing the soil (Section 5.10).
4. Wetlands which are headwaters provide significant function or value, in general. The significance of this wetland category is based on the Agency's individual wetland determinations for this category of wetland which included Agency field review, consultant dataforms, petitions, public comments, and desktop reviews (see Appendix 1). Wetlands which meet this category characteristically provide water storage for flood water and storm runoff as described in Section 5.1 of the VWR; and surface and groundwater protection (Section 5.2). Wetlands of this category have been found to also provide fish habitat (Section 5.3), wildlife habitat (5.4), and erosion control through binding and stabilizing the soil (Section 5.10).
  5. Wetlands which contain a species that appears in the Vermont Natural Heritage Inventory (VNHI) database as rare, threatened, endangered or uncommon; or represent an exemplary natural community as mapped by VNHI provide significant function or value, in general. The significance of this wetland category is based on the NHI's Natural Community Ranking Specifications (2014) and the Agency's individual determinations which included rare, threatened or endangered species habitat or exemplary wetland natural community. Individual wetland determinations included Agency field review, consultant dataforms, petitions, public comments, and desktop reviews (see Appendix 1). Wetlands which meet this category characteristically provide exemplary wetland natural community (Section 5.5); and rare, threatened and endangered species habitat (Section 5.6). They commonly provide water storage for flood water and storm runoff (Section 5.1) ; and surface and groundwater protection (Section 5.2). Wetlands of this category have been found to also provide education and research opportunities in natural science (Section 5.7); recreational value and economic benefits (Section 5.8); open space and aesthetics (Section 5.9); and erosion control through binding and stabilizing the soil (Section 5.10).

## **Description of Wetland Functions and Values**

### **6. Water Storage for Flood Water and Storm Runoff**

Wetlands that provide for the temporary storage of floodwater or stormwater runoff to the extent that they make an important contribution to reducing risks to public safety, reducing damage to public or private property reducing downstream erosion or enhancing the stability of habitat for aquatic life are significant wetlands.

The Agency finds that wetland categories described in paragraphs 1, 2, 3, 4, and 5 all characteristically or commonly provide this function at a significant level.

## **7. Surface and Ground Water Protection**

Wetlands that make an important contribution to the protection or enhancement of the quality of surface or of ground water are significant wetlands.

The Agency finds that wetland categories described in paragraphs 1, 2, 3, 4, and 5 all characteristically or commonly provide this function at a significant level.

## **8. Fish Habitat**

Wetlands that are used for spawning by northern pike or that are important for providing fish habitat are significant wetlands.

The Agency finds that wetland categories described in paragraph 2 commonly provide this function at a significant level.

## **9. Wildlife Habitat**

Wetlands that support a significant number of breeding waterfowl, including all species of ducks, geese and swans, or broods of waterfowl or that provide important habitat for other wildlife and migratory birds are significant wetlands. Wetlands that provide wildlife habitat are extremely diverse and range from small isolated wetlands to large forested swamps.

The Agency finds that wetland categories described in paragraph 3 characteristically provide this function at a significant level.

## **10. Exemplary Wetland Natural Community**

Wetlands that make an important contribution to Vermont's natural heritage are significant wetlands. These include wetlands that are identified as high quality examples of one of Vermont's recognized natural community types. There are over forty wetland natural community types recognized in Vermont by the Nongame and Natural Heritage Inventory of the Vermont Fish and Wildlife Department. These include rare types such as dwarf shrub bog, rich fen, alpine peatland, and red maple-black gum swamp, and more common types such as deep bulrush marsh, cattail marsh, northern white cedar swamp, spruce-fir-tamarack swamp, and red maple-black ash seepage swamp.

The Agency finds that wetland categories described in paragraph 5 characteristically provide this function at a significant level.

## **11. Rare, Threatened, and Endangered Species Habitat**

Wetlands that contain rare, threatened, or endangered species of plants or animals are significant wetlands.

The Agency finds that wetland categories described in paragraph 5 characteristically provide this function at a significant level.

## **12. Education and Research in Natural Sciences**

Wetlands that provide or are likely to provide valuable resources for education or scientific research are significant wetlands.

The Agency finds that wetland categories described in paragraphs 1, 2, and 5 have occasionally been found to provide this function at a significant level.

## **13. Recreational Value and Economic Benefits**

Wetlands that provide substantial recreational values or economic benefits are significant wetlands.

The Agency finds that wetland categories described in paragraphs 1, 2, and 5 have occasionally been found to provide this function at a significant level.

## **14. Open Space and Aesthetics**

Wetlands that contribute substantially to the open-space and aesthetic character of the landscape are significant wetlands.

The Agency finds that wetland categories described in paragraphs 1, 2, and 5 have occasionally been found to provide this function at a significant level.

## **15. Erosion Control through Binding and Stabilizing Soil**

Wetlands that are important for erosion control are significant wetlands. Such wetlands are typically located along stream, river, pond or lake shorelines, where erosive forces are present.

The Agency finds that the wetland category described in paragraphs 2 characteristically provide this function at a significant level.

### **Determination of Wetland Classification**

Based on the information obtained during the review of over 400 individual wetland determinations, site visits by Wetlands Program staff, desktop reviews, analysis by VNHI, comments received during the public notice period and an evaluation of the functions and values of the wetland types listed in paragraphs 1-5, the Secretary has determined that the wetlands under consideration are Class II wetlands.

**Buffer Zone** Unless otherwise designated by the Secretary, a fifty (50) foot buffer zone is established contiguous to the boundaries of a Class II wetland. VWR §4.2.

**Effect of Class II Wetland Determination**

Activity in a Class II wetland or its associated buffer zone is prohibited unless it is an allowed use under the VWR, or unless it is authorized by a permit, conditional use determination or order issued by the Secretary. The Secretary may impose any permit conditions as necessary to achieve the purposes of the VWR. Section 9.1 of the VWR. This Determination does not relieve the petitioner or any other person of the responsibility to comply with all other applicable federal, state or local laws.

**Petitions for Reclassification**

The Secretary may, upon a petition or on his or her own motion, determine whether any wetland is a Class II Wetland or a Class III wetland, pursuant to 10 V.S.A. § 914. Any request by a person for the Secretary to make a determination that a wetland found to be Class II pursuant to this determination is Class III or Class I shall be made in writing, according to the requirements of Section 8 of the VWR.

**Reconsideration of Wetlands Determination**

Within 15 days of the date of this decision, the applicant, any person entitled to notice under Section 8.3(a) of the VWR, or any person who filed written comments regarding the permit application may request in writing reconsideration by the Secretary. Section 8.4 of the VWR. Such a request shall specify all action(s) for which reconsideration is sought and shall provide an explanation of the reason(s) why the request is filed. Where a request for reconsideration has been properly filed, additional evidence may be submitted concerning the functions and values of the wetland, and concerning any other material issue as deemed appropriate by the Secretary. The Secretary may appoint a designee, who shall be at the Division Director level or higher, to render a decision on the request for reconsideration. The Secretary's written reconsideration decision shall be issued as expeditiously as possible under the circumstances, and shall be distributed in accordance with §8.3(c) of the Wetland Rules. If the Secretary fails to act on a request for reconsideration within 20 days of its filing, the request shall be deemed to be denied. The Secretary's written reconsideration decision shall constitute a final act or decision of the Secretary, subject to appeal pursuant to 10 V.S.A. § 8504 and Section 10 of these Rules.

No request for reconsideration may be filed concerning or resulting from a request for reconsideration. If the Secretary fails to act on a request for reconsideration within 20 days of its filing, the request shall be deemed to be denied.

Filing a timely request for reconsideration with the Secretary tolls the 30-day period for filing an appeal with the Environmental Court. The full time for appeal shall commence to run and shall be computed from the date of the issuance of the Secretary's decision on the reconsideration request.

**Appeals**

Appeals from any act or decision of the Secretary under the Wetland Rules are governed by 10 V.S.A. §8504.

Julie S. Moore, Secretary  
Agency of Natural Resources

by: \_\_\_\_\_  
Laura Lapierre, Program Manager  
Wetlands Program  
Watershed Management Division

Dated at Montpelier, Vermont  
this \_\_\_\_ day of \_\_\_\_\_ 2022

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