

# Increasing protections for Vermont lakes via reclassification under Vermont's Water Quality Standards

## VT DEC Lakes and Ponds Management and Protection Program, April 2021

The [Vermont Water Quality Standards](#) (VWQS) is a document pursuant to the US Clean Water Act that lays out standards to protect water quality; protect surface water uses (e.g., swimming, fishing, boating); and prevent degradation of public waters. Designated uses include swimming, boating, fishing, aquatic biota, aquatic habitat, aesthetics, drinking water source, and irrigation. The protection of water quality and water uses can be promoted by establishing specific management objectives for water bodies and describing the values and uses of those waters to be protected or achieved.

To protect Vermont's surface waters and their designated uses, the VWQS establishes **water quality classes** with associated management objectives. There are four possible classifications of Vermont surface waters:

- B(2) – good;
- B(1) very good;
- A(2) public water source;
- A(1) excellent.

Vermont's surface waters are managed to, at a minimum, support uses valued by the public at water quality class B(2). Using numeric criteria, water bodies demonstrating excellent or very good water quality can be "reclassified" to A(1) or B(1) status respectively, giving those waters a higher standard of protection. All waters must continue to meet the criteria for their classification, otherwise they are listed as impaired, and a restoration plan must be developed and implemented.

However, reclassification does not mean there can be no land-based activities or active management in the watersheds, lakeshores, or stream corridors of watersheds that are (re)classified to A(1). Instead, the activities must be carried out in such a way as to maintain the excellent condition of water bodies for those uses.

### **What is the basis for lake reclassification?**

The VWQS provides numeric nutrient criteria associated with each water quality classification.

	Class A(1)	Classes A(2) & B(1)	Class B(2)
Nutrient Concentrations			
Total Phosphorus ( $\mu\text{g/l}$ )	12	17	18
Nutrient Response Conditions			
Secchi Disk Depth (m)	5.0	3.2	2.6
Chlorophyll-a ( $\mu\text{g/l}$ ) <sup>3</sup>	2.6	3.8	7.0

As an example, Lake Willoughby (Westmore) is currently listed as a B(2) lake but its water quality is excellent and it exceeds the Class A(1) requirements: the 5 year mean value for Total Phosphorus concentrations is 9.7  $\mu\text{g/L}$ , chlorophyll-a is 1.5  $\mu\text{g/L}$ , and Secchi is 9.0 meters. Lake Willoughby is therefore eligible for reclassification to an A(1) lake. Given that total phosphorus concentrations on this lake are significantly increasing, it makes sense to pursue additional protections.

### **Why consider reclassification?**

Reclassification to A(1) status introduces three new water quality protections required under statute in Vermont related to discharge and solid waste management (10 V.S.A. § 1259, § 6-702, & § 6-1306). But the principal rationale for reclassification is to place a lake into the appropriate class corresponding with its actual status and create a mechanism for a restorative action sooner if the lake becomes impaired for A(1) uses. Additionally, an A(1) lake could be eligible for technical assistance and funding to 1) keep its total phosphorus concentrations from ever exceeding the A(1) limits and becoming impaired and 2) to restore it to A(1) in the event that it does become impaired for A(1), similar to efforts made to restore lakes that are impaired for the B(2) class, like Lake Champlain and Lake Carmi.

### **What is the process for reclassification?**

Reclassification is done via rulemaking, which can be initiated by DEC or in response to a petition from a local organizations, which is preferable as it demonstrates local support. The process for submitting a petition is available on the [VTDEC webpage](#) and involves significant consultation with local stakeholders as well as legislative committees.