<u>Letter of Support from D.U.M.P. (Don't Undermine Memphremagog's Purity)</u>

To Whom It May Concern:

As spokesperson for the volunteer environmental group DUMP (Don't Undermine Memphremagog's Purity), I write in support of the Echo Lake Association's initiative to reclassify Echo Lake to a higher status of A (1) water quality.

Echo Lake remains as one of the cleanest, if not the cleanest fresh water lake in Vermont's Northeast Kingdom. You can literally stand in water to your chest and clearly see your toes. The Echo Lake Association volunteer program begun many years ago to patrol the shoreline for invasive weed growth and aquatic invasives has contributed greatly to its excellent water quality. It was one of the first lakes to establish an all volunteer welcoming, educational, and boat cleaning inspection program at the public Fish and Game fishing access. Efforts continue to be made to be vigilant and aware of other threats to the Lake's water quality. Some of these in the past have included feeding of duck colonies, seagull infestations, and grazing to the shoreline. Fortunately, the one remaining dairy farm by the Lake is a more traditional grass and hay feed farm without liquid manure application as would be the case with a corn feeding operation. This farm is also under a conservation easement with a land trust. Phosphorous run off will still remain a concern.

Echo Lake volunteers spoke publicly at a State of Vermont sponsored public hearing in Newport in the early 2000's in favor of banning personal watercraft machines (seadoos) from the waters of Echo Lake, as had been the case at Willoughby Lake. Unfortunately, in spite of a majority at the hearing speaking of the noise, the strong wakes endangering loon nesting sites on the shoreline, and the speed of the machines on the small lake, the Agency of Natural Resources during Gov. James Douglas' administration ruled against such a ban, without explanation. Institution of such a ban on use of personal watercraft should accompany efforts to reclassify Echo Lake to a higher standard. In addition consideration should be given to power and speed limits for boats entering the Fish and Game access.

All efforts to protect and improve water quality at Echo Lake through practices required by reclassification to A (1) status should be supported.

Respectfully,

Henry Coe, Spokesperson, DUMP (Don't Undermine Memphremagog's Purity)



The Federation of Vermont Lakes and Ponds, Inc. P.O. Box 766
Montpelier, VT 05601
www.vermontlakes.org

Auguest 9, 2021

Julie Moore Secretary, Vermont Agency of Natural Resources 1 National Life Drive Montpelier, VT 05620-3901

Dear Secretary Moore:

The Federation of Vermont Lakes and Ponds (FOVLAP) supports the Vermont Department of Environmental Conservation (VTDEC) Lakes and Ponds Program's efforts to reclassify lakes that are in excellent condition and exceed the Vermont Water Quality Standards (VWQS) for an A(1) lake for certain uses, but are currently classified as B(2) lakes. VTDEC has already identified eight lakes that are eligible for reclassification under these criteria. These lakes include Raponda, Shadow, Caspian, Seymour, Echo (Charleston), Maidstone, Harvey, and Willoughby. We support the reclassification of these lakes.

FOVLAP's core mission is to preserve and protect Vermont's lakes and ponds as well as their watersheds for the benefit of this and future generations. FOVLAP is, therefore, an interested party and, as such, supports the reclassification of each lake cited above. We feel the reclassification of these lakes will be in the best interests of the surrounding communities and of all Vermonters.

To reclassify any of these lakes, a petition must be prepared and submitted to VTDEC. A key element of the petition requires the petitioners to reach out to interested parties, such as lakeshore landowners, local municipalities, civic and business organizations, and the towns adjacent to the proposing waterbody, to discuss the purpose of and the need for, the petition and to solicit letters of support that will be included in the petition.

There are compelling reasons for increasing protections for oligotrophic lakes that have excellent water quality, but for which ongoing monitoring programs have established that summer total phosphorus concentrations are increasing. Such water quality deterioration could lead to decreased usage, reduced recreational opportunities, and irreparable damage to these pristine resources. Matthews, Merrell, and Thomas¹ established through their long-term

To preserve and protect Vermont's lakes, ponds, and their watersheds for the benefit of this and future generations.

¹ Matthews, L., Merrell, K., Thomas, P., (2018). Is Vermont Losing its Oligotrophic Lakes? <u>NALMS Lakeline</u>, <u>Summer 2018</u> pp 16-18.

monitoring program that "Vermont's oligotrophic lakes could be starting down a path of extinction" and no one is sure why. As these authors have clearly stated, "These low-nutrient, crystal-clear lakes are the jewels of Vermont – especially prized for their natural beauty and recreational opportunities. It would be a shame to lose them." The increase in protection the reclassification of each lake will provide is not only warranted but is also essential. We fully support this reclassification and urge you to move forward with this process.

Sincerely,

Concell & We way

President

CC: Peter Walke, Commissioner, Vermont Department of Environmental Conservation

Oliver Pierson, Program Director, VT DEC Lakes and Ponds Program



MAIDSTONE LAKE ASSOCIATION

https://maidstonelake.net/
MAIDSTONELAKEASSOCIATION@GMAIL.COM

August 24, 21

Echo Lake Protective Association PO Box 41 East Charleston, VT 05833

ATTN: Reclassification Committee; Wall-Bull Family < wallbull3@gmail.com>

Dear Holy Bull:

The Maidstone Lake Association supports the petition sponsored by the Echo Lake Protective Association to reclassify Echo Lake from its current designation as a B(2) lake to an A(1) lake for aesthetic uses because we feel this reclassification will be in the best interest of the general public and the abutting municipalities.

Motion of Support passed by the Directors of the Maidstone Lake Association by email vote on August 23, 2021.

Attest.

Jim Mazzonna

President, Maidstone Lake Association

cc: MLA Board of Directors

To the Echo Lake Protective Association,

We endorse the Echo Lake Protective Association petition to the Vermont Agency of Natural Resources to Reclassify Echo Lake to A1 water quality to preserve and protect it from degradation from phosphorus and other pollutants.

Reclassification of Echo creates a mechanism for a high priority restorative action plan to maintain Echo's A(1) status should it begin to be impaired, making it eligible for technical assistance and expedited funding so that its water quality and habitat continue to be a valued asset in the Northeast Kingdom.

Signed:

Organization:

Memphemagog Watershed arrociation

Dand Convene President

Date; July 31 2021

Additional Comments:

By signing on to this response, you can show your support for our effort to Reclassify our Lake. Thank you in advance for your support, and feel free to add any additional comments/reasons to support this initiative.

Letters of Support can be mailed to: Echo Lake Protective Association

P.O. Box 41

E. Charleston, VT 05833

Or emailed to: HBull@echolakeassociation.net

To the Echo Lake Protective Association,

Additional Comments:

We endorse the Echo Lake Protective Association petition to the Vermont Agency of Natural Resources to Reclassify Echo Lake to A1 water quality to preserve and protect it from degradation from phosphorus and other pollutants.

Reclassification of Echo creates a mechanism for a high priority restorative action plan to maintain Echo's A(1) status should it begin to be impaired, making it eligible for technical assistance and expedited funding so that its water quality and habitat continue to be a valued asset in the Northeast Kingdom.

Signed:	Mga	Maria Young, Executive Dire	ector
Organization:	NorthWoods	Stewardship Center	
Date; July 28	, 2021_		
Date; July 28	, 2021		

SALEM LAKES PRESERVATION ASSOCIATION

SALEM LAKES PRESERVATION ASSOCIATION

A 501(C) (3) ORGANIZATION P.O. BOX 134, DERBY, VT 05829 WWW.SALEMLAKESVT.ORG

August 6, 2021

OUR BOARD

Roger Cartee

To the Echo Lake Protective Association,

Ed Wells

Janet Cartee

Sharon Kelley

We, the directors of the Salem Lakes Preservation Association, endorse the Echo Lake Protective Association petition to the Vermont Agency of Natural Resources to Reclassify Echo Lake to A1 water quality to preserve and protect it from degradation from phosphorus and other pollutants.

Reclassification of Echo creates a mechanism for a high-priority restorative action plan to maintain Echo's A(1) status should it begin to be impaired, making it

eligible for technical assistance and expedited funding so that its water quality

and habitat continue to be a valued asset in the Northeast Kingdom.

Dennis Bond

Dennis Bond

Jason Brueck

Beckie Eakin

John Guyette

TJ Jackman

Ross Ogilvie

Paul Roy

Tim Votapka

Regards,

Roger Cartee President

On behalf of and with unanimous approval from the Salem Lakes Preservation Association Board of Directors



Town of Charleston

5063 Vt. Rte. 105

W Charleston VT 05872

Phone No: (802) 895-2814 Fax No: (802) 895-2714

town of charlest on vt@comcast.net

www.charlestonvt.org

September 9, 2021

Secretary Julie Moore Vermont Agency of Natural Resources 1 National Life Drive, Davis 2 Montpelier, VT 05620-3901

Dear Secretary Moore:

Representatives of the Echo Lake Protective Association (ELPA) attended a meeting of the Charleston Selectboard on August 26, 2021 to discuss the State's lake reclassification program and request formal support from the Selectboard to have Echo Lake reclassified as an A(1) water body.

ELPA representatives explained in their presentation that reclassification will make Echo Lake eligible for ongoing state financial and technical support to maintain an A(1) status. They also noted that Echo Lake residents strongly support the reclassification effort as expressed by lake residents in a formal vote of support at the ELPA Annual Meeting on July 17, 2021, and by a written petition with signatures from an additional forty-five Echo Lake residents. The Charleston Town Planning Commission has previously provided ELPA with a letter of its support for this effort.

Echo Lake is one of our town's most precious natural resources and serves as an important asset to our property tax base. Preserving and protecting the lake will ensure it is able to continue as a year-round recreational and educational resource for our residents, school children, and visitors in the decades ahead.

We are fortunate to host one of the State's premiere lakes. The Charleston Selectboard unanimously supports the ELPA's effort to have Echo Lake reclassified as an A(1) Vermont water body, and be eligible for State resources to ensure the lake is able to maintain its pristine status. Please let us know if there is anything else we can provide.

Sincerely,

Patrick Austin

Chair, Charleston Selectboard

Town of Charleston

5063 Vt. Rte. 105

W Charleston VT 05872 Phone No: (802) 895-2814

Fax No: (802) 895-2814

townofcharlestonvt@comcast.net www.charlestonvt.org

August 26, 2021

Secretary Julie Moore Vermont Agency of Natural Resources 1 National Life Drive Davis 2 Montpelier, VT 05620-3901

Ms. Moore:

Representatives of the Echo Lake Protective Association (ELPA) attended the quarterly public meeting of the Charleston Town Planning Commission on June 24, 2021 to present and discuss the State's lake reclassification program and to request formal support from the Town Planning Commission to have Echo Lake reclassified as an A(1) water body to make the lake eligible for ongoing state financial and technical support.

Our 2019 Town Plan specifically focuses on the unique value of Charleston's abundant natural resources, and the need to protect and preserve them. Echo Lake is one of our town's most valuable natural resources as well as an important asset to our tax base. The lake hosts year-round recreational activities, serves as an educational resource for our schoolchildren, and is enjoyed as a magnificent centerpiece for those who live on and around the lake. Preserving and protecting Echo Lake is of paramount importance to our residents, the Echo Lake community, and the many visitors who enjoy fishing, boating, and swimming in its pristine waters.

The Town of Charleston Planning Commission endorses the decision by ELPA to have Echo Lake reclassified as an A(1) Vermont water body. Reclassification will bring necessary resources and protection from the State to identify and mitigate threats to ensure the lake is able to maintain its A(1) status over time. Please let me know if we can provide you with anything further to move this process forward.

Sincerely,

John B. Kellogg

1BKelloge

Chair, Charleston Planning Commission

Echo Lake Reclassification Supporting Documentation

Along with the town of Charleston, the towns of Morgan and Holland are also in Echo Lake's watershed. Echo Lake Protective Association and the Town of Charleston had honored a request from the Seymour Lake Association to allow them to take the lead on obtaining support for reclassification for the part of Echo Lake's watershed that is in Seymour Lake's watershed (which includes the towns of Morgan and Holland). While the Seymour Lake Association has actively discussed and considered reclassification, no decision to move forward has been made and it is undetermined if it will move forward. Due to Echo Lake's "highly significantly increasing" phosphorus levels, the co-petitioners are requesting that Echo Lake and its entire watershed be reclassified to A(1) status without delay. In addition, and to expedite this process, the co-petitioners respectfully request that Secretary Moore weigh the possibility of reclassifying the part of Echo Lake and its watershed that doesn't include Seymour Lake (per Appendix F of the Vermont Water Quality Standards).

Echo Lake is a 545-acre water body that reaches a depth of 129 feet and is one of only two cold deep-water lakes in the Clyde River system (supporting a diverse fishery that includes native lake trout). A hydroelectric power dam is located at the southern end (outlet) and a dam located on Seymour Lake (inlet) regulates the incoming flow of water. These two dams allow for a relatively stable water level.

The Town of Charleston has no zoning and does not issue town permits. All construction is subject to State of Vermont wastewater, shoreline encroachment and other regulations administered by the Vermont Department of Environmental Conservation and requires the applicable permits. Therefore, the reclassification of Echo Lake would put in place the additional necessary oversight to ensure high quality water standards continue to be met.

Nearly all the land in Charleston is privately owned except for a few small Stateowned fishing access areas and Town-owned municipal facilities. Thirteen percent of land around Echo Lake is conserved with the Vermont Land Trust.

Land Use: Town of Charleston, Vermont

Forested 72.0%
Total Agricultural 4.6%
Water 5.7%
Other Non-Forested 7.7%

Echo Lake, Charleston, Vermont – Lay Monitoring Data

10 Year Tracking, Data Trend Monitoring: The mean of the means = 10.01 ug/L.

The value of p for a one-tailed T Test is .001626. The result is significant at p < .05.

2020 Summary (Station 1)

	Parameter	Days	Min	Mean	Max			
	Secchi (m)	13	6.0	7.5	11.0			
	Chl-a (μg/L)	13	8.0	2.7	4.5			
	TP (μg/L)	12	9.8	12.7	18.7			
2019 Summary (Station 1)								
	Parameter	Days	Min	Mean	Max			
	Secchi (m)	5	5.5	7.2	8.5			
	Chl-a (μg/L)	5	1.3	1.9	2.9			
	TP (μg/L)	5	5.0	7.2	10.0			
2018 Summary (Station 1)								
	Parameter	Days	Min	Mean	Max			
	Secchi (m)	7	5.5	6.3	8.0			
	Chl-a (μg/L)	7	0.5	1.4	2.4			
	TP (μg/L)	7	6.8	11.1	21.1			
2017 Summary (Station 1)								
	Parameter	Days	Min	Mean	Max			
	Secchi (m)	5	7.0	8.0	9.0			
	Chl-a (μg/L)	5	0.5	0.7	0.9			
	TP (µg/L)	5	6.6	10.0	15.9			
2016 Summary (Station 1)								
	Parameter	Days	Min	Mean	Max			
	Secchi (m)	9	6.0	7.1	9.0			
	Chl-a (μg/L)	9	0.5	1.6	3.0			
	TP (µg/L)	9	8.1	11.6	24.1			

2015 Summary (Station 1)

2013 30	arrinary (Station	-,						
	Parameter	Days	Min	Mean	Max			
	Secchi (m)	9	6.5	7.6	9.0			
	Chl-a (µg/L)	9	0.5	1.2	1.9			
	TP (μg/L)	9	7.3	9.3	14.8			
2014 Summary (Station 1)								
	Parameter	Days	Min	Mean	Max			
	Secchi (m)	12	6.0	7.3	10.5			
	Chl-a (µg/L)	12	0.6	1.2	2.3			
	TP (μg/L)	11	6.2	10.1	18.8			
2013 Summary (Station 1)								
	Parameter	Days	Min	Mean	Max			
	Secchi (m)	9	4.0	6.1	7.5			
	Chl-a (µg/L)	9	1.1	2.3	4.0			
	TP (μg/L)	9	6.9	9.0	11.0			
2012 Summary (Station 1)								
	Parameter	Days	Min	Mean	Max			
	Secchi (m)	10	5.5	7.1	8.0			
	Chl-a (µg/L)	10	0.9	1.6	3.0			
	TP (μg/L)	10	7.4	8.6	11.3			
2011 Summary (Station 1)								
	Parameter	Days	Min	Mean	Max			
	Secchi (m)	8	6.5	8.2	11.0			
	Chl-a (µg/L)	7	0.5	1.1	2.2			

TP (μg/L) 8 7.7 10.5 15.5