

Greetings from the Lake Warren Preservation Association!

For those of you who are not familiar with our organization, we are a voluntary not-for-profit association (formerly Lake Warren Association) founded in the mid 1980's. We have been operating continuously since 1999 in furtherance of our mission to promote the health, safety and welfare of the lake, the community and its watershed.

The Lake's health and the ecosystem it supports have been in a slow decline for many years. Unfortunately, over the past decade, this decline has accelerated. Dangerous toxic blooms of Cyanobacteria have occurred in the last few seasons. Unless action is taken now, blooms are sure to become more common, limiting our ability to recreate safely. Several factors are contributing to the decline in the Lake's health and there are steps we need to take to improve water quality, ensuring that the Lake remains available to enjoy for future generations.

The erosion and resulting runoff of the unpaved section of Pine Cliff Road is a significant contributor to the Lake's decline in health, and increased traffic over the years has exacerbated this. Addressing these issues can lead to immediate and long-term improvement in the Lake's water quality. The NH Department of Environmental Services (NHDES), Southwest Region Planning Commission (SWRPC), and Lake Warren Preservation Association (formerly Lake Warren Association) completed a comprehensive review of Lake Warren's watershed and declining water quality in 2016, and created the [Lake Warren Watershed Management Plan](#). We encourage you to read this report to learn more about the challenges the Lake faces, and recommendations for addressing those challenges.

The Town and the LWPA Board see an opportunity to encompass work on Pine Cliff Road with the work that has been mandated by the State to remediate the Warren Dam. Combining projects of this scope can often streamline work and offer financial savings in the form of potential grant opportunities. To support the Town with this initiative, the LWPA surveyed its members and all residents in close proximity to the Lake to gather feedback about proposed alternatives to Pine Cliff Road's current configuration with the goal of reducing runoff/nutrient load into the lake.

In the survey, we aimed to address the two major problems identified with the unpaved section of Pine Cliff Road and sought input on how best to move forward. We outlined several proposals, including their pros and cons, and asked recipients to consider each, indicating which (if any) they would support. The proposed solutions could be used singly or in combination with one another. We also welcomed recipients to suggest new proposals.

The problems to address and proposed solutions were as follows:

PROBLEMS TO ADDRESS

Problem #1 – Dust

Year-round road dust, combined with the use of road salt in winter, introduces phosphorus, nitrogen and chloride into the Lake, impacting water quality and ecosystem health.

Problem #2 – Runoff and inadequate drainage

Managing runoff is crucial for preserving our waterways. Drainage issues lead to uncontrolled runoff, which creates a huge source of additional sediment, inorganic material, and nutrients in the Lake. In warm, nutrient-rich (high in phosphorus and nitrogen) environments, Cyanobacteria can multiply quickly, creating blooms that spread across the water's surface. This runoff allows harmful bacteria to proliferate.

POSSIBLE SOLUTIONS

One solution that provides quick relief, and at no cost to the taxpayers, is rerouting a portion of the road just south of the dam and increasing the buffer zone between that portion of the road and the Lake. This is made possible via an agreement with the abutting landowner and funding via Federal or State grants (TBD). While this solution will help reduce dust and improve runoff and drainage, it's not nearly enough to combat these issues in the long-term. In addition to this, we ask that you consider the following additional solutions:

Solution A— PAVE, repair, and add drainage to entire dirt section

Pros:

- Greatly reduce runoff
- Eliminate dust

Cons:

- More costly material (asphalt)
- Would take longer to complete project
- Has the potential to increase through traffic and speed of traffic unless these are addressed

Solution B – Make Pine Cliff Road a one-way gravel road (direction TBD)

Pros:

- Narrowing the road to one lane provides an opportunity to increase the buffer zone between the road and the Lake
- Decreased through traffic
- Narrowing the road to one lane would decrease future costs associated with paving and drainage
- Potential opportunity to put in a walking path

Cons:

- Inconvenience for anyone that uses Pine Cliff Road as a shortcut between Route 123 and Gilsum Mine Road
- Will increase traffic on Route 123 between Chase's Mill and Gilsum Mine Road
- Requires approval by the NH Transportation Commissioner RSA 265:23

Solution C – Make Pine Cliff Road a dead end (which end TBD)

Pros:

- May reduce the need for paving, leaving only drainage to be addressed
- Significantly decreased traffic
- Safer for pedestrians

Cons:

- Inconvenience for drivers
- Will increase traffic on Route 123 between Chase's Mill and Gilsum Mine Road

Solution D – Adding speed bumps to Pine Cliff Road (type TBD)

Pros:

- Reduce traffic speed
- May reduce through traffic
- Can be used in conjunction with other solutions proposed
- Lower cost

Cons:

- Problematic for road work
- Have to be removed for winter (unless implemented as speed tables in conjunction with paving)
- Maintenance
- Cost of implementing

Solution E – Create a three-way stop at Arbor Way

Pros:

- Reduce traffic speed
- May reduce through traffic
- Low cost
- Can be used in conjunction with other solutions proposed above

Cons:

- Difficult to enforce
- If road is not also paved, possibility of increased degradation of road in that spot
- Reduce parking options for lake access in that spot

Selectman Joel McCarty heard feedback from the residents who received the survey at the LWPA membership meeting in June, and the entire Selectboard heard feedback from residents at a subsequent Selectboard meeting. At that time, Mr. McCarty requested that a Public Hearing be scheduled to gather additional feedback from the rest of the community before the Selectboard could make any decisions on possible modifications to Pine Cliff Road. This Public Hearing is scheduled for **Tuesday, July 16th at 6:00 pm at the Town Hall at 9 Main Street.**

Click here if you are unable to attend the Public Hearing, but would still like to provide feedback via the survey: <https://forms.gle/PCz47X976JRpwp1t9>