

## **Bow Lake Master Plan Committee Update**

**June 2025**

Concerns for the health of Bow Lake were a major emphasis of the 2023 Master Plan. Consequently, a committee was formed to study and identify actions to preserve Bow Lake for current and future generations. Bow Lake is trending in the wrong direction and is at a tipping point to becoming a much less healthy waterbody. Since 2021, Bow Lake has had 6 Cyanobacteria Bloom Warnings and 4 Alerts, causing the beach to be closed and the lake restricted for 75 days.

### **Actions to Date:**

The committee is focused on two initial actions: educational communications and developing a Watershed Management Plan (WMP) to identify all the sources of nutrients (mostly phosphorous and nitrogen) that feed cyanobacteria and cause other problems. The WMP will also help prioritize and provide a roadmap for future actions to mitigate these problems, and it is needed to later qualify for additional grants to help pay for remediation actions, if found to be needed.

To fund the WMP, which typically cost from \$75K to \$100K, the voting citizens of Strafford and the Town recently supported a Warrant Article to provide \$25,000 toward this work. The Strafford Regional Planning Commission (SRPC) also applied for and won a \$25,000 PREPA Grant from the Piscataqua Region Estuaries Partnership (PREP) to be used toward the Bow Lake WMP. It is anticipated that a third grant from the NH Department of Environmental Services (NH DES) will be sought later this summer to fund the balance of the expected costs of a WMP.

### **Next Steps:**

The committee plans to initiate several forms of education, including handouts at public events, mailings, articles in the local newsletter, info on the Town and Planning Board websites, Facebook posts, and speakers to help all the residents of and visitors to Bow Lake learn how to avoid some of the causes of nutrient-loading and other problems at the lake.

There are several causes of excess nutrient loading, some natural and some are human-caused. They include runoff (particularly during heavy rains) from the surrounding lands and particularly, storm drain and roadway sources of discharges into the lake; over application of fertilizers; failed, poorly designed, and under-maintained septic systems; disposing of leaves and grass in the lake; waterfowl waste; internal nutrient loading from lake sediments; and other sources. The WMP will identify and evaluate the extent and impacts of these sources, and determine actions to reduce nutrient inputs.

To get a jump-start on the WMP, SRPC and the committee will be conducting a Septic Census. This will include the identification of the age, style, maintenance practices, and other information that will help determine the nutrient contribution from septic systems. The septic system survey is not an attempt to find information for compliance reporting. Rather, the survey will help determine the proportion of nutrients the septic systems contribute to Bow Lake compared to other nutrient sources. This will help identify the key lake water quality issues, and it may help in applications for future grants to obtain funding that will assist residents in paying for inspections, pumping, or replacement, if needed.

### **Thank You:**

Current committee members Phil Auger, Bob Bennett, Bruce Freeman, Howard Hansen, Sue Higgins, and Jeff Schloss thank the citizens of Strafford and the Town for their support of the Warrant Article, SRPC for their significant help, PREP for the grant they awarded, and you for your interest and assistance as we all move forward to preserve Bow Lake for all to use and enjoy. If you have interest in becoming involved with this important initiative please contact Sue Higgins (suemac2867@aol.com).

