## Agency of Natural Resources Department of Environmental Conservation Water Investment Division

## **MEMORANDUM**

To: Vermont House of Representatives, Committee on the Environment

Rep. Amy Sheldon, Chair

From: Chris Rottler, JD – Water Investment Coordinator, Watershed Planning Program

Date: January 27, 2025

Subject: Supplemental Answers to Testimony Provided on Clean Water Service Providers on January

22, 2025

1) What is the non-regulatory/natural resource portion of the phosphorus TMDL in the Lake Champlain and Memphremagog basins?

The TMDL model was originally built with the idea that the target reductions could be obtained through the regulatory sector (i.e. permit programs). Additional analysis was done that identified reductions from non-regulatory sources. The working assumption is that 25% of the TMDLs should be/will be met through non-regulatory projects, and 75% of the targets will be met through reductions obtained from regulatory programs. As noted in my testimony, CWSPs are only responsible for the portion of the non-regulatory section of the TMDL for which they have been provided funding in their Formula Grant(s).

2) What is the phosphorus efficiency per dollar spent from Clean Water Service Providers?

The average cost efficiency of the 24 implementation phase projects that have been funded by CWSPs is \$9,380.00 per kilogram of reduction each year. This number could change modestly when projects that are under construction are completed, and final numbers are reported. This is an average, however, and numbers do vary when looking at a specific basin or a specific project sector (i.e. forestry vs. stormwater, etc.)

The cost rate methodology <a href="https://dec.vermont.gov/sites/dec/files/wsm/erp/docs/2022-06-03\_FINAL\_FormulaGrantFundAllocations.pdf">https://dec.vermont.gov/sites/dec/files/wsm/erp/docs/2022-06-03\_FINAL\_FormulaGrantFundAllocations.pdf</a> outlines the expected costs per annual kilogram of phosphorus reduction which was just under \$14,000 per kg to bring a project from identification through design and implementation phases and including the 15% administrative costs. The current average costs for CWSP projects are slightly lower than this, although most projects that have been funded by CWSPs to date at the implementation phase benefited from earlier project ID, development and design funding, and the administrative costs of CWSP operations are not included so these costs don't reflect full costs of bringing a project to

completion. The added costs for those earlier phases and additional administrative costs would bring the costs up to this predicted average costs or even a little higher.

It is important to note that the existing set of projects funded at the implementation phase is limited with more, new efficient project types such as private forest roads becoming available. At the same time there are inflationary pressures in the other direction, and these average cost efficiencies are expected to change over time.

## 3) What is working well and what can we do better?

The system is ramping up, with more projects being identified and implemented. The whole effort has been a significant learning curve for both State staff and practitioners. More tools are being made available to CWSPs and project implementers, including additional project types such as forest roads and forest trails, and a contract has been signed to investigate projects on private roads. Basin Water Quality Councils are well-staffed, and there is robust participation in this important work.

Challenges exist, including: inflation; strains on the system from pressures on 'capacity'; a desire for additional 'tools', such as project types where CWSPs and implementers can look to address phosphorus pollution; and stress from an extended 'change management process.'

Yet, momentum is building, and progress is being made. The Department of Environmental Conservation, CWSPs, BWQCs, watershed groups, conservation districts, regional planning commissions, municipalities, and land conservation organizations are 'All-In', working to address phosphorus pollution from natural resource/non-regulatory sources.