

February 15, 2005

Paul Mitnik, P.E.
Bureau of Land and Water Quality
Department of Environmental Protection
17 State House Station
Augusta, ME 04333-0017

Dear Paul:

I write on behalf of the Androscoggin Lake Improvement Corporation (ALIC) to comment briefly on the December 2004 *Androscoggin River Total Maximum Daily Load Draft* report ("TMDL"). These comments are limited to the portion of the TMDL that discusses (1) the findings of non-attainment for the Dead River, and (2) the proposed actions by DEP to address this non-attainment. These comments should be read in conjunction with, and incorporate by reference herein, the written comments filed by ALIC with the DEP on December 15, 2004 regarding the November 2004 *Data Report*.

First, in the section titled "TMDL Summary, Description of the Waterbody" (page 1), and then again in section titled "Determining the TMDL, Introduction", mention must be made of the dissolved oxygen non-attainment found last summer on the Dead River. DEP can explain that, unlike for Gulf Island Pond, it believes that insufficient monitoring information is available at this time to determine the cause(s) of this non-attainment and therefore including an implementation plan for the Dead River is premature. However, the summary and introduction sections should note that this Dead River non-attainment is occurring not only on a water body that is very proximate in location to Gulf Island Pond, but more importantly is (1) hydrologically influenced by the River; (2) has a dam on it to minimize impacts to Androscoggin Lake from the same discharges that are being addressed in the TMDL; and (3) the existence of this dam, and the discharges being addressed in the TMDL, may or may not be causing or contributing to the non-attainment in the Dead River and that further study of this situation is critical.

Second, regarding the portion of the TMDL titled "Discussion of the Dead River" (beginning on page 46) ("Discussion"), ALIC offers the following comments:

- ▶ At the beginning of this discussion, the TMDL should explicitly state that, although there apparently was an absence of a monitored green algal bloom in 2004 (a brown bloom was observed), numerous past green blooms have been observed by local residents during summers with typical summer weather, suggesting under-reporting of this problem with only one year of data.

- ▶ Given the acknowledgement in the Discussion regarding how "much more data collection is need to fully determine how the system functions," ALIC strongly objects to the unsubstantiated cause-and-effect conclusions that are scattered throughout this Discussion (see examples below). These conclusions should be

removed from this Discussion, and DEP should simply (1) state the information that resulted from the monitoring; (2) state the further information that needs to be gathered; and (3) commit to doing so on a described schedule. For example:

* In the first full paragraph on page 49, DEP offers a definitive conclusion as to the cause of thermal stratification, without conductivity and other needed data;

* In the last full paragraph on page 49, DEP states that "it is clear that when the Dead River is thermally stratified, natural and non-point pollutant sources would be enough to cause non-attainment of Class B DO criteria," yet DEP acknowledges that it lacks any comprehensive loading data on natural and non-point pollutant sources that would be needed to reach such a definitive conclusion; and

* In the first paragraph on page 50, DEP states that "it is difficult to conclude that point sources contribute significantly to the DO non-attainment," yet DEP has performed no modeling, nor does it understand the system dynamics to make such a conclusion.

As stated above, the Discussion should be disciplined in abstaining from making conclusions on cause and effect without sufficient information, and should *only* (1) stating the information that resulted from the monitoring; (2) state the further information that needs to be gathered; and (3) commit to doing so on a described schedule.

▶ The information in the second full paragraph on page 50 is both incorrect and creates a highly erroneous impression. The percentages of phosphorus loads estimated by the 2003 DEP study are *projected* phosphorus levels, modeled to occur *after 5 years of maintenance of the 3 foot flashboards*. The percentages in the study are based on the projected level of 10.56 ppb phosphorus. In summer 2003, Androscoggin lake total-P levels were still 15 ppb; the expected decline in phosphorus levels has not yet occurred. The new flashboards were installed spring 2002, and the December 2003 flood broke the boards, which have since been repaired. It is not known whether the boards will hold up or break during the larger floods, whether logs booms will be necessary to protect the boards, or even whether the agreement providing funding for the maintenance of the boards will be signed and implemented

The more important and useful percentages from the 2003 study are as follows: if there were no dam, the projected phosphorus load to the lake would be 25.91 ppb, 72.6% of that from the Dead River during reverse flooding – 65% non-point source and 7.6% point source.

The study demonstrates that the existence and maintenance of the Dead River dam is necessary to avoid serious violations of GPA water quality standards. Therefore, the TMDL should explain that the recommended discharge limits are based on the assumption of the continued existence and maintenance of the Dead River dam.

▶ Finally, DEP needs to develop further monitoring and modeling information to know the causes of these known and expected violations on the Dead

River, since DEP possesses no credible information right now to demonstrate that implementing the solutions in the TMDL will bring the Dead River itself into compliance. As such, the TMDL should not be discussing (page 50) what DEP “could” do for additional data collection; it should state explicitly that DEP *will* conduct further Dead River monitoring in Summer 2005 and thereafter as necessary, and *will* initiate and conclude a monitoring and analysis process for the Dead River. The Discussion should further state that additional data collection and subsequent Dead River monitoring work will be aimed at identifying the point and non-point causes of last year’s violations and any subsequent monitored violations, and that this monitoring should continue as any phased new phosphorous reductions occur in the discharges on the River unless monitoring and modeling conclusively demonstrate that point source discharges of phosphorous into the River are irrelevant to achieving attainment on the Dead River.

▶ ALIC agrees that the scope of the Dead River monitoring should include the four types of data collection described, and we are willing to offer volunteers and/or paid staff to assist with the project whenever possible and appropriate.

Thank you for this opportunity to comment.

Sincerely,

Molly Saunders, Chair, Dead River Dam
Project
Androscoggin Lake Improvement Corporation