January 25, 2016

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Re: Comments of the Council of Great Lakes Industries on draft 2015 Lake Superior Lakewide Action and Management Plan

Dear Chris and John:

Thank you for the opportunity to provide comments on the draft 2015 Lake Superior Lakewide Action and Management Plan (LAMP). The discussion below includes both specific comments regarding draft LAMP language and general reactions to the process used for developing the objectives and content of LAMPs.

Briefly, although the Great Lakes Water Quality Agreement (GLWQA or Agreement) charges the Parties (the governments of Canada and the U.S.) with responsibility for producing LAMPs, CGLI believes that LAMP development, the process of building “buy-in” for LAMP provisions, and the implementation of LAMP priorities would be greatly enhanced if opportunities for stakeholder participation were greatly increased. Previous models for management of Great Lakes water resources have demonstrated the value of open processes and robust stakeholder engagement. To ensure success, current LAMP development processes should be returned to a multi-stakeholder engagement format.

Engage stakeholders more fully in Lake Superior Partnership activities

The draft LAMP identifies the government agencies in the Lake Superior Partnership as the parties that will be responsible for developing and implementing the LAMP. Although this definition of authority and responsibility is important and helpful, LAMP implementation will require significant engagement with non-government parties. Non-governmental groups should be considered “partners” in Partnership activities and be recognized formally and explicitly in the LAMP. Building this larger “team” will be essential for achieving LAMP objectives.

The Executive Summary, Section 9, and other portions of the draft LAMP refer to “the importance of the involvement of all Lake Superior stakeholders.” Moreover, the document
states that various non-governmental personnel were consulted during the drafting process. In fact, the Executive Summary states that “the Lake Superior Partnership works closely with other Lake Superior stakeholders including First Nations, Métis, municipalities, watershed management agencies, environmental groups, industry representatives, academia and members of the general public.” However, from our perspective any consultation that occurred during the development of the draft LAMP was neither open nor evident, and broader opportunities to consult on the draft LAMP were not widely solicited. In fact, CGLI attempted at several points during the drafting effort to engage with the drafting team, but was not offered an opportunity to do so.

CGLI requests that all interested stakeholders be engaged in Partnership activities as the final LAMP for Lake Superior is developed. Broader stakeholder participation also is necessary as LAMPs are developed for the other lakes. At the very least, a multi-stakeholder Advisory Committee should be established for each LAMP Partnership to provide a structured opportunity for stakeholder input.

Revisit the characterization of “threats” to Lake Superior

CGLI suggests that the draft LAMP use the term “stressor” instead of the term “threat” when describing issues that may adversely impact the Lake Superior ecosystem. Annex 2 of the GLWQA requires the Parties to “address environmental stressors that adversely affect the Waters of the Great Lakes which are best addressed on a lakewide scale through an ecosystem approach.” In our view, “stressors” are activities or agents that cause stress and require study or management in order to meet the specific objectives in the Agreement. Threats are more quantitative in nature. They are, in essence, declarations of intention or determinations of action that result in injury or other outcome. The draft LAMP uses these terms interchangeably, but the mere presence of a stressor or the existence of a potential risk is insufficient in and of itself to produce a “threat” to the lake. In addition to identified hazards, i.e. stressors, the likelihood of an unfavorable outcome, i.e. threat, must be considered.

Use more precise and balanced language when discussing threats/stressors in Section 4.2

Many of the topics and issues described in the draft LAMP are important in the Lake Superior region, but the language used in the draft must accurately describe the issues and their current status. Several examples follow.

“Chemical Contaminants”

- Figure 4 (page 35) attributes 63% of mercury releases in the Lake Superior Basin in 2010 to the mining/metals production sector and pinpoints the taconite industry in the caption. There are several problems with this eye-catching presentation. First, what is the source of this data? What kind of releases are these (water, air, waste generation)? How are the mercury releases in the figure related to the 80% reduction in mercury emissions described in the paragraph immediately above the figure? What portion of the 80% reduction is attributable to the mining/metals production sector?

- The draft states that modeling estimates show that 87.5% of mercury deposition to Lake Superior originates from global sources outside of the US and Canada (page 36). Are these global sources of mercury reflected in Figure 4? What portion of all sources of
mercury to Lake Superior (external, in-basin, and natural-occurring) is represented by the data in Figure 4?

“Additional Substances of Concern”

- This section identifies “pharmaceuticals and personal care products” as a threat to Lake Superior (page 38). Pharmaceuticals and personal care products are defined as “a diverse group of chemicals that enter waterways through wastewater treatment plant discharges after human use, and from agricultural run-off due spreading of biosolids or use in livestock.”

The only explanation in this section as to why personal care products threaten Lake Superior is the following vague suggestion:

There are concerns about the presence of pharmaceutical and personal care products chemicals in water as many are bioactive, some have the potential to bioaccumulate, some are persistent, and as the sources are often continuous (wastewater), there are constant exposures in waters where discharges occur.

No data, study or other reference is offered to support this assertion. Moreover, most personal care products are not “chemicals” in themselves, but rather are formulated products comprised of numerous chemical compounds. Finally, many personal care products that have created ecosystem concerns in the past have been or are being reformulated to alleviate concerns expressed in draft LAMP. The language used in the draft to describe the “threat” posed by personal care products seems vague and incomplete.

- This section also identifies “microplastics” as a threat to Lake Superior (page 38). However, this discussion confuses plastic debris with micobeads and fails to acknowledge the extensive progress that has been made in the region with respect to microbeads. Among other things, this section should be revised to incorporate information about the US federal legislation that recently was enacted regarding microbeads.

- The last paragraph on page 38 notes that very low concentrations of certain chemicals of emerging concern have been detected in the lakes at very low concentrations. The text cites unpublished Canadian data to support this assertion. What US data can be included to provide context for this information?

“Other Threats”

- The section entitled “Other Threats” identifies oil transportation as a threat to Lake Superior (page 40). The text highlights quantities of oil products that are being shipped in the US and Canada (are these quantities being shipped in the Lake Superior basin?) and apparently regards the activity as a risk simply because it occurs. These statements do not acknowledge that many potential risks associated with this activity are being managed through planning and readiness by response organizations already in place. This paragraph also mentions “proposed” shipping depots and oil storage/transfer facilities. As far as we know, there has been only one proposal to build a shipping depot in the Lake Superior basin, and it was withdrawn in August 2015.
This section also identifies mining impacts as a threat to Lake Superior (page 40). However, the description of “mining impacts” on page 40 does not acknowledge operational changes that mining companies have made to address impacts. Identifying mining activities categorically as a threat to the Lake Superior basin without acknowledging work that has been done by mining companies to address these issues does not accurately describe the current status or establish the likelihood that this potential stressor will become a threat to Lake Superior. Further, the parenthetical statement in this section (“mining is currently the largest source of mercury emissions in the basin”) is misleading. Out of basin sources contribute more mercury to Lake Superior. Finally, one of the top projects designed to address mining impacts proposes to map current and proposed mining sites (page 63). Depicting mining sites on a map does not establish the relative significance of the mining operations and implies that all mining operations in the Lake Superior basin threaten the lake.

As outlined above, CGLI recommends that all references to and descriptions of “threats” to Lake Superior be reviewed to ensure that the language is clear, accurate, and balanced. Listing potential stressors as threats to Lake Superior without explaining the significance of each potential stressor within the specific context of the Lake Superior ecosystem in a balanced and unbiased way weakens the LAMP as an implementation tool and may diminish buy-in from impacted stakeholder communities.

**Recognize human uses as important and natural**

The draft LAMP describes how human interaction with the environment has and can be used to mitigate and prevent destructive and/or problematic natural resource uses. Examples include the opening paragraph in the Executive Summary on page 3; the discussion of “threats” in the Management Actions section starting on page 6 (including the Top Projects listed in Table 2), and the detailed descriptions of Top Projects starting on page 61.

CGLI suggests that draft LAMP language also be revised so that it acknowledges that human utilization of natural resources is necessary and expected, and is a significant part of the resources management picture. As stated in the Executive Summary, “[t]he ultimate success of restoring and maintaining the Lake Superior ecosystem depends on the efforts of everyone.” The discussion of resource utilization by indigenous inhabitants and the practice of Traditional Ecological Knowledge is a good start toward acknowledging necessary interactions between humans and natural resources. The description of the Status of Lake Superior beginning on page 16 and other LAMP sections should recognize that sustainable human uses of the lake’s resources is an essential component of the lake ecosystem management picture that will result in changes to the pre-settlement landscape. An overarching goal of the LAMP should be to provide a framework for ensuring that the human use of Lake Superior water resources can be satisfied as the lake ecosystem is protected and restored.

**Expand the social and economic benefits derived from Lake Superior resources**

CGLI appreciates that the draft LAMP acknowledges the importance of the social and economic value of the Lake Superior resources (pages 12 and 13). However, the description of the “economic engine” that is fueled by Lake Superior resources should be expanded. Business and industrial activities that support the region on both sides of the border are much more robust than
indicated. In addition, we suggest that the schedule of Lakewide Management Actions in Section 9 include studies regarding the size, scope, and trend in economic activity in the Lake Superior basin.

**Improve coordination of research and action plan implementation**

Section 9 of the draft LAMP describes the Partnership’s top priorities for protecting and restoring the Lake Superior ecosystem in each of nine categories. Missing from the descriptions is enhanced research program support, planning, and coordination. Such planning is necessary for optimal direction of finite research and management program resources. For example, under the heading of “Additional Substances of Concern,” the draft LAMP calls for increasing the level of public education on new and emerging chemicals; their potential toxicity, pathways into fish, wildlife, and humans; and how the public can help remove them from the basin. Special emphasis on the topics of microplastics and safer alternatives for personal care, household cleaning products, and pesticides/herbicides (page 61).

This description overlooks the need for research into understanding of the significance of these items and their relative importance with respect to other ecosystem stressors. To understand this significance, studies within a life-cycle analysis context are needed in order to identify exposures, pathways, etc. CGLI suggests that each project description include the research program support, planning and coordination that is necessary to project success.

**Describe plans for continued monitoring and surveillance**

Planning for continued monitoring should be an essential part of the LAMP program. Sections 5.1 and 8.0 regarding the CMSI initiative describes previous sampling efforts and acknowledges the need for a 2016 monitoring effort. However, no mention is made of planning processes, including opportunities for public input, that will guide and support this important science-based effort. We suggest that the LAMP establish a plan for building constituencies for continued monitoring and a framework for ensuring that resources necessary for maintaining monitoring programs remain available. Enhanced public collaboration can serve an important role in supporting continued monitoring programs.

CGLI appreciates the opportunity to provide these comments and looks forward to enhanced opportunities to work with Annex 2 personnel on the LAMP development and implementation effort.

Sincerely,

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