

**From:** [Smith, Alex R - DNR](#)  
**To:** [David Blumer](#); [Lewis, Timothy L.](#); [Valarie Bausch](#); [Tom Goodwin](#); [geraldjj@centurytel.net](mailto:geraldjj@centurytel.net); [Michael Klutho](#)  
**Cc:** [Mesalk, Tyler J - DNR](#)  
**Subject:** RE: Red Cedar Lakes Comp Plan - with DNR edits that I can make  
**Date:** Tuesday, September 26, 2023 10:41:00 AM

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Hi everyone,

If the RCLA intends to apply for grant funds to implement activities in this management plan, please send me an email requesting an eligibility determination. The request must include 1) a cover letter with a brief description of the activities proposed for grant funding, 2) The citation of the supporting recommendation(s) in the plan, 3) a complete copy of the management plan, and 4) a summary of any public comments received. The request would need to be made by September 15, 2024.

That said, most of the activities in the plan do not require this eligibility determination or funding from a [Management Plan Implementation Grant](#).

- Agriculture in the watershed – counties should take the lead in contacting farmers, assessing fields, designing and implementing BMPs. RCLA can be a partner if funding falls short perhaps, but planning and Lake Restoration grants can provide funds. Also, DNR TRM grants could be an option.
  - Consider reaching out to the county conservationists and ask if they can help and what resources they might need
- Gully repair – planning grants can cover design costs and Lake Restoration grants can provide up to \$50k for implementation once the design is complete
- Shoreline restoration and erosion – Healthy Lakes and Lake Restoration grants
- Septic System – education grants can help with outreach, counties have authority for enforcement
- Additional monitoring and modeling – surface water planning and comprehensive planning grants
- Alum is not eligible until the external sources have been minimized to the greatest extent possible
- We do not understand the need for a boating use survey and how that will lead to a reduction in internal load.
- County forestry offices manage the ATV trails in the area. There are ATV grants available to cover trail maintenance and improvements, including bridges.

I hope that helps and feel free to reach out with any questions.

Best regards,  
Alex

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**Alex Smith**

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**From:** David Blumer <dblumerleaps@gmail.com>  
**Sent:** Saturday, September 9, 2023 2:06 PM  
**To:** Lewis, Timothy L. <lewi0118@stthomas.edu>; Valarie Bausch <vbausc@yahoo.com>; Tom Goodwin <tlgfin1@gmail.com>; geraldjj@centurytel.net; Michael Klutho <mklutho2801@gmail.com>  
**Cc:** Smith, Alex R - DNR <Alex.Smith@wisconsin.gov>  
**Subject:** Red Cedar Lakes Comp Plan - with DNR edits that I can make

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Hi Folks,

I thought I sent this out a month ago on or about August 18th. Apparently not. This is a modified draft of the Comp Plan that takes into account as many of Alex Smith's comments as I could. It still does not include modeling, which was major part of the comments Alex made.

Going back through all the grant materials and descriptions for this project, modeling was not mentioned as a task that was going to be done by LEAPS. This makes sense, I am not a lake modeler.

If the RCLA and/or the WDNR are going to require modeling for the plan, then someone else will have to do it. I can't and won't. Nor was it a part of the original project.

Everything else that I could address in Alex's comments I did. The Comp Plan is attached.

Dave

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Check out [LEAPS Facebook!](#)

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**From:** Smith, Alex R - DNR  
**Sent:** Thursday, June 29, 2023 2:07 PM  
**To:** geraldjj@centurytel.net; daniel.zerr@wisc.edu; legacyappletonllc@yahoo.com  
**Cc:** vbausc@yahoo.com; tlgfin1@gmail.com; oldtobylewis@gmail.com; mklutho2801@gmail.com; dblumerleaps@gmail.com; Mesalk, Tyler J - DNR; Broadway, Kyle J - DNR  
**Subject:** RE: Red Cedar Lakes Association (RCLA)

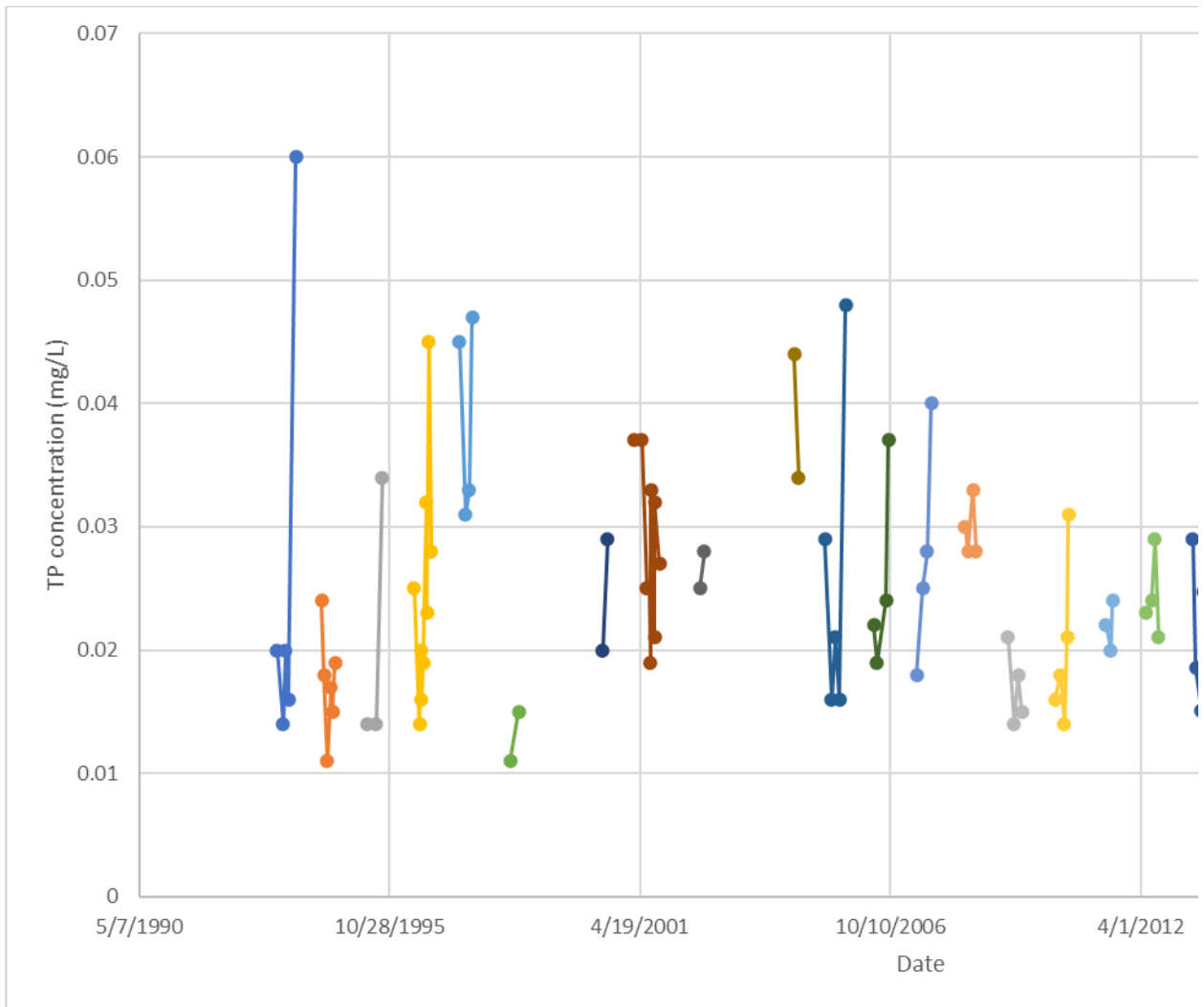
Good afternoon Gerry,

Thanks for submitting the Red Cedar Lakes Association Management Plan for review. Upon review, DNR staff have the following comments:

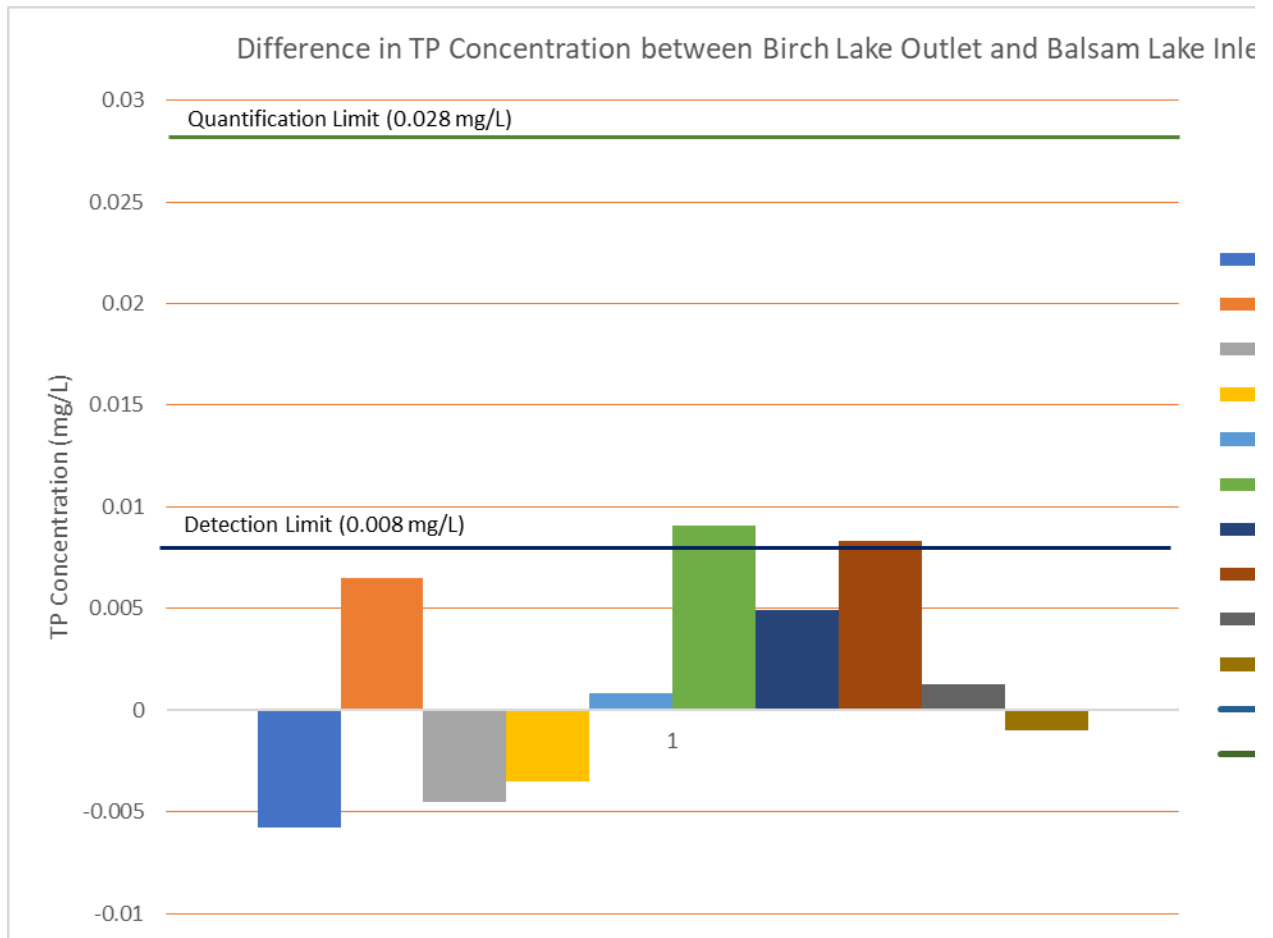
- The Plan should begin by describing State water quality standards for each lake and how this management plan will work to achieve those standards. Are the lakes meeting their respective standards? If not, how will the plan achieve those standards?
  - What total phosphorus (TP) reduction is necessary to achieve state water quality standards? What projects are necessary to achieve the standards? How will the lake's TP and Chlorophyll a concentrations respond to the reduction in external TP loading? Is it possible to achieve 15 ug/L in Red Cedar – maybe lay out the need for a Site Specific Criterion?
  - Page 51: “The best management prescription for protecting any two-story fishery is preventive maintenance – keep 1308 nutrient levels at or below their current levels. Protecting the watershed protects the lakes and protects the 1309 fish.” Again, the plan should be built upon the fact that the lakes are classified as two story lakes in WisCALM. The Plan should provide specific ways to reduce TP inputs such that the lake achieves water quality standards. Keeping nutrient levels at current levels isn't adequate given the lack of oxythermal habitat.
- Objective 1: Reduce the total amount of TP loading into Balsam Lake from Birch Lake (Red Cedar River) (4,827lbs) by 10% (483lbs) over the next ten years (2024-2033) (Table 1).
  - All the actions below this objective are studies to contemplate – nothing tangible (“evaluate alum”, “possible management actions”, etc.). What specific activities will achieve a 483 pound reduction?
- Objective 2: Reduce the total amount of TP loading into Red Cedar Lake from Pigeon and Sucker Creeks 91 (4,721lbs) by 75% (3,541lbs) over 10 years - 30% (1,417lbs) in the 1st five years; and an additional 45% 92 (2,124lbs) in the 2nd five years.
  - Are these numbers realistic? What would it take to achieve 75% reduction? How would the lake respond with a 75% reduction?
  - The actions are generic:
    - “Agricultural assessment”
      - how, what methods/protocols, who will do the assessment, is it repeatable for future comparisons?
    - “Address issues with cropland, barnyards, livestock fencing, and existing buffers”
    - “Watershed work in Sucker Creek/Pigeon Creek (1) Land use (2) Forestry”
      - Again, what are the projects and practices necessary to reduce TP? Does the Lake Association know the next steps to begin working on an Agricultural Assessment or Addressing issues with cropland? How will watershed projects and progress be tracked over the life of the Plan? Section 11 talks about annual reporting and tracking. Who is responsible for annual reporting and tracking?
  - Since the Plan doesn't specify which watershed BMPs should be pursued, we used cover crops from the Tainter Lake/Red Cedar TMDL as an example (realizing that site specific practices and reductions would be better). The Plan calls for reducing 1828 lbs of TP load in Pigeon Creek watershed. A 1828 pound reduction would require 10,880 acres of cover crops according to modeled reductions in the TMDL.

There are a total of 6295 acres in the Pigeon Creek watershed and only 770 acres of cropland. Applying cover crops to all 770 acres would reduce TP load by 129 lbs.

- Also, according to the TMDL, cropland loads TP at a rate of 1.18 pounds per acre. Forest land loads TP at 0.125 pounds per acre. Converting all the cropland/Ag land (770 acres) in Pigeon Creek to forest would result in a reduction of 812 pounds, from 908.6 pounds to 96.25 pounds. This demonstrates that even converting all of the agricultural land to forest would not be enough to achieve reduction goals in Objective 2 of the Plan (1828 lbs.). This gets back to the Site specific Criterion; if all the land area in the Red Cedar Lake's watershed is forested, would the lakes' resulting TP concentrations achieve state water quality standards?
- Plan shows maps of land use and includes tables for each sub-watershed. However, the Plan doesn't include a lake model or modeled inputs from each land use
- Plan should include a lake response model – are watershed projects worth it? Will the lake respond with improved water quality?
- Many signs point to naturally elevated TP concentrations:
  - Big Chetac has high groundwater TP concentrations
  - Paleocore results suggest the lakes are naturally eutrophic
  - Elevated baseflow TP concentrations in midsummer indicate groundwater contributions of TP
  - Low sediment concentrations in streams suggesting low runoff
- Recommend the Lake Association should quantify groundwater TP contributions in future study.
- Plan does not adequately display in lake water quality. The Plan has a lengthy narrative describing ranges of annual averages that is confusing and difficult to discern. The Plan should use graphs to display nutrient data and instead. Annual average data smooths out intra-annual variation like spring TP spikes or late summer TP increases. "The value in 2019-20, though lower than the value from 2001, was still higher than what it was in 1993, suggesting TP is increasing." After graphing the data, it's difficult to see a TP trend. The data are variable both within a year and between years.
  - Lake Association may need to further investigate TP data. In some years the highest TP concentrations are in spring with decreasing TP through the summer. In other years, TP concentrations are low in spring and increase through the summer. Why? Wet vs. dry years? Windy conditions increasing internal loading in Red Cedar? Large CLP concentrations in some years? Something else?



- Page 76 – “Data from two sampling sites – immediately below the Birch Lake dam, and another site just before the Red Cedar River enters Balsam Lake, suggest that a large wetland system between the Birch Lake dam and the inlet to Balsam Lake is adding phosphorus to the surface water.” The data in SWIMS do not support this statement. Six sample dates show that the upstream TP concentration is higher and four dates show the downstream TP concentration is higher. However, most of the time the differences between upstream and downstream are very low; below the detection limit of the lab meaning the lab can’t detect a difference. This suggests the wetland isn’t acting as a sink or a source. The TP concentration increases and decreases between upstream and downstream typically mirror each other



- Plan recommends reducing internal loading for each of the lakes by 10% (USGS report recommendation) – is this a problem? Is there a nutrient budget for each lake?
  - Balsam Lake is deep and strongly stratified. Is there rationale for a boating survey to understand sediment phosphorus release due to boat wakes?
  - What’s the rationale for alum and iron filings? Again, Balsam is strongly stratified and TP is still coming into the lake from Birch Lake. Analysis should be done to better understand how Balsam acts like a P sink and if occasional alum/iron additions would improve the P sink and protect Balsam and other downstream waters
  - Plan recommendations should be lake specific - Hemlock is shallow, so boat wakes could have more potential to resuspend sediment vs. Balsam Lake for example.
- Water budget – residence time. The plan does not factor stratification into the calculations. During summer, the lakes are only cycling the epilimnetic water, not the water below the thermocline. Plan should use flow data, stratification, and nutrients to describe residence time and nutrient loading.

Thanks for all your efforts to protect and improve the Red Cedar Lakes and Red Cedar watershed! Please reach out with any questions.

Best regards,  
Alex

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Alex Smith

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**From:** geraldjj@centurytel.net <geraldjj@centurytel.net>  
**Sent:** Tuesday, May 23, 2023 2:15 PM  
**To:** Smith, Alex R - DNR <Alex.Smith@wisconsin.gov>; daniel.zerr@wisc.edu; legacyappletonllc@yahoo.com  
**Cc:** vbausc@yahoo.com; tlgfin1@gmail.com; oldtobylewis@gmail.com; mklutho2801@gmail.com; dblumerleaps@gmail.com  
**Subject:** Red Cedar Lakes Association (RCLA)

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Good afternoon,

Attached you will find the RCLA 2024-2033 Comprehensive Lake and Watershed Management Plan which we have been working on since last summer. The process includes a 21 day comment period before it is officially submitted to the Wisconsin DNR for approval.

Because of your deep involvement in the watershed, our Board is asking you to review the plan and make any comments or suggestions as you see fit. On behalf of our Board, thank you for taking the time to review and comment on the plan.

Sincerely,  
Gerry