Amy P. Smagula the Editor

his spring issue of LakeLine looks at some lake and watershed restoration and rehabilitation projects in different lakes across the upper tier of the United



States, including one from Minnesota, two projects from the State of Maine, and another from Washington state.

Jeff Strom, Amy Timm, Jesse Anderson, and Scott MacLean share an

article summarizing and reflecting on more than 20 years of data from Minnesota, related to lake impairments, and trends in delisting of waterbodies that were once on the state's list of impaired waterbodies. The authors review the state's assessment and delisting process and discuss physical and chemical characteristics of the lakes that were delisted. They include a great breakdown of the various best management practices that were used on each waterbody. This is an excellent summary of the work being done to improve water quality and rehabilitate lakes that were once impaired. The authors also share several links to online sources of information from Minnesota that guide their process with lake and watershed work.

Robert Kennedy, Linda Bacon, and Aaron Englander outline the history of nutrient loading to Lily Pond in Rockport and Camden, Maine. They review historical land uses and nutrient sources to the pond, and best management practices that were utilized in the watershed to reduce those nutrients. Water quality monitoring over time documents reductions in nutrient load and chlorophyll-a in the pond and increases in transparency.

Jennifer Jespersen shares information about degrading water quality and

algal blooms in Georges Pond in Franklin, Maine. Her article focuses on bringing in stakeholders and project partners to plan for monitoring, and using the data generated from that monitoring to implement both an in-lake and watershed-based restoration plan for Georges Pond. Restoration efforts included two aluminum doses and several watershed projects.

Shannon Brattebo, Marisa Burghdoff, and Jen Oden provide the details of water quality in Lake Ketchum, a small lake north of Seattle, Washington. Because of historic nutrient loading from agricultural land use practices, the lake water quality declined, and persistent cyanobacteria blooms were a major problem. With a strategy of watershed phosphorus reductions and regular (annual) aluminum treatment to the lake, water quality has rebounded in the lake and continues to improve each year.

In the LakeLine Student Corner, Kaitlyn Button, a graduate student at Paul Smith's College, shares her work on the impacts of saltwater intrusion on freshwater macroinvertebrates in the Herring River system in Wellfleet, MA.

To collect data for projects like these, many of us now use continuous data loggers to allow us to collect data real-time at intervals we choose, even down to the minute, and then upload it to a cloud to make it readily available for our use. Our NALMS Lakespert, Steve Lundt, adds his thoughts about these data loggers and realities for integrating their use into lake monitoring and restoration projects.

Also included in this issue is an update from the NALMS 314 Working Group about their efforts to build momentum to restore funding to Section 314 of the Clean Water Act. A re-allocation of funding to this program can lead to implementation of even more projects focused on lake

rehabilitation and even protection and preservation efforts to limit future lake water quality decline.

Finally, our NALMS Board of Directors met in March for their mid-term meeting. A summary of their discussions is included in this issue.

Enjoy!

Amy P. Smagula is a limnologist with the New Hampshire Department of Environmental Services, where she coordinates the Exotic Species Program and special studies of the state's lakes and ponds. **

UPCOMING IN LAKELINE

Summer 2024: Waterfowl are synonymous them), why not share an article about them? Articles related to waterfowl and lakes are welcome. Topics could include managing waterbodies for waterfowl, mitigating impacts of waterfowl, discouraging waterfowl, lake related occurrences and impacts on waterfowl (aquatic vegetation related HABs and waterfowl impacts), and more. Draft articles for the summer issue of LakeLine are due by June 15, 2024, for publication in July 2024.

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Fall 2024: Ballast boat sports are very popular these days, riding both waves and wakes for recreational pursuits. The fall an article that you would like to include

(Upcoming issues, continued on p. 13...