

Vermont Department of Environmental Conservation

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Agency of Natural Resources

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MEMORANDUM

TO: Friends of Vermont Lakes

FROM: Perry Thomas, Lakes and Ponds Program Manager

SUBJECT: Vermont Aquatic Nuisance Species Management and Invasive Species Spread Prevention

DATE: May 24, 2019

CC: Emily Boedecker, Commissioner, DEC
Pete LaFlamme, Director, Watershed Management Division

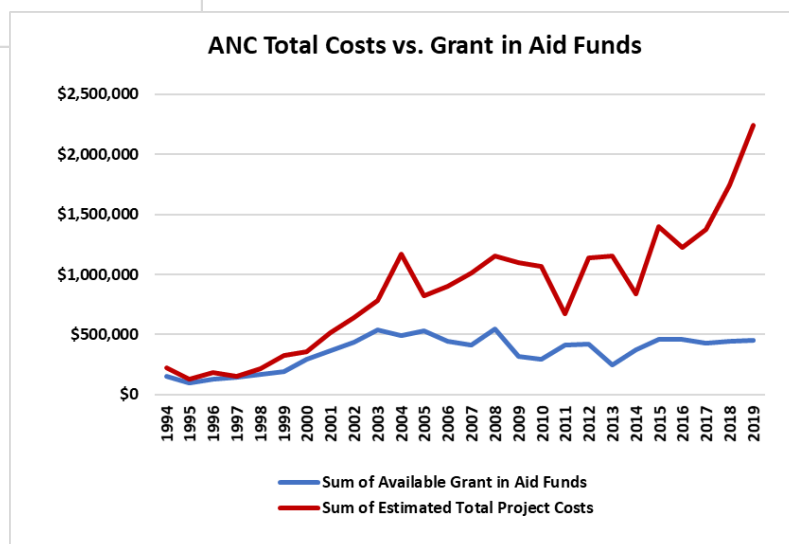
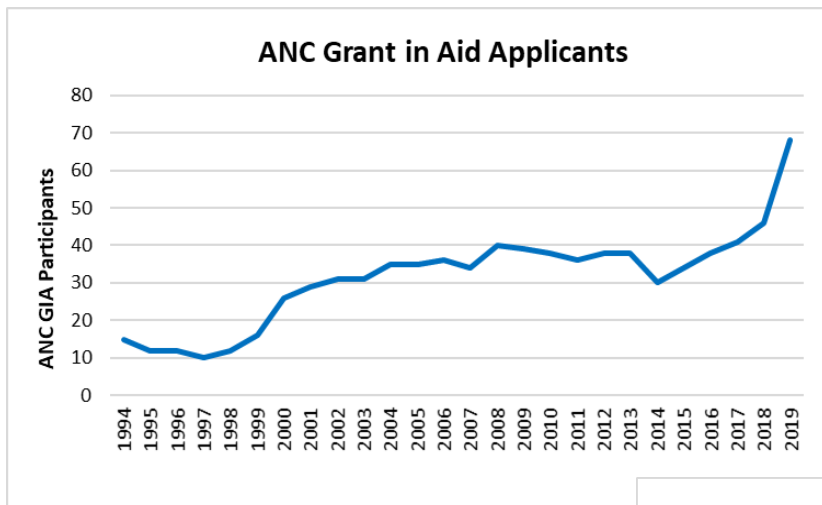
Thank you for contacting me recently about your concerns over the future of staffing for Vermont's work in aquatic nuisance species (ANS) management and invasive species (AIS) spread prevention. I am pleased to report that Division and Department leadership are fully supportive of the Lakes and Ponds Program's plan to not only maintain past staffing levels but also expand our mapping and reporting capabilities.

Yes, it's a tall order to fill gaps left by the departures of Ann Bove in 2017 and Josh Mulhollem this year. We're fortunate, though, to have talented, hardworking staff members ready to step up on behalf of Vermont's lakes in collaboration with strong partners like you. See the attached annual update for a summary of work we accomplished in 2018 and our plans to strengthen this work in 2019. Our AIS/ANS team includes two full-time, year 'round staff members, two to three seasonal staff members, and a summer intern. In addition, the Lakes and Ponds regulatory team supports the AIS/ANS team by managing Aquatic Nuisance Control permitting. Staffing details are described below, *with numbers of staff members and funding sources italicized*.

Grant Management and Overall ANS/AIS Coordination

This work is conducted by Kim Jensen in a full-time, year 'round Environmental Scientist position funded by a portion of the Agency's income from Motorboat Registration (MBR) fees. In addition, a temporary staff member is hired each year (funded by MBR fees), and we recruit a UVM Rubenstein Perennial Intern (funded by a partnership between UVM and DEC) to assist with water chestnut management and plant surveys.

Kim Jensen applies knowledge gained from a wealth of experience in project management and grant oversight as she assumes responsibility for overall ANS/AIS coordination and for shepherding incoming and outgoing grants. As many of you know, DEC receives funds from the Army Corps of Engineers, U.S. Fish and Wildlife Service, and Lake Champlain Basin Program to support extensive water chestnut management work in the Lake Champlain Basin and aquatic nuisance species management actions statewide. Each of the federal grants we receive requires ongoing communication with our federal partners as well as budget management and annual reporting. In addition, Kim oversees distribution of Aquatic Nuisance Control grants in aid, with support from DEC's Business Office. Over the past few years, we saw a marked increase in the demand for these funds (see figures below).



To support the many partners who seek funds for AIS spread prevention and ANS management projects, we hope to increase the amount of money available for grants in aid by tapping into more federal funding for projects in the Lake Champlain Basin, thereby releasing additional state funding for lake communities outside the Basin. To ease the administrative burden associated with the increasing number of grants awarded (e.g., 68 grants awarded in 2019), we are piloting a block grant approach this year. We look forward to expanding the number of block grants in 2020.

Kim also serves as lead aquatic invasive plant species identification expert, bringing to this work the skills of an experienced naturalist with a background in botany. She is supported in this role by several aquatic plant experts in the Watershed Management Division as well as colleagues in DFW's [Wildlife Diversity Program](#).

AIS Spread Prevention: Technical Assistance/Lake Access Greeters/Decontamination Stations

Going forward, most of DEC's AIS outreach work, including training and oversight of volunteer greeters and monitors, will be conducted by a full-time, year 'round Environmental Scientist funded by a portion of DEC's income from MBR fees. In addition, each summer we recruit one or two temporary staff members to support this work (funded by MBR fees).

This full-time Environmental Scientist is a new position, under development in [partnership with the New England Interstate Water Pollution Control Commission and the Lake Champlain Basin Program](#). We anticipate that the person filling this position will bring additional expertise in aquatic invasive animal species and

knowledge of spread prevention methods to augment existing expertise across DEC and DFW. As DEC's lead AIS/ANS outreach staff member, we expect this person to strengthen our partnership with DFW's Game Wardens and expand messaging regarding AIS spread prevention, with tools such as the [Vermont Boating Resource Guide](#).

The person in this position will operate and manage DEC's equipment related to spread prevention and AIS monitoring, including several watercraft; six decontamination units; and associated trailers. In addition, this person will train [Public Access Greeters](#) in operation and maintenance of DEC's decontamination equipment.

Aquatic Nuisance Control (ANC) Permitting

During 2018, Josh Mulhollem and Kim Jensen managed ANC permitting. In anticipation of Josh Mulhollem's departure, we moved ANC permit writing back under the umbrella of the Lakes and Ponds Program's regulatory team. The ANC permit drafting process continues to be efficiently supported by Environmental Technician Tim Cassese. Permitting staff are supported by permit application fees and the General Fund.

Over the past few months, permitting team supervisor Misha Cetner updated ANC permit templates and incorporated ANC permit application records into the database used to manage Encroachment and Shoreland Protection permits. This database is paired with a dashboard that allows permitting team members to efficiently track key stages in the permit drafting process as well as the public review period. There is also a public facing database, known as the Environmental Notice Bulletin (ENB). To receive notices regarding when ANC permits are ready for review, [set up an account with the ENB](#).

Note that we have strengthened our collaboration with tactical basin planners as we work with lake communities to improve long-range management plans required with ANC permit applications. As part of their long-range plans, applicants are asked to incorporate "a schedule of pesticide minimization." One important step toward pesticide minimization is to reduce nutrient loading from a lake's watershed. Tactical basin planners use various tools, including stormwater master planning, road erosion inventories, and lake wise evaluations to identify and prioritize actions that will reduce rates of nutrient runoff into lakes. In collaboration with regional partners, these projects are then targeted for funding through [Ecosystem Restoration Grants](#) and other funding sources. Given the importance of these actions to long-term lake health, we encourage citation of [tactical basin plans](#) in the long-range management plans included in ANC permit applications.

Going Forward

As we develop further plans, we anticipate not only upholding standards of the past but also practicing continuous improvement, just as Ann and Josh did. For example, during 2020, we will improve mapping of AIS populations in Vermont and refine our analysis of AIS distribution. The results of these analyses will help us target spread prevention efforts more effectively and catch new introductions earlier. Additional geographical and mapping expertise will be contributed by DEC's Monitoring, Assessment, and Planning Program.

Finally, we recognize that our work to monitor and manage cyanobacteria blooms falls under the category of ANS management. Allocating resources to this work is especially important as concern grows over the health effects of cyanotoxins. Here again we collaborate with partners to ensure that we practice state of the art monitoring and management. Partners include the [Vermont Department of Health](#), [NEIWPC](#), the [U.S. EPA](#), and the [Interstate Technology & Regulatory Council](#).

To learn more about how the Lakes and Ponds Program continues to lead Vermont's ANS management and AIS spread prevention campaigns, I urge you to attend the 2019 Lake Seminar. This year's Seminar will be held at the Lake Morey Inn on Friday, June 7, 2019. You'll find an agenda and a link to the registration site at <http://vermontlakes.org/about-us/lake-seminar/>.