



## MEMORANDUM

**To:** MCWD Board of Managers  
**From:** Brian Beck, Research and Monitoring Program Manager  
**Date:** June 13, 2019  
**Re:** Research and Monitoring Strategic Direction

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### **Purpose:**

To review and obtain feedback on the 2016 Board adopted strategic direction of Aquatic Invasive Species (AIS) programming, and the current balance of AIS initiatives within the Research and Monitoring Program in context of the 2020 budget.

### **Background:**

#### Origin of MCWD AIS Programming:

The Minnehaha Creek Watershed District's (District or MCWD) involvement in Aquatic Invasive Species management began following the discovery of zebra mussels in Lake Minnetonka in 2010. However, the Aquatic Invasive Species (AIS) Program was officially established as an amendment to the 2007 Comprehensive Plan (pps. 97-d through 97-ggg) in July 2013. In 2014, the District began implementing AIS activities outlined in the 2007 amended Comprehensive Plan.

A priority goal the AIS programming, as conceived in 2013, was to prevent the introduction of AIS to waters where they were not present. To achieve this goal District staff developed programming for prevention, containment, and control of AIS throughout the watershed. This program enlisted a variety of strategies, which included:

1. Cost-share support to partners' boat launch inspection programs (Prevention)
2. Early detection and rapid response (Containment and Control)
3. Education and outreach

Between 2013 and 2016, the AIS Program implemented these strategies in an attempt to stop the spread of AIS in MCWD. However, over that period AIS infestations continued to occur in MCWD lakes despite considerable financial investment and staff efforts.

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## 2017 Strategic Direction of MCWD AIS Programming:

In 2016, as part of a Board commissioned organizational strategic planning process, District staff began assessing the effectiveness of the pilot AIS programming established in 2013, the cost and effort required for the programming, and the District's role in the evolving statewide AIS framework.

Organizational findings from the strategic planning process revealed the following overarching issues:

- Unclear mission and strategic goals
- A lack of organizational focus and prioritization
- Pervasive programmatic silos and lack of organizational alignment around mission

AIS programming, similar to many other programs at MCWD at the time, had grown without clear direction and alignment with a focused organizational strategy. The issue identification conducted as part of strategic planning identified that *“the role of the organization in the field of aquatic invasive species (AIS) remains an area in need of clarification and direction.”*

The Board adopted 2017 Strategic Alignment Plan provided direction on recalibrating AIS programming as follows:

- Operationalize the absorption of the reprioritized AIS Program into the Research and Monitoring Program, identifying opportunities for optimal staff and budget allocations.
- Focus program on diagnosing where high ecological impact AIS are driving water quality responses in MCWD systems, and collaborating with the Planning Department to develop management strategies integrated with MCWD's capital project planning priorities.
- Identify strategies to reduce direct prevention costs to the District while supporting the strategic prevention initiatives of MCWD partners.

As part of the 2017 Strategic Alignment Plan, it was understood that this shift would require significant changes at an operational level. According, the plan identified the following considerations:

- Develop operational plans that optimally allocate funding and staff time to achieve the recalibrated priorities, and facilitate the integration of AIS programming into the Research and Monitoring (R&M) department
- Strengthen interdepartmental linkages to assist in the development of high impact capital improvements, and effectively communicate findings

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- Identify opportunities to accomplish the program purpose with fewer resources than currently being utilized.

Basis for 2017 Decision to Realign MCWD AIS Programming:

A number of factors were evaluated and considered leading to the Board’s decision in 2017 to direct the recalibration and realignment of the District’s AIS programming. Considerations generally included:

1. Cost and resource deployment (time and money)
2. Program effectiveness
3. Evolution of the statewide AIS governance framework

*1. Resource Deployment (time and money):*

The principal area of growth in AIS programming between 2013 and 2016 was in prevention activities (Figure 1). Over this time the AIS Program expanded the funding for partner boat launch inspections, early detection surveys, and rapid response deployments in an effort to prevent the introduction and establishment of AIS (Figure 2).

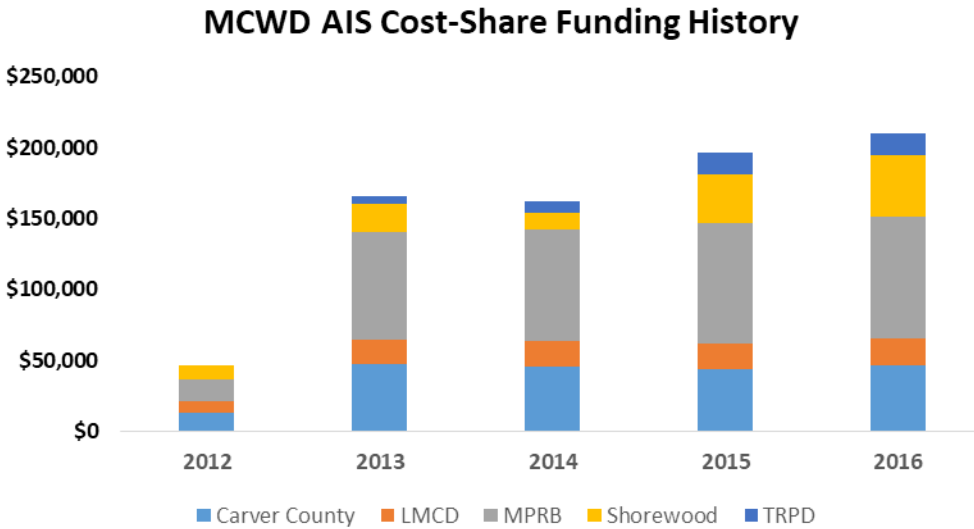


Figure 1. Historic MCWD boat launch inspection cost share programming

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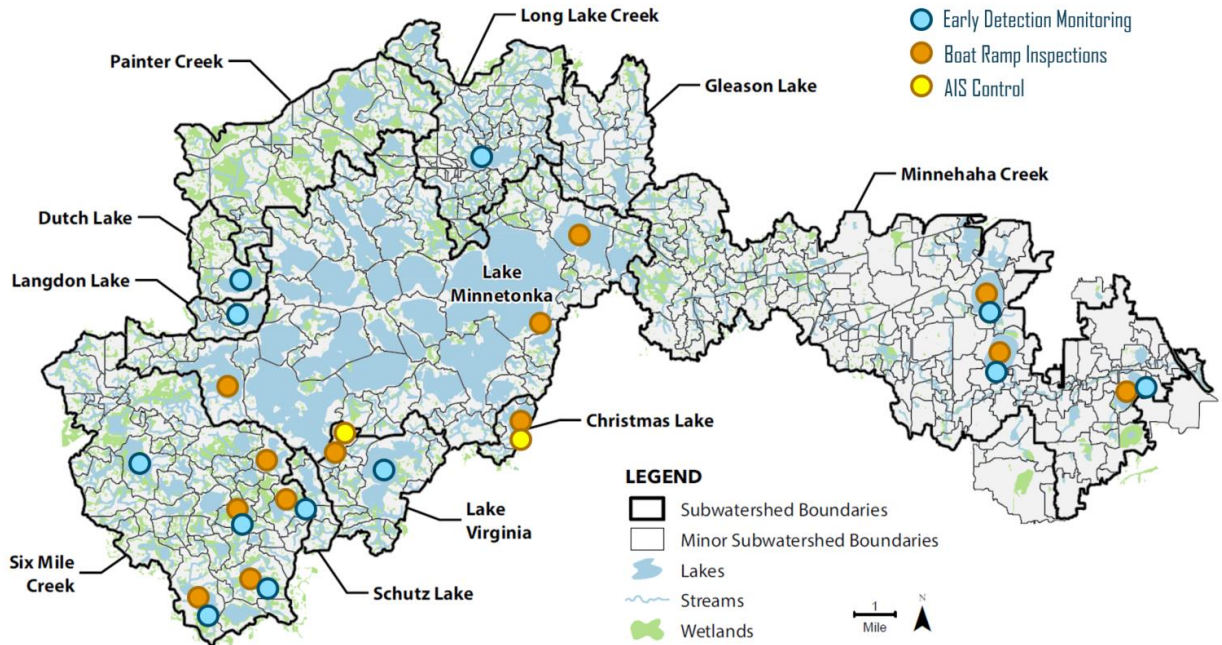


Figure 2. Locations of AIS early detection, boat ramp inspections, and containment/control projects within Minnehaha Creek watershed in 2015.

2. Program Effectiveness:

District staff and the MCWD Board of Managers also assessed the effectiveness of AIS programming resources deployed between 2013 and 2016. In general the District found that direct prevention programming, while providing an outreach and public education benefit, resulted in limited success in preventing new infestations of AIS in MCWD lakes (Figure 3a).

During the review of this program it became evident that several factors resulted in the limited success of the boat launch inspection program. For example, AIS have multiple exposure pathways into most lakes (i.e. incoming streams and birds), which means that boat launch inspections are only controlling one possible exposure pathway for AIS. Other issues include the inability to achieve 100% inspection of watercraft entering waterbodies and the lack of District authority of boat launch infrastructure.

These trends in effectiveness are mirrored at a statewide level, with the number of AIS infected lakes increasing despite increased efforts by local and regional entities to prevent the spread of AIS (Figure 3b).

Through the 2015-2016 strategic assessment the Board concluded that the benefits from MCWD AIS prevention programming were not commensurate with the level of resources the District was deploying.

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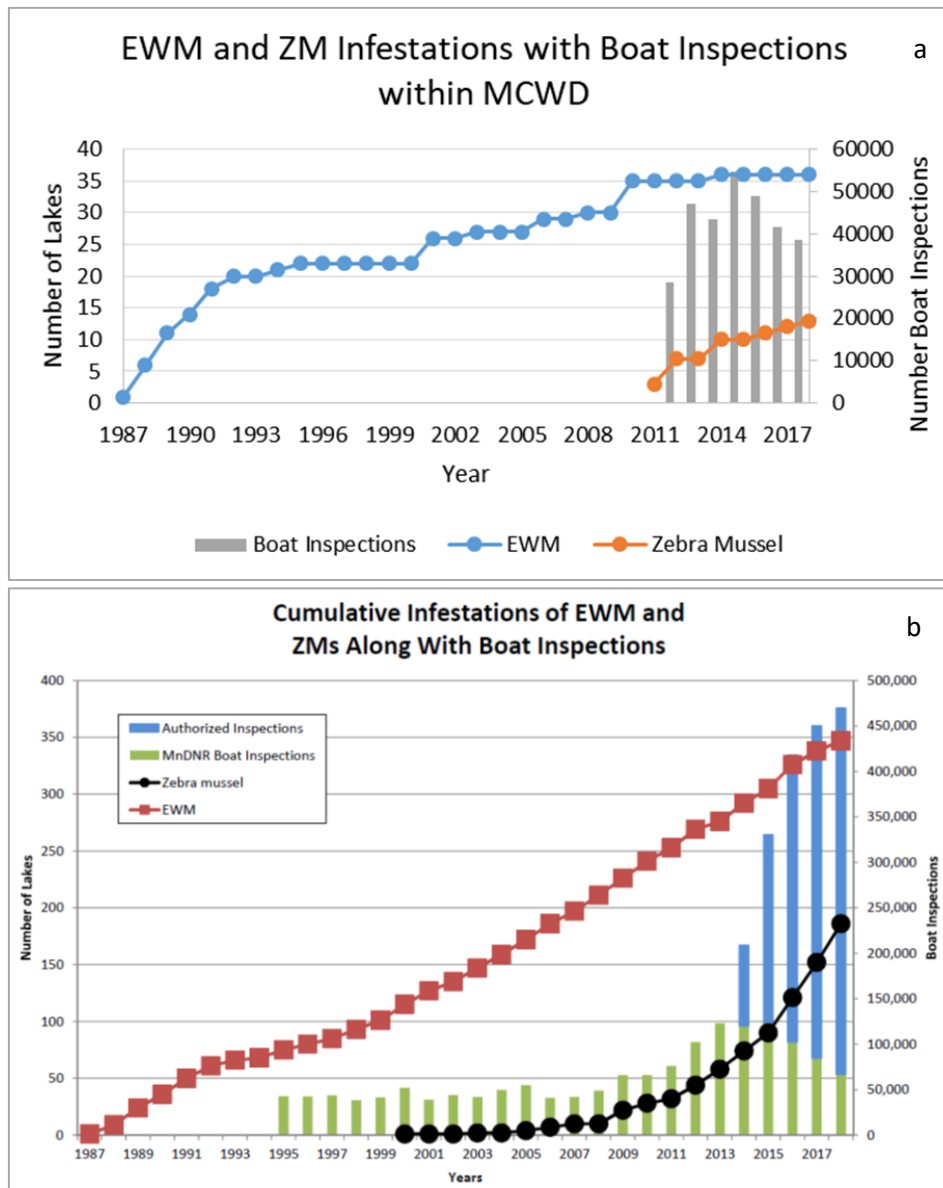


Figure 3. Eurasian water milfoil and Zebra mussel infestation in lakes within Minnehaha Creek Watershed District (a) and statewide (b).

### 3. *Evolution of Statewide AIS Governance Framework*

In addition to the assessment of cost – benefit, a consideration of the MCWD Board in realigning its AIS programming was the observed evolution in the statewide governance framework related to AIS policy and funding.

In 2012, there was not a clear policy or funding framework statewide to support local interest in AIS prevention programming. To fill this gap, local entities such as MCWD developed plans and invested in prevention programming.

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Over time a mosaic of other local organizations (counties, cities and lake associations) determined AIS prevention programming to be a priority and began dedicating funding to activities including staffing inspections and boat launches. This patchwork of interest in, and appetite for, funding and conducting local prevention programming underscored the element of local control and authority in play on this statewide issue.

To address the need for a cohesive statewide AIS framework, while recognizing the inherent localized interests involved, in 2014 the Minnesota Legislature passed MN Statute [466A.19](#), which dedicated \$10 million annually to be distributed to counties, based proportionally on boat launches and boat trailer parking spaces. This funding, to be disbursed by counties, exceeded MCWD's limited ability to contribute to prevention programming, and provided a stable source of funding for the issue with local control.

In parallel with the decision to legislate new funding sources for AIS prevention, the Minnesota AIS Research Center (MAISRC) was established. Coupled with the State's decision on prevention funding, the establishment of a dedicated state-level research center for AIS represented a significant evolution in the statewide framework for AIS and evolved the context in which MCWD was providing local AIS programming.

### **Realignment of MCWD AIS Programming (2017-2019):**

#### Reduction in Prevention and Research Funding:

Based on the 2016 cost – benefit analysis of MCWD AIS prevention (and research) programming, and the evolution of statewide policy and funding frameworks between 2012 and 2014, the MCWD Board began gradually making annual reductions in budget allocations to prevention and research programming (Figure 4).

#### Emphasis on Ecological Management:

Over this same time period, MCWD Research and Monitoring also began to implement AIS programming through a broader lens of ecological management, by focusing on managing species that have significant and measurable impact on the water quality, have well established control measures supported by research, have cost effective management methods, are within the District's existing organizational capabilities, align with MCWD capital project priorities, and are supported through public and private partnerships.

The District's efforts within the Six Mile Creek Halsted Bay focal geography to assess and manage common carp is a leading example of this shift. These efforts are supported by partnerships with Carver and Hennepin Counties, the cities of Victoria, Minnetrista and St. Bonifacius, Laketown Township, Three Rivers Park District, and local lake associations. With state funding from the Lessard Sams Outdoor Heritage Council (LSOHC), this program is

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working to improve 2,488 acres of aquatic habitat and water quality conditions in the Six mile Creek Halsted Bay focal geography.

### MCWD AIS Cost-Share Funding History

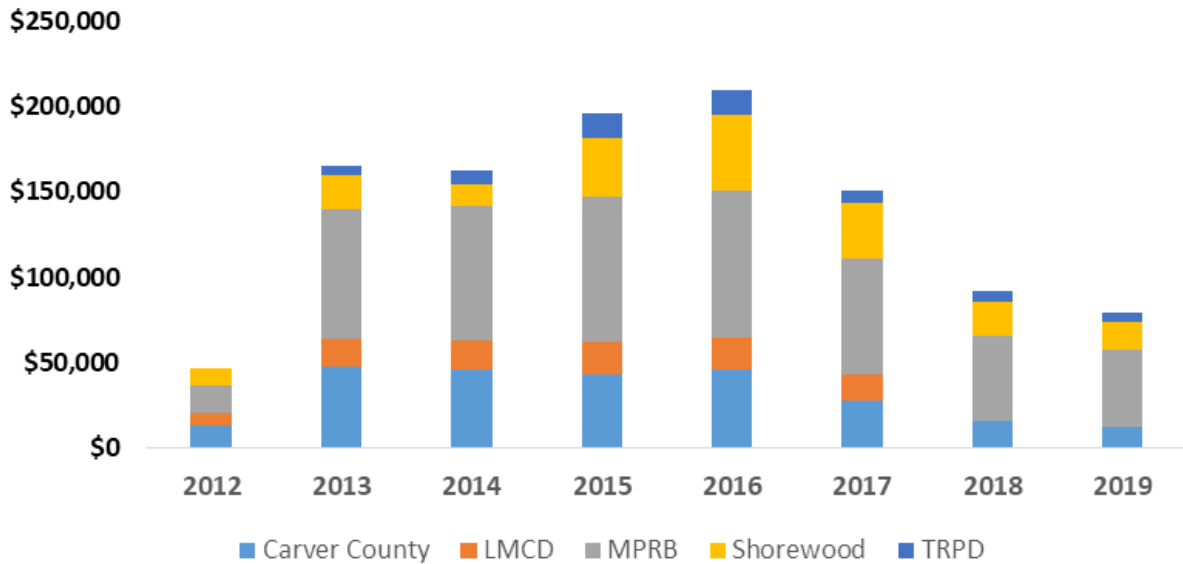


Figure 4. MCWD boat launch inspection cost share programming prior to (2012 to 2016) and after (2017 to 2019) the adoption of the 2017 Strategic Plan.

#### Future of MCWD AIS Programming (2020 – Beyond):

##### Prevention Programming:

As the MCWD Board of Managers begins working through its 2020 budget planning, a decision must be made on whether to continue gradually decreasing annual allocations towards prevention programming.

In 2019, the budget for AIS boat launch inspection cost share is \$80,000, which is a 35% reduction from the 2018 budget of \$122,000 (Figure 1).

In response to this shift, the District recently received feedback from some local lake associations regarding the planned reduction in funding for AIS prevention programming, and a request from Carver County officials to provide clarity on future levels of funding to inform local planning and budget decisions.

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At the June 13, Operations and Programs Committee staff will facilitate a discussion regarding the following options for the 2020 budget allocation for AIS prevention programming:

- Keep AIS prevention funding levels stable in 2020 to allow partner agencies to adjust, with further reductions to be considered for the 2021 budget.
- Make planned reductions in 2020 AIS prevention funding.

Ecological Management Framework:

Looking to the future, understanding that the District has shifted its focus from AIS programming towards managing species that have demonstrable impact on water quality and known cost-effective control strategies will require an updated management framework. It may be beneficial to review decision making guidelines, which will continue to inform District ecological programming in the future.

Those criteria have included:

- Is there significant and measurable impact on water quality and system ecology?
- Do well established control measures exist that are supported by applied research?
- Is it feasible and cost-effective to manage the biological system in question?
- Is the management within the District existing organizational capabilities?
- Does the proposed management align with planned MCWD capital project priorities?
- Does the District have the policy and funding support of local public and private partners?

District staff will also facilitate a discussion of these guidelines with the OPC at the June 13, 2019 Meeting.

**Conclusion:**

The Research and Monitoring Program is in the process of shifting AIS programming at MCWD from prevention to management of species that have demonstrable impact on water quality and known cost-effective control strategies. To accomplish this shift in focus, the District must reduce legacy prevention programming and reallocate the staff time and funding to more effective ecological management programs.

If there are questions in advance of the meeting, please contact: Brian Beck at (952) 471-8306 or [bbeck@minnehahacreek.org](mailto:bbeck@minnehahacreek.org).

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