

**MEETING DATE:** April 14, 2016

**TITLE:** Authorization to enter into agreement with the Minnesota Aquatic Invasive Species Research Center to perform a Zebra Mussel Veliger Control Study

**RESOLUTION NUMBER:** 16-XXX

**PREPARED BY:** Eric Fieldseth, AIS Program Manager

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**TELEPHONE:** 952-471-7873

**REVIEWED BY:**  Administrator  Counsel  Dept. Director.(Name) Craig Dawson  
 Board Committee  Engineer  Other

**WORKSHOP ACTION:**

<input checked="" type="checkbox"/> Advance to Board mtg. Consent Agenda.	<input type="checkbox"/> Advance to Board meeting for discussion prior to action.
<input type="checkbox"/> Refer to a future workshop (date):_____	<input type="checkbox"/> Refer to taskforce or committee (date):_____
<input type="checkbox"/> Return to staff for additional work.	<input type="checkbox"/> No further action requested.
<input type="checkbox"/> Other (specify): _____	

**PURPOSE or ACTION REQUESTED:**

Hennepin County has awarded the District a \$24,000 grant to evaluate prevention and population suppression of zebra mussels by targeting veliger larvae with very low doses of a copper-based pesticide. Staff requests authorization to enter into agreement with the Minnesota Aquatic Invasive Species Research Center to perform study with MCWD staff assistance.

**PROJECT/PROGRAM LOCATION:**

Lake Minnetonka

**PROJECT TIMELINE:**

May through December 2016

**PROJECT/PROGRAM COST:**

Fund name and number: 5005, AIS

Requested amount of funding: \$24,000

Funding will be reimbursed by \$24,000 grant awarded by Hennepin County

**PAST BOARD ACTION:**

March 24, 2016 – Staff presented to the Board that Hennepin County awarded MCWD a \$24,000 grant to perform a Zebra mussel veliger control study in partnership with the Minnesota Aquatic Invasive Species Research Center.

**BACKGROUND:**

The 2014 Legislature appropriated \$10 million annually to go to counties for prevention activities related to managing aquatic invasive species (AIS). Hennepin County sets aside some of those funds for competitive grants to area agencies and groups for AIS Prevention and Research. The Minnesota Aquatic Invasive Species Research Center (MAISRC) proposed a partnership with MCWD to apply for a grant to study a unique way of possibly controlling zebra mussel populations in some lakes and preventing their spread. The MCWD acted as a local agency to apply for the funds. MAISRC will lead the study, with assistance from MCWD staff. A summary of the research study is below:

**SUMMARY**

This proposal would evaluate prevention and population suppression of zebra mussels by targeting veliger larvae with very low doses of a copper-based pesticide, EarthTec QZ. Literature has shown that molluscicides are more toxic to veliger larval stages than to adults – particularly in the case of copper-based pesticides.

The prevention benefits would be twofold: first would be control of adult population sizes, and second would be reduction in concentrations of live larvae in “residual waters” transported by recreational boats. Reducing larval survival would also reduce recruitment (i.e., larval settlement). Controlling recruitment (via bay wide or lake wide treatments in small lakes) could reduce ecological and economic harm with minimal non-target impacts. And given the short life span of adults and the fact that population persistence over the longer term depends on annual recruitment, this strategy might be used to control population growth rate. This study would be led by Dr. Mike McCartney from the MN AIS Research Center, with assistance from MCWD staff.

**RESOLUTION**

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- WHEREAS, Zebra mussels have been shown to provide ecological impacts in some waterbodies, and are present in several District lakes; and
- WHEREAS, The MCWD AIS Management Plan identifies applied research studies as an important component to the program, and will be a ready partner for pilot projects that may serve as models for regional or state-wide application; and
- WHEREAS, The Christmas Lake rapid response to the zebra mussel infestation showed copper-based pesticides can be effective at controlling zebra mussels, and literature has shown microscopic veligers can be controlled with very low doses reducing non-target impacts; and
- WHEREAS, In 2014 the Minnesota Legislature appropriated \$10 million annually to counties for AIS Prevention activities, and Hennepin County set aside a portion of its funds for grant opportunities; and
- WHEREAS, The Minnesota Aquatic Invasive Species Research Center proposed a partnership with MCWD to apply for a Hennepin County grant to study zebra mussel veliger control; and
- WHEREAS, Hennepin County has awarded the MCWD with a grant of \$24,000 to partner with the Minnesota Aquatic Invasive Species Research Center to perform a Zebra mussel veliger control study; and
- WHEREAS, At the March 24, 2016 Board Meeting, staff presented that Hennepin County awarded MCWD a \$24,000 grant to perform a Zebra mussel veliger control study in partnership with the Minnesota Aquatic Invasive Species Research Center.

**NOW, THEREFORE, BE IT RESOLVED** that the Minnehaha Creek Watershed District Board of Managers hereby authorize the District Administrator to enter into agreement with the Minnesota Aquatic Invasive Species Research Center, upon approval of District Counsel as to form and execution, for a cost not to exceed \$24,000.

Resolution Number 16-0XX was moved by Manager \_\_\_\_\_, seconded by Manager \_\_\_\_\_.  
Motion to adopt the resolution \_\_\_ ayes, \_\_\_ nays, \_\_\_ abstentions. Date: \_\_\_\_\_.

\_\_\_\_\_  
Secretary Date: \_\_\_\_\_

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**DRAFT for discussion purposes only and subject to Board approval and the availability of funds.  
Resolutions are not final until approved by the Board and signed by the Board Secretary.**