

Hennepin County Aquatic Invasive Species Prevention Grant
Final Report
for
Watercraft Inspection Program Expansion
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Prepared by:

Brian Vlach

Senior Manager of Water Resources

Three Rivers Park District

I Introduction

Through their Aquatic Invasive Species Prevention Grants program, Hennepin County awarded Three Rivers Park District (TRPD) a grant of up to \$40,000 to:

1. Sustain the watercraft inspection efforts at Bryant Lake where zebra mussels were found in the fall of 2015
2. Increase the hours for watercraft inspection as well as provide level II decontamination services for incoming and outgoing watercraft at Medicine Lake (Plymouth). Medicine Lake has become a primary vector for spread of zebra mussels (discovered in 2017) and starry stonewort (discovered in 2018).
3. Sustain and increase watercraft inspection hours for Fish Lake (Maple Grove)
4. Sustain the watercraft inspection efforts at the public accesses on Twin Lakes (Robbinsdale) and Little Long Lake (Minnetrissa).
5. Supporting watercraft inspection effort and providing Level II decontamination services at Lake Minnetonka Regional Park access, in which Three Rivers Park District staff also performed inspections under a contract with the Minnehaha Creek Watershed District (MCWD).

The project included two main activities; hiring/training of additional watercraft inspectors to extend coverage beyond an overall “baseline” effort and scheduling and providing supervisory oversight for the additional inspectors in the execution of their duties at the specific sites to which they were assigned.

The original grant application request for this project was for \$40,110. Hennepin County generously awarded \$40,000 to supplement existing watercraft inspection program for Medicine, Fish, Bryant, Lake Minnetonka Regional Park, Twin, and Little Long as the targeted lakes identified in the grant contract agreement. In 2018, Hennepin County also generously awarded Three Rivers Park District \$20,000 for the purchase of a decontamination unit to be used at Lake Minnetonka Regional Park, and awarded Bassett Creek Watershed Management Commission \$20,000 for the purchase of a decontamination unit to be used at French Regional Park – Medicine Lake. A portion of the grant dollars awarded in 2019 was used for the continual operation and maintenance of both decontamination units. Both of the decontamination units were operated and maintained by Three Rivers Park District Level II staff during incoming and exiting watercraft inspections. Bassett Creek Watershed Management Commission provided \$5000 to assist with the Level II staffing and operation for the decontamination unit at French Regional Park-Medicine Lake. The awarded grant dollars and financial assistance from Hennepin County and Bassett Creek Watershed Management Commission has been critical to supplement and improve the Three Rivers Park District watercraft inspection program.

II Results

Following is a summary of highlights for the 2019 watercraft inspection program as it pertains to this grant:

- There were eleven Level I and five Level II watercraft inspector training sessions that were held for District personnel between April 24th and August 1st of 2019. The sessions were led by staff from MnDNR with water resources and operations staff from Three Rivers Park District providing assistance.
- A total of 122 TRPD staff were authorized as Level I inspectors for the 2019 season. TRPD staff conducted inspections at a total of 13 accesses in the Metro area, which included the 6 accesses covered under this grant. This is the largest number of authorized inspectors managed by a single organization in the state, including MnDNR.
- A total of 21 TRPD staff were authorized as Level II inspectors for the 2019 season to operate decontamination units at 3 accesses (French Regional Park-Medicine Lake, Lake Minnetonka Regional Park, and Baker Park Reserve-Lake Independence).
- TRPD secured and provided all Level I and Level II inspection staff with tablets that had the watercraft inspection application provided by MnDNR. Data recorded by the inspectors using the tablet and application were uploaded to the MnDNR data base.

Based on data collected at each access, Table 1 shows the percent of total Level I inspection hours that were funded by the Hennepin County AIS prevention grant for each of the accesses identified above.

Table 1 – Percent of Total Watercraft Inspection Hours Funded by Hennepin County AIS Prevention Grant by Lake Access (2019)

<i>Access</i>	<i>Total Inspection Hours</i>	<i>Inspection Hours Assigned to AIS Prevention Grant</i>	<i>% of Inspection Hours Funded by AIS Prevention Grant</i>
Medicine Lake	2361	901	38%
Fish Lake	1993	1196	60%
Bryant Lake	1591	553	35%
Twin Lakes	265	264	100%
Little Long Lake	204	200	98%
Lake Minnetonka ¹	1235	688	56%
TOTAL	7649	3802	50%

¹ Access at Three Rivers Park District - Lake Minnetonka Regional Park

Table 2 – Decontamination Watercraft Inspection Hours and Hours of Operation 2019

<i>Access</i>	<i>Decontamination Inspection Hours</i>	<i>% of Total Inspection Hours</i>	<i>Total Number of Decontaminations</i>
Medicine Lake	729	31%	91
Lake Minnetonka	1235	100%	52

Table 3 below summarizes the watercraft inspection results by access for the five lakes covered under this grant other than Lake Minnetonka. Table 4 summarizes the same information for the Lake Minnetonka Regional Park access covered under this grant.

Table 3 – Inspection Results for 2019 by Lake Access (not including Lake Minnetonka accesses)

<i>Parameter</i>	<i>Lake Access</i>					<i>TOTALS</i>
	<i>Medicine</i>	<i>Fish</i>	<i>Bryant</i>	<i>Twin</i>	<i>Little Long</i>	
<i>Total # of inspections</i>	6896	2112	1347	360	36	10751
<i>Inspection Hours</i>	2361	1993	1591	265	204	6414
<i>Inspections/hr.</i>	2.92	1.06	0.85	1.36	0.18	1.68
<i># in-bound inspections</i>	4845	2105	981	250	25	8206
<i># outbound inspections</i>	2029	3	365	110	11	2518
<i># Contaminated watercraft</i>	467	45	88	15	1	616
<i># Zebra Mussel Contaminations</i>	8	2	1	0	0	11
<i>Entering</i>	4	2	0	0	0	6
<i>Exiting</i>	4	0	1	0	0	5
<i>% Contaminated Watercraft</i>	6.8%	2.13%	6.53%	4.17%	2.78%	5.73%

Table 4 – Inspection Results for 2019 by Lake Access (Lake Minnetonka accesses only)

<i>Parameter</i>	<i>Lake Minnetonka Regional Park</i>
<i>Total # of inspections</i>	2545
<i>Inspection Hours</i>	1234.5
<i>Inspections/hr.</i>	2.06
<i># in-bound inspections</i>	1521
<i># outbound inspections</i>	1021
<i># Contaminated watercraft</i>	422
<i># Zebra Mussel Contaminations</i>	6
<i>Entering</i>	2
<i>Exiting</i>	4
<i>% Contaminated Watercraft</i>	16.6%

Following are the “take home” messages from the above information, supplemented with supporting observations from operations staff:

- Of the six accesses at which Hennepin County AIS program grant funds were used to support supplemental watercraft inspections, 4 accesses (Medicine Lake, Fish Lake, Bryant Lake, Lake Minnetonka Regional Park, and Twin) were considered “high use” based on the MnDNR criteria of 0.9 watercraft launches/hr. or more.
- There were 13,296 watercraft inspections conducted in the 2019 season at the six accesses covered by the Hennepin County grant, which comprised about 65% of the total watercraft inspections (approximately 20,388) conducted by TRPD staff at all accesses it services.

- Medicine Lake had the largest number of watercraft inspections (6896) representing approximately 52% of the total inspections covered by the grant. This access receives a significant amount of boat traffic (2.92 inspections/hour) and is considered high risk for spreading AIS to other lakes. The number of inspections service hours (2361 hours) for Medicine Lake has increased since the discovery of zebra mussels in 2017 and starry stonewort in 2018.
 - Zebra mussels were discovered on several docks throughout the lake in November of 2017. Recent shoreline and snorkeling surveys indicate that zebra mussels have been found in other parts of the lake.
 - A watercraft inspector discovered starry stonewort on a boat exiting Medicine Lake in July of 2018. This was the first discovery of starry stonewort within the metro area. The discovery of starry stonewort by a trained watercraft inspector supports the significant importance for the watercraft inspection program. This recent discovery of starry stonewort initiated a rapid response plan for treatment/control measures by TRPD and MnDNR staff. There were 5 treatments conducted in 2019 to contain the Starry Stonewort within area adjacent to the boat access.

- Bassett Creek Watershed Management Commission used Hennepin County AIS prevention grant dollars to purchase a decontamination unit to be operated by TRPD staff at French Regional Park in 2018. Bassett Creek Watershed Management Commission also financially contributed \$5000 in 2018 and 2019 towards the operation of the decontamination unit. Boats were decontaminated anytime watercraft inspectors found starry stonewort or zebra mussels on boats. There was a total of 91 watercraft that were decontaminated at French Regional Park-Medicine Lake in 2019.

- Three Rivers Park District used Hennepin County AIS prevention grant dollars to purchase a decontamination unit for the Lake Minnetonka Regional Park in 2018. The Lake Minnetonka Regional Park access receives a significant amount of use (2.06 inspections/hour), and has a large number of boats entering and existing the access that are considered contaminated (16.6%). This estimate is high because a large number of the boats/trailers exiting the water has vegetation and/or zebra mussels attached to the vegetation, and does not take into account the boater taking the initiative of removing the vegetation after exiting the water. There was a total of 52 watercraft that were decontaminated at the Lake Regional Park access.

- The watercraft inspection program preventing the infestation of zebra mussels in Fish Lake has been critical. Zebra mussels were found on two boats trying to enter Fish Lake in 2018 and 2019. There has been no discoveries of zebra mussel infestation within Fish Lake.

- There was a need to increase outgoing watercraft inspections on Bryant Lake because of the discovery of zebra mussels in 2015. Hennepin County grant funds helped support the expansion of inspections for existing watercraft (27%) at the Bryant Lake access.

- Hennepin County AIS funds supported expansion for a third consecutive year of the District's watercraft inspection program to two new launches, one on Twin Lake in Robbinsdale and the other on Little Long Lake in Minnetrista (which drains to Whaletail Lake). While both have a relatively low volume of use, the presence of inspectors at these locations has been generally welcomed by the public as well as lakeshore residents. It was noted by operations personnel that persons using these launches appeared somewhat less aware of AIS laws than those at accesses where inspections are common. This was reflected in a relatively high percent of contaminated watercraft at these accesses for 2019 (2.78% for Little Long Lake and 4.17% for Twin Lake). The Hennepin County AIS prevention grant dollars allows TRPD to implement watercraft inspections on lakes that aren't normally staffed due to budgetary financial constraints.