



Title:	Authorization to Execute Summer Carp Removal Contracts with WSB
Resolution number:	22-043
Prepared by:	Name: Jill Sweet Phone: (952) 930-1976 jsweet@minnehahacreek.org
Reviewed by:	Name/Title: Anna Brown, Planner-Project Manager
Recommended action:	Approve a contract with WSB for the management and removal of common carp in the Six Mile Creek-Halsted Bay subwatershed.
Schedule:	All removal work under contract will occur between August and October of 2022
Budget considerations:	Fund name and code: SMCHB Carp Management 5-5007 Fund budget: \$567,000 Expenditures to date: \$542,000 Requested amount of funding: \$26,000

Summary:

In September 2017, the Lessard Sams Outdoor Heritage Council awarded the Minnehaha Creek Watershed District (MCWD) \$567,000 for the Six Mile Creek-Halsted Bay (SMCHB) Habitat Restoration Project.

The program takes a holistic and comprehensive approach to managing common carp in the SMCHB Subwatershed, consisting primarily of three management strategies:

- Adult biomass removal
- Barriers to prevent carp movement between waterbodies and assist with removal
- Aeration of shallow lakes to prevent successful carp reproduction

Consistent with the accomplishment plan approved by the Lessard Sams Outdoor Heritage Council, the grant funds will be used to pay for the capital cost of barrier installation, utility installation for aeration, and the fish removal contracts. The MCWD match includes equipment for removal and monitoring, the aeration units, and design services for barriers.

Since 2018, staff made significant progress implementing each of the carp management strategies. Barrier installation is complete at all four locations, aeration sites have become operational, and removal efforts have carried through the last three years of implementation. Carp removal will be the primary focus for the remainder of grant implementation.

To-date, MCWD has successfully implemented box netting, winter seining, and stream trapping removal methods. In total we have removed approximately 29,449 carp totaling 275,346 pounds from the subwatershed. The only remaining lakes with carp removal needs are East Auburn and Pierson.

District staff consulted with WSB in Q1 of 2022 to develop a removal plan within SMCHB subwatershed utilizing the remaining LSOHC grant dollars intended for carp removals. Approximately \$23,000 of grant funding remains for carp removals with plans to target three waterbodies with carp densities still exceeding 100 kg/ha utilizing strategies appropriate for each waterbody. Under this plan, staff is proposing removal activities on East & West Auburn and Pierson Lakes. Each removal activity has the capacity to attempt multiple removal events as desired. To make the best

use of remaining funds, MCWD will determine which activity is the most productive based on the success of the initial removal events and may shift efforts from one lake to the other.

Auburn Lake Hoop-Netting

East and West Auburn Lakes have an estimated net carp density of 230 kg/ha and require the removal of approximately 1,200 individuals to achieve the target density of 100 kg/ha. MCWD has previously attempted removal in these two lakes with a variety of methods. Baited box net trapping was used with some success, a winter seine on East Auburn was attempted but was unsuccessful, and this spring carp were trapped in the stream outlet removing approximately 1,100 carp. This leaves a removal goal of approximately 100 additional carp, though removals past the 100 kg/ha threshold are likely to have additional benefit for the lake ecosystem.

This summer and fall, WSB will operate a baited hoop-net to target the remaining carp. The base level cost for project management, installation, and deconstruction of the hoop-net are laid out in the scope with the option and ability to scale removal events based on success.

Pierson Lake Box-Netting

Pierson Lake has a carp density of 170 kg/ha and require the removal of approximately 2,400 individuals to achieve the target density of 100 kg/ha. The Pierson Lake Association has previously completed stream trapping removal at the Pierson outlet with great success and only in the past year has the carp density increased to a level that prompts further carp removal, likely due to a recruitment event. In the spring of 2022, a push-trap was installed in the stream channel at the outlet of Pierson to catch carp as they migrate into the Marsh Lake to spawn. However, drought conditions and low water levels in the stream outlet made it impossible for carp to migrate into the stream and therefore no trapping occurred.

This summer and fall, WSB will operate a baited box-net on Pierson Lake to target the remaining carp in the lake. The base level cost for project management, installation, and deconstruction of the box-net are laid out in the scope with the option and ability to scale removal events based on success.

The total cost for both removal efforts is \$22,988.50 with approximately \$11,428 allocated to Auburn Lake and \$12,025 allocated to Pierson Lake. There is flexibility to adjust tasks and budget based on the relative success of each effort.

Supporting documents (list attachments):

- Carp Removal within the Six Mile Subwatershed Scope



RESOLUTION

Resolution number: 22-043

Title: Authorization to Execute a Carp Removal Contract with WSB

WHEREAS, pursuant to Resolution 14-047 the MCWD Board of Managers has identified the Six Mile Creek-Halsted Bay (SMCHB) subwatershed as a priority area for focusing District planning activities and coordination efforts with subwatershed partners;

WHEREAS, in September 2017, the Lessard Sams Outdoor Heritage Council recommended the SMCHB Habitat Restoration project for \$567,000 in funding, and the funding was approved by the MN Legislature in May 2018;

WHEREAS, the District has outlined a carp removal strategy utilizing commercial seining, baited box-net trapping and trapping within stream channels during carp migration;

WHEREAS, MCWD has established a goal of achieving carp densities of 100 kg/ha system wide, and Pierson Lake and East and West Auburn Lakes remain above that target density;

WHEREAS, WSB & Associates has developed proposals for carp removal on Pierson Lake and Auburn Lakes, that District staff finds responsive to the 2022 program at a not to exceed fee that staff, in its experience, considers competitive;

WHEREAS, MCWD solicited quotes for baited box net trapping from two qualified firms, and received one proposal for the work from WSB & Associates;

WHEREAS, WSB & Associates, is the only contractor providing hoop-net removals, and therefore is uniquely qualified to perform this work.

NOW, THEREFORE, BE IT RESOLVED that on the basis of the specific experience of WSB & Associates and the finding of District staff that the contract fee is competitive, the Minnehaha Creek Watershed District Board of Managers finds it appropriate to authorize a professional services contract with that firm without competitive process for hoop-net removals;

BE IT FURTHER RESOLVED that the District Administrator is authorized, on advice of counsel, to execute a contract with WSB & Associates, for services to remove common carp in Auburn Lake and Pierson Lake within the Six Mile Creek-Halsted Bay Subwatershed, consistent with the Lessard-Sams Outdoor Heritage Council Grant Accomplishment Plan, in the amount of \$22,989.00;

BE IT FINALLY RESOLVED that the Minnehaha Creek Watershed District Board of Managers establishes a not to exceed budget of \$26,000 for this work, and authorizes the District administrator to issue change orders up to that amount.

Resolution Number 22- **043** was moved by Manager _____, seconded by Manager _____. Motion to adopt the resolution ___ ayes, ___ nays, ___ abstentions. Date: 7/28/2022

 Secretary Date: _____

Scope of Work: Carp Removal within the Six Mile Subwatershed - Summer/Fall 2022

This statement of work applies to the effort to reduce carp biomass on the Pierson Lake and Auburn Lake to meet Minnehaha Creek Watershed District (MCWD) carp management goals to improve water quality and ecological integrity.

At the beginning of 2022 carp biomass estimate for Auburn Lakes (provided by MCWD) showed the lake supports 30,175 pounds of carp biomass (4,460 individuals) and required a reduction of 7,940 pounds or 1,200 individual carp to reach a density of 100 kg/ha (critical threshold). In the spring to summer of 2022, MCWD partnered with WSB on a stream trapping project that successfully captured and removed 1,081 carp from the system.

The current carp biomass estimate for Pierson Lake (provided by MCWD) shows the lake supports 3,912 pounds of carp biomass (~6,000 individuals) and requires a reduction of 15,343 pounds or 2,400 individual carp to reach a density of 100 kg/ha (critical threshold).

Under this statement of work, WSB will work collaboratively with the MCWD to install and operate a baited hoop net in Auburn Lake and baited box traps in the Pierson Lake. This will also include removal and disposal of carp.

A detailed description of tasks, as well as a budget and project schedule are provided below.

Task 1. Project Management

Project management includes reviewing and ensuring scope items are being completed and tracking budget, as well as miscellaneous administrative items that need to be addressed during the course of the project.

Task 2. Permitting

WSB currently holds a MN DNR Fisheries Research permit (#34721) to remove carp from Auburn and Pierson via in-stream trapping techniques that were pursued in the spring of 2022. A request to amend this permit to include the Hoop Netting on Auburn and Box-netting on Pierson will be pursued to cover the work outlined in this scope of work.

Task 3. Hoop Net & Box Net Installation

WSB staff will install a hoop net in Lake Auburn. Site selection will be done in coordination with MCWD staff to target areas where carp are known to inhabit in late summer to early fall based on electrofishing data and telemetry data. Hoop net dimensions will be approximately 30 feet long and 4 feet in diameter and anchored in the littoral zone of the lake. Baiting may be done by boat or by shore, depending on where they are installed. It will be a priority to make them easily accessible from the shoreline for baiting so that time and effort are preserved.

On Pierson Lake, WSB staff will consult with MCWD staff on the best locations for the installation of box nets that takes into account ease of access for baiting and removal operations. A firm substrate with little to no vegetation is preferred for setting box nets. Box net's will be set near shore and must be accessible for daily baiting operations throughout the project period. WSB will rely on observations from MCWD staff and reconnaissance on the day of installation to choose one to two sites to install nets. Installation can occur as soon as project is authorized.

Task 4. Net Operation, Support, and Carp Removal Operations

Subtask 4a. Auburn Hoop-Net

Under this task, WSB will work collaboratively to operate and provide support to MCWD while the traps are deployed. Hoop nets are designed to be a passive removal device and will require frequent checks to determine if



carp are present that may be removed. These checks can be done simultaneously with the daily baiting schedule. Cracked corn will be the primary bait, however, some experimental baits may be introduced as operations progress.

WSB can be available for any operational issues that arise during deployment and/or to bait the sites on occasion. Support may be provided as needed and may be limited to consulting with MCWD staff remotely on timing of carp removal from within the traps. WSB will deliver up to 60 bags of cracked corn to MCWD that can be used to bait the sites.

MCWD may attempt to remotely monitor the condition of the traps and track carp and other fish that may enter the trap using remote viewing technology. It is not certain that the remote viewing will be able to capture presence absence of carp in the baited hoop nets but can act as a supplement to the daily checks that will be done while baiting the traps.

On-site removal of carp by WSB staff in cooperation with MCWD staff is also provided under this task. WSB staff will be available to assist with physical removal of captured carp from the trap for disposal if requested by MCWD. This will be coordinated by MCWD staff daily through the course of the project. The project cost reflects if assistance by WSB scientists is requested by MCWD staff and plans on a total of 48 hours that could be eight or more visits to the lake at 4-8 hours per visit. This tasks also include a fee for WSB technical support during the operation of the hoop nets.

Subtask 4b. Pierson Box-Nets

Under this task, WSB will work collaboratively to operate and provide support to MCWD while the trap(s) is/are deployed. MCWD will bait daily, except for weekends, and monitor the consumption of cracked corn or other bait that is used. Timing of the trap operation and removal of carp will be done and based on corn consumption. In other systems these traps have been used, the timing of carp visiting the baited site seems to peak overnight. Net's may be sprung in the evenings (start 10:00 pm) and carp removed and disposed of overnight. Up to four (4) removal events are included in this project scope that will be done with assistance of one or more MCWD staff. On the day a pull is scheduled, MCWD staff may be asked to prepare the net by bringing the ropes to shore and checking that the sides of the net are free from obstruction.

On-site removal of carp by WSB staff in cooperation with MCWD staff is provided under this task.

Carp Disposal

Captured carp must be disposed of according to permit conditions. First, they may be offered to the licensed commercial fisherman and if there is no interest, then disposed of through burial or incineration. WSB staff will be available to assist with the transport to a burial site that has been identified by MCWD staff. The cost for assistance with carp disposal is included in subtasks 4a and 4b.

Task 5. Hoop Net & Box Net Deconstruction and Removal

At the conclusion of the trapping period (approximately one month), WSB will deconstruct and remove the traps. If traps continue to actively capture carp and budget allows, trapping may continue after one month with consultation between WSB and MCWD.



Schedule

Task	July	August	September
Task 1: Project Management			
Task 2: Permitting			
Task 3: Net Installation			
Task 4: Net Operation			
Task 5: Net Deconstruction			

This project is time sensitive. The project cannot begin until authorization by the MCWD board; based on this the project is anticipated to begin in August and conclude sometime in September.

Project Budget

Task/Activity	Budget
Task 1. Project Management	\$486
Task 2. Permitting	\$648
Task 3. Hoop Net/Box Net Installation & Rental Fee	\$4,176
Task 4. Net Operation and Carp Removal	
Subtask 4a. Auburn Hoop-Net	\$7,596
Subtask 4b. Pierson Box-Net	\$8,193
Task 5. Hoop Net/Box Net Deconstruction	\$2,354
Project Total	\$22,988.50

WSB fees are calculated on an hour hourly basis. Additional WSB staff time will be billed at an hourly rate according to the attached rate sheet, and only under approval by MCWD.

A rental fee of \$750 for each trap is included in task 3. The budget reflects the use of two box nets in Pierson and one hoop net in Auburn.

Task 4 assumes that there would be eight (8) separate removal events (where carp are physically removed from the traps) over a period of 4 weeks. We have budgeted 4 to 8 hours of WSB staff time as well a small number of hours to consult between removal periods on trap operation and other needs from MCWD. The removal events on the two lakes will be scheduled on the same days whenever possible to maximize efficiency. Task 4 also includes the cost of bait, 60 bags of cracked corn, to be delivered to MCWD by WSB staff. Time is available under this task for WSB Staff to bait the sites approximately 7 times over the course of the project period.

The final task, net deconstruction and removal, includes time for removal of the traps from the site and decontamination and trap maintenance.

