

MEETING DATE: March 28, 2019

TITLE: Authorization to release RFP for Long Lake Creek Subwatershed Assessment

RESOLUTION NUMBER: 19-039

PREPARED BY: Eric Fieldseth

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REVIEWED BY: Administrator Counsel Program Mgr. (Name): Brian Beck
 Board Committee Engineer Other

WORKSHOP ACTION:

<input 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 checked="" type="checkbox"/> Other (specify): Requesting approval at March 28, 2019 Board Meeting	

PURPOSE or ACTION REQUESTED:

Authorization to release Requests for Proposals (RFP) to assist MCWD staff in completing the Long Lake Creek Subwatershed Assessment. Two separate RFP's will be released:

- RFP for consultant to work in cooperation with MCWD staff in completing Watershed and In-Lake Nutrient Study
- RFP for consultant to work in cooperation with MCWD staff in completing a carp assessment

PROJECT/PROGRAM LOCATION:

Long Lake Creek Subwatershed

PROJECT TIMELINE:

April 2019 – July 2020

PROJECT/PROGRAM COST:

Authorized grant amounts:

- Long Lake Creek Subwatershed Assessment - \$112,000

PAST BOARD ACTION:

March 9, 2017 – Res. 17-019: Authorization to partner with the Cities of Long Lake, Medina and Orono, and the Long Lake Waters Association, to pursue Hennepin County Natural Resource Opportunity Grant funds, and to provide an in-kind contribution to advance a Long Lake Creek Subwatershed Carp Assessment (*Note – Grant funds were not awarded*)

April 26, 2018 – Res. 18-043: Authorization to execute an agreement with the Cities of Long Lake, Medina and Orono, and the Long Lake Waters Association, to partner on a carp assessment in Long Lake. MCWD's participation is contingent upon all the partners contributing and partnering on the project.

July 12, 2018 – Res. 18-066: Resolution of Support for the Long Lake Creek Subwatershed Partnership. MCWD will act as a technical resource, synthesizing water quality data with carp data to more specifically diagnose issues and drivers within the subwatershed, and to regularly convene partners to identify, recommend and prioritize implementation efforts.

August 23, 2018 – Res. 18-084: Authorization to Apply for BWSR CWF Competitive Grant Funding for Long Lake Creek Subwatershed Assessment. MCWD staff to apply for FY 2019 BWSR CWF Competitive Grant Funding for Long Lake Creek Subwatershed Assessment.

February 28, 2019 – Res. 19-023: Authorization to execute contract with University of Wisconsin – Stout to measure phosphorus release from sediments in Long, Wolsfeld, Holy Name, and School Lake to inform lake management strategies.

SUMMARY:

Five lakes within the Long Lake Creek Subwatershed are impaired for excess nutrients including Holy Name, School, Wolsfeld, Long, and Tanager. In 2014, the Upper Minnehaha Creek Watershed TMDL identified watershed phosphorus loading, internal phosphorus loading, and common carp as potential drivers for poor water quality and ecological integrity within these lakes. However, there has been little diagnostic work completed in this watershed, which makes it difficult to identify cost effective nutrient reduction projects.

In 2018, a system-wide partnership has formed among the Cities of Medina, Long Lake, and Orono, the Long Lake Waters Association, and the MCWD to pursue water quality improvements in the Long Lake Creek Subwatershed. Work under this partnership was initiated earlier in 2018 by the Cities of Medina and Long Lake, and the Long Lake Waters Association to conduct a small scale carp assessment to begin understanding the impacts carp may be having on Long Lake. Additionally, over the last two years, MCWD has been focusing diagnostic monitoring in the Long Lake Creek Subwatershed to fill data gaps and begin identifying problem areas that may be driving nutrient impairments.

In August 2018, MCWD, in coordination with the Cities of Medina, Long Lake and Orono, and Long Lake Waters Association, applied for an accelerated implementation grant from the Board of Water and Soil Resources (BWSR) in the amount of \$112,000 for the Long Lake Creek Subwatershed Assessment. The application was successful, resulting in the District being awarded the full grant request.

The purpose of the grant is to accelerate the development of a comprehensive implementation plan by building a detailed watershed model, strengthening our understanding of carp, and identifying cost-effective best management practices (BMPs). The implementation plan developed using the BWSR grant funding will provide MCWD and its partners a detailed roadmap to improve ecological and water quality conditions in the Long Lake Creek Subwatershed.

There are three major components to the subwatershed assessment:

1. Watershed and In-Lake Project
MCWD will utilize watershed models, in-lake models, and wetland assessments to develop cost-effective projects to reduce watershed and in-lake nutrient loading to impaired lakes.
2. Carp Assessment Project
Carp management implementation strategies will be developed by understanding carp abundance, seasonal movements, and migration patterns and identifying potential carp nurseries and recruitment patterns across the subwatershed.
3. Comprehensive Watershed Roadmap
The final report will integrate the watershed, in-lake, and carp management strategies into a cohesive roadmap for project implementation.

REQUEST FOR PROPOSALS:

There will be two discrete RFPs, which will focus on 1) watershed nutrient assessment and 2) common carp assessment in the Long Lake Creek subwatershed. Both projects will be led by MCWD staff; however, several tasks will be completed by contractors in coordination with MCWD. Since there are two distinct components within the assessment that require different expertise, two separate RFP's will be distributed.

RFP 1: Upper Long Lake Creek Subwatershed and In-Lake Nutrient Study

The consultant, in cooperation with MCWD, will identify BMP's, develop project costs, and estimate nutrient load reductions. This will be accomplished by developing watershed and lake models that will be used to estimate load reductions and BMP costs. A feasibility report will be developed that outlines prioritized projects, estimated load reductions, and project costs to accelerate implementation of water quality improvement projects within the Upper Long Lake Creek Subwatershed.

RFP 2: Long Lake Creek Subwatershed Carp Assessment

The MCWD will be conducting a carp assessment in the Long Lake Creek Subwatershed to understand common carp abundance, seasonal movements, and recruitment patterns throughout the system to develop carp management implementation strategies. MCWD is seeking the assistance from a consultant to work closely with MCWD in completing several tasks within the assessment.

Selection Criteria and Timeline

The consultant's proposals will be reviewed based on their qualifications and experience, proposed approach, and proposed costs. The final scope of work will be negotiated after the consultants are selected. A review committee comprising select staff will evaluate all proposals, and recommend the consultants to the MCWD Board of Managers according to the following timeline:

- Board Approval of RFP: March 28, 2019
- RFP Distributed: March 29, 2019
- RFP Submissions Due: April 15, 2019
- Review Proposals & Consultant Selection: April 16, 2019
- Contract approved by Board: April 25, 2019

RESOLUTION

RESOLUTION NUMBER: 19-039

TITLE: Authorization to release RFP's to assist MCWD staff in completing the Long Lake Creek Subwatershed Assessment

WHEREAS, Long Lake Creek Subwatershed has several waterbodies that are impaired for excess nutrients, and the Upper Minnehaha Creek TMDL lists watershed phosphorus loading, in-lake sediment phosphorus release, and carp as drivers of poor water quality in Long Lake Creek waterbodies; and

WHEREAS, a regional partnership was formed in 2016 among the Cities of Medina, Long Lake and Orono, and the Long Lake Waters Association, to pursue water quality improvements in the Long Lake Creek Subwatershed; and

WHEREAS, the District's watershed management plan acknowledges this regional partnership, with the partnership leveraging the skills and resources of each entity, by collaborating and identifying shared priorities for the implementation of projects and programs to improve water quality in the Long Lake Creek Subwatershed; and

WHEREAS, the District has been collecting additional water quality data on lakes and streams within the Long Lake Creek Subwatershed to better identify issues and drivers in the subwatershed to inform implementation; and

WHEREAS, carp management was identified as an initial target of the partners, with the Cities of Medina and Long Lake, and Long Lake Waters Association completing a small scale carp assessment that identified carp abundance in Long Lake to be over five times the ecologically damaging threshold; and

WHEREAS, MCWD has committed to serving as a convener and technical resource for the partnership, synthesizing data to identify issues and drivers within the subwatershed to inform implementation; and

WHEREAS, MCWD has applied for and been selected for funding for a BWSR Accelerated Implementation Grant of \$112,000 to identify best management practices and develop a comprehensive implementation plan for the Long Lake Creek Subwatershed; and

WHEREAS, MCWD will seek assistance from consultants in completing the subwatershed assessment, and due to the distinct needs for the two major components of the work, the subwatershed and in-lake nutrient study and the carp assessment, two separate RFP's will be distributed; and

NOW, THEREFORE, BE IT RESOLVED that the Minnehaha Creek Watershed District Board of Managers hereby authorizes the District Administrator to solicit proposals for assistance in completing the Long Lake Creek Subwatershed Assessment.

Resolution Number 19-039 was moved by Manager _____, seconded by Manager _____.
Motion to adopt the resolution ___ ayes, ___ nays, ___ abstentions. Date: _____.

Secretary Date: _____

**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.**



REQUEST FOR PROPOSALS
Long Lake Creek Subwatershed
Carp Assessment

Organizational Background

The Minnehaha Creek Watershed District (MCWD) is a local unit of government responsible for managing and protecting water resources within the 178 square miles that drain into Lake Minnetonka, the Minneapolis Chain of Lakes, Minnehaha Creek and ultimately the Mississippi River. Over the past 50 years, the MCWD has collected and maintained extensive water and natural resource data which have supported implementation of over 70 capital projects and the conservation and restoration of over 700 acres of land. MCWD employs a dedicated professional staff of 26 who specialize in natural resource planning, project development, land conservation, land use policy, water quality monitoring, permitting, education, and communication.

Background and Purpose

In 2014, the Upper Minnehaha Creek Watershed Nutrient and Bacteria TMDL Study identified nutrient load reduction goals for five impaired water bodies within the 11.9 square mile Long Lake Creek subwatershed. In 2017, Minnehaha Creek Watershed District (MCWD) updated its Watershed Management Plan, which outlines water quality issues, potential drivers of poor water quality, and general implementation strategies within the Long Lake Creek subwatershed. A comprehensive feasibility study for the lower watershed was completed in 2011, which did not include the four impaired lakes in the upper watershed (Long Lake, School Lake, Wolsfeld Lake, and Holy Name Lake). Therefore, the Upper Long Lake Creek subwatershed lacks a holistic implementation framework even though it contains a majority of nutrient impairments.

The goal of this project is to identify watershed and in-lake BMPs to improve water quality for impaired water bodies within the Upper Long Lake Creek subwatershed. There will be two separate projects that will assess the nutrient and ecological conditions of the Upper Long Lake Creek subwatershed:

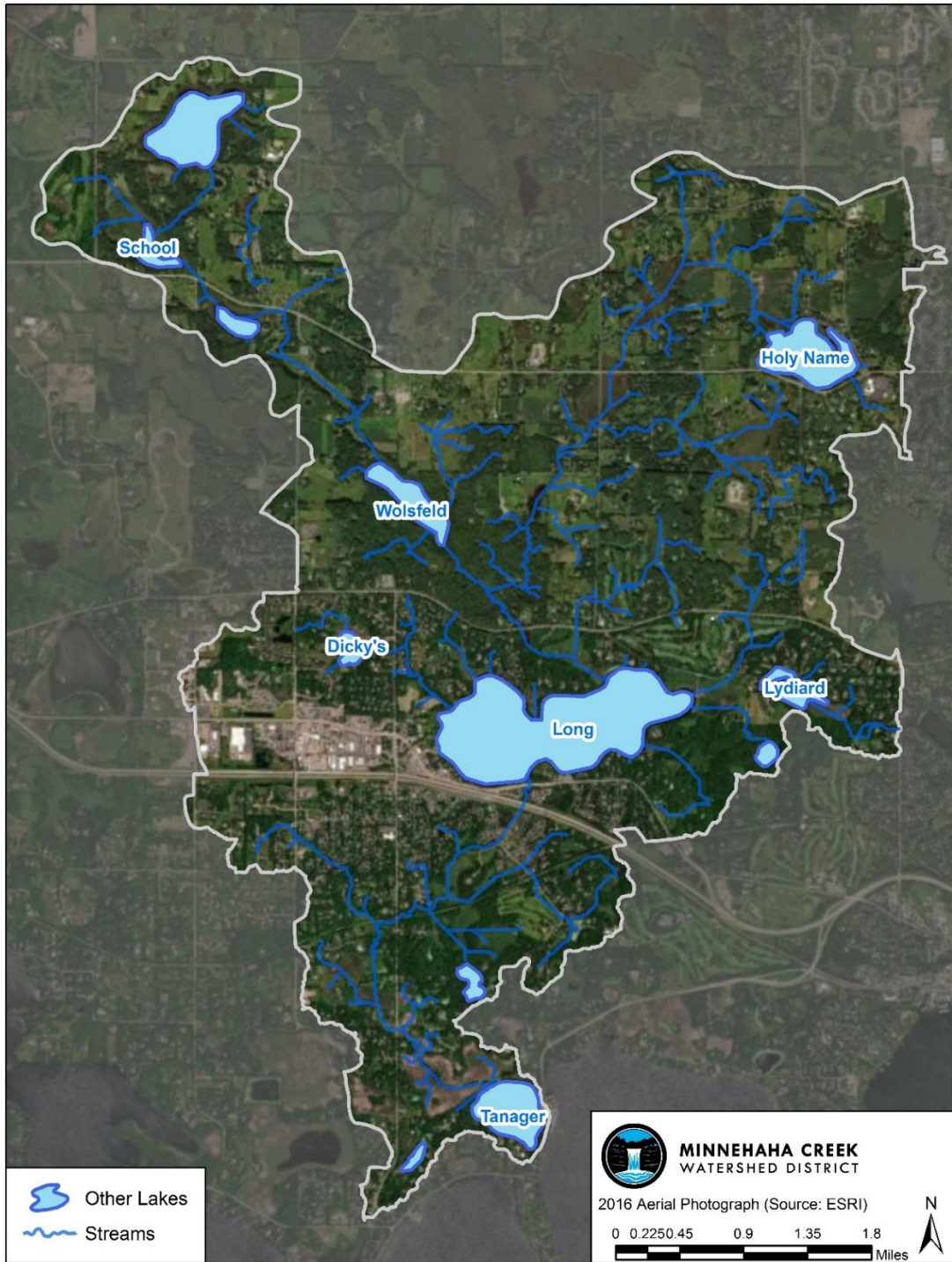
Upper Long Lake Creek Subwatershed and In-Lake Nutrient Study

The existing P8 watershed model and BATHTUB lake response models will be updated and refined by MCWD staff. The consultant, in cooperation with the MCWD, will identify BMPs, develop project costs, and estimate nutrient load reductions. A feasibility report will be developed that outlines prioritized projects, estimated load reductions, and project costs to accelerate implementation of water quality improvement projects within the Upper Long Lake Creek subwatershed.

Long Lake Creek Subwatershed Carp Assessment

The MCWD will be conducting a carp assessment in the Long Lake Creek Subwatershed to understand common carp abundance, seasonal movements, and recruitment patterns throughout the system to develop carp management implementation strategies. MCWD is seeking the assistance from a Consultant to work closely with MCWD in completing the assessment.

Figure 1. Long Lake Creek Subwatershed Map



This Request for Proposals (RFP) concerns the second of these two.

Project Components

This project will be led by MCWD, with MCWD staff being responsible for completing several of the tasks. The Consultant will complete additional tasks in coordination with MCWD. Table 1 provides an overview of the consultant led tasks that are part of this RFP. Table 2 provides other tasks MCWD staff will be responsible for completing during the assessment.

MCWD may negotiate which tasks will ultimately be included in the final scope of work for the consultant. If costs from the RFP exceed the available budget, MCWD may decide to complete some of the tasks from Table 1 with its own staff.

Table 1. Overview of consultant tasks for the Long Lake Creek Subwatershed Carp Assessment

Consultant Tasks	Long Lake	Tanager Lake	Holy Name Lake	Wolsfeld Lake	School Lake	Subwatershed-wide
Task 1. Electrofishing carp biomass estimate			x	x		
Task 2. Carp population estimate in limited access lake					x	
Task 3. Implant PIT tags			x	x	x	
Task 4. Collection of carp for aging analysis			x	x	x	
Task 5. Carp aging analysis using carp otoliths	x	x	x	x	x	
Task 6. Track radio-tagged carp						x

Table 2. Overview of tasks to be completed by MCWD staff

MCWD Tasks	Long Lake	Tanager Lake	Holy Name Lake	Wolsfeld Lake	School Lake	Subwatershed-wide
Task 1. Electrofishing carp biomass estimate	x	x				
Task 2. Implant PIT tags	x	x				
Task 3. Collection of carp for aging analysis	x	x				
Task 4. Fall Trap Net Surveys			x	x	x	
Task 5. Arranging for installation of PIT Antenna Systems						x

Lake Accessibility

Long Lake – Long Lake is accessible through a public access on the west end of the lake.

Wolsfeld Lake – Wolsfeld Lake has no public access, however, access is available through private property (1612 Willow Drive, Long Lake, MN) on the northwest end of the lake. The property owner is willing to allow watercraft to be launched off their property through their pasture. The conditions of the shoreline and lake substrate off the launch area is currently unknown, although the area is believed to be sandy. MCWD will arrange and coordinate for access through this private property. If consultant wishes to examine launch area prior to submitting their proposal, they should coordinate with MCWD staff.

Holy Name Lake – There is a city owned public access on the south end of Holy Name Lake.

School Lake – School does not have a public access, and is likely not accessible with larger watercraft. Private access to the lake can had on the east side of the lake along a driveway at 2820 County Rd 24, Medina, MN. Access is likely limited to carry-in watercraft. If consultant wishes to examine launch area prior to submitting their proposal, they should coordinate with MCWD staff.

Tanager Lake – Tanager Lake is accessible through a navigable channel from Browns Bay on Lake Minnetonka.

Table 3. Lake Information

Lake	DOW #	Acres	Littoral Acres	Max Depth (ft.)
Long	27016000	285	131	33
Tanager	27014100	53.5	38	23
Wolsfeld	27015700	40.3	30.6	27
Holy Name	27015800	70.82	70.82	7
School	27015100	11.2	8	19

The following section describes each consultant led task for the Long Lake Creek Subwatershed Carp Assessment.

***Task 1: Electrofishing Carp Biomass Estimate
Holy Name & Wolsfeld Lake***

Purpose: To provide a carp biomass estimate for Holy Name and Wolsfeld Lake to compare to the ecologically damaging threshold of 100 kg/ha carp biomass described in literature.

Methods: Consultant should conduct 3 standardized boat electrofishing surveys per lake for common carp following methodology described in Bajer and Sorensen 2012.

Timeline: Surveys should be conducted between July and September 2019.

Reporting: Consultant should report results from each survey in a final report, including but not limited to the following:

- Survey date
- Water temperature
- Carp biomass estimate from each survey, as well as average biomass from all surveys combined – reported as kg/ha
- Raw data from each survey: Total Electrofishing time, Total # carp caught, CPUE (#/hr), Density (#/ha), Average Weight (kg), Biomass (kg/ha), Population Estimate (# carp)

***Task 2: Carp population estimate in limited access lake
School Lake***

Purpose: To provide a carp biomass estimate for School Lake to compare to the ecologically damaging threshold of 100 kg/ha carp biomass described in literature. School Lake has limited accessibility, and will likely only be accessible with carry-in watercraft. See Lake Accessibility section for more information on access.

Methods: Consultant should propose methods they intend to use for developing a carp biomass estimate in School Lake.

Timeline: Consultant should propose timeline to complete this task within the project timeline of April 2019 – June 2020.

Reporting: Results from each survey should be reported, including but not limited to the following:

- Survey methods
- Date & water temperature
- Raw data from each survey
- Biomass or carp abundance estimate
- Average weight of carp captured

Task 3: Implant PIT Tags
Holy Name, Wolsfeld & School Lake

Purpose: PIT tags are one of the primary methods MCWD intends to use to track carp movement throughout the subwatershed.

- MCWD is arranging for PIT antennas to be installed at strategic locations within the subwatershed.
- MCWD will be responsible for providing PIT tags and supplies for implanting tags.
- Consultant would be responsible for implanting up to 100 tags in Holy Name Lake, 50 in Wolsfeld Lake and 50 in School Lake. MCWD understands carp abundance in these lakes is unknown, so Consultant should coordinate closely with MCWD on this task if catch efficiency is low.

Methods: Consultant should propose methods they intend to use for capturing carp to implant with PIT tags.

Timeline: MCWD would like as many of the tags implanted prior to carp migration in spring 2019, which would require carp to be captured shortly after ice-out. Consultant should coordinate closely with MCWD on progress of this task. If needed, the remaining tags may be installed later in the summer of 2019.

Reporting: Reporting on this task should include the following:

- List of unique tag numbers implanted by lake
- Date and number of tags implanted per lake
- Survey methods used for capturing carp

Task 4: Collection of carp for aging analysis
Holy Name, Wolsfeld & School Lake

Purpose: MCWD would like to gain an understanding of historical carp recruitment patterns within these lakes through carp aging analysis from carp otoliths. Consultant would be responsible for capturing carp for aging analysis in Holy Name, Wolsfeld and School Lake.

- MCWD would like up to 75 carp collected from each of these lakes for aging analysis. Since carp abundance in these lakes is generally unknown, consultant should coordinate closely with MCWD on the progress of this task.

Methods: Consultant should propose methods they intend to use for capturing carp for aging analysis. Consultant should consider utilizing survey efforts in Tasks 1 and 2 to aid in carp collection efforts for this task.

Timeline: Carp should be captured during the open water season of 2019, providing enough time to complete the aging analysis described in Task 5 by June 2020.

Reporting: Reporting on this task should include, but is not limited to, the following:

- Number of carp collected for aging in each lake
- Size distribution of carp collected in each lake
- Date and number of carp collected on each date
- Survey methods used for capturing carp

***Task 5: Carp aging analysis using carp otoliths
Long, Tanager, Holy Name, Wolsfeld & School Lake***

Purpose: MCWD would like to gain an understanding of historical carp recruitment patterns within these lakes through carp aging analysis from carp otoliths. We'd like to understand where carp recruitment has occurred in the past, how frequent recruitment has been, and at what scale has recruitment occurred.

Methods: Consultant should age a subsample of carp from each lake by examining carp otoliths following established protocols for carp described in Bajer and Sorensen 2010.

- MCWD will provide up to 100 carp from Long Lake
- MCWD will provide up to 100 carp from Tanager Lake
- Consultant will provide up to 75 carp from Holy Name Lake
- Consultant will provide up to 75 carp from Wolsfeld Lake
- Consultant will provide up to 75 carp from School Lake

Timeline: Aging study should be completed and included in a report by June 2020.

Reporting: Reporting on this task should include the following:

- Number of carp collected for aging in each lake
- Visual representation of age and size structure in each lake by year class carp were hatched
- Written analysis and summary of carp recruitment history for each lake

***Task 6: Track radio-tagged carp
Subwatershed-wide***

Purpose: Nine high frequency radio tags have already been implanted in carp from Long Lake. MCWD would like the consultant to track the movement of these carp during spring 2019 carp migration to help gain an understanding of seasonal carp movement patterns and identify potential carp spawning locations.

Methods: Consultant is responsible for receiver and antenna to track high frequency radio tags. MCWD will provide the radio tag frequencies for the nine tagged carp. Five different tracking surveys should occur spaced approximately 2 weeks apart. Consultant should make every effort to locate each of the nine radio-tagged carp during each tracking survey within the subwatershed. Consultant should coordinate with MCWD on when each survey occurs based on observations in the field by MCWD or consultant.

Timeline: Consultant should coordinate with MCWD on when each survey occurs based on observations in the field by MCWD or consultant. Likely timeline for this task is between May and June 2019.

Reporting: Consultant should submit maps for each of the five tracking surveys. Each map should identify the location of the nine radio-tagged carp within the subwatershed.

Project Timeline

Task

Timeline

Release of RFP	Friday, March 29, 2019
Deadline for Questions Regarding RFP	Friday, April 5, 2019
Deadline for Submittal of Responses to RFP	Friday, April 19, 2019
Selection of Consultant and Contract	Late April 26th, 2019

Instructions for Proposers

Project Proposal Contents:

1. Cover Letter
2. Statement of Methodology and Experience (SME) (see criteria below)
 - a. Background information about the consulting firm
 - b. Identification of team members, their qualification and experience as it relates to the project, and expected percent time contributed toward the project by individual team members
 - c. Description of any similar projects completed by consulting firm with contact information for two references
 - d. Description of proposed approach, including specific methodology (e.g. time in field, survey work) and any assumptions (two page maximum)
3. Separate sealed Project Budget Worksheet
4. Contact information
5. Conflicts of interest (see below)

Project Proposal Due Date: April 19th, 2019

Please submit electronic copies of proposals to Brian Beck at: bbeck@minnehahacreek.org. Hard copies are not required, but can be mailed to: 15320 Minnetonka Blvd, Minnetonka, MN 55345. The MCWD reserves the right to accept or reject any or all proposals.

Proposer's Budget for the Project.

The requested services under this RFP will be funded through state funds. The Contract Maximum, to be set after determination of the scope of work, is the cap for contractual services including both professional fees and expenses.

Addenda/Clarifications

Any changes to this RFP will be made by the MCWD through a written addendum. No verbal modification will be binding

Contract Award

Issuance of this RFP and receipt of proposals do not commit the MCWD to the awarding of a contract. The MCWD reserves the right to postpone opening for its own convenience, to accept or reject any or all proposals received in response to this RFP, to negotiate with other than the selected consultant should negotiations with the selected consultant be terminated, to negotiate with more than one consultant simultaneously, or to cancel all or part of this RFP.

Joint Offers

Where two or more proposers desire to submit a single proposal in response to this RFP, they should do so on a prime-subcontractor basis rather than as a joint venture. The MCWD intends to contract with a single firm and not with multiple firms doing business as a joint venture.

Proposal Evaluation Procedure:

All design proposals will be subject to competitive evaluation in this order:

1. SME will be evaluated according to criteria (below) by a committee of MCWD staff.
2. Cost estimates will be opened and evaluated.
 - a. Total project cost will be considered
 - b. Cost per hour will be considered
3. Committee will weigh methodology and experience
4. Proposal with best combined evaluation will be recommended for approval to the Board of Managers.

CRITERIA:

Methodology

- *Project Understanding:* Does the proposal make it clear that the consultant fully understands the scope, goals, and technical requirements of the project?
- *Completeness and Specificity:* How fully does the proposal explain what the consultant will do to develop the required deliverables?
- *Identification of Needs:* Does the proposal carefully consider what resources will be required to complete the tasks, including staff time, additional technical information, etc.?
- *Innovation:* Does the approach incorporate modern or cutting edge techniques and analysis consistent with a technically sound product, where appropriate and requested in the RFP?

Experience

- *Company Experience:* What other similar projects has the consultant performed that are directly related to the proposed work (evaluated via the proposer's submittal materials)?
- *Staff Experience:* What qualifications and work experience do the proposed staff members or subcontractors bring to the project?
- *Area Knowledge:* Does the company or any of the project team have specific knowledge about the project area that would aid in the study?

CONTRACTUAL AGREEMENT:

MCWD will execute a contract referencing the Scope of Work and Project Budget Worksheet submitted by the CONSULTANT. Payments will be issued in hourly payments upon certification of completion of identified tasks. The payment schedule can be negotiated and finalized through the contract after selection of a CONSULTANT by MCWD.

CONFLICT OF INTEREST:

It is the Policy of the MCWD that the CONSULTANT may not simultaneously represent governmental jurisdictions fully or partially located within the DISTRICT without prior written approval from the District Administrator. Any existing or anticipated future conflicts of interest must be identified in the proposal submitted by the CONSULTANT.



REQUEST FOR PROPOSALS
Long Lake Creek Subwatershed Assessment

Organizational Background

The Minnehaha Creek Watershed District (MCWD) is a local unit of government responsible for managing and protecting water resources within the 178 square miles that drain into Lake Minnetonka, the Minneapolis Chain of Lakes, Minnehaha Creek and ultimately the Mississippi River. Over the past 50 years, the MCWD has collected and maintained extensive water and natural resource data which have supported implementation of over 70 capital projects and the conservation and restoration of over 700 acres of land. MCWD employs a dedicated professional staff of 26 who specialize in natural resource planning, project development, land conservation, land use policy, water quality monitoring, permitting, education, and communication.

Background and Purpose

In 2014, the Upper Minnehaha Creek Watershed Nutrient and Bacteria TMDL Study identified nutrient load reduction goals for five impaired water bodies within the 11.9 square mile Long Lake Creek subwatershed (Figure 1). In 2017, Minnehaha Creek Watershed District (MCWD) updated its Watershed Management Plan, which outlines water quality issues, potential drivers of poor water quality, and general implementation strategies within the Long Lake Creek subwatershed. A comprehensive feasibility study for the lower watershed was completed in 2011, which did not include the four impaired lakes in the upper watershed (Long Lake, School Lake, Wolsfeld Lake, and Holy Name Lake). Therefore, the Upper Long Lake Creek subwatershed lacks a holistic implementation framework even though it contains a majority of nutrient impairments.

The goal of this project is to identify watershed and in-lake BMPs to improve water quality for impaired water bodies within the Upper Long Lake Creek subwatershed. There will be two separate projects that will assess the nutrient and ecological conditions of the Upper Long Lake Creek subwatershed:

Upper Long Lake Creek Subwatershed and In-Lake Nutrient Study

The existing P8 watershed model and BATHTUB lake response models will be updated and refined by MCWD staff. The consultant, in cooperation with the MCWD, will identify BMPs, develop project costs, and estimate nutrient load reductions. A feasibility report will be developed that outlines prioritized projects, estimated load reductions, and project costs to accelerate implementation of water quality improvement projects within the Upper Long Lake Creek subwatershed.

Upper Long Lake Creek Subwatershed Carp Assessment

The MCWD will be conducting a carp assessment in the Long Lake Creek Subwatershed to understand common carp abundance, seasonal movements, and recruitment patterns throughout the system to develop carp management implementation strategies. MCWD is seeking the assistance from a Contractor to work closely with MCWD in completing the assessment.

This Request for Proposals (RFP) concerns the first of these two.

Project Components

This project will be led by MCWD, with MCWD staff being responsible for completing several of the tasks. The Contractor will complete additional tasks in coordination with MCWD. Table 1 provides an overview of the various tasks that will be completed during the assessment.

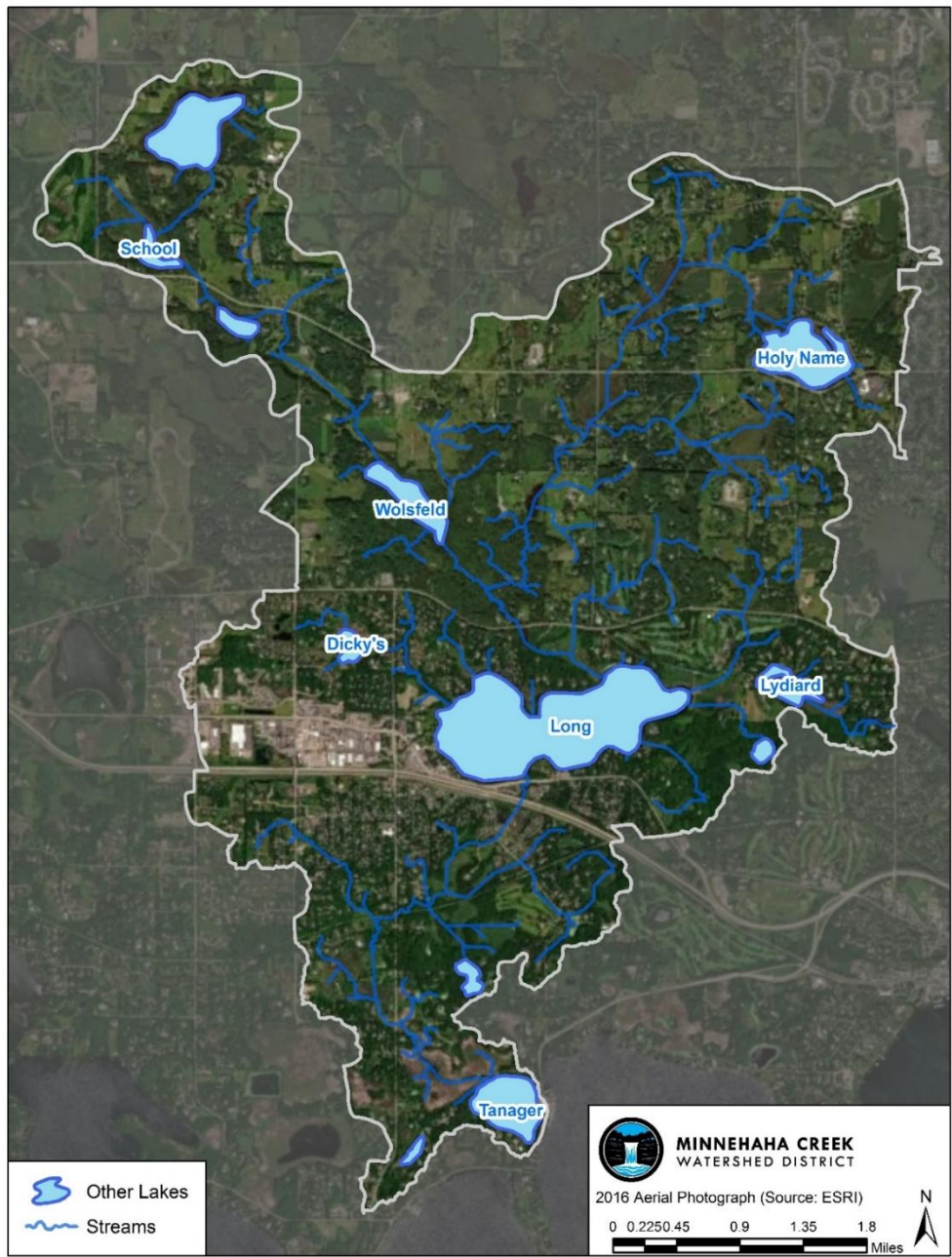


Figure 1. Long Lake Creek Subwatershed Map

Table 1. Overview of tasks for the Long Lake Creek Subwatershed nutrient assessment

Phase	Task	CONTRACTOR	MCWD
Phase 1: Refine P8 Watershed Model (May 2019 to June 2019)	Task 1a. Collect watershed geospatial data from local partners		x
	Task 1b. Delineate subwatersheds based on LiDAR data collected from the State of Minnesota Geospatial Commons		x
	Task 1c. Calibrate P8 watershed model based on MCWD monitoring data		x
	Task 1d. Consultant will QA/QC watershed P8 watershed model	x	
Phase 2: Build BATHTUB Lake Response Models (May 2019 to July 2019)	Task 2a. Data collection and analysis to support lake model development		x
	Task 2b. Develop and calibrate lake response models		x
Phase 3: Wetland Assessment (June 2019 to October 2019)	Task 3a. Select wetlands for habitat, biodiversity, and nutrient cycling assessment		x
	Task 3b. Assess wetland habitat and biodiversity	x	
	Task 3c. Assess wetland phosphorus cycling		x
	Task 3d. Develop planning level cost estimates to restore wetland habitat and nutrient cycling	x	
Phase 4: In-lake and Watershed Project Identification (October 2019 to March 2019)	Task 4a. Work with local partners to identify potential projects		x
	Task 4b. Develop in-lake restoration projects based on BATHTUB model and field assessment		x
	Task 4c. Identify watershed BMPs based on Tasks 4a, 4b, and Contractor input	x	
	Task 4d. Develop planning level cost estimates and phosphorus load reductions for BMPs identified by MCWD, local partners, and Contractor	x	
	Task 4e. Meeting between Contractor, MCWD, and local partners to discuss BMP costs and load reductions	x	X
Phase 5: Prioritize and Develop Concept Designs and Load Reductions for BMPs (January 2020 to July 2020)	Task 5a. Work with local partners to select cost effective projects for concept design		x
	Task 5b. Select cost effective BMPs in conjunction with MCWD	x	x
	Task 5c. Contractor will bring BMPs selected by MCWD and local partners to concept design	x	
Phase 6: Reporting (January 2020 to July 2020)	Task 6a. MCWD will develop a comprehensive report that summarizes findings from Phases 1 - 5		x
	Task 6b. Prepare final report that contains narrative, figures, and concept drawings for BMPs developed in Task 3c and 5c	x	
	Task 6c. Consultant attend final meeting to discuss final results of subwatershed assessment	x	x

The following section describes each phase and task for the Long Lake Creek Subwatershed nutrient assessment. In addition, each item that will be consultant led is bolded and labeled “Contractor” in parenthesis to clearly delineate Contractor deliverables.

Phase 1: Refine P8 Watershed Model

A P8 model will be developed by MCWD staff that represents current conditions for the watershed at a refined scale based on existing hydraulic structures and existing best management practices (BMPs). The purpose of developing a watershed model for the Long Lake Creek Subwatershed is so MCWD can run scenarios and assess how BMPs designed by the Contractor will impact downstream waterbodies. MCWD will work with local partners to obtain the most up-to-date pipeshed information, existing BMPs, culverts, and other geospatial data that will help develop higher resolution subwatersheds for future BMP identification purposes. Water quality and flow data collected by MCWD will be used to calibrate the P8 watershed model.

Task 1a. Collect watershed geospatial data from local partners (MCWD and Local Partners)

Task 1b. Delineate subwatersheds based on LiDAR data collected from the State of Minnesota Geospatial Commons and geospatial data collected from local partners (MCWD)

Task 1c. Calibrate P8 watershed model based on MCWD monitoring data (MCWD)

Task 1d. Consultant will QA/QC watershed P8 watershed model (Contractor):

The Contractor will review watershed P8 model developed by MCWD. MCWD staff will provide the annual volume, total suspended solids (TSS) loads, and total phosphorus (TP) loads from the Long Lake Creek subwatershed P8 model for Contractor review. MCWD staff will also provide calibration parameters for Contractor. The calibration results and calibration parameters will be summarized in a technical memorandum. The contractor will summarize comments in technical memorandum and submit to MCWD staff.

Phase 2: BATHTUB lake response model development

Lake response models (BATHTUB) will be built for each lake in the Upper Long Lake Creek subwatershed, which includes Long Lake, Holy Name Lake, School Lake, and Wolsfeld Lake. The lake response models will incorporate P8 modeled phosphorus loading, internal loading estimates, and bathymetry data collected by MCWD. Each lake response model will be calibrated using surface water quality data. These lake models will be used in subsequent tasks to determine the impact of watershed and in-lake best management practices on water quality.

Task 2a. Data collection and analysis to support lake model development (MCWD)

Task 2b. Develop and calibrate lake response models (MCWD)

Phase 3: Wetland Assessment

Wetlands in the Upper Long Lake Creek Subwatershed will be assessed for habitat diversity, biodiversity, and nutrient cycling. MCWD will work with local partners and the consultant to identify wetlands that have the potential for restoration based on regulatory, land use, and scientific constraints.

Task 3a: Select wetlands for habitat, biodiversity and nutrient cycling assessment (MCWD and Partners):

MCWD staff will provide a list of priority wetlands identified for restoration potential based on existing or future land use, MCWD's Functional Assessment of Wetlands (FAW) data, and Partner input.

Task 3b: Assess wetland habitat and biodiversity (Contractor):

The contractor will be provided the list of wetlands identified for restoration in Task 3a and the resources used to identify those wetlands for restoration potential. The Contractor will review the list of wetlands and may identify and suggest other wetlands for restoration potential in this task. The Contractor will provide the MCWD with a preliminary list of seven to ten wetlands to assess for habitat and biodiversity assessment, which will be reviewed and approved by MCWD staff.

The contractor will use the Rapid Floristic Quality Index (RFQA) to assess the habitat and biodiversity of seven to ten wetlands in the Upper Long Lake Creek Subwatershed.

Task 3c: MCWD will assess wetland phosphorus nutrient cycling (MCWD)

Task 3d: Develop planning level cost estimates to restore wetland habitat and nutrient cycling (Contractor):

The contractor will develop planning level cost estimates for wetlands selected for potential restoration efforts.

Phase 4: In-lake and Watershed Project Identification

A list of watershed BMPs will be developed including their relative cost-effectiveness for nutrient removal. BMP load reductions will be quantified by building BMPs into the recently updated watershed and lake models.

Task 4a: Work with local partners to identify potential projects based on land use plans (MCWD and local partners)

Task 4b: Identify in-lake restoration projects based on BATHUB modeling and field assessments (MCWD)

Task 4c: Identify BMPs based on watershed modeling (Contractor and MCWD staff):

The Contractor will focus on identifying BMPs to reduce watershed nutrient loading to impaired water bodies based on wetland assessment, water quality data, and P8 watershed model output. The Contractor will provide the MCWD with a preliminary list of potential watershed BMPs to MCWD staff. MCWD will compile the list of potential BMPs from the local partners, MCWD staff, and Contractor. This list will be refined to a final set of BMPs that will have planning level cost estimates and load reductions estimated in Task 4d.

Task 4d: Develop planning level cost estimates and phosphorus load reductions for watershed and wetland BMPs identified by MCWD, local partners, and Contractor (Contractor):

The contractor will build all applicable BMPs from Tasks 4a, 4b, and 4c into a P8 watershed model to assess load reductions. In addition, the contractor will develop planning level costs for each BMP identified in Tasks 3a, 4a, 4b, and 4c. The deliverable from this task will be the phosphorus load reduction and planning level costs of each BMP so that the MCWD, local partners, and Contractor can prioritize and select the most cost effective BMPs in Phase 5.

Phase 5: Prioritize and Develop Concept Designs and Load Reductions for BMPs

High impact watershed and in-lake BMPs will be selected in this task. Prioritized BMPs will be brought to conceptual design with concept drawings.

Task 5a: MCWD will work with local partners to select cost effective projects to move further in design (MCWD and local partners).

Task 5b: Select cost effective BMPs in conjunction with MCWD (MCWD and Contractor):

Identify BMPs to reduce nutrient loading to impaired water bodies based on wetland assessment, cost effectiveness, planning level costs, and load reduction impact on impaired water bodies.

Task 5c: Contractor will bring BMPs selected by MCWD and local partners to concept design and develop concept drawings (Contractor):

The contractor will bring the five to seven BMPs selected in Tasks 5a and 5b to concept design by developing concept drawings, refining TP and TSS load reductions, and refining cost engineering cost estimates.

Phase 6: Develop Assessment and Diagnostic Report

A final report will be developed that includes the methods used in the analysis, results of the modeling, stormwater management BMP locations, costs and P-removal efficiencies and

recommended actions. The feasibility report will be used as an implementation roadmap for local partners and the MCWD to improve water quality conditions.

Task 6a: MCWD will develop a comprehensive technical report that summarizes the findings from Phases 1 through 6 (MCWD):

The report will outline chapters or sections that will be filled in using content developed by the Contractor. The MCWD will use deliverables from Task 6b for report content not developed by MCWD staff.

Task 6b: Prepare final report that contains narrative, figures, and concept drawings for BMPs developed in Task 3c and 5c (Contractor):

The Contractor will prepare a final report summarizing BMPs or restorations designed in Tasks 3c and 5c. The narrative from the Contractor's final report will be used to inserted into a final report that is developed by MCWD staff.

Task 6c: Final Meeting (Contractor, MCWD, and Local Partners):

The MCWD will hold a final meeting to discuss the results of the feasibility study. This meeting will be led by MCWD staff and be used for discussing the BMPs identified

Project Timeline

Task

Timeline

Release of RFP	Friday, March 29, 2019
Deadline for Questions Regarding RFP	Friday, April 5, 2019
Deadline for Submittal of Responses to RFP	Friday, April 19, 2019
Selection of Consultant and Contract	April 25th, 2019
Phase 1	May 2019 – June 2019
Phase 2	May 2019 – August 2019
Phase 3	June 2019 – October 2019
Phase 4	October 2019 – March 2020
Phase 5	January 2020 – July 2020
Phase 6	January 2020 – July 2020

Instructions for Proposers

Project Proposal Contents:

1. Cover Letter
2. Statement of Methodology and Experience (SME) (see criteria below)
 - a. Background information about the consulting firm
 - b. Identification of team members, their qualification and experience as it relates to the project, and expected percent time contributed toward the project by individual team members
 - c. Description of any similar projects completed by consulting firm with contact information for two references
 - d. Description of proposed approach, including specific methodology (e.g. time in field, survey work) and any assumptions (two page maximum)
3. Separate sealed Project Budget Worksheet
4. Contact information
5. Conflicts of interest (see below)

Project Proposal Due Date: April 19th, 2019

Please submit electronic copies of proposals to Brian Beck at: bbeck@minnehahacreek.org. Hard copies are not required, but can be mailed to: 15320 Minnetonka Blvd, Minnetonka, MN 55345. The MCWD reserves the right to accept or reject any or all proposals.

Proposer's Budget for the Project.

The requested services under this RFP will be funded through state funds. The Contract Maximum, to be set after determination of the scope of work, is the cap for contractual services including both professional fees and expenses.

Addenda/Clarifications

Any changes to this RFP will be made by the MCWD through a written addendum. No verbal modification will be binding

Contract Award

Issuance of this RFP and receipt of proposals do not commit the MCWD to the awarding of a contract. The MCWD reserves the right to postpone opening for its own convenience, to accept or reject any or all proposals received in response to this RFP, to negotiate with other than the selected consultant should negotiations with the selected consultant be terminated, to negotiate with more than one consultant simultaneously, or to cancel all or part of this RFP.

Joint Offers

Where two or more proposers desire to submit a single proposal in response to this RFP, they should do so on a prime-subcontractor basis rather than as a joint venture. The MCWD intends to contract with a single firm and not with multiple firms doing business as a joint venture.

Proposal Evaluation Procedure:

All design proposals will be subject to competitive evaluation in this order:

1. SME will be evaluated according to criteria (below) by a committee of MCWD staff.
2. Cost estimates will be opened and evaluated.
 - a. Total project cost will be considered
 - b. Cost per hour will be considered
3. Committee will weigh methodology and experience
4. Proposal with best combined evaluation will be recommended for approval to the Board of Managers.

CRITERIA:

Methodology

- *Project Understanding*: Does the proposal make it clear that the consultant fully understands the scope, goals, and technical requirements of the project?
- *Completeness and Specificity*: How fully does the proposal explain what the consultant will do to develop the required deliverables?
- *Identification of Needs*: Does the proposal carefully consider what resources will be required to complete the tasks, including staff time, additional technical information, etc.?
- *Innovation*: Does the approach incorporate modern or cutting edge techniques and analysis consistent with a technically sound product, where appropriate and requested in the RFP?

Experience

- *Company Experience*: What other similar projects has the consultant performed that are directly related to the proposed work (evaluated via the proposer's submittal materials)?
- *Staff Experience*: What qualifications and work experience do the proposed staff members or subcontractors bring to the project?
- *Area Knowledge*: Does the company or any of the project team have specific knowledge about the project area that would aid in the study?

CONTRACTUAL AGREEMENT:

MCWD will execute a contract referencing the Scope of Work and Project Budget Worksheet submitted by the CONSULTANT. Payments will be issued in hourly payments upon certification of completion of identified tasks. The payment schedule can be negotiated and finalized through the contract after selection of a CONSULTANT by MCWD.

CONFLICT OF INTEREST:

It is the Policy of the MCWD that the CONSULTANT may not simultaneously represent governmental jurisdictions fully or partially located within the DISTRICT without prior written approval from the District Administrator. Any existing or anticipated future conflicts of interest must be identified in the proposal submitted by the CONSULTANT.

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