

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
1027 W St. Paul Ave.
Milwaukee, WI, 53233

Tony Evers, Governor
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711



8/16/2024

Phantom Lake Management District
P.O. Box 391
Mukwonago, WI 53149

RE: Application SE-2023-68-17961M to mechanically harvest in Lower and Upper Phantom Lakes, Waukesha County.

Dear Phantom Lake Management District:

The Department of Natural Resources has completed its review of your application for a permit to mechanically harvest up to 65 acres of aquatic plants in Lower and Upper Phantom Lakes, located in Sections 26, 27, 34 and 35, Township 5 North, Range 18 East, Town of Mukwonago and Village of Mukwonago in Waukesha County. Your application is approved in part and denied in part.

The Phantom Lake Management District application to harvest in accordance with Maps 12 and 17 in Lower Phantom Lake is approved. This includes:

1. 10 foot lanes along the east shore and a portion of the southwest shore (yellow on Map 12);
2. 30 foot lanes along the southern shore of the inlet, the western shore and the northern shore of the outlet (orange on Map 12);
3. Two 50 foot lanes running West/East (red on Map 12);
4. Three 50 foot lanes running NW, West Shore and Phantom Glen Park to the Whispering Bay Condo Pier (Red on Map 12);
5. A 75 foot lane running North/South along the east shore (blue on Map 12);
6. One additional 50 foot lane after June 15th, running West/East (purple on Map 12).
7. Two channels along Lakeview Drive and Oconee Drive (central portion of the lake, green on Map 12, purple on Map 17);
8. A channel along Lakeside Drive, southwest side of the lake (green on Map 12, purple on Map 17);
9. A channel along Circle Drive, south side of the lake; and (green on Map 12, purple on Map 17); and
10. A bay adjacent to Lake Street, north side of the lake (green on Map 12, purple on Map 17).

The Phantom Lake Management District application to harvest in accordance with Map D in Upper Phantom Lake is approved.

The Phantom Lake Management District application to add two new harvesting areas and expanding the width of one lane in Lower Phantom Lake **is denied**. This proposed harvesting expansion (Map C) includes:

1. A 50 foot lane running North/South in the middle of the lake (previously harvested but eliminated in the 2018, 2019 and 2019-2023 permits);
2. A shoreland area around the Whispering Bay Condo Pier;
3. Increasing the width of the lane running North/South along the east shoreline from 75 feet to 100 feet.

It is our determination that your proposed harvesting expansion would negatively impact aquatic plants, wildlife and the fishery in Lower Phantom Lake. A permit decision is attached which includes our findings of fact listing the specific reasons for denial of the proposed harvesting expansion. Your rights to appeal this permit decision are also defined.

If you have any questions about this determination, please contact me at heidi.bunk@wisconsin.gov or 262-719-0814.

Sincerely,
Heidi Bunk
Water Resources Management Specialist

Cc: Madison Johansen, Statewide APM coordinator, WDNR
Michael Kowalkowski, Attorney, WDNR

**BEFORE THE
DEPARTMENT OF NATURAL RESOURCES**

Application of the Phantom Lake Management District, Permit Number SE-2023-68-17961M to mechanically remove up to 65 acres of aquatic plants in Upper and Lower Phantom Lakes, located in Sections 26, 27, 34 and 35, Township 5 North, Range 18 East, Town of Mukwonago and Village of Mukwonago in Waukesha County.

FINDINGS OF FACT AND ORDER

The Phantom Lake Management District, P.O. Box 391, Mukwonago, WI 53149 filed an application with the Department on 06/30/2023, under Sections 23.24 and 281.17(2), Wis. Stats, and Wisconsin Natural Resource Code 109, to mechanically remove up to 65 acres of aquatic plants in Upper and Lower Phantom Lakes, located in Sections 26, 27, 34 and 35, Township 5 North, Range 18 East, Town of Mukwonago and Village of Mukwonago in Waukesha County. Permit is approved in part and denied in part.

FINDINGS OF FACT

1. The Phantom Lake Management District, P.O. Box 391, Mukwonago, WI 53149 filed an application with the Department on 06/30/2023, under Wisconsin Natural Resource Code 109, to mechanically remove up to 65 acres of aquatic plants in Upper and Lower Phantom Lakes, located in Sections 26, 27, 34 and 35, Township 5 North, Range 18 East, Town of Mukwonago and Village of Mukwonago in Waukesha County.
2. Lower Phantom Lake is a 373 acre lake located in Waukesha County. It has a maximum depth of 12 feet and an average depth of 4 feet. The water clarity is excellent, typically to the bottom of the lake. Plant diversity is excellent, with 35 documented species of native aquatic plants.
3. Upper Phantom Lake is a 110 acre lake located in Waukesha County. It has a maximum depth of 29 feet and an average depth of 11 feet. The water clarity is good, ranging from 7 to 15 feet. Plant diversity is good, with 25 documented species of native aquatic plants.
4. Lower Phantom Lake has a public park located off of Andrews Street (Phantom Glen Park). The park includes a public boat launch, picnic areas, rest rooms, parking and an ADA fishing pier.
5. The Phantom Lake Management District had a valid permit (SE-2019-68-5219M) that expired on December 31st, 2023. The District applied for a new 5 year permit on 06/30/2023 before the previous permit expired. The applicant proposes to mechanically harvest multiple areas of Lower Phantom Lake and four areas of Upper Phantom Lake (Map C and Map D).
6. The Department of Natural Resources (Department) completed the review of the permit and issued a cover letter with permit conditions on July 24th, 2023. The permit number is SE-2023-68-17961M.
7. The Phantom Lake Management District (District) filed a petition for judicial review on August 22nd, 2023. Two meetings took place between the District and the Department on August 2nd, 2023 and February 9th, 2024. On July 26th, 2024, the Waukesha County Circuit Court remanded the matter back to the Department for reconsideration of the District's 2023 application.
8. The applicant previously received approval to harvest in Lower Phantom Lake (Map 12) and three areas of Upper Phantom Lake (Map E). The approvals were in the form of multiple year permits and one-year permits. These permits dated 2012-2016, 2017, 2018, May 2019 and July 10th, 2019-December 31st, 2023. Between the permit issued in 2012 and the permit issued in 2019, the Department approved several expansion areas authorized for mechanical harvest.
9. The 2012-2016 permit allowed harvesting in Lower Phantom Lake in the following areas (Map A):
 - i. 10 foot lanes along the east shore and a portion of the southwest shore (yellow on Map A);
 - ii. 30 foot lanes along the southern shore of the inlet, the western shore and the northern shore of the outlet (blue on Map A);
 - iii. 50 foot lanes, one running North/South along the east shore and two running West/East (red on Map A);

- iv. Two additional 50 foot lanes after June 15th, one running North/South and one running West/East (purple on Map A).
10. The 2012-2016 permit allowed harvesting in Upper Phantom Lake in the following areas (Map E):
- i. One 50 foot lane from the entrance of Lower Phantom Lake to the 15 foot contour in Upper Phantom Lake;
 - ii. Two swim areas adjacent to summer camp grounds.
11. The 2017 Harvesting Permit Extension was issued November 18th, 2016 and extended the permit until December 31st, 2017. No additional harvesting areas were added to the permit.
12. The 2018 Harvesting Permit Extension was issued May 22nd, 2018 and extended the permit until December 31st, 2018. Three harvesting areas in Lower Phantom Lake were expanded (Map B).
- i. The 50 foot lane running North/South along the east shore was increased to 75 feet.
 - ii. The 30 foot lane running NW from the inlet to the Lake Street Bay was increased to 50 feet.
 - iii. The 30 foot lane running along the west shore from the inlet down to the Hillside Drive peninsula was increased to 50 feet.
 - iv. The 50 foot lane running North/South in the middle of the lake (previously allowed after June 15th each year) was eliminated.
13. The 2019 Harvesting Permit Extension was issued May 17th, 2019 and extended the permit until June 30th, 2019. No additional harvesting areas were added to the permit.
14. The 2019-2023 five year harvesting permit was issued July 10th, 2019 with an expiration date of December 31st, 2023. Four additional harvesting areas in Lower Phantom Lake were added to the permit (Map 17):
- i. Two channels along Lakeview Drive and Oconee Drive (central portion of the lake);
 - ii. A channel along Lakeside Drive, southwest side of the lake;
 - iii. A channel along Circle Drive, south side of the lake; and
 - iv. A bay adjacent to Lake Street, north side of the lake.
- One additional area was added in Upper Phantom Lake (Map F). This was a 30 foot lane along the SE shoreline in the NR 107 designated sensitive area.
15. The Phantom Lake Management District, filed an application with the Department on 06/30/2023 for a new five year harvesting permit. The District proposed adding two new harvesting areas and expanding the width of one lane (Map C). These include:
- i. A 50 foot lane running North/South in the middle of the lake (previously harvested but eliminated in the 2018, 2019 and 2019-2023 permits);
 - ii. A shoreland area around the Whispering Bay Condo Pier;
 - iii. Increasing the width of the lane running North/South along the east shoreline from 75 feet to 100 feet.
16. The Department has completed an investigation of the project site and has evaluated the proposed project as described in the permit application and plans.

17. The Phantom Lake Management District application to add two new harvesting areas and expanding the width of one lane in Lower Phantom Lake **is denied**. This proposed harvesting expansion includes:
- i. A 50 foot lane running North/South in the middle of the lake (previously harvested but eliminated in the 2018, 2019 and 2019-2023 permits);
 - ii. A shoreland area around the Whispering Bay Condo Pier;
 - iii. Increasing the width of the lane running North/South along the east shoreline from 75 feet to 100 feet.

The remainder of the permit application as denoted in Maps 12 and 17, and in the application numbered SE-2023-68-17961M is approved with conditions for the 5 year harvesting permit. This permit was originally issued July 24th, 2023 and extends to December 31st, 2027.

18. The proposed harvesting expansion will cause significant adverse impacts to threatened and endangered resources (NR 109.05(3)(d), Wis. Adm. Code).
- i. The Department has determined that a state listed endangered fish species has been documented in Lower Phantom Lake.
 - ii. The Department has determined that multiple state listed threatened fish species have been documented in Lower Phantom Lake.
 - iii. The Department has determined that multiple state listed special concern fish species have been documented in Lower Phantom Lake.
 - iv. The Department has determined that a state listed endangered mussel species has been documented downstream of Lower Phantom Lake, in the Mukwonago River.
 - v. The Department has determined that multiple state listed threatened mussel species have been documented downstream of Lower Phantom Lake, in the Mukwonago River.
 - vi. The Department has determined that a state listed special concern mussel species has been documented downstream of Lower Phantom Lake, in the Mukwonago River.
 - vii. The Department has determined that a state listed endangered bird species has been documented in Lower Phantom Lake.
 - viii. The Department has determined that multiple state listed special concern invertebrate species have been documented in Lower Phantom Lake.
 - ix. The Department has determined that the proposed harvesting expansion will cause significant adverse impacts in areas that will affect the habitat, feeding, and/or rearing of one or more of these endangered, threatened, and special concern species.
19. The proposed harvesting expansion will result in a significant adverse effect on water quality, aquatic habitat or the aquatic community including the native aquatic plant community (NR 109.05(3)(e), Wis. Adm. Code).
- i. The proposed harvesting expansion will adversely impact fish spawning and habitat.
 - a. Information provided by the Department's fisheries biologist indicate that expansion of the harvesting footprint will negatively impact the fishery of Lower Phantom Lake.
 - b. Endangered fish species found in this system include the Starhead Topminnow and threatened species found in this ecosystem include Pugnose Shiner and Northern Longear Sunfish. These species have specific life history requirements which include a diversity of habitat including aquatic plants. Expanding the allowed cutting area in Phantom Lake will likely reduce the proliferation of threatened and endangered species found in Lower Phantom Lake due to overall reduction in aquatic plant habitat as well as increased fragmentation of contiguous habitat currently found in the proposed expansion of cutting area.
 - c. Expansion of the cutting area in shallow littoral areas will likely result in a direct decrease of juvenile gamefish and panfish species, as well as potential harvest of threatened and endangered species.
 - d. Upper and Lower Phantom Lakes provide a diversity of angling opportunities including panfish, Largemouth Bass, Walleye, Northern Pike.
 - e. Lower Phantom Lake has excellent water quality due to the diversity and abundance of aquatic plants. The aquatic plant community supports fish species found both upstream and downstream in the Mukwonago River.

- ii. The proposed harvesting expansion will adversely impact wildlife habitat.
 - a. Information provided by the Department’s wildlife biologist indicates that expansion of the harvesting footprint, specifically the North/South 50 foot wide lane in the center of Lower Phantom Lake, and the expansion of the lane running North/South along the eastern shore, will negatively impact the wildlife inhabiting Lower Phantom Lake.
 - b. Lower Phantom and Upper Phantom Lake support a wide range of wildlife including state endangered, state threatened and special concern species.
 - c. The wildlife biologist conducted a field visit in July 2023, noting that areas where aquatic plants are already being harvested are void of any of state listed animals. The wildlife biologist observed many waterfowl and water birds including mallards, geese, trumpeter swans and black tern within the emergent vegetation.
 - d. The emergent vegetation provides habitat and food for resident wildlife as well as migrate stopovers, but also provides critical cover for brood rearing.
 - e. The submerged vegetation throughout the lake such as sago, coontail, and wild celery are all producing seeds which are a significant food source for waterfowl.
 - f. The submerged aquatic plants also provide key habitat for snails, mussels, and invertebrates which are again providing essential nourishment for a variety of wildlife.
 - g. Lower Phantom Lake has a unique population of Southern Wild Rice. Wild rice beds exist in places of high biological diversity and provide benefits that extend throughout the food chain. Wild rice provides an important source of food for wildlife.

- 20. The proposed harvesting expansion is in locations identified by the Department as sensitive areas (NR 109.05(3)(f), Wis. Adm. Code).
 - i. The Department has determined that additional encroachment on the plant community significantly decreases the ability of animals utilizing the lake to fulfill their life stage requirements by fragmenting the habitat.

- 21. The proposed harvesting expansion will result in impacts to high value aquatic plants (NR 109.05(3)(g), Wis. Adm. Code).
 - i. Information provided by the Department’s resource managers and the 2023 Phantom Lake Aquatic Plant Management Plan indicate Lower Phantom Lake has 6 documented high value aquatic plant species, as listed in NR 109.05(3)(g), Wis. Adm. Code. These include large leaf pondweed (*Potamogeton amplifolius*), clasp leaf pondweed (*Potamogeton richardsonii*), sago pondweed (*Stuckenia pectinata*), illinois pondweed (*Potamogeton illinoensis*), wild celery (*Vallisneria americana*) and southern wild rice (*Zizania aquatica*).
 - ii. The Department has determined that the proposed harvesting expansion will significantly adversely impact high value species by harvesting in areas where these species are located.

- 22. The applicant has certified to the department that a copy of the application has been made available to all affected property owners’ associations, inland lakes districts, and riparian owners.

- 23. The Department of Natural Resources has determined that the agency’s review of the proposed project constitutes an integrated analysis action under s. NR 150.20(2), Wis. Adm. Code. The Department has considered the impacts on the human environment, alternatives to the proposed projects and has provided opportunities for public disclosure and comment. The Department and the applicant have completed all procedural requirements of s. 1.11(2)(c), Wis. Stats., and NR 150, Wis. Adm. Code for this project.

- 24. The project as permitted will comply with all applicable requirements of Sections 23.24 and 281.17(2), Wis. Stats., and Chapter NR 109, Wis. Adm. Code.

- 25. The permit application has been reviewed and meets the minimum requirements by law and a permit approving in part the original application is being issued. Issuance of the permit is not an endorsement or approval for the action authorized.

GENERAL PERMIT CONDITIONS

- 1. You shall follow the treatment plan outlined in the 2023 permit application and permit conditions. Any changes to the permitted activity will require an additional permit from the Department.

2. The treatment notification protocols, treatment plan, and reporting protocols shall be performed in compliance with Wisconsin Administrative Code Chapter NR 109. Noncompliance with the permit can result in enforcement actions under Wis. Stat. Chapters 23, 30 and 31 and restriction of aquatic plant management activities for subsequent years under Wisconsin Administrative Code Chapter NR 109. The conditions and treatment plan are required to be followed to ensure efficacy of the treatment.
3. You shall notify Heidi Bunk of the Department of Natural Resources at Heidi.bunk@wisconsin.gov 4 business days before treatment with the date and time of proposed treatment. This notification shall occur each year.
4. You shall have a paper or electronic copy of this decision letter and permit with the individual conducting the harvesting during all associated harvesting events.
5. You shall submit an annual report with a detailed map of treatment areas, total acres harvested, total time spent harvesting and aquatic plant material removed by weight (unit), volume (unit) and species – including by-catch, within 30 days of the last treatment to [DNR APM Program](#).

SPECIFIC PERMIT CONDITIONS

1. Upper Phantom Lake: The quantity and species of plants to be mechanically harvested with the harvester and the widths of the cutting paths shall be in accordance with the 2023 APM plan update for the Phantom Lakes (Map D).
2. Lower Phantom Lake: The quantity and species of plants to be mechanically harvested with the harvester and the widths of the cutting paths shall be in accordance with Maps 12 and 17 for Lower Phantom Lake.
3. Cutter bars shall be kept out of the sediment.
4. Aquatic plants cut shall be removed from the water.
5. A minimum of **1 foot** of aquatic plant growth shall remain at the bottom of the lake in all harvested areas.
6. Harvesting transit lanes shall not take place in less than three feet of water.
7. Harvesting channel width shall follow the 30 foot, 50 foot and 75 foot lanes as indicated in Map 12. One additional 50 foot transit lane, illustrated by Map 12, may be cut after June 15th of each year.
8. Harvesting the channel by Oconee Drive, the channel by Lakeside Drive, the channel by Circle Drive and the bay by Lake Street (all indicated on Map 17) shall be cut by a smaller harvester approved by the Department.
9. You shall harvest in a manner to minimize accidental capture of fish, frogs and turtles. Animals captured shall be netted and released back to the lake.

NOTICE

1. You shall decontaminate all project equipment used in the waterbody to minimize transport of aquatic invasive species (AIS) immediately after each use on the project site. You shall utilize best management practices: <https://dnr.wi.gov/topic/Invasives/disinfection.html> You shall comply with all provisions in Wis. Stat. s. 30.07 and Wis. Adm. Code s. NR 40.07 and Manual code 9183.1 For further information, please refer to the following: <https://dnr.wi.gov/topic/invasives/classification.html>.
2. You shall comply with the provisions of Wis. Adm. Code s. NR 500, regarding solid waste transporting. For more information, please refer to the following: <https://dnr.wisconsin.gov/topic/Waste/Licenses.html>

3. You shall comply with local and county ordinances regarding disposal of aquatic plant materials. Disposal of the harvested aquatic plants must be located in the area specified in the permit application (Roberts Nursery, Township 4 N, Range 18 E, Section 2, SW/4 of the SE/4; address 1616 Honeywell Road). Disposal shall not occur in a wetland or floodplain.

CONCLUSIONS OF LAW

1. The Department has authority under s. Sections 23.24 and 281.17(2), Wis. Stats., and Chapter NR 109 Wis. Adm. Code and the foregoing Findings of Fact, to issue an order approving the application in part and denying the proposed harvesting expansion requested.

ORDER

IT IS THEREFORE ORDERED THAT the application of Phantom Lake Management District, permit number SE-2023-68-17961M, under Sections 23.24 and 281.17(2), Wis. Stats, and Wisconsin Natural Resource Code 109, to mechanically harvest up to 65 acres of aquatic plants in Lower and Upper Phantom Lakes, located in Sections 26, 27, 34 and 35, Township 5 North, Range 18 East, Town of Mukwonago and Village of Mukwonago in Waukesha County is approved in part and denied in part.

The Phantom Lake Management District application to harvest in accordance with Maps 12 and 17 in Lower Phantom Lake is approved. This includes:

- i. 10 foot lanes along the east shore and a portion of the southwest shore (yellow on Map 12);
- ii. 30 foot lanes along the southern shore of the inlet, the western shore and the northern shore of the outlet (orange on Map 12);
- iii. Two 50 foot lanes running West/East (red on Map 12);
- iv. Three 50 foot lanes running NW, West Shore and Phantom Glen Park to the Whispering Bay Condo Pier (Red on Map 12);
- v. A 75 foot lane running North/South along the east shore (blue on Map 12);
- vi. One additional 50 foot lane after June 15th, running West/East (purple on Map 12).
- vii. Two channels along Lakeview Drive and Oconee Drive (central portion of the lake, green on Map 12, purple on Map 17);
- viii. A channel along Lakeside Drive, southwest side of the lake (green on Map 12, purple on Map 17);
- ix. A channel along Circle Drive, south side of the lake; and (green on Map 12, purple on Map 17); and
- x. A bay adjacent to Lake Street, north side of the lake (green on Map 12, purple on Map 17).

The Phantom Lake Management District application to harvest in accordance with Map D in Upper Phantom Lake is approved.

The Phantom Lake Management District application to add two new harvesting areas and expanding the width of one lane (Map C) in Lower Phantom Lake **is denied**. This proposed harvesting expansion includes:

- 1) A 50 foot lane running North/South in the middle of the lake (previously harvested but eliminated in the 2018, 2019 and 2019-2023 permits);
- 2) A shoreland area around the Whispering Bay Condo Pier;
- 3) Increasing the width of the lane running North/South along the east shoreline from 75 feet to 100 feet.

NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to ss. 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review shall name the Department of Natural Resources as the respondent. This notice is provided pursuant to s. 227.48(2), Wis. Stats. To request a contested case hearing pursuant to s. 227.42, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. The filing of a request for a contested case hearing is not a prerequisite for judicial review and does not extend the 30-day period for filing a petition for judicial review.

Dated at the Waukesha Department of Natural Resources, Wisconsin on 8/16/2024

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
For the Secretary

By: \s\ Heidi Bunk

Heidi Bunk
Water Resources Management Specialist