

BEFORE THE DEPARTMENT OF NATURAL RESOURCES

3-SD-82-809

In the Matter of Reestablishment of Water Levels for Lake Koshkonong in Dane, Jefferson and Rock Counties

ORDER

THE DEPARTMENT ORDERS:

1. Water levels for Lake Koshkonong from May 1 through October 31 are established as follows:

A. Minimum lake elevation: 775.73 feet, MSL

B. Maximum lake elevation: 776.33 feet, MSL

C. Power generation is not allowed when the lake elevation is below 775.73 feet, MSL.

D. Subject to the provisions of 1.E., 1.F. and 1.G., the owner of the dam shall attempt to maintain the lake level as close to 776.20 feet, MSL, as possible, except after October 15 when the transition to the November 1 through April 30 lake level occurs.

E. Three slide gates shall be fully opened and shall remain open whenever the lake elevation exceeds 776.10 feet, MSL.

F. Six slide gates and the wicket gates shall be fully opened and shall remain open whenever the lake elevation exceeds 776.33 feet, MSL.

G. The owner of the dam shall monitor the average daily flows of the Crawfish River at the USGS Gaging Station at Milford and the Rock River at the USGS Gaging Station at Watertown daily. The intent of sub-paragraphs (1) and (2) is to establish minimum performance standards to enable the operator of the dam to keep lake levels within the established limits. Flow releases described in sub-paragraphs (1) and (2) shall be accomplished by operation of the slide and wicket gates in accordance with the rating tables prepared by the Department and incorporated by reference as Exhibit A.

(1) Whenever the lake level is above 776.20 feet, MSL, and the combined average daily flow of the Crawfish and Rock Rivers has increased more than 200 cubic feet per second from the previous day, the operator shall release at least 1.5 times the latest combined average daily flow measured at the Milford and Watertown gages.

(2) Whenever the lake level falls below 776.20 feet, MSL, and the combined average daily flow of the Crawfish and Rock Rivers has declined over the four previous consecutive days, the operator shall release no more than 1.5 times the latest combined average daily flow measured at the Milford and Watertown gages.

2. Water levels for Lake Koshkonong from November 1 through April 30 are established as follows:

- A. Minimum lake elevation 775.00 feet, MSL
- B. Maximum lake elevation 775.77 feet, MSL
- C. Power generation is not allowed when the lake level is lower than 775.00 feet, MSL.
- D. Six slide gates and the wicket gates shall be fully opened and remain open when the lake level is higher than 775.77 feet, MSL.

3. Rock County shall continue to operate and maintain the existing lake stage telemetry station. Lake levels referred to in this order shall be measured at this gaging station. If the station becomes temporarily inoperable, the dam may be operated using alternate methods of monitoring lake levels approved by the Department. Rock County shall fund installation of the telemetry devices and shall fund ongoing telephone line costs at the USGS gaging stations at Milford and Watertown as long as the USGS maintains the stations at those locations.

4. The slide gates shall be maintained in a condition that will allow all of the gates to be opened or closed in four hours.

5. The powerhouse and wicket gates shall be maintained in an operable condition and shall be used to achieve water levels and flows established in this order regardless of whether or not power is generated by the dam.

6. A minimum of 64 cubic feet per second shall be discharged through the dam at all times.

7. All manipulations of the dam shall be reported promptly to the operator of the next dam downstream.

8. The owner of the dam shall maintain a daily log of lake levels and gate manipulations and make the log available to the Department upon request.

9. This order may be amended only after conferring with all parties to these proceedings. If any party determines that a review of the operating regime is necessary, they should contact the Department of Natural Resources and Rock County requesting such a review.

(2) Whenever the lake level falls below 776.20 feet, MSL, and the combined average daily flow of the Crawfish and Rock Rivers has declined over the four previous consecutive days, the operator shall release no more than 1.5 times the latest combined average daily flow measured at the Milford and Watertown gages.

2. Water levels for Lake Koshkonong from November 1 through April 30 are established as follows:

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5. The powerhouse and wicket gates shall be maintained in an operable condition and shall be used to achieve water levels and flows established in this order regardless of whether or not power is generated by the dam.

6. A minimum of 64 cubic feet per second shall be discharged through the dam at all times.

7. All manipulations of the dam shall be reported promptly to the operator of the next dam downstream.

8. The owner of the dam shall maintain a daily log of lake levels and gate manipulations and make the log available to the Department upon request.

9. This order may be amended only after conferring with all parties to these proceedings. If any party determines that a review of the operating regime is necessary, they should contact the Department of Natural Resources and Rock County requesting such a review.

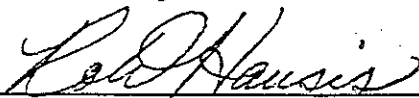
NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that Wisconsin law establishes time limits for filing requests for review of Department decisions.

To request a contested case hearing pursuant to section 227.42, Stats., you have 30 days after the decision is mailed to serve a petition for hearing on the Secretary of the Department of Natural Resources.

This notice is provided pursuant to section 227.48(2), Stats.

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES  
For the Secretary

by   
Robert D. Hansis  
Water Regulation Supervisor

Date mailed April 25, 1991

## EXHIBIT A

The following gate settings and associated flows are the Department's best estimates of flow through the slide and wicket gates as of the date of this order. These flows are based on current USGS rating tables for the slide gates and theoretical flow calculations through the wicket gates without turbines/generators in place. This exhibit will be revised after actual wicket gate calibrations become available or turbines/generators are installed in the powerhouse.

OPENINGS	DISCHARGE (CFS) AT LAKE STAGE:		
	<u>776.1</u>	<u>776.2</u>	<u>776.3</u>
3 GATES	700	800	860
4 GATES	850	900	960
5 GATES	925	1000	1060
6 GATES	1050	1100	1150
6 GATES AND 25% OF #1 TURBINE	1150	1200	1300
6 GATES AND 25% OF #1 TURBINE 25% OF #2 TURBINE	1300	1350	1425
6 GATES AND 50% OF #1 TURBINE 25% OF #2 TURBINE	1450	1500	1550
6 GATES AND 50% OF #1 TURBINE 50% OF #2 TURBINE	1600	1650	1700
6 GATES AND 75% OF #1 TURBINE 50% OF #2 TURBINE	1750	1770	1830
6 GATES AND 75% OF #1 TURBINE 75% OF #2 TURBINE	1875	1925	1960
6 GATES AND 100% OF #1 TURBINE 75% OF #2 TURBINE	2000	2050	2085
6 GATES AND 100% OF #1 TURBINE 100% OF #2 TURBINE	2160	2190	2230

*~1000 cfs, but no indication of what the condition was assumed.*

## FINDINGS OF FACT

1. On September 8, 1982, the Department of Natural Resources issued an order pursuant to Section 31.02, Stats., establishing water levels for Lake Koshkonong and operating procedures for the Indianford Dam. The order contained several new provisions for management of lake levels and operating the dam. Among them were the requirement to operate the dam according to levels at the lake as opposed to at the dam, the installation of flashboards on the crest of the dam during low flows and a faster response to changes in the level of the lake. The Department completed intensive environmental and hydraulic studies and prepared a lengthy environmental assessment for the proposal.
2. The order was appealed by Charles Shearer, John Haight, Jr., Earl Rehbaum, Carcajou Shooting Club, Inc., Thiebau Hunting Club, Inc., Rock River Basin Property Owners Association and the County of Rock. After hearing seven days of testimony on the merits of the Department's order, Jefferson County Circuit Court denied the appellants' request for an injunction and also affirmed the Department's order.
3. The decision of Jefferson County Circuit was appealed to District IV of the Wisconsin Court of Appeals by Shearer, et al. and the County of Rock. The Court of Appeals ruled that the Department was required to hold a hearing before issuing the water level order and ordered that the Department hold a hearing on the matter as argued by Shearer, et al.
4. After the case was remanded to the Department, several meetings were held to explore the possibilities of negotiating an order that would satisfy the involved parties. Represented at these meetings were the parties involved in these proceedings, including Charles Shearer, et al., by Attorney Glenn C. Reynolds, Rock County by Attorney James H. Fowler III, Rock River-Koshkonong Association by Attorney John H. Short, Wisconsin Edison Corporation by Peter H. Burno, and the Department of Natural Resources.
5. The attached order represents a compromise that has been agreed to by all of the parties involved.
6. Lake Koshkonong is a natural widening of the Rock River which has been raised by the Indianford Dam. The dam is located approximately 7 miles downstream from the lake's outlet in the NW1/4 of the NW1/4, Section 21, T4N, R12E, Town of Fulton, Rock County. The dam is owned by Rock County and its operation is overseen by the Rock County Public Works Department, Division of Parks, 3715 Newville Road, Janesville, WI 53545.
7. The dam consists of a slide gate section consisting of six slide gates on the east bank, a 227 foot wide open spillway with an average crest elevation of 775.27 feet, Mean Sea Level datum (MSL), and a powerhouse containing head gates and wicket gates on the west bank.

8. Original operating orders for the dam were issued by the Wisconsin Railroad Commission in 1919. Those orders are not adequate for conditions that currently exist.
9. In order to allow reasonable recreational use of the lake, to protect fish and wildlife habitat, to protect water quality and to minimize shoreline erosion during the open water season, it is desirable to keep lake levels between 775.73 feet and 776.33 feet, MSL, between May 1 and October 31.
10. In order to allow reasonable recreational use of the lake, to protect fish and wildlife habitat, to protect water quality and to minimize shoreline erosion, it is desirable to keep lake levels between 775.00 feet and 775.77 feet, MSL, between November 1 and April 30.
11. A representative ordinary high water mark determined on the west shore of Lake Koshkonong is at elevation 776.7 feet, MSL. Allowing the lake to be held above this elevation would infringe on present uses of private property abutting the lake.
12. Water levels above 776.33 feet, MSL, will cause inundation of some shorelines and could lead to excessive erosion and siltation from wave action and destruction of peripheral wetlands.
13. A flow of at least 64 cubic feet per second is needed to maintain existing water quality in the Rock River downstream from the Indianford Dam.
14. All elevations listed in this order are referenced to Department of Natural Resources Benchmark 22-D which is a square cut in the west end of the concrete walkway on the upstream side of the powerhouse at elevation 783.28 feet, MSL.
15. The water levels and operating procedures established in this order will not adversely impact wetlands as defined in Section NR 1.95(4)(c), Wisconsin Administrative Code.
16. The water levels and operating procedures established in this order will not increase water pollution in surface waters and will not cause environmental pollution as defined in Section 144.01(3), Wisconsin Statutes.
17. The Department has prepared an environmental assessment of this order and has concluded that the action is not a major state action significantly affecting the quality of the human environment.

CONCLUSIONS OF LAW

1. The Department has authority under Section 31.02, Wisconsin Statutes, to issue an order establishing water levels for Lake Koshkonong and operating procedures for the Indianford Dam.
2. The Department has complied with the procedural requirements of Sections 31.02 and 1.11, Wisconsin Statutes.
3. The Department has complied with Section NR 1.95, Wisconsin Administrative Code.