

BEFORE THE  
DEPARTMENT OF NATURAL RESOURCES

In the Matter of the Reestablishment of )  
Water Levels for Lake Mendota, City of )  
Madison, Dane County )

3-SD-77-808

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

The Department of Natural Resources proposes to reestablish water levels pursuant to Section 31.02, Statutes, for Lake Mendota in the City of Madison, Dane County. Order issued.

FINDINGS OF FACT

1. The City of Madison and Dane County, Wisconsin 53701, requested the Department to reestablish water levels pursuant to Section 31.02, Statutes, for Lake Mendota in the City of Madison, Dane County. The Department, the City of Madison and Dane County have complied with all procedural requirements of Section 31.02, Statutes.
2. Lake Mendota is maintained by the Tenney Park Dam located on the Yahara River in the NW $\frac{1}{4}$  of the SE $\frac{1}{4}$  of Section 12, T7N, R9E, Dane County. The dam is owned by the City of Madison, Dane County, Wisconsin 53701.
3. Levels were established for Lake Mendota by the Railroad Commission of Wisconsin in Docket No. WP-414 (April 29, 1931), maximum, 849.80, mean sea level datum during periods of ordinary stream flow; average, 849.40, mean sea level datum during the period April to October; and that during periods of high runoff the level of Lake Mendota not be maintained in excess of 4 feet higher than the level of Lake Monona.
4. The levels of Lakes Monona and Waubesa are highly dependent upon the level of Lake Mendota as determined by the operation of the Tenney Park Dam. The difference in the operational range of levels proposed for Lake Mendota in this docket and the operational range of levels proposed for Lakes Monona and Waubesa in Docket No. 3-SD-77-819 is 4.9 feet. During periods of either normal or low flow the Tenney Park Dam should be operated to maintain this difference in order to equalize the effect of the normal and low flows on the three lakes.
5. The Tenney Park Dam is structurally capable of maintaining a maximum water level difference of 10 feet. There is sufficient storage capacity above elevation 850.1, mean sea level datum, to prevent excessive flooding of the shoreline or failure of the dam during the 100-year recurrence interval flood.
6. The ordinary high watermark of Lake Mendota has been determined to be at elevation 850.7 feet, mean sea level datum. Establishing and maintaining water levels above this elevation would infringe upon uses presently made of private property abutting the lake.

7. In order to allow recreational use adjacent to the shoreline, an elevation of at least 849.6 feet, mean sea level datum, must be maintained between the first spring runoff occurring after March 1 and October 30. Water levels below 849.6 feet, mean sea level datum, between November 1 and the first spring runoff occurring after March 1 will not adversely affect recreational use near the shore. Between November 1 and the first spring runoff occurring after March 1, it is desirable to lower the water level to elevation 848.2 feet, mean sea level datum, to prevent ice damage to the shoreline and to provide for flood storage capacity during the spring runoff.

8. It is desirable to keep the range of levels maintained during the summer period (May 1 to October 30) as small as possible. Historically, levels recorded by the USGS have ranged from 852.0 feet to 848.0 feet, mean sea level datum.

9. Water levels above 850.1 feet, mean sea level datum, will cause inundation of the shoreline, lead to excessive erosion and siltation from wave action, and destroy lake edge wetlands.

10. In order to aid the spawning of northern pike, it is desirable that the water level be brought to and be maintained at 849.6 feet, mean sea level datum, as soon as possible after March 1. In order to promote spawning of walleyes and other fish in the channel between Lakes Mendota and Monona, one of the taintor gates must be open at least three tenths of a foot from April 1 through May 15 to provide a flow through the channel.

11. All elevations herein are referenced to a U.S. Coast & Geodetic Survey benchmark No. E-101 described as a standard disk stamped E-101 1934 and further described as along the C.M.St.P&P Railroad tracks about 450 feet south of the crossing of the Chicago & Northwestern Railway, elevation 854.29 feet mean sea level datum adjusted to 1929.

12. The following water levels are in the interest of public rights in navigable waters and will promote safety and protect life, health, and property:

Maximum water level of 850.1 feet, mean sea level datum.

Minimum water level of 849.6 feet, mean sea level datum, between the first spring runoff occurring after March 1 and October 30.

Minimum water level of 848.2 feet, mean sea level datum, between November 1 and the first spring runoff occurring after March 1.

13. The water quality of the Yahara River downstream of the Tenney Park Dam is dependent upon the amount of water released. To be consistent with the design of the sewage treatment plant at Stoughton and present water quality standards a minimum of 4 cubic feet per second should be released from the dam.

14. The Department has made an environmental assessment of the proposed water levels and has determined that their establishment would not be a major state action significantly affecting the quality of the human environment.

CONCLUSIONS OF LAW

1. The Department has authority under subsections 31.02(1) and (2), Statutes, and in accordance with the foregoing findings of fact, to issue an order establishing water levels for Lake Mendota.

2. The Department has complied with Section 1.11, Statutes.

ORDER

THE DEPARTMENT THEREFORE ORDERS:

1. The maximum level of Lake Mendota is hereby established at 850.1 feet, mean sea level datum.

2. The minimum level of Lake Mendota between the first spring runoff occurring after March 1 and October 30 is established at 849.6 feet, mean sea level datum. The minimum level of Lake Mendota between November 1 and the first spring runoff occurring after March 1 is established at 848.2 feet, mean sea level datum.

3. From April 1 through May 15 one of the taintor gates of the Tenney Park Dam shall be left open at least 0.3 feet. At all other times a minimum flow of at least 4 cfs shall be released.

4. During normal flow and low flow conditions, the level of Lake Mendota shall be held within 4.9 feet of the level of Lake Monona.


5. The above established levels and flow shall be adhered to as closely as possible by reasonable and proper operation of the Tenney Park Dam.

Dated at Waunakee, Wisconsin

Jan. 18, 1979

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES  
For the Secretary

By



Douglas Morrissette  
Southern District Director