

Devil's Lake Outlet

MDNR ID #01976

Hazard Potential: Low

Lenawee County, Michigan
Woodstock Township Sec. 26, 27, 34, 35 (T5S, R2E)
Rollin Township Sec. 2, 3, 4, 9, 10, 11 (T6S, R1E)

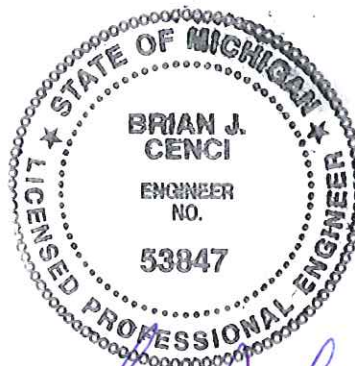
Inspection conducted June 18, 2015
Act 451 P.A. of 1994 Part 307

Owner of Lake Level
Lenawee County

Represented by: Jennifer L. Escott
Lenawee County Drain Commissioner
320 Springbrook Ave., Suite 102,
Adrian, Michigan 49221

Inspectors:
Joseph P. Brezvai
Lenawee County Drain Commission
Brian J. Cenci, P.E.
Eng., Inc.

Professional Engineer:
Brian J. Cenci, P.E.



Brian J. Cenci
10-18-15

DEVIL'S LAKE LEVEL

INTRODUCTION

Devil's Lake is located in portions of both Woodstock and Rollin Townships, Lenawee County, Michigan. The lake has an adjacent body of water, Round Lake, that is connected by two channels. Together, the total surface area is approximately 2,000 acres.

In order to maintain the level of the lakes, the Honorable G. Arthur Rathbun determined the normal lake level. It was set at 1,043.33 feet above sea level on October 14, 1935. This was done in order to protect fish and wildlife, maintain navigation and promote public health and welfare.

The structure used to control the lake level is made of concrete and has a fifteen foot wide spillway. The depth of the structure is unknown, primarily due to no accurate records available. The outlet channel is the Devil's Lake Outlet Drain which flows to the Addison Mill Pond.

RECOMMENDATIONS AND CONCLUSIONS

See attached report.

A special assessment district is not established for the Devil's Lake Outlet. The need for the assessment district will become more prudent as the condition of structure requires additional maintenance.



**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
LAND AND WATER MANAGEMENT DIVISION
DAM INSPECTION REPORT**

This form is to be used for inspection reports required by Part 307, Inland Lake Levels, for those dams that do not meet the size criteria as defined by Part 315, Dam Safety, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Dams six (6) feet or more in height, as defined by Part 315, and impounding five (5) acres or more at the design flood elevation, must meet the inspection report format as outlined in Section 31518 of Part 315.

A person failing to comply, or falsely representing dam conditions, is guilty of misconduct in office.

DAM NAME Devils Lake Outlet		DAM ID 01976	COUNTY Lenawee
DATE OF INSPECTION June 18, 2015	NAME OF WATERBODY Devils Lake	SECTION, TOWN, RANGE Sec. 4 T 6-S, R 1-E	LEVEL THIS DATE 1043.80
DATE ELEVATION SET BY COURT 10-14-1935	LEGAL LEVEL 1043.333	DRAWDOWN LEVEL Not Applicable	HIGH WATER MARK ELEVATION 1043.83

EARTH EMBANKMENTS LEFT EMBANKMENT NA FT. RIGHT EMBANKMENT NA FT. TOTAL LENGTH NA FT.
(LOOKING DOWNSTREAM)

	UPSTREAM	CROWN	DOWNSTREAM
VEGETATIVE COVER	N/A	N/A	N/A
EROSION	No	No	No
SEEPAGE			None observed at the time of inspection
SLIDES, SLUMPS & CRACKS	N/A	None observed	N/A
ANIMAL BURROWS	N/A	N/A	N/A
WAVE ACTION PROTECTION	Good		Good
REMARKS*	No erosion of sides present at time of inspection	Good – no settlement	Good

CONTROL STRUCTURE

TYPE Concrete overflow weir.	YEAR CONSTRUCTED Estimated 1936	STRUCTURAL HEIGHT (top of dam elevation minus stream invert) 5.0 feet
LENGTH OF SPILLWAY 15 feet	FREEBOARD 2.0 feet	HYDRAULIC HEIGHT (design flood elevation minus stream invert) 5.0 feet
VERTICAL PIPE SIZE Not applicable.	HORIZONTAL PIPE SIZE Not applicable	HEAD (normal headwater minus normal tailwater) 3.0 feet

DESCRIBE CONDITION OF THE FOLLOWING ITEMS.

STOPLOG VALVES AND GATES (open and close to check condition): Check location of top stoplog in relation to top of riser pipe intake box or fixed crest, for leakage, and condition of stoplogs, valves and gates.

N/A

CONTROL STRUCTURE (continued)

OUTLET PIPE: Check for damage from ice, logs, vandalism; inside discharge pipe for settlement and/or joint separation; condition of pipe coating. N/A – no pipe, channel	
CONCRETE STRUCTURE: Check for erosion; location of cracking or spalling. If old or new; settlement; need for crack repairs. No changes since last inspection; good condition.	
WALKWAY & RAILING: Check if in place or removed, condition, and if adequate protection provided. Good condition	TRASHRACK OR LOG BOOM: Check if operable. N/A
EMERGENCY SPILLWAY: Size, type, and condition. None exists	

INLET & OUTLET CHANNELS

	INLET	OUTLET
SIZE	Approx. 60 to 70 feet wide channel. Some wave action from use of lake by boat traffic.	Channel is less than 30 feet wide. Some rip rap in channel and downstream of spillway.
EXISTING CONDITION	Good	Good
EROSION	None	None
DEBRIS & OBSTRUCTIONS	None	None
RIPRAP PROTECTION	Yes	Yes
REMARKS*	Good condition	Good condition

RECOMMENDATIONS

List work needed, how to be done, by whom, estimated cost, source of funds, recommended completion date. If emergency, to what extent. ADDITIONAL COMMENTS.

Inspection Ordered By: Jennifer L. Escott, Lenawee County Drain Commissioner

Lenawee County Delegated Agent

Brian J. Cenci, P.E.

INSPECTOR'S NAME (PRINTED)

SIGNATURE

No. 6201053847

P.E. REGISTRATION NO.

4063 Grand Oak Drive, Suite A109

ADDRESS

Lansing, MI 48911

CITY, STATE, ZIP CODE

517-887-1100

TELEPHONE NUMBER

Please submit this completed report and photographs of the dam, downstream channel, and deficiencies cited in the report to:
 DAM SAFETY PROGRAM
 LAND AND WATER MANAGEMENT DIVISION
 MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
 PO BOX 30458
 LANSING MI 48909-7958

*NOTE: If space is inadequate for remarks, attach additional sheets as needed.

DEVIL'S LAKE LEVEL CONTROL STRUCTURE



North Side of Dam



South Side of Dam



Looking downstream at outlet channel