



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER RESOURCES 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 Sunset Lake Level Control Structure		DAM ID 808	COUNTY Iron
DATE OF INSPECTION October 7, 2020	NAME OF WATERBODY Sunset Lake	SECTION, TOWN, RANGE Sec 7, T43N, R34W	LEVEL THIS DATE 1548.0+/-
DATE ELEVATION SET BY COURT June 10, 1958	LEGAL LEVEL Summer 1547.0 Winter 1546.5	DRAWDOWN LEVEL n/a	HIGH WATER MARK ELEVATION 1548.0+/-

EARTH EMBANKMENTS LEFT EMBANKMENT n/a FT. RIGHT EMBANKMENT n/a FT. TOTAL LENGTH n/a FT.
(LOOKING DOWNSTREAM)

	UPSTREAM	CROWN	DOWNSTREAM
VEGETATIVE COVER	Trees/aquatic veg.	n/a	n/a
EROSION	None	None	None
SEEPAGE			None
SLIDES, SLUMPS & CRACKS	None	None	None
ANIMAL BURROWS	None	None	None
WAVE ACTION PROTECTION	None		None
REMARKS*	See attached photos		

CONTROL STRUCTURE

TYPE Concrete	YEAR CONSTRUCTED 1961/1970	STRUCTURAL HEIGHT (top of dam elevation minus stream invert) 3 feet
LENGTH OF SPILLWAY 8 feet	FREEBOARD none	HYDRAULIC HEIGHT (design flood elevation minus stream invert) 3 feet
VERTICAL PIPE SIZE n/a	HORIZONTAL PIPE SIZE n/a	HEAD (normal headwater minus normal tailwater) Headwater = tailwater

DESCRIBE CONDITION OF THE FOLLOWING ITEMS.

<p>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. Structure completely inundated by lake level. No stoplogs in place on date of inspection.</p>
<p>OUTLET PIPE: Check for damage from ice, logs, vandalism; inside discharge pipe for settlement and/or joint separation; condition of pipe coating. n/a</p>

CONTROL STRUCTURE (continued)

CONCRETE STRUCTURE: Check for erosion; location of cracking or spalling. If old or new; settlement; need for crack repairs.	
Concrete elements appear in fair to poor condition. Difficult to assess structure since everything is covered in water.	
WALKWAY & RAILING: Check if in place or removed, condition, and if adequate protection provided. n/a	TRASHRACK OR LOG BOOM: Check if operable. n/a
EMERGENCY SPILLWAY: Size, type, and condition. n/a	

INLET & OUTLET CHANNELS

	INLET	OUTLET
SIZE	Lake narrows to about 20 feet upstream of structure	Approximately 16-18 feet wide channel
EXISTING CONDITION	Fair	Good
EROSION	Previous reports indicate eroded areas around ends of control structure	Previous reports indicate eroded areas around ends of control structure
DEBRIS & OBSTRUCTIONS	Aquatic vegetation and large tree in inlet—see photos	None
RIPRAP PROTECTION	Some rip rap—see photos	A few rocks/stones—see photos
REMARKS*	Water level 1.5 feet above normal winter level.	

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.

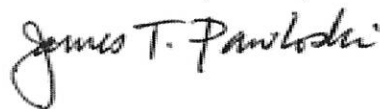
Structure is completely inundated by impoundment and difficult to assess. Outlet channel is flooded. Outlet channel should be investigated further to confirm whether obstructions exist downstream. Culvert at county road crossing downstream was investigated and was not obstructed. Previous reports indicate fair to poor condition of control structure, including areas of settlement and deteriorated features. Recommend major repair or replacement of structure to simplify operation and reduce maintenance costs. A full span sheet pile structure with channel guides for stoplogs would simplify operations and better manage water levels.

Drain Commissioner should consider development of drainage/assessment district and a legal easement for access as none currently exist.
Additional level gage was added after inspection was completed.

Inspection Ordered By: Bill Casagranda, Drain Commissioner
Iron County Delegated Agent

James T. Pawloski, PE

INSPECTOR'S NAME (PRINTED)



ADDRESS 5081 East Martin Lake Drive

SIGNATURE

34034

CITY, STATE, ZIP CODE Gaylord, MI 49735

P.E. REGISTRATION NO.

TELEPHONE NUMBER 231-499-5608

Please submit this completed report and photographs of the dam, downstream channel, and deficiencies cited in the report to:

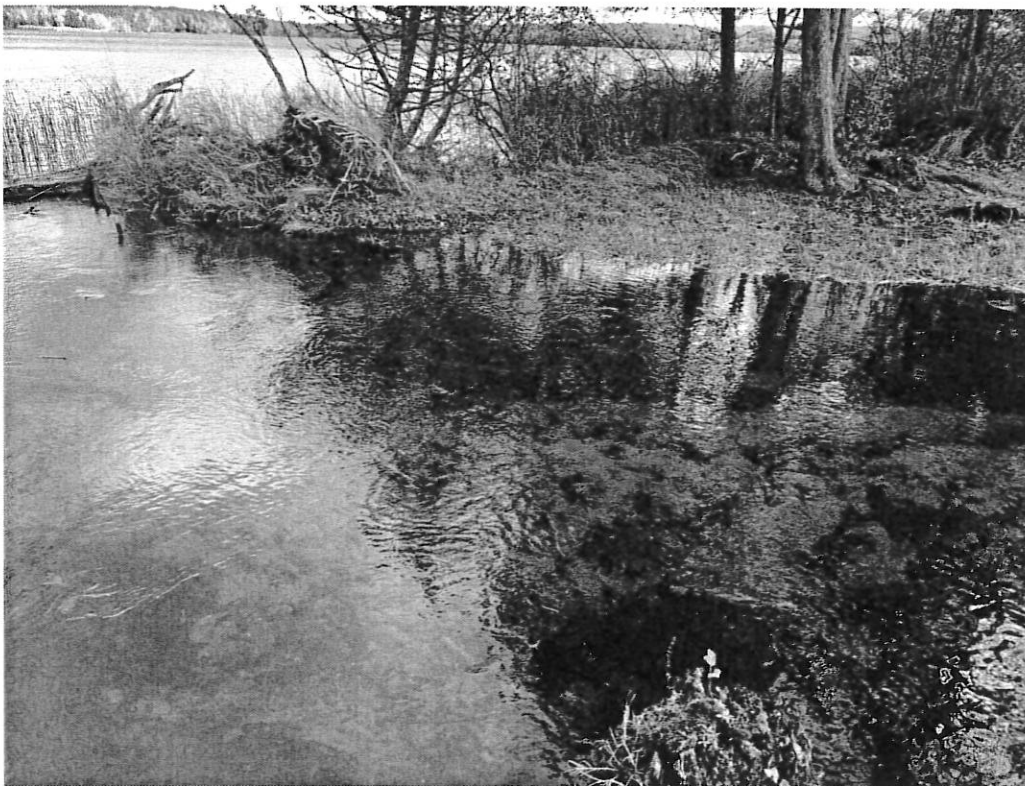
DAM SAFETY PROGRAM
WATER RESOURCES DIVISION
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
PO BOX 30458
LANSING MI 48909-7958

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

**SUNSET LAKE LEVEL CONTROL STRUCTURE
DAM ID 808
IRON COUNTY**



PHOTOGRAPH 1— Structure viewed from downstream



PHOTOGRAPH 2— View of left abutment area from right abutment

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PHOTOGRAPH 3—View from downstream



PHOTOGRAPH 4—Measuring elevation

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PHOTOGRAPH 5— View of right abutment area



PHOTOGRAPH 6— View of inundated control section

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PHOTOGRAPH 7— View of flooded outlet channel