

Leland Dam Authority
Regular Session – Wednesday, April 17, 2024
Tentative minutes

Proceedings of the meeting are being recorded (audio and video). The video of the meeting can be found at the following link: <https://leelanau.gov/meetingdetails.asp?MAId=2701>

Call to Order:

Meeting called to Order by Chairman Steve Christensen at 10:07 a.m. Today's meeting is being held at the Government Center, 8527 E. Government Center Drive, Suttons Bay, Michigan.

Pledge of Allegiance:

The Pledge of Allegiance to the Flag of the United States of America was recited, followed by a moment of silence.

<u>Roll Call:</u>	Chairman, Steve Christensen (Drain Commissioner)	PRESENT
	Vice-Chairman, Garth Greenan (Road Commissioner)	PRESENT
	Member, Kama Ross (District #5 Commissioner)	PRESENT
	Member, Richard Thompson (Engineer Category)	PRESENT
	Member, Drew Warner (Riparian Category)	PRESENT

Interim County Administrator Richard Lewis introduced himself to all Dam Authority Members.

Other staff members present included Maintenance Director Jerry Culman II, and Executive Assistant Lauren Cypher.

Guests present.

Approval of Agenda / Late Additions or Deletions:

Chairman Christensen said he would like to add Patrick Machin with Machin Engineering, Inc. to the agenda as #1a. Machin is here to review the recommended modifications/repairs to the hydraulics at the Dam. Christensen would also like to add item #6 as Miscellaneous Reports.

Commissioner Ross added that she would like to follow up more about lake levels on social media and maybe letting people know the Dam Authority is working on the procedure manual and other newsworthy items. Thompson mentioned that he has written a letter for the Lake Leelanau Lake Association newsletter that he will share today, regarding who controls the lake level and responsibilities. Christensen added agenda item #7 Social Media/News.

MOTION BY GREENAN TO ACCEPT THE AGENDA AS AMENDED ADDING ITEMS #1A MACHIN ENGINEERING, INC., #6 MISCELLANEOUS REPORTS, AND #7 AS SOCIAL MEDIA/NEWS. SECONDED BY ROSS.

Discussion – none.

AYES – 5 (Greenan, Ross, Thompson, Warner, Christensen)

NO – 0

MOTION CARRIED.

Approval of Minutes – Wednesday, February 28, 2024:

MOTION BY GREENAN TO APPROVE THE FEBRUARY 28, 2024 MEETING MINUTES AS PRESENTED. SECONDED BY THOMPSON.

Discussion – none.

AYES – 5 (Greenan, Ross, Thompson, Warner, Christensen)

NO – 0

MOTION CARRIED.

Public Comment: (3 minutes)

The following individuals spoke: Chris Crump

Action Items –

Patrick Machin, Machin Engineering, Inc.:

Chairman Christensen began by explaining briefly the previous discussions of items to be addressed at the Dam which were the control room roof and walkway. Christensen said basically those front burner items were replaced with focus of what would be needed in a hydraulic system and maintenance of that system at the Dam due to other dam failures in the State.

Patrick Machin, Principal of Machin Engineering, Inc. was present for this item. Machin addressed Dam Authority members and gave a brief history of Machin Engineering's history of work and familiarity with the Leland Dam.

Machin stated that after many discussions and revisiting the Dam with Maintenance Director Jerry Culman and looking at overall operations he stated that this facility is a very low duty cycle. In order to operate the dam, the rams operate very minorly, basically at half of its capacity to move gate up and down. Having said that, Machin added that they have had conversations with Michigan Fluid Power which was the vendor that provided the original skid system for pump and motors and the piping feeding the hydraulics.

Machin continued and said that after all discussions with Authority members and talking it all over again that it is their opinion that the system is operating very well, and will continue to operate very well due to the number of redundancies included in the system. The system includes two gear driven pumps, which are the highest life cycle pumps that you can get, according to service providers and manufacturers. There are two pumps, but one pump can operate both cylinders, moving at half speed because they have half of the flow. The pressure is fine, everything can operate. If you take one cylinder out, one cylinder can operate with one pump which can operate the Dam. Machin continued and said, if you combine everything together that is basically seven modes of redundancy which is quite good. Most have two or three, but we can add an eighth using the manual operator installed in 2018.

Machin reviewed the letter dated April 17, 2024, addressed to Chairman Christensen which gave the recommended modification and/or repair to address (#1-8) concerns. The letter handout can be seen at the following link:

https://leelanau.gov/downloads/machin_engineering_spec_assistance_04172024.pdf

Machin stated that based on their findings the items that, in their opinion, need to be repaired or added or replaced are considered minor to the system and are "on the shelf" type of things. These items/services are things that the company Michigan Fluid Power can do and the original

service provider to the Dam. Machin continued by saying his recommendation is, instead of going out for bids, is to take this list and send it to this company and get a price from them. Machin added that Michigan Fluid Power is a highly regarded Michigan service company. Additional discussion continued between Machin, Dam Authority members, and Interim Administrator Lewis. Additional items discussed were secondary containment, plaques for emergency measures, two-person coverage of functions in case of employee turnovers, and Michigan Municipal Risk Management Authority (MMRMA) topics.

MOTION BY GREENAN TO RECOMMEND THE LEELANAU COUNTY BOARD OF COMMISSIONERS MOVE FORWARD WITH THE RECOMMENDATION FROM MACHIN ENGINEERING, INC. AND TO WAIVE THE BID PROCESS AND HIRE MICHIGAN FLUID POWER TO MOVE FORWARD WITH THE RECOMMENDATIONS PUT FORTH BY MACHIN ENGINEERING, INC. AND WILL PROVIDE A COST NOT TO EXCEED AMOUNT TO BE DETERMINED. SECONDED BY ROSS.

Discussion – Thompson would like to suggest a placard for emergency situations. Discussion ensued regarding wording. Machin said he would address it.

AYES – 5 (Greenan, Ross, Thompson, Warner, Christensen)

NO – 0

MOTION CARRIED.

Chairman Christensen stated he will be working with Interim Administrator Lewis to write up that EDS for the Executive Board meeting in May.

Lake Leelanau Lake Association (Discussion):

No discussion.

Replacement Cylinder:

Topic covered under Action Item #1, Patrick Machin, Machin Engineering, Inc.

Design for Power Unit:

Topic covered under Action Item #1, Patrick Machin, Machin Engineering, Inc.

Sensors and Staff Gauges:

https://leelanau.gov/downloads/water_level_electronic_sensor_04172024.pdf

Member Richard Thompson addressed this agenda item and stated that over the past month he has worked with John Popa repairing the sensor at the Dam. Thompson said the conduit for that sensor was broken and explained the repair. The sensor read well for a few days but periodically they would see readings that jump up and down. Thompson said the life of that sensor is about 10-years and it is at about eight now. Brief discussion ensued.

MOTION BY ROSS TO APPROVE THE EXPENDITURE TO REPLACE THE PROCESSOR AND SENSOR FOR THE ELECTRONIC GAUGE AT THE LELAND DAM WITH AN AMOUNT NOT TO EXCEED \$2,000.00. SECONDED BY GREENAN.

Discussion – none.

AYES – 5 (Ross, Thompson, Warner, Christensen, Greenan)

NO – 0

MOTION CARRIED.

Discussion continued.

Culman gave an update on starting to raise the lake level for summer. It is on manual, and he is keeping an eye on it each day with very minimal flow over the top at this point.

Culman stated there had been a failure in the control box and that he had contacted Chris Hayes regarding buying a PLC [Programmable Logic Controller] for the possibility of having one available on the shelf.

MOTION BY THOMPSON TO PURCHASE A REPLACEMENT “PLC” AS SOON AS POSSIBLE IN AN AMOUNT NOT TO EXCEED \$2,000.00. SECONDED BY ROSS.

Discussion – brief

AYES – 5 Thompson, Warner, Christensen, Greenan, Ross)

NO – 0

MOTION CARRIED.

Procedures/Manual Update:

Chairman Christensen gave an overview of the procedures they have been putting together. This document/manual is coming along but we are now bumping up against the summer season. Christensen continued that they had come to realize that the Narrows was set low last year carrying under the court order, so they carried near the top of the two-inch window that was allowed. At some point they had decided to go mid-range for the duration, and now they need to decide what to do for this summer season.

Dam Authority Member Warner suggested that they go toward the lower end of the court order out of concern for the property owners on south lake and see if that may help a little bit. Warner said he thinks they are dealing with fewer people concerned about boating than the issues of property values of potentially hundreds of people.

Thompson said he had written up a few sentences regarding the operation of the Dam and referenced his handout which can be seen at the following link:

https://leelanau.gov/downloads/water_level_control_procedure_04172024.pdf

Brief discussion ensued regarding setting the summer level.

MOTION BY THOMPSON TO RECOMMEND ATTEMPTING TO HOLD THE DAM LEVEL AT 589.21’ ABOVE MEAN SEA LEVEL MINUS TWO INCHES (WHICH WOULD EQUATE TO 589.04’). SECONDED BY ROSS.

Discussion – brief

AYES – 5 (Thompson, Warner, Christensen, Greenan, Ross)

NO – 0

MOTION CARRIED.

Chairman Christensen asked about having discussion regarding when to dump after a significant rainfall and when to be on auto and when to be on manual. These items can be thought on and addressed at the next meeting.

Discussion ensued regarding the next meeting date which was then set for Wednesday May 22, 2024 at 10:00 a.m., with an alternate date of May 29, 2024.

Reports (Christensen):

Chairman Christensen stated that there is a little tiny piece of land on the Falling Waters Lodge side, that is owned by the County. The Falling Waters Lodge owners are suggesting that we sell it to them for \$1.00. It is 116.6 square feet.

Social Media/News:

Thompson said he had written a small article for the Lake Leelanau Lake Association to go into their next newsletter, and said he would present it to the Dam Authority. The article can be seen at the following link:

https://leelanau.gov/downloads/IIIa_draft_letter_04172024.pdf

Discussion followed.

Public Comment (5 minutes):

The following individuals spoke:

Diane Pelak; Chris Crump

Commissioner Comments:

None.

Adjournment:

Move to adjourn by Greenan. Seconded by Ross.

Chairman Christensen adjourned the meeting at 12:29 p.m.

Steve Christensen, Drain Commissioner
Chairman, Leland Dam Authority

Alison Middleton, Administrative Deputy Clerk for
Michelle L. Crocker, Leelanau County Clerk