

# Mink-Somers Outlet Restoration Project

2020-2021

Presented by Gene McLain

# The Outlet



**Figure 1 1983 Photograph of the Loose Rock Dam on Somers Lake  
(photo courtesy of the MNDNR)**



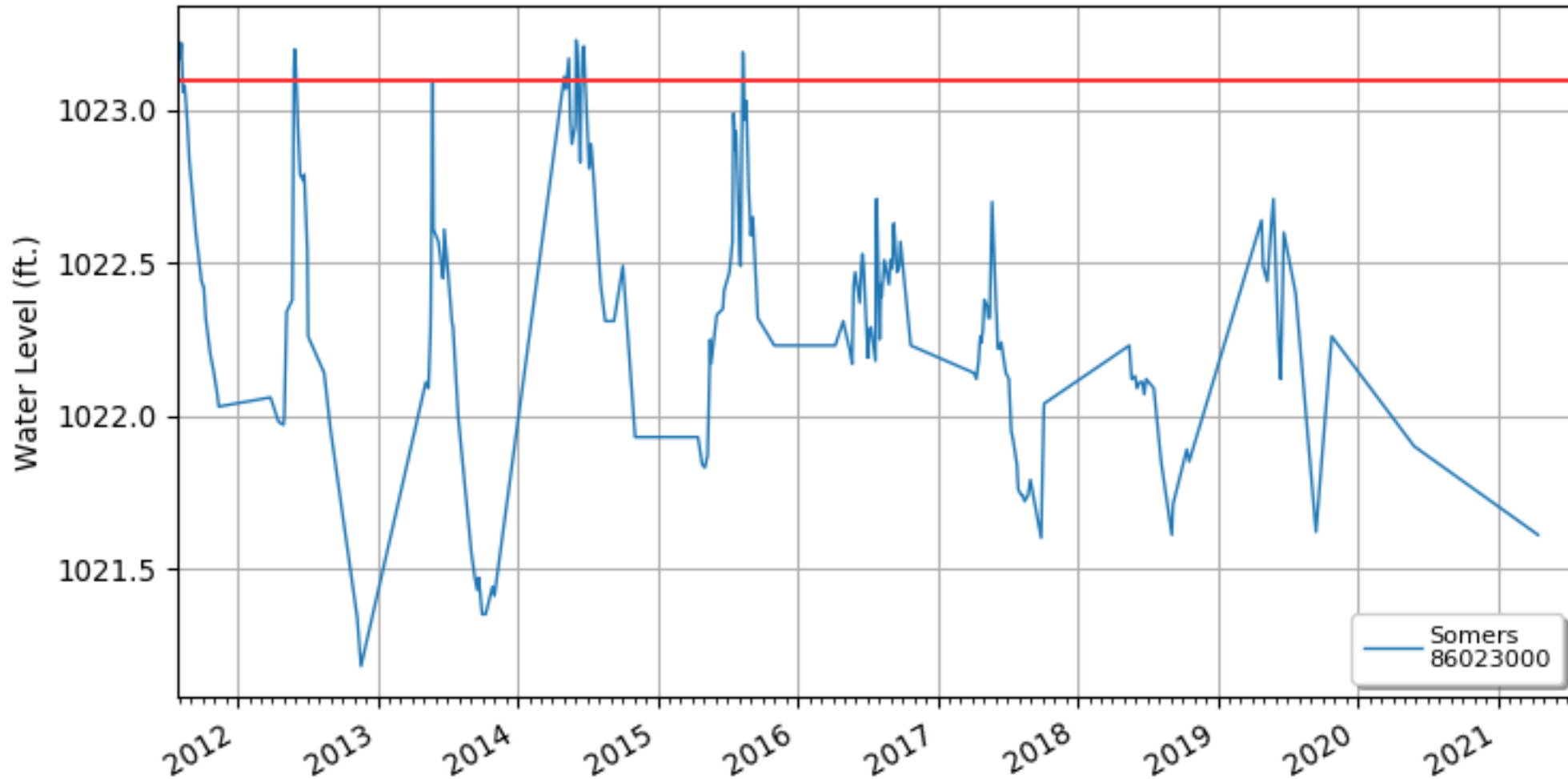
**Figure 2 2021 Photograph of the Loose Rock Dam on Somers Lake  
(photo courtesy of the MNDNR)**

# History

- ▶ Last certified study by the Mn DNR was in October 1983
- ▶ The values at that time determined the O. H. W. (Ordinary High Water)
- ▶ Some elevation numbers:
  - ▶ The O.H.W. is 1023.1 feet (NGVD 1929) {considered sea level until 1973}
  - ▶ The surface of Somers Lake in 1983 was 1022.37 ft
  - ▶ In 1951 the surface of Somers Lake was 2.37 feet lower
  - ▶ In 1974 the surface of Somers Lake was 7.56 inches higher
  - ▶ In April 2021 the surface of Somers Lake was 1021.61 or 9.12 inches lower
  - ▶ Tuesday the surface of the water was 1020.5 or almost 22 ½ inches lower than the outlet is supposed to be
    - ▶ Or 31 ¼ inches below the ordinary high water.

# HISTORICAL LAKE LEVELS

Recorded Water Levels  
2011-7-27 to 2021-7-27



# PROPERTY OWNER SURVEY 2020

## Project Proposals

The Project ranking was more difficult to score due to people using their own method on paper. The online version did not allow more than one answer per project. But these are the numbers;

NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	TOTAL	PROJECT	AVG
8	8	18	11	3	48	AGGRESSIVE AIS	9.6
10	7	13	4	8	42	ID INPUT	8.4
13	14	3	6	1	37	REMOVE MUCK	7.4
14	8	3	3	7	35	SECURE OUTLET	7
4	5	5	9	11	34	KILL WEEDS	6.8
0	2	4	6	8	20	HARVESTING	4
1	2	1	3	4	11	LANDING	2.2
0	0	2	3	4	9	EDUCATE	1.8
0	0	1	2	2	5	PLOW SNOW	1

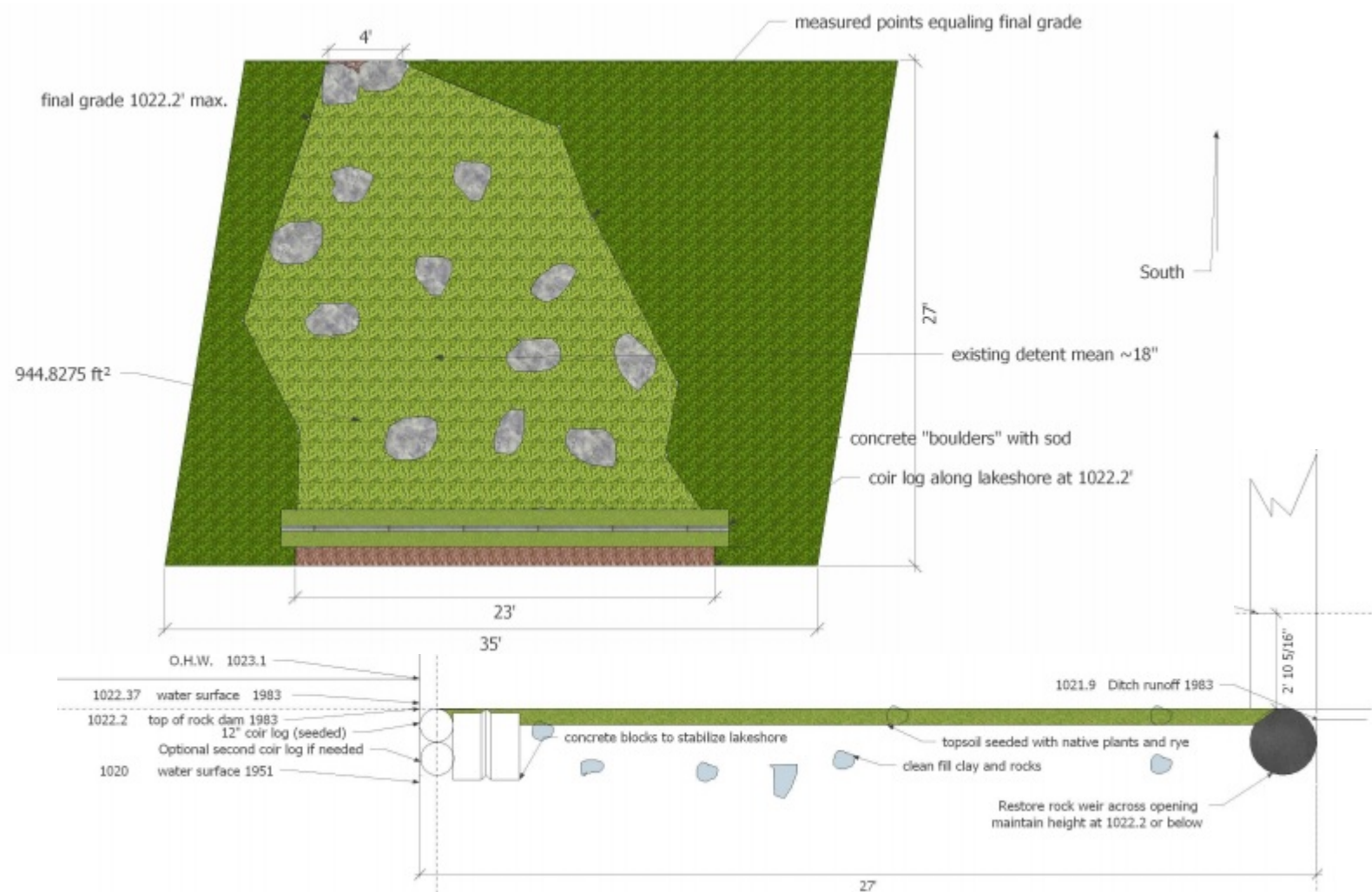
- ▶ In response to interest in securing the outlet as one of the high priorities, research was done to determine the possibility of working with the outlet.
- ▶ Findings:
- ▶ Legend has it that some people would add or remove rocks to change the amount of water the loose rock dam/weir held back
- ▶ Landowner wanted to move the location and widen outlet to reduce erosion.
- ▶ Stakeholders: Land Owner, Township, County, Mn DNR - Area Hydrologist, National Wetland Inventory-WCSWCD, County ditch manager, Riparians.

# Discoveries

- ▶ We were informed that to change or do anything to the outlet, we would have to have a project engineered before the DNR would approve any project.
- ▶ We got an estimate from a local engineering firm that has worked on our lake before.
  - ▶ Their price for Engineering, design and project overview \$ 33,800
    - ▶ NOT including any construction costs or material
- ▶ This year we were able to get both the hydrologist and wetland manager onsite at the outlet to assess the situation.
  - ▶ We were informed that to change the height or width of the outlet would require a unanimous vote of all property owners on the lakes.
  - ▶ Much back and forth discussion resulting in a design plan to restore the outlet to it's 1983 values
  - ▶ We needed a design plan by a landscaper or surveyor and would be able to restore the ice ridge at the outlet without need of engineering or a public waters permit.
    - ▶ This meeting and negotiation saved the above amount and more!

# PROPOSED DESIGN

## Has NOT been approved by DNR



# Requests for Estimates

due to uncertainty the estimates have a range

## ▶ Design Plan:

- ▶ Backyard Reflections - \$ 1,000 (assuming to get construction job)
- ▶ Rachel Contracting - No estimate as his union shop couldn't compete
- ▶ J K Landscaping - \$1,200 - \$1,500
- ▶ Webb Surveying - \$1,000 - \$1,500 (lower number unless DNR change)

## ▶ Construction:

- ▶ Backyard Reflections - \$9,856.52
- ▶ J K Landscaping - No Bid
- ▶ Thompson Excavating - \$7,500 with possible allowances
  - ▶ Recommended by Board Vote but value exceeds maximum for board approval
  - ▶ Vote of property owners needed for construction portion.



# OUTLET RESTORATION PROJECT

- ▶ SITE SURVEY WITH EXISTING CONDITIONS AND PLAN VIEW IN PROCESS
- ▶ ONCE DNR HYDROLOGIST APPROVES PLAN,
  - ▶ CONSTRUCTION WILL START IMMEDIATELY
  - ▶ CONSTRUCTION SHOULD TAKE A COUPLE OF DAYS
  - ▶ PROPERTY OWNER OFFERS TO WATER SEEDING
- ▶ SPECIAL THANKS TO STEVE COMPTON AND FAMILY FOR THEIR COOPERATION AND ASSISTANCE.
- ▶ SPECIAL THANKS TO PAUL MIELKE FOR WEED WHIPPING THE TALL GRASS SO WE COULD TAKE MEASUREMENTS

THIS WILL NOT ADD MORE  
WATER TO THE LAKE

BUT IT WILL HELP KEEP  
AS MUCH AS WE CAN !