

## 2022 Year in Review

2022 was a year of progress and collaboration for the Four Lakes community, with its strong push toward lake restoration for Secord, Smallwood, Wixom and Sanford lakes.

Most notably this year, \$200 million in additional funding was provided to Four Lakes Task Force (FLTF), on behalf of the Four Lakes Special Assessment District, from the State of Michigan to restore the lakes. In addition, we established a fair and consistent methodology to assess property owners and implemented the first special assessment for operations and maintenance. We made significant engineering progress by achieving 100% design engineering for Secord and Smallwood dams and achieved 60% engineering for Edenville and Sanford.

### Key Accomplishments in 2022

<b>March 30</b>	Governor Whitmer signs supplemental bill that includes <a href="#">\$200 million</a> for restoring the Four Lakes' dams
<b>April 20</b>	Fourth and final Preliminary Day of Review offers property owners chance to discuss the SAD methodology and benefit factors for their property
<b>May 24</b>	Debris removal begins on Sanford and Wixom lakebottoms
<b>May 25</b>	<a href="#">FLTF posts its response to the Independent Forensic Team's final report</a> on the investigation of Edenville and Sanford dams
<b>July 8</b>	<a href="#">Public Sector Consultants (PSC) 2022 survey</a> reveals about 50% of respondents were confident that the community will recover in 5 years – up from 38% in 2021
<b>July 17</b>	Gladwin and Midland County Boards of Commissioners unanimously <a href="#">approve the assessment roll</a> for the Operations and Maintenance Assessment, the computation of cost for operations and maintenance, and the \$250 million project cost estimate for restoring the four dams
<b>August 24</b>	<a href="#">Tittabawassee River flows back on course</a> through the Sanford Dam
<b>September 15</b>	Edenville Township and Wixom Lake Improvement Board perform a pilot test of aerially spraying evaluation plots on Sanford and Wixom lakebottoms to control growth of woody trees (see related story)
<b>October</b>	FLTF qualifies for \$790,000 grant from the Federal Emergency Management Agency towards restoration of Edenville Dam
<b>October 20</b>	<a href="#">Engineering and Technical Symposium educates 200+ people</a> about the path to restoration. Symposium features 16 vendors and 11 presenters including the Director of EGLE, Liesl Clark
<b>November 1</b>	FLTF submits <a href="#">60% dam safety design permit for Sanford Dam to EGLE</a>
<b>November 2</b>	<a href="#">EGLE issues permit for the Secord Dam project</a> to begin final construction
<b>November 4</b>	FLTF submits <a href="#">Smallwood Dam permit to EGLE and EPA</a>
<b>December</b>	First operations and maintenance assessment appears on winter tax bills
<b>December 13</b>	FLTF announces <a href="#">awarding of bids</a> for restoration of Secord and Smallwood dams to Fisher Contracting
<b>Week of December 13</b>	EGLE expected to issue permit for the Smallwood Dam project to begin final construction

## Bottomland Vegetation Management

2022 saw ongoing woody vegetation control by mowing on all four lakes either by lakefront property owners, lake associations or certain townships.

Additionally, EGLE approved and issued permits during summer 2022 allowing helicopter-based aerial treatments to control growth of woody saplings in the lakebeds. Initial aerial treatment of 210 acres on Sanford Lake and the Tittabawassee arm of Wixom Lake occurred on September 15, 2022. Follow-up inspections indicate excellent control and no application drift to non-target locations. Generous donations from Corteva AgriSciences will support an additional 600 acres of treatment planned for early summer 2023.

### Q. What is FLTF's role in Bottomland vegetation management?

A. FLTF was delegated by Midland and Gladwin counties under "Part 307" to restore and maintain the lakes at their pre-flood "legal lake levels." This includes rebuilding the dams to modern safety standards and developing an assessment district that covers rebuilding and ongoing operational costs. Part 307 does not allow assessment for aquatic (or dry lakebed) vegetation management. Therefore, FLTF is not assessing for, paying for, or supervising aerial applications or paid mowing activities. FLTF is collaborating with townships, lake associations, and lake improvement boards to promote a uniform approach to vegetation management. FLTF has also been the recipient of donations specifically for aerial treatments which are being distributed to the various townships or improvement boards as appropriate. FLTF has also shared available imagery and other mapping products useful for identifying vegetative or barren areas in the exposed lakebeds with these same entities.

### Q. Which groups are responsible for paid mowing or helicopter application costs?

A. Townships, under Act 188, can levy an assessment for vegetation management in the lakes for recreational improvement or use other available funds. Those townships include Secord, Clement, Bourret, Hay, Tobacco (west of M30) and Edenville (Sanford Lake). Alternatively, lake improvement boards can be formed under "Part 309" to assess and conduct aquatic or dry lakebed vegetation control. Four Lakes has the Sanford Lake Improvement Board and the Wixom Lake Improvement Board.

## Flood Recovery Projects

FLTF was busy in 2022 with flood recovery projects, including debris removal, dam stabilization and stabilization of shorelines and culverts damaged by erosion.

**Debris Removal.** Lake bottom flood debris removal projects are wrapping up on Sanford and Wixom lakes. Work began in May 2022 and will be finished in January 2023. Projects completed include Sanford Village area, Sanford Lake County Park, River Trails Heritage County Park, Wixom Lake bottom lands and Sanford Lake bottom lands.

Post-flood debris removal work has totaled \$4,321,542. On Sanford Lake, 1,044 debris points (trees, boat lifts, milled and miscellaneous wood, man-made debris, unknown items) were removed to-date. On Wixom Lake, 1,307 debris points were removed. Watch a video showing this work [here](#).

### Communication Highlights

FLTF conducted extensive communications in 2022. During the course of the year there were:

- 44,400 visits to the FLTF website
- 50 news flash emails sent to a subscriber list of more than 4,500 people
- 69 updates published
- 17 meetings including five board meetings, multiple community information sessions, the Preliminary Day of Review, and the Engineering and Technical Symposium, which drew interested attendees from throughout the U.S.

**Shoreline Stabilization.** FLTF has performed 22 shoreline stabilization projects and 6 culvert stabilization projects. One shoreline stabilization project and one repair project underway will both be completed in Spring 2023. In total, 10,634 feet of shoreline was restored using 48,335 tons of riprap among other materials. Watch a video showing this work [here](#).

This will be the last project performed unless FLTF can find more funds to assist property owners with the cost of these projects. Both federal and state funding are being pursued.

**Dam Stabilization.** Dam stabilization projects on Smallwood, Edenville and Sanford dams have all been completed.

*NUMBER OF HOMES  
PROTECTED: 98*

*TOTAL AMOUNT OF  
SHORELINE PROTECTED: 2.1  
MILES*

## Lake Readiness Plans

<b>Secord</b>	<b>Smallwood</b>
<ul style="list-style-type: none"> <li>✓ Engineering completed</li> <li>✓ EGLE permit to rebuild is approved</li> <li>✓ Pounding sheet pile into the dam embankment is underway</li> <li>✓ Fisher Contracting submits low bid and is chosen for reconstruction of Secord Dam</li> </ul>	<ul style="list-style-type: none"> <li>✓ 100% design documents submitted to EGLE in September 2022</li> <li>✓ EPA reviewing permit</li> <li>✓ Construction expected to be permitted in December</li> <li>✓ Fisher Contracting submits low bid and is chosen for reconstruction of Smallwood Dam</li> </ul>
<b>Edenville</b>	<b>Sanford</b>
<ul style="list-style-type: none"> <li>✓ 60% Engineering Plans</li> <li>✓ Engineering team is identifying pull-ahead projects in preparation for restoration construction</li> <li>✓ Consumers Energy is rerouting power lines around the dam</li> <li>✓ 100% design documents are expected to be completed by mid-year 2023 with final construction planned to begin by early 2024</li> </ul>	<ul style="list-style-type: none"> <li>✓ EGLE permit submitted November 1, 2022</li> <li>✓ 60% dam safety design</li> <li>✓ Submittal initiated the review process to receive a permit for dam construction activities impacting regulated environmental areas</li> <li>✓ Final permitting of Sanford Dam is expected by mid-2023</li> </ul>

## What to Expect in 2023

- Update on cost and planning on the Four Lakes Restoration Project in January
- 100% design documents for Edenville and Sanford dams by mid-year 2023
- Final permitting for Edenville and Sanford dams in first half of 2023
- Continue focus on obtaining grants to reduce assessment
- Environmental restoration planning:
  - Transition projects for debris removal, vegetation
  - Habitat enhancements like spawning areas at tailrace
  - “Soft” shoreline demonstration project
  - Consulting with DNR on future lake management and recreation plans
  - Fundraising for environmental and recreational project