Meeting Two Summary

June 18, 2024 | 9:00 a.m.-12:00 p.m.

Allegan County Community Services Building Human Services Conference Room 3255 122nd Ave., Ste. 300 Allegan, MI 49010

Attendees

- Environmental Protection Agency (EPA) Citizens Advisory Group
- Kalamazoo River Watershed Council
- Great Lakes Fishery Commission
- Michigan Department of Natural Resources (DNR)
- · City of Allegan
- Allegan Township
- Allegan County Board of Commissioners
- Allegan Conservation District
- Lake Allegan Association
- Allegan County Administration
- Allegan Area Chamber of Commerce
- Consumers Energy
- Public Sector Consultants

Introductions

- Opening remarks
- Overview of the meeting agenda
- Review of previous meeting

Presentation on the Fish of Lake Allegan and the Kalamazoo River

Matt Diana, a fisheries biologist for the DNR Fisheries Division, spoke about the Calkins Bridge Dam in relation to the fish within the Kalamazoo River and the effects dams have on native and invasive fish species.

Presentation highlights:

- Why does the DNR care about dams?
 - There is a high risk of failure and high hazards associated with dams, the average age of a dam being 57 years. The DNR has been a local leader in dam removals through the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Dam Risk Reduction Grant Program. Removing dams impacts fish migrations of both native and invasive species, water quality and habitat, recreation, and contamination.

Kalamazoo River history

• The Kalamazoo River has multiple dams upstream from the Calkins Bridge Dam, which lead to large sediment deposits being held behind many of those dams. Below the dams, the sediment is scarce because of all of the sediment being held upstream, which makes certain sections of the river have more nutrient load than others. There has been a history of polychlorinated biphenyl (PCB) contamination from the paper industry along the Kalamazoo, Lake Allegan having the highest concentrations of those contaminants, with many fish consumption advisories issues to not eat fish from Morrow to Calkins Bridge dam. Remediation efforts within the lake have been focused on dredging and dam removal. The natural remediation process, which allows for contaminants to leave Lake Allegan naturally, can take over 50 years. Currently, Lake Allegan is very difficult to dredge due to the surplus of sediment and the high concentration of PCBs.

Fish within the Kalamazoo River

• The Kalamazoo River upstream from Calkins Bridge Dam is segmented by six dams. The fish that can be found behind impounded sections of the dam include lentic species (common carp, bluegill, and largemouth bass), with little diversity. The free-flowing sections of the river are home to more than 25 species of native fish, including pike, catfish, suckers, redhorse, and bass, which are healthy populations despite the contamination levels of the river. The Lower Kalamazoo River has a greenway plan, which revolves around the beautification and natural state of the river, helping to improve access to the waterfront to the community. The DNR has been stocking steelhead, coho salmon, Chinook salmon, walleye, and smallmouth

bass at fisheries along the river, with great success seen in the population stability of these species. A partnership between the U.S. Fish and Wildlife Service (FWS), DNR, and Gun Lake Tribe has created a lake sturgeon rearing program to protect the state threatened and long-lived species that is native to the Kalamazoo River. Mussels were another aspect of discussion relating to native fish because the only way these species can move is through fish movement, which is why they are an indicator species to fish activity. The relocation of mussels has seen various success, but over 22 species of native mussels can be found within the Kalamazoo River alone. Matt shared that a study done in 2004 showed that individuals along the Kalamazoo River had 19,092 fishing days annually, which generated over \$500k into the local economy.

Areas of Concern (AOC) restoration targets

• The Superfund site cleanup on the Kalamazoo River has been completed; participants wanted to highlight this storymap available on Kalamazoo River Watershed Council website that details the efforts in that remediation and the history of the Kalamazoo River. There have been several dams removed upstream from the Calkins Dam, creating high-gradient river channel habitat with connection to the floodplain restoration. The DNR has targets relating to fish community diversity, which has been achieved upstream, and impairments to wildlife deformities and reproductive problems, which is continuing to be studied through these efforts.

Invasive species

Sea lamprey are a large concern surrounding the decision on the Calkins Dam as
they are highly parasitic to lake trout and salmon within Lake Allegan and the
upstream Kalamazoo River. The FWS treats nursery tributaries from Lake Michigan,
over 200 streams and rivers. Once waterways are open to Lake Michigan, the need
for treatment for sea lamprey will be necessary.

Lake Allegan

• Lake Allegan itself is a very shallow lake, getting shallower every day as the sediment builds behind the Calkins Dam. The contamination levels are so extreme that even though the fisheries are rearing high-quality fish, fishing on the lake is catch and release only. There have been efforts to remove common carp from the lake starting in 2019 through funding from the EPA. Since 2019, over 54,000 individual carp have been removed from the lake by Carp Solutions. This is nearing the goal of the DNR to have less than 100kg/ha of common carp in Lake Allegan. The total maximum daily load (TMDL) phosphorous level goals for Lake Allegan is to have less than 30 percent fish biomass for common carp and channel catfish. The DNR's work within the lake has shown drastic changes in the fish population, from common carp having a biomass of 87 percent in the lake in 2001 to having 19 percent

biomass in 2022. The TMDL goals from the DNR are still not reached after three years of the carp removal program. Changes in sportfish populations have been seen from local anglers along the lake, with young yellow perch being seen increasing in size and quantity. Some of the success of these sportfish can be connected to the increased vegetation level within Lake Allegan, found through surveys done with Georgia Pacific and the EPA. There has been an expansion of vegetation in the north and south side of Lake Allegan by at least 10 percent in the past five years. The goals moving forward with Lake Allegan from a DNR perspective are to increase public access to the lake and fishing opportunities on the rivers and lakes within the Kalamazoo River Watershed.

Fish passage at dams

• Matt discussed within his presentation that fish passage was something that the DNR had been exploring at the Calkins Bridge Dam. A study conducted with the City of Plainwell showed a cost and benefit analysis of fish passage through their dam, finding the increase of fish passability saved the city \$6.7M annually. There is a general problem with the lack of passage of native species in the Kalamazoo River, not just with fish, but with mussels as well. With fish passage comes the discussion of invasive sea lamprey, which are able to pass through with the fish. New technology is being designed to counter these invasives, but there will always be a risk involved.

Group Activity: Opportunities

The participants first worked in small groups to discuss the following questions:

- What assets do we build upon if the dam is relicensed?
- What assets do we build upon if the dam is decommissioned and removed?

Participants considered at least one item from each of the three categories we have identified in the previous meeting: people, nature, economy.

Scenario: Dam is relicensed

• The people focus led most of the feedback to be centered around property values being maintained and ideally increasing, improved boat traffic and tourism, expanding the public access recreation on the lake, and community investment. If the dam stays, the people-focused viewpoint concentrated on having the community unite around Lake Allegan and embracing it as part of their identity and heritage. An expanded and improved boat launch site would improve the ability for boats and kayaks to launch into Lake Allegan, which would assist with the DNR goal of

improving usability of the lake. The idea to use the lake for contests and tournaments, fishing tournaments, and boat races specifically, was also discussed as a great way to get the community out on Lake Allegan. The nature-focused viewpoint was centered around water quality improvements, effective fish passage, and reducing phosphorous levels within the lake. The more additional parkland and beach areas that can be managed and expanded around the lake would serve the community well and have a more open environment for tourists to enjoy. Management for invasive species and weeds was also a large discussion point for any remediation efforts that would need to occur. A navigable waterway connection between Lake Allegan and the City of Allegan was another concept that was discussed and agreed upon by many of the breakout groups. From an economic standpoint, the tourism opportunities of centering around a lakefront image and community management planning for the future were both well supported from all of the breakout groups.

Scenario: Dam is decommissioned and removed

• If the dam goes, from the people section, many participants wanted to highlight the recreational tourism aspect of having a river-front community with more public access. The nature section seemed to have more discussion from the group, as efforts to form a large-scale PCBs remediation was mentioned from multiple breakout groups. The Kalamazoo River Greenway was focused on by many groups, with having a new trail system or recreational activities taking up some of the area of what is now Lake Allegan. Protection against invasive species and further development within the lake boundary now was also a discussion topic. Finally, from the economic perspective, the maintenance cost of the dam would be eliminated, which was mentioned by one group. Every breakout session discussed how the groundwater impacts and drinking water access would be a concern if the dam were to go. The possibility for the decommission of the power-generating facility on the dam and to convert the building for other commercial use was a point of discussion among the breakout groups.

Discussion of the dam removal and remediation efforts

Concerns were voiced about the toxicity of sediment within Lake Allegan and a
question was posed about what happens with the sediment if the dam were to be
removed. The smell of the sediment was a particular concern of the residents around
the lake and how quickly the sediment would be able to be removed and disposed of.
There are many steps to evaluate the remediation if it were to occur, but there would
need to be a bigger discussion about how that process would work if the dam were
removed.

Wrap-Up

- Next meeting: August 28 from 9:00 a.m.-12:00 p.m.
 - Questions to consider for the next meeting:
 - What is Consumers' role in helping this community achieve our preferred future?
 - What are our final priorities?
 - Sentiment of "keep these things at any cost" is still okay?
 - Would another owner and operator of the dam be okay? If the dam is sold, what should Consumers keep in mind?
 - Are there other speakers/topics this group could benefit hearing from?
 - Community risk concerns and considerations—SOAR model in use, but considering all
 of the trade offs
 - Need more representation from the DNR and Allegan County Department of Parks,
 Recreation, and Tourism
- Meeting four: November 12—last meeting in 2024