

4/16/2020

Pelican River Dams Update

HISTORY

Historically, there were eight dams along the Pelican River (Figure 2). These dams are barriers that make dispersal for river species difficult both up and downstream, but these structures can be converted in such a way that they are more favorable to passage of fish, muskrats, otters, shorebirds, waterfowl, salamanders, frogs, crayfish and other invertebrate species. As part of the Red River of the North Fisheries Management Plan, the Minnesota Department of Natural Resources (DNR) has listed goals of removing barriers to restore uninterrupted fish migration pathways.



Figure 1. Groundbreaking of the Fish Lake Dam in February 2018.

The first dam to be converted to rapids was Dunton Locks, which was completed in 2001. This site became a show piece for this type of project. With the passage of the Clean Water Land and Legacy Amendment in 2008, more funding became available to do these types of projects.

The Fish Lake Dam, at the outlet of the Pelican Group of Lakes, was built in 1932 for the purpose of maintaining consistent water levels in Pelican Lake. This dam has a long and storied history, including numerous partial washouts and patches, which caused drops in lake water levels of Pelican Lake and had left the dam in deteriorating shape. In 2016, PGOLID wrote and was awarded a grant from the DNR to replace this dam with rock arch rapids (Figure 1).

The partnership between the DNR and PGOLID for this project set a new precedence for how these projects can be accomplished. By partnering with a local government, the DNR was able to accomplish the project more quickly while also assuring support from the local area.

Building on the success of the Fish Lake Dam, the DNR partnered with PGOLID again in 2019 to compete the Lizzie and Prairie Dams, and the Pelican Rapids City Council voted to modify the Pelican Rapids City dam.

With all these efforts, only two dams remain: the Elizabeth Dam and Bucks Mill Dam. The DNR has secured funding for completing the Elizabeth Dam next year. They would like to partner with PGOLID one last time to complete this project as well. The DNR will likely work to partner with a local government in Becker County to replace Bucks Mill the following year. Howard Fullhart, DNR Fisheries said, "This concept or partnership all comes from the success we have had with PGOLID."

It is very realistic that the Pelican River will be dam free by 2025. These projects cumulatively will have reconnected 84 river miles and 14,790 acres of lakes.

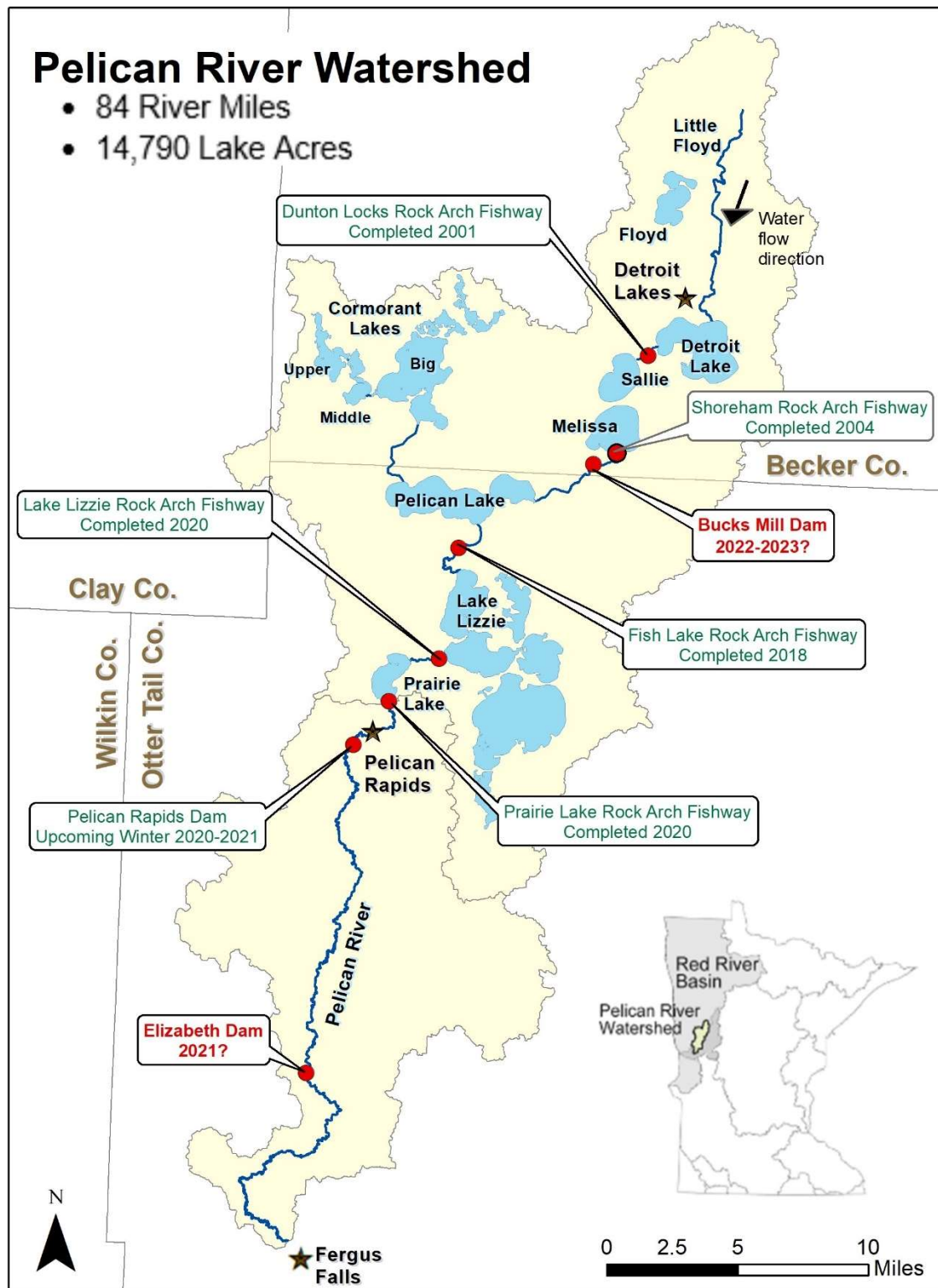


Figure 2. History of dam modification projects in the Pelican River Watershed.

UPDATES

FISH LAKE DAM

The Fish Lake Dam construction is complete. Hough's retainage remains to be paid. This grant ends in June 2020, so all invoices need to be paid and final grant paperwork submitted by mid-June.

Action items:

1. Decision on adding a couple more large, flat boulders to the site. This would entail bringing heavy equipment back to the site again.
2. Fix the access road to the site if rocks are brought in and if necessary.
3. Fix up landing area to the Southeast of the Dam (may involve bringing in gravel or reseeding)
4. Final site condition review by property owner and sign off.
5. Pay Hough retainage.
6. Submit final grant summary paperwork.
7. Grant ends June 30, 2020.

LAKE LIZZIE AND PRAIRIE DAM

Construction on the Lizzie and Prairie dams is essentially complete. Seeding and other construction clean up items will be addressed as soon as conditions permit this spring.

Action items:

1. Sign Hough payment request (attached).

ELIZABETH DAM

The DNR has secured funding for the Elizabeth Dam and would like to complete the site survey and design this June 2020. They would like to sign a partnership agreement with PGOLID to complete this project like they did with Lizzie and Prairie.

Action items

1. Vote on approval to partner with the DNR on the Elizabeth Dam.
2. Sign agreement with DNR (to come next week).

TIMELINE

- June 2020: Fish Lake Dam grant funds expire
- May 2020: Survey Elizabeth Dam
- June 2020: Complete design of Elizabeth Dam modification
- Winter 2020/2021: Construction of Elizabeth Dam
- June 2022: Lizzie and Prairie funds expire

MONTHLY STATEMENT OF CONTRACT ACCOUNT

Request for Partial Payment No. 1

April 6, 2020

HEI No. 8513-0003

Prairie and Lizzie Lake Dam Modification and Fish
Passage Project

Otter Tail County, Minnesota


Hough, Inc.

STATEMENT OF THE CONTRACT ACCOUNT

Original Contract Amount	\$352,235.00
Total of Change Orders to Date	\$0.00
Original Contract plus Change Orders	\$352,235.00
Value of Work Completed to Date	\$326,729.60
Less 5% Retained	\$16,336.48
Value of Work Completed less Retained Percentage	\$310,393.12
Total Previously Certified	\$0.00
Amount Due this Request	\$310,393.12

CERTIFICATE OF THE CONTRACTOR

I hereby certify that the work performed, and the materials supplied to date as shown on this Request for Payment, represent the actual value of accomplishment under Terms of the Contract between Hough, Inc. and The Pelican Group of Lakes Improvement District and all authorized changes thereto.

By: 
Title: Project Manager
Date: 4-6-2020

CERTIFICATE OF THE ENGINEER

This is to certify that in accordance with the terms of the Contract, the Contractor is entitled to a partial payment in the amount requested.

Engineer:  Date: 4/6/2020

APPROVAL BY OWNER: _____ Date: _____

ATTEST: _____ Date: _____

Request for Partial Payment No.1

April 6, 2020

HEI Project No. 8513-0003

Prairie and Lizzie Lake Dam Modifications and Fish Passage

Otter Tail County, MN

Hough, Inc.

Base Bid

No.	Item	Unit	Quantity	Unit Price	Qty. Comp. to Date	Total
1	Mobilization	LS	1	\$19,950.00	1.0	\$ 19,950.00
2	Floating Silt Curtain	LF	204	\$35.00	150.0	\$ 5,250.00
3	Remove Existing Dam and Abutments	LS	1	\$23,137.00	1	\$ 23,137.00
4	MNDOT Class II Riprap	CY	647	\$100.00	699	\$ 69,900.00
5	MNDOT Class III Riprap	CY	1,286	\$107.00	1238	\$ 132,444.60
6	Rock Weir (36" to 60" Diameter Boulders)	LF	687	\$53.00	651	\$ 34,503.00
7	Rock Boulders (36" to 60" Diameter Boulders)	EA	30	\$450.00	30	\$ 13,500.00
8	Flat Rock Boulders (48" to 72" Diameter)	EA	8	\$775.00	8	\$ 6,200.00
9	Clay Fill Embankment	CY	225.0	\$60.00	187	\$ 11,220.00
10	Aggregate Class V	TON	245	\$31.00	0	\$ -
11	Traffic Control	LS	1	\$7,500.00	0.8	\$ 5,625.00
12	Temporary Site Access	LS	1	\$5,000.00	1.0	\$ 5,000.00
13	Seeding and Mulching	LS	1.0	\$10,000.00	0	\$ -
TOTAL TO DATE						\$ 326,729.60