



December 18, 2018

Ms. Lisa Wilson, Director
Sauk County Conservation, Planning & Zoning
West Square Building, Room 248
505 Broadway
Baraboo, WI 53913

RECEIVED
SAUK COUNTY

DEC 27 2018

CONSERVATION PLANNING
AND ZONING

Subject: Cazenovia Dam, Field File: 52.01, Little Baraboo River, Richland County
Floodplain Mapping, **Optional** Ordinance Adoption Notice

Dear Ms. Wilson:

In April 2000, the Department of Natural Resources (Department) approved a dam failure analysis for the Cazenovia Dam located in the Northwest Quarter of the Northeast Quarter of Section 13, Township 12 North, Range 2 East, Village of Cazenovia, Richland County, across the Little Baraboo River. Sauk County adopted the hydraulic shadow map into their floodplain zoning ordinance on September 20, 2016.

Since the adoption occurred, the Village of Cazenovia, owner of the Cazenovia Dam, submitted a revised Dam Failure Analysis which the Department approved on August 24, 2018. Based on the results of the approved study and recent repairs to the dam and adjacent structures, Cazenovia Dam has an assigned hazard rating of Significant Hazard.

The revised areas of potential dam failure inundation (hydraulic shadow) are adequately reflected on a map with additional information such as stationing, water surface profile, maximum velocities, and floodway widths provided on a profile plot and in a floodway data table. This information is provided in the following enclosures:

1. Floodway map dated October 8, 2018 and titled "Hydraulic Shadow Map – Cazenovia Dam Break Analysis"
2. Flood profile dated October 8, 2018 and titled "Cazenovia Dam Break Analysis, Plan: Extend – Unsteady – Breach – Mod Sz min"
3. Floodway data table dated October 8, 2018 and titled "Floodway Data Table – Little Baraboo River (Cazenovia Branch) – Floodway for the Hydraulic Shadow (Dam Failure)"

Note that this 2018 hydraulic shadow zoning is *less restrictive* than the 2000 hydraulic shadow zoning currently adopted into the Sauk County Floodplain Zoning Ordinance. For this reason, it is *optional* for Sauk County to repeal the 2000 hydraulic shadow zoning and adopt the 2018 hydraulic shadow zoning in its place. If you choose not to adopt the 2018 data, the 2000 data should remain in your ordinance.

Under the requirements of Chapter 87.30, Wisconsin Statutes and Chapter NR 116.05, Wisconsin Administrative Code, the materials submitted with this letter need to be reviewed and any comments on technical aspects of the study shall be provided to the Department within 30 days from the date this decision was delivered. **After the 30-day review and comment period, please inform me whether the County wants to formally adopt the above referenced materials into the floodplain zoning ordinance within six months.**

To assist you in the adoption process, refer to Wisconsin Administrative Code, Chapter NR 116 and the procedures outlined in "Floodplain and Shoreland Zoning: A Guidebook for Local Officials". Please pay particular attention to the Class 2 notice requirements for public hearings. The second publication must be at least one week before the hearing. After the County has approved the amendment, a certified copy must be sent to me for final administrative review and approval. Please provide a notarized affidavit of publication as proof of the Class 2 publication and other supporting documentation.

If you have any questions, please contact me at (608) 275-3287 or Tanya.Lourigan@wisconsin.gov.

NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to sections 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review must name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to section 227.42, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with section NR 2.05(5), Wis. Adm. Code, and served on the Secretary in accordance with section NR 2.03, Wis. Adm. Code. The filing of a request for a contested case hearing does not extend the 30-day period for filing a petition for judicial review.

This decision was mailed on December 18, 2018

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
For the Secretary

By Tanya L. Lourigan
Tanya L. Lourigan, P.E.
Water Management Engineer
Fitchburg Service Center

cc: Todd Deibert, P.E. and Patrick Boland, P.E. – Jewell Associates Engineers, Inc (email)

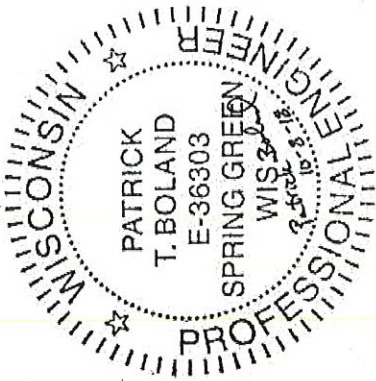
attachments: Cazenovia Dam Failure Analysis – Hydraulic Shadow Map, Hydraulic Shadow Profile, and
Floodway Data Table

FLOODWAY DATA TABLE - LITTLE BARABOO RIVER (CAZENOVIA BRANCH) - RICHLAND & SAUK COUNTIES, WI							
FLOODING SOURCE			FLOODWAY FOR THE HYDRAULIC SHADOW (DAM FAILURE)				
CROSS SECTION	DISTANCE ¹	DISTANCE ²	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC.)	PEAK DISCHARGE (CU. FT./SEC)	PEAK WATER SURFACE EL. (FT)
FIS Cross Section							
CAZENOVIA BRANCH							
AC ²	39,617		548	2,250	3.10	7,000	915.2
AD	40,638		865	4,923	4.74	11,123	918.1
AE	41,691		1,310	5,853	4.58	11,130	918.8
AF	43,309		1,825	5,800	3.82	11,384	920.1
AG	44,584	0	575	1,883	12.99	12,796	923.4
--	45,200	616	480	1,637	11.95	12,863	925.7
--	45,760	1,176	375	1,826	10.23	12,904	927.3
--	46,152	1,568	535	1,723	10.46	12,922	928.0
--	46,320	1,736	165	1,462	10.71	12,941	928.1
--		Bridge					
--	46,488	1,904	145	1,338	9.86	13,188	929.4
--	46,660	2,016	115	1,122	13.02	13,193	929.3
--	46,712	2,128	185	1,890	7.90	13,197	930.3
--	46,740	2,156	195	1,804	7.32	13,197	930.4
LEE LAKE	46,768	2,184	270	4,630	1.28	5,946	941.9

¹ Feet above confluence with Baraboo River

² Feet above Richland County Line

³ FIS (Sauk County, Wisconsin) controls beginning at cross section AC and continuing downstream



Cazenovia Dam Break Analysis · Plan: Extend - Unsteady - Breach - Mod Sz min

Cazenovia Branch Main

