



## River Hydro Asset Key Terms

Definitions/purpose of the major components and aspects critical of safe, compliant, and reliable operations:

- Dam: The entire barrier to hold back the water (reservoir) typically consists of embankments, spillways, and powerhouse
- **Spillway:** Primary location for water flow when not used for generation
- Powerhouse: Location of generation units
- **Embankment:** Earthen barrier to hold back the reservoir, which contains a hydraulic barrier (core wall)

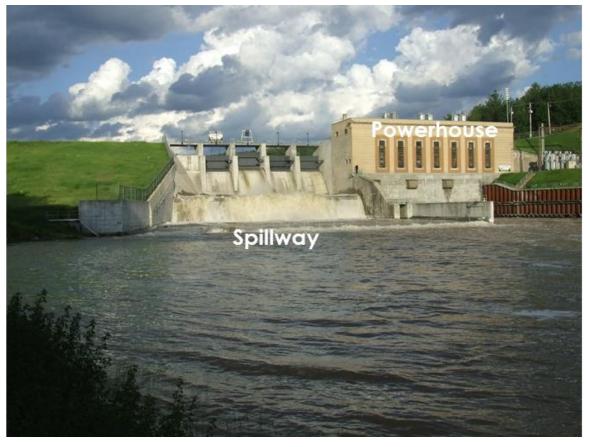






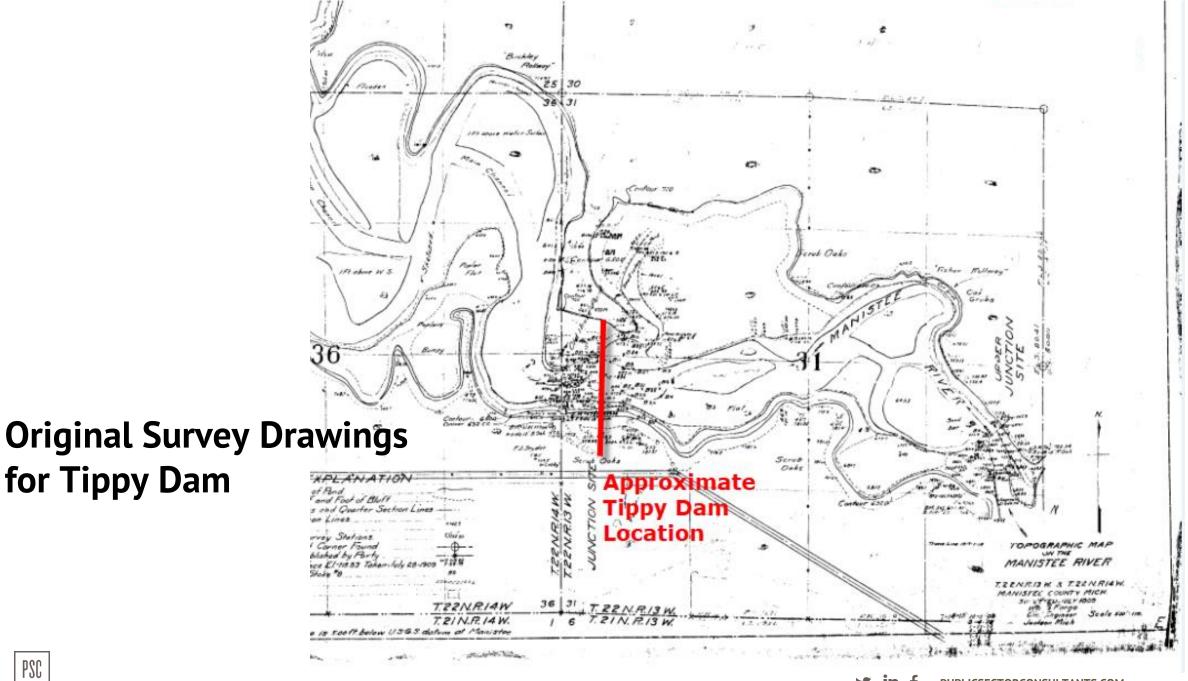
## **Tippy Dam Structures**











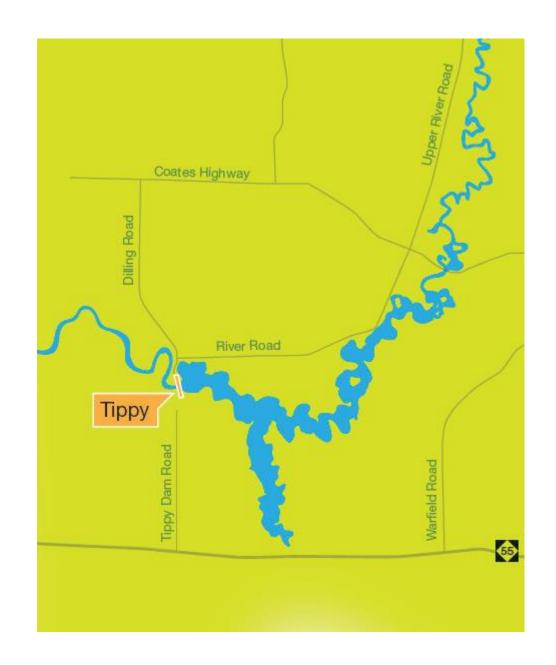
PSC

for Tippy Dam

**PUBLICSECTORCONSULTANTS.COM** 

## **Tippy Hydro**

- The Tippy Hydro was built in 1918 and is Michigan's second-largest hydro dam, producing up to 21,000 kilowatts and providing electricity to approximately 6,500 customers.
- The Michigan Department of Natural Resources operates the Tippy Dam Recreation Area, providing camping and fishing access to the Manistee River and Tippy Pond.
- Tippy is the largest bat hibernaculum in the Lower Peninsula. To protect the bats, strict regulations are in place regarding operations at the dam. Employees are only allowed to do maintenance work that would require using the spillway between June 1 and September 1.



General Information: Tippy Dam

FERC License Expiration Date: June 30, 2034

Dam Height (ft.): 82

Length of Dam (ft.): 830

Drainage Area (sq. miles): 1,451

Impoundment Area (acres): 1,330

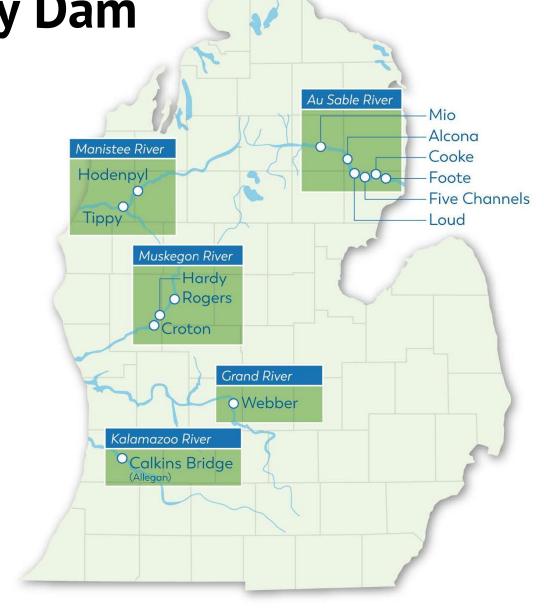
Age (years): 104

FERC Hazard Classification: High\*

Approximate Population at Risk: <800

Approximate Recreation Use:

80,490 visitors annually



<sup>\*</sup>Failure or misoperation will probably result in loss of human life.

## Percentage of Fuel Type Used to Produce Consumers Energy's Total Electricity

