

# A Community Conversation About Calkins Bridge (Allegan) Dam

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# Conversation Objectives

- **Share information** about the development of Consumers Energy's long-term hydro strategy
- **Gain community-wide understanding** about the process and future scenarios
- **Gather input** on community factors that should be accounted for in the strategy

# Overview of Consumers Energy River Hydro Strategy

*August 2022*

Mio

Alcona

Loud

Five Channels

Cooke

Foote

Rogers

Hardy

Croton

Tippy

Hodenpyl

Webber

Calkins Bridge

**Consumers Energy**

Count on Us®



# CE River Hydro History



Owned more than 90 river hydro assets



Typically, small multiple-use assets that supported a local community



Generation advances and exhaustion of prudent locations stopped expansion



70+ assets sold or retired between 1940 and 1970 due to asset value (*customer value vs. cost*)

# River Hydro Fleet Details

Dam	Capacity (MWs)	Average MW/day	Plant Commissioned	FERC License Expiration Date
Rogers	6.75	2.66	1906	6/30/2034
Hardy	31.5	11.87	1931	6/30/2034
Croton	8.85	3.79	1907	6/30/2034
Hodenpyl	17	5.57	1925	6/30/2034
Tippy	20.1	7.13	1918	6/30/2034
Calkins Bridge	2.55	1.52	1935	3/31/2040
Webber	3.25	1.3	1907	5/31/2041
Mio	5	1.74	1916	6/30/2034
Alcona	8	3.29	1924	6/30/2034
Loud	4	2.08	1913	6/30/2034
Five Channels	6	2.79	1912	6/30/2034
Cooke	9	3.15	1911	6/30/2034
Footte	9	3.51	1918	6/30/2034
<b>Total:</b>	<b>131</b>	<b>50</b>	<b>About 1% of CE Total Generation</b>	

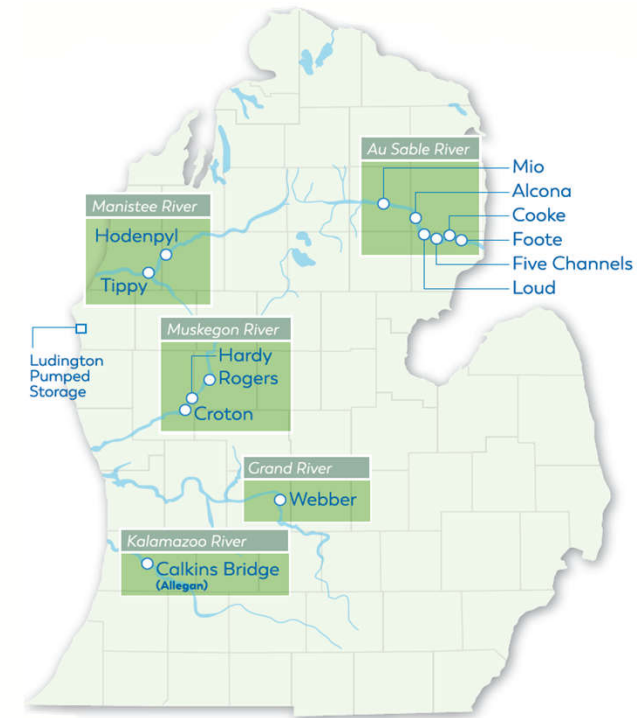
# Regulatory Agencies







- Michigan Public Service Commission
- Federal Energy Regulatory Commission (FERC)
  - Division of Hydropower Administrative and Compliance (DHAC)
    - Michigan Department of Environment, Great Lakes, and Energy (EGLE)
    - Michigan Department of Natural Resources (DNR)
    - U.S. Fish and Wildlife Service
    - U.S. Forest Service
    - Michigan Hydro Relicensing Coalition
  - Division of Dam Safety and Inspections

# Detailed Review

-  Safety
-  Complying with regulations
-  Cost of operation
-  Environment
-  Community
-  Recreation



# Safety

-  Satisfactory Condition with FERC
-  FERC Inspections
-  Owner's Dam Safety Program
-  Public Safety





# Complying with Regulations



Division of Hydropower Administration and Compliance



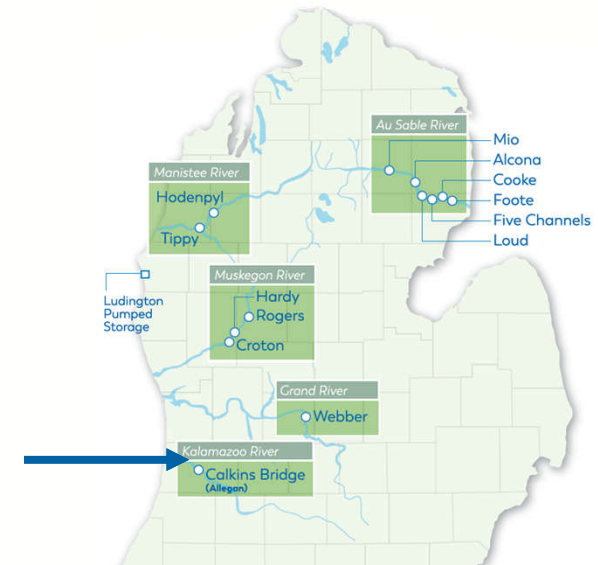
FERC Licensing Process

- Integrated Licensing Plan



Dam Safety and Inspections

- Updated Regulations in 2022





# Cost of Operation (Fleet)

## Benefit of CE River Hydros:

Total average value = \$12.9M/year

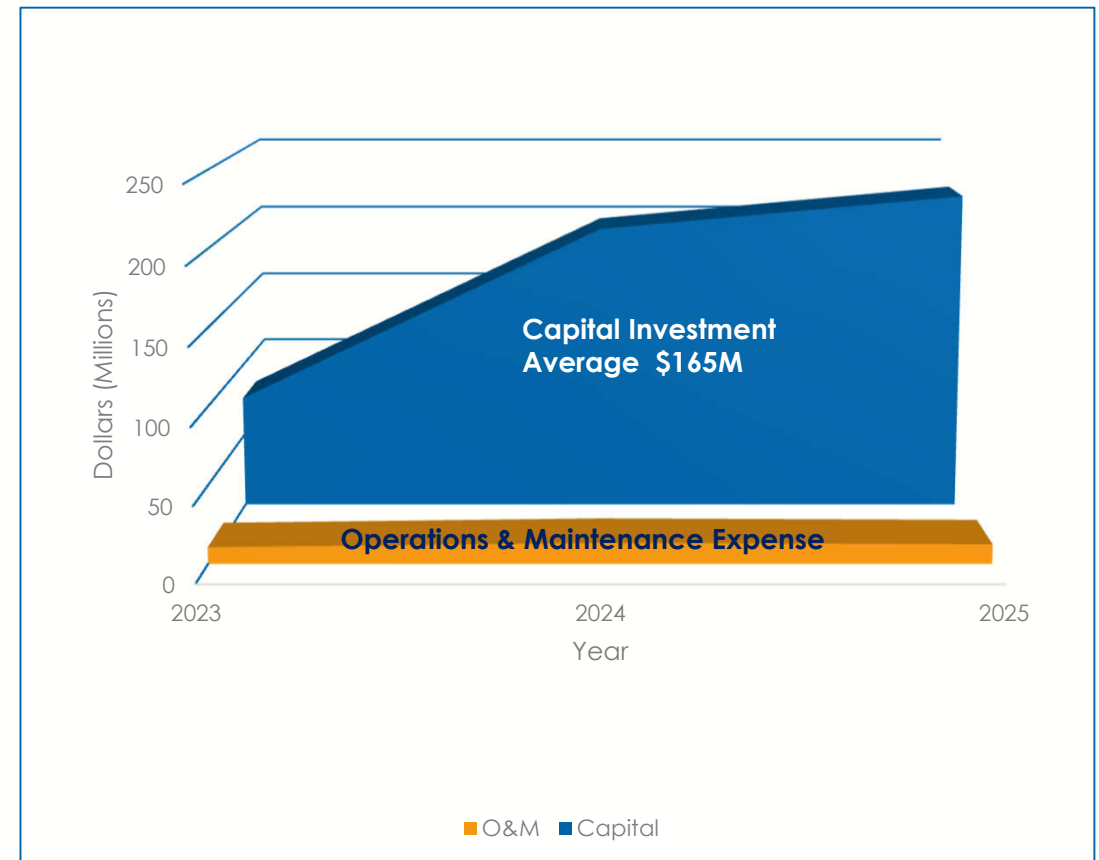
## Cost of River Hydros:

**Operations and maintenance = \$12.6M/year**

- Funding for internal/external labor to operate and maintain equipment.

**Capital investments = \$165.0M/year**

- Major projects i.e.: replacement of spillway, new generators, new spill gates, new splash wall, or new wicket gates



# Calkins Bridge Dam Cost

	Actual O&M Costs 2017-2021	Forecasted O&M Costs 2023-2027	Actual Capital Costs 2017-2021	Forecasted Capital Costs 2023-2027
Calkins Bridge	\$4.72M	\$5.34M	\$3.92M	\$4.59M






Roof Replacement Project Forecast (2024-2025): \$1.05M  
Unit 1 Wicket Gate Project Forecast (2023-2024): \$2.05M  
Electrical Projects Forecast (2024-2027): \$1.3M

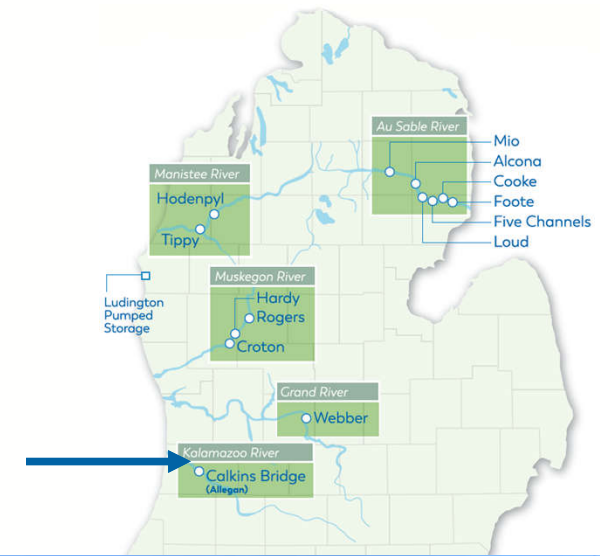
Calkins Bridge Avg O&M Cost: \$1.01M

Calkins Bridge Avg Value: \$388.8k of the \$12.9M (fleet)

\*All forecasts are subject to change or shift

# Environment

-  River sediment
-  Water quality
-  A downstream barrier (invasive species)
-  Known environmental superfund site
-  River downstream of dam is key sturgeon spawning area



# Community



Allegan Dam Road Bridge



1,659-acre Lake Allegan



Desirable, large lake lots



Here for feedback





# Recreation

- Approximately 6,000 annual recreational visitors
- Two boat launches
- Downstream fishing access
- Neighboring Allegan State Game Area recreational opportunities



# Future Scenarios

- Relicense the dam, meeting all the new regulatory requirements, and continue to generate power
- Surrender the license and sell the dam to a third-party owner, who could maintain the dam structure and impoundment
- Remove the dam and return the river to its natural state
- Replace the dam with an alternative structure

# Relicensing – Integrated Licensing Process

- Relicensing is handled through FERC and takes approximately five years
- The process involves the general public, nongovernmental organizations, tribal, state, federal, and local government input
- The applicant needs to demonstrate how it will address—either through mitigation, protection, or enhancement projects—the resources surrounding the dam and the dam itself
- Examples of issues the applicant will need to study are:
  - Water quality and other environmental issues
  - Fish and wildlife
  - Cultural
  - Recreation
  - Aesthetics
  - Land use
  - Tribal resources

# Surrendering the FERC License

- Consumers may choose to no longer generate power and not relicense the facility. This process would require them to file a request [with FERC to surrender their license](#)
- Without power generation, Consumers could look to alternative options for the dam:
  - Transfer ownership of the dam to a different party
  - Remove the dam and restore the natural flow of the river
  - Replace the dam with an alternative structure
- All of these options involve significant input and sign off from many regulatory agencies

# Removal of a Dam

- The process for [removing a dam](#) is regulated by state and federal agencies. When considering a dam removal, the applicant and regulators consider:
  - **Benefits of the dam and the impoundment** (preventing the movement of aquatic invasives, sediment control, historical significance, transportation uses, water supply, flood control, recreational boating, fishing, swimming, etc.)
  - **Concerns with the dam** (safety and security, costs and liabilities of keeping the dam, environmental and ecological impacts, impediments to fish and other species movement, etc.)
  - **Engineering and design considerations** for the removal of the dam itself and the rehabilitation of the ecosystem
  - **Property rights** and bottomland ownership issues
  - **Costs and potential funding sources** for the removal



# Transferring Ownership

- Example: Four Lakes Task Force—four dams located on the Tittabawassee River in Midland and Gladwin Counties
- Ownership was transferred from a private party to the Four Lakes Task Force, which oversees the Special Assessment District (SAD) on behalf of the counties
- Counties established a [SAD](#) to allow for the property owners located on the impoundments to pay an operations and capital improvements assessments for the purpose of maintaining legally established lake levels
- Process involved FERC, EGLE, and local county officials

# Replacing the Dam

- When a full removal of the dam does not meet the needs of the community, regulators, and/or dam owners, dams sometimes can be replaced with an in-river structure. These options may include:
  - Modifications to the current dam
  - Replacing the dam with a different dam structure (e.g., low-head dam)
  - Rock structure

# Engagement Process and Plan Development Timeline

- August–October 2022: Pre-strategy development community engagement
  - Community meetings around each dam
  - Website launched
  - Survey of property owners located within 100 feet of Consumers’ property lines
- 2023: Long-term hydro strategy is developed
- 2023–2034: Relicensing and/or retiring process underway, including community engagement

# Community Input



# Community Input

**What is this community's relationship to the river, the dam, and its impoundment?**





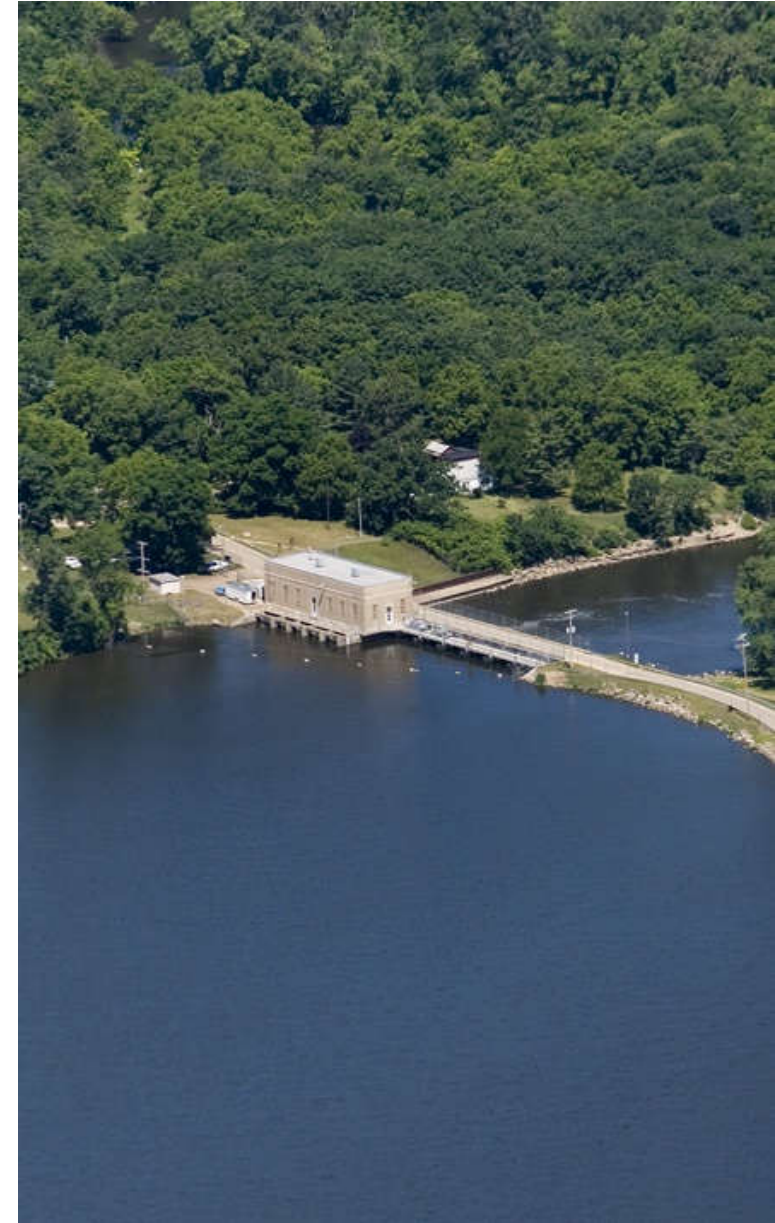
# Community Input

**How would that relationship change if the dam was retired and removed?**



# Community Input

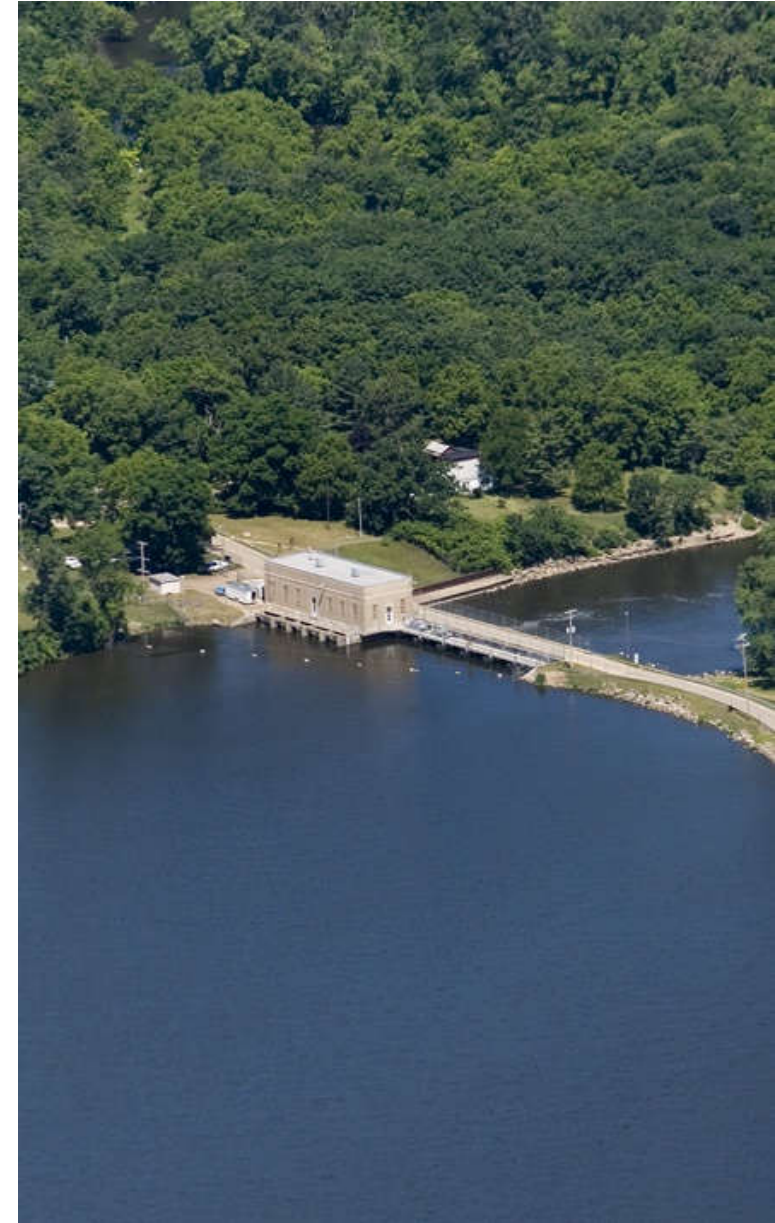
**Does the information presented  
this evening change your opinion  
on the dam and its future?**



# Community Input

**What factors do you believe Consumers Energy should prioritize when determining the future of the dam?**

- Safety
- Regulations compliance
- Community
- Operations costs
- Environment
- Recreation





# Community Input

**What would Consumers Energy need to do to make you feel their decision is sound?**



For more information, please visit  
[www.consumersenergy.com/hydrofuture](http://www.consumersenergy.com/hydrofuture)





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