

Consumers Energy River Hydro Strategy 2023 Community Meetings

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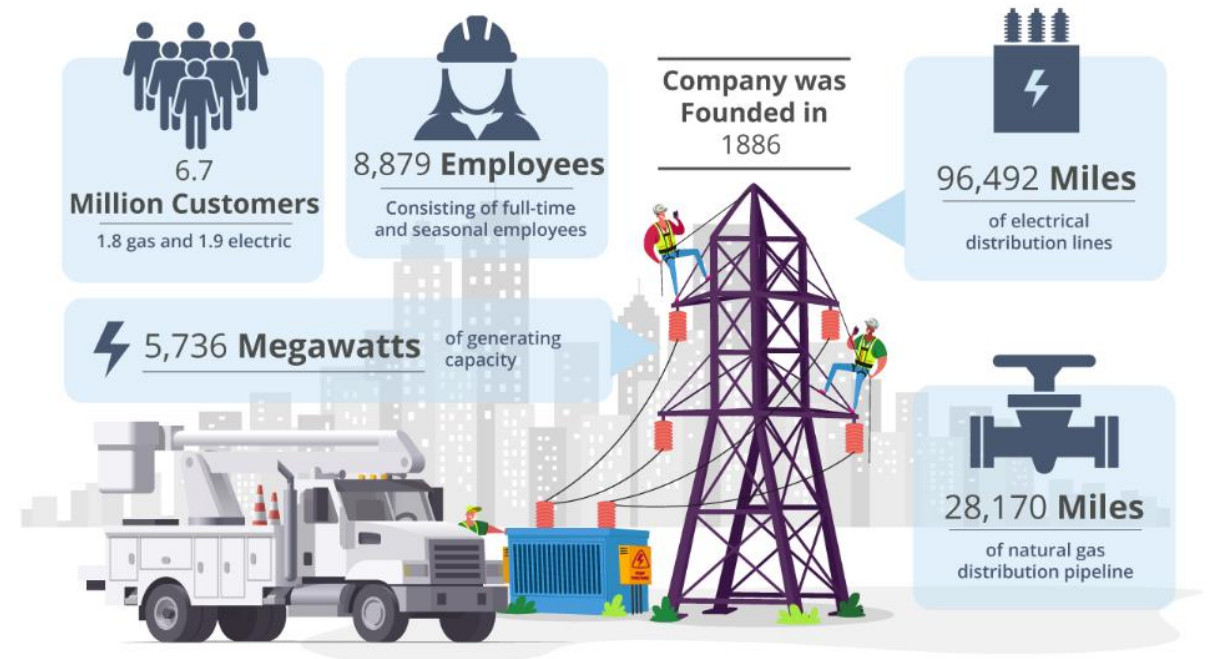
Agenda for Tonight

- Provide updated information about the development of Consumers Energy's long-term river hydro strategy
- Continue to engage the community in the conversation, identify concerns, and address questions
- Identify a path for the community to have additional ownership in the future decisions



Consumers Energy Hydro Long-term Hydro Strategy

With 11 out of 13 of the operating licenses issued by the Federal Energy Regulatory Commission (FERC) expiring over the next 11 years, Consumers Energy has started a multi-year review of all its hydroelectric plants to find a solution to keep rates affordable, and if possible, keep the impoundments.



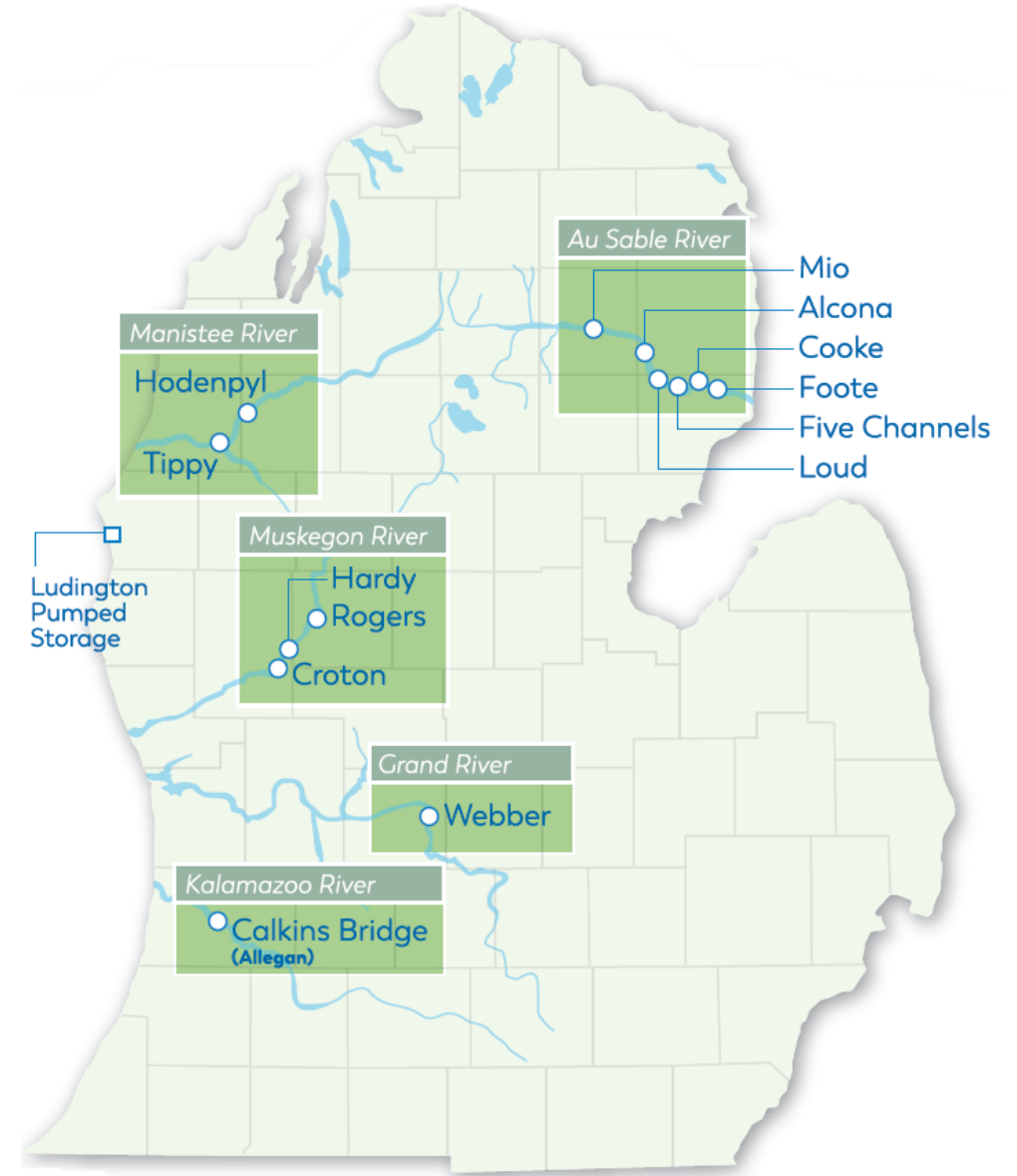
Source: 2022 CMS Energy 10-K

Data reflects Dec. 31, 2022 reports

River Hydro Locations

River Systems

- Au Sable River (6)
- Manistee River (2)
- Muskegon River (3)
- Grand River (1)
- Kalamazoo River (1)

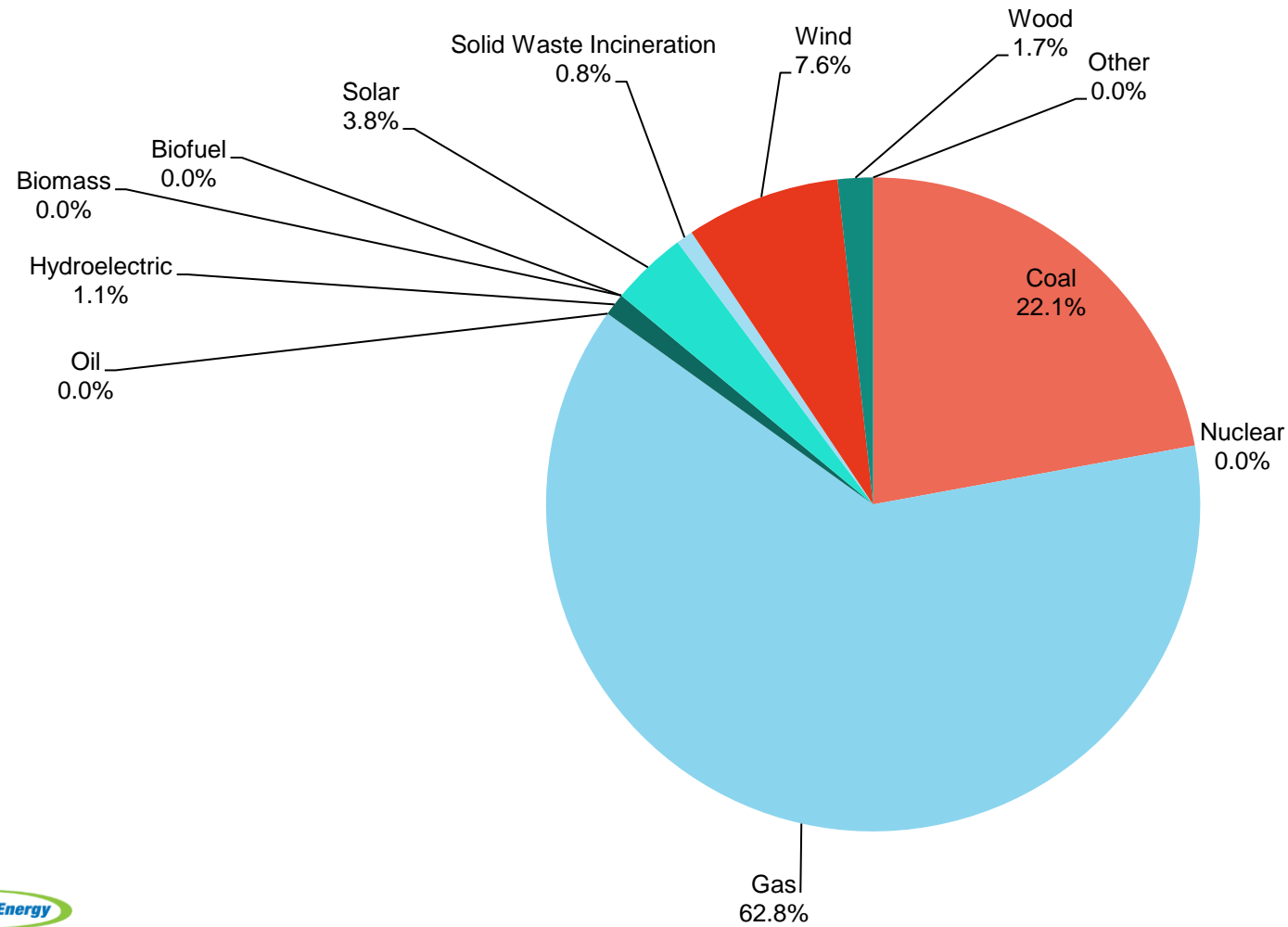


Hydro Fleet Generation Capacity Overview

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
Foote	9	3.51	1918	6/30/2034
Total:	131	50	About 1% of CE Total Generation	

Consumers Energy Generation Sources

Percentage of Fuel Type Used To Produce Consumer Energy's Total Electricity 2024



Thank You for Your Participation in 2022



Consumers Energy asks for public input on Michigan dam operations



(WLUC)
By [Brendan Vrabel](#)
Published: Aug. 9, 2022 at 12:21 PM EDT
[f](#) [m](#) [t](#) [p](#) [in](#)



1,700 attendees at 22 facilitated sessions with communities and local leaders



Nearly 570 unique comments via emails and online



60 percent return rate for the adjacent property owner surveys (1,381/2,312)



Three meetings with stakeholder groups

What Did We Hear and Learn?

Communities had not considered an alternative future for the river hydro plants.

Trust in the company's safety record is high.

Community members do not trust the company to prioritize what communities want concerning the hydro plants.

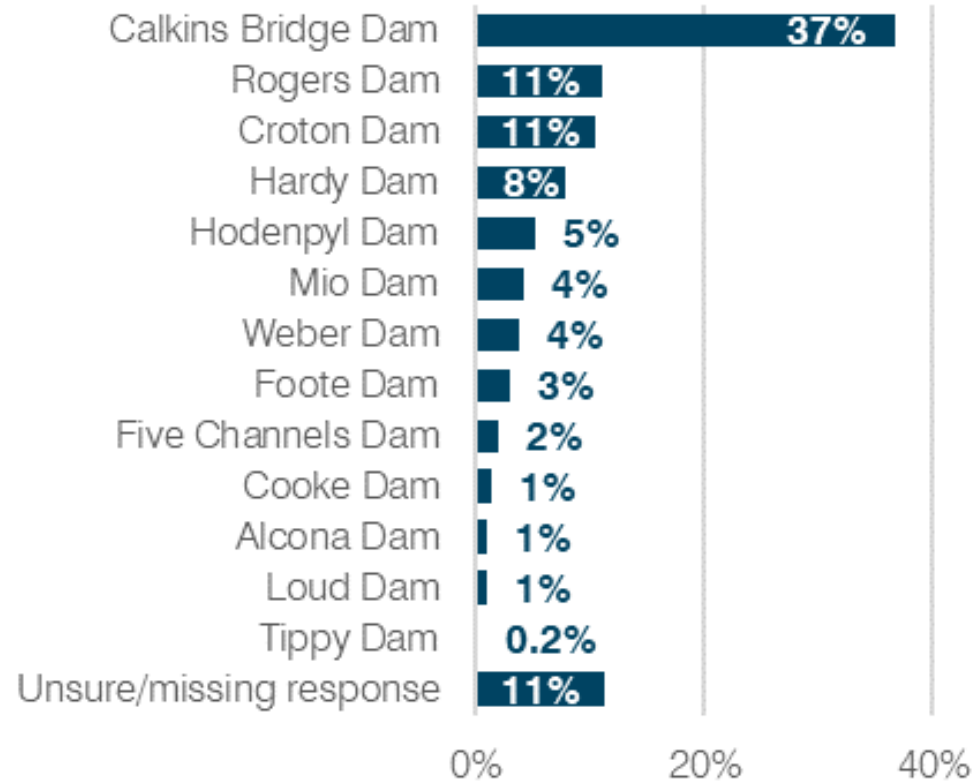
Preferences for the future of the plants reflect the respondents' personal connection to them and their amenities.

Preferences for the plants varied based on means of engagement.

Community members were most concerned about keeping the impoundment.

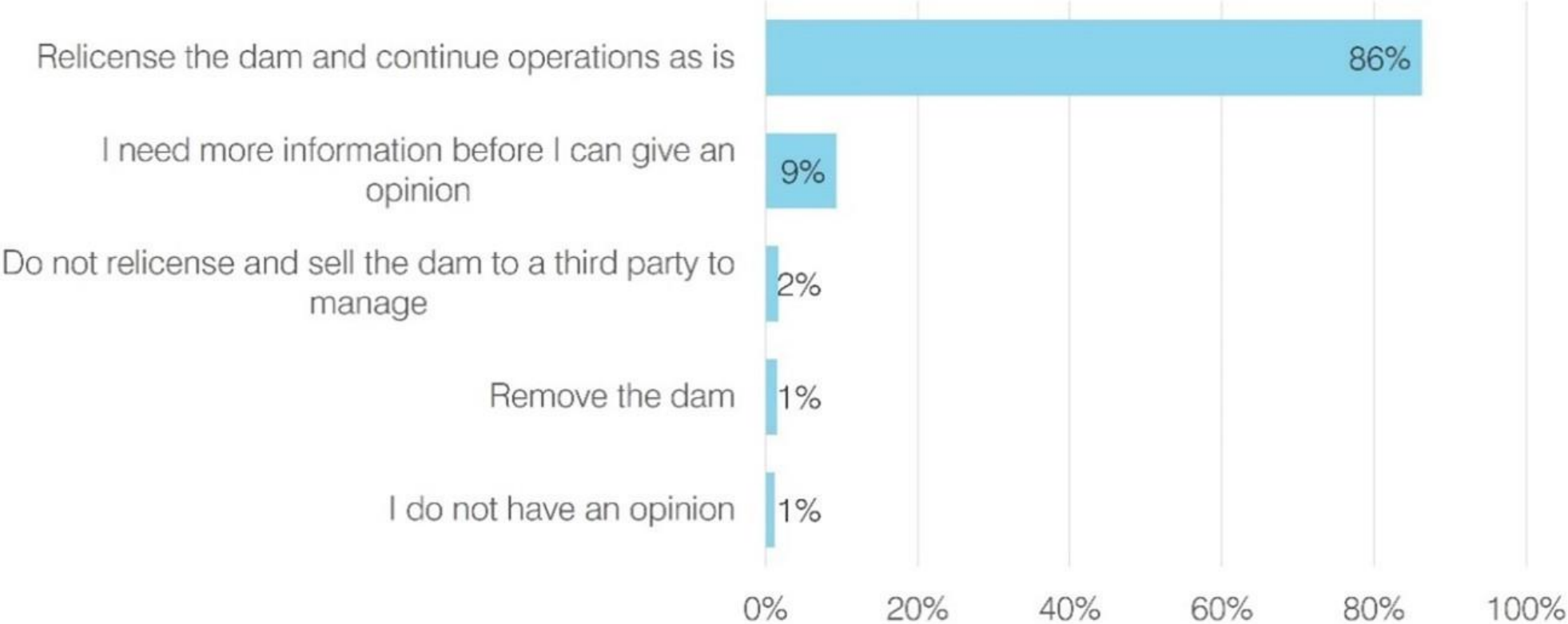
Summary of Adjacent Property Owners Feedback from 2022

Survey Respondents By River Hydro



N = 1,381

Preferences Regarding the Future of the Dams



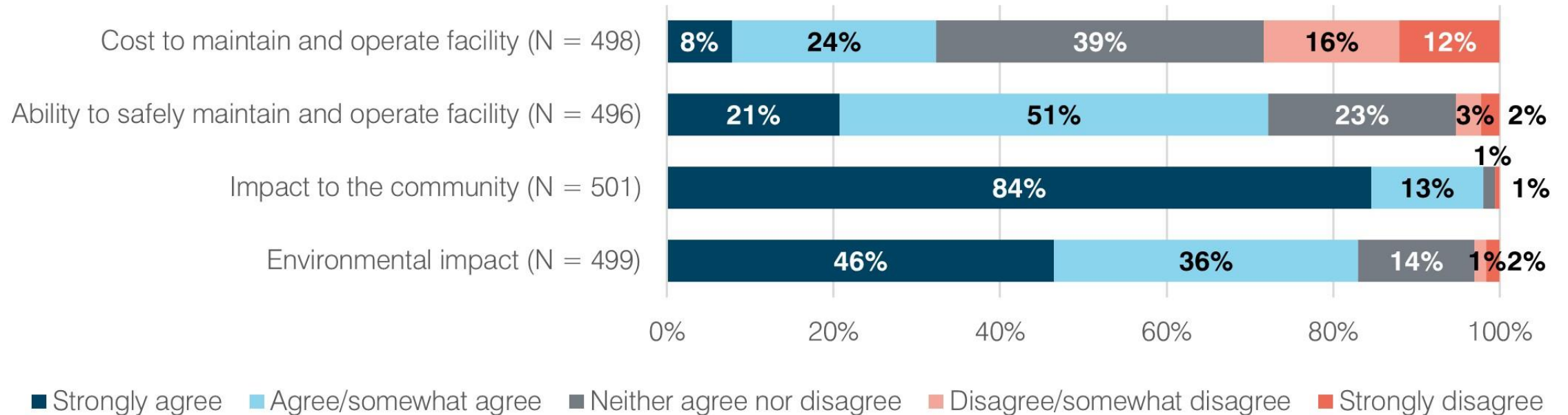
(N = 1,340)



Property Owner Survey Results

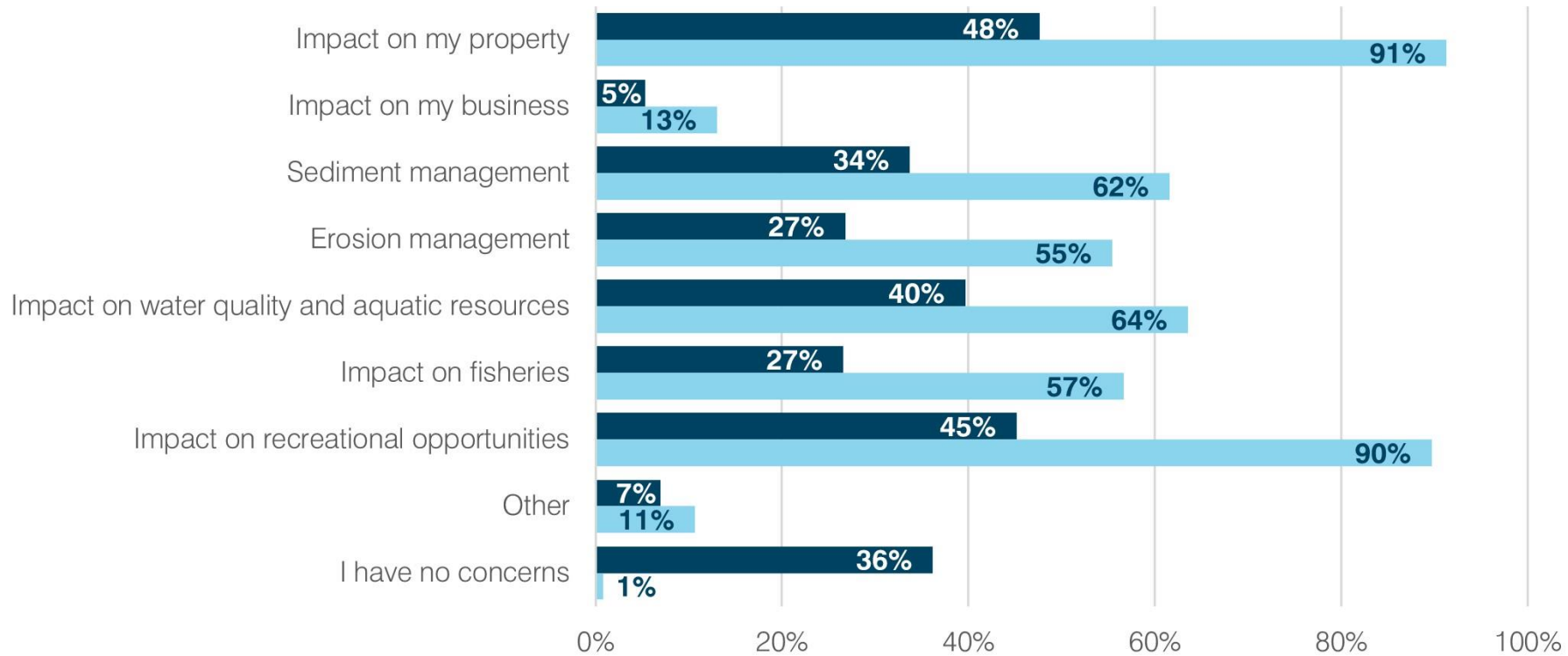
Important Factors When Deciding Between Dam Relicensing and Removal

(N varied by response)



Property Owner Survey Results

Concerns About Dam Operation at Time of Survey and If It Were Removed
(N varied by response)



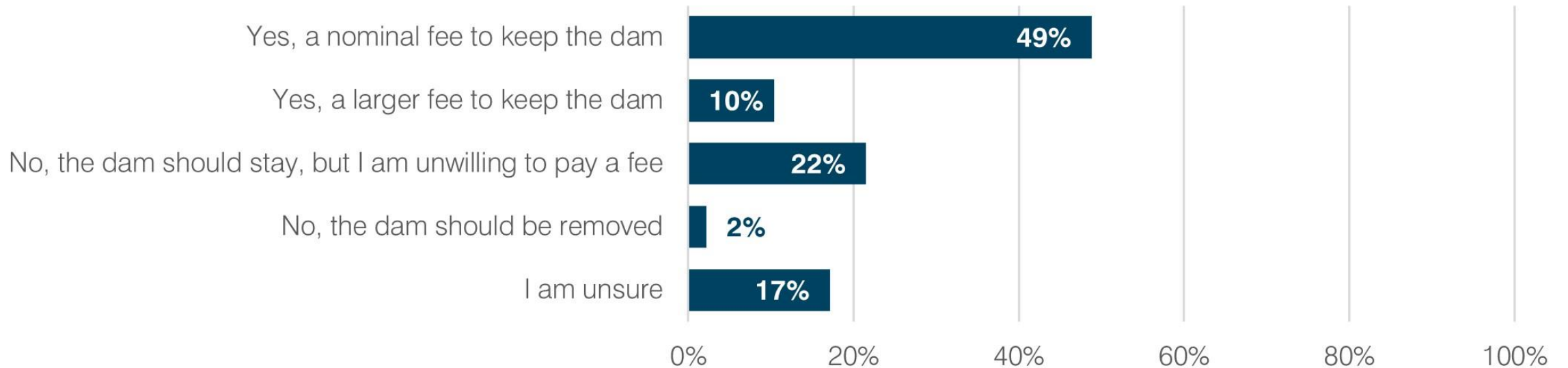
■ As the dam currently operates (N = 489)

■ If the dam were to be removed (N = 505)

Property Owner Survey Results

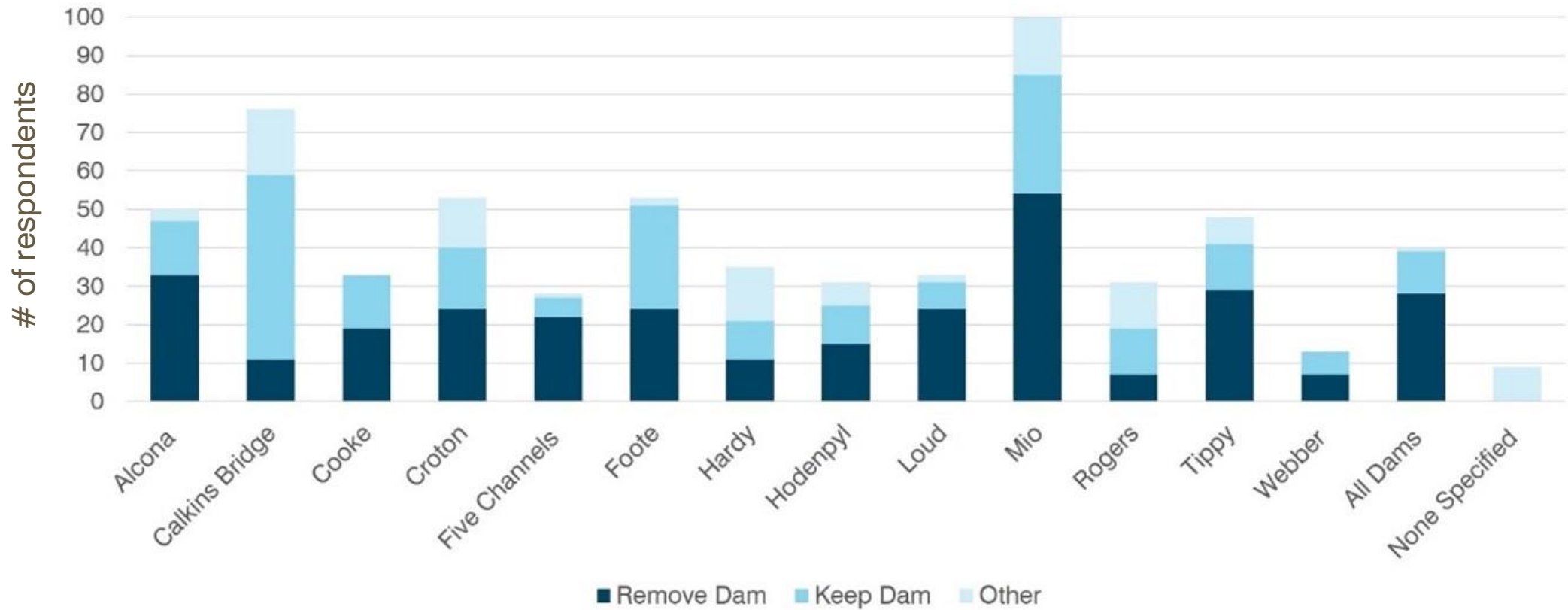
Respondents' Willingness to Pay an Additional Annual Fee

(N = 502)



Website Respondent Preferences

Preferences of Website Respondents



(N = 567)

River Hydro Specific Feedback

Calkins Bridge Dam

- 811 comments were received across all channels of input
- Main concerns and priorities:
 - Tax contributions and property values
 - Presence of contaminated sediments
 - Fisheries and other aquatic resources
 - Access to flatwater recreation
 - Keeping the impoundment



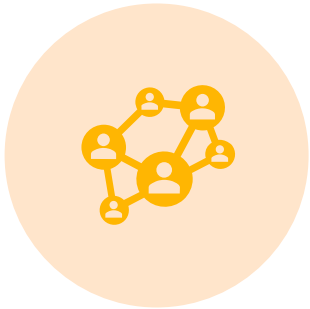
Responding to Feedback

Taking Feedback and Turning into Data

Responding to feedback we heard from the community, over the past year Consumers Energy has:

- Completed 13 economic contribution studies to understand the economic contribution the facilities have on:
 - Taxes
 - Economic spending
 - Property values
- Continued to regularly meet with lake associations and local governments
- Actively identified and applied for external funding
- Collected data to understand impact on rates
- Announced a willingness to allow for potential buyers

Improving Engagement in 2023



Expanded engagement opportunities so more voices can contribute to the conversation. Two virtual statewide meetings will be held this year.



More direct outreach to people in the communities where the plants are located. Direct mailers and more social media promotion was conducted.



Meetings in 2022 were focused on gathering information from adjacent property owners and community members. This year we are sharing more data and providing more context of the decision-making process.



The community needs a way to stay plugged in and engaged as decisions occur over the next few years. The company is committing to creating a local body that has direct line to decision makers.

What is an Economic Contribution Analysis?

- What is an economic contribution analysis?
 - A current-state snapshot of the overall market without making assumptions about future changes in the underlying economy.
 - Measures the economy-wide effects of the current level of activity of a business or industry, or, for this study, activity generated from recreational assets
- What contributions were considered?
 - Employment: Number of full- and part-time jobs associated with affected industries
 - Labor income: Dollar total of employee and proprietor compensation excluding distribution of profits
 - Value-added: Regional income, also called gross regional product
 - Taxes: Total expected tax revenues across levels of government

Regional Economic Contributions Data

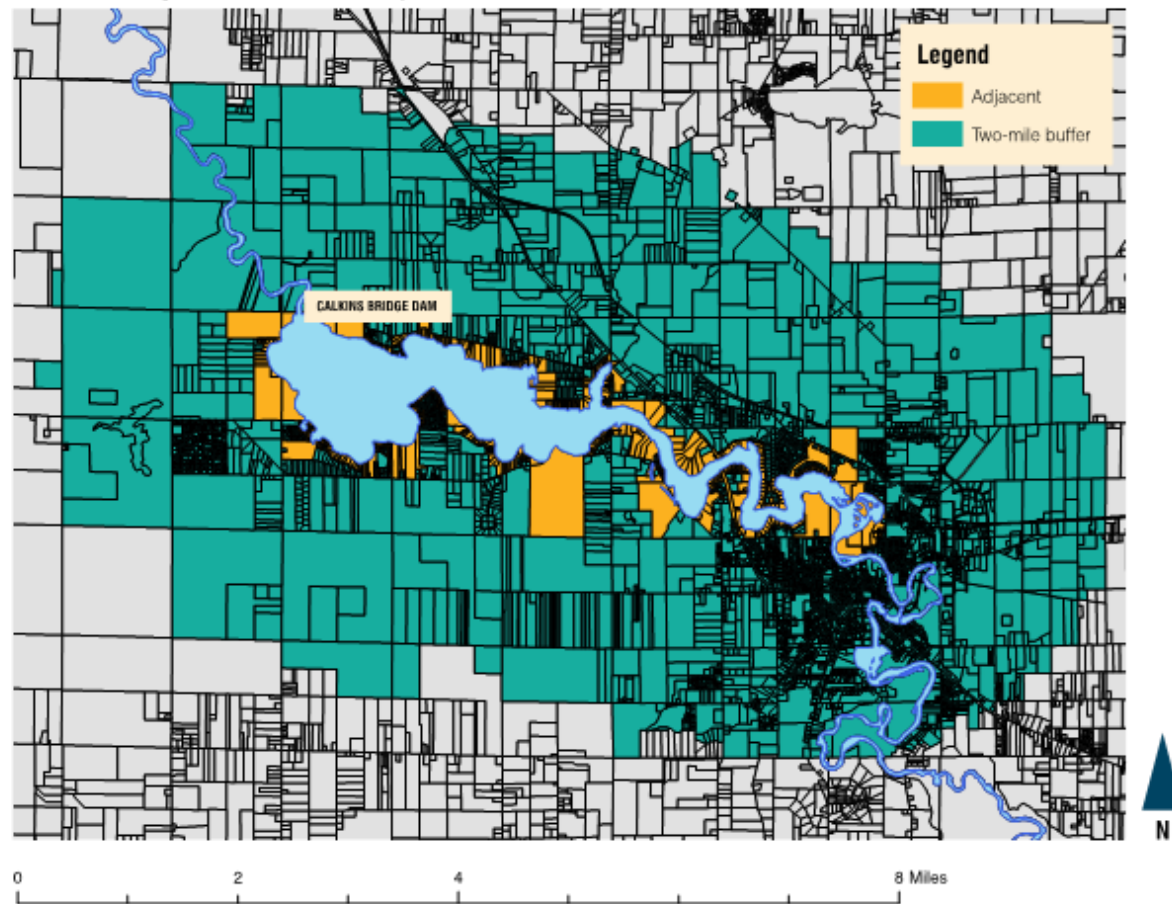
Calkins Bridge Dam

Economic Contribution Analysis: Calkins Bridge

- Annually, recreational and business assets surrounding the impoundment created by the Calkins Bridge Dam contribute:
 - About \$3.35 million in gross regional product and support for 60 jobs
 - More than \$858,000 in local, county, state, and federal taxes through direct, indirect, and induced tax effects from recreational and related spending

Property Value Analysis: Calkins Bridge

Calkins Bridge Dam Parcel Analysis



The presence of the lake and river also enhance adjoining property values, contributing:

- An additional \$68.4 million in market value to 4,599 adjacent and nearby properties
- An additional \$1.46 million in local and state property tax revenue due to the increased market value

Statewide Economic Contribution of the River Hydro System

Economic Contribution Comparison

River	Direct Employment	Direct Gross Regional Product	Direct Total Tax Revenues	Total Estimated Market Value Enhancement
Au Sable River				
Alcona	67	\$1,567,448	\$597,530	NA
Mio	125	\$4,653,303	\$1,556,964	\$1,135,609
Loud	12	\$356,804	\$120,818	NA
Five Channels	6	\$166,820	\$56,482	NA
Cooke	165	\$4,981,310	\$1,686,123	NA
Foote	229	\$6,368,987	\$2,227,590	NA
Muskegon River				
Croton	25	\$956,226	\$303,639	\$40,019,546
Hardy	425	\$15,831,079	\$4,970,917	\$2,489,925
Rogers	18	\$516,415	\$176,769	\$14,353,427
Manistee River				
Tippy	356	\$15,250,720	\$4,731,736	NA
Hodenpyl	274	\$9,557,553	\$3,069,668	NA
Kalamazoo River				
Calkins Bridge	51	\$2,726,359	\$740,368	\$68,359,791
Grand River				
Webber	13	\$489,987	\$152,043	\$3,641,676



Statewide Economic Contribution Analysis

\$140 million is added to the state's gross product each year as a result of dam-related recreational spending

636 jobs are additionally created statewide by the indirect and induced purchases made by households and businesses

1,420 jobs across the state are a direct result of recreational spending around these impoundments

\$20 million in local, county, and state tax revenue is generated annually from that spending

\$130 million in increased market value for residential properties adjacent to the dam impoundment

\$2.3 million to local governments in property tax revenues generated from the increased property value

Understanding the Cost Impact of the River Hydro Fleet

Cost of Generation

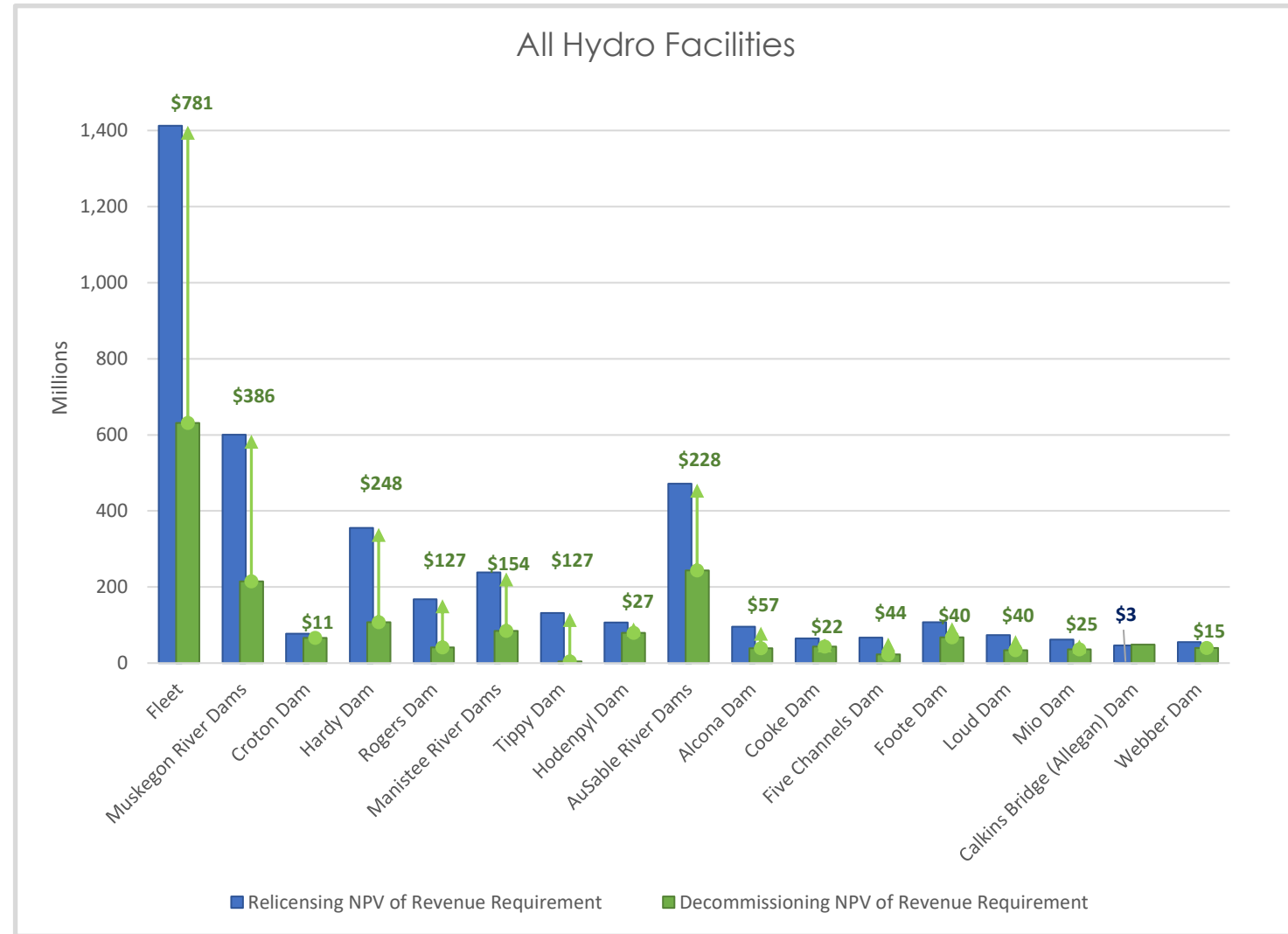
- Hydro power represents approximately 1.1% of Consumers Energy total electricity generation.
 - Hydro power is 9x more expensive than other sources of generation
 - After elimination of coal as a generation source, hydro power is about 15x more expensive than other sources of generation

Financial Impacts

Customers would pay:

- ~\$781M* more to relicense vs. decommission all 13 hydros
- ~\$3M* more to decommission vs. relicense Calkins Bridge Dam if the entire fleet is operating
 - Over the course of the next license period it would cost \$255 million more to relicense than decommission
 - Only hydro with a lower decommissioning cost
 - Fewer hydros will reduce potential savings from shared-cost benefits

*In Net Present Value (NPV): Value of all future cash flows (positive & negative) over the entire life of an investment discounted to the present. Note: These figures are accurate as of June 2023 and based on numerous regulatory and operational assumptions



Bill Impacts

Over 60 years, the cost to relicense Consumers Energy's hydro fleet will increase average customer bills:

- ↑ Residential \$3.60/month or \$43.20/year
- ↑ Small business \$13.80/month or \$165.60/year
- ↑ Large business \$1,040/month or \$12,480/year

Current average bills:

Residential: \$117/month
Small Business: \$441/month
Large Business: \$30,236/month



Seeking External Funding Options

IIJA

Infrastructure Investment and Jobs Act

243 (Efficiency)

- 9 Project applications
- \$16.4M Potential Funding
- Jun 2023 – Applications due (submitted)
- Oct 2023 – Approval notification

UPDATE: 93 applications totaling \$199M requested vs. \$75M program

247 (Dam Safety)

- 11 Project Applications
- \$23.2M Potential Funding
- Jun 2023 – Letter of Intent (Submitted)
- Oct 2023 – Applications Due
- Feb 2024 – Approval Notification

UPDATE: 599 LOI submitted totaling \$823M requested for a \$550M program

Department of Energy Loans

9 Dam Safety Project Loan Applications

- \$636M Max guaranteed loan
- Approx \$113M savings over 30 years
- Projects planned from 2023-2031

Update: Applying August 2023

IRA

Inflation Reduction Act

Currently not eligible for production tax credit
Working to expand eligibility for 30% tax PTC

State

Met with multiple state officials on potential budget funding
Interest but funding not secured

Local

Outreach to all impacted communities
Exploring potential contribution

Seeking Potential Buyers



Preparing a Request for Proposals (RFP) that will generate potential buyers



Anticipated release of RFP in Q4 2023



Applications due in 2024



Applications reviewed and interviews scheduled in 2024



Interviews conducted in 2024

Status on Relicensing the Hydro Facilities

- Consumers Energy is considering each river hydro plant individually and in relation to others up- and downstream.
- Investment from external funding is necessary for Consumers to pursue relicensing
- If sufficient funding is not available, the company will need to determine a long-term exit strategy. Options could be:
 - Sell, if suitable new buyers respond
 - Explore decommissioning and river restoration
 - Explore an alternative structure that maintains some level of reservoir and/or blocks sea lamprey
- Work towards keeping the impoundment intact (along with associated community benefits) regardless of future relicensing decision

Partnering for Community Prosperity

- In concert with communities, Consumers Energy seeks to be a partner to local groups to develop rivershed prosperity plans.
- More information will be announced before the end of the year, including a local organization that will serve as a convener of a new local group of community stakeholders that will work directly with Consumers Energy.
- These groups will assist Consumers Energy with any future decision on the dams and integrate the communities' voices in a collective way.

For More Information

Stay up to date on Consumers Energy's Long-Term Hydro
Strategy

consumersenergy.com/hydrofuture

If you are interested, please join
Consumers Energy for a meeting regarding
Lake Allegan reliability issues in the
Conference Center in this building.



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