ALGONQUIN TO ARNPRIOR

The Madawaska River







Madawaska River Watershed

DAMS AND GENERATING STATIONS

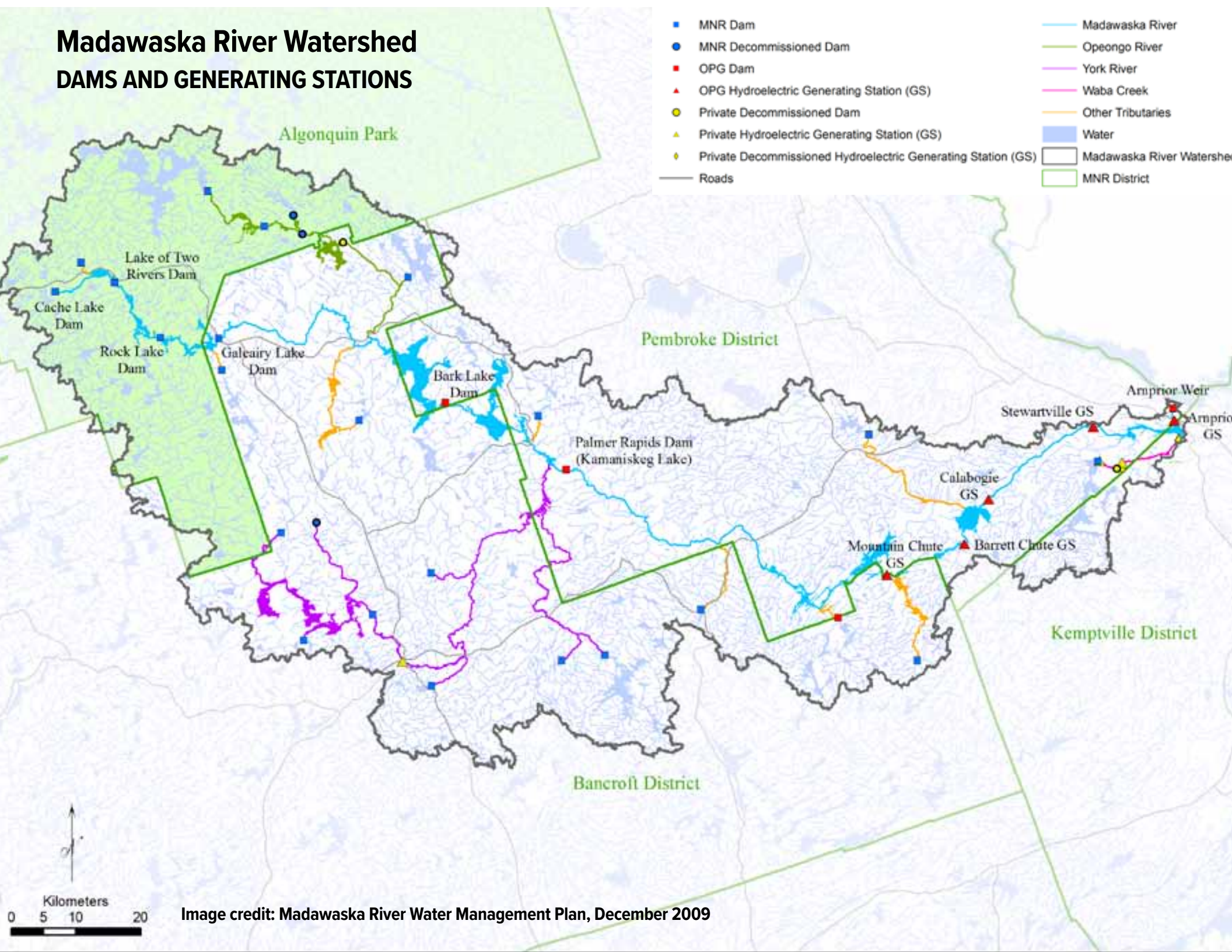


Image credit: Madawaska River Water Management Plan, December 2009

The headwaters of the Madawaska River flow out of a network of streams and lakes in the southeast corner of Algonquin Provincial Park.

The river cuts its way across the Precambrian highlands of the Canadian Shield in its 270-kilometre journey to its confluence with the Ottawa River at lac des Chats near Arnprior.

- The total drainage area is over 8500 square kilometres.
- There are 41 structures within the watershed.
- Ministry of Natural Resources owns 25 dams.
- OPG owns 5 generating stations, 2 control dams and one weir on the main stem of the river.
- There are 4 additional generating stations owned by other companies or private interests.
- OPG is the only owner of multiple hydroelectric facilities on the watershed.

Credit: Madawaska River Water Management Plan, December 2009

Along the Madawaska River, OPG owns...

2 CONTROL DAMS:

Bark Lake Dam
Palmer Rapids Dam

5 GENERATING STATIONS:

Mountain Chute GS
Barrett Chute GS
Calabogie GS
Stewartville GS
Arnprior GS

1 WEIR:

Arnprior



Matouweskarini

"People of the Shallows"



Matouweskarini

“People of the Shallows”

FIRST DAY

Cache Lake to Rock Lake



Cache Lake

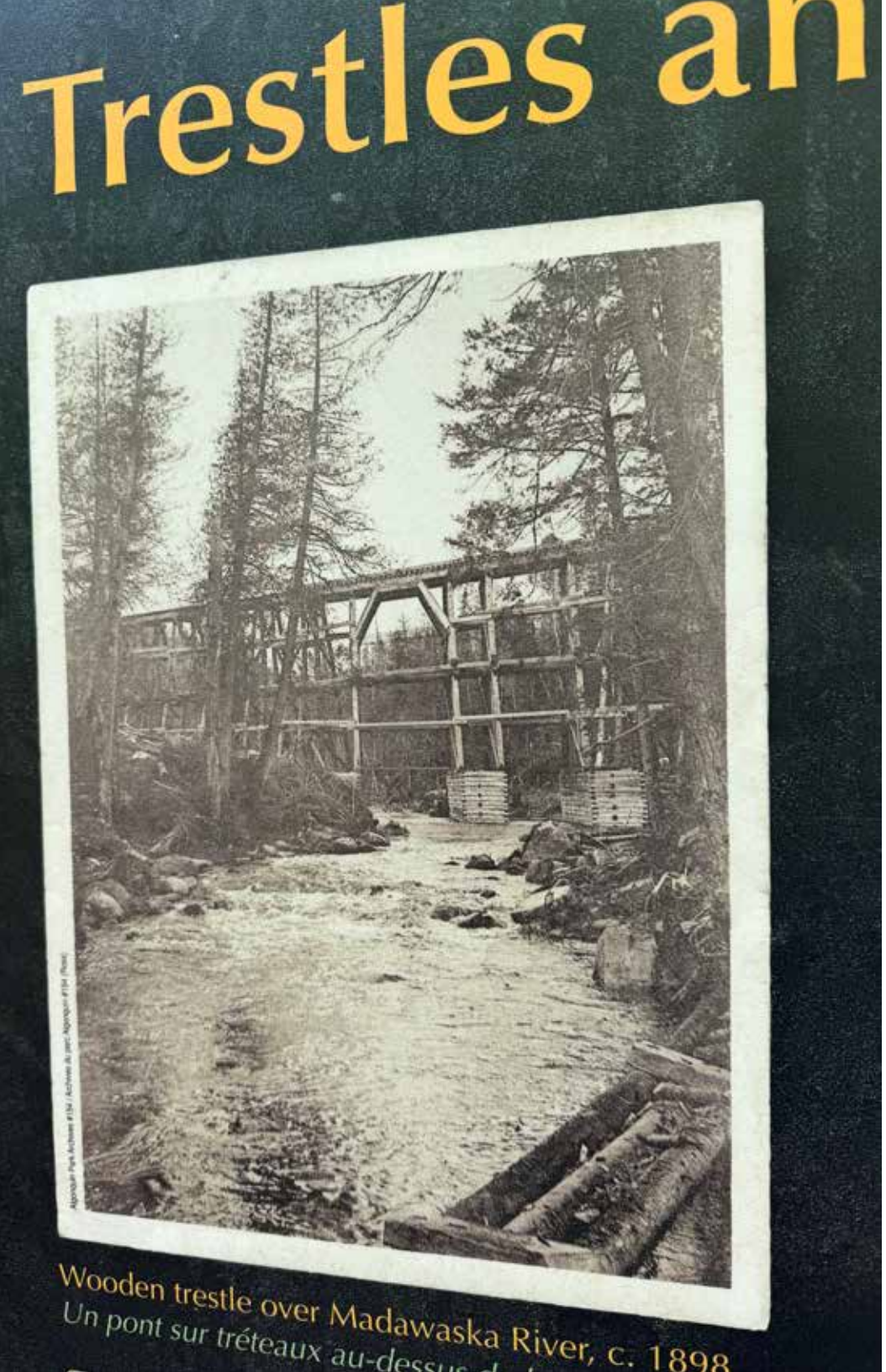
Cache Lake Dam

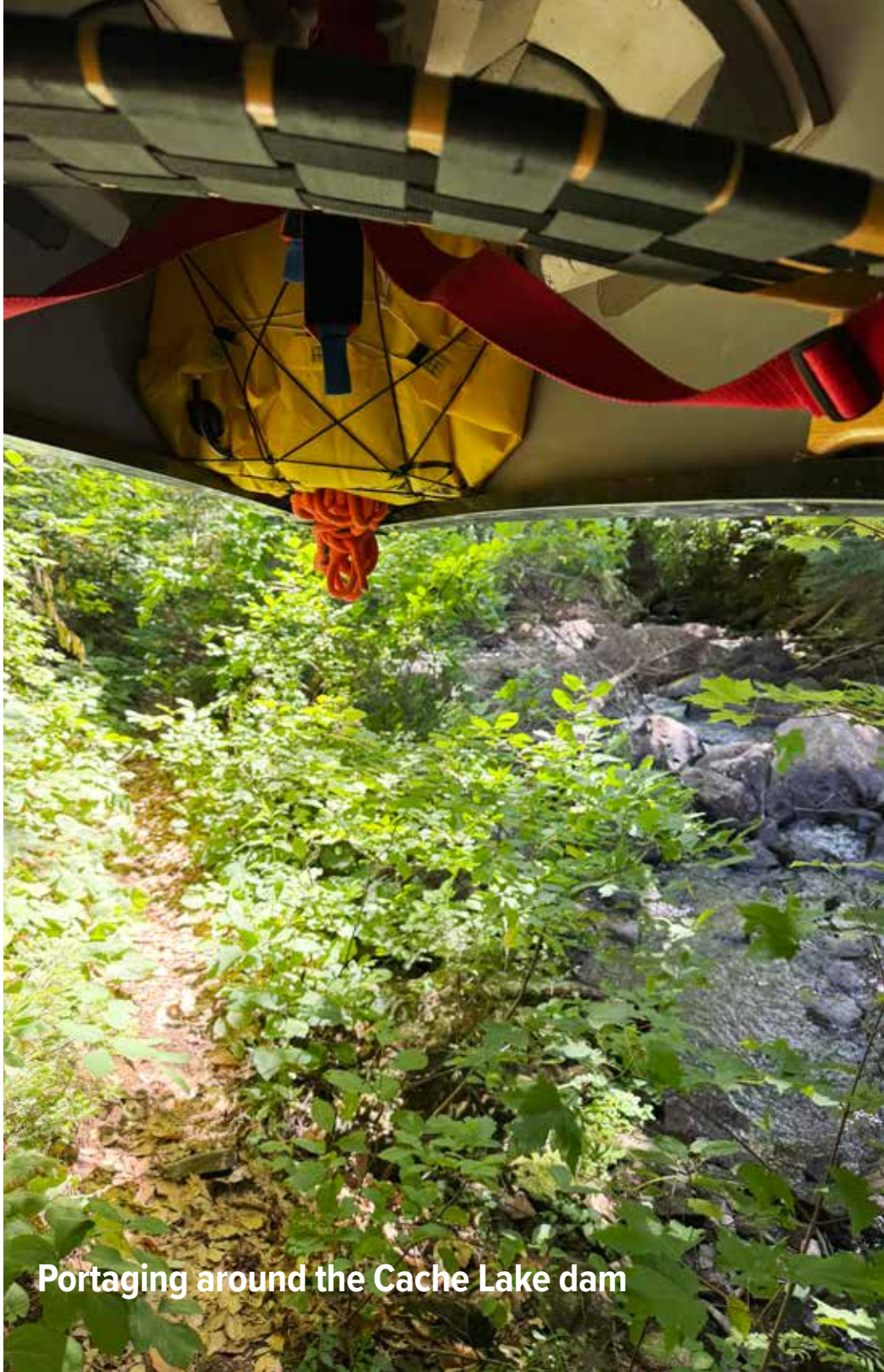






Portaging around the Cache Lake dam





Portaging around the Cache Lake dam



Madawaska River as it flows out of Cache Lake below the dam


5 BEAVER DAMS
between
Cache Lake and
Rock Lake



The Madawaska River widens where Head Creek flows in

Booth Rail Trail





Cache Lake to Rock Lake

30.73 km

9 hours

SECOND DAY

Rock Lake to Upper Mad (Little Niagara)



Rock Lake campsite



Rock Lake

Madawaska River Watershed

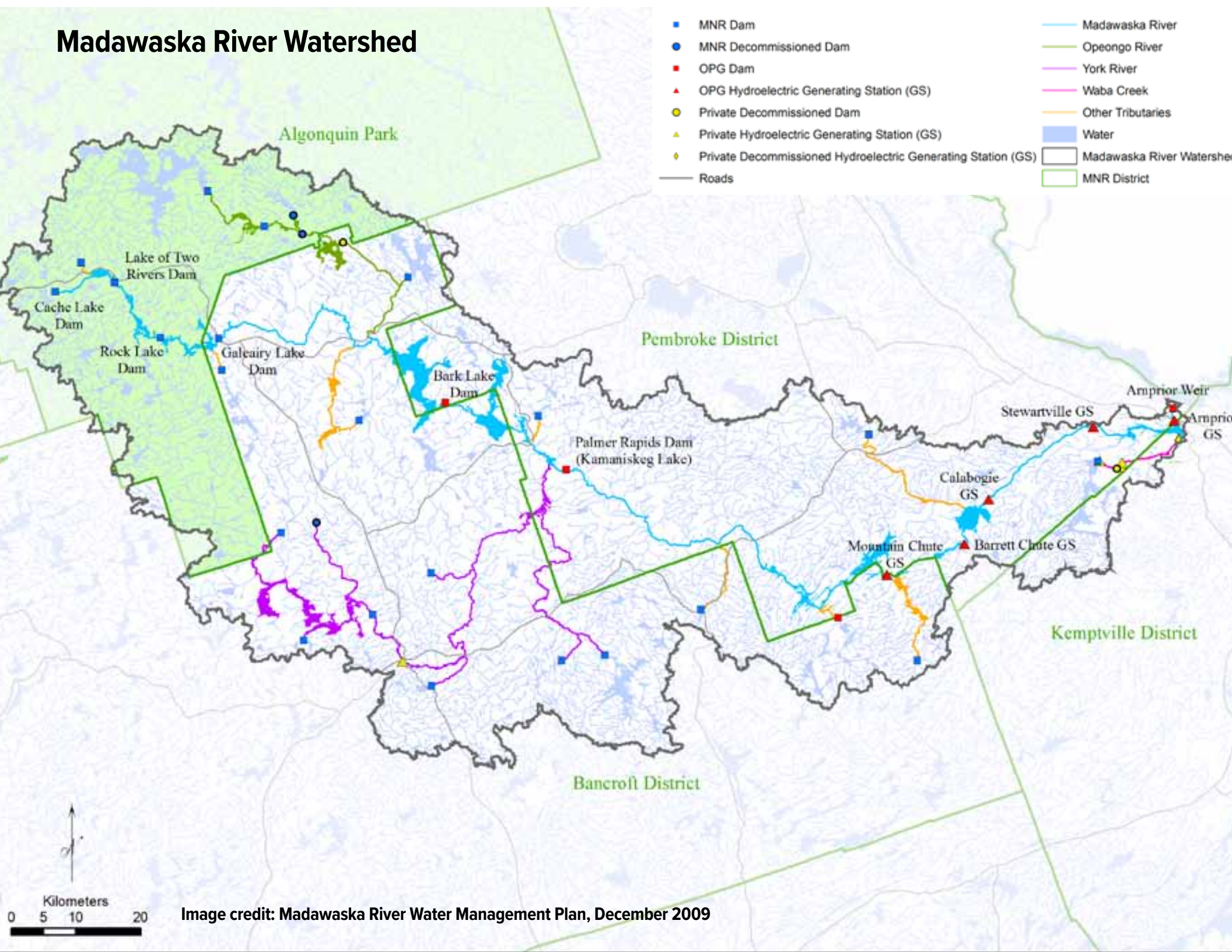


Image credit: Madawaska River Water Management Plan, December 2009

Rock Lake Dam





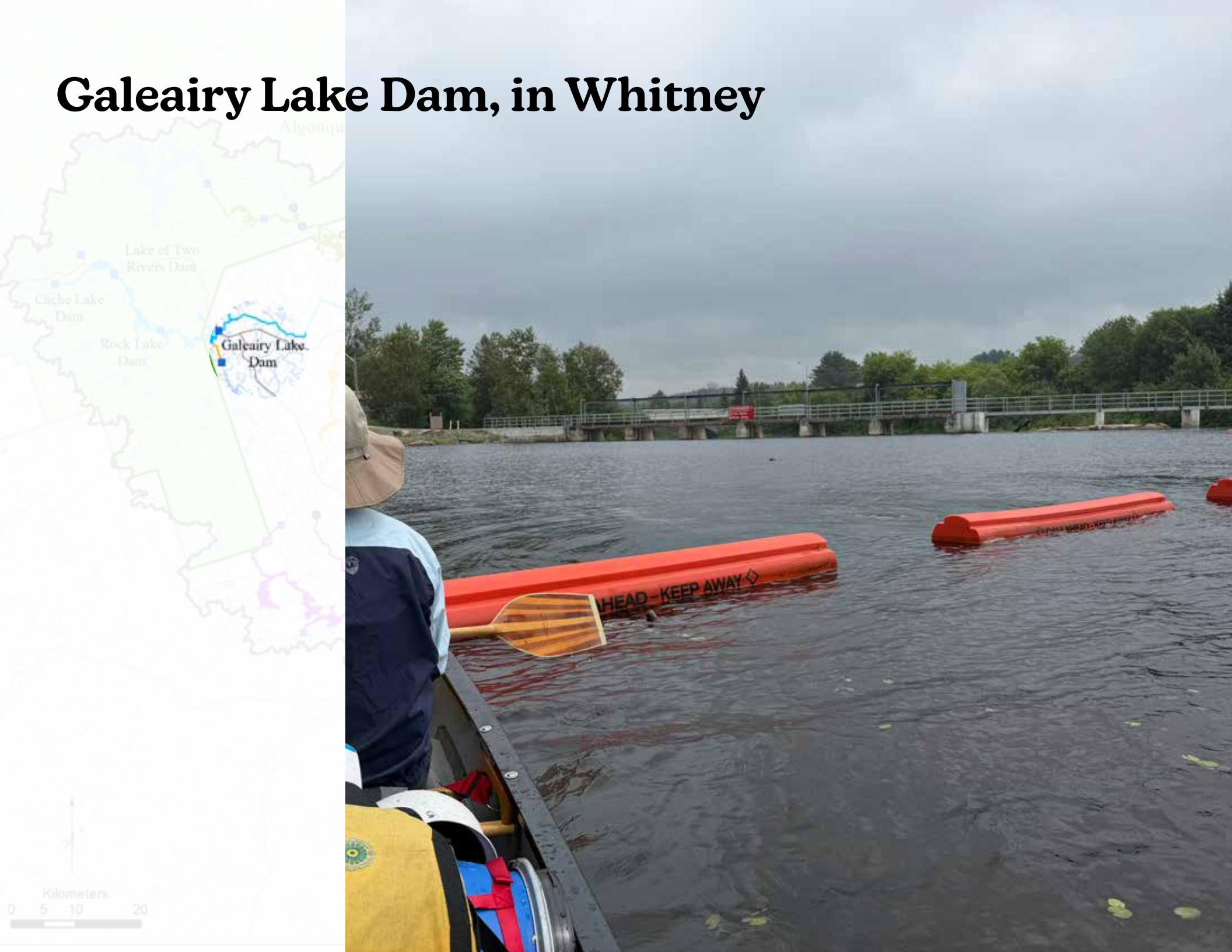


Galeairy Lake



Arriving in Whitney

Galeairy Lake Dam, in Whitney





Preparing to line a ledge





Looking upstream at Rosy Cozy, just downstream of Whitney



Hermann's Chute on the Upper Mad



Part of “The Uncountables” on the Upper Mad



Looking upstream at the approach to Devil's Elbow



Our campsite at Little Niagara



Rock Lake to Upper Mad (Little Niagara)

34.17 km

10 hours

Our campsite at Little Niagara

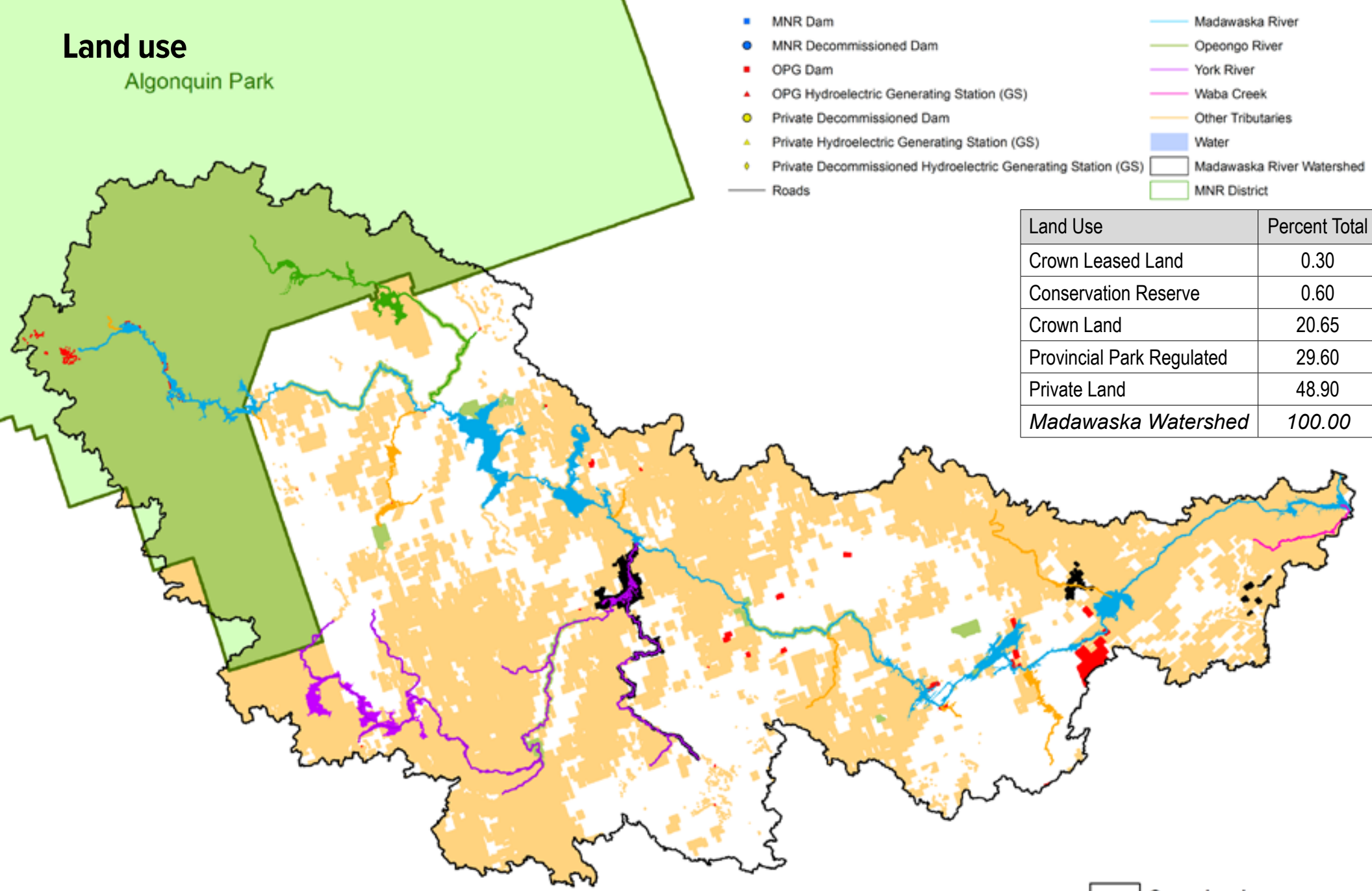
THIRD DAY

Upper Mad (Little Niagara) to the village of Madawaska



Juggling to start the day

Land use



Land Use	Percent Total
Crown Leased Land	0.30
Conservation Reserve	0.60
Crown Land	20.65
Provincial Park Regulated	29.60
Private Land	48.90
Madawaska Watershed	*100.00*

Image credit: Madawaska River Water Management Plan, December 2009



Leaving Little Niagara







The bridge on Major Lake Road over the Madawaska River, about 8 km from the village of Madawaska



Lots of meandering between Major Lake Road and Madawaska



Great lunch spot



The old train trestle near J.R. Booth Park outside of the village of Madawaska. Hwy 60 is visible just past it.



Highway 60!



Algonquin's Edge Resort



Algonquin's Edge Resort



Upper Mad (Little Niagara) to Madawaska

16 km

6 hours

Madawaska River Watershed

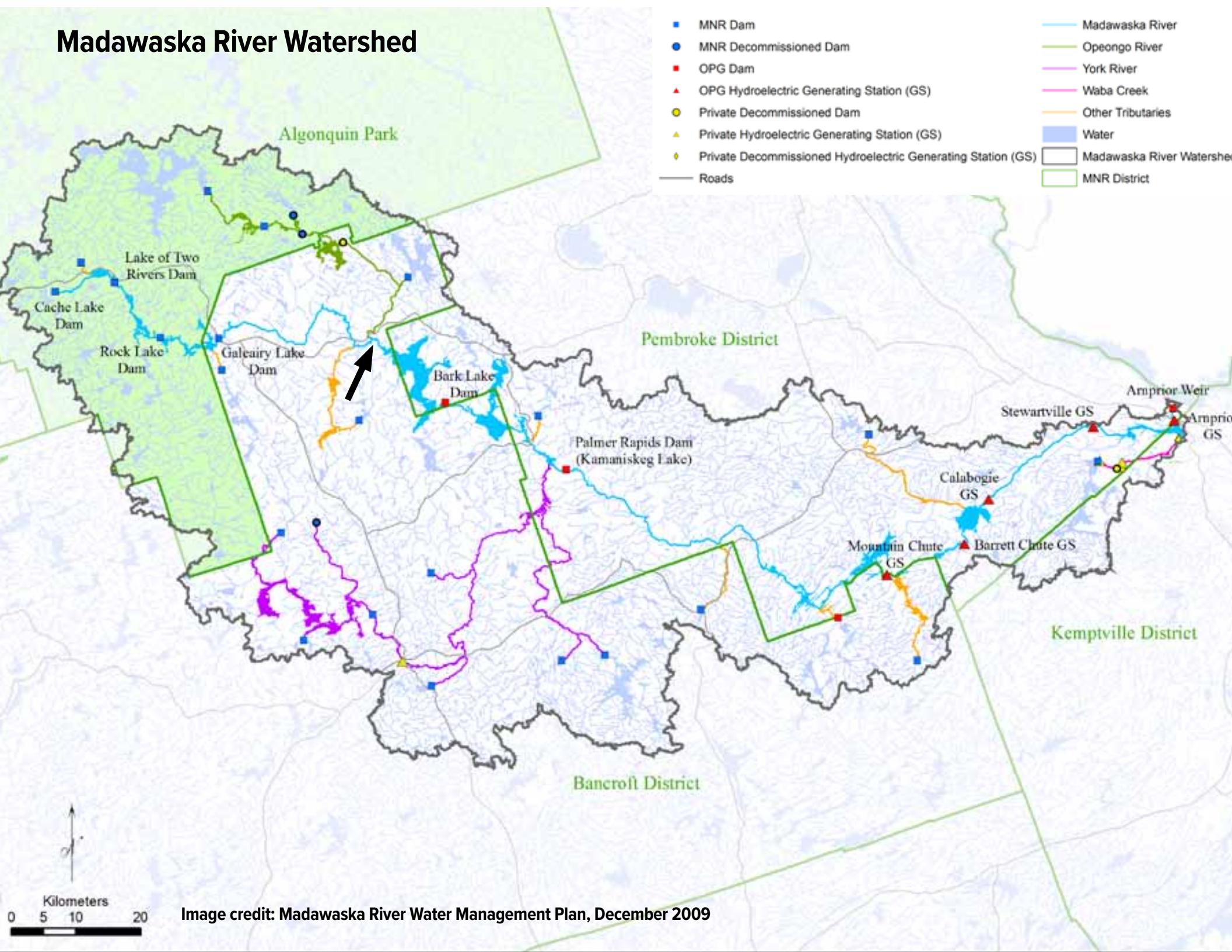


Image credit: Madawaska River Water Management Plan, December 2009

FOURTH DAY

The village of Madawaska to Combermere



The old railway bridge in the distance... turn left before it!



Don’t rely on Google Maps



Backtracksies



Murray Brothers Mill near Madawaska



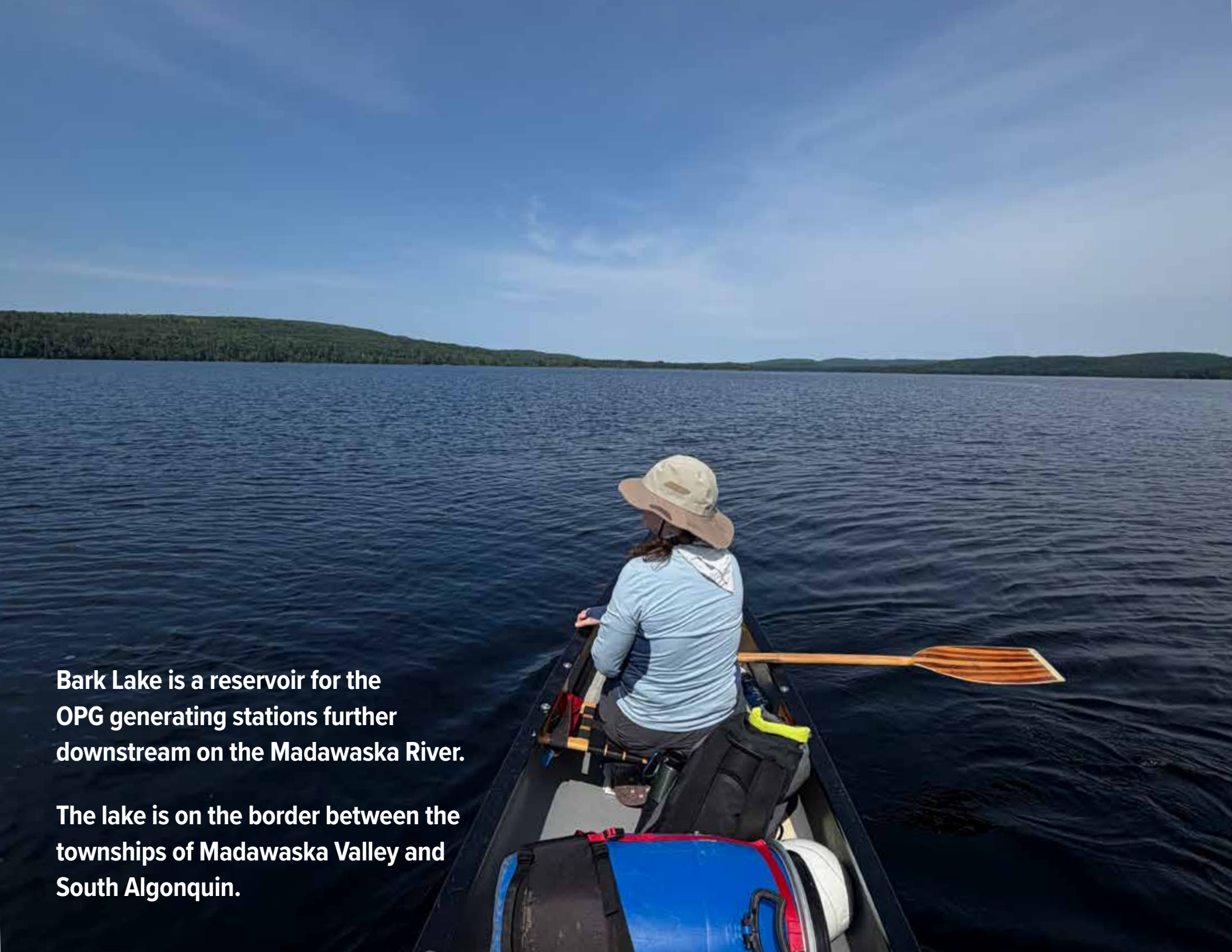
Murray Brothers Mill near Madawaska



Murray Brothers Mill near Madawaska



The Highway 60 bridge over the Opeongo River flowing into the Madawaska River, near Aylen Lake Road



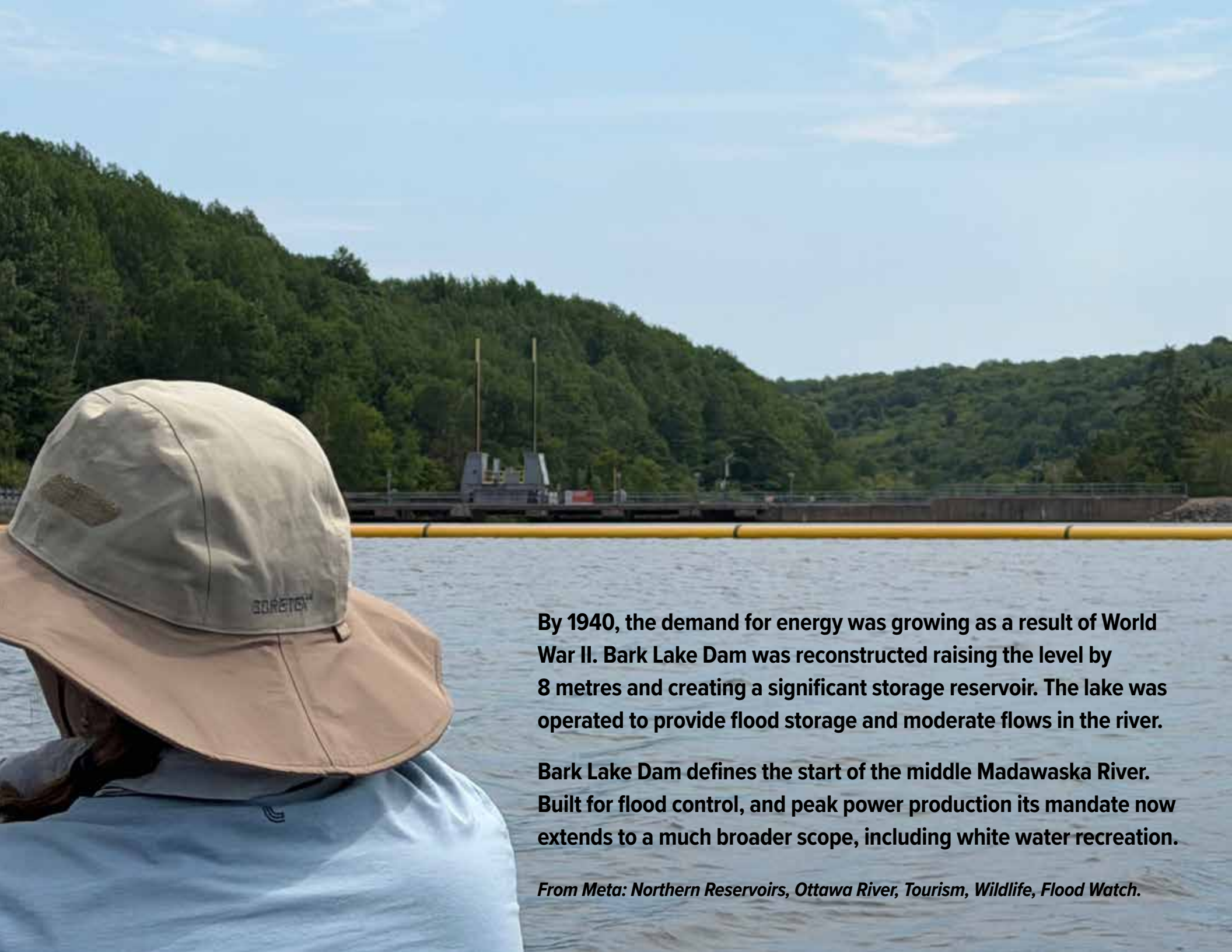
Bark Lake is a reservoir for the OPG generating stations further downstream on the Madawaska River.

The lake is on the border between the townships of Madawaska Valley and South Algonquin.





Approaching the portage at Bark Lake Dam



By 1940, the demand for energy was growing as a result of World War II. Bark Lake Dam was reconstructed raising the level by 8 metres and creating a significant storage reservoir. The lake was operated to provide flood storage and moderate flows in the river.

Bark Lake Dam defines the start of the middle Madawaska River. Built for flood control, and peak power production its mandate now extends to a much broader scope, including white water recreation.

From Meta: Northern Reservoirs, Ottawa River, Tourism, Wildlife, Flood Watch.





Portaging Bark Lake Dam



Portaging Bark Lake Dam



Officially on the Middle Mad



Leaving the Middle Mad and heading to Kaminiskeg Lake



Kaminiskeg Lake

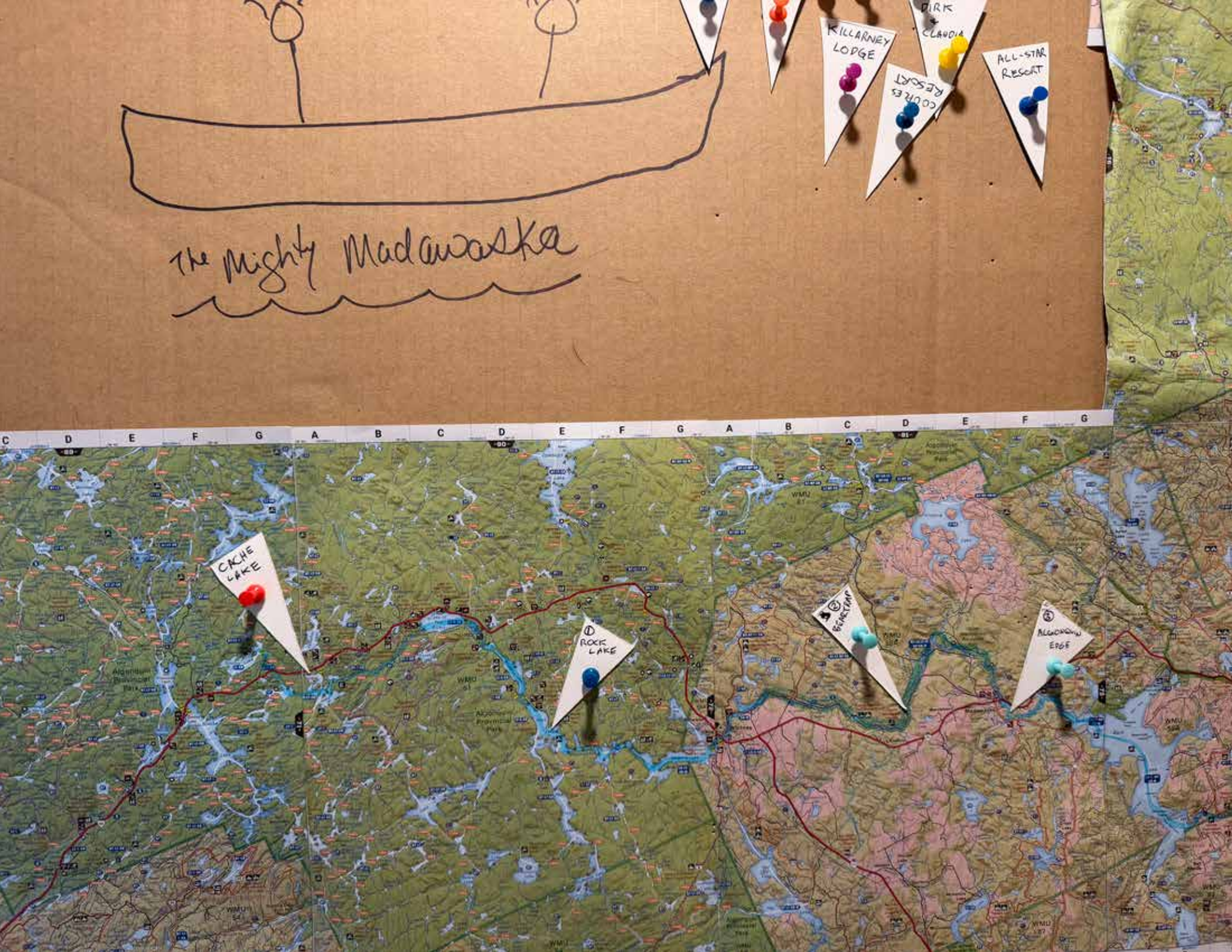


Madawaska to Combermere

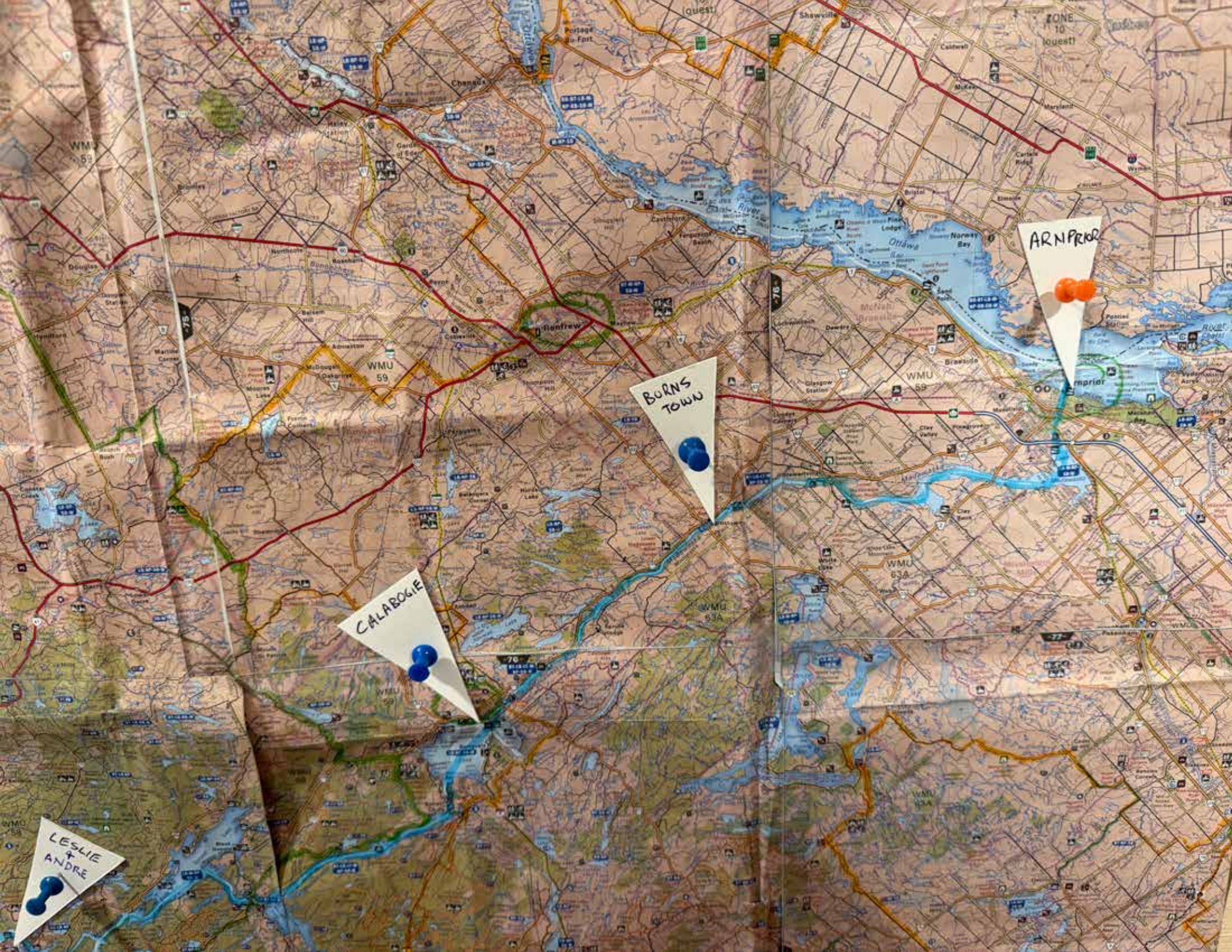
41.51 km

11 hours

The bridge at Combermere


The Mighty Madawaska
KILLARNEY LODGE
COUPLES RESORT
DIRK & CLAUDIA
ALL-STAR RESORT
CACHE LAKE
1 ROCK LAKE
3 BEARCLAW
4 ALGONQUIN EDGE


3
ALGONQUIN
EDGE
4 HOME
RIFLE
SHOOT
LESLIE
+
ANDRE
WMU
55A
WMU
55B
WMU
58
WMU
57
Barry's Bay
Madawaska
723
Barry's Bay


ARNPRIOR
BURNS TOWN
CALABOGIE
LESLIE & ANDRE
Renfrew
Pembroke
Petawawa
Deep River
Chalk River
Ottawa River
WMU 59
WMU 63A
ZONE 10 (ouest)

FIFTH DAY (AFTER A WEEK AT HOME)

Combermere to the Lower Mad



The dock in Combermere



Conroy Marsh where the York River flows into the Madawaska River

Palmer Rapids Dam









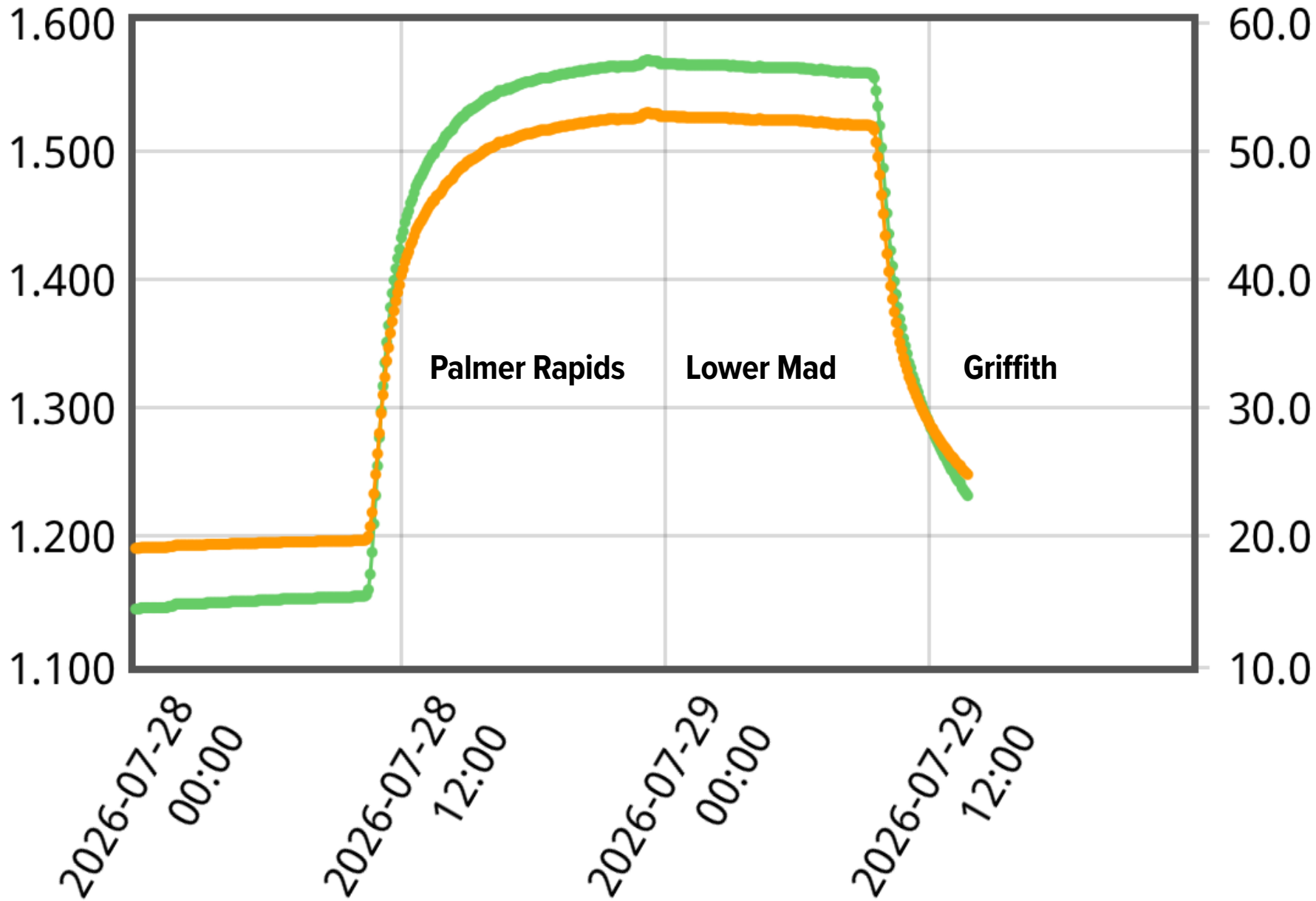
Palmer Rapids Dam

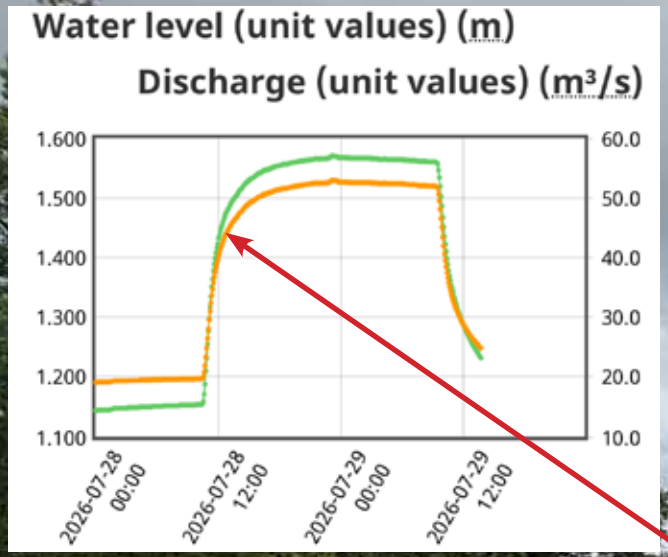


Looking across to Jessup's camground at Palmer Rapids

Water level (unit values) (m)

Discharge (unit values) (m³/s)





Reorganized after a swim



Drying out at lunch time near downtown Palmer Rapids



Latchford Bridge



Combermere to Lower Mad

33.26 km

9 hours

Island Rapids on the Lower Mad

SIXTH DAY

Lower Mad to Centennial Lake



Camped at Exam Time on the Lower Mad

Watershed relief

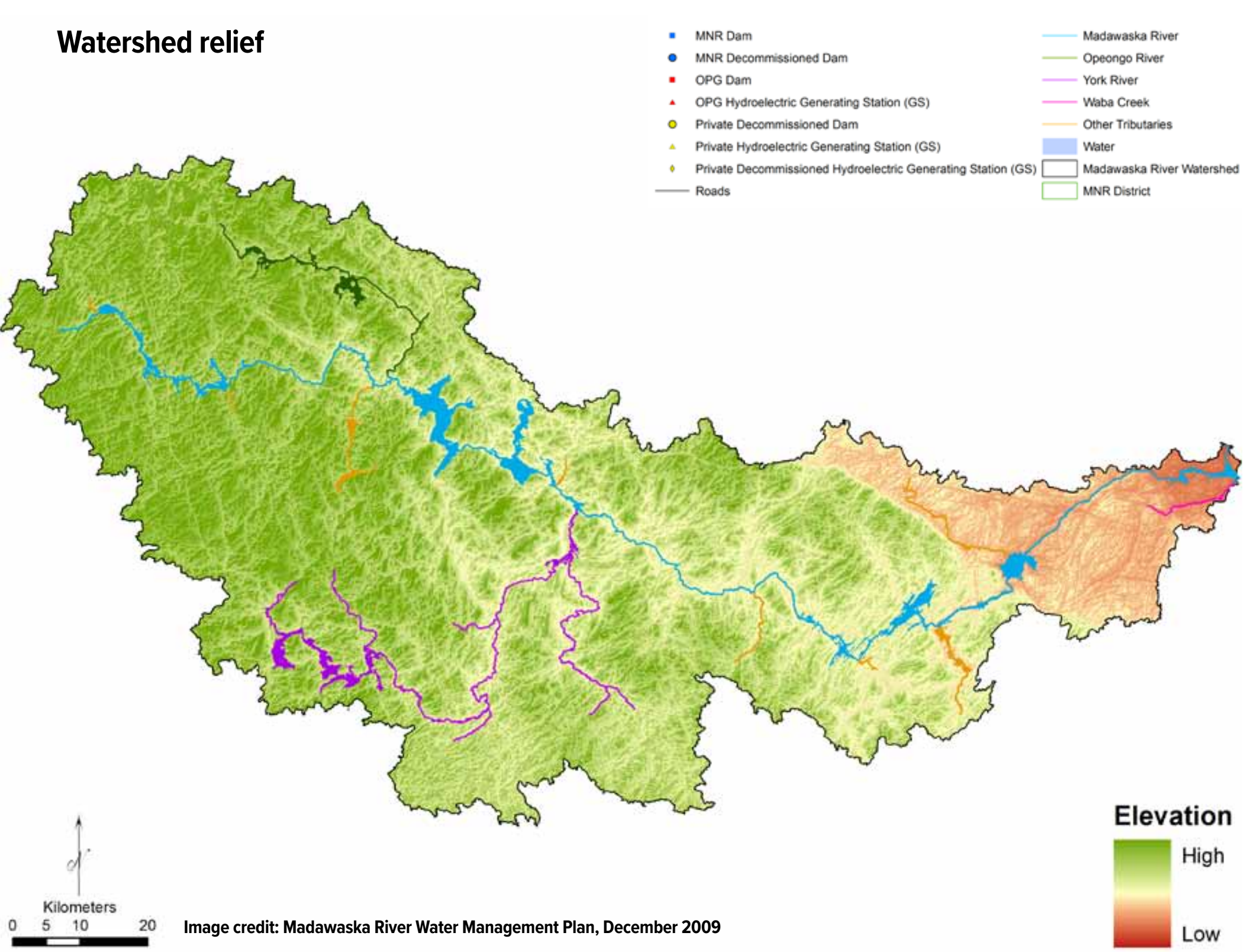


Image credit: Madawaska River Water Management Plan, December 2009



Rifle Chute



Approaching the portage at Slate Falls







Slate Falls





Lunch at Blueberry



On the lower Lower Mad



Highway 41 at Griffith


Lower Mad to
Centennial Lake
33.73 km
8.5 hours

Madawaska River Watershed

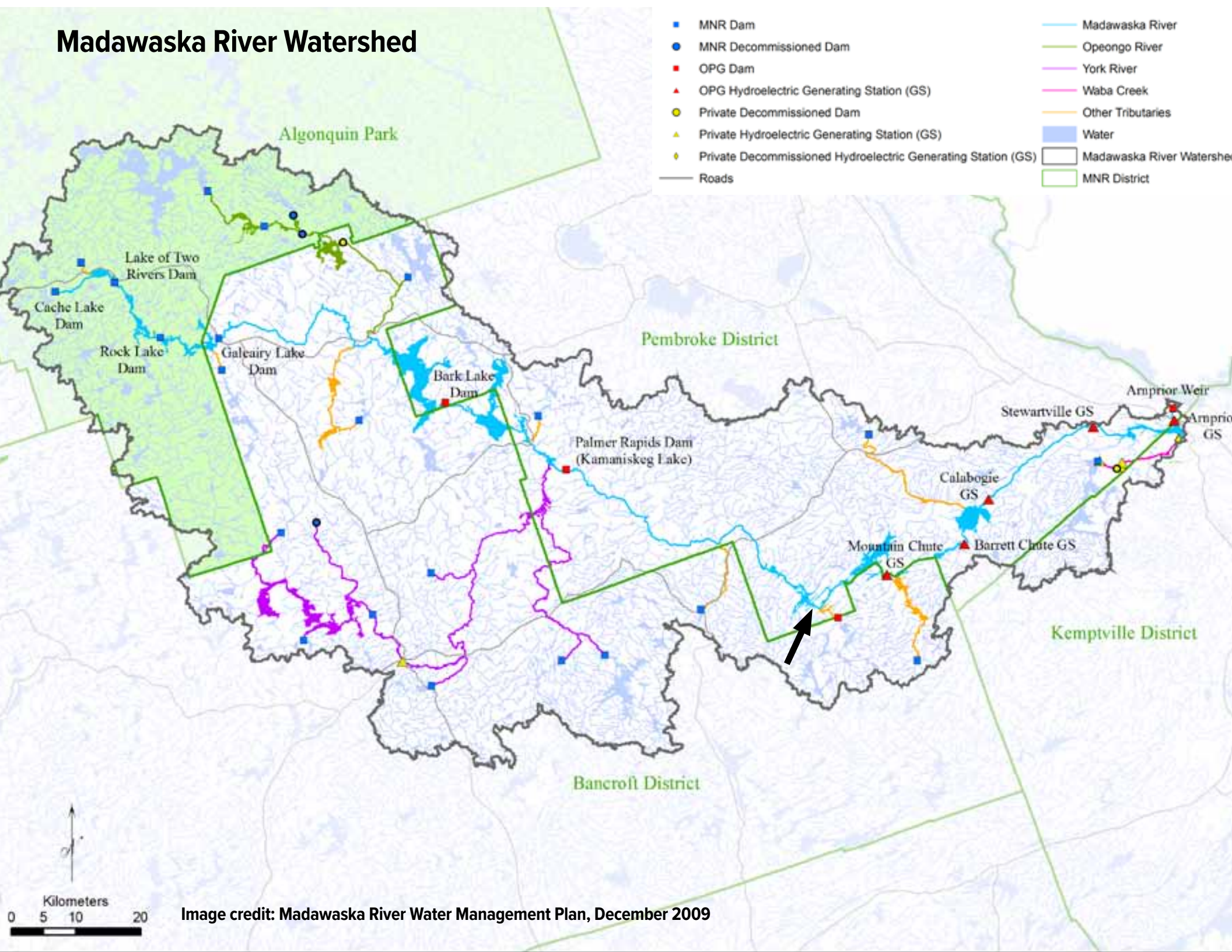


Image credit: Madawaska River Water Management Plan, December 2009

SEVENTH DAY

Centennial Lake to Calabogie



Andre and Lesley's dock

Vegetation types

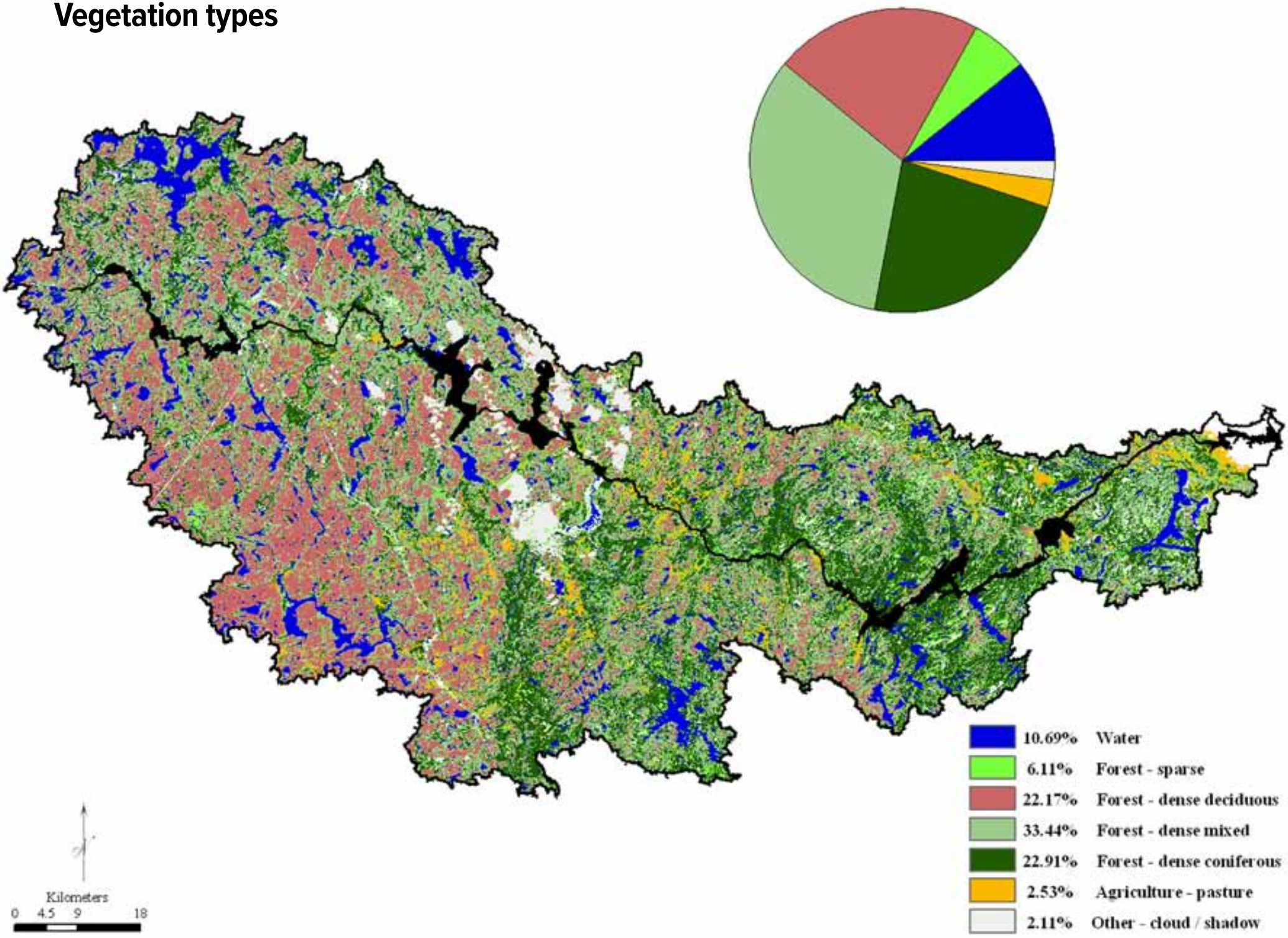


Image credit: Madawaska River Water Management Plan, December 2009



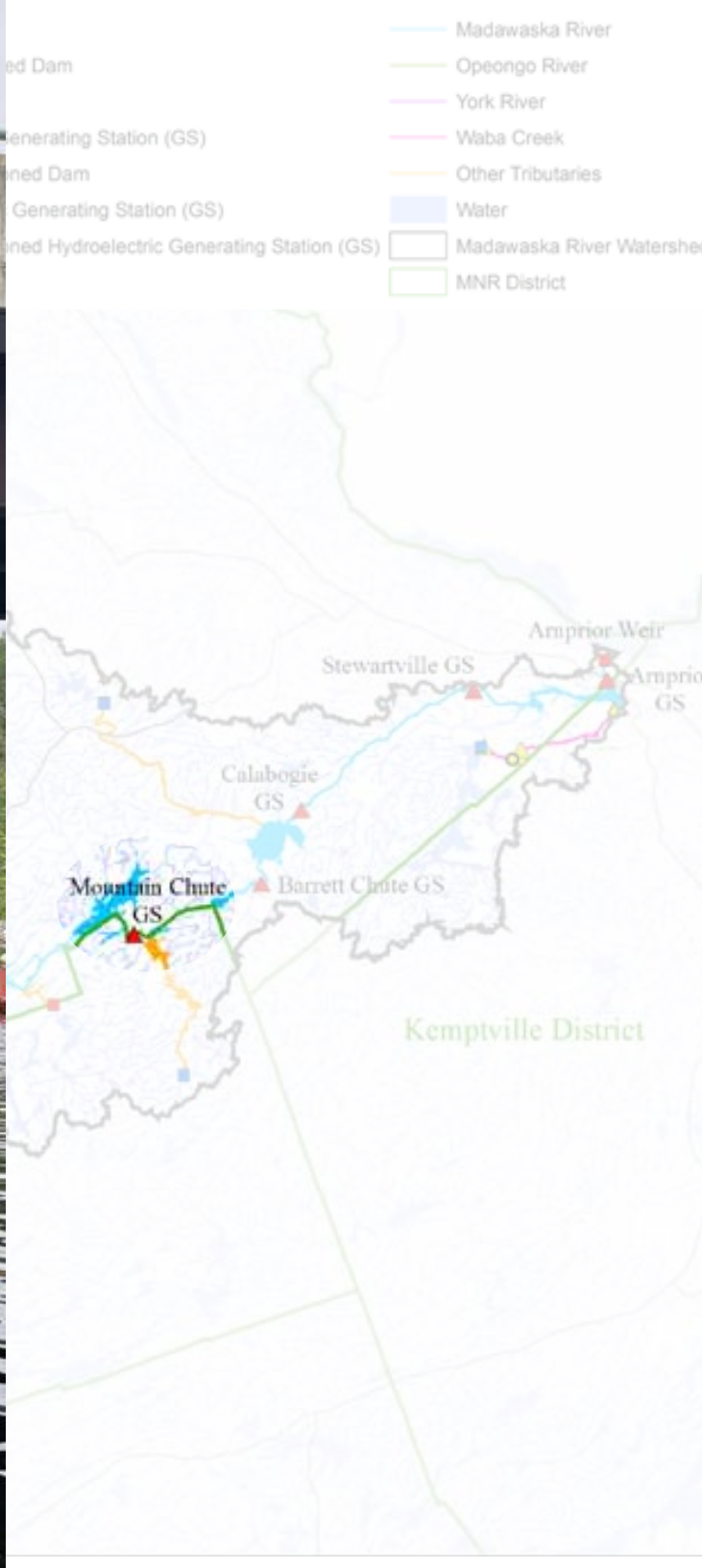
Centennial Lake



Centennial Lake

Mountain Chute Dam

Leaving Black Donald Lake



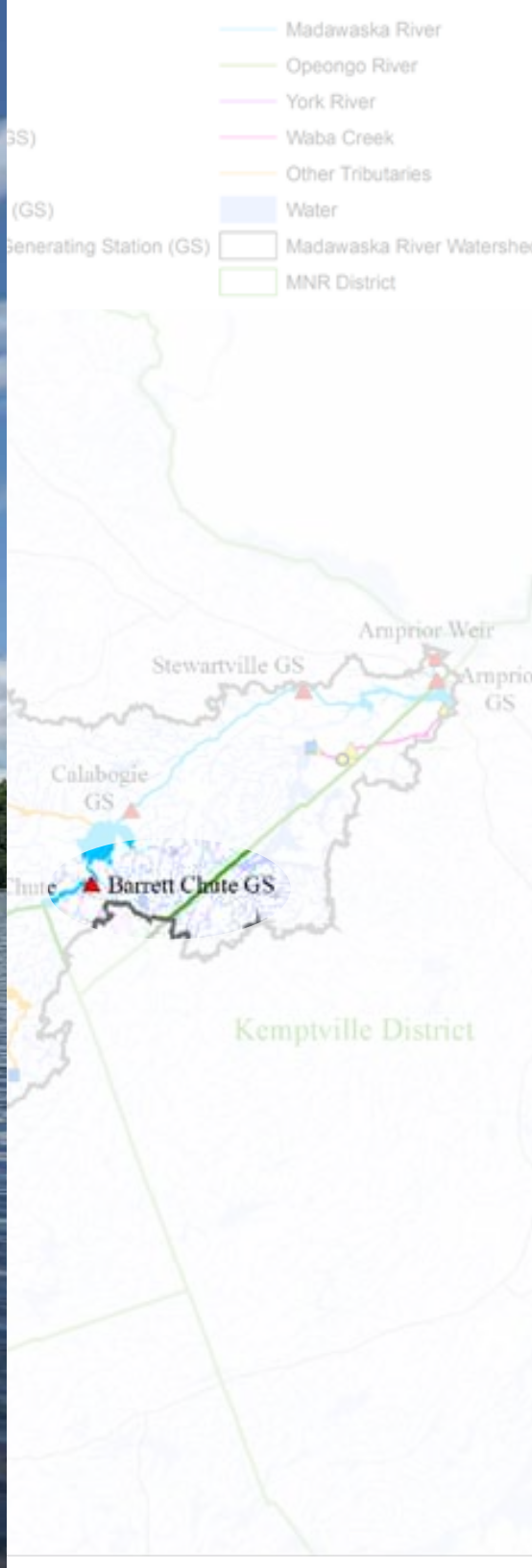

MOUNTAIN CHUTE





Found some friends crazy enough to join us for a day or two

Barrett Chute Dam





Portaging Barrett Chute Dam



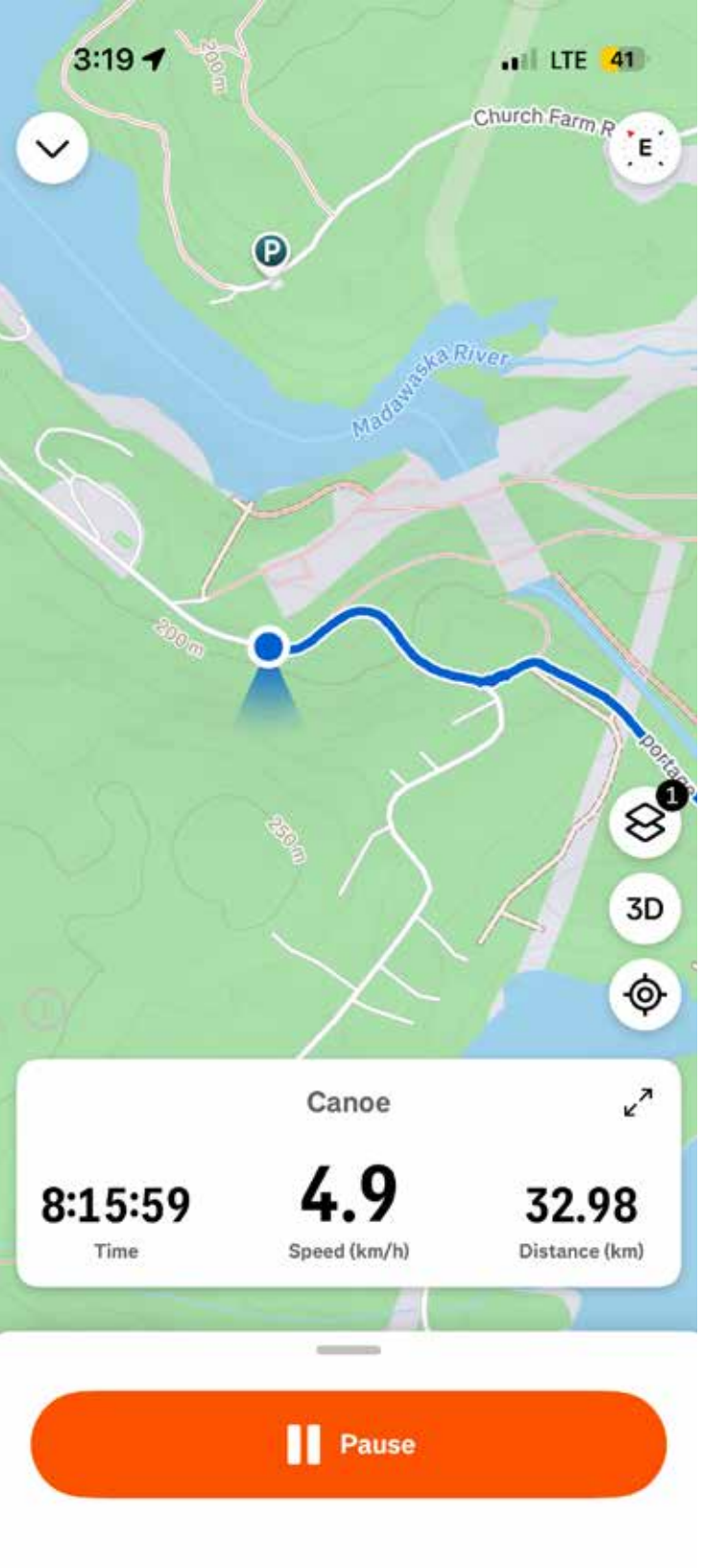
Portaging Barrett Chute Dam



Portaging Barrett Chute Dam



Portaging Barrett Chute Dam



Portaging Barrett Chute Dam



Barrett Chute Dam



Onward to Calabogie Lake



Calabogie Lake... cottages and boats



The portage to Somewhere Inn, Calabogie

Centennial Lake to Calabogie

39.3 km

10 hours

Image credit: Somewhere Inn, Calabogie





Madawaska River Watershed

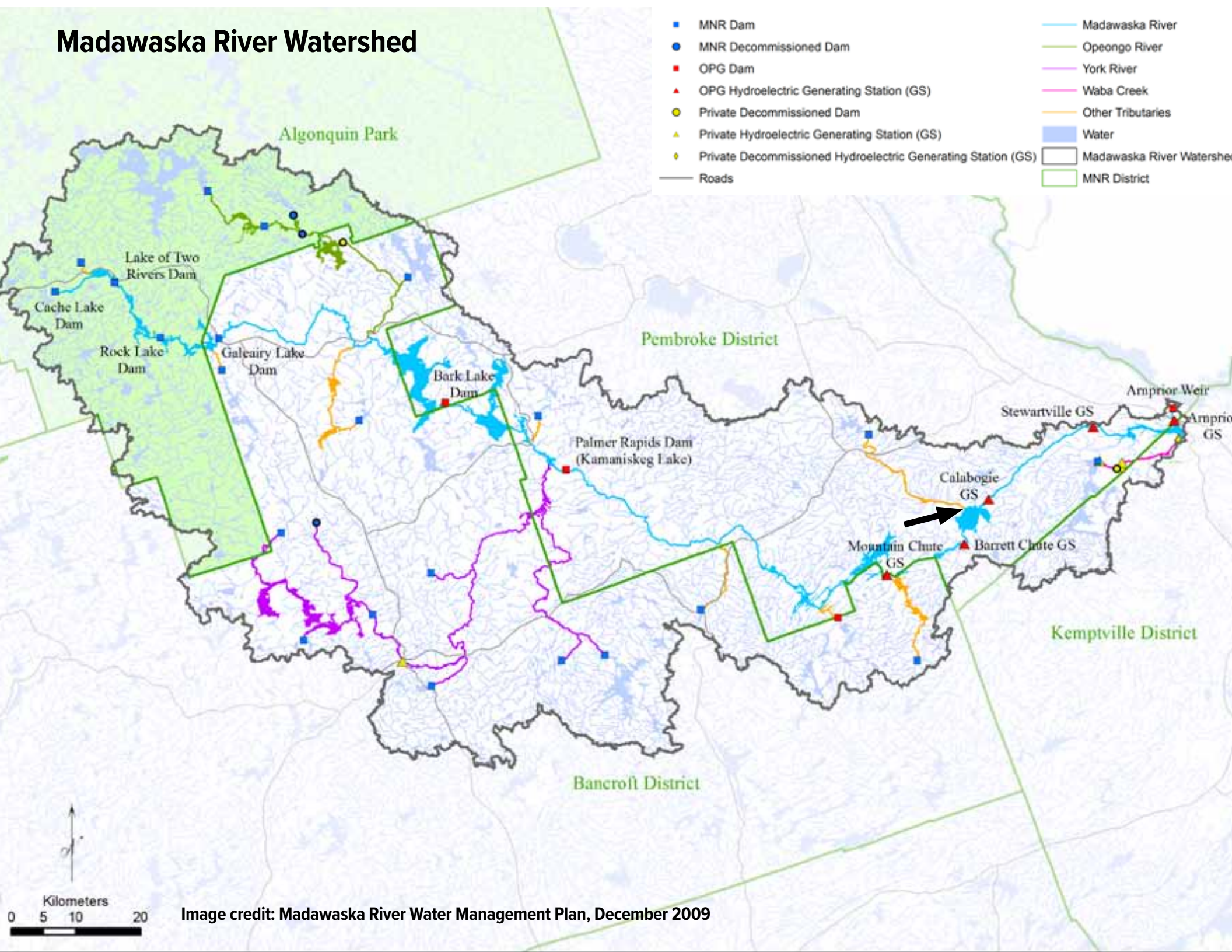
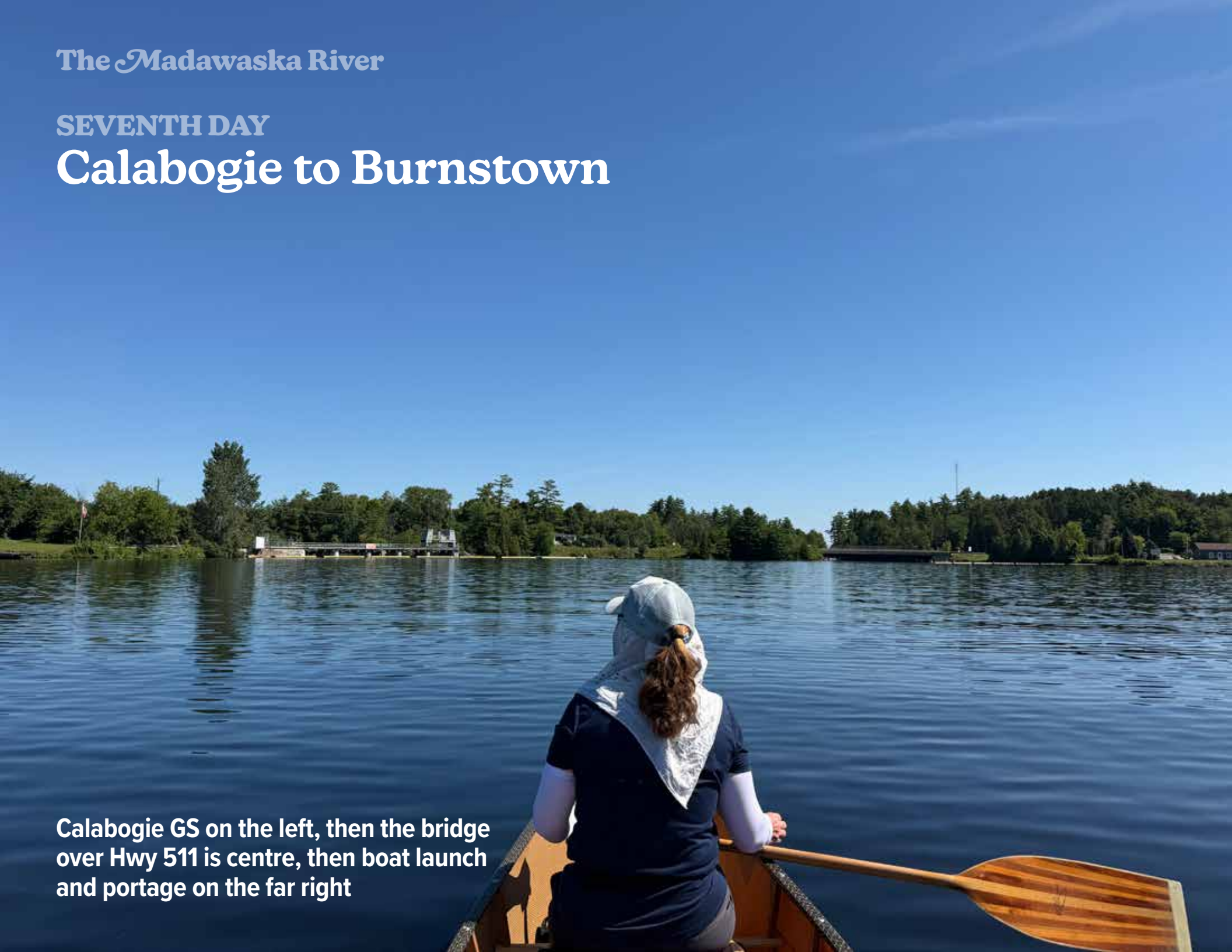


Image credit: Madawaska River Water Management Plan, December 2009

SEVENTH DAY

Calabogie to Burnstown



Calabogie GS on the left, then the bridge over Hwy 511 is centre, then boat launch and portage on the far right

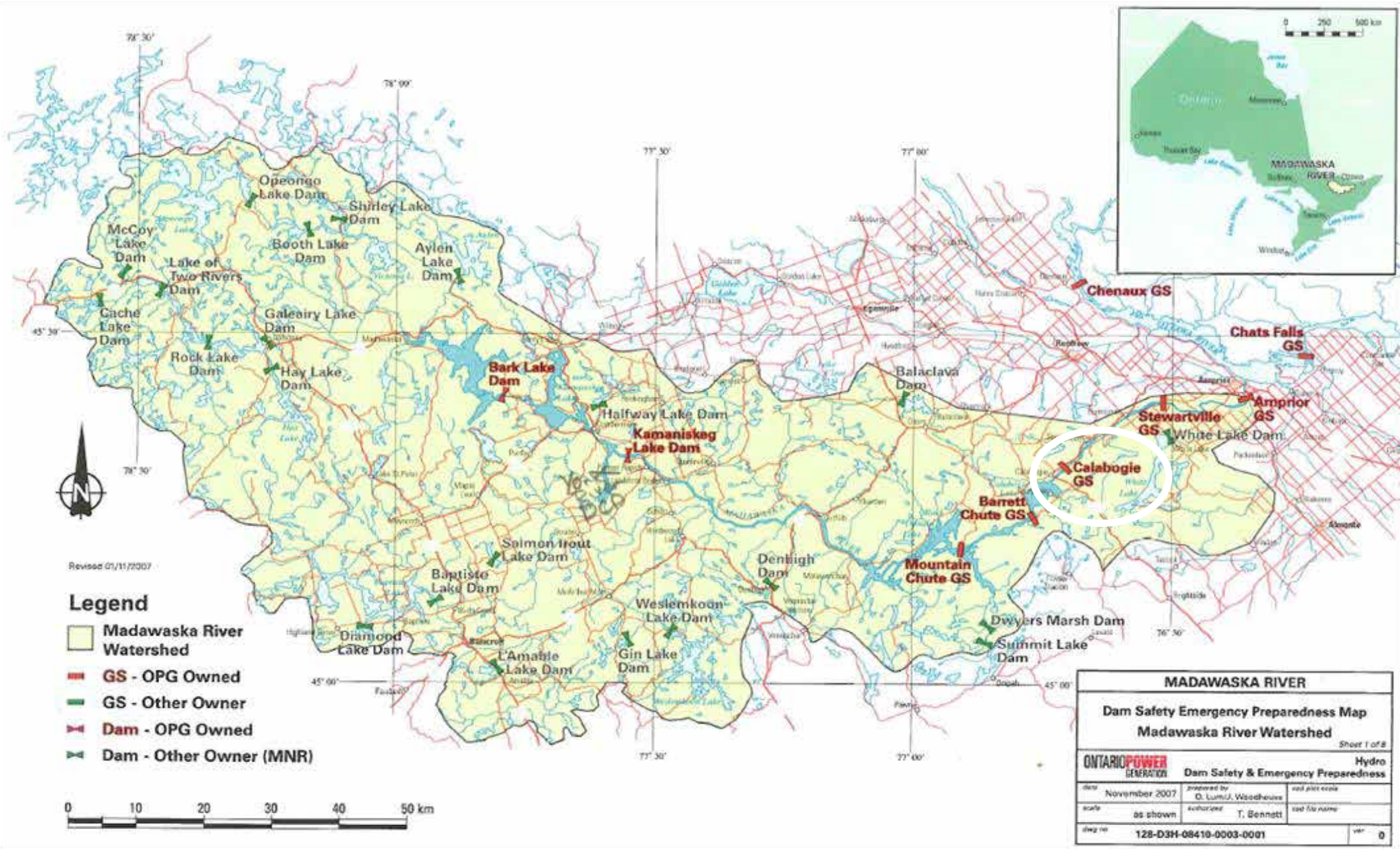


Image Credit: 2017 ICOLD System approach and simulation in risk assessment of dams



Boat launch take-out, cross the highway and then the portage is on the K&P trail



K&P Recreational Trail over the west branch of the Madawaska River



Portaging
Calabogie GS



Too low to paddle



We had to walk the canoe a long way



The confluence of the two branches up ahead

- **All OPG facilities have capacities greater than 1 MW and all non-OPG generating stations have capacities of less than 1 MW.**
- **OPG generating stations on the Madawaska River are part of the interconnected electric grid managed by the Independent Energy System Operator (IESO).**
- **Energy produced by OPG is sold to the wholesale market managed by the IESO and provides power to customers in the Province of Ontario.**
- **OPG facilities on the Madawaska River provide the Ontario energy system with 611 MW of installed peaking capacity.**
- **All seven OPG sites underwent three separate dam safety reviews between 1986 and 2012 with the most recent findings indicating that increases in discharge capacities at MRS sites should be considered.**



Credit: Madawaska River Water Management Plan, December 2009



Looking back upstream at the Calabogie GS



The bridge at Burnstown



But of course!



Aprés dinner



Calabogie to just below Burnstown

25.16 km

9 hours

Serious cottage country

Madawaska River Watershed

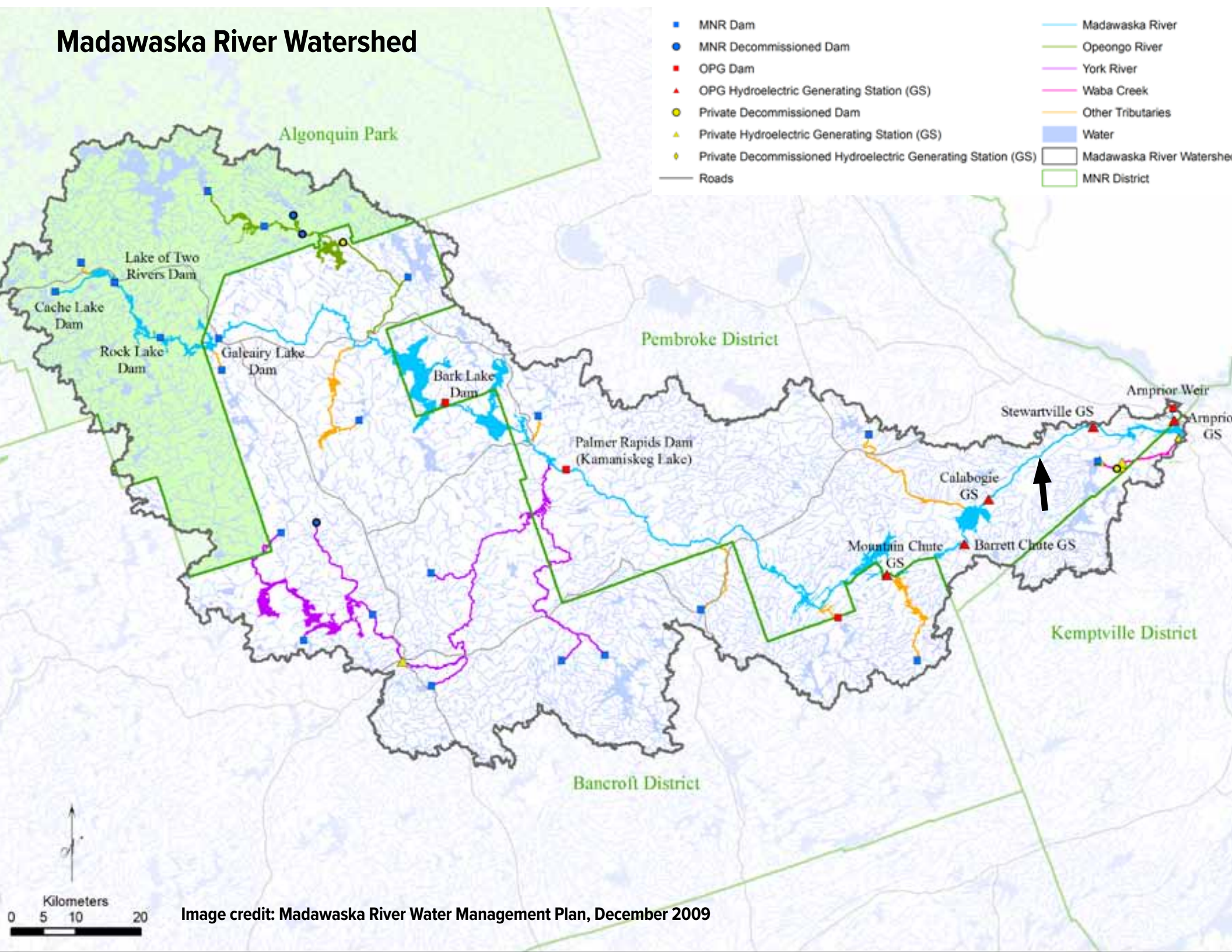


Image credit: Madawaska River Water Management Plan, December 2009

EIGHTH DAY

Burnstown to Arnprior



Meeting up again in the morning with Larry and Brenda at our Airbnb on the river



Stewartville GS

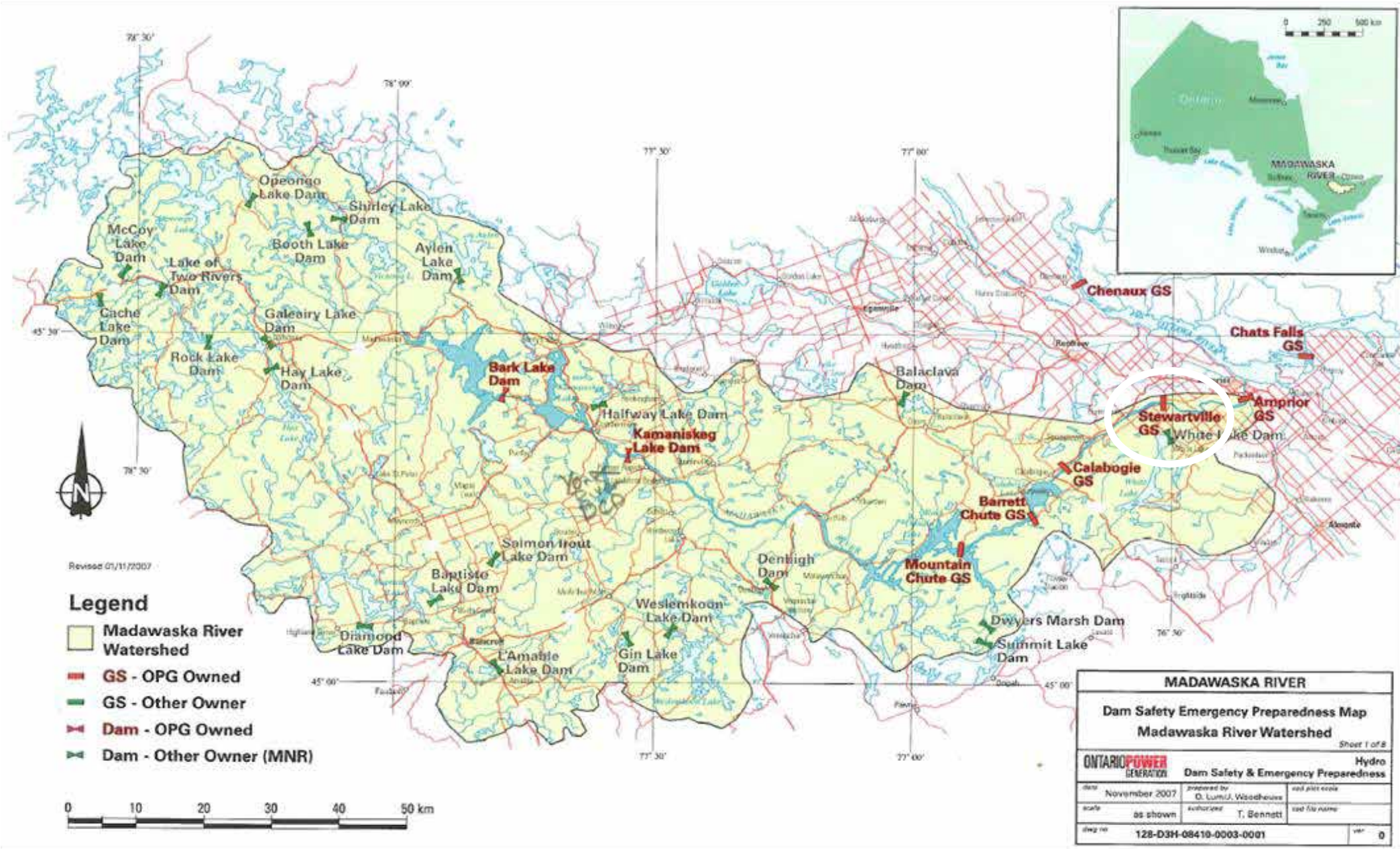


Image Credit: 2017 ICOLD System approach and simulation in risk assessment of dams



The access point to the Stewartville GS



We double dare you to portage this dam


Go straight


Then left, then left again



Make another left at the big machine



Go straight, then make a right



Keep going...



Onward to the Arnprior GS



Arnprior Generating Station
Image: OPG



Arnprior! Did you know there's a huge weir in Arnprior?



Looking upstream at the Madawaska River and the weir in Arnprior



The confluence of the Madawaska River and the Ottawa River

Burnstown to Arnprior parking lot above dam

18.07 km

6.5 hours

22.88 km to Ottawa River!



The Friends of the Madawaska River is raising funds to do **road improvements** to the put-in (Aumond Bay) and take-out (Buck Bay) on the Lower Madawaska River.

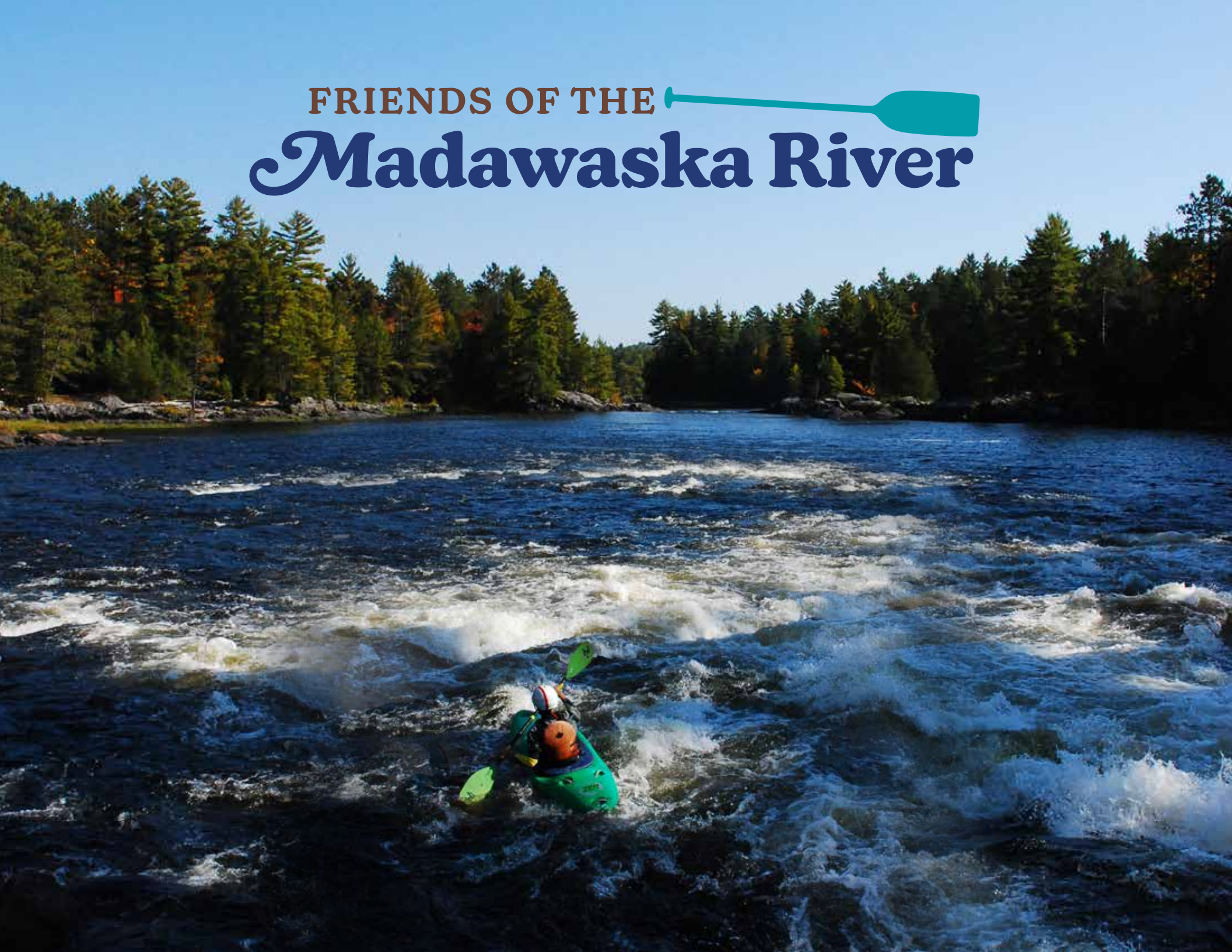
The roads require:

- grading
- ditches
- fill
- crowning
- pull outs

We'll be reaching out to local companies for quotes.

We expect this will be costly and will likely take at least two years to raise enough money to do the work properly.

friendsofthemadawaskariver@gmail.com
friendsofthemadawaskariver.ca


FRIENDS OF THE
Madawaska River