

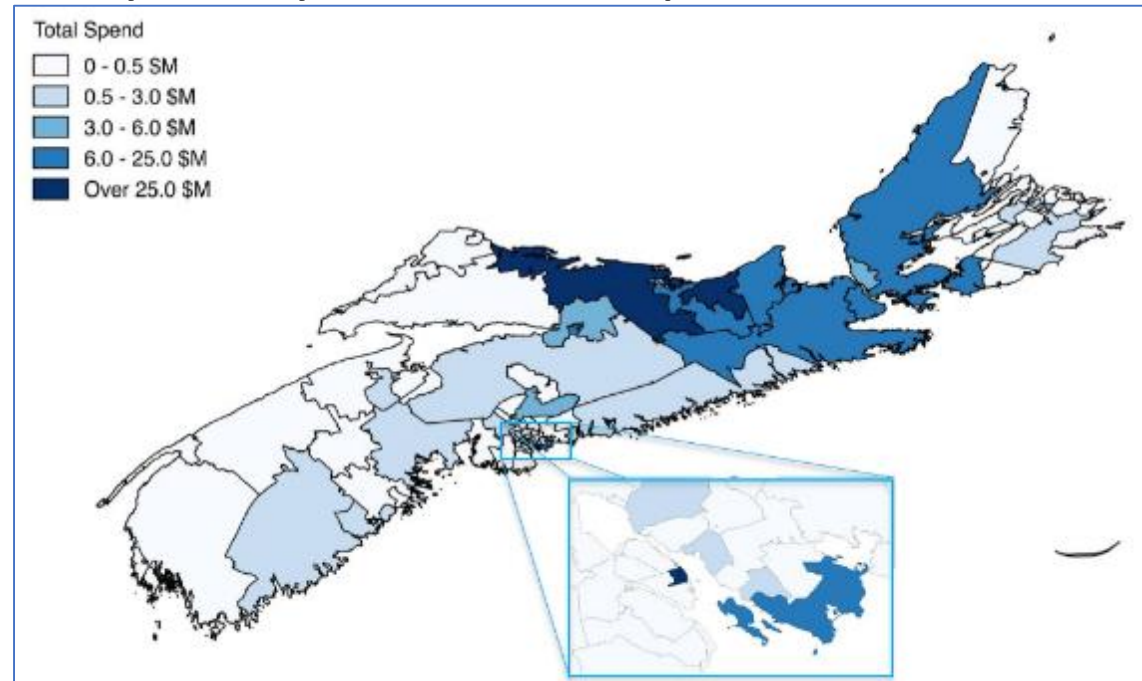
PHP Wind Farm

Project Update



PHP Mill

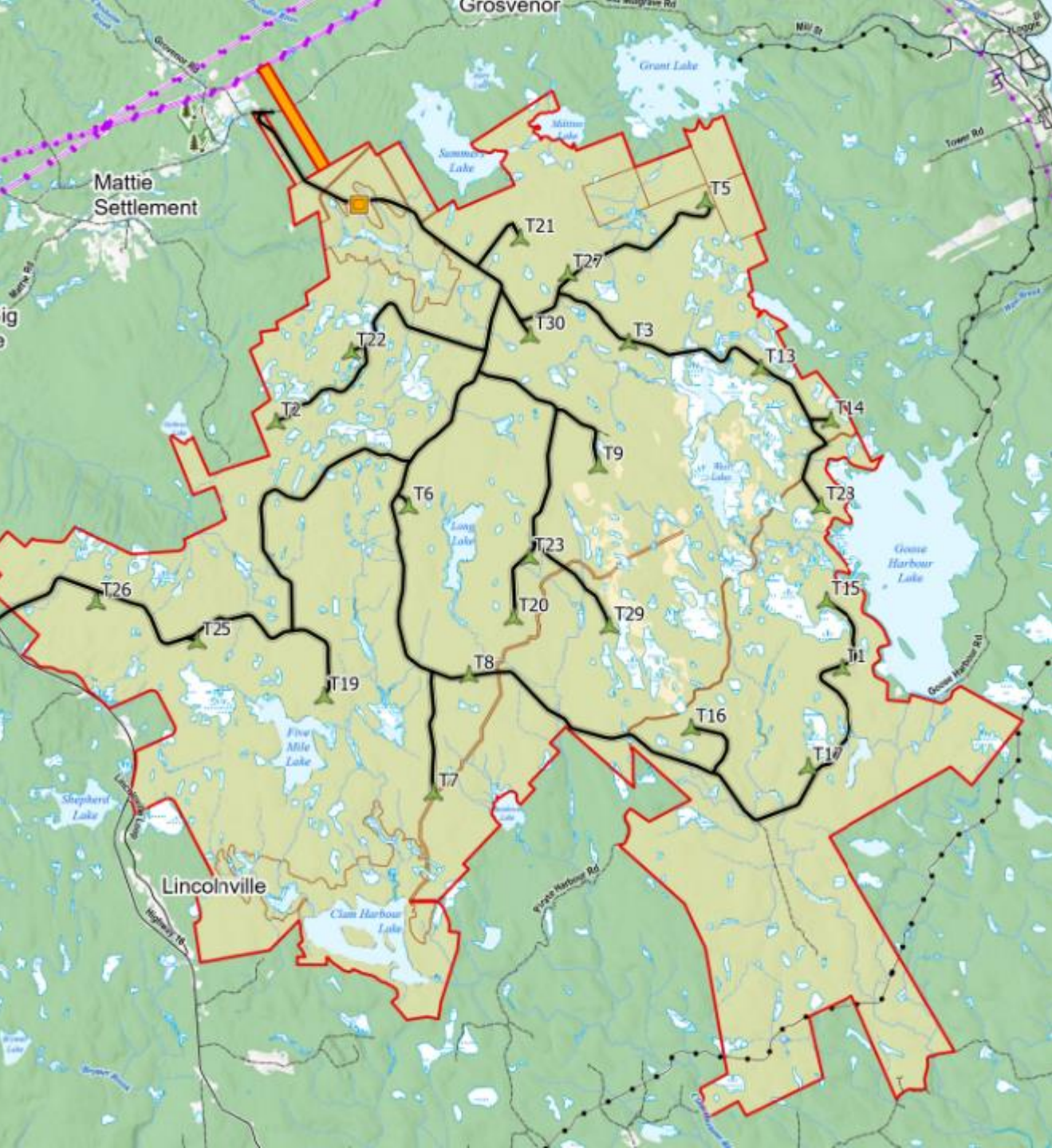
- Generated about \$200 million per annum to the GDP in 2022
- Provincial tax revenues of all types average to approximately \$51 million annually
- As of the end of 2022, PHP had produced over \$2.1 billion of provincial expenditures (\$2.9 billion nationally)
- PHP spending supports a supply-chain that includes over 500 Nova Scotia companies in virtually every area of the province





PHP's Keys to Success

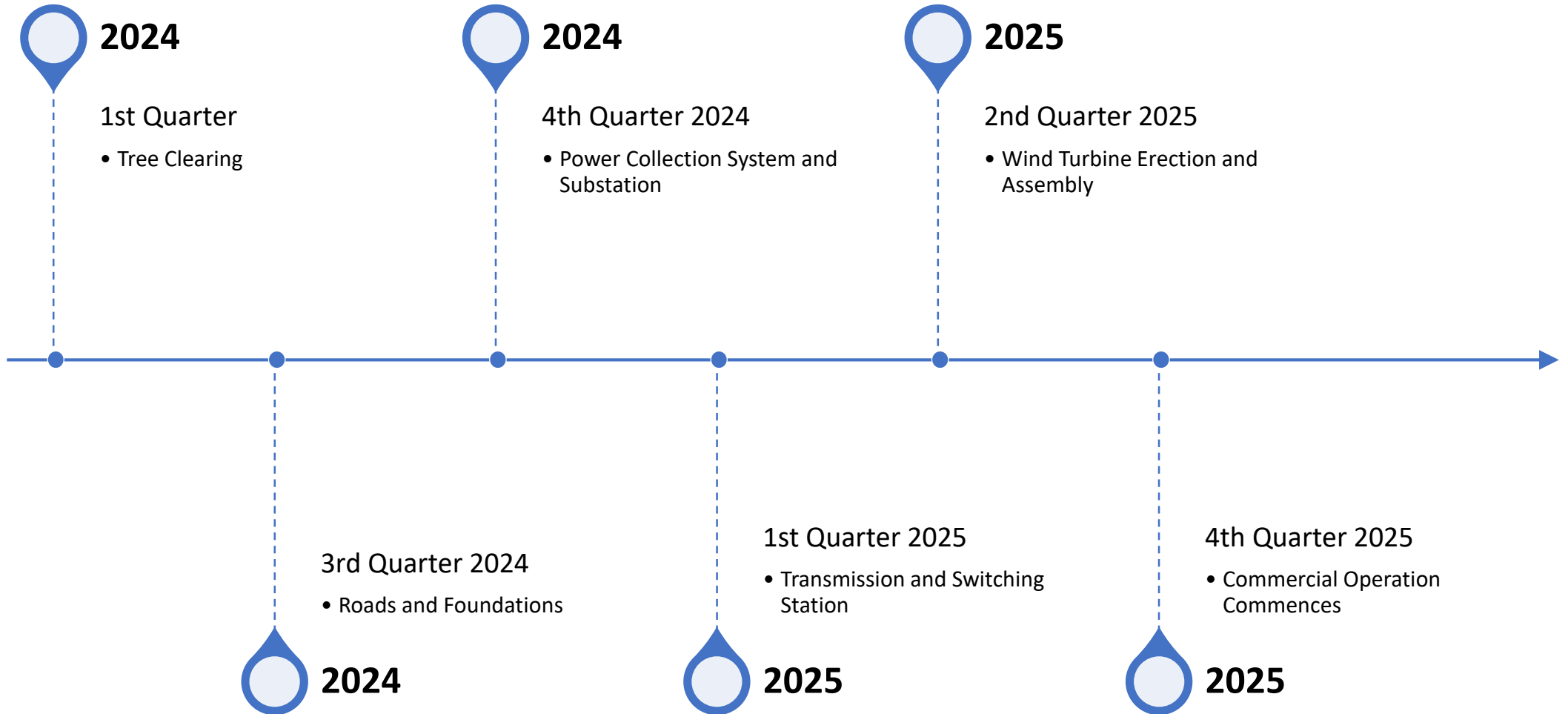
- Goose Harbour Lake Windfarm is critical piece of the business puzzle for ongoing health and competitiveness of PHP Mill
 - Will supply >50% of PHP's energy needs at stabilized quantity and cost
 - Help green the provincial grid



Project Overview

- Located near Lincolnville, Upper Big Tracadie, Mattie Settlement and Mulgrave
- Project Components:
 - For the current phase, 24 wind turbines are being developed.
 - Turbine Model = Nordex 7.0 MW
 - Total Height = 199.5 (rounded to 200 m for this assessment)
 - Access roads
 - 230 kV Transmission line
 - Overhead power collection system
 - Substation

Project Schedule



Project Update



Public Engagement, PAG & CLC Committee

Project Specific CLC Committee formed.
2 meetings held to date.
Monthly update meetings held with MODG.



Turbine Selection

Nordex 7.0 Turbine chosen technology.
Finalizing Agreements.
7.0 MW, 118 Meter HH, 163 Meter Rotor.



Engineering

90 % Engineering complete and under review.



EA & Crown Lease

EA Approval from Dept. Of Env March 2023
Working with DNRR to secure crown land lease.



Tree Clearing

Tree clearing began on Jan 15th.
Over 50% complete.



Logistics – Mulgrave Marine Terminal

Preliminary Route Study Completed.
Engineering underway for bridge installation.



PHP Wind Spend

Life to date development > 10MM

Total Project Capex ~ \$400 MM

Anticipated Local spend items

- + Construction etc.
- + Annual turbine maintenance
- + Services – road maintenance, security, etc...

PHP Wind Farm

Logistics



Borehole Locations



BUCHANAN DESIGN GROUP
CONSULTING PROFESSIONAL ENGINEERS
7 OFFICE LANE
P.O. BOX 1000
LAKE, MO 63036
PH: 663-479-3200 Email: bsdg@bdsdg.com

LEGEND

- PROPOSED BRIDGE LOCATION
- PROPOSED BRIDGE CENTERLINE
- PROPOSED BOREHOLE LOCATION

NOTES:

1. EACH CORNER OF PROPOSED BRIDGE SHOWN (40m LONG x 9.5m WIDE) WILL BE IDENTIFIED FOR DRILLING COMPANY'S USE PRIOR TO DRILLING.

DESIGNED BY:	DATE:	2023/11/10
REV:	DESCRIPTION:	BY DATE

PROJECT TITLE:	

PROJECT TITLE:	STRAIT SUPERPORT

TRAINING TITLE:	SITE PLAN

DESIGNED BY:	08
DRAWN BY:	STAFF
APPROVED BY:	08
DATE:	NOVEMBER 10, 2023
FACILITY No.:	GRF01

BOREHOLE LOCATIONS



Port Of Arrival
– Mulgrave
Marine
Terminal



Laydown Yard



Proposed Route

Segment 1 – Town of Mulgrave.

Segment 2 – Zutphen existing road requires minor upgrades.

Segment 3 – New road to be constructed on Zutphen Property. Approximately 650 meters.

Segment 4 – Old Mulgrave Road – TIR owned (non maintained) requiring upgrades.

Segment 5 – Roads on crown land to be upgraded as part of PHP Project.



Discussion Points

Transportation – Mulgrave is the Port Of Delivery

Borehole Locations

Laydown

Transportation Route

Looking for support from the town on using Highway 344

Engaged TIR

Meeting with all groups to discuss details; Nordex, Logistec, Port, PHPW, TIR, etc...

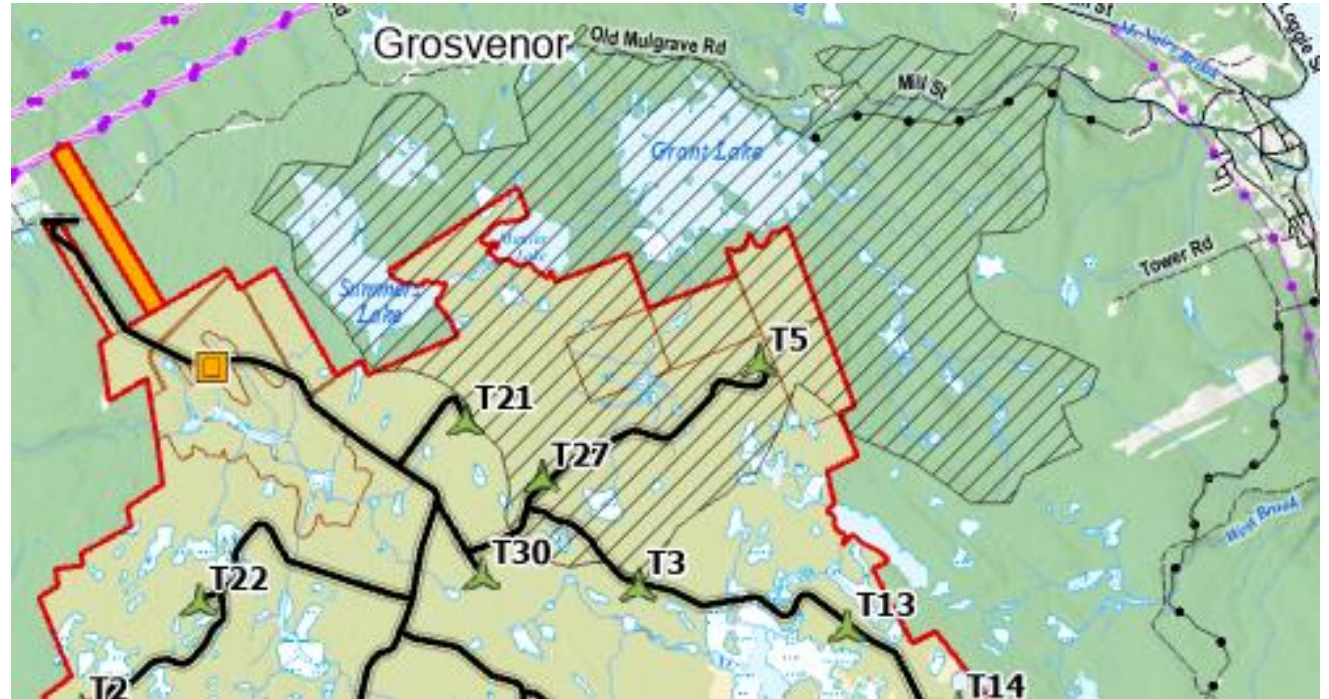
PHP Wind Farm

Mulgrave Grants
Lake Watershed

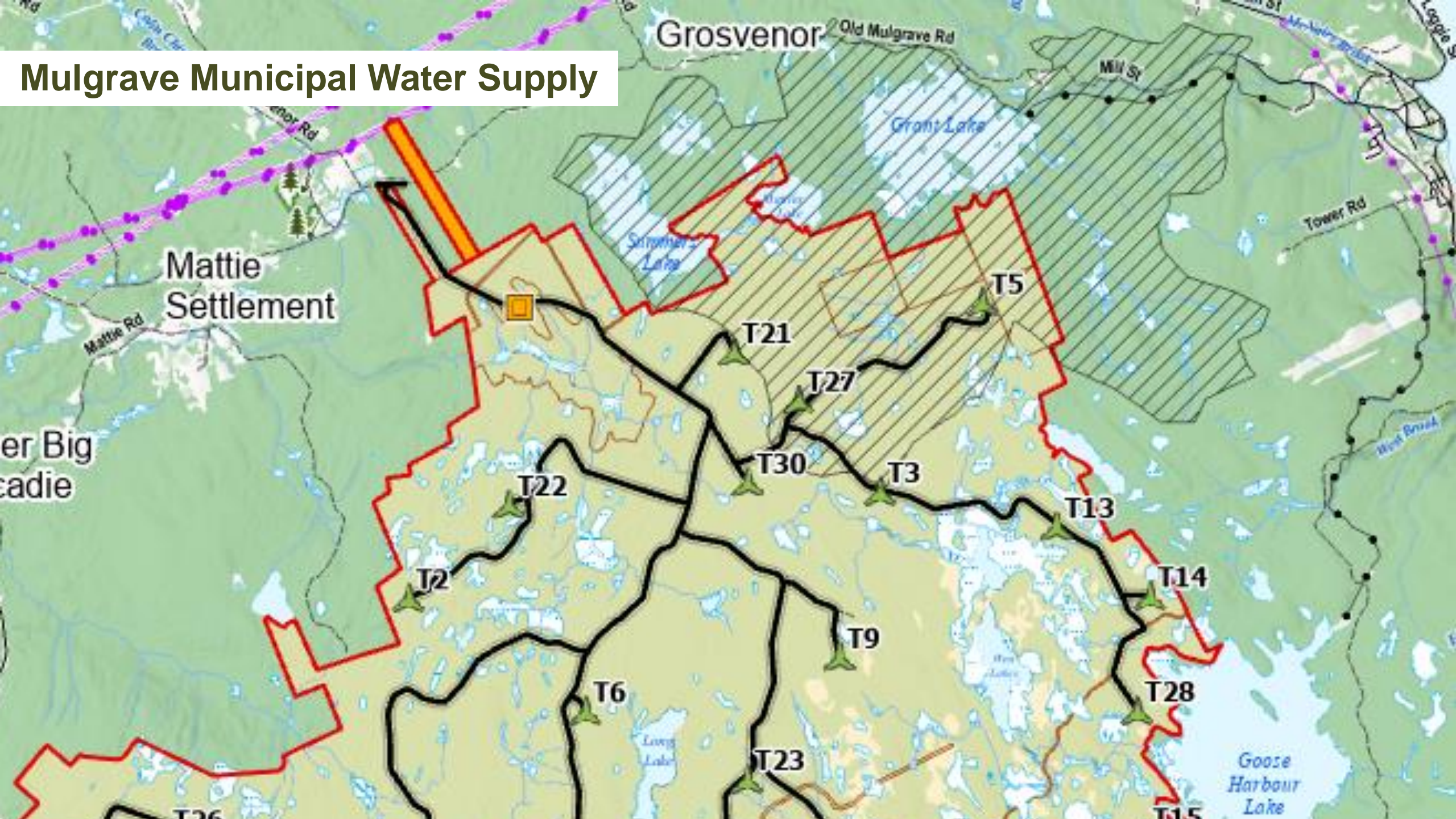


Mulgrave Watershed

- 2 of the Projects turbines (T27 & T5) are within Mulgrave Municipal Water Supply Area.
- The Province has reviewed and approved the Project's EA which identified and assessed the water supply area as a resource
- Various plans for the protection of freshwater resources have been submitted to the Province for review.
(e.g., *Surface Water Management Plan and Erosion & Sediment Control Plan*)
- PHP has also conducted forestry operations within this watershed for decades and has internal best management practices specific to this watershed including one developed by the Town of Mulgrave.
- Other wind farm projects have been successfully been constructed in other municipal water supplies (HRM, and West Hants) with no impacts to water quality or quantity.
- PHP Mill also has a withdrawal permit for water sourced from this watershed area and has worked collaboratively with the town and council for many decades and is a member of the Mulgrave Source Water Protection Advisory Committee



Mulgrave Municipal Water Supply



Respectful request for consideration by Mayor and Council to amend aspects of the “Town of Mulgrave – Source Water Protection Plan” request via a letter to Mayor and Council dated February 27, 2024

- **WHAT ARE THE CHANGES** – Edits to sections 4.7 and 5.8 to include “development and operation of large scale wind turbines” in the section regarding Commercial Activities.
1. Request to addition of a second paragraph to Section 4.7
 - *A Class 1 Environmental Assessment for the Goose Harbour Lake Windfarm was approved by the Minister of Environment and Climate Change (March 2023) Large Scale Wind Turbines (defined as a turbine with a name plate capacity of more than 100 kilowatts (kW) and generates power primarily for sale to a 3rd party) are permitted in the watershed area.*



Town of Mulgrave Source Water Protection Plan



*Developed by the
Source Water Protection Advisory Committee*

“To ensure that the drinking water from the Grant Lake Watershed is sustainable and of the highest quality for residents of the Town of Mulgrave”

Respectful request for consideration by Mayor and Council to amend aspects of the “Town of Mulgrave – Source Water Protection Plan” request via a letter to Mayor and Council dated February 27, 2024

- **WHAT ARE THE CHANGES (continued)** – Edits to sections 4.7 and 5.8 to include “development and operation of large scale wind turbines” in the section regarding Commercial Activities.
2. Request to add to Section 5.8 *Commercial Activities*
 - **Current:**
 - *There is currently no serious commercial activities taking place in the watershed. The advisory committee will develop BMP's for commercial activities if the need arises.*
 - **Request replacing with:**
 - *Any “Large Scale Wind Turbines” (defined as a turbine with a name plate capacity of more than 100 kilowatts (kW) and generates power primarily for sale to a 3rd party) located in the watershed will have been approved by the Minister of Environment and Climate Change and will follow the Best Management Practices to mitigate any risks during the construction and operations phases.*
 3. May we also request, since we propose opening the Plan for editing, to replace all references to NewPage and change to Port Hawkesbury Paper LP.



Town of Mulgrave Source Water Protection Plan



*Developed by the
Source Water Protection Advisory Committee*

“To ensure that the drinking water from the Grant Lake Watershed is sustainable and of the highest quality for residents of the Town of Mulgrave”

Questions?

