

Mersey River Wind Farm
Potential Eastern Wood-Pee wee Habitat



MERSEY RIVER WIND

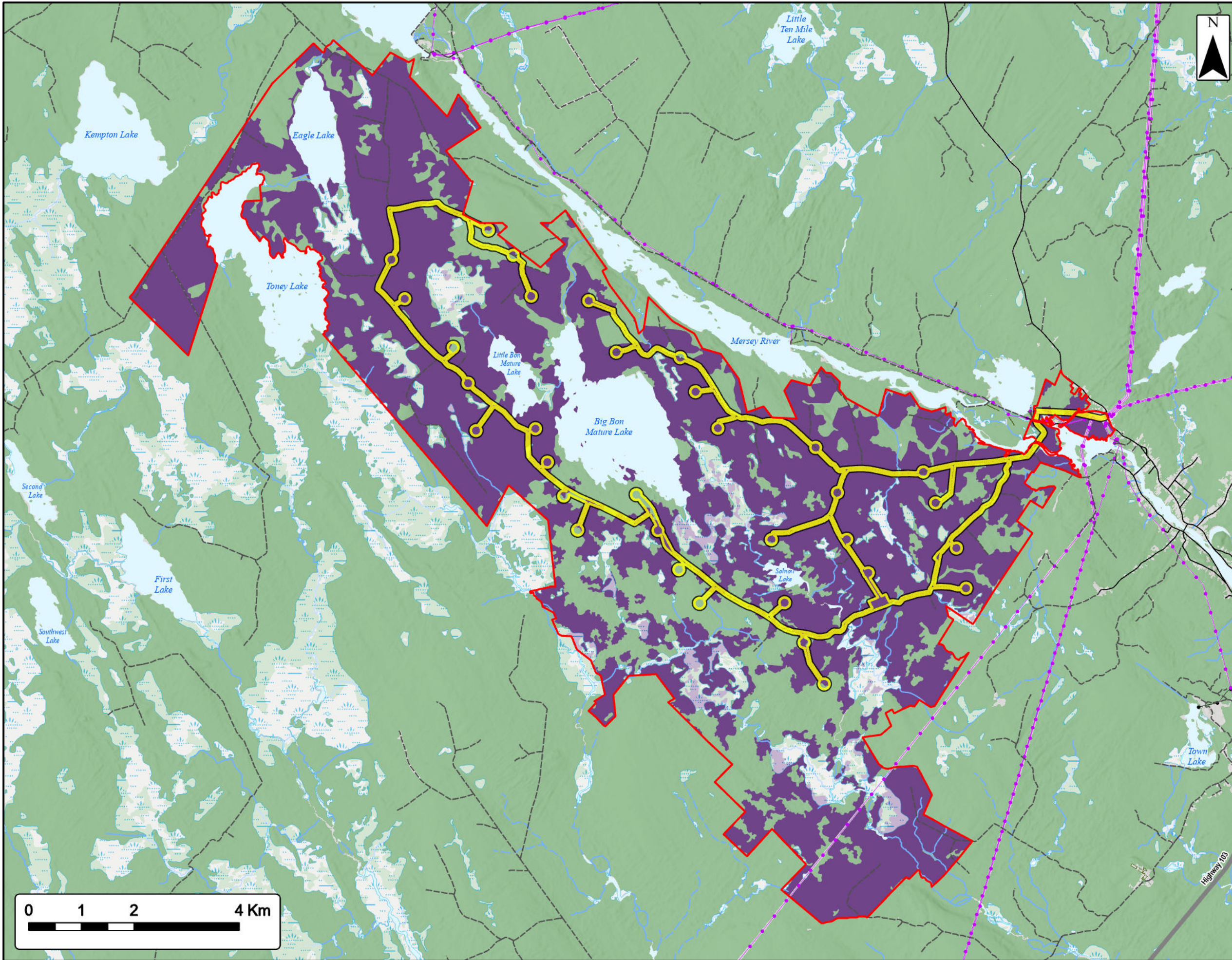
| | |
|--|--|
| Study Area | |
| Assessment Area | |
| Potential Eastern Wood-Pee wee Habitat | |
| Transportation | |
| Highway | |
| Road | |
| Unpaved Road | |
| Utilities (line) | |
| Existing Pipeline | |
| Existing Transmission Lines | |
| Water Features | |
| Mapped Stream | |
| Mapped Indefinite Stream | |
| Mapped Lakes and Rivers | |
| Mapped Wet Area | |



Coordinate System: NAD83 UTM Zone 20N Sources: Esri Basemaps, GeoNOVA, SNSIS, NRCan, NSNRR, ACCDC, IBA Canada

| | | | |
|-------------|------------|------------|-------------|
| Date: | Jan 2023 | Project #: | 21-7833 |
| Scale: | 1:70,000 | Drawing #: | 7.31 |
| Drawn By: | P. Opra | | |
| Checked By: | M. Savelle | | |





Mersey River Wind Farm
Evening Grosbeak Habitat



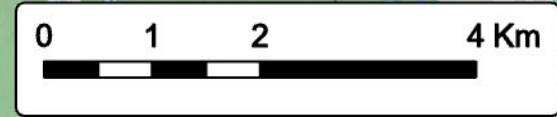
MERSEY RIVER WIND

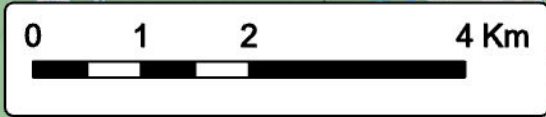
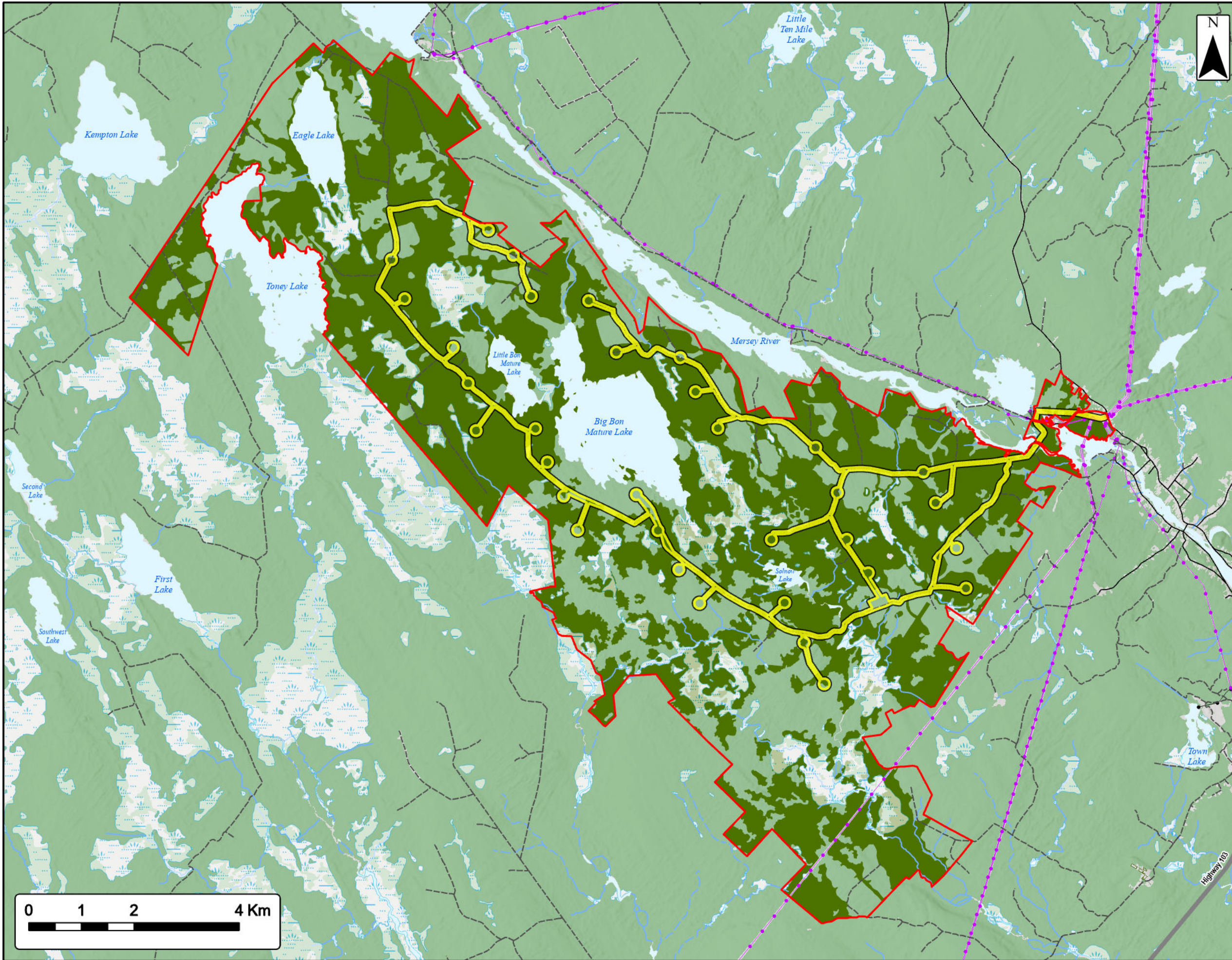
| | |
|-----------------------------|--|
| Study Area | |
| Assessment Area | |
| Evening Grosbeak Habitat | |
| Transportation | |
| Highway | |
| Road | |
| Unpaved Road | |
| Utilities (line) | |
| Existing Pipeline | |
| Existing Transmission Lines | |
| Water Features | |
| Mapped Stream | |
| Mapped Indefinite Stream | |
| Mapped Lakes and Rivers | |
| Mapped Wet Area | |



Coordinate System: NAD83 UTM Zone 20N Sources: Esri Basemaps, GeoNOVA, SNSIS, NRCan, NSNRR, ACCDC, IBA Canada

| | | | |
|-------------|------------|------------|-------------|
| Date: | Jan 2023 | Project #: | 21-7833 |
| Scale: | 1:70,000 | Drawing #: | 7.32 |
| Drawn By: | P. Opra | | |
| Checked By: | M. Savelle | | |





Mersey River Wind Farm

Olive-Sided Flycatcher Habitat



MERSEY RIVER WIND

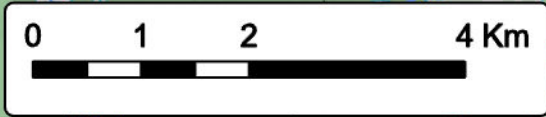
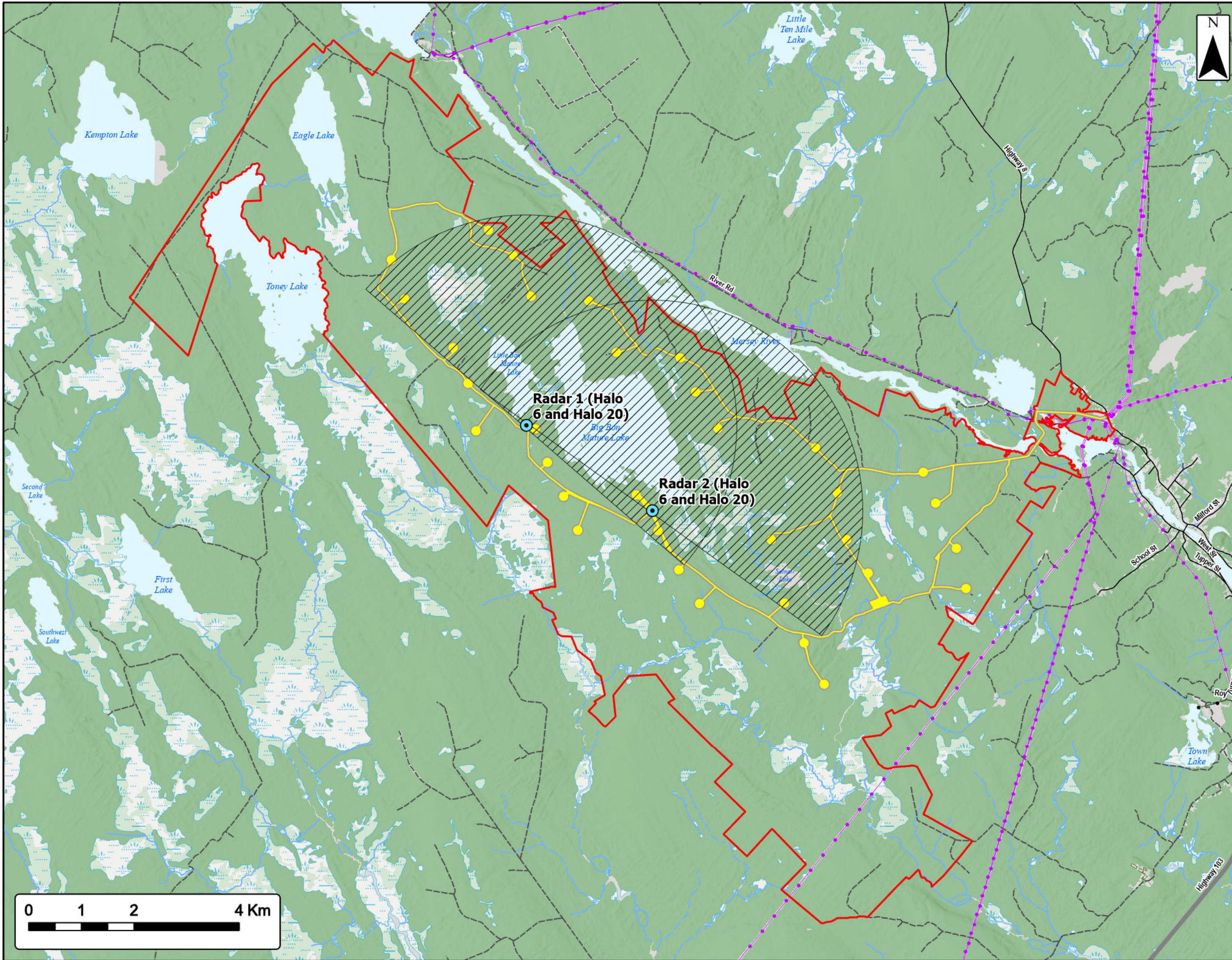
| | |
|--------------------------------|--|
| Study Area | |
| Assessment Area | |
| Olive-Sided Flycatcher Habitat | |
| Transportation | |
| Highway | |
| Road | |
| Unpaved Road | |
| Utilities (line) | |
| Existing Pipeline | |
| Existing Transmission Lines | |
| Water Features | |
| Mapped Stream | |
| Mapped Indefinite Stream | |
| Mapped Lakes and Rivers | |
| Mapped Wet Area | |



Coordinate System: NAD83 UTM Zone 20N Sources: Esri Basemaps, GeoNOVA, SNSIS, NRCan, NSNRR, ACCDC, IBA Canada

| | | | |
|-------------|------------|------------|-------------|
| Date: | Jan 2023 | Project #: | 21-7833 |
| Scale: | 1:70,000 | Drawing #: | 7.33 |
| Drawn By: | P. Opra | | |
| Checked By: | M. Savelle | | |





Mersey River Wind Farm

Radar



MERSEY RIVER WIND

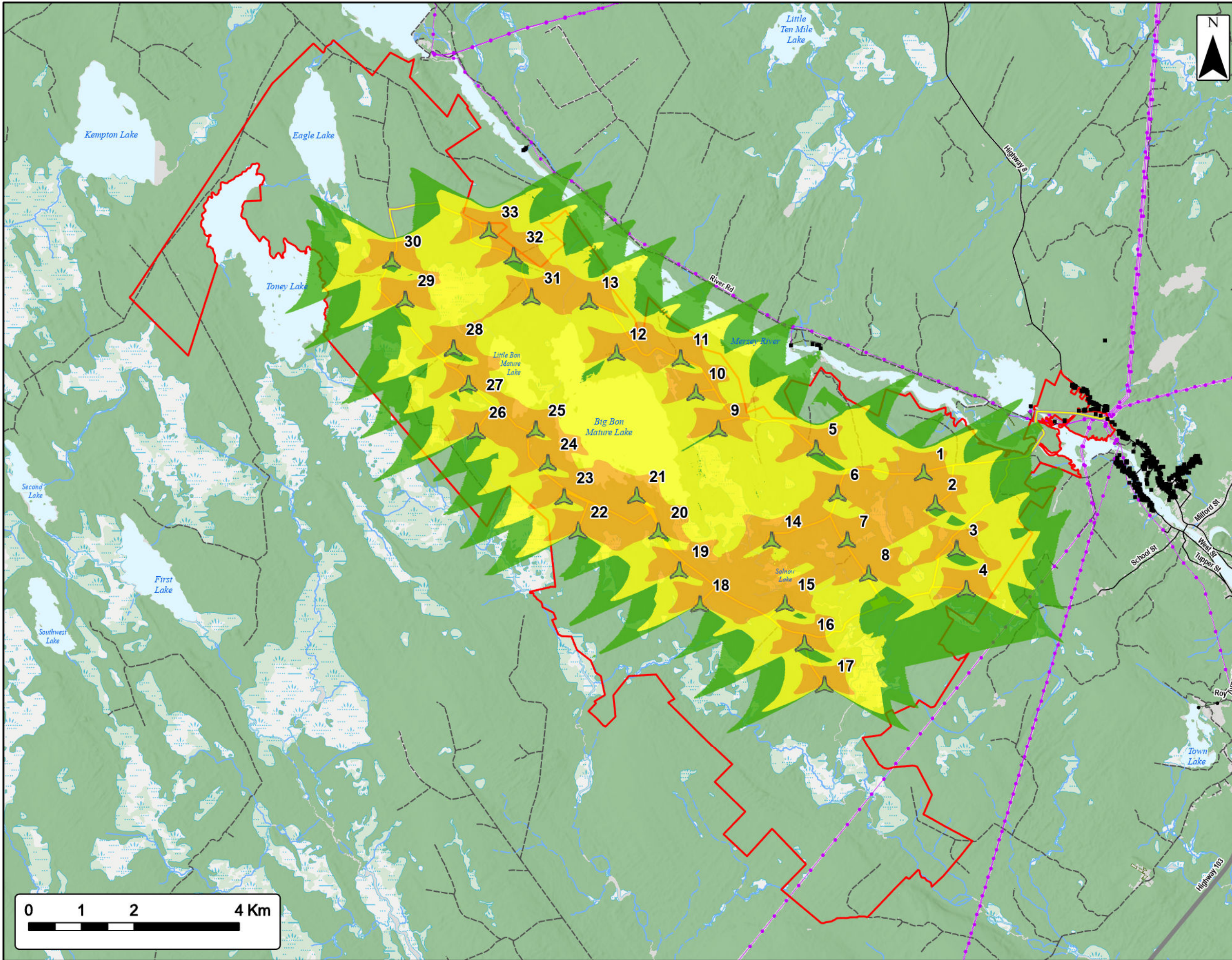
| | |
|-----------------------------|--|
| Study Area | |
| Assessment Area | |
| Radar Location | |
| 4 km Radar Sweep Area | |
| Transportation | |
| Highway | |
| Road | |
| Unpaved Road | |
| Utilities (line) | |
| Existing Pipeline | |
| Existing Transmission Lines | |
| Water Features | |
| Mapped Stream | |
| Mapped Indefinite Stream | |
| Mapped Lakes and Rivers | |
| Mapped Wet Area | |



Coordinate System: NAD83 UTM Zone 20N Sources: Esri Basemaps, GeoNOVA, SNGIS, NRCan, NSNRR, ACCOG, IBA Canada

| | | | |
|-------------|------------|------------|-------------|
| Date: | Jan 2023 | Project #: | 21-7833 |
| Scale: | 1:70,000 | Drawing #: | 7.34 |
| Drawn By: | M. Savelle | | |
| Checked By: | M. Smith | | |



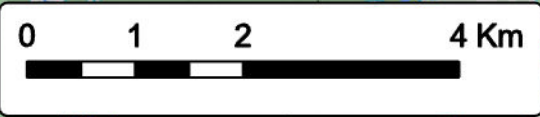


Mersey River Wind Farm
Shadow Flicker - Worst Case Scenario



MERSEY RIVER WIND

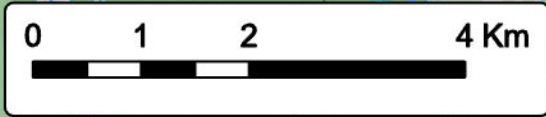
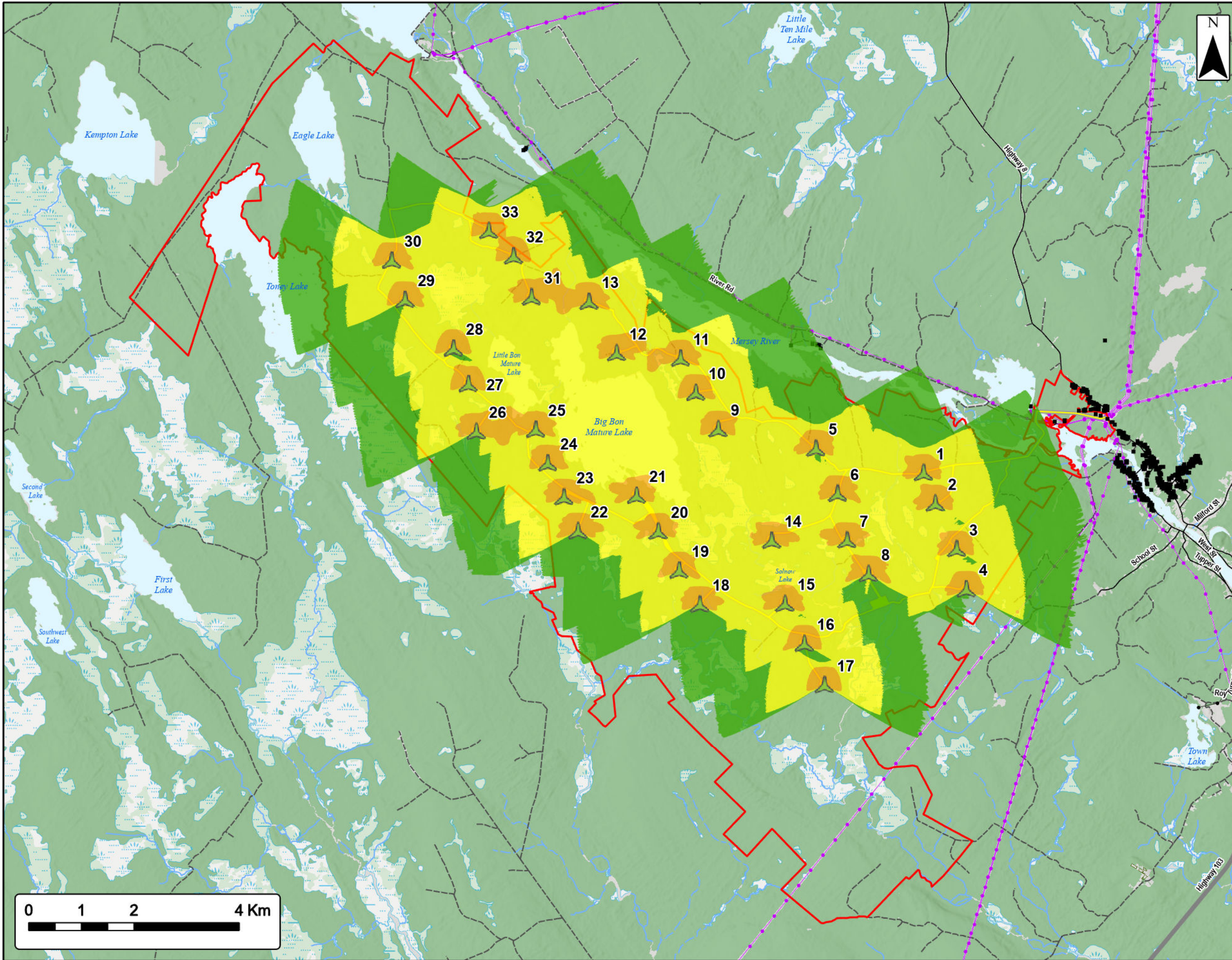
- Proposed Turbine Location
- Study Area
- Assessment Area
- Non Participating Buildings with 2km of the Assessment Area
- Predicted Shadow Hours / Year (Worst Case)**
- 10-30
- 30-100
- 100+
- Water Features**
- Mapped Stream
- Mapped Indefinite Stream
- Mapped Lakes and Rivers
- Mapped Wet Area



Coordinate System: NAD83 UTM Zone 20N Sources: Esri Basemaps, GeoNOVA, SNGIS, NRCan, NSNRR, ACCOG, IBA Canada

| | | | |
|-------------|------------|------------|--------------|
| Date: | Jan 2023 | Project #: | 21-7833 |
| Scale: | 1:70,000 | Drawing #: | 10.1A |
| Drawn By: | M. Savelle | | |
| Checked By: | M. Smith | | |





Mersey River Wind Farm
Shadow Flicker - Worst Case Scenario



MERSEY RIVER WIND

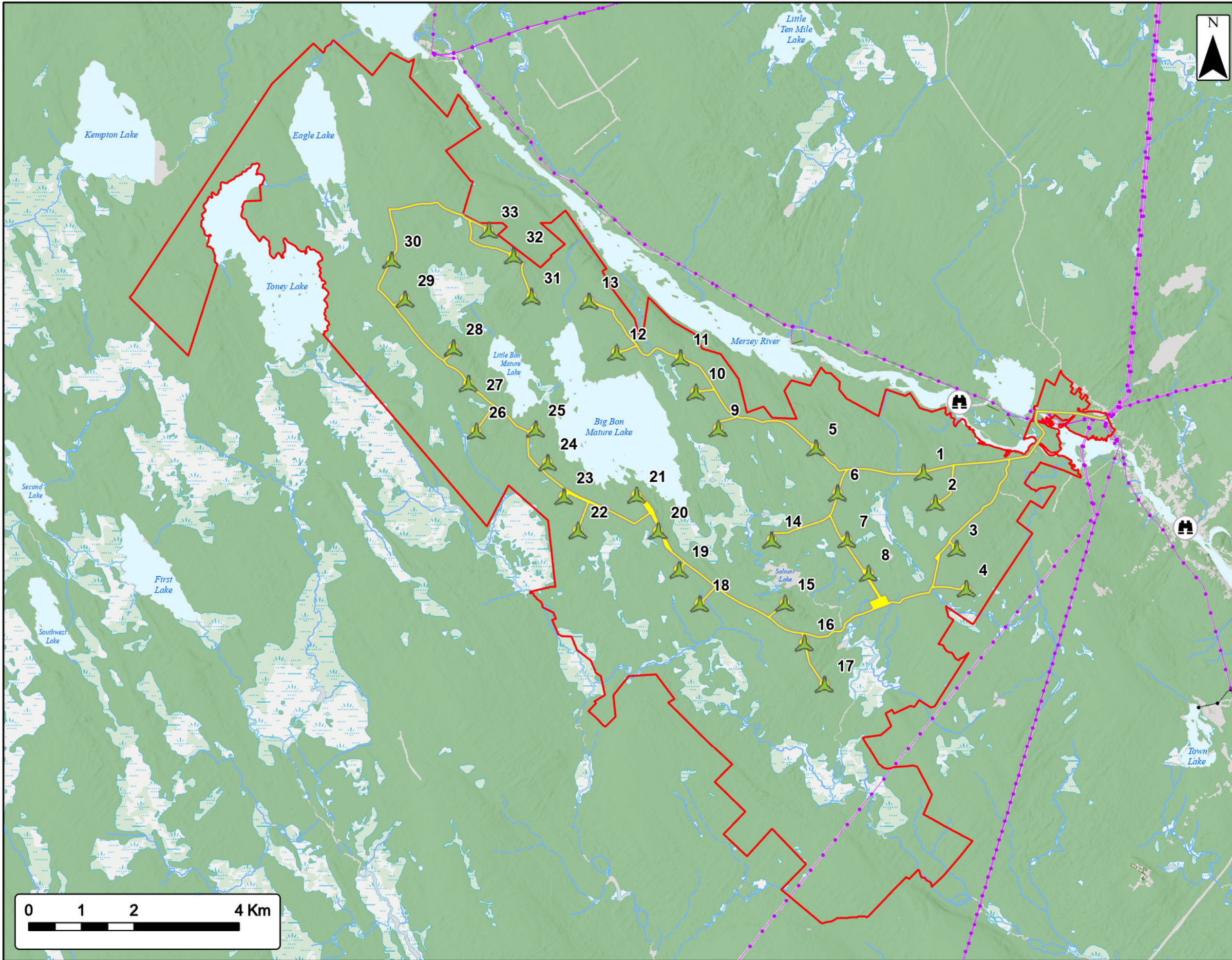
- Proposed Turbine Location
- Study Area
- Assessment Area
- Non Participating Buildings with 2km of the Assessment Area
- Predicted Shadow Minutes / Day (Worst Case)**
- 10-30
- 30-100
- 100+
- Water Features**
- Mapped Stream
- Mapped Indefinite Stream
- Mapped Lakes and Rivers
- Mapped Wet Area



Coordinate System: NAD83 UTM Zone 20N Sources: Esri Basemaps, GeoNOVA, SNGIS, NRCan, NSNRR, ACCOG, IBA Canada

| | |
|----------------------|-------------------------|
| Date: Jan 2023 | Project #: 21-7833 |
| Scale: 1:70,000 | Drawing #: 10.1B |
| Drawn By: M. Savelle | |
| Checked By: M. Smith | |





Mersey River Wind Farm
Visual Simulation



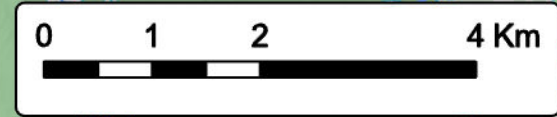
MERSEY RIVER WIND

- Proposed Turbine Location
- Study Area
- Assessment Area
- Camera Location
- Transportation**
- Highway
- Road
- Unpaved Road
- Utilities (line)**
- Existing Pipeline
- Existing Transmission Lines
- Water Features**
- Mapped Stream
- Mapped Indefinite Stream
- Mapped Lakes and Rivers
- Mapped Wet Area






Coordinate System: NAD83 UTM Zone 20N Sources: Esri Basemaps, GeoNOVA, SNGIS, NRCan, NSNRR, ACCOG, IBA Canada

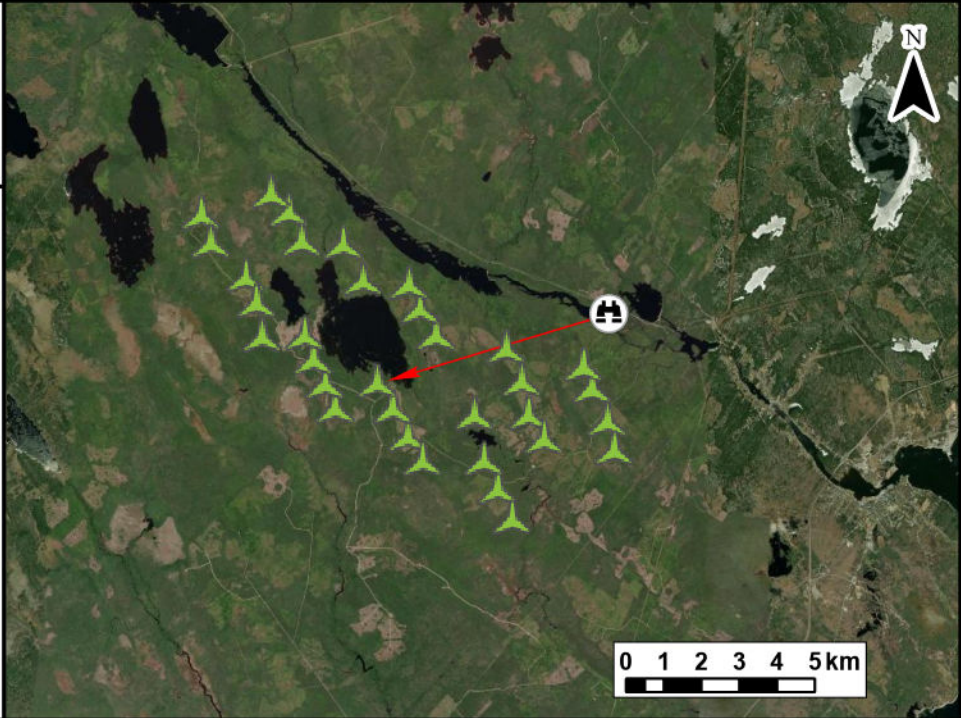
| | |
|----------------------|-------------------------|
| Date: Jan 2023 | Project #: 21-7833 |
| Scale: 1:70,000 | Drawing #: 10.2A |
| Drawn By: M. Savelle | 10.2A |
| Checked By: M. Smith | |





Notes:
 1. Data Sources: GeoNova, Client
 2. Basemaps: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
 3. Projection: NAD83 UTM Zone 20

-  Camera Location
-  Camera Bearing
-  Proposed Turbine Location



TECHNICAL INFORMATION

| | |
|-----------------------------|---|
| Visual Simulation Location: | Mersey River Bridge |
| View Coordinates: | Latitude: 44° 03' 37.15" N Longitude: 64° 45' 12.04" W Easting: 359569 m Northing: 4880067 m |
| Direction of View: | West, Heading 287° |
| Camera Make/ Model: | Canon EOS REBEL T7 |
| Lens: | 50 mm |
| Image Resolution: | 6000 x 4000 |
| Weather Conditions: | Clear Sky |
| Date of Photo: | 2022/07/28 |
| Time of Photo: | 13:41 |
| Photo Credit: | Rohan Kariyawansa, Strum Consulting |




**Mersey River
Wind Farm -
Visual Simulation
Mersey River Bridge**

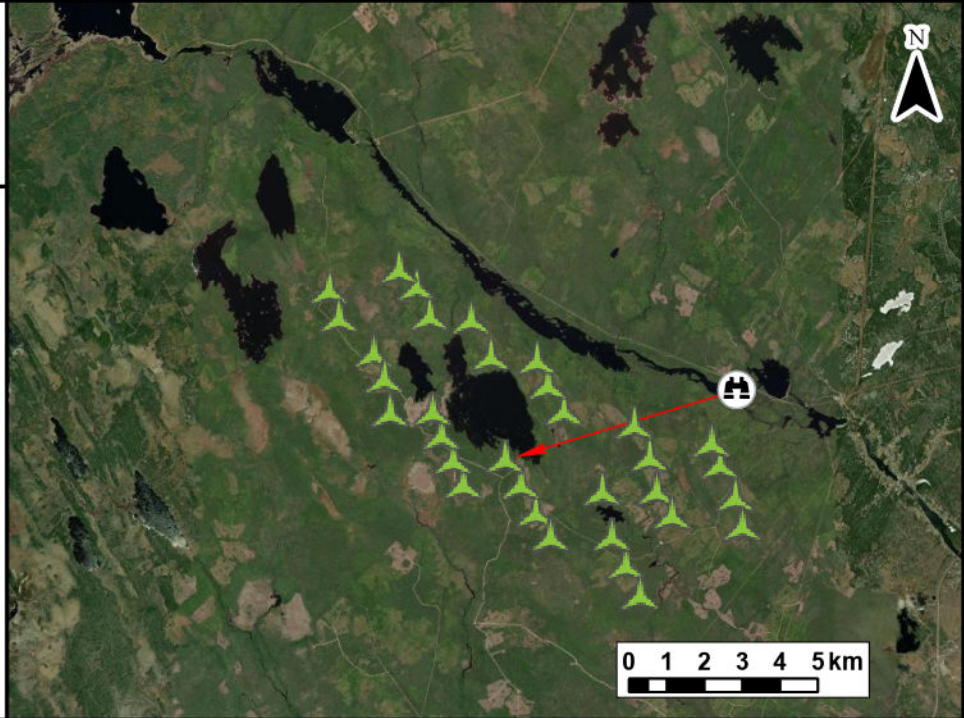


| | |
|-------------------------|----------------------------|
| Date: Jan 2023 | Project #: 21-7833 |
| Scale: 1:200,000 | Drawing #: 10.2B |
| Drawn By: M. Savelle | |
| Checked By: M. Smith | |




Notes:
 1. Data Sources: GeoNova, Client
 2. Basemaps: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
 3. Projection: NAD83 UTM Zone 20

-  Camera Location
-  Camera Bearing
-  Proposed Turbine Location



| TECHNICAL INFORMATION | |
|-----------------------------|---|
| Visual Simulation Location: | Mersey River 1 |
| View Coordinates: | Latitude: 44° 04' 48.58" N Longitude: 64° 48' 30.02" W Easting: 355213 m Northing: 4882366 m |
| Direction of View: | West, Heading 293° |
| Camera Make/ Model: | Canon EOS REBEL T7 |
| Lens: | 50 mm |
| Image Resolution: | 6000 x 4000 |
| Weather Conditions: | Clear Sky |
| Date of Photo: | 2022/07/28 |
| Time of Photo: | 9:28 |
| Photo Credit: | Rohan Kariyawansa, Strum Consulting |




**Mersey River
Wind Farm -
Visual Simulation
Mersey River**

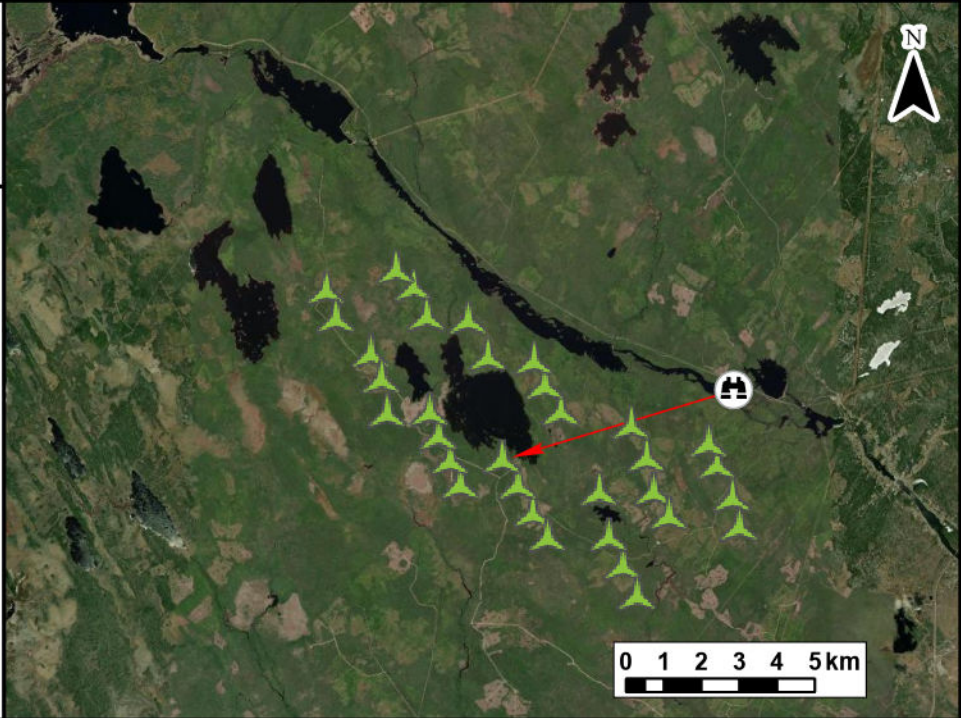


| | |
|-------------------------|----------------------------|
| Date: Jan 2022 | Project #: 21-7833 |
| Scale: 1:200,000 | Drawing #: 10.2C |
| Drawn By: M. Savelle | |
| Checked By: M. Smith | |



Notes:
 1. Data Sources: GeoNova, Client
 2. Basemaps: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
 3. Projection: NAD83 UTM Zone 20

 Camera Location
 Camera Bearing
 Proposed Turbine Location



TECHNICAL INFORMATION

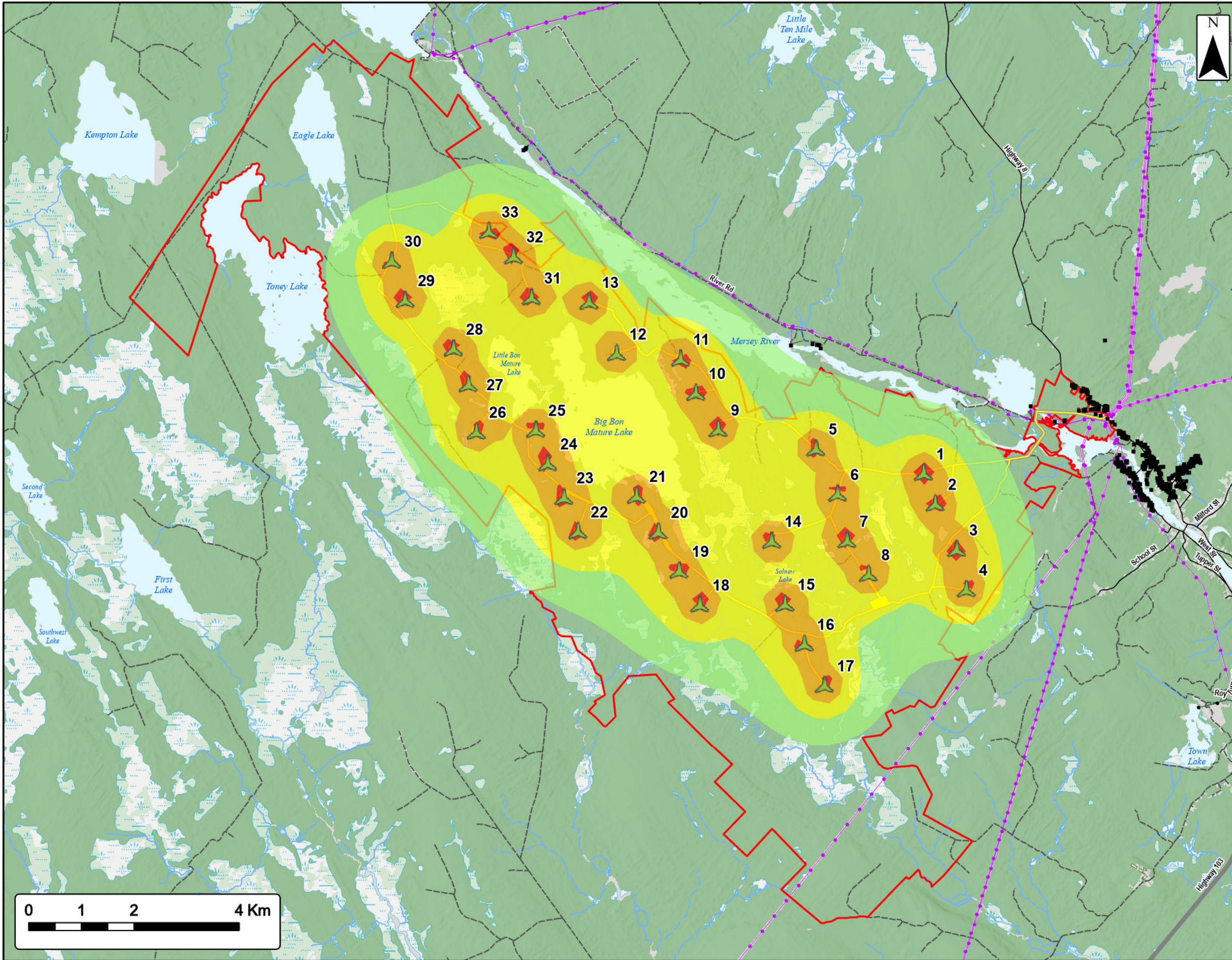
Visual Simulation Location: Mersey River 2
 View Coordinates: Latitude: 44° 04' 48.58" N
 Longitude: 64° 48' 30.02" W
 Easting: 355213 m
 Northing: 4882366 m

 Direction of View: Southwest, Heading 251°
 Camera Make/ Model: Canon EOS REBEL T7
 Lens: 50 mm
 Image Resolution: 6000 x 4000
 Weather Conditions: Clear Sky
 Date of Photo: 2022/07/28
 Time of Photo: 9:28
 Photo Credit: Rohan Kariyawansa, Strum Consulting

**Mersey River
 Wind Farm -
 Visual Simulation
 Mersey River**



| | |
|-------------------------|----------------------------|
| Date: Jan 2023 | Project #: 21-7833 |
| Scale: 1:200,000 | Drawing #: 10.2D |
| Drawn By: M. Savelle | |
| Checked By: M. Smith | |



Mersey River Wind Farm

Sound Model



MERSEY RIVER WIND

Proposed Turbine Location

Study Area

Assessment Area

Non Participating Buildings with 2km of the Assessment Area

Predicted Sound level (dBA)

- 35-40
- 40-45
- 45-50
- 50+

Water Features

- Mapped Stream
- Mapped Indefinite Stream
- Mapped Lakes and Rivers
- Mapped Wet Area



Coordinate System: NAD83 UTM Zone 20N Sources: Esri Basemaps, GeoNOVA, SNGIS, NRCan, NSNRR, ACCOG, IBA Canada

| | | | |
|-------------|------------|------------|-------------|
| Date: | Jan 2023 | Project #: | 21-7833 |
| Scale: | 1:70,000 | Drawing #: | 10.3 |
| Drawn By: | M. Savelle | | |
| Checked By: | M. Smith | | |

