

# KmtnuK Wind Power Project

Surficial Geology

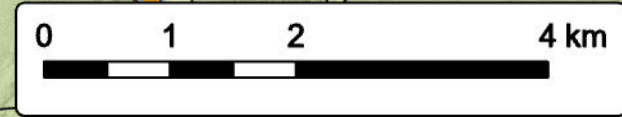


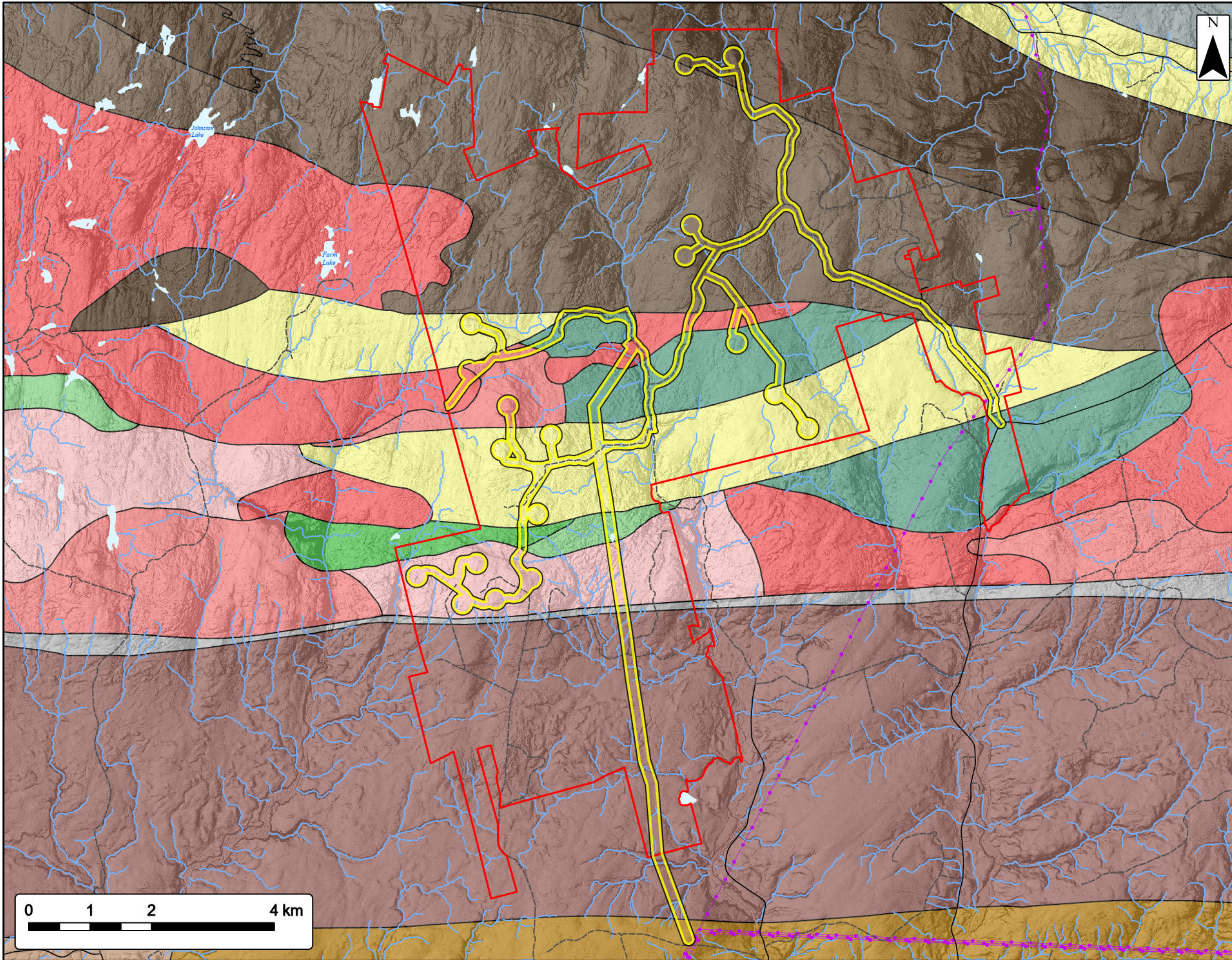
- Study Area
- Assessment Area
- Proposed Turbine Location
- Surficial Geology By Unit**
- Alluvial Deposits
- Bedrock
- Colluvial Deposits
- Hummocky Ground Moraine
- Kame Fields and Esker Systems
- Organic Deposits
- Silty Till Plain
- Stony Till Plain
- Transportation**
- Road
- Unpaved Road
- Utilities (line)**
- Existing Transmission Lines
- Water Features**
- Mapped Stream
- Mapped Indefinite Stream
- Mapped Lakes and Rivers



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

Date:	Oct 2023	Project #:	23-9127
Scale:	1:60,000	Drawing #:	<b>7.4</b>
Drawn By:	K. Wallace		
Checked By:	M. Savelle		





# Kmtnuq Wind Power Project

## Bedrock Geology



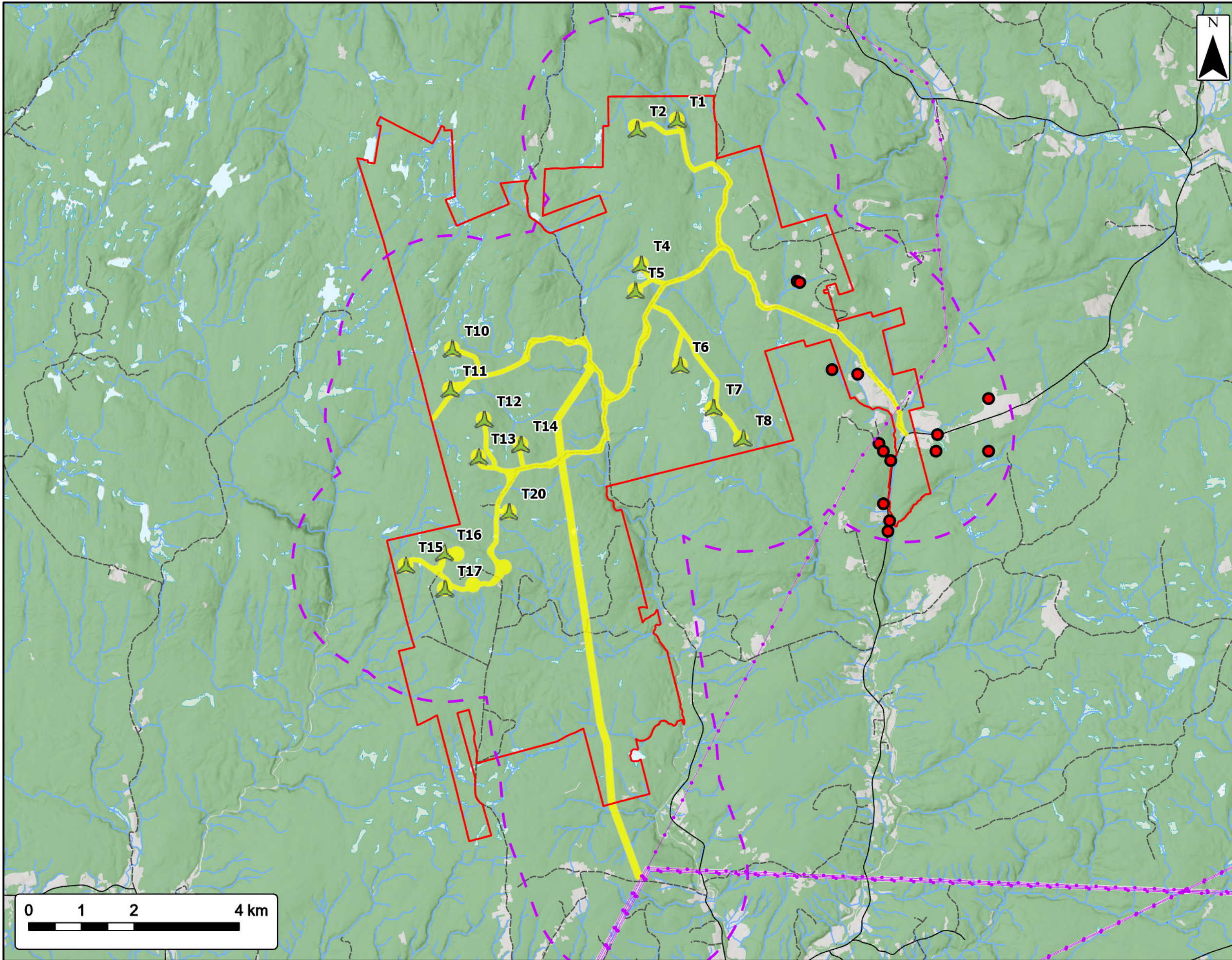
Study Area		<b>Utilities (line)</b>	
Assessment Area		Existing Transmission Lines	
<b>Bedrock Geology By Formation</b>	<b>Water Features</b>		
Wolfville Formation: Northern Mainland		Mapped Stream	
Pictou Group		Mapped Indefinite Stream	
Parrsboro Formation		Mapped Lakes and Rivers	
Mabou Group			
Nutby Formation			
Diamond Brook Formation			
Byers Brook Formation			
Earltown Formation			
Unnamed unit			
Gamble Brook Formation			
Folly River Formation			
Devonian - Carboniferous Granite: Cape Breton Island			
Devonian - Carboniferous Diorite - Grabbro			
Neoproterozoic granitoid			
Neoproterozoic diorite - gabbro			



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Date:	Oct 2023	Project #:	23-9127
Scale:	1:60,000	Drawing #:	<b>7.5</b>
Drawn By:	K. Wallace		
Checked By:	M. Savelle		





# KmtnuK Wind Power Project

## Groundwater Wells

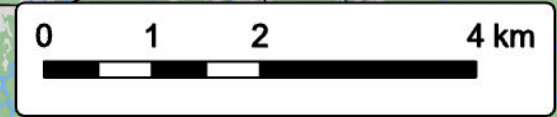


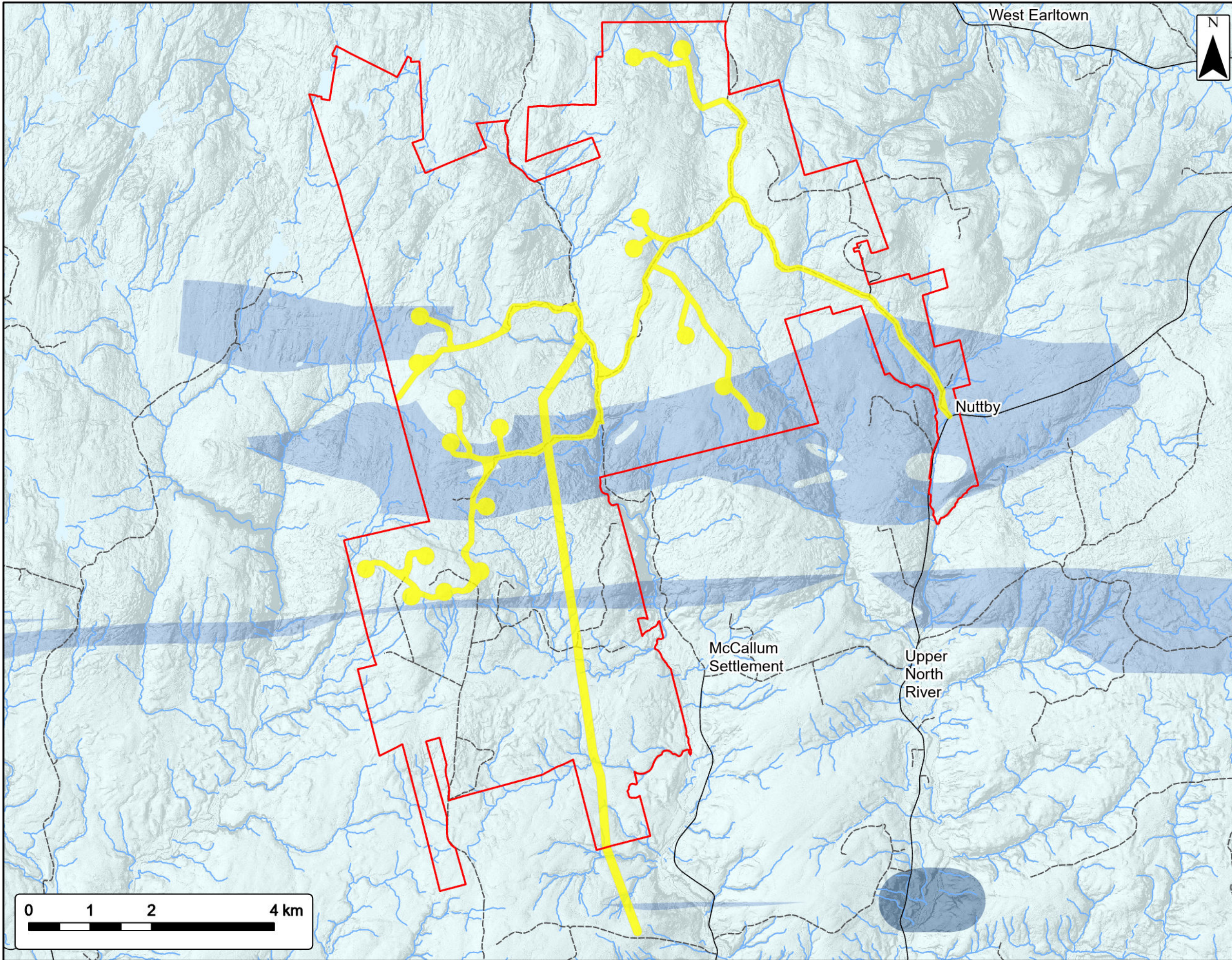
- Study Area
- Assessment Area
- 2 km Assessment Area Buffer
- Proposed Turbine Location
- Groundwater Well**
- Drilled
- Utilities (line)**
- Existing Transmission Lines
- Transportation**
- Road
- Unpaved Road
- Water Features**
- Mapped Stream
- Mapped Indefinite Stream
- Mapped Lakes and Rivers
- Mapped Wet Area



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

Date: Oct 2023	Project #: 23-9127
Scale: 1:70,000	Drawing #: <b>7.6</b>
Drawn By: K. Wallace	
Checked By: M. Savelle	





# KmtnuK Wind Power Project

## Karst Risk



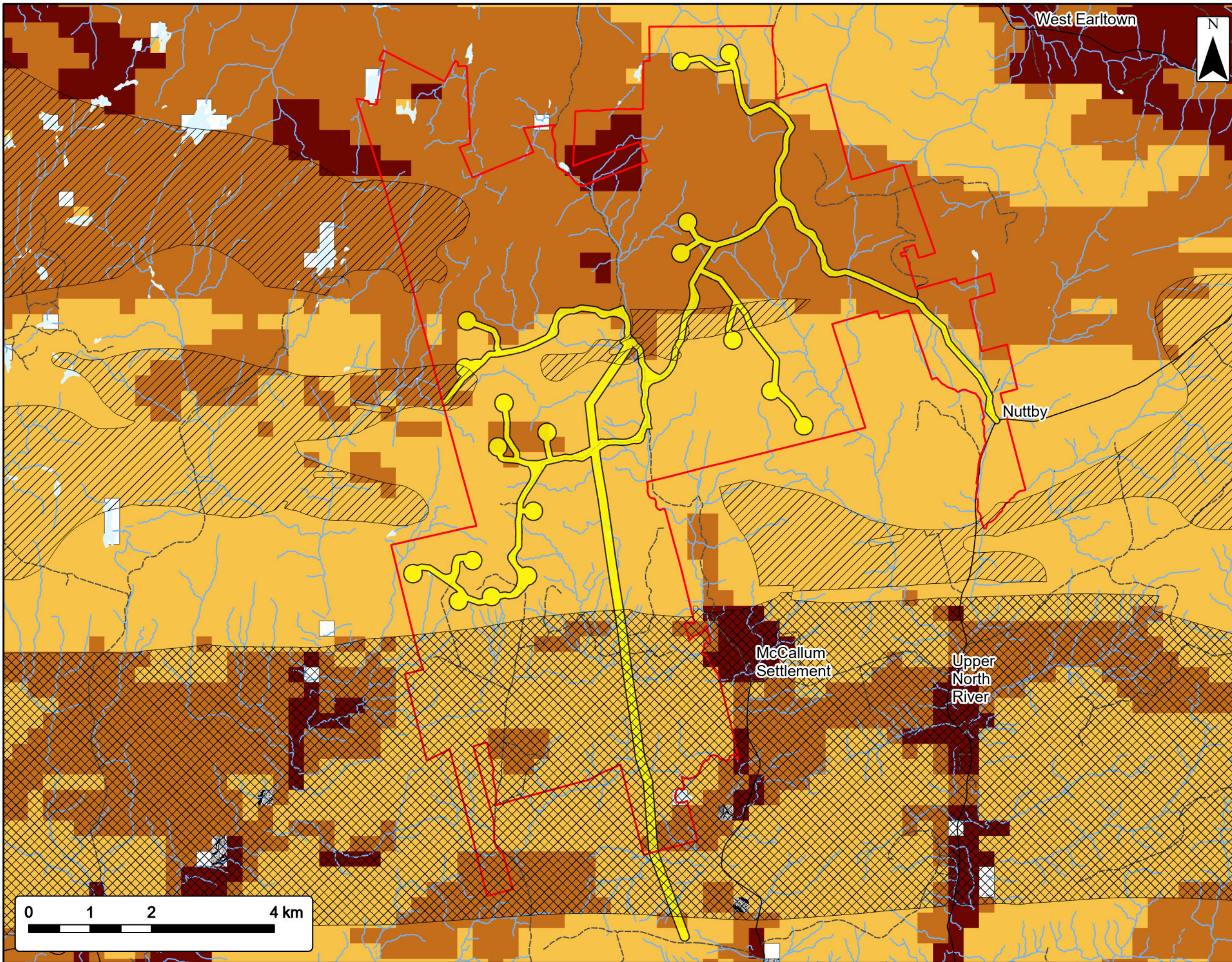
Study Area	
Assessment Area	
<b>Karst Risk</b>	
High Risk	
Medium Risk	
Low Risk	
<b>Transportation</b>	
Road	
Unpaved Road	
<b>Water Features</b>	
Mapped Stream	
Mapped Indefinite Stream	



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

Date:	Oct 2023	Project #:	23-9127
Scale:	1:60,000	Drawing #:	<b>7.7</b>
Drawn By:	K. Wallace		
Checked By:	M. Savelle		





# Kmtnuq Wind Power Project

Radon and Uranium Potential



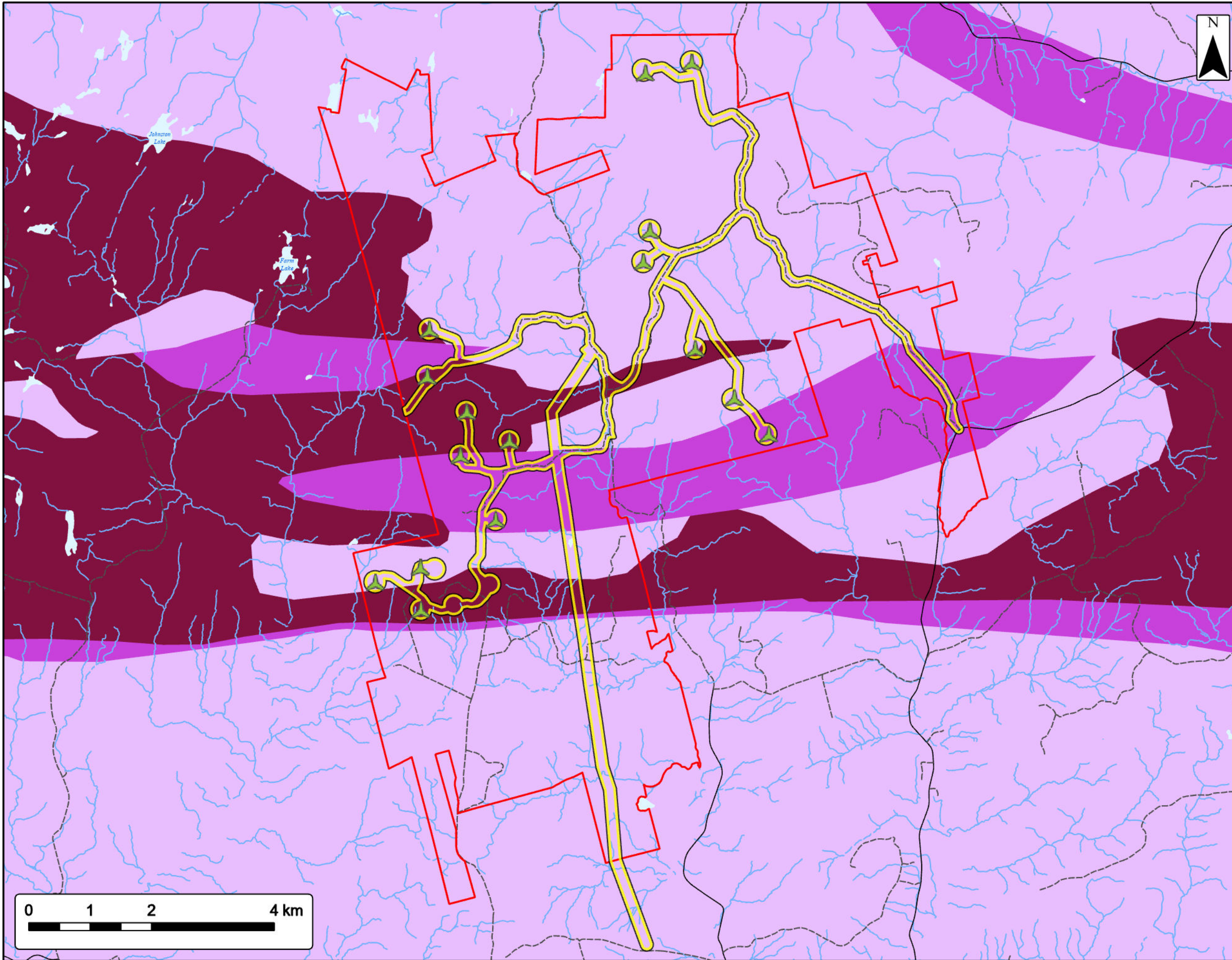
Study Area	
Assessment Area	
<b>Radon Potential</b>	
High (171-275)	
Medium (121-170)	
Low (11-120)	
Water Feature/No Data (0-10)	
<b>Relative Risk of Uranium in Bedrock Wells</b>	
High Risk	
Medium Risk	
<b>Transportation</b>	
Road	
Unpaved Road	
<b>Water Features</b>	
Mapped Stream	
Mapped Indefinite Stream	
Mapped Lakes and Rivers	



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


Date:	Oct 2023	Project #:	23-9127
Scale:	1:60,000	Drawing #:	<b>7.8</b>
Drawn By:	K. Wallace		
Checked By:	M. Savelle		







**Kmtnuk Wind Power Project**  
Arsenic Risk





Study Area 


Assessment Area 

Proposed Turbine Location 


**Arsenic Risk in Bedrock Water Wells**


High Risk 

Medium Risk 


Low Risk 


**Transportation**


Road 

Unpaved Road 

**Water Features**

Mapped Stream 

Mapped Indefinite Stream 

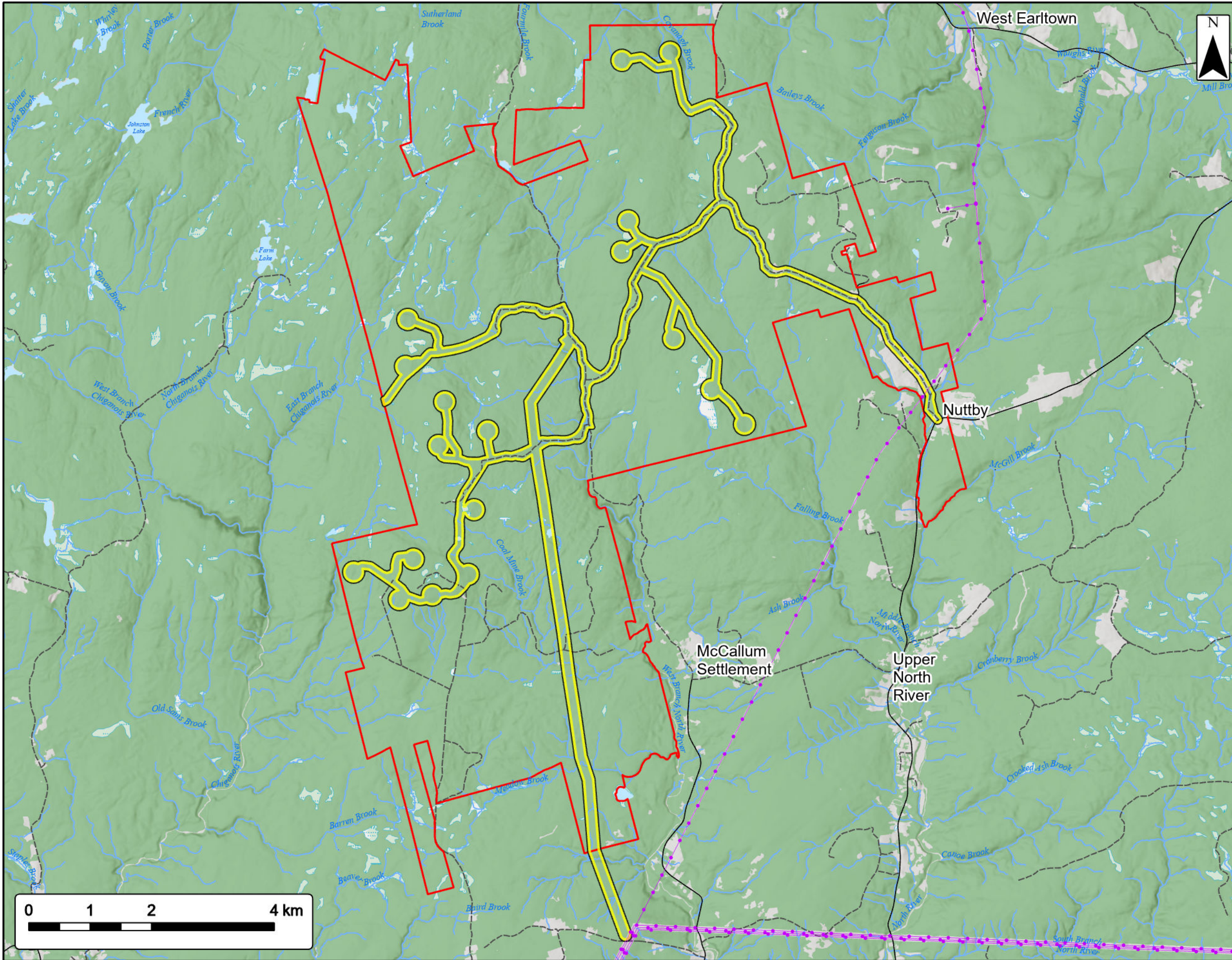
Mapped Lakes and Rivers 



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

Date:	Oct 2023	Project #:	23-9127
Scale:	1:60,000	Drawing #:	<b>7.9</b>
Drawn By:	K. Wallace		
Checked By:	M. Savelle		





**Kmtnuik Wind Power Project**  
 Desktop Identified Freshwater Features



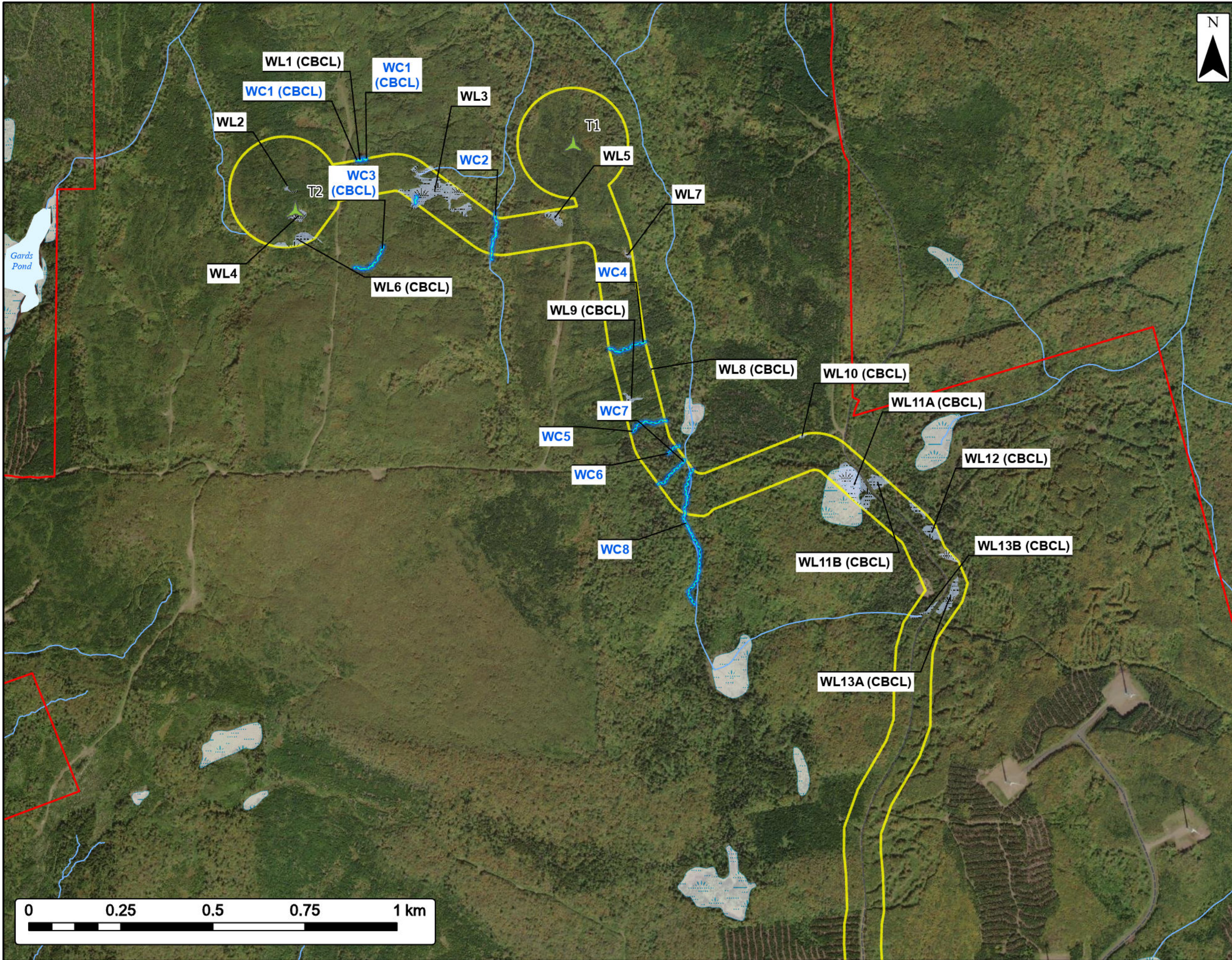
Study Area	
Assessment Area	
<b>Utilities (line)</b>	
Existing Transmission Lines	
<b>Transportation</b>	
Road	
Unpaved Road	
<b>Water Features</b>	
Mapped Stream	
Mapped Indefinite Stream	
Mapped Lakes and Rivers	
Mapped Wet Area	



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

Date:	Oct 2023	Project #:	23-9127
Scale:	1:60,000	Drawing #:	<b>7.10</b>
Drawn By:	K. Wallace		
Checked By:	M. Savelle		

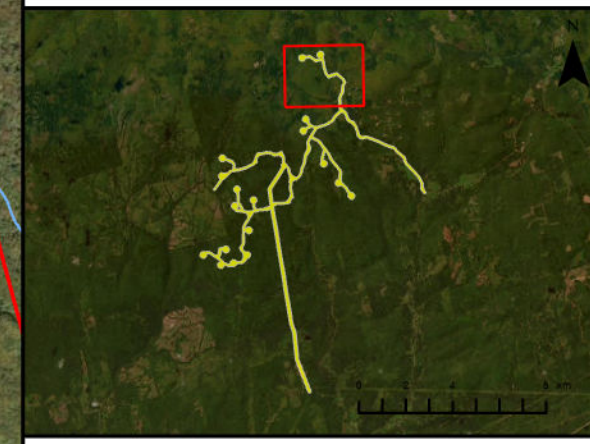




**Kmtnuuk Wind Power Project**  
Field Assessments



Study Area	
Assessment Area	
Proposed Turbine Location	
Field Assessed Watercourse (WC)	
Field Assessed Wetland (WL)	
<b>Transportation</b>	
Unpaved Road	
<b>Water Features</b>	
Mapped Stream	
Mapped Lakes and Rivers	
Mapped Wet Area	

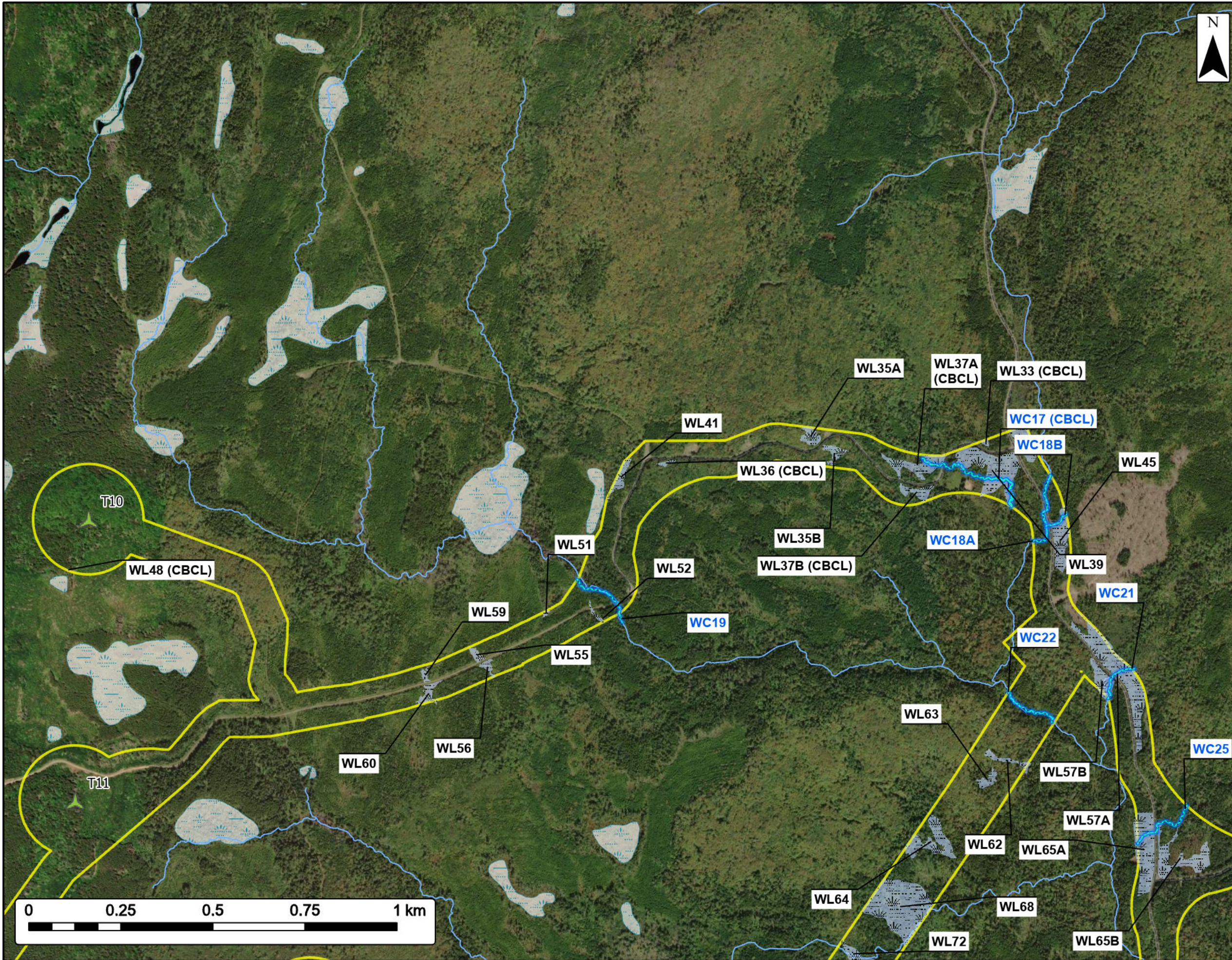


Coordinate System: NAD83 UTM Zone 20N Sources: ESRI Basemaps, GeoNOVA, SNSIS, NRCan, NSNRR, ACCDC, IBA Canada

Date:	Oct 2023	Project #:	23-9127
Scale:	1:10,000	Drawing #:	<b>7.11A</b>
Drawn By:	K. Wallace		
Checked By:	M. Savelle		



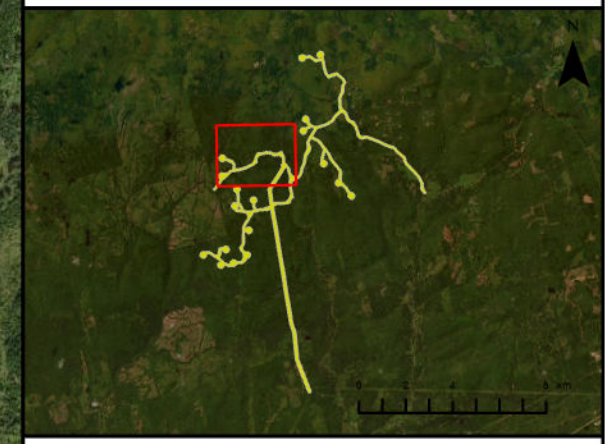




**KmtnuK Wind Power Project**  
Field Assessments



- Study Area
- Assessment Area
- Proposed Turbine Location
- Field Assessed Watercourse (WC)
- Field Assessed Wetland (WL)
- Transportation**
- Unpaved Road
- Water Features**
- Mapped Stream
- Mapped Wet Area



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

Date: Oct 2023	Project #: 23-9127
Scale: 1:10,000	Drawing #:
Drawn By: K. Wallace	<b>7.11B</b>
Checked By: M. Savelle	

