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527500

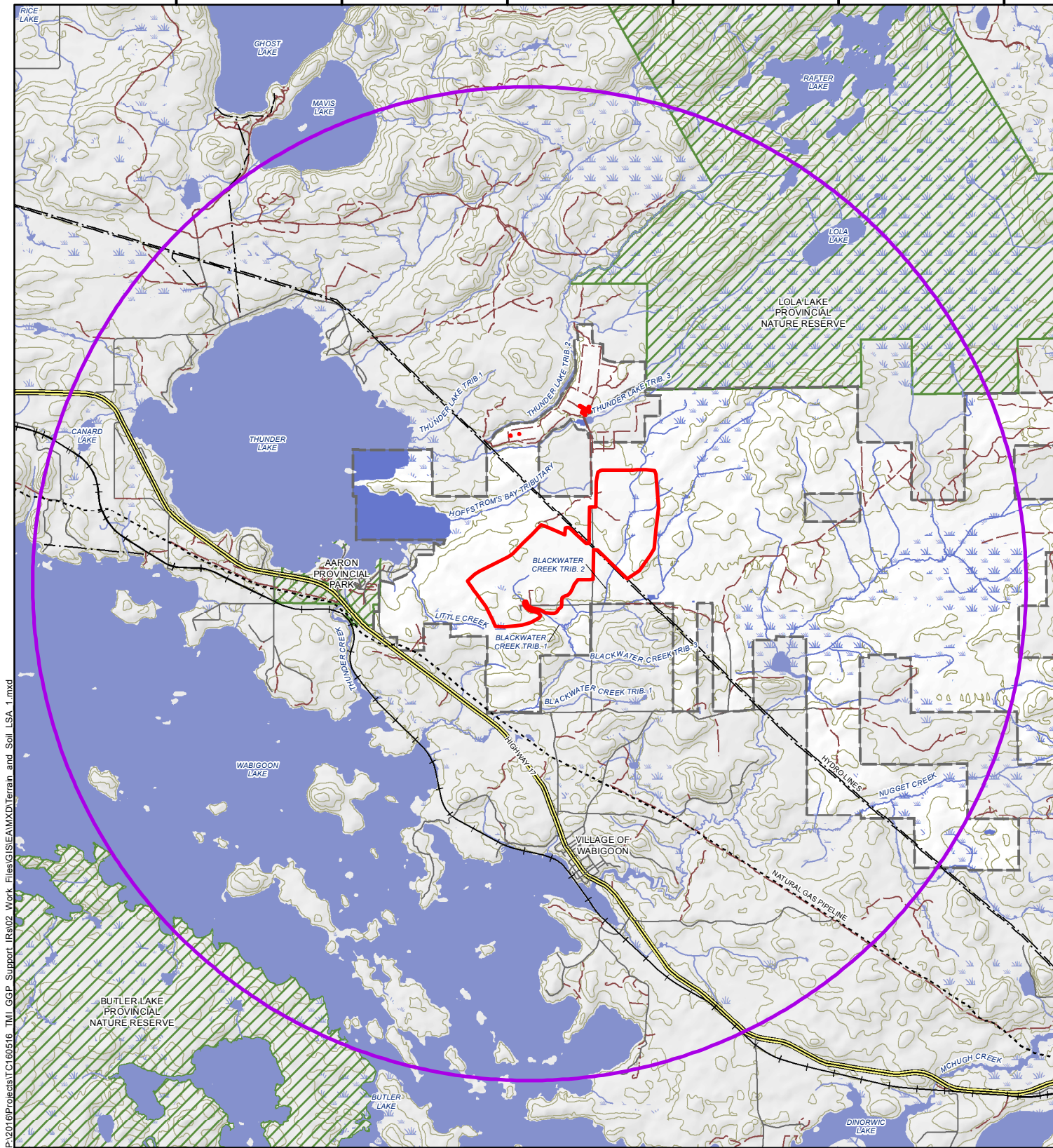
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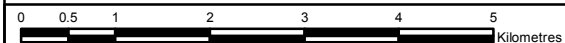
LEGEND

- Operations Area
- Terrain and Soil Local Study Area
- Railway
- Hydro Line
- Natural Gas Pipeline
- Highway
- Local Street
- Resource / Recreation Trail
- Provincial Park
- Watercourse
- Waterbody
- Contours (10 m interval)
- Property Boundary of Claims and Dispositions
- Area Beyond Property Boundary

NOTES:

- Topographic data extracted from Land Information Ontario (LIO), MNRF.
- Watercourses represent pre-development conditions based on LIO database, as modified by KBM.

Datum: NAD83
Projection: UTM Zone 15N



GOLIATH GOLD PROJECT

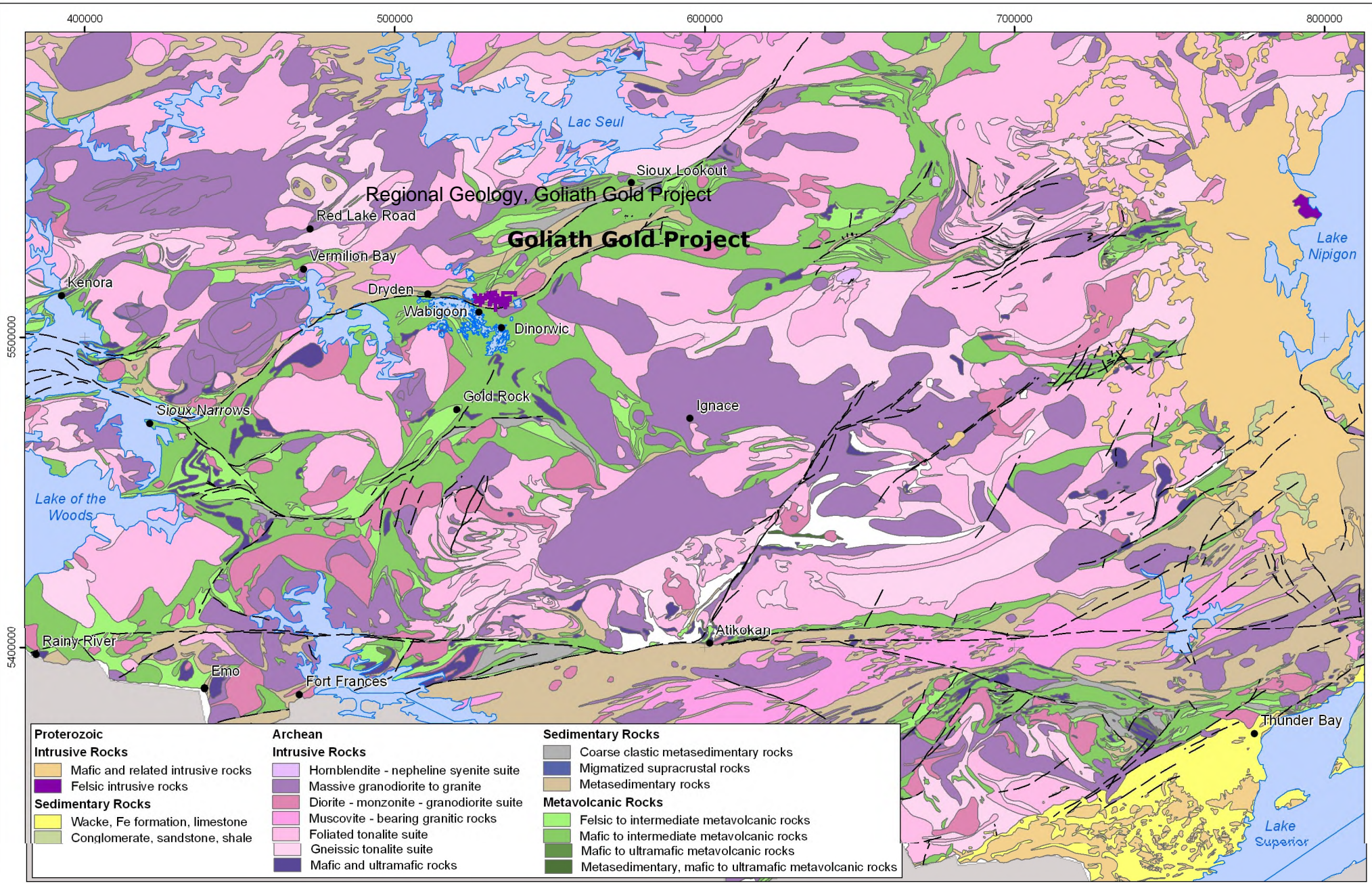
Terrain and Soil Local Study Area (LSA)

PROJECT N°: TC160516

FIGURE: 6.1.4.1-1

SCALE: 1:80,000

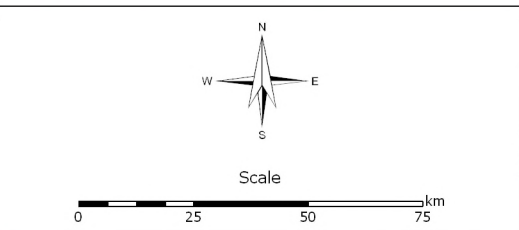
DATE: April 2018



| Proterozoic | Archean | Sedimentary Rocks |
|---|--|---|
| Intrusive Rocks | Intrusive Rocks | Sedimentary Rocks |
| Orange box: Mafic and related intrusive rocks | Purple box: Hornblende - nepheline syenite suite | Grey box: Coarse clastic metasedimentary rocks |
| Pink box: Felsic intrusive rocks | Dark purple box: Massive granodiorite to granite | Dark blue box: Migmatized supracrustal rocks |
| Sedimentary Rocks | Pink box: Diorite - monzonite - granodiorite suite | Light brown box: Metasedimentary rocks |
| Yellow box: Wacke, Fe formation, limestone | Light pink box: Muscovite - bearing granitic rocks | Metavolcanic Rocks |
| Light green box: Conglomerate, sandstone, shale | Light pink box: Foliated tonalite suite | Light green box: Felsic to intermediate metavolcanic rocks |
| | Light pink box: Gneissic tonalite suite | Dark green box: Mafic to intermediate metavolcanic rocks |
| | Dark blue box: Mafic and ultramafic rocks | Dark green box: Mafic to ultramafic metavolcanic rocks |
| | | Dark green box: Metasedimentary, mafic to ultramafic metavolcanic rocks |

Legend:

- Goliath Gold Project
- Faults

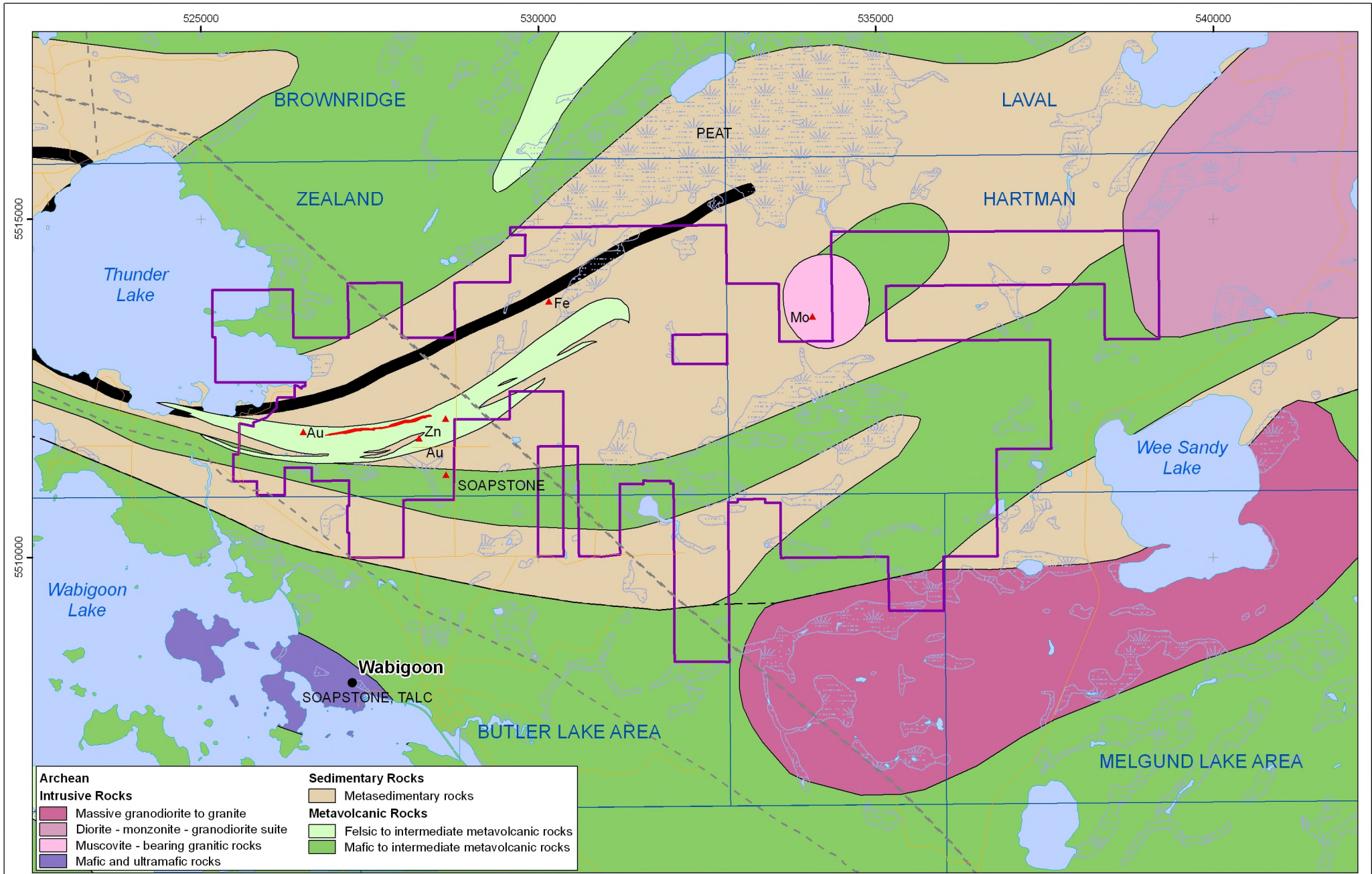


TREASURY
MINERALS

**Regional Geology
Goliath Gold Project, Ontario,**

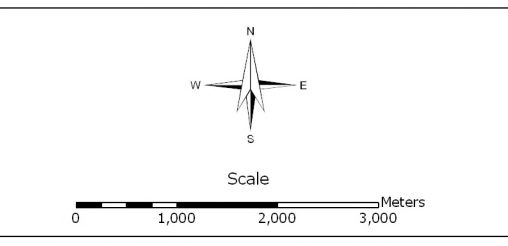
| | | |
|--------------------------------|---------------------------|-------------------|
| Date: 05/17/10 | Scale: 1:1,650,000 | Figure: 6.1.4.2-1 |
| Projection: NAD83 UTM Zone 15N | Office/Author: Sudbury/JM | |

CCIC Caracoe Creek International Consulting Inc.
Geological & Geophysical Consultants



| Archean Intrusive Rocks | Sedimentary Rocks |
|--|---|
| Massive granodiorite to granite | Metasedimentary rocks |
| Diorite - monzonite - granodiorite suite | Metavolcanic Rocks |
| Muscovite - bearing granitic rocks | Felsic to intermediate metavolcanic rocks |
| Mafic and ultramafic rocks | Mafic to intermediate metavolcanic rocks |

| Legend: | |
|----------------------------------|------------------|
| Mineral occurrences | Goliath Property |
| Faults | Townships |
| Roads | Mineralization |
| Utility Line (transmission, gas) | Iron Formation |



| | | |
|---|---------------------------|-------------------|
| | | |
| Bedrock Geology Goliath Gold Project, Ontario, | | |
| Date: 05/17/10 | Scale: 1:75,000 | Figure: 6.1.4.2-2 |
| Projection: NAD83 UTM Zone 15N | Office/Author: Sudbury/JM | |
| Carade Creek International Consulting Inc. Geological & Geophysical Consultants | | |

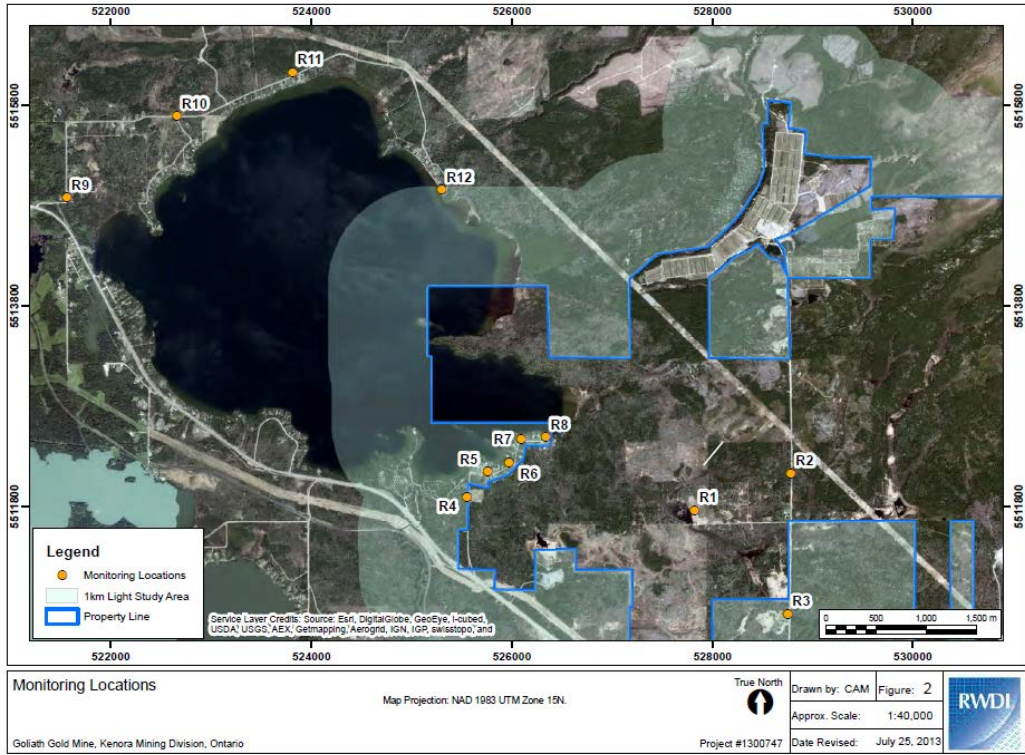


Figure 6.1.4.4-1: Location of Light Receptors and the Light LSA

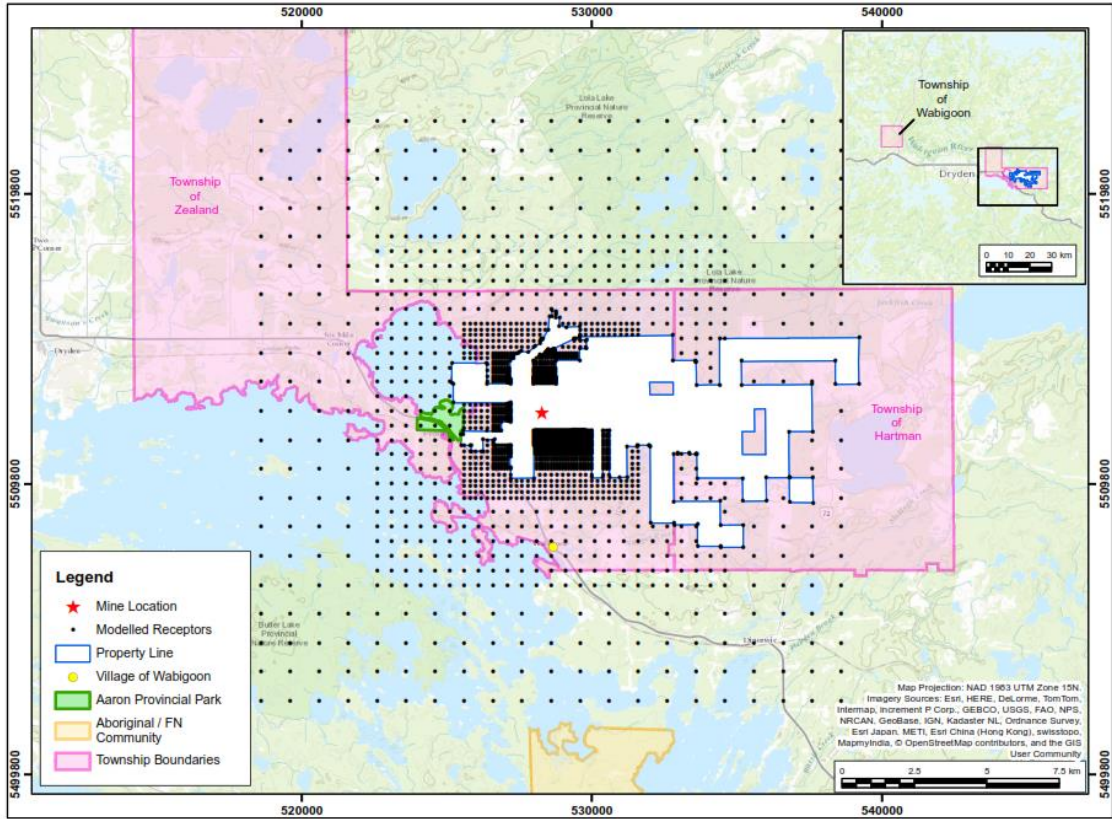
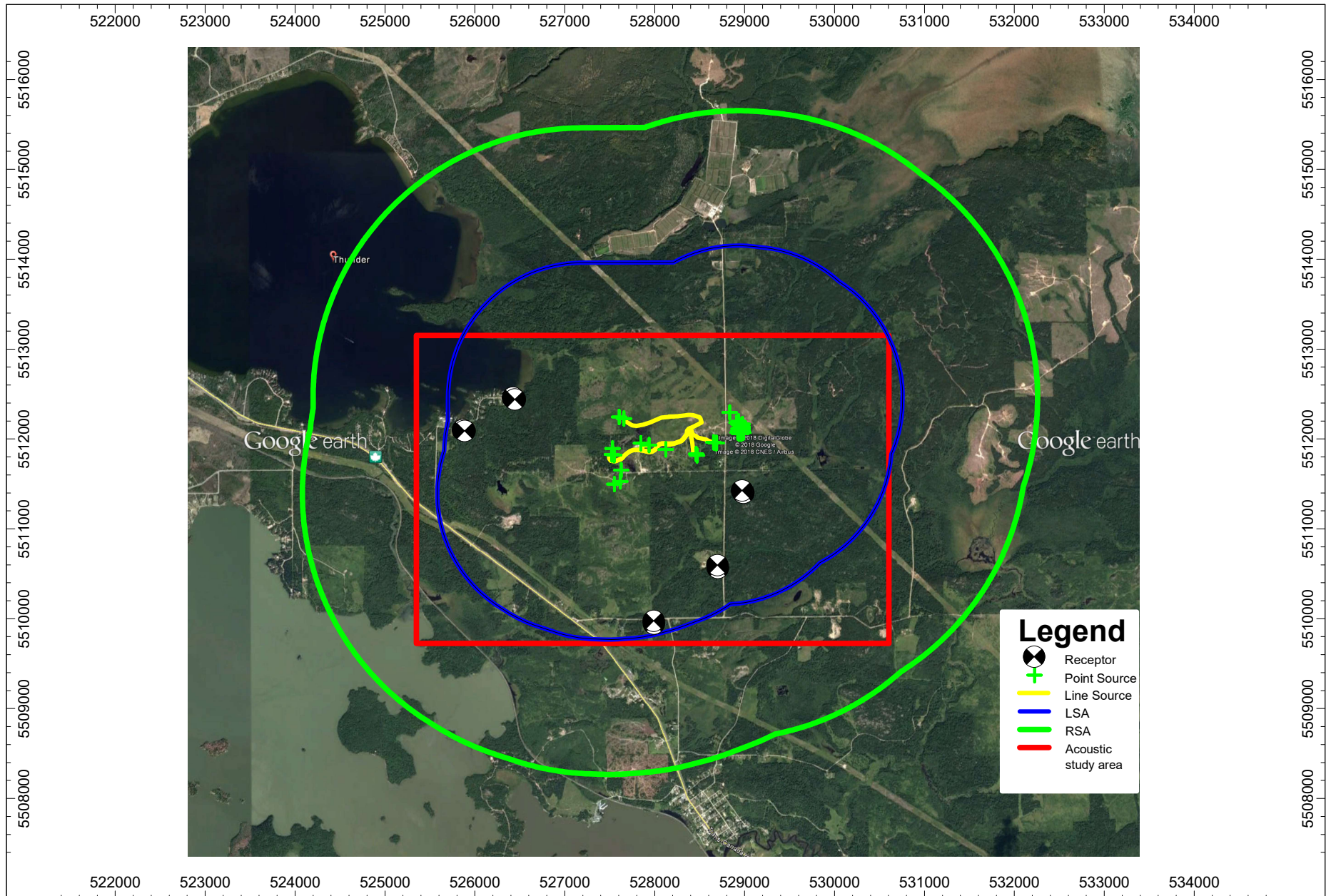


Figure 6.1.4.5-1: Air Quality LSA



Study Areas for Noise and Vibration

Figure 6.1.4.3-1

Treasury Metals - Goliath Gold Project

True North



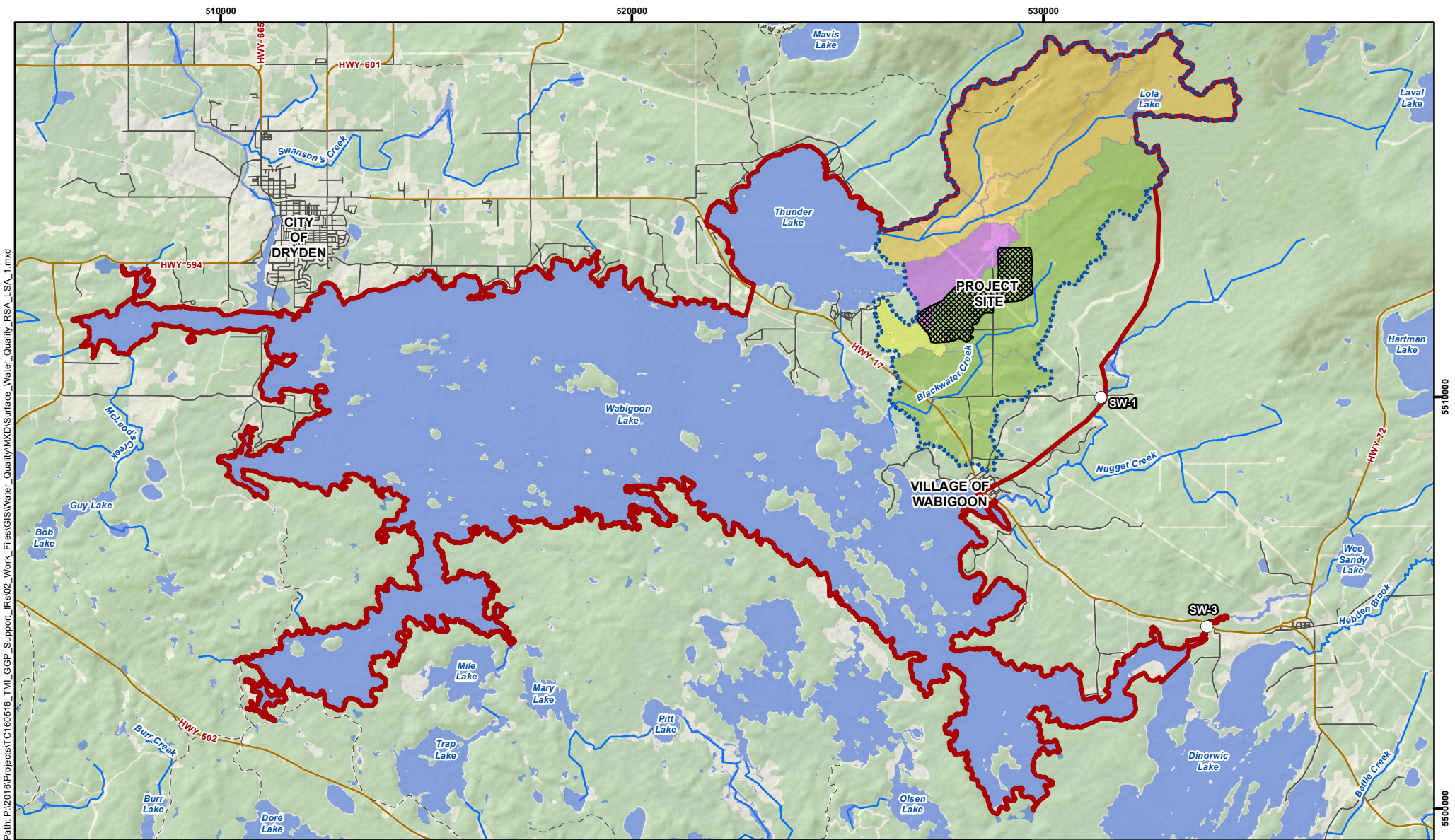
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Date: Mar 13, 2018

Project #1602163





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LEGEND

- Local Study Area (LSA)
- Regional Study Area (RSA)
- Operations Area
- Watershed**
- Blackwater Creek
- Hoffstrom's Bay Tributary
- Little Creek
- Thunder Lake Tributary 2 and 3
- Baseline Surface Water Quality Sampling Locations
- Highway
- Local Road
- Resource / Recreation

NOTES:
- Topographic data extracted from Land Information Ontario, MNRF.



GOLIATH GOLD PROJECT
Surface Water Quality RSA and LSA



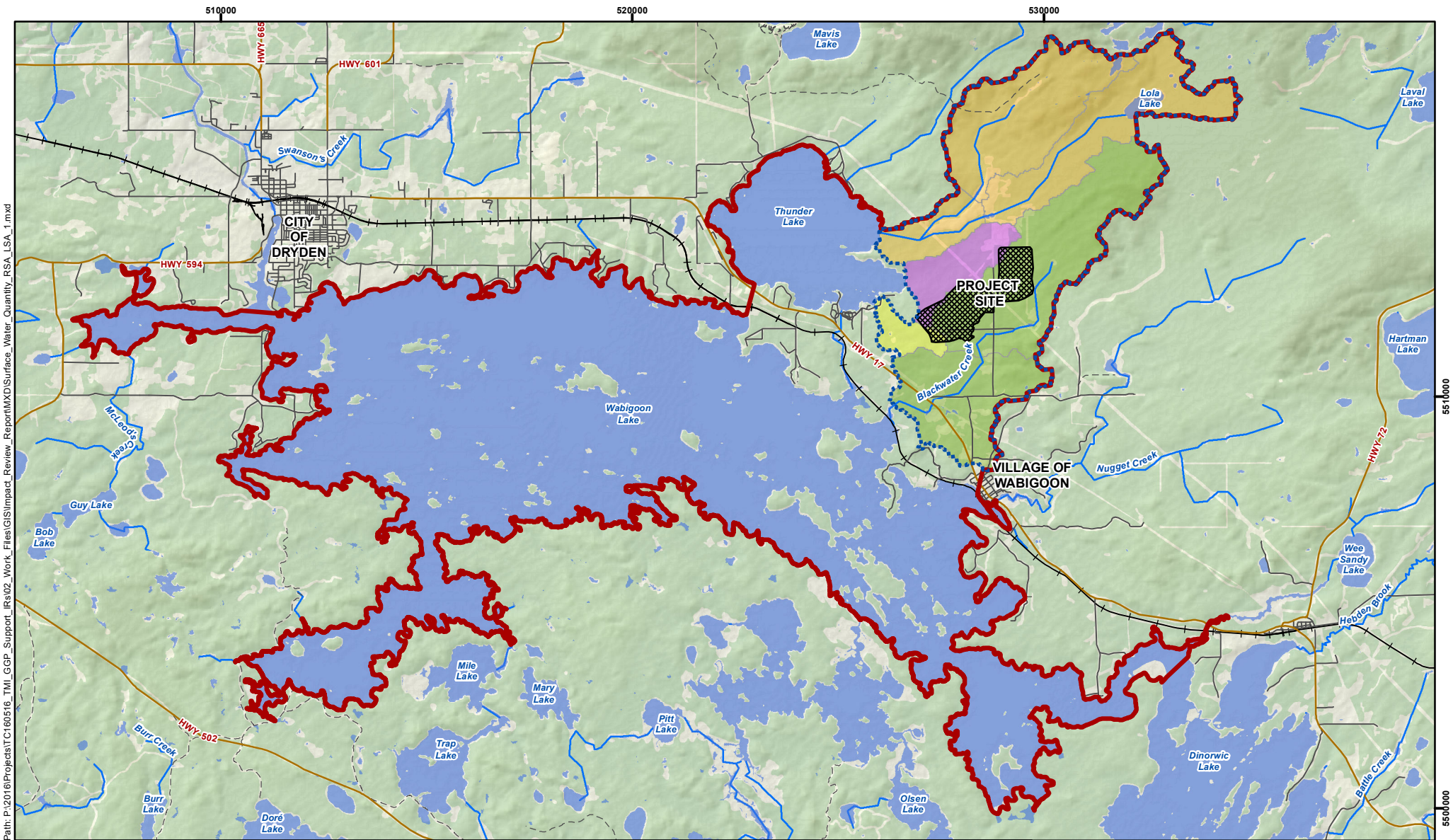
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NAD 1983 UTM Zone 15N

PROJECT N^o: TC160516

FIGURE: 6.1.4.7-1

SCALE: 1:130,000

DATE: April 2018



Path: P:\2018\Projects\TC160516_TML_GGP_Support_IRs\02_Work_Files\GIS\Impact_Review_Report\MXD\Surface_Water_Quantity_RSA_LSA_1.mxd

LEGEND

- Local Study Area (LSA)
- Regional Study Area (RSA)
- Operations Area
- Watershed**
- Blackwater Creek
- Hoffstrom's Bay Tributary
- Little Creek
- Thunder Lake Tributary 2 and 3
- Highway
- Local Road
- Resource / Recreation
- Railway

NOTES:
- Topographic data extracted from Land Information Ontario, MNRF.



GOLIATH GOLD PROJECT

Surface Water Quantity Study Areas



Datum & Projection:
NAD 1983 UTM Zone 15N



PROJECT N^o: TC160516

FIGURE: 6.1.4.8-1

SCALE: 1:130,000

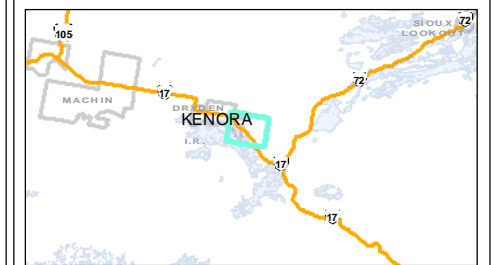
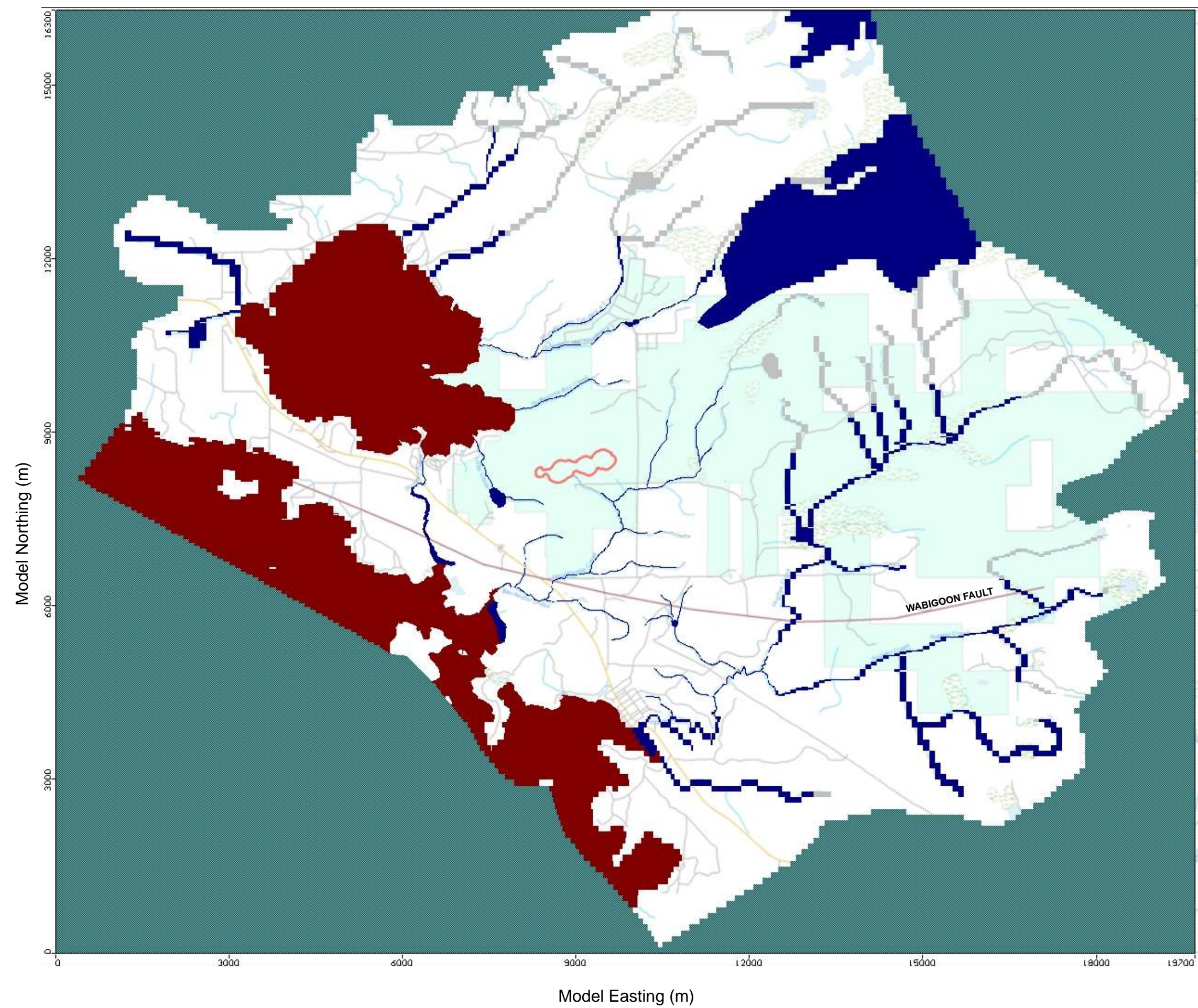
DATE: April 2018

GOLIATH GOLD PROJECT

Figure 6.1.4.9-1 Hydrogeology LSA and RSA

Legend

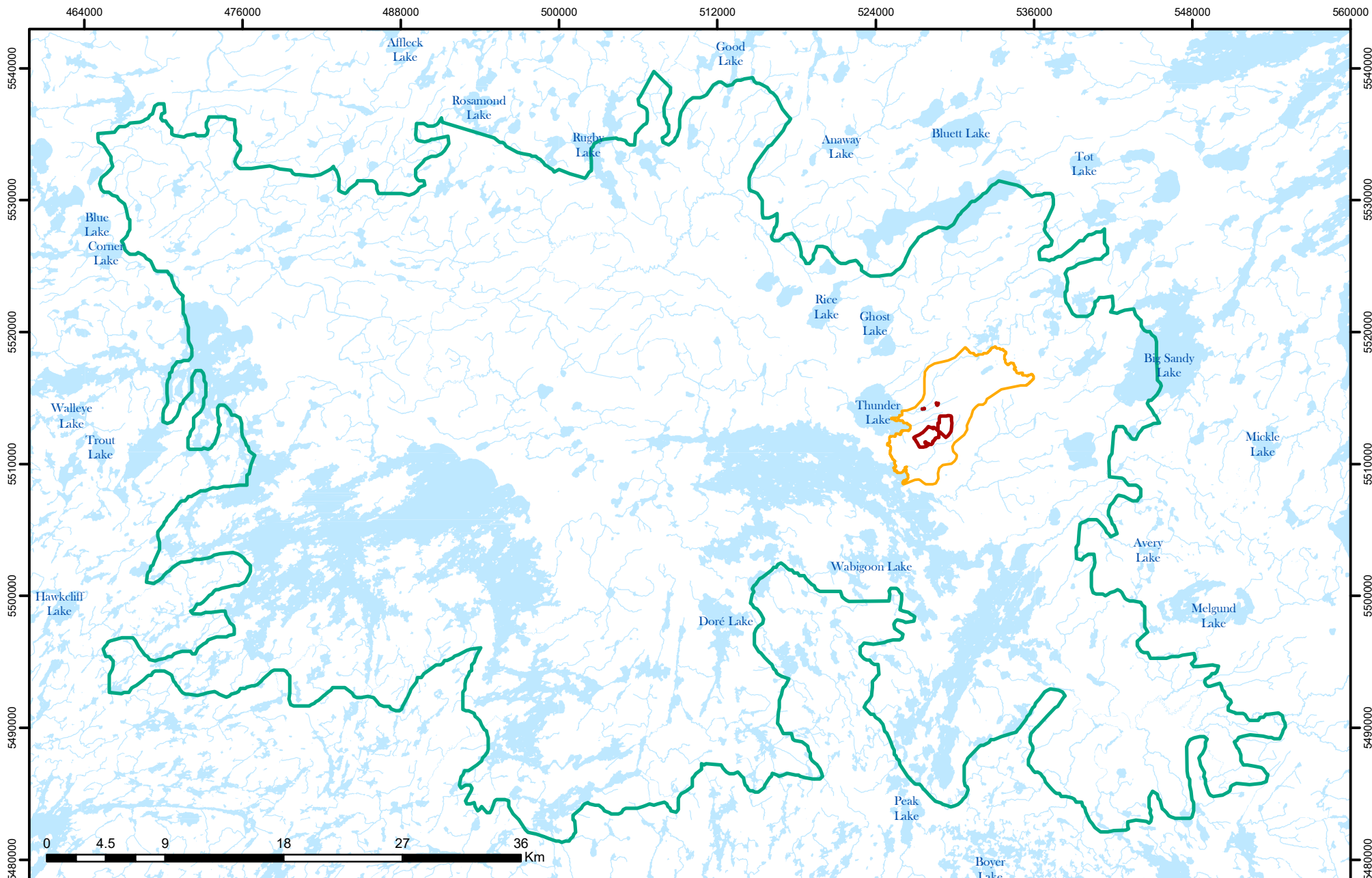
- Constant Head Nodes
- River Nodes
- Drain Nodes



Conditions encountered in the field may be different from the interpreted information presented on this figure.

Project #: TC160516
Date: April 2018
Client: Treasury Metals Inc.





Legend

- Development Footprint
- Local Study Area
- Regional Study Area



**Figure 6.1.4.11-1
Wildlife and Wildlife Habitat Study Areas**

1:391,728
 Projection: NAD 1983 UTM Zone 15N
 Date created: 2018-04-11



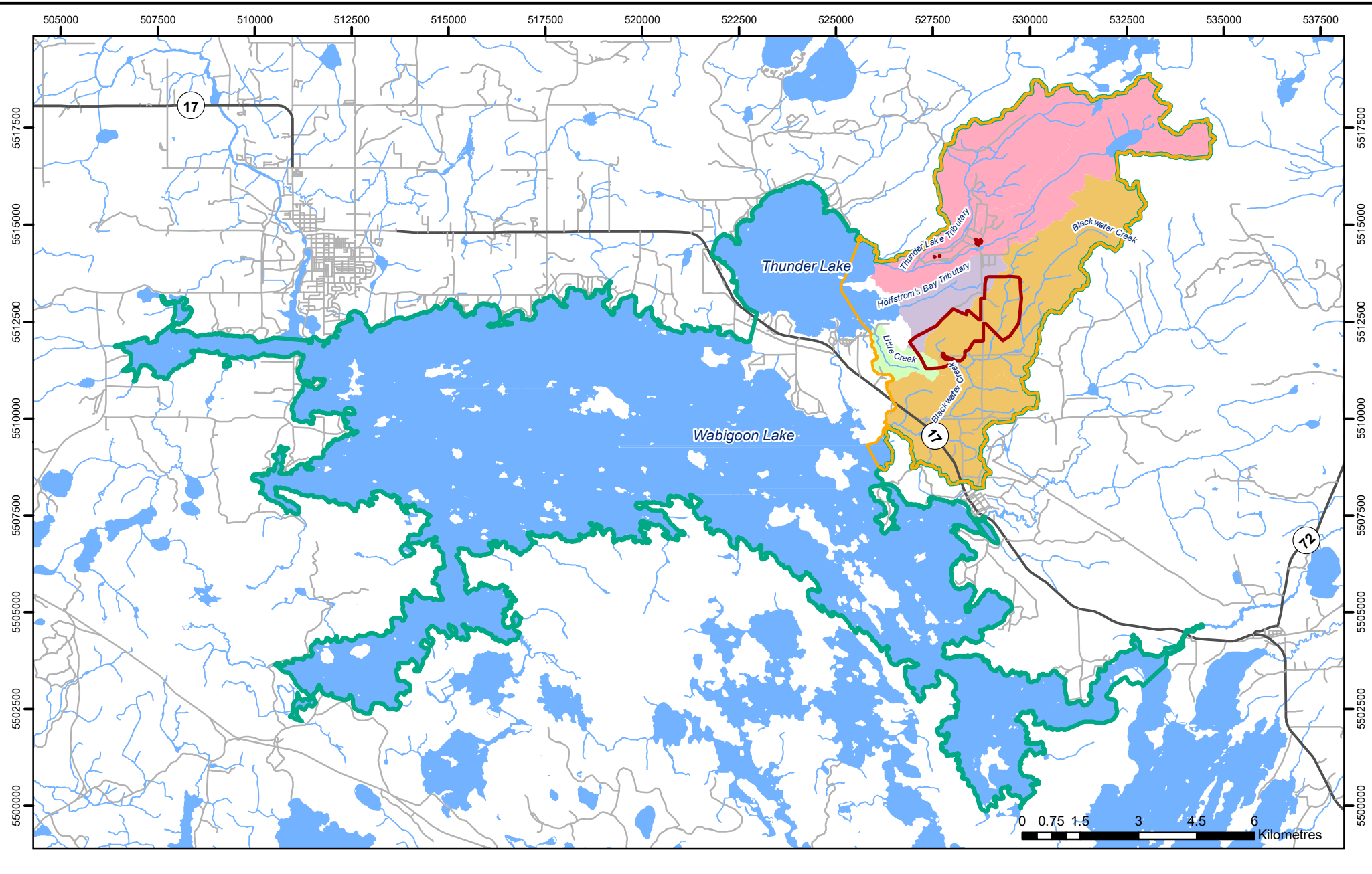


Figure 6.1.4.13-1
Fish and Fish Habitat Study Areas

Projection: NAD 1983 UTM Zone 15N
 Date created: 2018-04-12
 SCALE: 1:130,589

Legend

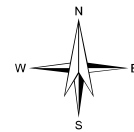
| | | |
|---------------------|-----------|--------------------------------|
| Project Footprint | Highway | Watersheds |
| Local Study Area | Stream | Blackwater Creek |
| Regional Study Area | Waterbody | Hoffstrom's Bay Tributary |
| Road | | Little Creek |
| | | Thunder Lake Tributary 2 and 3 |





Legend

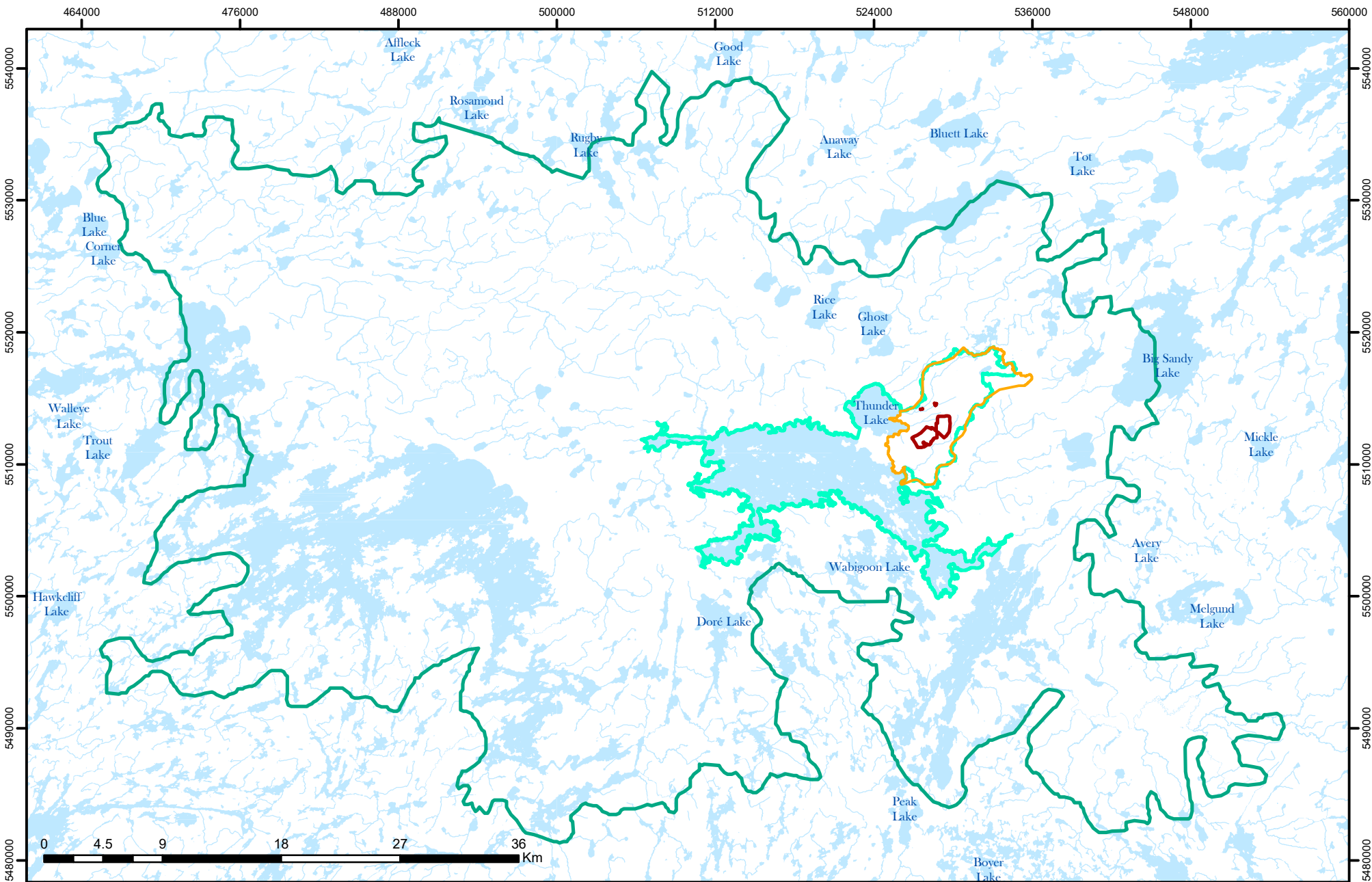
- Development Footprint
- Wild Rice Local Study Area



**Figure 6.1.4.14-1
LSA for Wild Rice**

1:127,189
 Projection: NAD 1983 UTM Zone 15N
 Date created: 2018-04-11





Legend

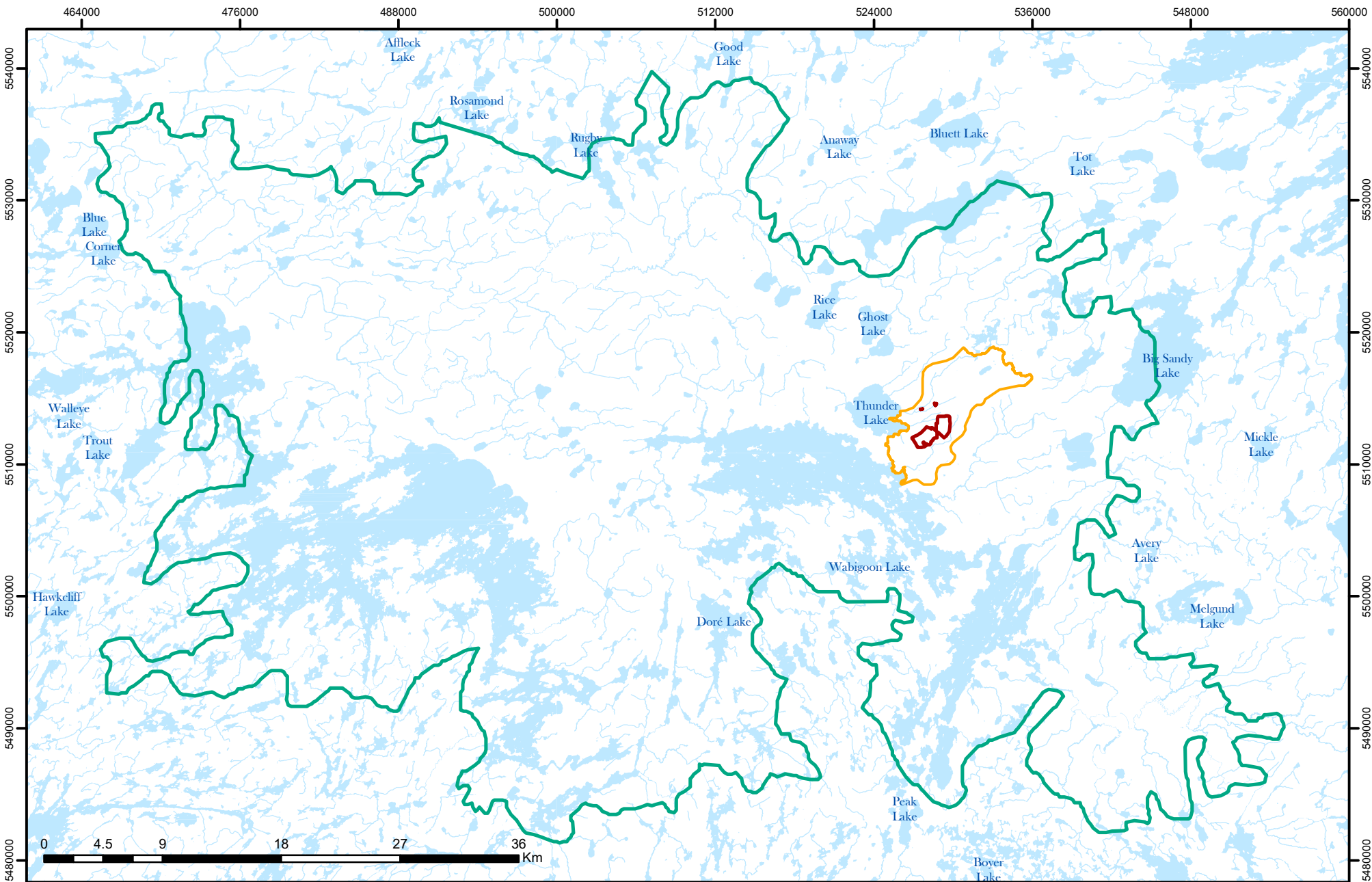
- Development Footprint
- Local Study Area
- Regional Study Area
- Wild Rice Local Study Area



**Figure 6.1.4.14-2
Vegetation and Wetlands Study Areas**

1:391,728
 Projection: NAD 1983 UTM Zone 15N
 Date created: 2018-04-11





Legend

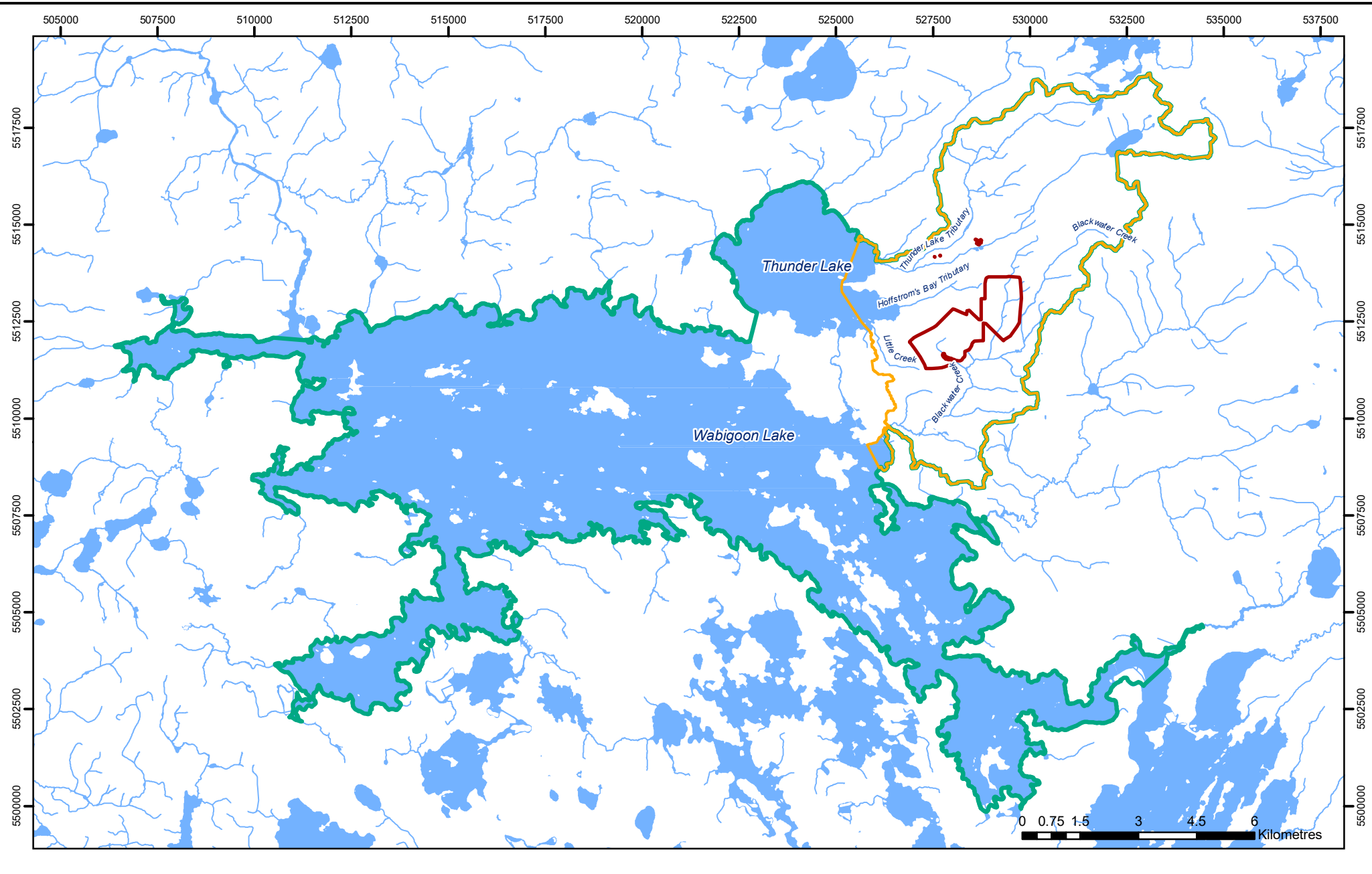
- Development Footprint
- Local Study Area
- Regional Study Area



Figure 6.1.4.15-1
Land and Resource Use (Terrestrial) Study Areas

1:391,728
 Projection: NAD 1983 UTM Zone 15N
 Date created: 2018-04-11





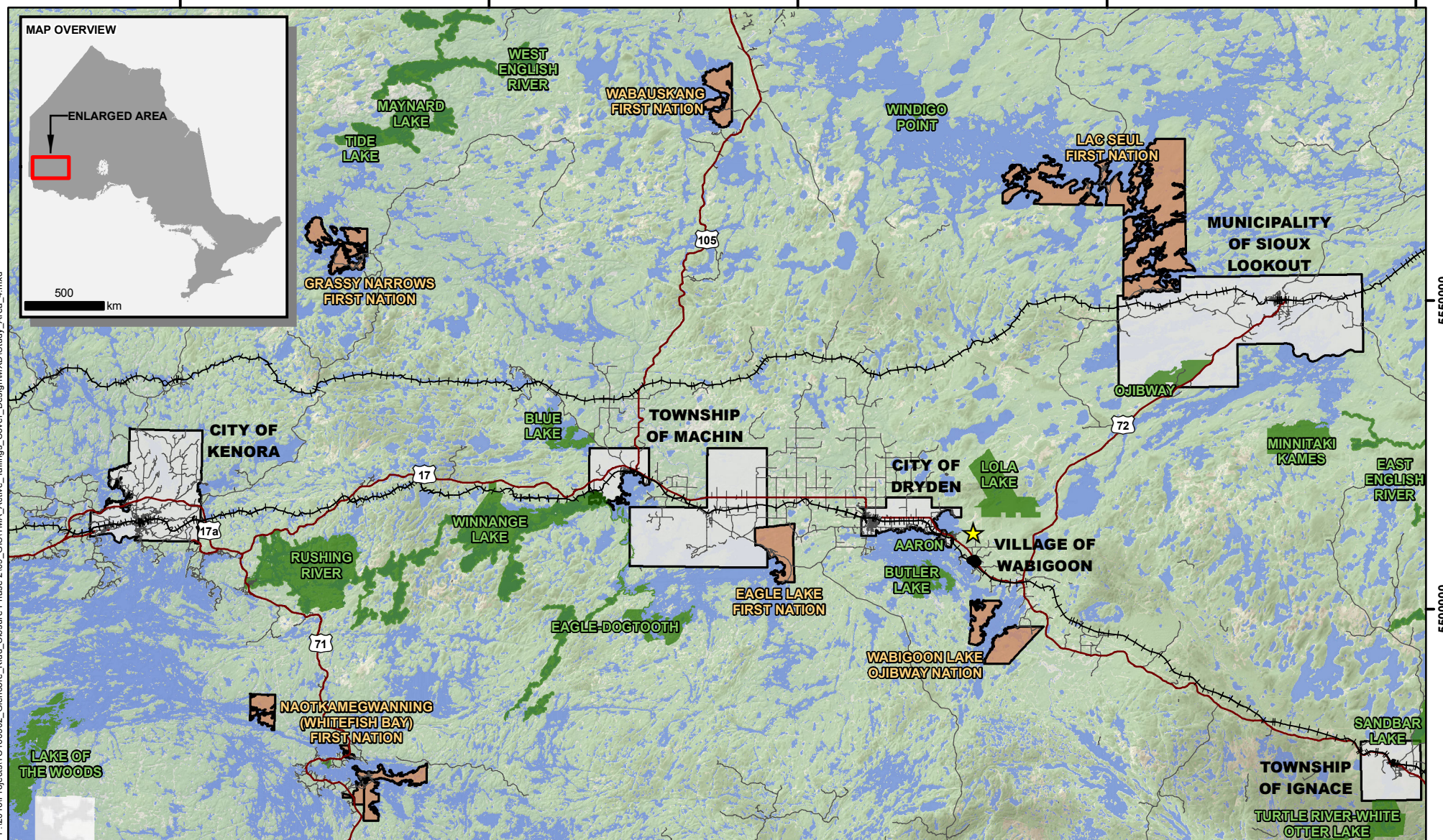
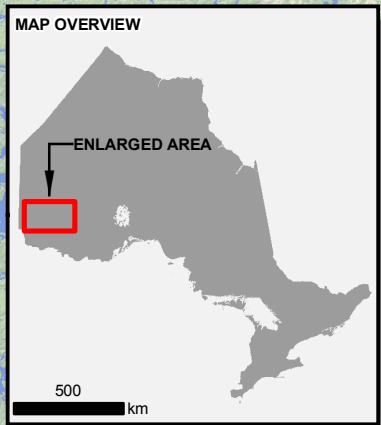
**Figure 6.1.4.15-2
Land and Resources
(Aquatic) Study Areas**

- Legend**
- Project Footprint
 - Stream
 - Waterbody
 - LSA Aquatic
 - RSA Aquatic

Projection: NAD 1983 UTM Zone 15N
 Date created: 2018-04-11
 SCALE: 1:130,589



400000 450000 500000 550000 600000



5550000
5500000

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LEGEND

- ★ Project Location
- ++++ Railway
- ▭ Socio-economic Study Area
- ▭ First Nation Reserves*
- ▭ Communities*
- ▭ Provincial Parks
- Highway
- Local Road
- Waterbody

NOTES:
- Topographic data extracted from Land Information Ontario, MNRF.

* Only communities and reserves located within the study area are shown.

Datum: NAD83
Projection: UTM Zone 15N



GOLIATH GOLD PROJECT

Socio-economic Study Area

PROJECT N°: TC160516

FIGURE:6.1.4.17-1

SCALE: 1:880,000

DATE: April 2018



524000

526000

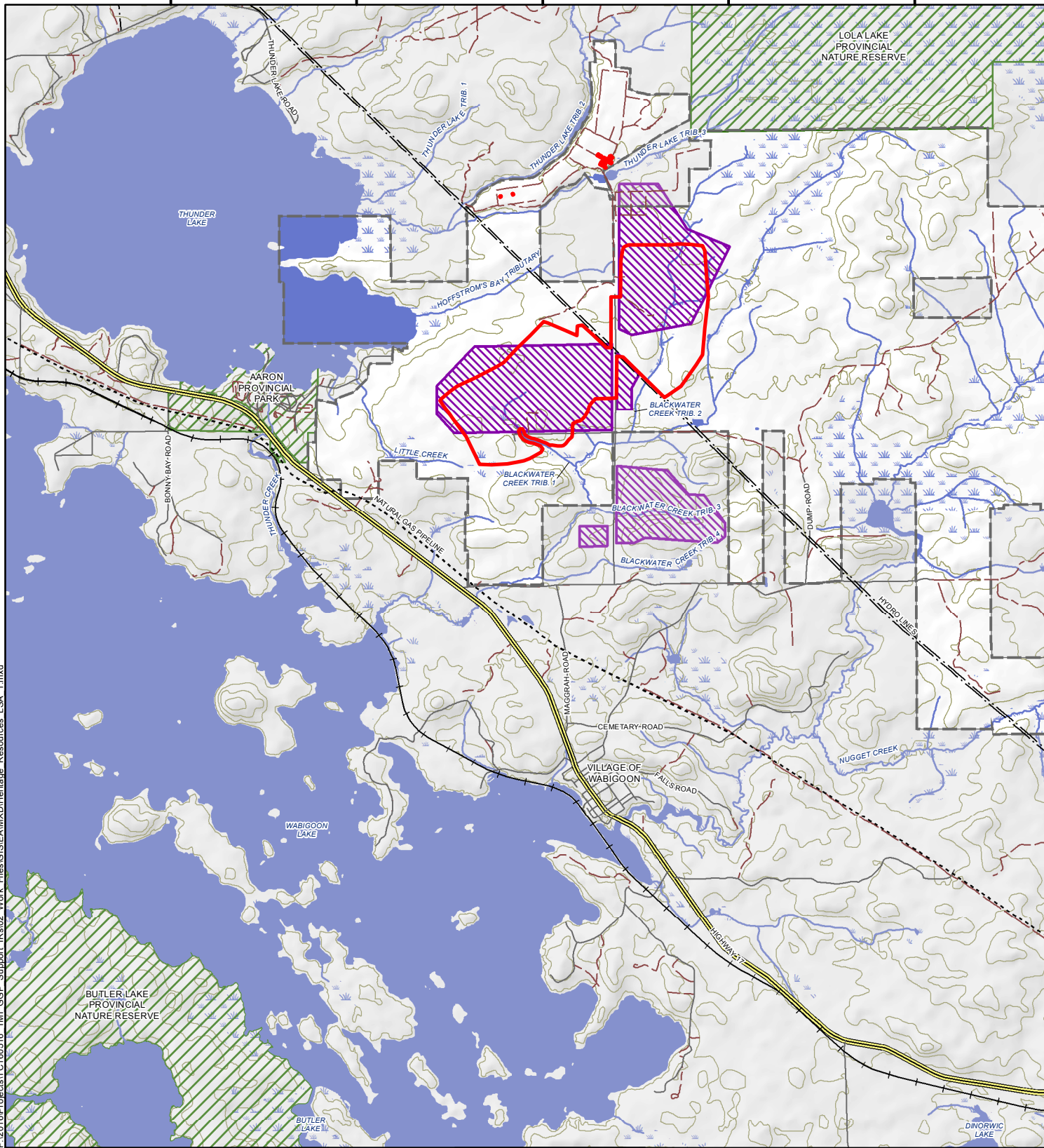
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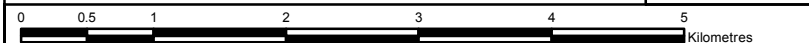
LEGEND

- Operations Area
- Heritage Resources Local Study Area
- Railway
- Hydro Line
- Natural Gas Pipeline
- Highway
- Local Street
- Resource / Recreation Trail
- Provincial Park
- Watercourse
- Waterbody
- Contours (10 m interval)
- Property Boundary of Claims and Dispositions
- Area Beyond Property Boundary

NOTES:

- Topographic data extracted from Land Information Ontario (LIO), MNRF.
- Watercourses represent pre-development conditions based on LIO database, as modified by KBM.

Datum: NAD83
Projection: UTM Zone 15N



GOLIATH GOLD PROJECT

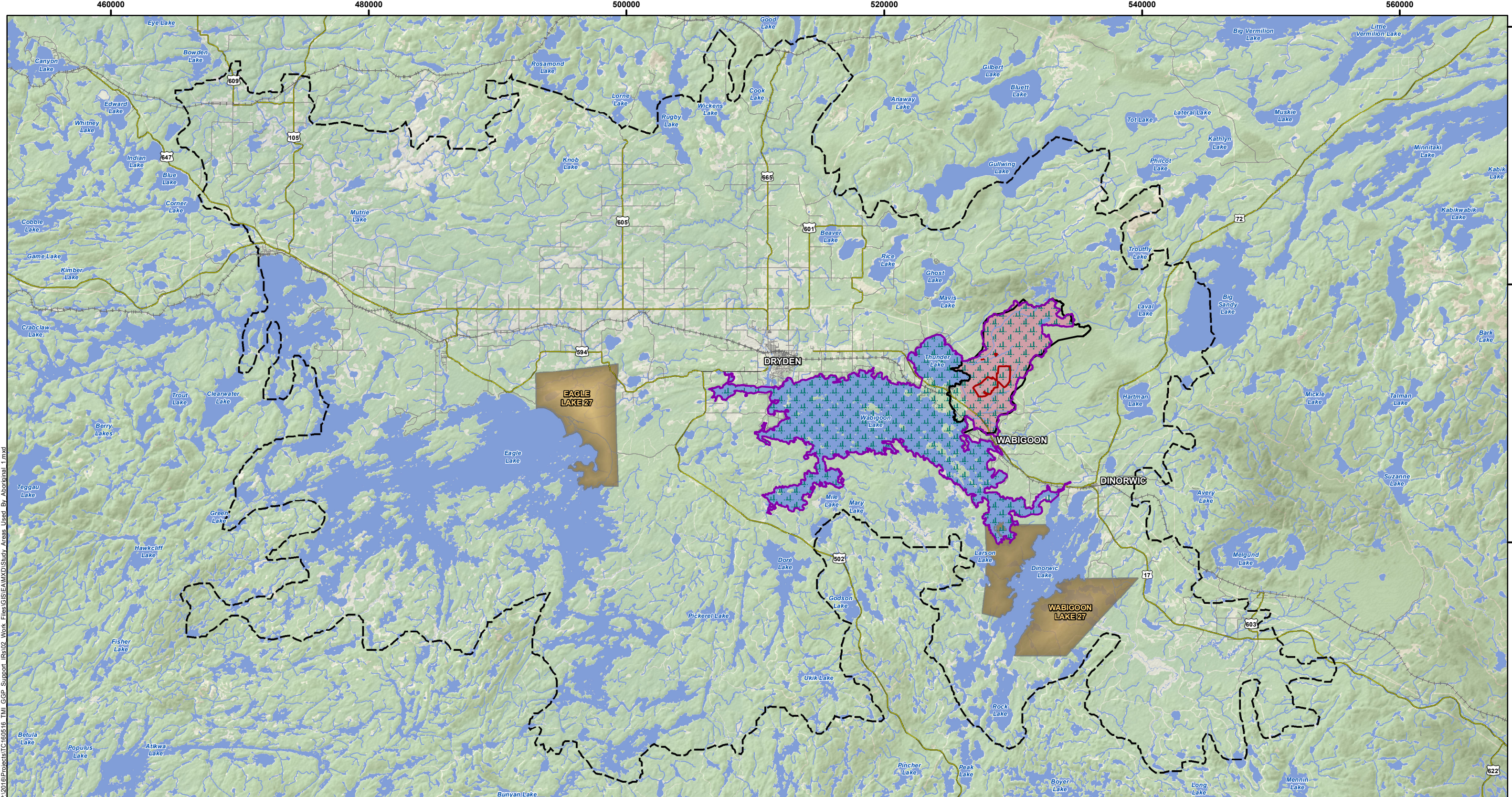
Heritage Resources Local Study Area (LSA)

PROJECT N^o: TC160516

FIGURE: 6.1.4.19-1

SCALE: 1:57,000

DATE: March 2018





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LEGEND

- Operations Area
- Terrestrial Local Study Area
- Terrestrial Regional Study Area
- Wildrice Local Study Area
- Aquatic Regional Study Area
- Aquatic Local Study Area
- First Nation Reserves
- Canadian Pacific Railway
- Highway
- Local Road

NOTES:
 - Topographic data extracted from Land Information Ontario, MNRF.

Datum: NAD83
 Projection: UTM Zone 15N

GOLIATH GOLD PROJECT

Study Areas Used for Aboriginal Peoples VCs

| | |
|-----------------------------------|--------------------|
| PROJECT N ^o : TC160516 | FIGURE: 6.1.4.20-1 |
| SCALE: 1:280,000 | DATE: April 2018 |

