# Lower Trent Conservation Authority (LTRCA)

# LEGEND:

# **Hazard Mapping:**





**Erosion Hazard Limit** 

Dynamic Beach Setback

# Base Mapping:

- Geographical Names
- Dynamic Beach (Start Pt)
- Dynamic Beach (End Pt)
- Road Network
- LTRCA Administrative Boundary

# INTERPRETATION OF THE HAZARD MAPS:

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# DATA SOURCES:

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Inset Map: © OpenStreetMap contributors

# **DEFINITIONS:**

# 100 Year Flood Level

The 100 Year Combined Flood Level considers both static lake level and storm surge, having a combined probability of being equalled or exceeded during any year of 1% (i.e., probability, P =0.01). The 100 Year Combined Flood Level elevation for LTRCA is +76.03 m IGLD85 (+75.62 m CGVD2013).

#### Flood Hazard Limit

The Flood Hazard Limit is defined as the 100-Year Flood Level plus an allowance for wave runup and uprush. For the exposed shoreline, wave effects are calculated based on localized nearshore conditions and waves. For embayments, the standardized 15 m setback is applied. Refer to the Lake Ontario Shoreline Management Plan for additional details.

# Toe of Bluff

The Toe of Bluff is the transition from the gently sloping beach to the steep portion of the bank or bluff slope.

#### Stable Slope Allowance

The Stable Slope Allowance is defined as a horizontal setback equivalent to 3.0 times the height of the bank or bluff.

## **Erosion Hazard Limit**

The landward extent of the Erosion Hazard is the sum of the 100 year erosion rate plus the Stable Slope Allowance, measured horizontally from the toe of the bank or bluff.

The Erosion Hazard Limit is not mapped in sheltered waters, however, localized shoreline/riverine erosion may occur and is subject to review by the Conservation Authority.

#### Dynamic Beach Hazard Limit

Horizontal: UTM 18N NAD1983, metres.

Vertical: CGVD2013, metres

The Dynamic Beach Hazard Limit is defined as the sum of the Flood Hazard plus 30 metres measured horizontally. Local conditions may require a modified mapping approach if the beach is eroding or a barrier beach. Refer to the Lake Ontario Shoreline Management Plan report for additional details.

# **Datum Conversion:**

IGLD1985 - CGVD2013 = 0.41 m (average)To convert from IGLD85 to CGVD2013, subtract

Note: There are local variations along the reaches within LTRCA. Refer to the Lake Ontario SMP for additional details.



MAP PUBLISHED MARCH 2020

# PREPARED BY:



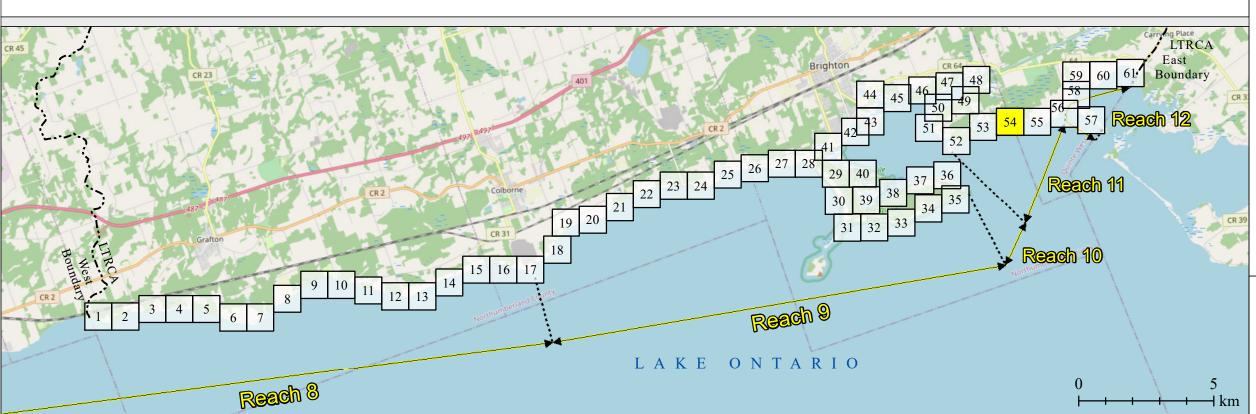






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Phone: 613-394-4829 Web: www.ltc.on.ca

**LOWER TRENT** 

# Lower Trent Conservation Authority (LTRCA)

# LEGEND:

# **Hazard Mapping:**





Erosion Hazard Limit

Dynamic Beach Setback

# Base Mapping:

- Geographical Names
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- Dynamic Beach (End Pt)
- LTRCA Administrative Boundary

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Vertical: CGVD2013, metres

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# **Datums:**Horizontal: UTM 18N NAD1983, metres. Datum Conversion: IGLD1985 - CGVD2

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To convert from IGLD85 to CGVD2013, subtract
0.41 m.

Note: There are local variations along the reaches within LTRCA. Refer to the Lake Ontario SMP for additional details.

50 100 200 \_\_\_\_\_m



# PREPARED BY:



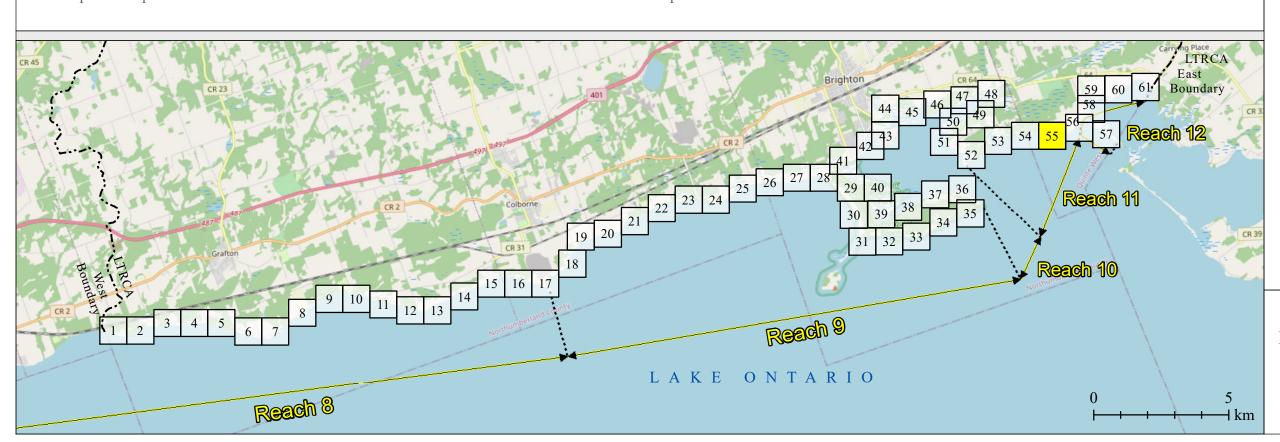






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MAP PUBLISHED MARCH 2020

Lower Trent Conservation Authority (LTRCA)

# LEGEND:

# **Hazard Mapping:**





**Erosion Hazard Limit** 

Dynamic Beach Setback

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Resources and Forestry

# Horizontal: UTM 18N NAD1983, metres. Vertical: CGVD2013, metres

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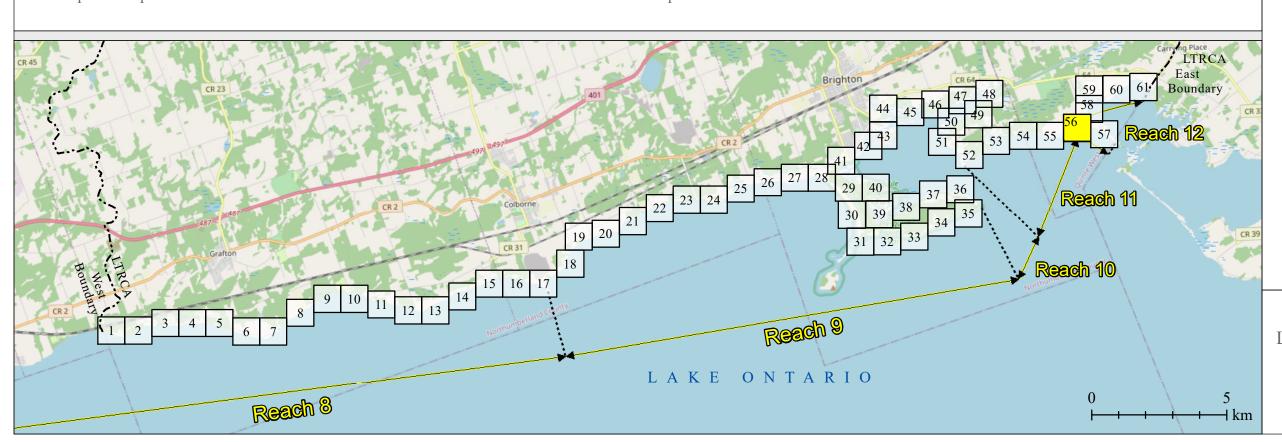






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LTRCA Map 56 of 61

# Lower Trent Conservation Authority (LTRCA)

# LEGEND:

# **Hazard Mapping:**





**Erosion Hazard Limit** 

Dynamic Beach Setback

# Base Mapping:

- Geographical Names
- Dynamic Beach (Start Pt)
- Dynamic Beach (End Pt)
- Road Network
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Inset Map: © OpenStreetMap contributors

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Vertical: CGVD2013, metres

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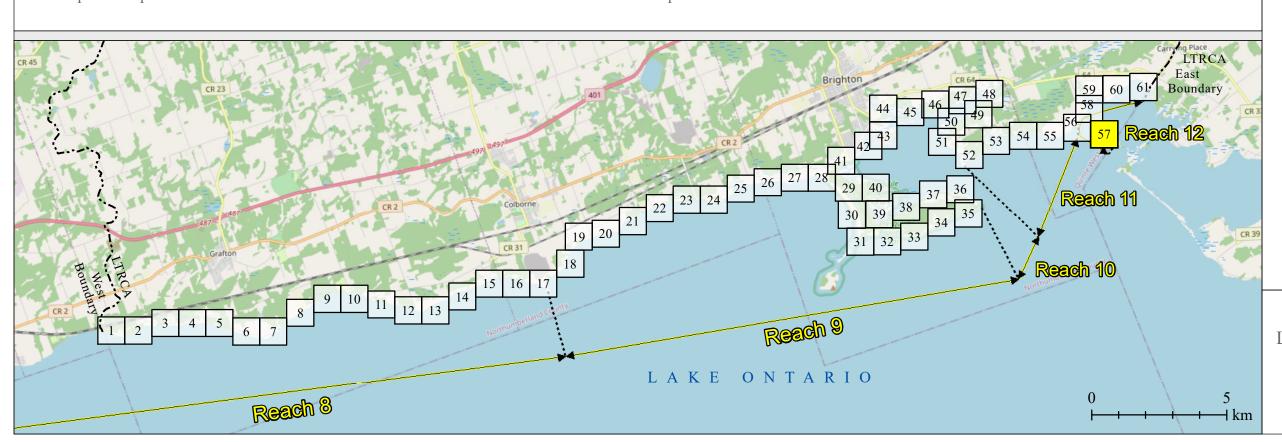


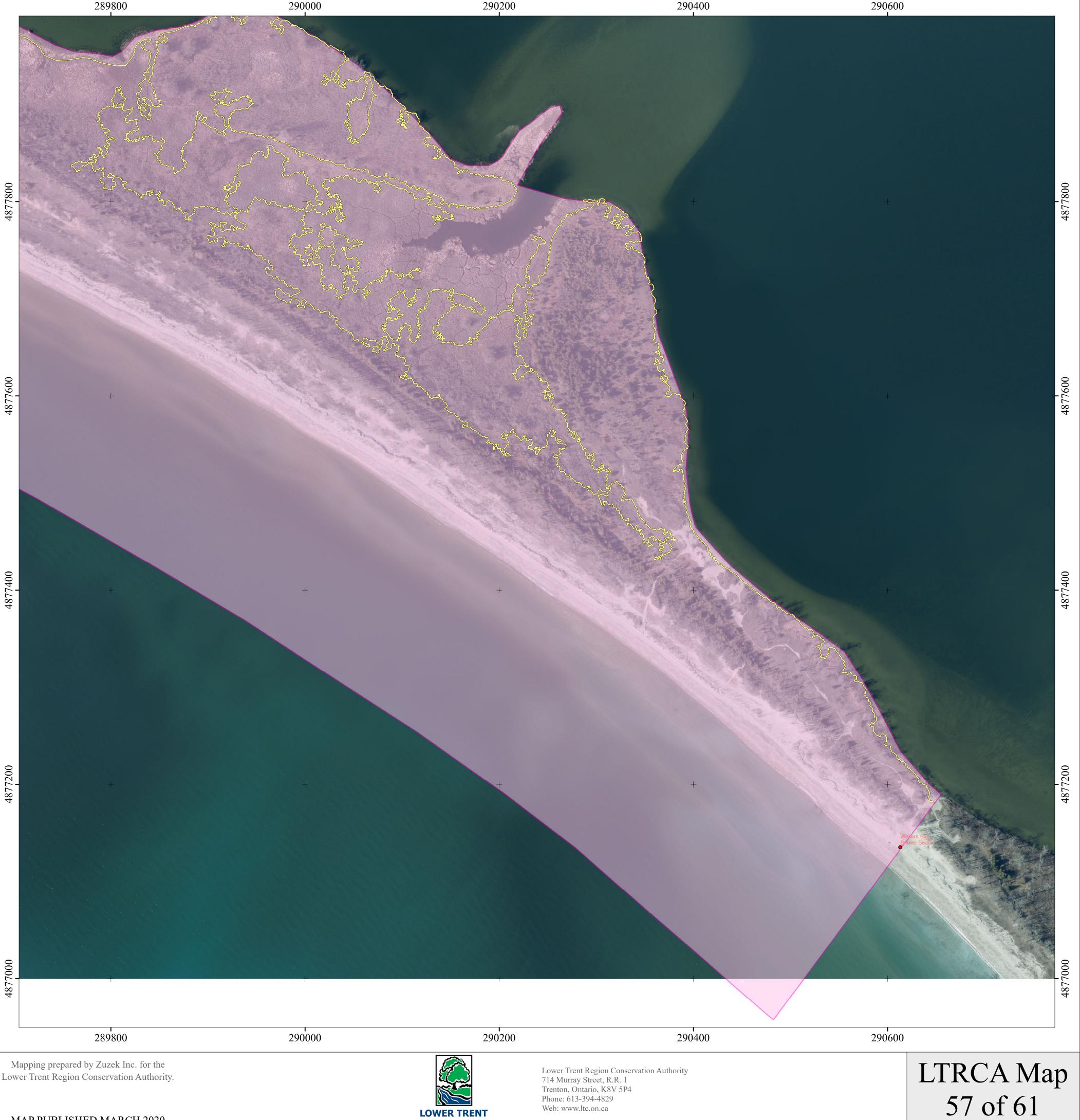




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Lower Trent Conservation Authority (LTRCA)

# LEGEND:

# **Hazard Mapping:**









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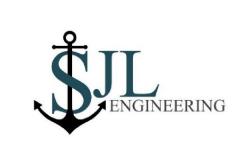
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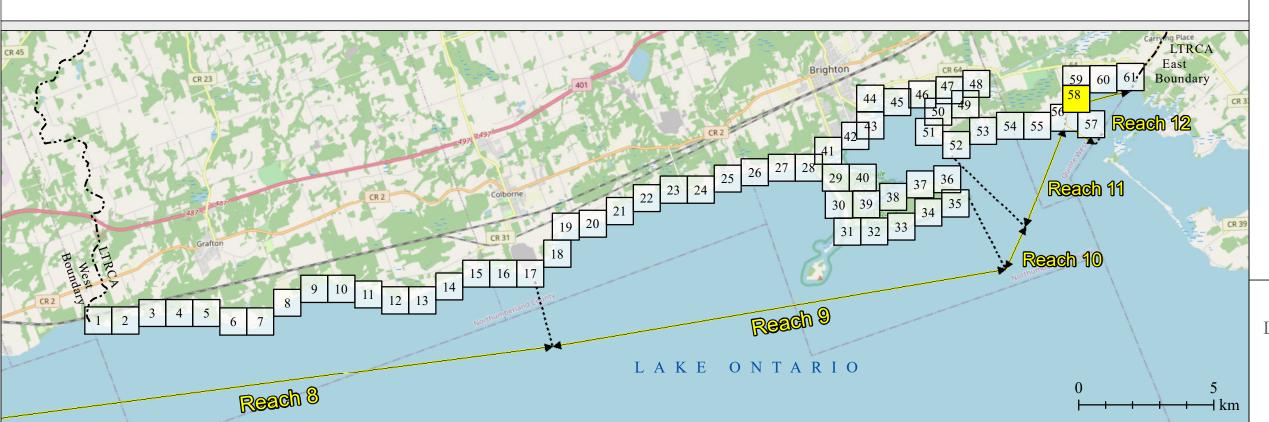






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Lower Trent Region Conservation Authority.

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LTRCA Map 58 of 61

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# Lower Trent Conservation Authority (LTRCA)

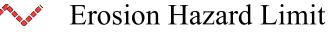
# LEGEND:

# **Hazard Mapping:**









Dynamic Beach Setback

# Base Mapping:

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# LAKE ONTARIO

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Horizontal: UTM 18N NAD1983, metres. IGLD1985 - CGVD2013 = 0.41 m (average)Vertical: CGVD2013, metres To convert from IGLD85 to CGVD2013, subtract

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Mapping prepared by Zuzek Inc. for the Lower Trent Region Conservation Authority.

MAP PUBLISHED MARCH 2020



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LTRCA Map 59 of 61

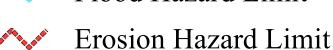
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# LEGEND:

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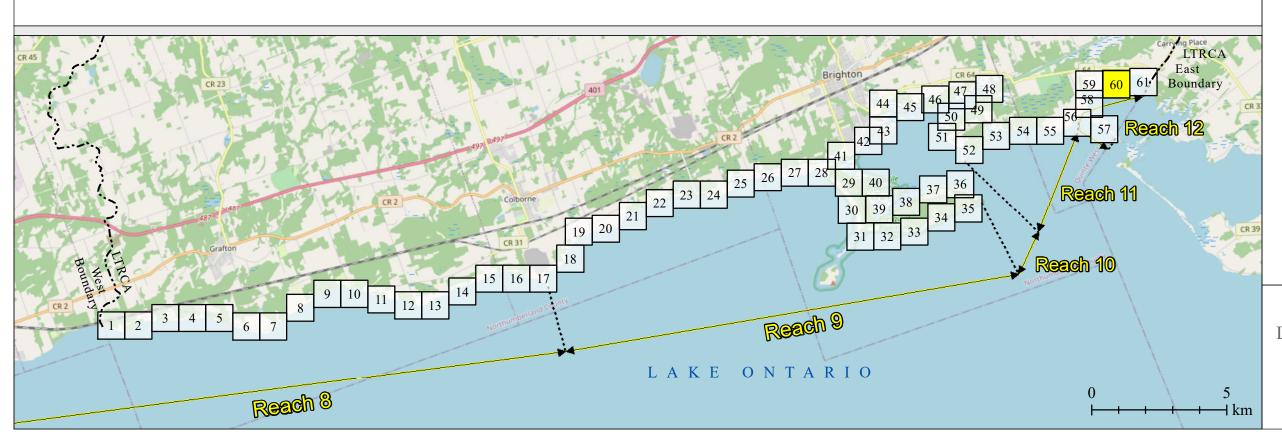






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290800

291000

Lower Trent Region Conservation Authority.

MAP PUBLISHED MARCH 2020

290400

290600



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LTRCA Map 60 of 61

Lower Trent Conservation Authority (LTRCA)

# LEGEND:

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# **Datum Conversion:**

Horizontal: UTM 18N NAD1983, metres. IGLD1985 - CGVD2013 = 0.41 m (average)To convert from IGLD85 to CGVD2013, subtract Vertical: CGVD2013, metres

> Note: There are local variations along the reaches within LTRCA. Refer to the Lake Ontario SMP for additional details.



# PREPARED BY:



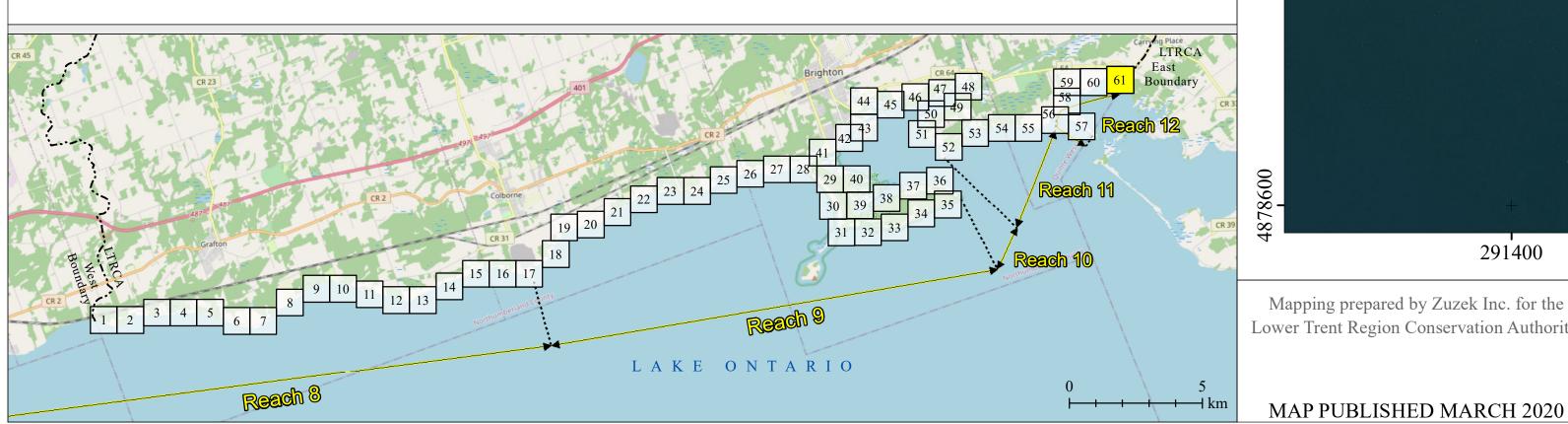


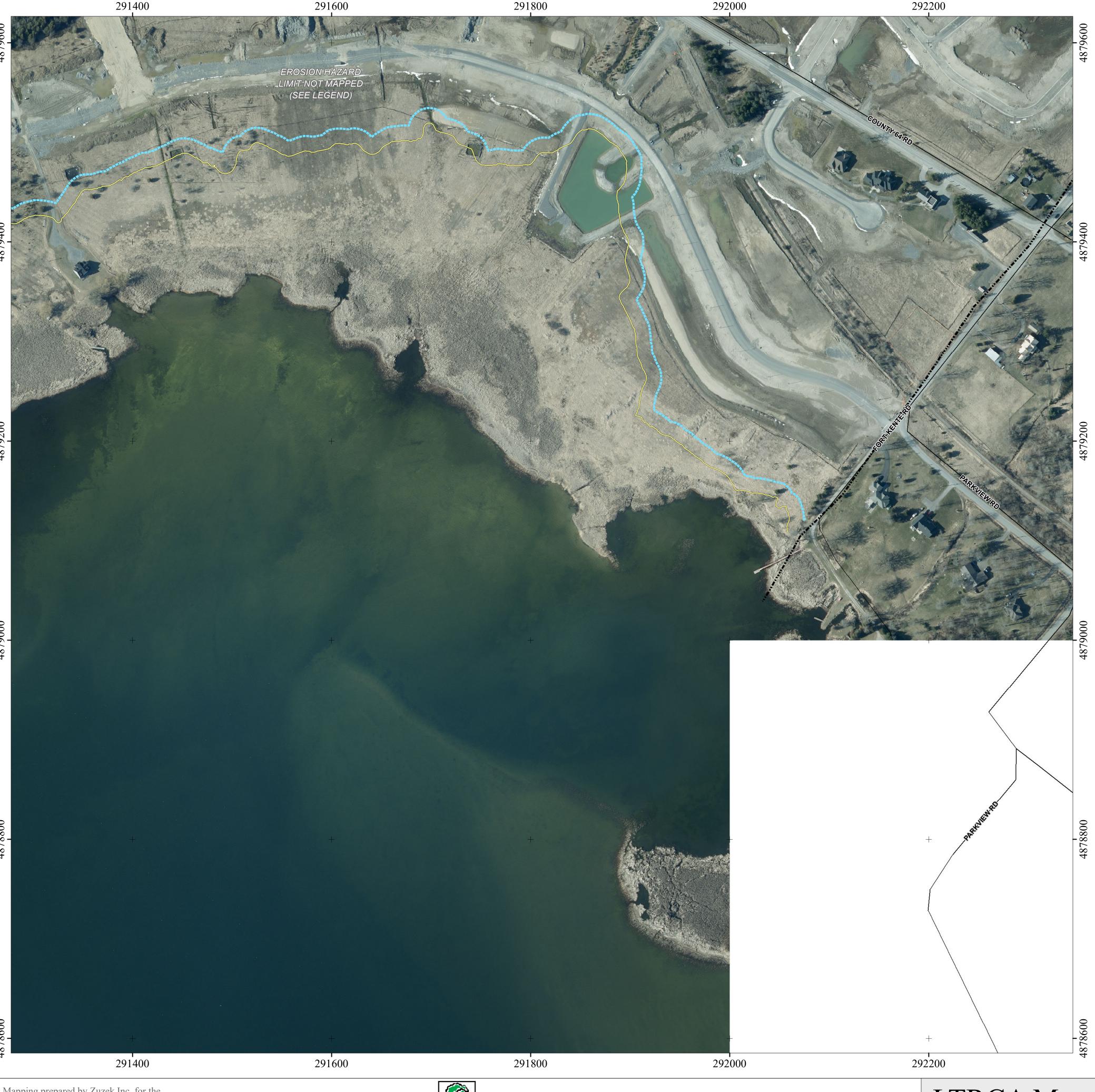




This map was published in March 2020 for LTRCA. The mapping of hazardous lands, including erosion, flooding, and dynamic beach areas, is subject to change. The proponent of a proposed development on or adjacent to the hazardous lands should contact LTRCA to discuss permit requirements.

Every reasonable effort has been made to ensure the accuracy of this map. However, neither LTRCA, Zuzek Inc., SJL Engineering, or any other affiliated party assume any liability arising from its use. This map is provided without warranty of any kind, either expressed or





Mapping prepared by Zuzek Inc. for the Lower Trent Region Conservation Authority.



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