# APPENDIX D Flood Inundation Maps



1. Please refer to the accompanying St. Albert Flood Hazard Study for important information concerning these maps.

- 2. Within the flood inundation areas shown on this map, there may be isolated pockets of high ground. To determine whether or not a particular site is subject to flooding, reference should be made to the computed flood levels in conjunction with site-specific surveys where detailed definition is required.
- 3. Non-riverine and local sources of water have not been considered, and structures such roads, railways or barriers such as levees can restrict water flow and affect local flood levels. Channel obstruction, local stormwater inflow, groundwater seepage or other land drainage can cause flood levels to exceed those indicated on the map. Lands adjacent to a flooded area may be subject to flooding from tributary streams not indicated on the maps.
- 4. Backwater flood inundation along Big Lake was mapped using the most upstream cross-section of the hydraulic model.

Flood Inundation Mapping - Delineates flood inundation areas, showing the extent of one or more flood scenarios under existing conditions. Depending on the particular flood scenario, the mapping may be divided into multiple zones. Flood inundation mapping is typically used for near real-time emergency response planning and operations.

Flood Inundation Area - The area inundated during a particular flood scenario under existing conditions. The flood inundation area may be divided into multiple zones, including areas inundated due to potential flood control structure failure. Flood inundation areas may change as a result of future development or flow obstructions.

**Flood Scenario** - Flow conditions that describe a particular flood event. Flood scenarios typically represent a range of flows, based either on flood frequency analysis or set flow intervals. The flood scenarios included with this map set include the 2-year, 5-year, 10-year, 20-year, 35-year, 50-year, 75-year, 100-year, 200-year, 350-year, 500-year, 750-year and 1000-year flood events.

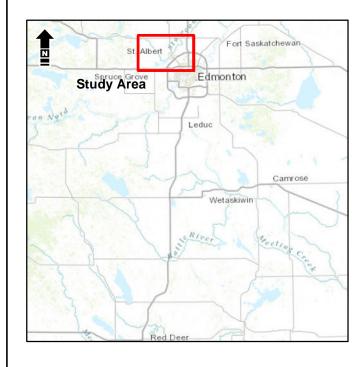
Data obtained from AltaLIS © Government of Alberta and GeoBase® used under license.

Aerial imagery acquired by OGL Engineering on May 26, 2019 for Alberta Environment and Parks.

Additional Base Mapping available ESRI Base Mapping and Imagery Services.

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community











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### **Open Water Inundation Index Map**

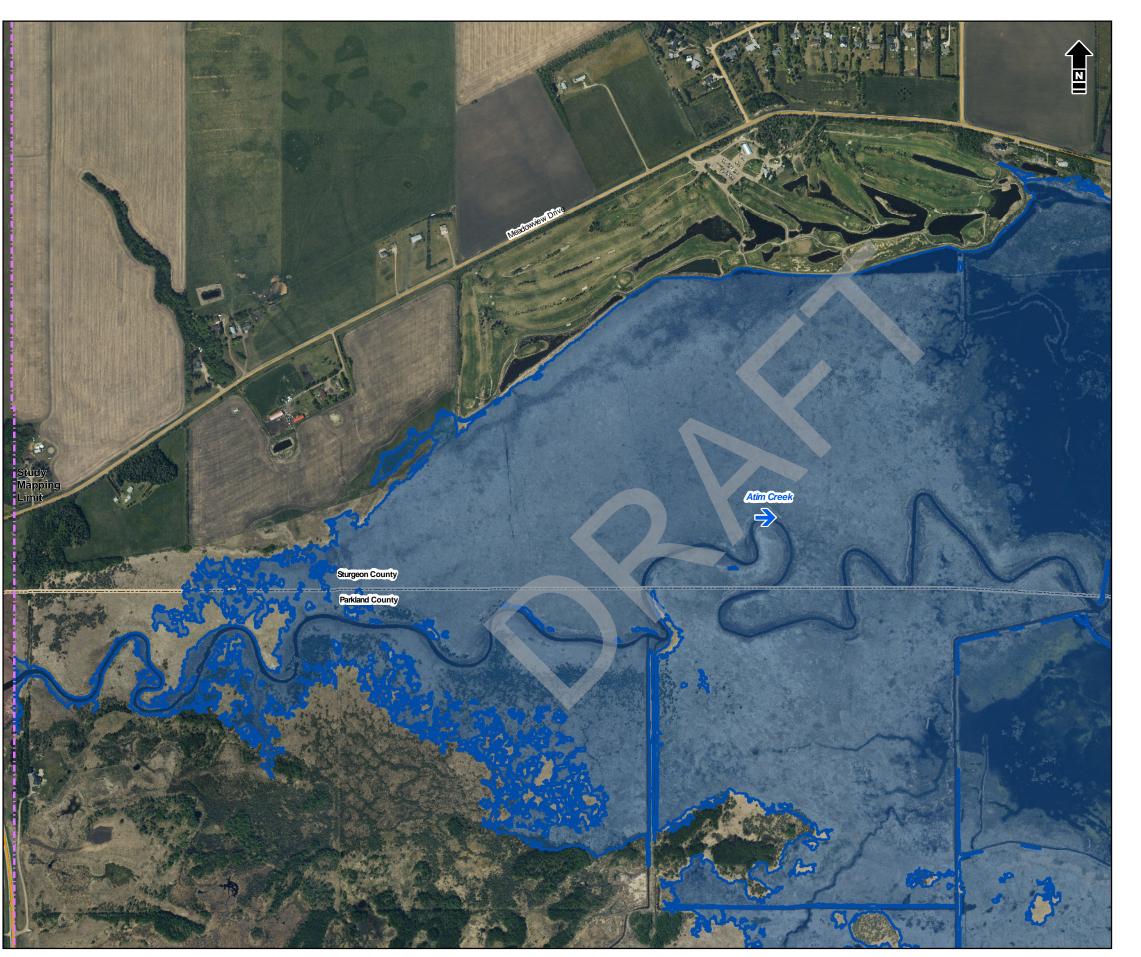
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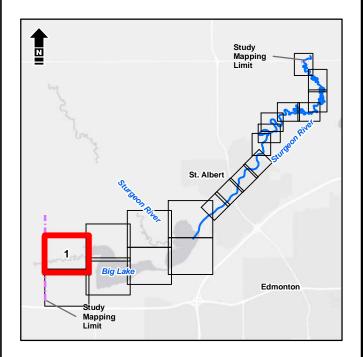
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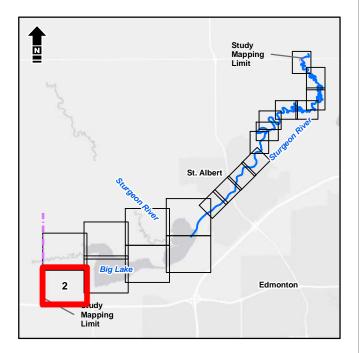
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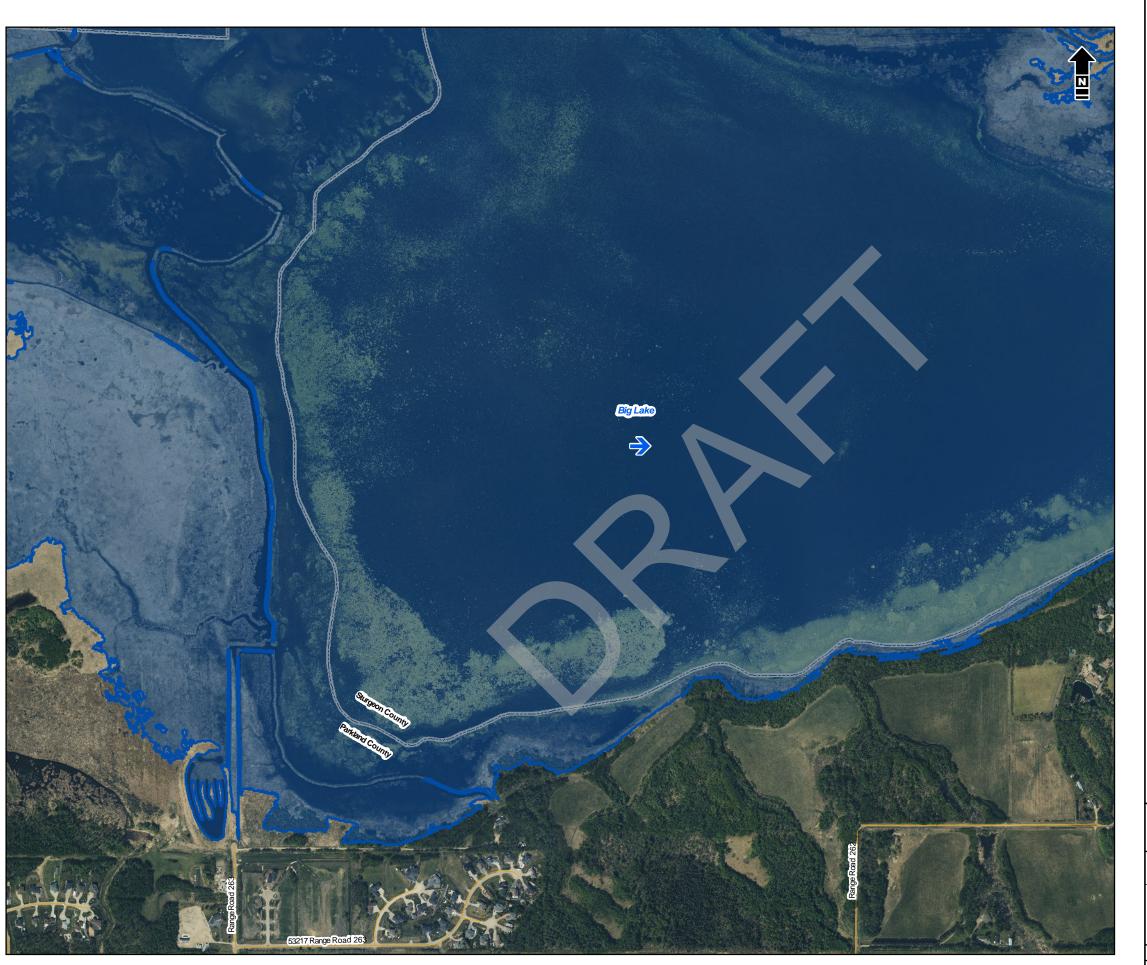


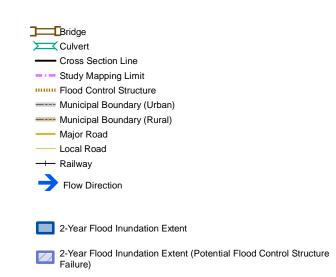
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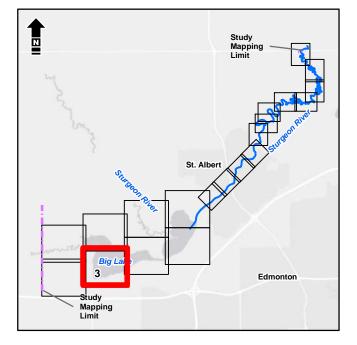
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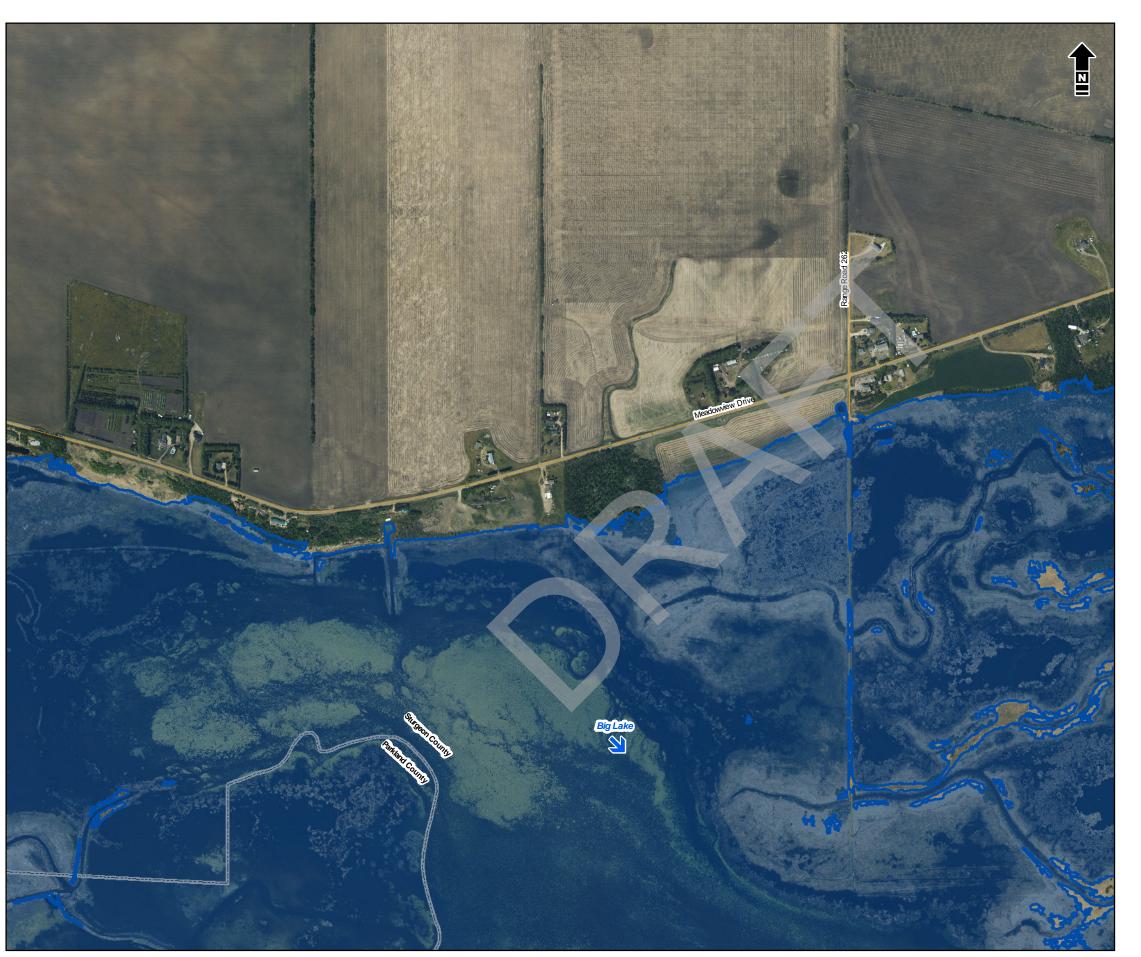


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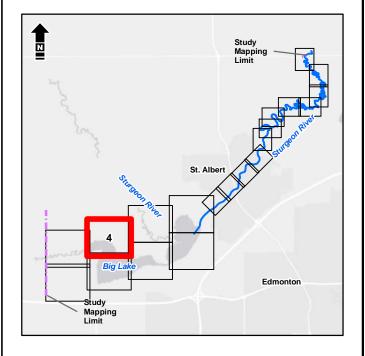
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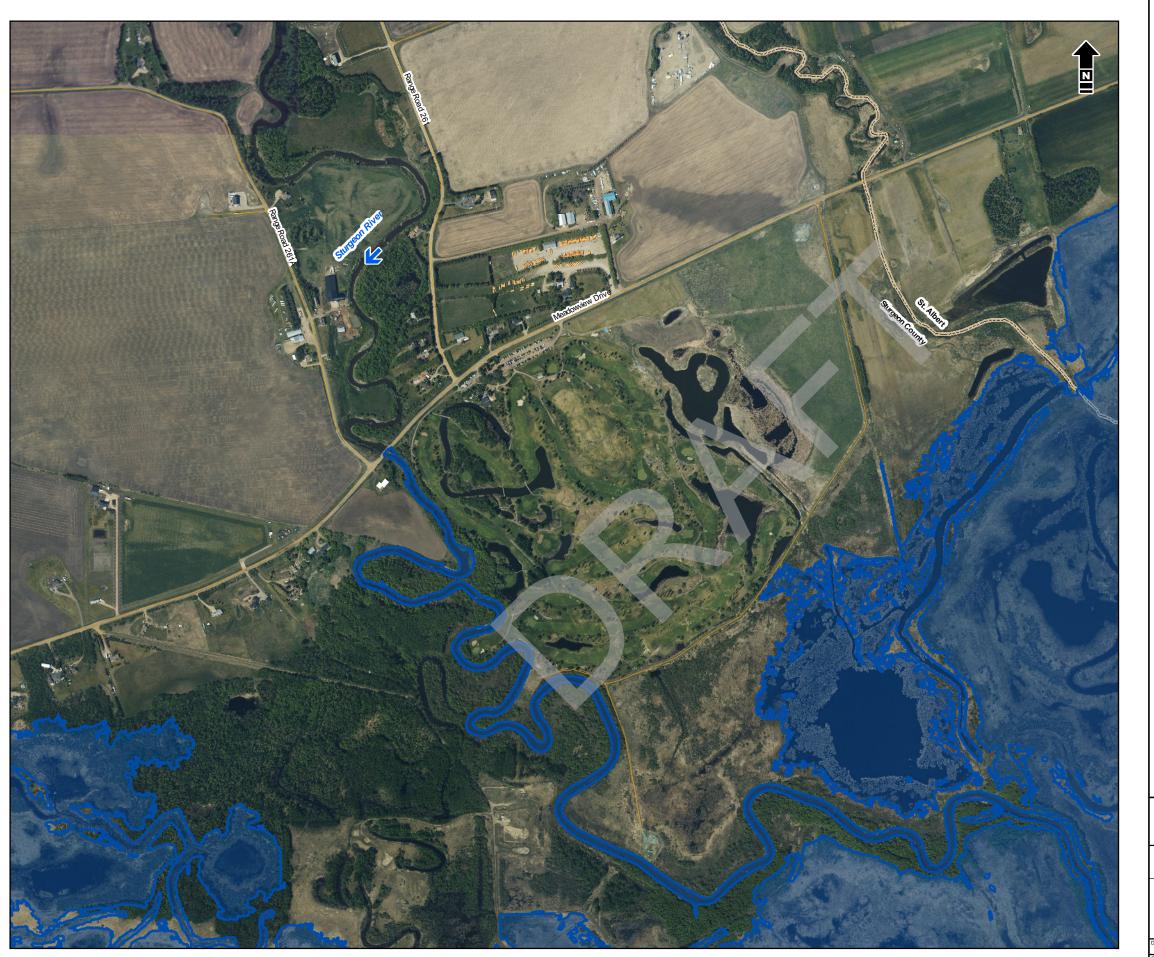


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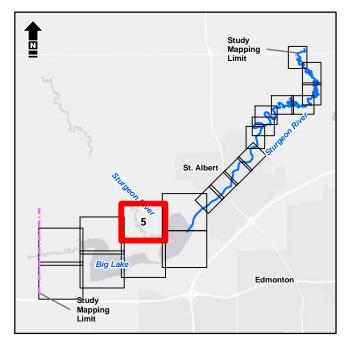
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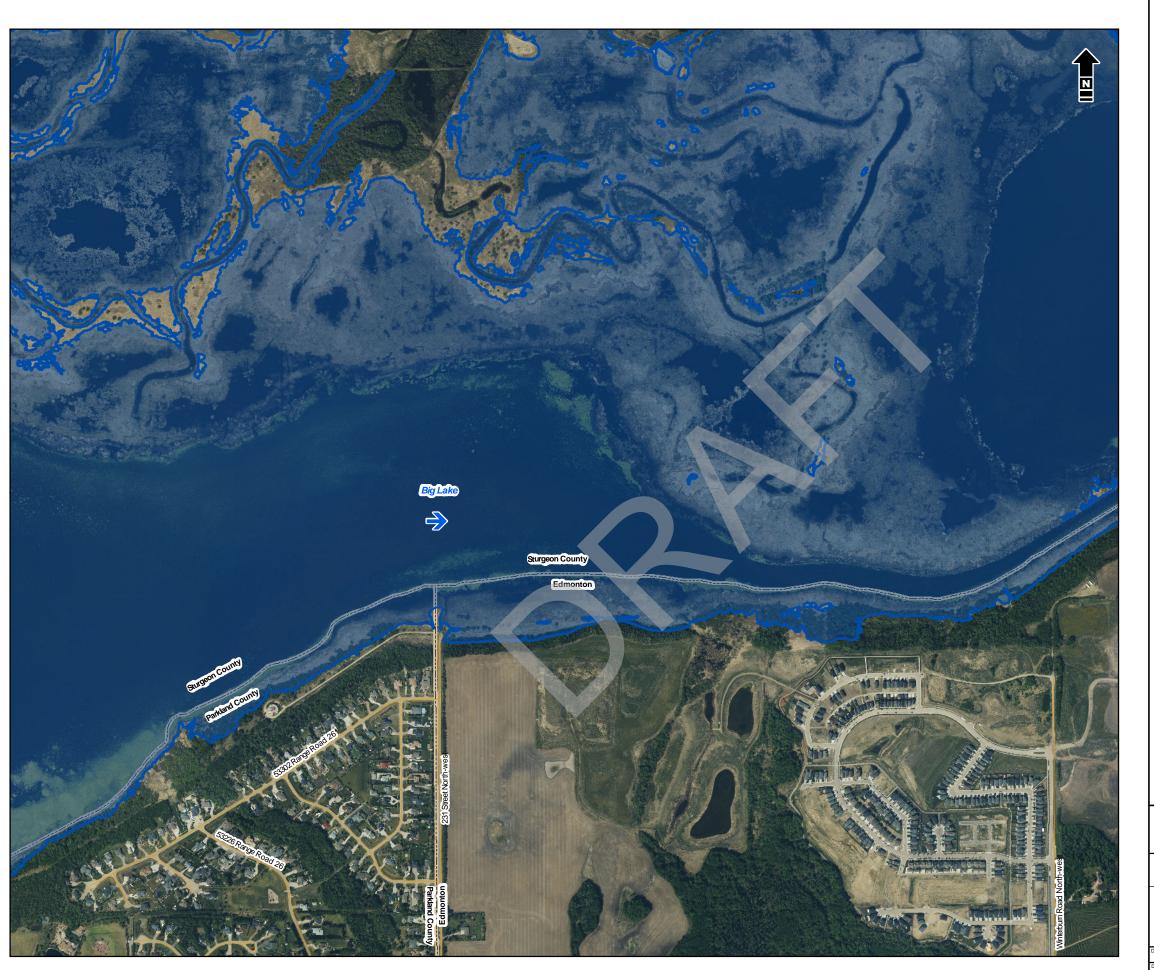


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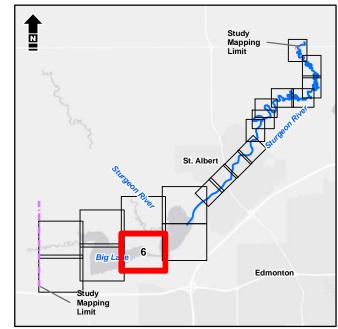
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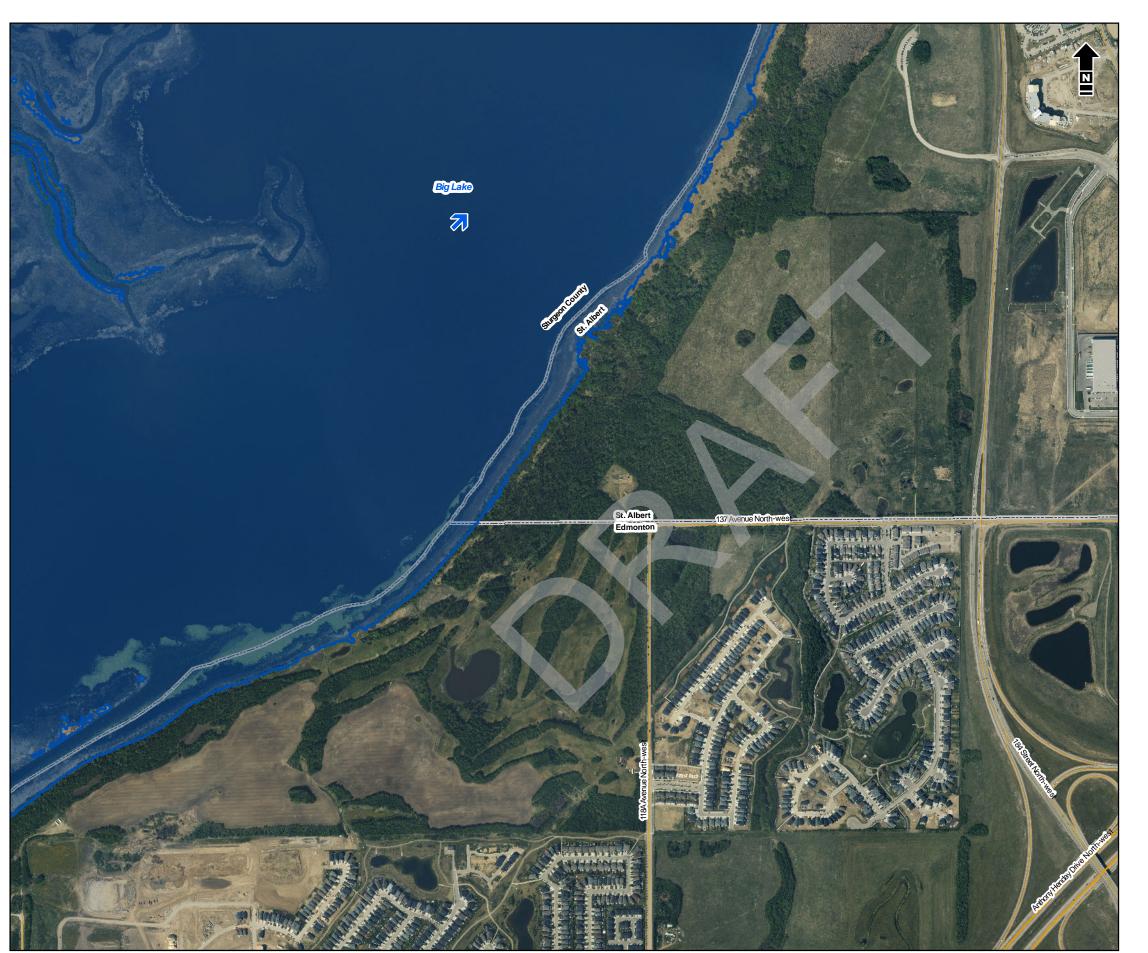
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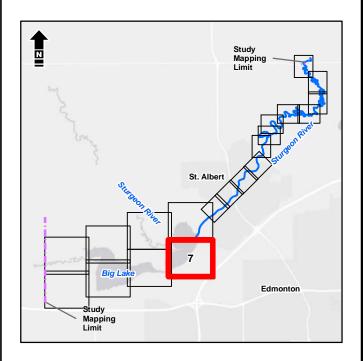
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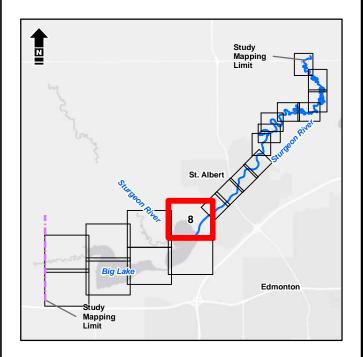
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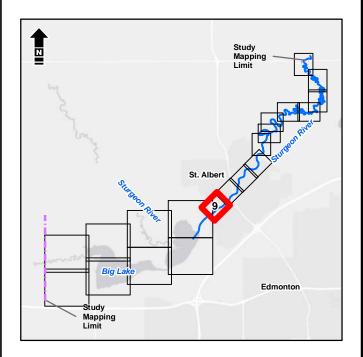
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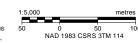
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### <u>DISCHARGE</u> Sturgeon River = 14 m<sup>3</sup>/s



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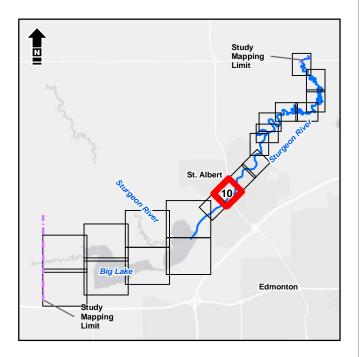
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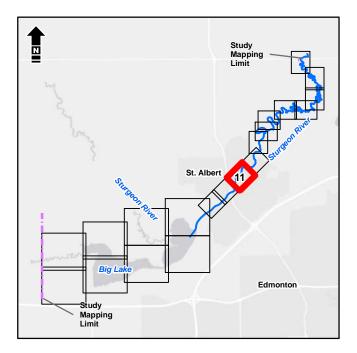
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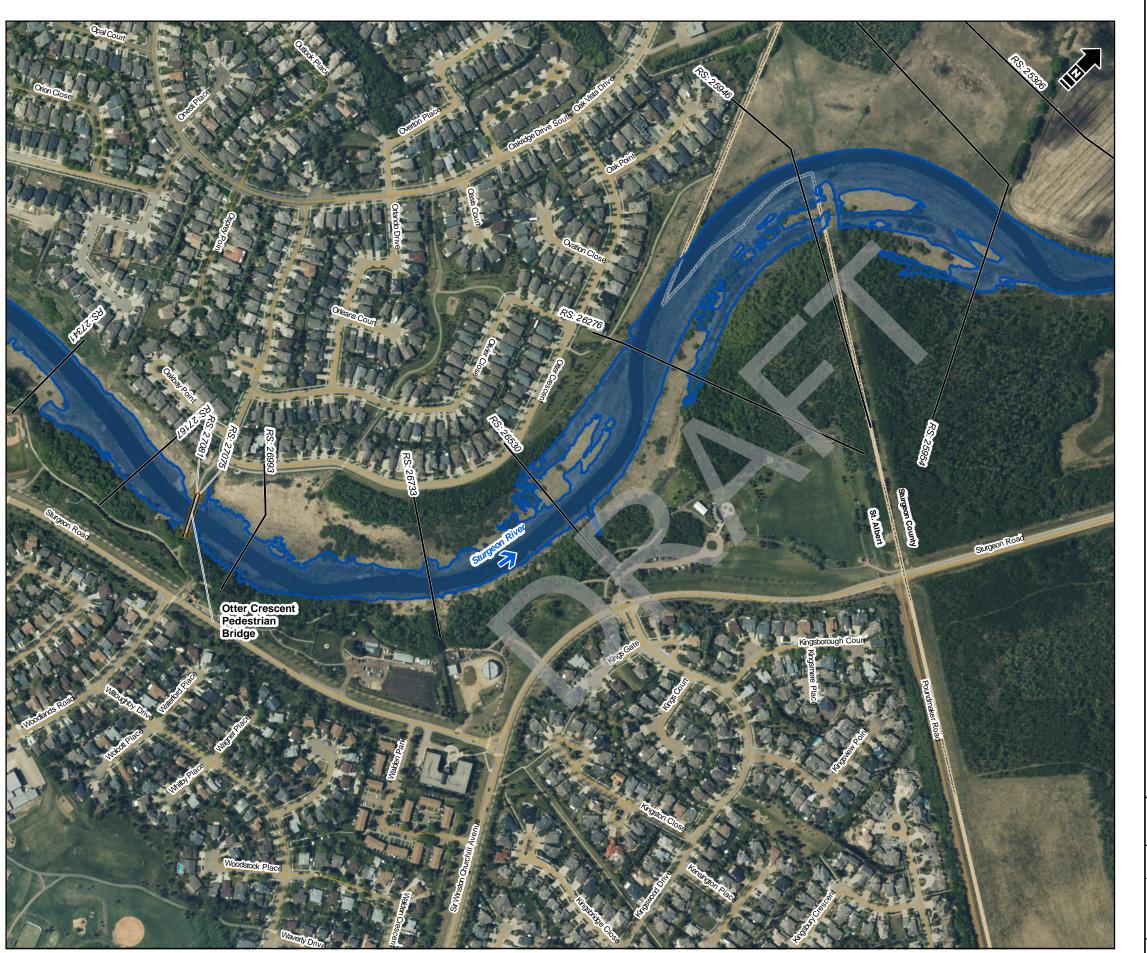
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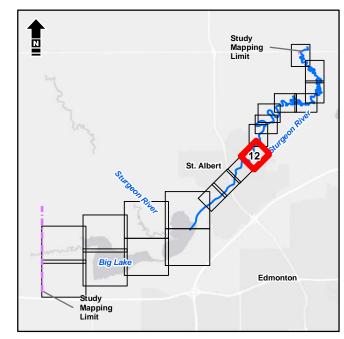
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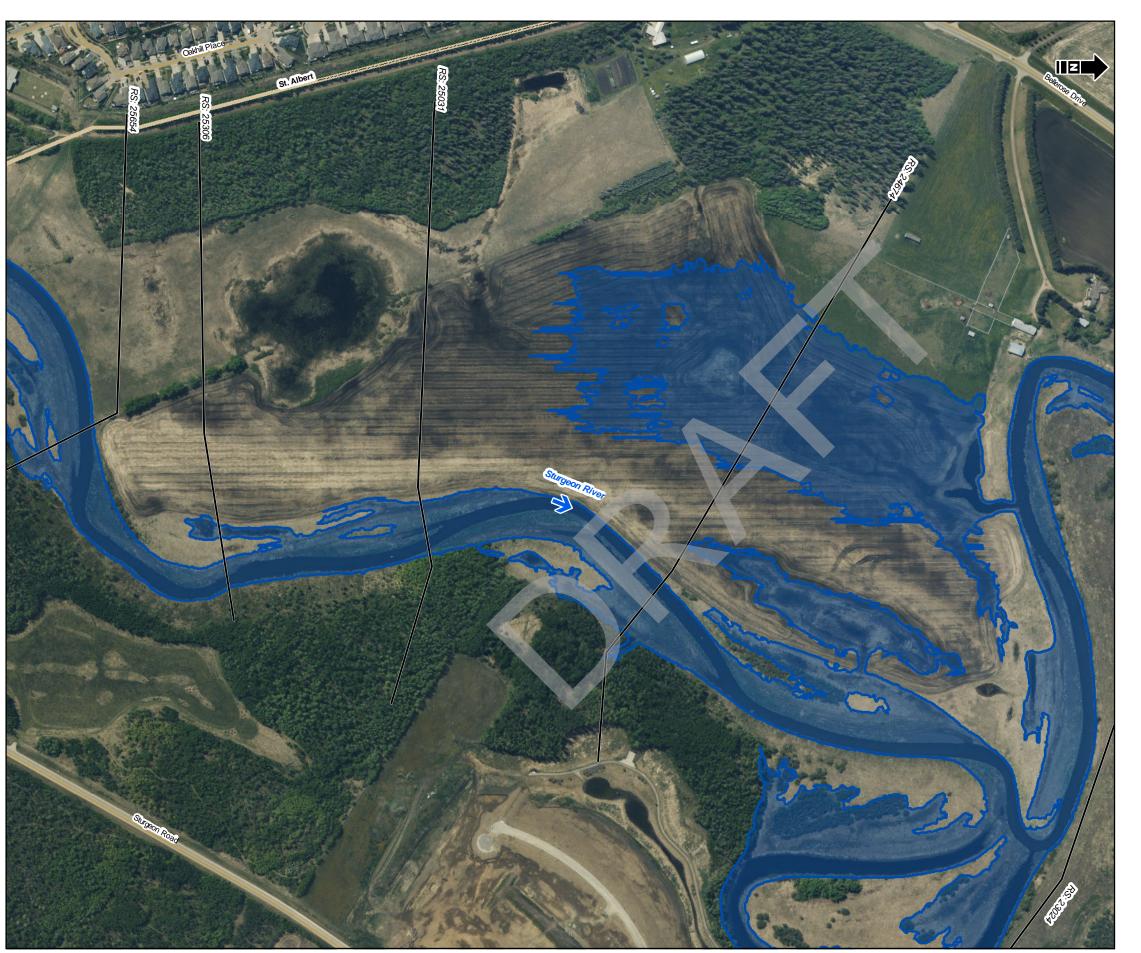






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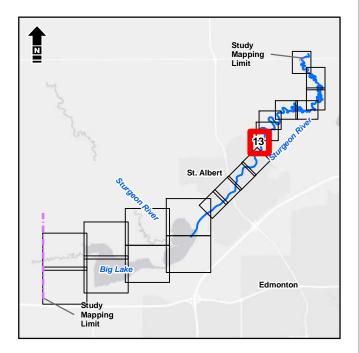


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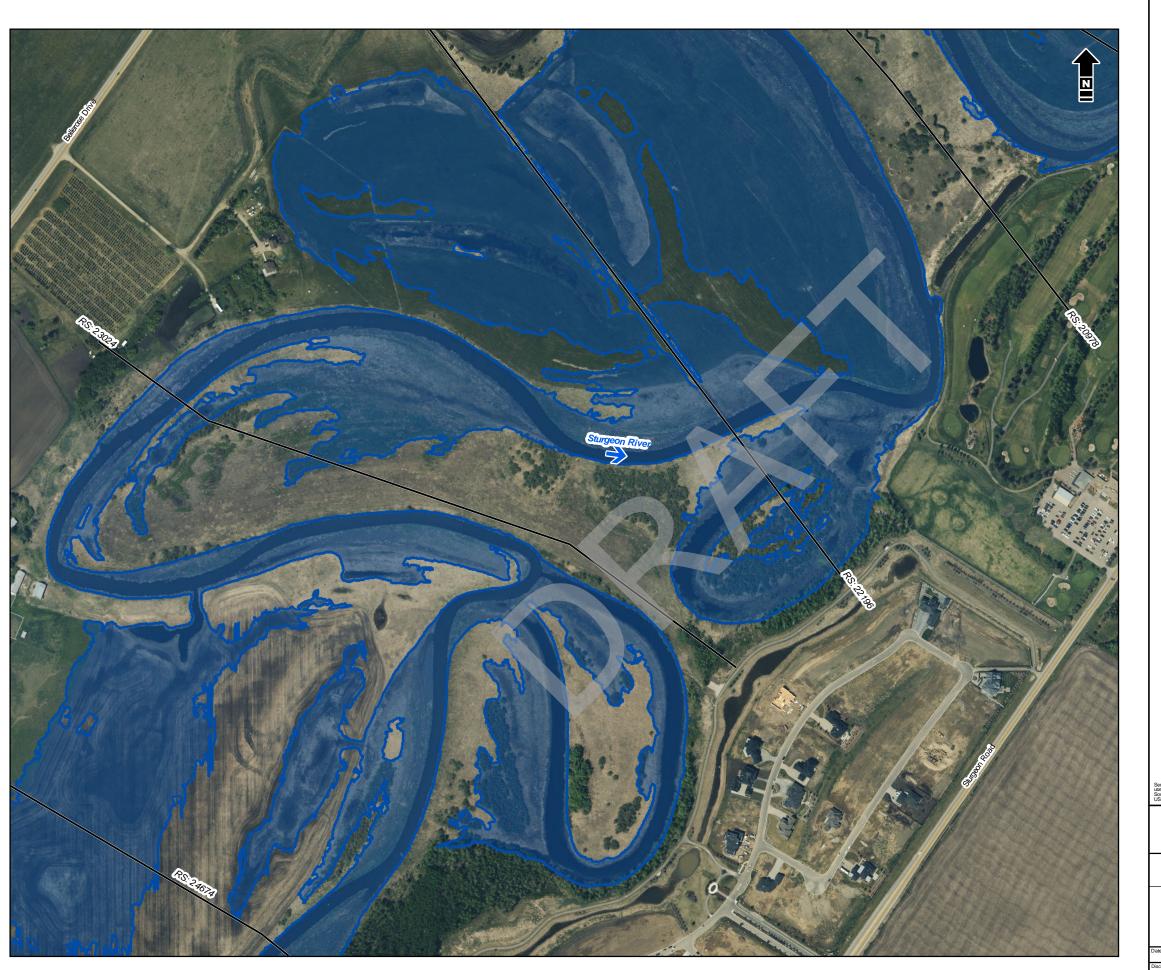
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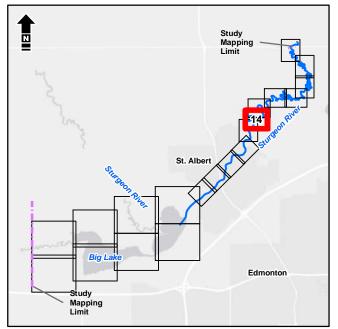
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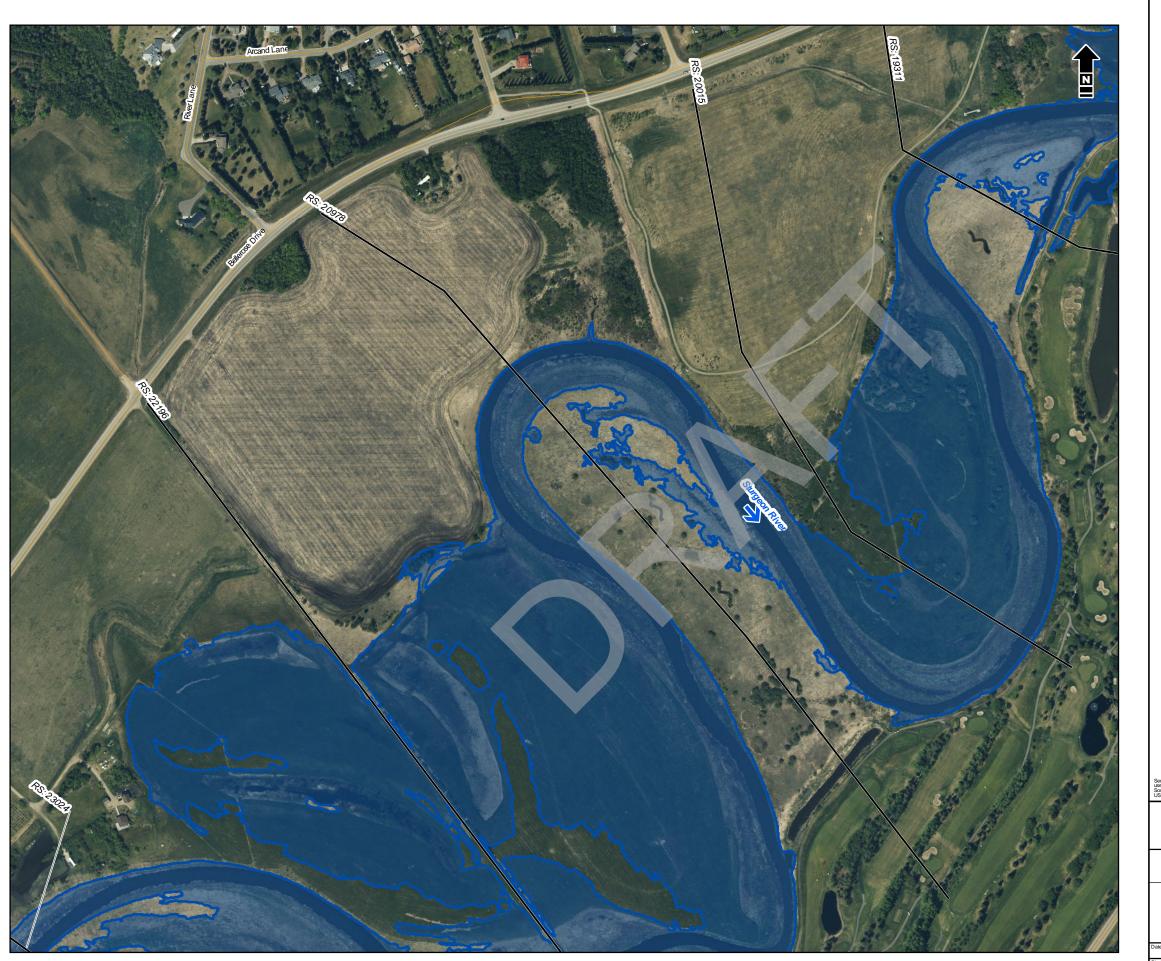






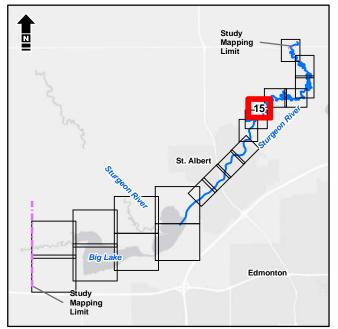
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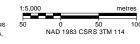
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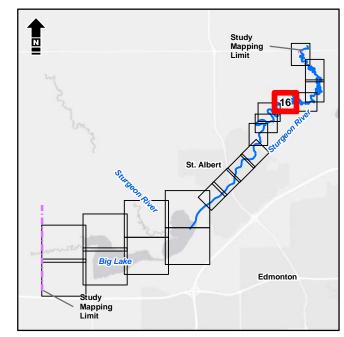
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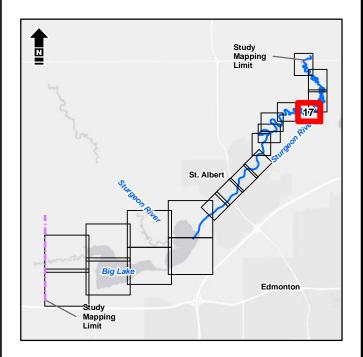
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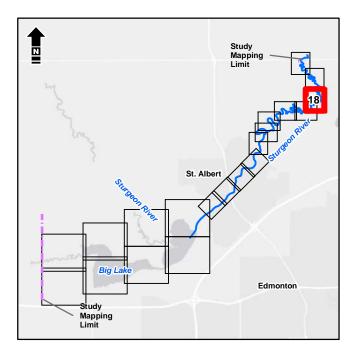
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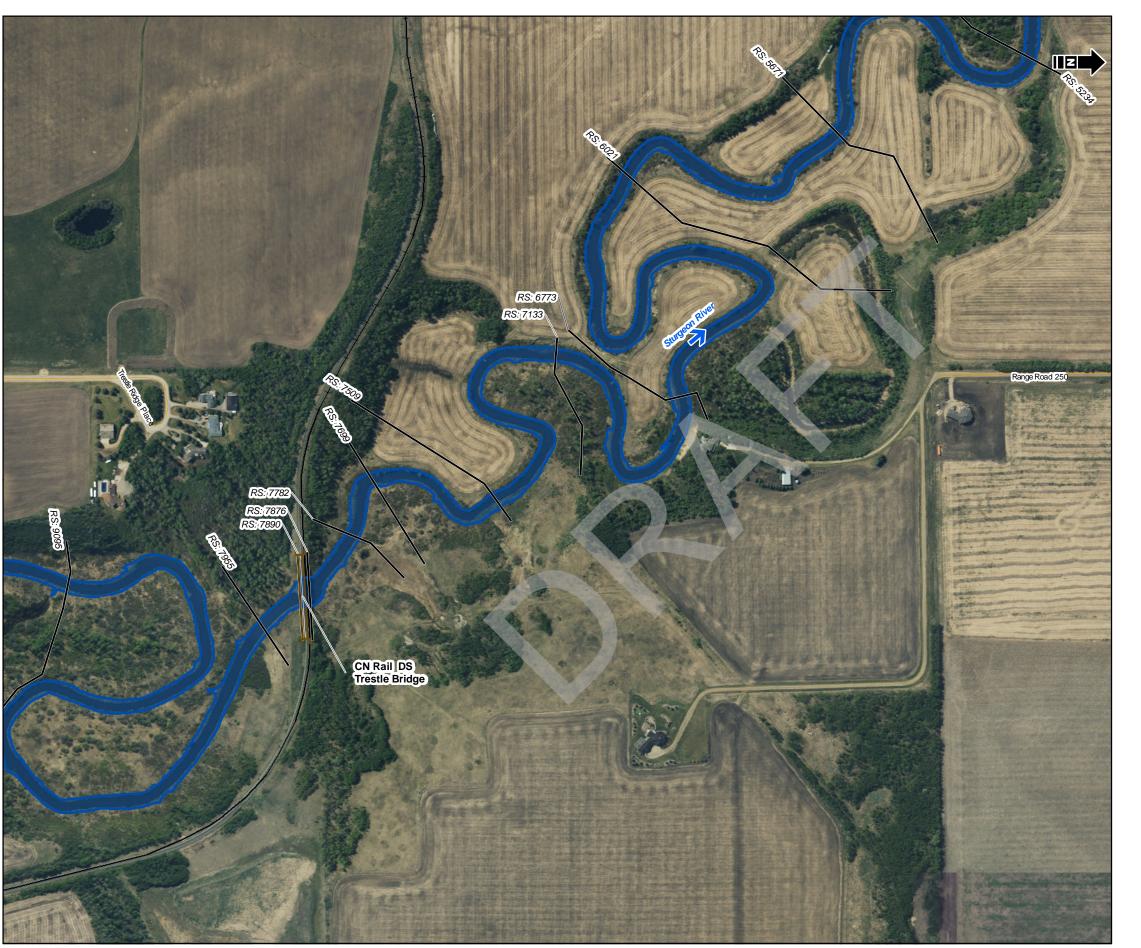




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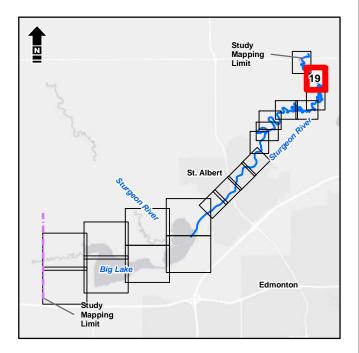
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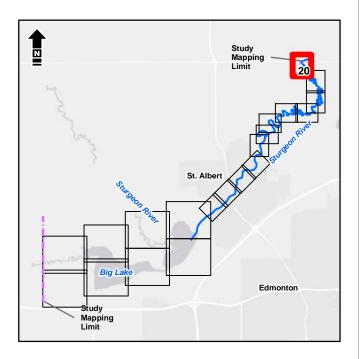
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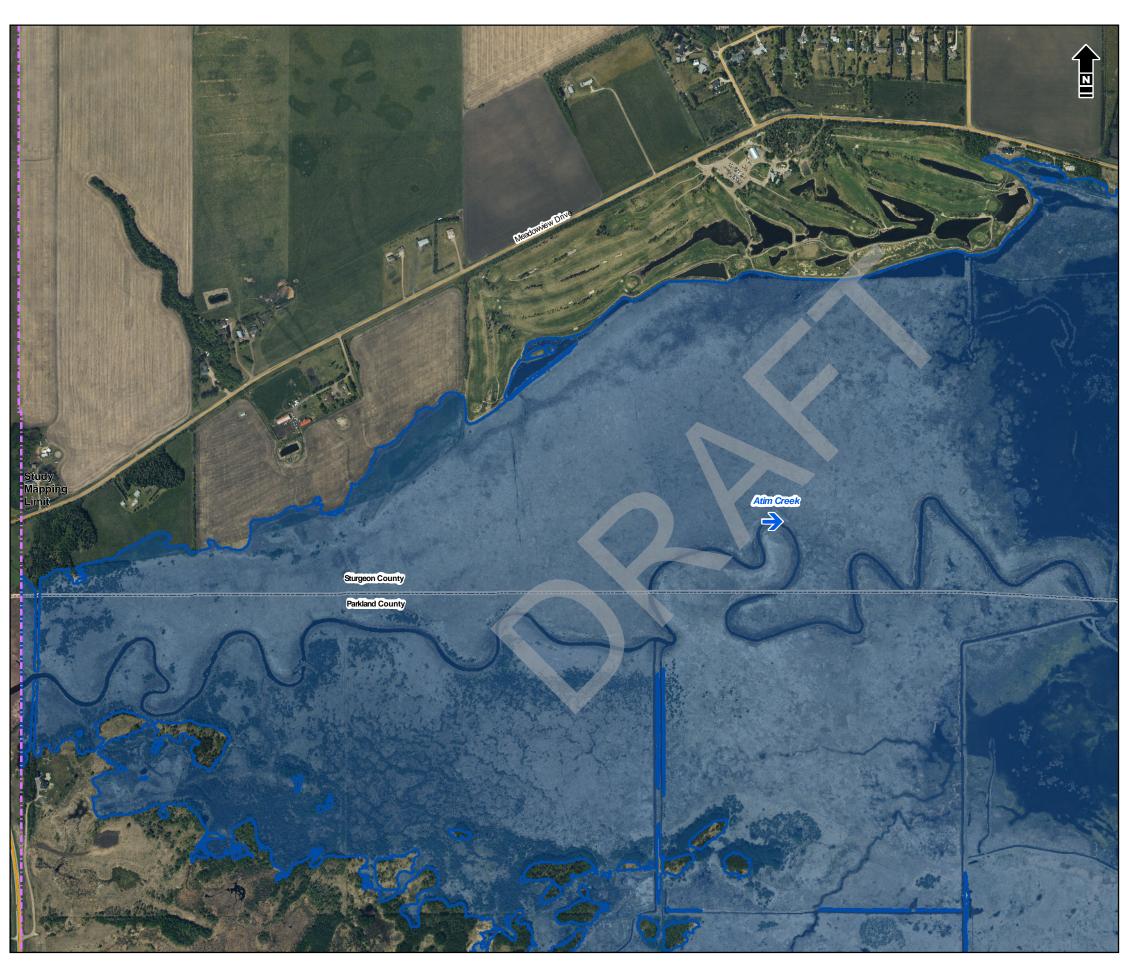


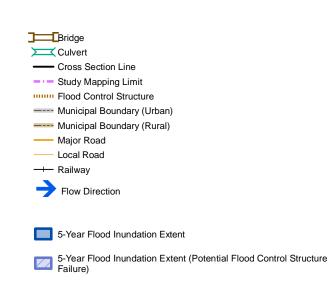


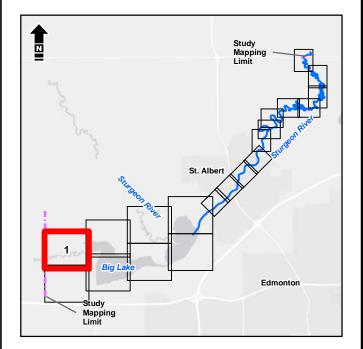
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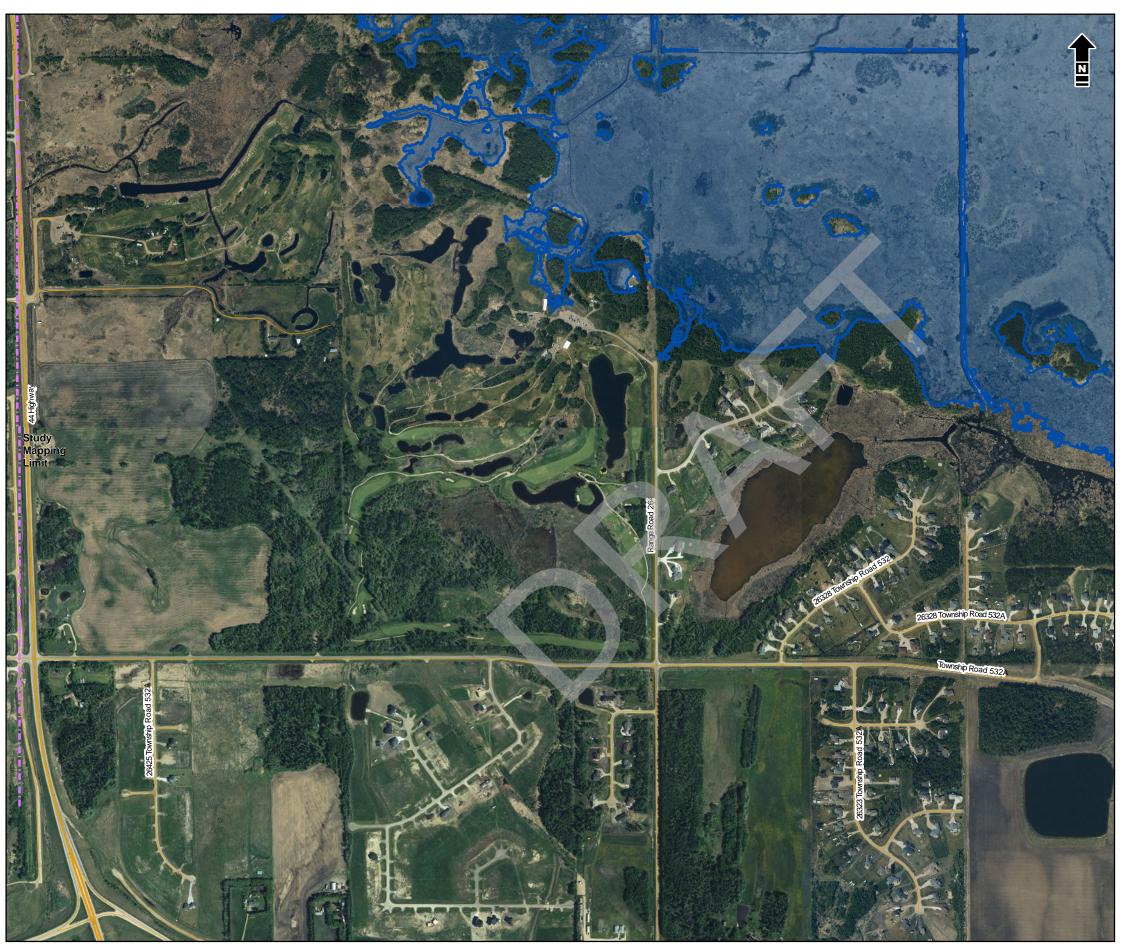
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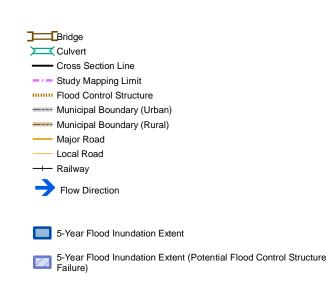
## Open Water Flood Inundation Mapbook | 5-Year

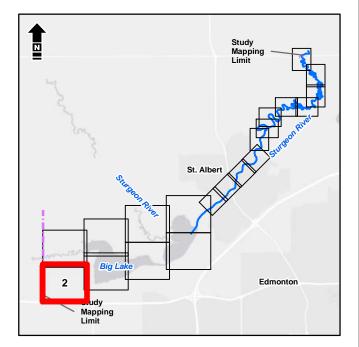
Date: March 2020 Project: 28312 Submitter: P. Rogers Reviewer:

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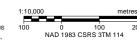
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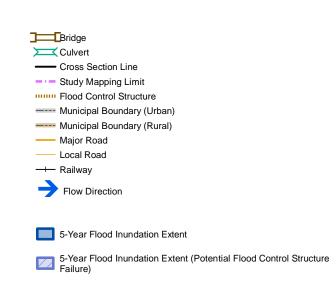
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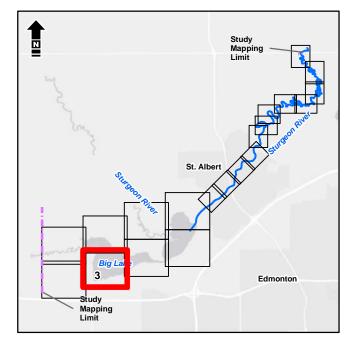
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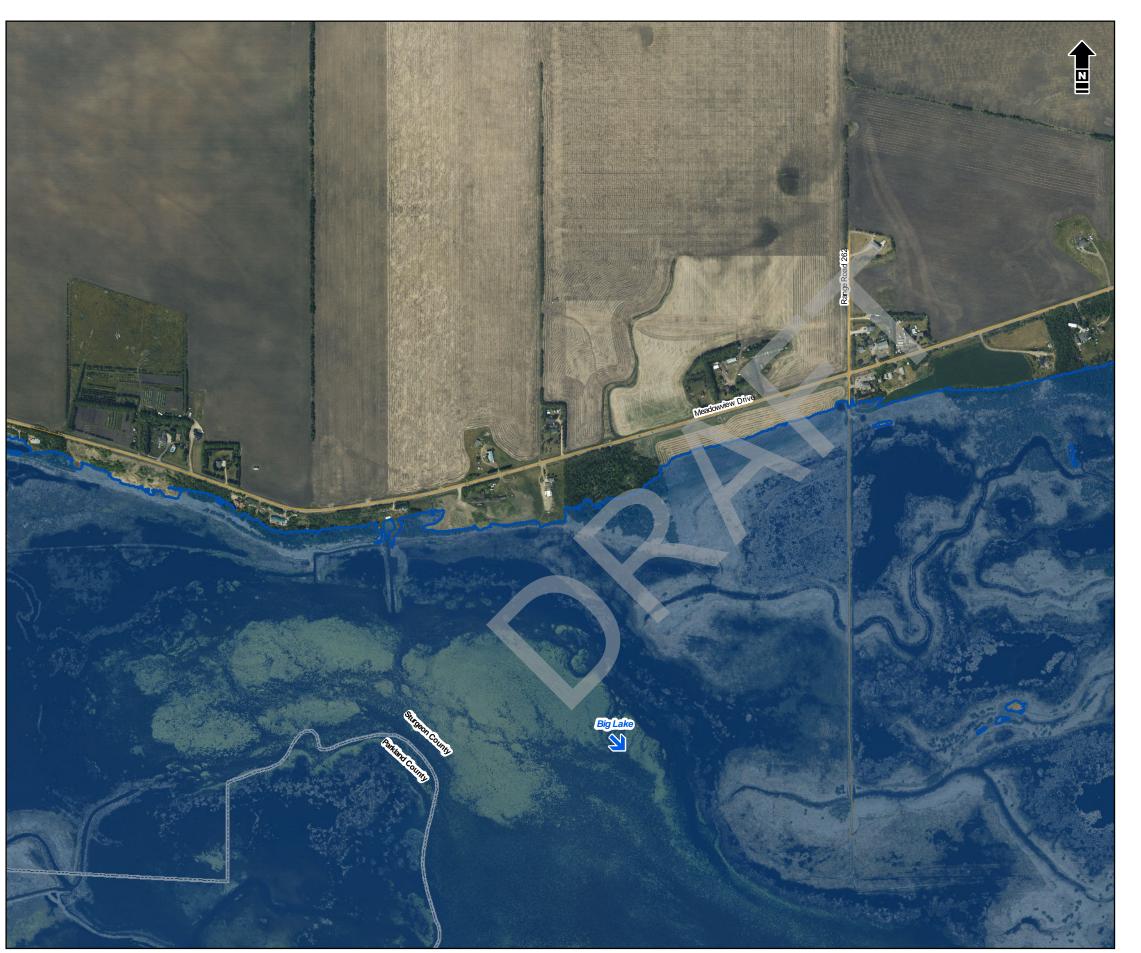
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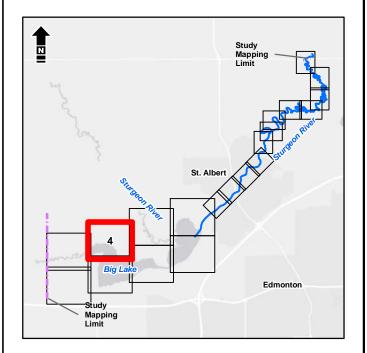
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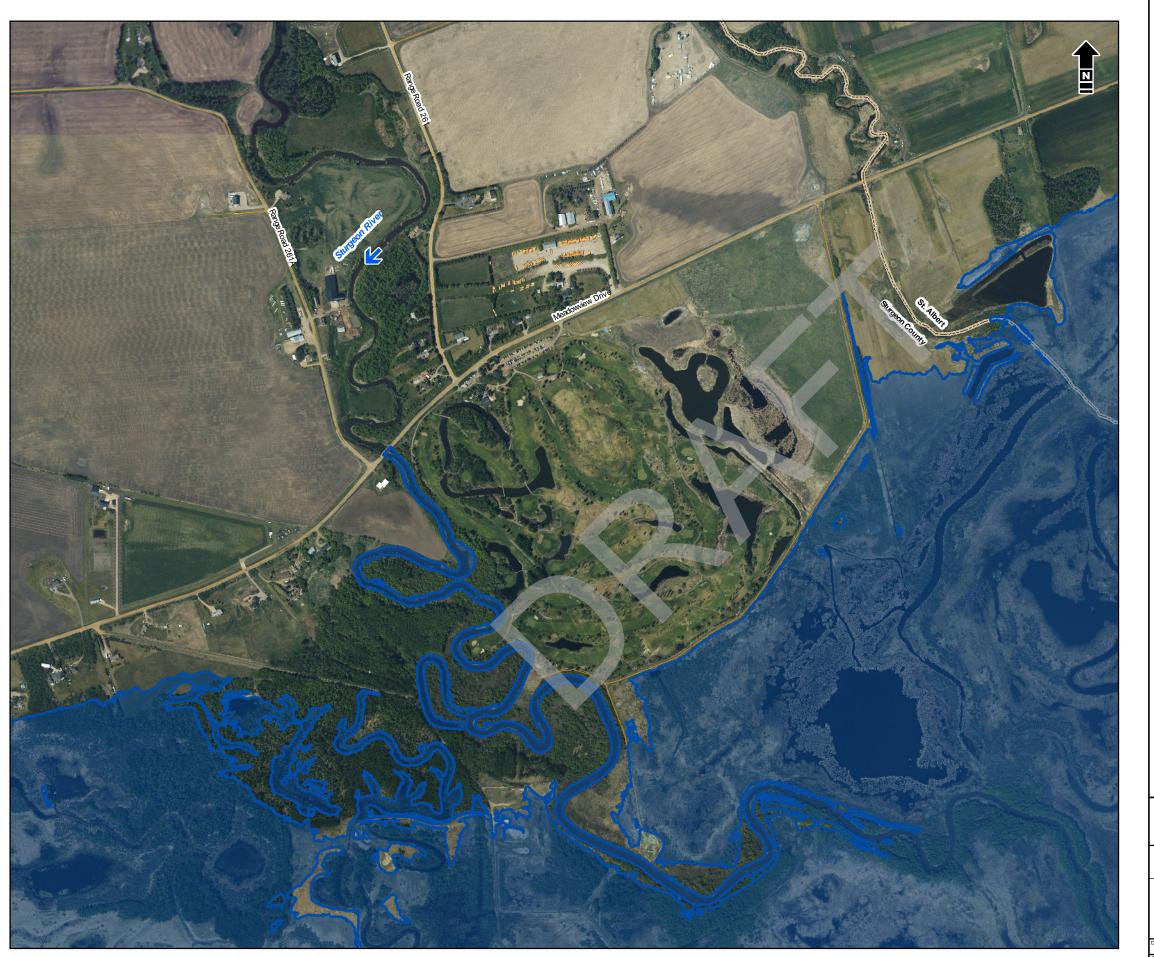


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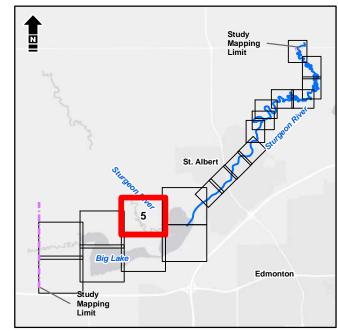
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Bridge
Culvert
Cross Section Line
Study Mapping Limit
Flood Control Structure
Municipal Boundary (Urban)
Major Road
Local Road
Railway
Flow Direction

5-Year Flood Inundation Extent (Potential Flood Control Structure Failure)



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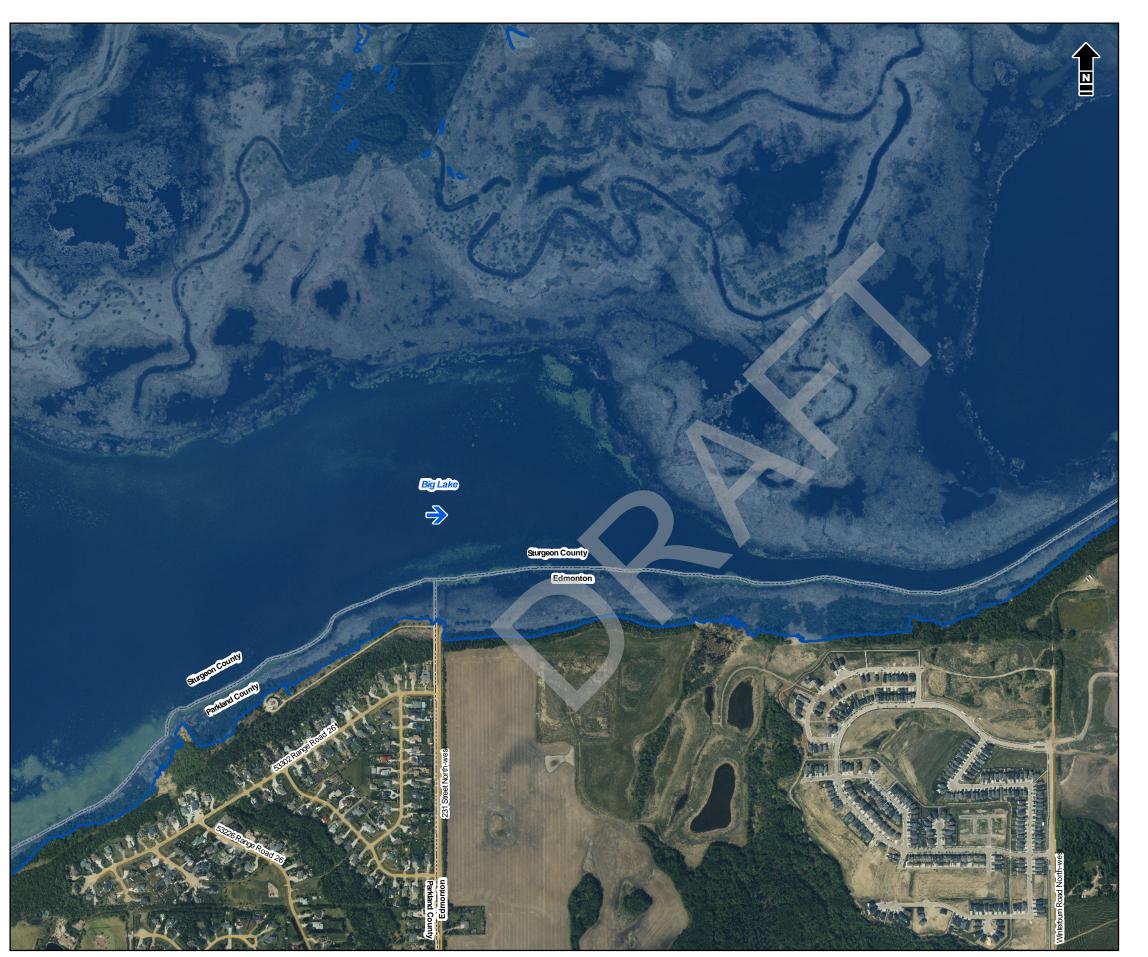
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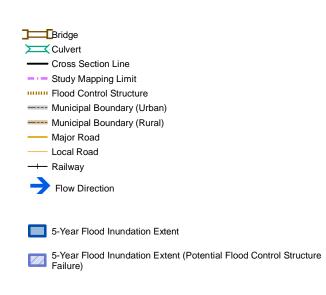
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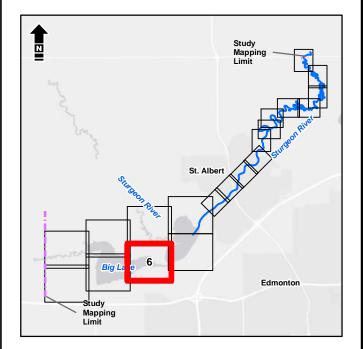
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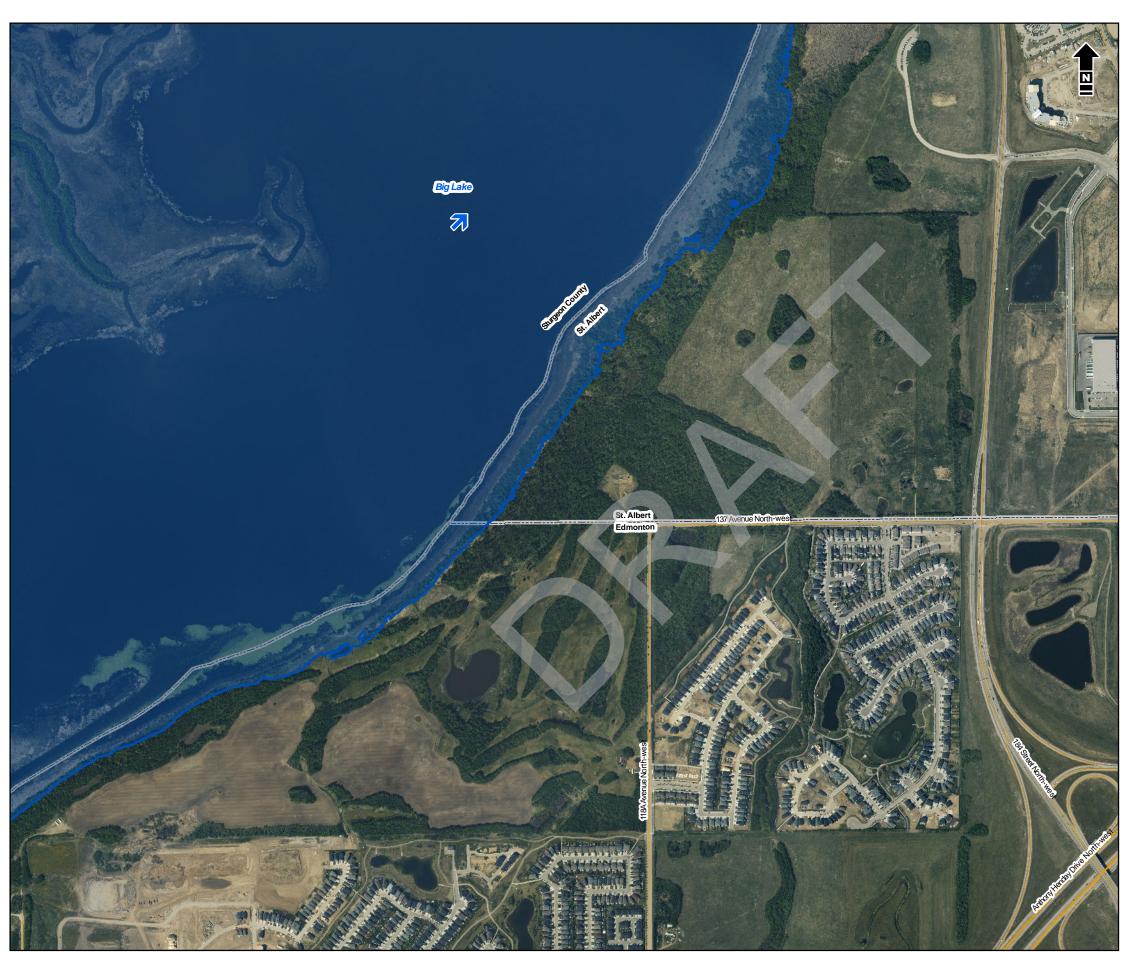
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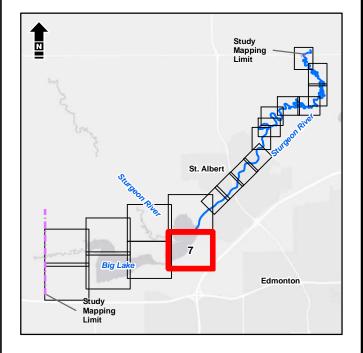
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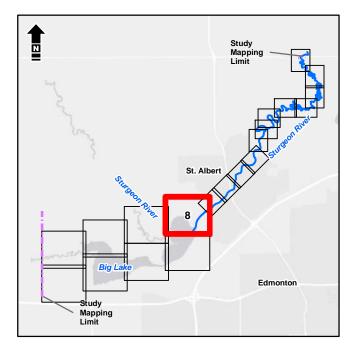
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Bridge Culvert ---- Cross Section Line -- Study Mapping Limit Flood Control Structure ---- Municipal Boundary (Urban) ---- Municipal Boundary (Rural) --- Major Road — Local Road — Railway Flow Direction 5-Year Flood Inundation Extent 5-Year Flood Inundation Extent (Potential Flood Control Structure Failure)



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## Open Water Flood Inundation Mapbook | 5-Year

March 2020 M. Shome



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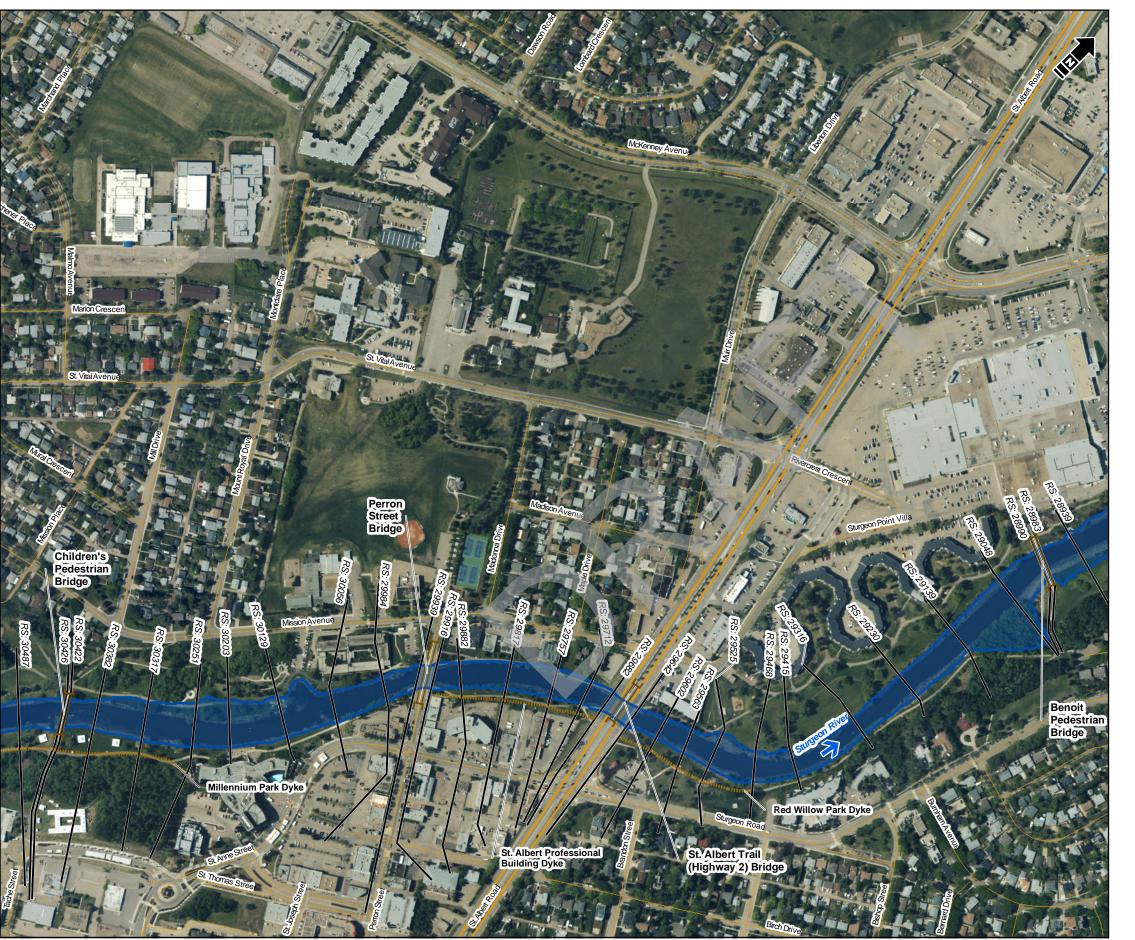
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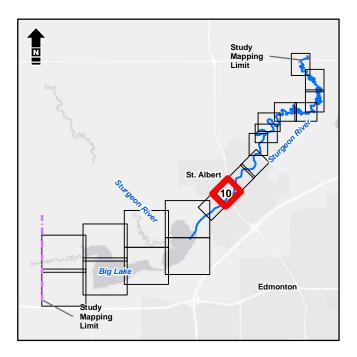
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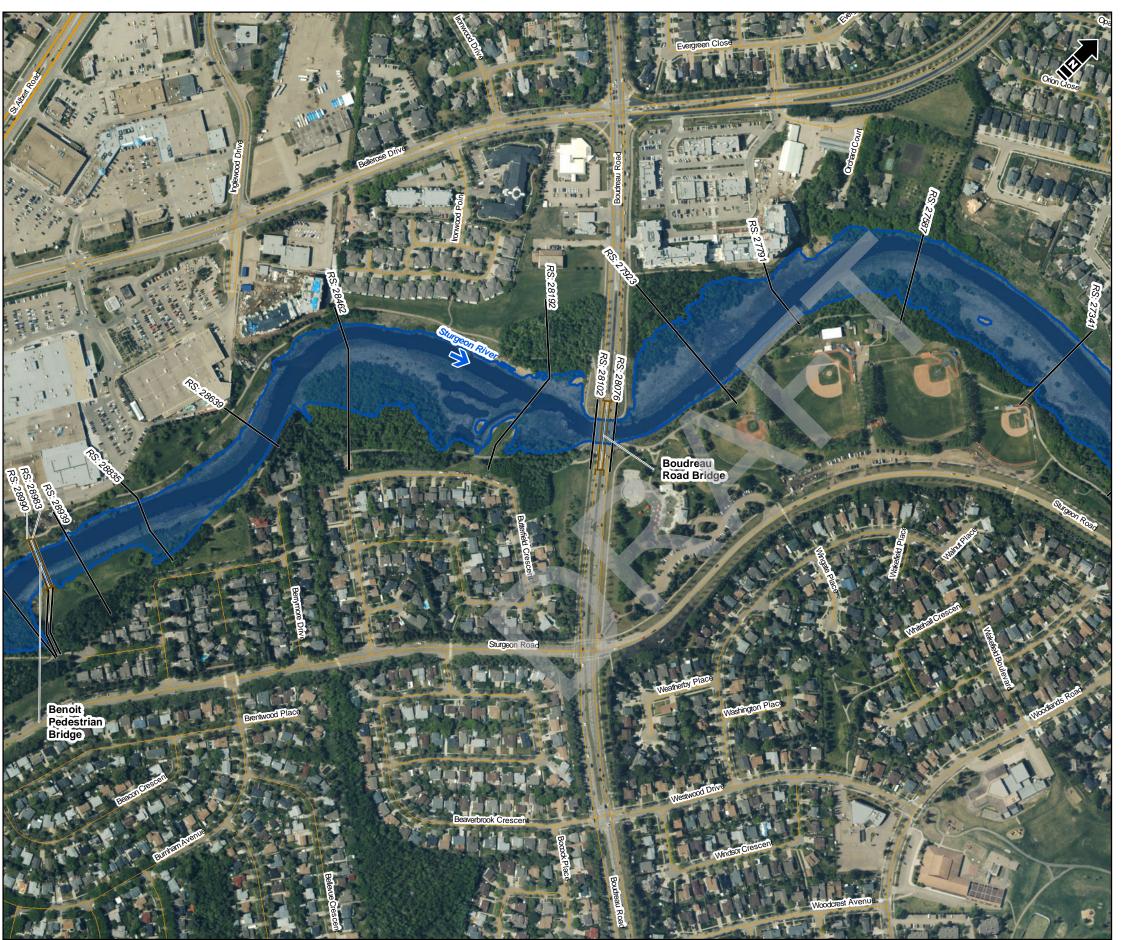






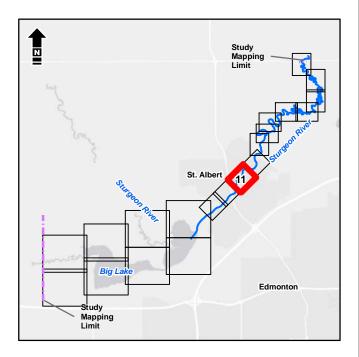
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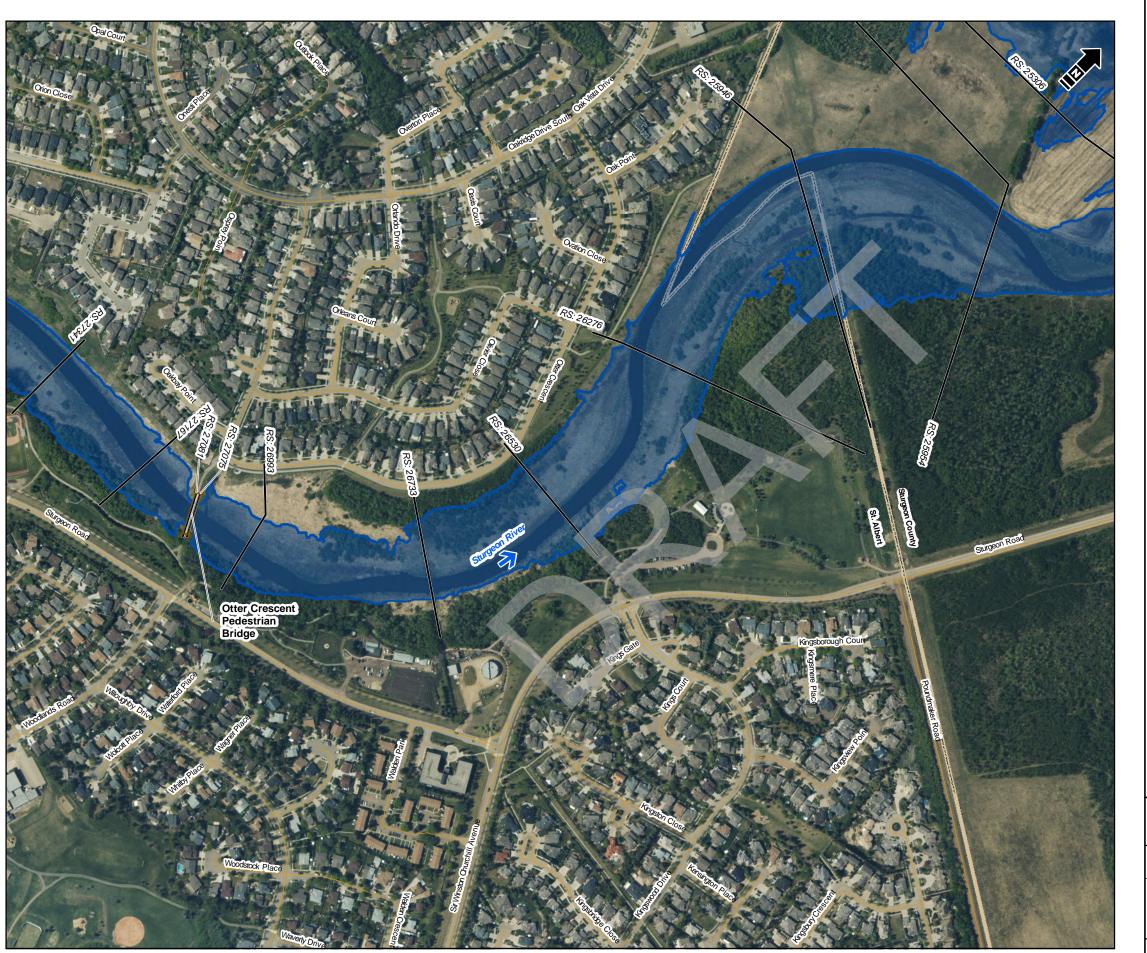
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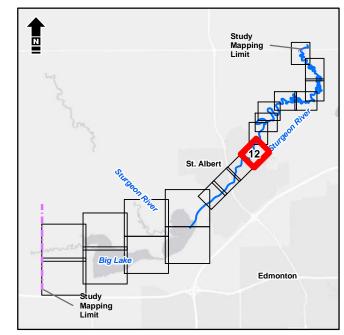
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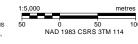


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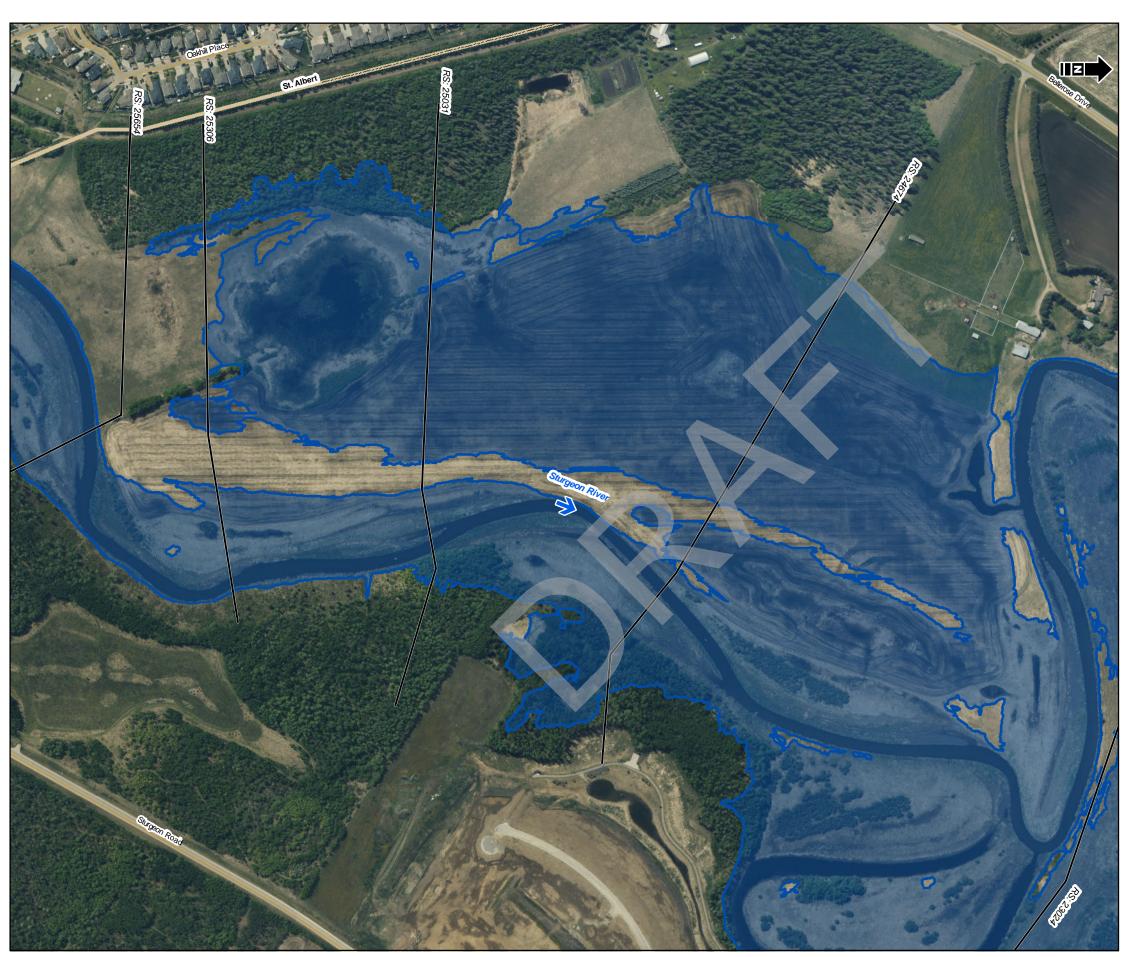




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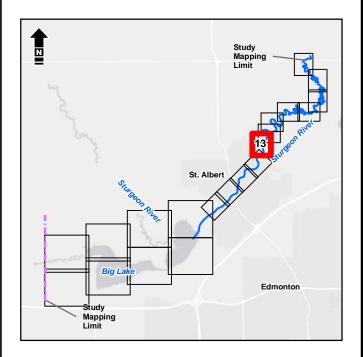
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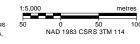
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5-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

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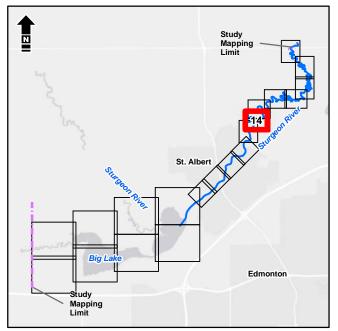
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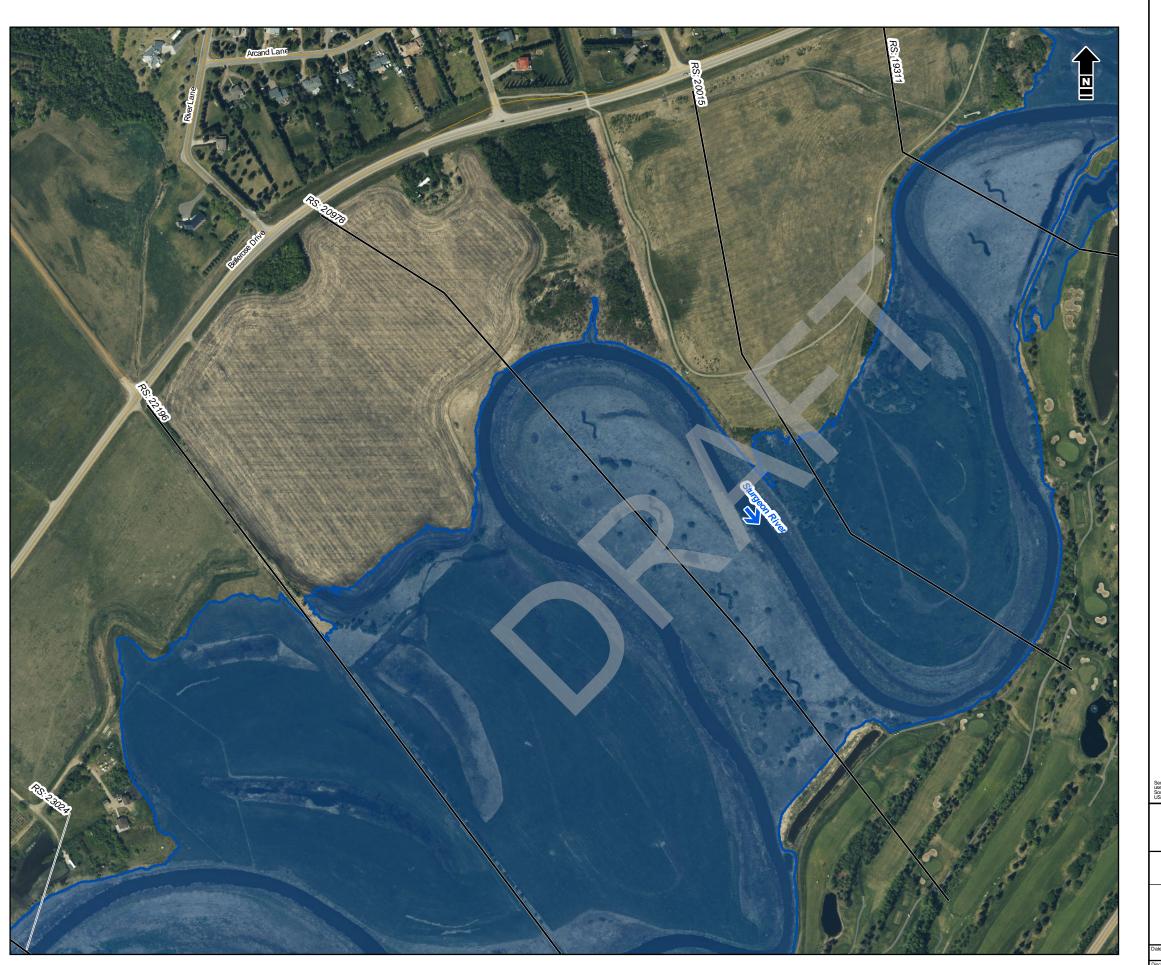




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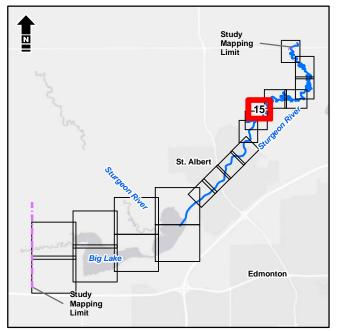
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March 2020

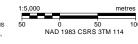


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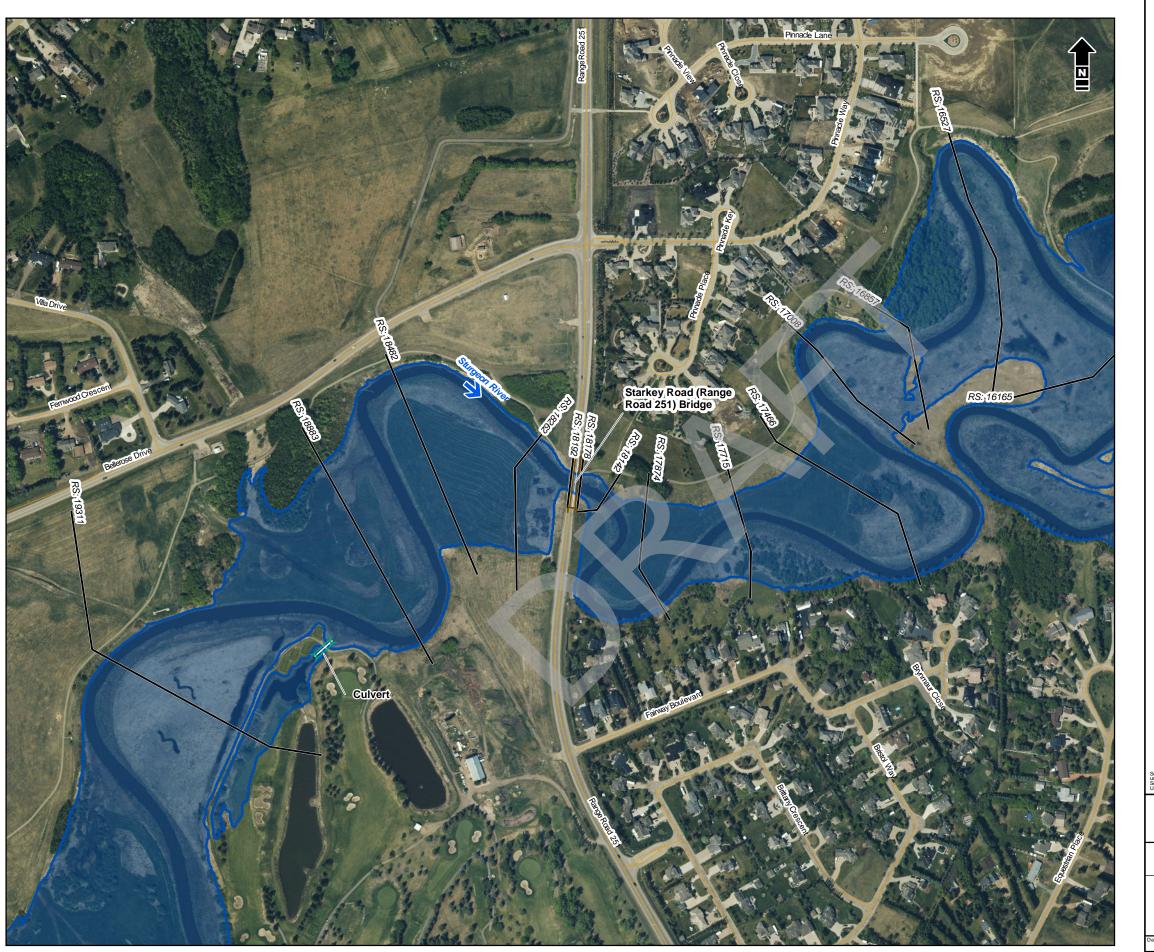




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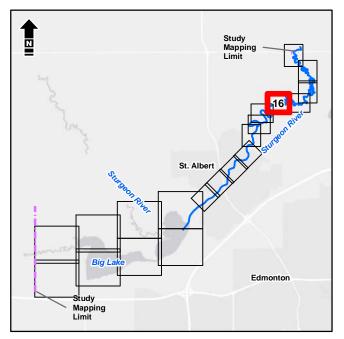
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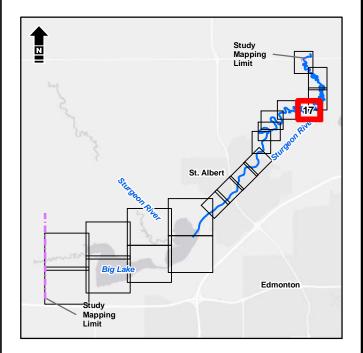
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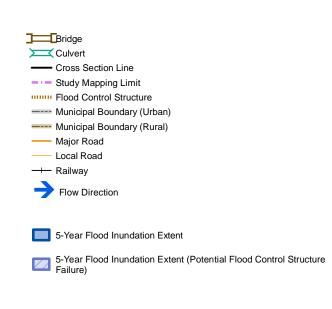


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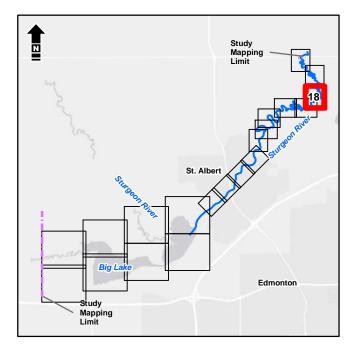
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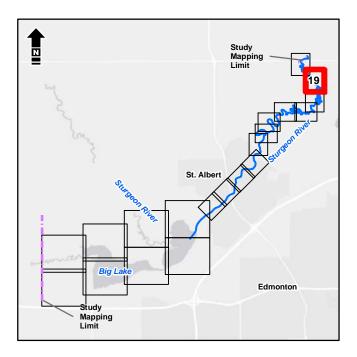
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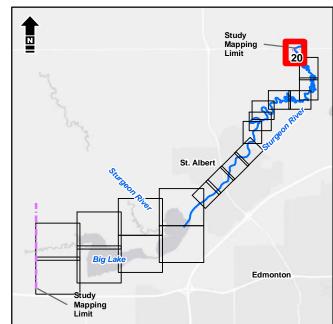
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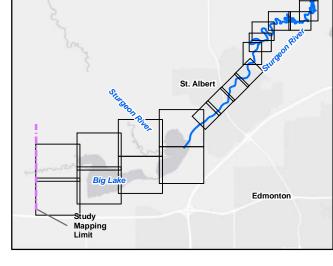
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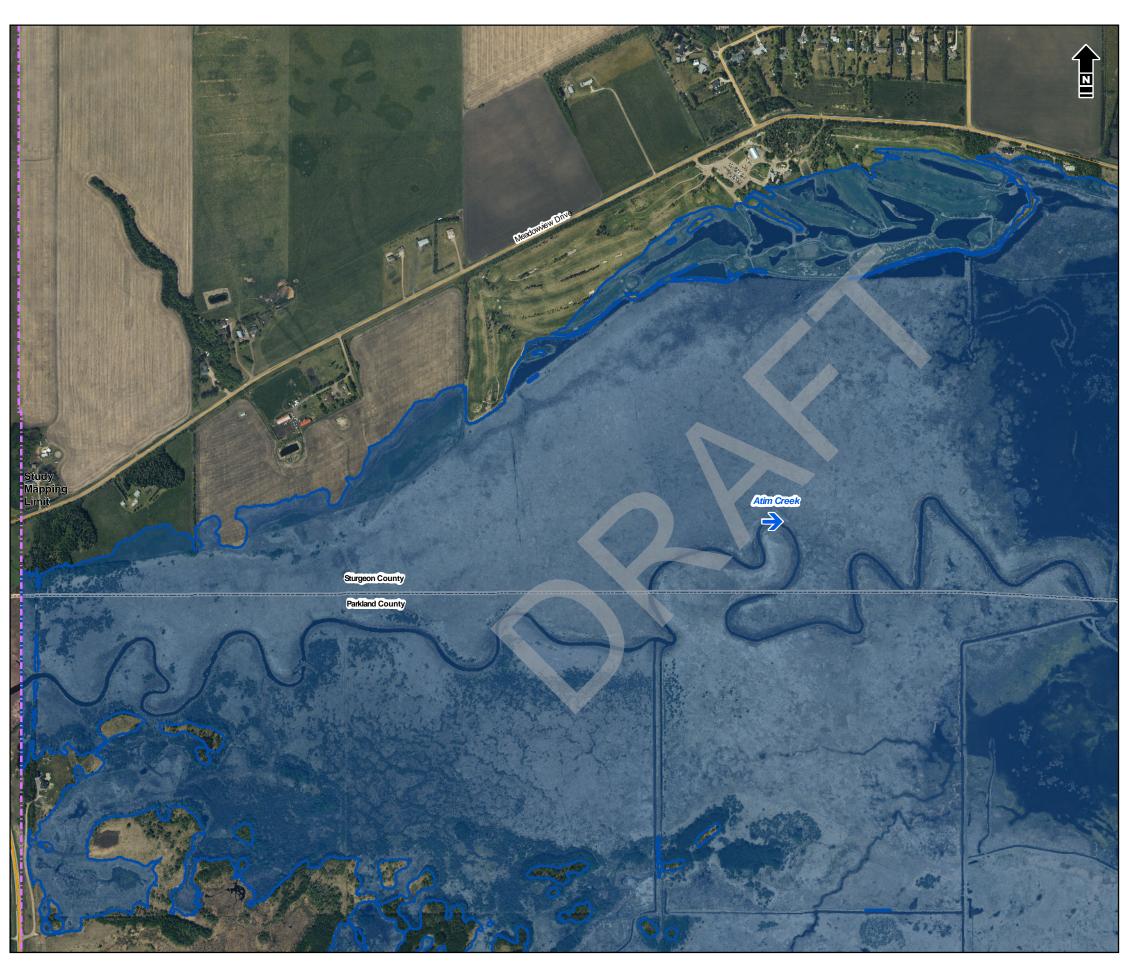


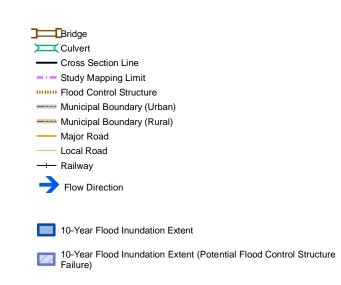


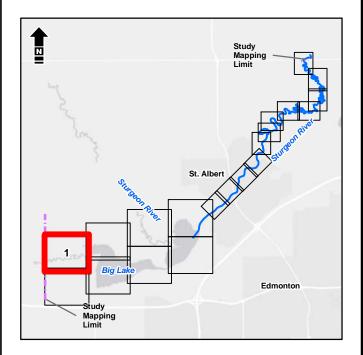
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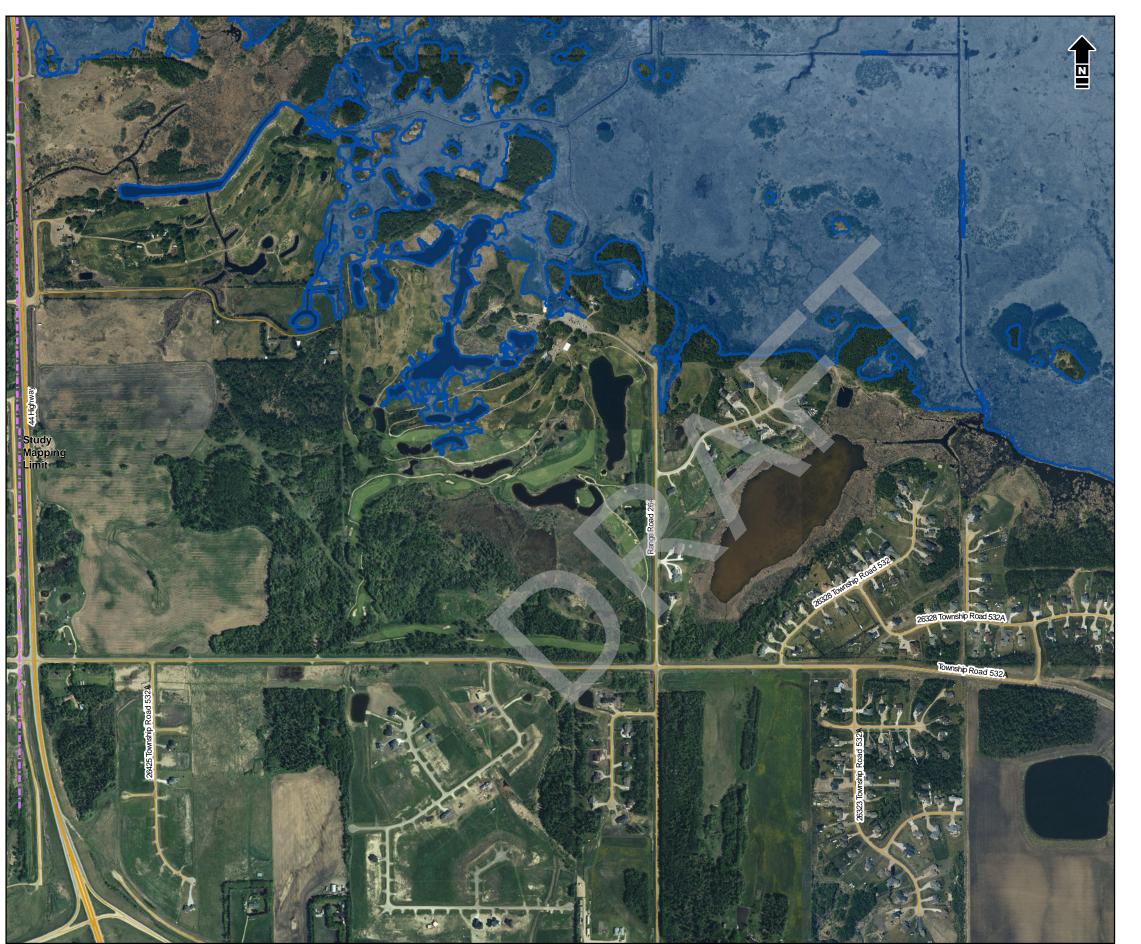
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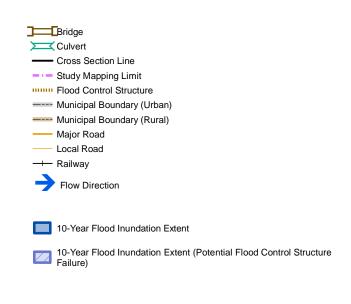
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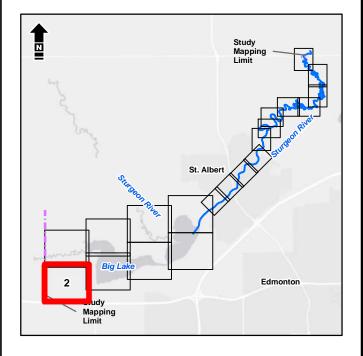
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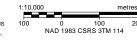
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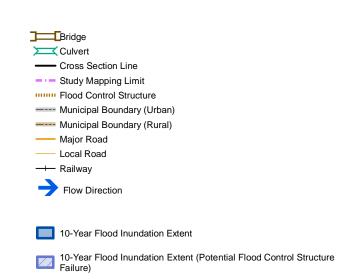
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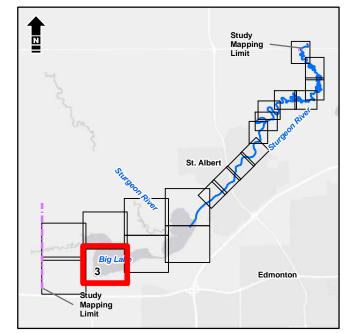
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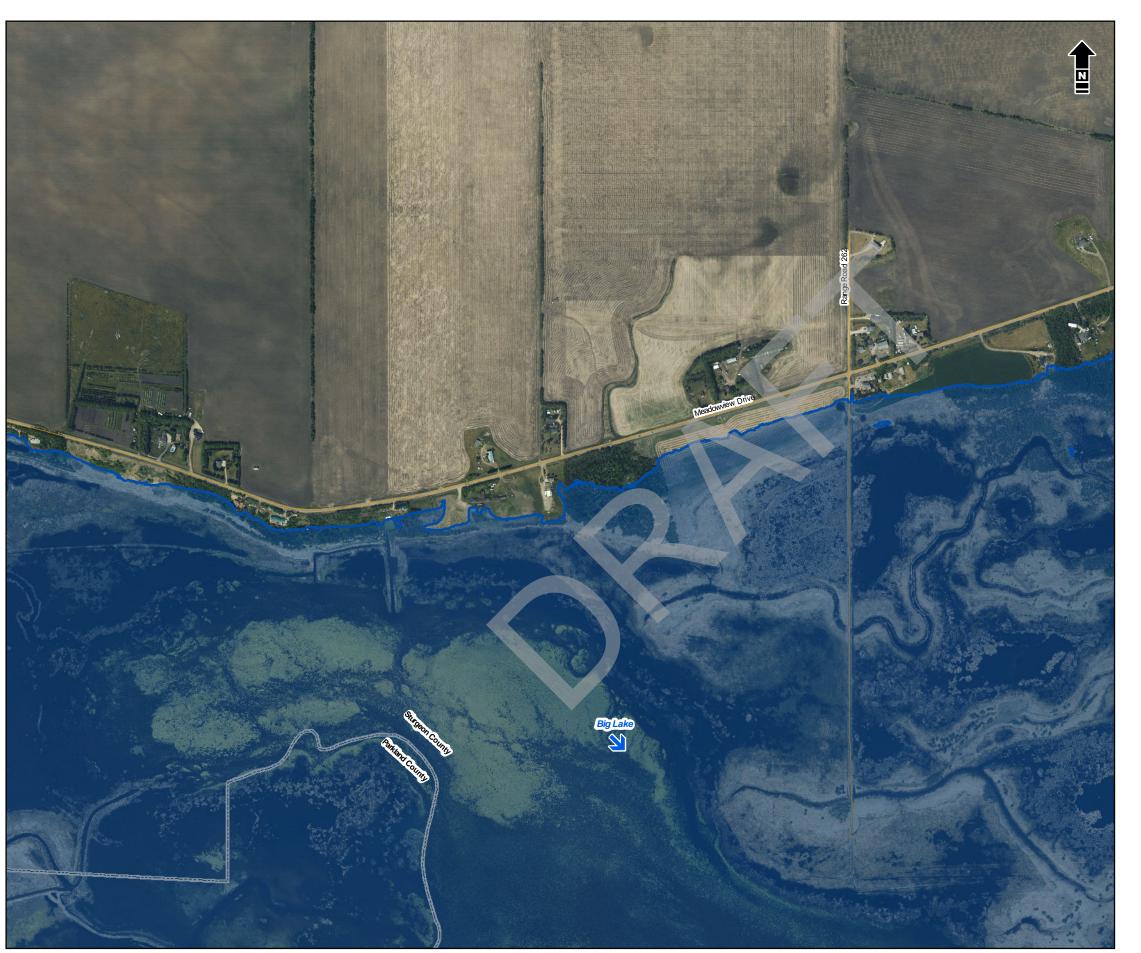
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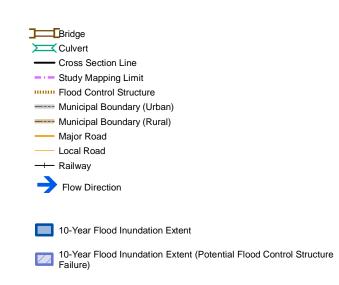
## Open Water Flood Inundation Mapbook | 10-Year

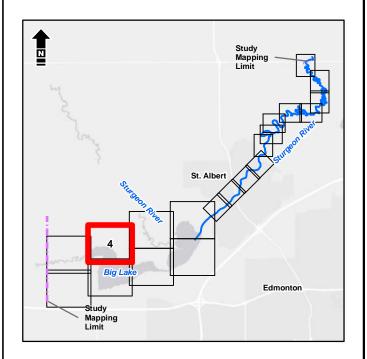
Date: March 2020 Project: 28312 Submitter: P. Rogers Reviewer:

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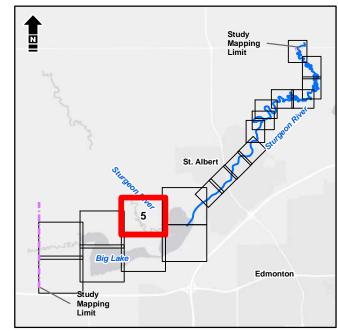
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Bridge
Culvert
Cross Section Line
Study Mapping Limit
Flood Control Structure
Municipal Boundary (Urban)
Municipal Boundary (Rural)
Major Road
Local Road
Railway
Flow Direction

10-Year Flood Inundation Extent
(Potential Flood Control Structure Failure)



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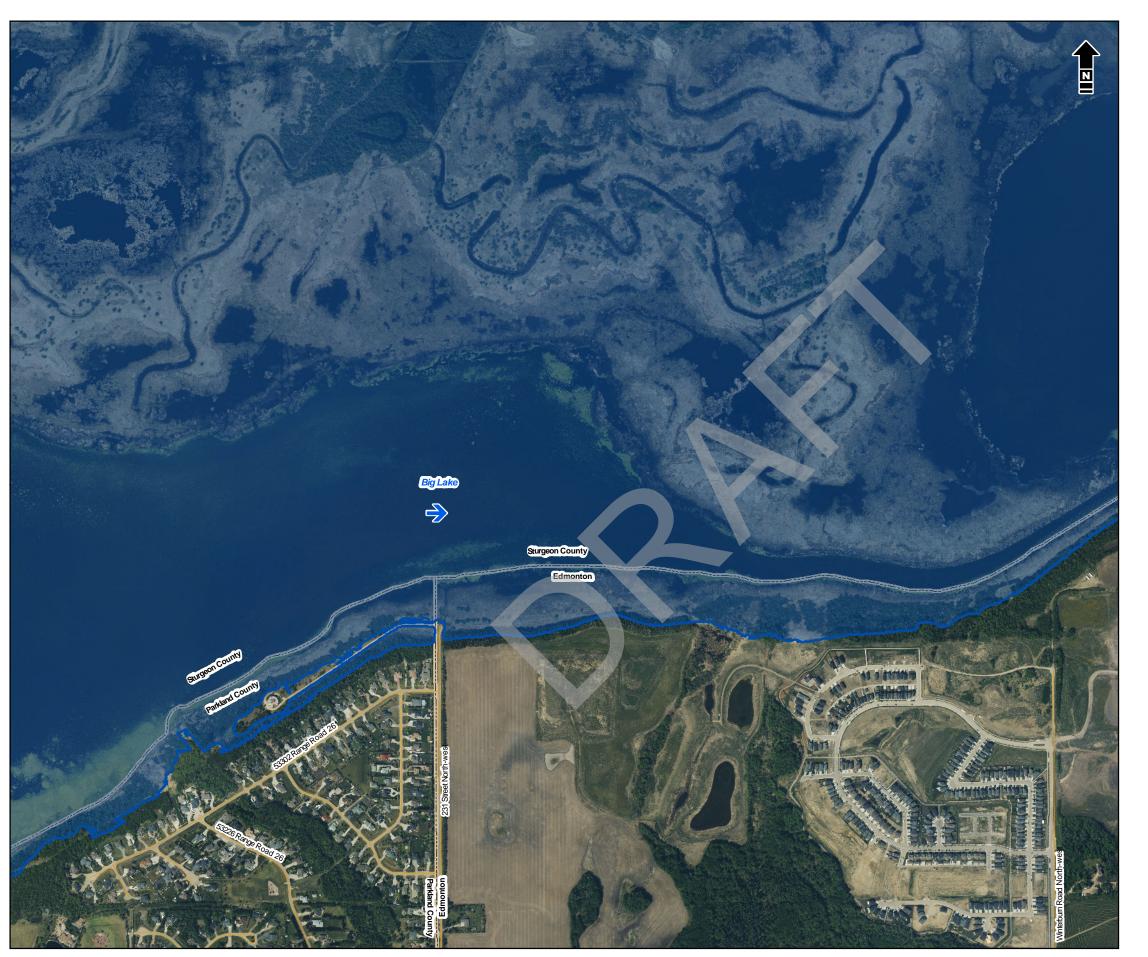
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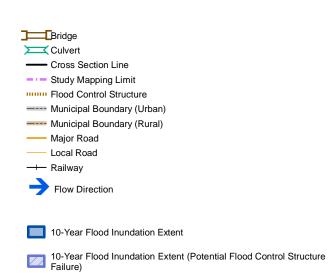
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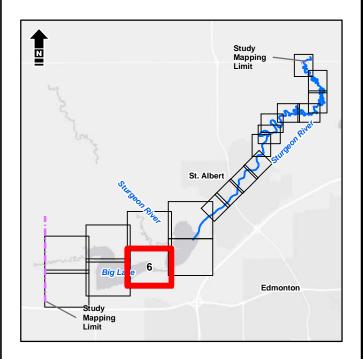
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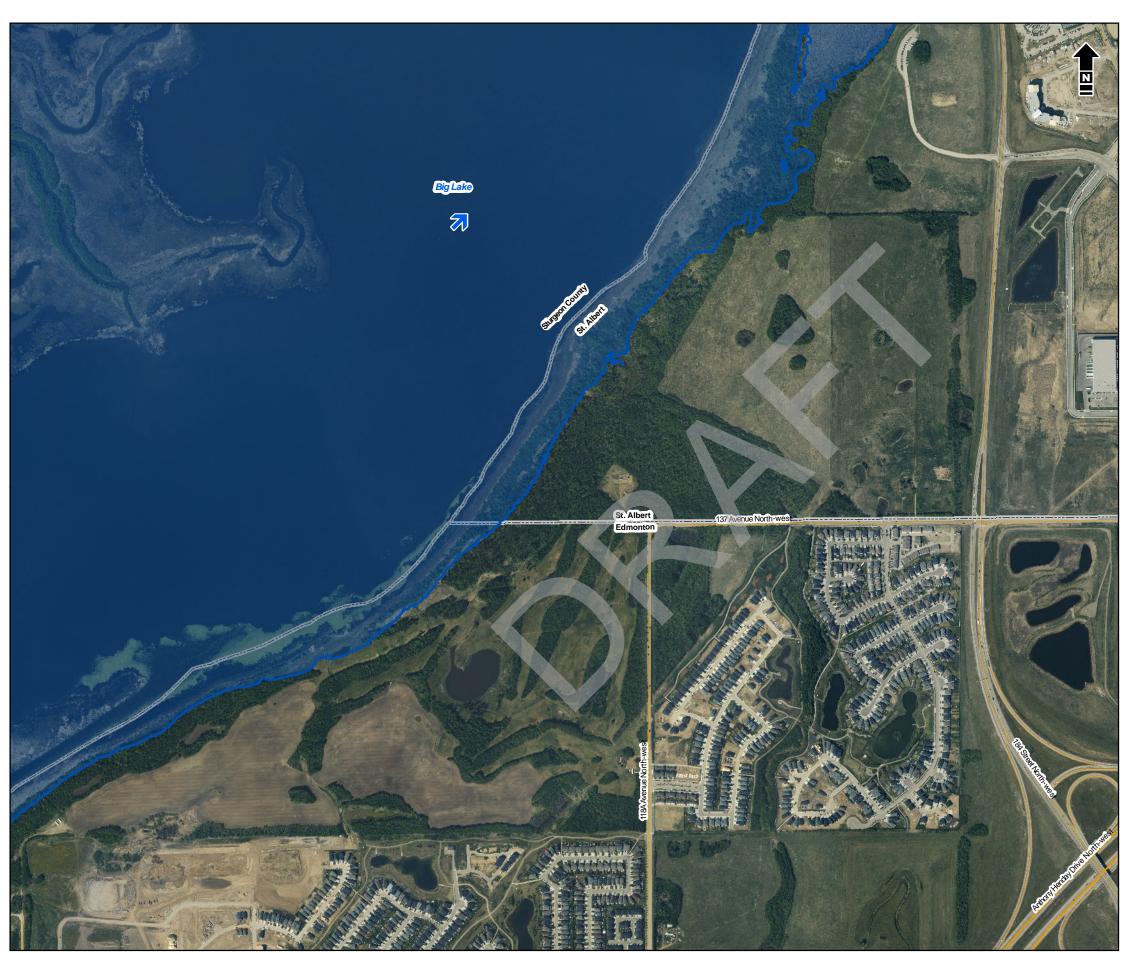
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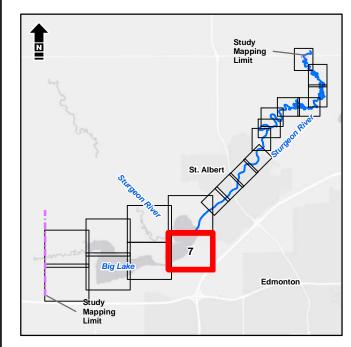
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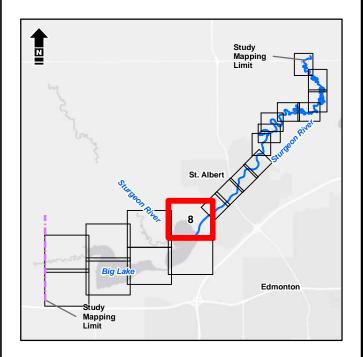
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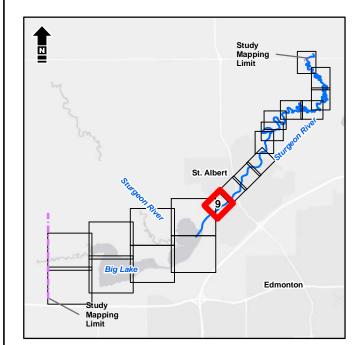
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10-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

### <u>DISCHARGE</u> Sturgeon River = 39 m<sup>3</sup>/s



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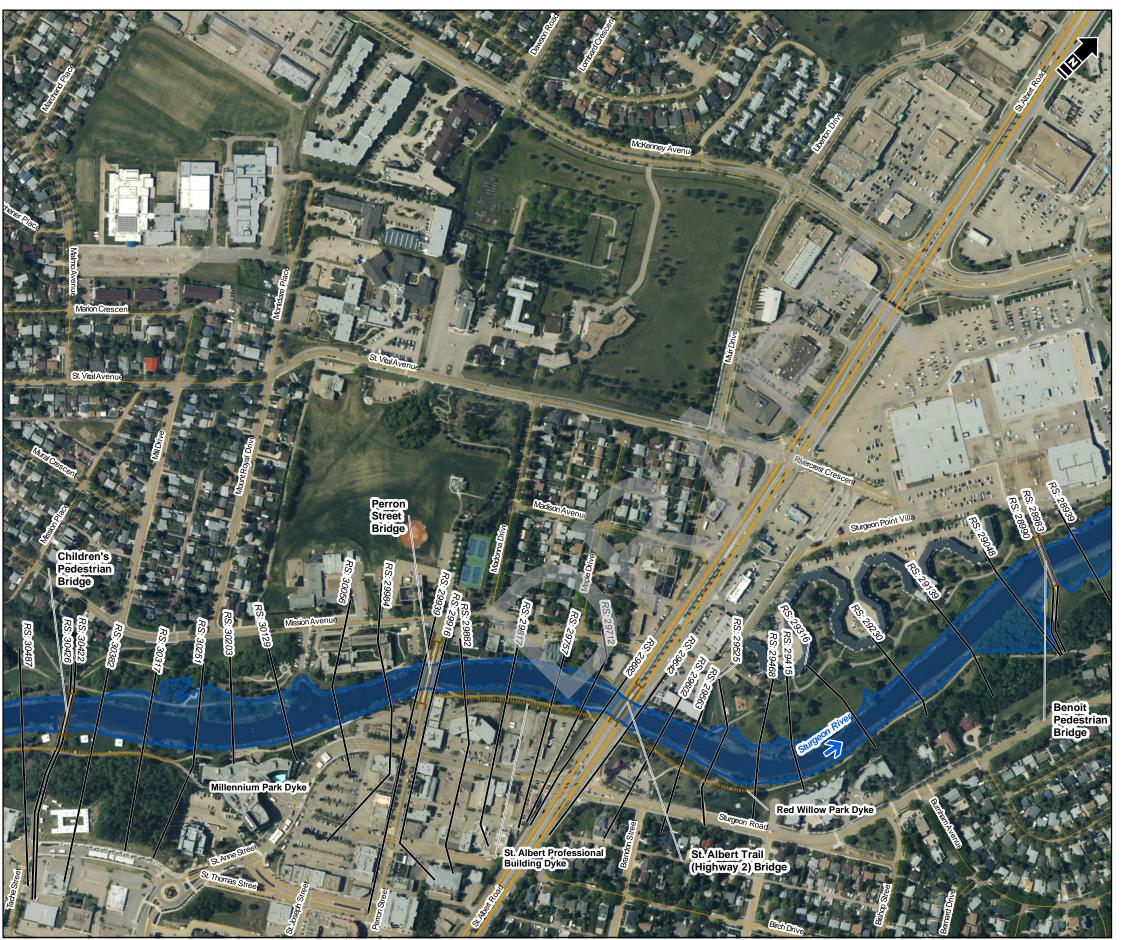
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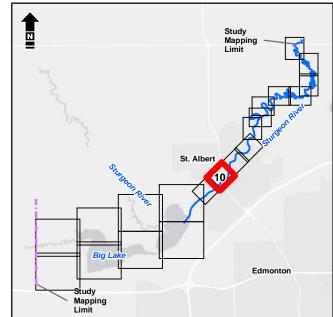
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Culvert
Culvert
Cross Section Line
Study Mapping Limit
Municipal Boundary (Urban)
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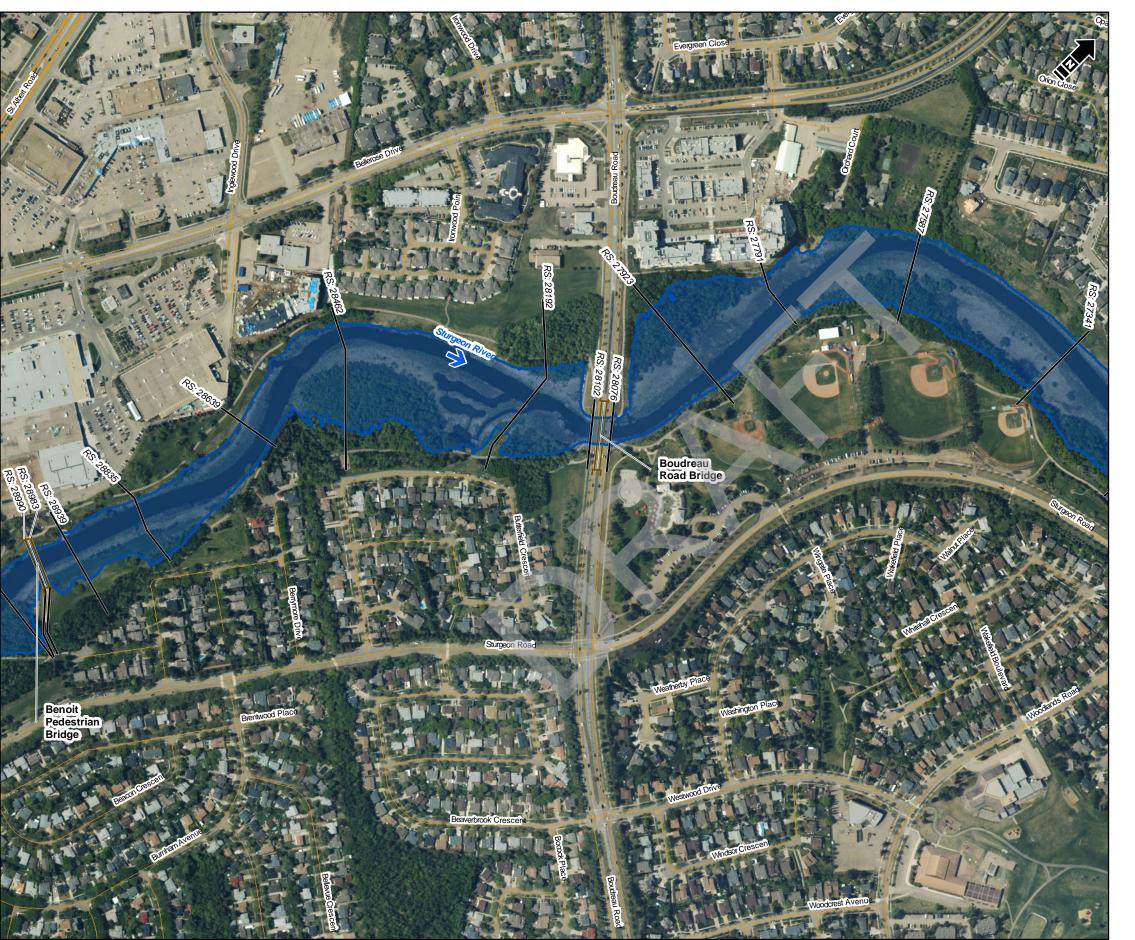


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### Open Water Flood Inundation Mapbook | 10-Year

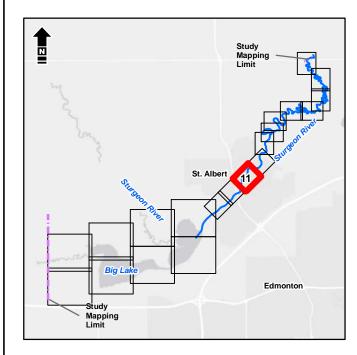
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Bridge Culvert ---- Cross Section Line -- Study Mapping Limit Flood Control Structure ---- Municipal Boundary (Urban) ---- Municipal Boundary (Rural) --- Major Road — Local Road — Railway Flow Direction 10-Year Flood Inundation Extent 10-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

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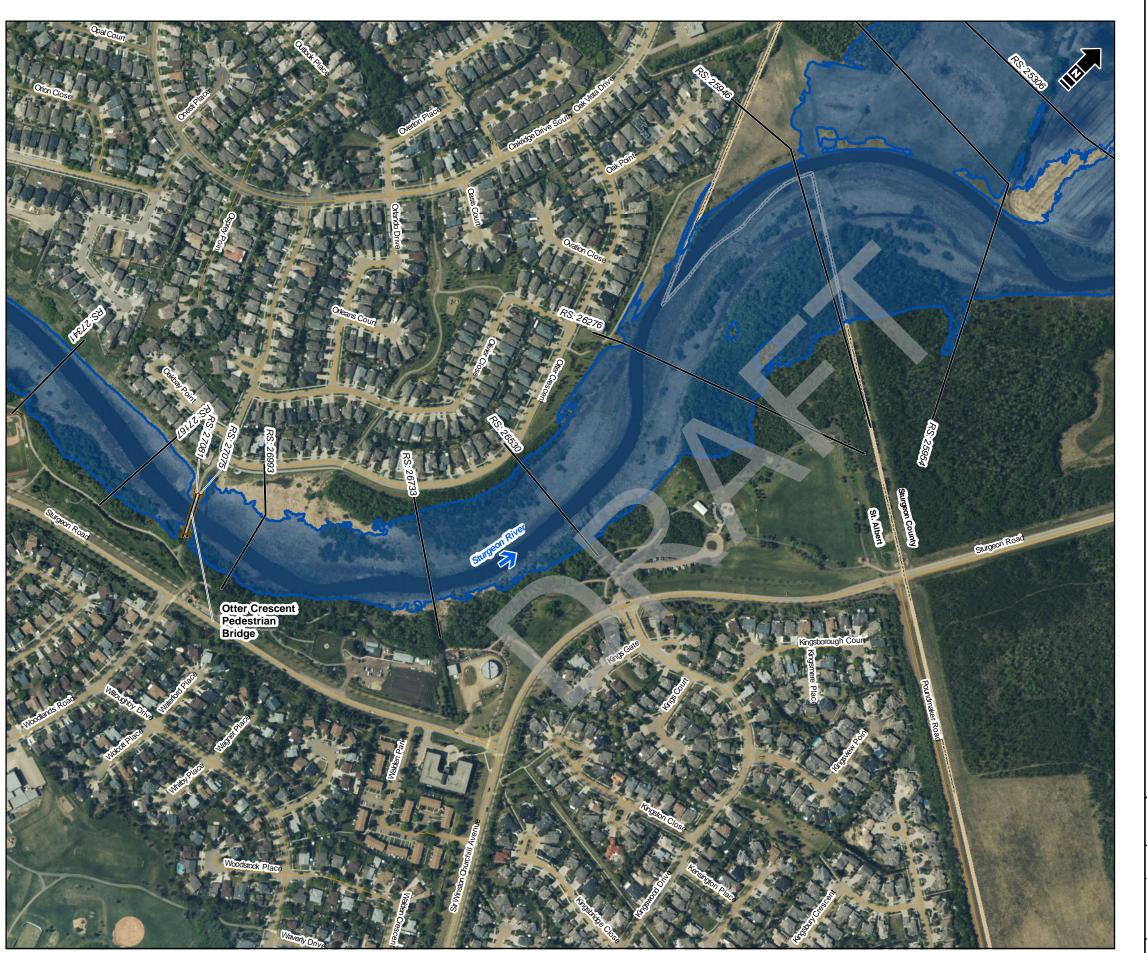


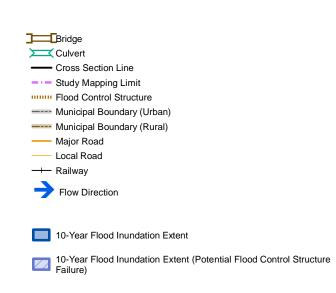


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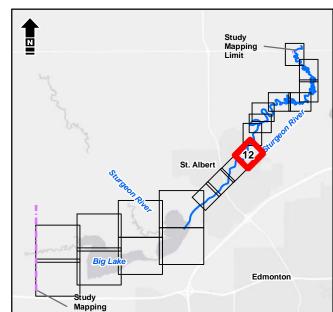
# Open Water Flood Inundation Mapbook | 10-Year

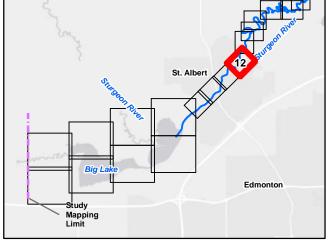
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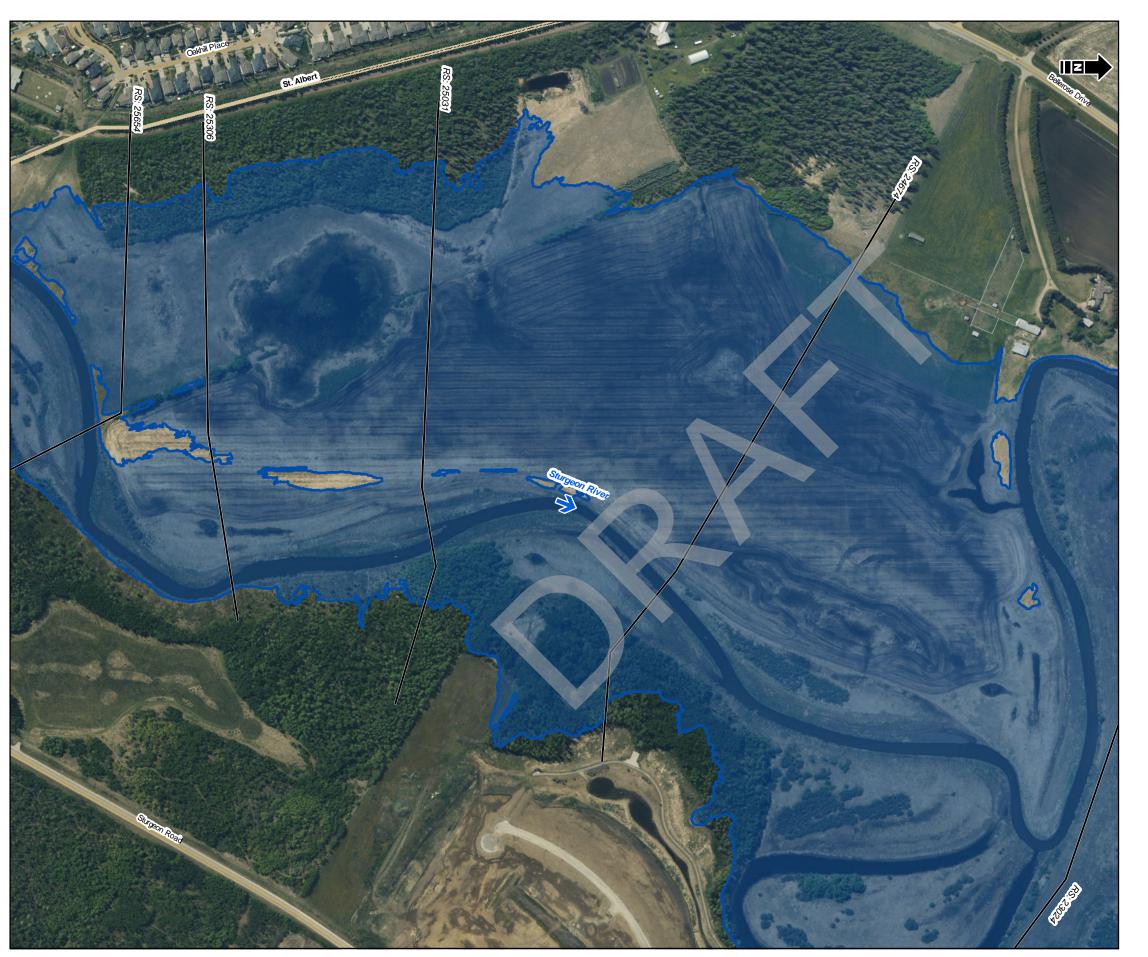




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## Open Water Flood Inundation Mapbook | 10-Year

March 2020



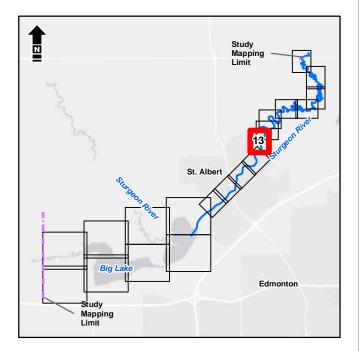
Bridge Culvert ---- Cross Section Line -- Study Mapping Limit Flood Control Structure ---- Municipal Boundary (Urban) ---- Municipal Boundary (Rural) --- Major Road — Local Road

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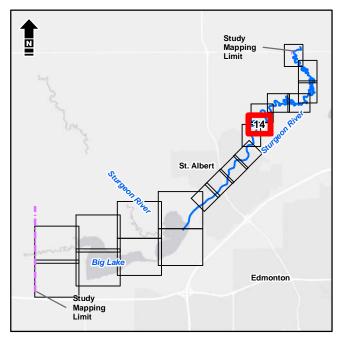
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March 2020



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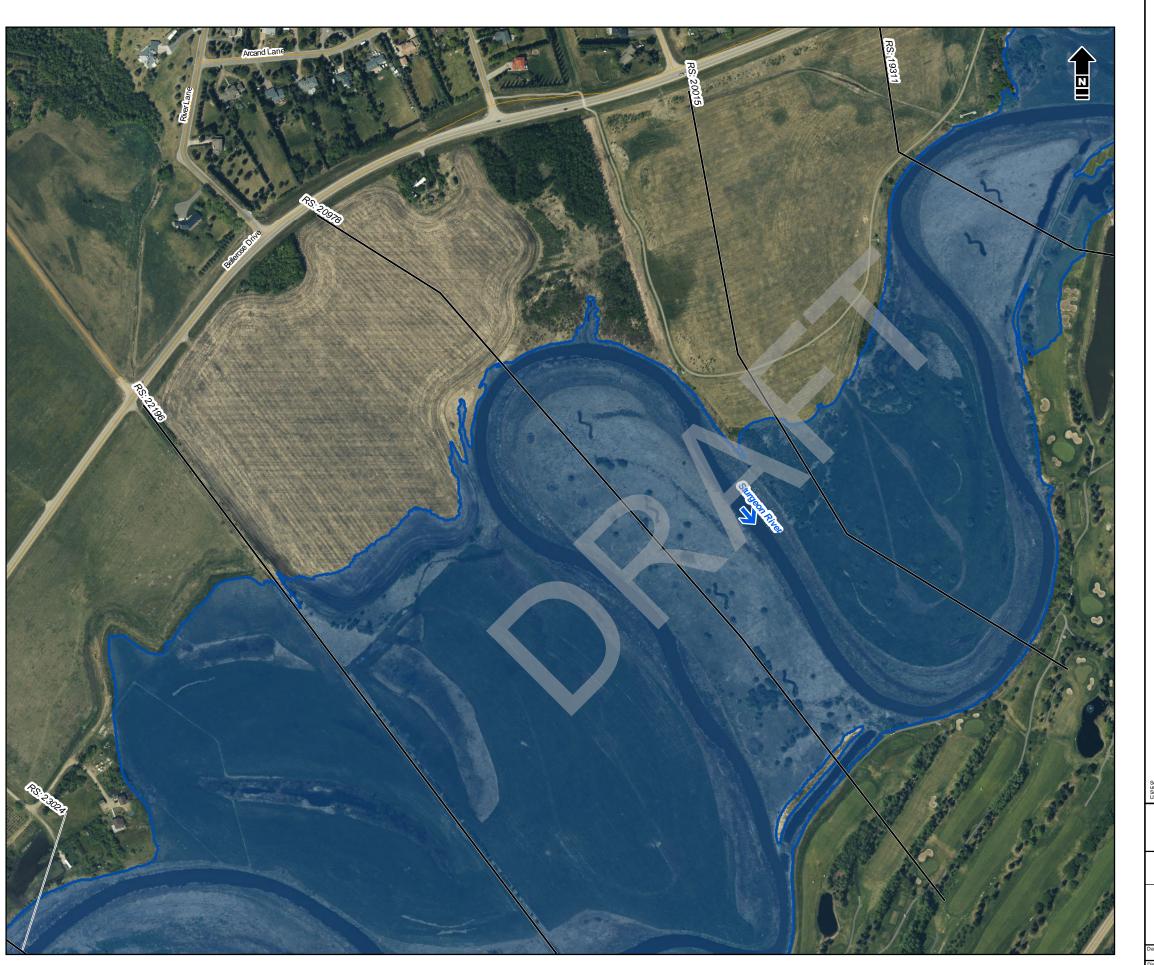




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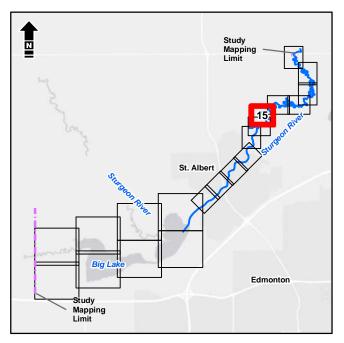
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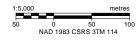


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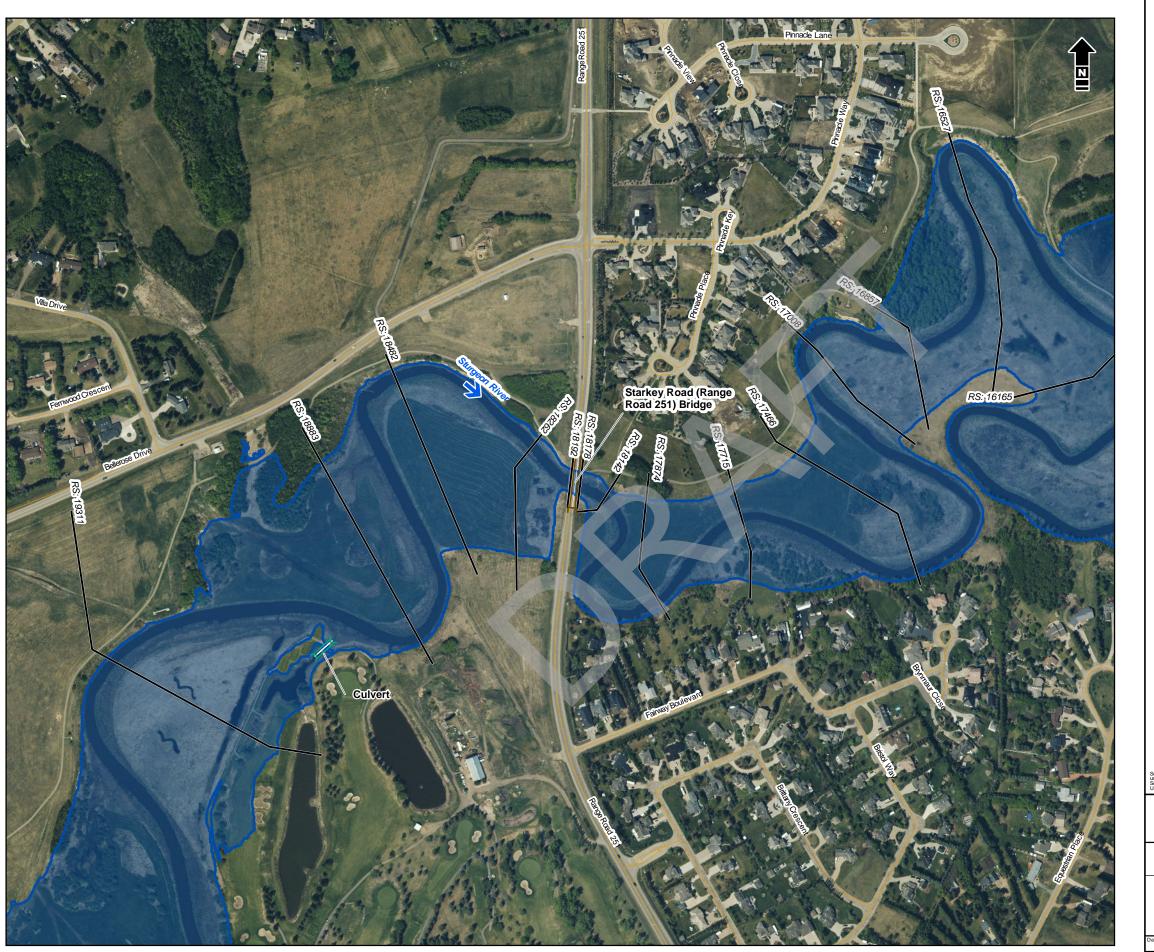




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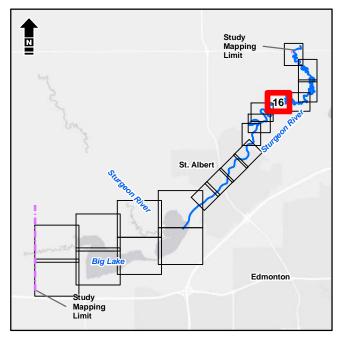
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March 2020



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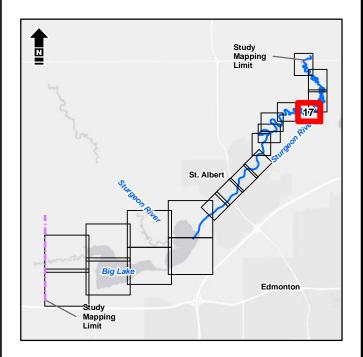
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March 2020

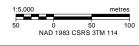


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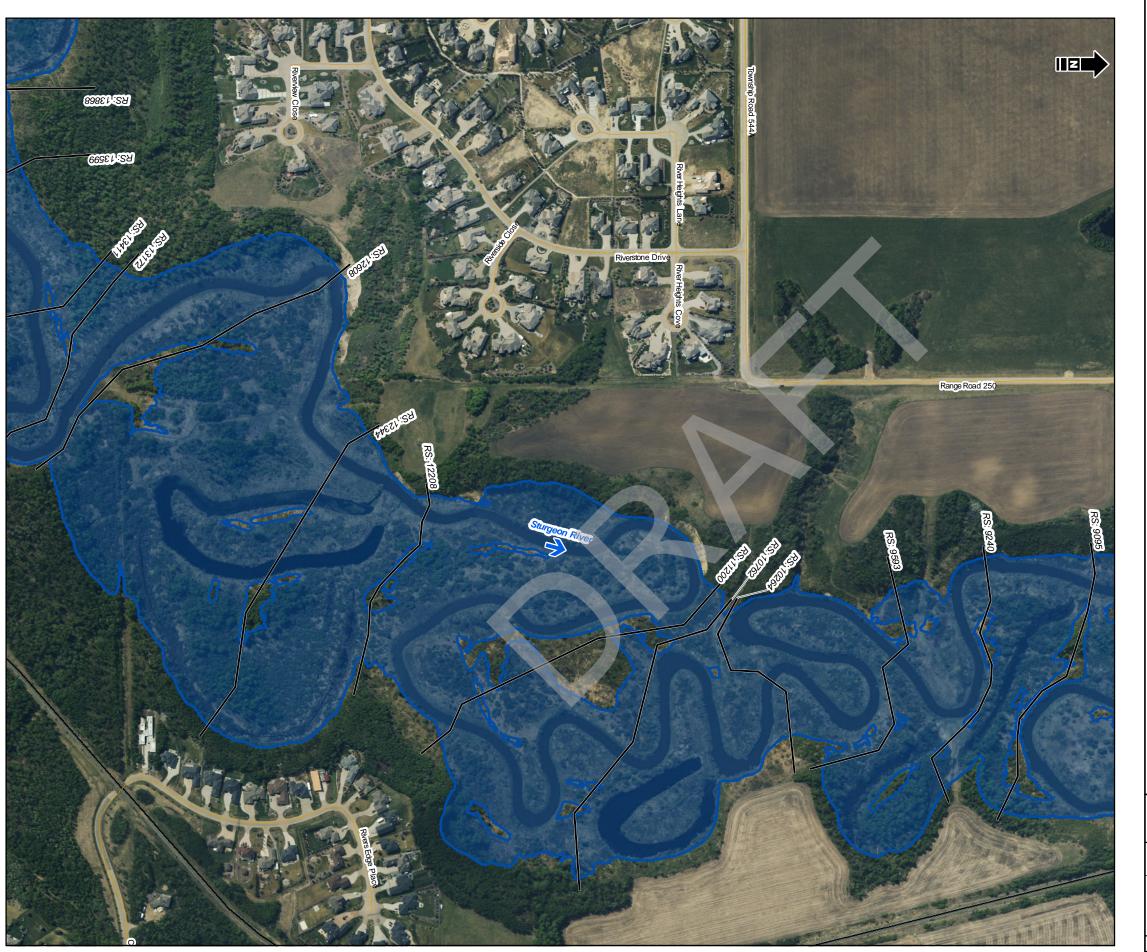




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# Open Water Flood Inundation Mapbook | 10-Year

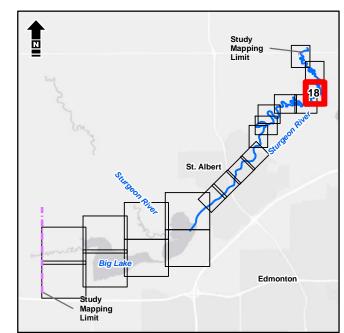
March 2020



Bridge
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Hood Control Structure
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10-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

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### Open Water Flood Inundation Mapbook | 10-Year

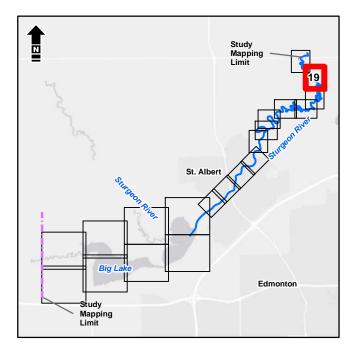
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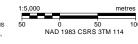


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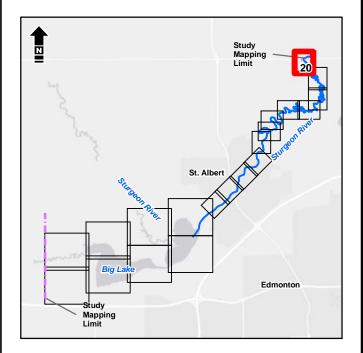
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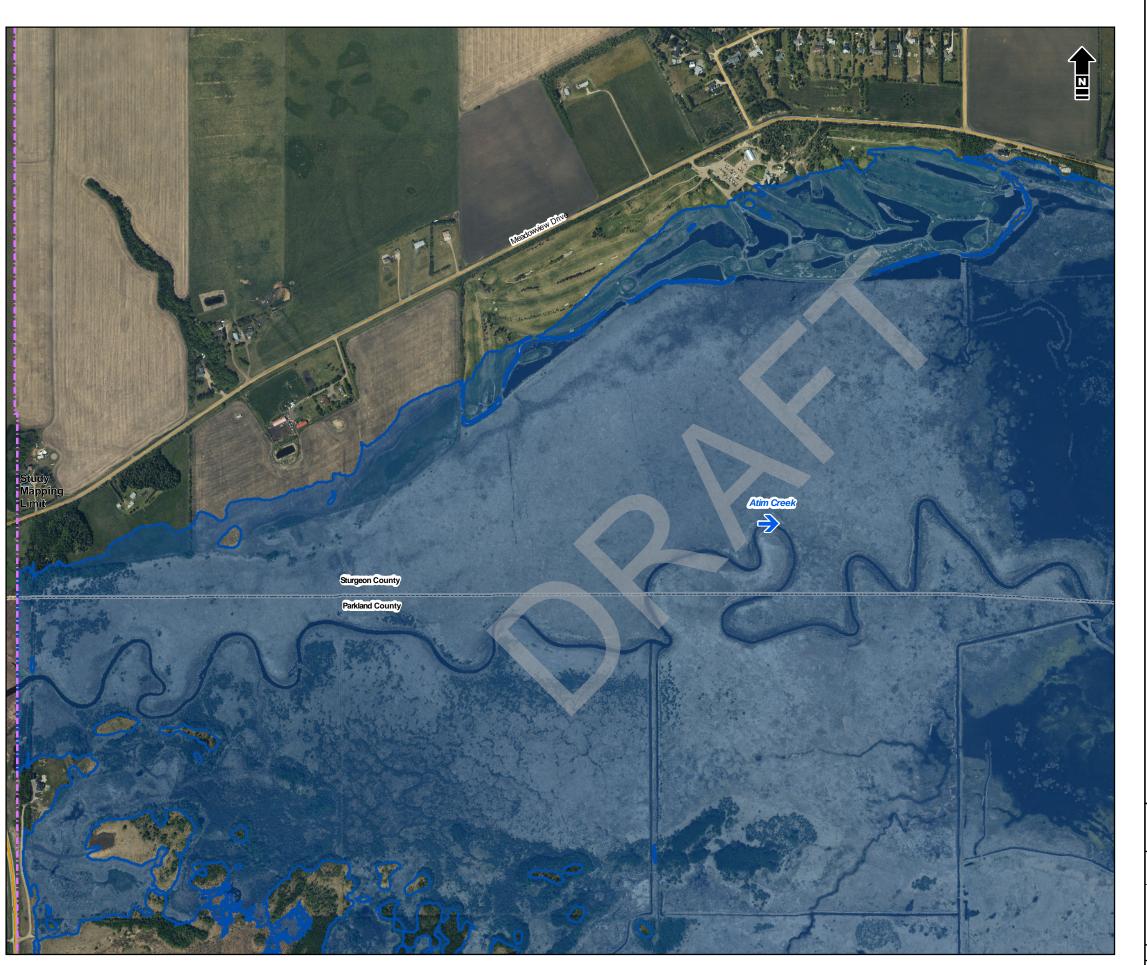


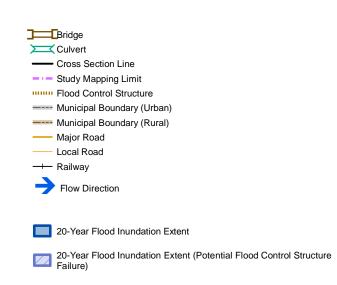


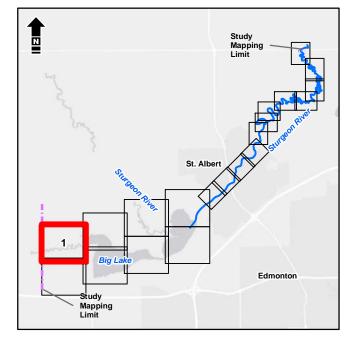
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# Open Water Flood Inundation Mapbook | 10-Year

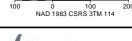
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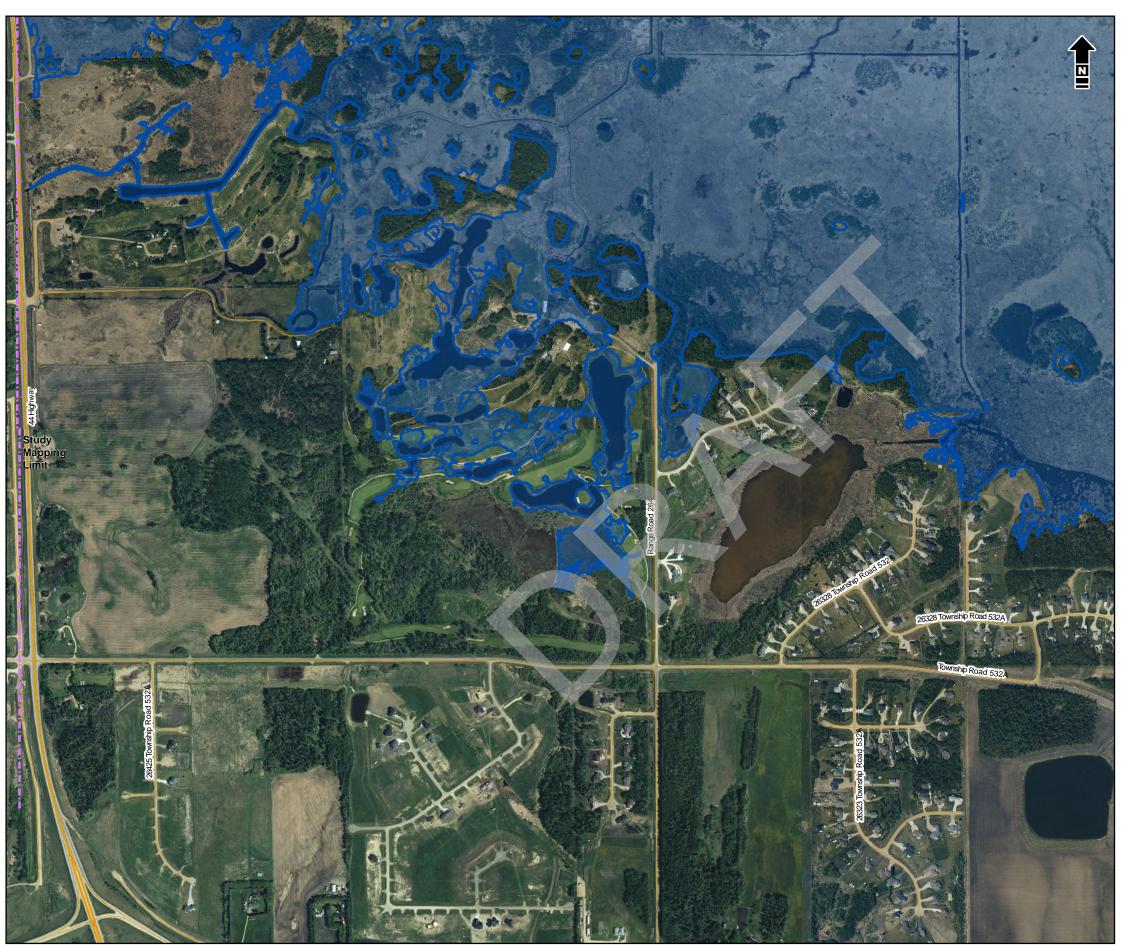
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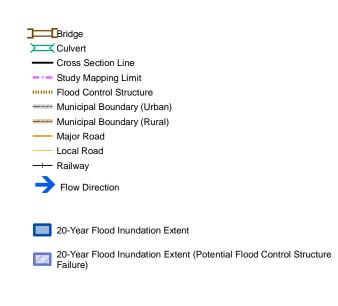
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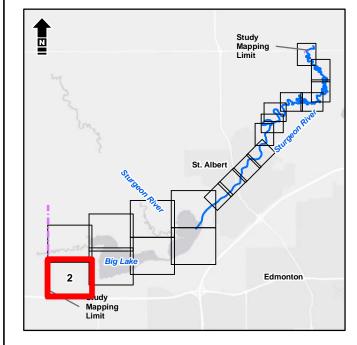
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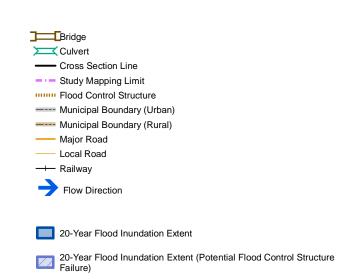
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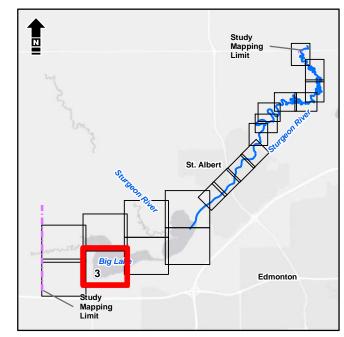
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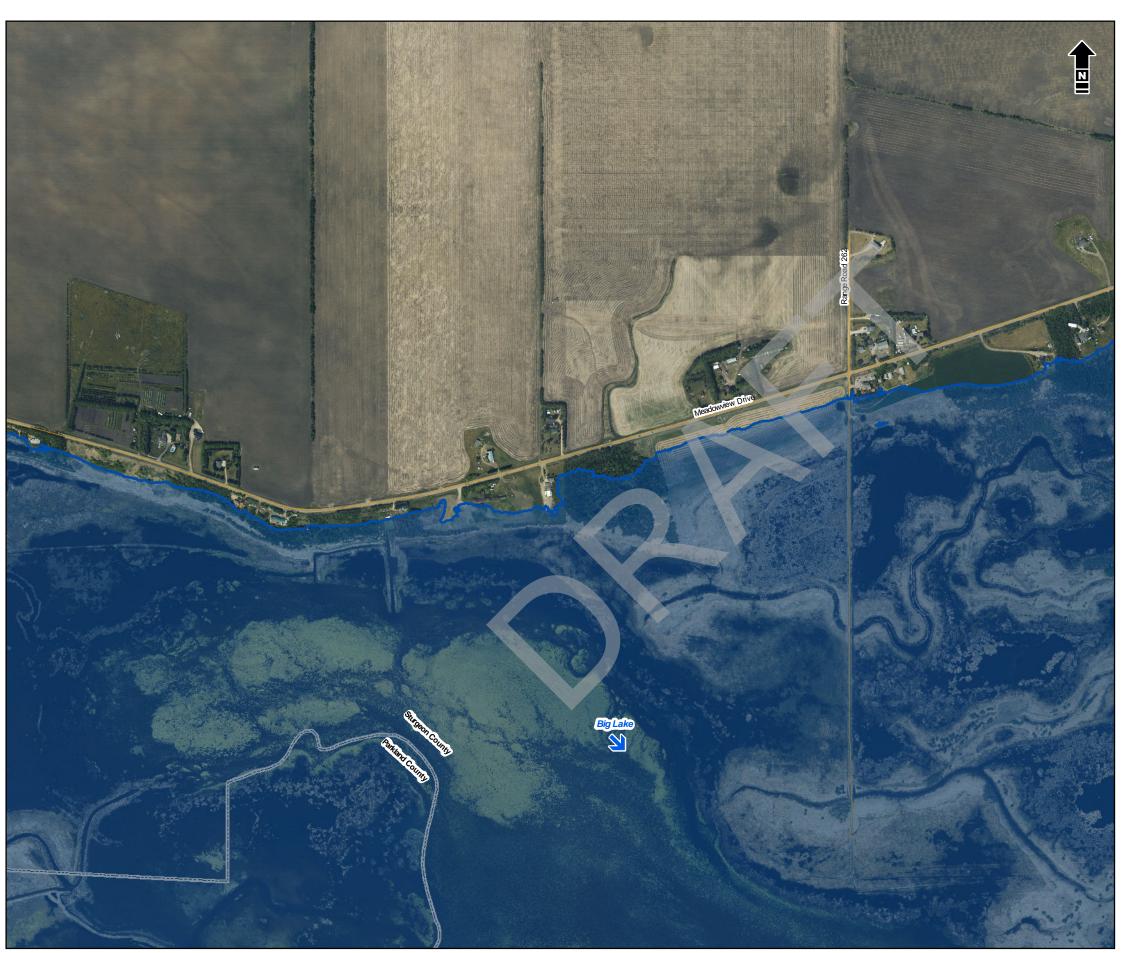
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## Open Water Flood Inundation Mapbook | 20-Year

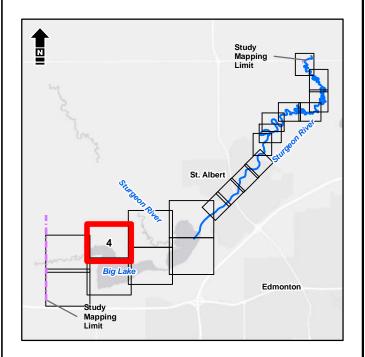
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## Open Water Flood Inundation Mapbook | 20-Year

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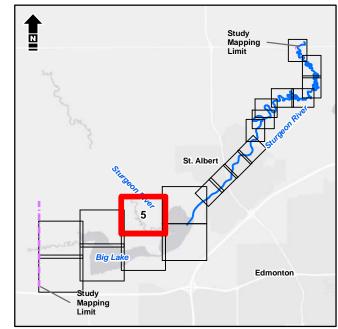
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Culvert
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Flow Direction

20-Year Flood Inundation Extent (Potential Flood Control Structure Failure)



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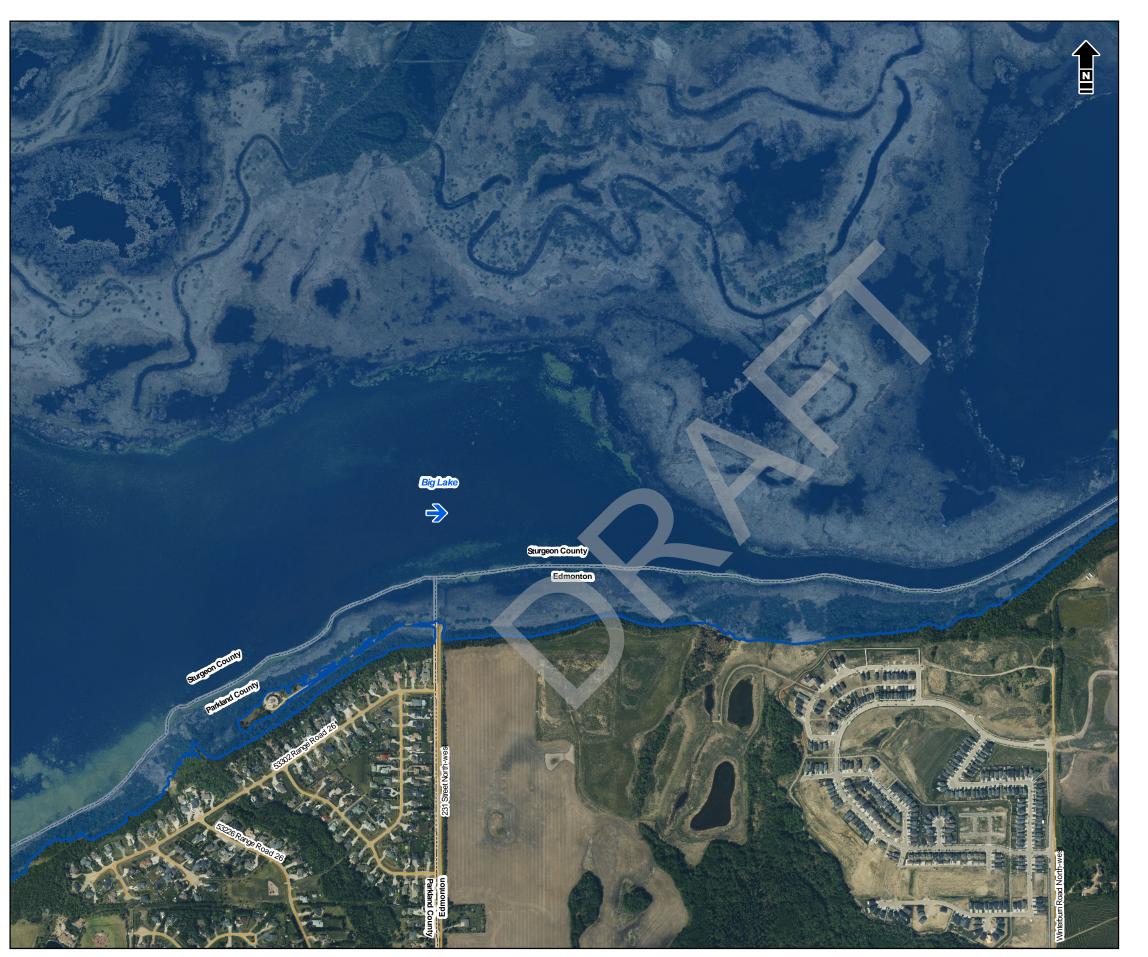
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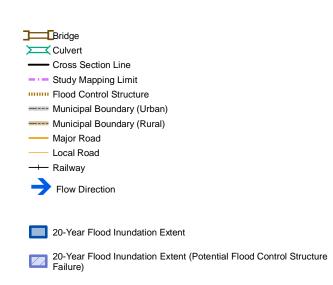
## Open Water Flood Inundation Mapbook | 20-Year

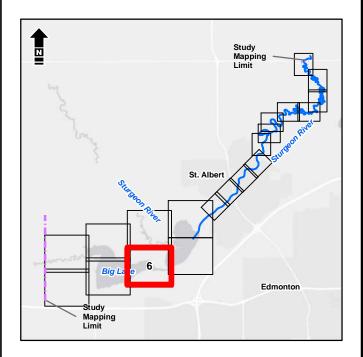
Date: March 2020 Project: 28312 Submitter: P. Rogers Reviewer:

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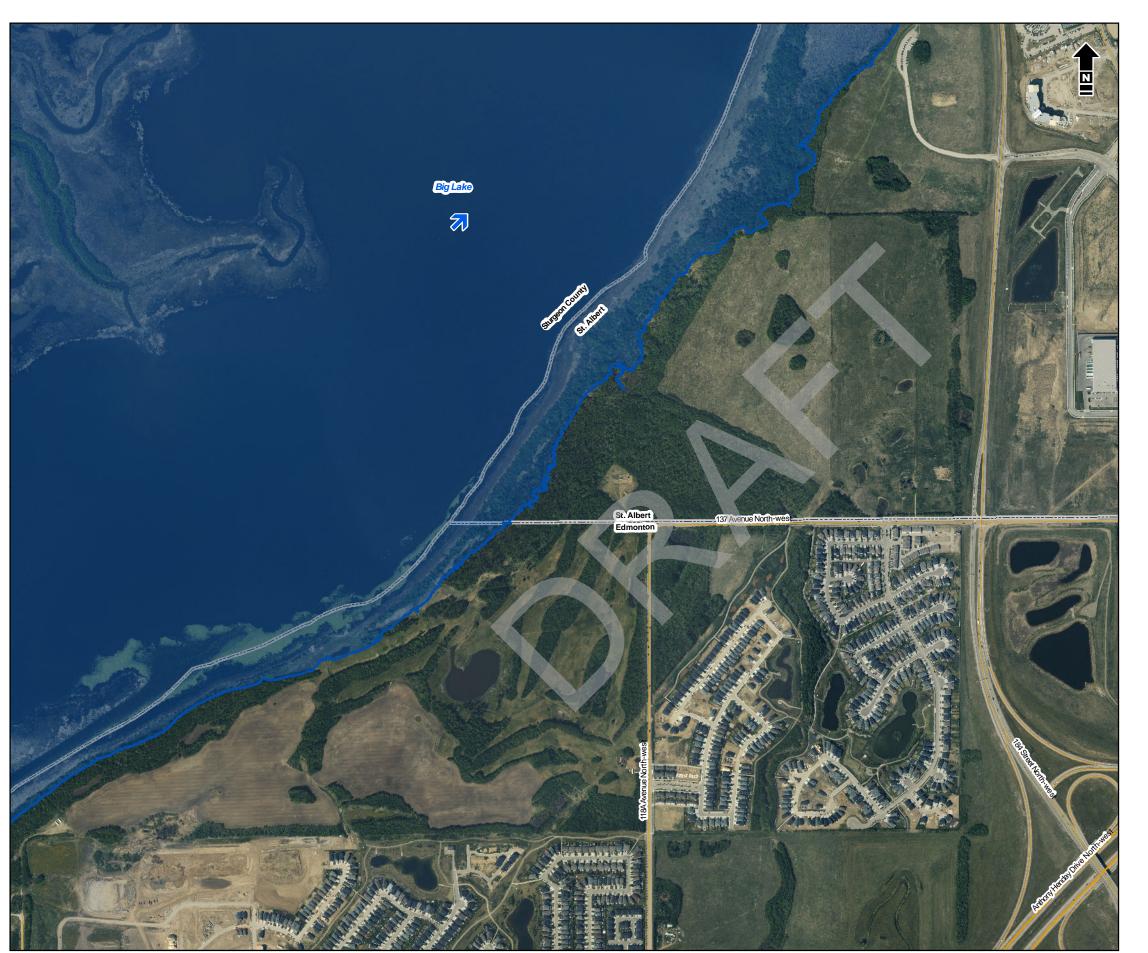
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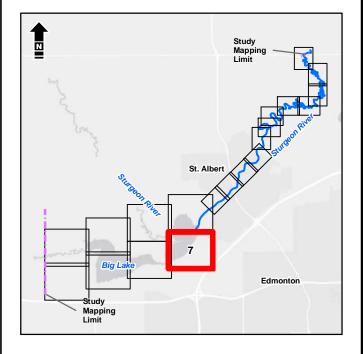
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Culvert
Cross Section Line
Study Mapping Limit
Flood Control Structure
Municipal Boundary (Urban)
Major Road
Local Road
Local Road
Flow Direction

20-Year Flood Inundation Extent (Potential Flood Control Structure Failure)



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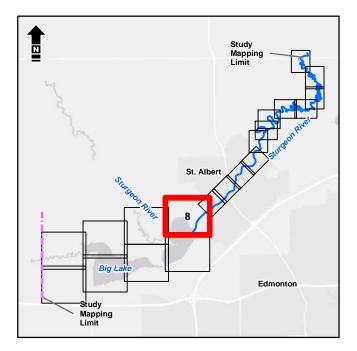
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Bridge Culvert ---- Cross Section Line -- Study Mapping Limit Flood Control Structure ---- Municipal Boundary (Urban) ---- Municipal Boundary (Rural) --- Major Road — Local Road — Railway Flow Direction 20-Year Flood Inundation Extent 20-Year Flood Inundation Extent (Potential Flood Control Structure Failure)



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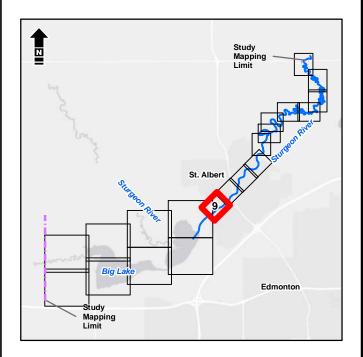
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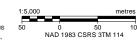
Bridge
Culvert
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Municipal Boundary (Urban)
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Railway
Flow Direction

20-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

### <u>DISCHARGE</u> Sturgeon River = 52 m<sup>3</sup>/s



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### Open Water Flood Inundation Mapbook | 20-Year

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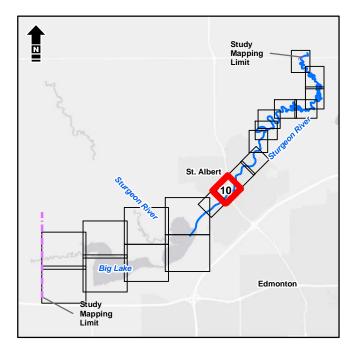
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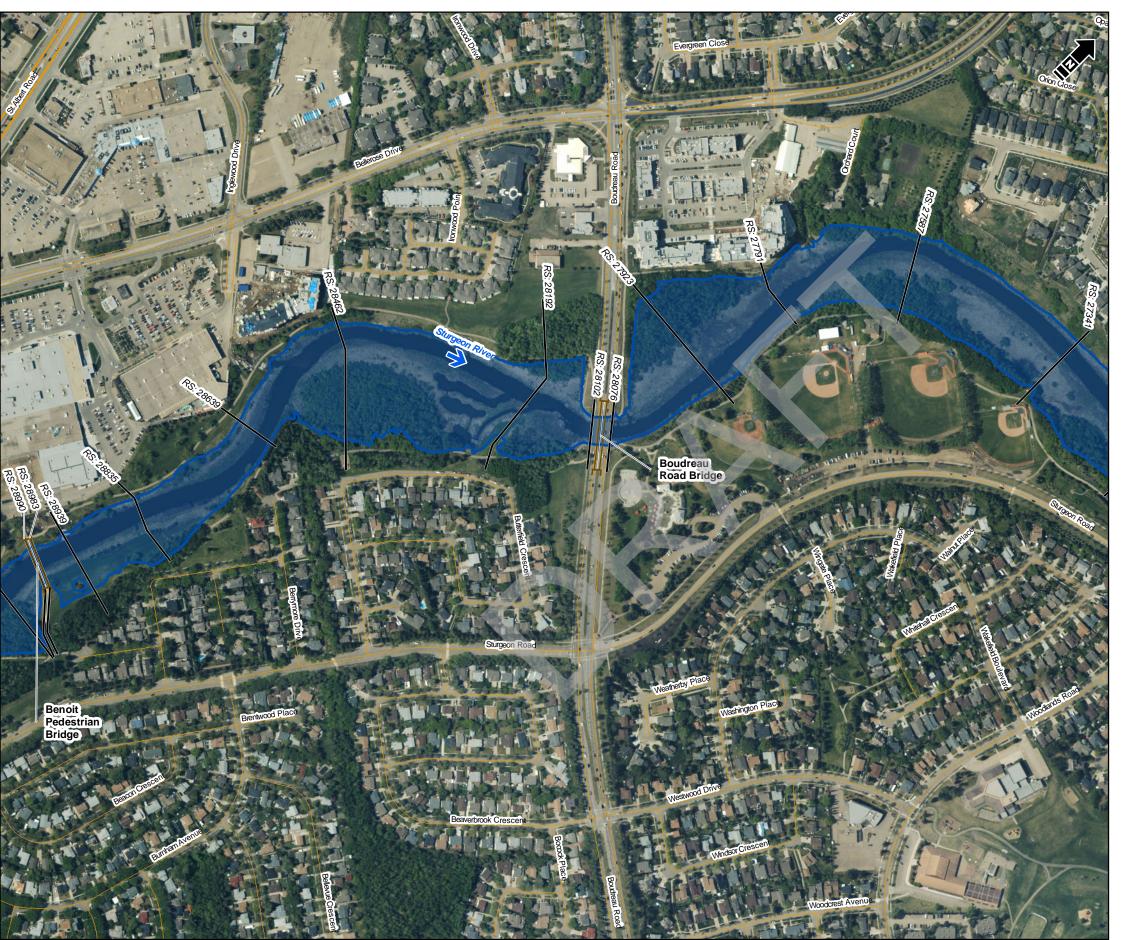




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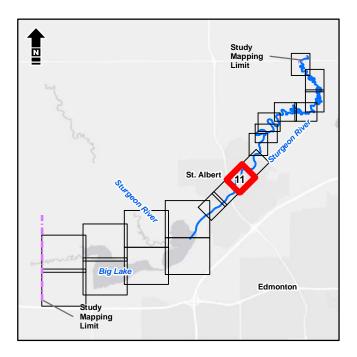
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March 2020



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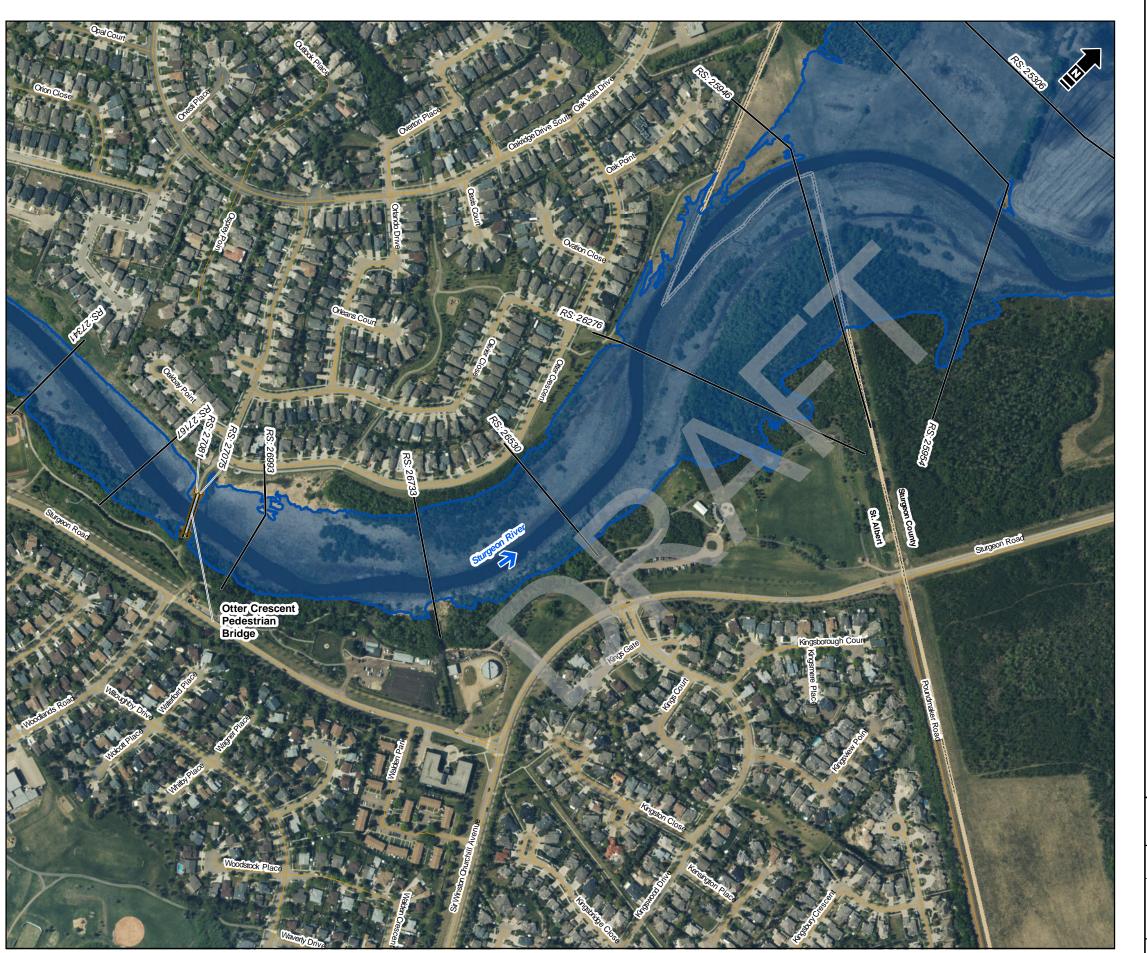


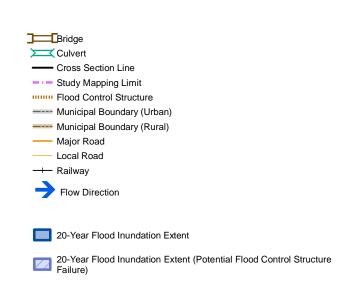


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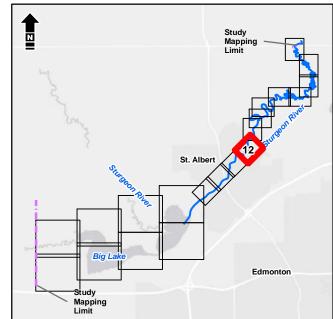
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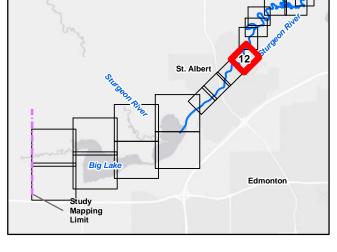
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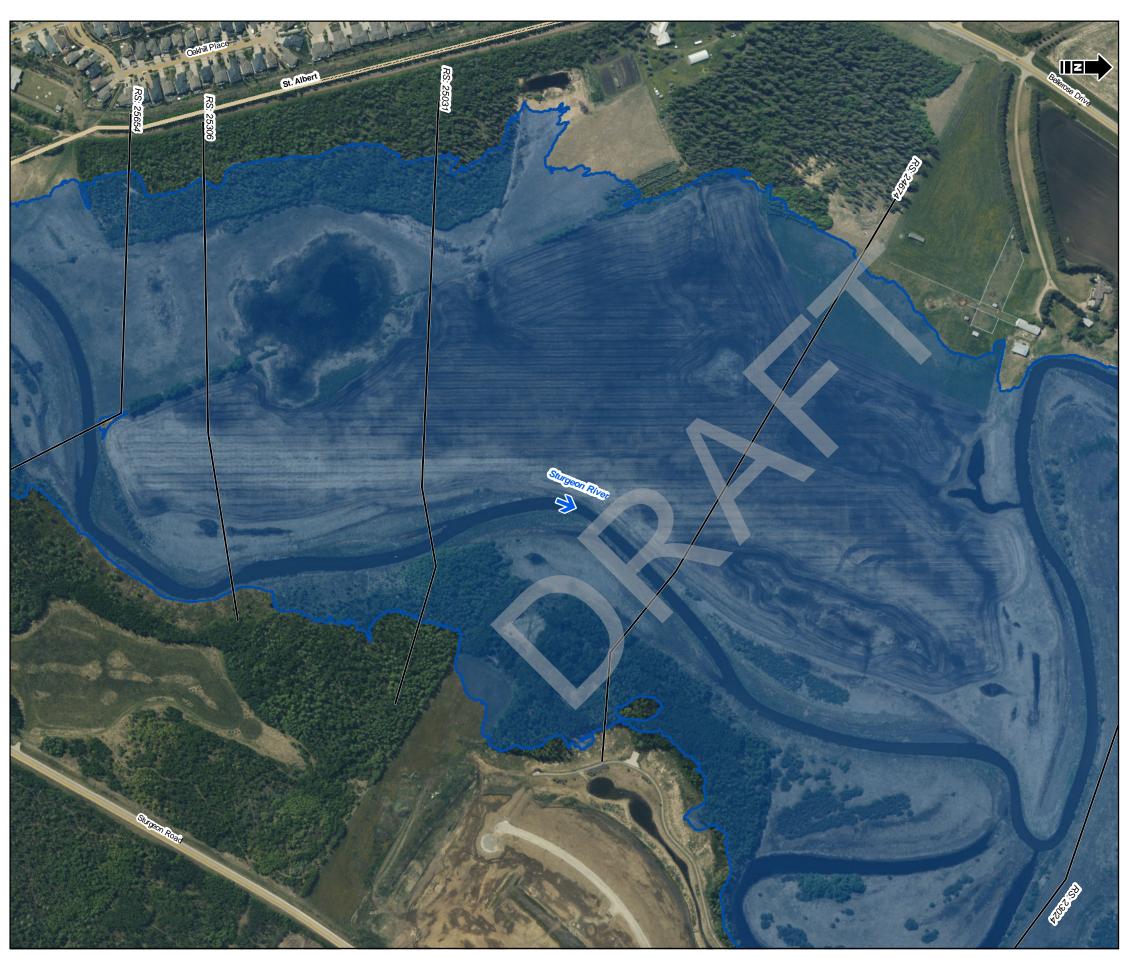




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# Open Water Flood Inundation Mapbook | 20-Year

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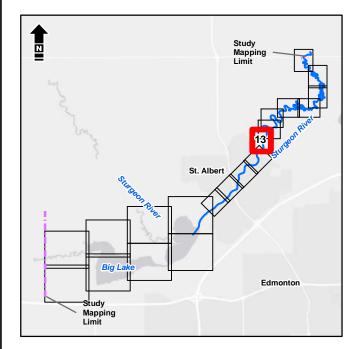


Bridge
Culvert
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20-Year Flood Inundation Extent

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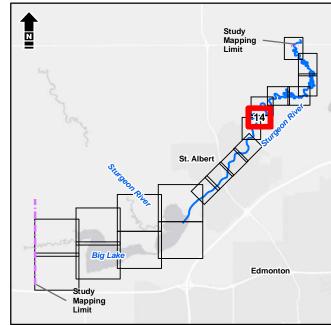
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Bridge Culvert Culvert --- Cross Section Line -- Study Mapping Limit Flood Control Structure ---- Municipal Boundary (Urban) ---- Municipal Boundary (Rural) --- Major Road — Local Road — Railway Flow Direction 20-Year Flood Inundation Extent 20-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

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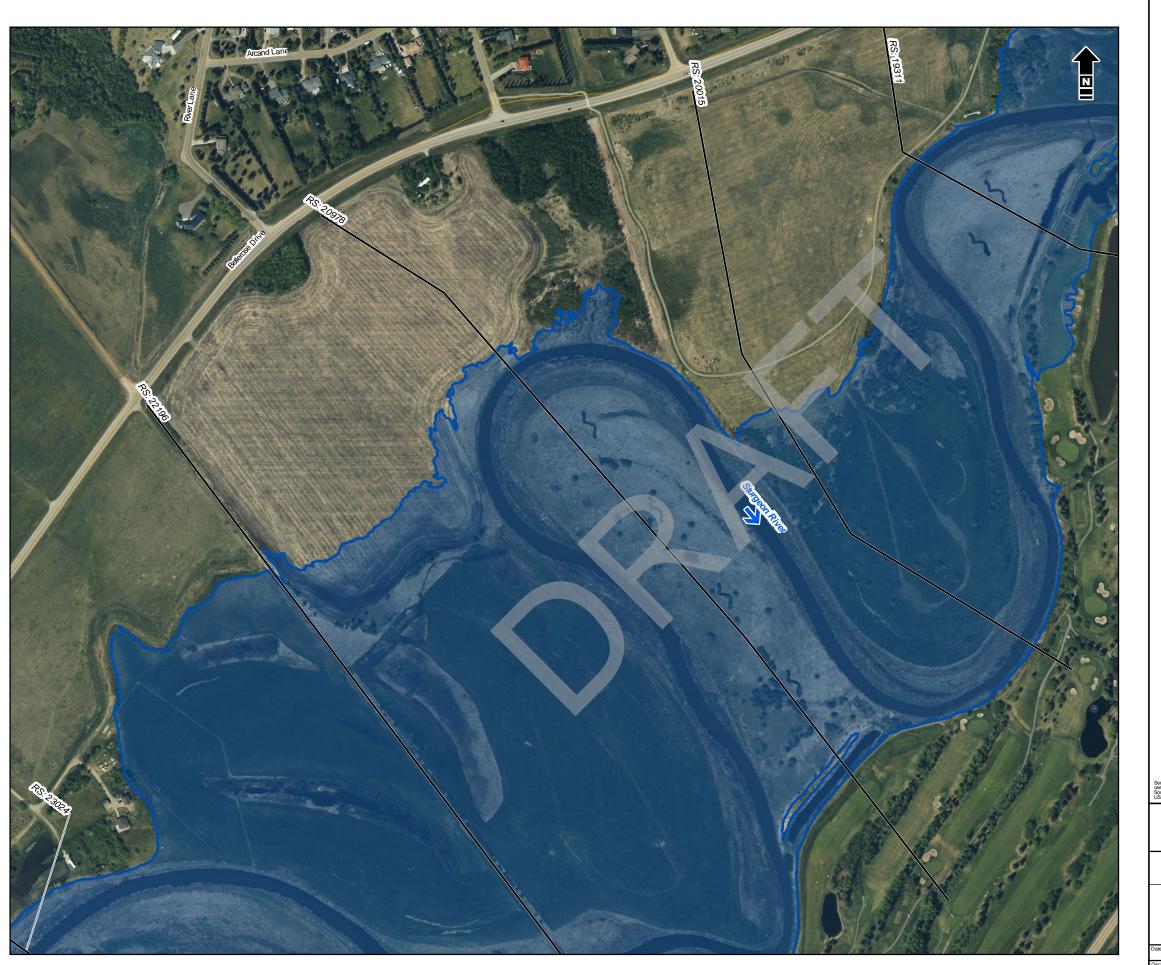




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# Open Water Flood Inundation Mapbook | 20-Year

March 2020



Culvert
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20-Year Flood Inundation Extent
(Potential Flood Control Structure Failure)

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Study Mapping Limit

St. Albert

St. Albert

Big Lake

Edmonton

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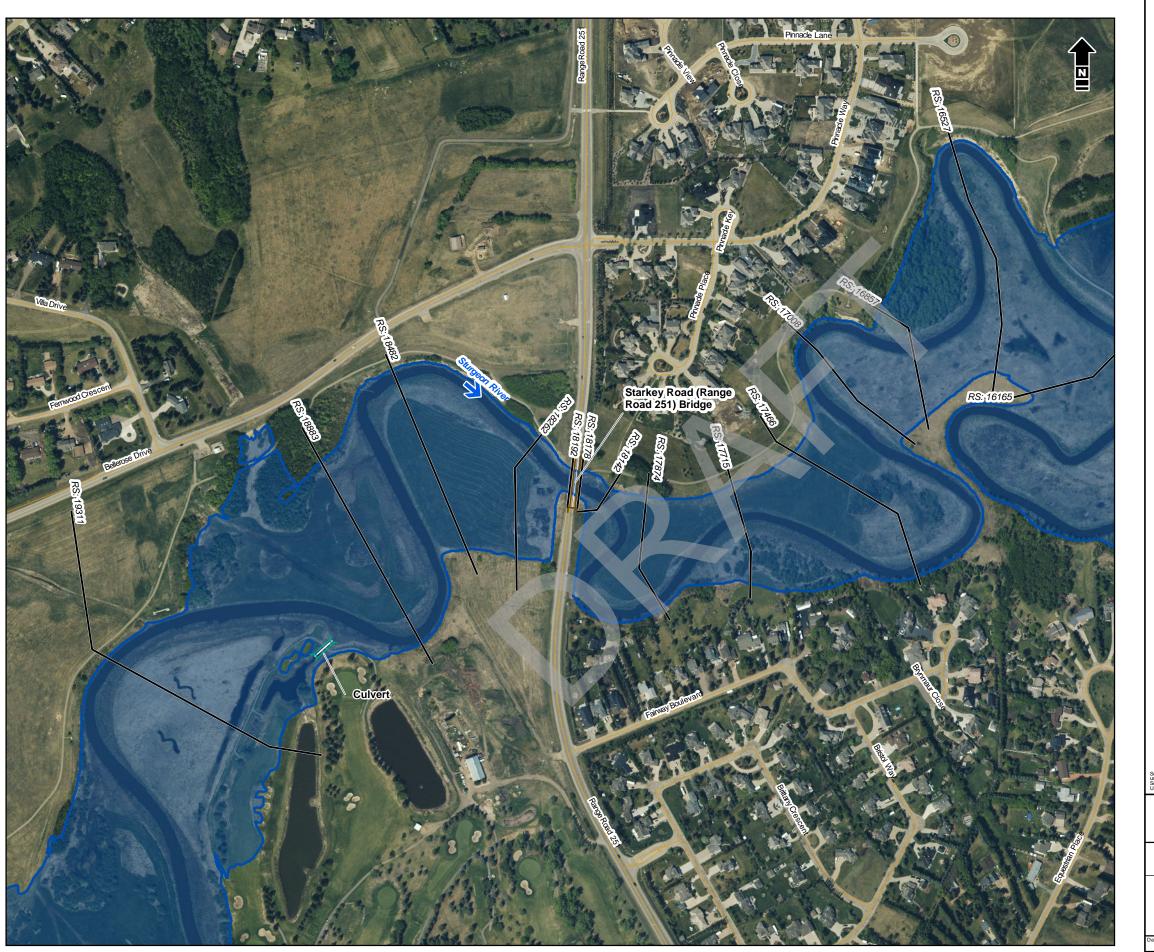


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### Open Water Flood Inundation Mapbook | 20-Year

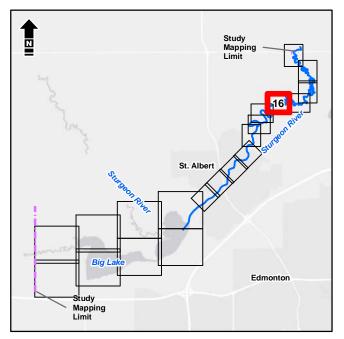
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# Open Water Flood Inundation Mapbook | 20-Year

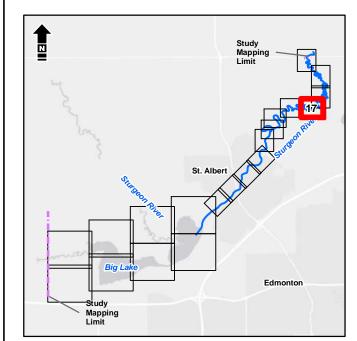
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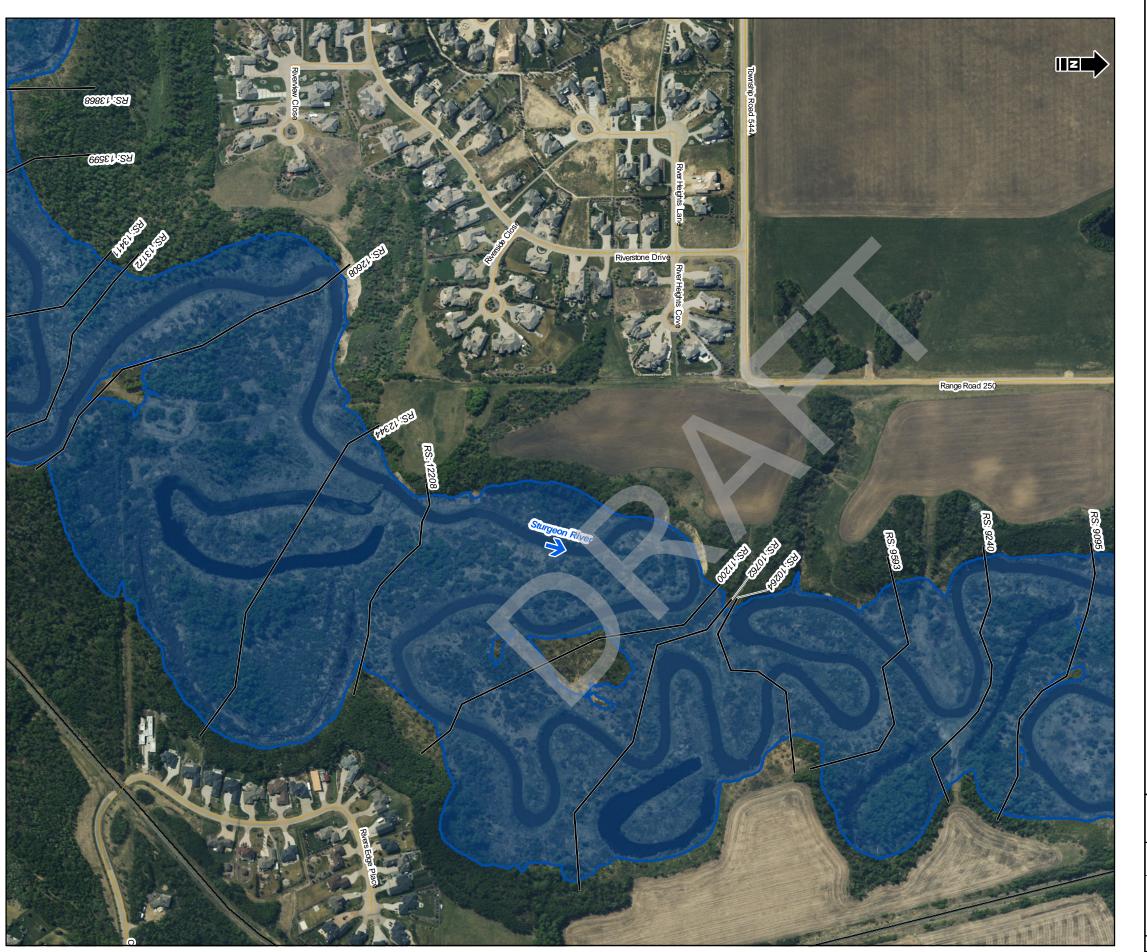
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### Open Water Flood Inundation Mapbook | 20-Year

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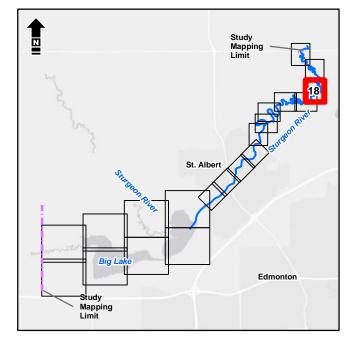
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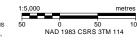


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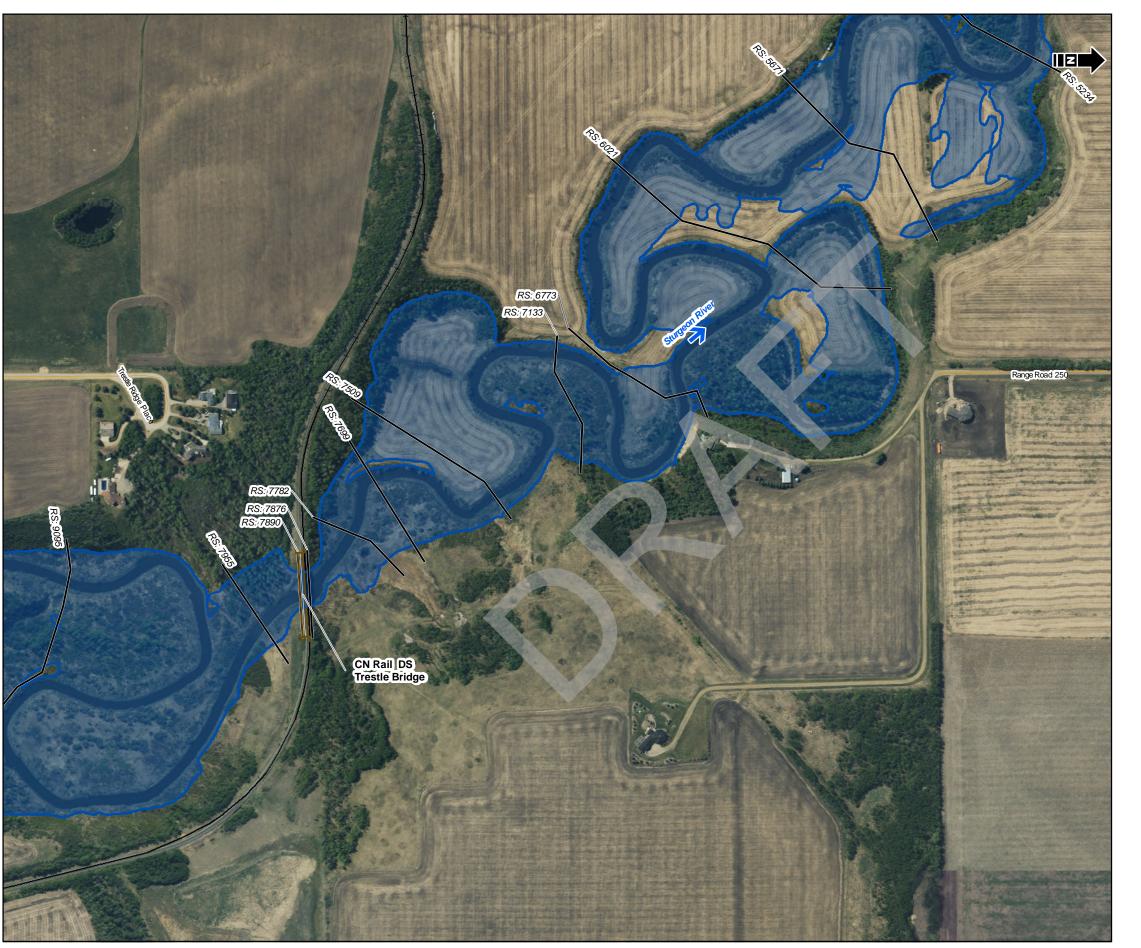




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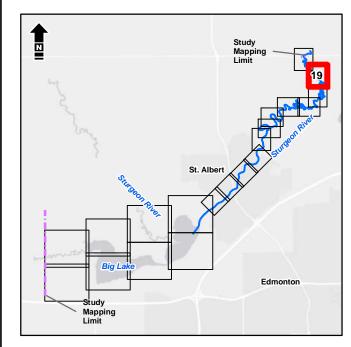
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March 2020



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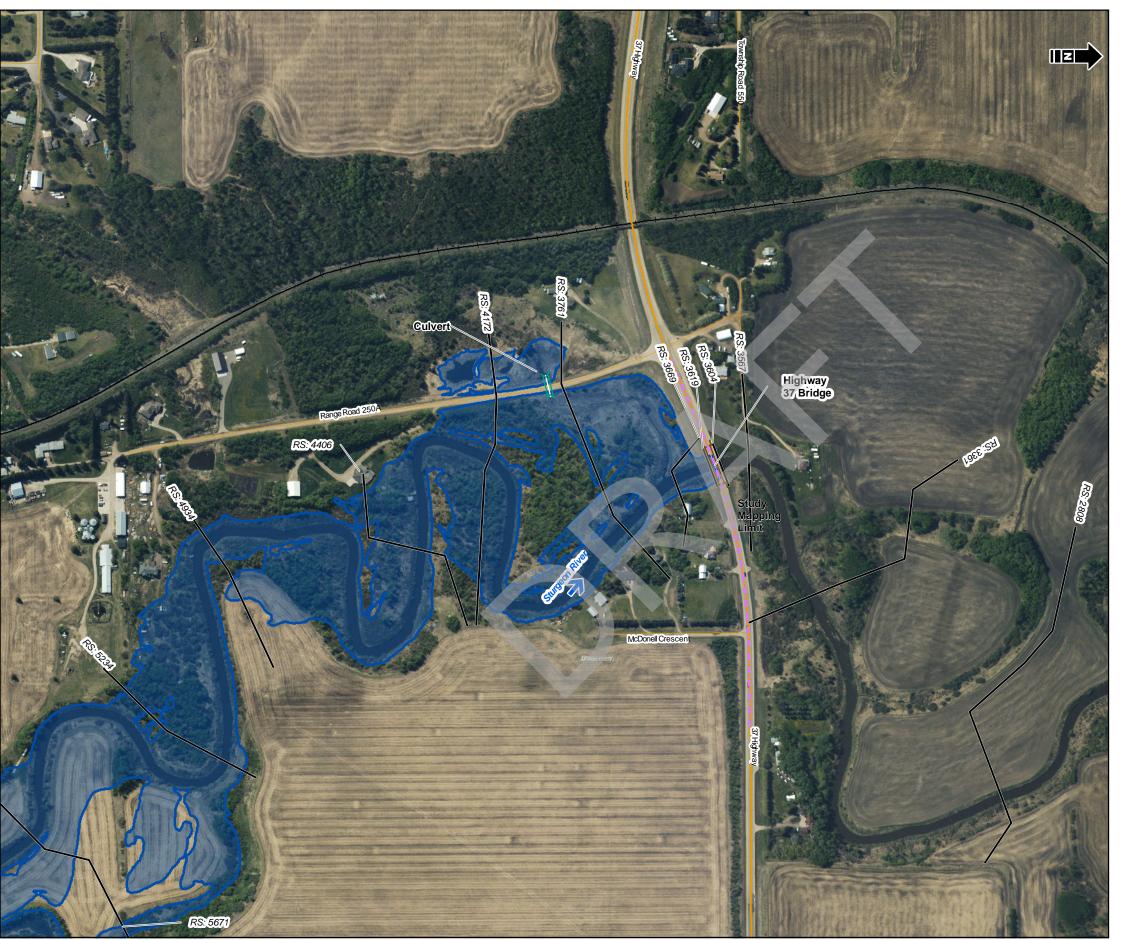


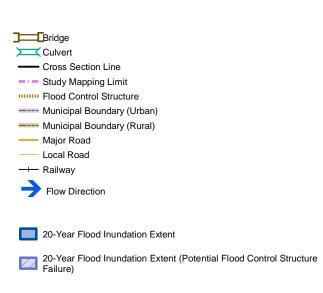


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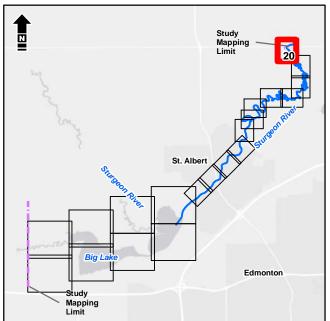
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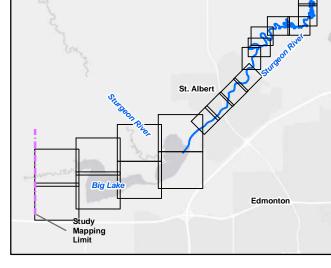
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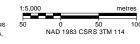


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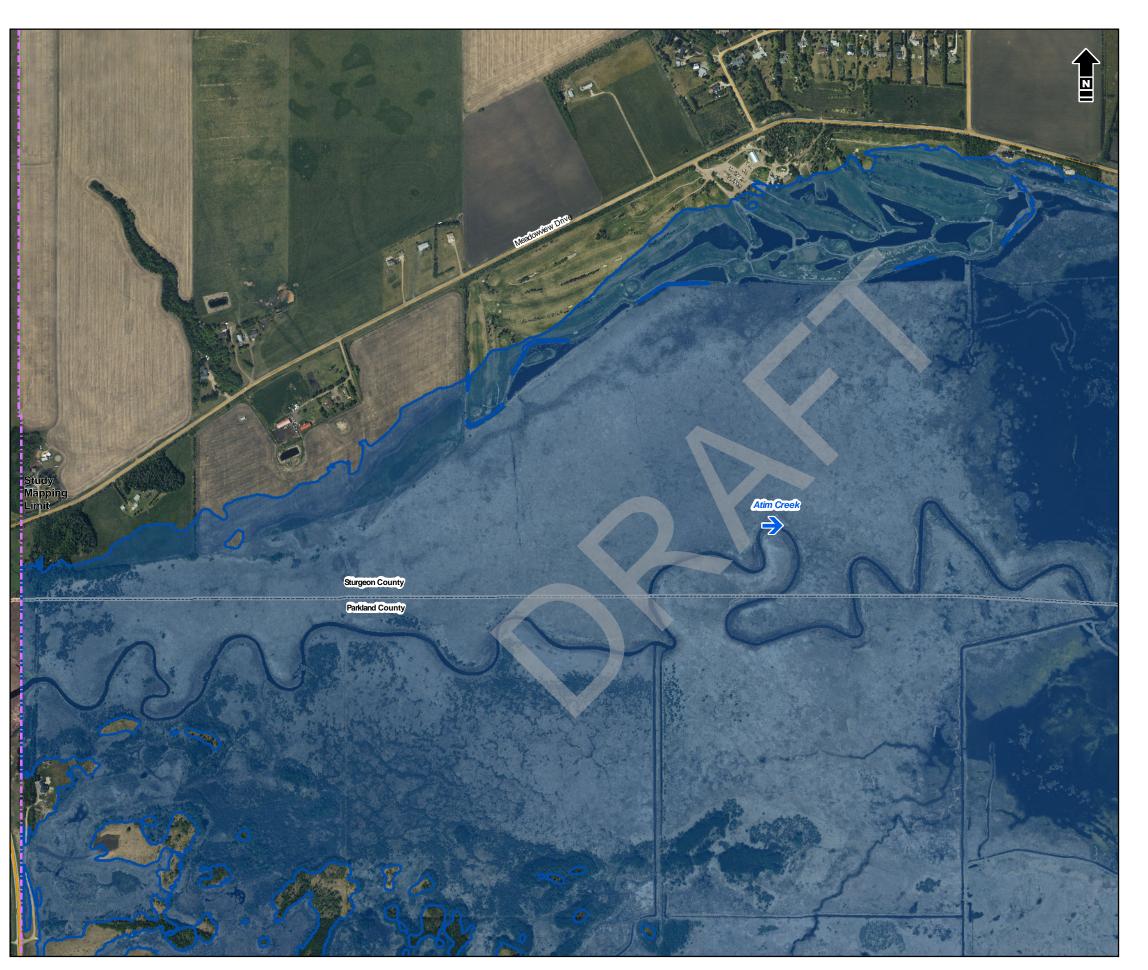




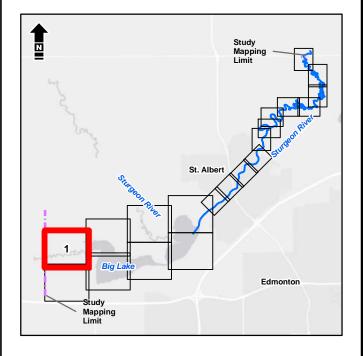
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# Open Water Flood Inundation Mapbook | 20-Year

March 2020







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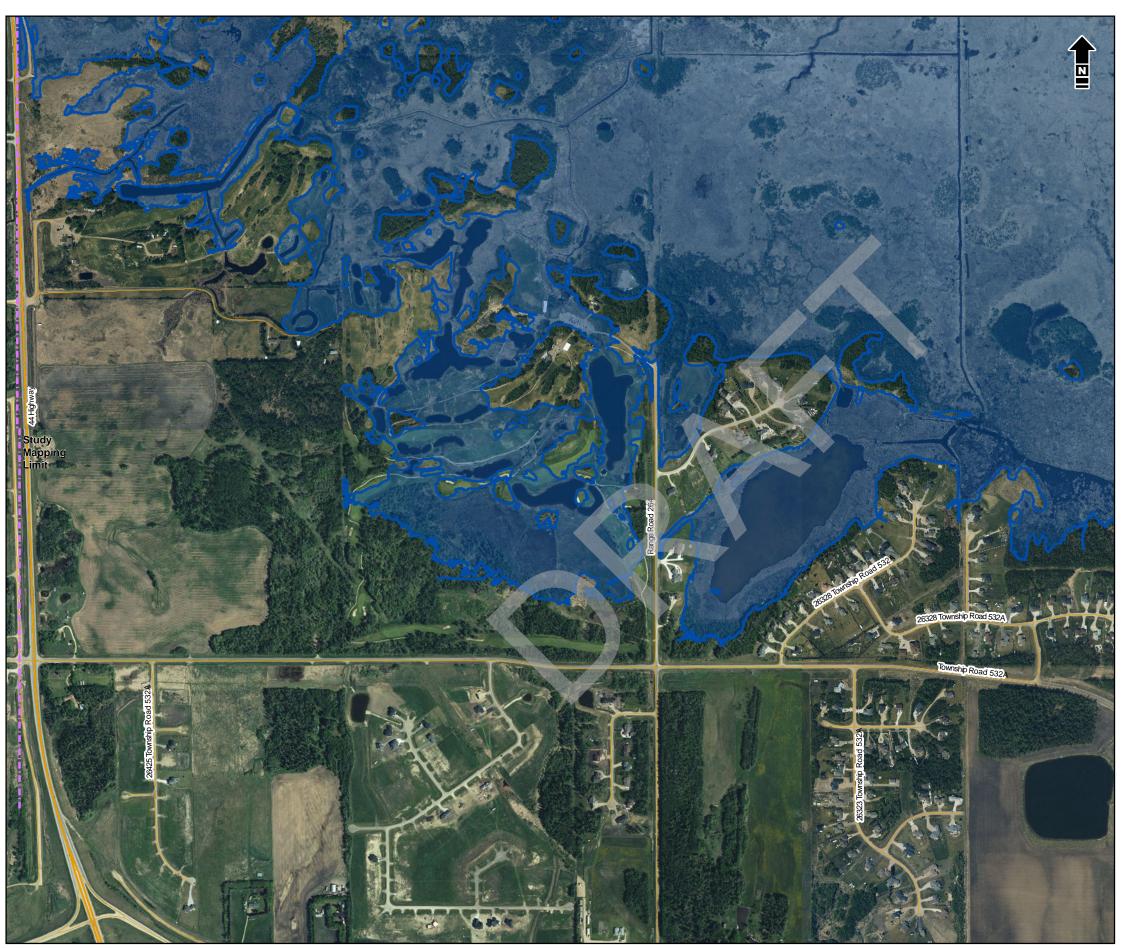
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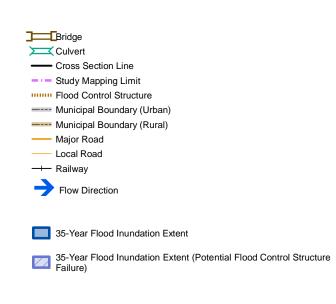
### Open Water Flood Inundation Mapbook | 35-Year

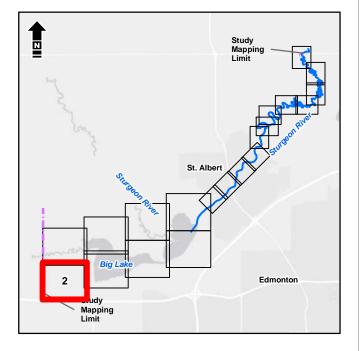
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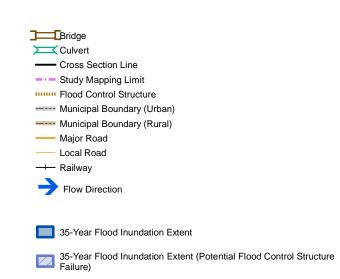
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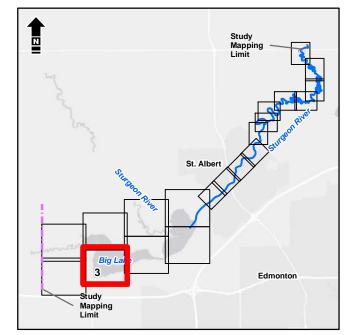
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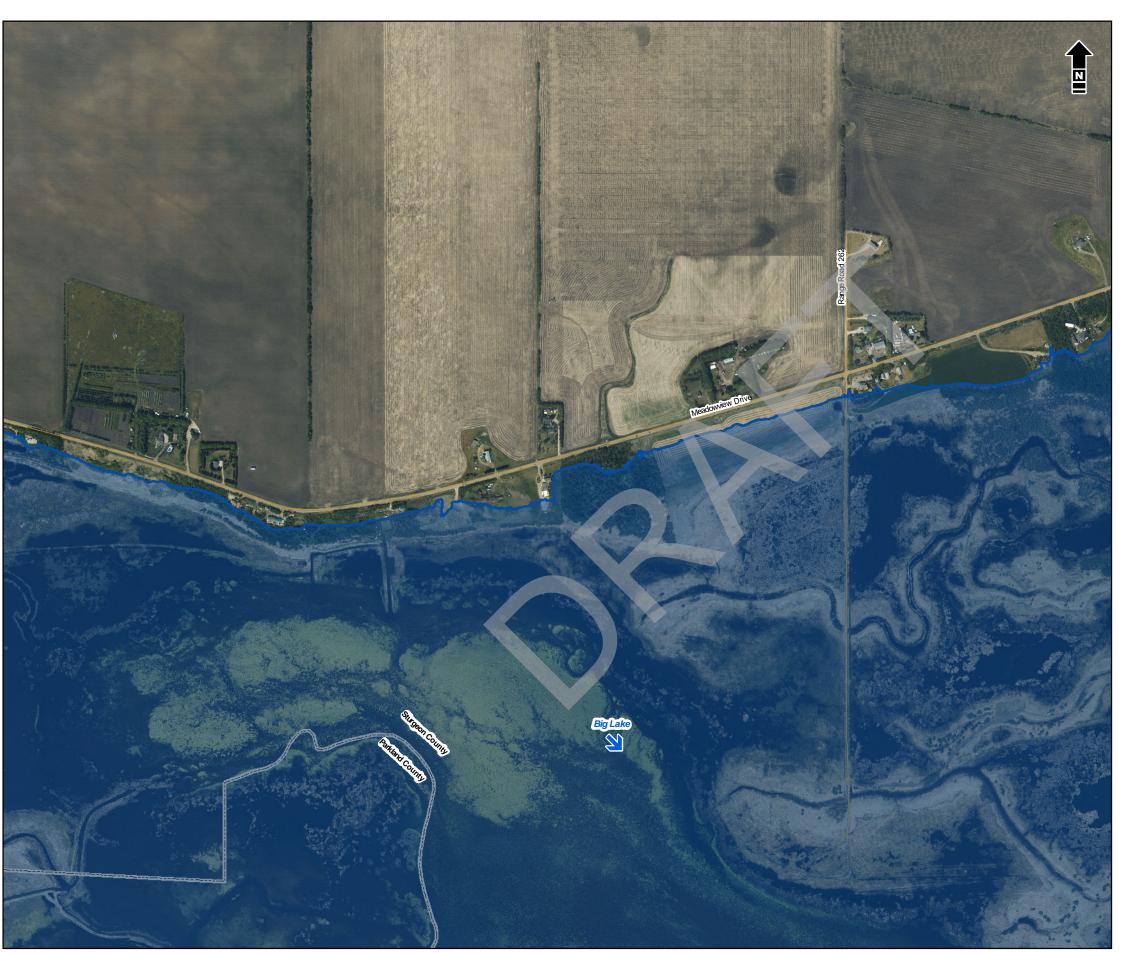
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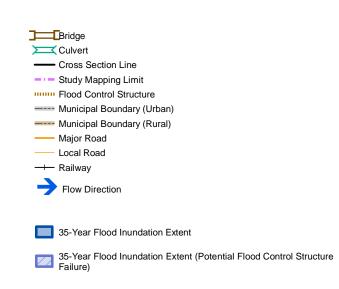
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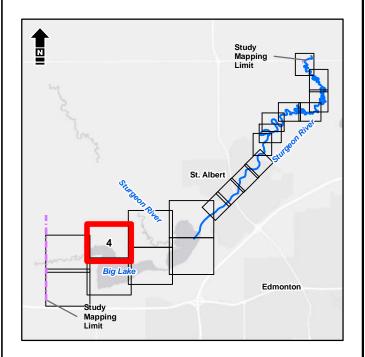
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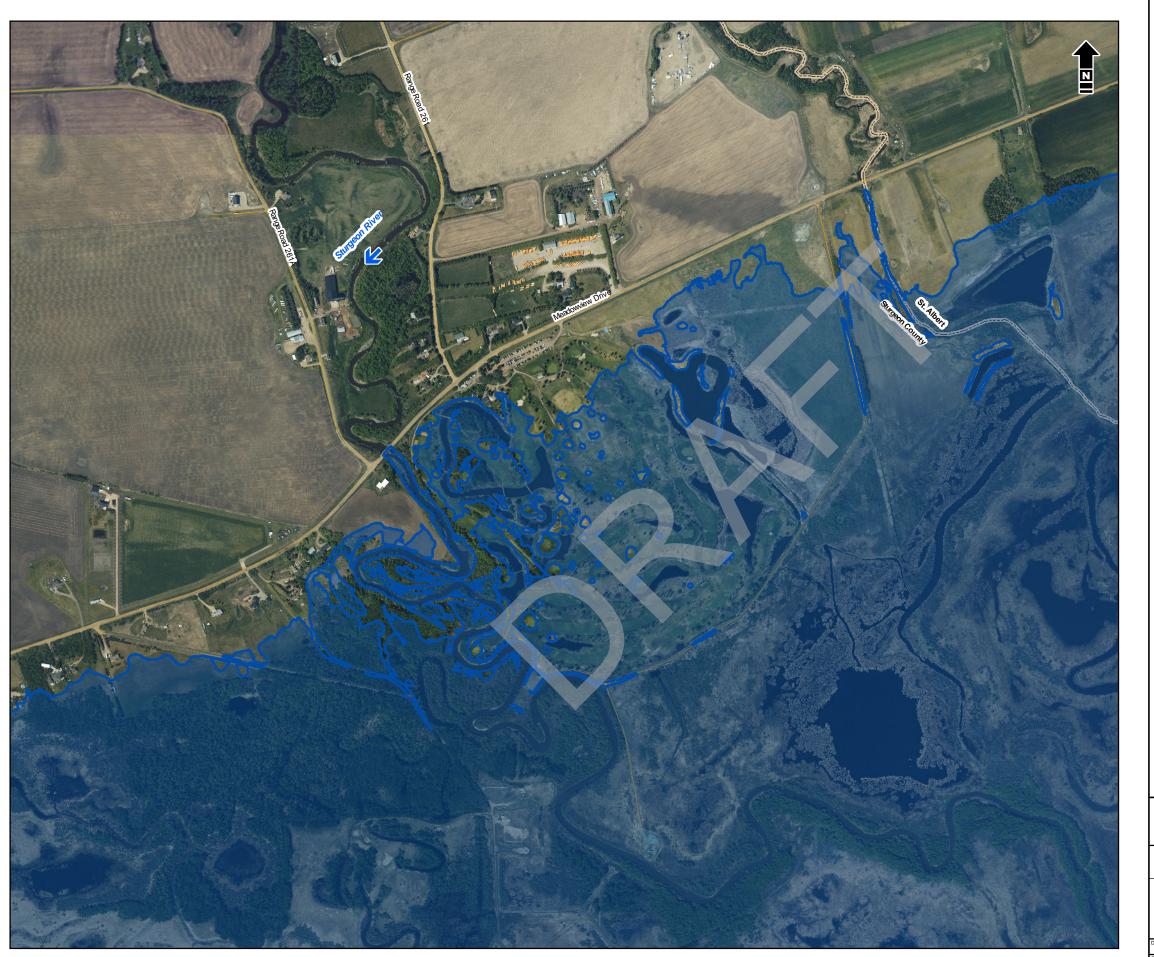
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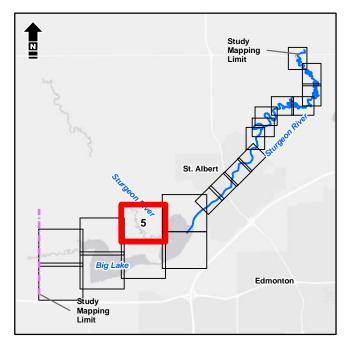
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Bridge
Culvert
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35-Year Flood Inundation Extent
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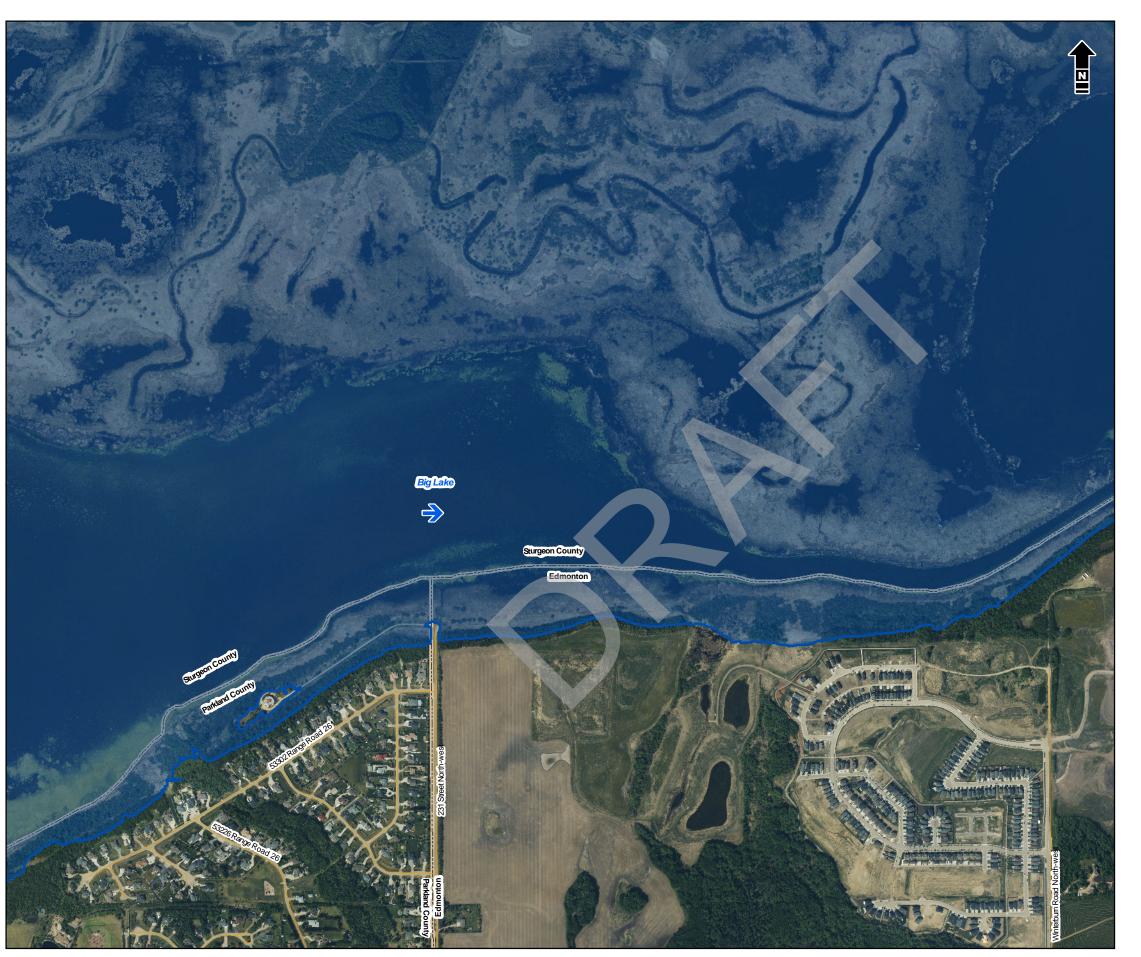
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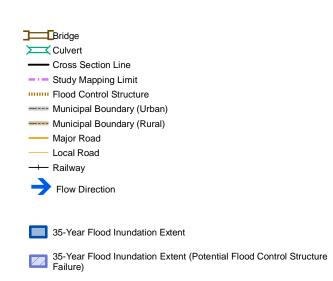
### Open Water Flood Inundation Mapbook | 35-Year

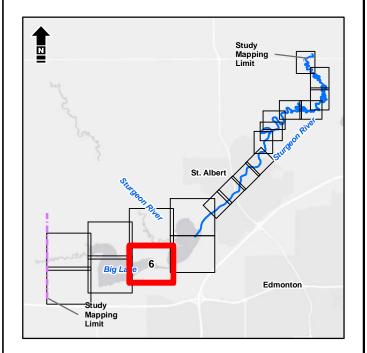
Date: March 2020 Project: 28312 Submitter: P. Rogers Reviewer:

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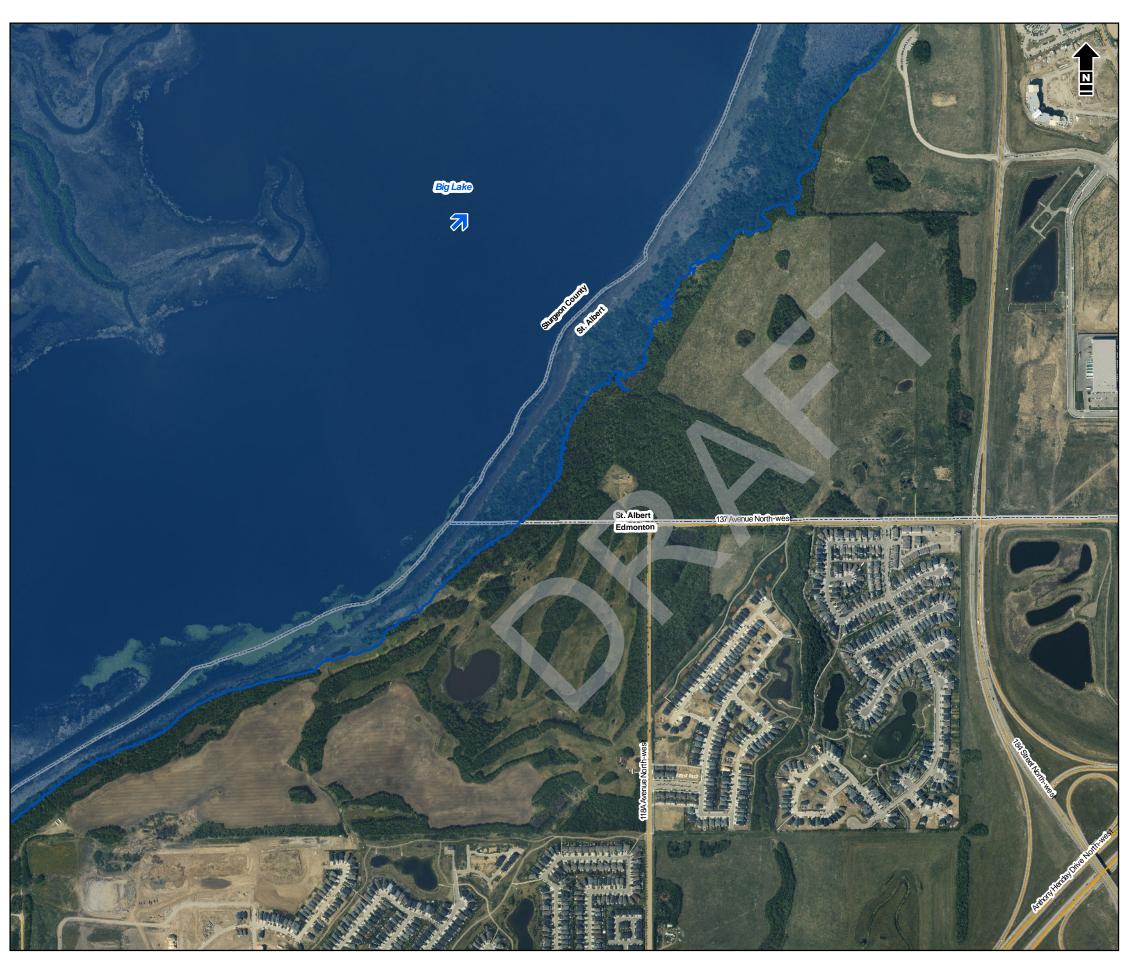
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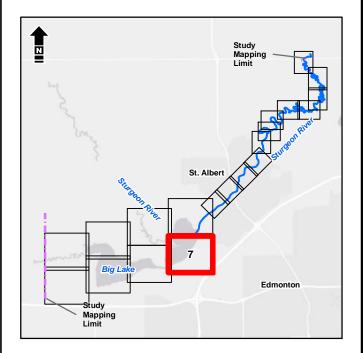
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Culvert
Cross Section Line
Study Mapping Limit
Flood Control Structure
Municipal Boundary (Urban)
Major Road
Local Road
Railway
Flow Direction

35-Year Flood Inundation Extent (Potential Flood Control Structure Failure)



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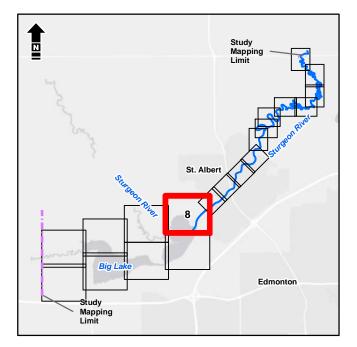
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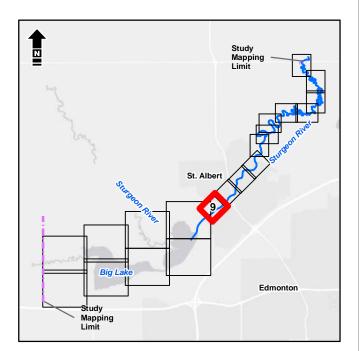
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Culvert
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35-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

#### <u>DISCHARGE</u> Sturgeon River = 64 m<sup>3</sup>/s



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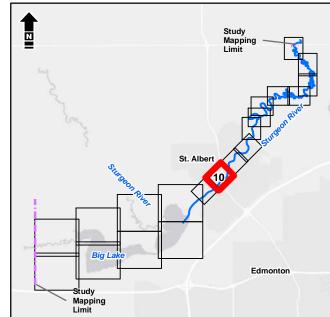
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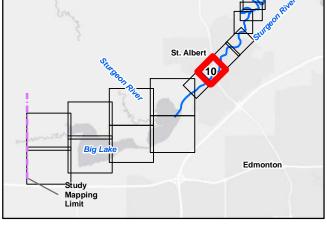
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Bridge Culvert Culvert --- Cross Section Line -- Study Mapping Limit Flood Control Structure ---- Municipal Boundary (Urban) ---- Municipal Boundary (Rural) --- Major Road — Local Road — Railway Flow Direction 35-Year Flood Inundation Extent 35-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

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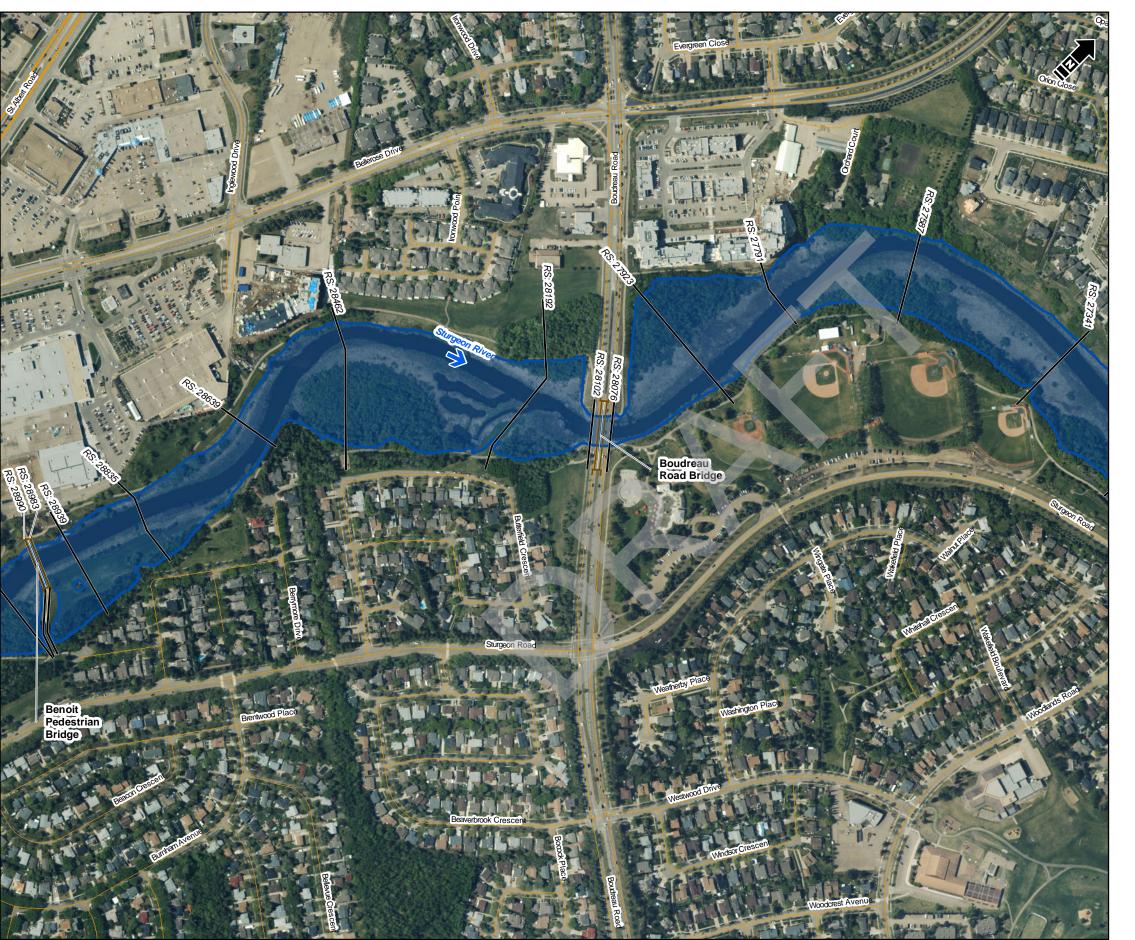




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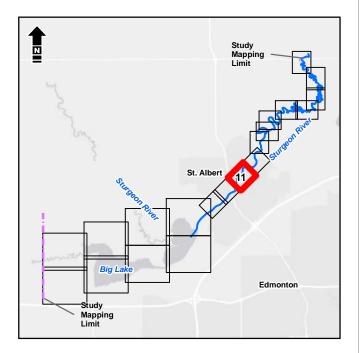
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March 2020



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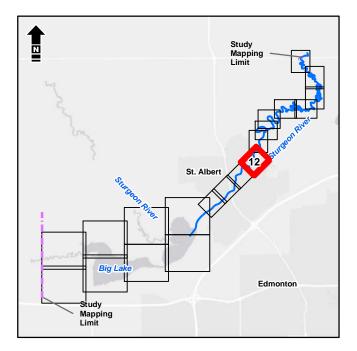
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March 2020



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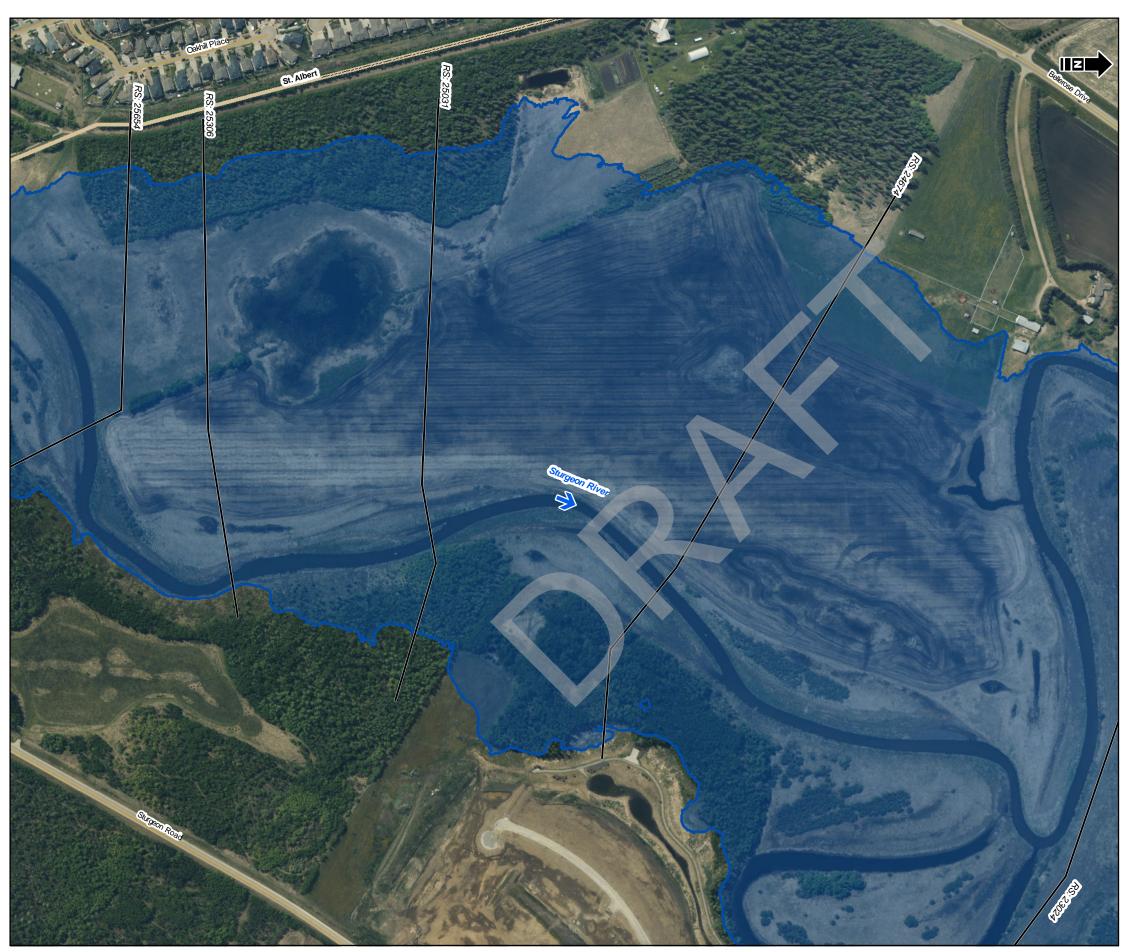




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# Open Water Flood Inundation Mapbook | 35-Year

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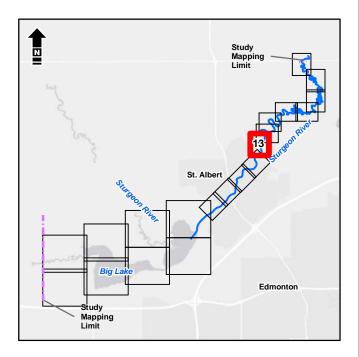


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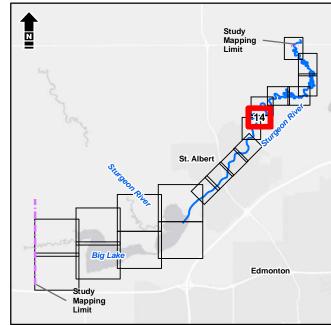
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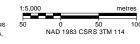


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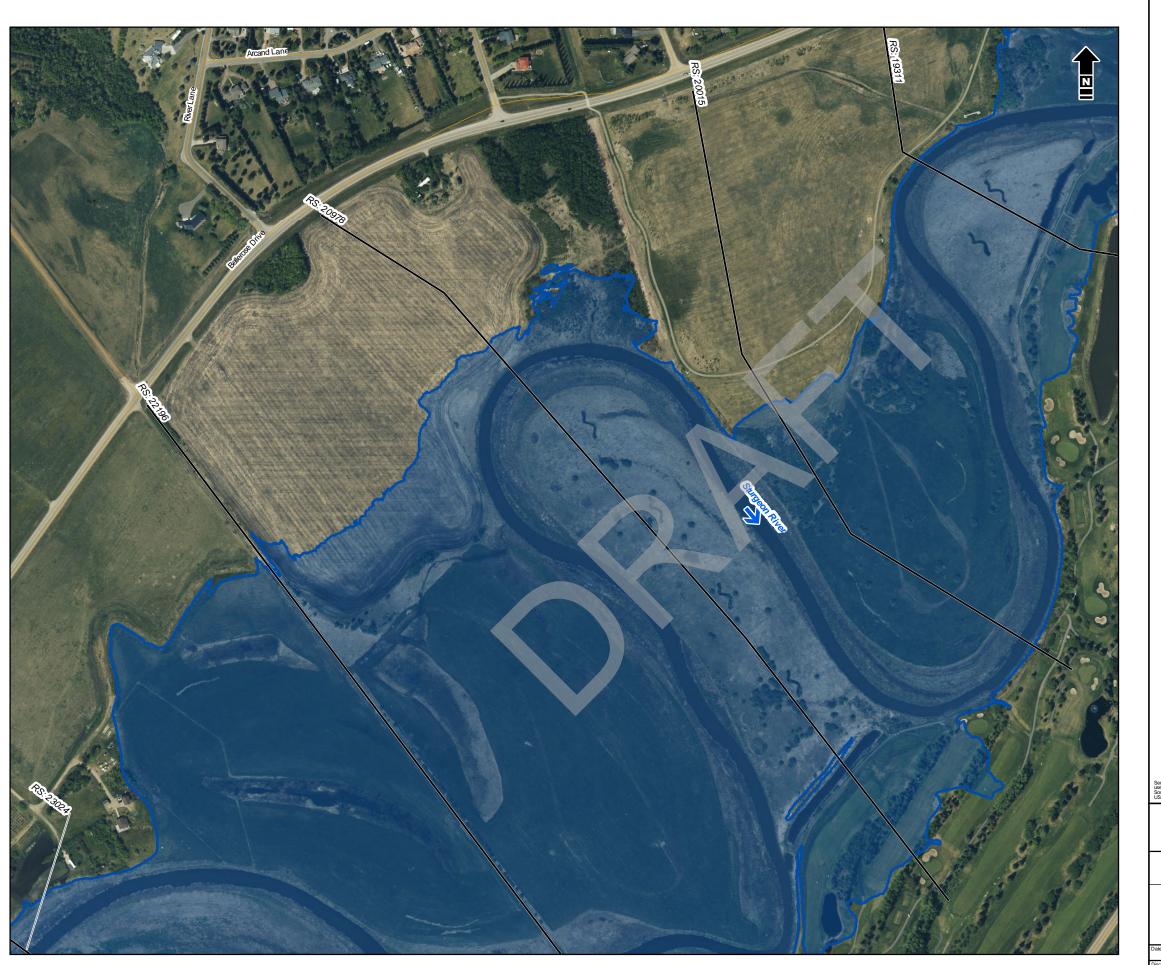




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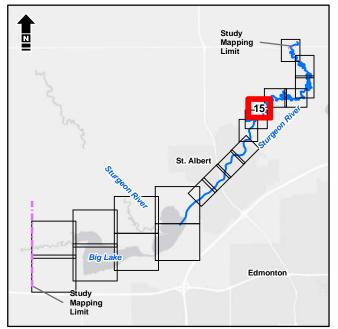
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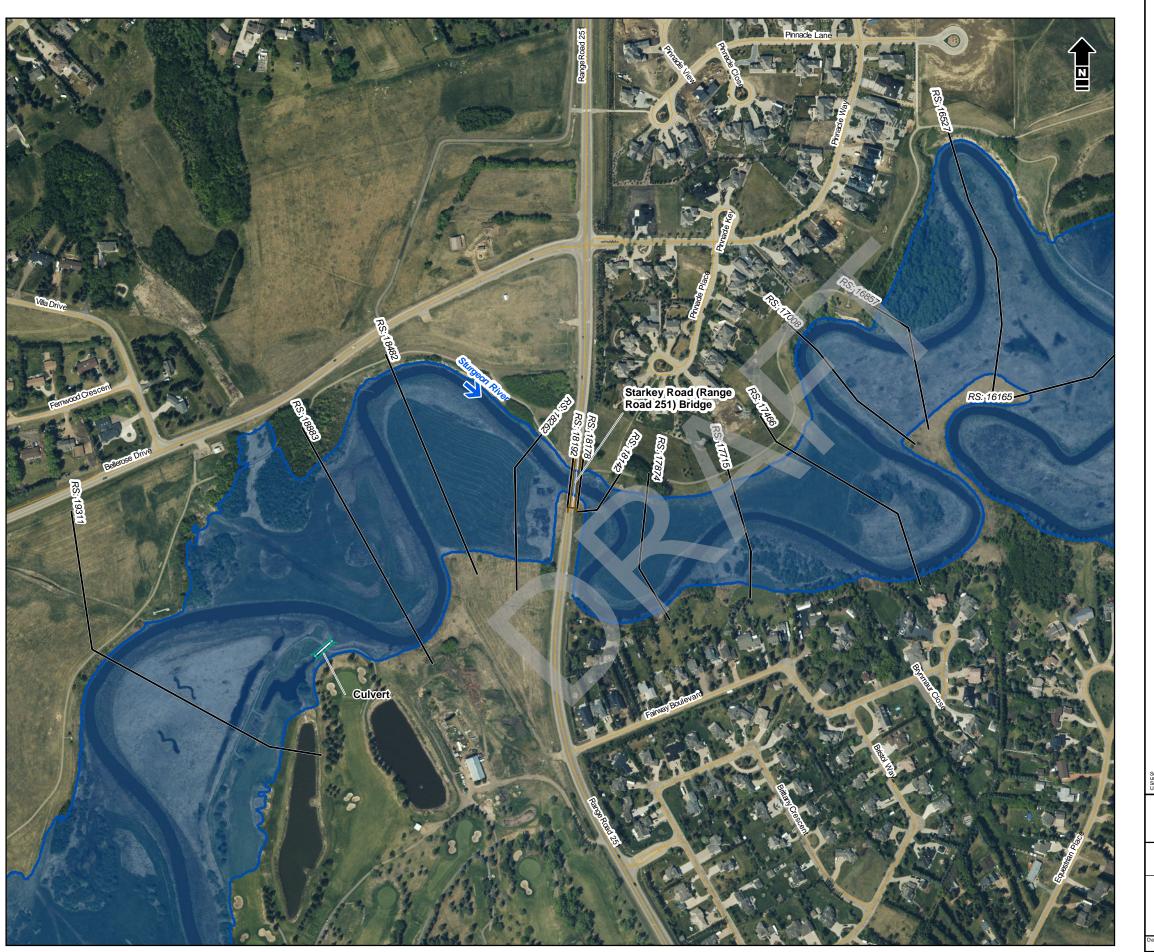




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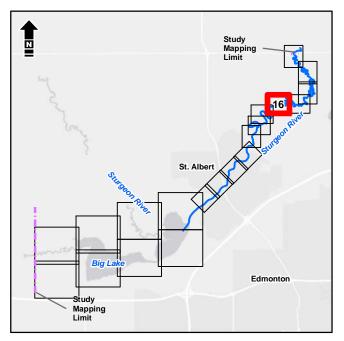
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March 2020



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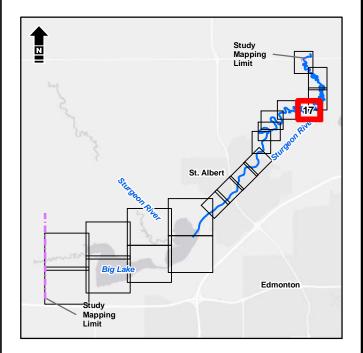
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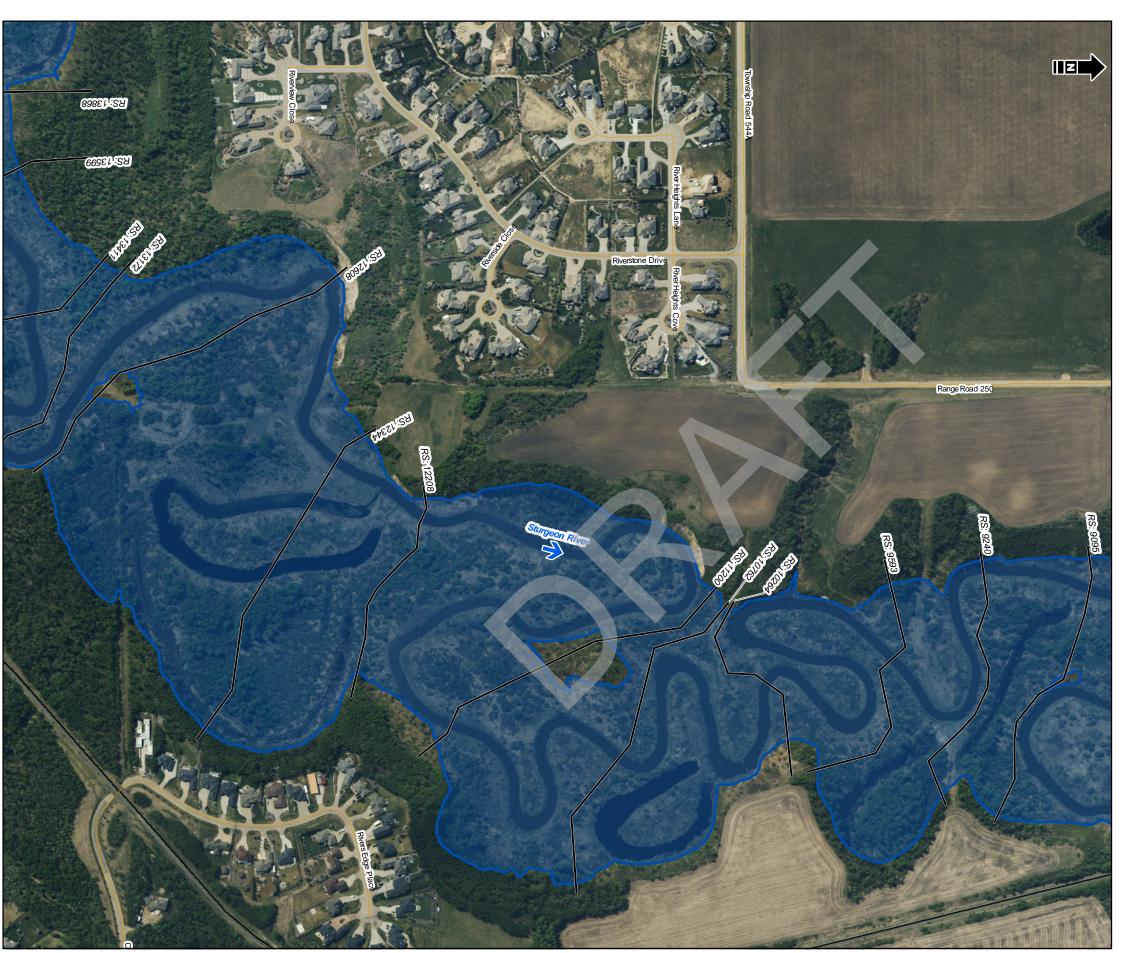




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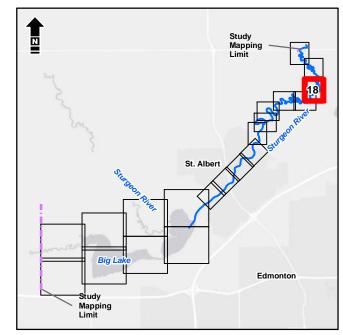
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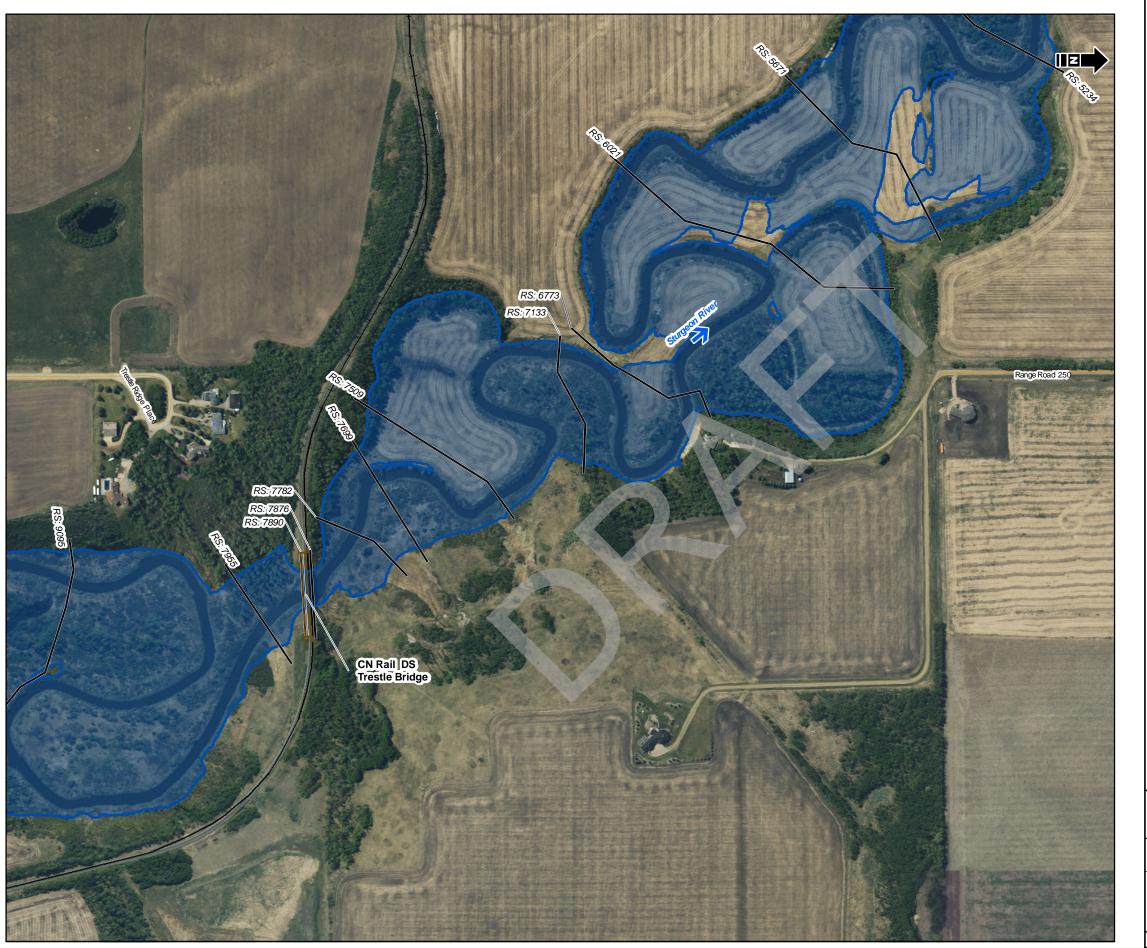
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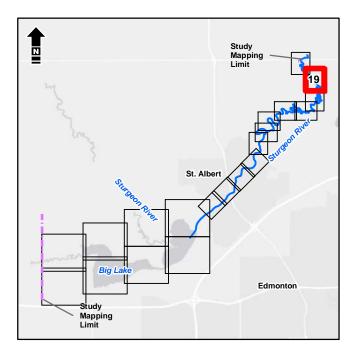
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Bridge Culvert --- Cross Section Line -- Study Mapping Limit Flood Control Structure ---- Municipal Boundary (Urban) ---- Municipal Boundary (Rural) --- Major Road — Local Road — Railway Flow Direction 35-Year Flood Inundation Extent 35-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

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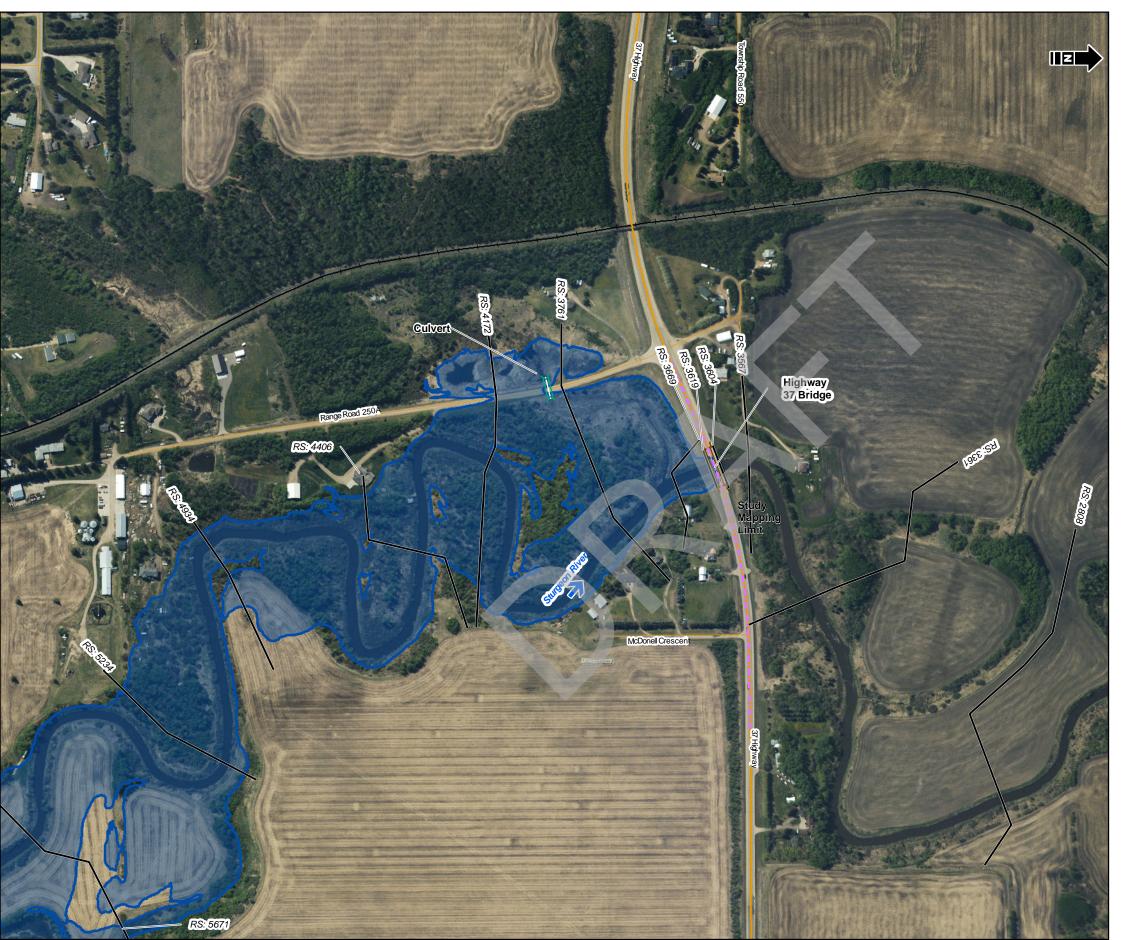




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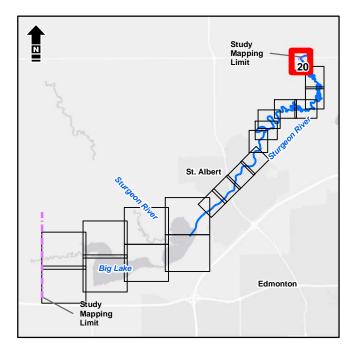
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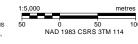


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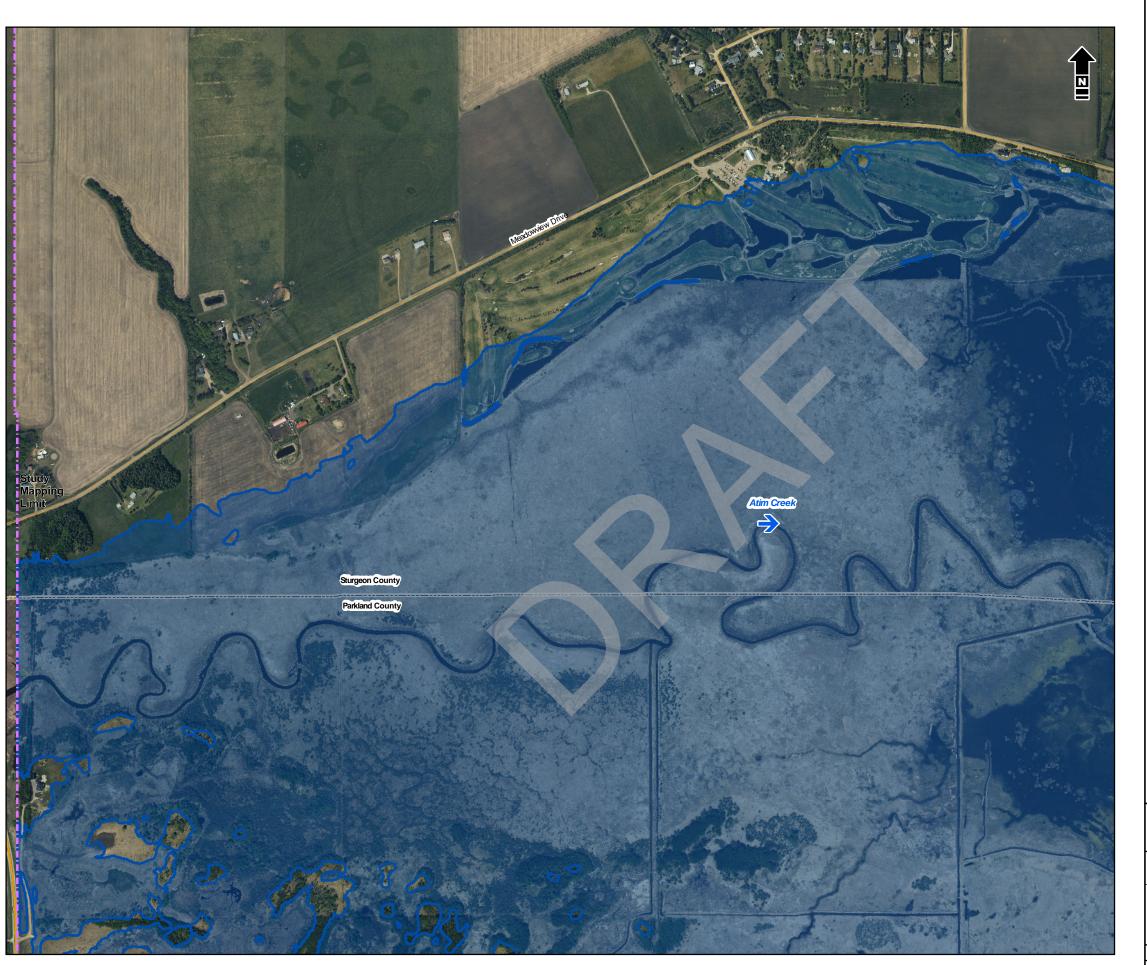




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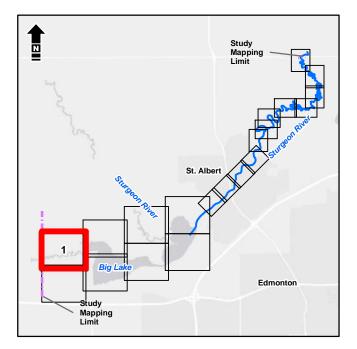
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50-Year Flood Inundation Extent (Potential Flood Control Structure Failure)



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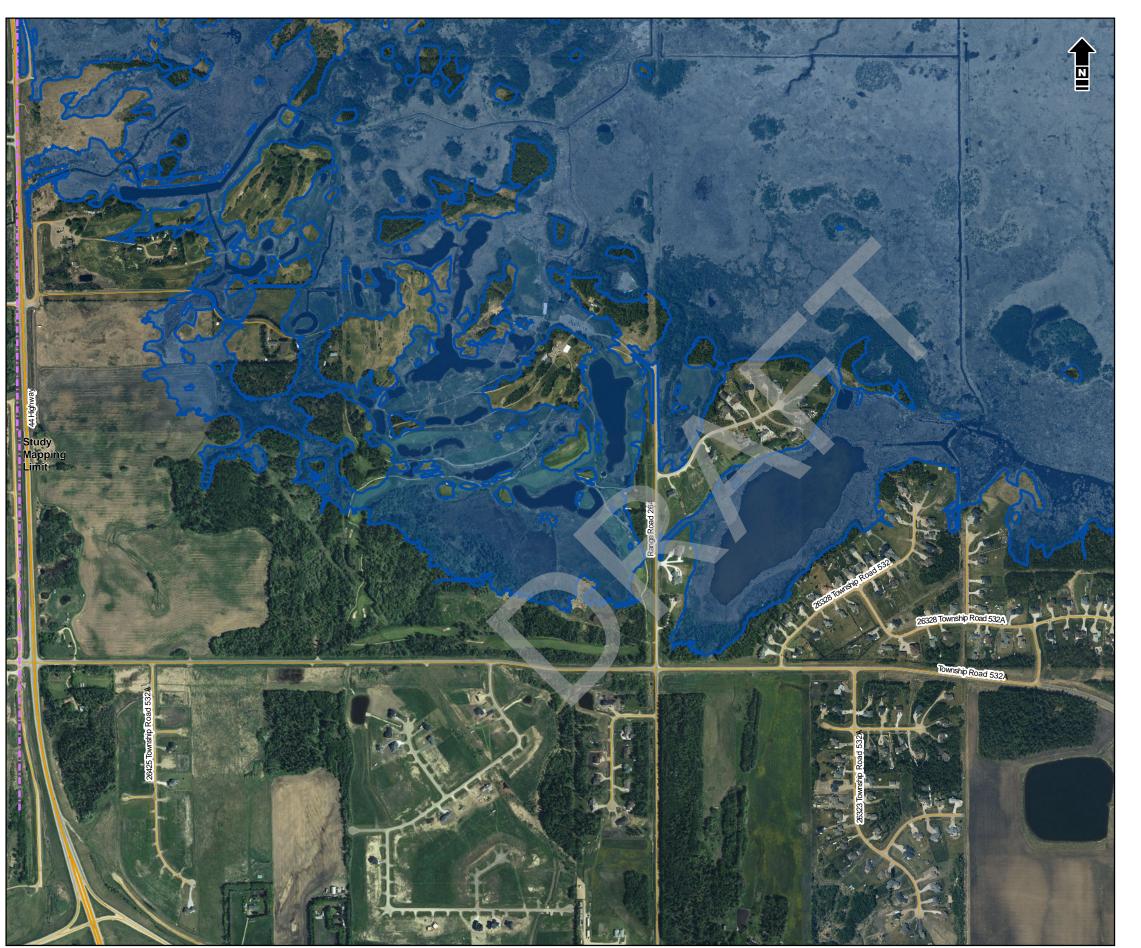


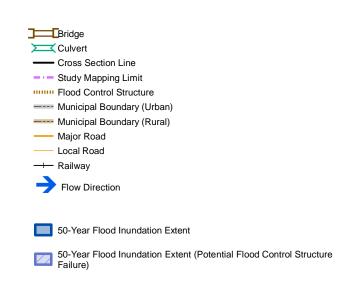
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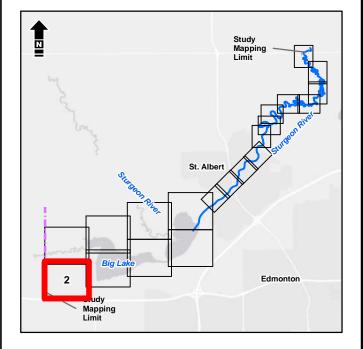
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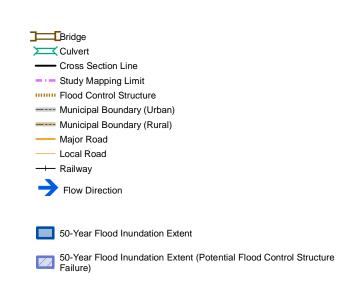
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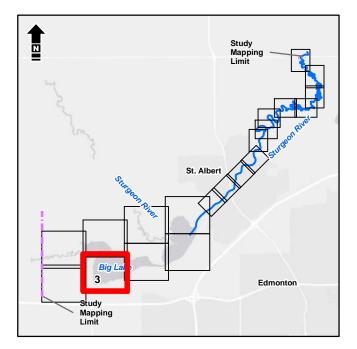
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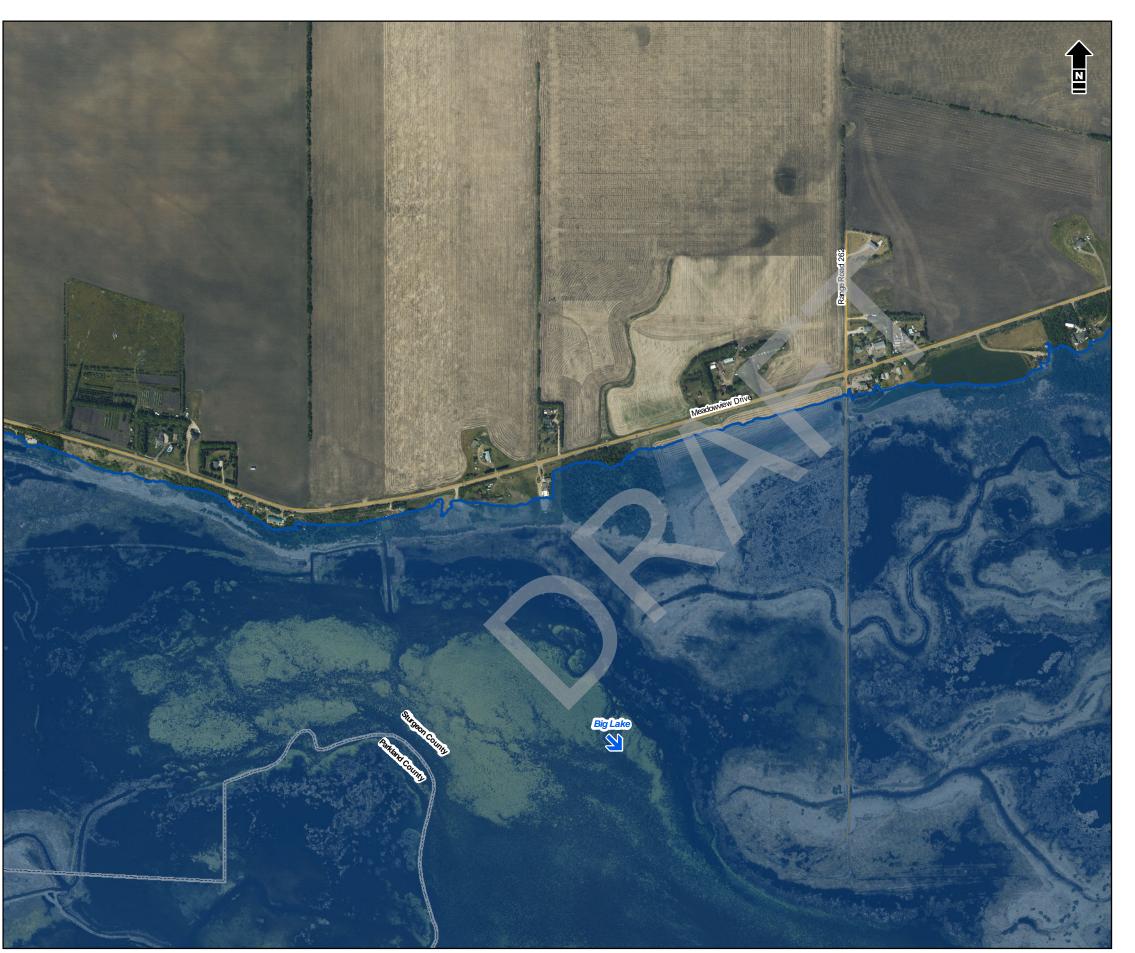
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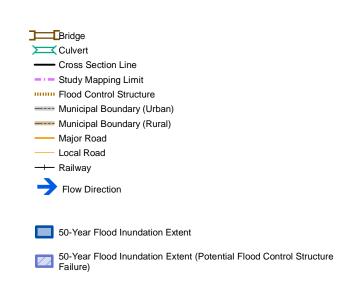
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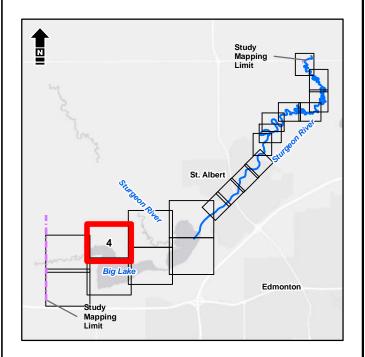
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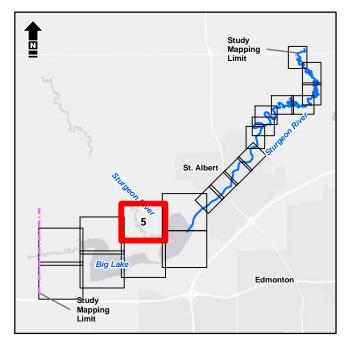
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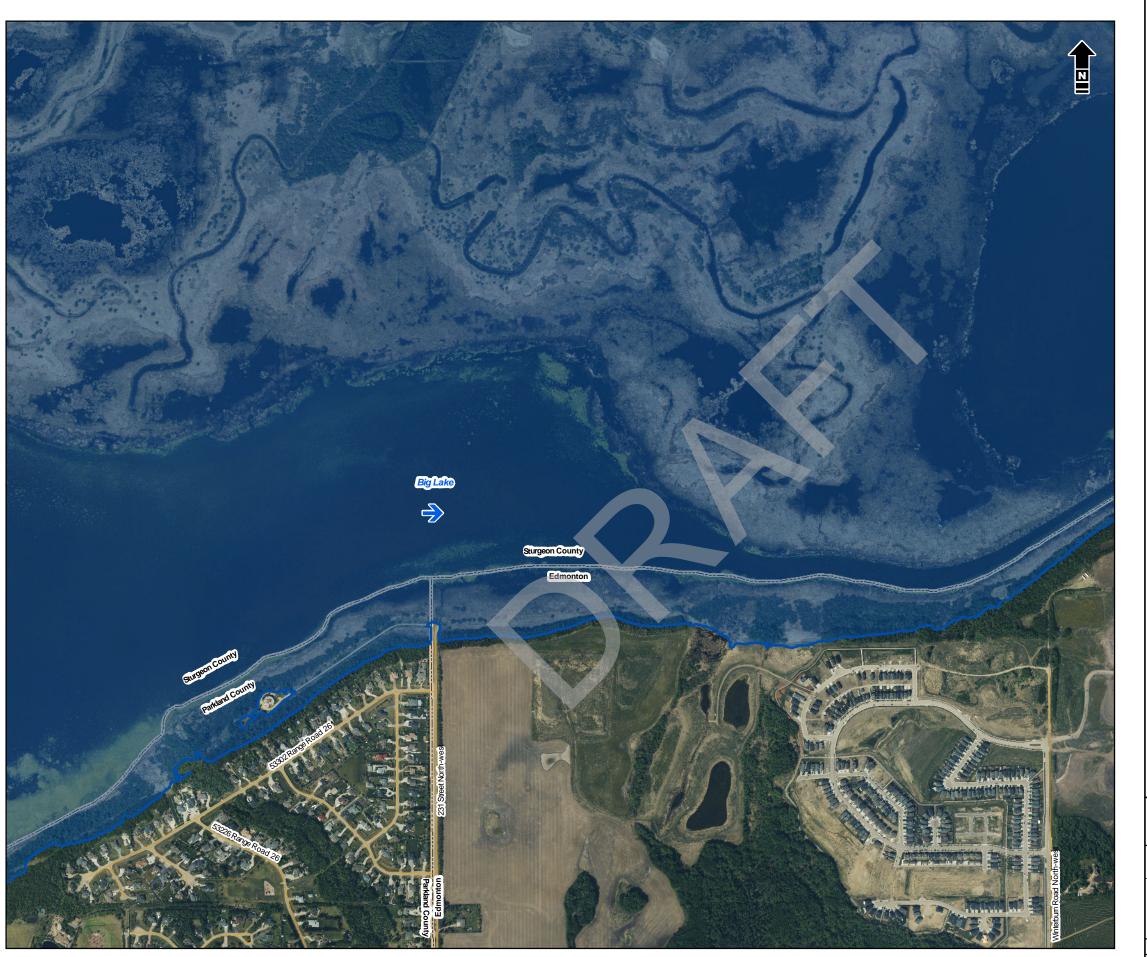


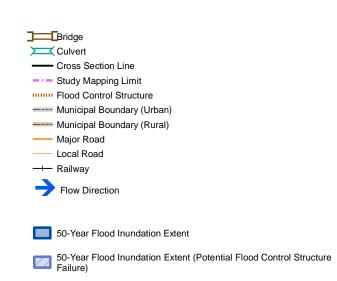
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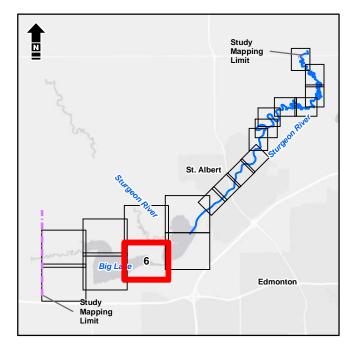
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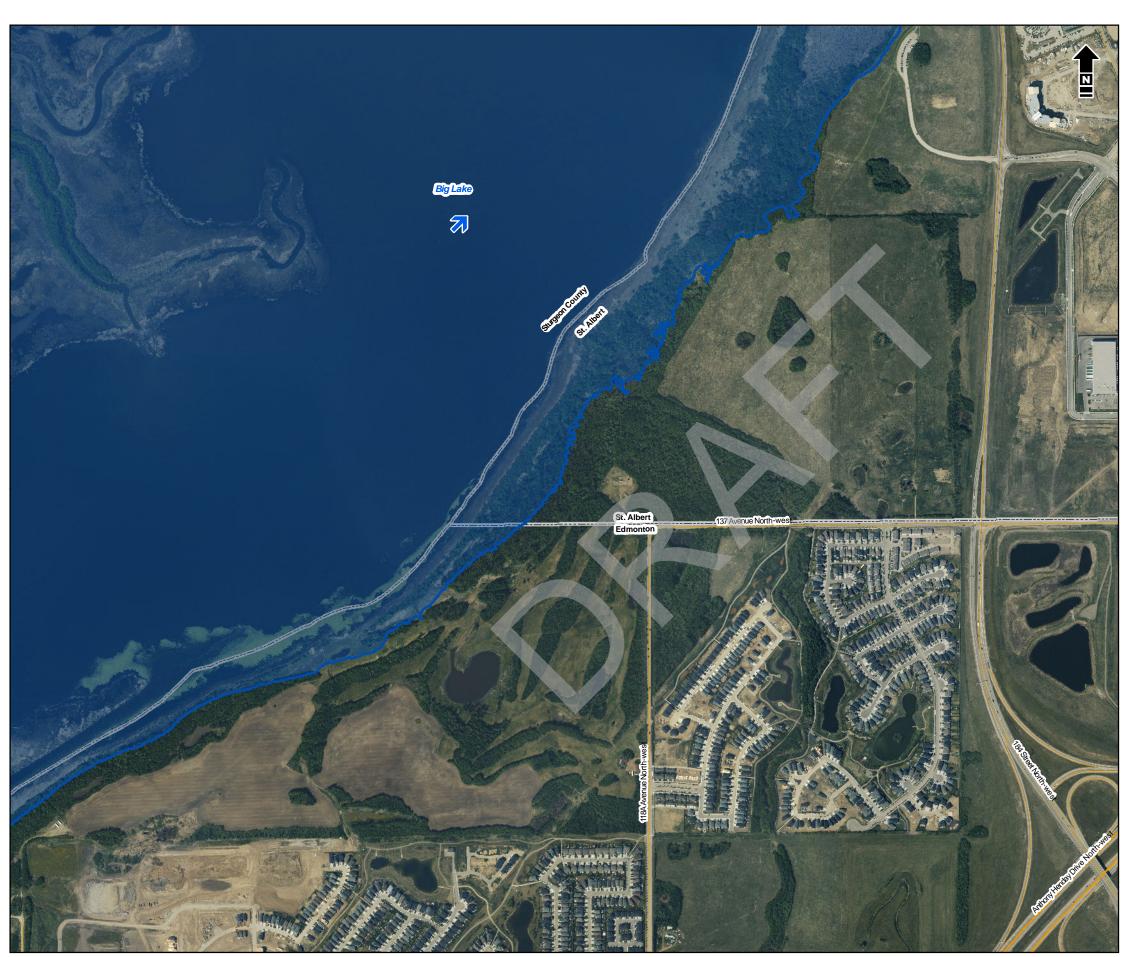
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Date: March 2020 Project: 28312 Submitter: P. Rogers

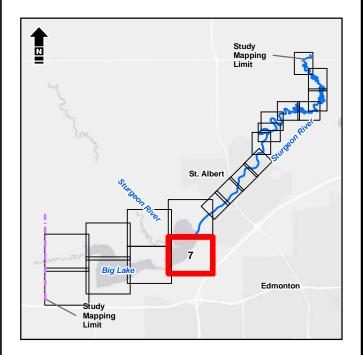
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Bridge
Culvert
Cross Section Line
Study Mapping Limit
Flood Control Structure
Municipal Boundary (Urban)
Major Road
Local Road
Local Road
Flow Direction

50-Year Flood Inundation Extent (Potential Flood Control Structure Failure)



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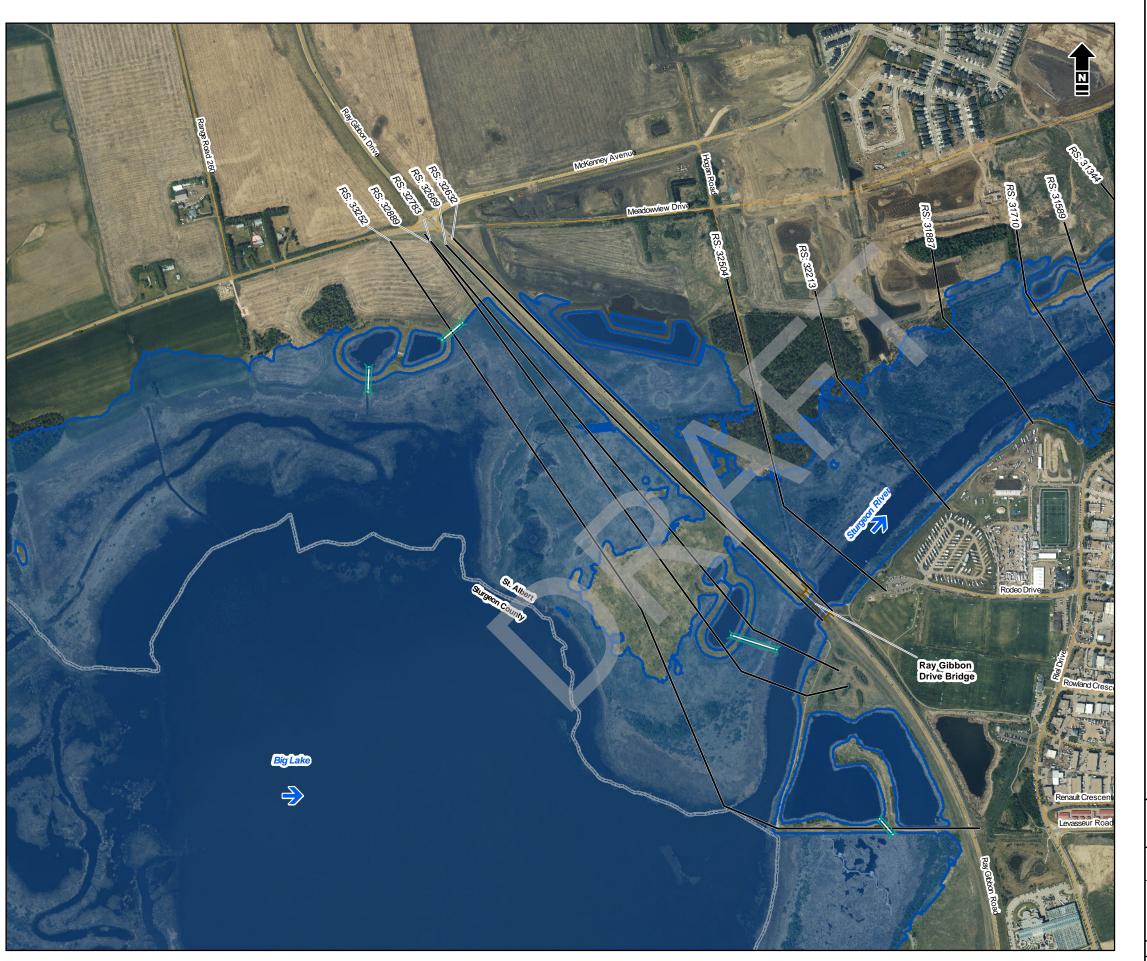


Alberta Government St. Albert Flood Hazard Study

### Open Water Flood Inundation Mapbook | 50-Year

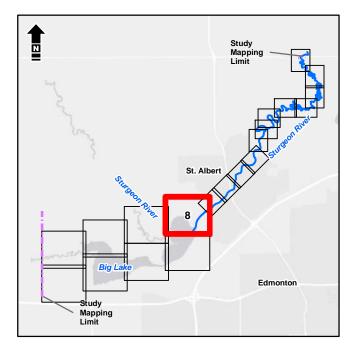
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Culvert
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### Open Water Flood Inundation Mapbook | 50-Year

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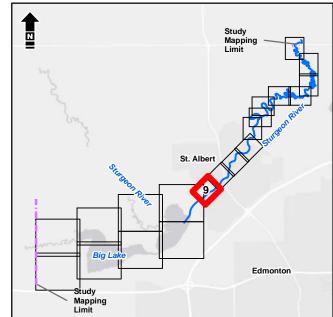
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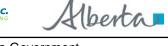
#### <u>DISCHARGE</u> Sturgeon River = 72 m<sup>3</sup>/s



Study
Mapping
Limit

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#### Open Water Flood Inundation Mapbook | 50-Year

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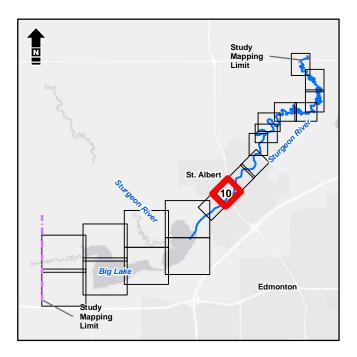
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Bridge **Culvert** --- Cross Section Line -- Study Mapping Limit Flood Control Structure ---- Municipal Boundary (Urban) ---- Municipal Boundary (Rural) --- Major Road — Local Road — Railway Flow Direction 50-Year Flood Inundation Extent 50-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

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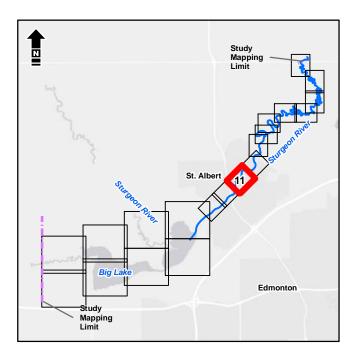
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March 2020



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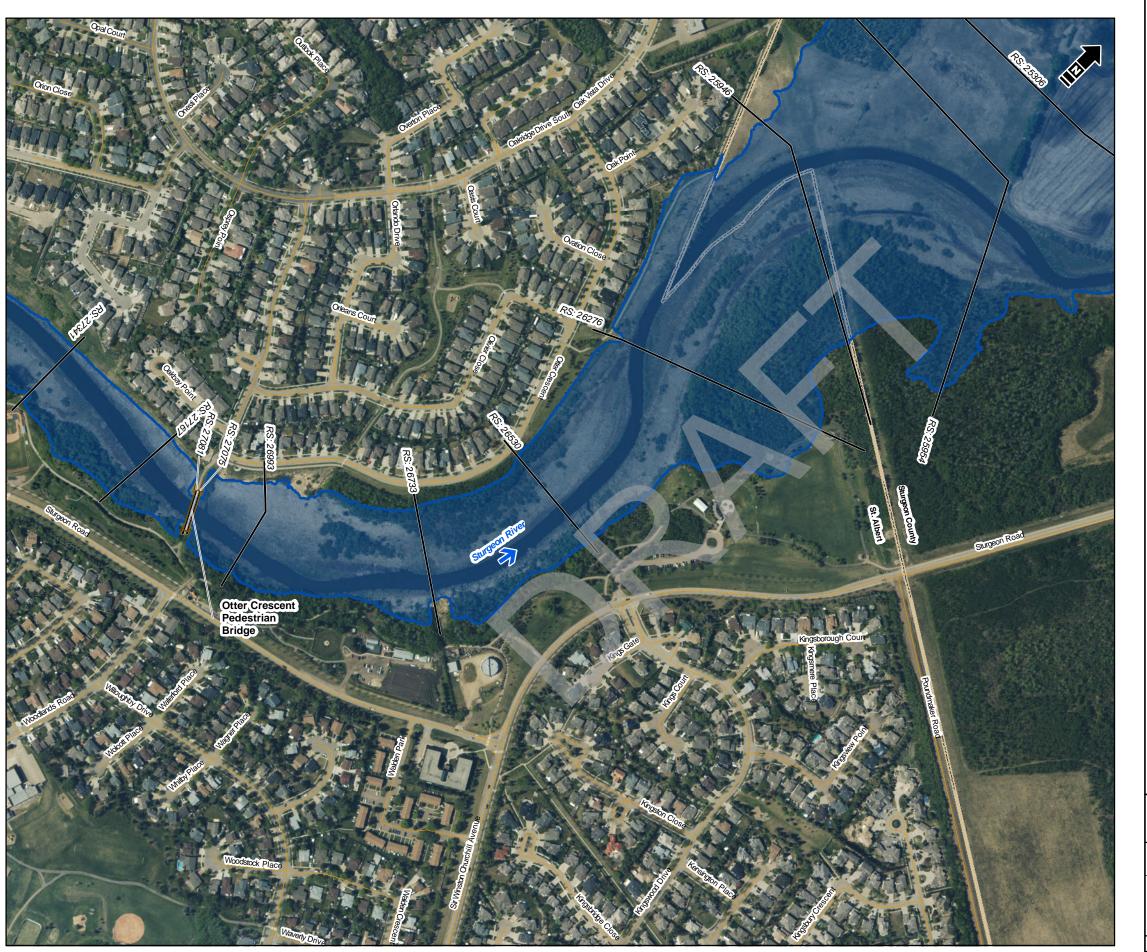
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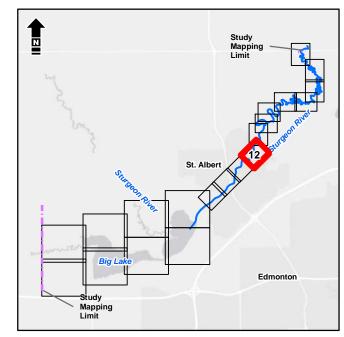
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March 2020



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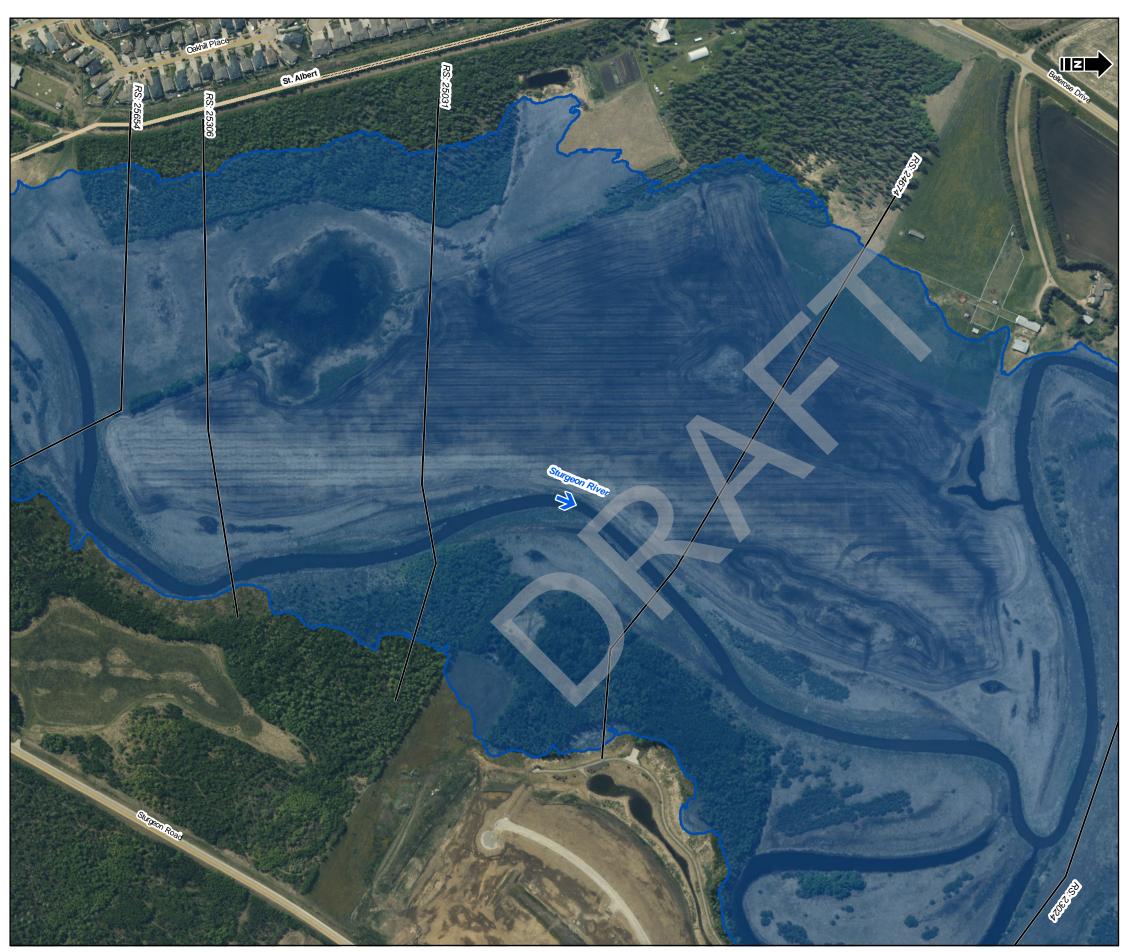




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## Open Water Flood Inundation Mapbook | 50-Year

March 2020

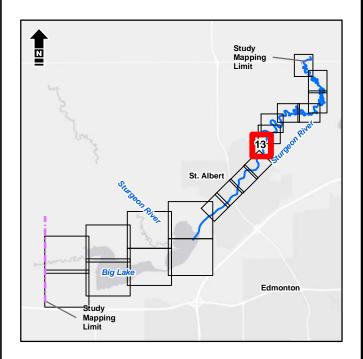


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### Open Water Flood Inundation Mapbook | 50-Year

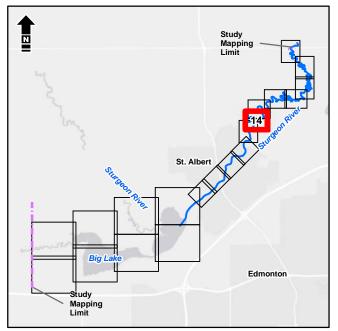
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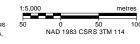


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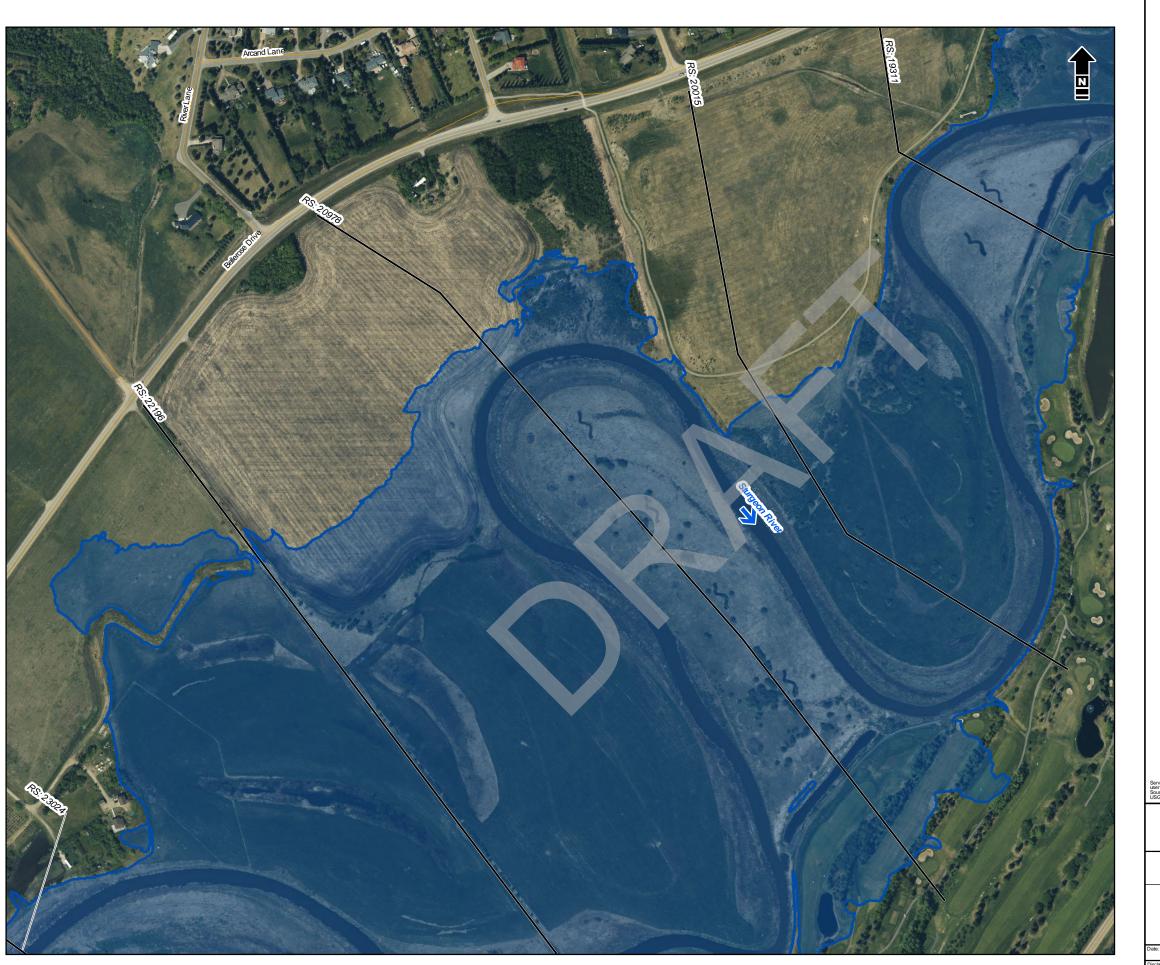




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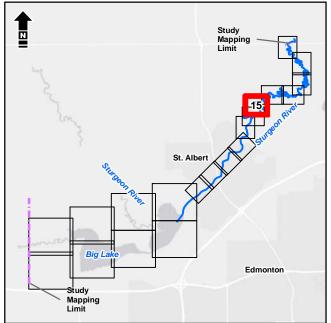
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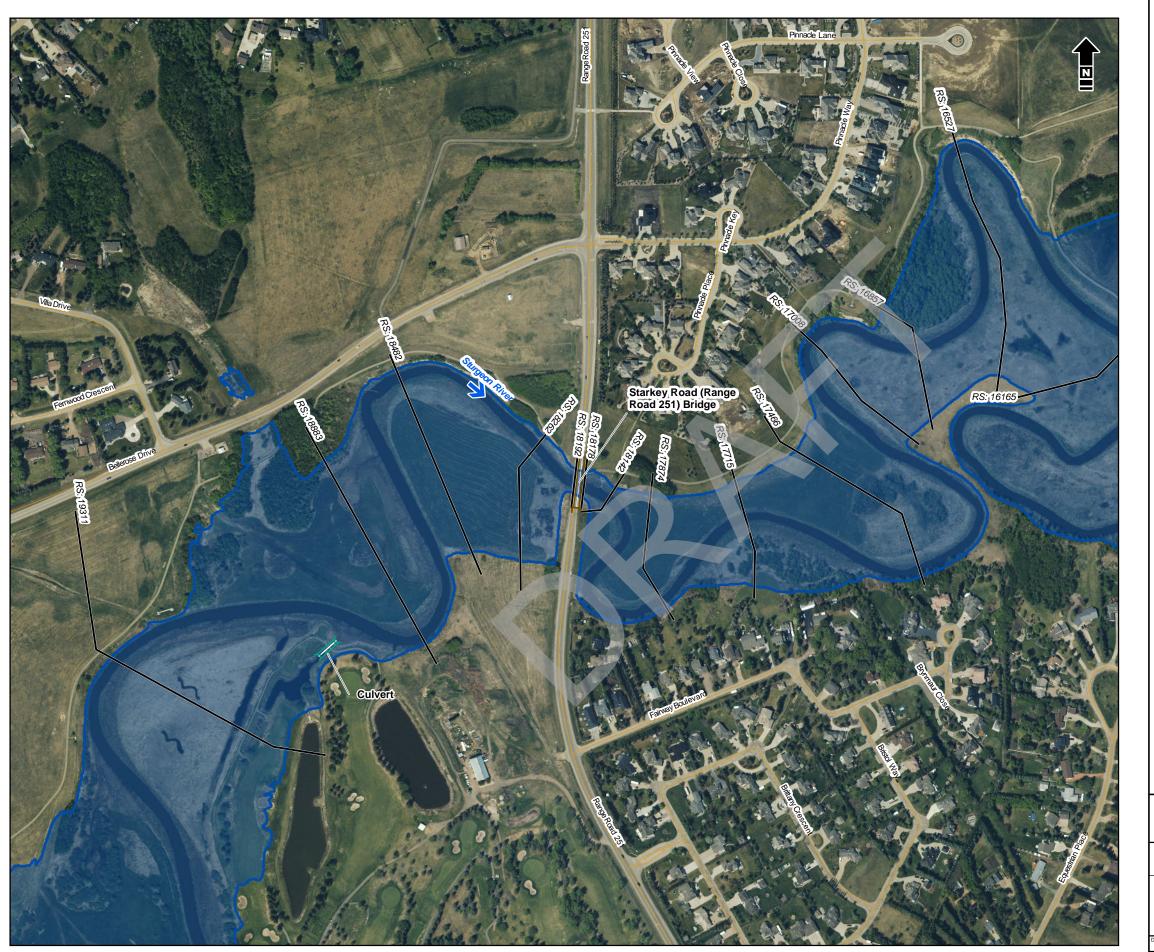




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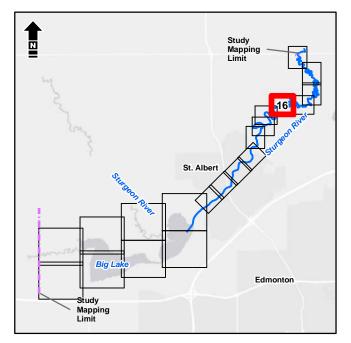
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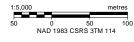
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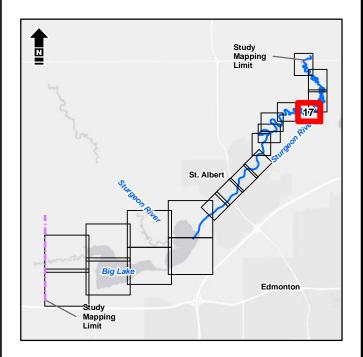
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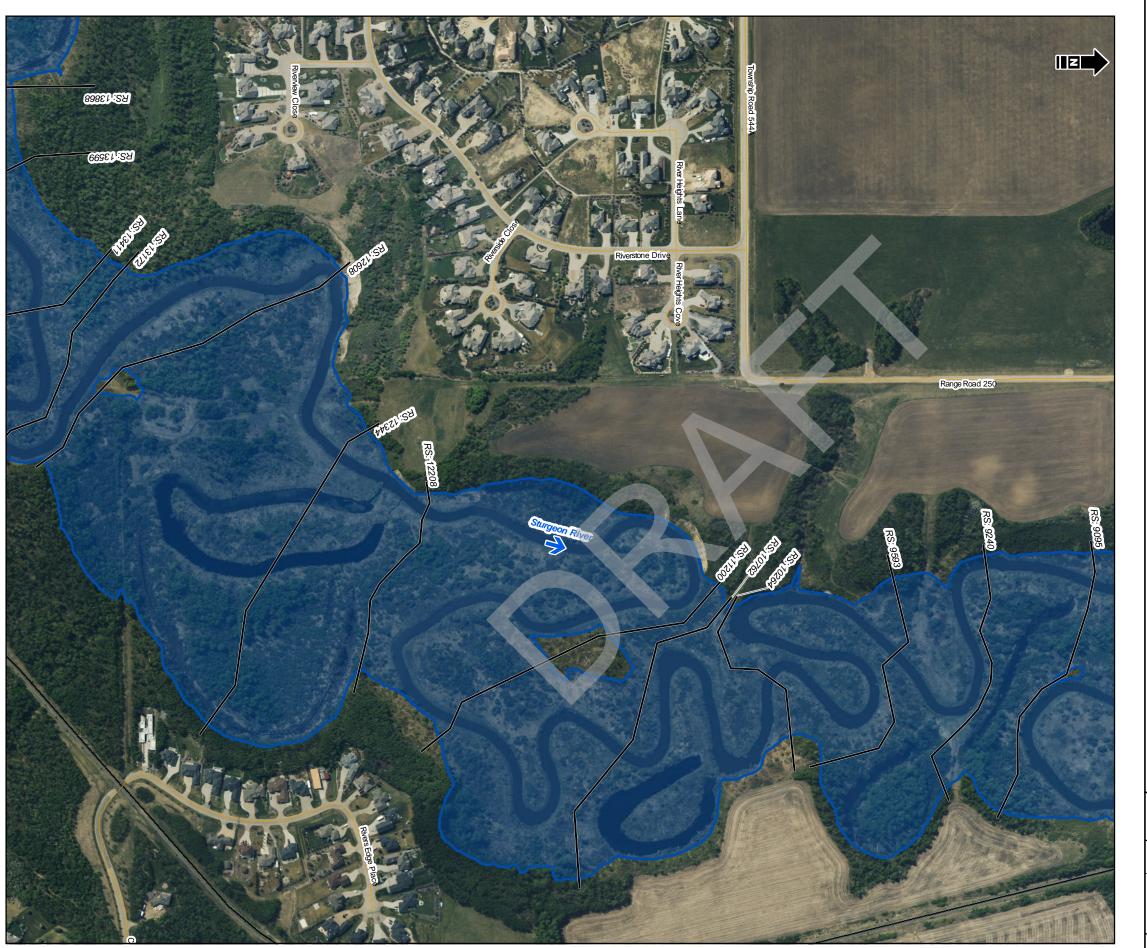




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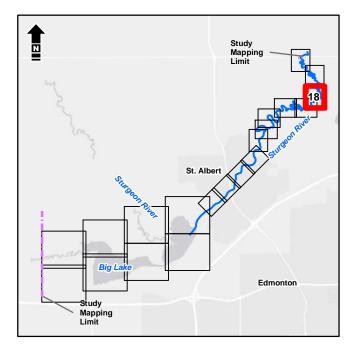
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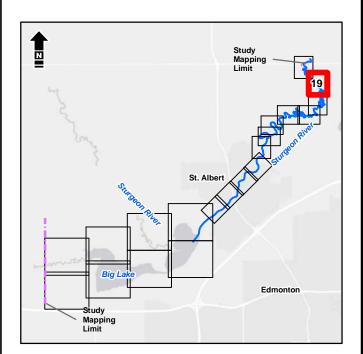
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March 2020



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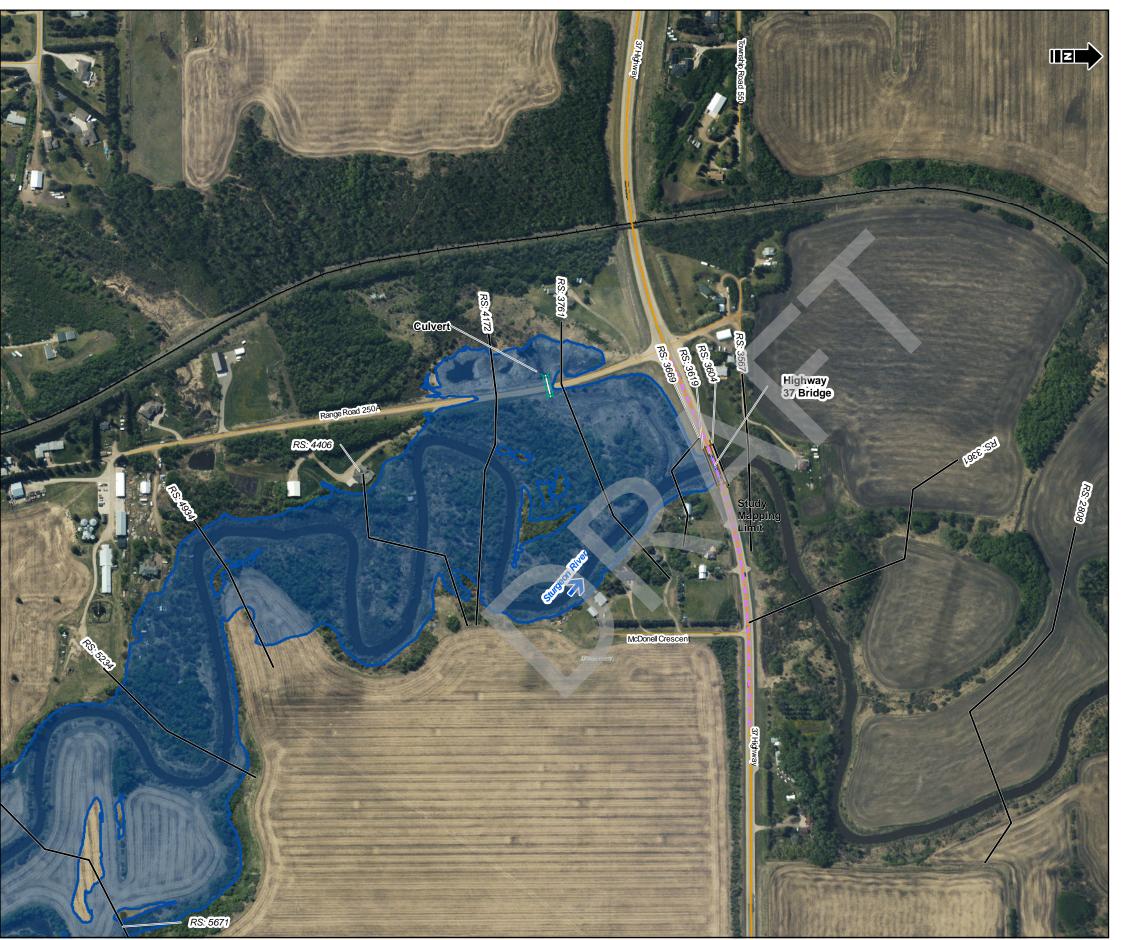


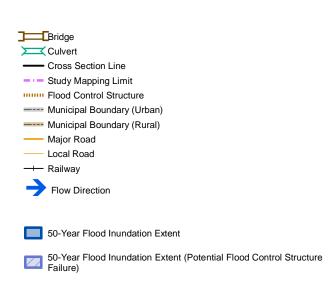


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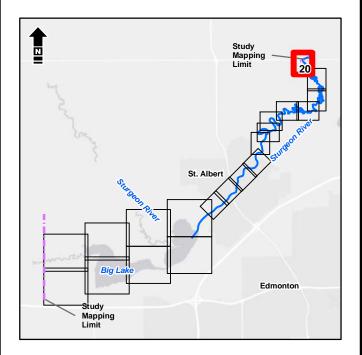
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March 2020





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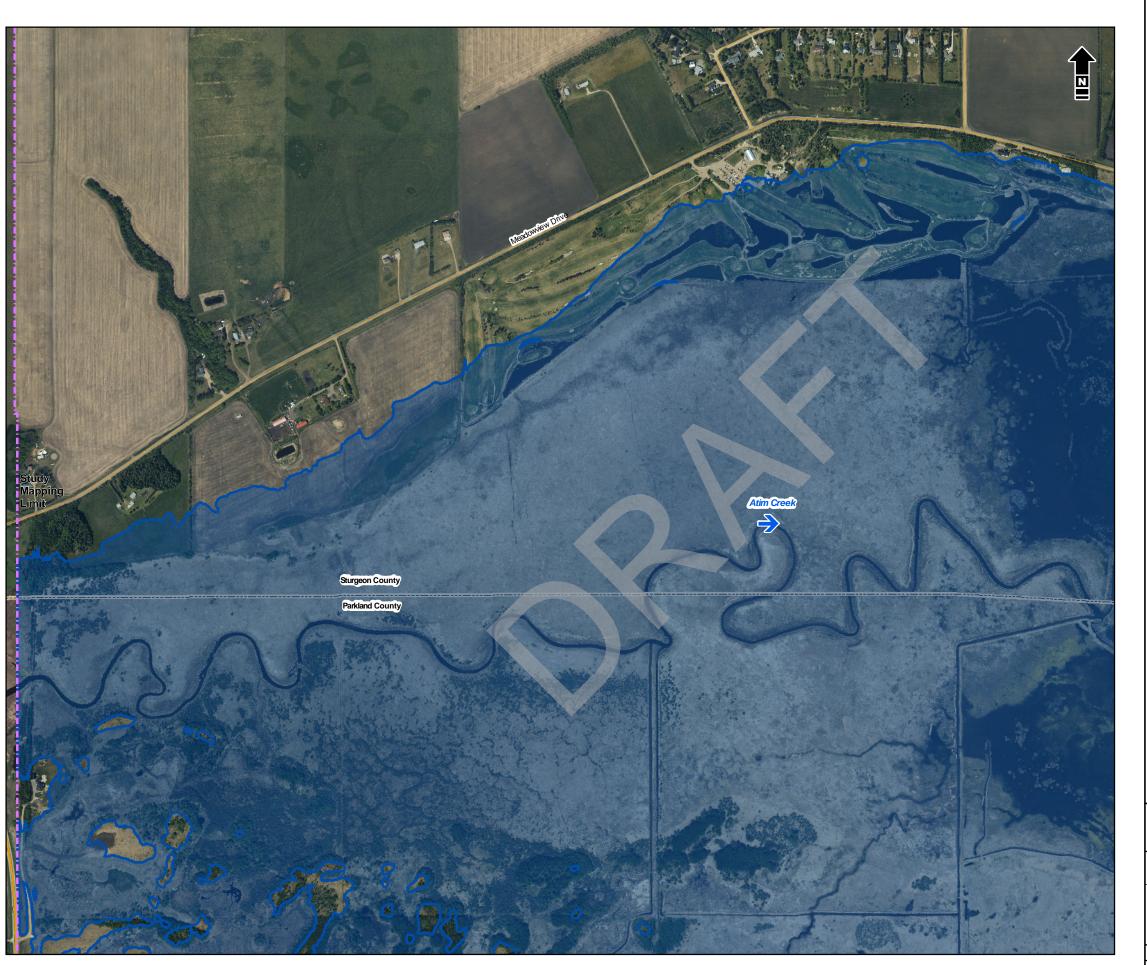


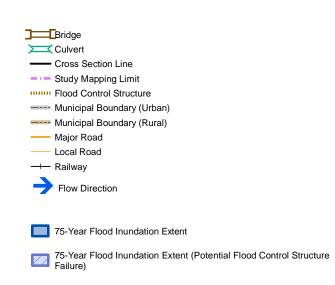


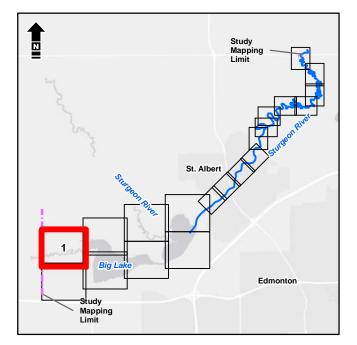
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March 2020







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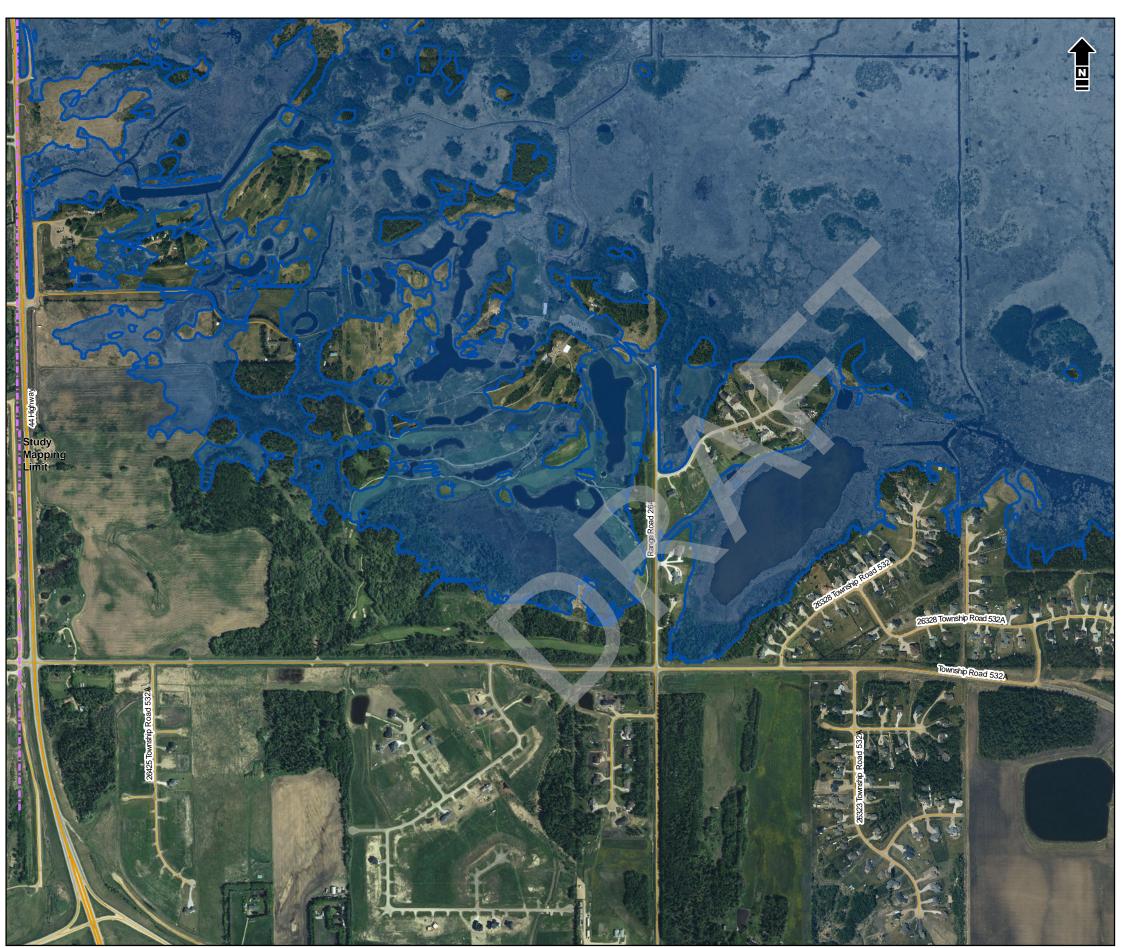
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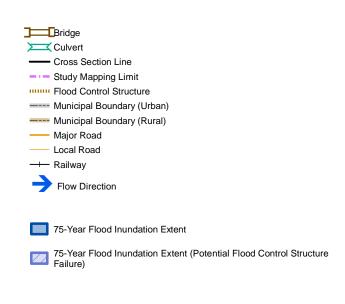
### Open Water Flood Inundation Mapbook | 75-Year

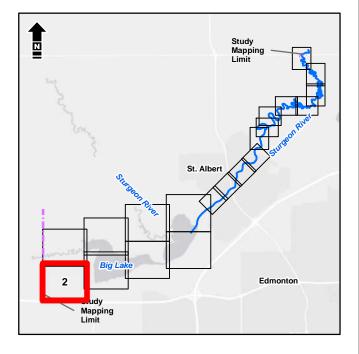
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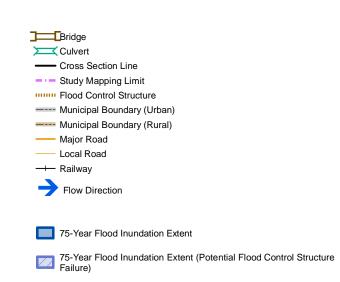
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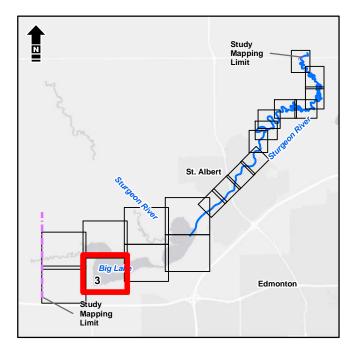
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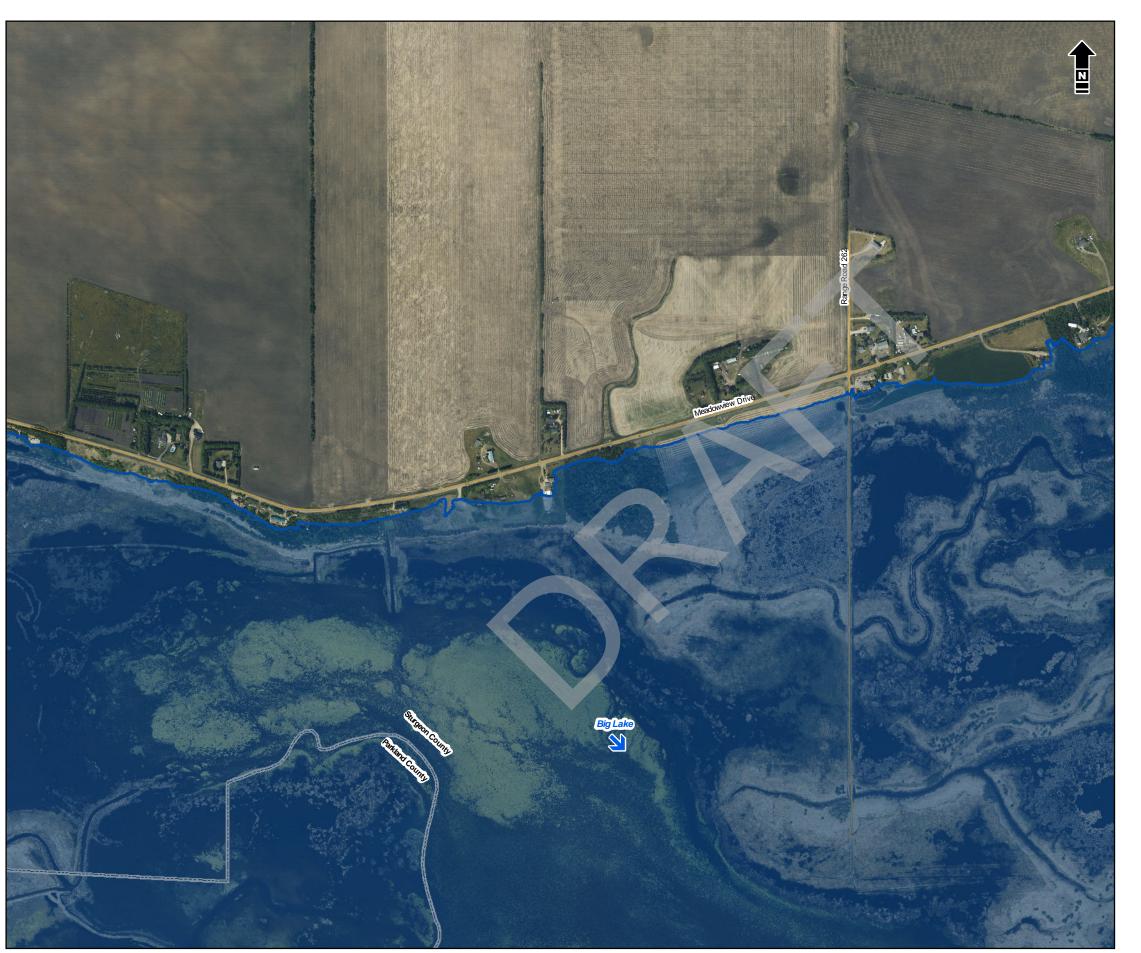


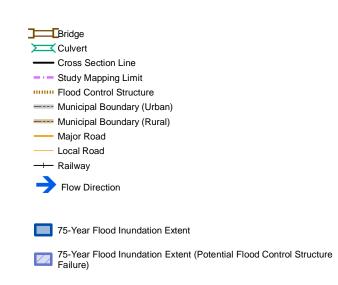
Alberta Government St. Albert Flood Hazard Study

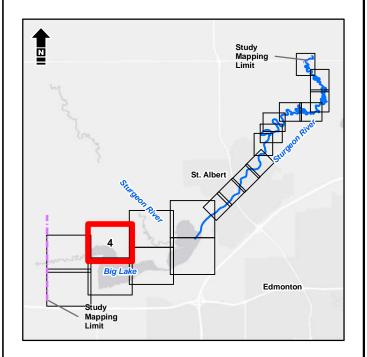
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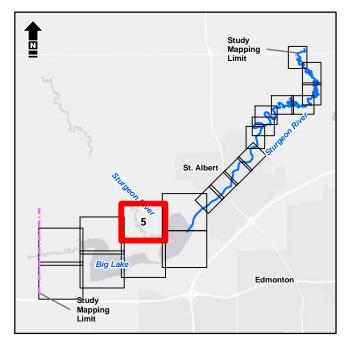
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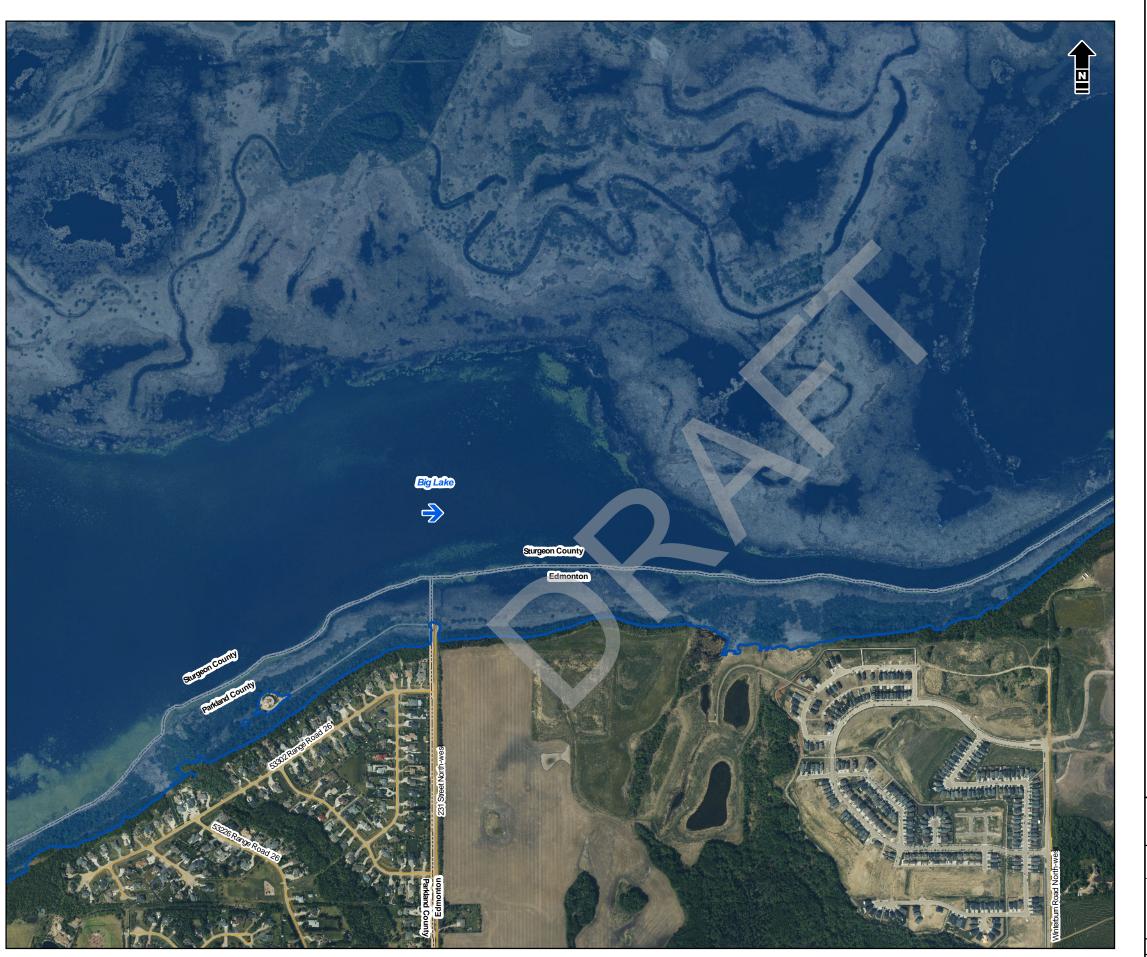


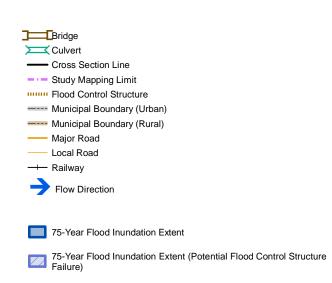
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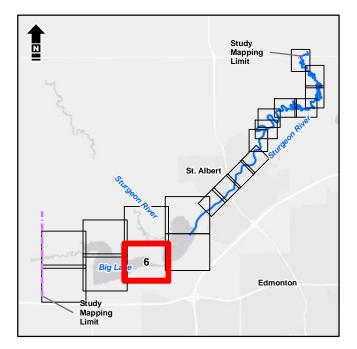
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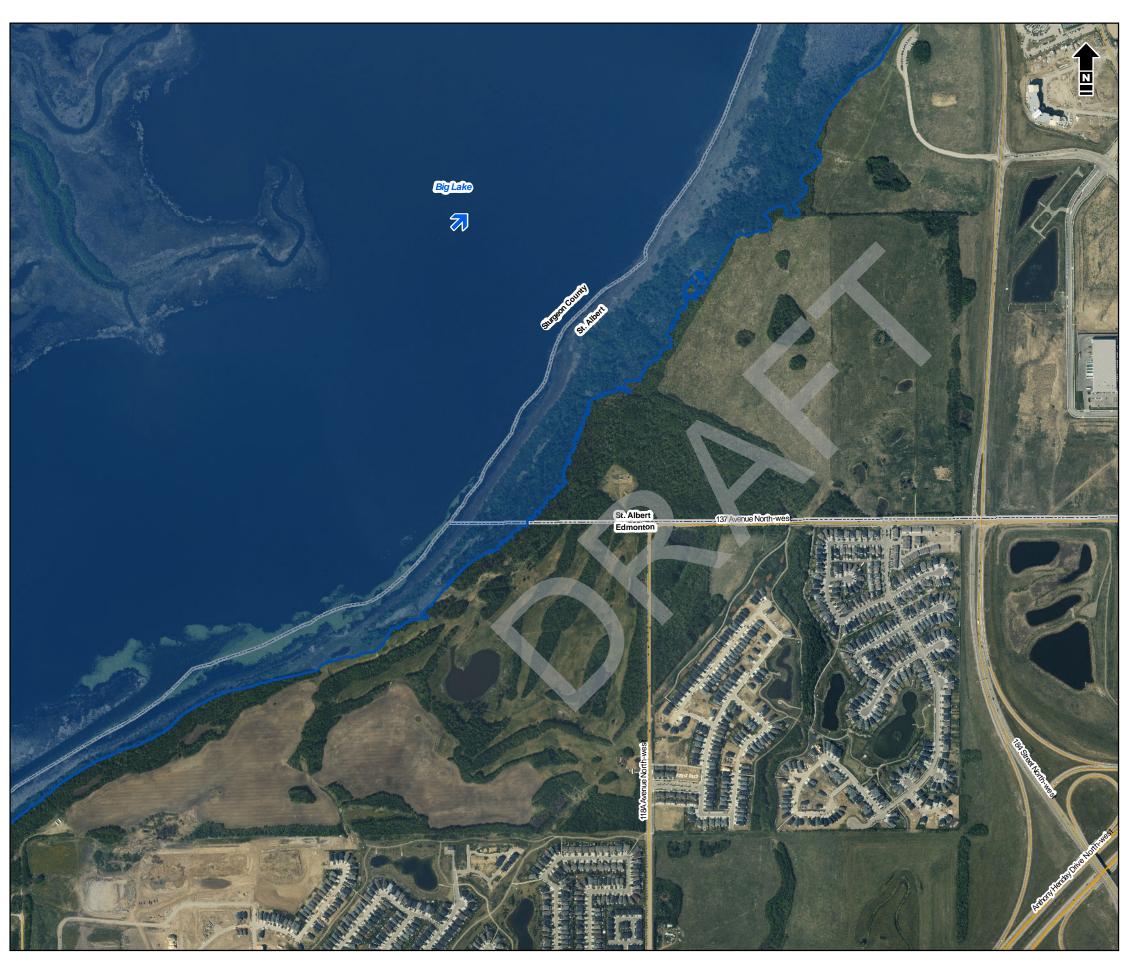


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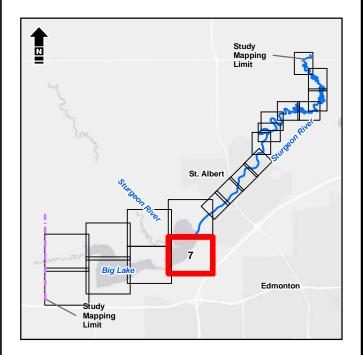
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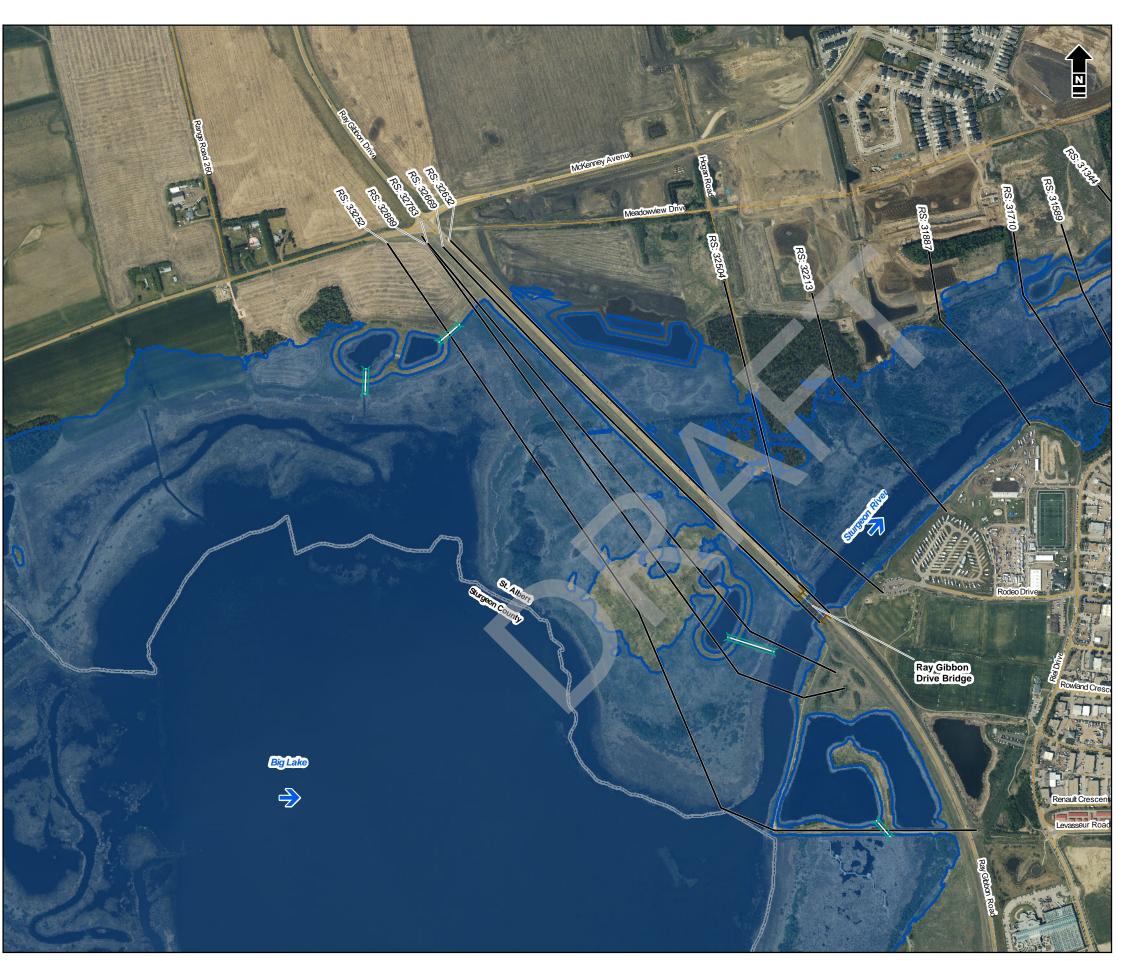
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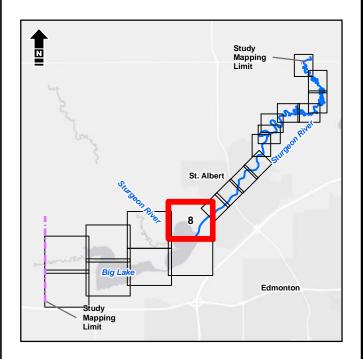
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Flow Direction

75-Year Flood Inundation Extent (Potential Flood Control Structure Failure)



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1:10,000 metres 100 0 100 200 NAD 1983 CSRS 3TM 114





Alberta Government St. Albert Flood Hazard Study

### Open Water Flood Inundation Mapbook | 75-Year

Date: March 2020 Project: 28312 Submitter: P. Rogers Reviewer: M. Shome

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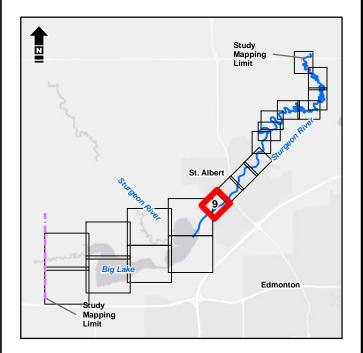
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Bridge **Culvert** --- Cross Section Line -- Study Mapping Limit Flood Control Structure ---- Municipal Boundary (Urban) ---- Municipal Boundary (Rural) --- Major Road — Local Road — Railway Flow Direction 75-Year Flood Inundation Extent 75-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

## <u>DISCHARGE</u> Sturgeon River = 82 m<sup>3</sup>/s



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Alberta Government St. Albert Flood Hazard Study

## Open Water Flood Inundation Mapbook | 75-Year

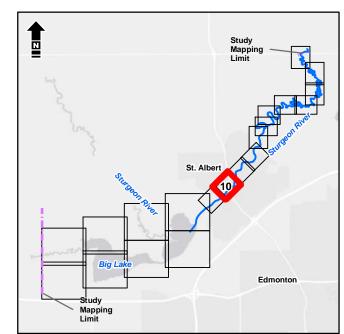
March 2020



Bridge
Culvert
Cross Section Line
Study Mapping Limit
Hood Control Structure
Municipal Boundary (Urban)
Major Road
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Railway
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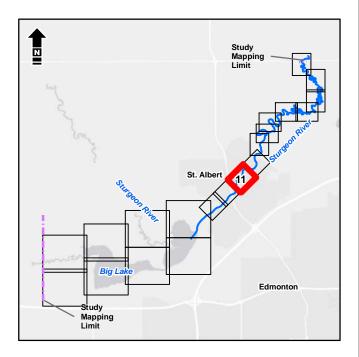
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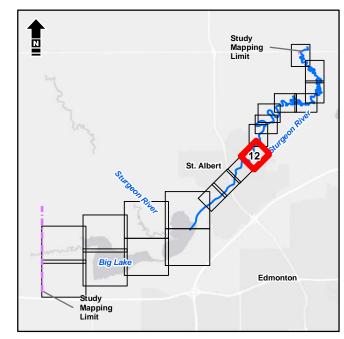
# Open Water Flood Inundation Mapbook | 75-Year

March 2020



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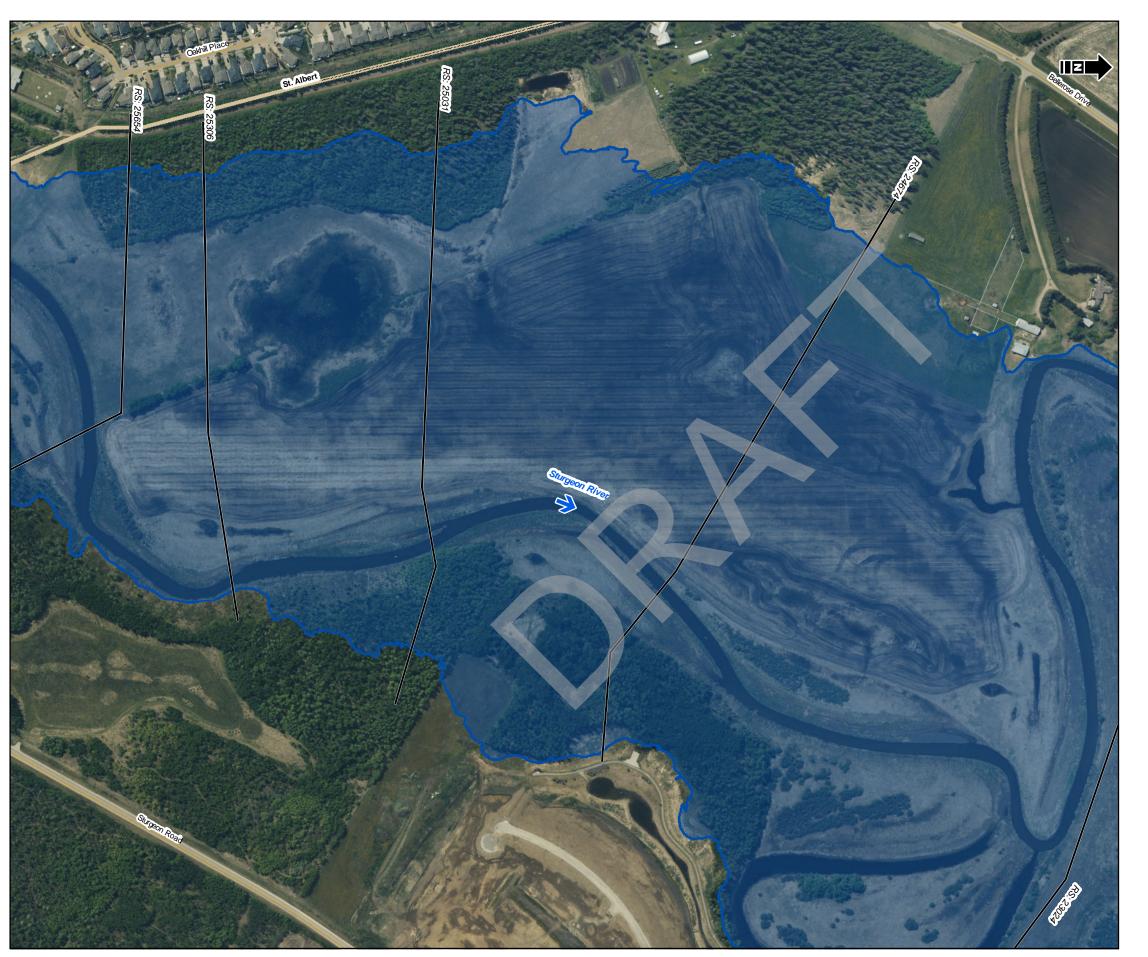




Alberta Government St. Albert Flood Hazard Study

## Open Water Flood Inundation Mapbook | 75-Year

March 2020



Bridge Culvert ---- Cross Section Line -- Study Mapping Limit Flood Control Structure

---- Municipal Boundary (Urban) ---- Municipal Boundary (Rural)

--- Major Road

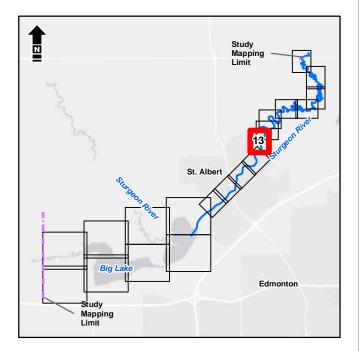
— Local Road

— Railway Flow Direction

75-Year Flood Inundation Extent

75-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

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Alberta Government St. Albert Flood Hazard Study

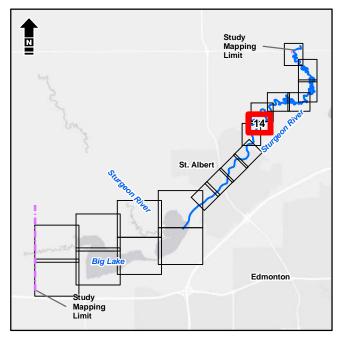
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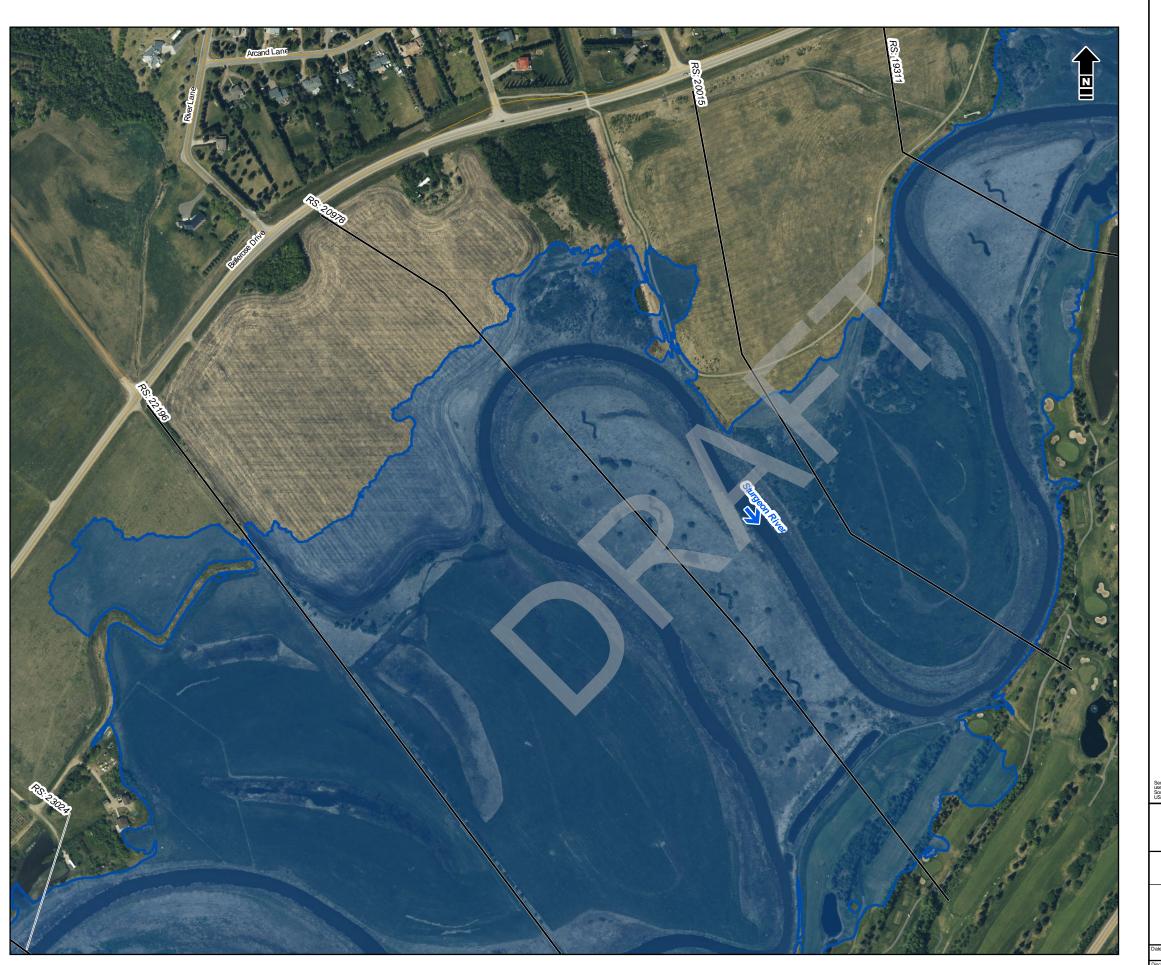
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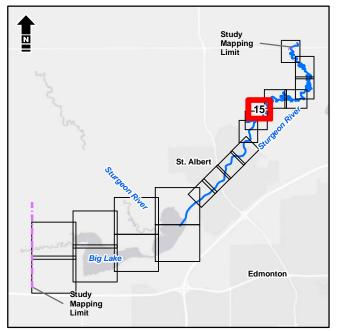
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March 2020

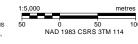


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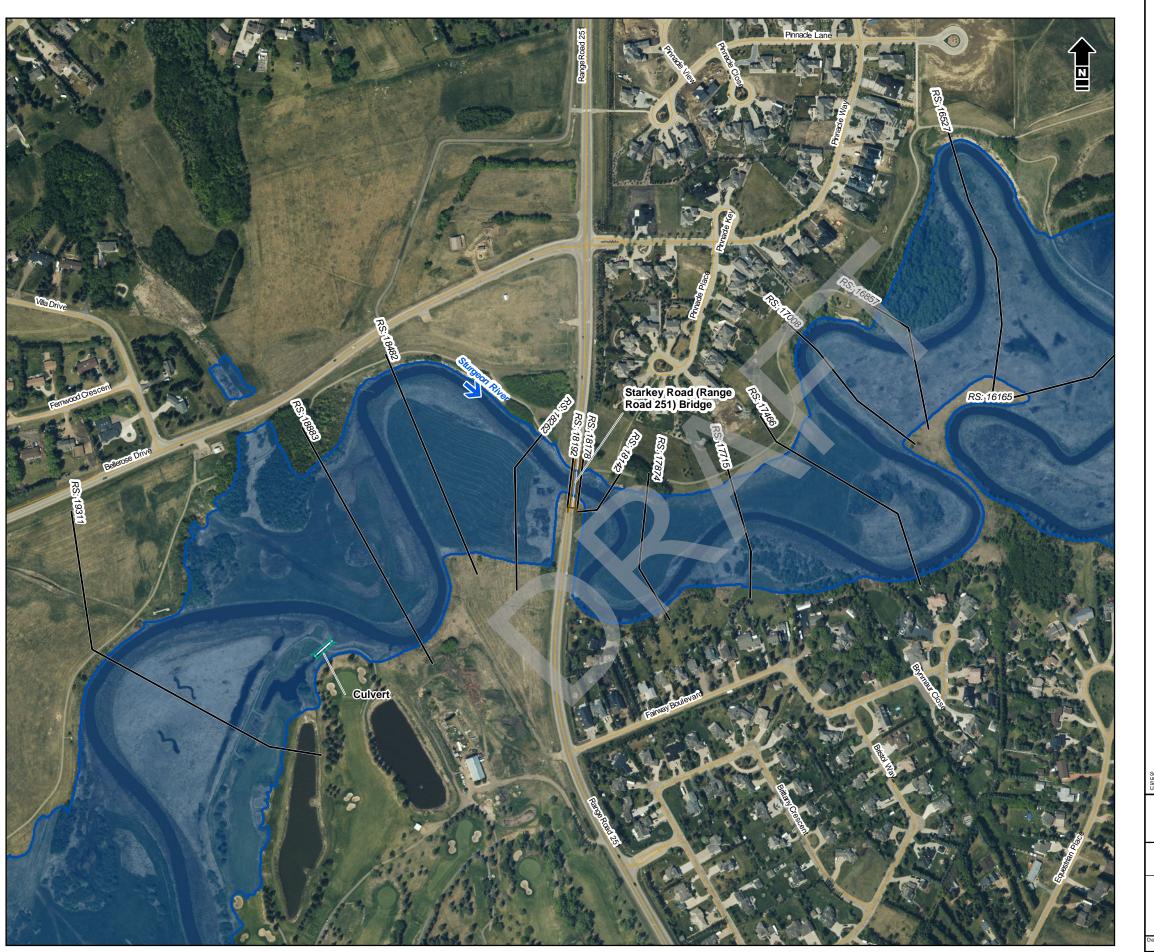




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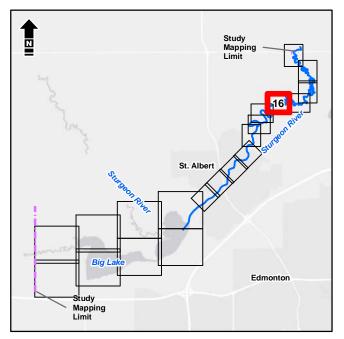
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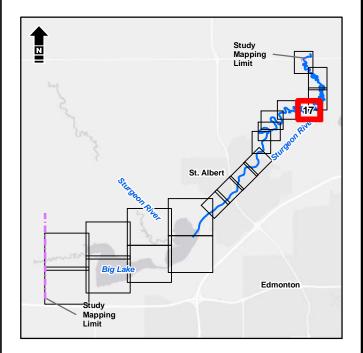
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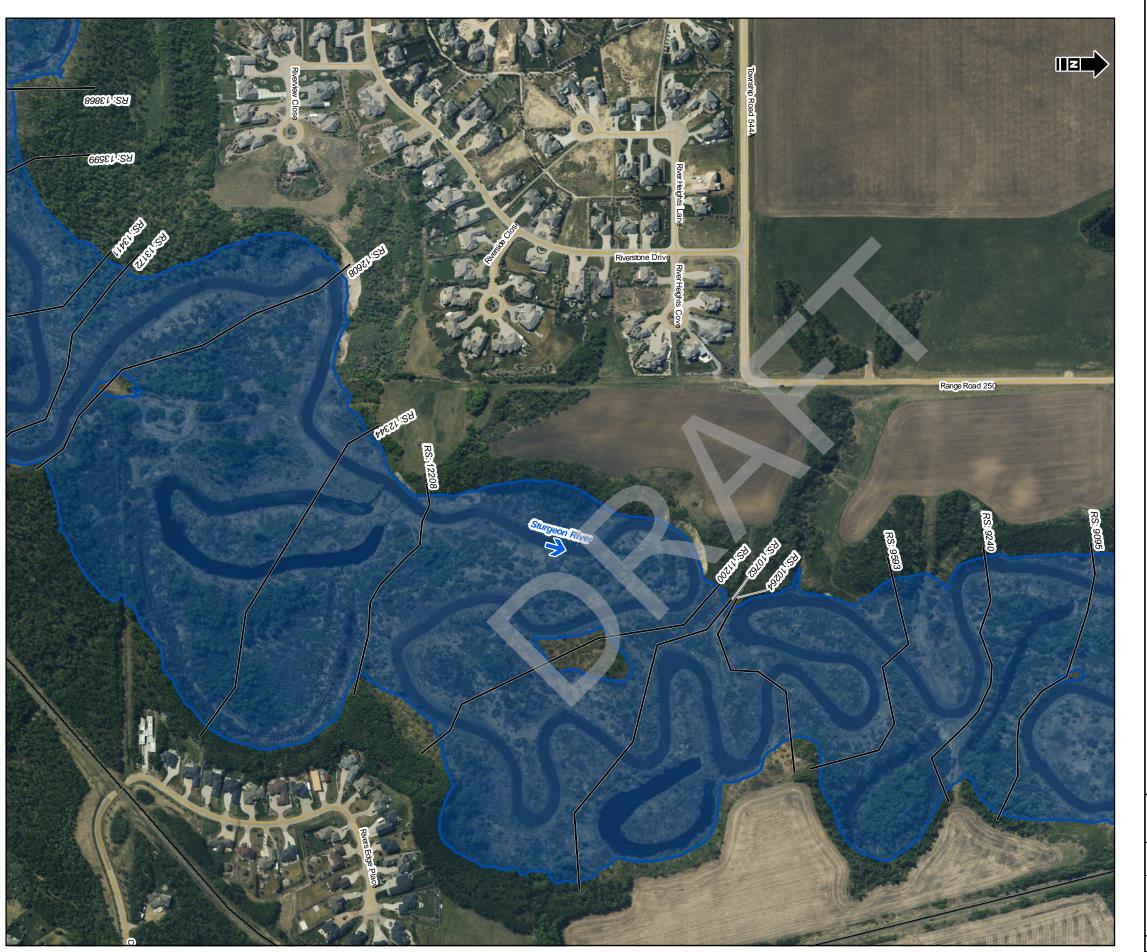




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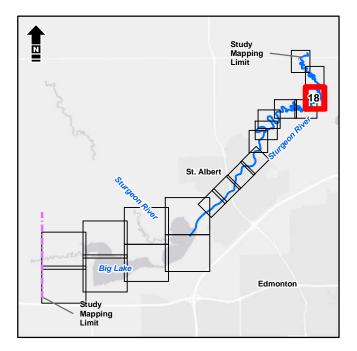
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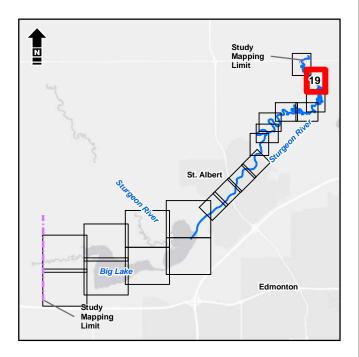
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March 2020



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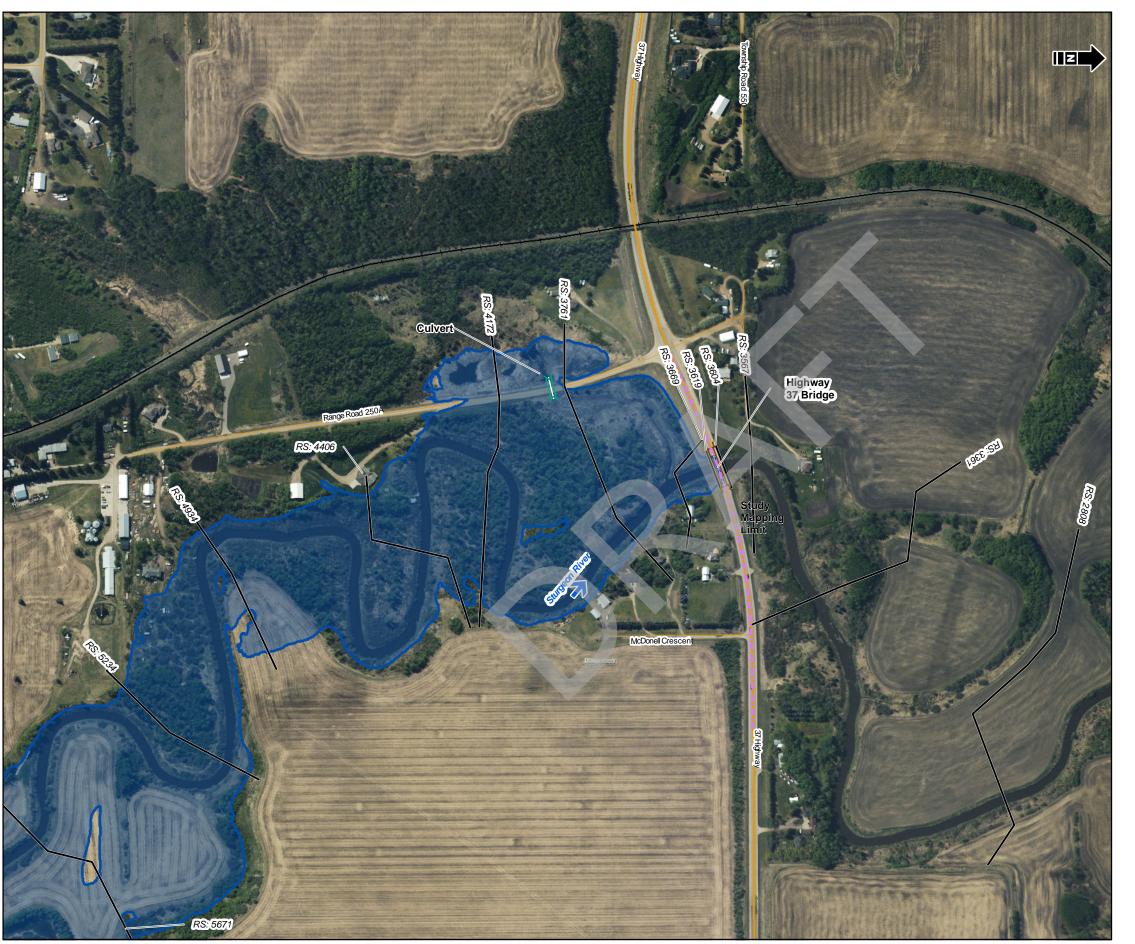




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# Open Water Flood Inundation Mapbook | 75-Year

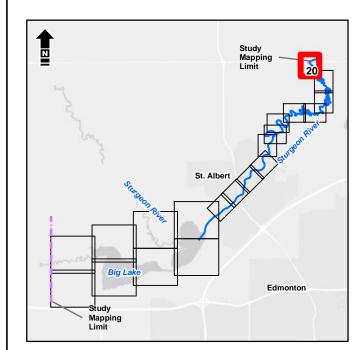
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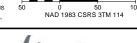
Bridge
Culvert
Cross Section Line
Study Mapping Limit
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75-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

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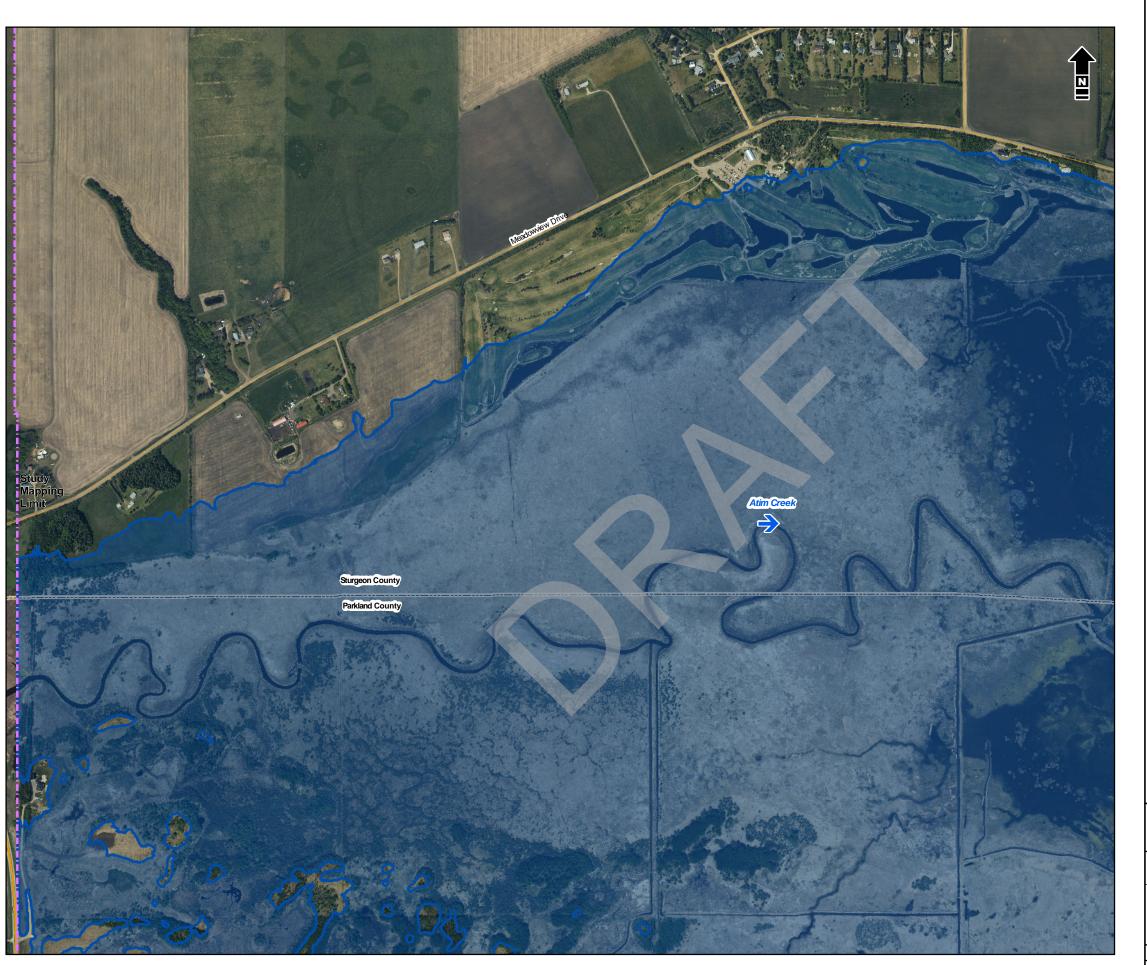


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### Open Water Flood Inundation Mapbook | 75-Year

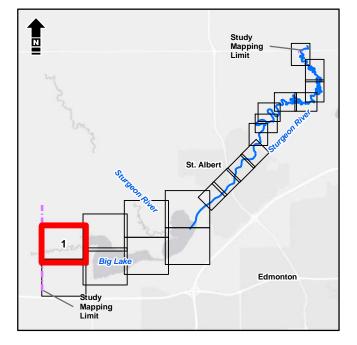
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Culvert
Cross Section Line
Study Mapping Limit
Flood Control Structure
Municipal Boundary (Urban)
Major Road
Local Road
Railway
Flow Direction

100-Year Flood Inundation Extent (Potential Flood Control Structure Failure)



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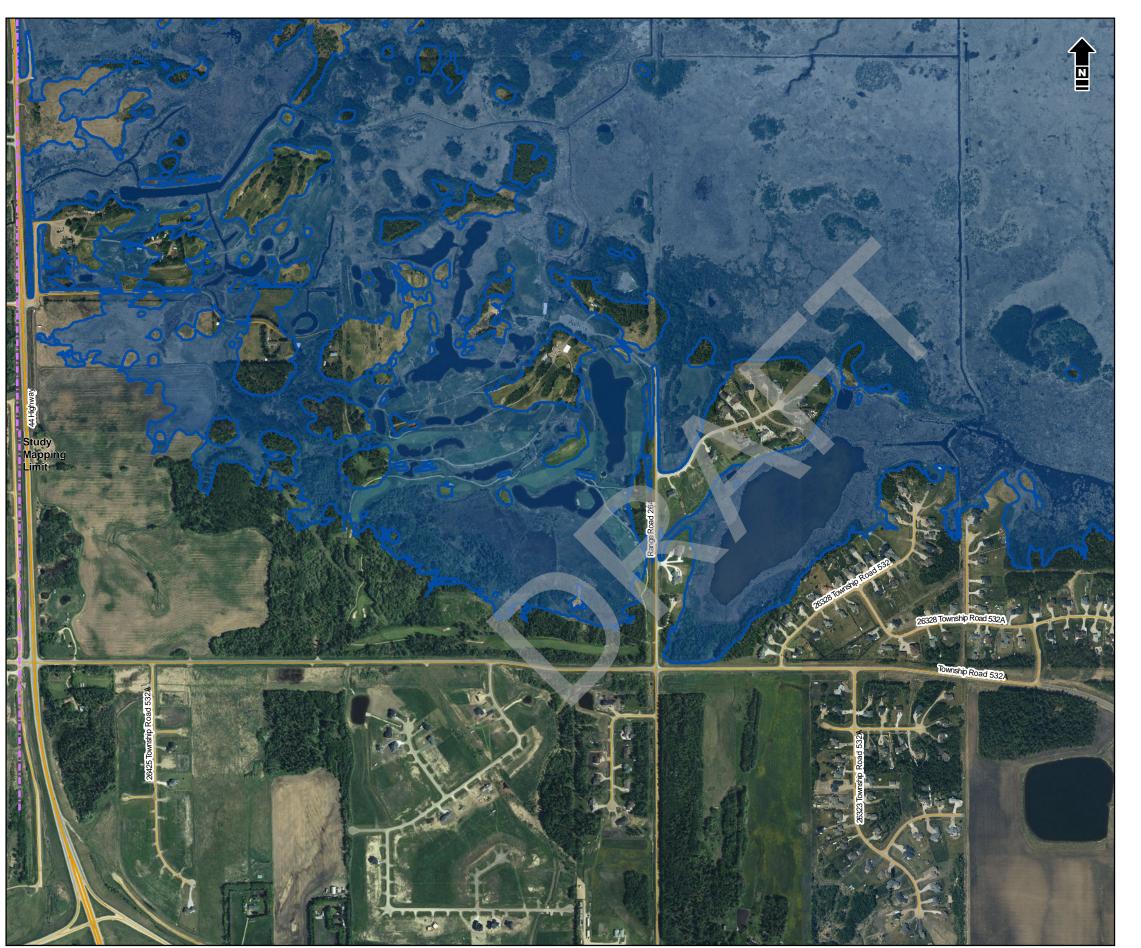
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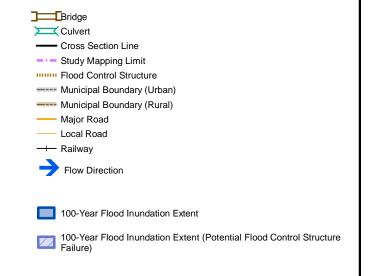
### Open Water Flood Inundation Mapbook | 100-Year

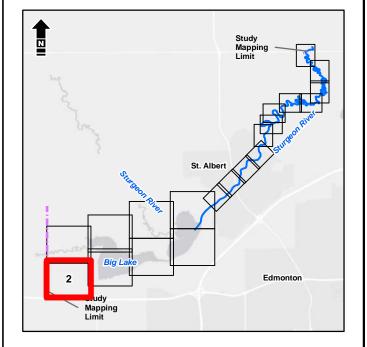
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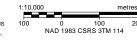
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### Open Water Flood Inundation Mapbook | 100-Year

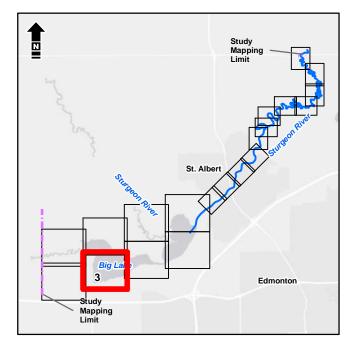
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Classification: Public







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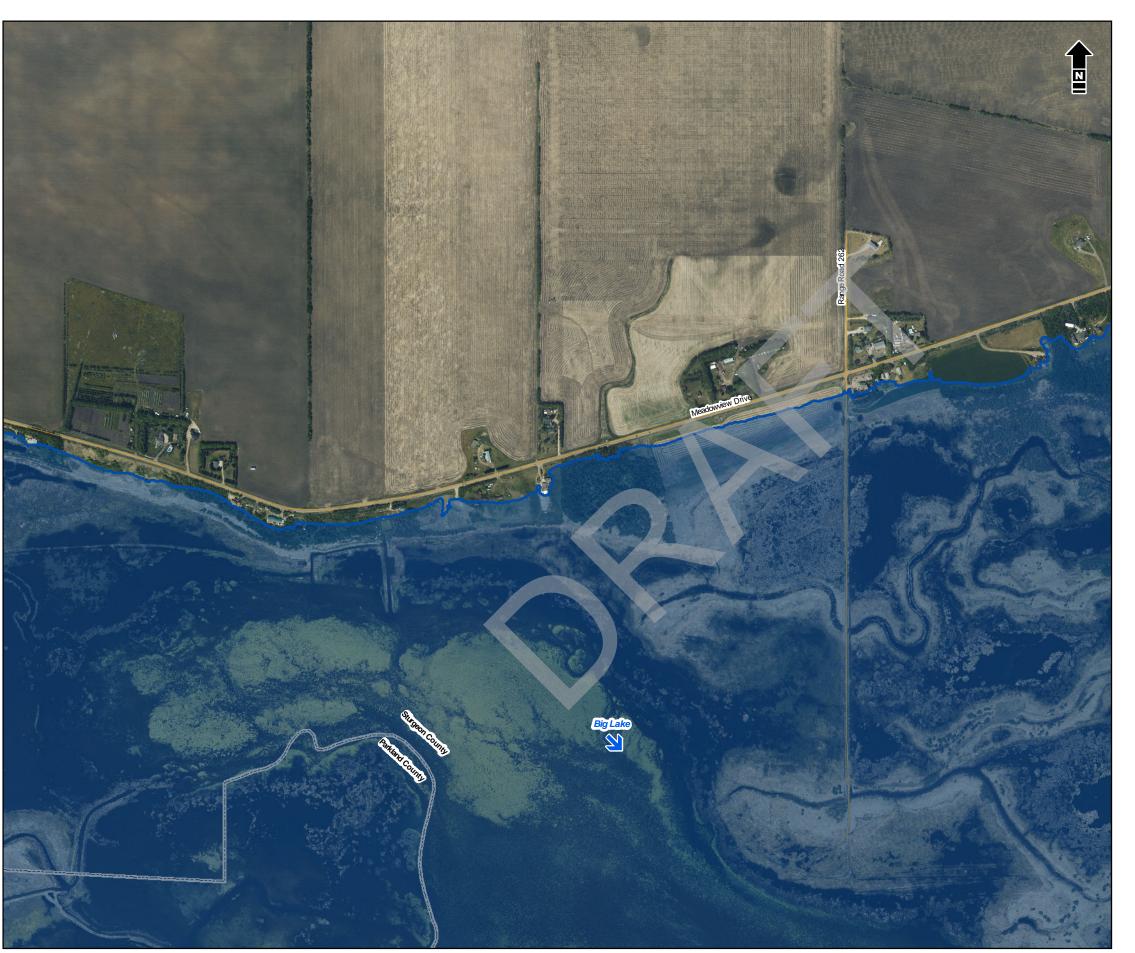
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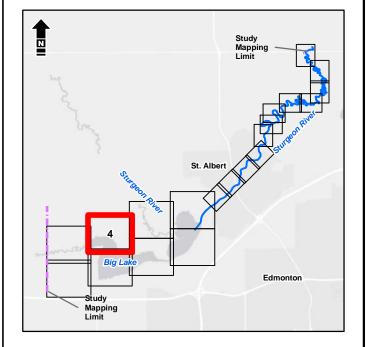
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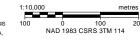
Bridge
Culvert
Cross Section Line
Study Mapping Limit
Hood Control Structure
Municipal Boundary (Urban)
Municipal Boundary (Rural)
Major Road
Local Road
Railway
Flow Direction

100-Year Flood Inundation Extent

100-Year Flood Inundation Extent (Potential Flood Control Structure Failure)



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Alberta Government St. Albert Flood Hazard Study

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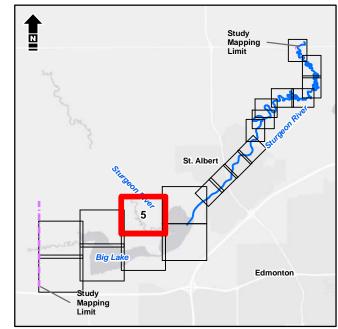
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Culvert
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100-Year Flood Inundation Extent (Potential Flood Control Structure Failure)



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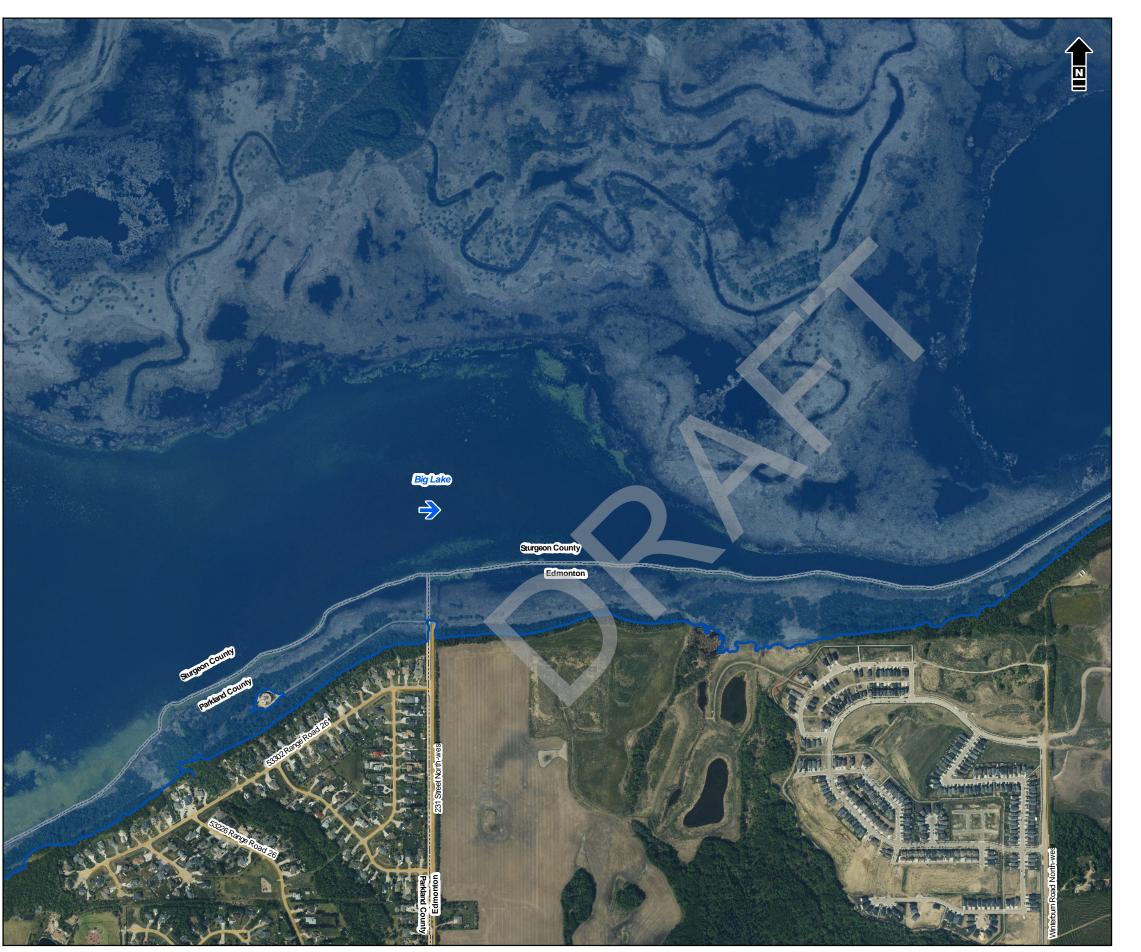
Alberta Government St. Albert Flood Hazard Study

### Open Water Flood Inundation Mapbook | 100-Year

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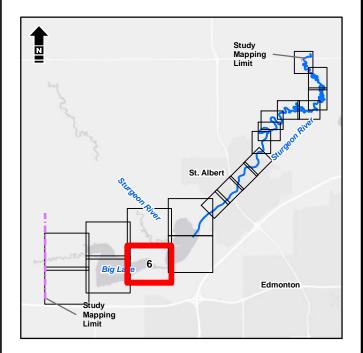
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M. Shome





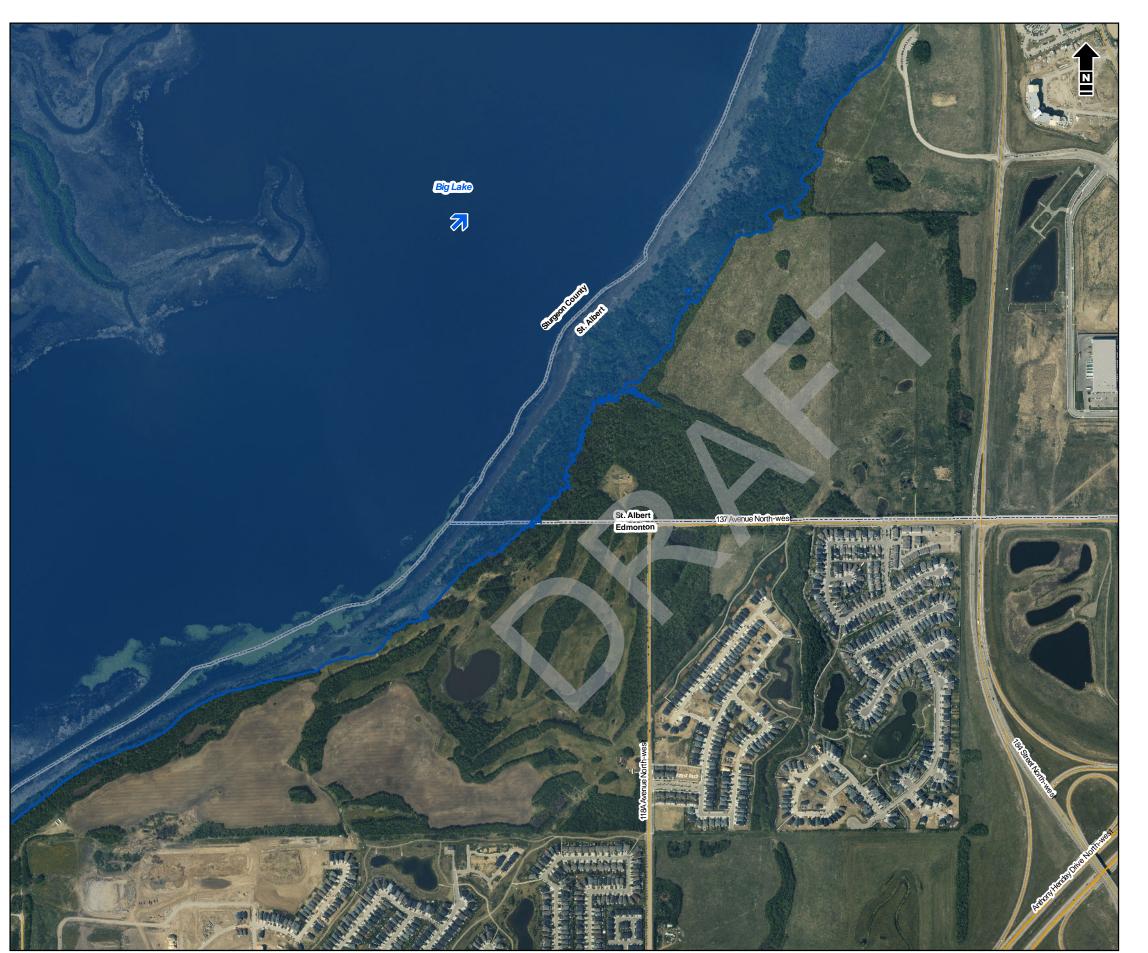
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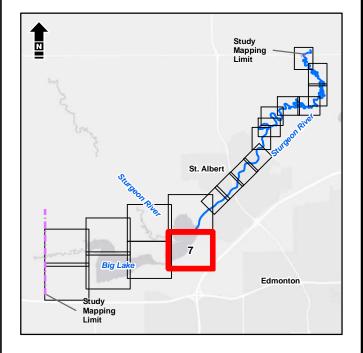
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Alberta Government St. Albert Flood Hazard Study

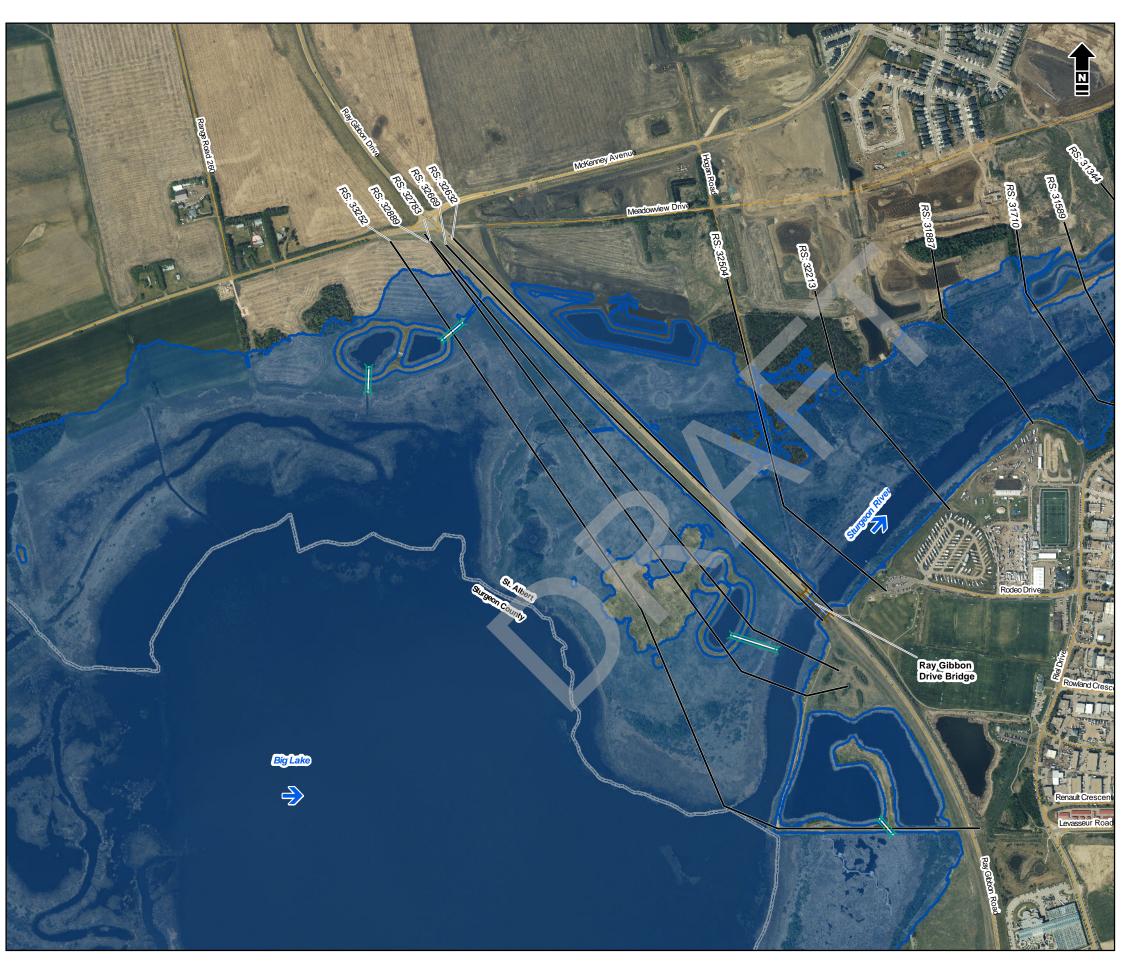
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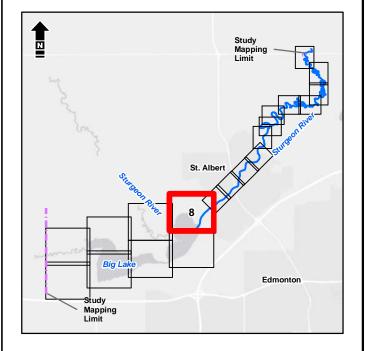
Classification: Public

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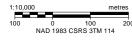


Bridge
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Study Mapping Limit
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Alberta Government St. Albert Flood Hazard Study

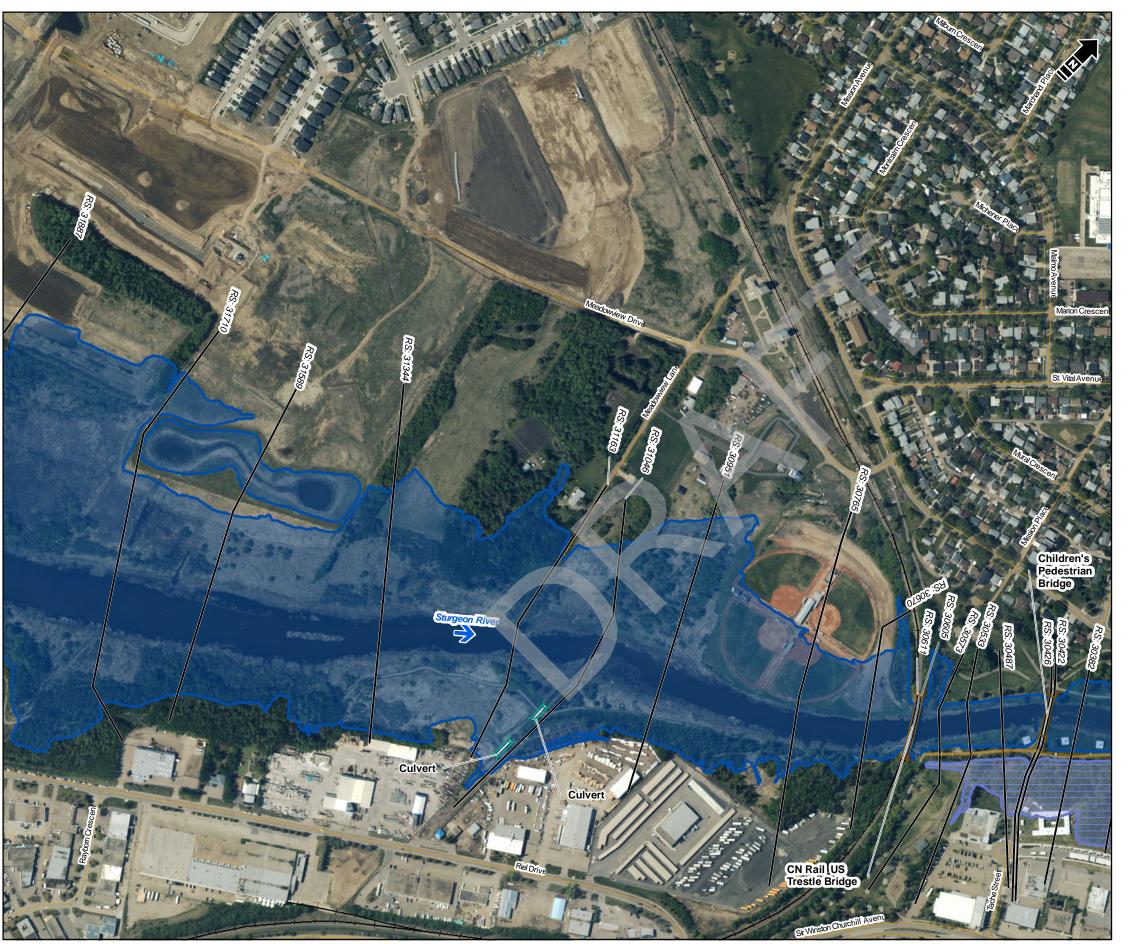
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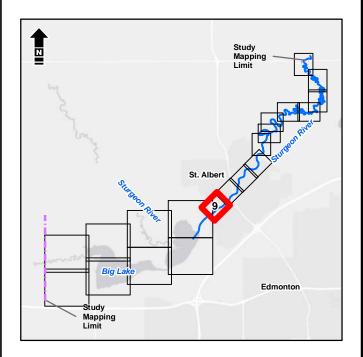
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Bridge Culvert Culvert --- Cross Section Line -- Study Mapping Limit Flood Control Structure ---- Municipal Boundary (Urban) ---- Municipal Boundary (Rural) --- Major Road — Local Road — Railway Flow Direction 100-Year Flood Inundation Extent 100-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

### <u>DISCHARGE</u> Sturgeon River = 90 m<sup>3</sup>/s



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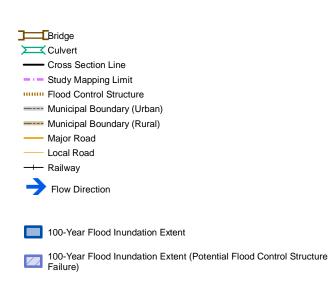




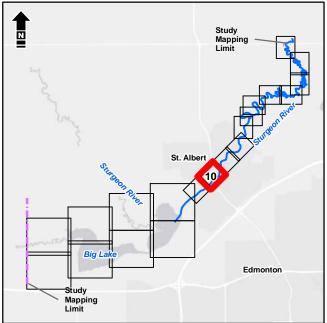


Alberta Government St. Albert Flood Hazard Study

## Open Water Flood Inundation Mapbook | 100-Year



#### <u>DISCHARGE</u> Sturgeon River = 90 m<sup>3</sup>/s









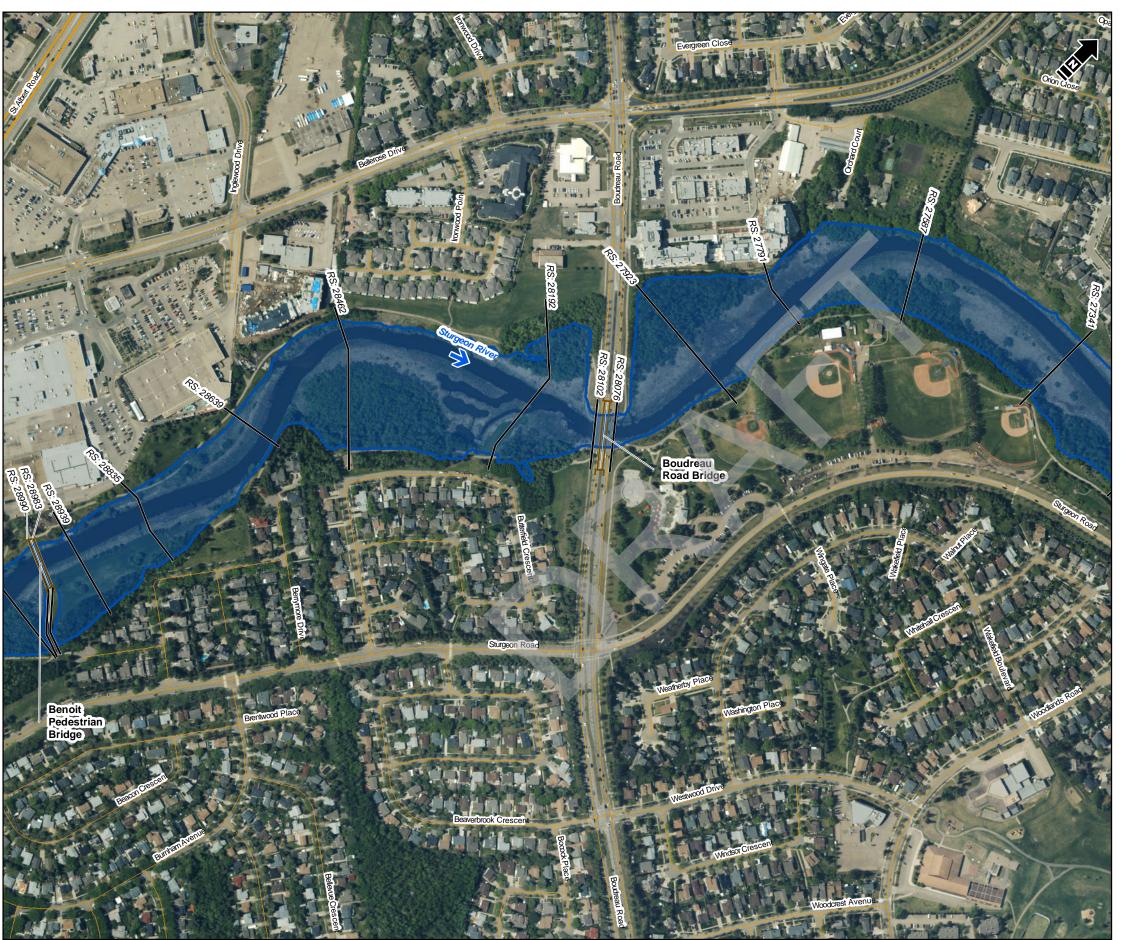
Alberta Government St. Albert Flood Hazard Study

#### Open Water Flood Inundation Mapbook | 100-Year

Date: March 2020 Project: 28312 Submitter: P. Rogers Reviewer.

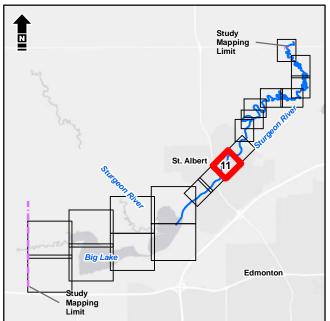
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Bridge Culvert ---- Cross Section Line -- Study Mapping Limit Flood Control Structure ---- Municipal Boundary (Urban) ---- Municipal Boundary (Rural) --- Major Road — Local Road — Railway Flow Direction 100-Year Flood Inundation Extent 100-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

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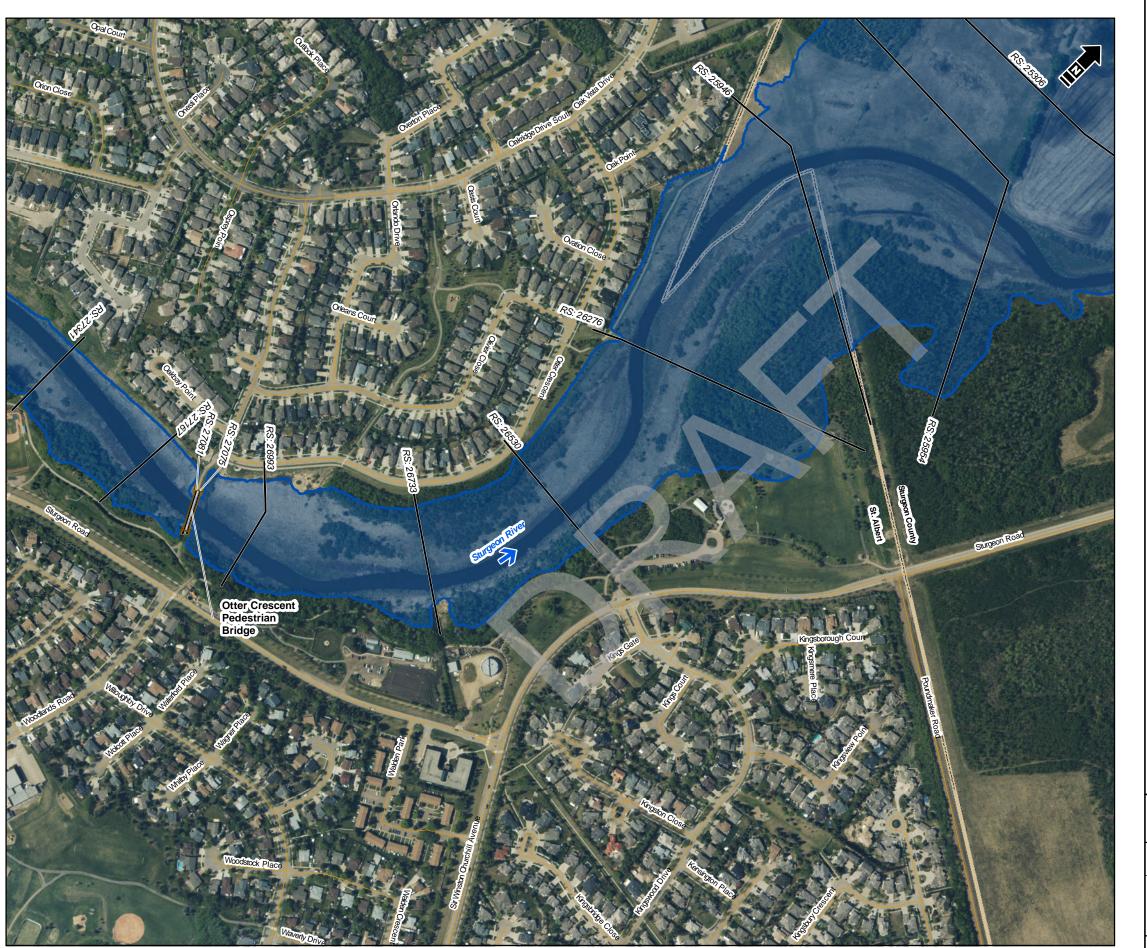


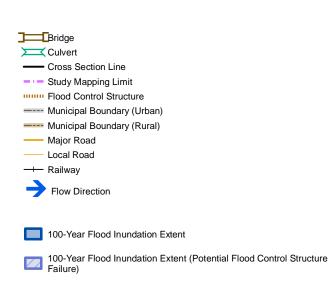




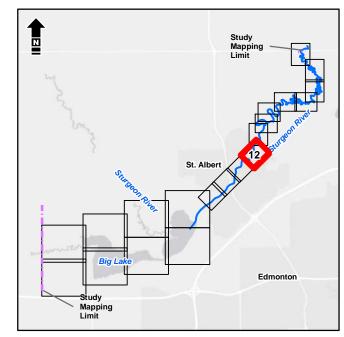
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# Open Water Flood Inundation Mapbook | 100-Year

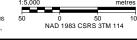




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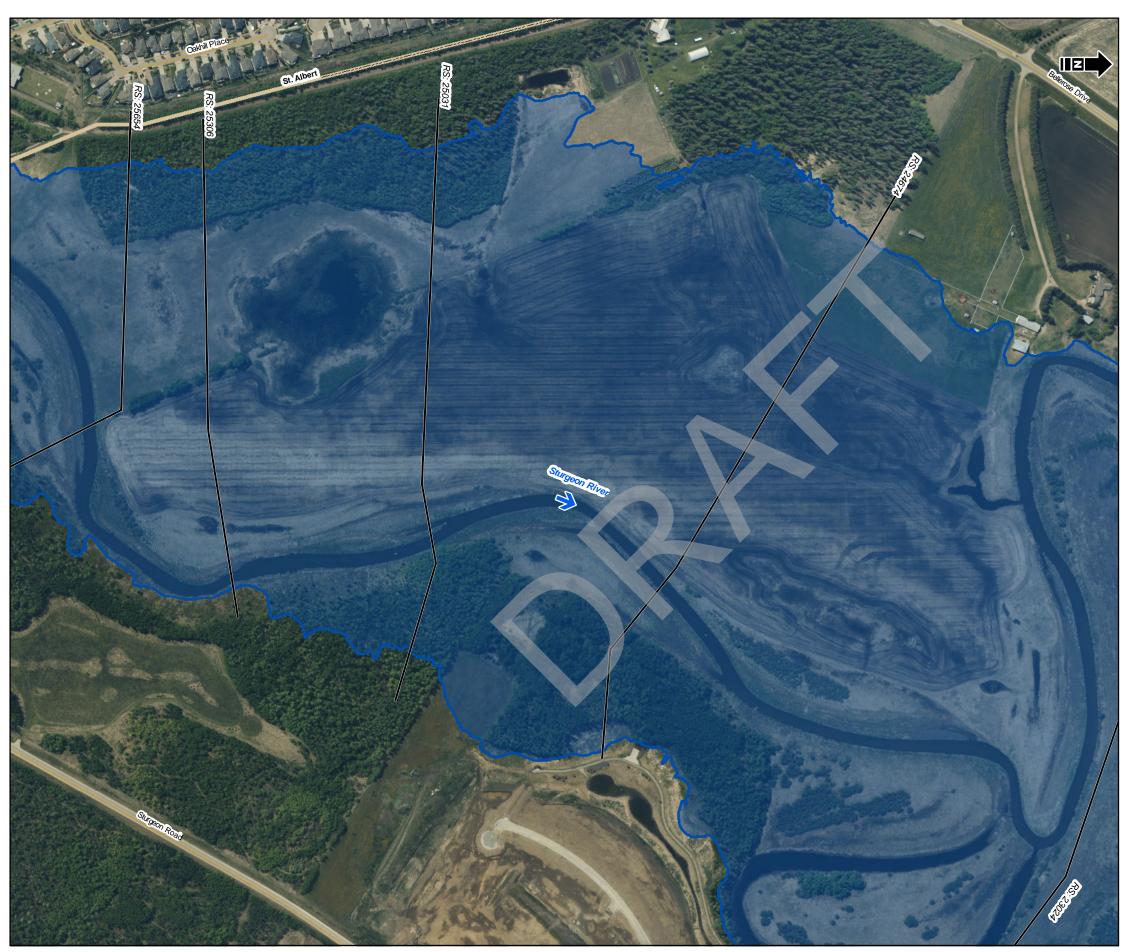






Alberta Government St. Albert Flood Hazard Study

## Open Water Flood Inundation Mapbook | 100-Year



Bridge

Culvert

---- Cross Section Line

-- Study Mapping Limit

Flood Control Structure

---- Municipal Boundary (Urban) ---- Municipal Boundary (Rural)

--- Major Road

— Local Road

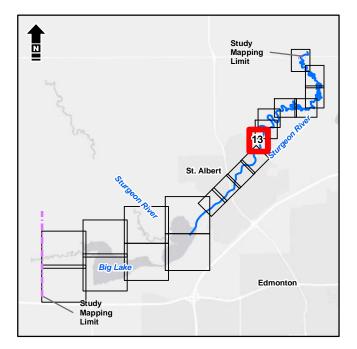
— Railway

Flow Direction

100-Year Flood Inundation Extent

100-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

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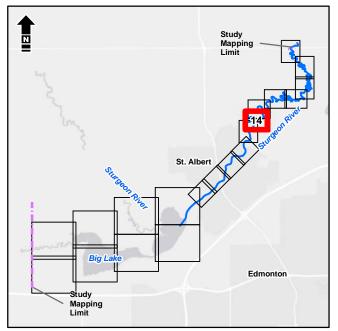
# Open Water Flood Inundation Mapbook | 100-Year

March 2020



Bridge Culvert Culvert --- Cross Section Line -- Study Mapping Limit Flood Control Structure ---- Municipal Boundary (Urban) ---- Municipal Boundary (Rural) --- Major Road — Local Road — Railway Flow Direction 100-Year Flood Inundation Extent 100-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

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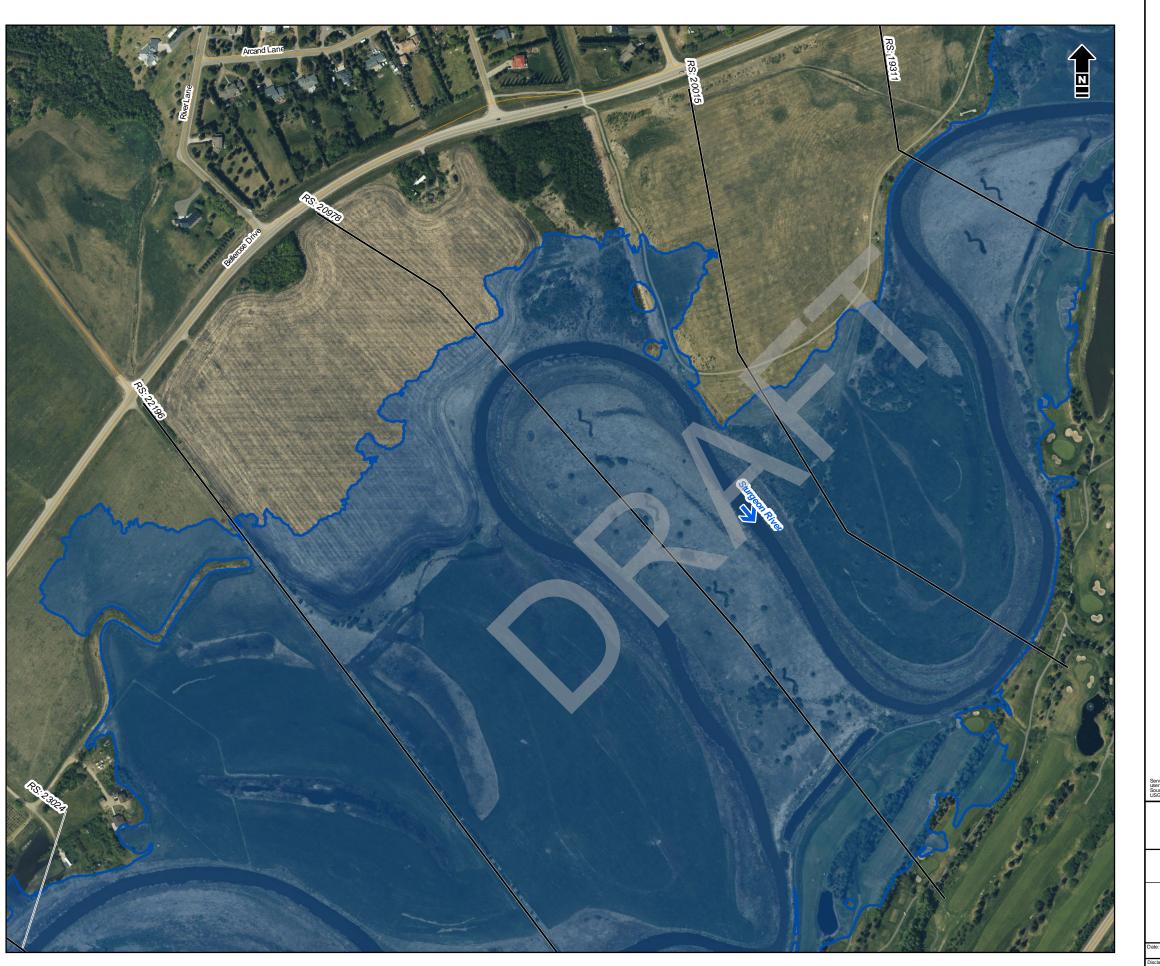




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# Open Water Flood Inundation Mapbook | 100-Year

March 2020

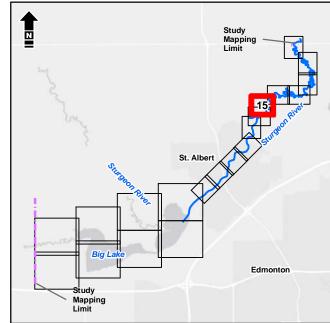


Bridge
Culvert
Cross Section Line
Study Mapping Limit
Flood Control Structure
Municipal Boundary (Urban)
Major Road
Local Road
Railway
Flow Direction

100-Year Flood Inundation Extent

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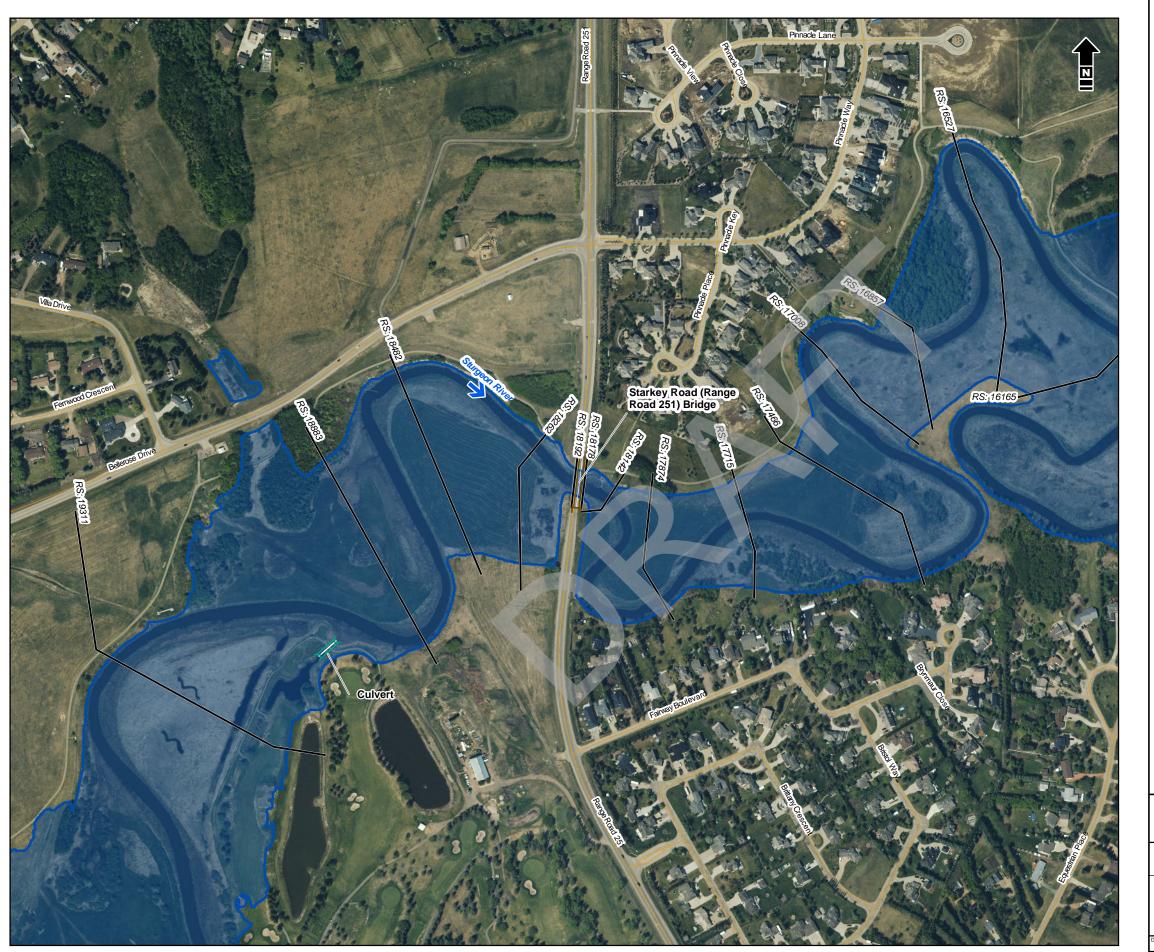


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### Open Water Flood Inundation Mapbook | 100-Year

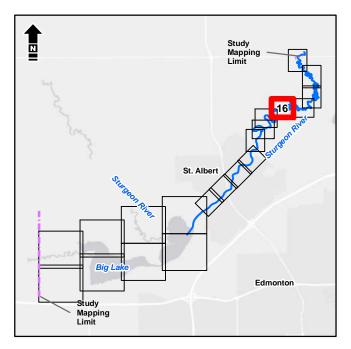
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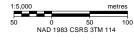


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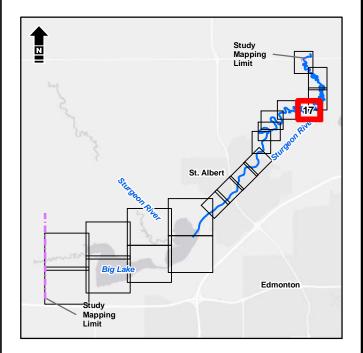
## Open Water Flood Inundation Mapbook | 100-Year

March 2020



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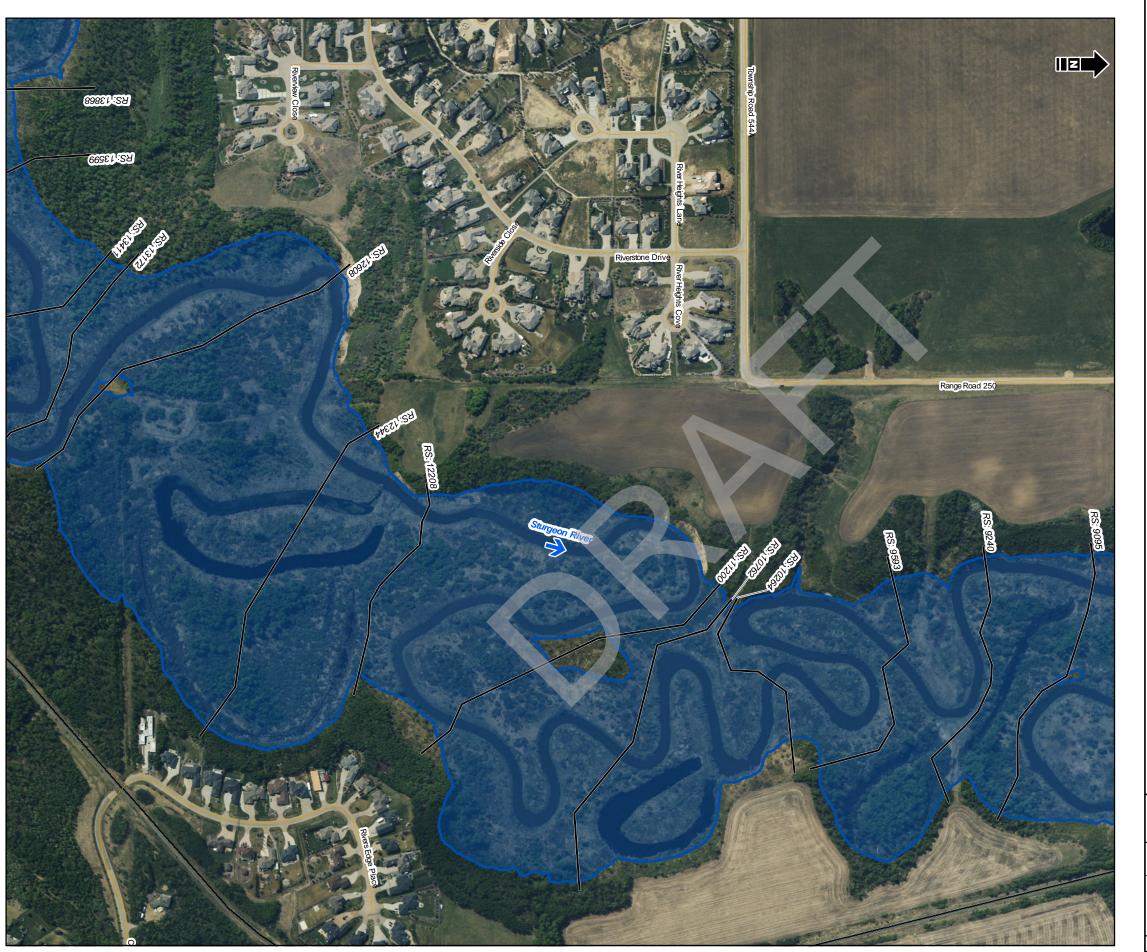






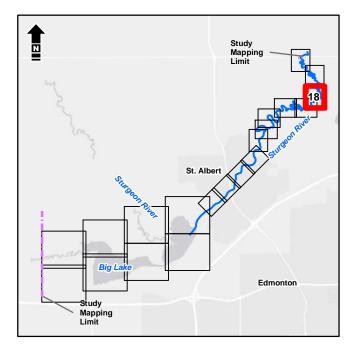
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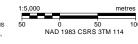


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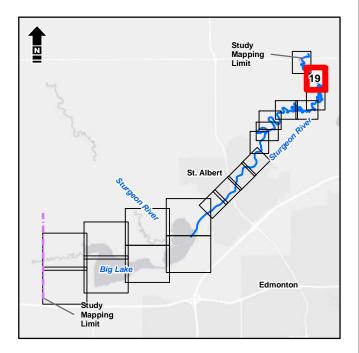
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March 2020



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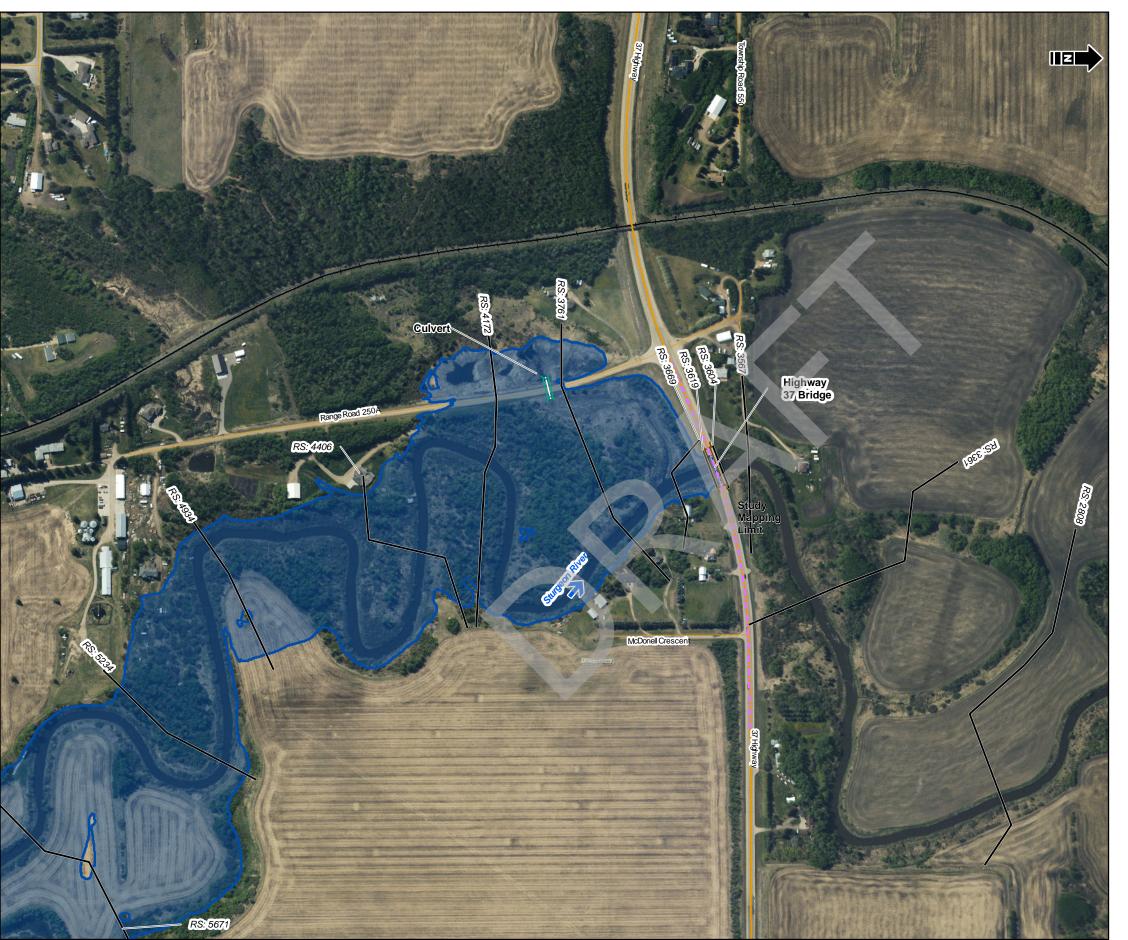




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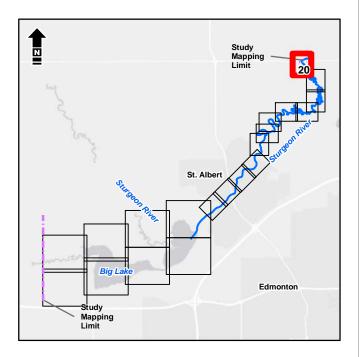
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March 2020



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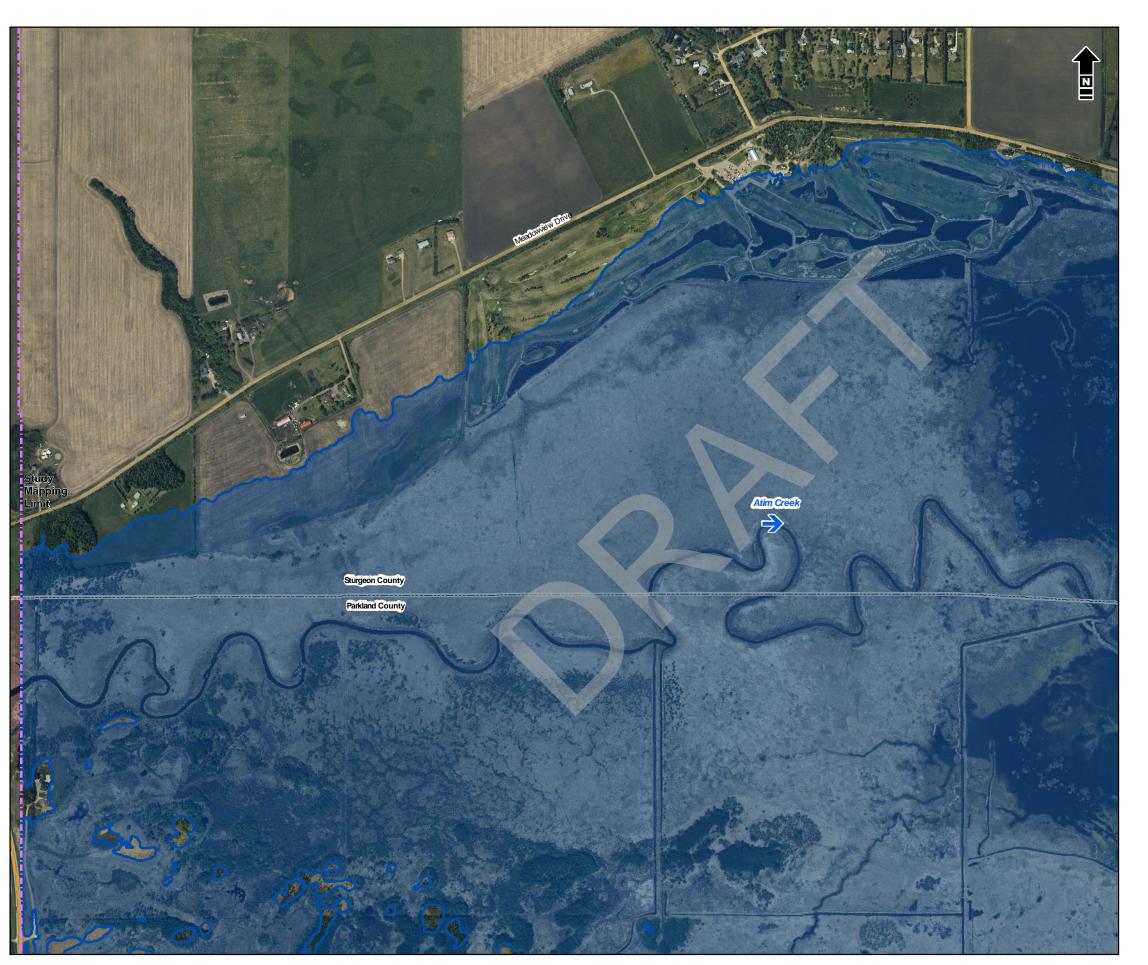


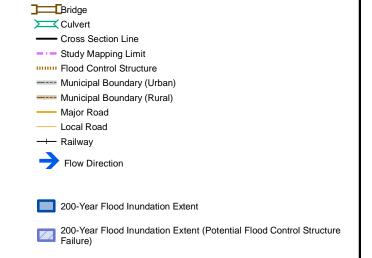


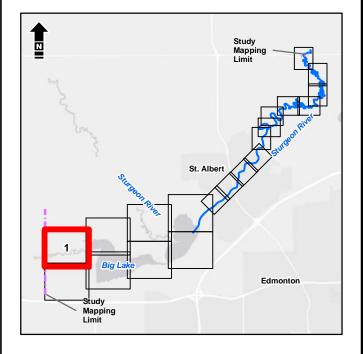
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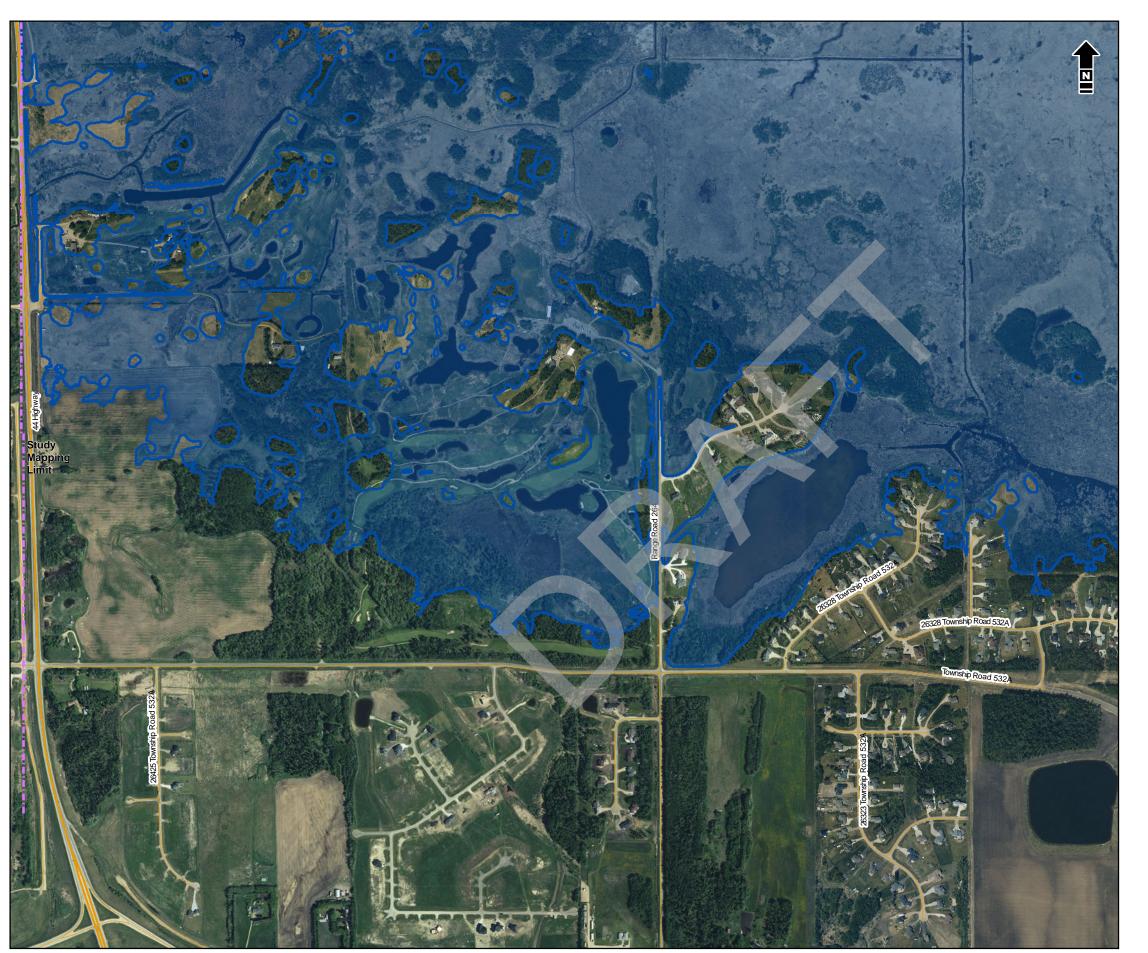
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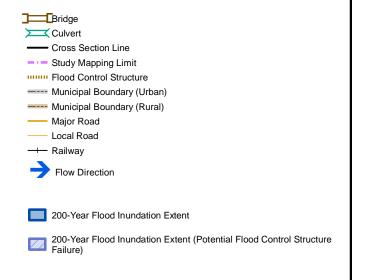
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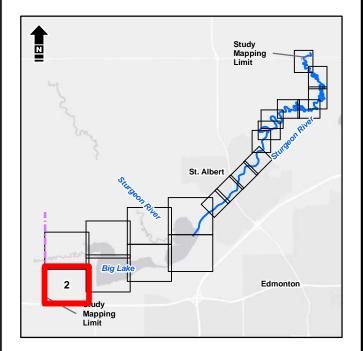
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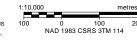
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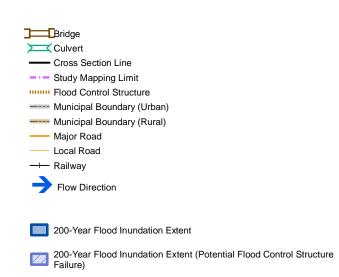
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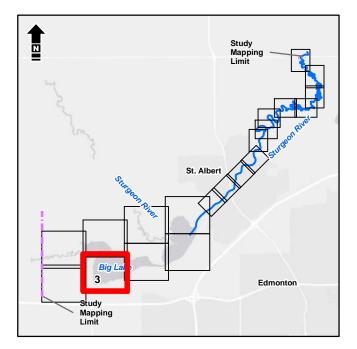
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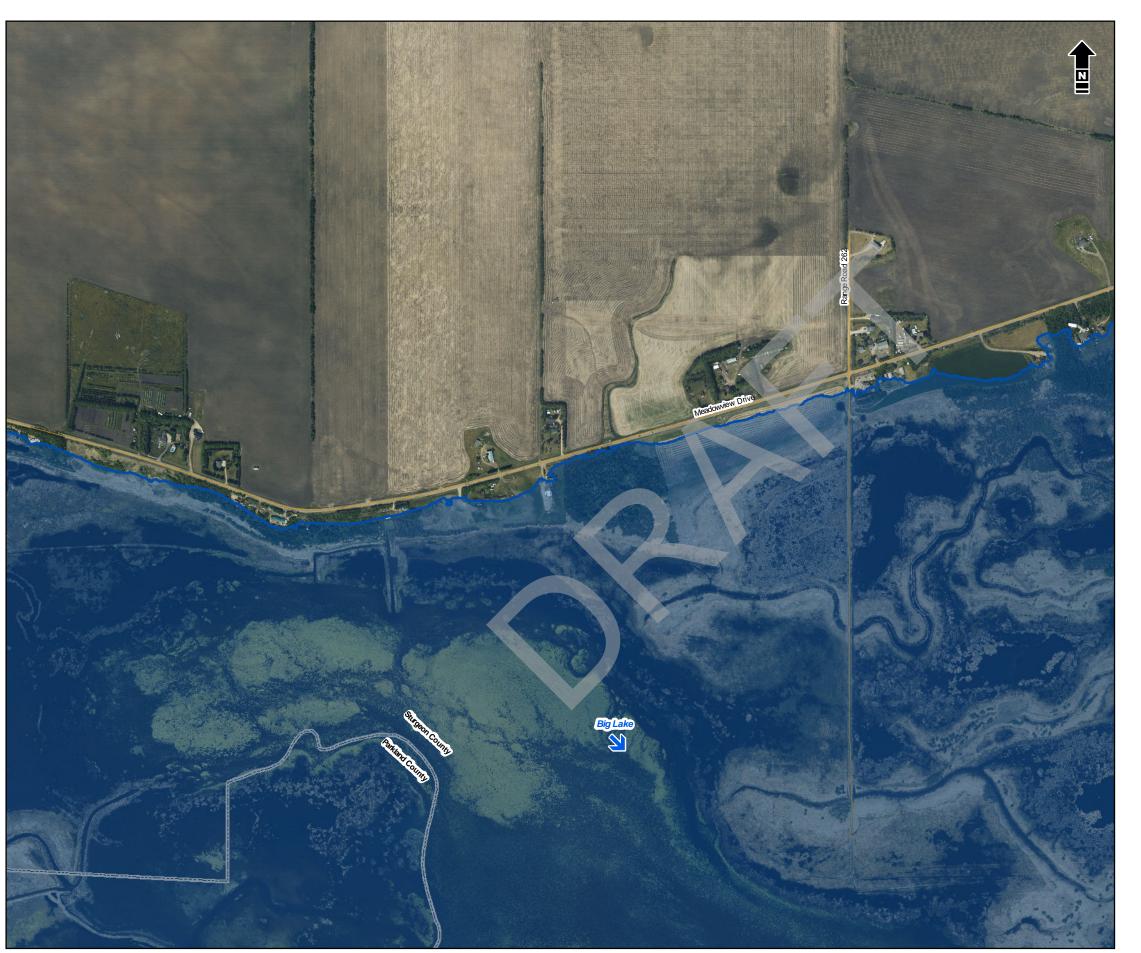
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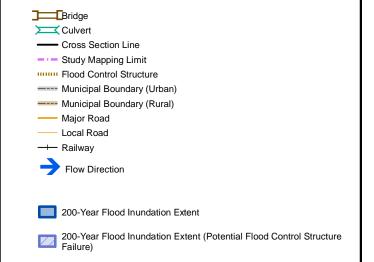
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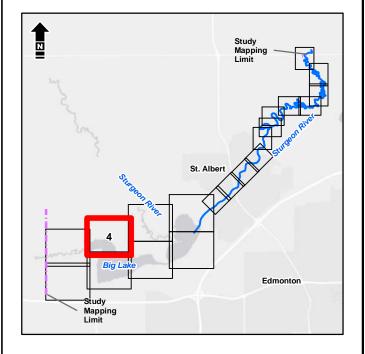
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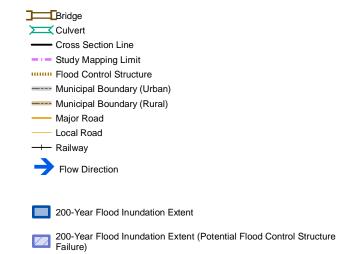
### Open Water Flood Inundation Mapbook | 200-Year

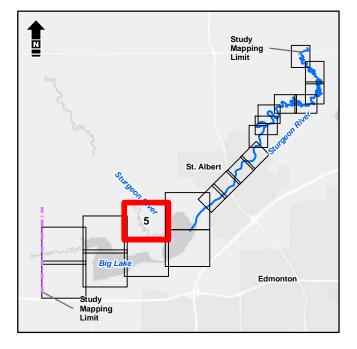
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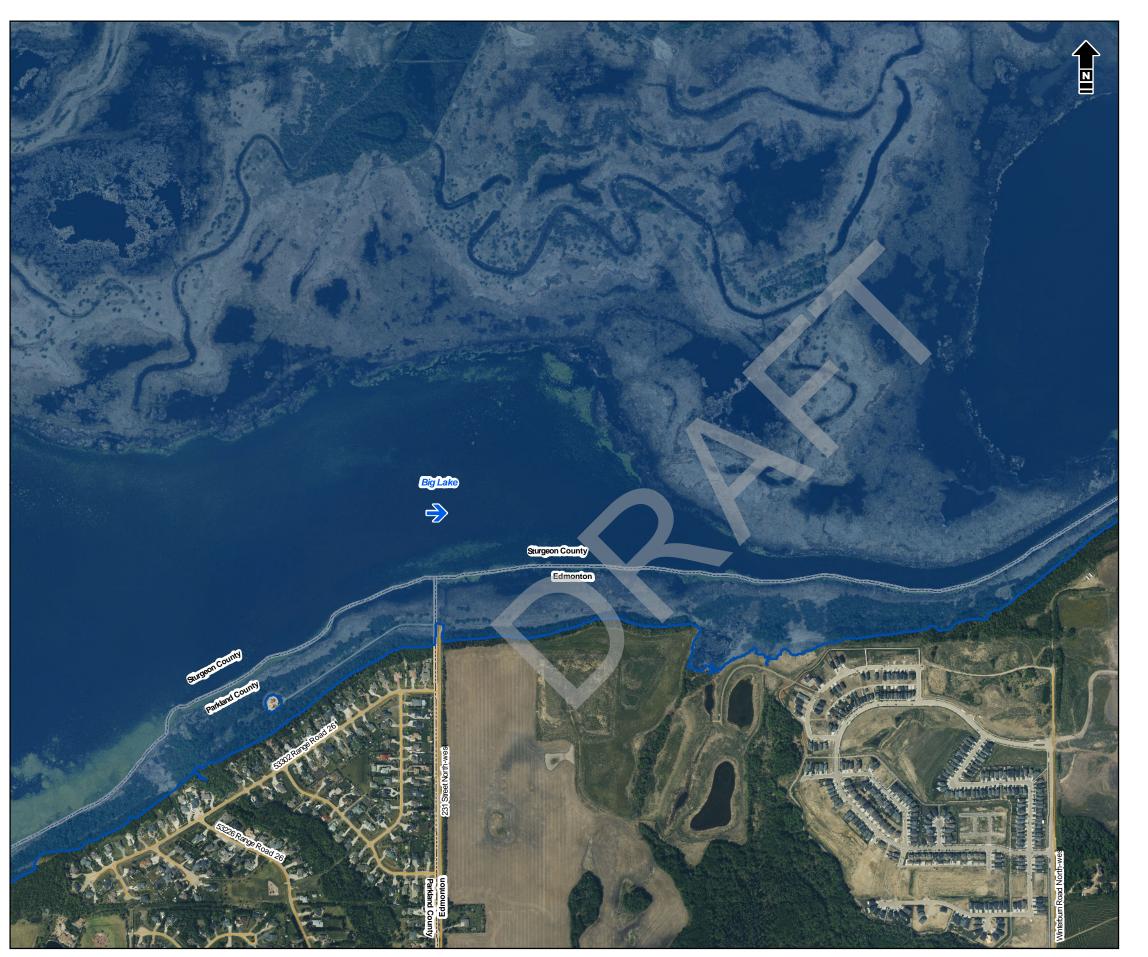
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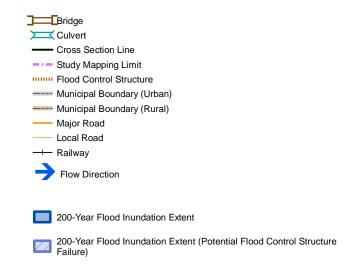
### Open Water Flood Inundation Mapbook | 200-Year

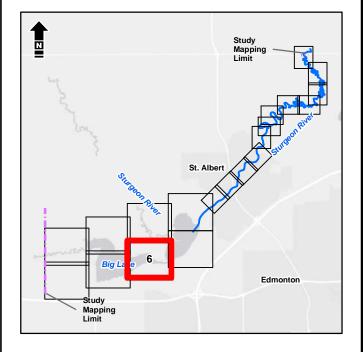
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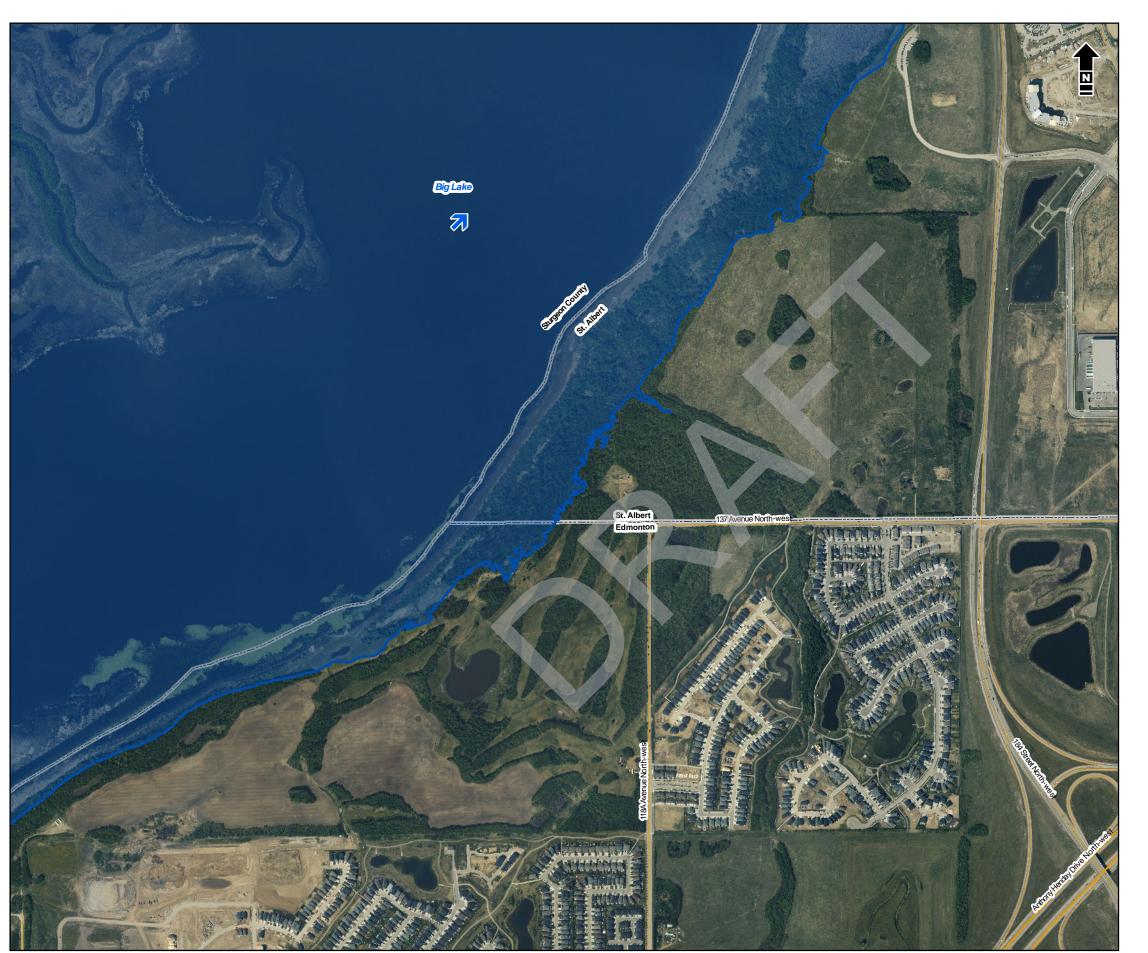


Alberta Government St. Albert Flood Hazard Study

#### Open Water Flood Inundation Mapbook | 200-Year

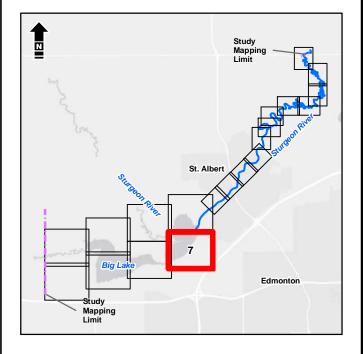
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Bridge
Culvert
Cross Section Line
Study Mapping Limit
Hood Control Structure
Municipal Boundary (Urban)
Municipal Boundary (Rural)
Major Road
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Railway
Flow Direction

200-Year Flood Inundation Extent
Pailure



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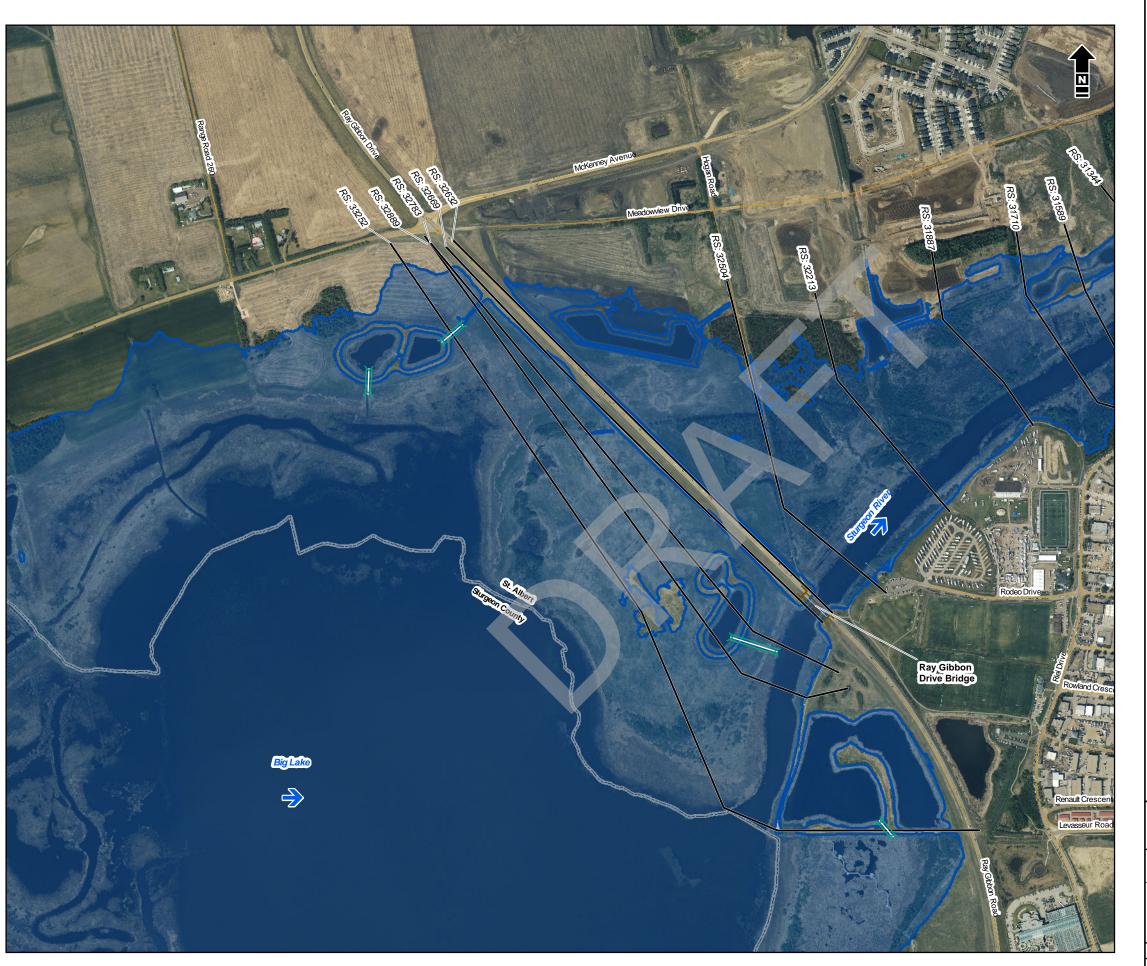
### Open Water Flood Inundation Mapbook | 200-Year

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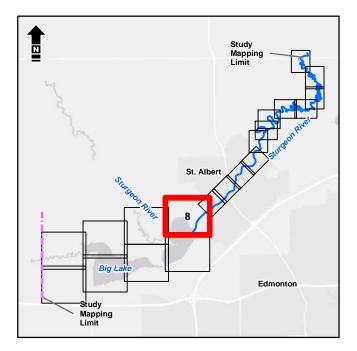
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Bridge Culvert --- Cross Section Line -- Study Mapping Limit Flood Control Structure ---- Municipal Boundary (Urban) ---- Municipal Boundary (Rural) --- Major Road — Local Road — Railway Flow Direction 200-Year Flood Inundation Extent 200-Year Flood Inundation Extent (Potential Flood Control Structure Failure)



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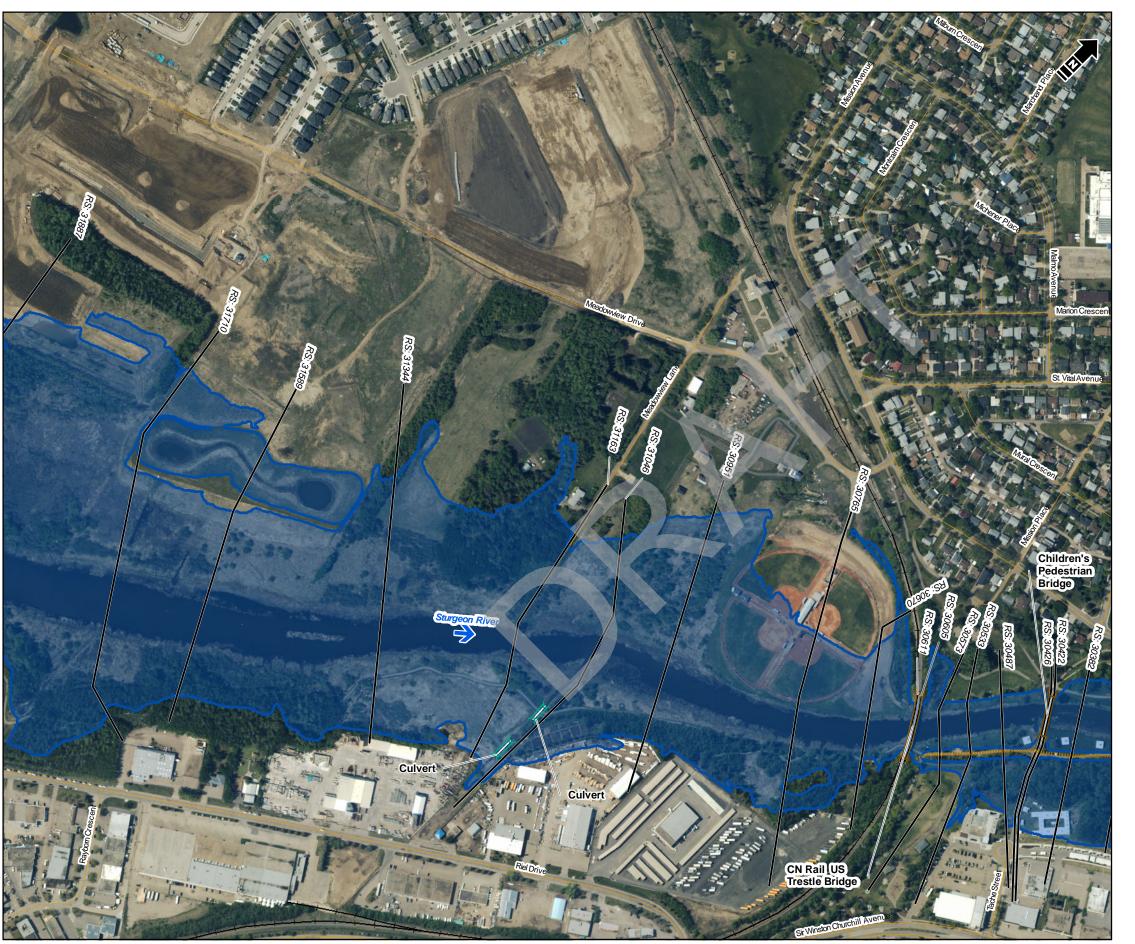




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# Open Water Flood Inundation Mapbook | 200-Year

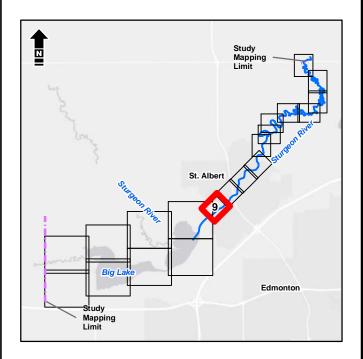
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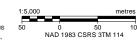
Bridge
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200-Year Flood Inundation Extent
(Potential Flood Control Structure Failure)

#### <u>DISCHARGE</u> Sturgeon River = 110 m<sup>3</sup>/s



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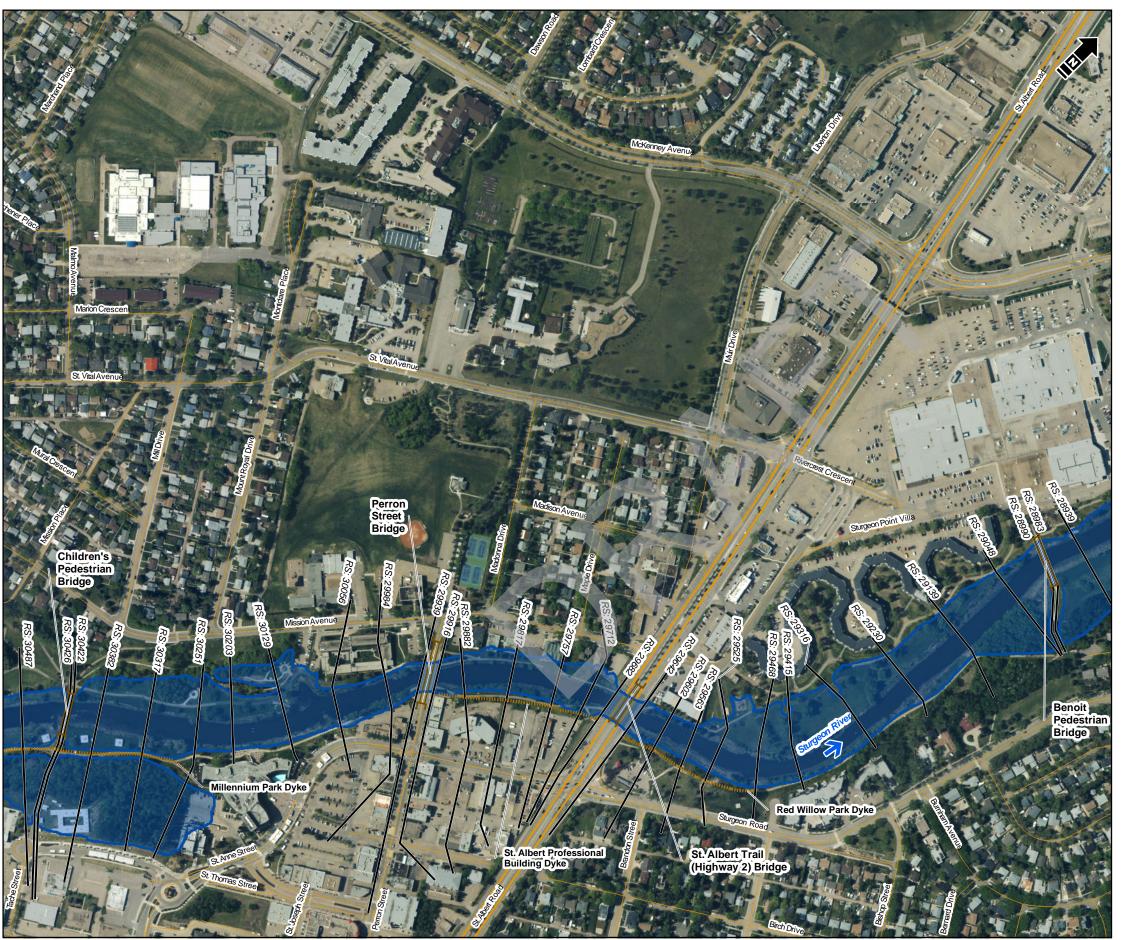
#### Open Water Flood Inundation Mapbook | 200-Year

Date: March 2020 Project: 28312 Submitter: P. Rogers

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Culvert
Cross Section Line
Study Mapping Limit
Municipal Boundary (Urban)
Major Road
Local Road
Railway
Flow Direction

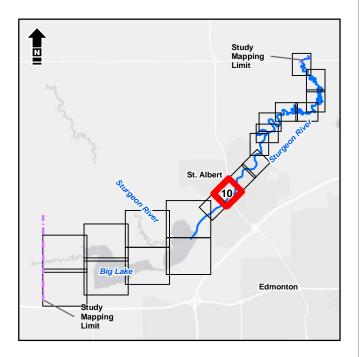
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Flow Direction

200-Year Flood Inundation Extent

200-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

#### <u>DISCHARGE</u> Sturgeon River = 110 m<sup>3</sup>/s



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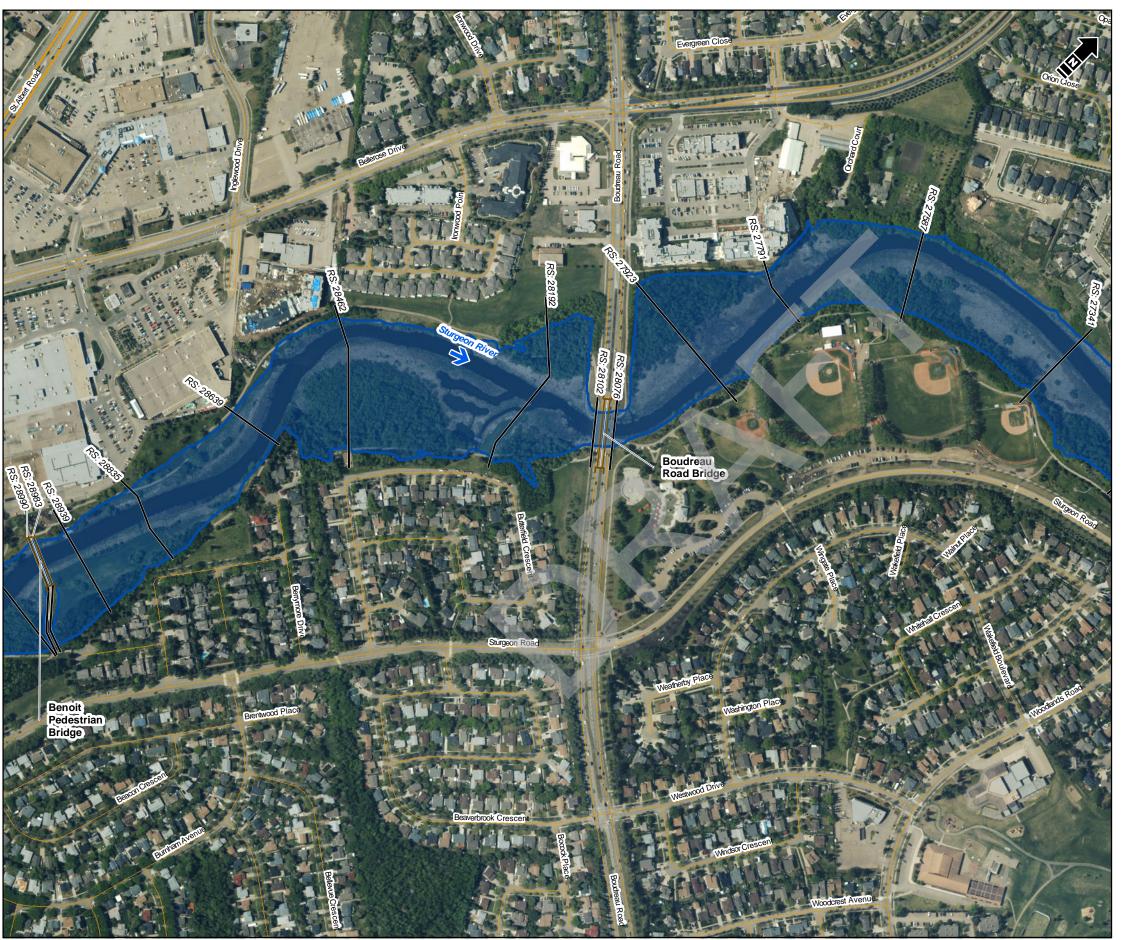
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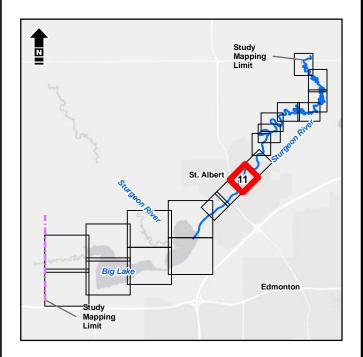
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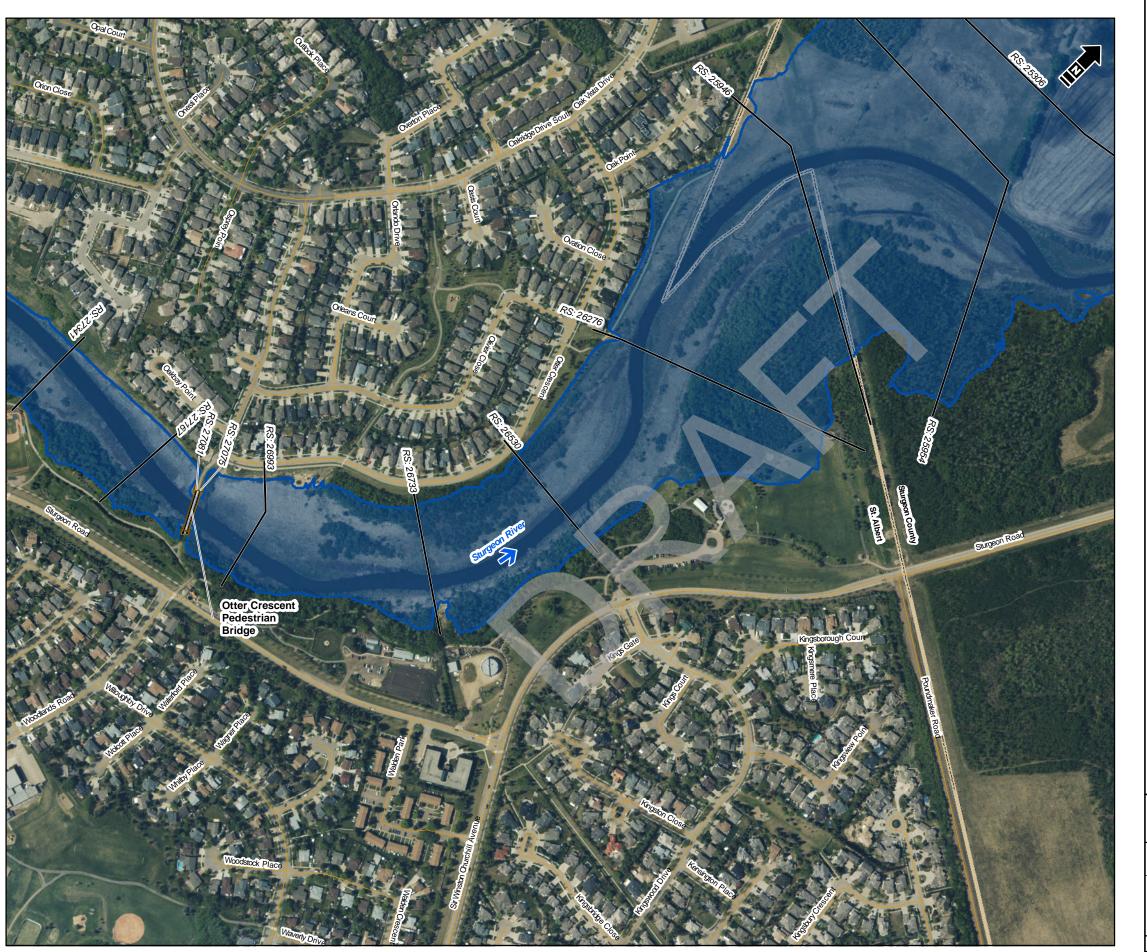






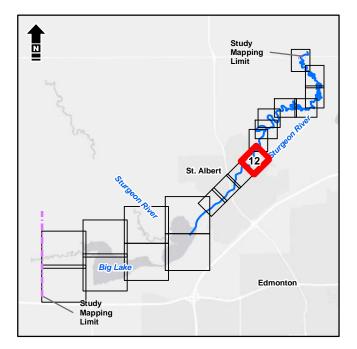
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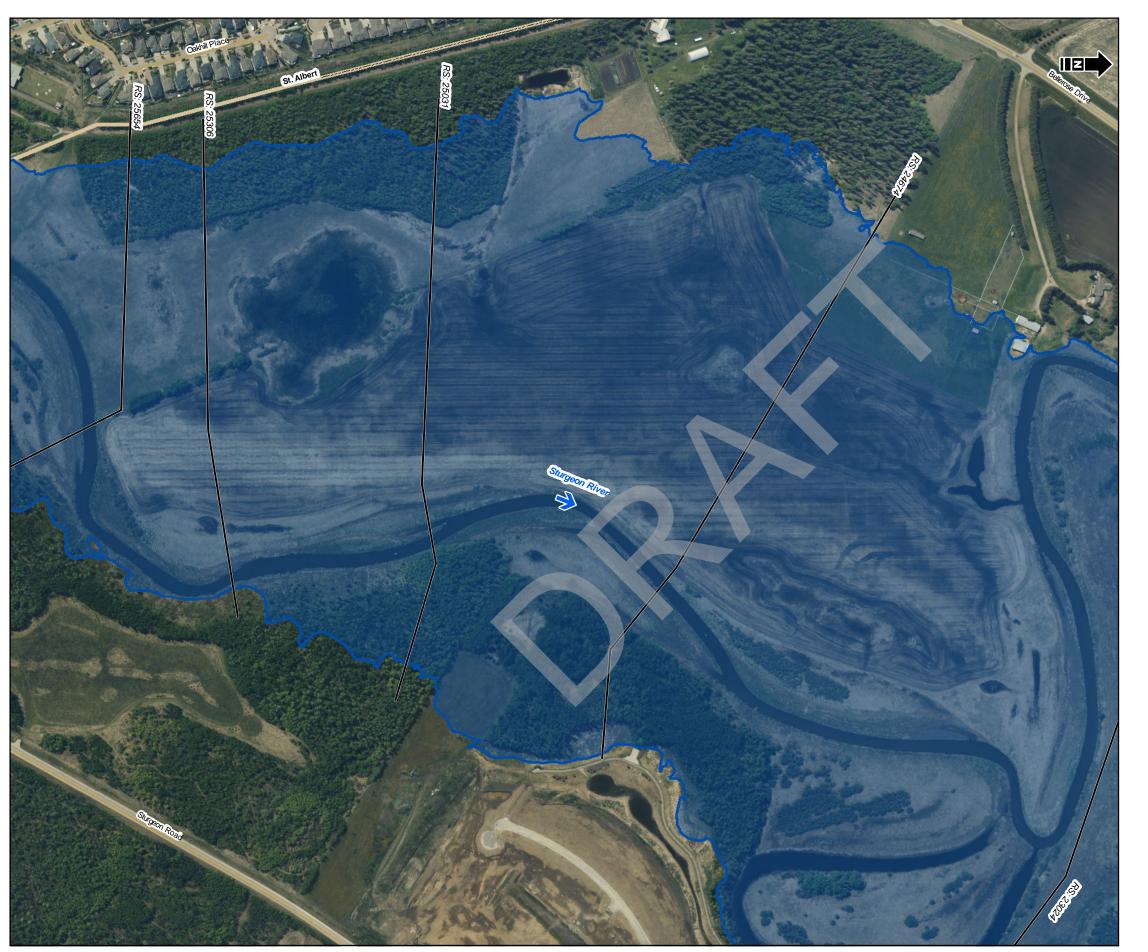
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## Open Water Flood Inundation Mapbook | 200-Year



Bridge

Culvert

---- Cross Section Line

-- Study Mapping Limit

Flood Control Structure

---- Municipal Boundary (Urban) ---- Municipal Boundary (Rural)

--- Major Road

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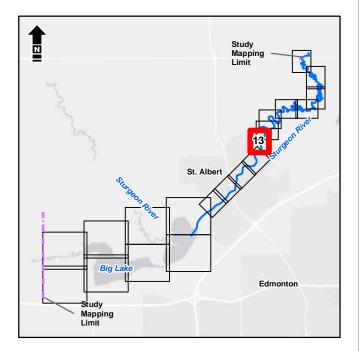
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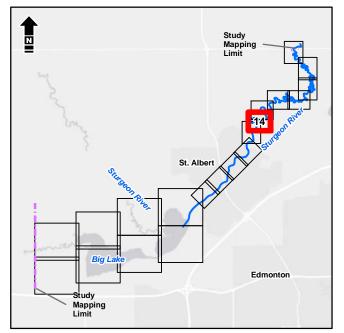
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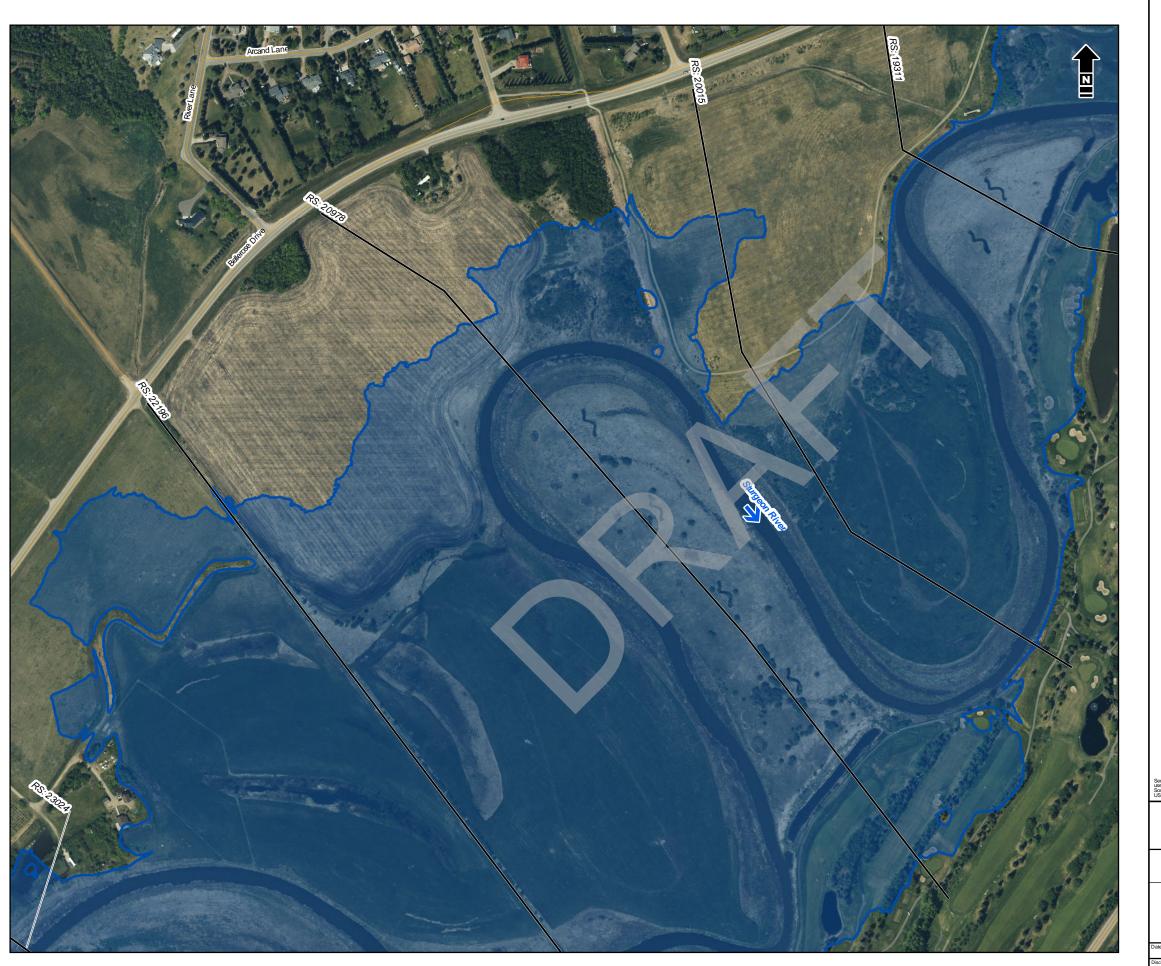




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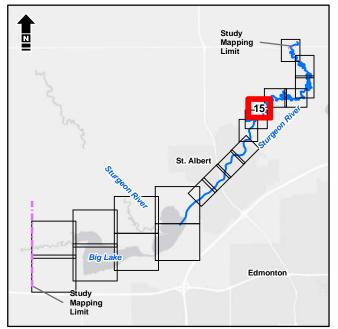


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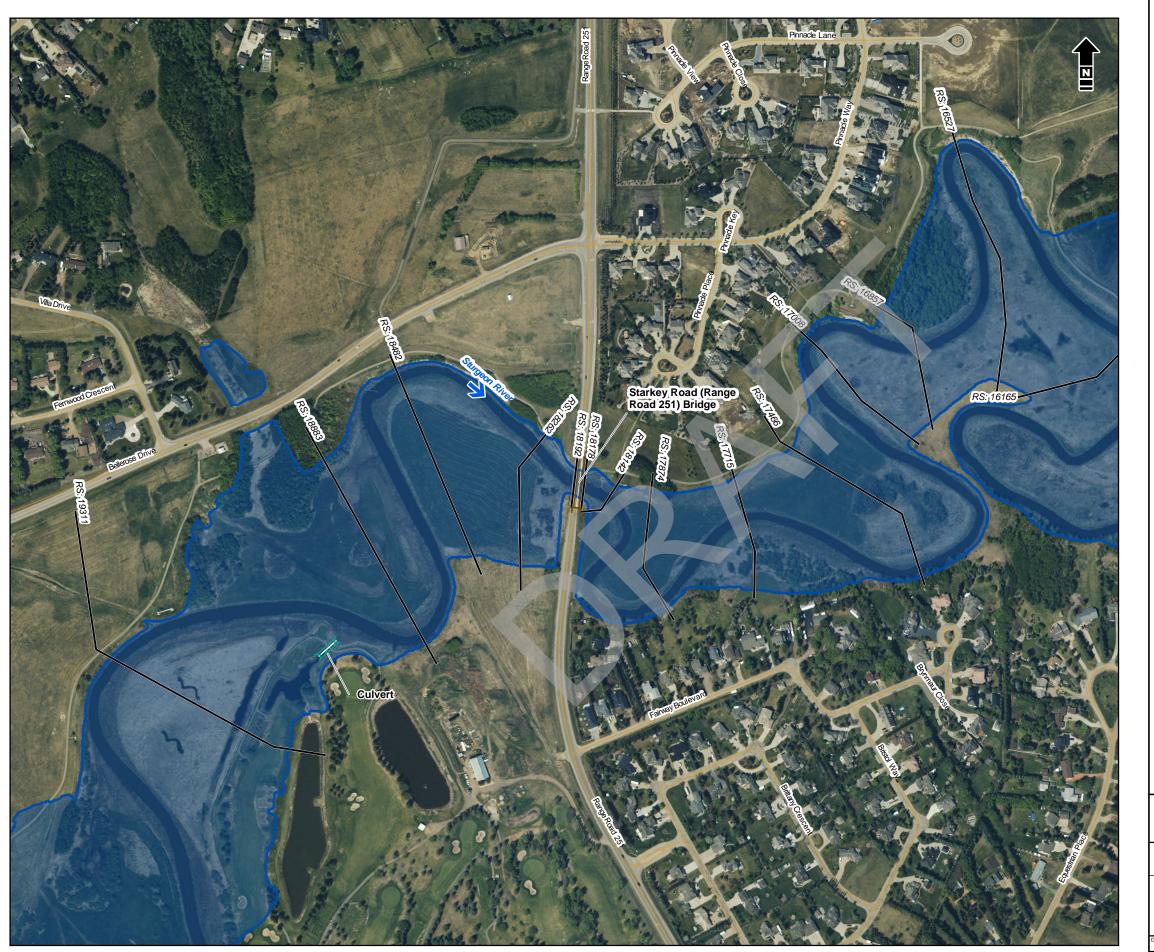




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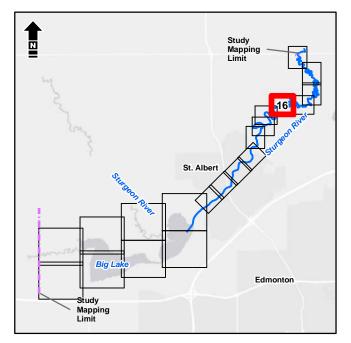
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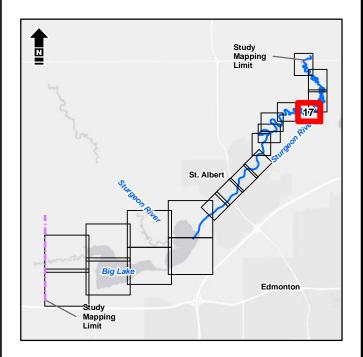
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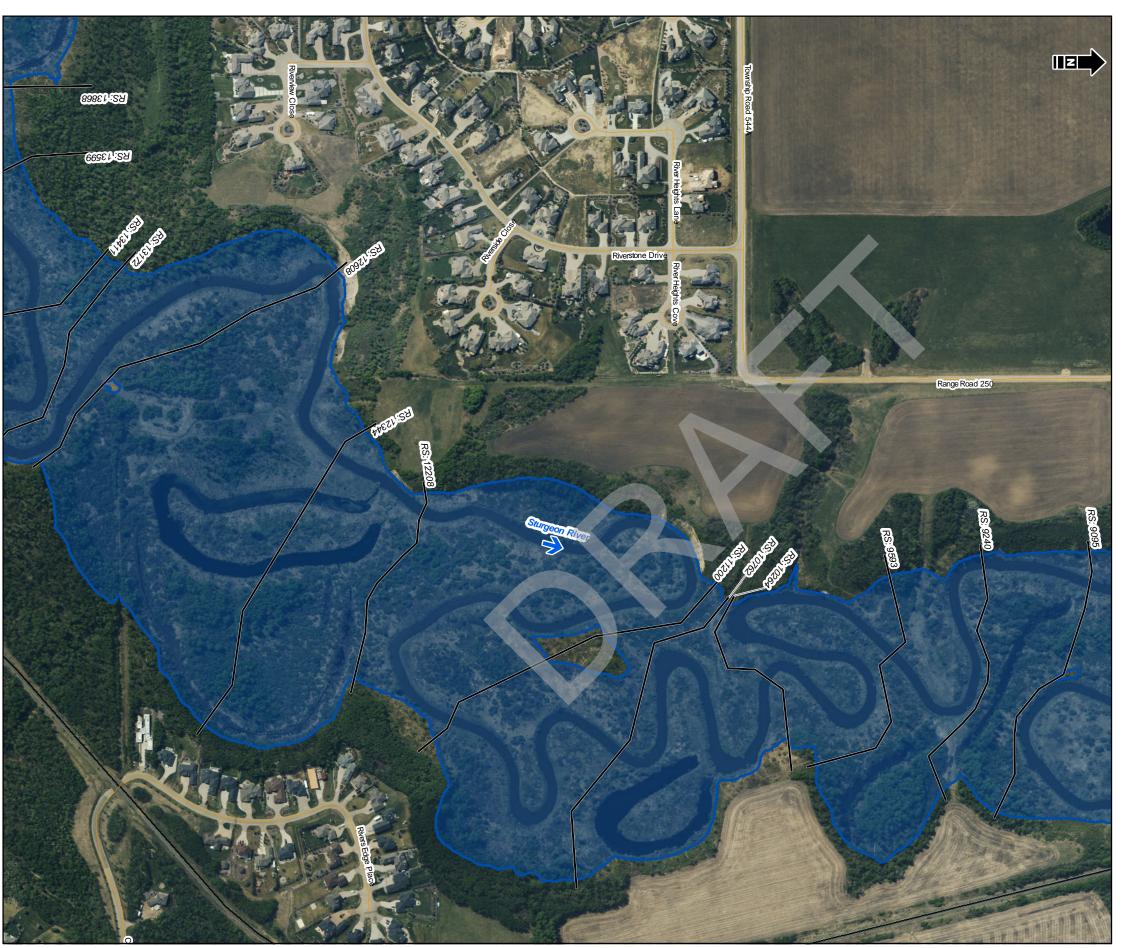






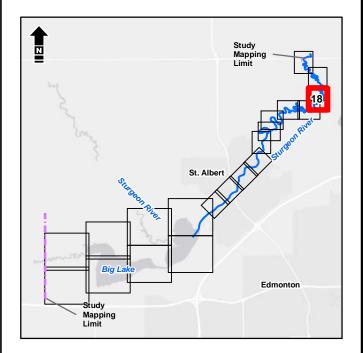
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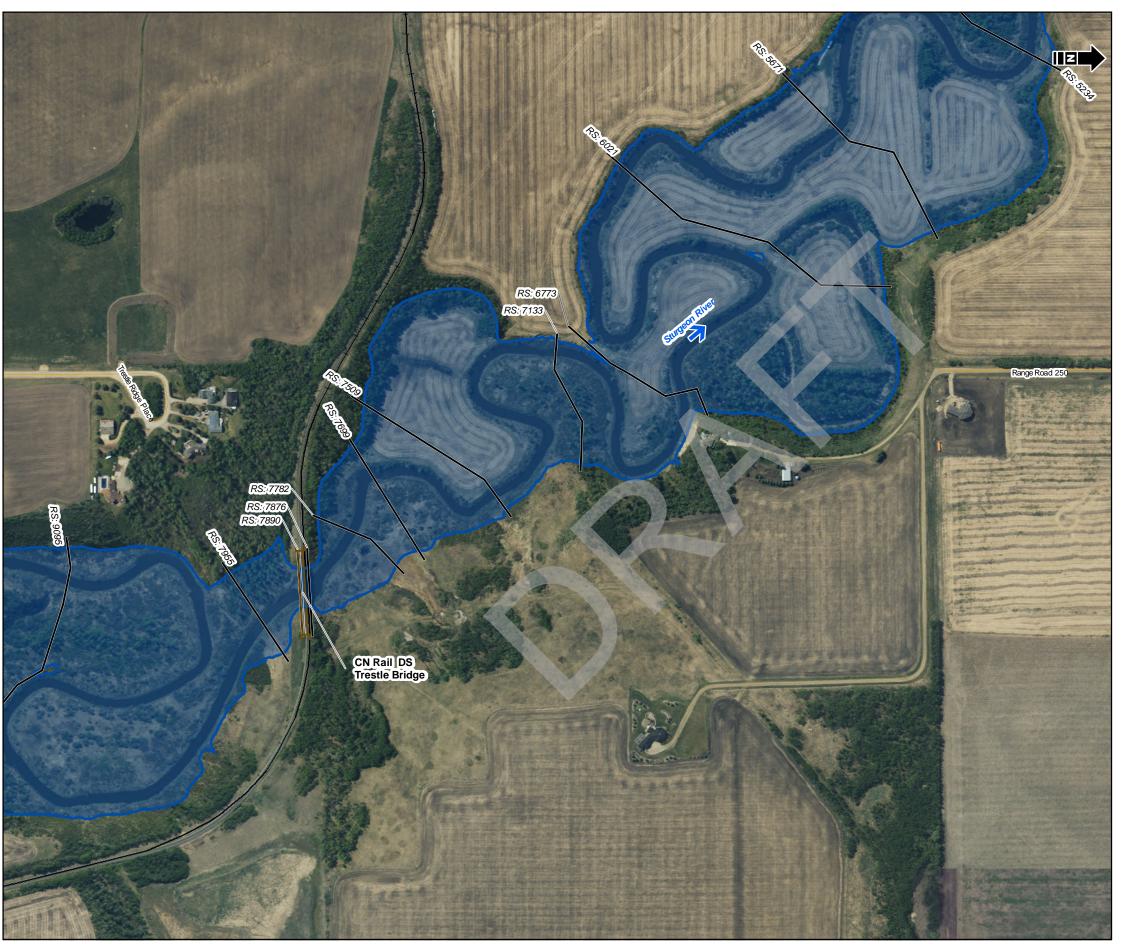




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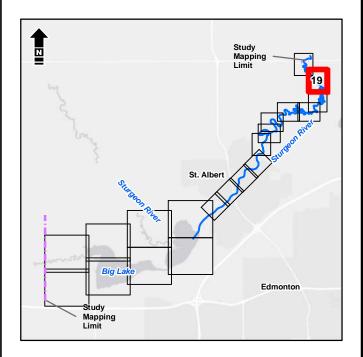
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# Open Water Flood Inundation Mapbook | 200-Year

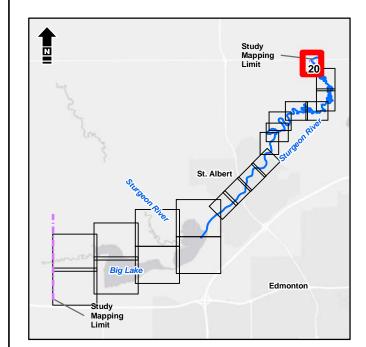
March 2020



Culvert
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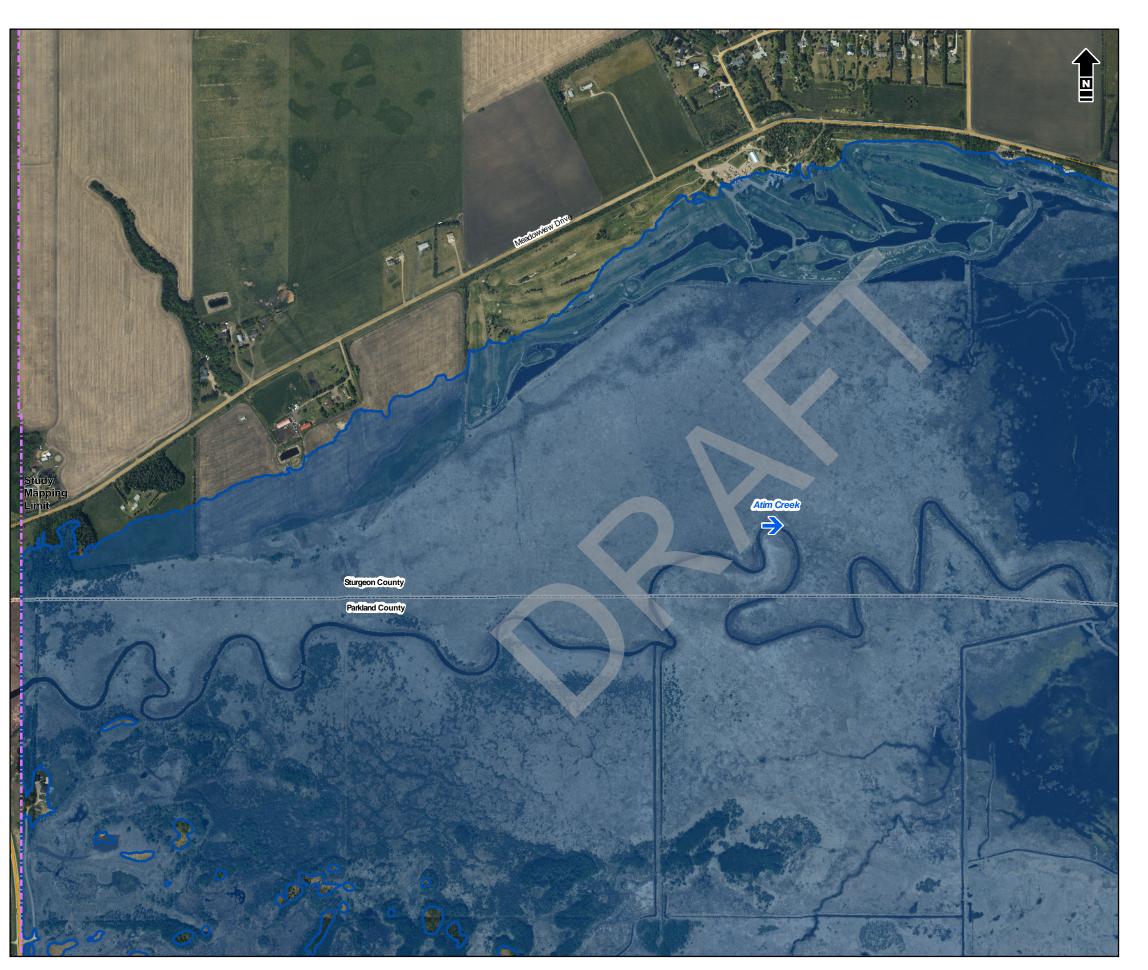


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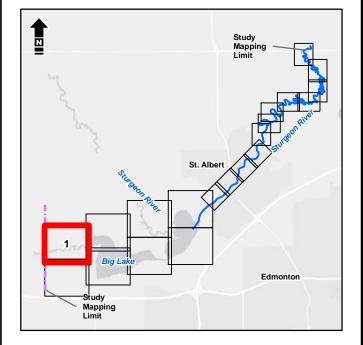
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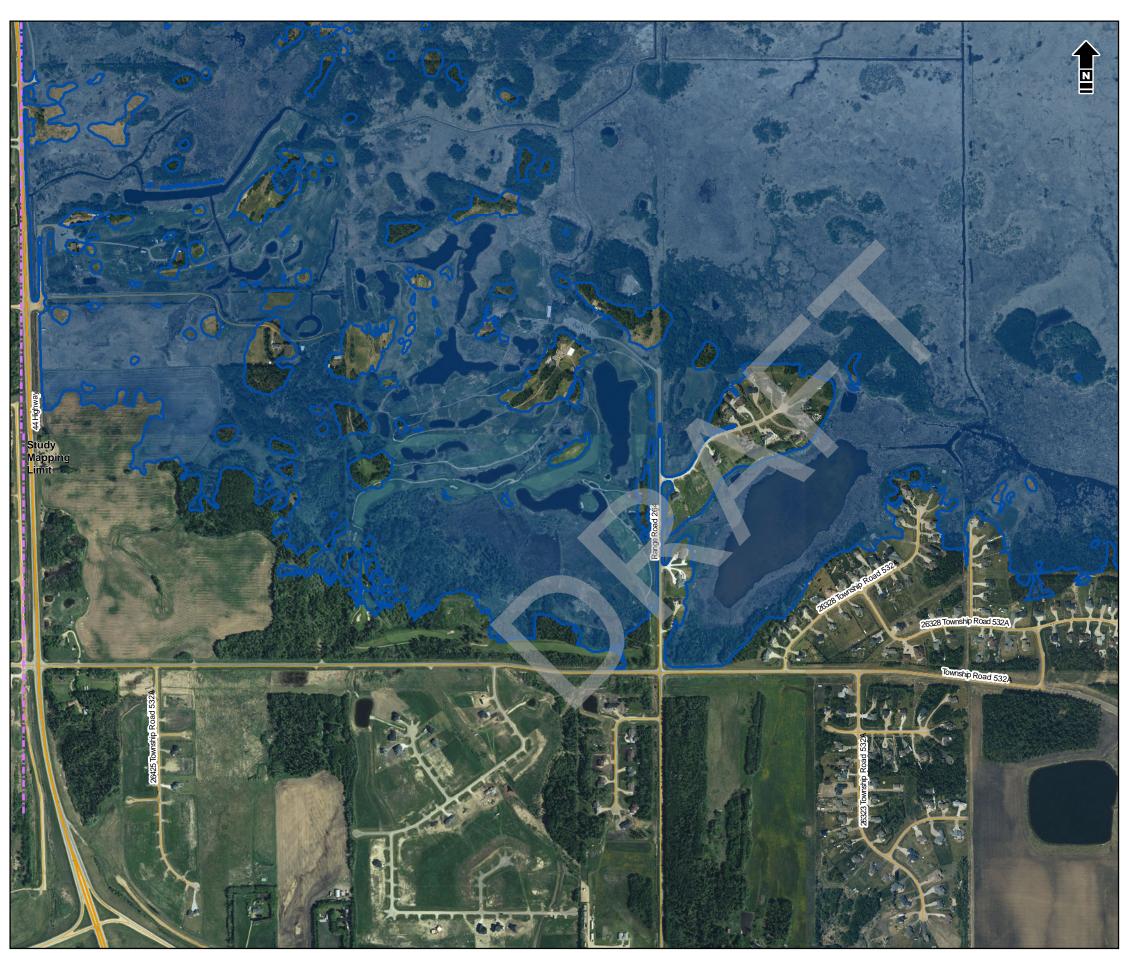
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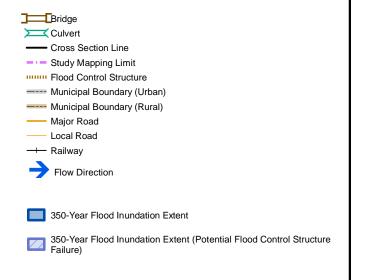
### Open Water Flood Inundation Mapbook | 350-Year

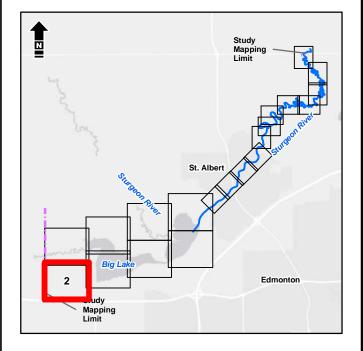
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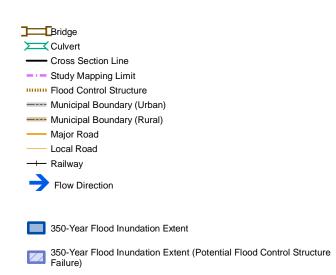
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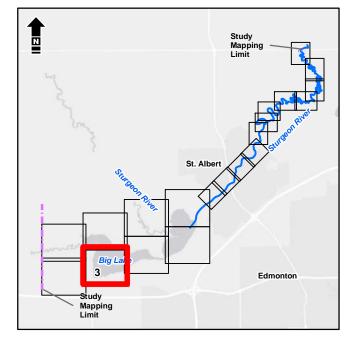
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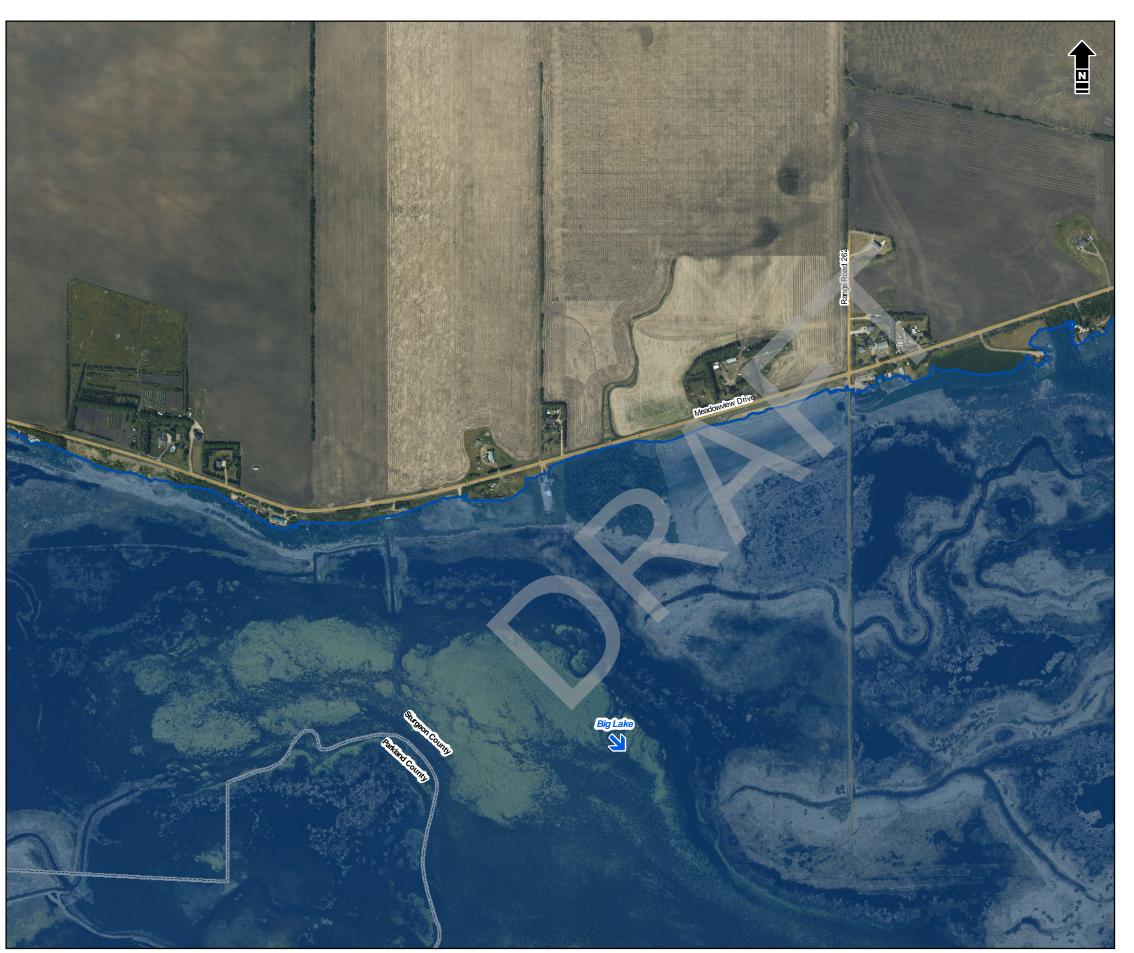
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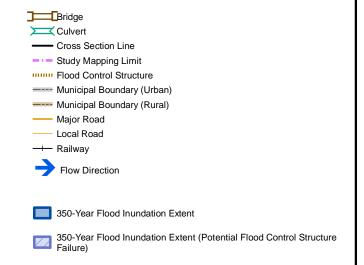
## Open Water Flood Inundation Mapbook | 350-Year

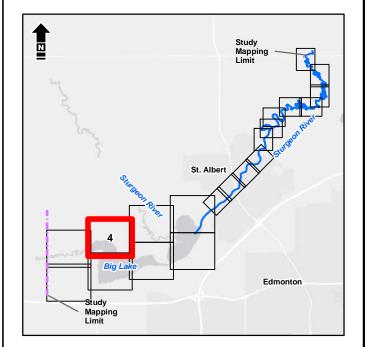
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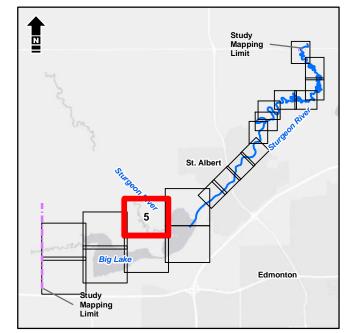
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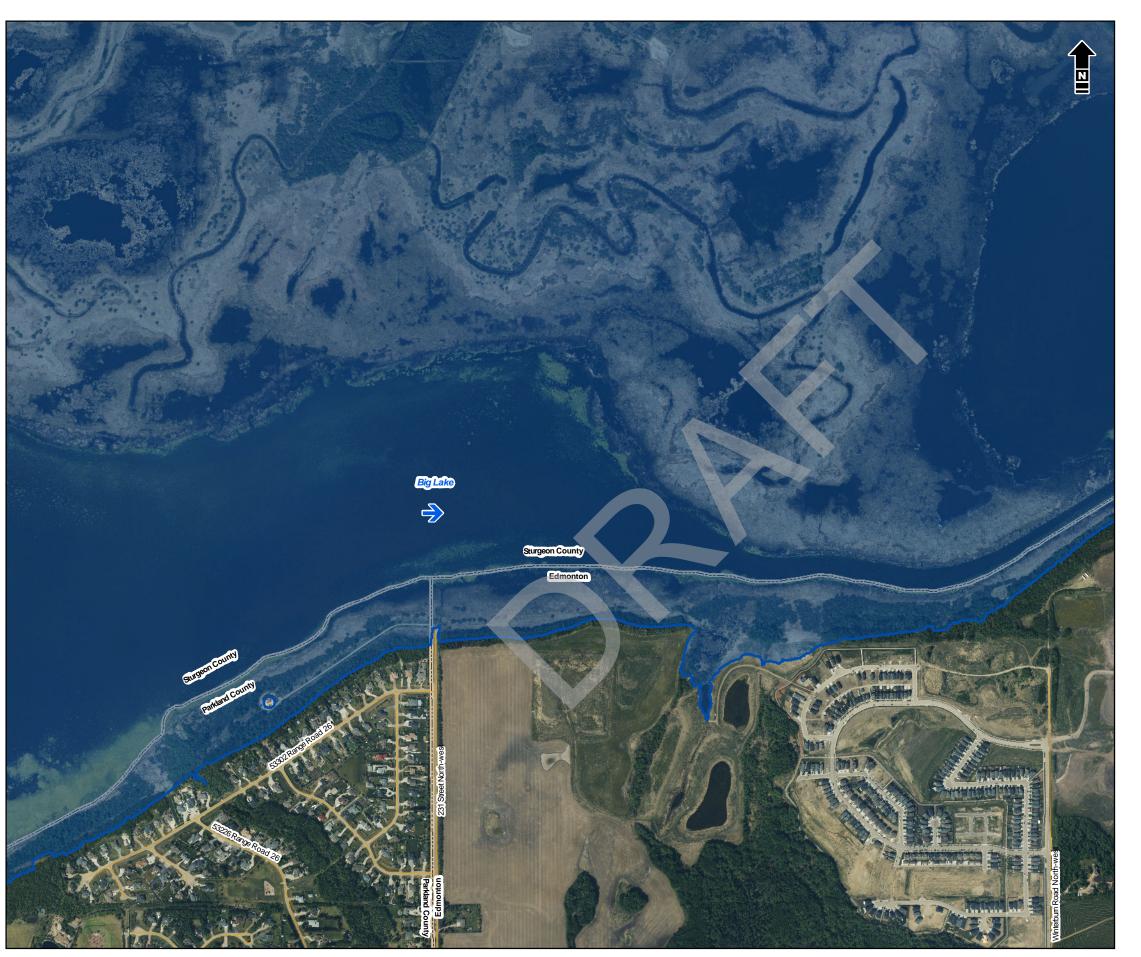


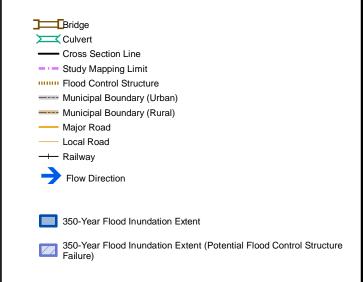
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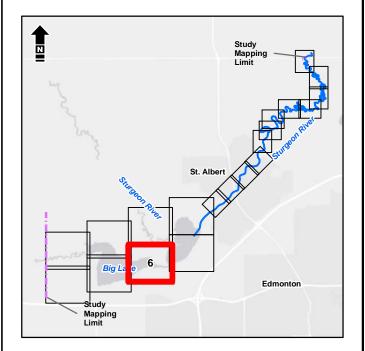
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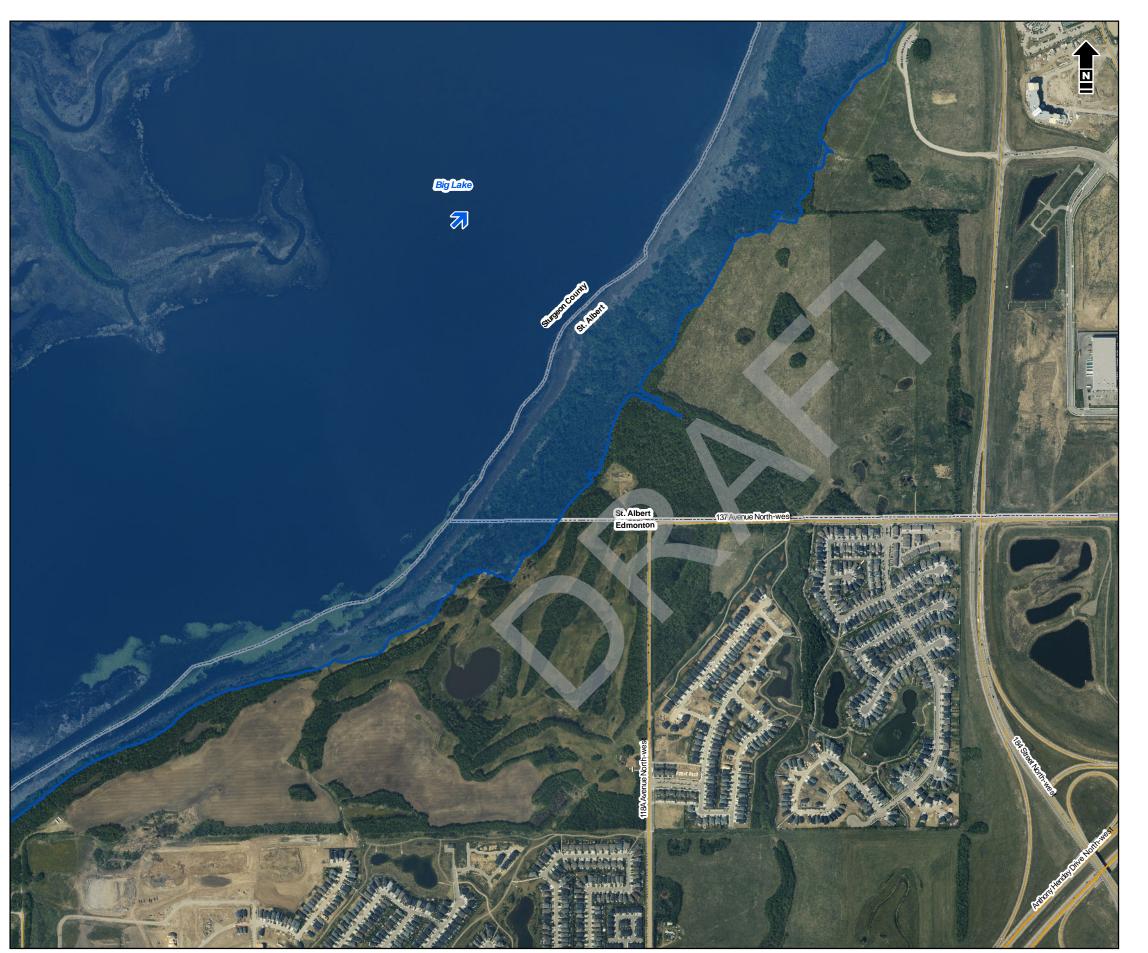




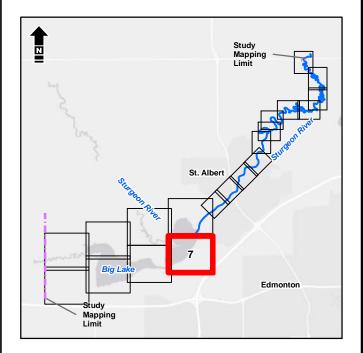
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# Open Water Flood Inundation Mapbook | 350-Year

March 2020



Bridge Culvert --- Cross Section Line -- Study Mapping Limit Flood Control Structure ---- Municipal Boundary (Urban) ---- Municipal Boundary (Rural) --- Major Road — Local Road — Railway Flow Direction 350-Year Flood Inundation Extent 350-Year Flood Inundation Extent (Potential Flood Control Structure Failure)



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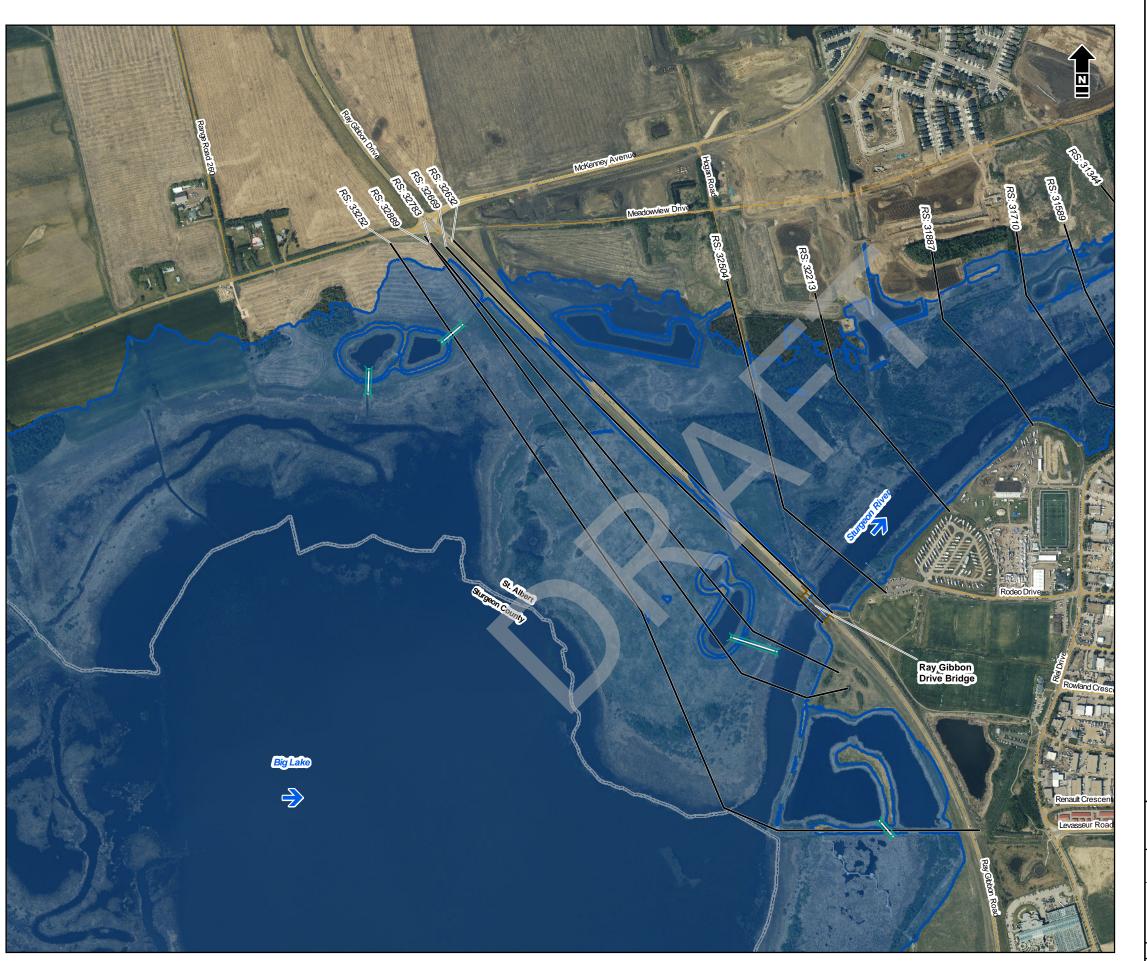




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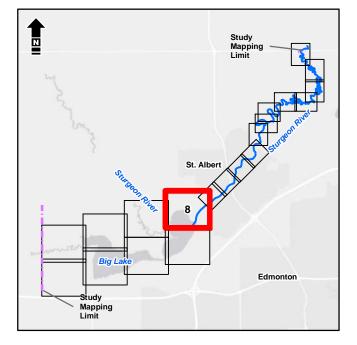
# Open Water Flood Inundation Mapbook | 350-Year

March 2020



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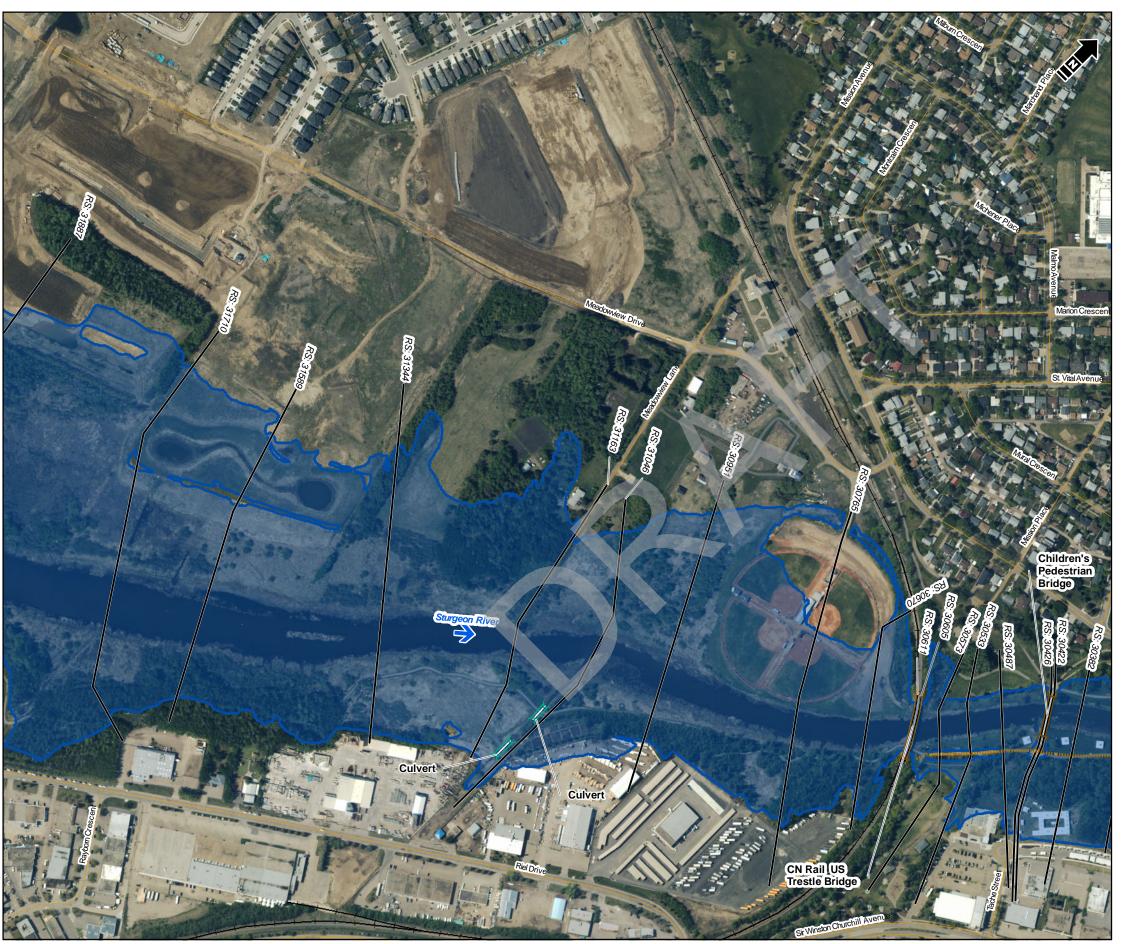
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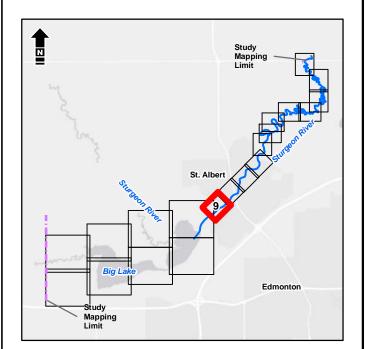
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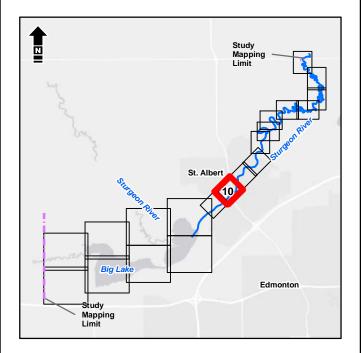
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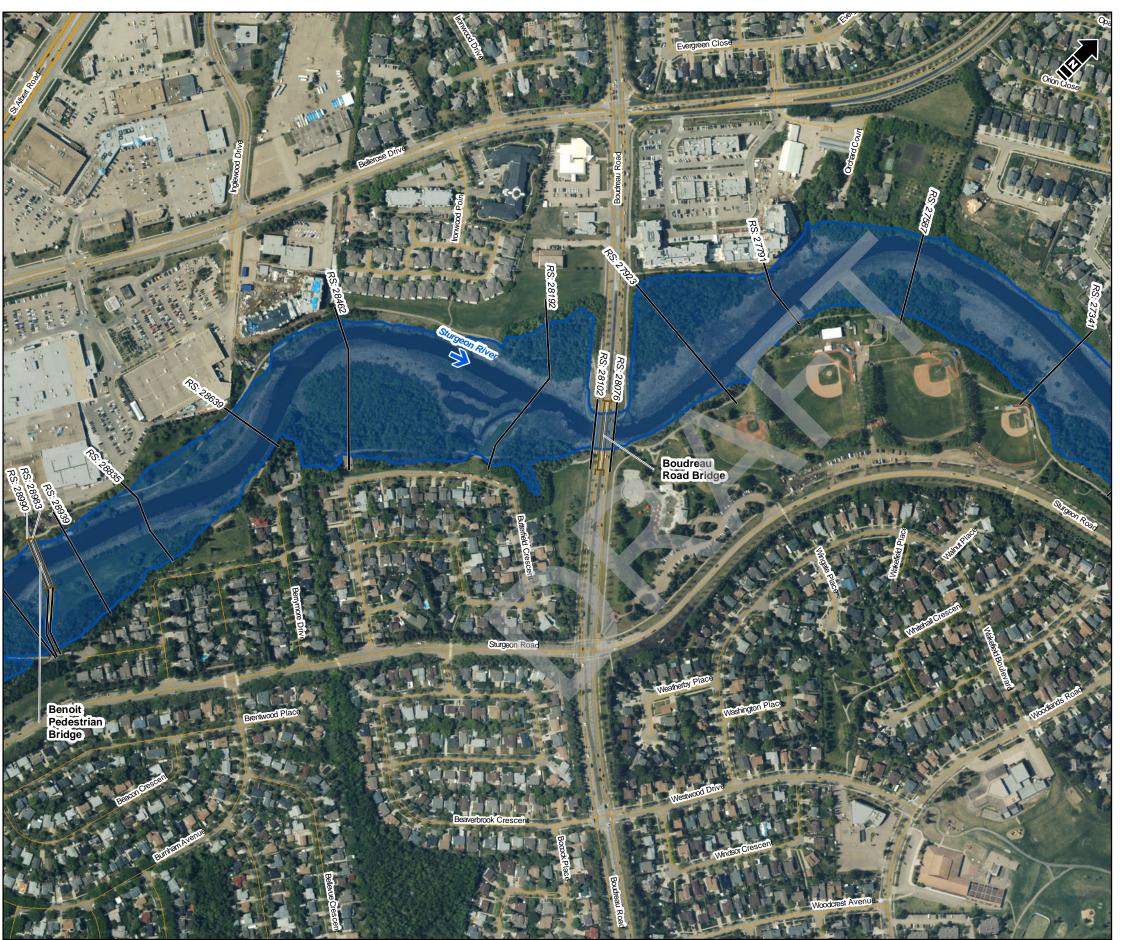
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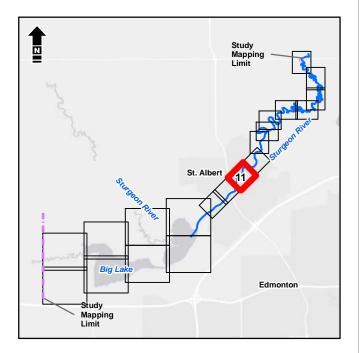
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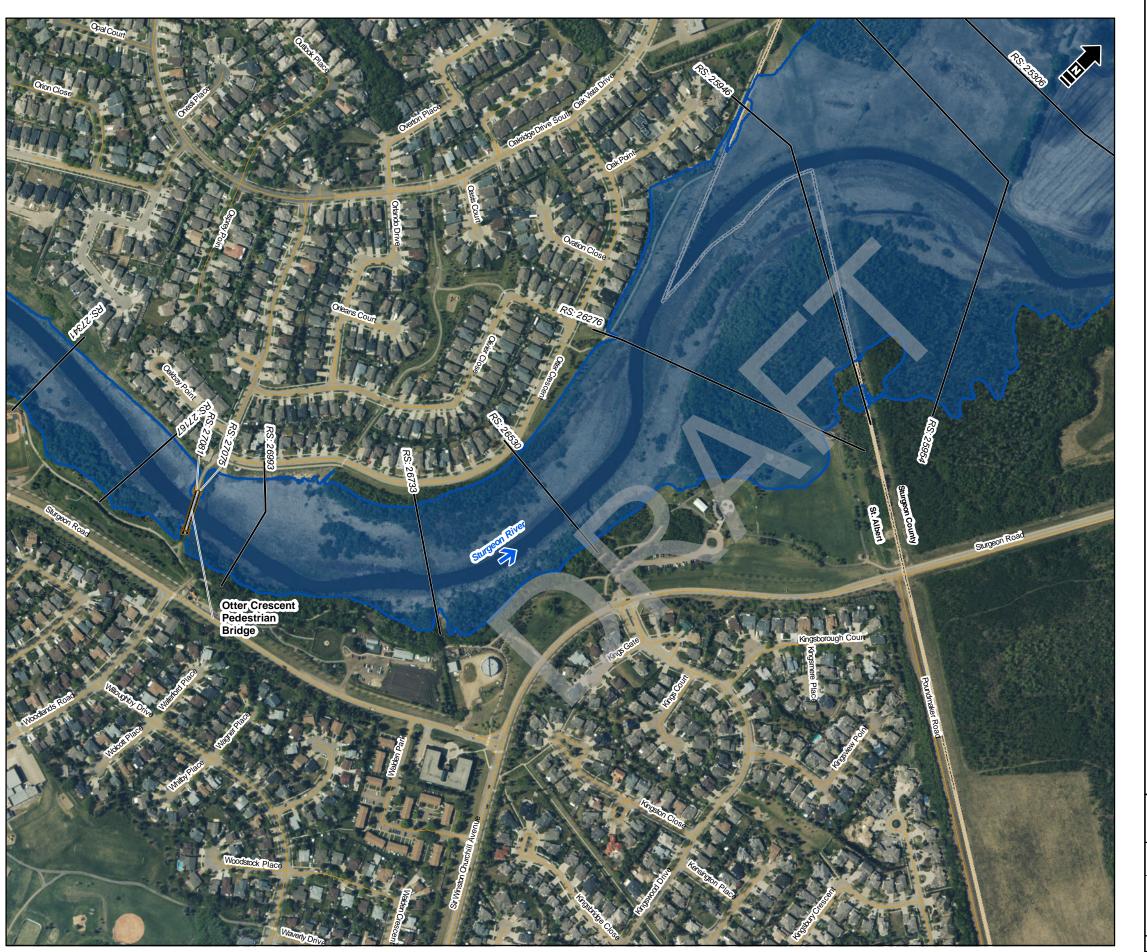




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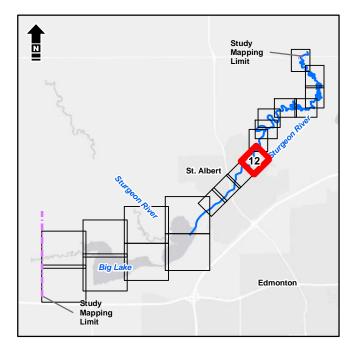
# Open Water Flood Inundation Mapbook | 350-Year

March 2020



Bridge Culvert Culvert --- Cross Section Line -- Study Mapping Limit Flood Control Structure ---- Municipal Boundary (Urban) ---- Municipal Boundary (Rural) --- Major Road — Local Road — Railway Flow Direction 350-Year Flood Inundation Extent 350-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

<u>DISCHARGE</u> Sturgeon River = 130 m<sup>3</sup>/s



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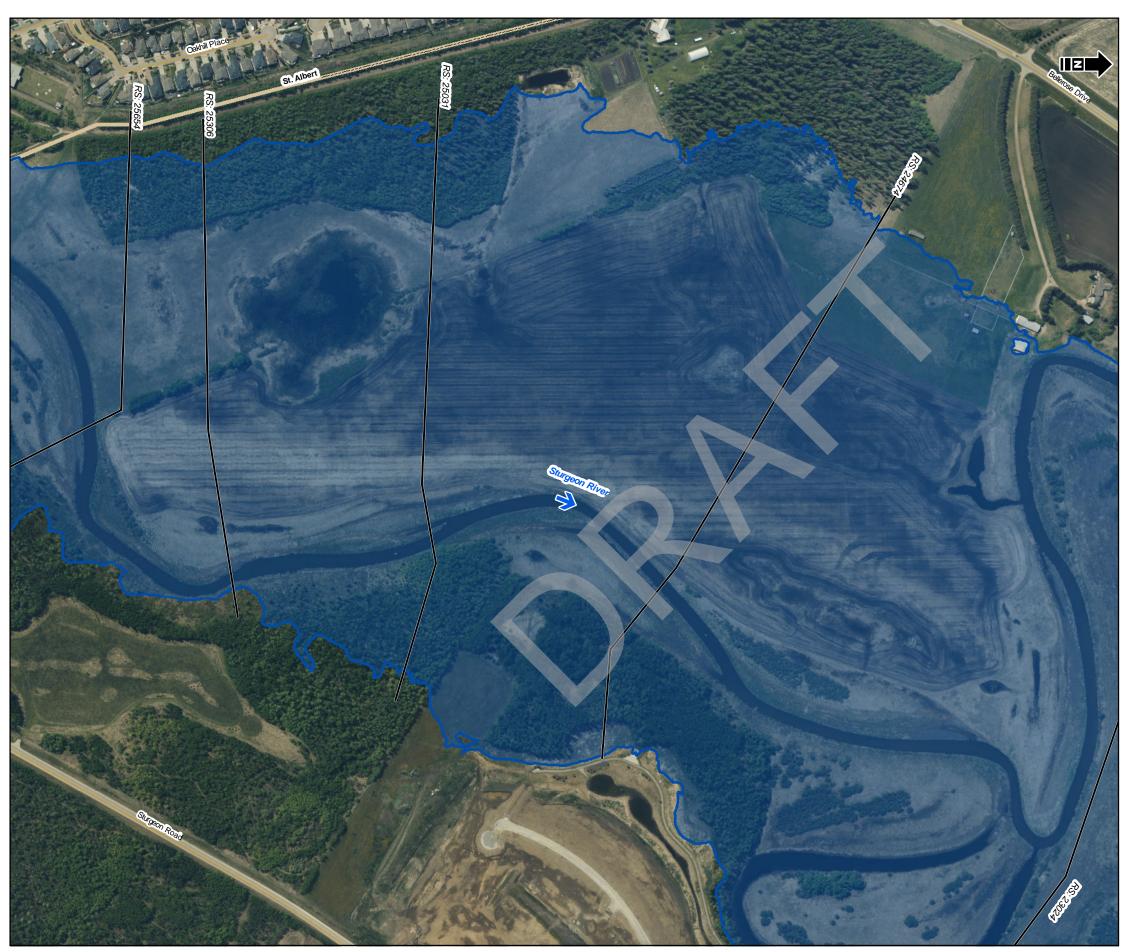




Alberta Government St. Albert Flood Hazard Study

# Open Water Flood Inundation Mapbook | 350-Year

March 2020



Bridge

Culvert

---- Cross Section Line

-- Study Mapping Limit Flood Control Structure

---- Municipal Boundary (Urban)

---- Municipal Boundary (Rural)

--- Major Road

— Local Road

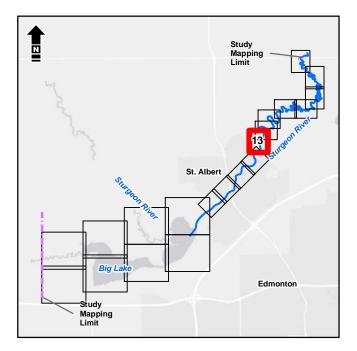
— Railway

Flow Direction

350-Year Flood Inundation Extent

350-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

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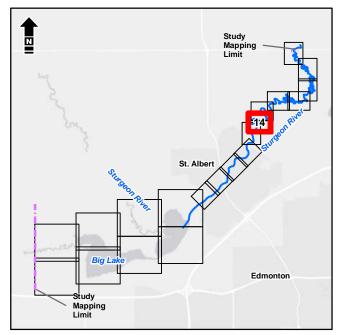
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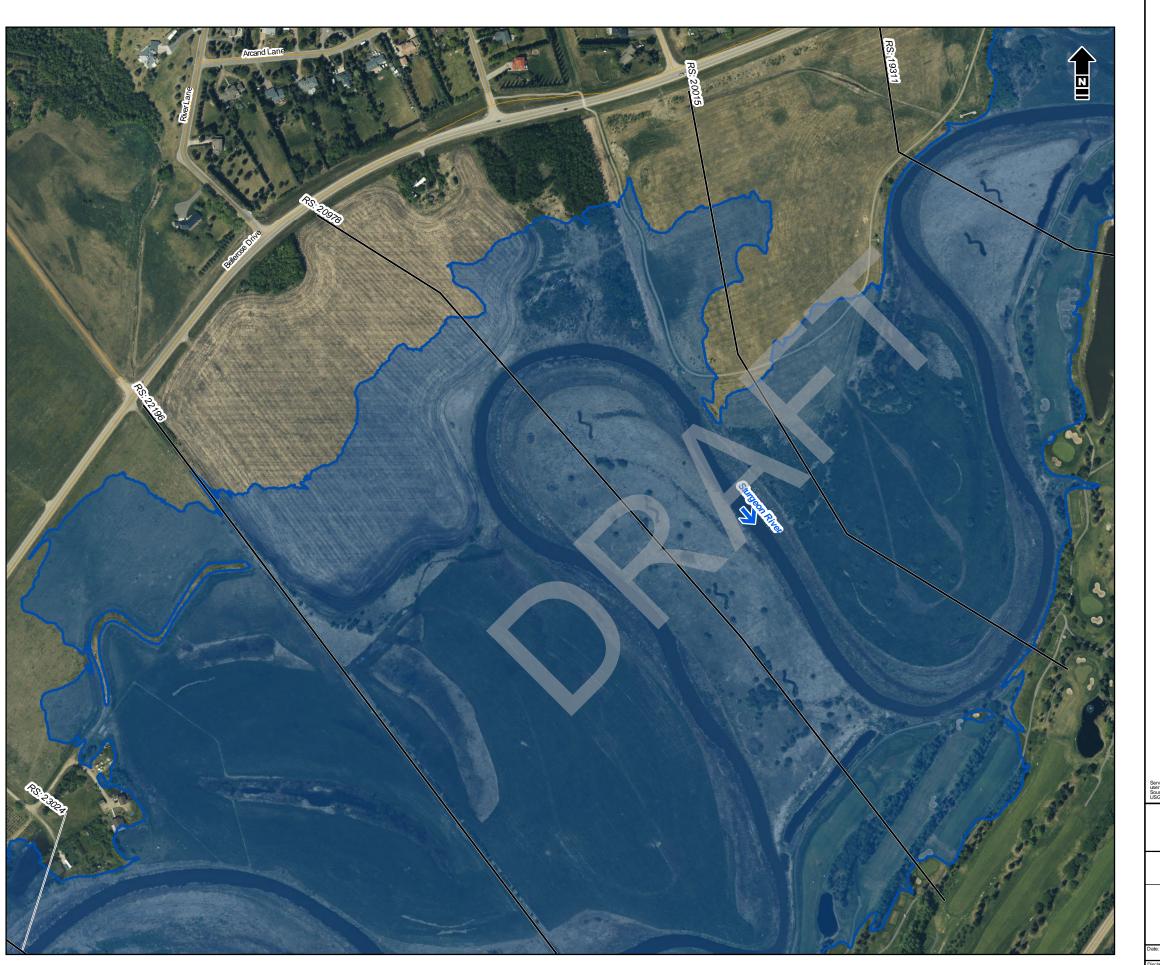
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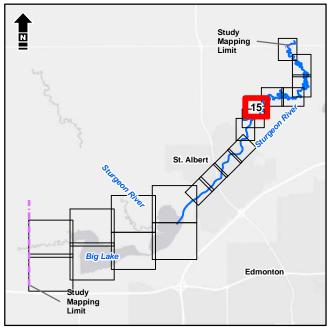
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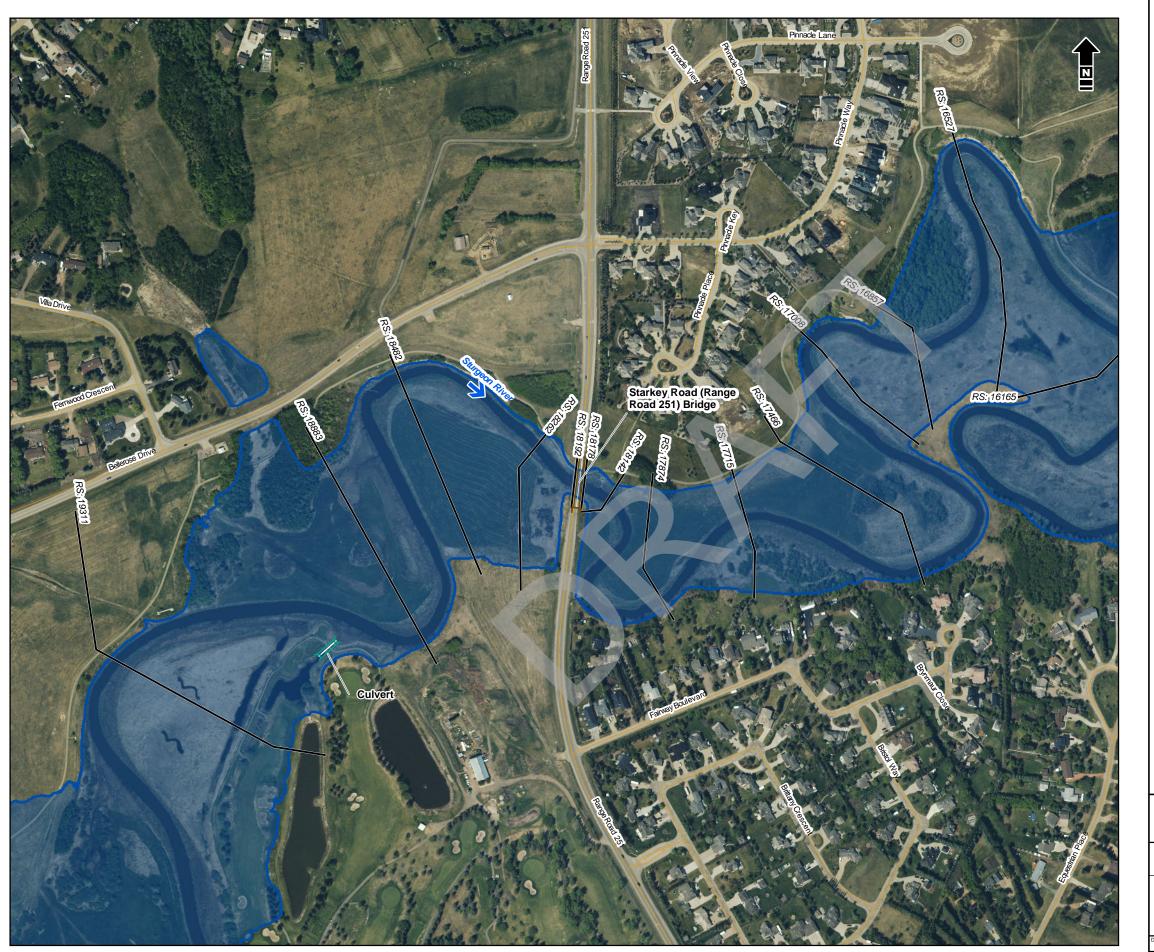




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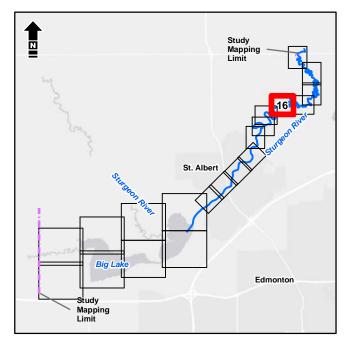
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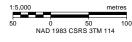


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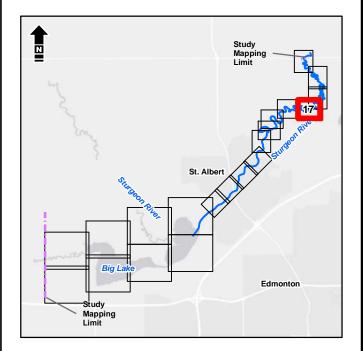
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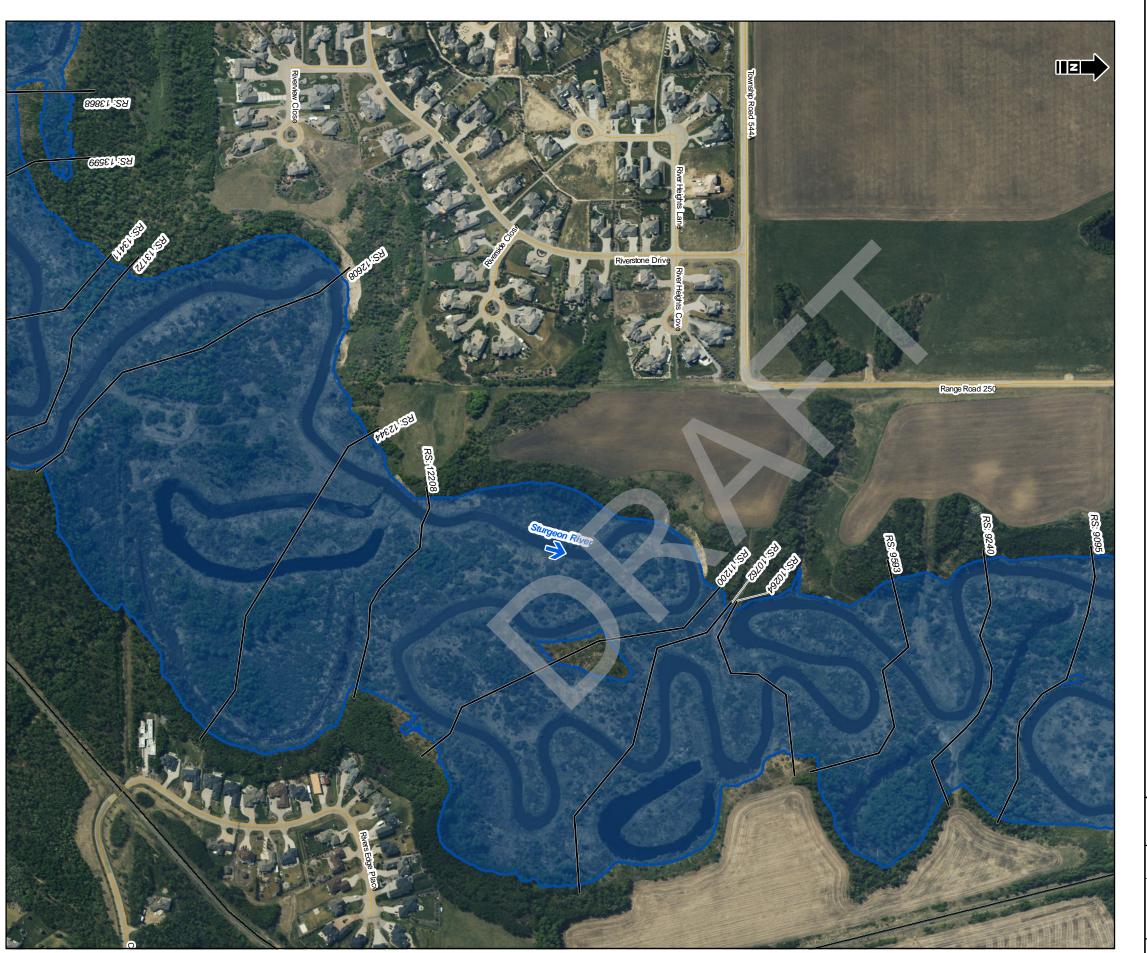


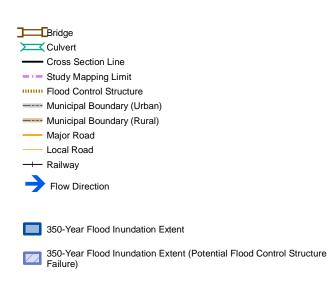


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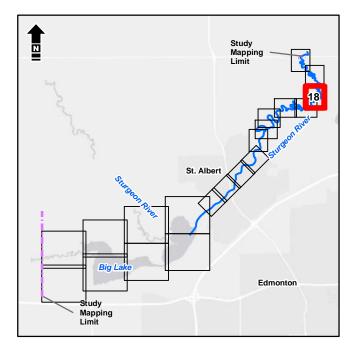
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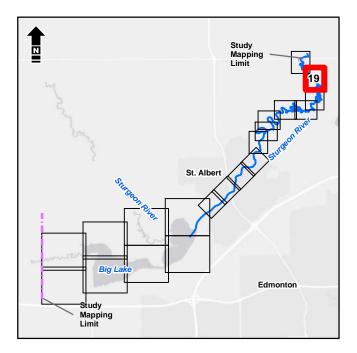
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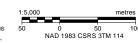


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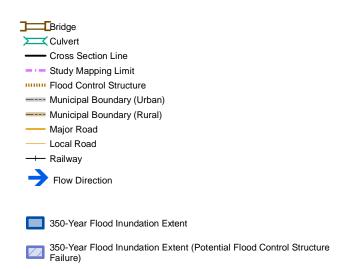


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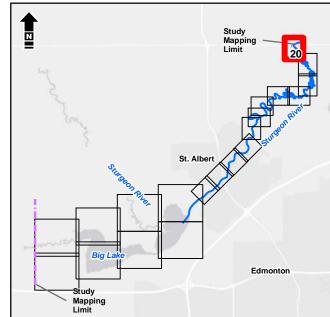
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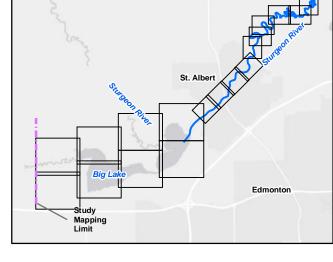
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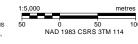


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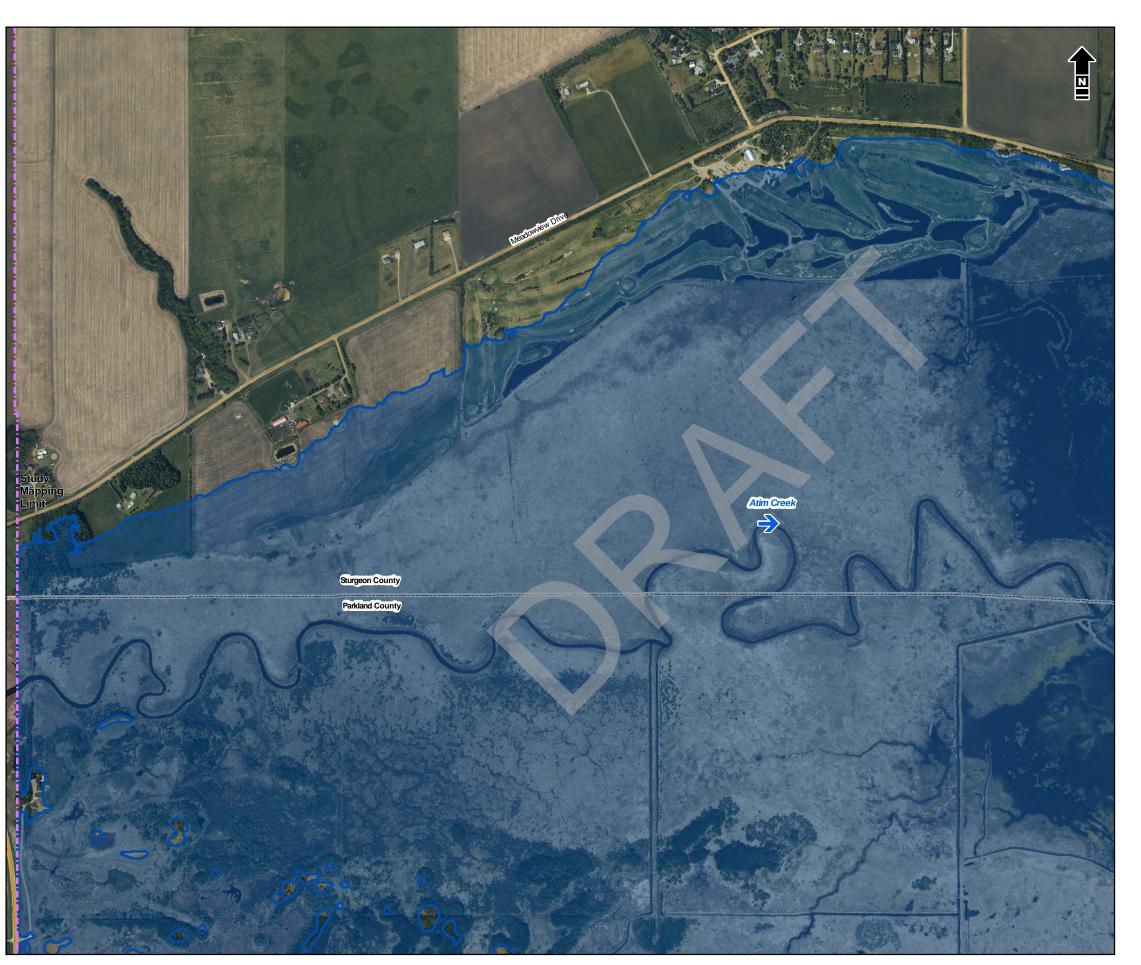


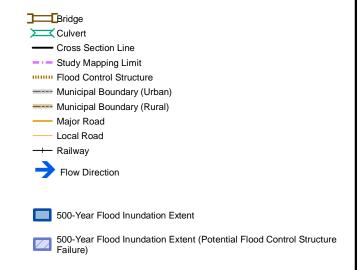


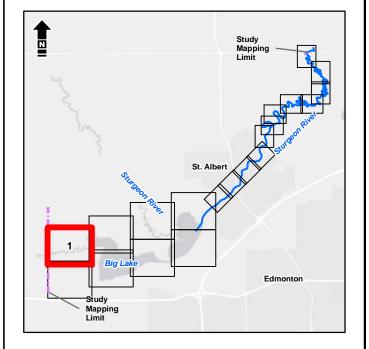
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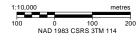
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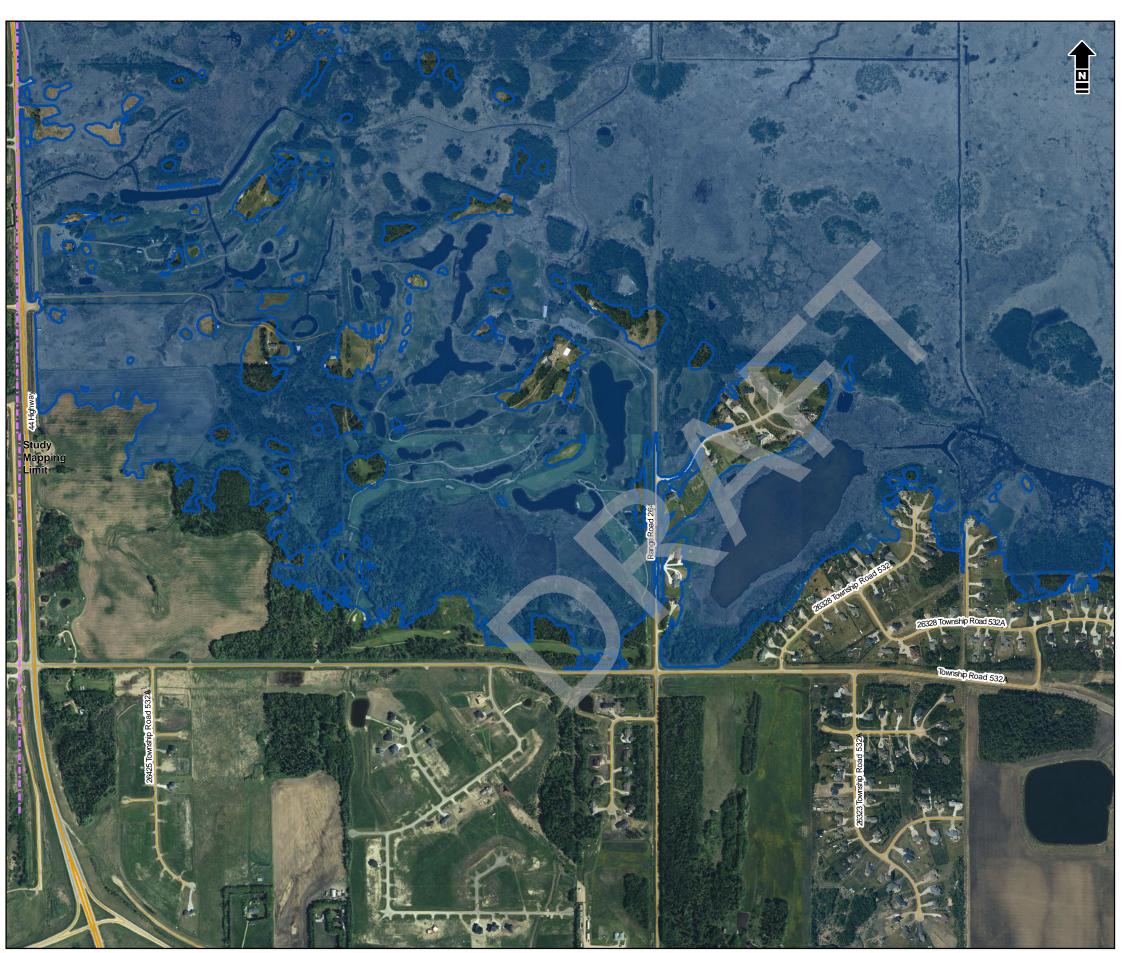
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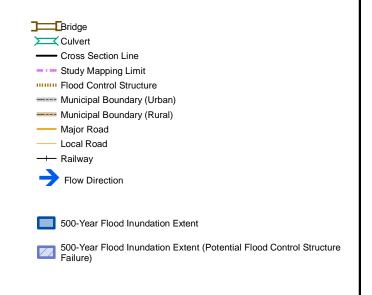
## Open Water Flood Inundation Mapbook | 500-Year

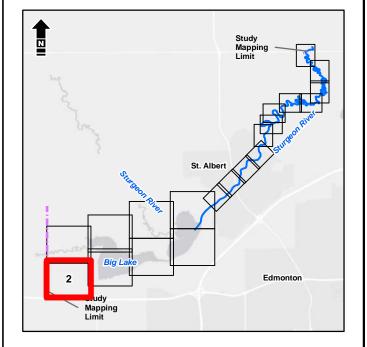
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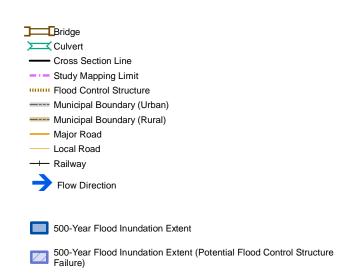
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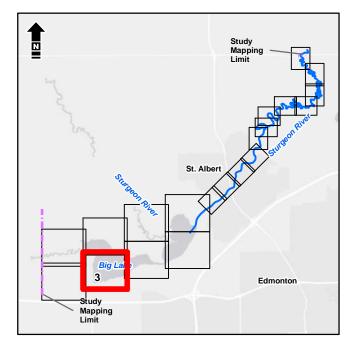
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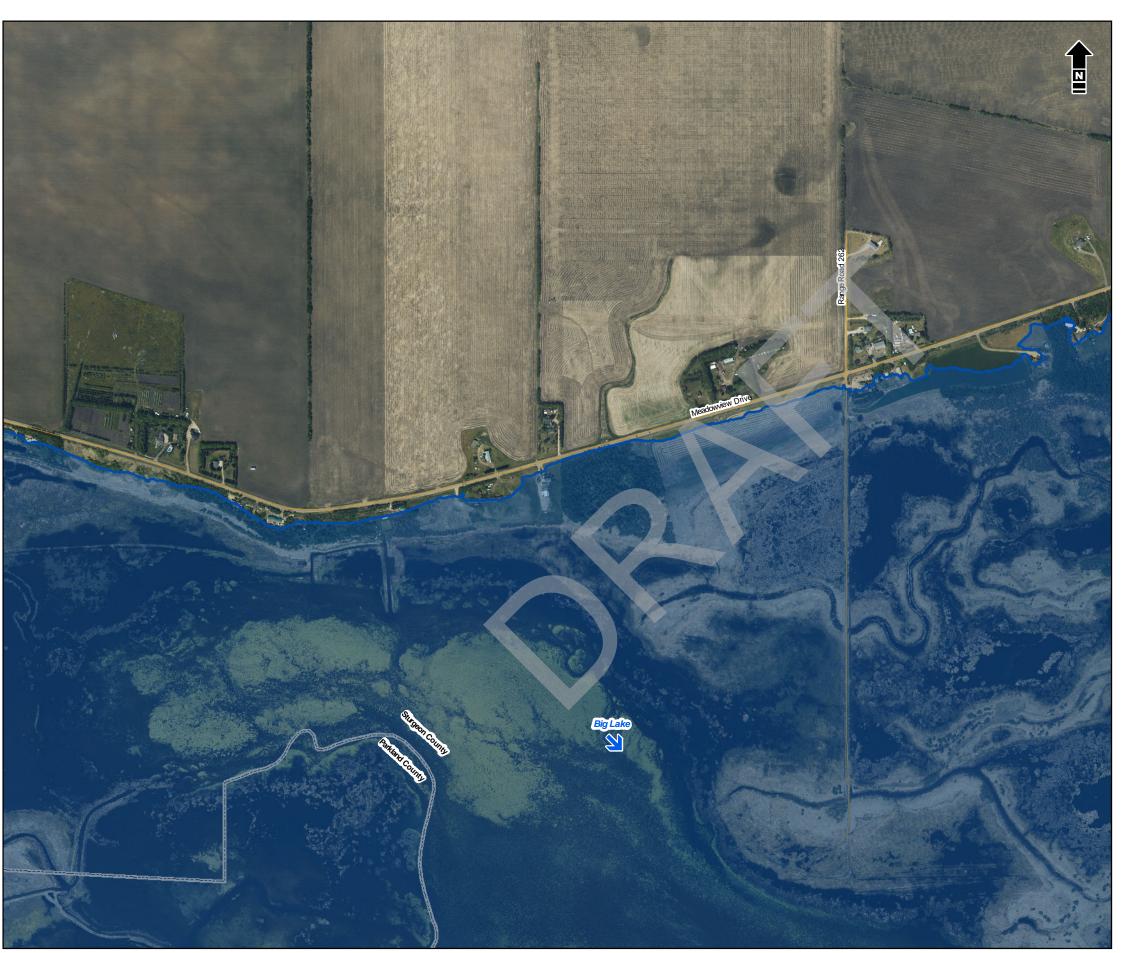
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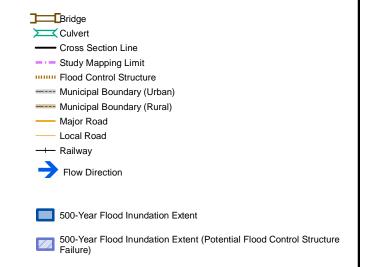
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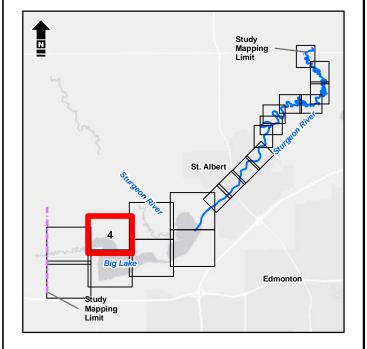
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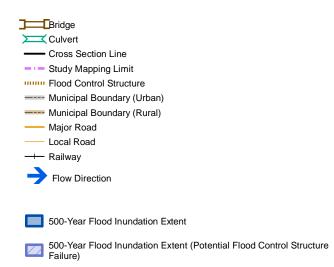
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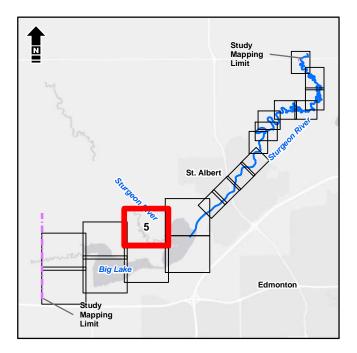
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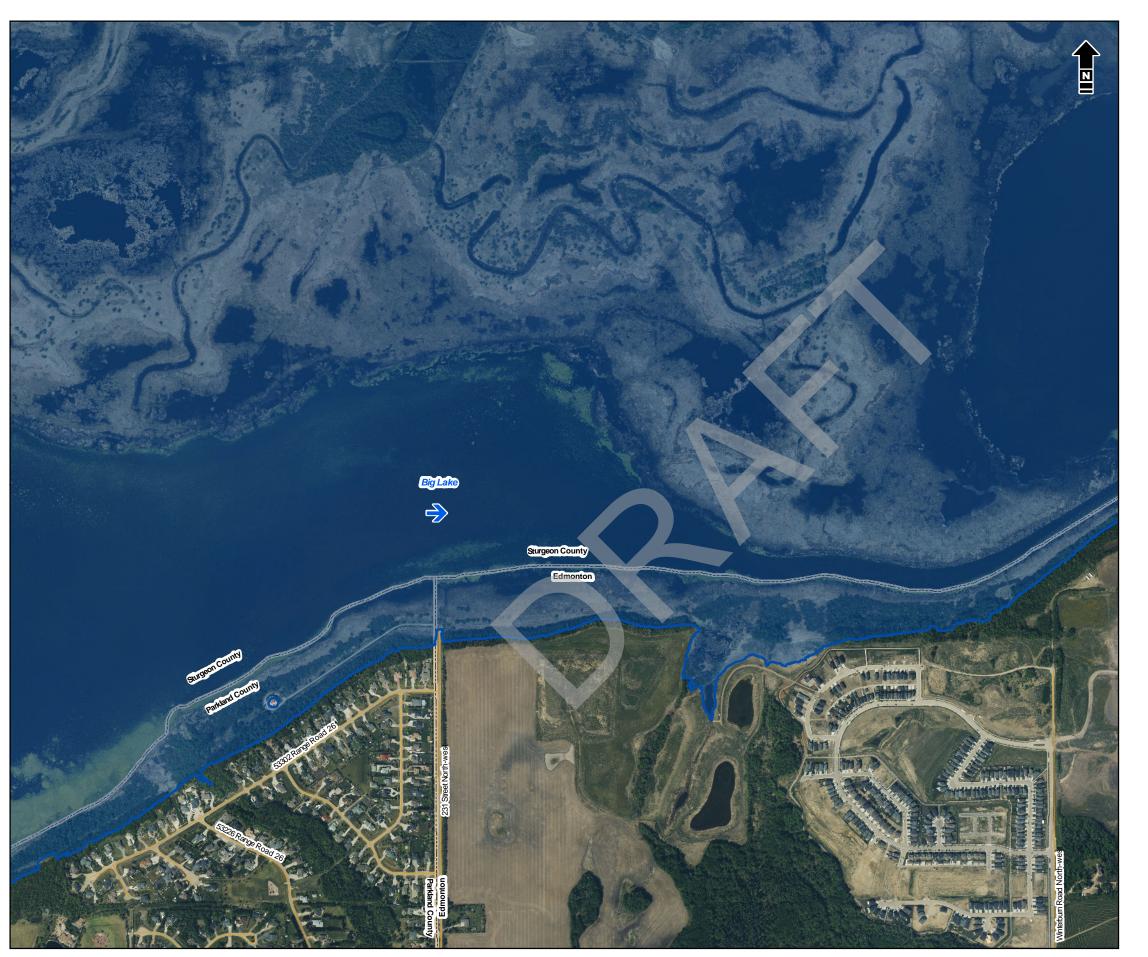
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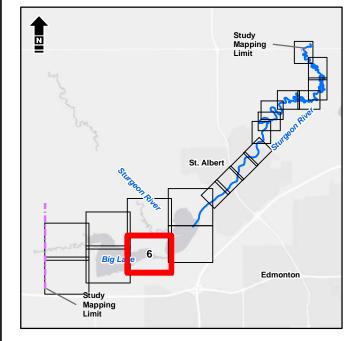
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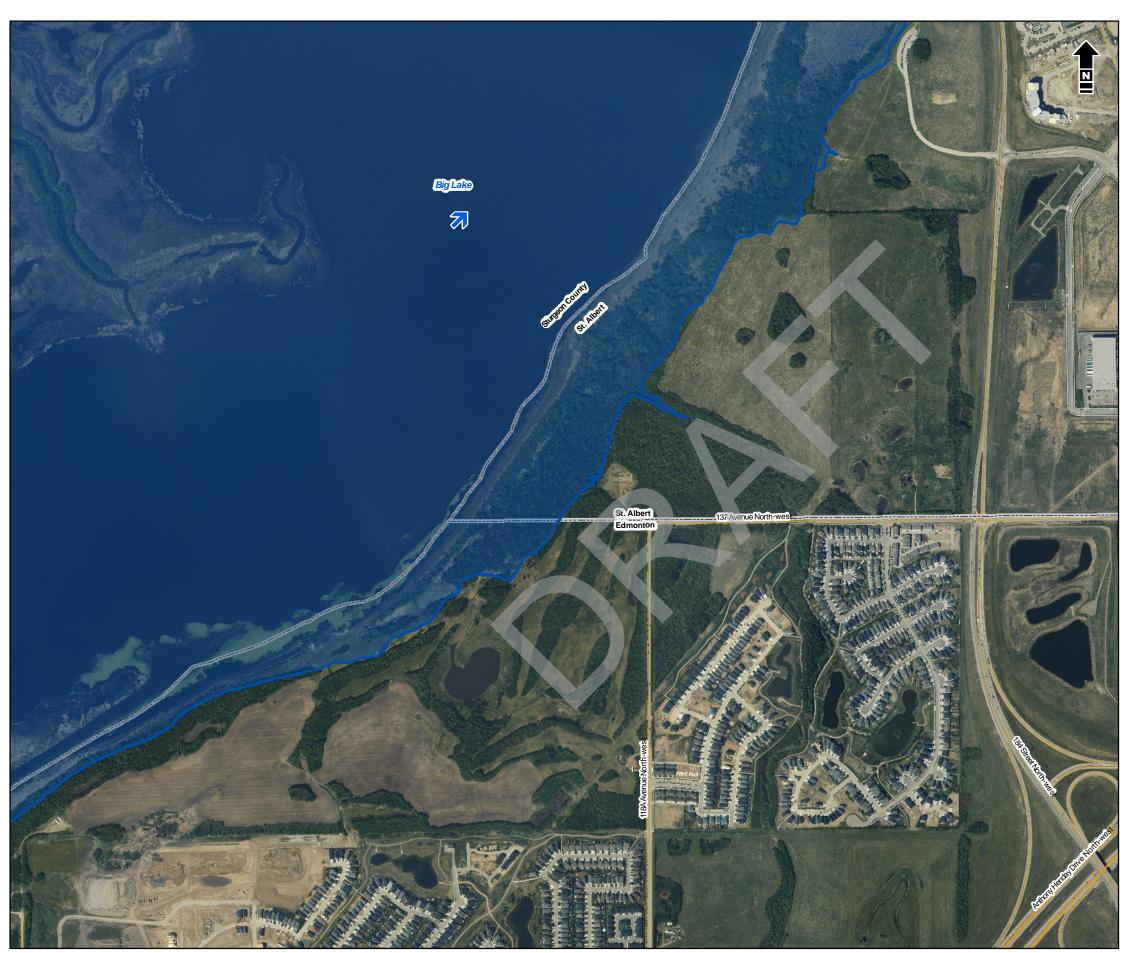
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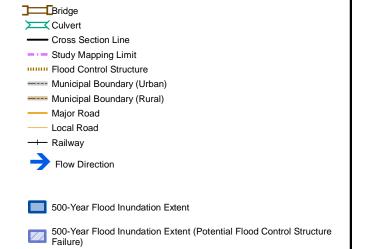
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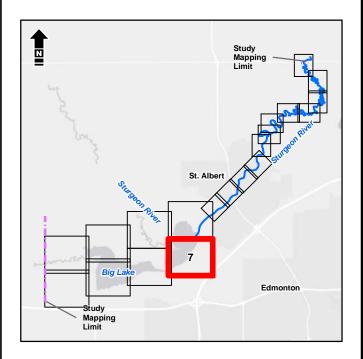
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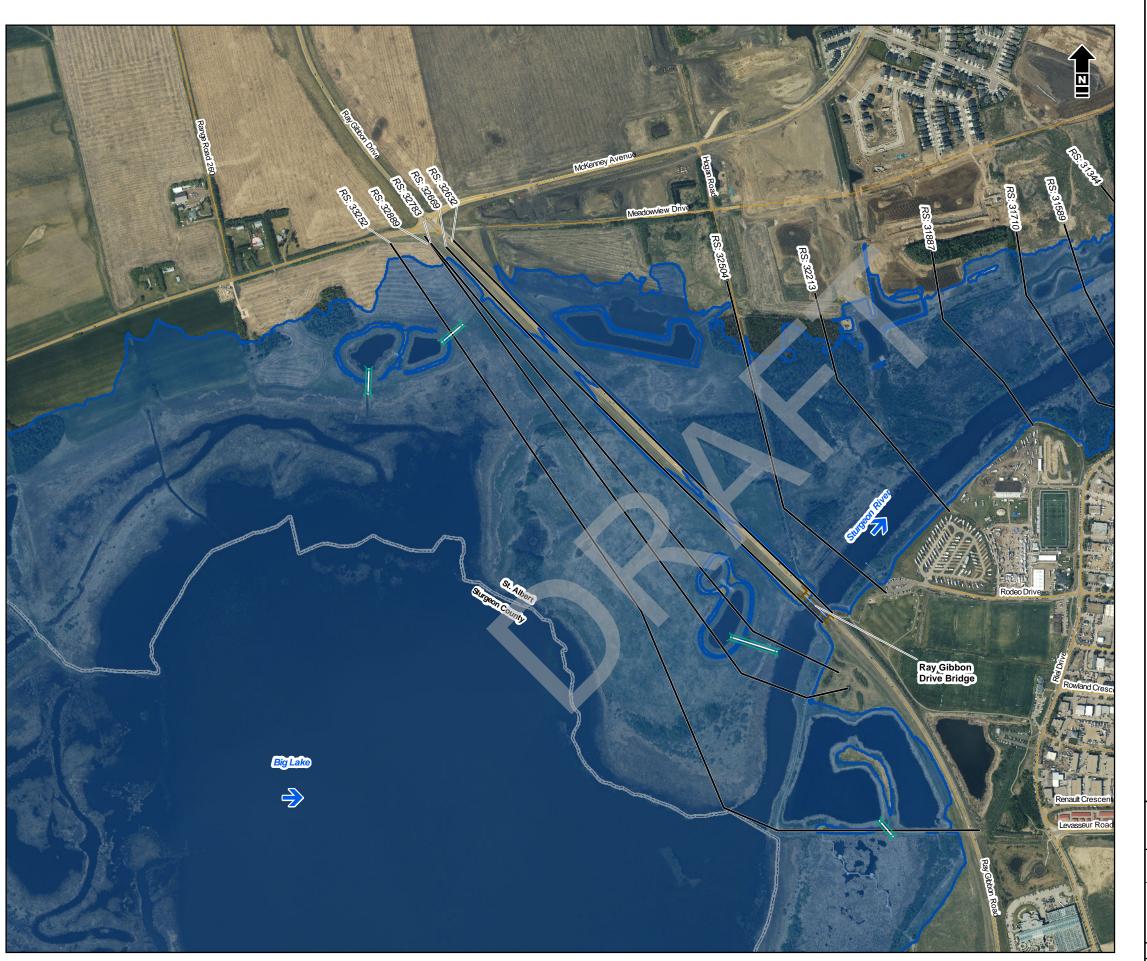
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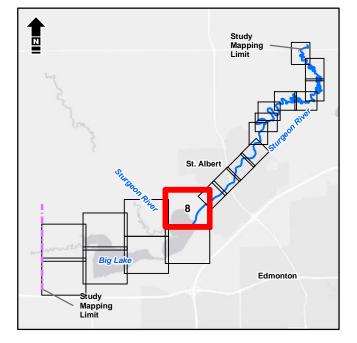
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Bridge
Culvert
Cross Section Line
Study Mapping Limit
Flood Control Structure
Municipal Boundary (Urban)
Major Road
Local Road
Railway
Flow Direction

500-Year Flood Inundation Extent
(Potential Flood Control Structure Failure)



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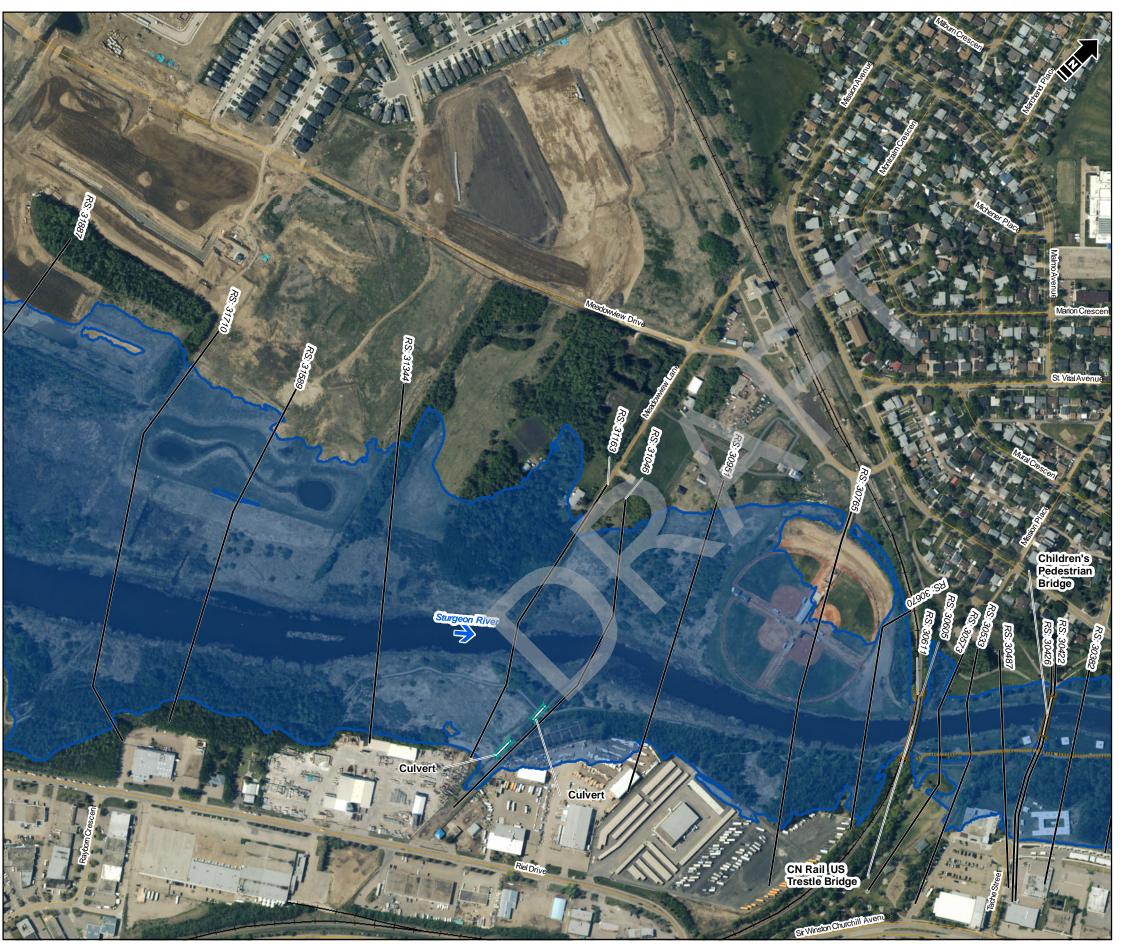
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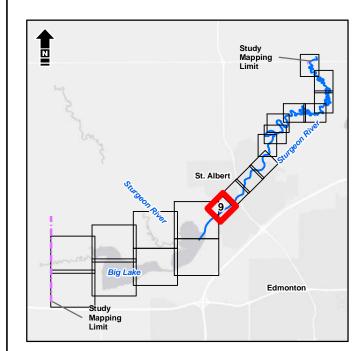
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500-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

### <u>DISCHARGE</u> Sturgeon River = 140 m<sup>3</sup>/s



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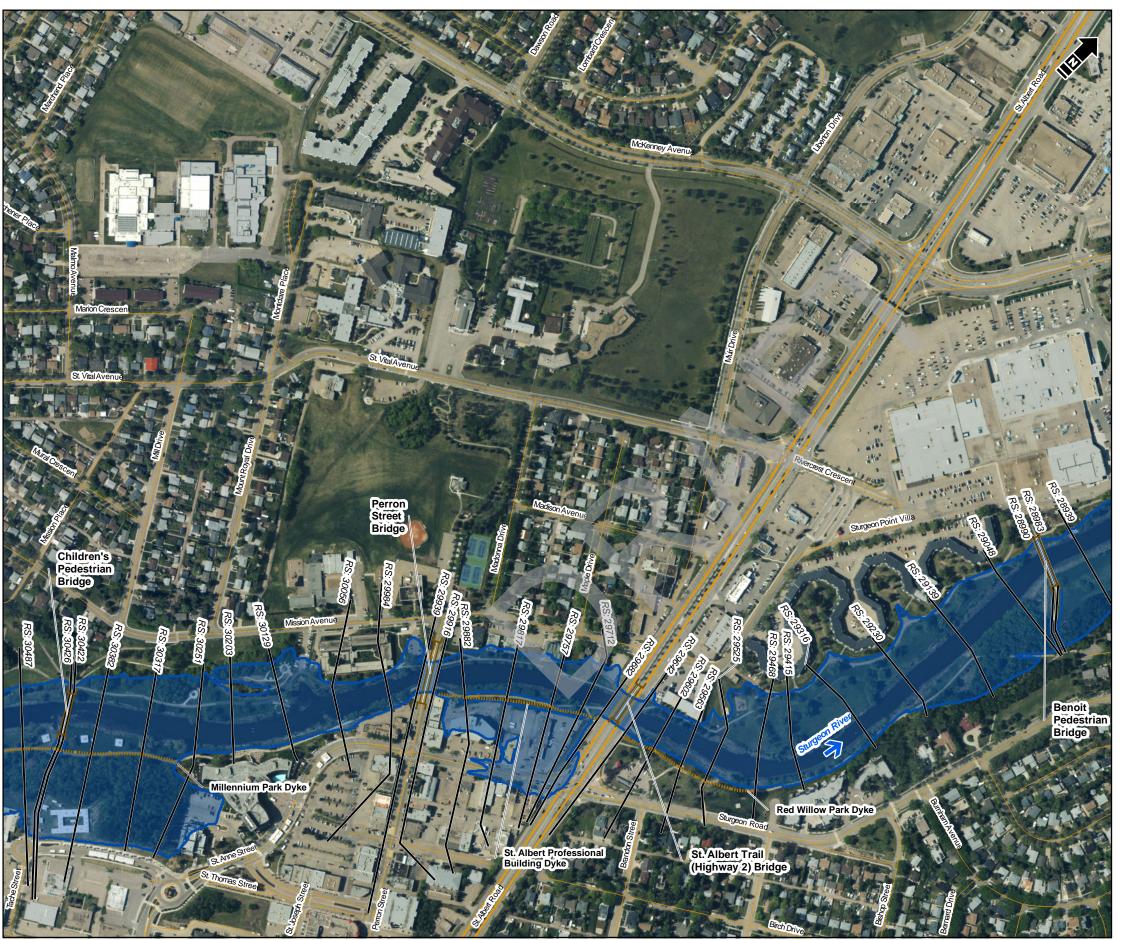
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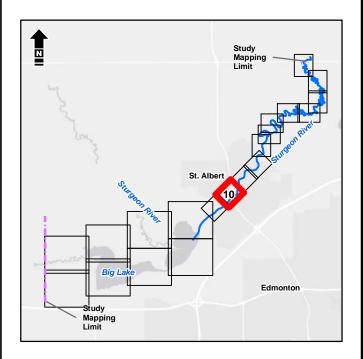


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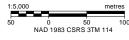
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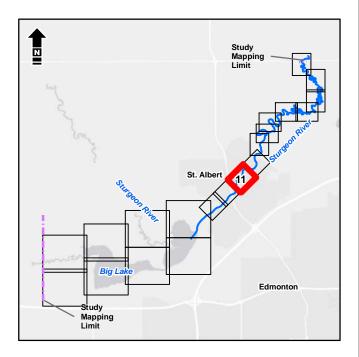
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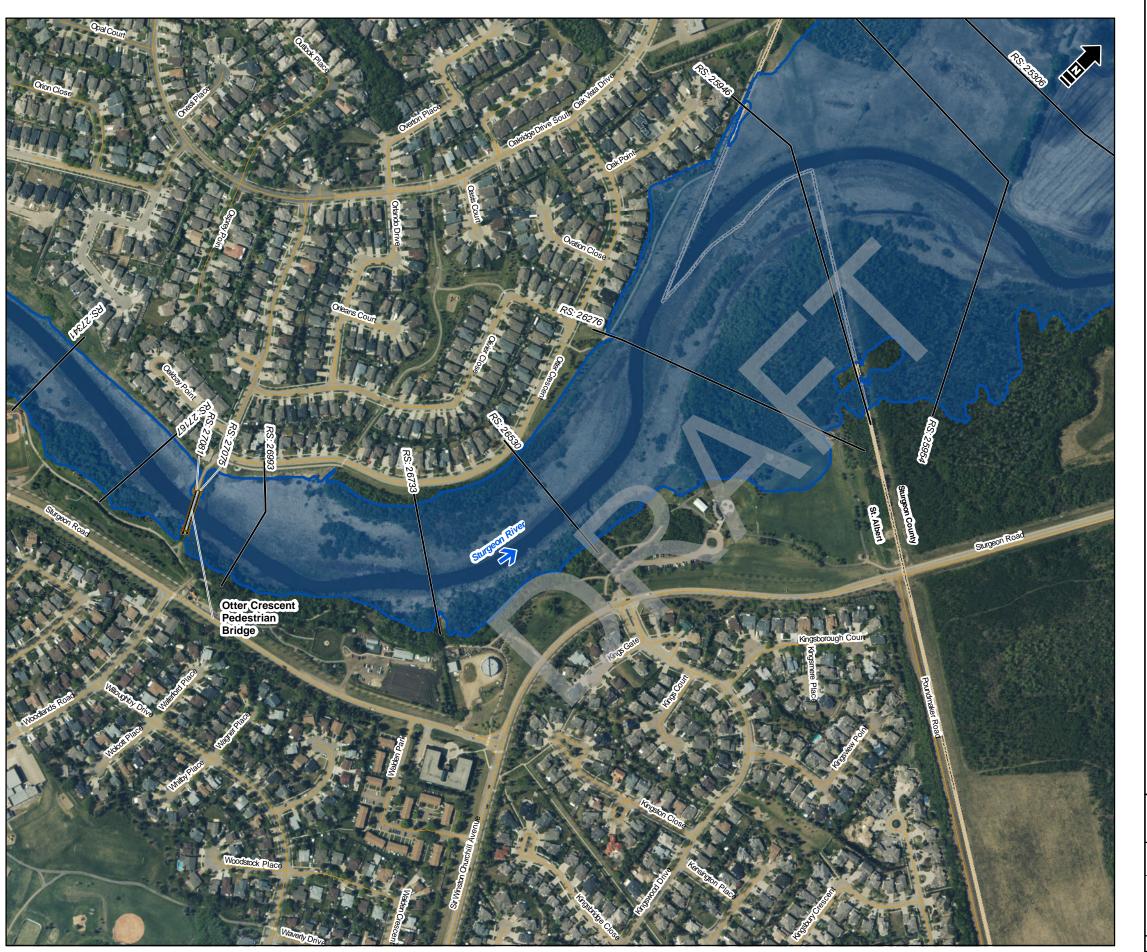




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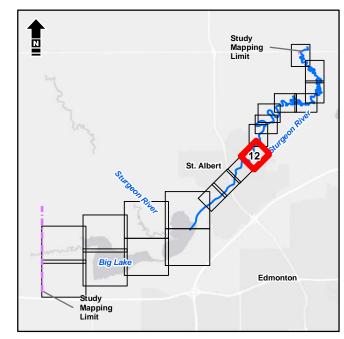
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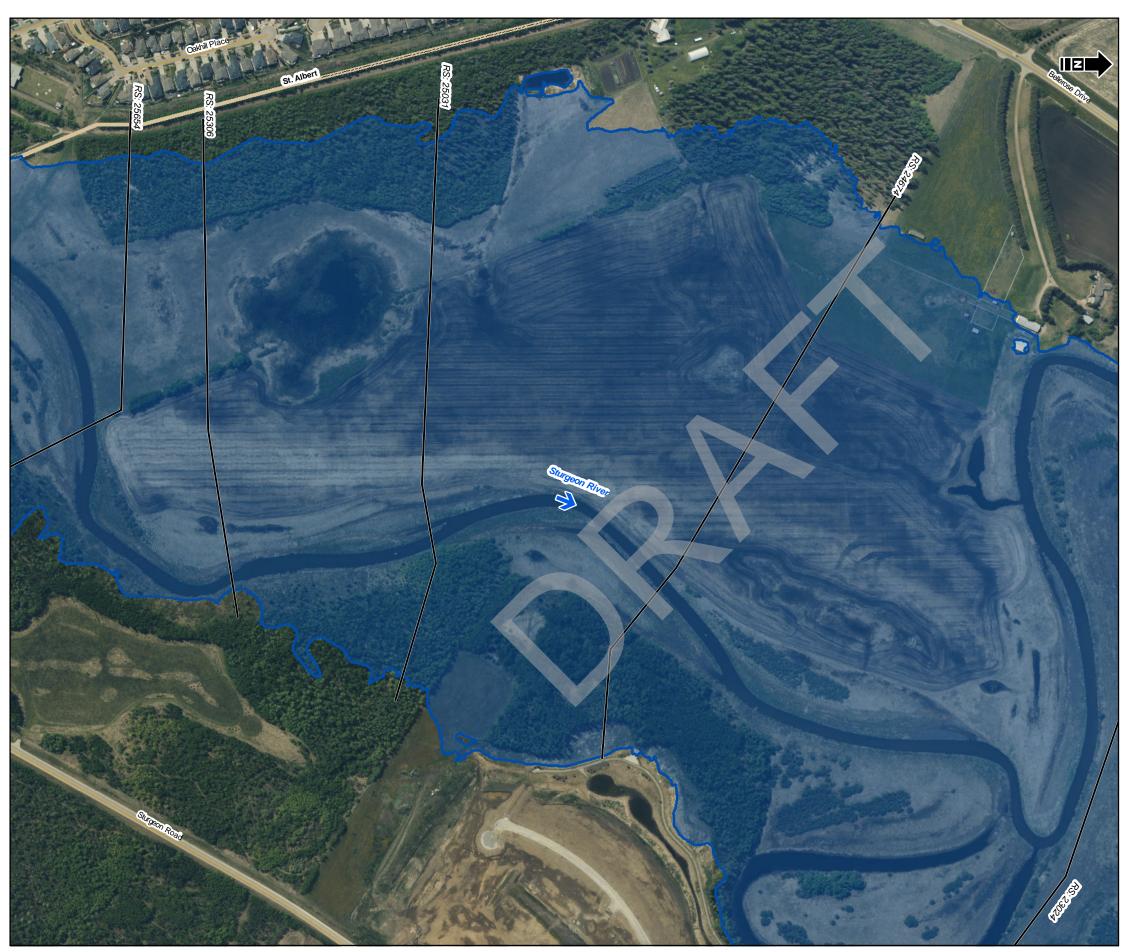




Alberta Government St. Albert Flood Hazard Study

## Open Water Flood Inundation Mapbook | 500-Year

March 2020



Bridge

Culvert

---- Cross Section Line

-- Study Mapping Limit

Flood Control Structure

---- Municipal Boundary (Urban) ---- Municipal Boundary (Rural)

--- Major Road

— Local Road

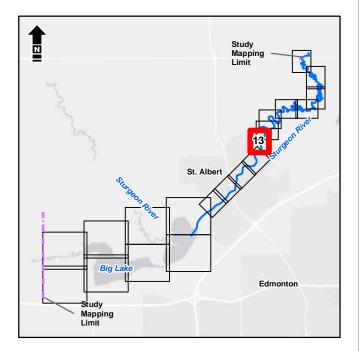
— Railway

Flow Direction

500-Year Flood Inundation Extent

500-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

<u>DISCHARGE</u> Sturgeon River = 140 m<sup>3</sup>/s



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Alberta Government St. Albert Flood Hazard Study

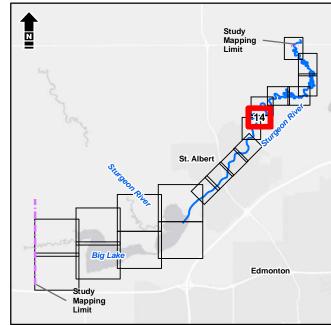
# Open Water Flood Inundation Mapbook | 500-Year

March 2020



Bridge Culvert Culvert --- Cross Section Line -- Study Mapping Limit Flood Control Structure ---- Municipal Boundary (Urban) ---- Municipal Boundary (Rural) --- Major Road — Local Road — Railway Flow Direction 500-Year Flood Inundation Extent 500-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

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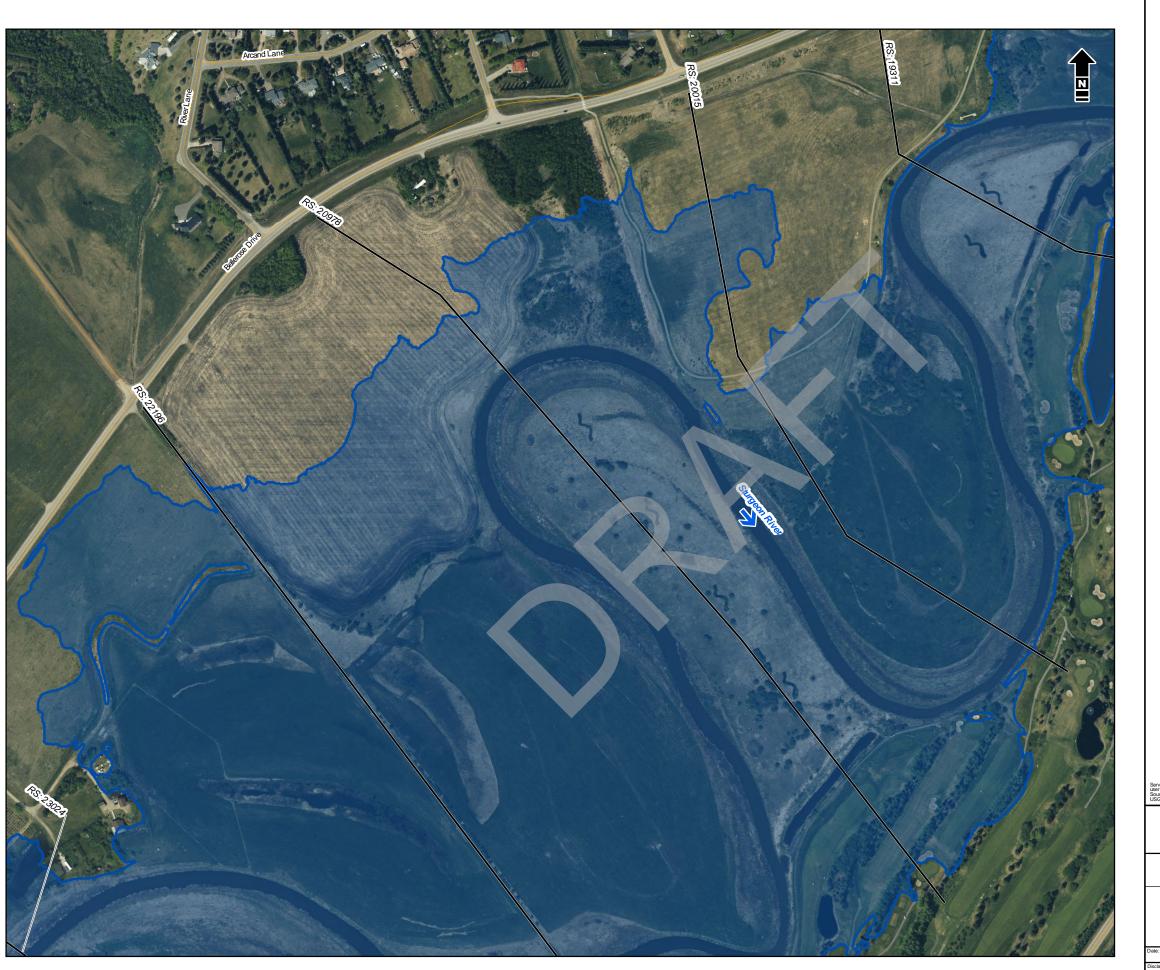




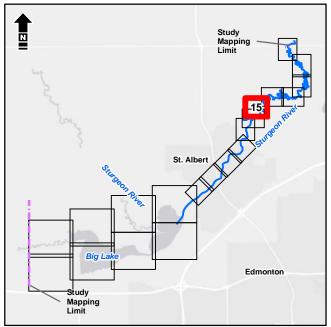
Alberta Government St. Albert Flood Hazard Study

# Open Water Flood Inundation Mapbook | 500-Year

March 2020

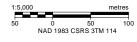


<u>DISCHARGE</u> Sturgeon River = 140 m<sup>3</sup>/s



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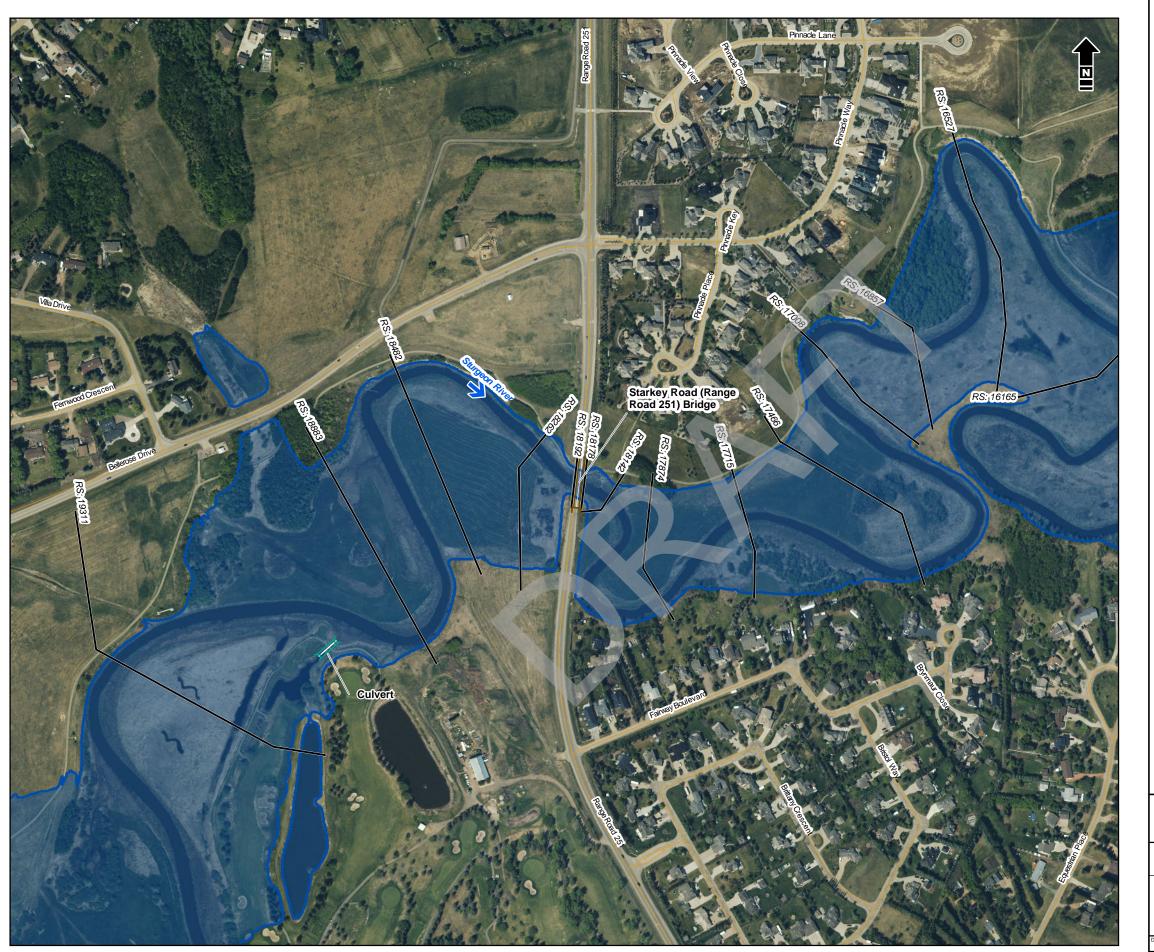




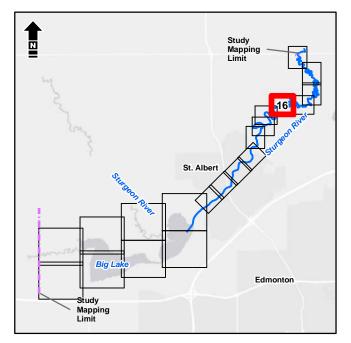
Alberta Government St. Albert Flood Hazard Study

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March 2020



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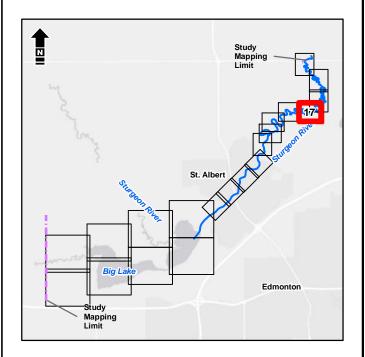
Alberta Government St. Albert Flood Hazard Study

### Open Water Flood Inundation Mapbook | 500-Year

March 2020



<u>DISCHARGE</u> Sturgeon River = 140 m<sup>3</sup>/s



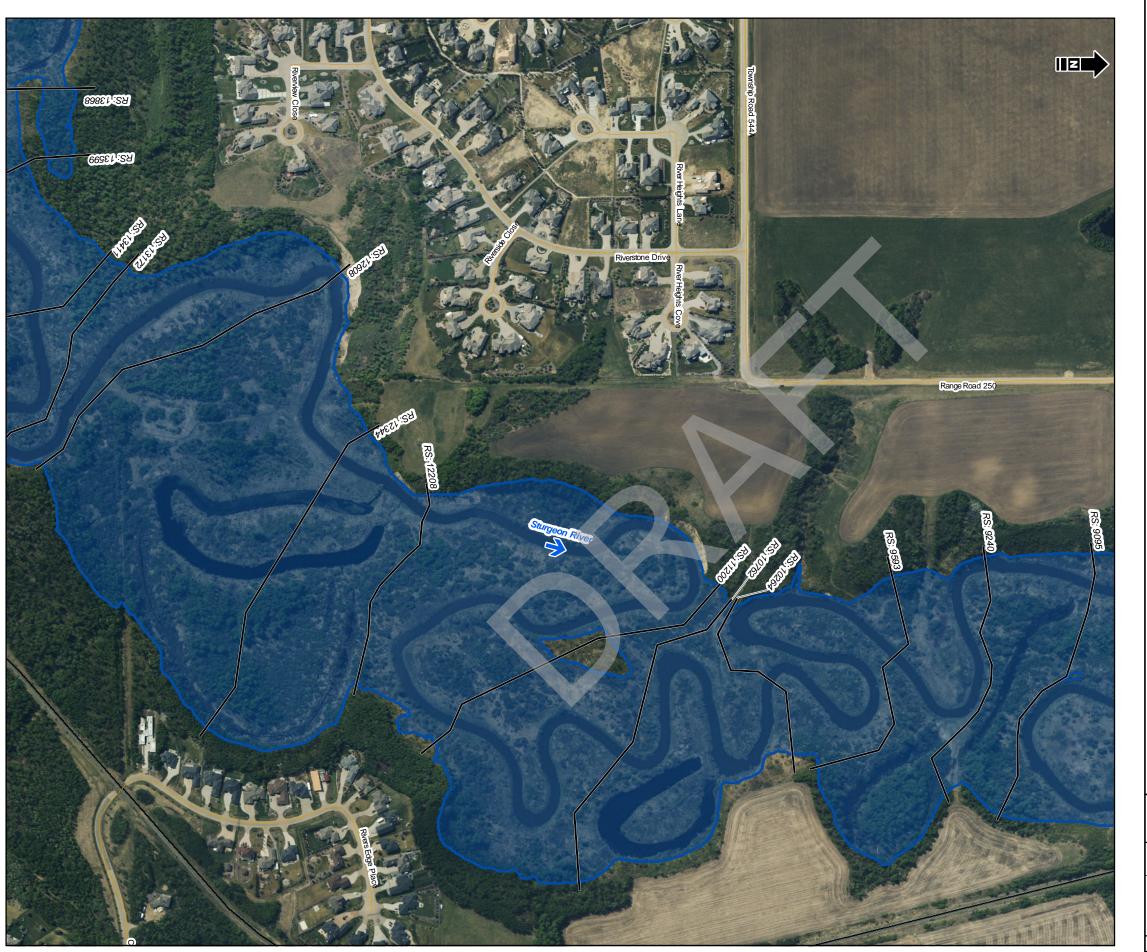
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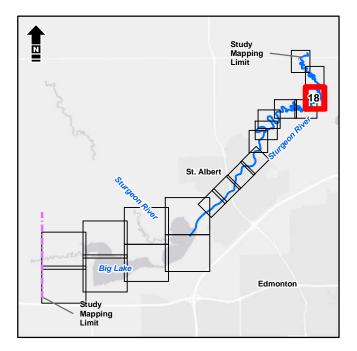


Alberta Government St. Albert Flood Hazard Study

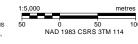
# Open Water Flood Inundation Mapbook | 500-Year



<u>DISCHARGE</u> Sturgeon River = 140 m<sup>3</sup>/s



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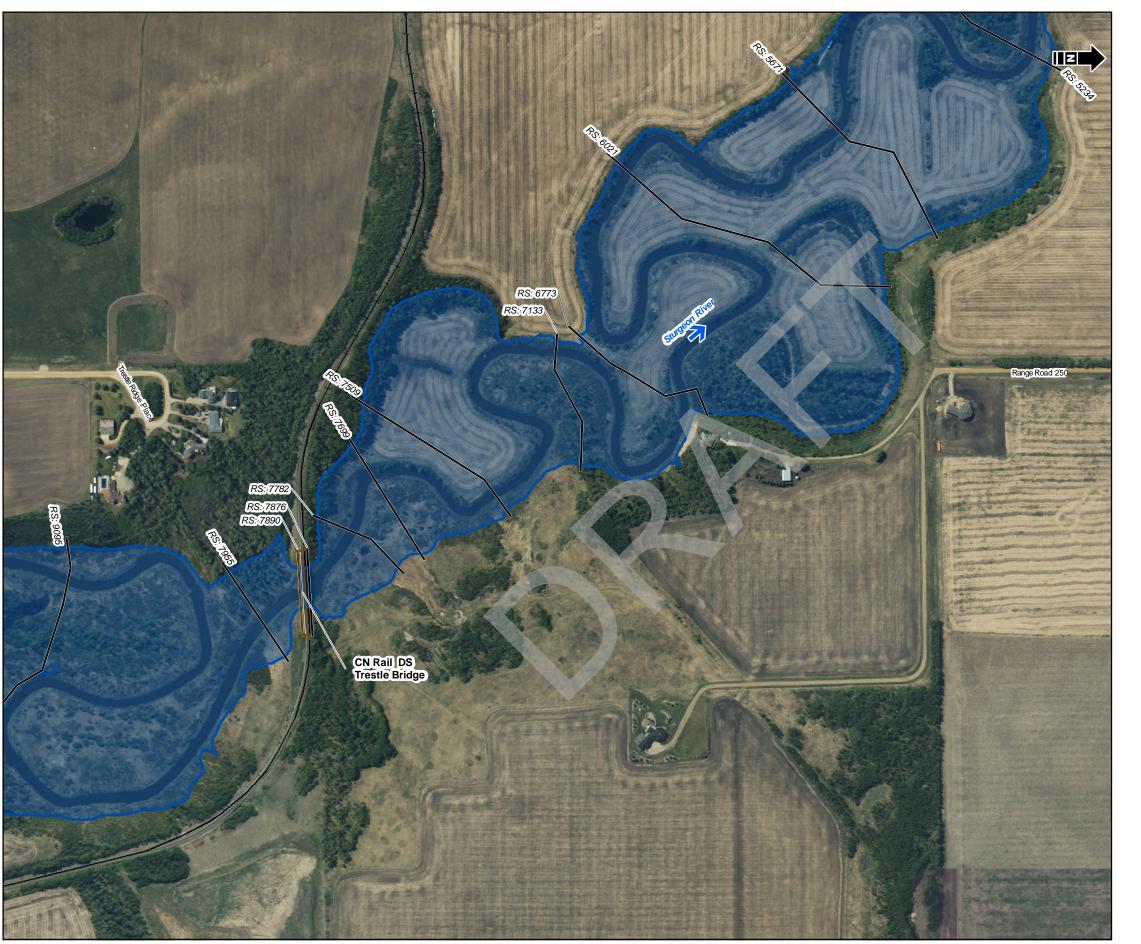




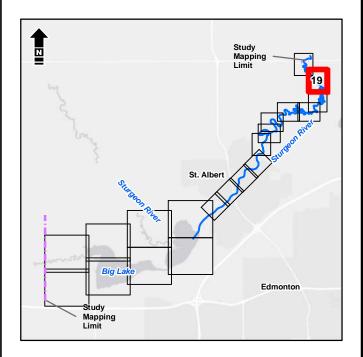
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### Open Water Flood Inundation Mapbook | 500-Year

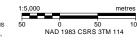
March 2020



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Alberta Government St. Albert Flood Hazard Study

# Open Water Flood Inundation Mapbook | 500-Year

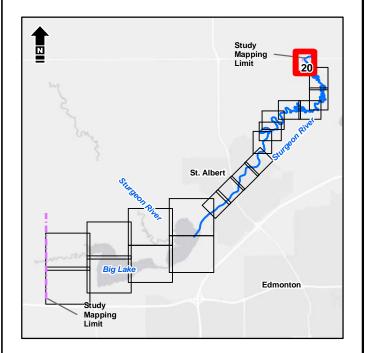
March 2020



Bridge
Culvert
Cross Section Line
Study Mapping Limit
Municipal Boundary (Urban)
Major Road
Local Road
Railway
Flow Direction

500-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

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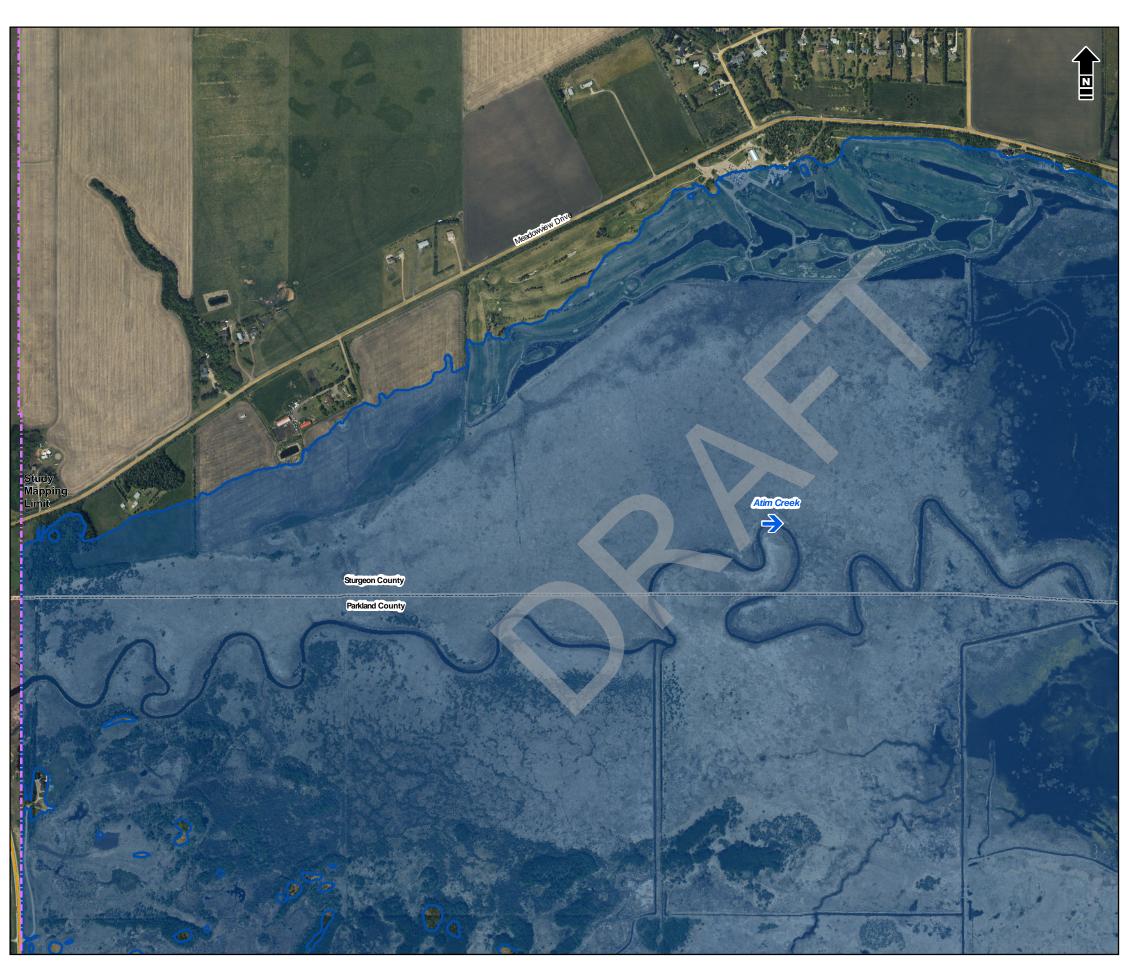
Alberta Government St. Albert Flood Hazard Study

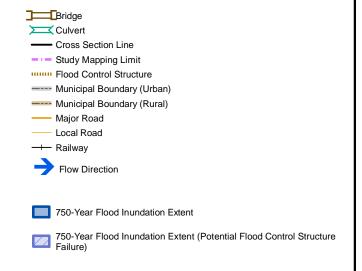
### Open Water Flood Inundation Mapbook | 500-Year

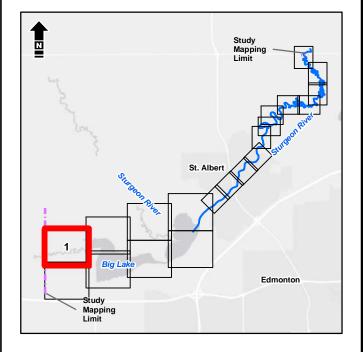
Date: March 2020 Project: 28312 Submitter: P. Rogers

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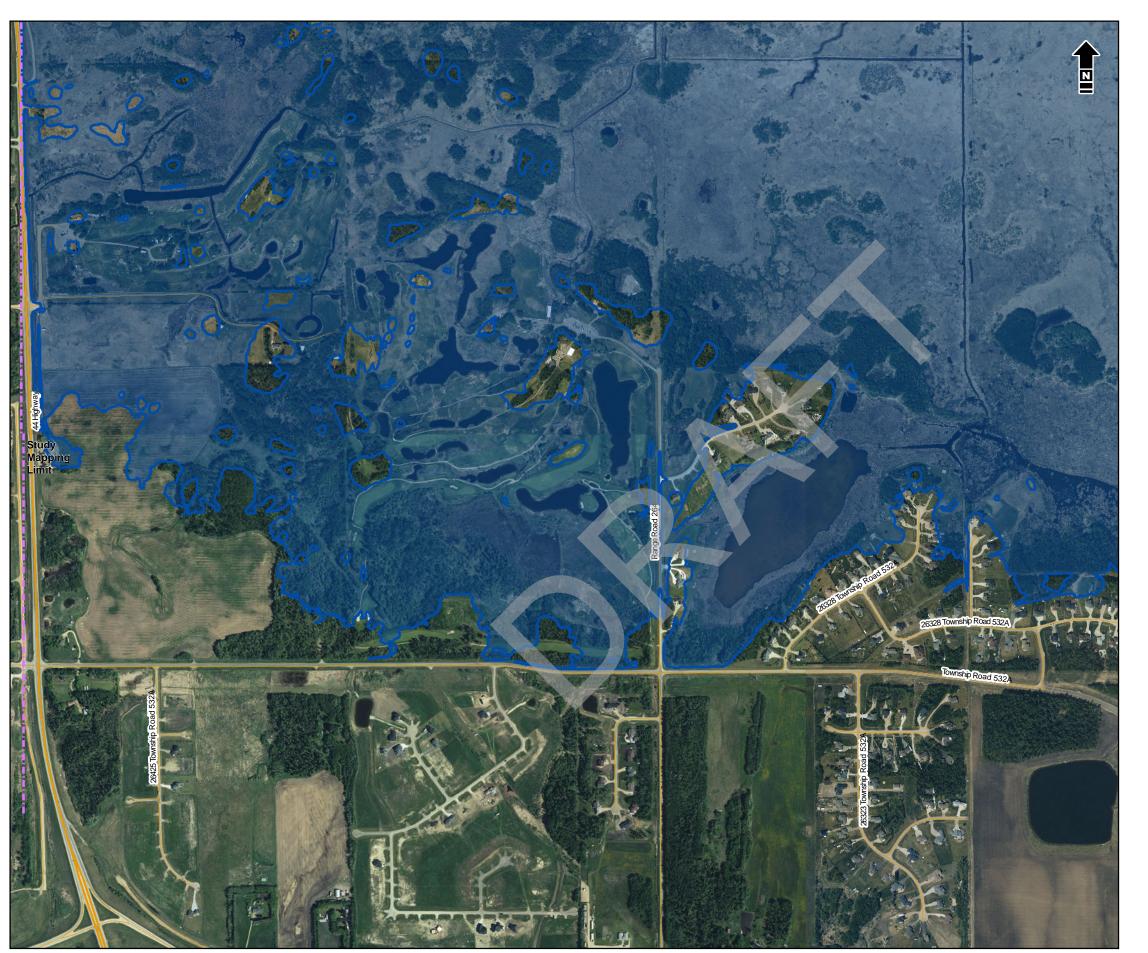
Alberta Government St. Albert Flood Hazard Study

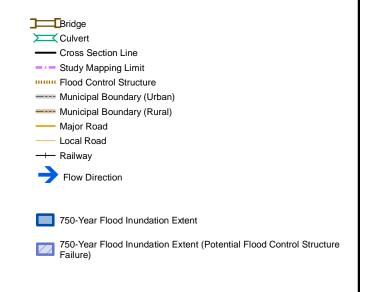
### Open Water Flood Inundation Mapbook | 750-Year

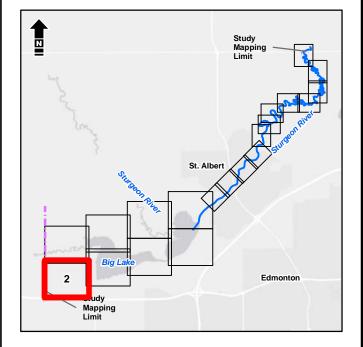
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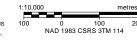
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Alberta Government St. Albert Flood Hazard Study

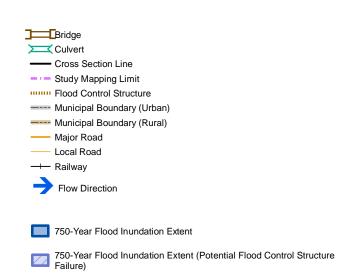
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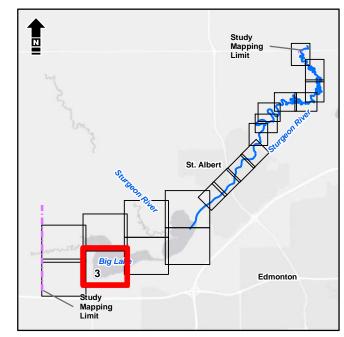
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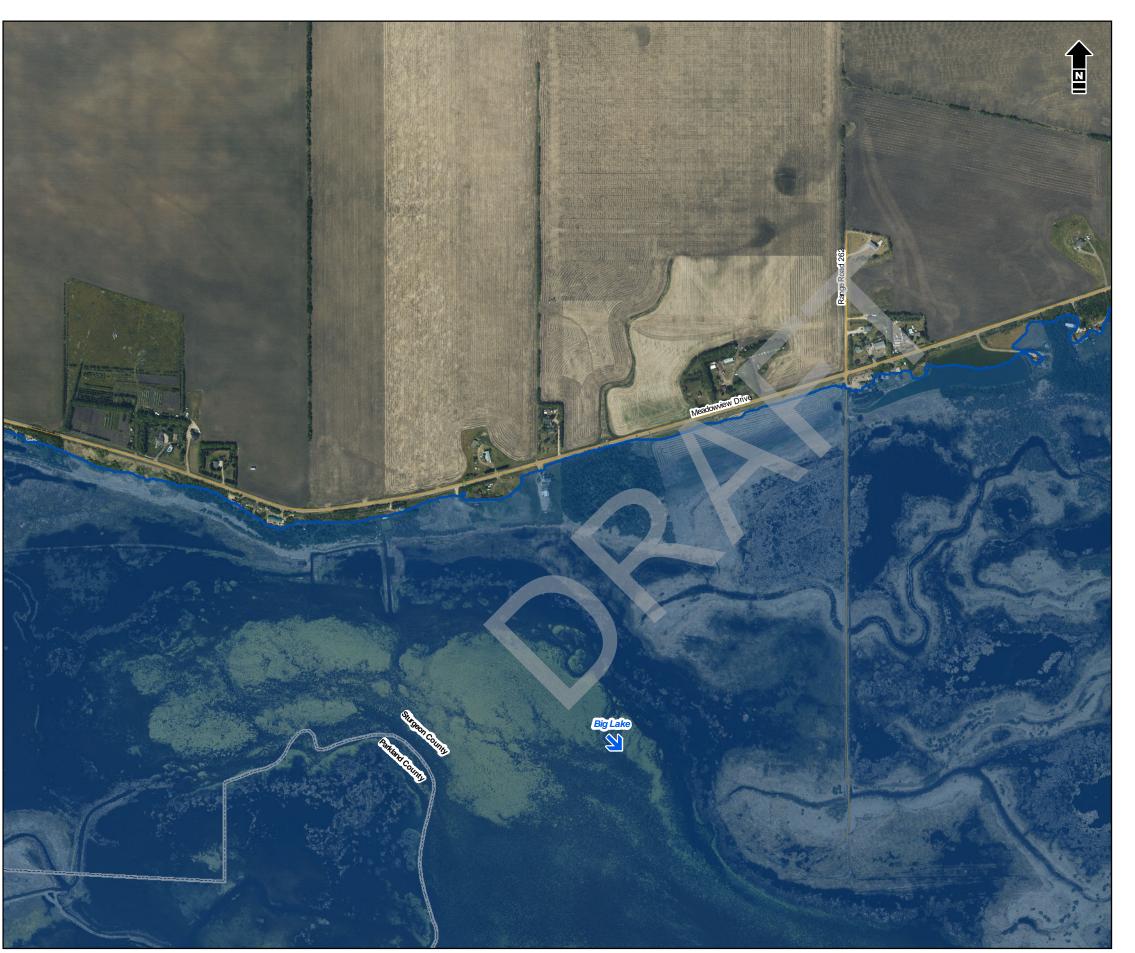
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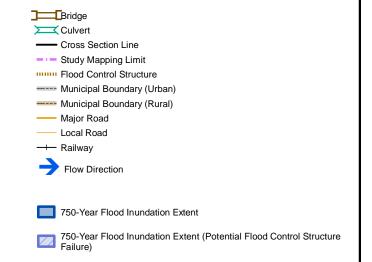
### Open Water Flood Inundation Mapbook | 750-Year

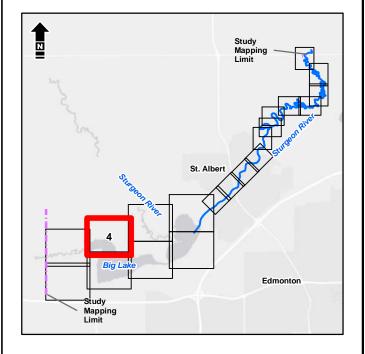
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Alberta Government St. Albert Flood Hazard Study

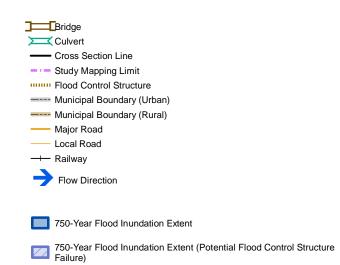
### Open Water Flood Inundation Mapbook | 750-Year

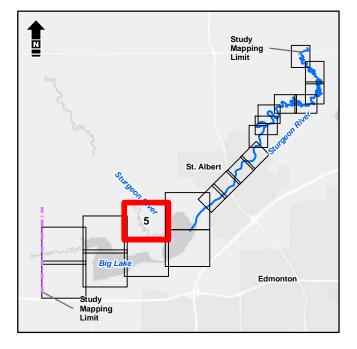
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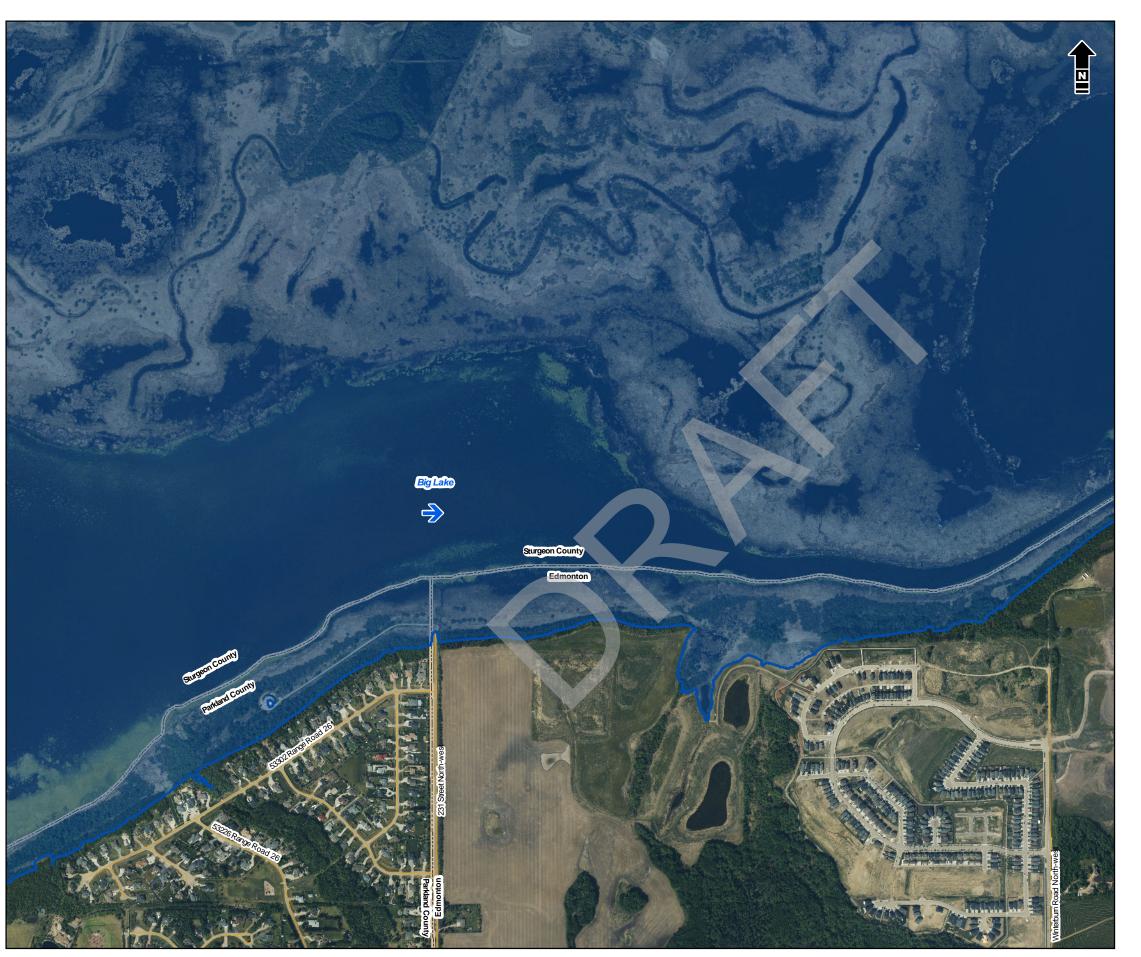
Alberta Government St. Albert Flood Hazard Study

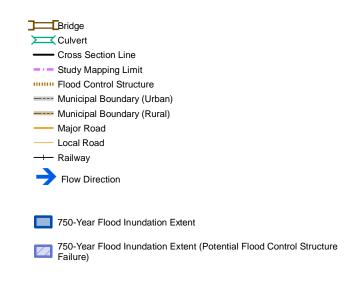
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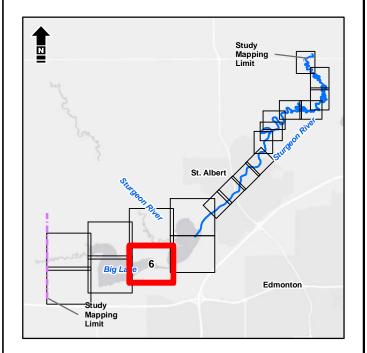
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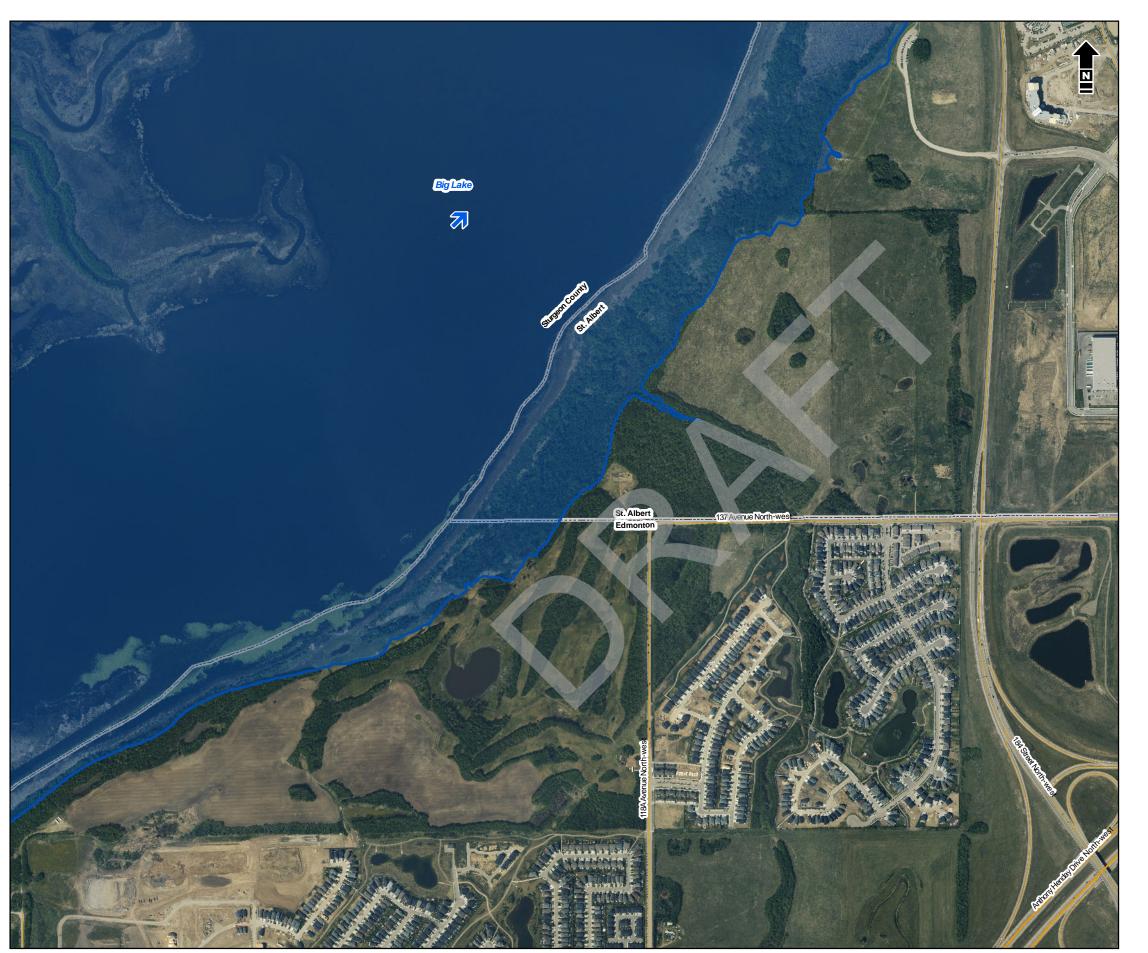
Alberta Government St. Albert Flood Hazard Study

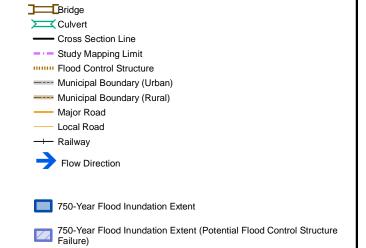
### Open Water Flood Inundation Mapbook | 750-Year

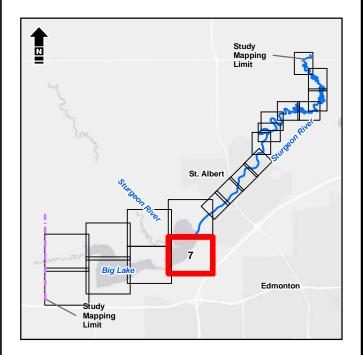
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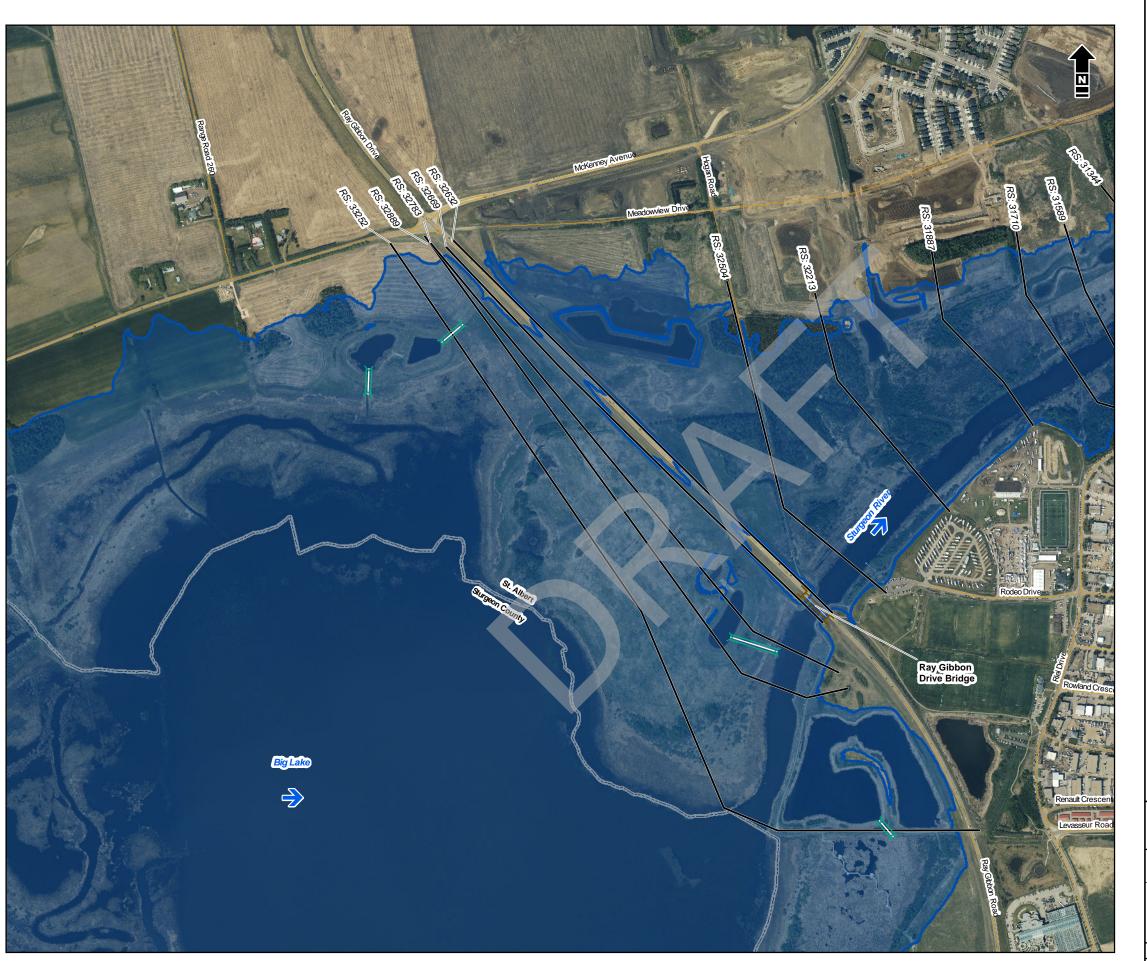
Alberta Government St. Albert Flood Hazard Study

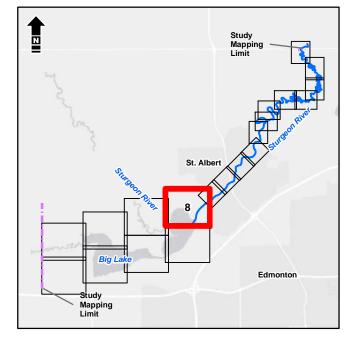
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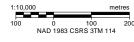
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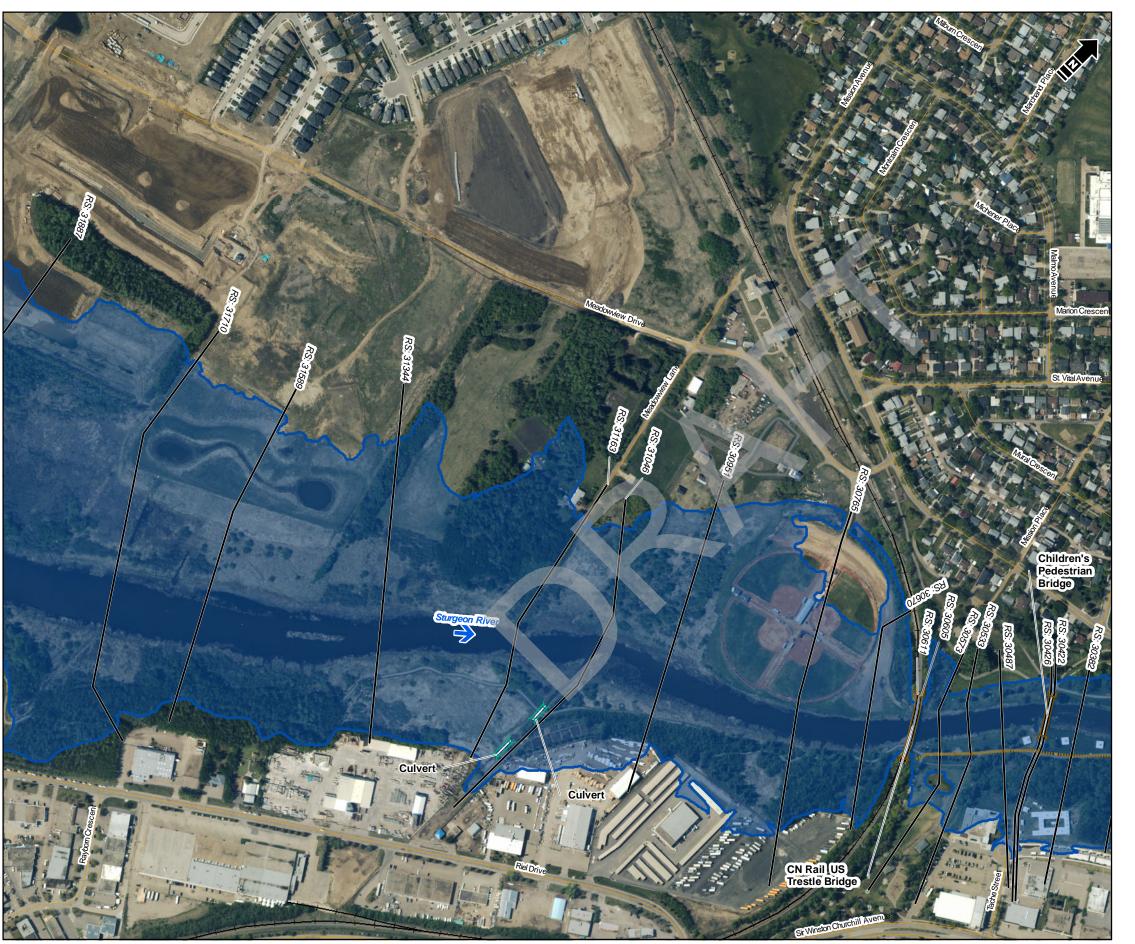




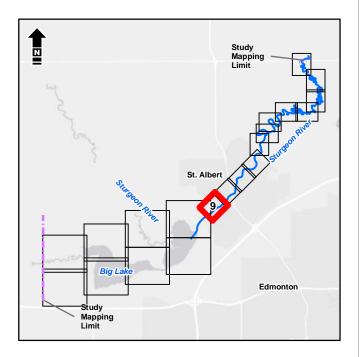
Alberta Government St. Albert Flood Hazard Study

# Open Water Flood Inundation Mapbook | 750-Year

March 2020 M. Shome



### <u>DISCHARGE</u> Sturgeon River = 155 m<sup>3</sup>/s



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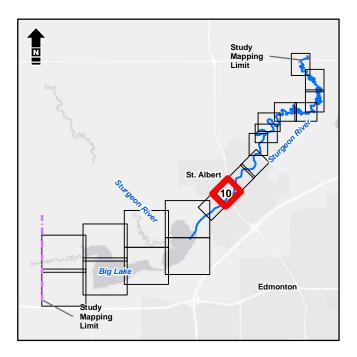
### Open Water Flood Inundation Mapbook | 750-Year

March 2020

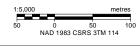
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<u>DISCHARGE</u> Sturgeon River = 155 m<sup>3</sup>/s



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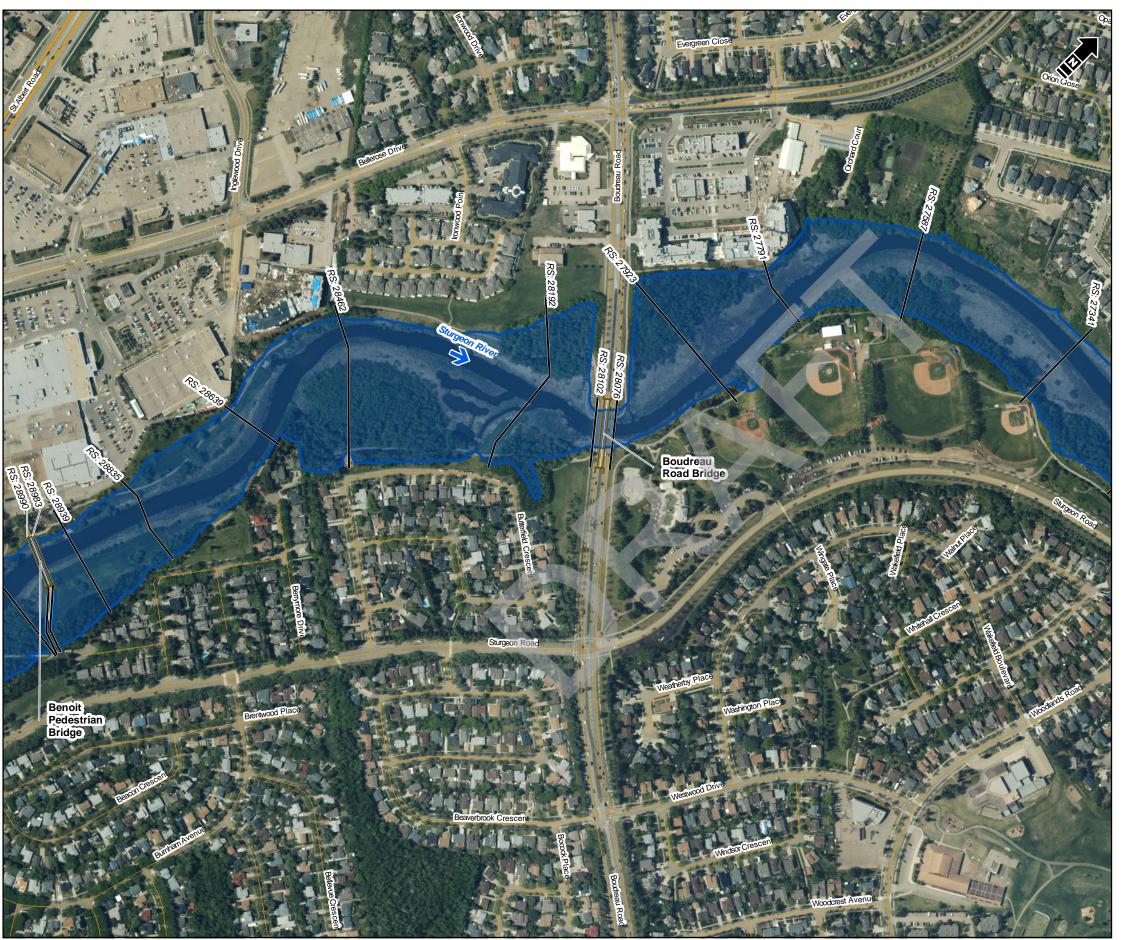




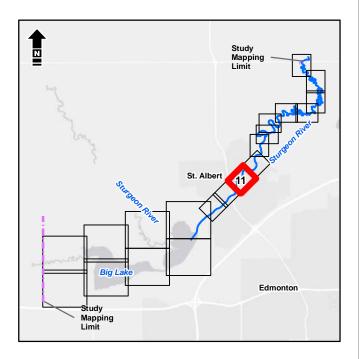


Alberta Government St. Albert Flood Hazard Study

### Open Water Flood Inundation Mapbook | 750-Year



<u>DISCHARGE</u> Sturgeon River = 155 m<sup>3</sup>/s



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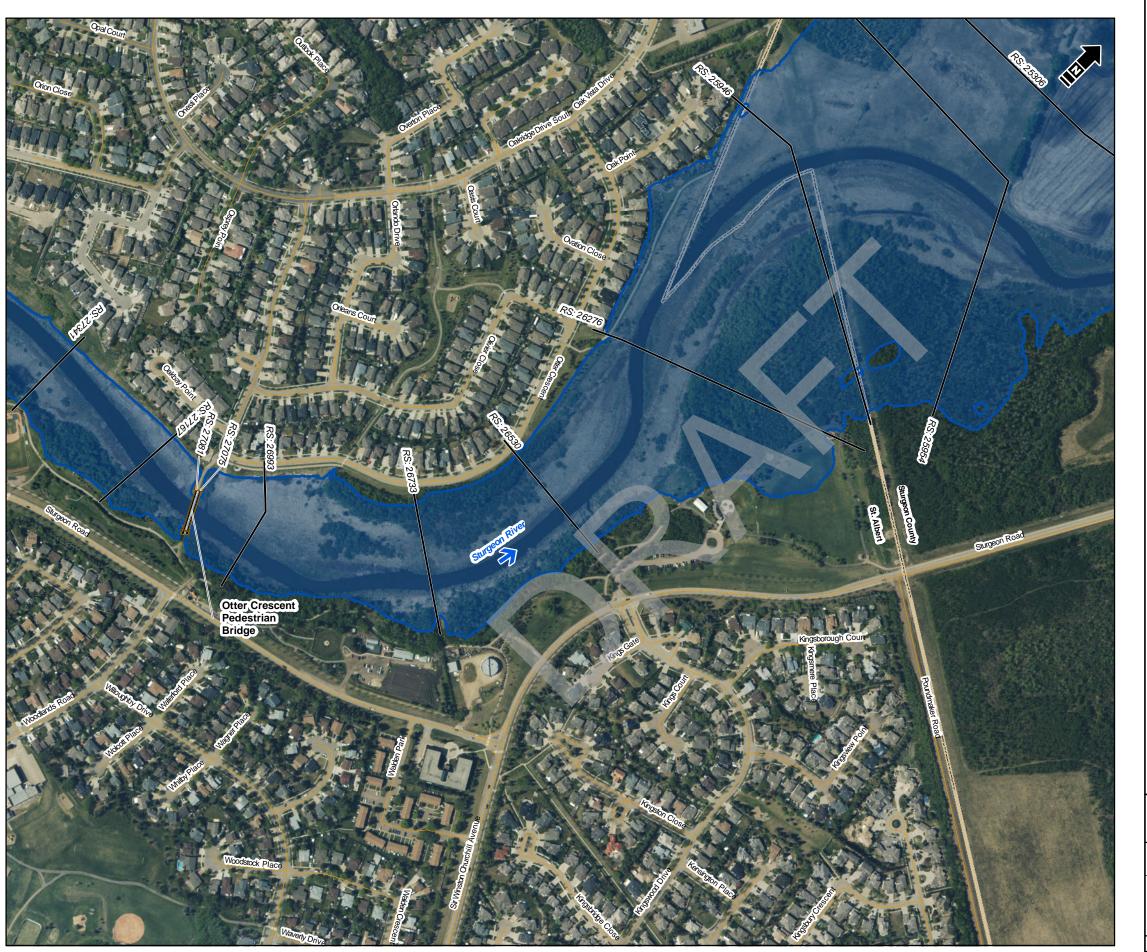




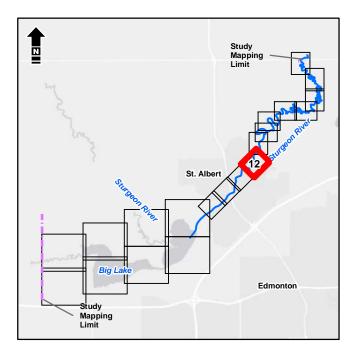


Alberta Government St. Albert Flood Hazard Study

# Open Water Flood Inundation Mapbook | 750-Year



<u>DISCHARGE</u> Sturgeon River = 155 m<sup>3</sup>/s



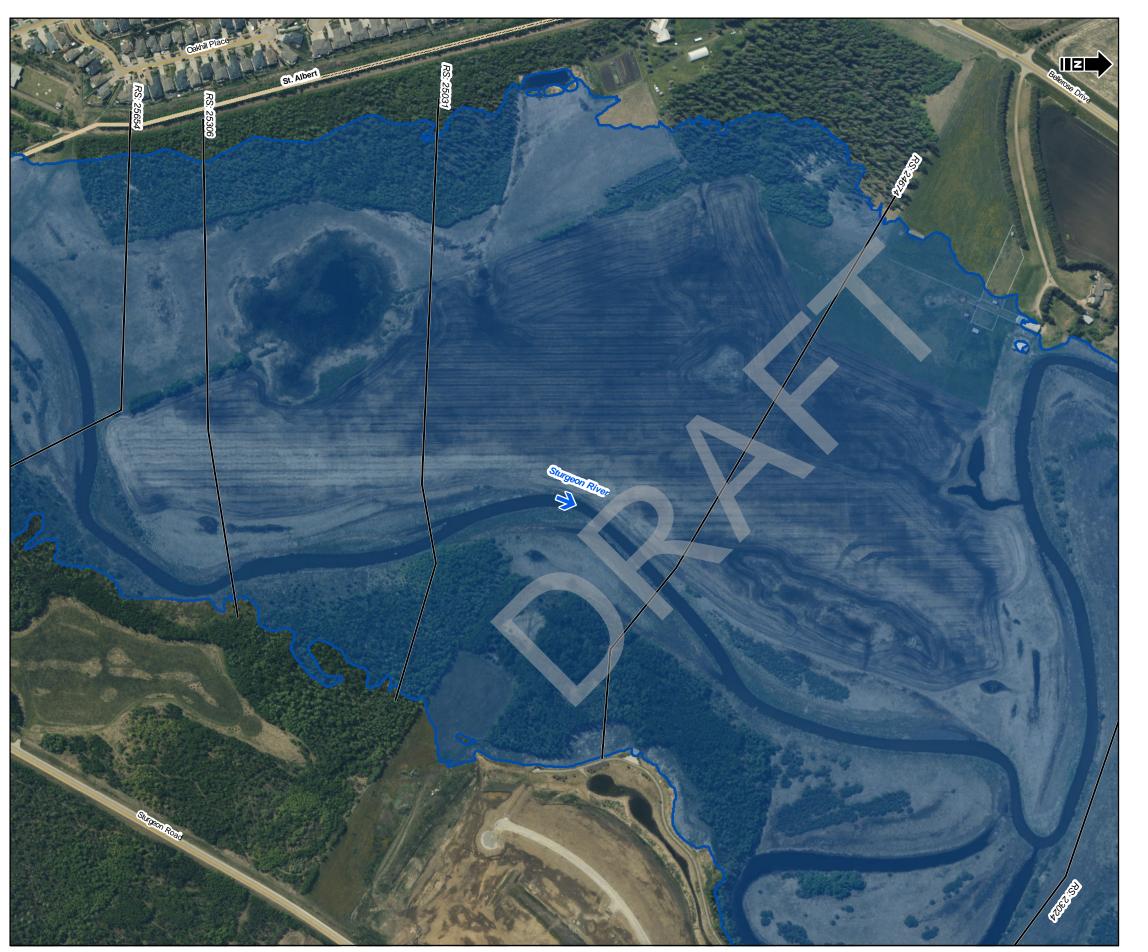
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Alberta Government St. Albert Flood Hazard Study

### Open Water Flood Inundation Mapbook | 750-Year



Bridge

Culvert

---- Cross Section Line

-- Study Mapping Limit

Flood Control Structure

---- Municipal Boundary (Urban)

---- Municipal Boundary (Rural) --- Major Road

— Local Road

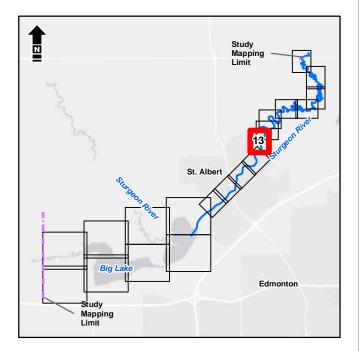
— Railway

Flow Direction

750-Year Flood Inundation Extent

750-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

<u>DISCHARGE</u> Sturgeon River = 155 m<sup>3</sup>/s



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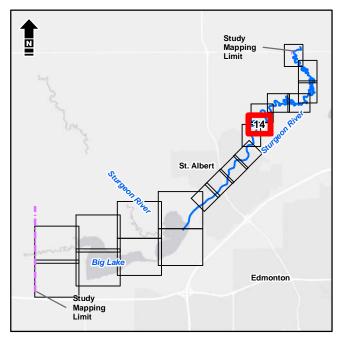
Alberta Government St. Albert Flood Hazard Study

# Open Water Flood Inundation Mapbook | 750-Year

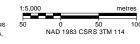
March 2020



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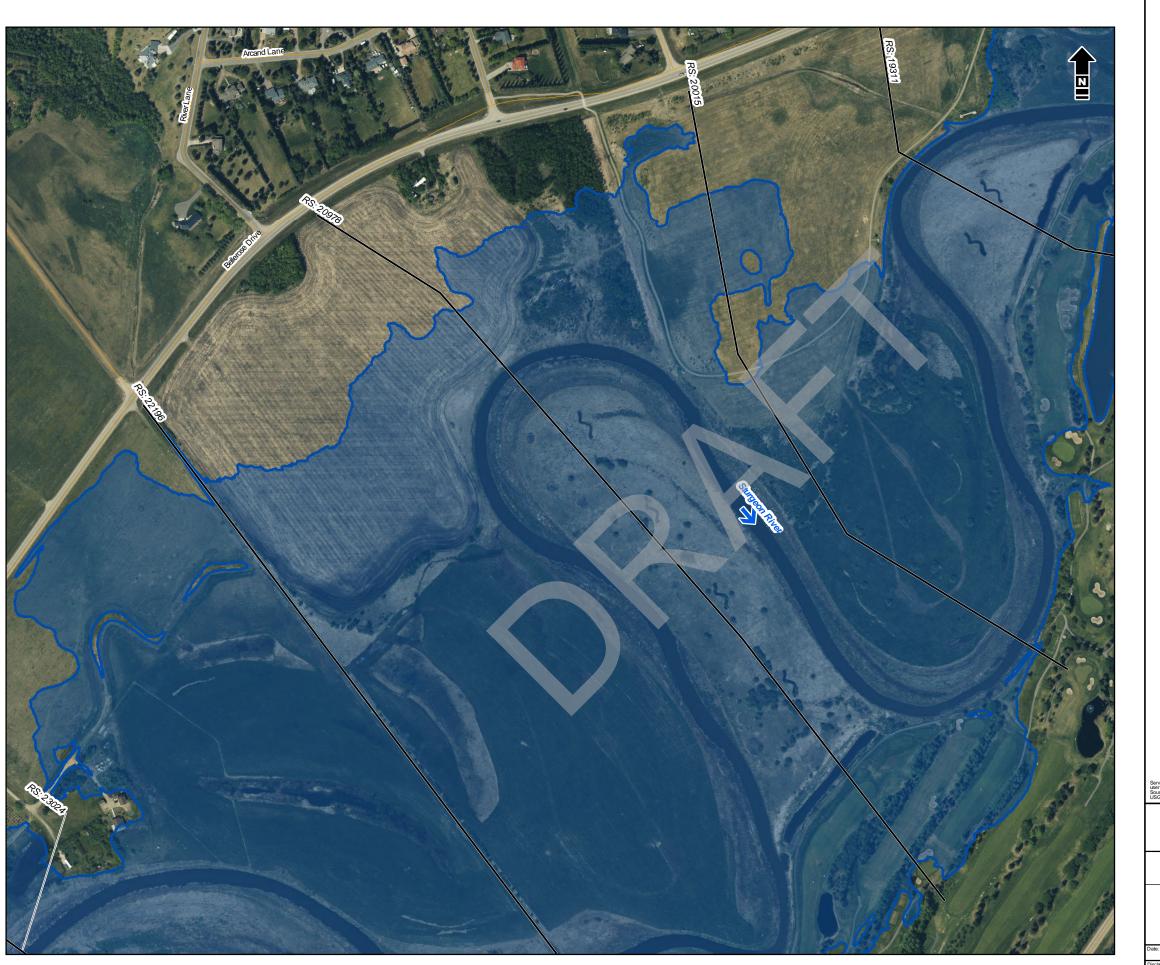




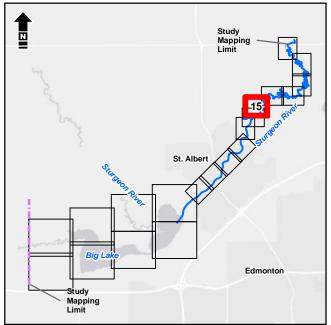
Alberta Government St. Albert Flood Hazard Study

# Open Water Flood Inundation Mapbook | 750-Year

March 2020

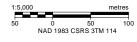


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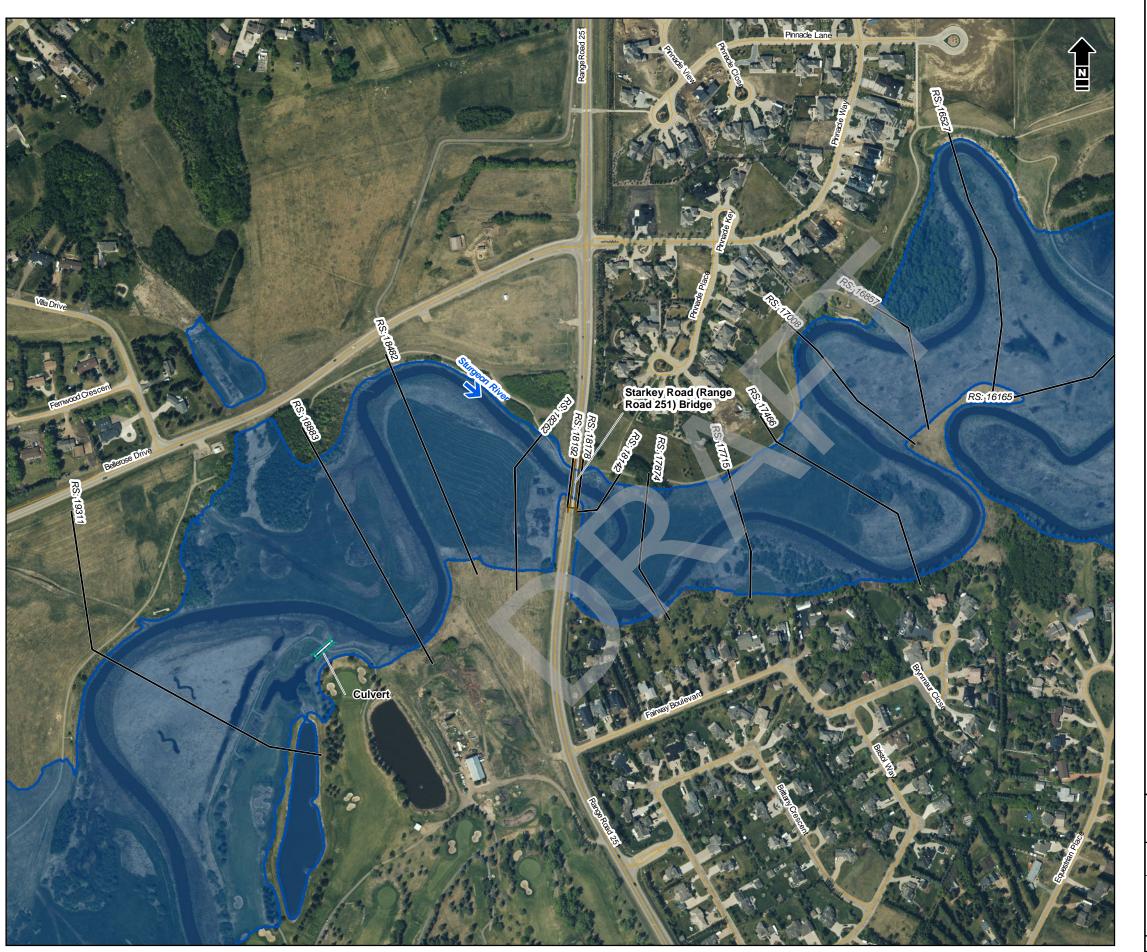




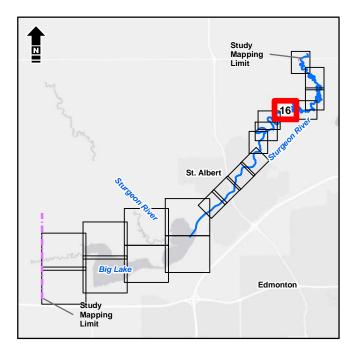
Alberta Government St. Albert Flood Hazard Study

# Open Water Flood Inundation Mapbook | 750-Year

March 2020



### <u>DISCHARGE</u> Sturgeon River = 155 m<sup>3</sup>/s



Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GS user community.

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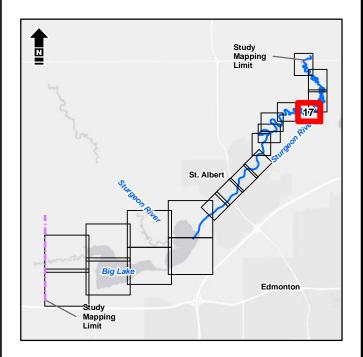


Alberta Government St. Albert Flood Hazard Study

### Open Water Flood Inundation Mapbook | 750-Year



<u>DISCHARGE</u> Sturgeon River = 155 m<sup>3</sup>/s



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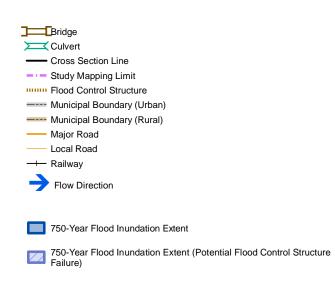




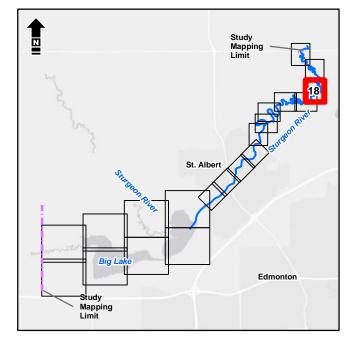
Alberta Government St. Albert Flood Hazard Study

# Open Water Flood Inundation Mapbook | 750-Year

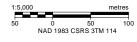




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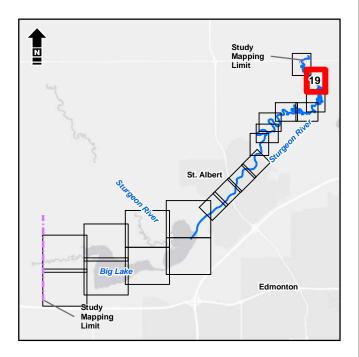
Alberta Government St. Albert Flood Hazard Study

# Open Water Flood Inundation Mapbook | 750-Year

March 2020



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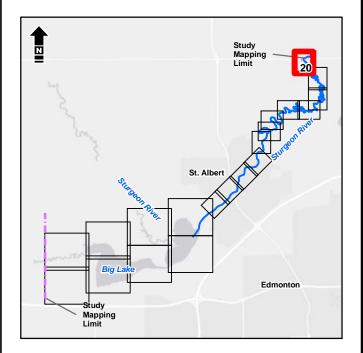
Alberta Government St. Albert Flood Hazard Study

# Open Water Flood Inundation Mapbook | 750-Year

March 2020



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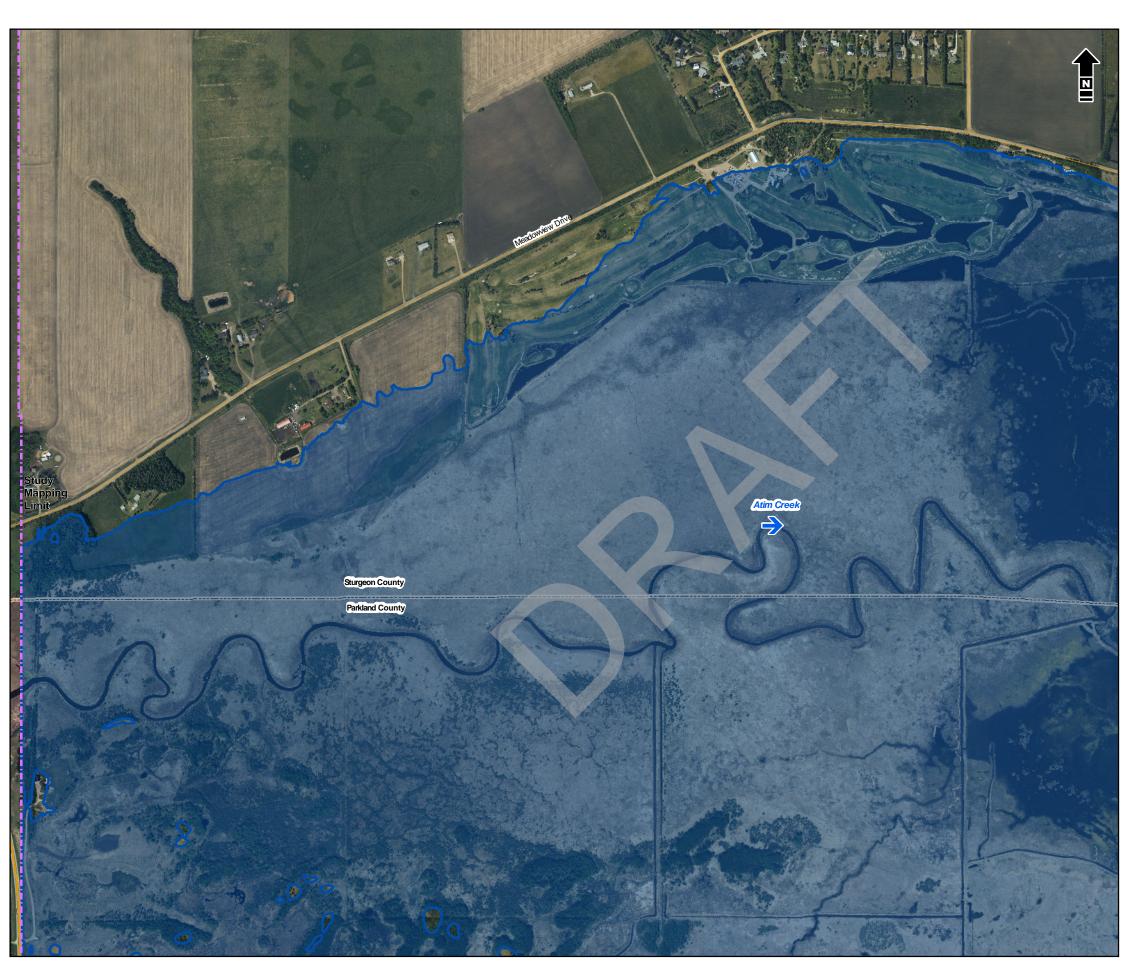




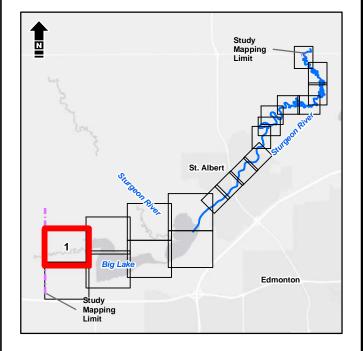
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# Open Water Flood Inundation Mapbook | 750-Year

March 2020







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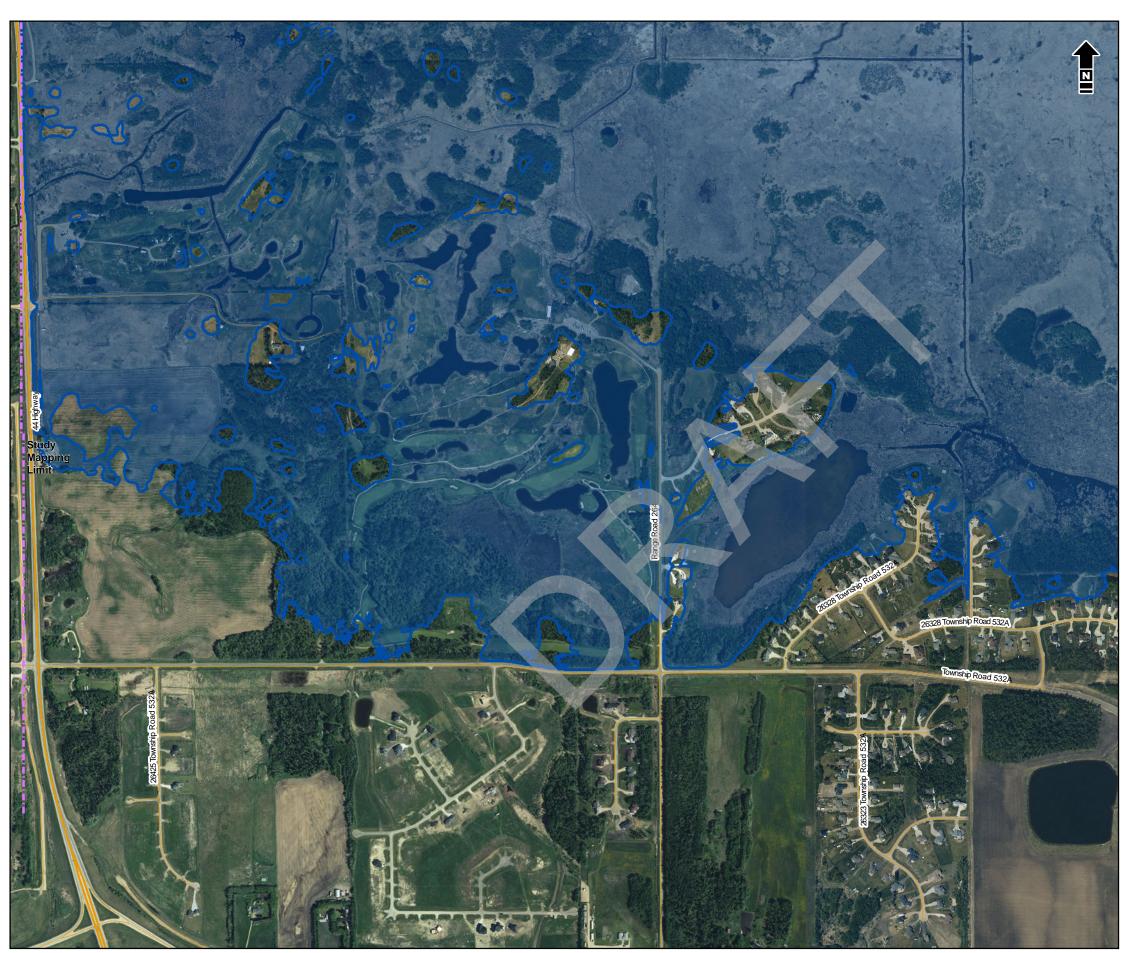
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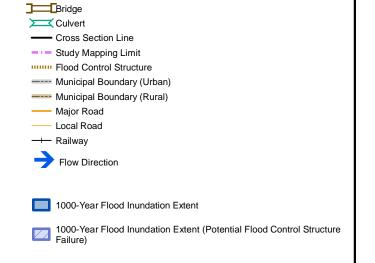
### Open Water Flood Inundation Mapbook | 1000-Year

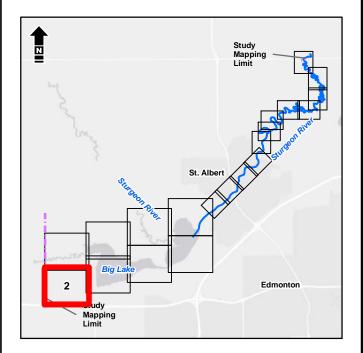
Date: March 2020 Project: 28312 Submitter: P. Rogers Reviewer.

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Alberta Government St. Albert Flood Hazard Study

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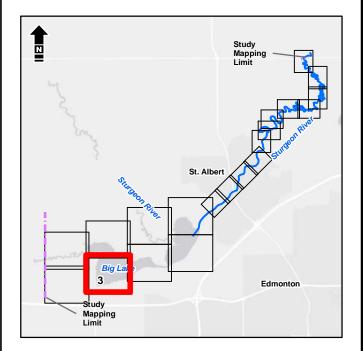
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Culvert
Cross Section Line
Study Mapping Limit
Hood Control Structure
Municipal Boundary (Urban)
Major Road
Local Road
Railway
Flow Direction

1000-Year Flood Inundation Extent (Potential Flood Control Structure Failure)



Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
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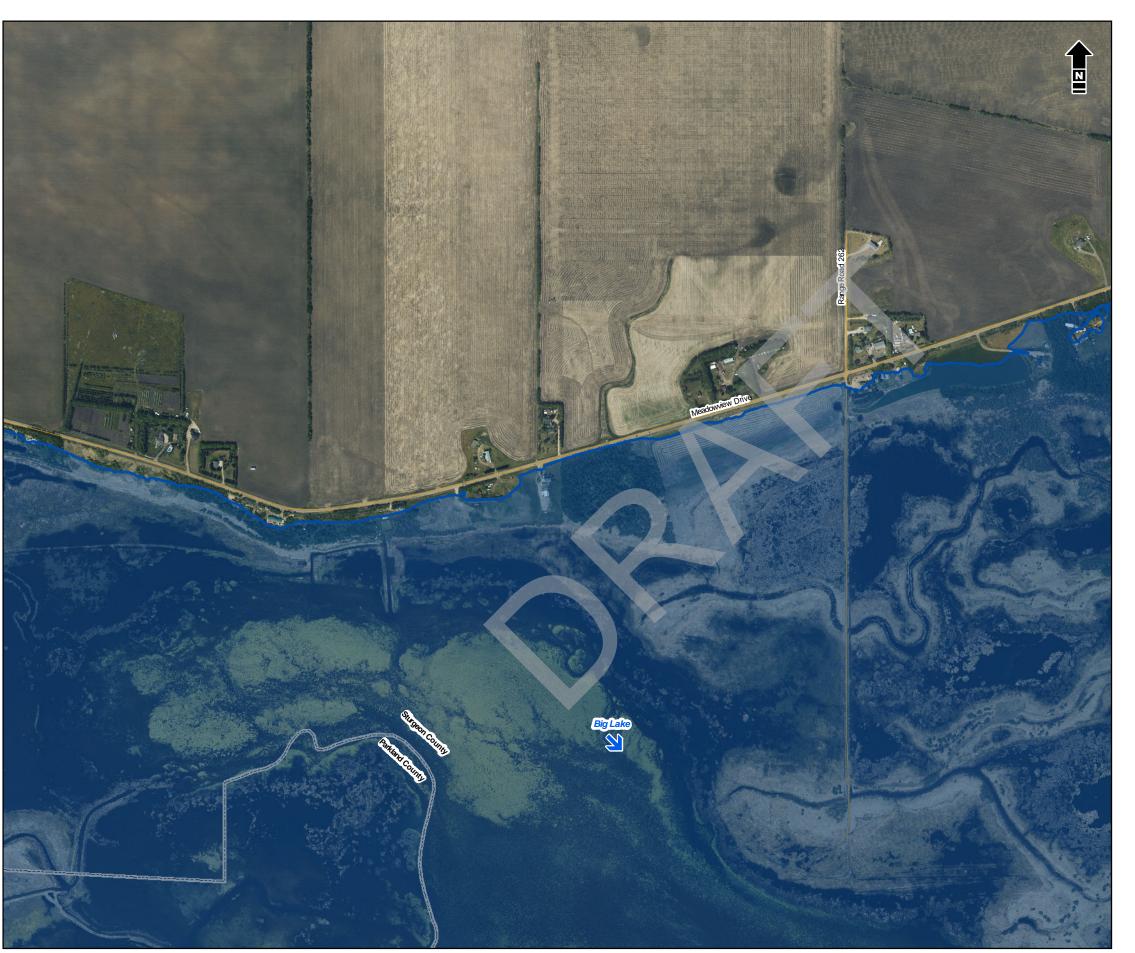
Alberta Government St. Albert Flood Hazard Study

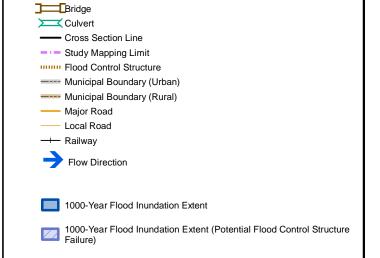
### Open Water Flood Inundation Mapbook | 1000-Year

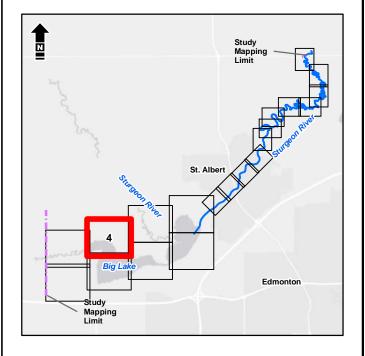
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Alberta Government St. Albert Flood Hazard Study

### Open Water Flood Inundation Mapbook | 1000-Year

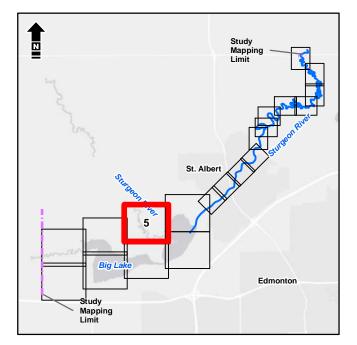
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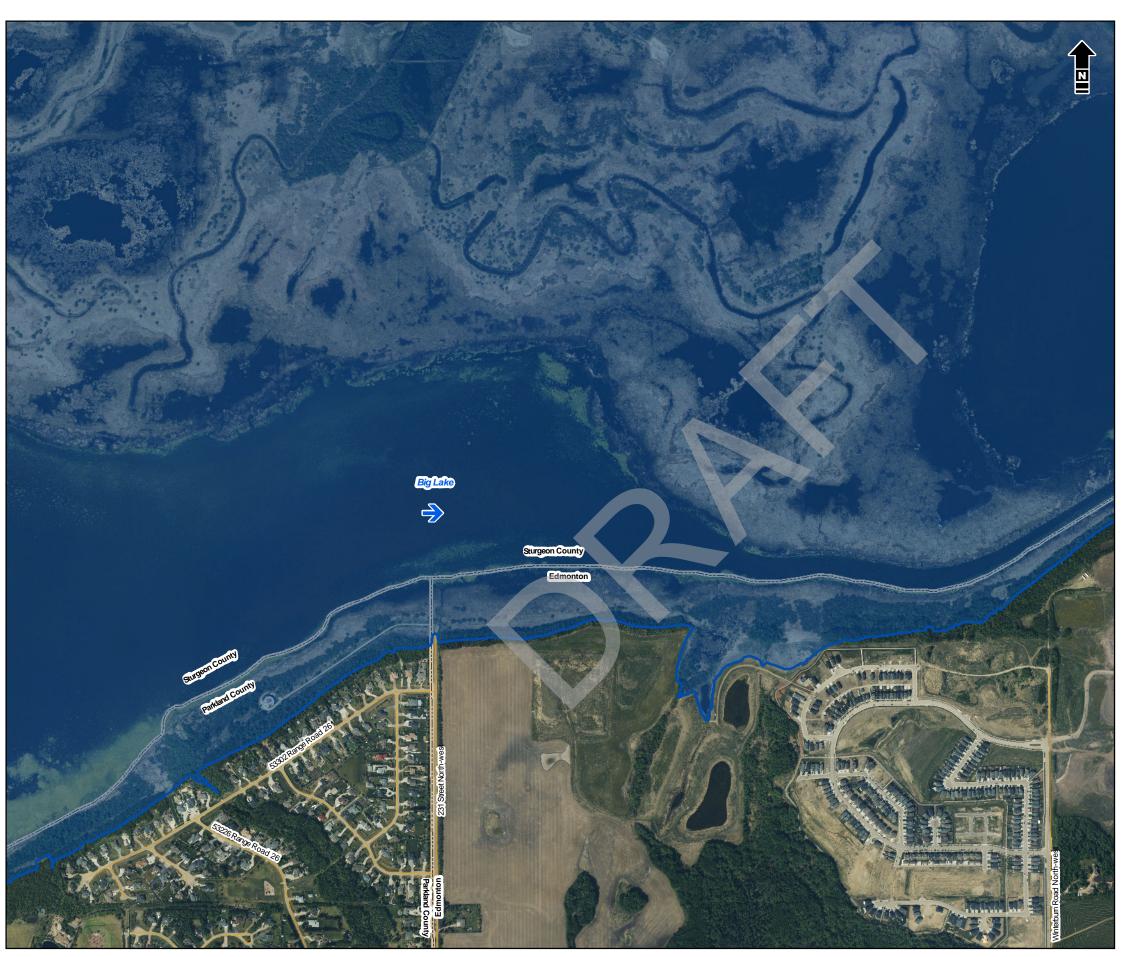
Alberta Government St. Albert Flood Hazard Study

### Open Water Flood Inundation Mapbook | 1000-Year

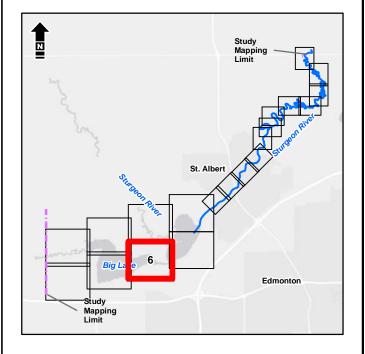
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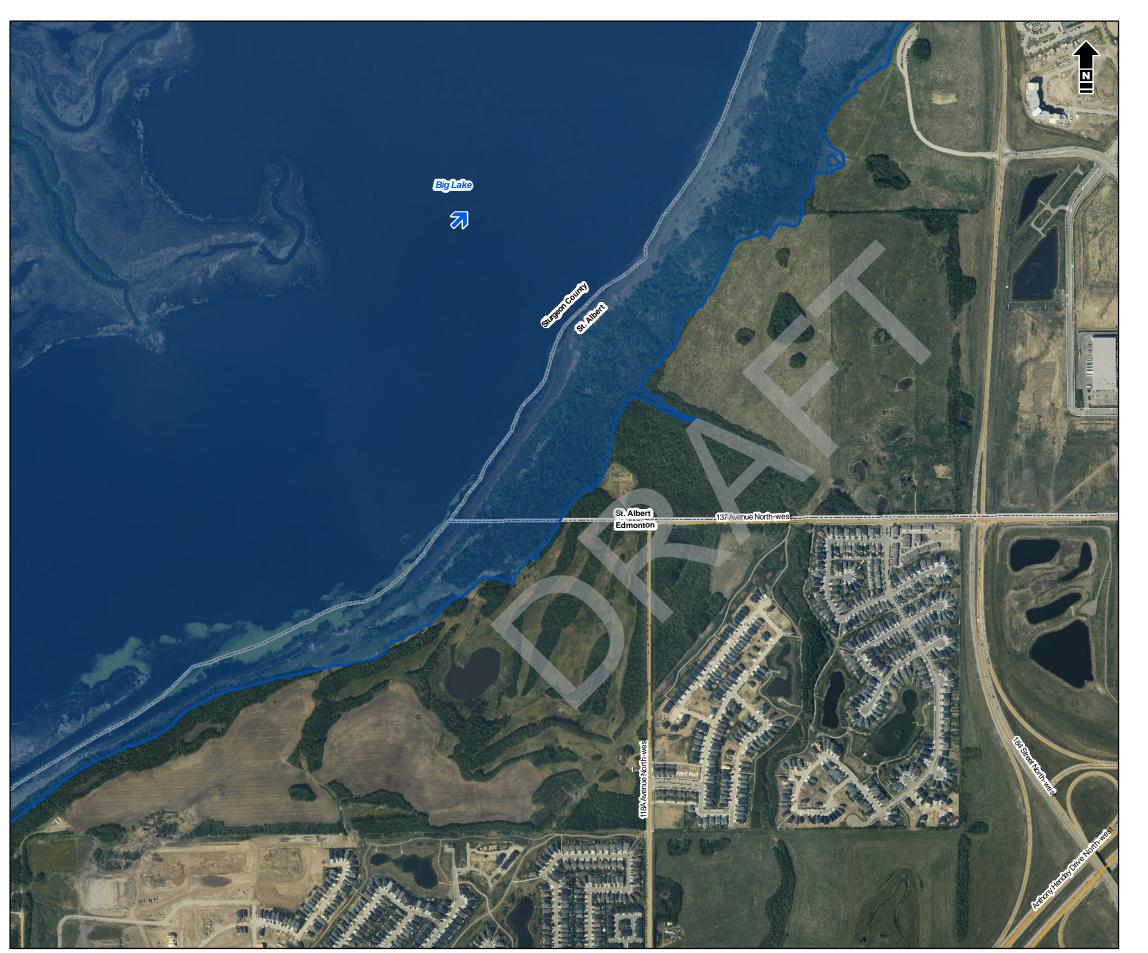
Alberta Government St. Albert Flood Hazard Study

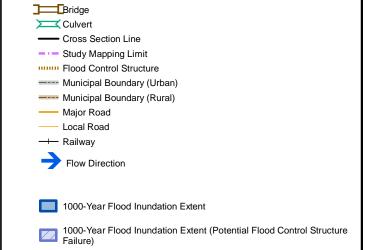
### Open Water Flood Inundation Mapbook | 1000-Year

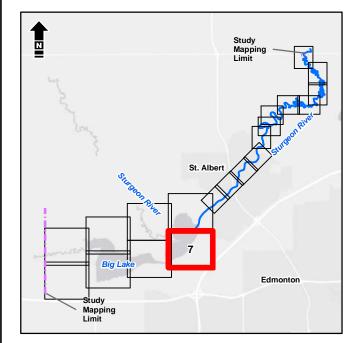
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Alberta Government St. Albert Flood Hazard Study

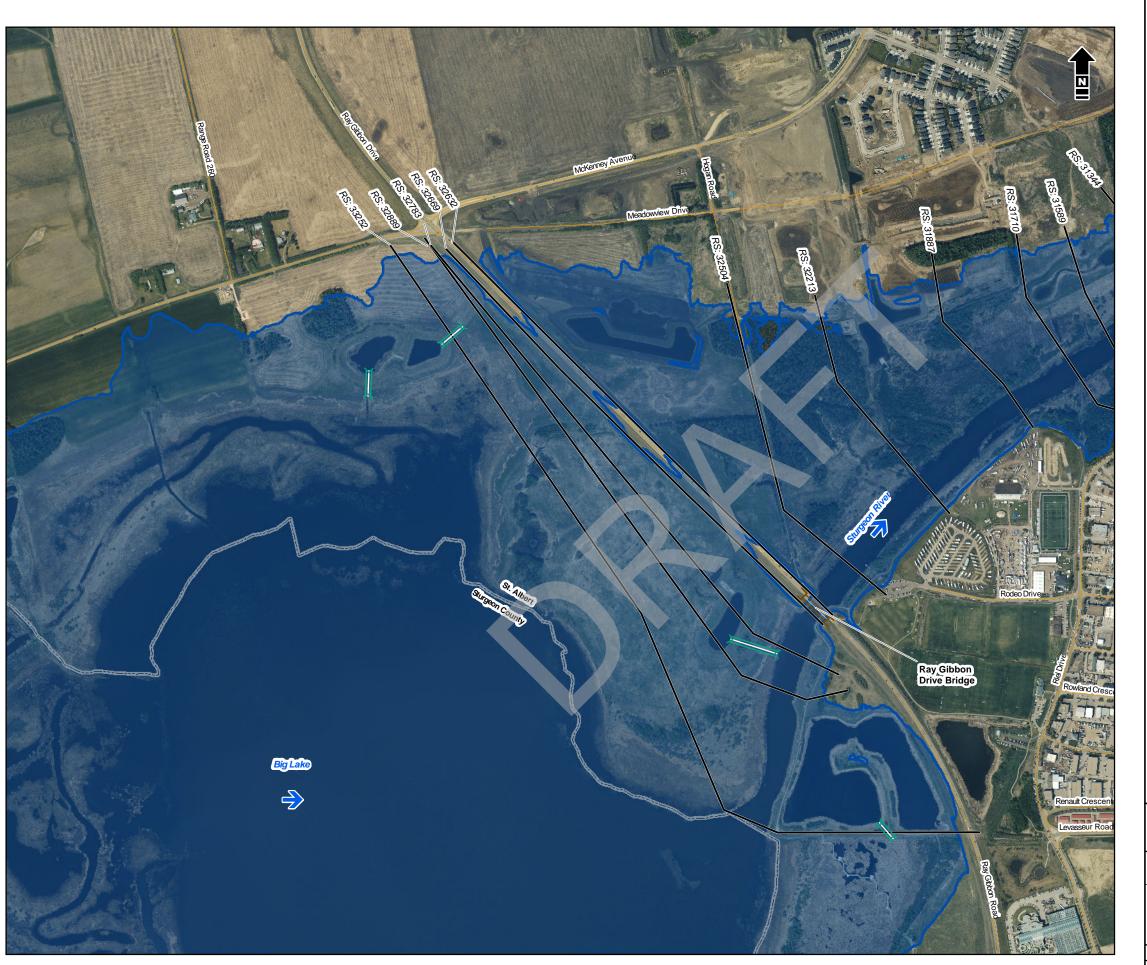
### Open Water Flood Inundation Mapbook | 1000-Year

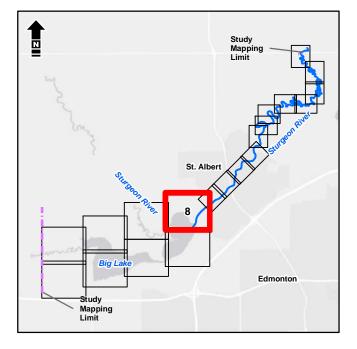
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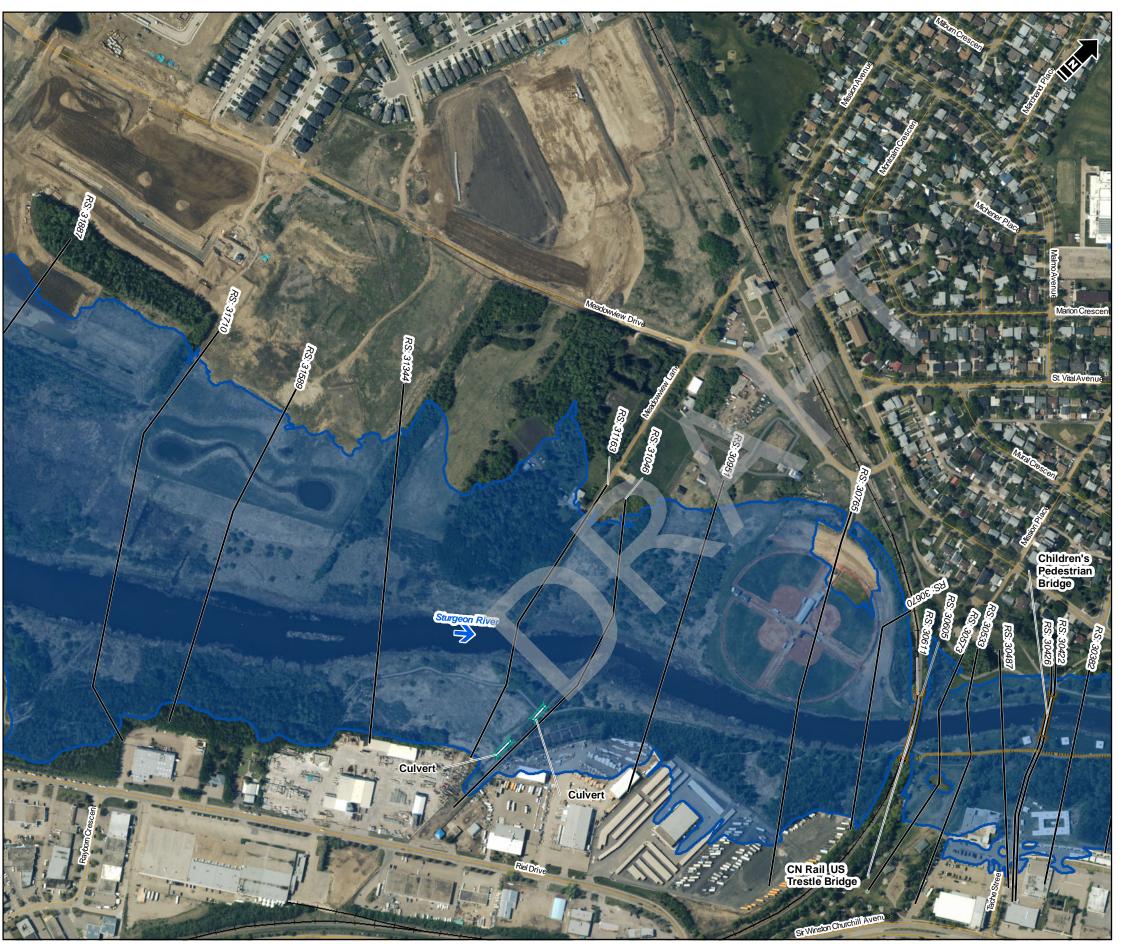




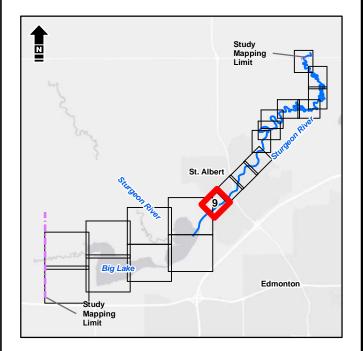
Alberta Government St. Albert Flood Hazard Study

# Open Water Flood Inundation Mapbook | 1000-Year

March 2020 M. Shome



### <u>DISCHARGE</u> Sturgeon River = 166 m<sup>3</sup>/s



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Alberta Government St. Albert Flood Hazard Study

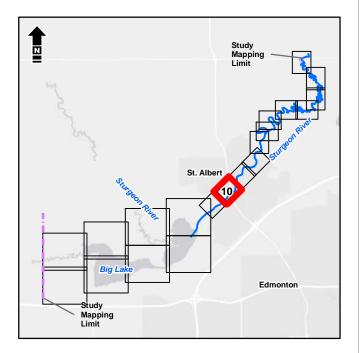
### Open Water Flood Inundation Mapbook | 1000-Year

March 2020

Classification: Public



<u>DISCHARGE</u> Sturgeon River = 166 m<sup>3</sup>/s



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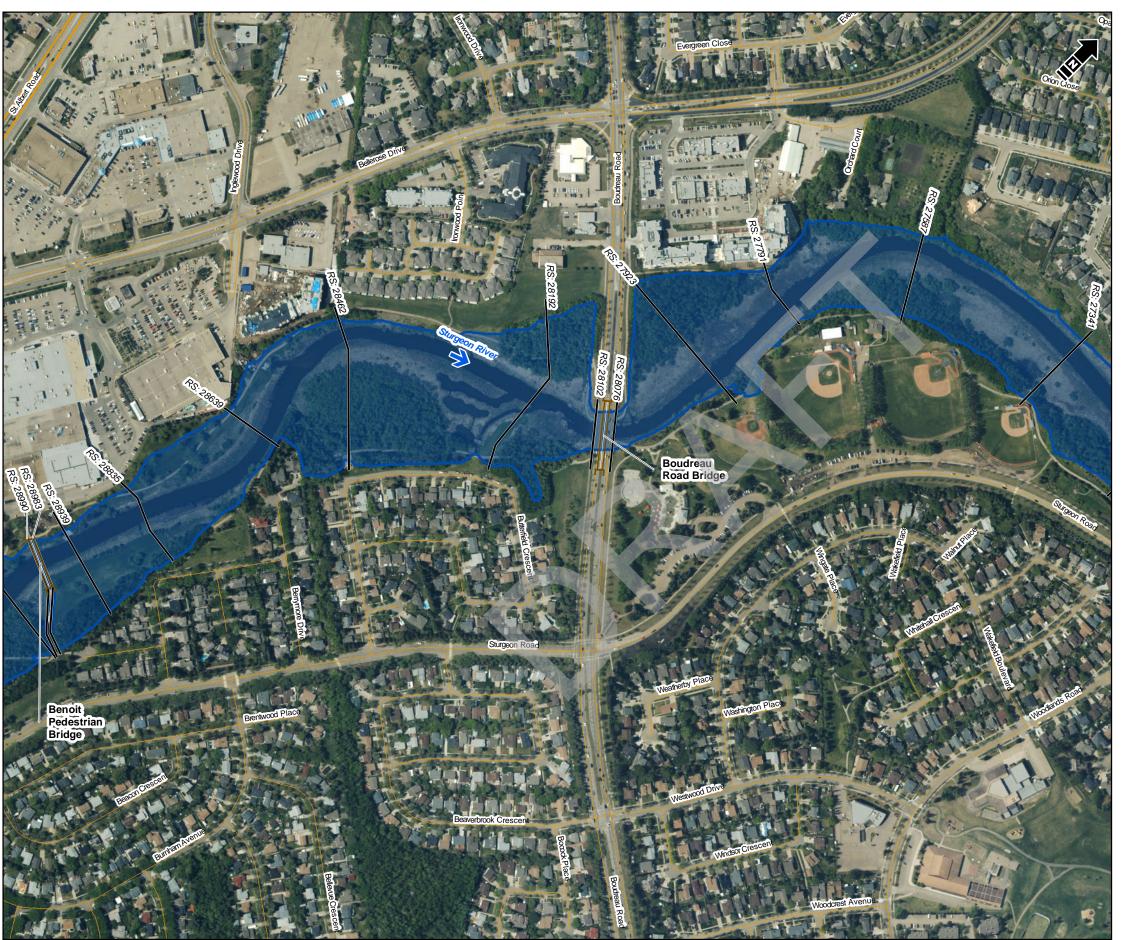




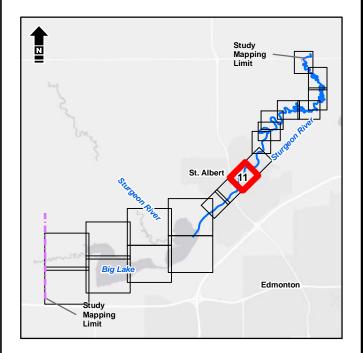


Alberta Government St. Albert Flood Hazard Study

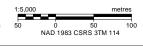
# Open Water Flood Inundation Mapbook | 1000-Year



<u>DISCHARGE</u> Sturgeon River = 166 m<sup>3</sup>/s



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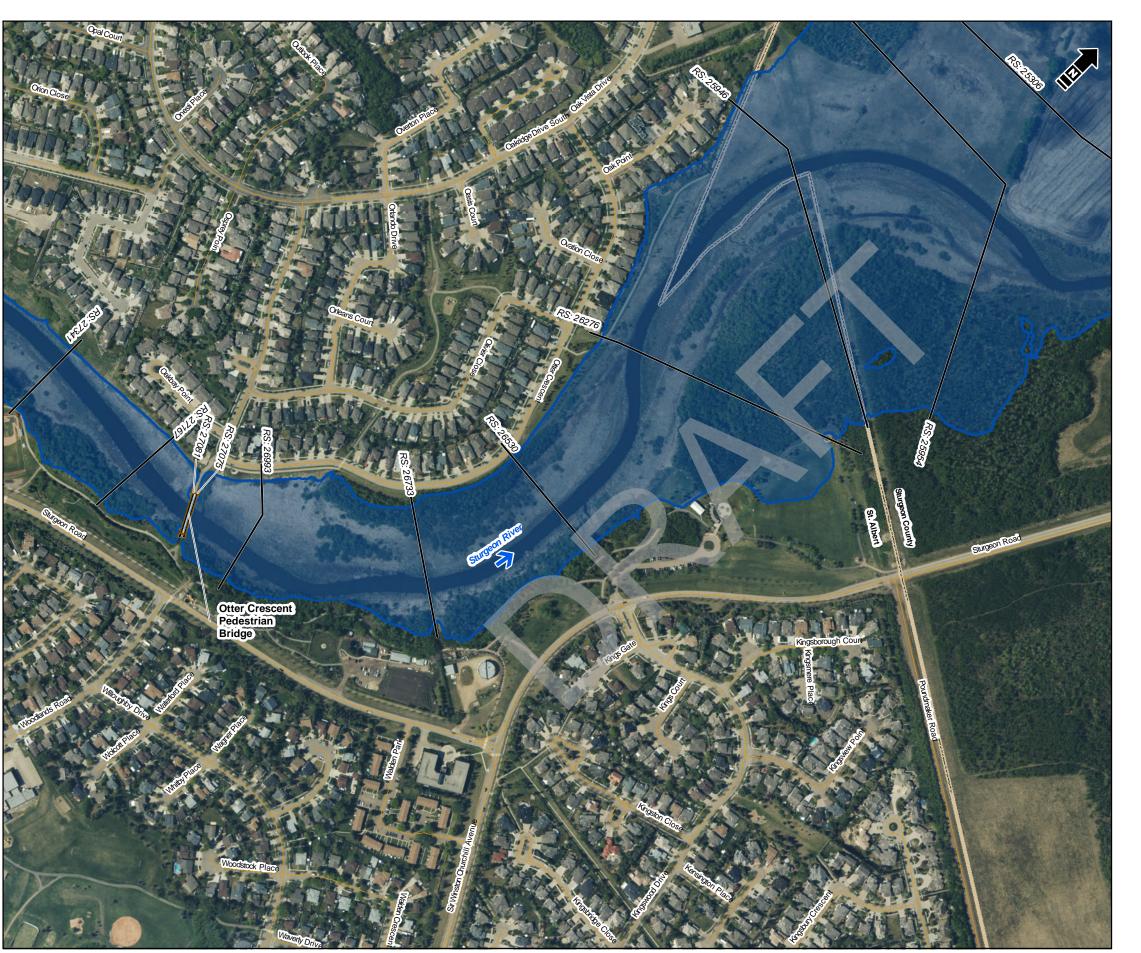


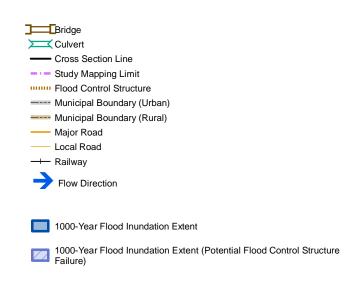




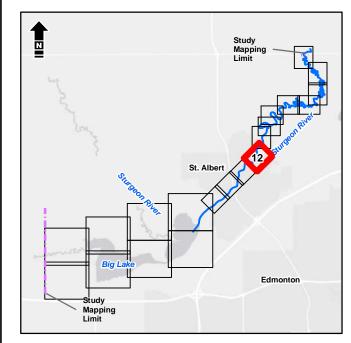
Alberta Government St. Albert Flood Hazard Study

# Open Water Flood Inundation Mapbook | 1000-Year





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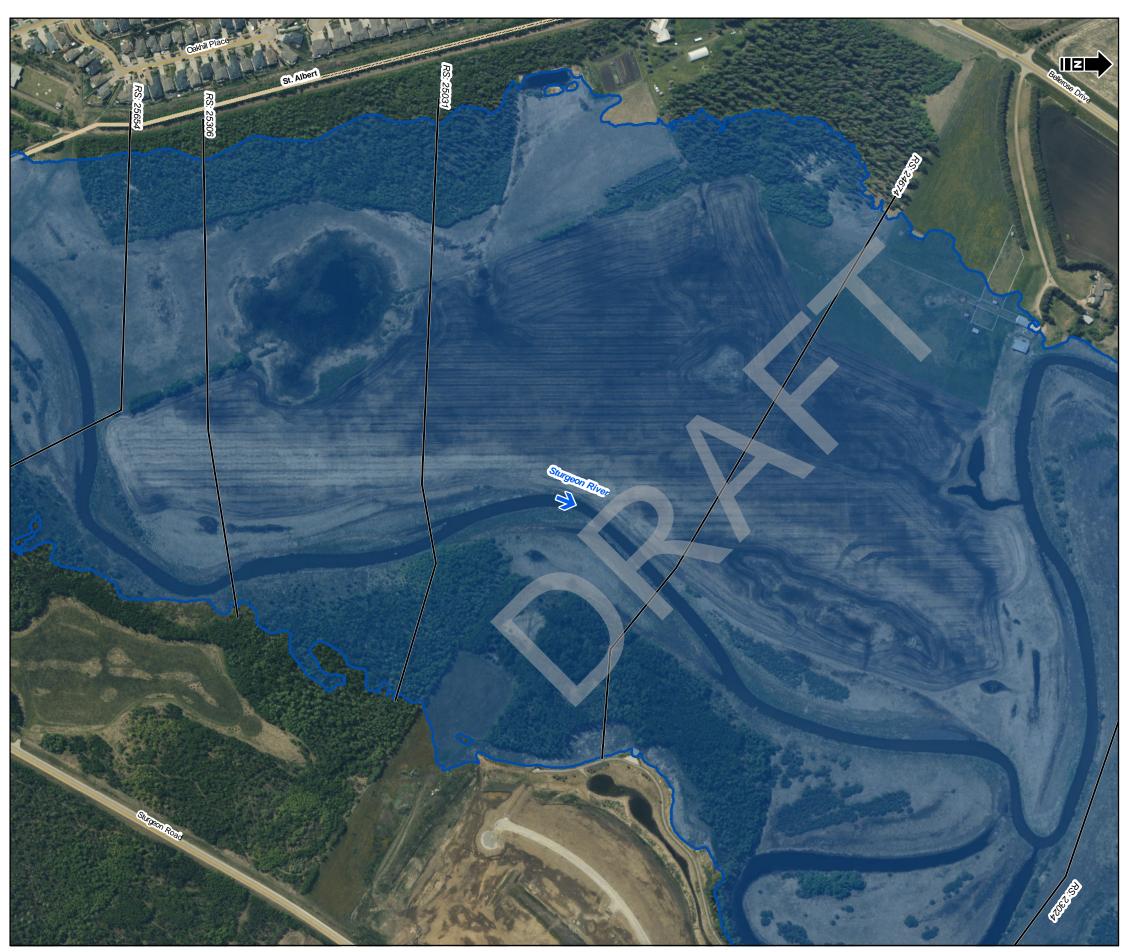


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Alberta Government St. Albert Flood Hazard Study

# Open Water Flood Inundation Mapbook | 1000-Year



Bridge

Culvert

--- Cross Section Line

-- Study Mapping Limit Flood Control Structure

---- Municipal Boundary (Urban)

---- Municipal Boundary (Rural)

--- Major Road

— Local Road

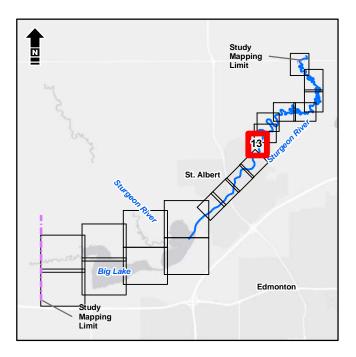
— Railway

Flow Direction

1000-Year Flood Inundation Extent

1000-Year Flood Inundation Extent (Potential Flood Control Structure Failure)

<u>DISCHARGE</u> Sturgeon River = 166 m<sup>3</sup>/s



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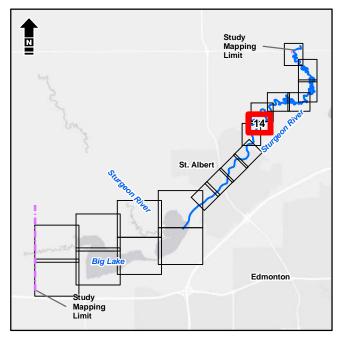
Alberta Government St. Albert Flood Hazard Study

# Open Water Flood Inundation Mapbook | 1000-Year

March 2020



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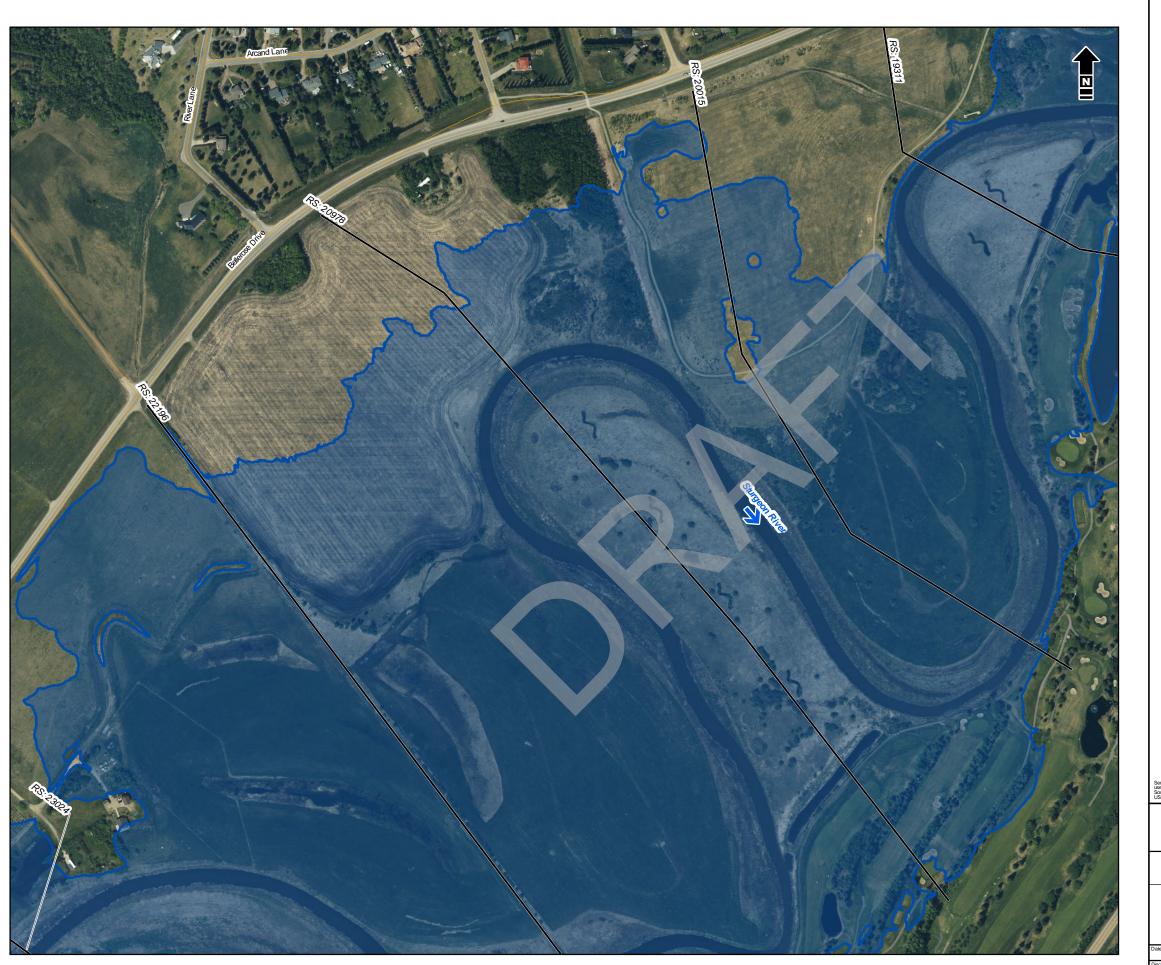




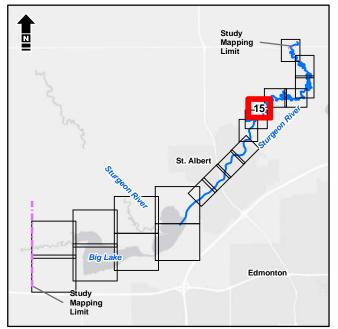
Alberta Government St. Albert Flood Hazard Study

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March 2020



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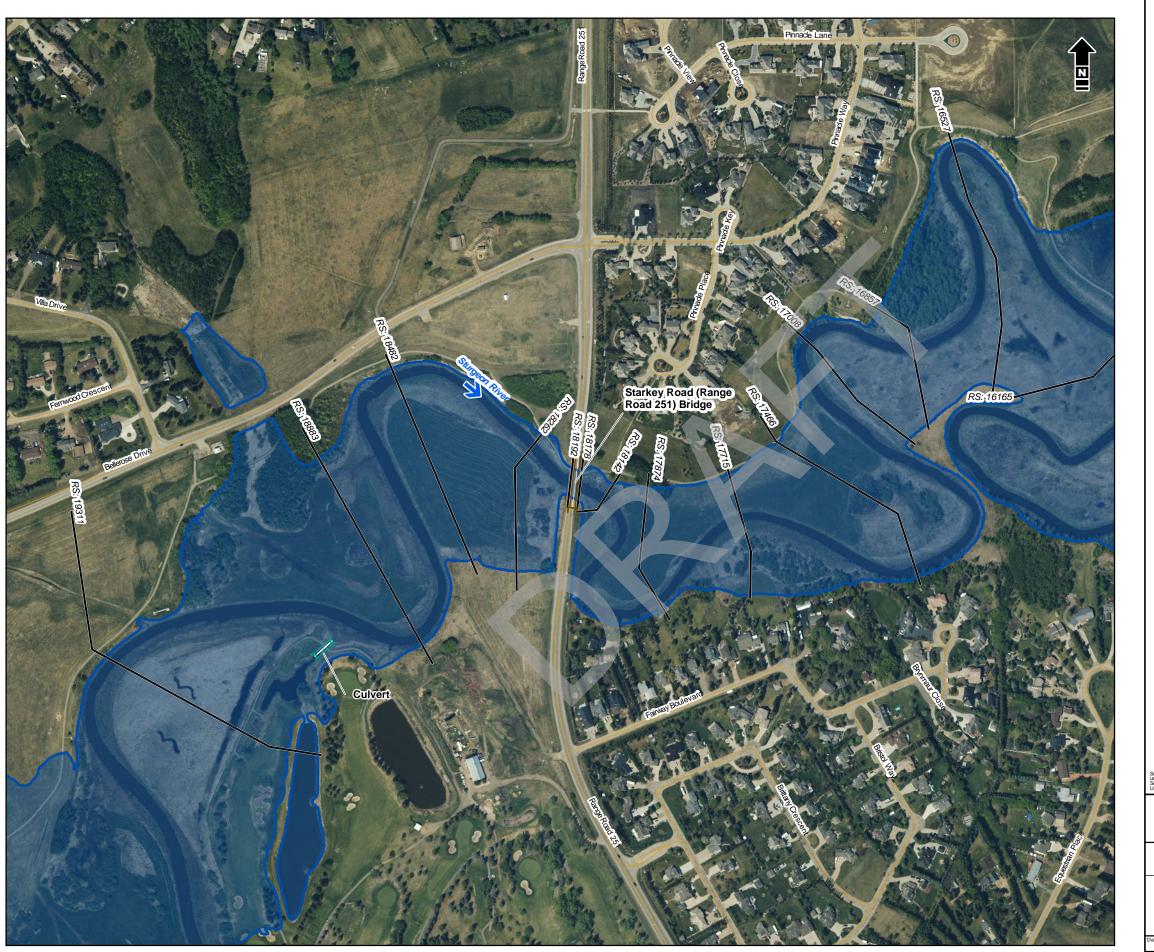




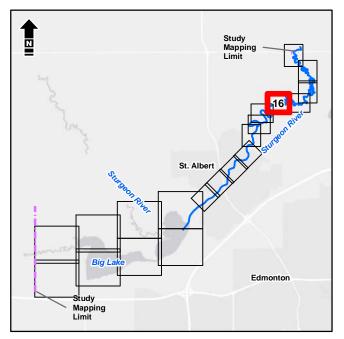
Alberta Government St. Albert Flood Hazard Study

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March 2020

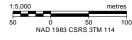


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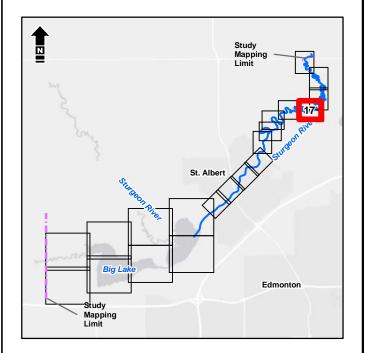
Alberta Government St. Albert Flood Hazard Study

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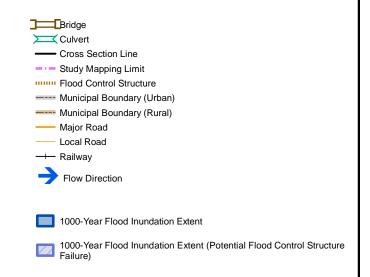




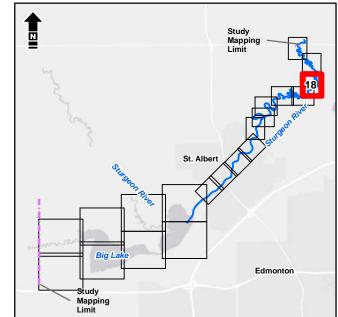
Alberta Government St. Albert Flood Hazard Study

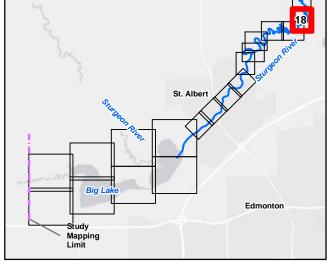
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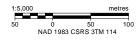


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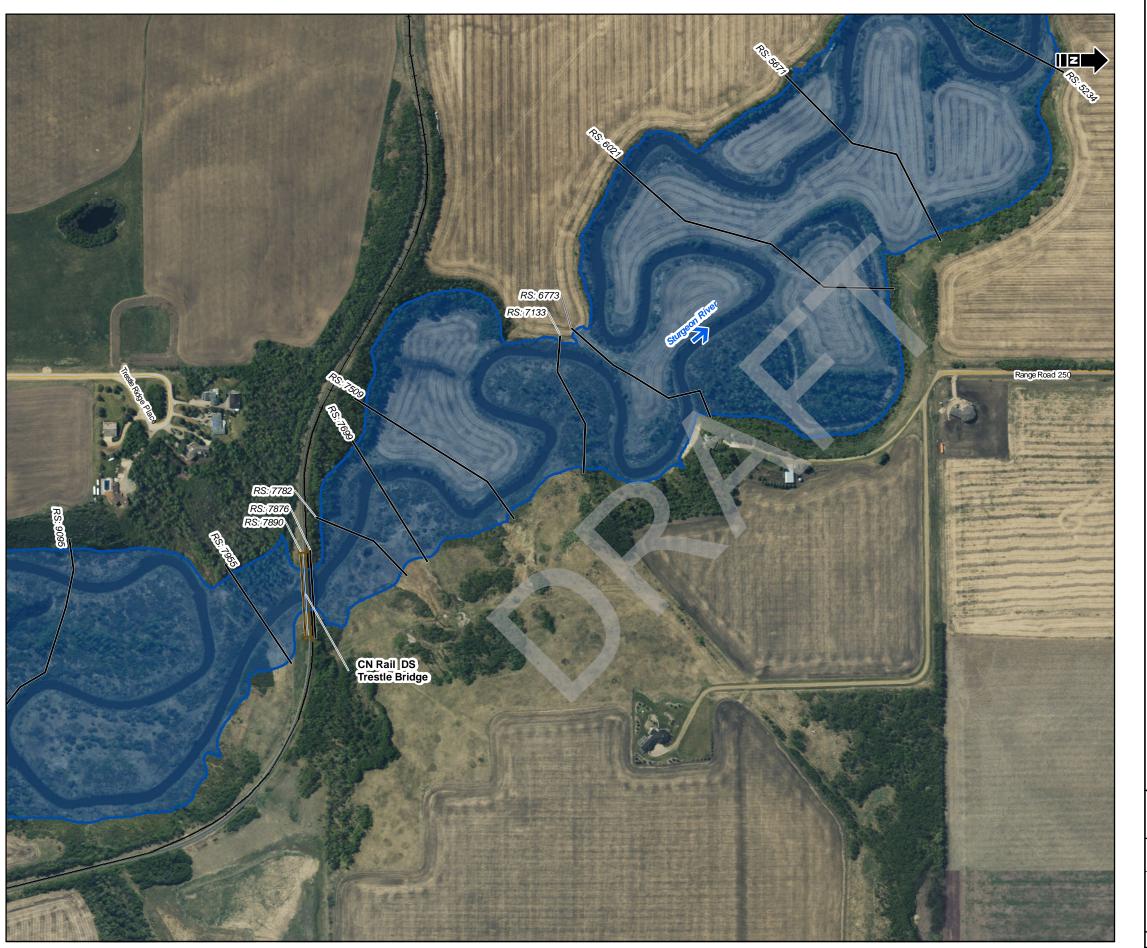




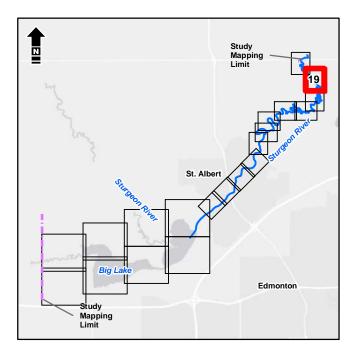
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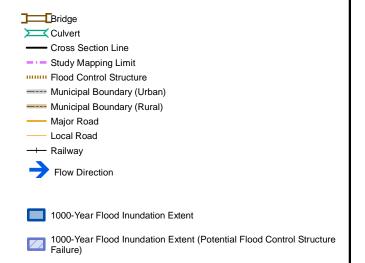


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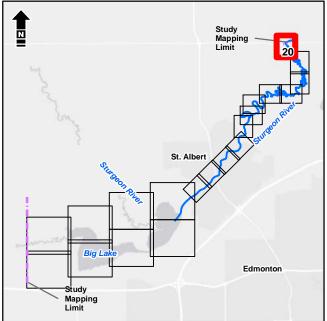
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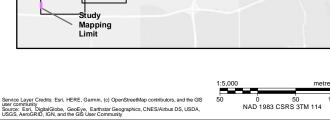
March 2020





### <u>DISCHARGE</u> Sturgeon River = 166 m<sup>3</sup>/s







Alberta Alberta Government St. Albert Flood Hazard Study

Open Water Flood Inundation Mapbook | 1000-Year

Date:		Project:	Submitter:	Reviewer:
	March 2020	28312	P. Rogers	
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