

**BIPOLE III**  
**TRANSMISSION LINE WATERCOURSE CROSSINGS**  
**POST-CONSTRUCTION MONITORING REPORT - 2017**

October 2017

**Prepared for:**

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## EXECUTIVE SUMMARY

As outlined in *The Environment Act* Licence for the Bipole III Transmission Project (Licence No. 3055), construction, operation, and maintenance of the Project will adhere to mitigation found within the EIS and supporting materials, as well as Environmental Protection Plans (EnvPP). Included in the Project EnvPP is an obligation to monitor the effectiveness of mitigation measures. This report provides documentation of site visits conducted on 412 watercourse crossings along the four 230 kV AC collector lines between Keewatinohk CS and Heday CS, the 230 kV AC Collector Line from Keewatinohk CS to Long Spruce GS, the Keewatinohk and Riel Ground Electrode lines, and segments N1-N4, C1, C2, S1 and S2 of the 500 kV Transmission Line from Keewatinohk CS to the Riel CS during summer 2017. Follow-up inspections at the 15 sites recommended in the 2016 stream crossing monitoring report and a further nine sites flagged in the 2016/2017 environmental inspector daily reports are also documented.

Of the 412 stream crossing sites inspected, clearing of the riparian buffer zone and the installation of tower footings and anchors was complete at most crossings. The majority of S1 and S2 crossing riparian zones consists of grasses and forbes within an agricultural landscape and did not require clearing. All five 230 kV AC Collector Lines were complete at the time of aerial surveys in 2017. The stage of construction varied between and within each of the segments from the Keewatinohk CS to the Riel CS. Clearing of the RoW and the installation of tower anchors and footings was complete at 95% of sites. Additionally, towers were present at 54% of watercourse crossings with towers fully complete and conductors strung at 20% of sites.

Twenty one mitigation measures were identified within the EnvPP and supporting material. Of these, stream crossing construction was in compliance with 18 mitigation measures at all sites where applicable, depending on the stage of construction. Of the sites that were non-compliant (15), follow-up monitoring in 2018 is recommended at 10 sites.

The mitigation measure most frequently in non-compliance was the presence of slash, debris, and/or accumulation of sediments instream which may inhibit water flow and prevent the free movement of fish (9 sites). The removal of instream blockages from eight sites is recommended. Secondary issues included insufficient erosion protection (5 sites) and failure to remove temporary crossings (1 site). Of the 15 sites requiring mitigation or continued monitoring, 12 were originally noted in 2016.

## **ACKNOWLEDGEMENTS**

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## 1.0 INTRODUCTION

As outlined in *The Environment Act* Licence for the Bipole III Transmission Project (Licence No. 3055), construction, operation, and maintenance of the Project will adhere to mitigation found within the EIS and supporting materials as well as Environmental Protection Plans (EnvPP). Included in the Project EnvPP is an obligation to monitor the effectiveness of mitigation measures. Stream crossing monitoring consists of a minimum of one site visit to each identified stream crossing in the first spring and/or summer following construction and subsequent site visits as required. This report provides documentation of site visits conducted June 2017 at 412 watercourse crossings intersected by the AC Collector lines between the Keewatinohk CS, Henday CS and the Long Spruce GS and along the 500 kV Transmission Line extending from Keewatinohk CS to its terminus at the Riel CS outside of Winnipeg (Maps 100-01 to 100-94).

## 2.0 STUDY AREA

The northern terminus of the 500 kV Transmission Line and the Collector Lines and Construction Power Line fall within the Nelson River drainage basin. From there the 500 kV line traverses the Saskatchewan River, Lake Manitoba, Assiniboine River and Red River basins.

The Nelson River watershed includes four sub-basins (Lower Nelson River, Burntwood River, Grass River, and upper Nelson River) and includes almost half of the project's watercourse crossings extending from Goose Creek, a tributary of the lower Nelson River, to south of Wekusko Lake.

The Lower Nelson River sub-basin includes the Nelson River and numerous small and medium-sized tributaries such as the Limestone River and Goose Creek. The Construction Power, AC Collector and Segment N1 of the 500 kV line lie within the lower Nelson River sub-basin.

The Burntwood River sub-basin includes segment N2 and is the largest sub-basin contributing drainage along the 500 kV line and begins approximately at Rat Lake, flows southeast to Wuskwatim Lake, and then flows northeast joining the Nelson River at Split Lake. The predominant watercourse in the Burntwood River sub-basin is the Churchill River Diversion (CRD), which enters from the north via the Rat River. Diversion flows extend down the Burntwood River through Wuskwatim, Opegano, Birch Tree, and Apussigamasi lakes before converging with the Nelson River at Split Lake.

The Grass River sub-basin lies south of the Burntwood River sub-basin and includes parts of segments N3 and N4. This sub-basin begins in the west near Cranberry Portage and, similar to the Burntwood River sub-basin, flows northeast converging with the

Nelson River at Split Lake. Waterbodies in this sub-basin include numerous lakes and rivers; notably, the Grass, Missipisew, and Wuskatasko rivers and Wekusko, Herblet, Snow, and Tramping lakes.

The Saskatchewan River basin originates near Flin Flon along the Saskatchewan border and flows southeast to Cedar Lake. The 500 kV line intersects two sub-basins (Clearwater Lake/Moose Lake and Cedar Lake) and extends from Cedar Lake, south of The Pas and includes segments N3 and N4. The Clearwater Lake/Moose Lake sub-basin includes tributaries such as Frog Creek and Little Frog Creek, and the majority of crossing sites in this basin are located on unnamed tributaries of Little Frog Creek. The Cedar Lake sub-basin includes the Saskatchewan River, which flows eastward across Saskatchewan and Manitoba and empties into Lake Winnipeg.

The Lake Manitoba basin extends from the Lake Winnipegosis sub-basin in the north, south through the escarpment region of Manitoba to the Whitemud River sub-basin and includes part of segment N4, segment C1, C2 and S1. Within the Lake Manitoba basin, the 500 kV line intersects five sub-basins (Lake Winnipegosis, Swan Lake, Duck Mountain, Lake Manitoba West, and Whitemud River). The right of way (RoW) extends north of Red Deer Lake to southwest of Portage La Prairie and parallels both Lake Winnipegosis and Lake Manitoba.

The northern portion of the Lake Winnipegosis sub-basin is characterized by the Overflowing River, Red Deer Lake, and Red Deer River and includes segment N4. Further south, the small lakes and streams on top of the Porcupine Mountains flow northeast to Lake Winnipegosis through the Bell and Steeprock rivers and Cork Cliff Creek. The Duck Mountain sub-basin (in association with the Valley River and Turtle River basins) collects water from the eastern sides of the Duck and Riding mountains and enter Lake Winnipegosis either directly or via Dauphin Lake and the Mossy River and includes segment C1. Characteristic of the escarpment, streams in the three sub-basins have elevated water velocity and coarse stream substrate. Once on the lowland areas adjacent to lakes Winnipegosis, Swan, and Manitoba, water velocity slows and substrates shift to fine silts and organics. Shoreline vegetation is generally a combination of birch, dogwood, grass/sedge, poplar, or willow. Segment C2 is contained within the Lake Manitoba West and Whitemud River sub-basins.

The 500 kV line then passes through the Assiniboine and Red River Basins from the west to the east and includes segments S1 and S2. Five sub-basins (Central Assiniboine, La Salle River, Morris River, Seine River and Cooks/Devils Creek) are intersected by the right of way which crosses the Assiniboine, Red River, Marsh and Rat rivers. The line turns northwest of Steinbach, crossing the Seine River and Fish Creek before extending westward from Springfield (Cooks/Devils Creek sub-basin) to its terminus at the Riel station east of Winnipeg. The majority of watercourses crossed are man-made

agricultural drains, often lacking trees or shrubs in the riparian zone, are dominated by grasses and other forbes, and are generally intermittent with soft substrates and grown-in with emergent vegetation. Natural and man-made watercourses in these sub-basins tend to be dominated by fine, soft substrates and low water velocity. The Red and Assiniboine rivers, ultimately draining into Lake Winnipeg, are the largest rivers crossed, characterized by shorelines of soft substrates, higher flow and riparian buffer zones consisting of forested strips which include Manitoba Maple, cottonwood, aspen, elm, ash and birch, willow, and a variety of shrubs.

### 3.0 METHODS

Stream crossing sites were evaluated using Manitoba Hydro's Daily Inspection Reports and site visits in the summer of 2017 to assess the adherence to prescribed mitigation. Mitigation measures included those prescribed in the Bipole III Transmission Project Aquatic Environment Technical Report and the Bipole III Transmission Project Construction Environmental Protection Plans for the AC Collector Lines, Construction Power Line and Station, KGEL, RGEL and segments N1, N2, N3, N4, C1, C2, S1 and S2.

Daily Inspection Reports on Manitoba Hydro's Environmental Protection Information Management System (EPIMS) were reviewed to identify where mitigation compliance was documented during construction and to focus field studies.

Field studies consisted of an aerial reconnaissance at each site on the 500 kV Transmission Line and the 230 kV AC Collector Lines. Stream crossing sites rated as 'important/moderate' fish habitat were chosen for closer examination to obtain an overall evaluation of the state of the site. Once at the site, buffers were evaluated by measuring their width from the stream or floodplain and comparing to the width prescribed, as well as evaluating the amount of vegetation left in the buffer and the clearing method used. Stability of stream banks and floodplain were evaluated visually and rutting, slumping, or other damage to the ground noted. The presence of slash or disturbed sediment within the buffer and below the tree line/high water mark (HWM) was noted, as well as any evidence of erosion.

Vehicle crossings were evaluated for appropriate grade and angle across the stream, and the presence of any organic debris remaining from a temporary crossing. If any erosion control measures were in place (e.g., ice/snow bridges, blankets, silt fences) their effectiveness was evaluated. Tower locations were assessed to determine if they adhered to prescribed mitigation. Photos of sites were taken to capture the overall state of the sites as well as any particular concerns. Any further reclamation needed to meet the prescribed mitigation was noted and if a follow-up site visit was needed for further monitoring of reclamation this was also noted.

## 4.0 RESULTS

Manitoba Hydro is constructing four 230 kV AC Collector Lines (K61H, K62H, K63H, K64H) from the Keewatinohk CS to the Henday CS. These Collector Lines will run along a length of approximately 27.4 km. A fifth 230 kV AC Collector Line (L61K) will also run in a northerly direction from Long Spruce GS to Keewatinohk CS along a length of approximately 53.2 km. A Construction Power Line (KN36) runs from Limestone Construction Power Station to the Keewatinohk Construction Power Station along a length of approximately 28.8 km. A 1380 km 500 kV DC Transmission Line is being constructed from the Keewatinohk CS to its terminus in the south at the Riel CS. At both Keewatinohk CS and Riel CS, a ground electrode will be connected to the CS by a low voltage overhead line.

Site visits to stream crossings were conducted between June 26 and June 29, 2017. At the time of the monitoring, construction was at various stages of completion in each segment. The Construction Power Line (KN36) as well as all five Collector Lines between Keewatinohk CS and the Henday CS were complete at the time of monitoring. Along the 500 kV Transmission Line, clearing of the riparian buffer zones (RBZ) was complete in segments N1 through N4, C1, C2 and S1. S2 consists of primarily grasses and forbes and does not require clearing at most sites. Tower foundations and anchors have been installed adjacent to all crossings in segments N1 through N4, C1, and C2. Tower anchors in S1 and S2 were completed in most areas. Towers were present at 54% and complete at 20% of all watercourse crossings. Conductors were strung adjacent to all KGEL sites but no towers were present at any of the RGEL sites.

### Site Visits

Aerial surveys were conducted at 412 stream crossings with ground surveys at a subset of sites with the focus on higher quality fish habitat or sites with notable non-compliance. Construction at most stream crossings was compliant with prescribed mitigation where applicable, depending on the stage of construction. Of the sites that were non-compliant (15), remediation is recommended at most sites with follow-up site visits in 2018 at 10 sites. The primary issue requiring remediation is the presence of slash, woody debris and/or sediments accumulating in-channel. Secondary issues include insufficient erosion protection and failure to remove temporary crossings. A summary of sites where non-compliance was observed is found in Table 1 and a summary of compliance with mitigation for all sites is available in Appendix 1.

### *AC Collector Lines*

Construction of all five of the Collector Lines was complete at the time of inspection in 2017. Of the 37 watercourse crossings, compliance was observed at all but one site (Table 1). As in 2016, woody debris was still observed accumulating instream at the

vehicle crossing at Brooks Creek (CL-Aqua-104) (Photos 1 and 2). Removal of the debris from the channel is recommended, followed by an inspection in 2018, as this stream has been identified as important fish habitat.

### *500 kV DC Transmission Line*

#### *Segment N1*

Construction on the N1 segment included completion of clearing of the RBZs at all but one of the 68 watercourse crossings, an unnamed tributary of the Burntwood River which is characterized by steep valley walls (N1-Aqua-167). At the time of inspection tower footings were complete adjacent to all watercourse crossings and towers were present at half of all crossing sites. Non-compliance was recorded at seven sites, of which remediation and follow-up monitoring in 2018 is recommended for six (Table 1). In 2016, eight sites were identified as requiring remediation and a follow-up visit in 2017. These sites are discussed below together with the new sites where non-compliance was observed.

#### Erosion and Sediment Control

In 2016 erosion control measures were recommended at the Limestone River (N1-Aqua-129; photo 3) and an unnamed tributary of the South Moswakot River (N1-Aqua-133; photo 5) where naturally formed drainage channels were identified in the RoW and were draining into the main watercourse. Although no erosion control measures were implemented in 2016 or 2017, the channels have not increased in size (Photos 4 and 6). As of 2017 vegetation is actively growing within the channels which will provide erosion protection and therefore erosion control measures may not be necessary at this time. Both sites are considered to have important habitat for fish and therefore a follow-up visit is recommended in 2018 to assess vegetation regrowth and bank stability.

Bank slumping was noted on the southern bank of the Burntwood River (N1-Aqua-173) in both 2015 and 2016 and appeared to have increased slightly (photos 7 and 8). During monitoring in 2017 slumping does not appear to have increased and re-vegetation is occurring, albeit slowly (photos 9 and 10). Although no erosion was noticed the current vegetation may not be sufficient to stabilize the bank therefore a follow-up visit in 2018 is recommended.

#### Instream materials (slash/sediment/other)

The removal of slash from below the HWM was recommended for sites N1-Aqua-135, 156, and 167 in 2016. Slash and woody debris remained in the watercourses when visited in 2017 (photos 11, 12, and 13). Removal of debris is recommended due to the potential for impairment of water flow and fish movements and a follow-up visit is required in

2018 but only for sites N1-Aqua-156 and 167. Site N1-Aqua-135 is considered to be marginal for fish habitat therefore clean-up of debris is recommended but a follow-up in 2018 is not necessary.

#### Temporary Crossing

The temporary stream crossing on the centerline trail within the RoW at site N1-Aqua-169 was not removed following construction in 2015 and was still intact at the time of the site visit in 2017. The temporary crossing consists of a thick layer of wood slash and debris and if allowed to remain in the stream may restrict water flow and fish movements as well as alter fish habitat (photos 14 and 15). Although the stream is not considered important fish habitat, removal of the temporary crossing is recommended as well as a follow-up site inspection in 2018.

#### *Segment N2*

Construction on segment N2 included the completion of the clearing of the RoW and the RBZs as well as the installation of the tower foundations/anchors at all watercourse crossings. Completed towers were observed at 36 of the 67 crossings. In 2017, only two sites were in non-compliance with respect to the prescribed mitigation measures (Table 1) compared with three sites identified in 2016.

#### Instream materials (slash/sediment/other)

Woody debris was observed instream at the vehicle crossing at sites N2-Aqua-103 (photo 16) and N2-Aqua-119 (Photo 17) in 2016 and was still present when inspected in 2017 (photos 18 and 19). To avoid the potential for the restriction of water flow and impediment to fish passage at N2-Aqua-103 it is recommended the debris be removed and placed above the HWM. At N2-Aqua-119 due to the lack of fish habitat and the high degree of beaver activity in the vicinity of the area affected by the blockage, no remediation is required.

Sediment accumulation within the channel at the vehicle crossing of N2-Aqua-112 (Isbister Creek), as well as a large plank placed across the stream as a temporary bridge adjacent to it (likely by local resource users), was observed partially blocking the channel of Isbister Creek in 2016 (Photo 20). Inspection of the site in 2017 showed removal of the plank and no sediment accumulation within the channel therefore no follow-up is required (photo 21).

#### *Segment N3*

Construction on segment N3 included the completion of the RoW and RBZ clearing and the installation of all the tower foundations and anchors located near watercourse

crossings. In addition, towers were complete at the first 13 crossing sites (N3-Aqua-100 to 112) and were present at a further 20 crossing sites. Of the 39 watercourse crossings evaluated, non-compliance was recorded at four sites. In addition, three sites were re-visited in response to recommendations in 2016, which included continued monitoring of the southern bank at the Saskatchewan River (N3-Aqua-134) and the banks at the Mitishto River (N3-Aqua-103) (Table 1).

#### Instream materials (slash/sediment/other)

Woody debris was observed instream along the vehicle crossing on the bypass route at site N3-Aqua-102 (Photo 22) in 2016. As of 2017 the woody debris at the site was no longer present and a follow-up inspection is not required for either site.

#### Erosion and Sediment Control

Active re-vegetation of the banks at N3-Aqua-103 was recommended in 2015 and 2016 to augment the erosion control measures (i.e. straw matting) already in place on the steep banks of the Mitishto River (photos 23 and 24). Shrubs and forbes are slowly re-vegetating the banks through the matting and in 2017 the banks appeared stable with no sign of erosion (photos 25 and 26). Continued monitoring of the site for bank stability and state of re-vegetation is not necessary in 2018.

Steep banks were observed at N3-Aqua-106 and 107 which are susceptible to erosion. The centerline trail at N3-Aqua-106 consisted of a mulch layer reducing potential erosion, but the centerline trail at N3-Aqua-107 consisted of erosion prone exposed soil (photos 27 and 28). Implementation of erosion control and a follow-up site visit in 2018 are recommended.

Bank slumping was noted on the southern bank of the Saskatchewan River (N3-Aqua-134) in 2015 (photo 29). The site visit in 2016 showed a significant growth of shrubs and forbes along the bank potentially providing sufficient stability to mitigate against further slumping (photo 30). In 2017, growth of shrubs and forbes continued although due to high water in 2017, a large portion of the RoW was under water but no erosion was visible (photo 31).

#### *Segment N4*

Of the 42 watercourse crossings evaluated in segment N4, clearing of the RBZ and installation of tower anchors was complete at all sites in the vicinity of watercourse crossings. Towers were also present at 13 sites along N4. No Non-compliance issues with respect to prescribed mitigation measures were recorded at any site along N4 in 2017. However, one site (N4-Aqua-114) flagged in 2016 for having instream woody debris was revisited.

### Instream materials (slash/sediment/other)

In 2016, an accumulation of sediment and woody debris was noted in the channel within the RoW at N4-Aqua-112, an unnamed tributary of Lake Winnipegosis considered to be important habitat for fish (Photo 30). Although water flow was not completely blocked, removal of the woody debris and excavation of the sediment was recommended to avoid any possible restriction to fish movement in the future. In 2017, no significant woody debris remained in the crossing and the site does not require any further remediation or follow-up (Photo 33).

### *Segment C1*

Of the 27 watercourse crossings evaluated in segment C1, clearing of the RBZs and installation of tower anchors had been completed at all crossing sites. In addition, towers were completed at 13 of the crossing sites and were in place at a further seven crossing sites. Non-compliance with respect to the prescribed mitigation was not observed at any site in segment C1. However, one site (C1-Aqua-125) flagged in 2016 for having erosion and sediment accumulation in the channel was revisited in 2017.

### Erosion and Sediment Control

Erosion and sediment accumulation resulting in the widening or alteration of the channel path at the vehicle crossing at German Creek (C1-Aqua-125) was brought to Manitoba Hydro's attention in early June 2016 (Photo 34). No erosion or sediment accumulation was noted in 2017 but high water levels prevented proper assessment of the site (photo 35). The crossing also appears to be used by livestock which may be the main cause of erosion at the site.

### *Segments C2, S1 and S2*

All stream crossings on segments C2, S1 and S2, where construction occurred and streams were crossed were compliant with the prescribed mitigation measures outlined in the EnvPP.

The stage of construction varied in these segments. At the time of the monitoring, clearing of the RBZs had been completed at all 35 watercourse crossings of segment C2.

Of the 32 watercourse crossings evaluated on segment S1, the RBZs required no clearing at the majority of the crossings due to the lack of trees and tall shrubs. Of those sites with trees large enough to require removal (14), clearing of the RBZ was incomplete at Bagot and Rat creeks. Tower anchors were installed at most of the crossing sites in S1.

All but six of the 57 crossings in segment S2 lacked vegetation of a sufficient height to require clearing, as they consisted mainly of agricultural drains. Of those six only the Red

River had not been cleared. Tower anchors/footings had been installed at most of the S2 watercourse crossing sites with towers present at half of the crossings.

*KGEL*

Towers were complete adjacent to all five watercourse crossings present through the KGEL line in 2017. Non-compliance with respect to the prescribed mitigation was only observed at one site, KGEL-Aqua-111. The presence of debris left over from winter work appears to be partially blocking the stream and should be removed (Photo 36). A follow-up visit is recommended in 2018 although the watercourse crossing appears to be marginal for fish habitat.

*RGEL*

Towers were not present at any of the three RGEL sites in 2017 and given their proximity to agricultural land, no clearing of the RoW is necessary. All three stream crossings through the RGEL line were compliant with the prescribed mitigation measures outlined in the EnvPP.

Table 1. Summary of stream crossings on Bipole III segments KGEL, ACCL, N1-N4, C1, C2, S1, and S2 where non-compliance to prescribed mitigation was observed, June 2017.

Segment	ESS ID	Name	Easting	Northing	Habitat Class	Compliance	Issue	Additional Mitigation	2018 Site Visit
CL	CL-Aqua-104	Brooks Creek	797159	6261608	Important	N	Trees/slash in channel	Remove trees/slash	Y
KGEL	KGEL-Aqua-111	unnamed tributary of the Nelson River	446163	6278120	Unknown	N	Trees/slash remains in channel	Remove trees/slash	Y
N1	N1-Aqua-129	Limestone River	728318	6276582	Important	N	Small channel runs within centerline trail in RZ, subject to erosion	Natural re-veg; monitor for erosion	Y
N1	N1-Aqua-133	unnamed tributary of South Moswakot River	713966	6262984	Important	N	Small channel runs within centerline trail in RZ, subject to erosion	Install erosion control	Y
N1	N1-Aqua-156	unnamed tributary of Assean Lake	643387	6233758	Marginal	N	Trees/slash in channel	Remove trees/slash	Y
N1	N1-Aqua-167	unnamed tributary of the Burntwood River	621912	6215061	Marginal	N	Trees/slash in channel	Remove trees/slash	Y
N1	N1-Aqua-169	unnamed tributary of Odei River	619430	6211533	Marginal	N	Temporary crossing in place	Remove temporary crossing	Y
N1	N1-Aqua-172	unnamed tributary of Burntwood River	617341	6208379	No Fish Habitat	N	Trees/slash in channel	No remediation; no fish habitat	N

Segment	ESS ID	Name	Easting	Northing	Habitat Class	Compliance	Issue	Additional Mitigation	2018 Site Visit
N1	N1-Aqua-173	Burntwood River	616194	6206740	Important	N	Slumping and erosion of SW bank	Install erosion control	Y
N2	N2-Aqua-103	unnamed tributary of Brannigan Creek	609674	6196997	Marginal	N	Trees/slash in channel	Remove trees/slash	N
N2	N2-Aqua-119	unnamed tributary of Partridge Crop Lake	594113	6172024	Marginal	N	Trees/slash in channel	None. Beaver Impacted	N
N3	N3-Aqua-104	Unnamed tributary of Mitishto River	478723	6050185	Marginal	N	Trees/slash in trib to Mitishto	Remove trees/slash	N
N3	N3-Aqua-105	Unnamed tributary of Mitishto River	476178	6049315	Marginal	N	Trees/slash in trib to Mitishto	Remove trees/slash	N
N3	N3-Aqua-106	Unnamed tributary of Mitishto River	473865	6048581	Marginal	N	Steep cut banks may lead to erosion	Install erosion control	Y
N3	N3-Aqua-107	Unnamed tributary of Mitishto River	470609	6047554	Marginal	N	Steep cut banks may lead to erosion	Install erosion control	Y

RZ = riparian buffer zone

## 5.0 MAPS

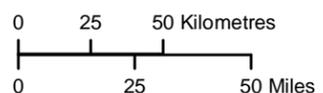


### Bipole III Transmission Project

- Project Infrastructure**
- Final Preferred Route
  - ◆ Converter Station
- Infrastructure**
- ◆ Converter Station
  - ⊙ Generating Station
  - Transmission Line - 230 kV and 500 kV
- Map Tile Index - 1:50,000**
- Map Series Tile
  - Map Tile
- Landbase**
- Community
  - First Nation
  - National/Provincial Park



Coordinate System: UTM Zone 14N NAD83  
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## Index of Map Series

Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

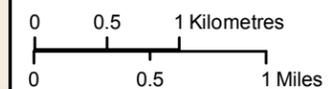
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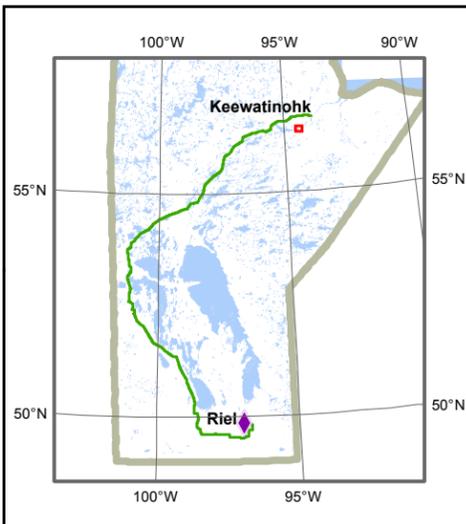
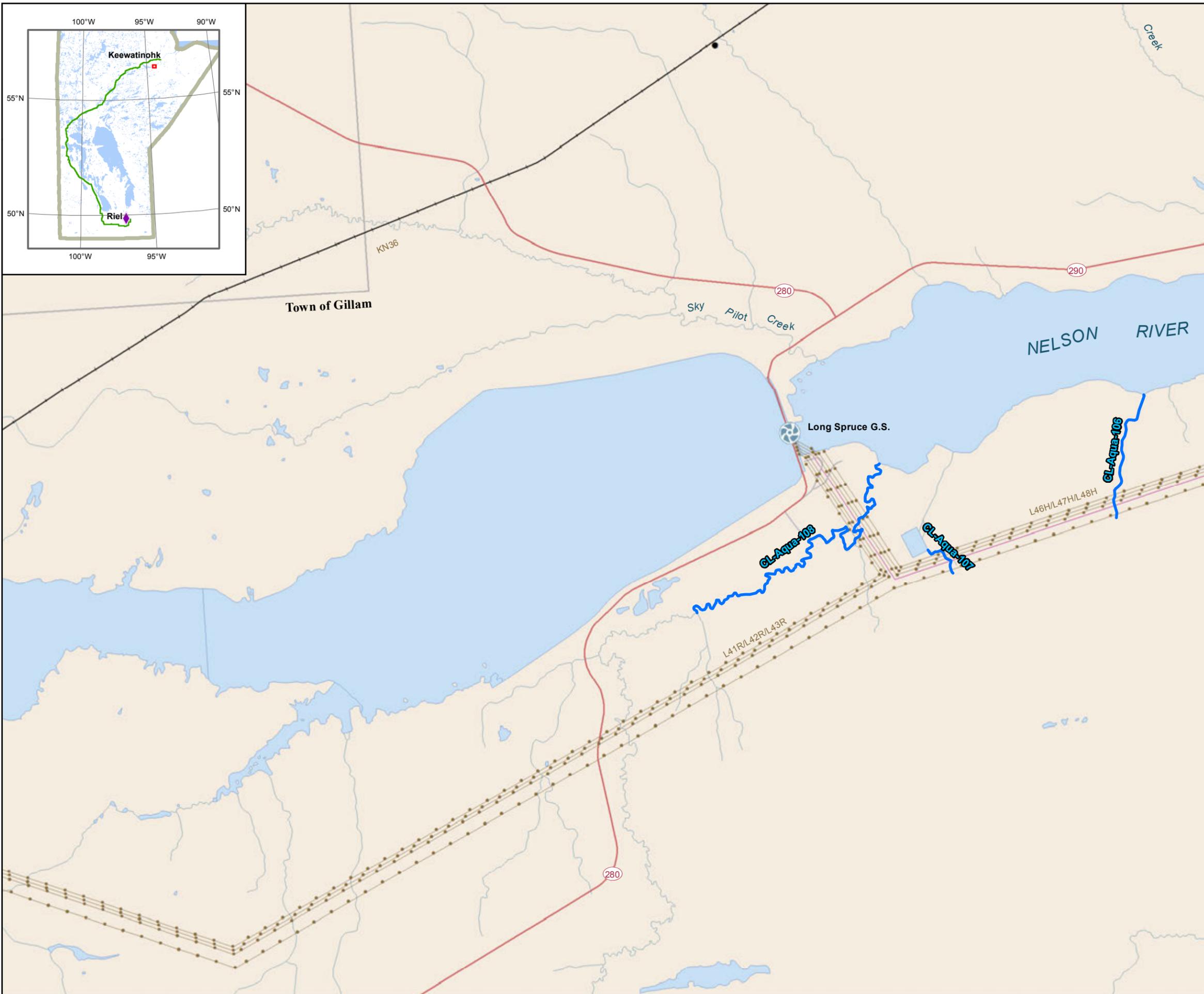
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### Bipole III Transmission Project

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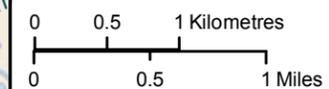
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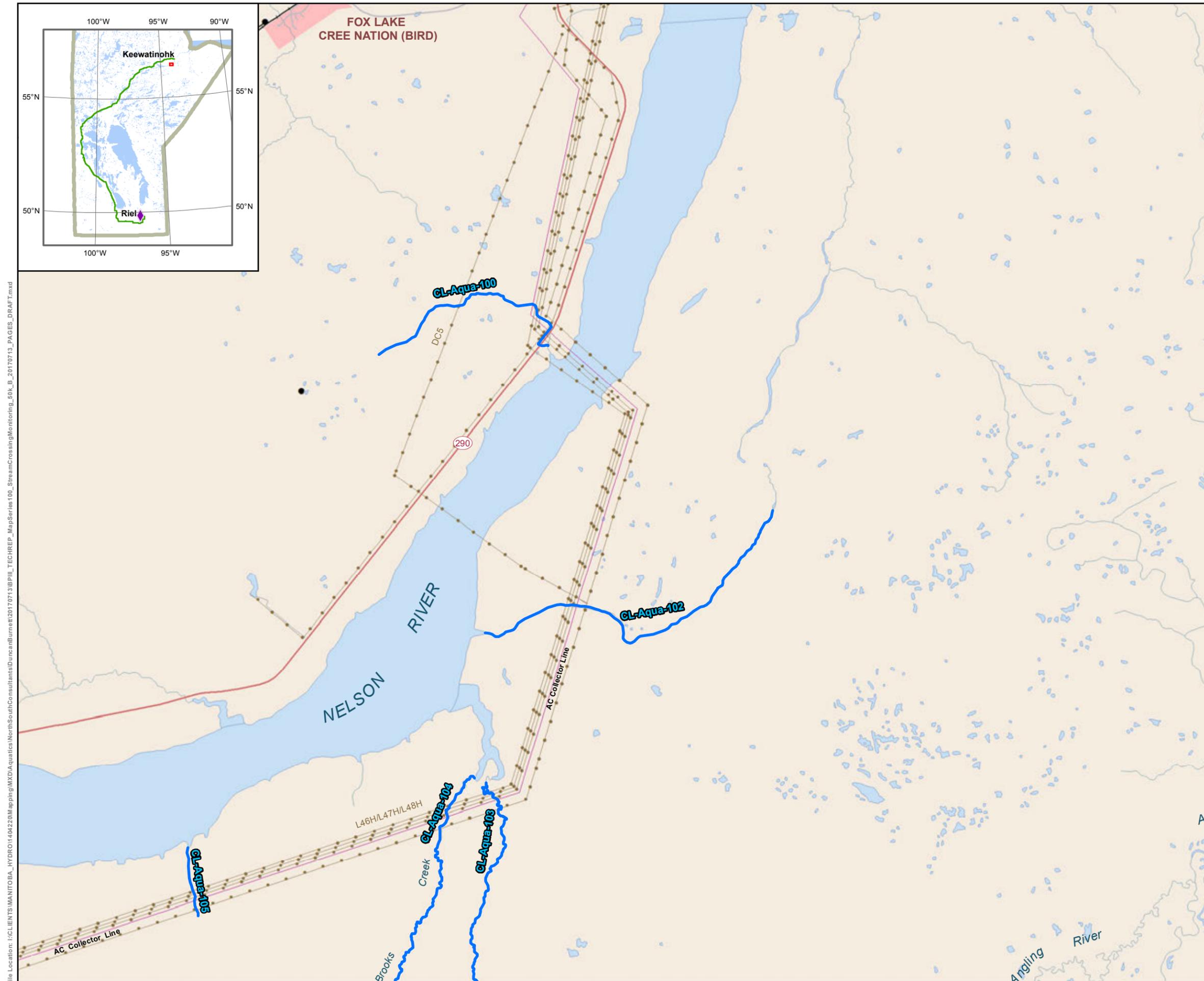
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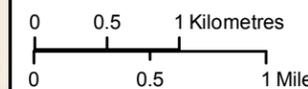
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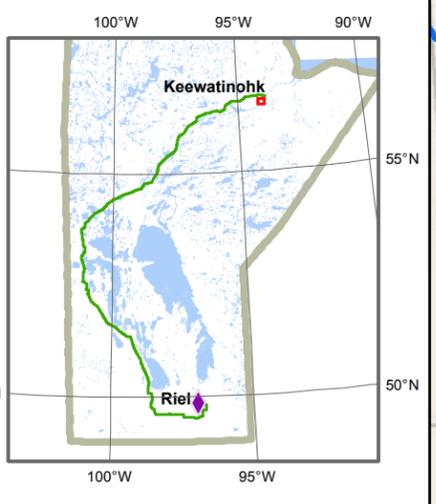
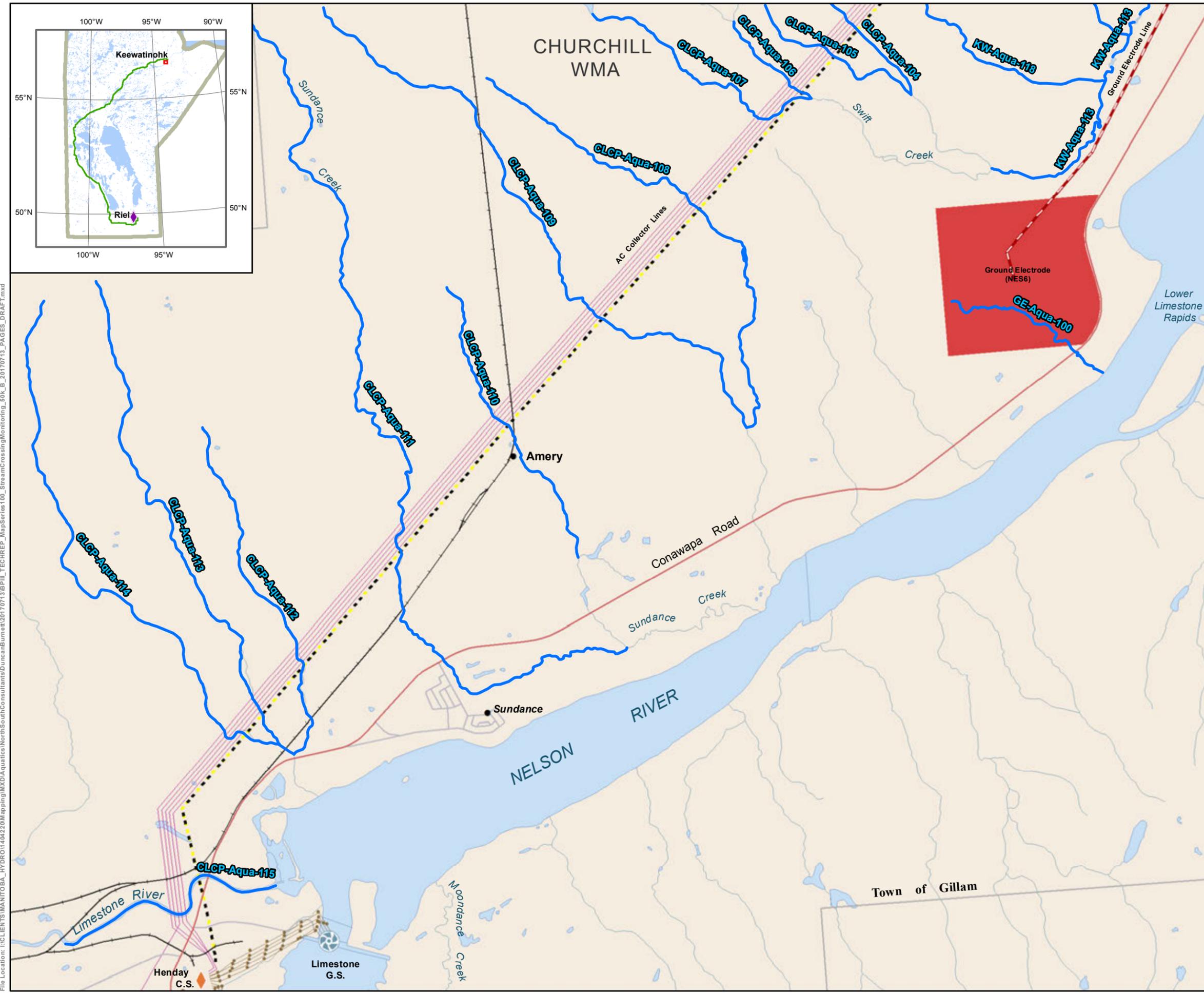
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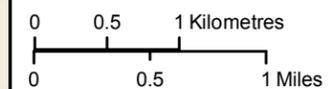
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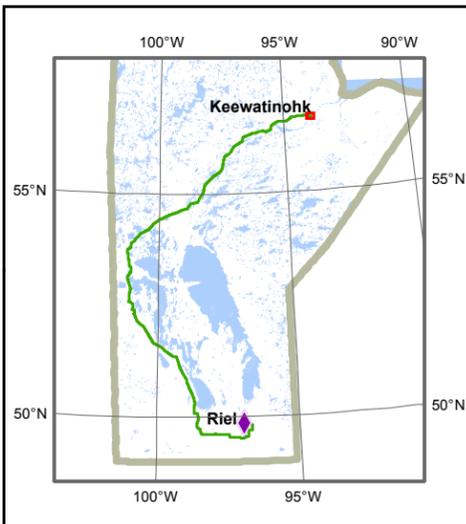
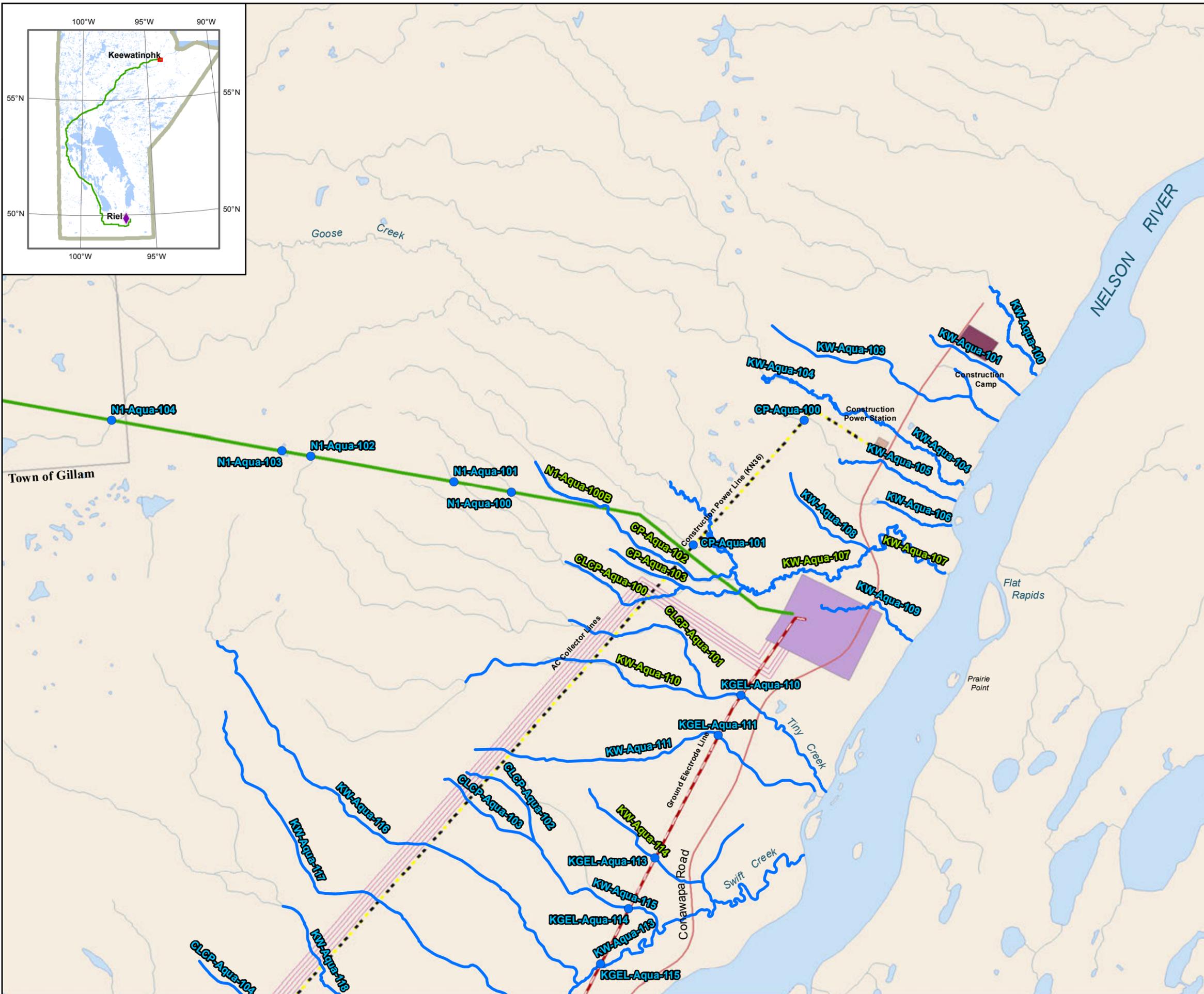
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## Bipole III Transmission Project

### Project Infrastructure

-  Final Preferred Route
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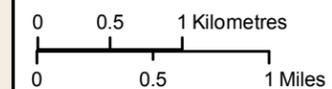
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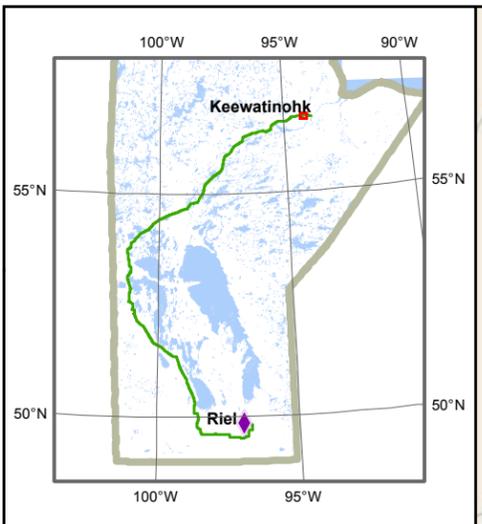
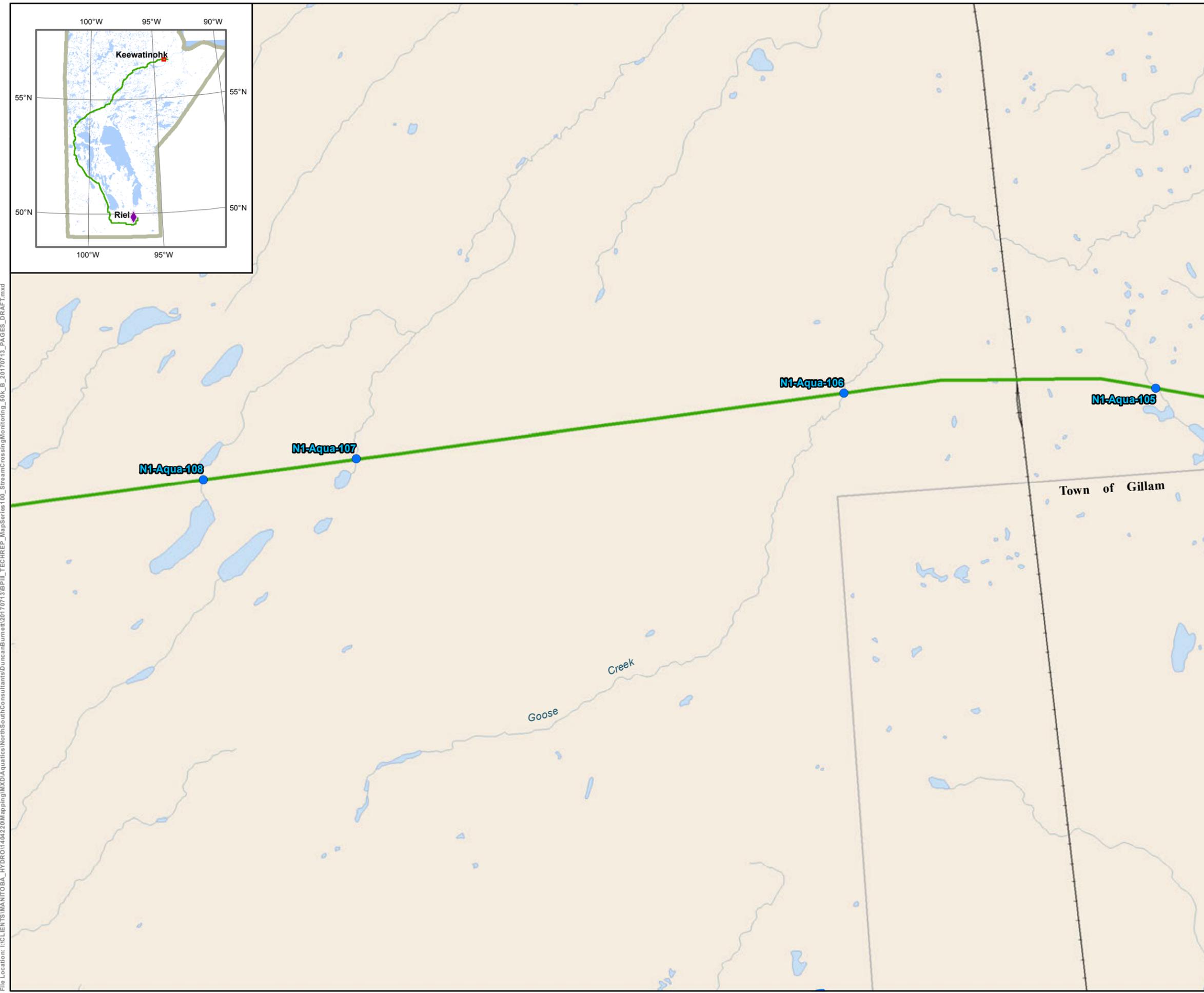
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## Bipole III Transmission Project

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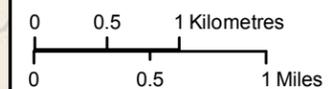
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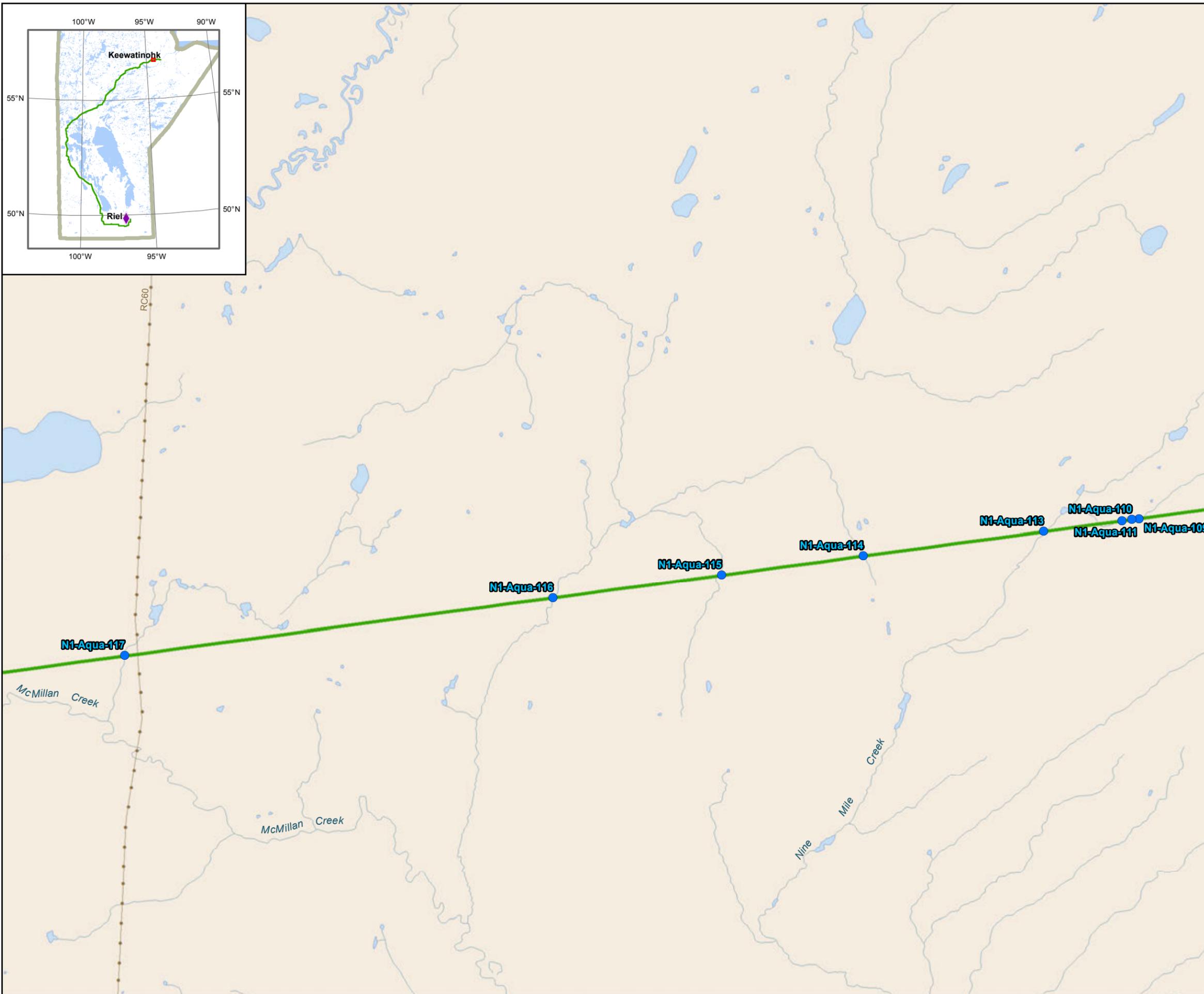
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## Bipole III Transmission Project

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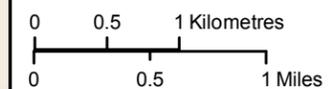
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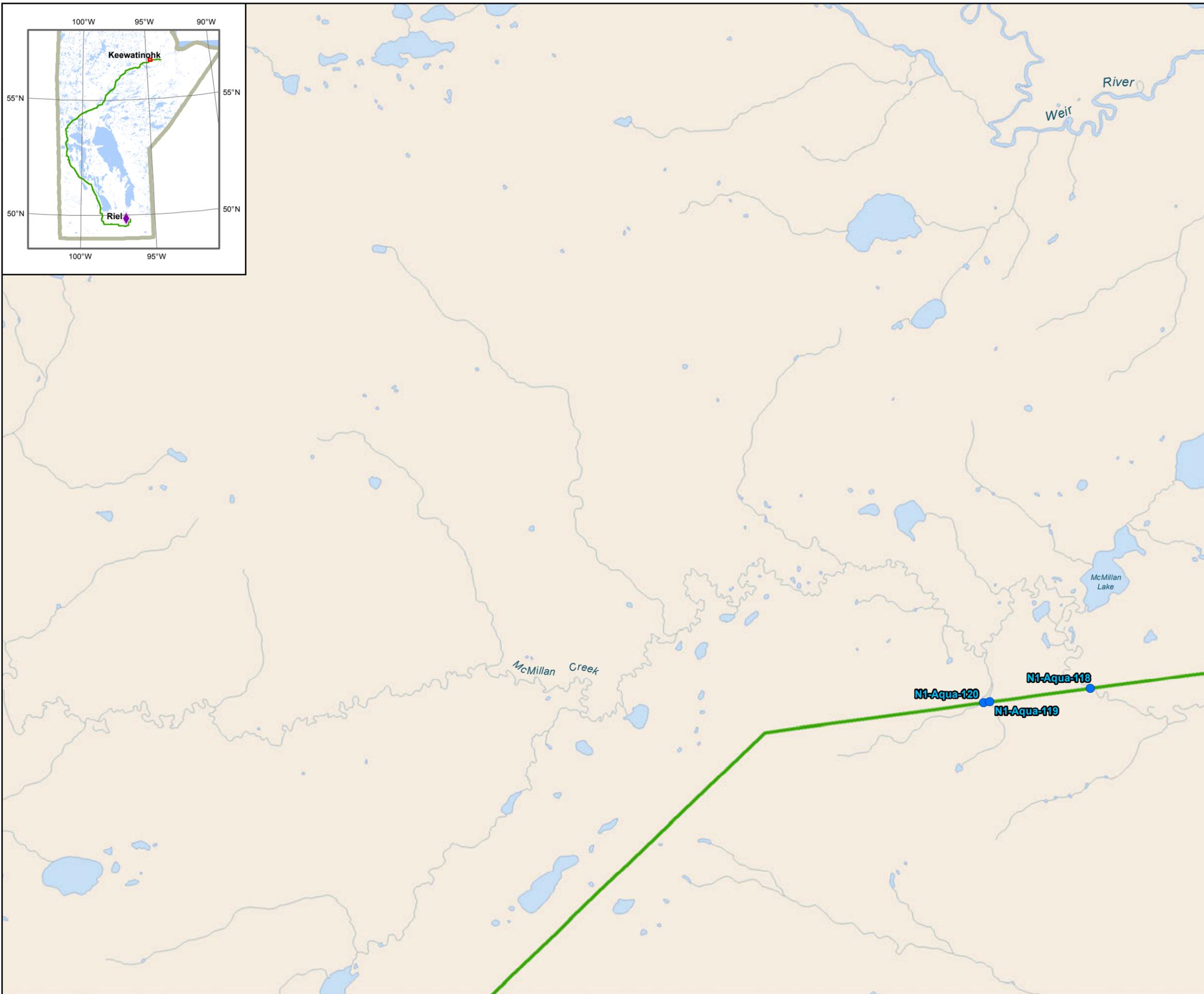
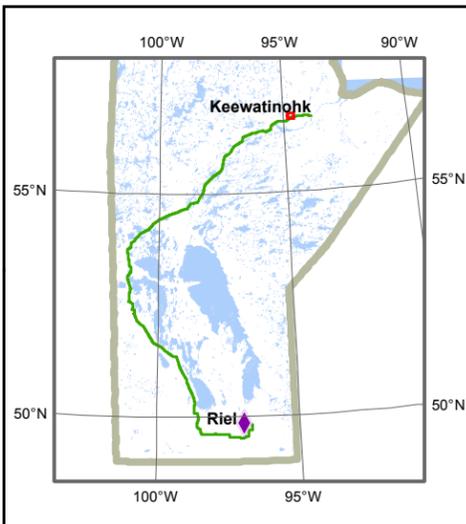
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## Bipole III Transmission Project

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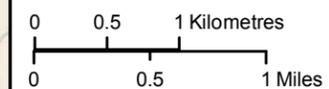
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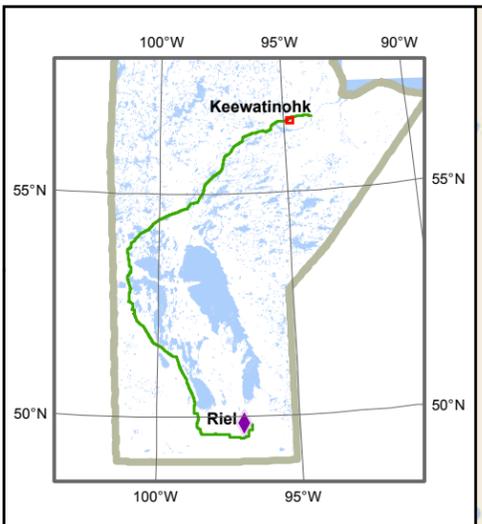
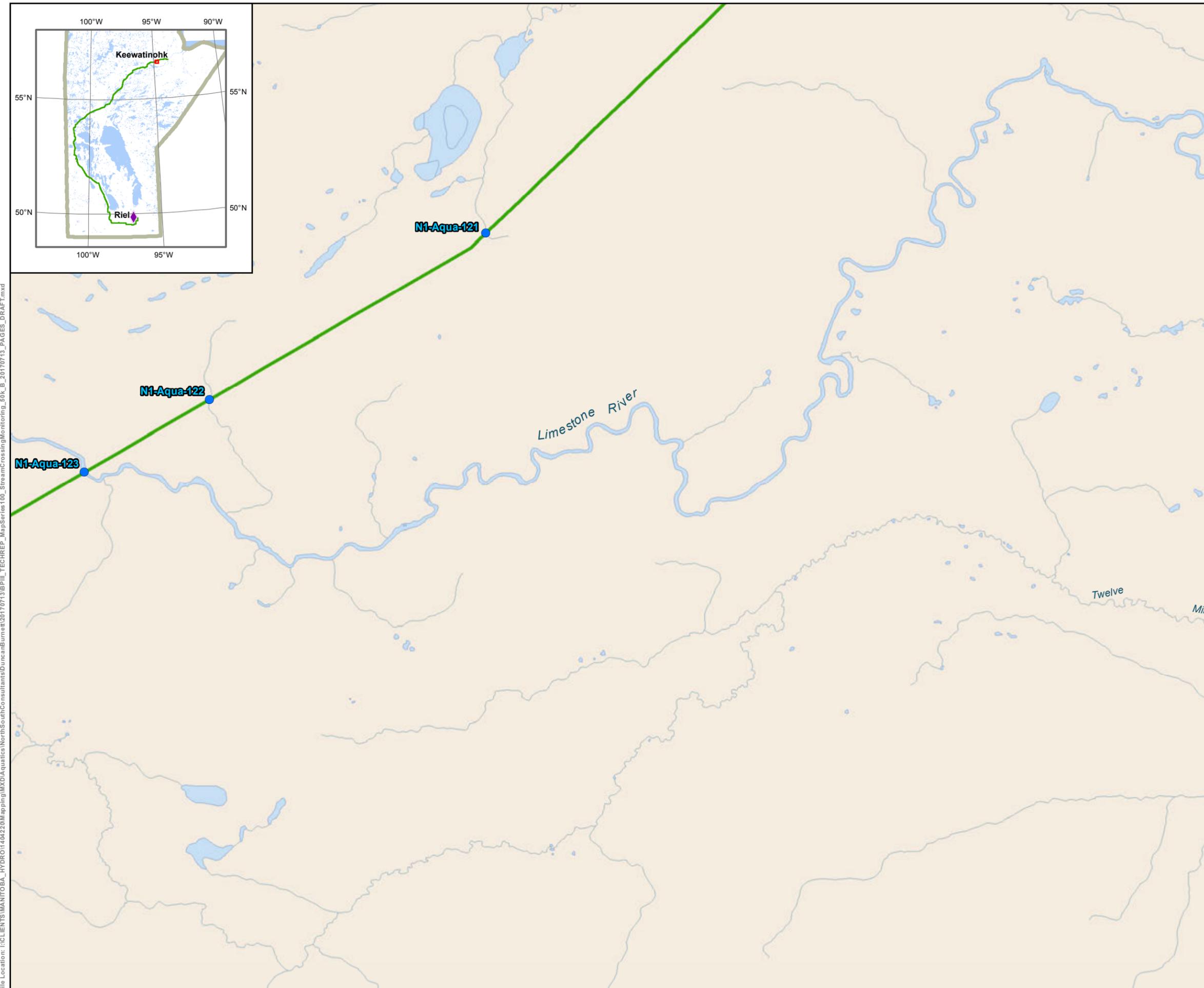
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### Bipole III Transmission Project

#### Project Infrastructure

-  Final Preferred Route
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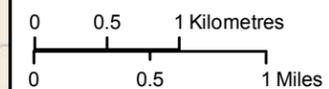
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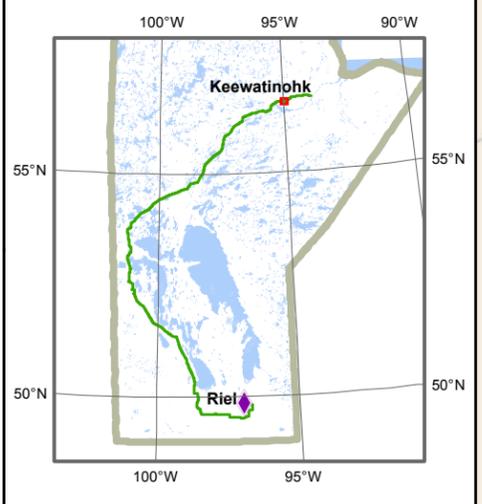
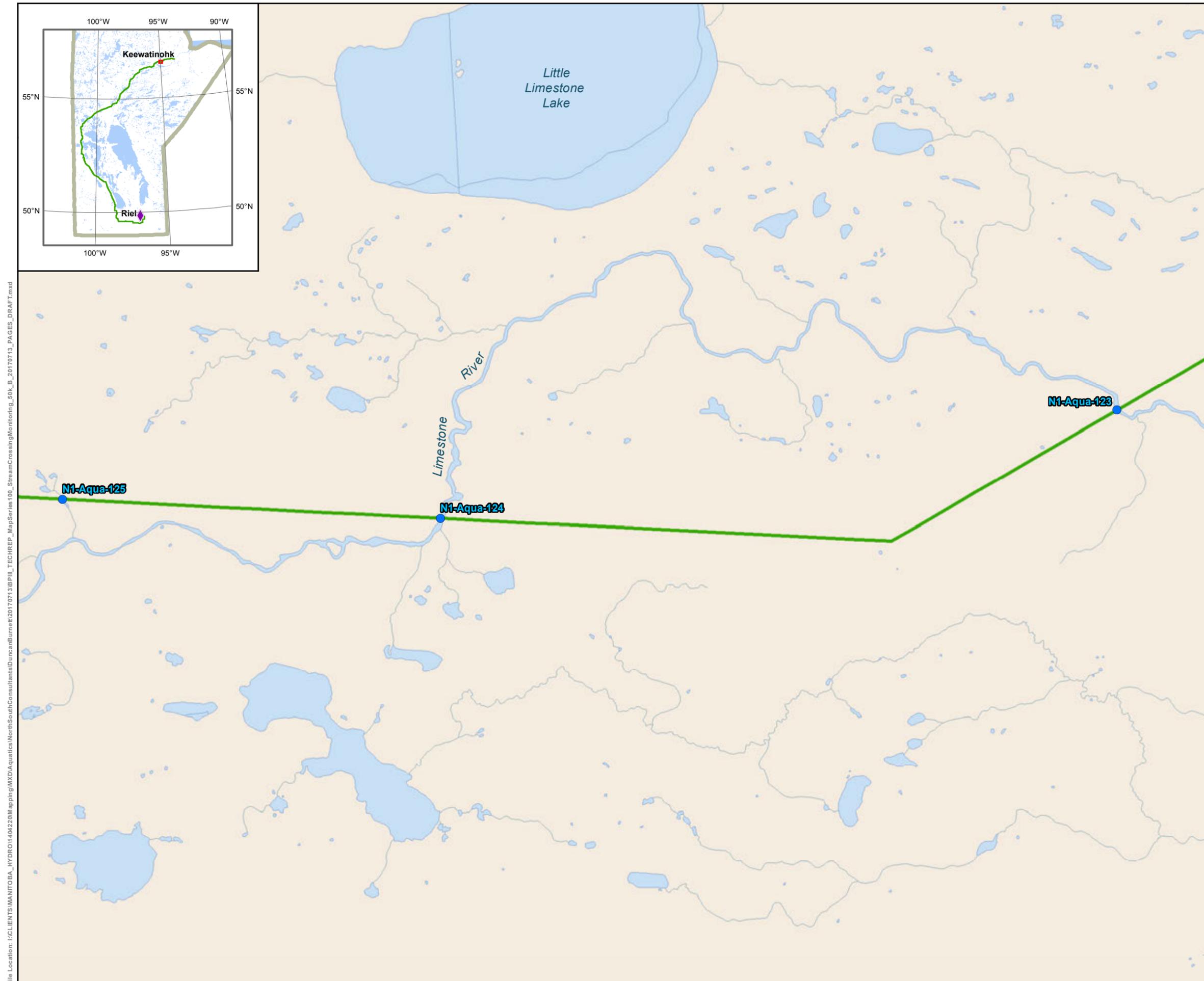
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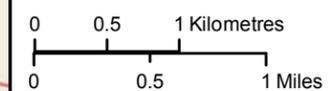
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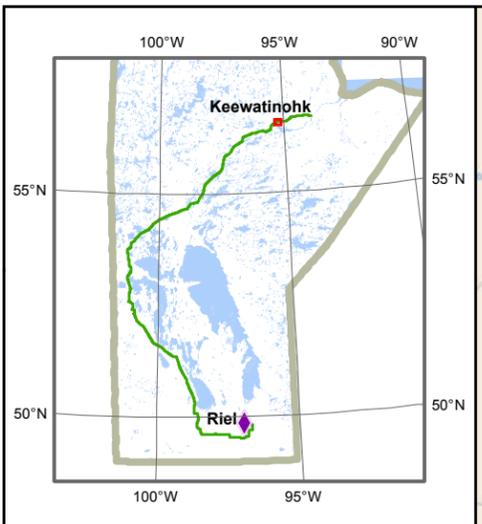
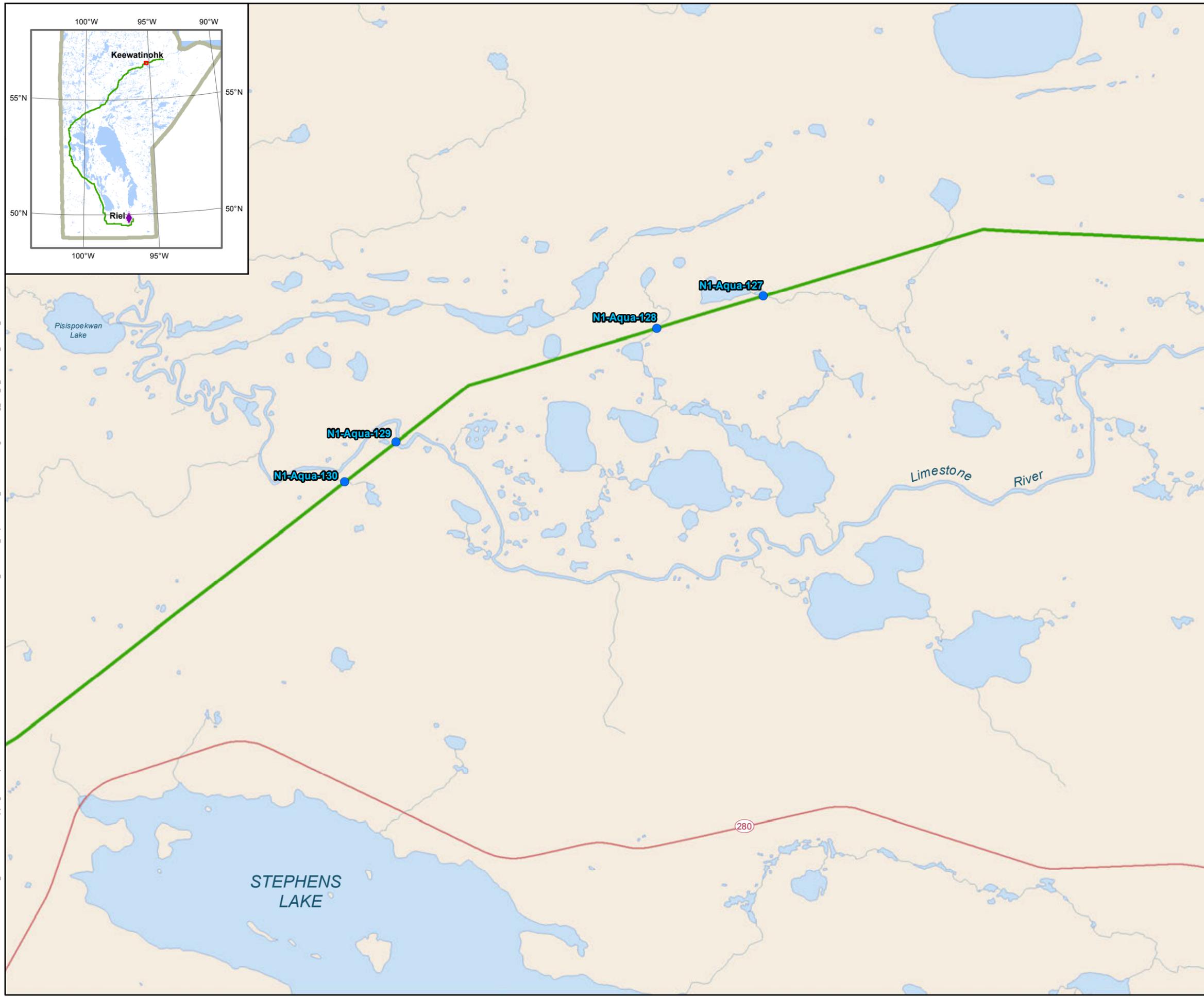
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## Bipole III Transmission Project

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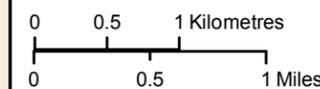
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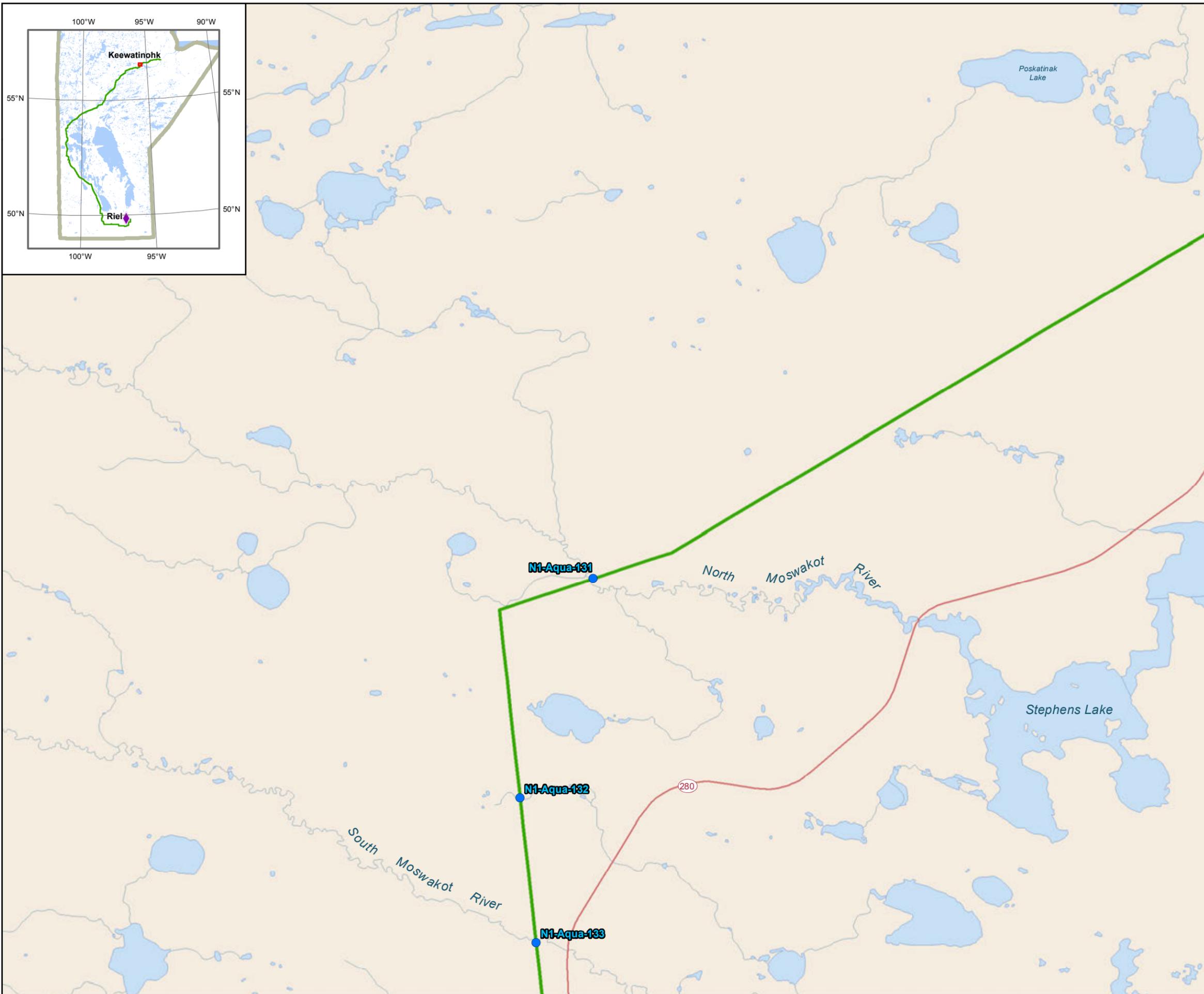
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### Bipole III Transmission Project

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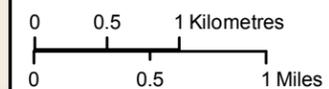
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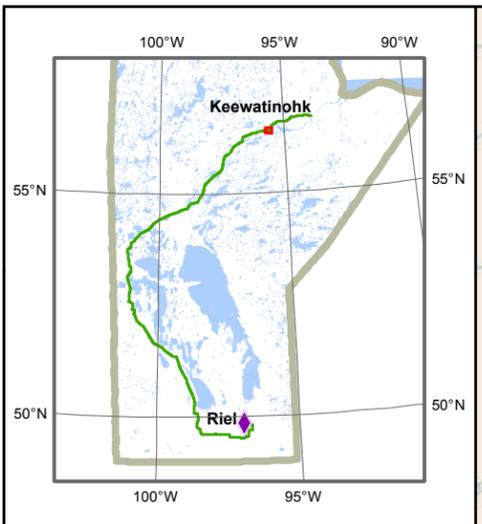
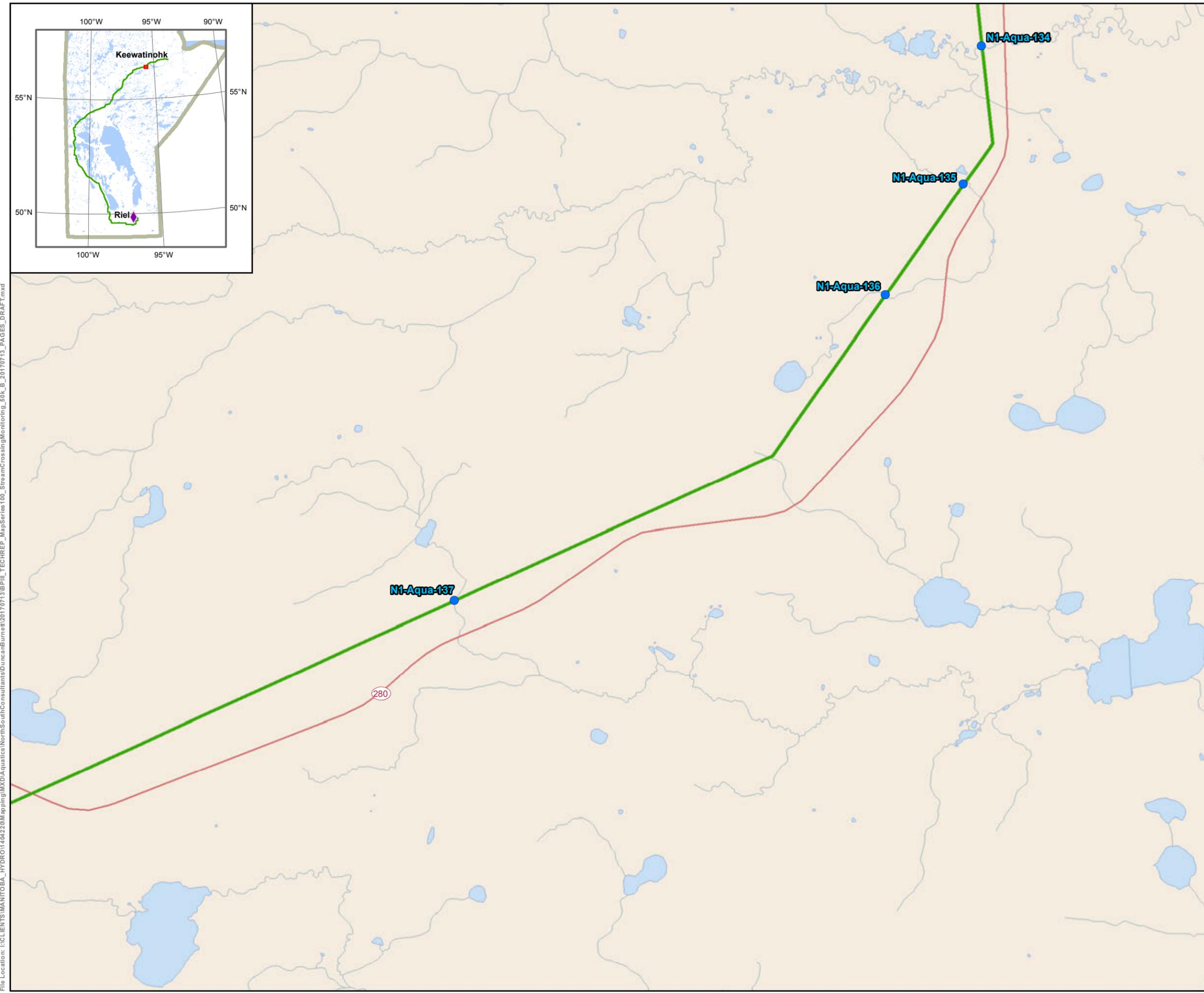
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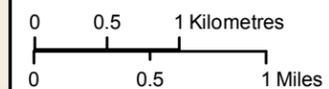
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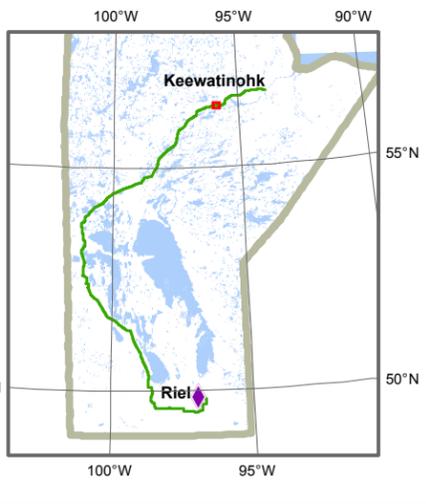
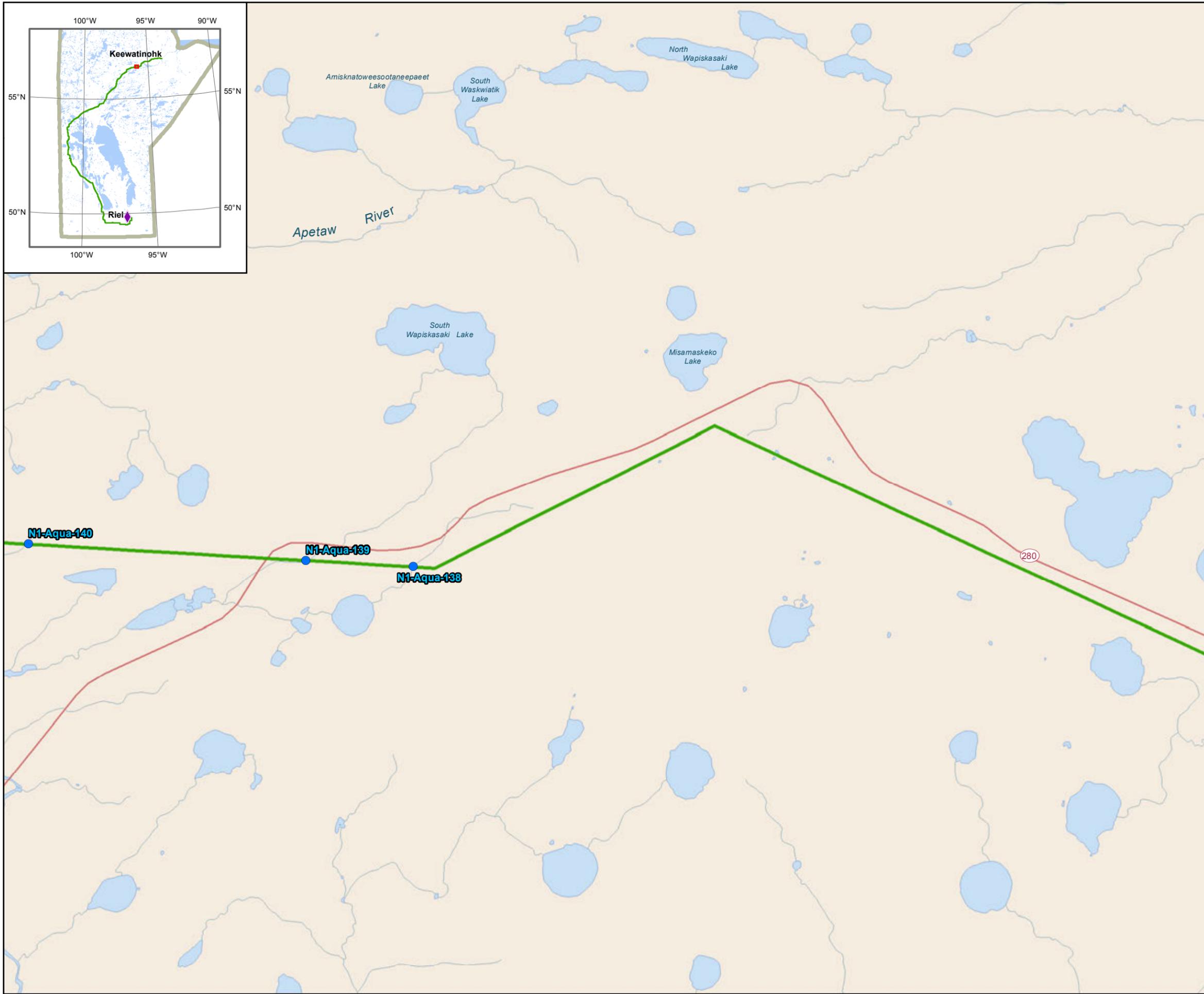
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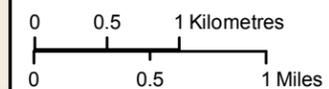
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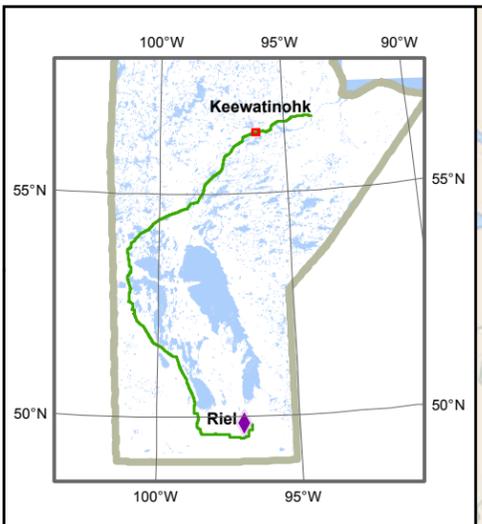
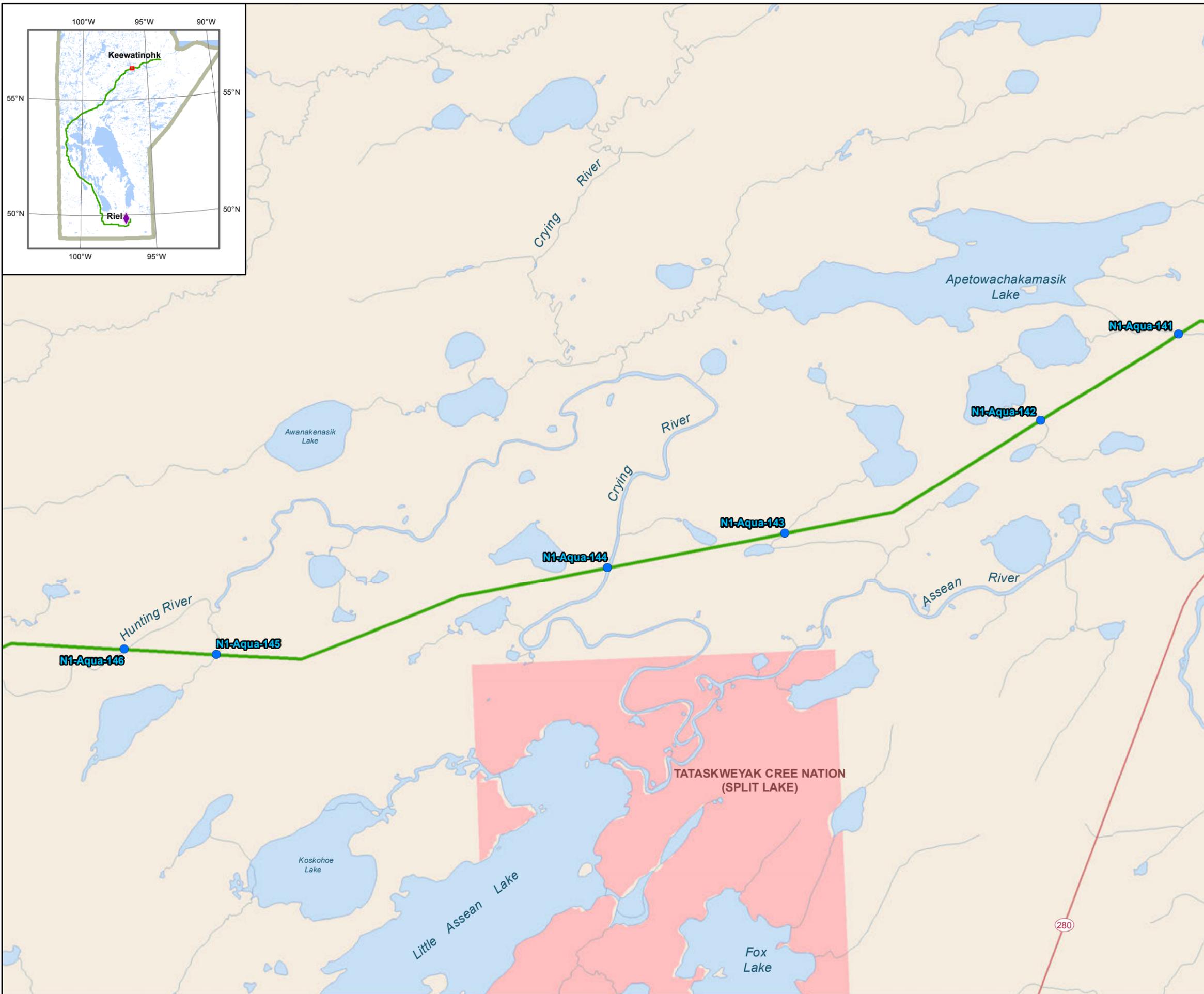
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- Rural Municipality
- First Nation
- National/Provincial Park

Coordinate System: UTM Zone 14N NAD83  
 Data Source: MBHydro, ProvMB, NRCAN  
 Date Created: July 13, 2017



## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
-  Ground Electrode Line
-  Ground Electrode Site
-  Construction Power (KN36)
-  Construction Power Site
-  Construction Camp Site

#### Infrastructure

-  Converter Station
-  Generating Station
-  Electrical Station

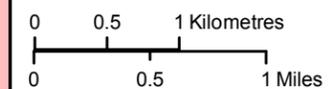
#### Monitoring Location

-  Aquatics Monitoring Site 2017
-  Aquatics Monitoring Site 2017

#### Landbase

-  Community
-  City / Town
-  Rural Municipality
-  First Nation
-  National/Provincial Park

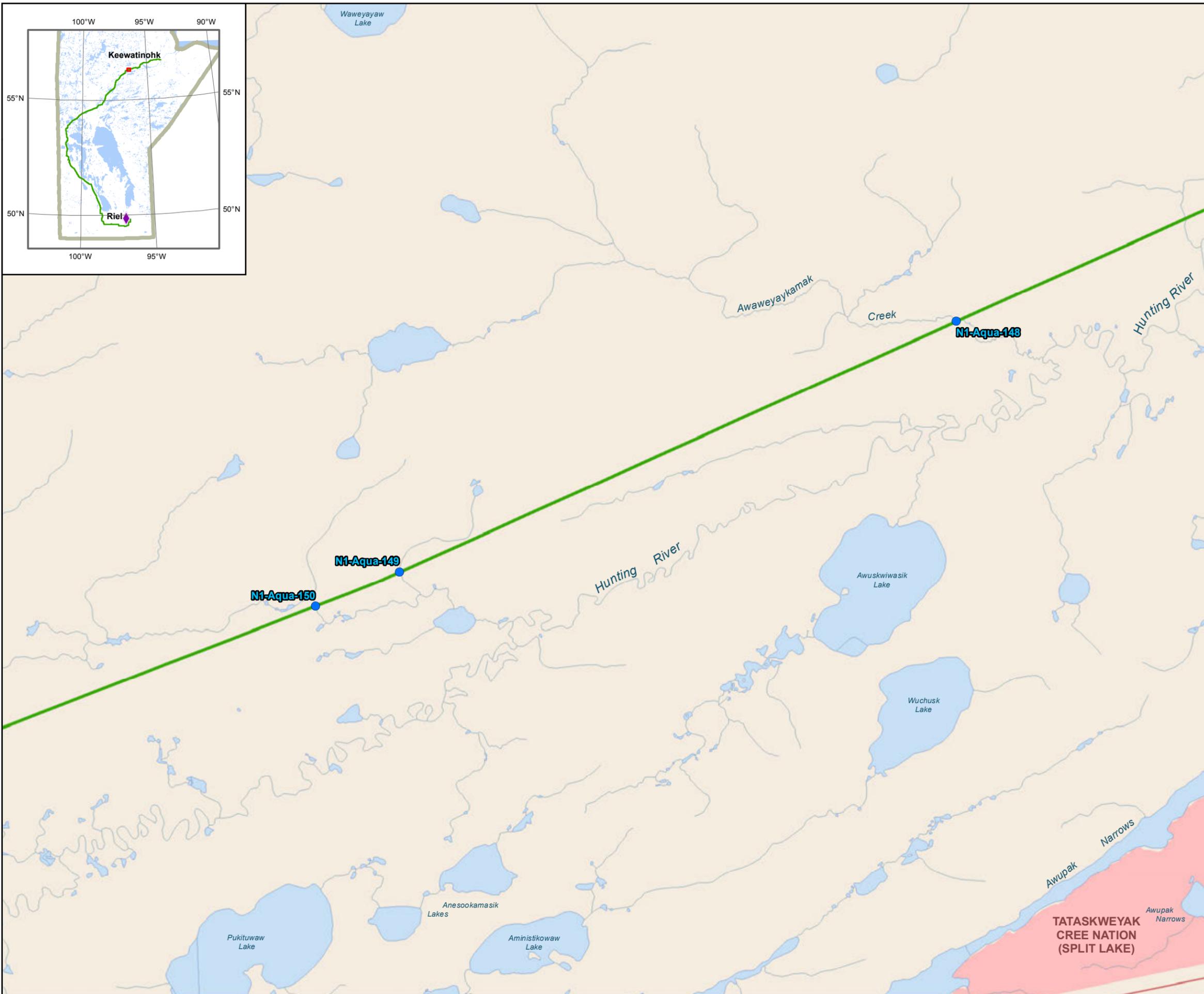
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## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

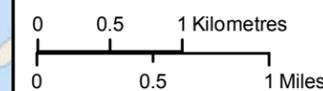
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

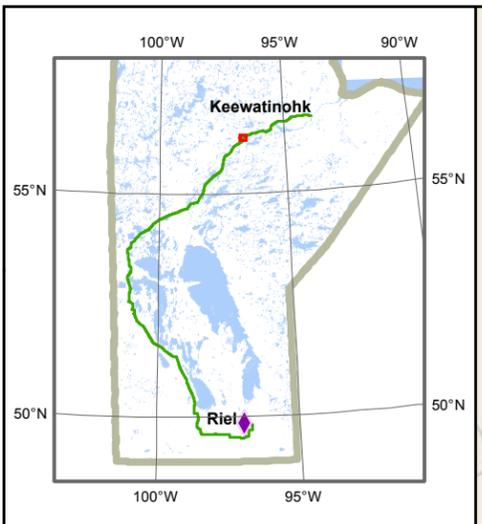
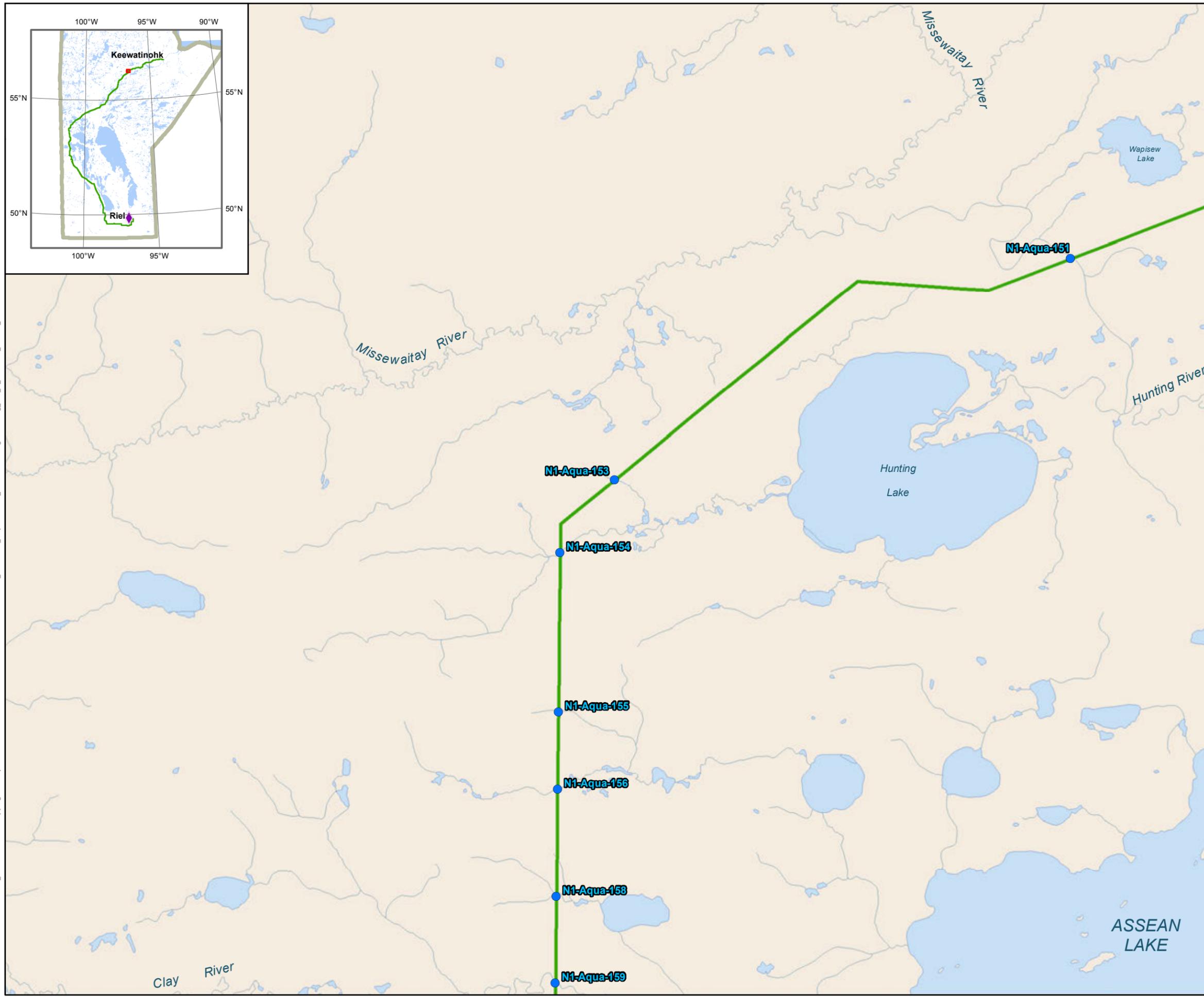
- Community
- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

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## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

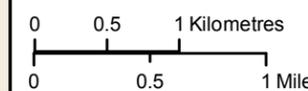
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

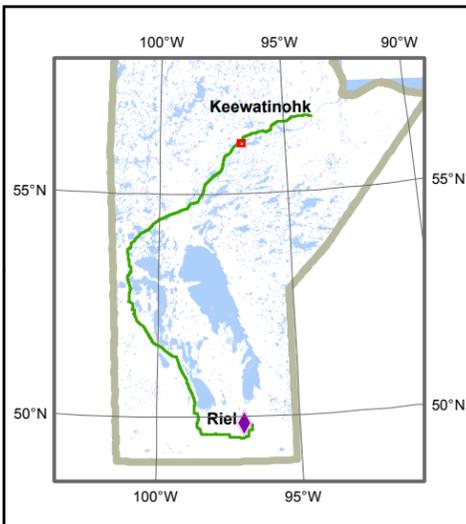
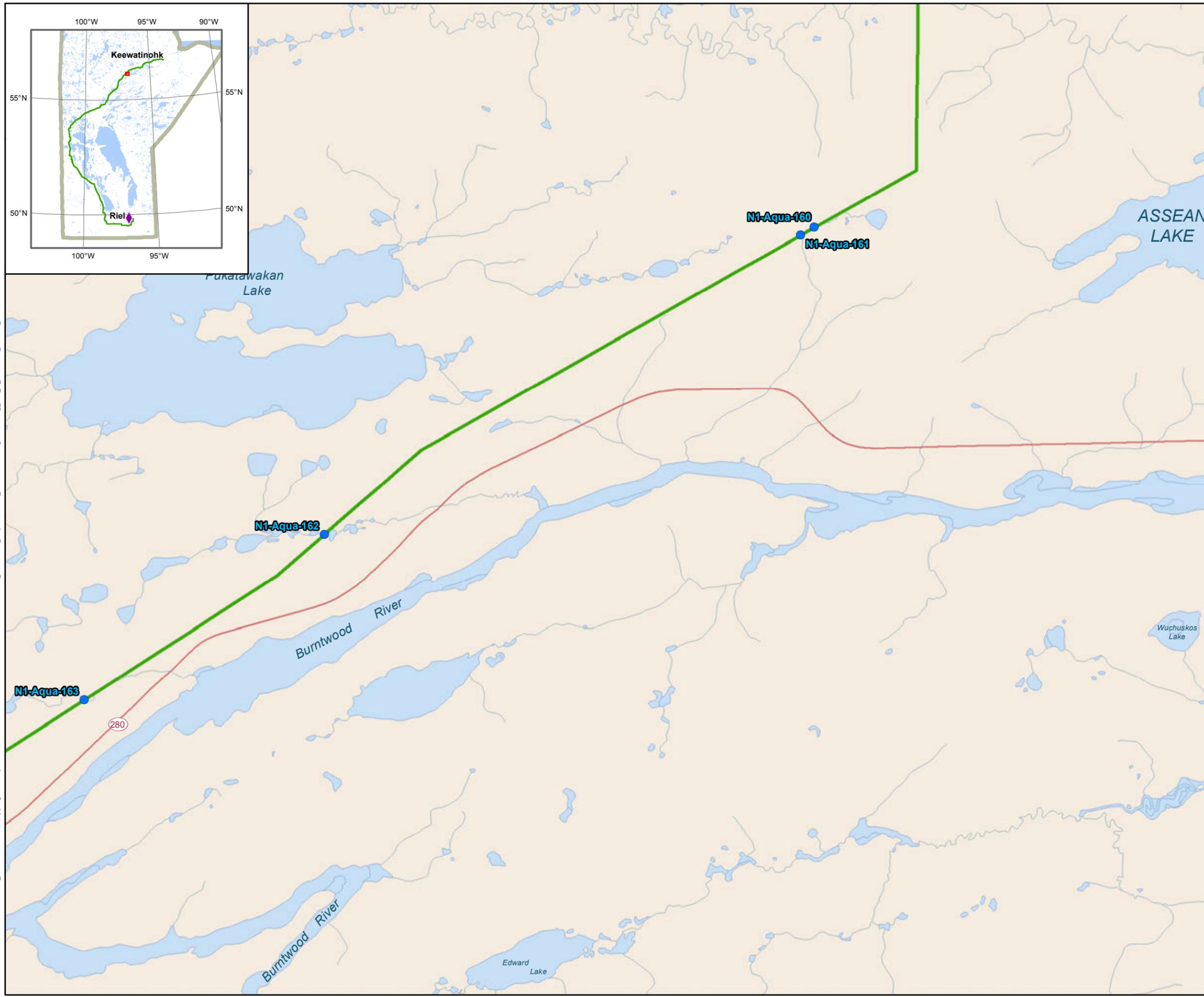
- Community
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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
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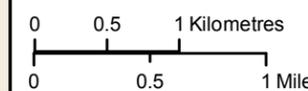
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

- Community
- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

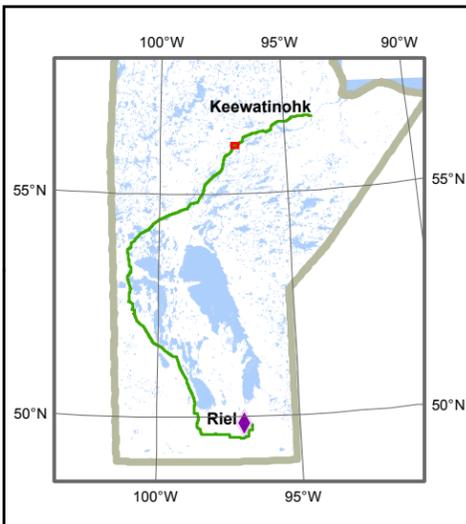
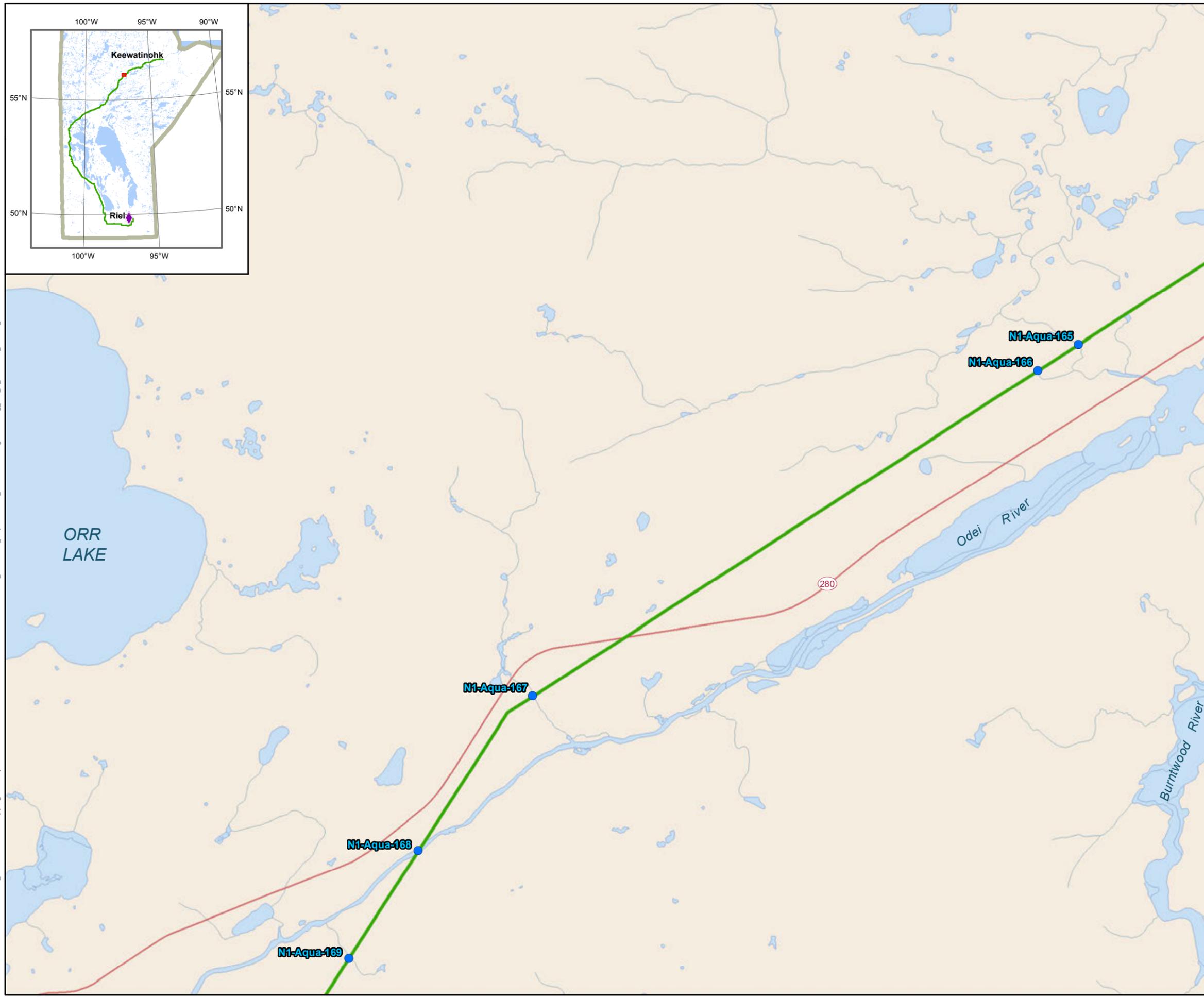
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## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
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#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

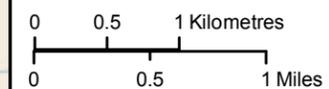
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

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- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

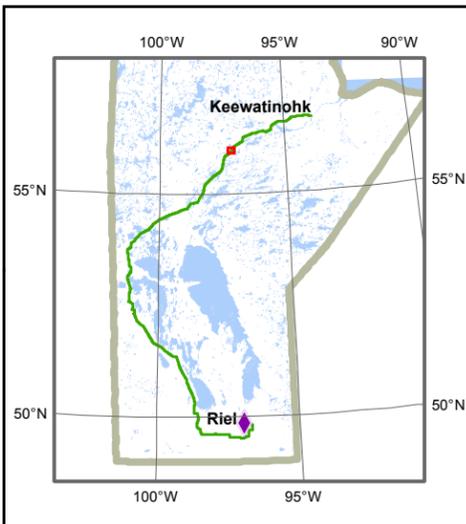
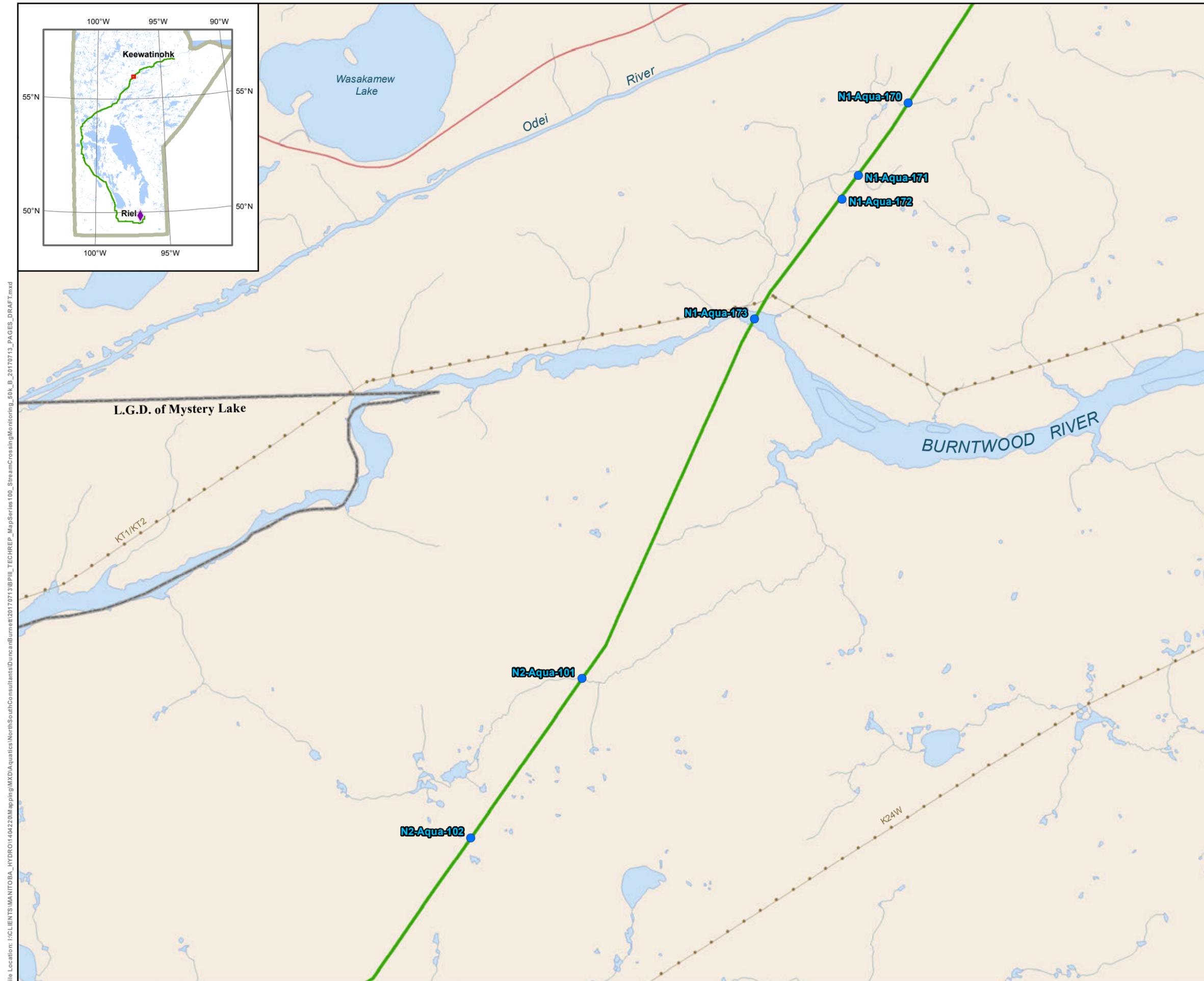
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## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

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#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

- Community
- City / Town
- Rural Municipality
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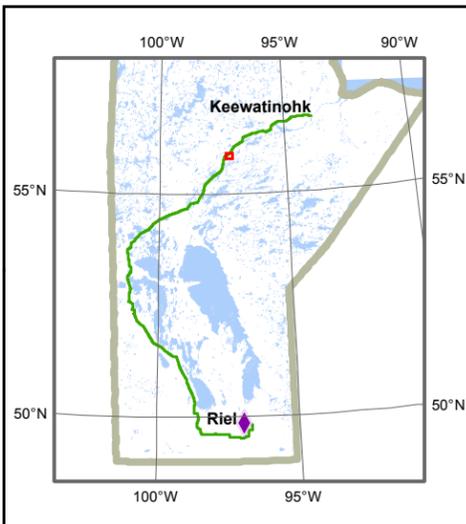
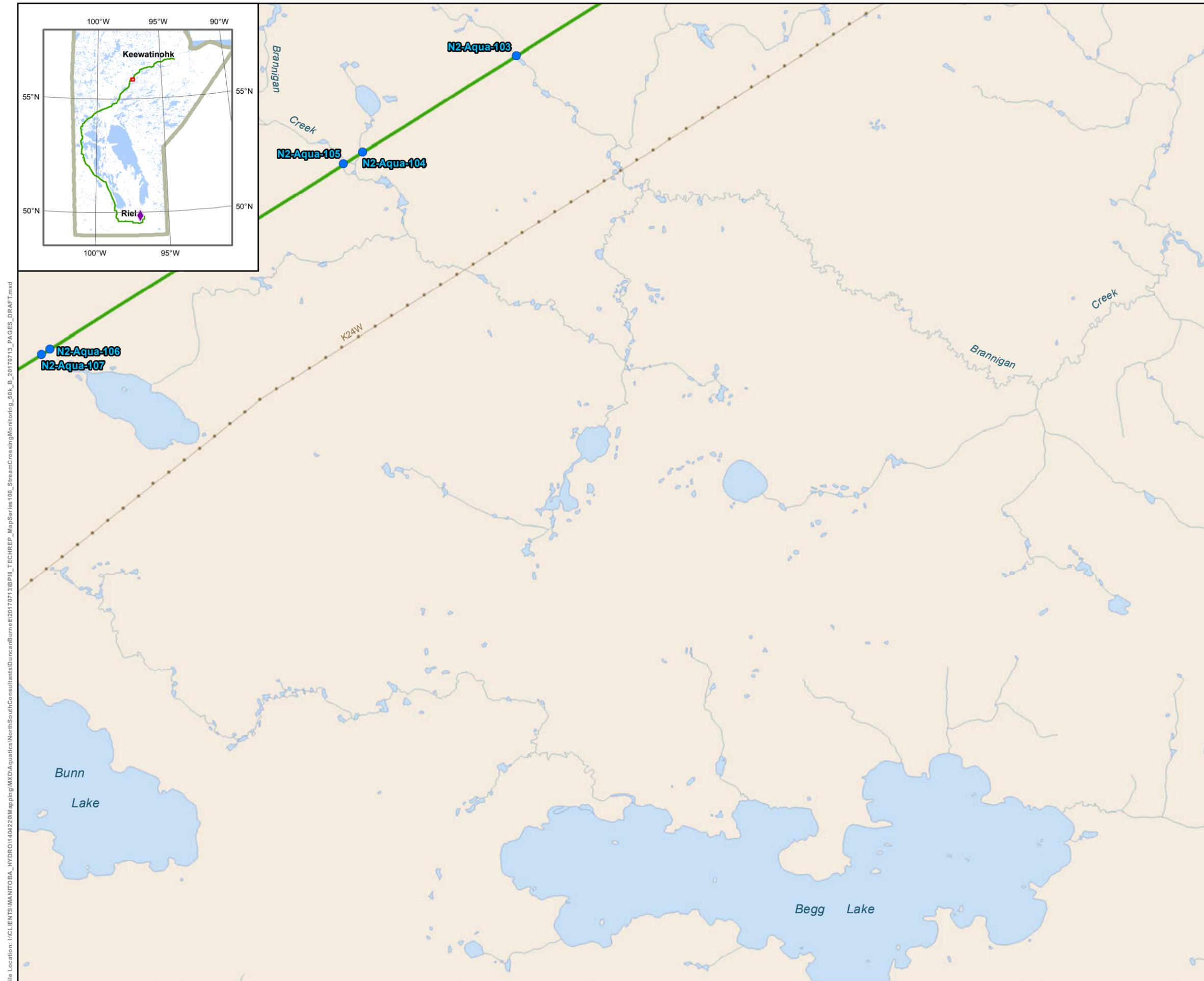
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## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
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#### Infrastructure

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- Electrical Station

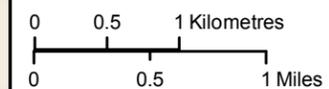
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

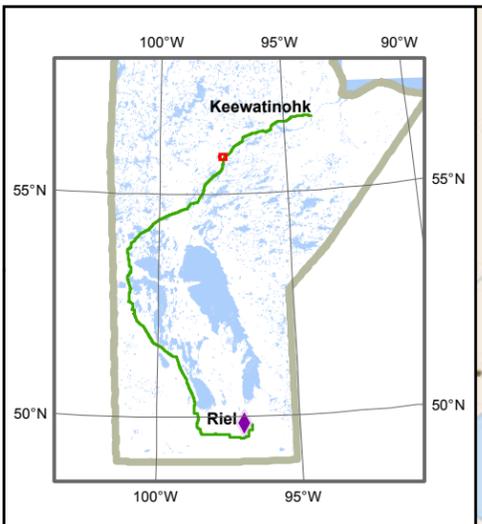
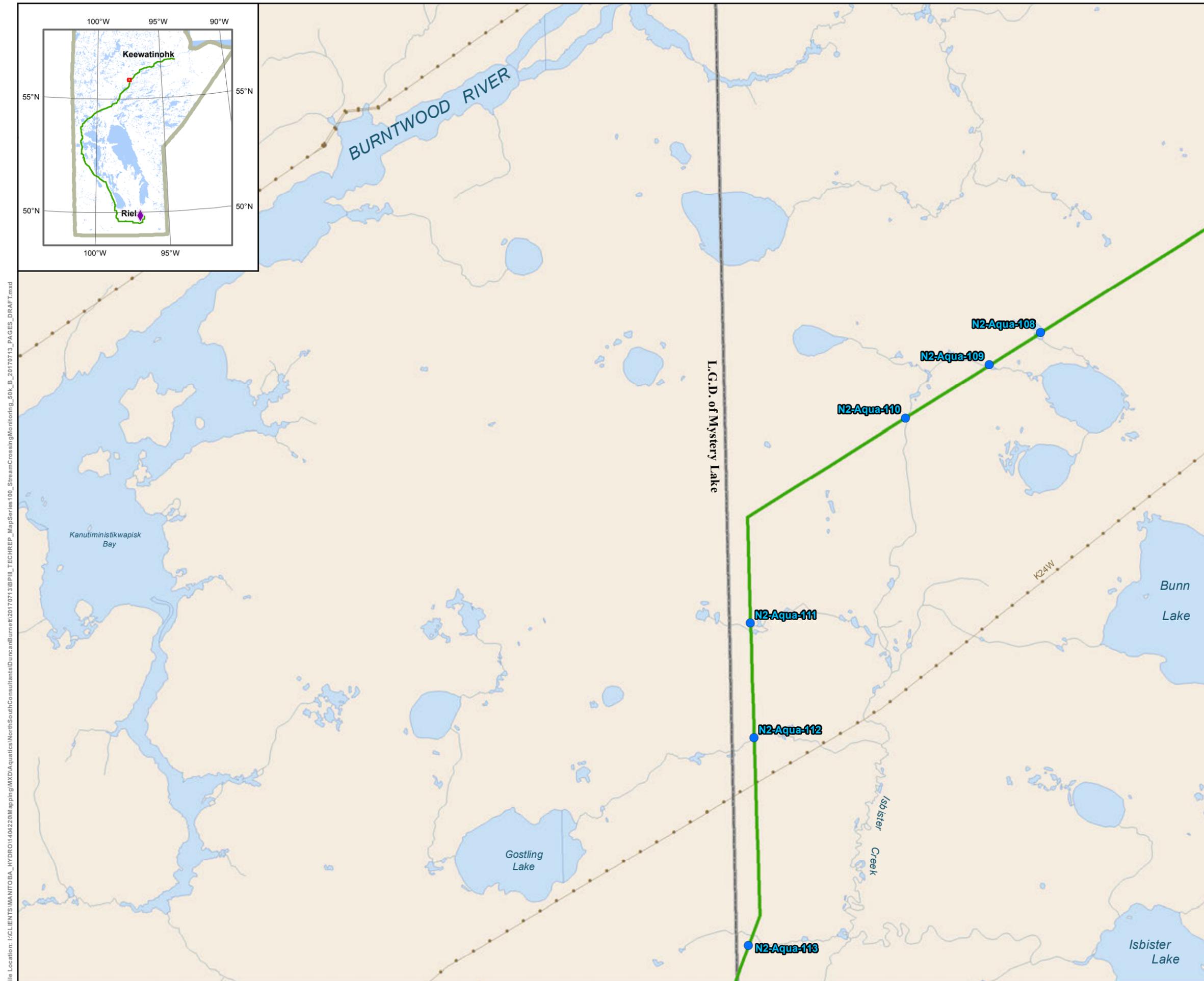
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## Stream Crossing Compliance Monitoring 2017

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## Bipole III Transmission Project

### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
-  Ground Electrode Line
-  Ground Electrode Site
-  Construction Power (KN36)
-  Construction Power Site
-  Construction Camp Site

### Infrastructure

-  Converter Station
-  Generating Station
-  Electrical Station

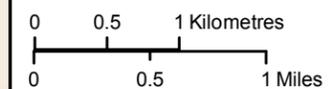
### Monitoring Location

-  Aquatics Monitoring Site 2017
-  Aquatics Monitoring Site 2017

### Landbase

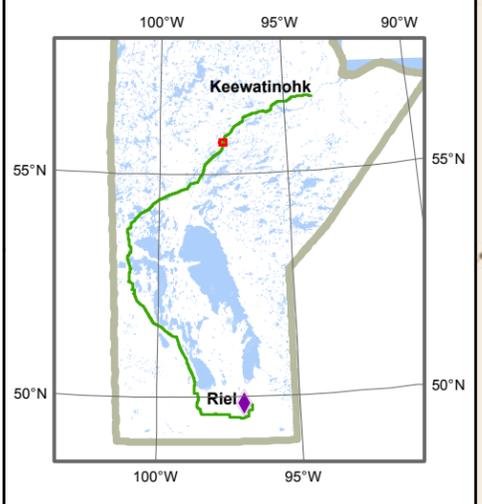
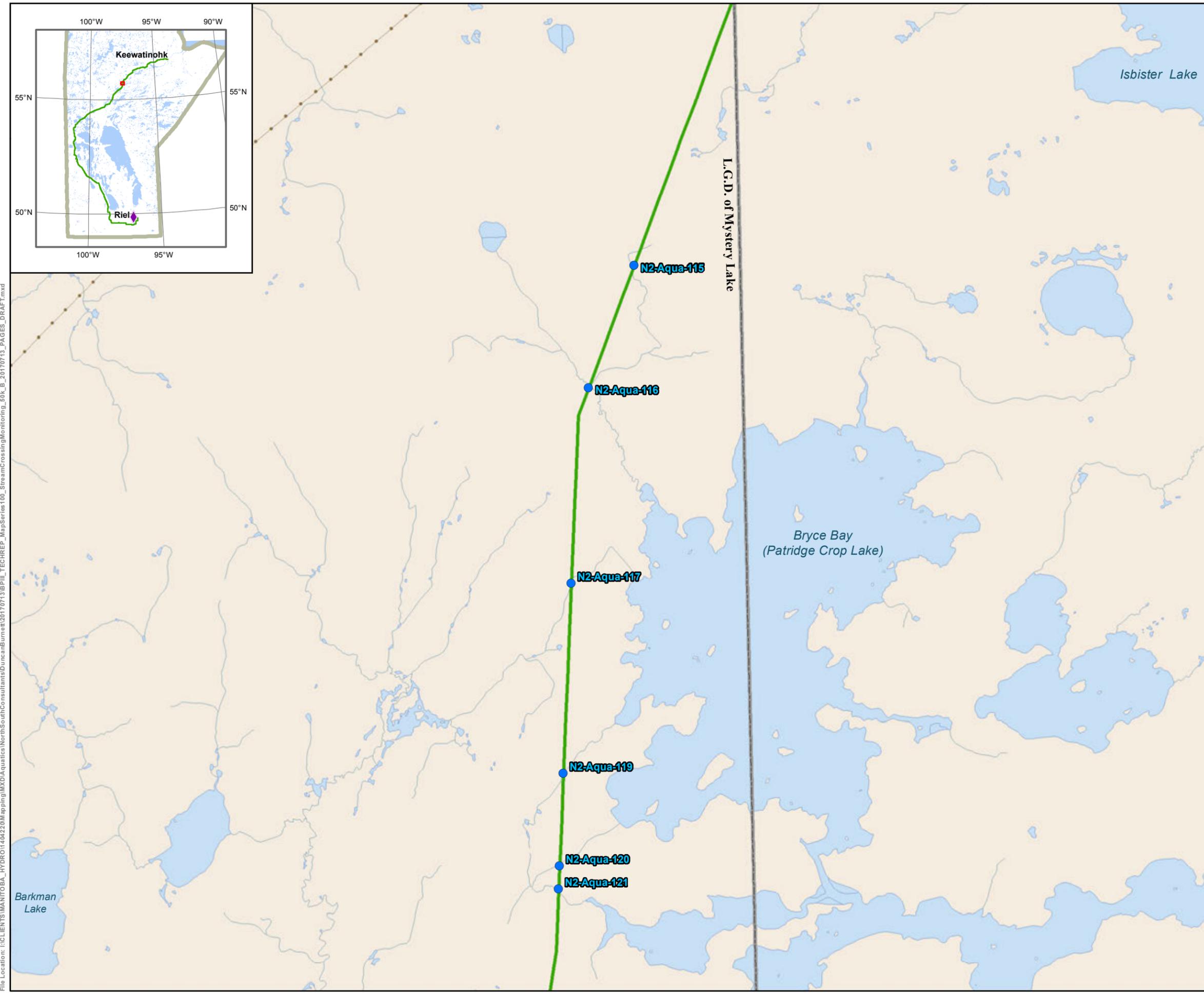
-  Community
-  City / Town
-  Rural Municipality
-  First Nation
-  National/Provincial Park

Coordinate System: UTM Zone 14N NAD83  
 Data Source: MBHydro, ProvMB, NRCAN  
 Date Created: July 13, 2017



# Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
-  Ground Electrode Line
-  Ground Electrode Site
-  Construction Power (KN36)
-  Construction Power Site
-  Construction Camp Site

#### Infrastructure

-  Converter Station
-  Generating Station
-  Electrical Station

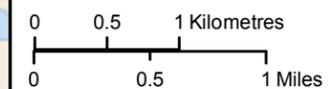
#### Monitoring Location

-  Aquatics Monitoring Site 2017
-  Aquatics Monitoring Site 2017

#### Landbase

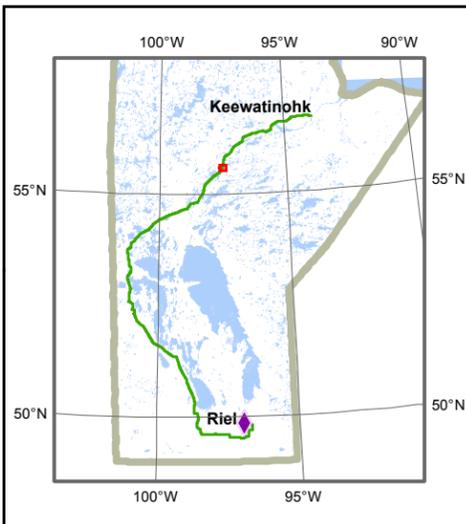
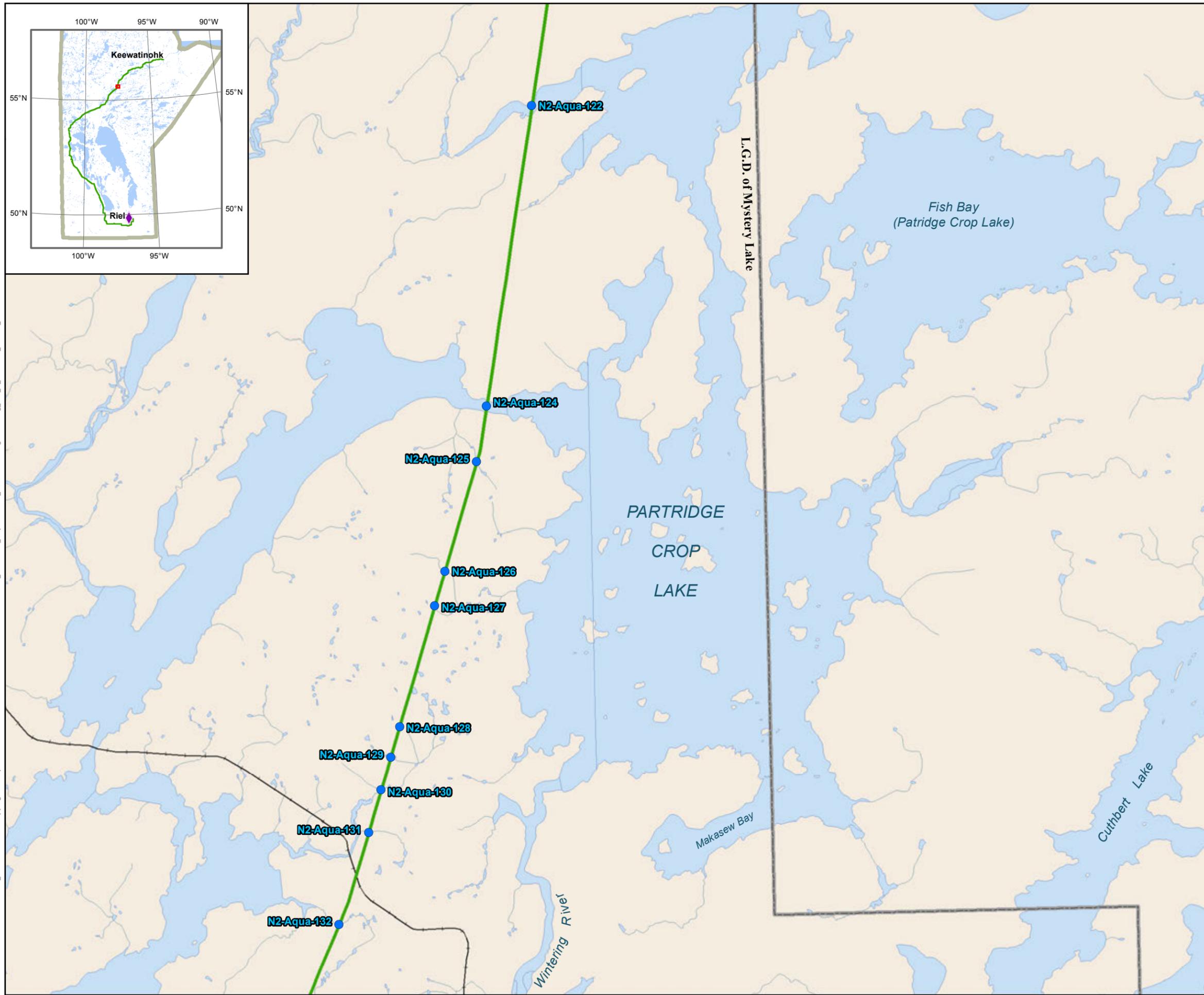
-  Community
-  City / Town
-  Rural Municipality
-  First Nation
-  National/Provincial Park

Coordinate System: UTM Zone 14N NAD83  
 Data Source: MBHydro, ProvMB, NRCAN  
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## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
-  Ground Electrode Line
-  Ground Electrode Site
-  Construction Power (KN36)
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#### Infrastructure

-  Converter Station
-  Generating Station
-  Electrical Station

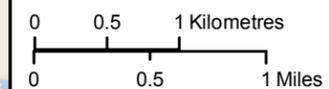
#### Monitoring Location

-  Aquatics Monitoring Site 2017
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#### Landbase

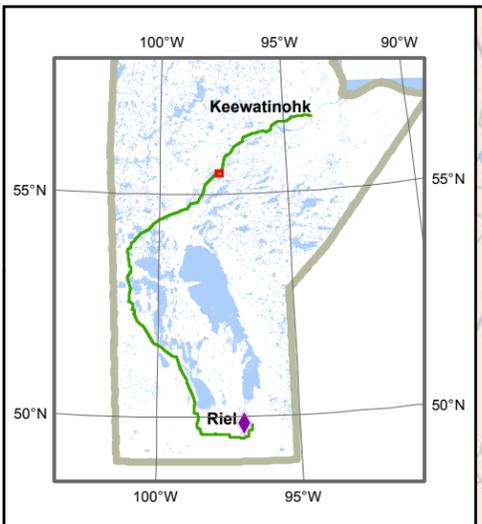
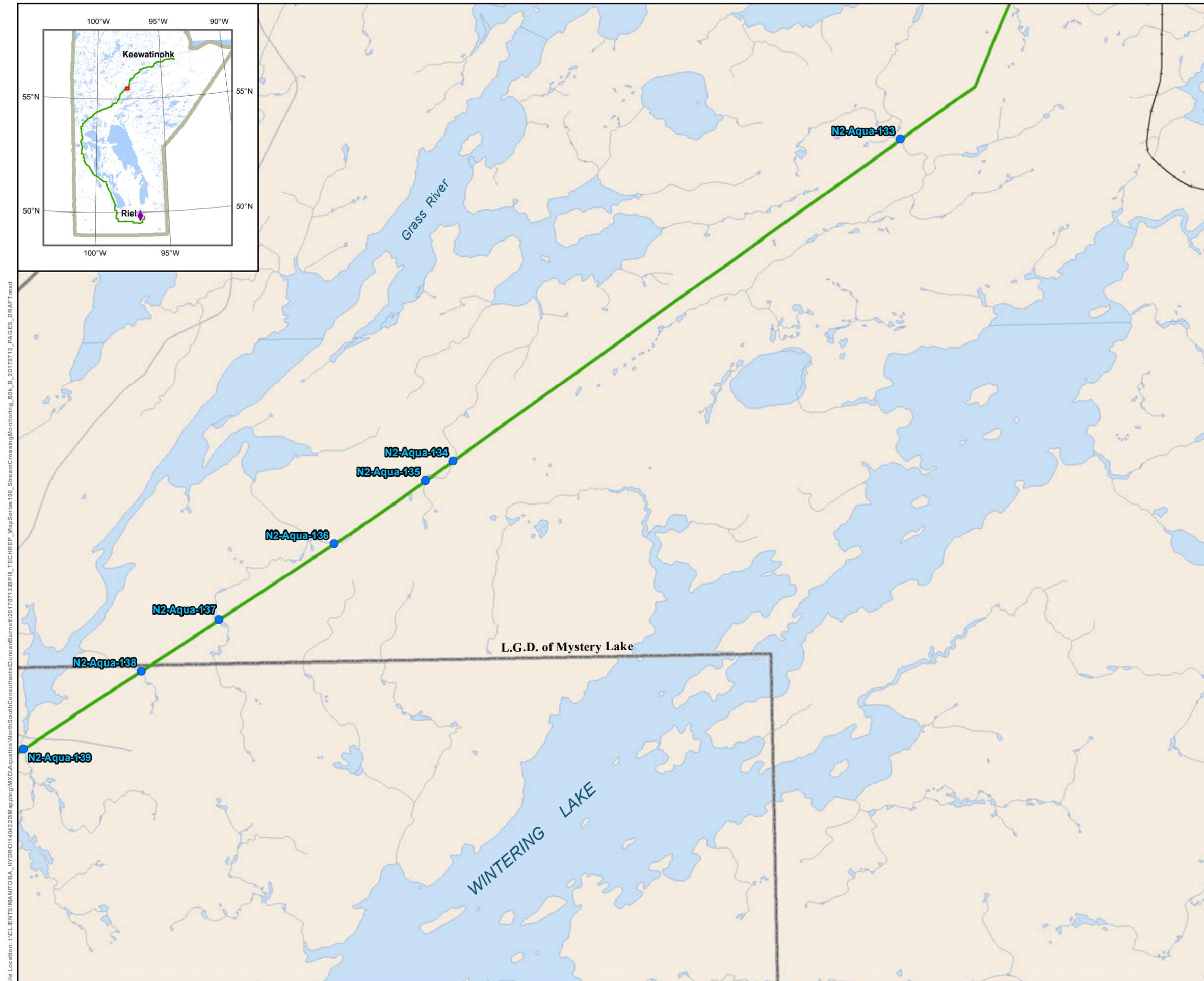
-  Community
-  City / Town
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## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

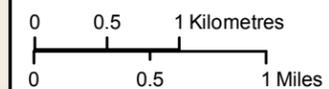
#### Monitoring Location

- Aquatics Monitoring Site 2017
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#### Landbase

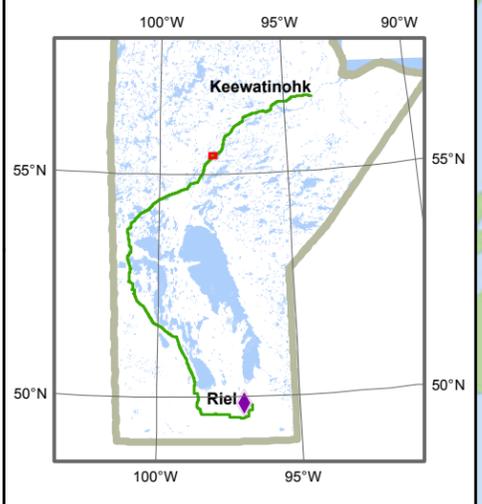
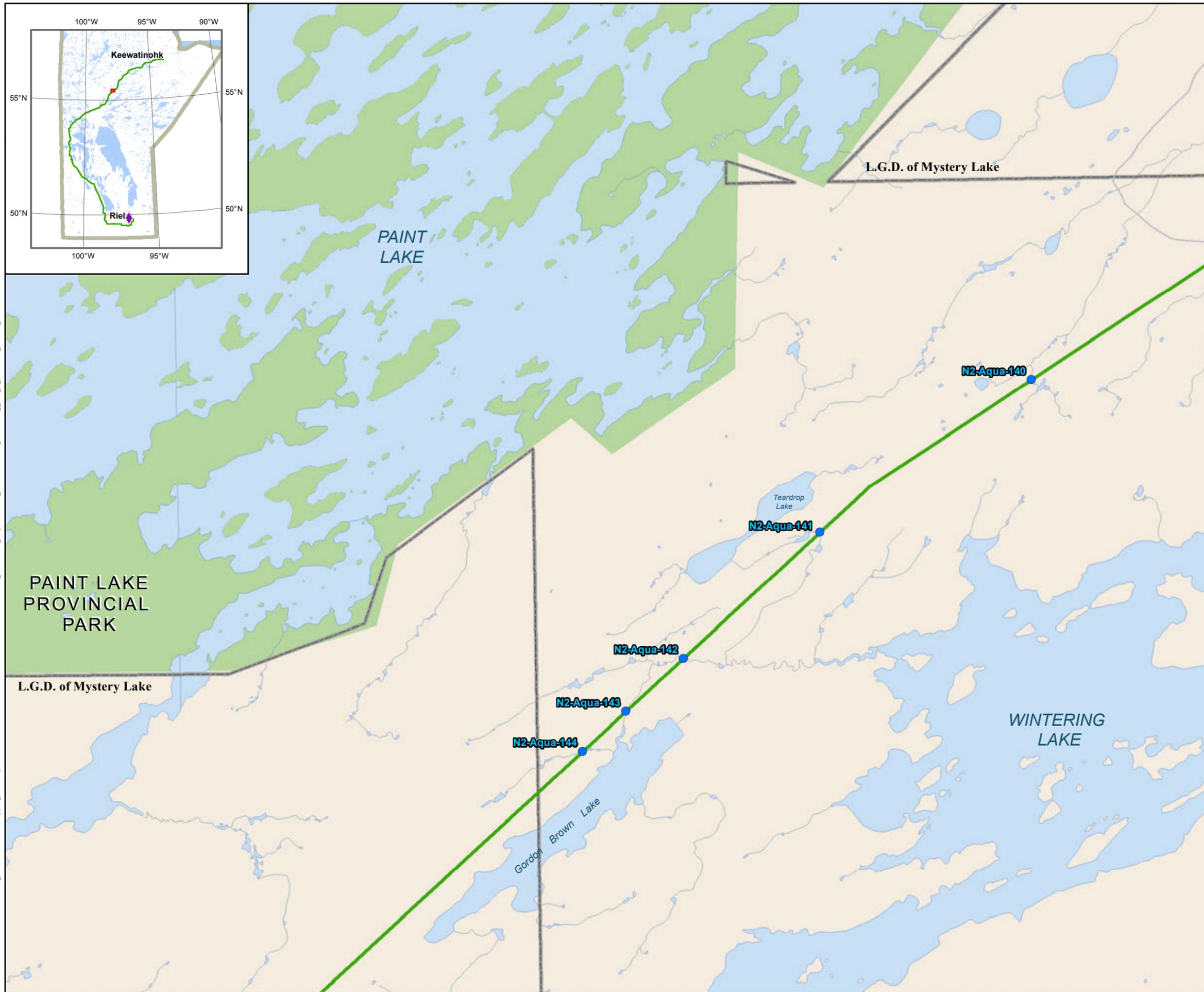
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## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
-  Ground Electrode Line
-  Ground Electrode Site
-  Construction Power (KN36)
-  Construction Power Site
-  Construction Camp Site

#### Infrastructure

-  Converter Station
-  Generating Station
-  Electrical Station

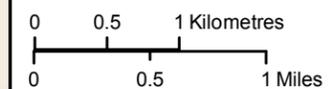
#### Monitoring Location

-  Aquatics Monitoring Site 2017
-  Aquatics Monitoring Site 2017

#### Landbase

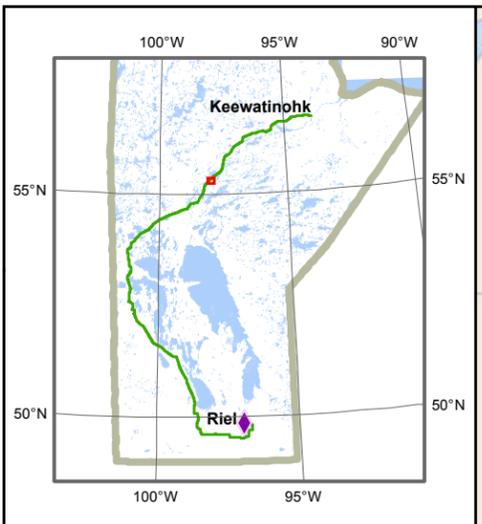
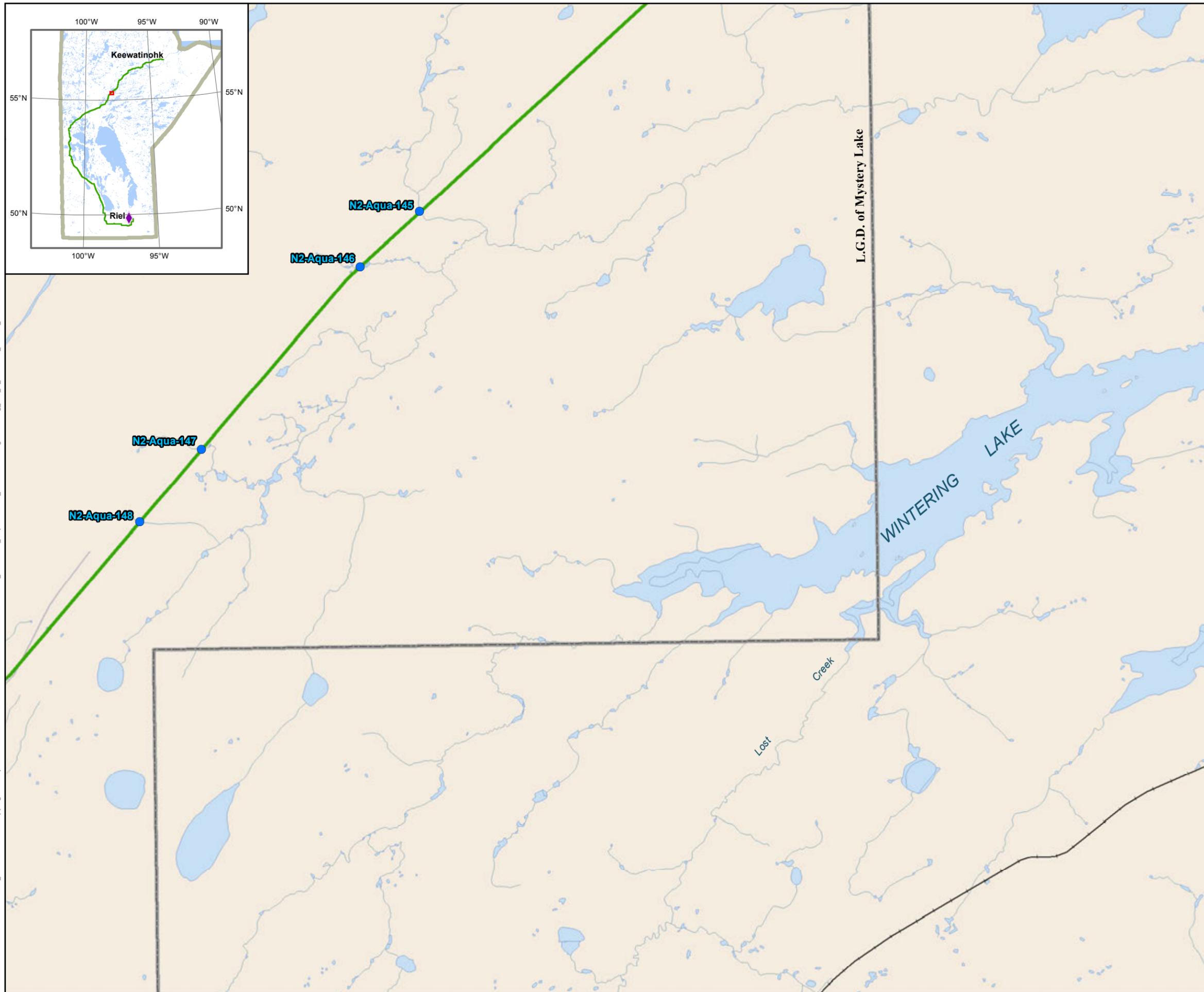
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### Bipole III Transmission Project

#### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
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#### Infrastructure

-  Converter Station
-  Generating Station
-  Electrical Station

#### Monitoring Location

-  Aquatics Monitoring Site 2017
-  Aquatics Monitoring Site 2017

#### Landbase

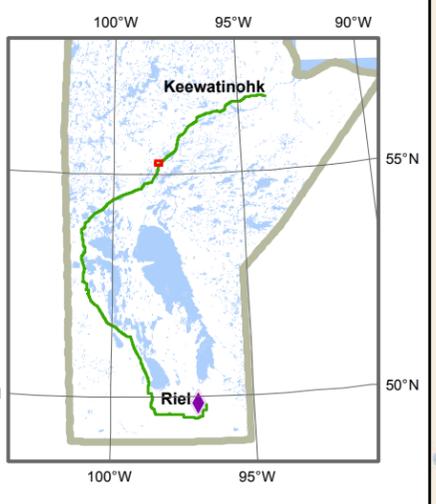
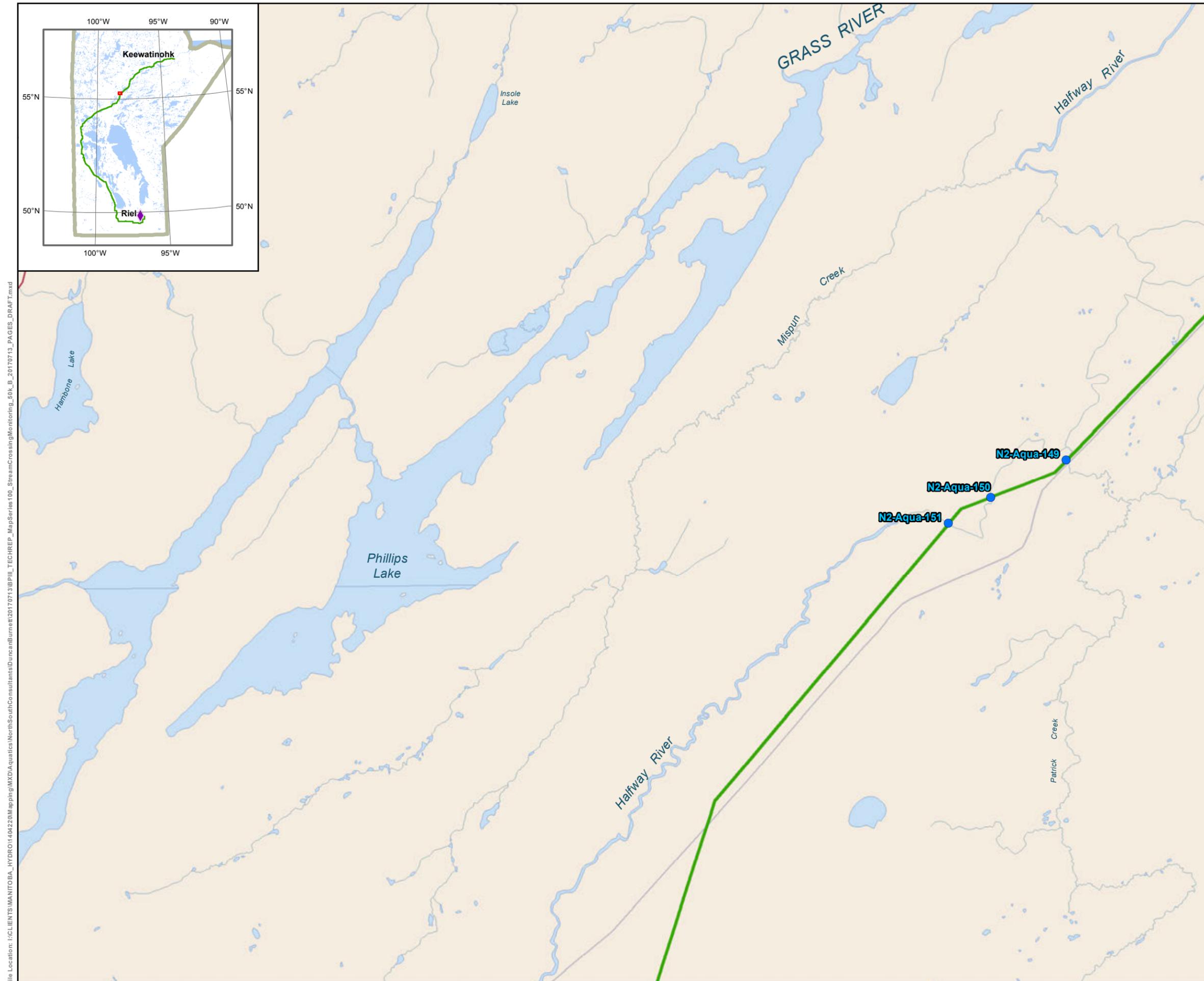
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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
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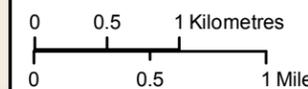
#### Monitoring Location

- Aquatics Monitoring Site 2017
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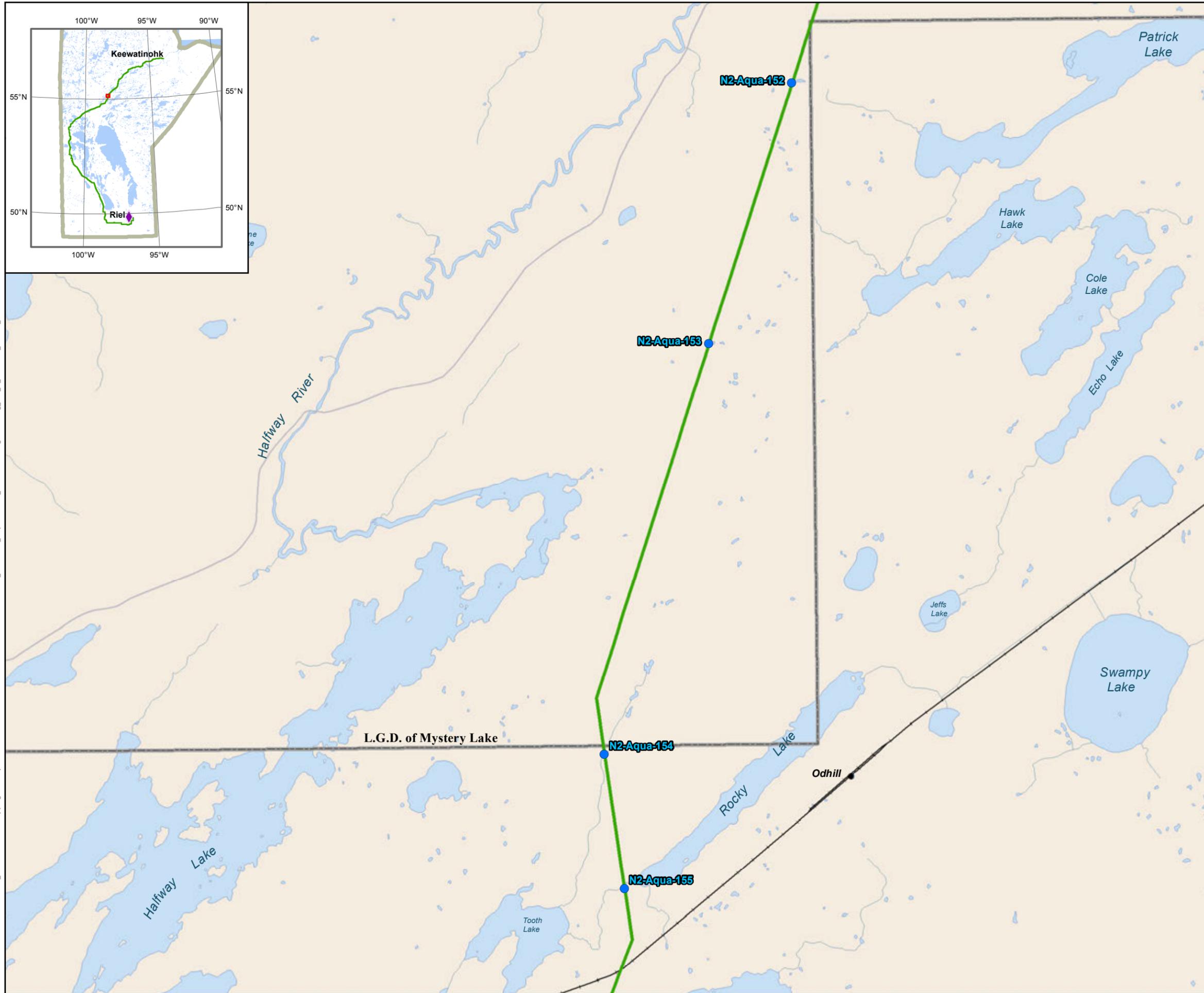
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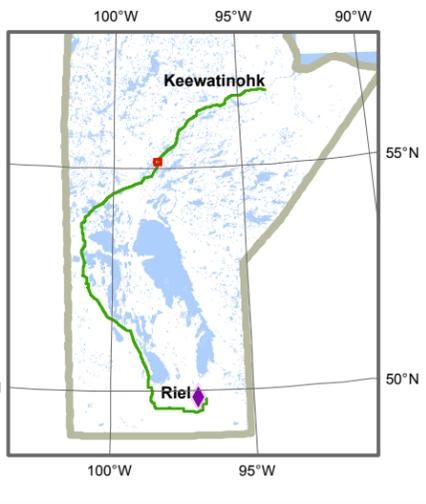
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## Stream Crossing Compliance Monitoring 2017



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### Bipole III Transmission Project

#### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
-  Ground Electrode Line
-  Ground Electrode Site
-  Construction Power (KN36)
-  Construction Power Site
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#### Infrastructure

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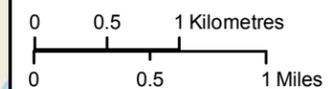
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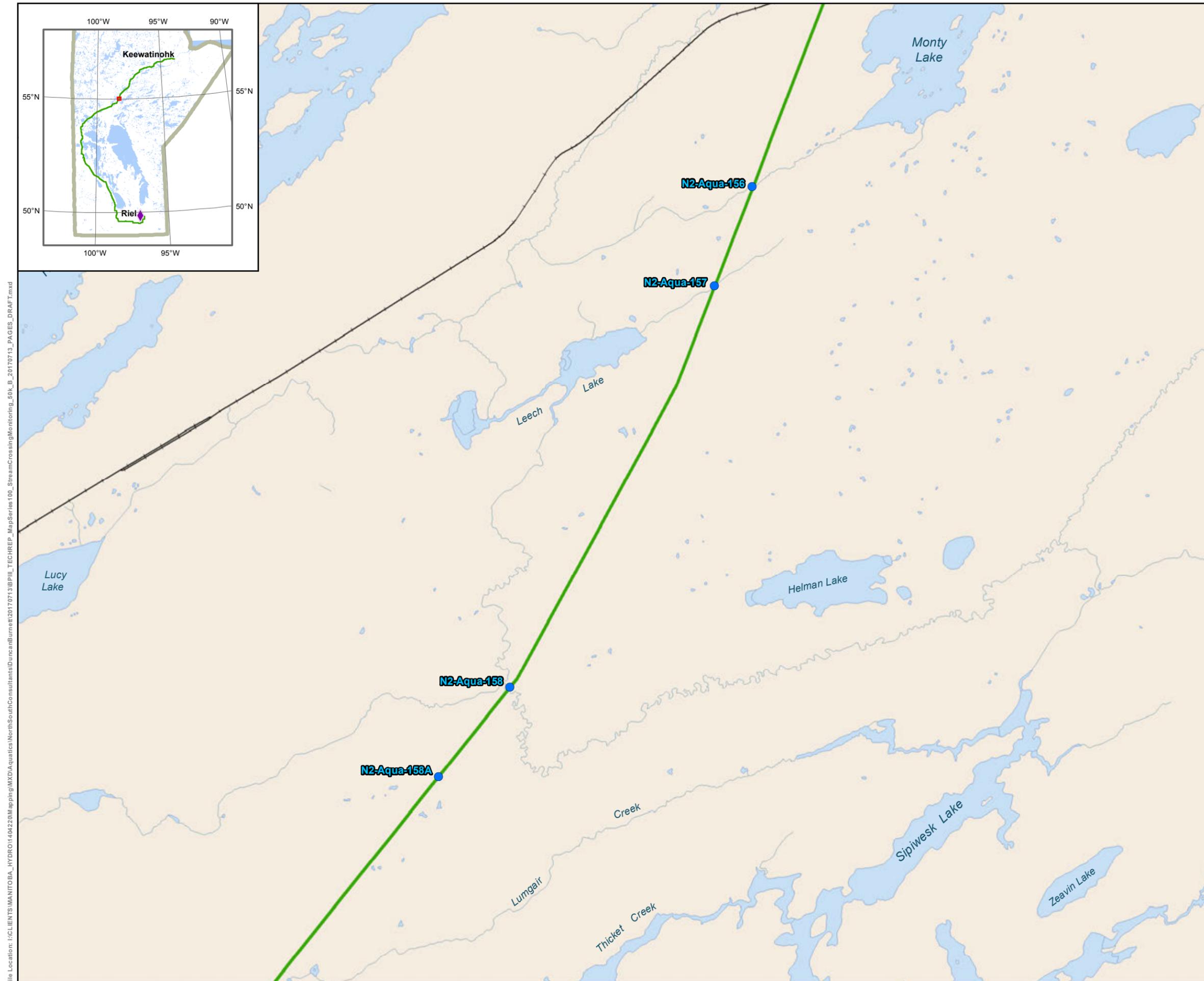
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Coordinate System: UTM Zone 14N NAD83  
 Data Source: MBHydro, ProvMB, NRCAN  
 Date Created: July 13, 2017



## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
-  Ground Electrode Line
-  Ground Electrode Site
-  Construction Power (KN36)
-  Construction Power Site
-  Construction Camp Site

#### Infrastructure

-  Converter Station
-  Generating Station
-  Electrical Station

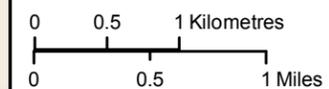
#### Monitoring Location

-  Aquatics Monitoring Site 2017
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#### Landbase

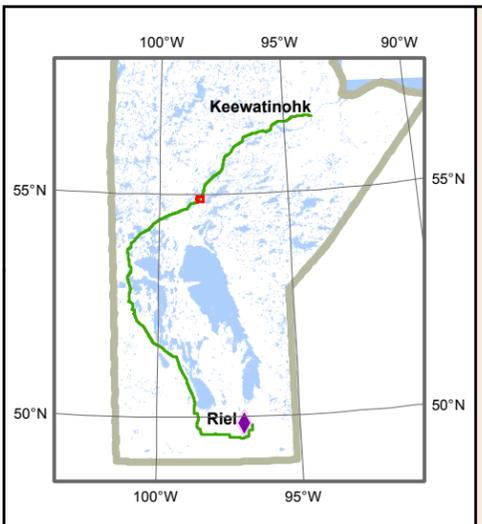
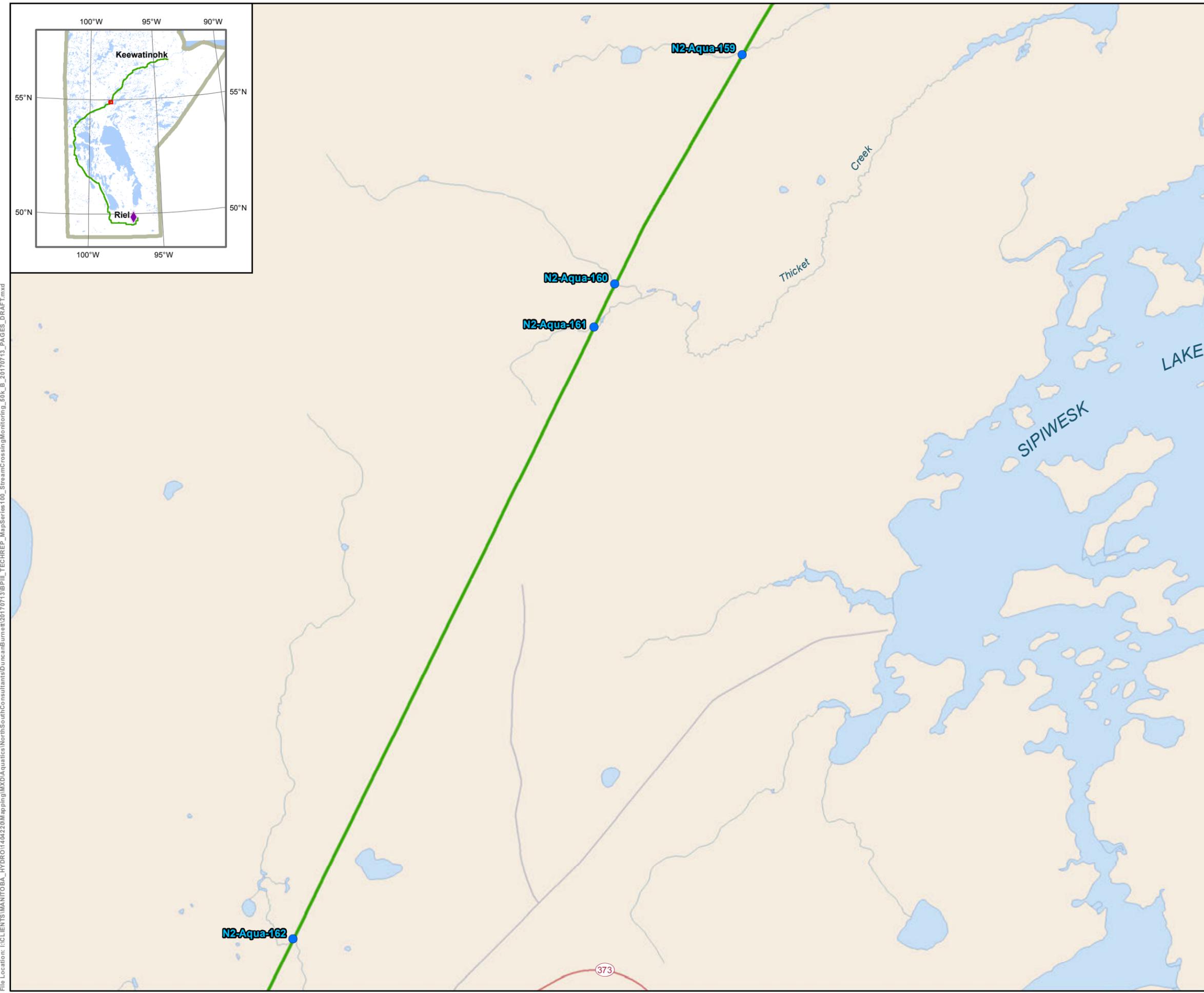
-  Community
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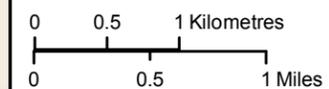
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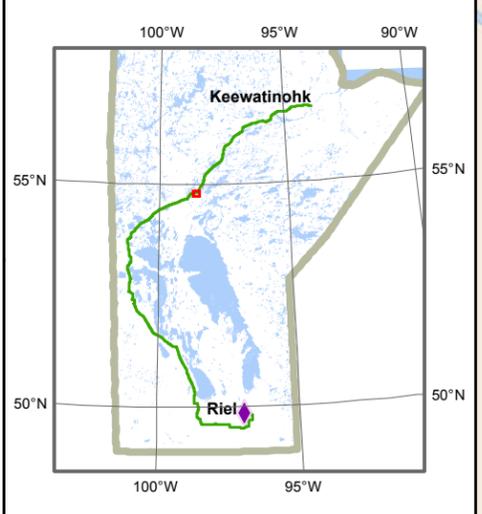
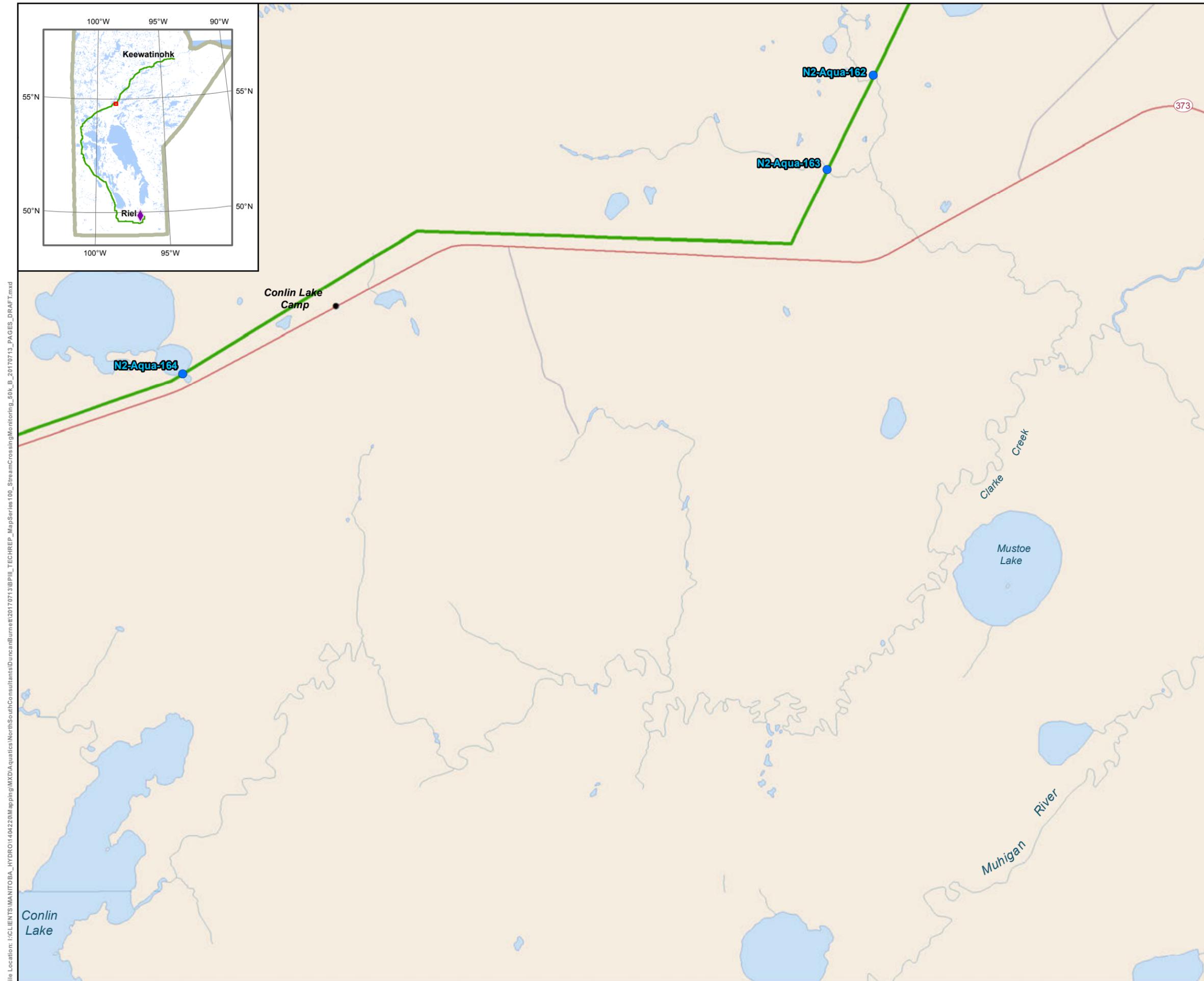
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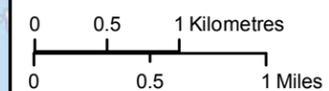
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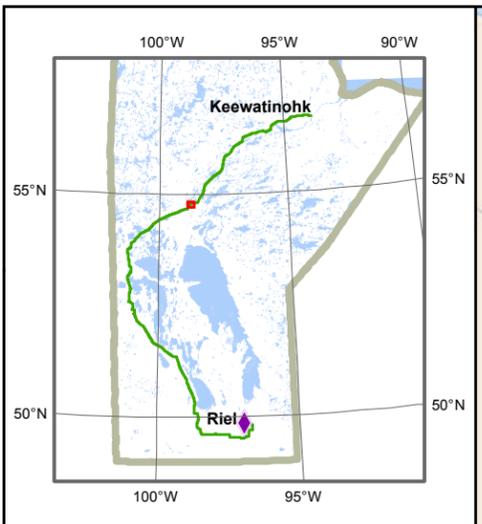
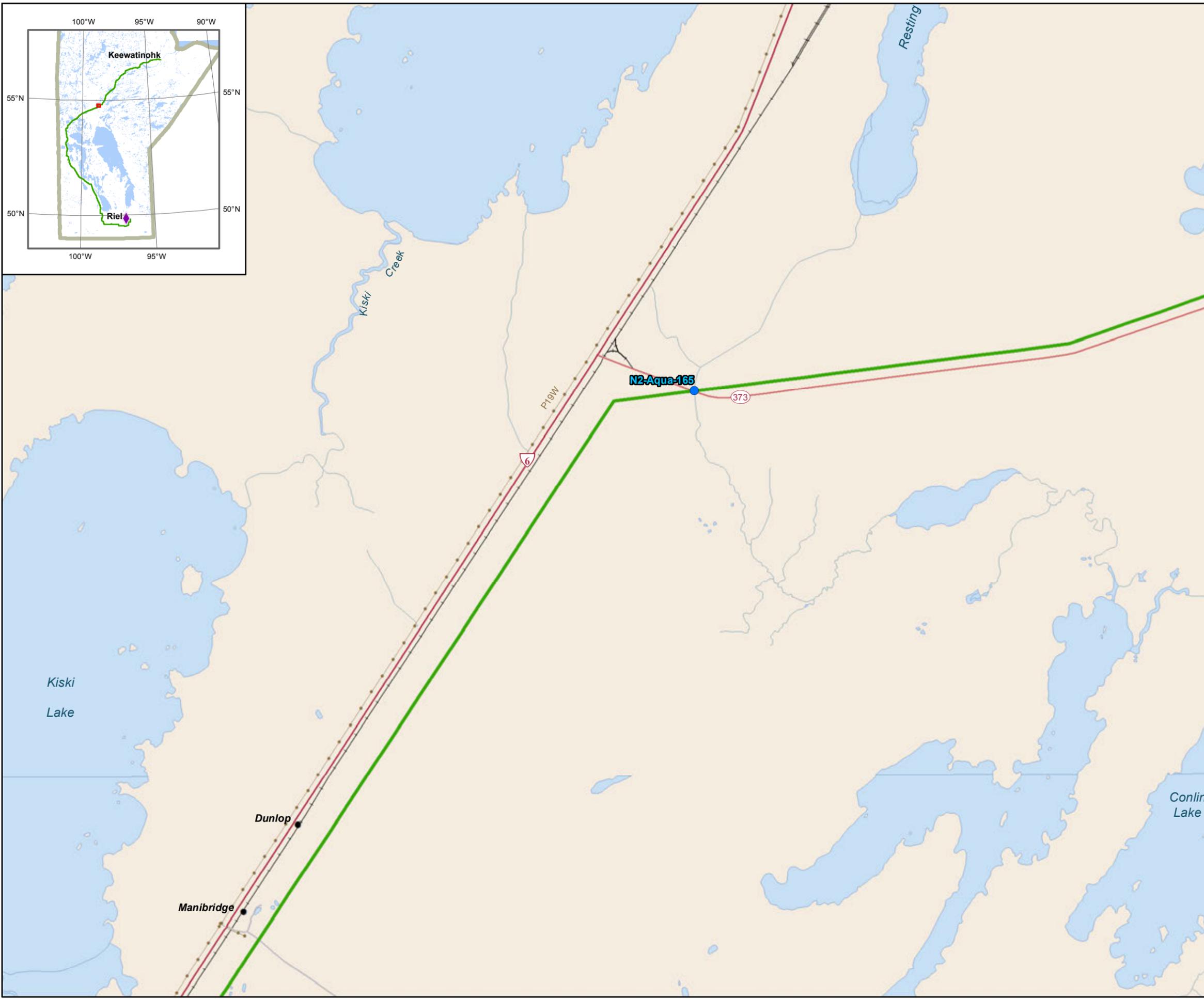
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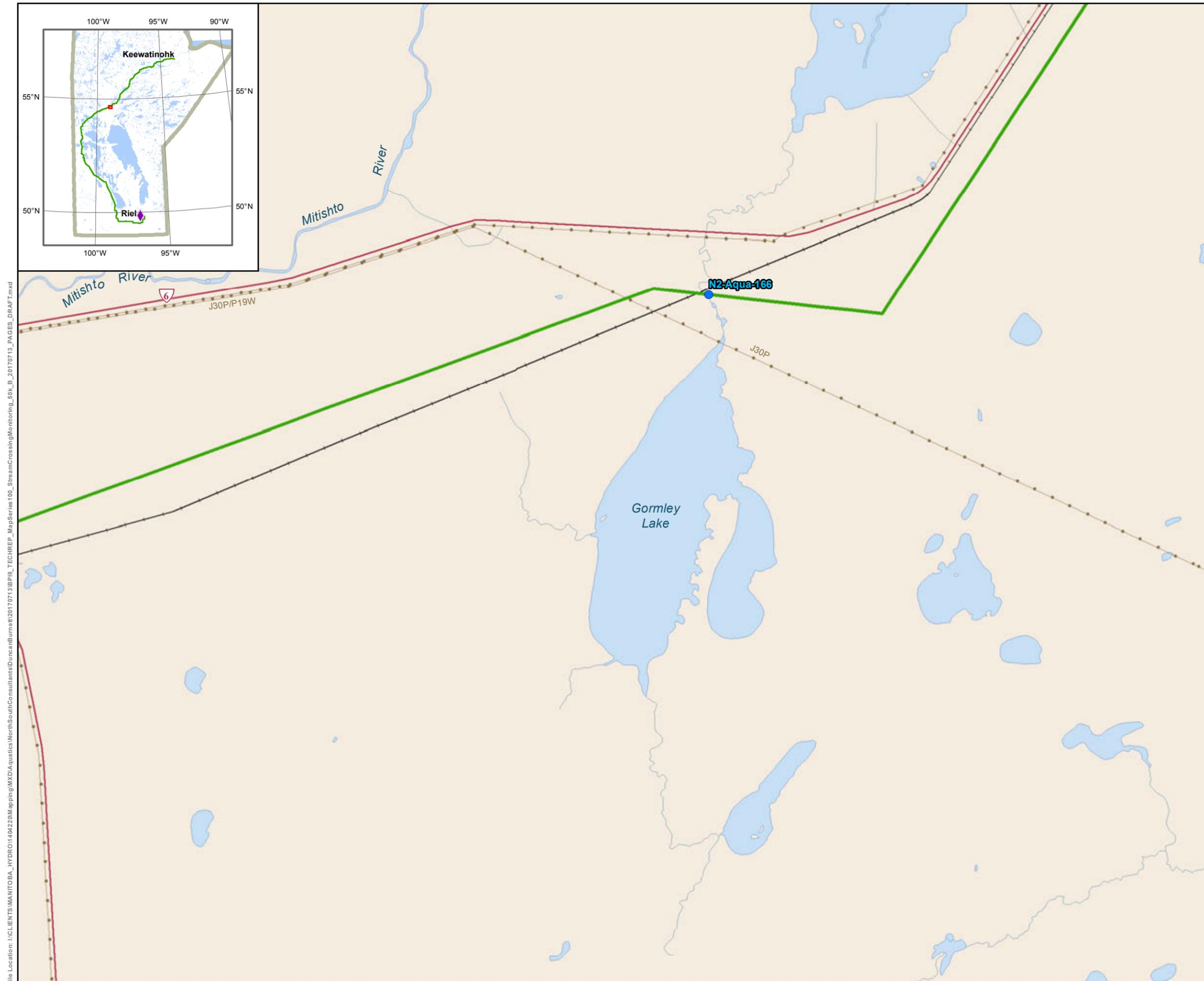
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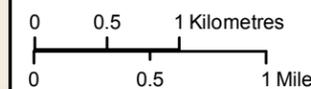
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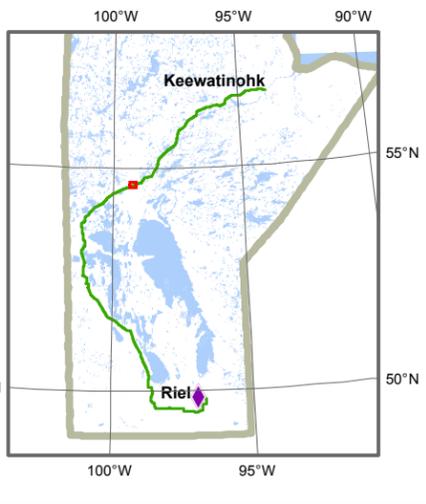
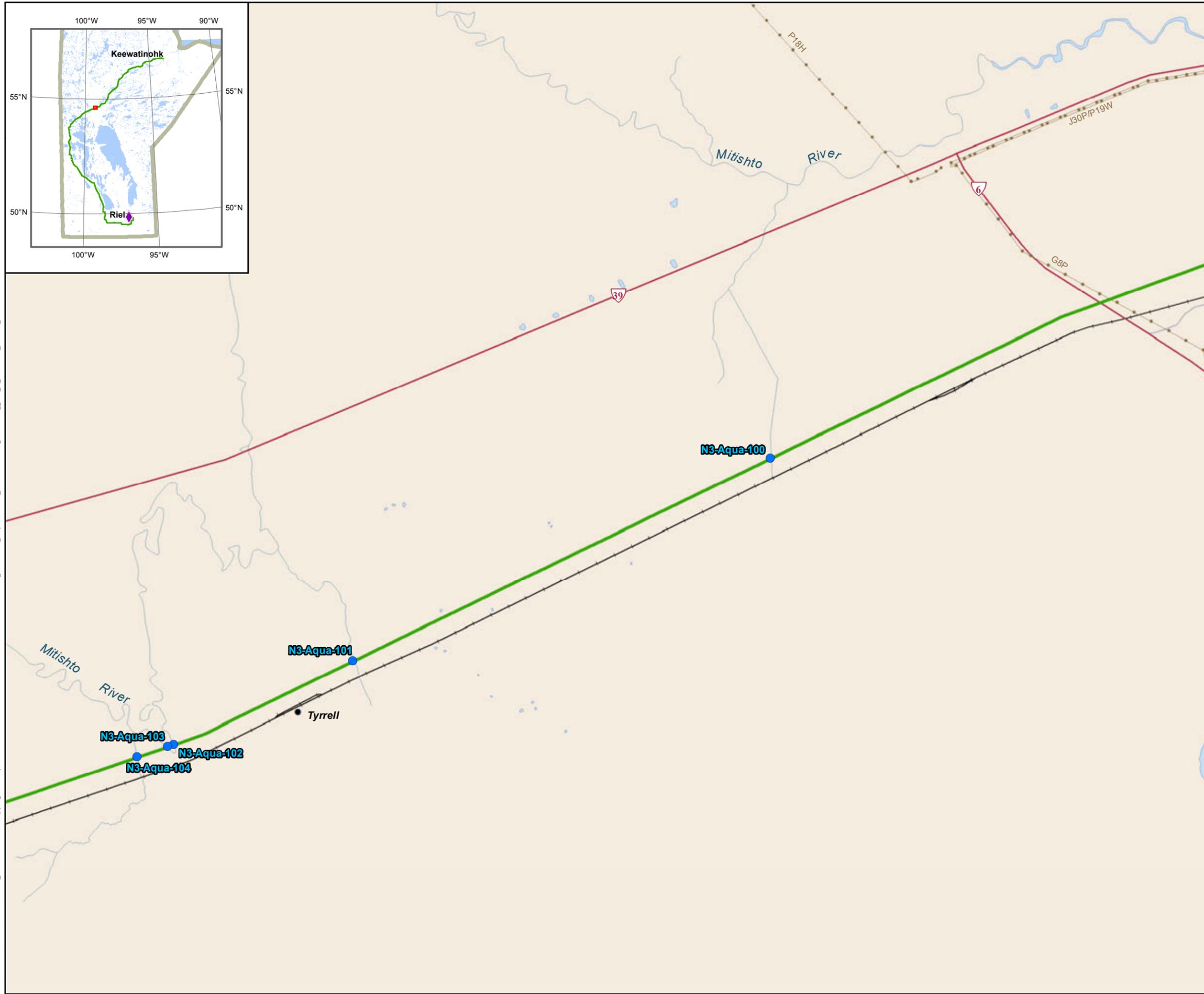
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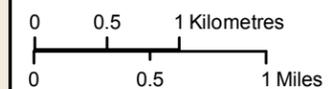
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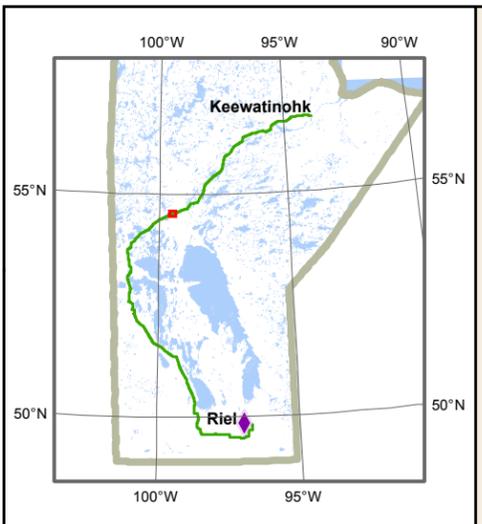
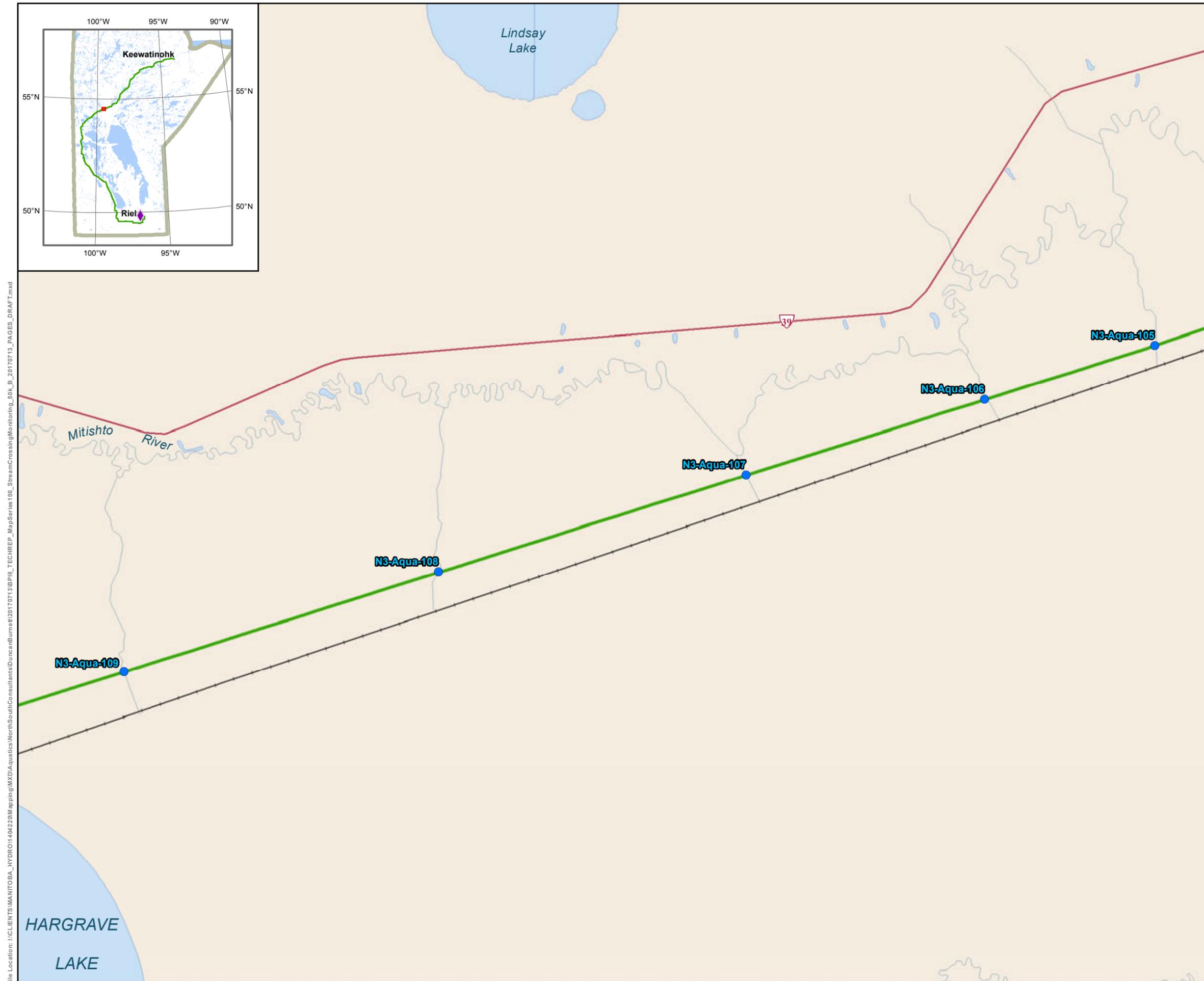
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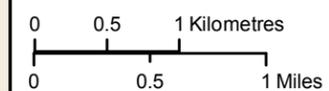
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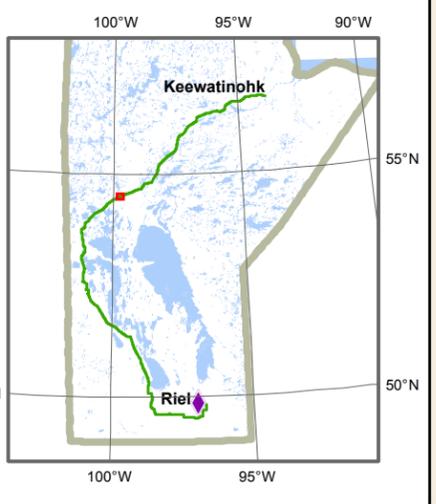
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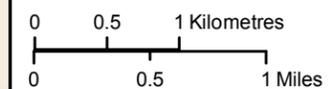
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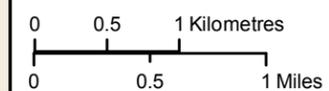
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### Bipole III Transmission Project

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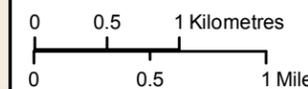
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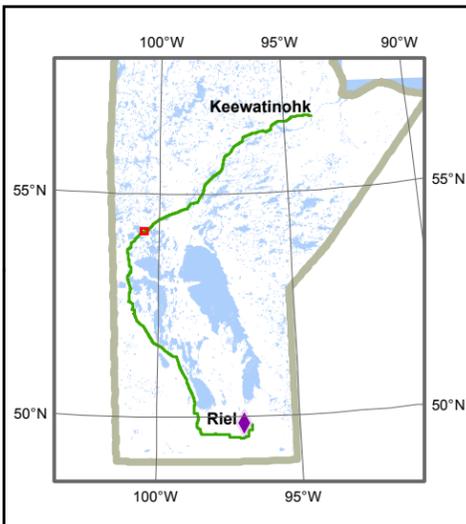
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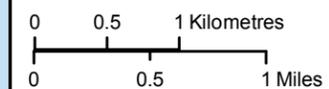
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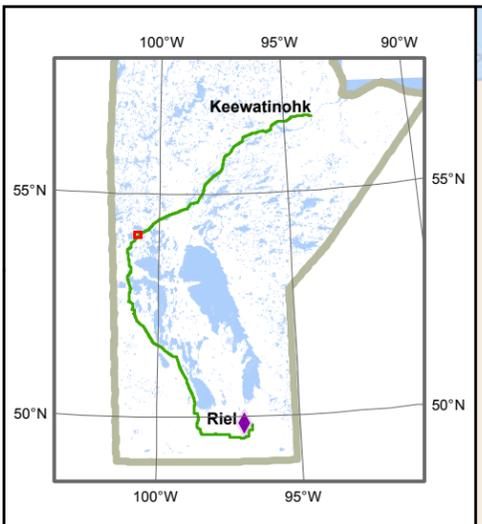
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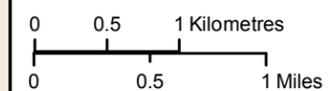
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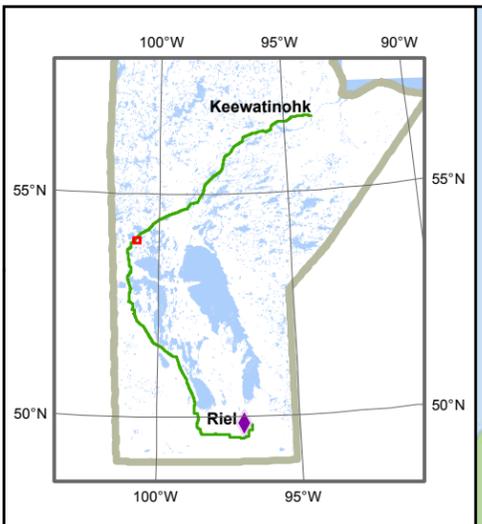
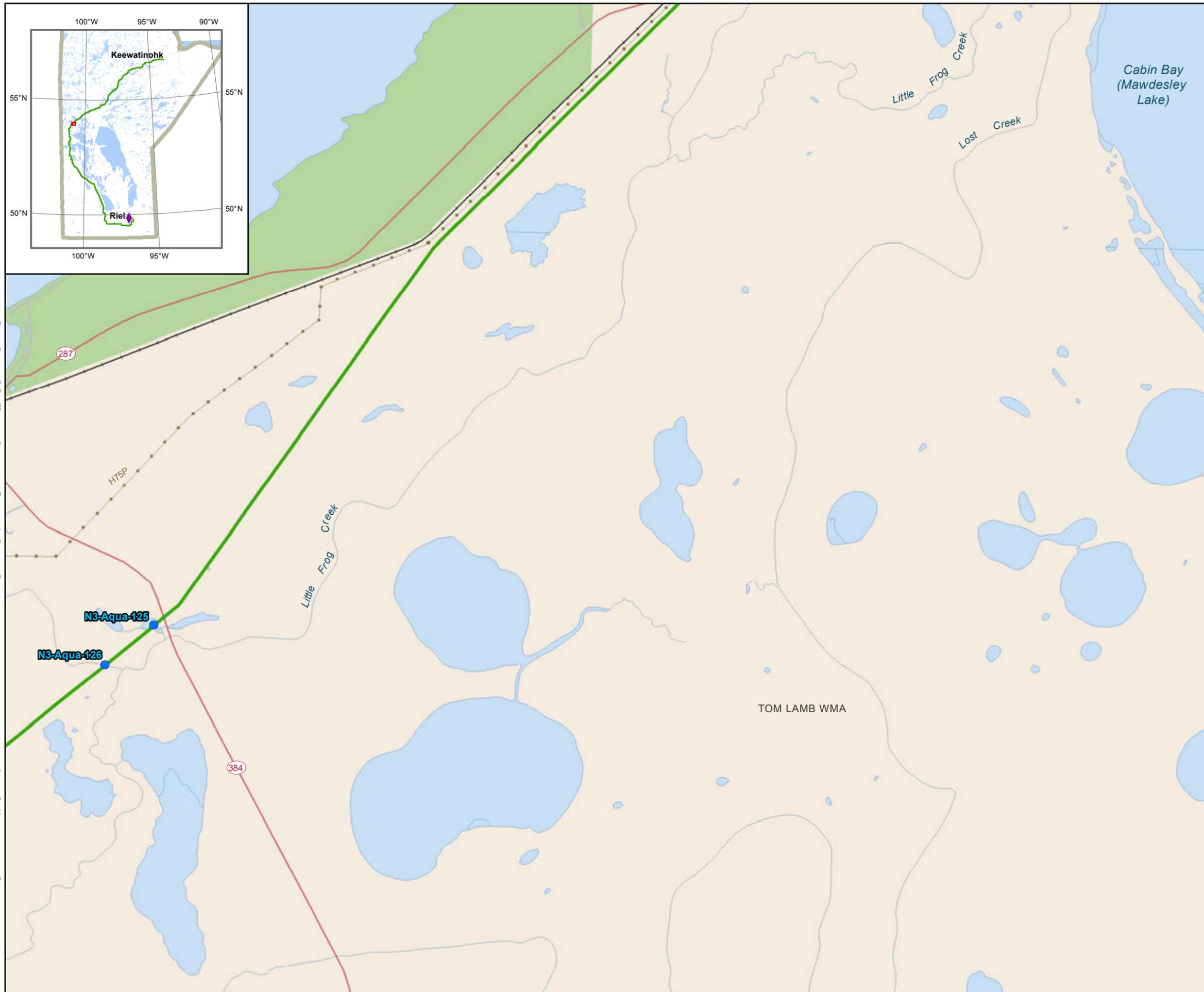
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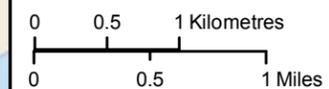
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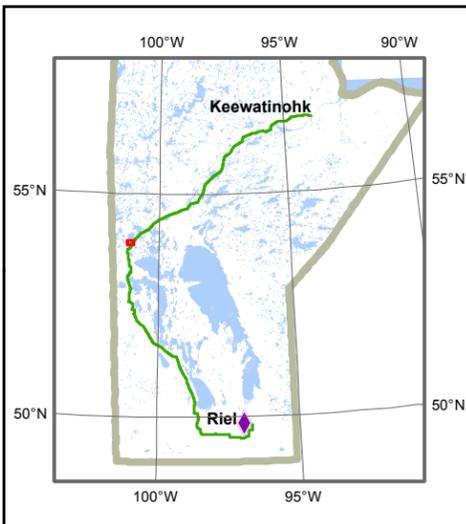
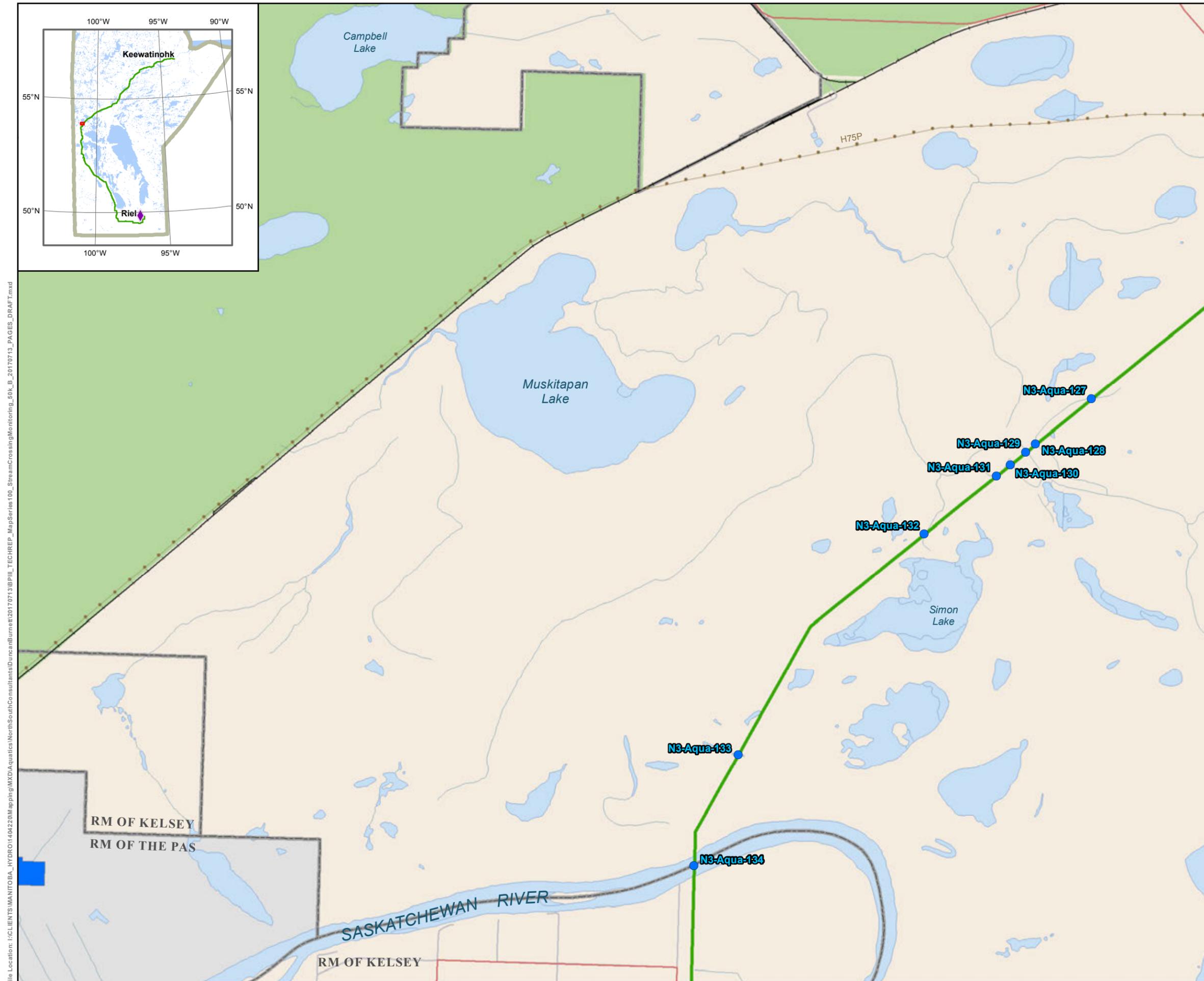
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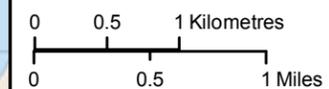
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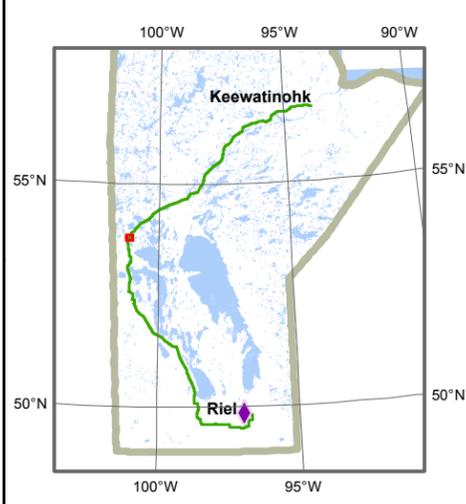
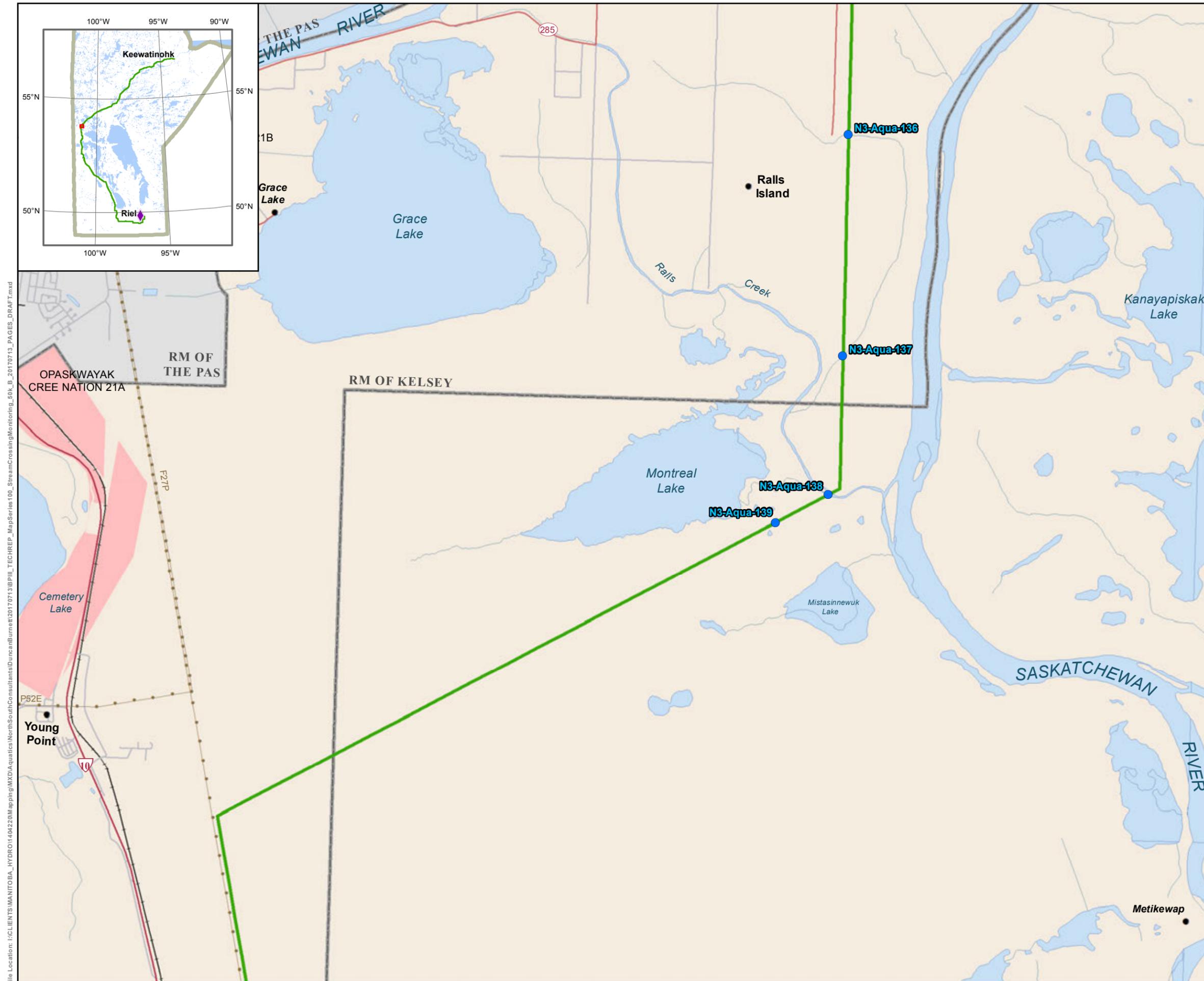
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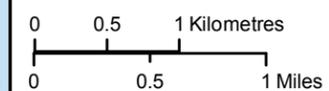
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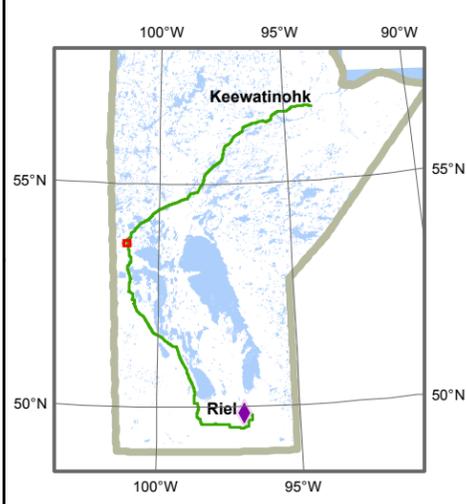
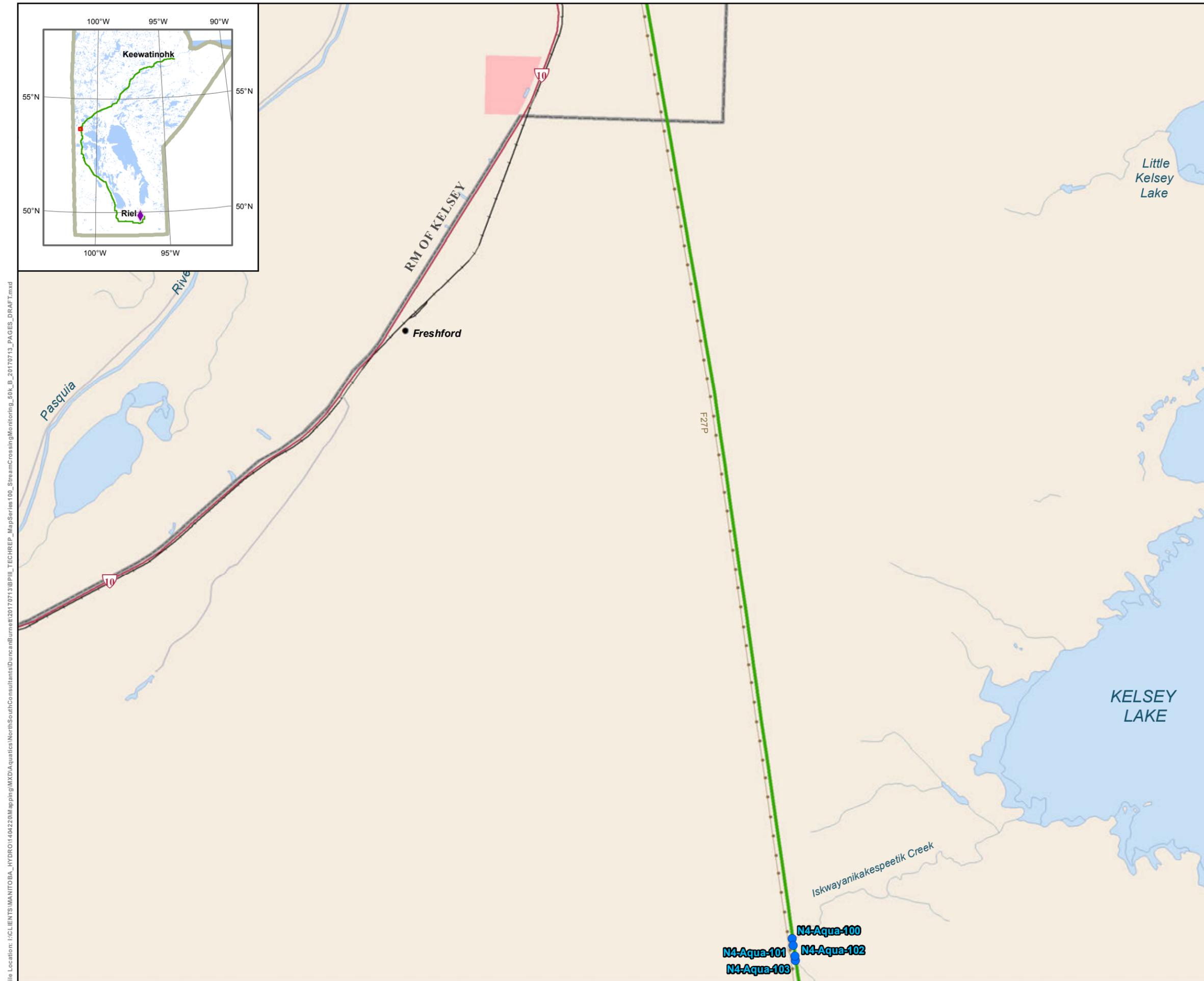
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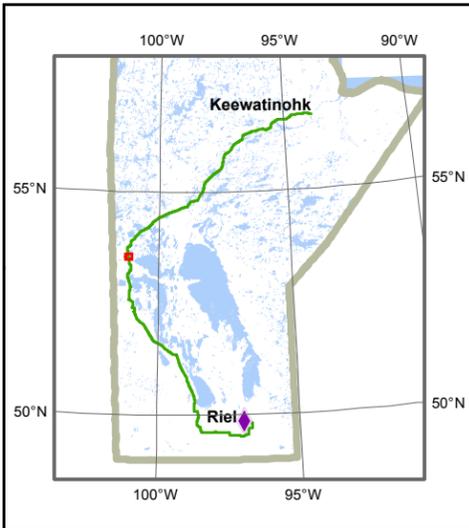


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N4-Aqua-105

KELSEY LAKE



### Bipole III Transmission Project

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- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

#### Monitoring Location

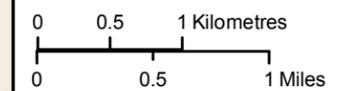
- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

- Community
- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

F27P

Coordinate System: UTM Zone 14N NAD83  
Data Source: MBHydro, ProvMB, NRCAN  
Date Created: July 13, 2017



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## Stream Crossing Compliance Monitoring 2017

## Bipole III Transmission Project

### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
-  Ground Electrode Line
-  Ground Electrode Site
-  Construction Power (KN36)
-  Construction Power Site
-  Construction Camp Site

### Infrastructure

-  Converter Station
-  Generating Station
-  Electrical Station

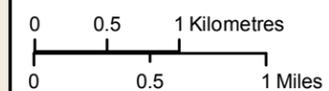
### Monitoring Location

-  Aquatics Monitoring Site 2017
-  Aquatics Monitoring Site 2017

### Landbase

-  Community
-  City / Town
-  Rural Municipality
-  First Nation
-  National/Provincial Park

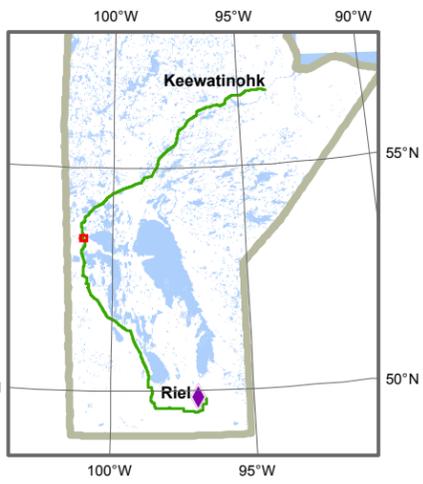
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# Stream Crossing Compliance Monitoring 2017

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**N4-Aqua-106**

F27P



## Bipole III Transmission Project

### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
-  Ground Electrode Line
-  Ground Electrode Site
-  Construction Power (KN36)
-  Construction Power Site
-  Construction Camp Site

### Infrastructure

-  Converter Station
-  Generating Station
-  Electrical Station

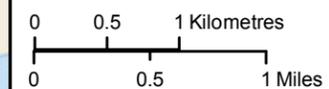
### Monitoring Location

-  Aquatics Monitoring Site 2017
-  Aquatics Monitoring Site 2017

### Landbase

-  Community
-  City / Town
-  Rural Municipality
-  First Nation
-  National/Provincial Park

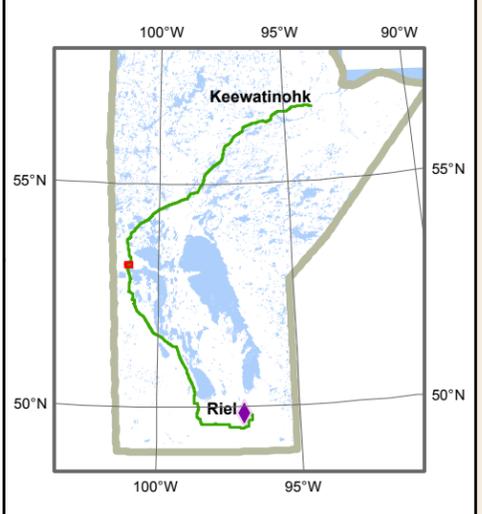
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# Stream Crossing Compliance Monitoring 2017

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## Bipole III Transmission Project

### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
-  Ground Electrode Line
-  Ground Electrode Site
-  Construction Power (KN36)
-  Construction Power Site
-  Construction Camp Site

### Infrastructure

-  Converter Station
-  Generating Station
-  Electrical Station

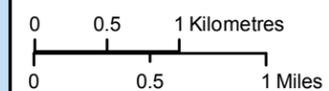
### Monitoring Location

-  Aquatics Monitoring Site 2017
-  Aquatics Monitoring Site 2017

### Landbase

-  Community
-  City / Town
-  Rural Municipality
-  First Nation
-  National/Provincial Park

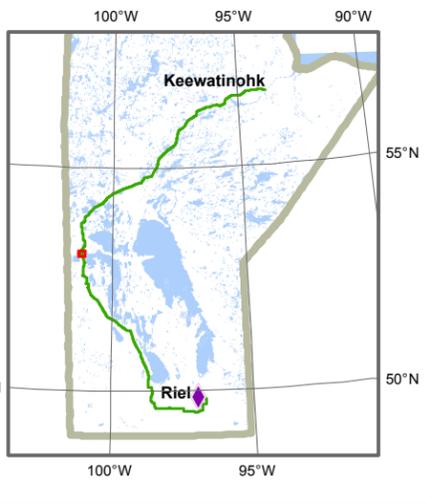
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# Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

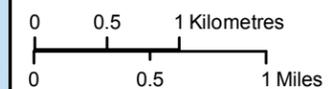
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

- Community
- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

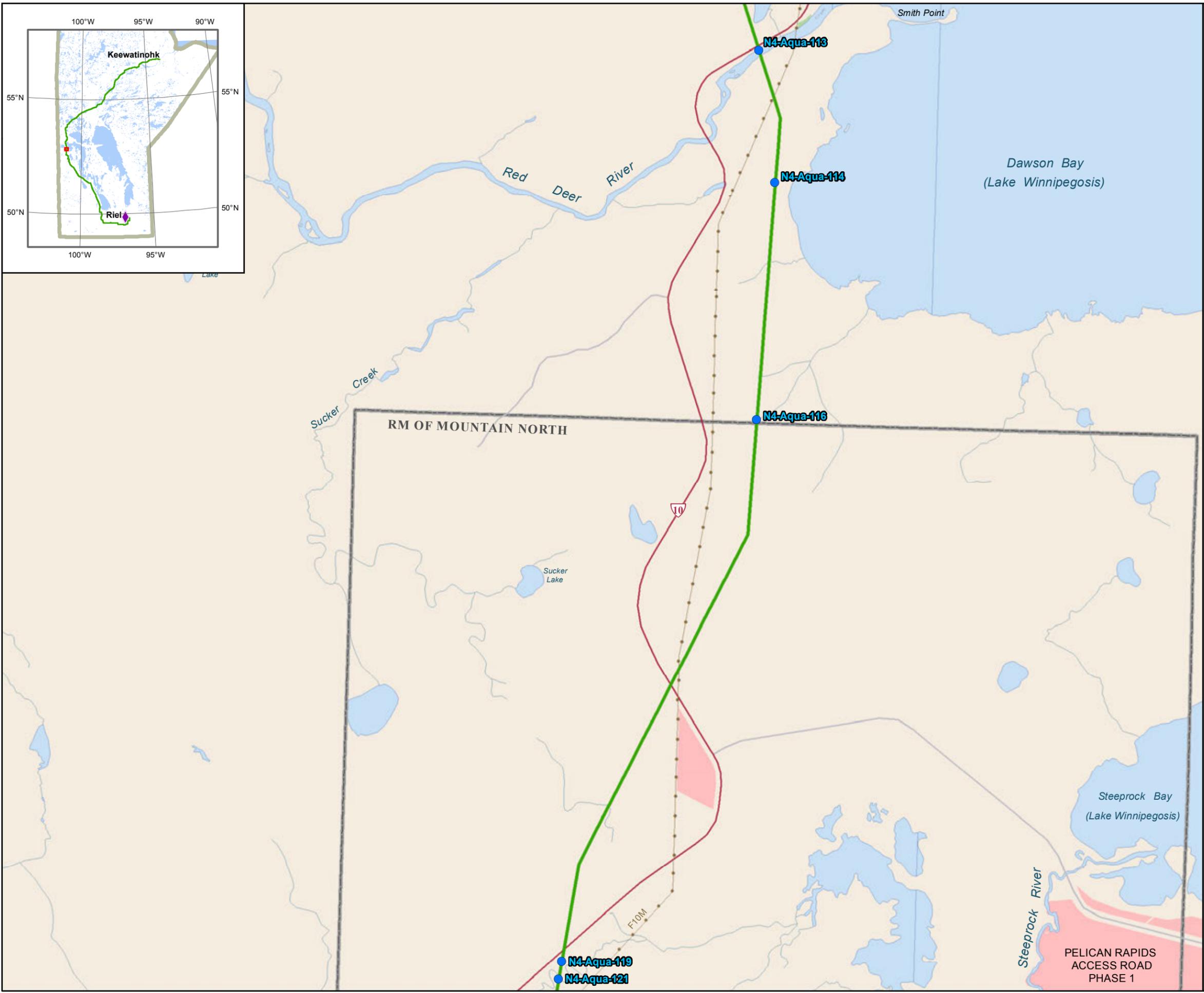
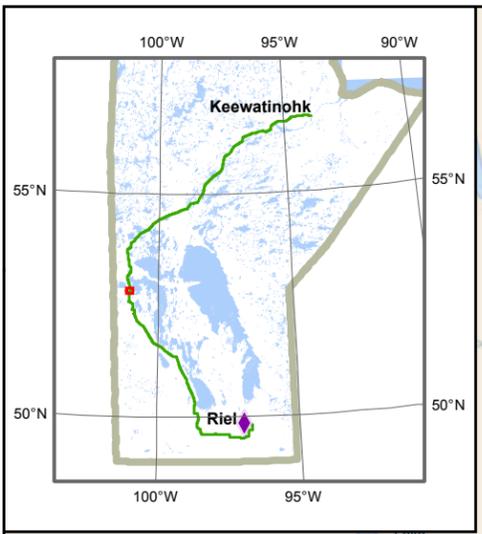
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## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
-  Ground Electrode Line
-  Ground Electrode Site
-  Construction Power (KN36)
-  Construction Power Site
-  Construction Camp Site

#### Infrastructure

-  Converter Station
-  Generating Station
-  Electrical Station

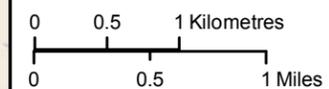
#### Monitoring Location

-  Aquatics Monitoring Site 2017
-  Aquatics Monitoring Site 2017

#### Landbase

-  Community
-  City / Town
-  Rural Municipality
-  First Nation
-  National/Provincial Park

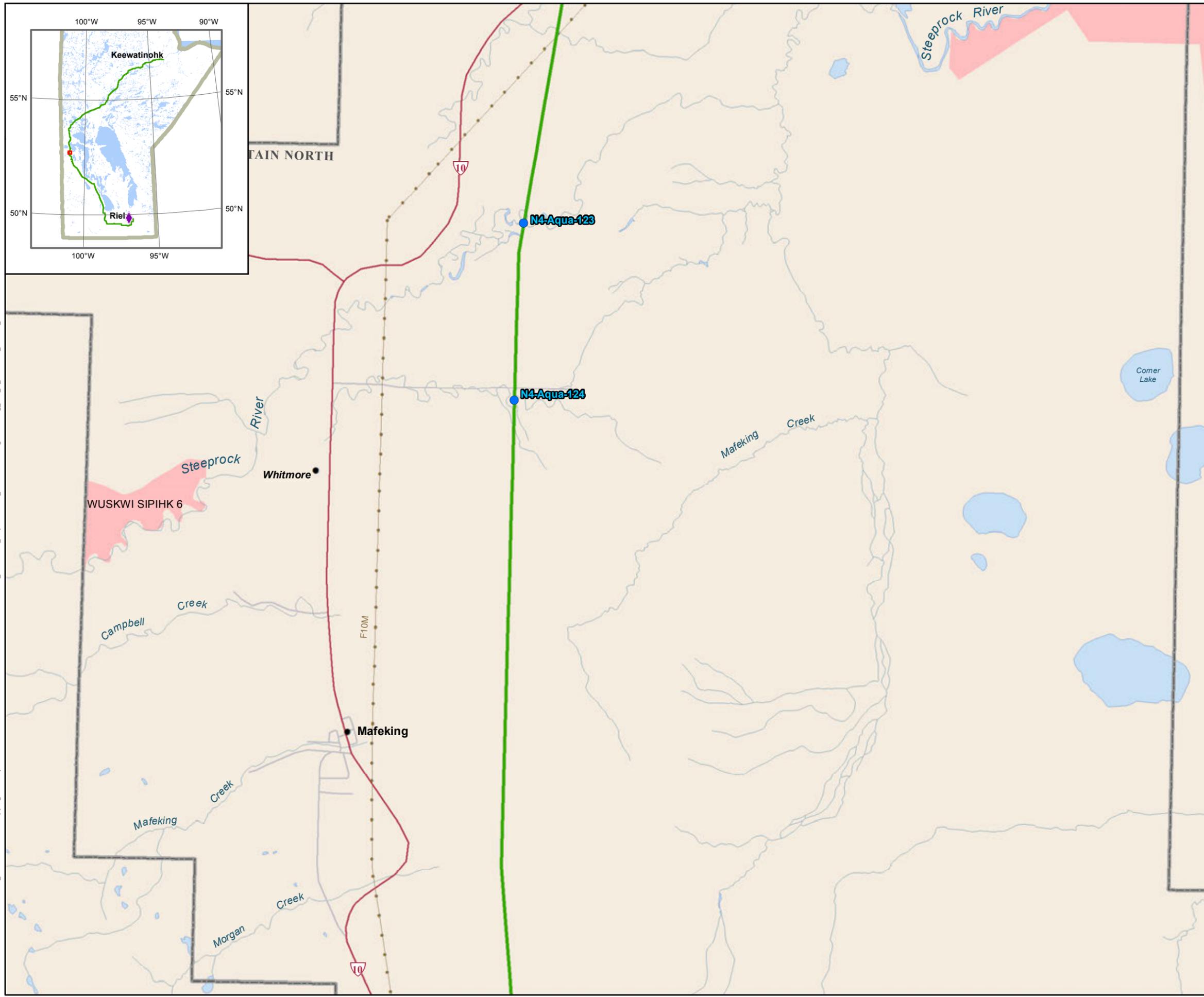
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## Stream Crossing Compliance Monitoring 2017

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TAIN NORTH

Whitmore

F10M

Mafeking

Morgan Creek

Mafeking Creek

Campbell Creek

Steeprock River

Mafeking Creek

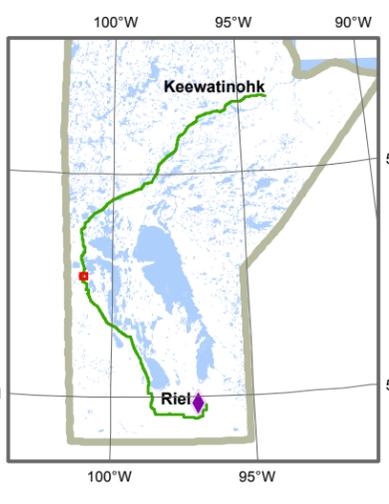
Comer Lake

Steeprock River

N4-Aqua-123

N4-Aqua-124

WUSKWI SIPIHK 6



### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

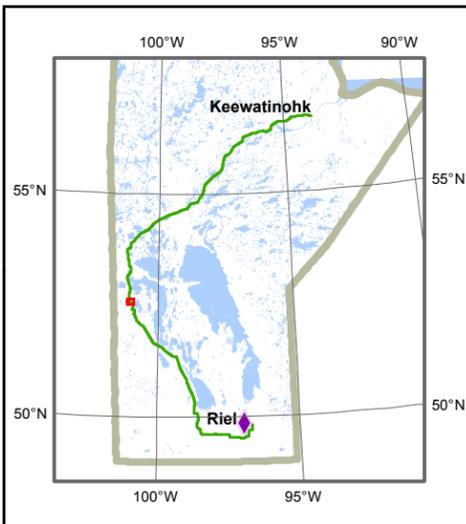
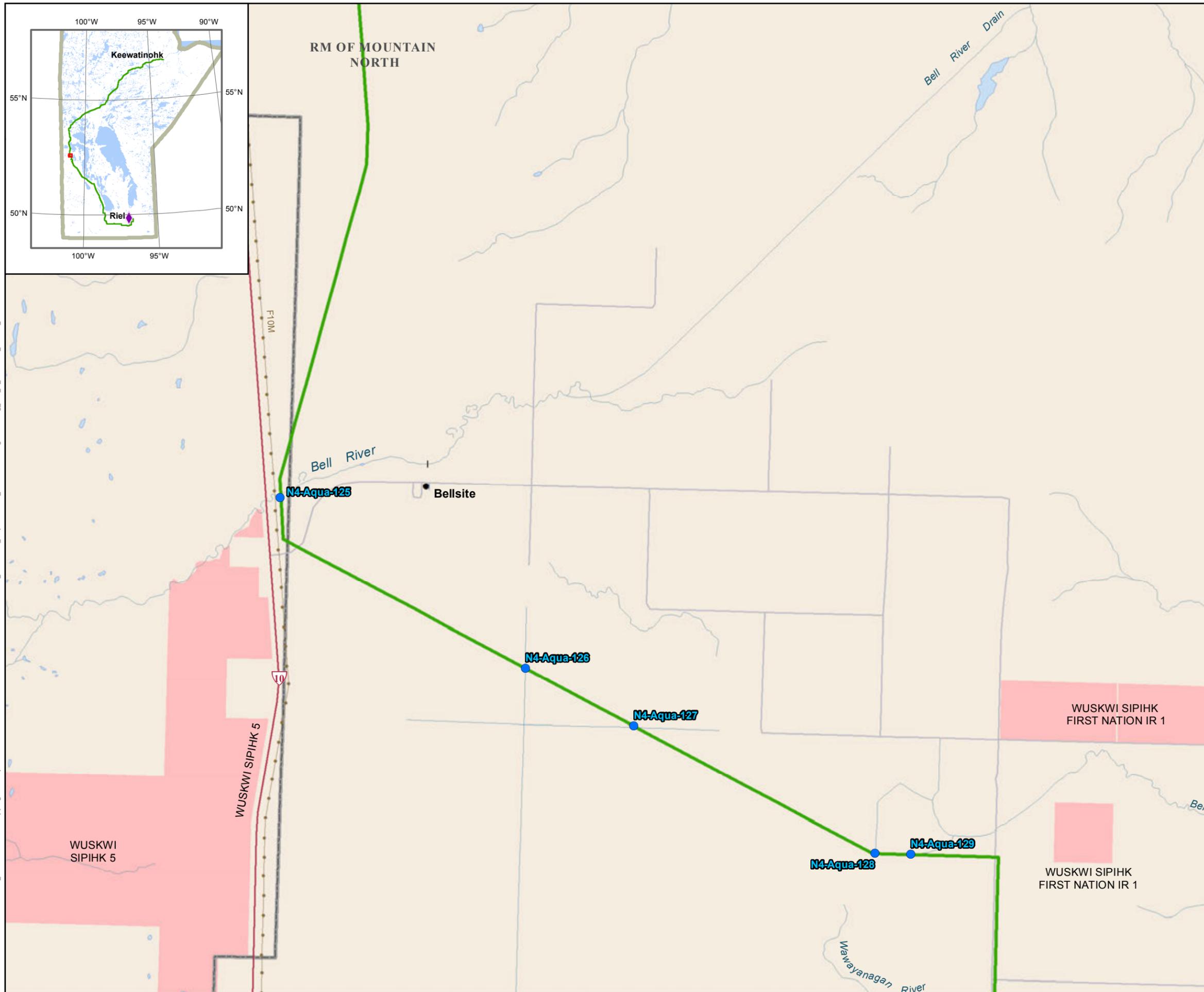
- Community
- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

Coordinate System: UTM Zone 14N NAD83  
 Data Source: MBHydro, ProvMB, NRCAN  
 Date Created: July 13, 2017



## Stream Crossing Compliance Monitoring 2017

File Location: I:\CLIENTS\MANITOBA\_HYDRO\1494220\map\pin\gl\MXD\Aquatics\North\South\consultants\Durcan\Burne\120170713\BIPOL\_III\_TECHREP\_MapSeries100\_StreamCrossingMonitoring\_50k\_B\_20170713\_PAGES\_DRAFT.mxd



RM OF MOUNTAIN NORTH

Bell River Drain

Bell River

Bellsite

F10M

WUSKWI SIPIHK 5

WUSKWI SIPIHK 5

N4-Aqua-126

N4-Aqua-127

N4-Aqua-128

N4-Aqua-129

WUSKWI SIPIHK FIRST NATION IR 1

WUSKWI SIPIHK FIRST NATION IR 1

Wewayanagan River

Bell

### Bipole III Transmission Project

#### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
-  Ground Electrode Line
-  Ground Electrode Site
-  Construction Power (KN36)
-  Construction Power Site
-  Construction Camp Site

#### Infrastructure

-  Converter Station
-  Generating Station
-  Electrical Station

#### Monitoring Location

-  Aquatics Monitoring Site 2017
-  Aquatics Monitoring Site 2017

#### Landbase

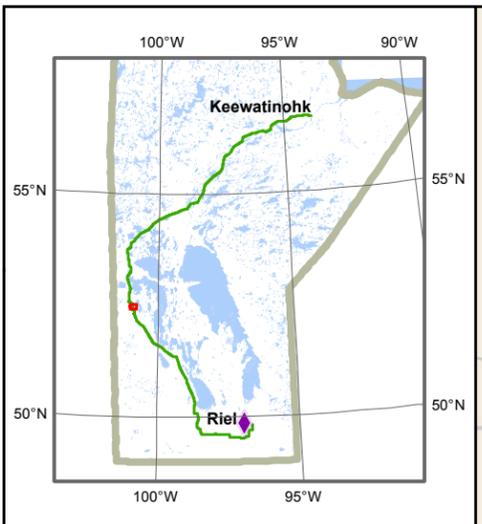
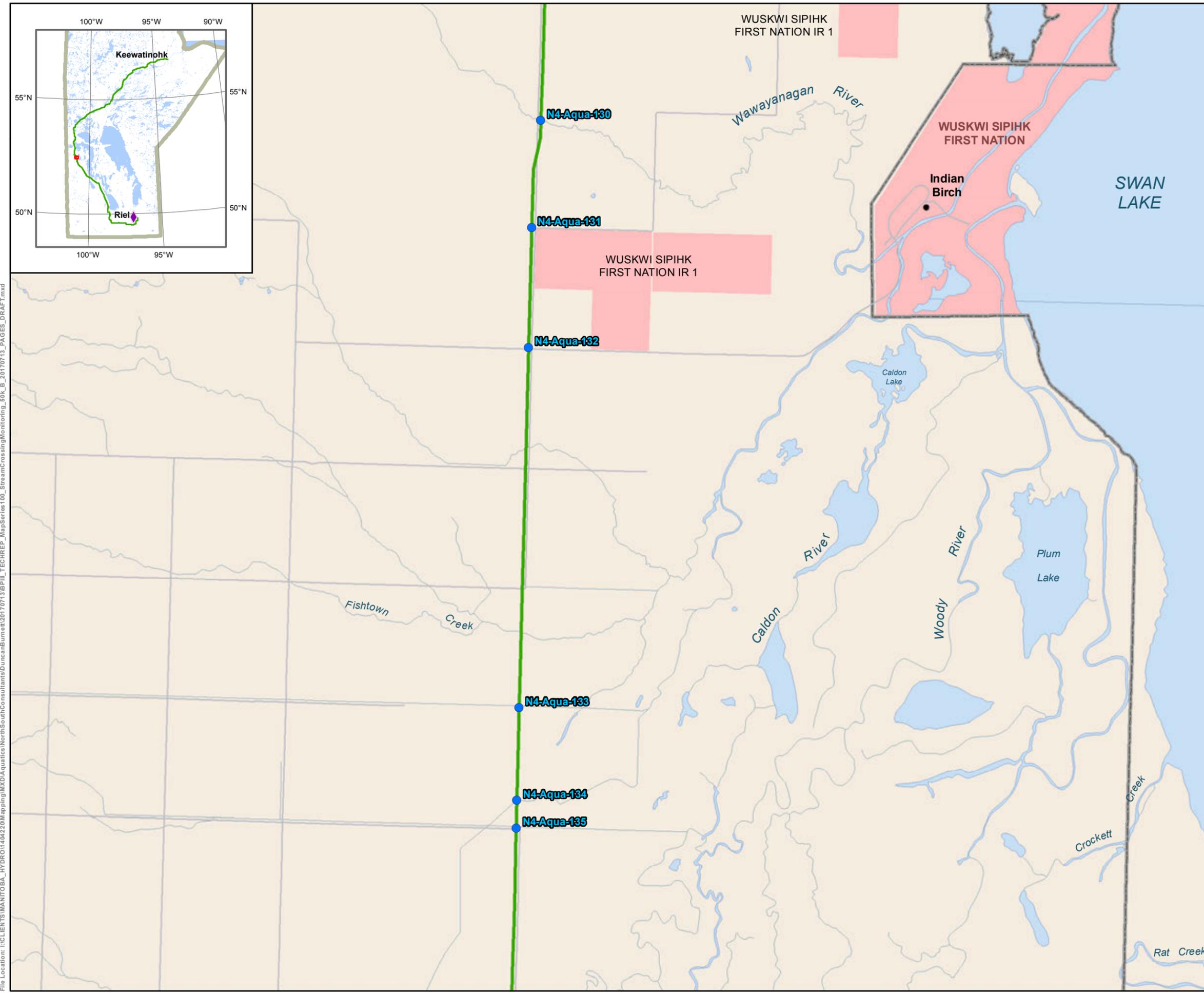
-  Community
-  City / Town
-  Rural Municipality
-  First Nation
-  National/Provincial Park

Coordinate System: UTM Zone 14N NAD83  
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 Date Created: July 13, 2017



## Stream Crossing Compliance Monitoring 2017

File Location: I:\CLIENTS\MANITOBA\_HYDRO\1494220\map\pin\gl\MXD\Aquatics\North\South\consultants\DurcanBurne\20170713\BPIPIL\_TECHREP\_MapSeries100\_StreamCrossingMonitoring\_50k\_B\_20170713\_PAGES\_DRAFT.mxd



### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

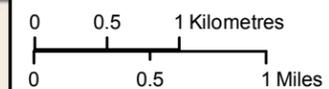
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

- Community
- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

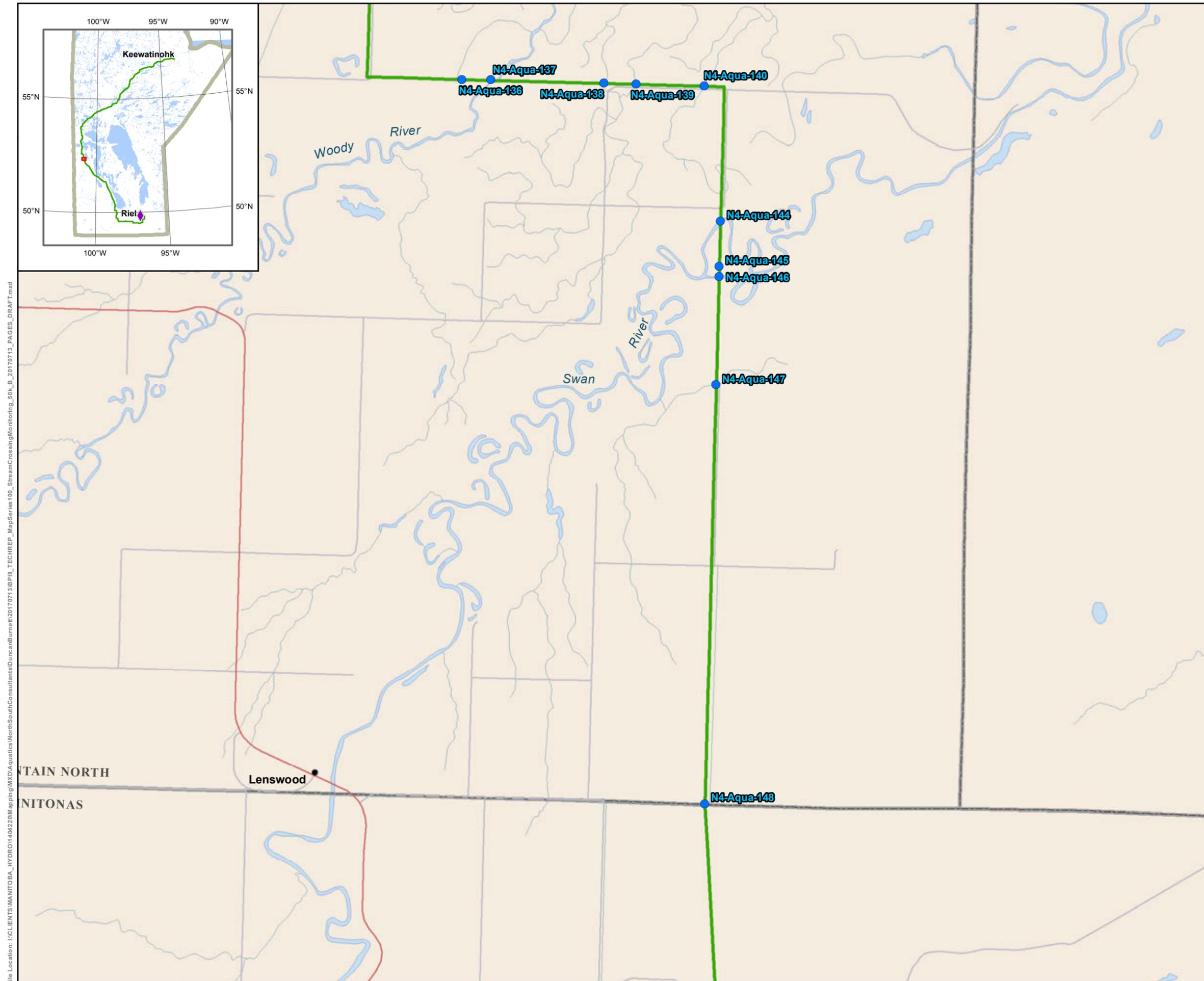
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## Stream Crossing Compliance Monitoring 2017

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## Bipole III Transmission Project

### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
-  Ground Electrode Line
-  Ground Electrode Site
-  Construction Power (KN36)
-  Construction Power Site
-  Construction Camp Site

### Infrastructure

-  Converter Station
-  Generating Station
-  Electrical Station

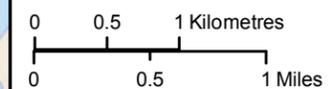
### Monitoring Location

-  Aquatics Monitoring Site 2017
-  Aquatics Monitoring Site 2017

### Landbase

-  Community
-  City / Town
-  Rural Municipality
-  First Nation
-  National/Provincial Park

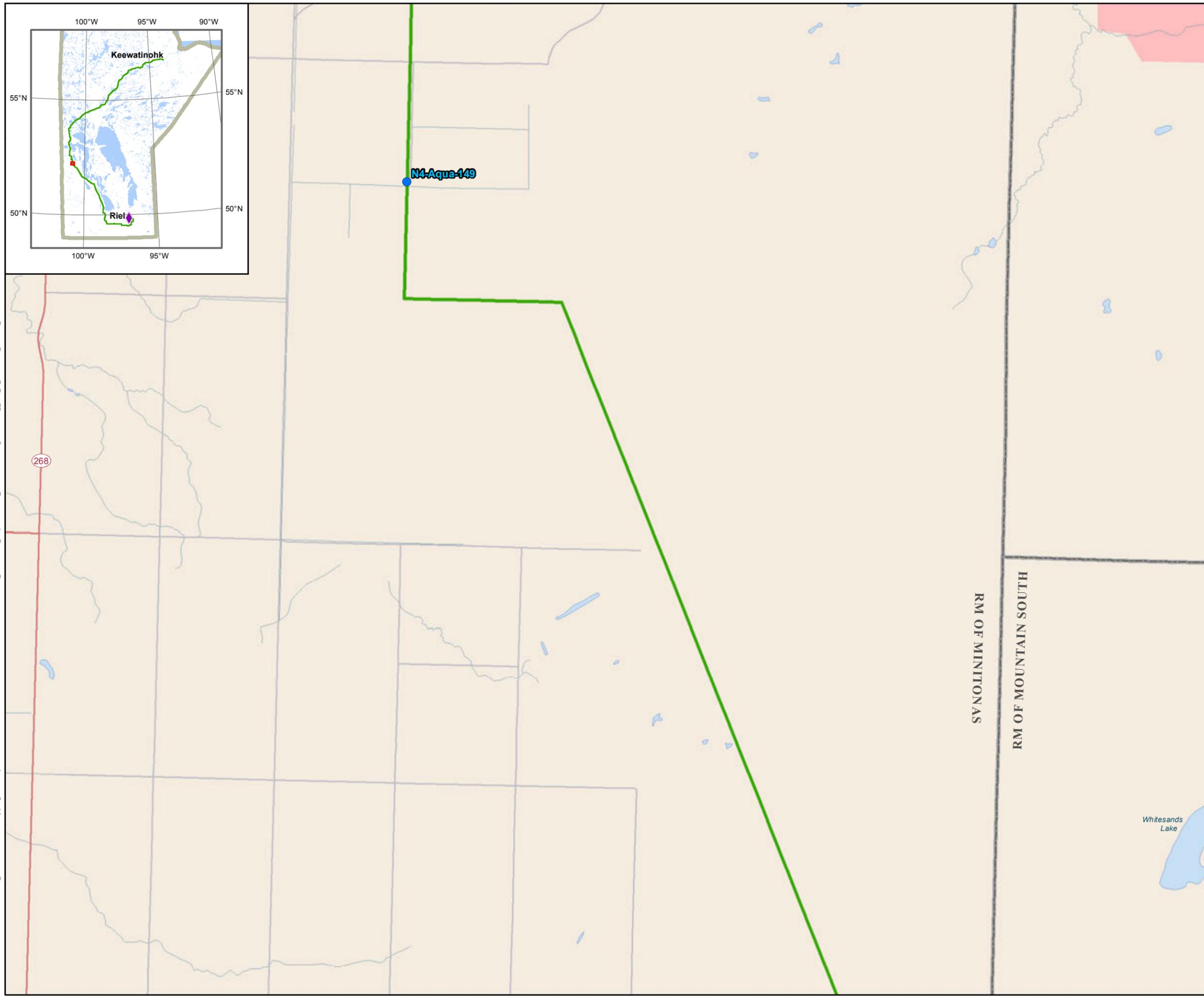
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# Stream Crossing Compliance Monitoring 2017

File Location: I:\CLIENTS\MANTOBA\_HYDRO\1494220\map\pin\g\MXD\Aquatics\North\South\consultants\Durcan\Burne\120170713\BPIIL\_TECHREP\_MapSeries100\_StreamCrossingMonitoring\_50k\_B\_20170713\_PAGES\_DRAFT.mxd



### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

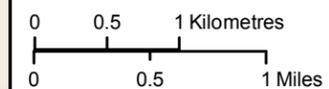
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

- Community
- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

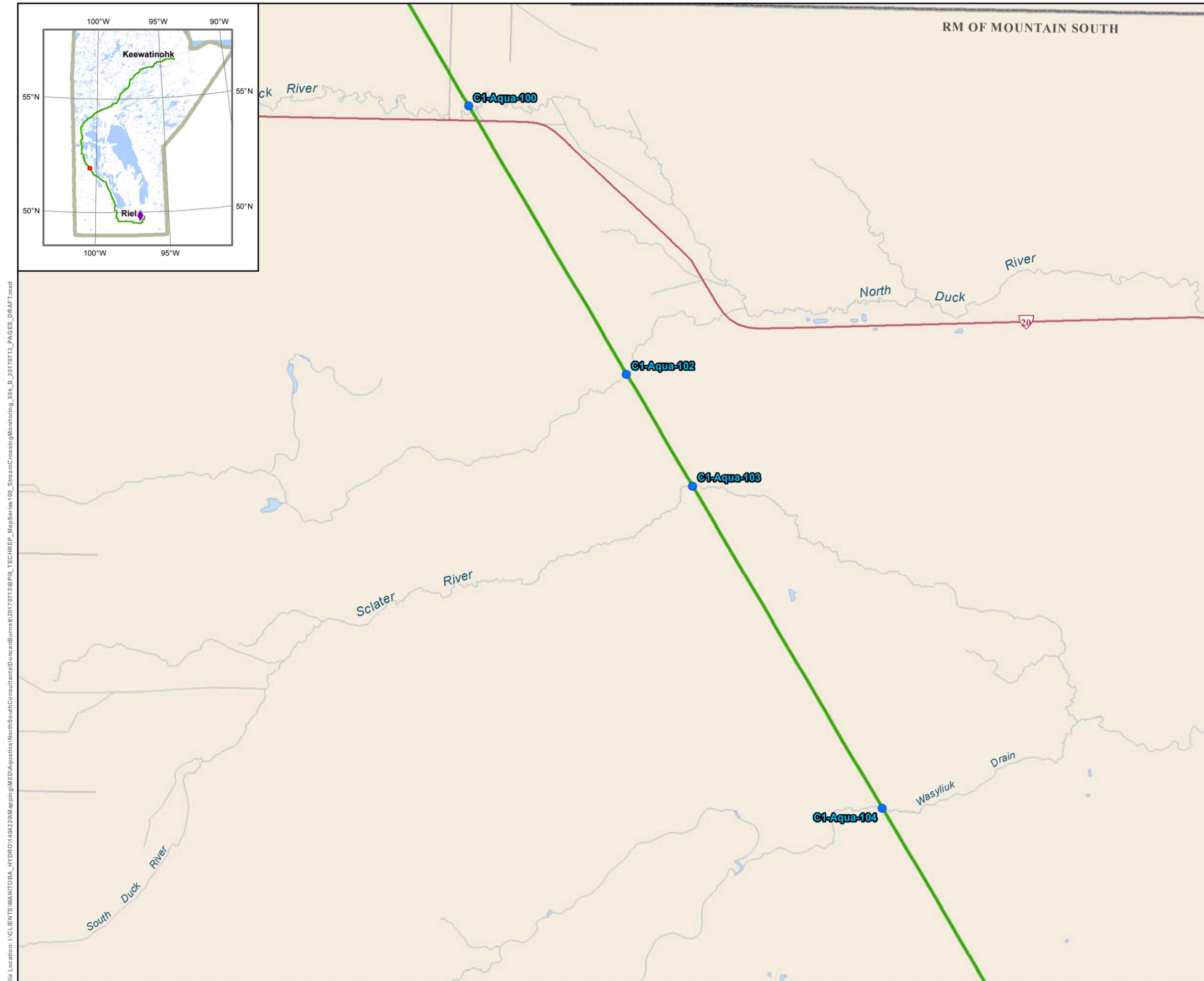
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## Stream Crossing Compliance Monitoring 2017

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RM OF MOUNTAIN SOUTH

South Duck River

G1-Aqua-100

North Duck River

G1-Aqua-102

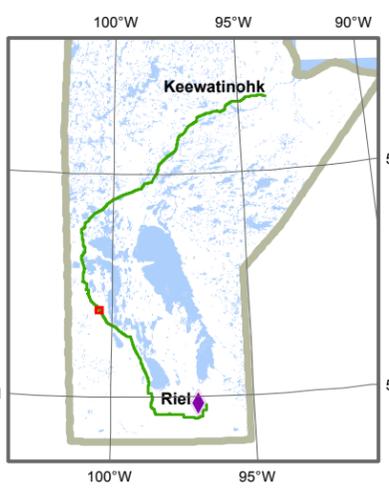
G1-Aqua-103

Sclater River

Wasyliuk Drain

G1-Aqua-104

South Duck River



55°N 50°N  
 100°W 95°W 90°W

## Bipole III Transmission Project

### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

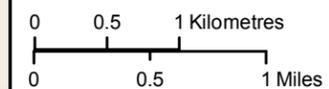
### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

### Landbase

- Community
- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

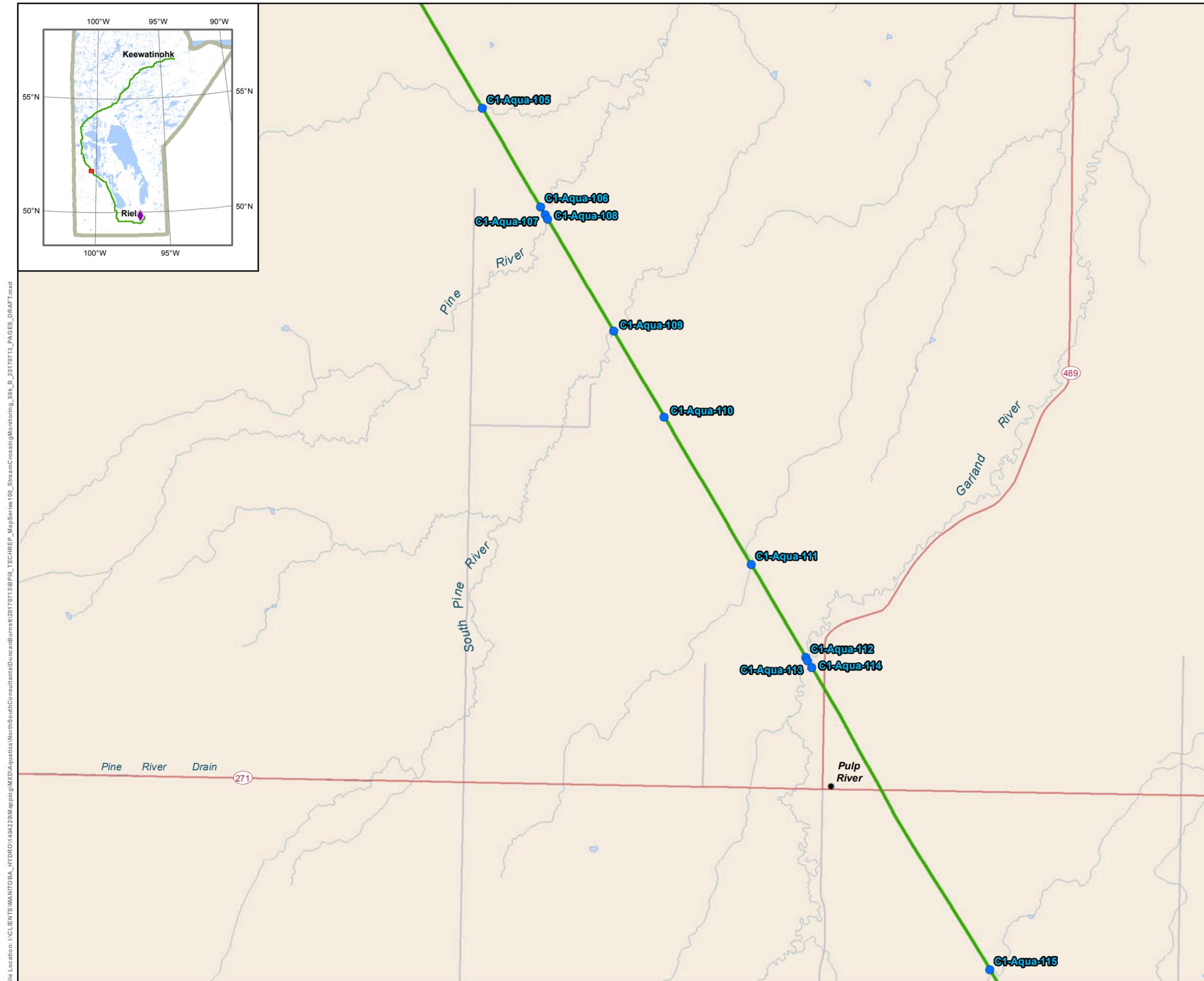
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# Stream Crossing Compliance Monitoring 2017

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## Bipole III Transmission Project

### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
-  Ground Electrode Line
-  Ground Electrode Site
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-  Construction Power Site
-  Construction Camp Site

### Infrastructure

-  Converter Station
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-  Electrical Station

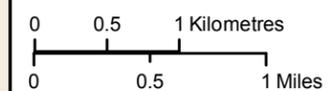
### Monitoring Location

-  Aquatics Monitoring Site 2017
-  Aquatics Monitoring Site 2017

### Landbase

-  Community
-  City / Town
-  Rural Municipality
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-  National/Provincial Park

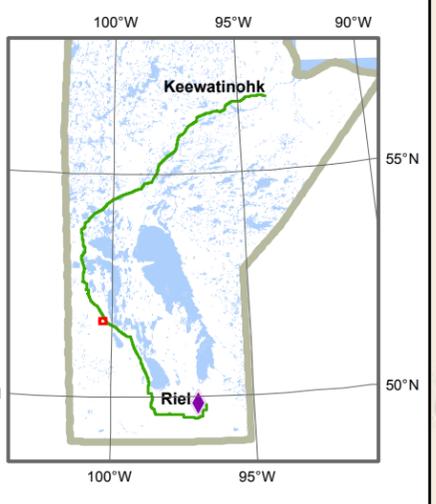
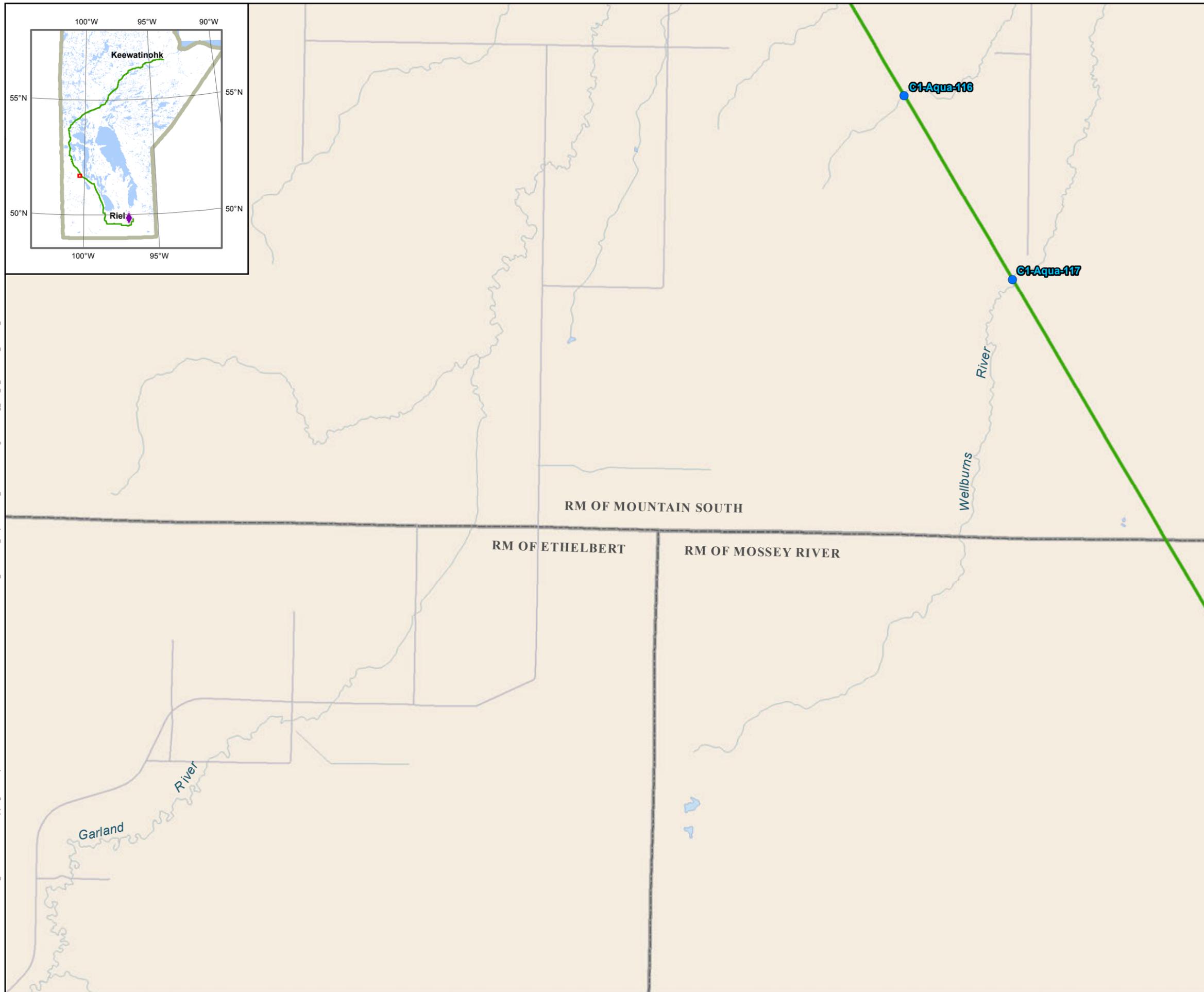
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# Stream Crossing Compliance Monitoring 2017

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## Bipole III Transmission Project

### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
-  Ground Electrode Line
-  Ground Electrode Site
-  Construction Power (KN36)
-  Construction Power Site
-  Construction Camp Site

### Infrastructure

-  Converter Station
-  Generating Station
-  Electrical Station

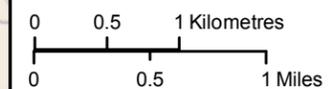
### Monitoring Location

-  Aquatics Monitoring Site 2017
-  Aquatics Monitoring Site 2017

### Landbase

-  Community
-  City / Town
-  Rural Municipality
-  First Nation
-  National/Provincial Park

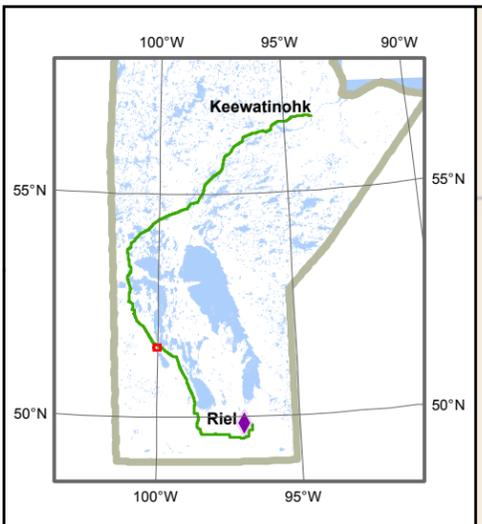
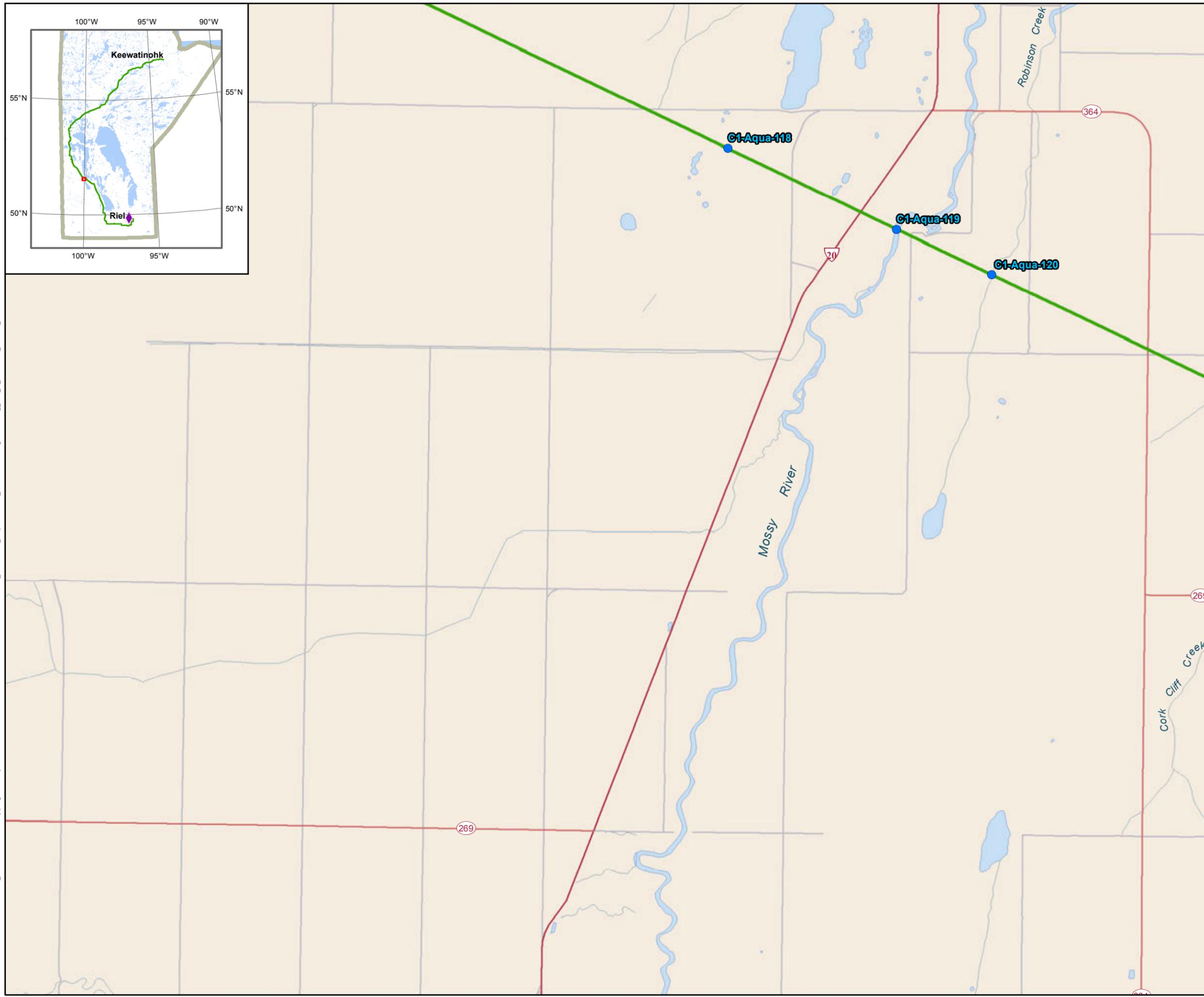
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# Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

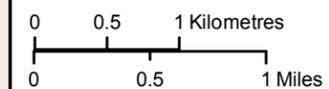
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

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- City / Town
- Rural Municipality
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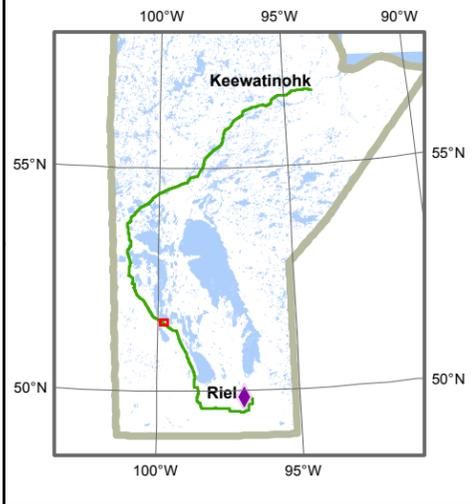
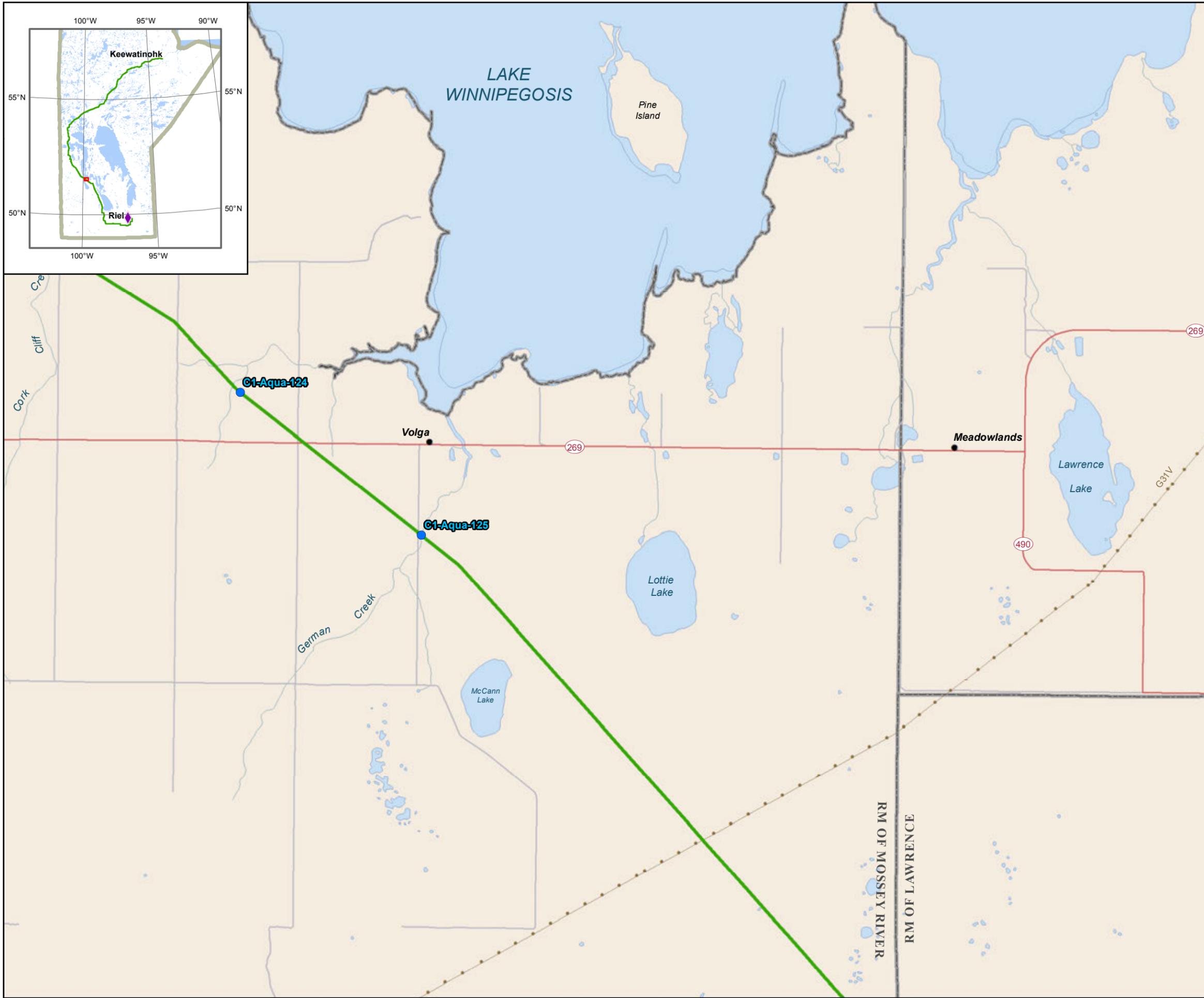
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## Stream Crossing Compliance Monitoring 2017

File Location: I:\CLIENTS\MANITOBA\_HYDRO\1494220\map\pin\gl\MXD\Aquatics\North\South\consultants\DurcanBurne\120170713\BPIIL\_TECHREP\_MapSeries100\_StreamCrossingMonitoring\_60k\_B\_20170713\_PAGES\_DRAFT.mxd



## Bipole III Transmission Project

### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
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-  Ground Electrode Site
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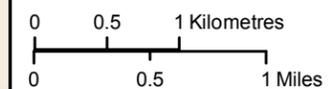
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-  First Nation
-  National/Provincial Park

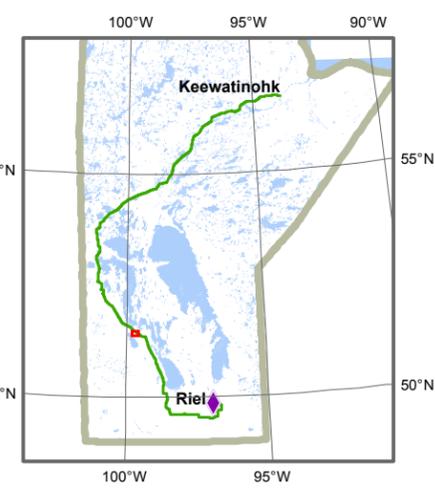
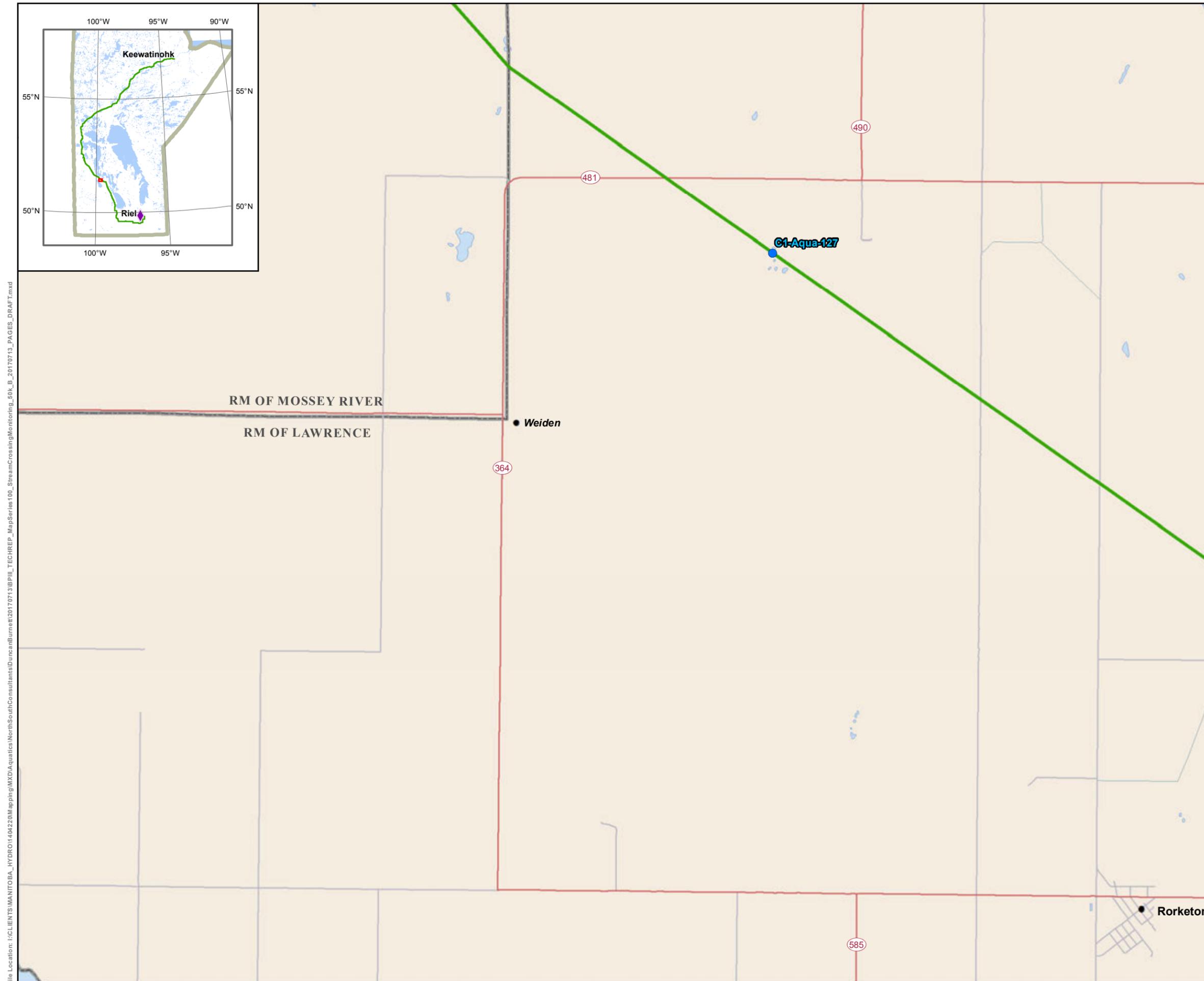
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# Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

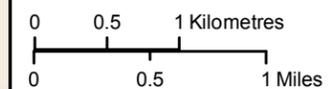
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

- Community
- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

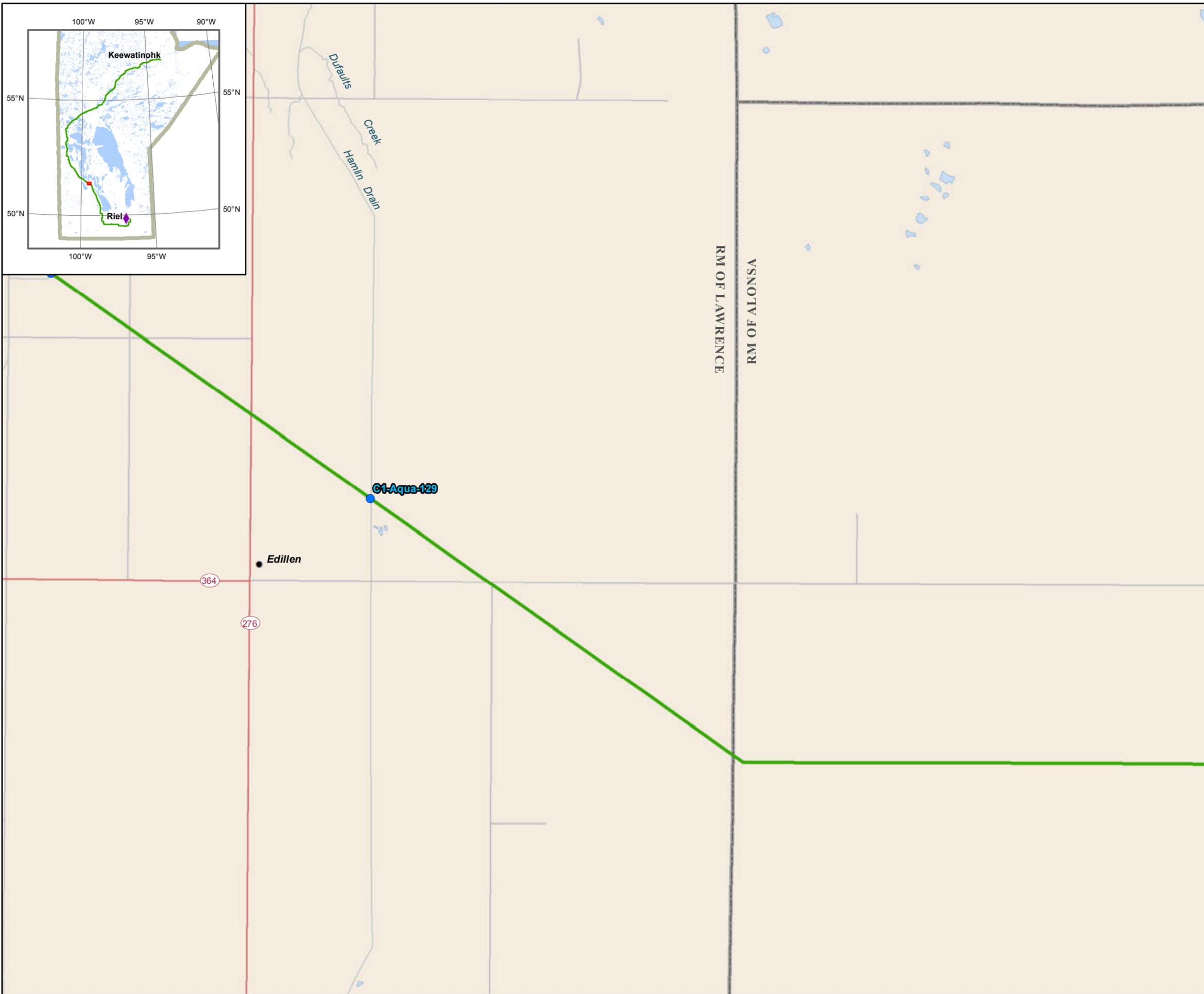
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## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

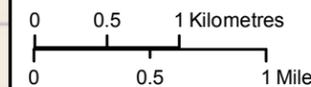
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

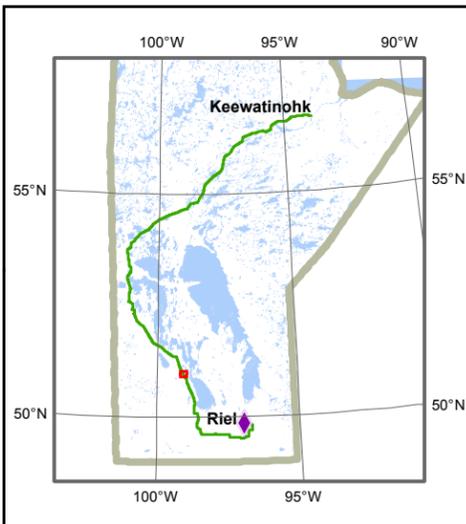
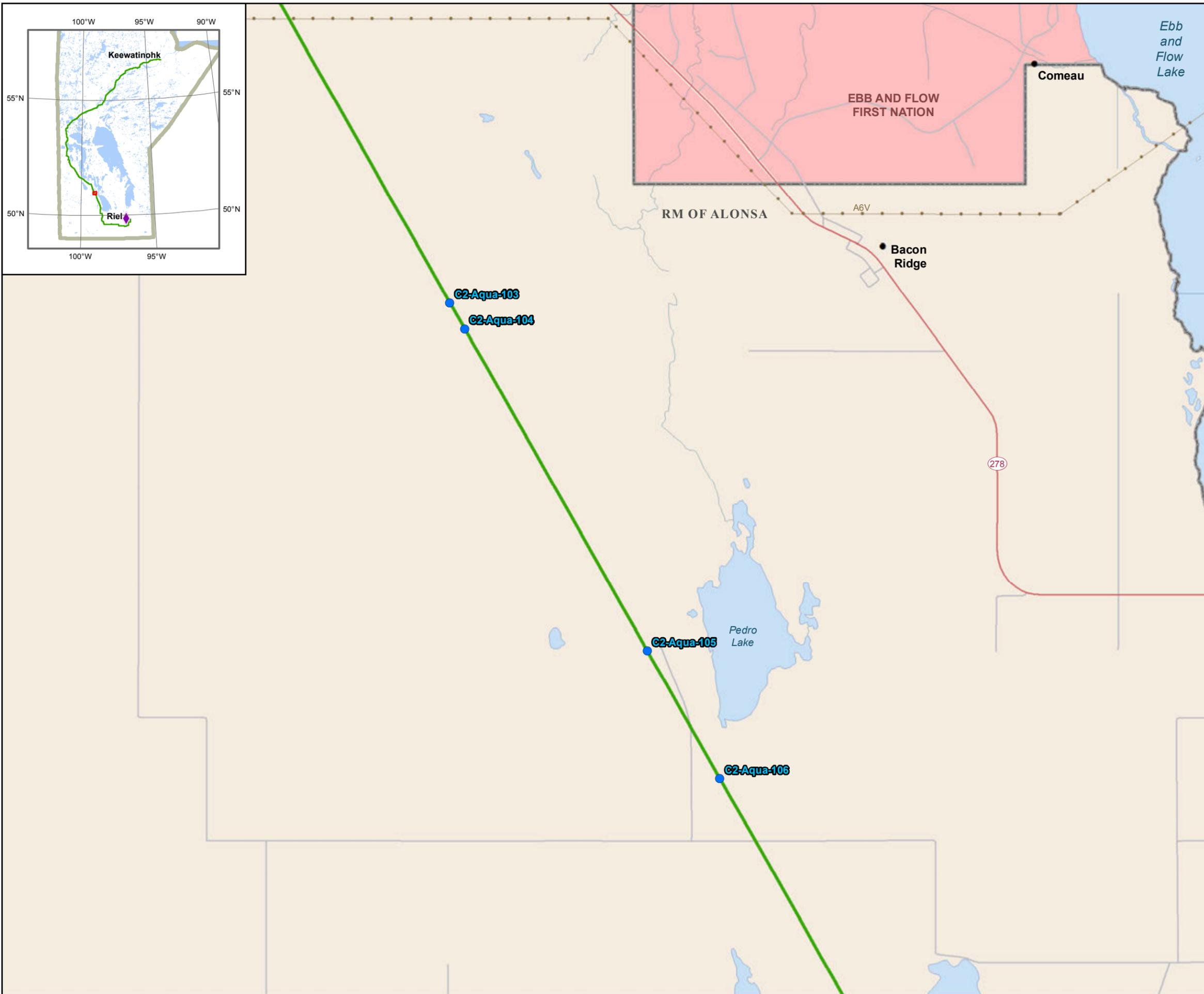
#### Landbase

- Community
- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

Coordinate System: UTM Zone 14N NAD83  
Data Source: MBHydro, ProvMB, NRCAN  
Date Created: July 13, 2017



## Stream Crossing Compliance Monitoring 2017



### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

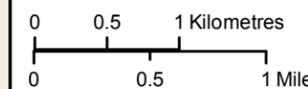
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

- Community
- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

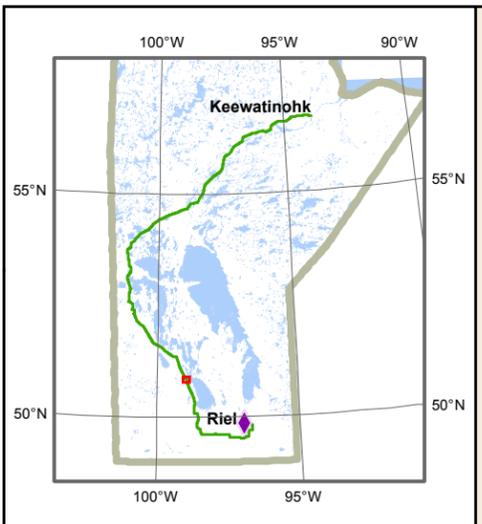
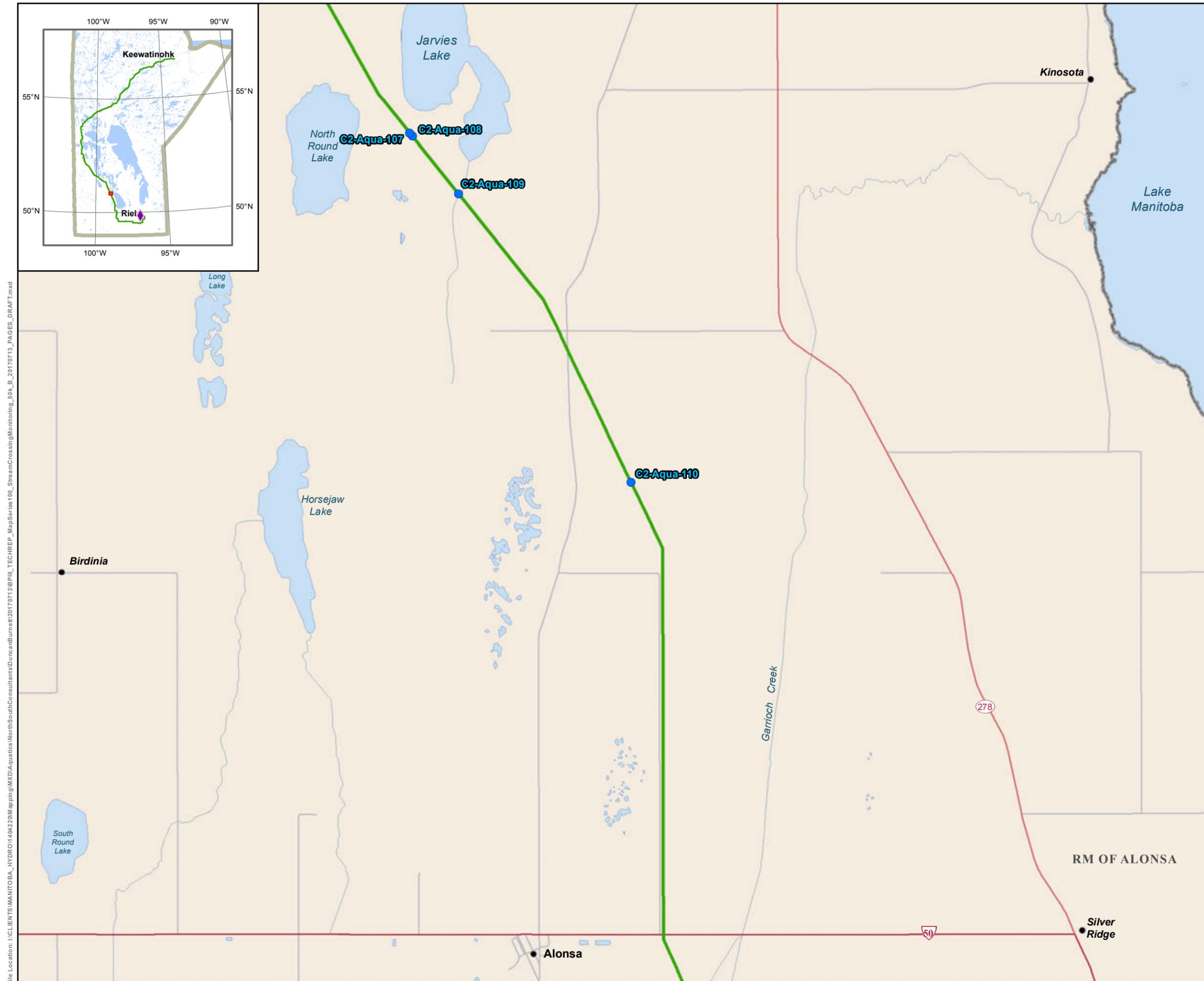
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## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

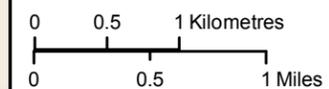
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

- Community
- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

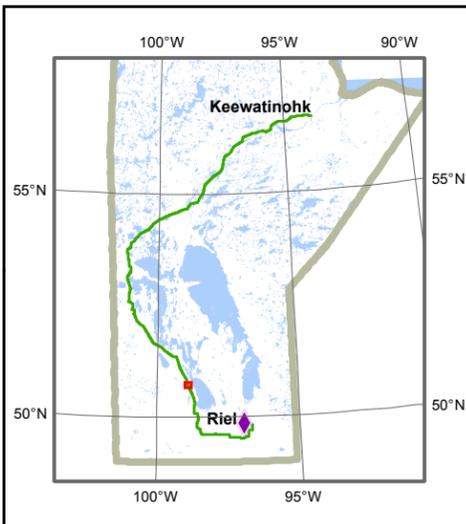
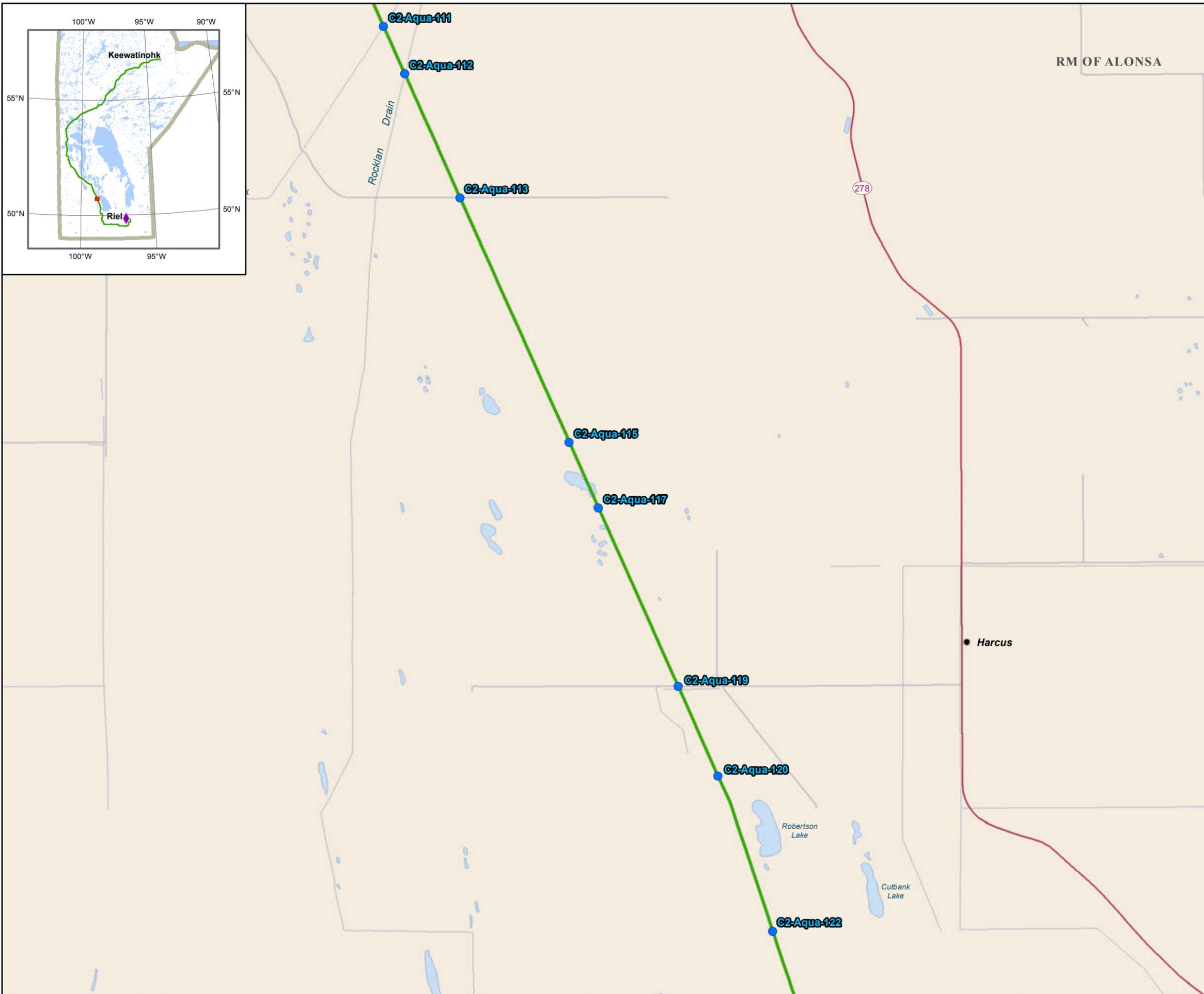
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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

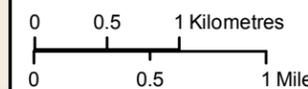
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

- Community
- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

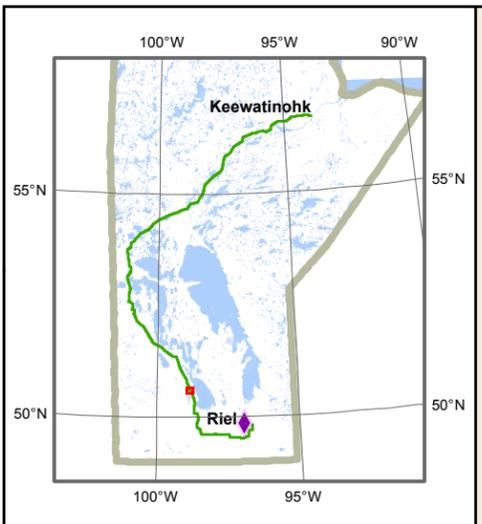
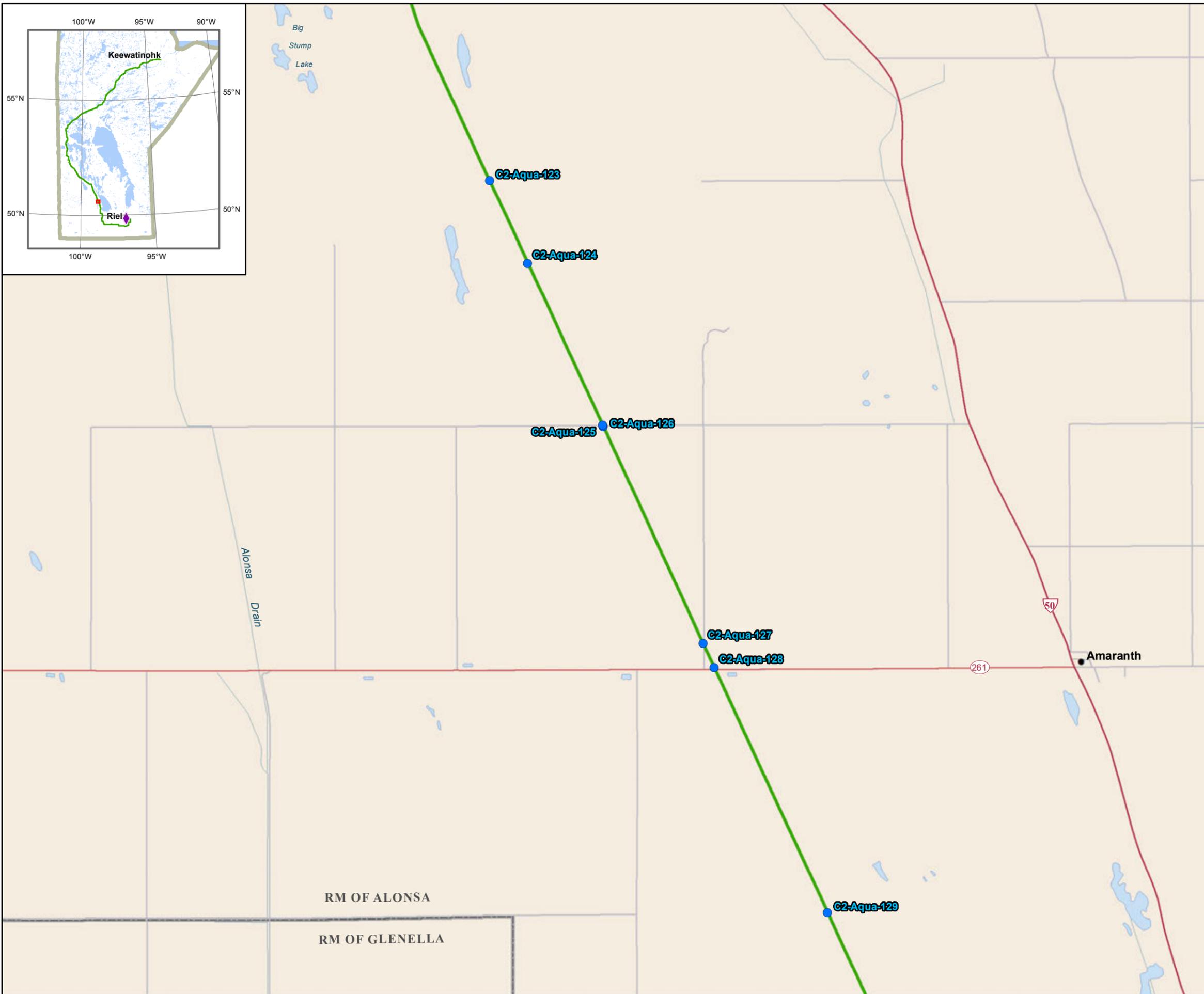
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## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

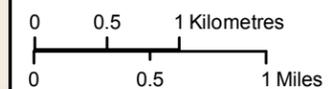
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

- Community
- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

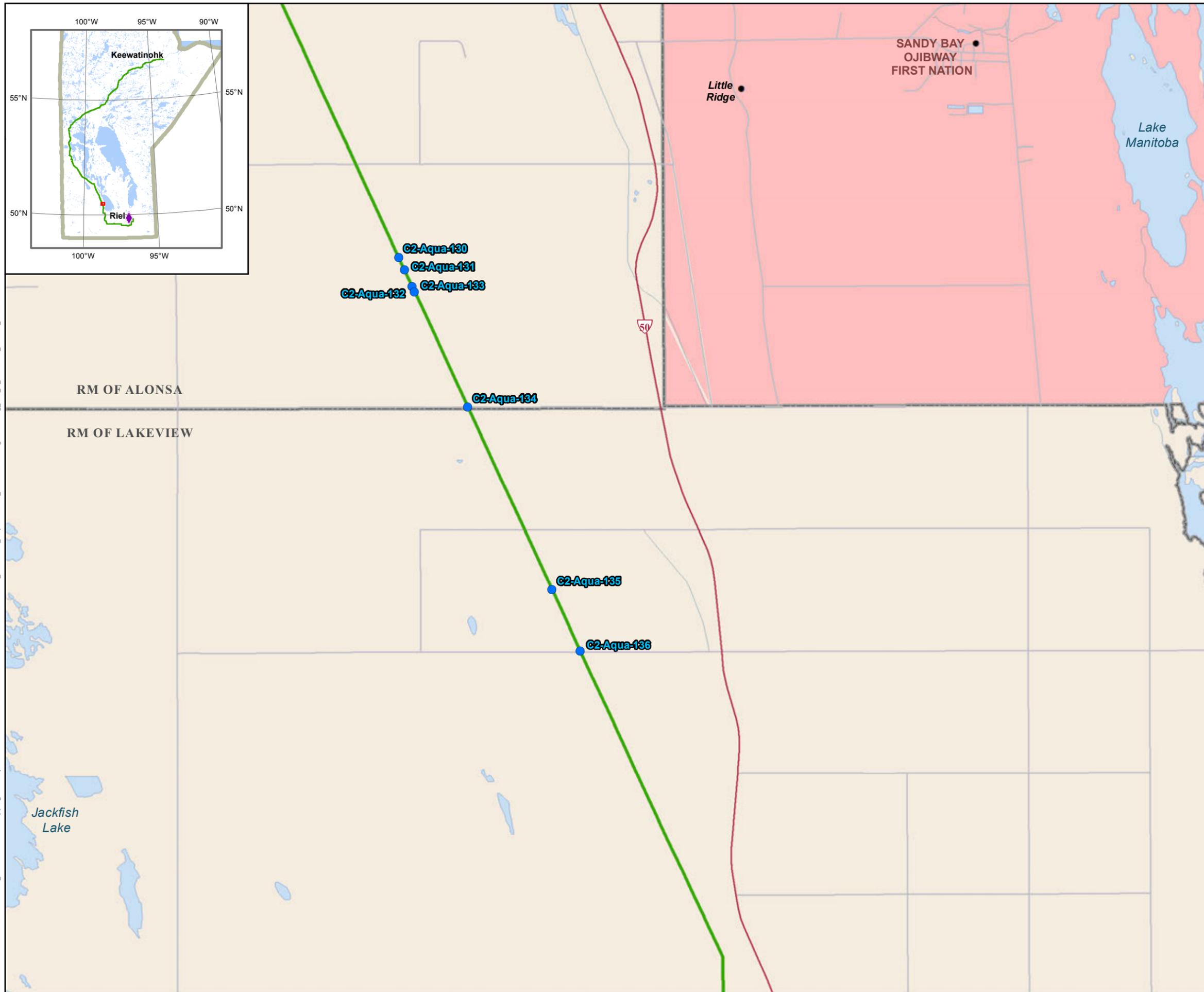
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## Stream Crossing Compliance Monitoring 2017

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## Bipole III Transmission Project

### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
-  Ground Electrode Line
-  Ground Electrode Site
-  Construction Power (KN36)
-  Construction Power Site
-  Construction Camp Site

### Infrastructure

-  Converter Station
-  Generating Station
-  Electrical Station

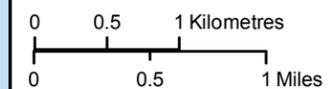
### Monitoring Location

-  Aquatics Monitoring Site 2017
-  Aquatics Monitoring Site 2017

### Landbase

-  Community
-  City / Town
-  Rural Municipality
-  First Nation
-  National/Provincial Park

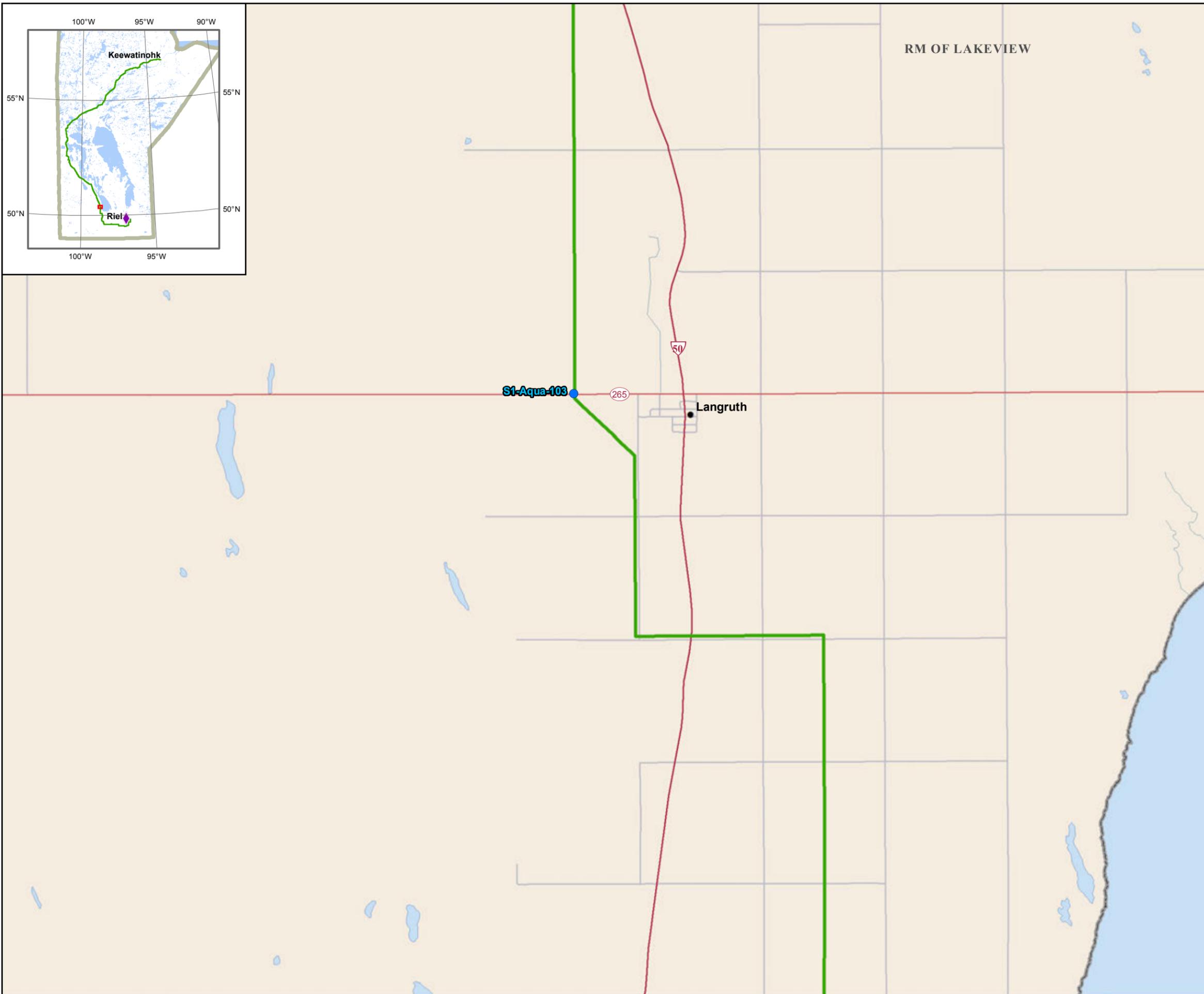
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# Stream Crossing Compliance Monitoring 2017

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## Bipole III Transmission Project

### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

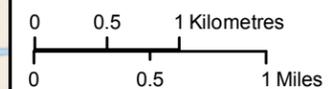
### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

### Landbase

- Community
- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

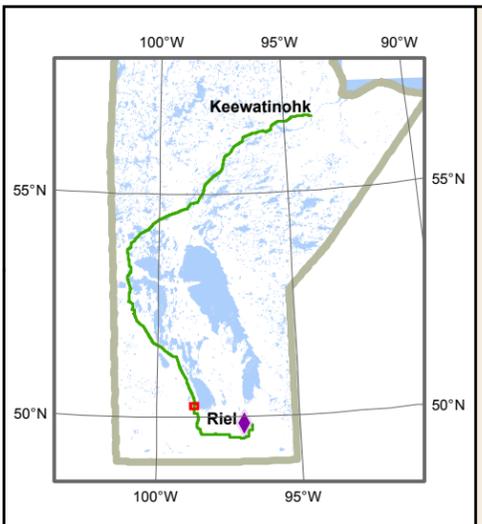
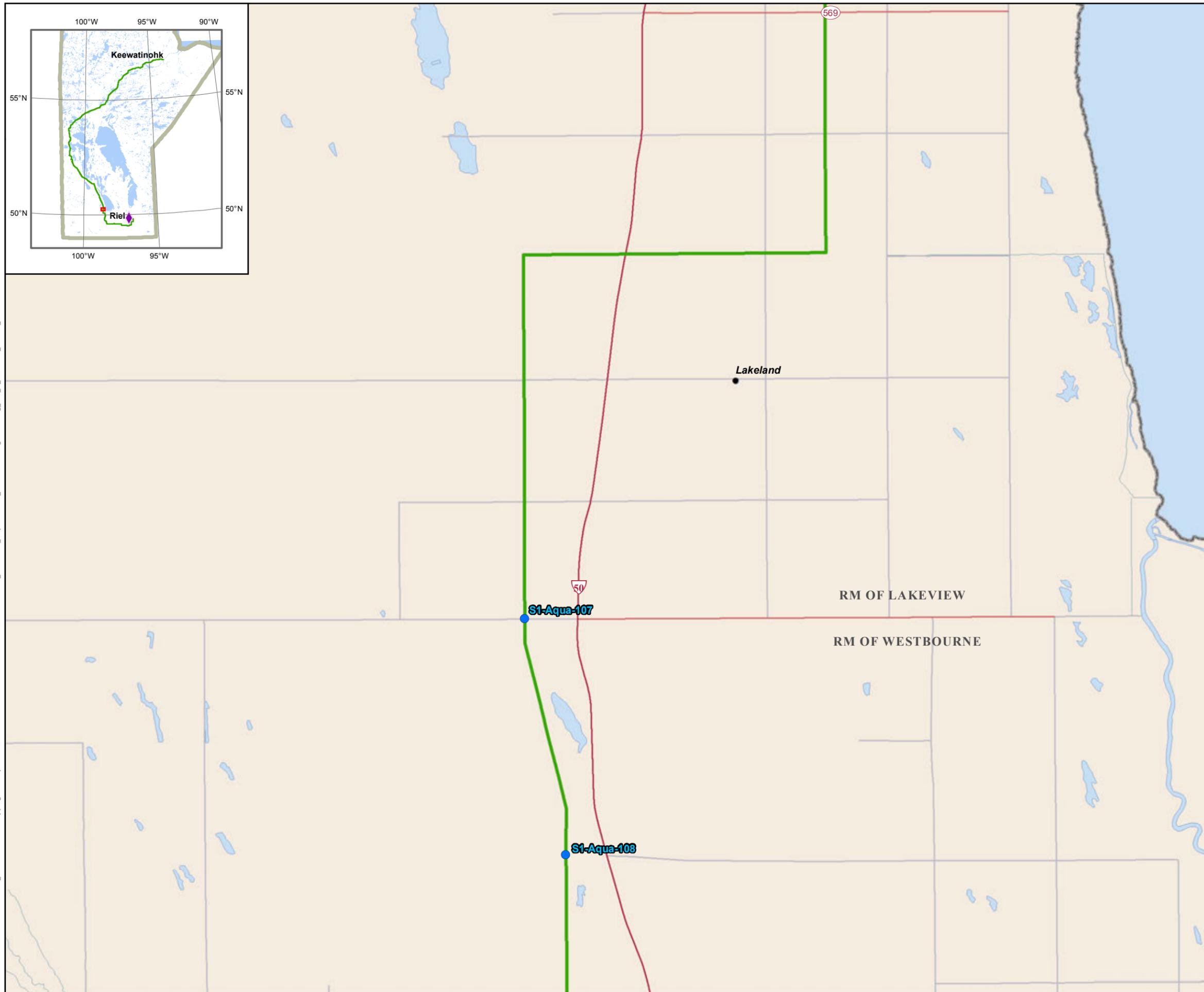
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# Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

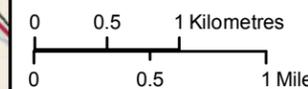
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

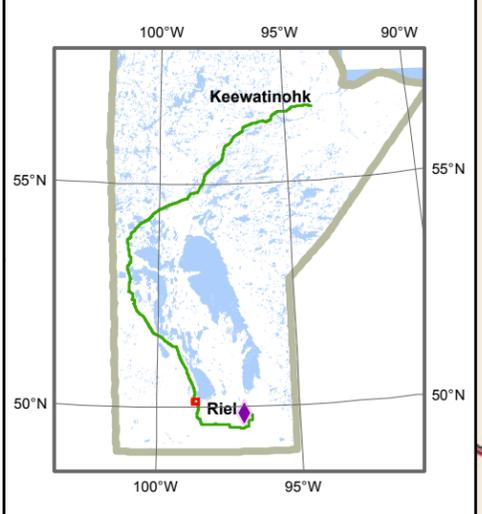
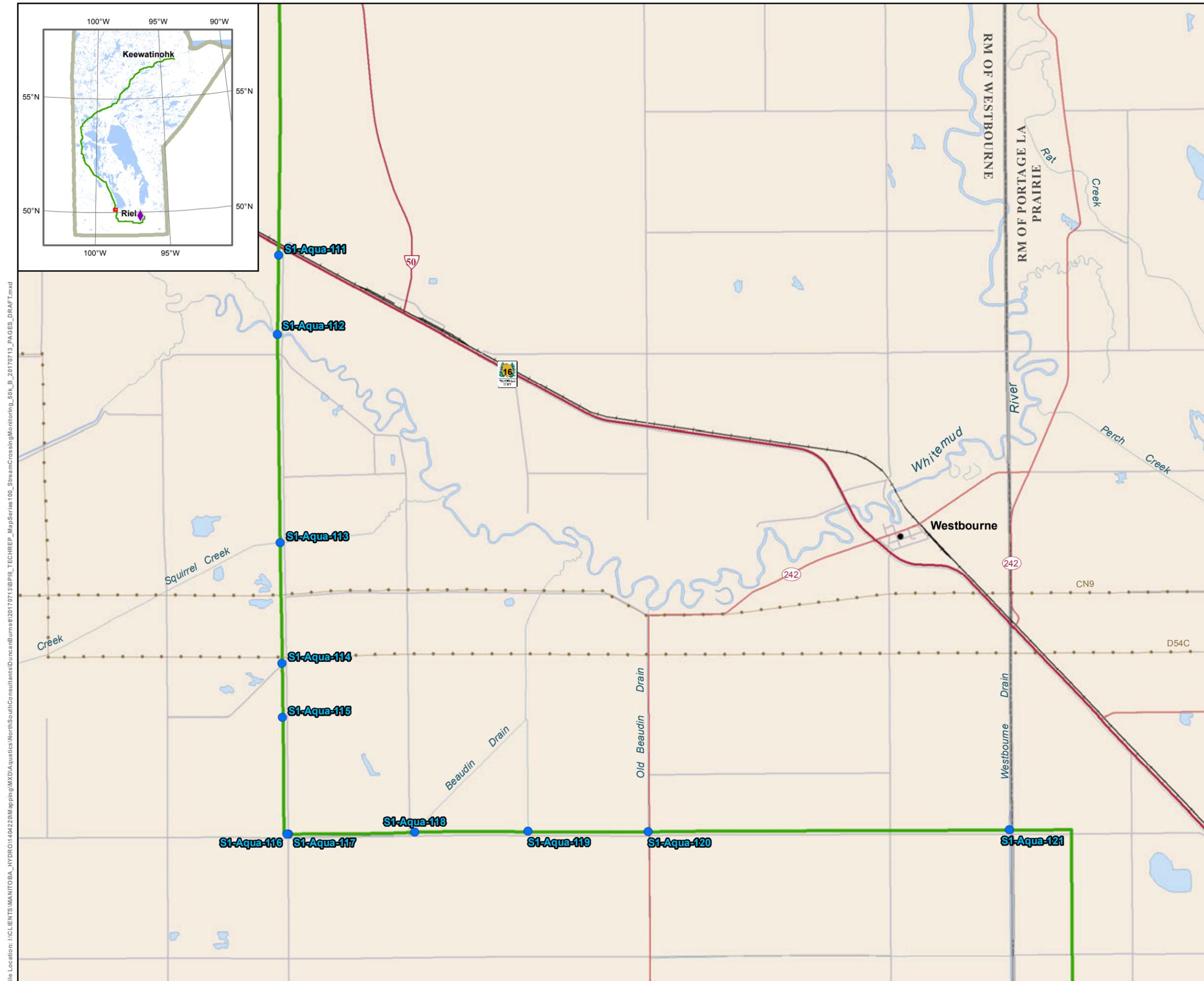
- Community
- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

Coordinate System: UTM Zone 14N NAD83  
 Data Source: MBHydro, ProvMB, NRCAN  
 Date Created: July 13, 2017



## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

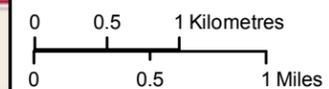
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

- Community
- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

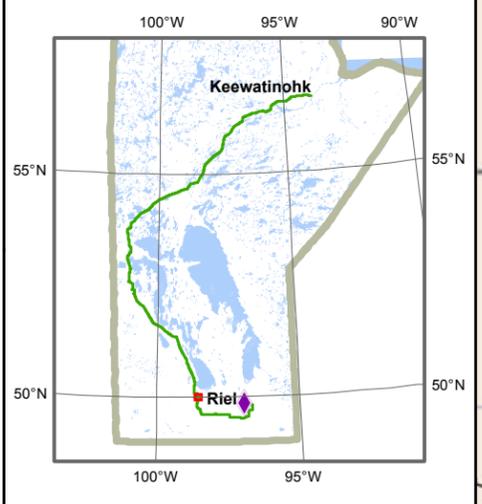
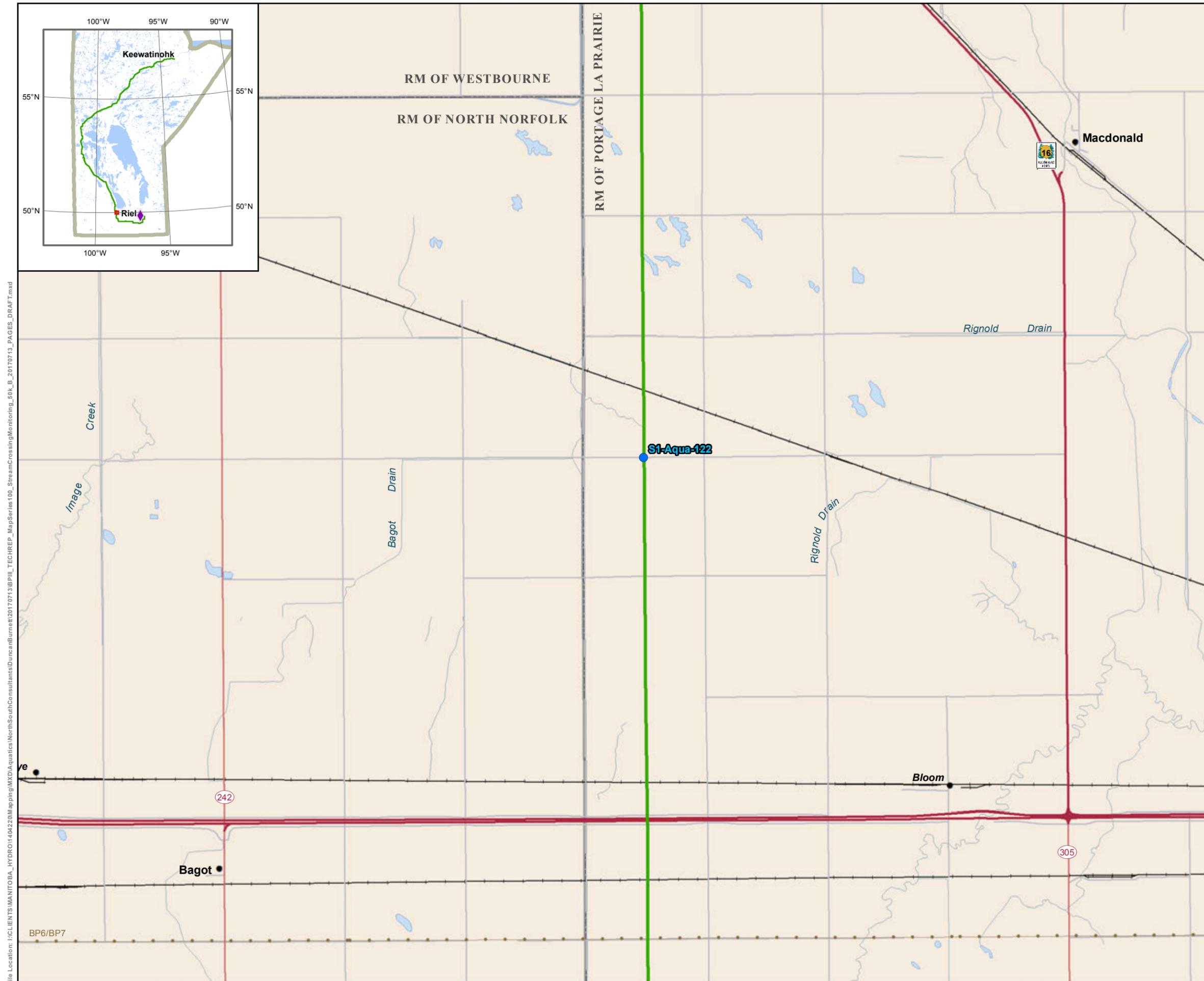
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## Stream Crossing Compliance Monitoring 2017

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RM OF WESTBOURNE  
 RM OF NORTH NORFOLK

RM OF PORTAGE LA PRAIRIE

Rignold Drain

Rignold Drain

Bagot Drain

Image Creek

Bagot

Bloom

S1-Aqua-122

305

242

BP6/BP7

### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

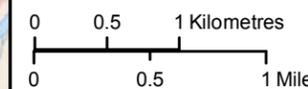
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

- Community
- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

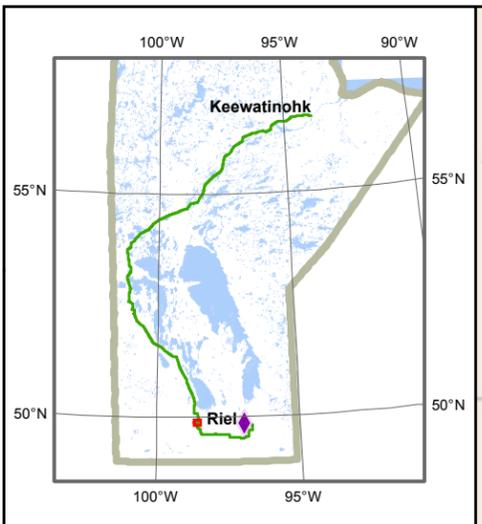
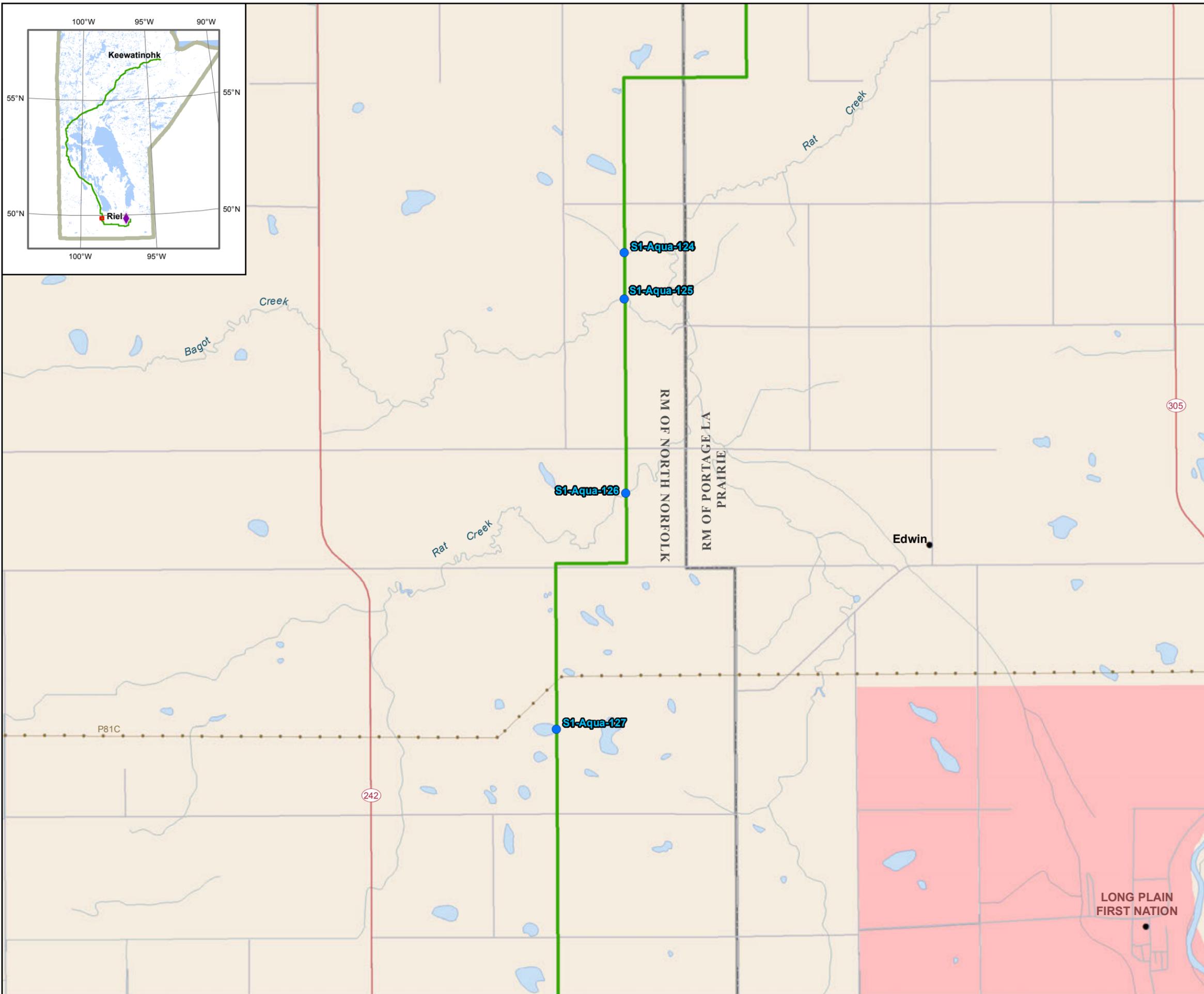
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## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

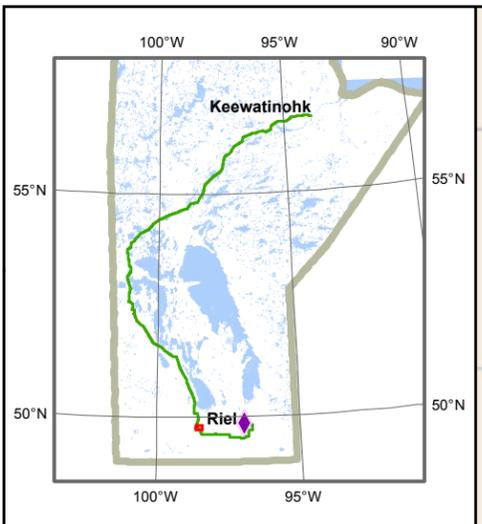
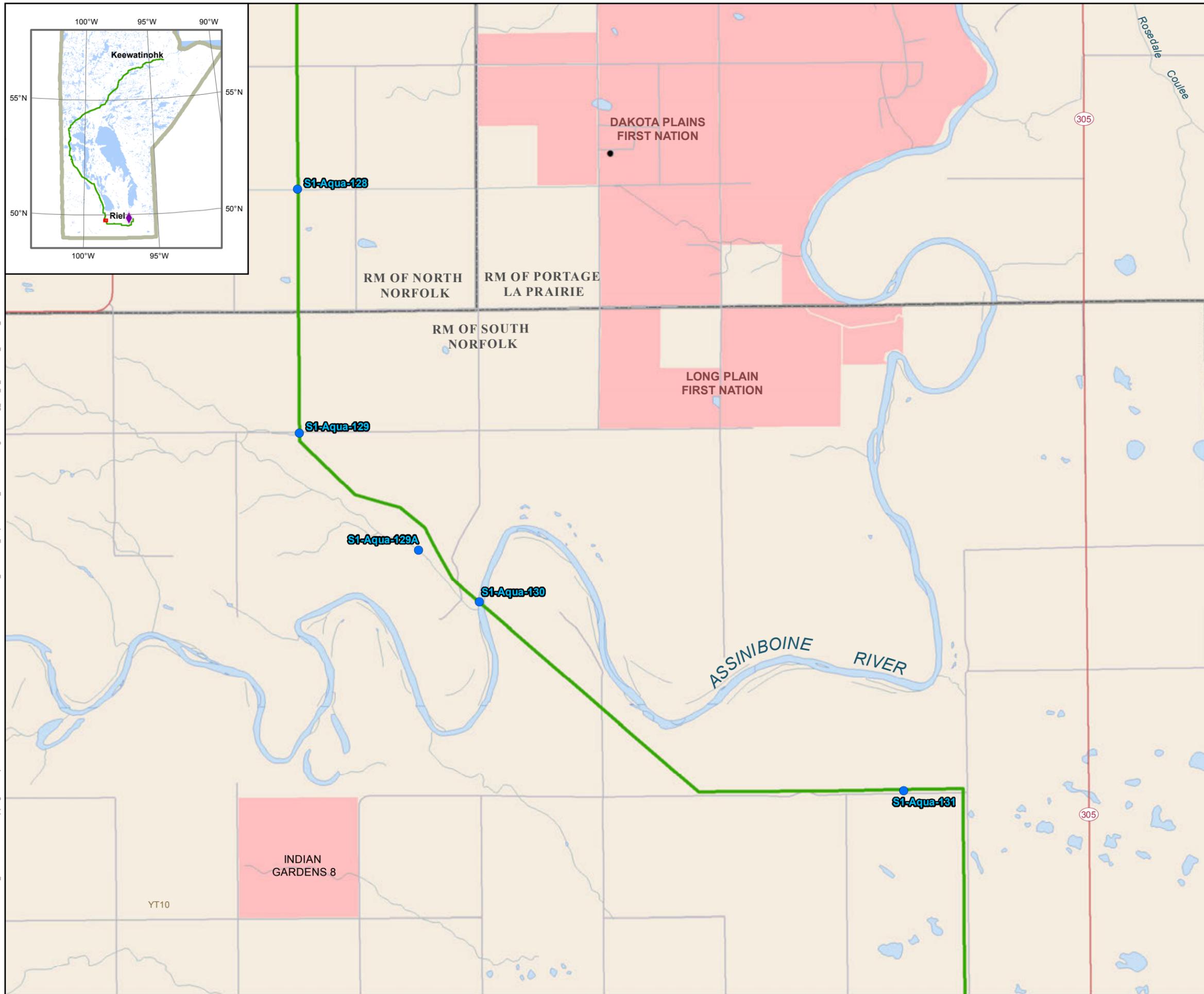
- Community
- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

Coordinate System: UTM Zone 14N NAD83  
 Data Source: MBHydro, ProvMB, NRCAN  
 Date Created: July 13, 2017



## Stream Crossing Compliance Monitoring

2017



### Bipole III Transmission Project

#### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
-  Ground Electrode Line
-  Ground Electrode Site
-  Construction Power (KN36)
-  Construction Power Site
-  Construction Camp Site

#### Infrastructure

-  Converter Station
-  Generating Station
-  Electrical Station

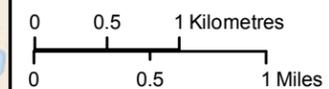
#### Monitoring Location

-  Aquatics Monitoring Site 2017
-  Aquatics Monitoring Site 2017

#### Landbase

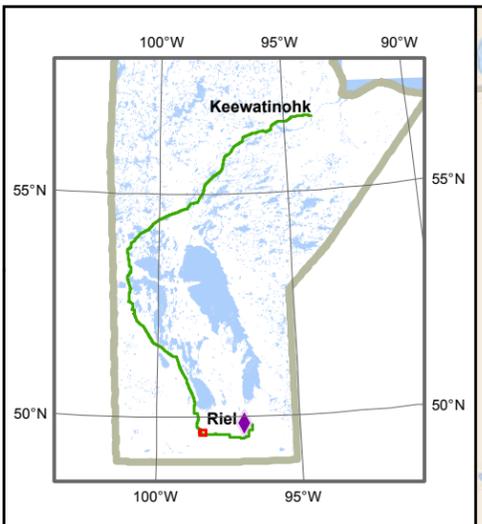
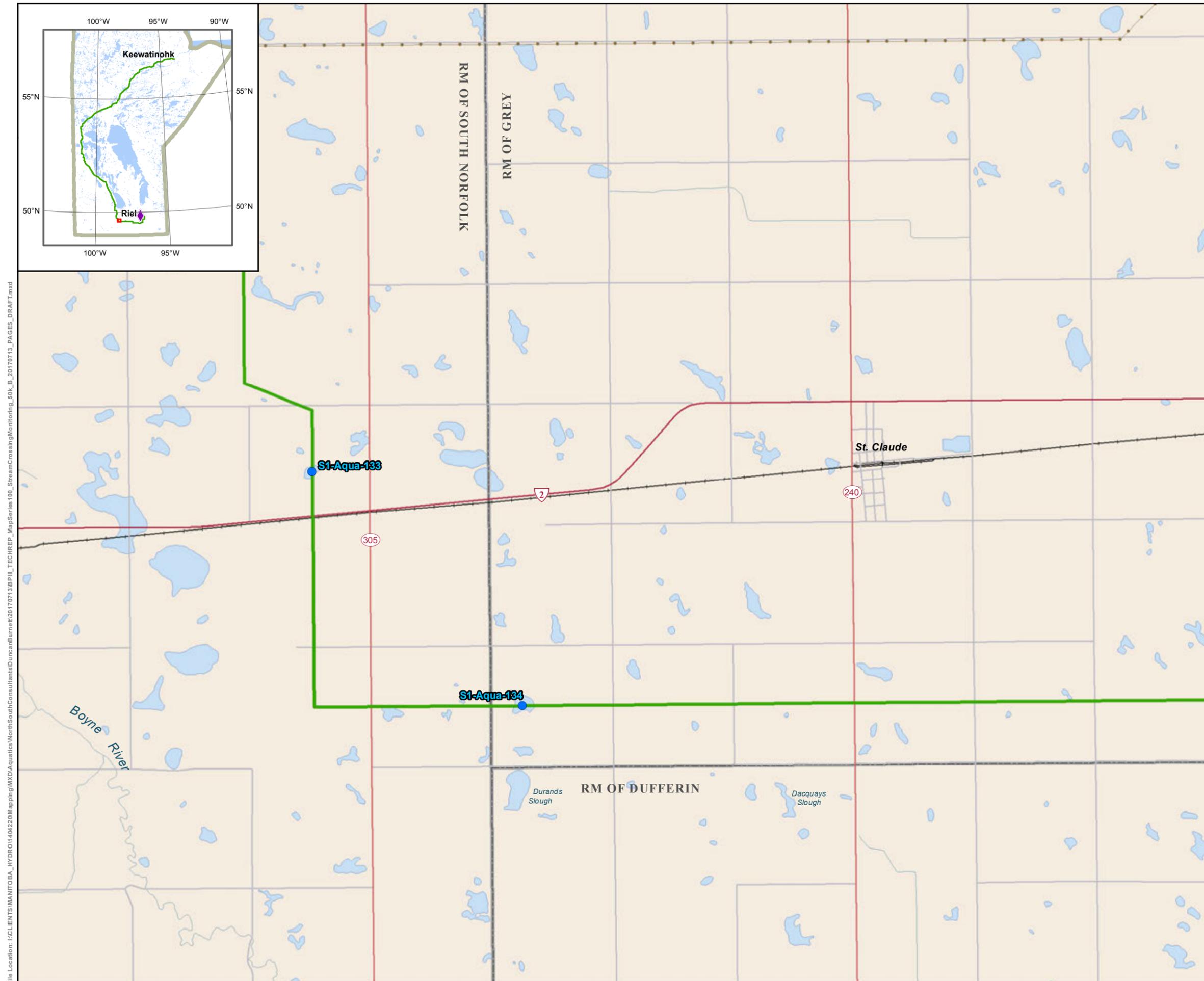
-  Community
-  City / Town
-  Rural Municipality
-  First Nation
-  National/Provincial Park

Coordinate System: UTM Zone 14N NAD83  
 Data Source: MBHydro, ProvMB, NRCAN  
 Date Created: July 13, 2017



## Stream Crossing Compliance Monitoring 2017

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## Bipole III Transmission Project

### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
-  Ground Electrode Line
-  Ground Electrode Site
-  Construction Power (KN36)
-  Construction Power Site
-  Construction Camp Site

### Infrastructure

-  Converter Station
-  Generating Station
-  Electrical Station

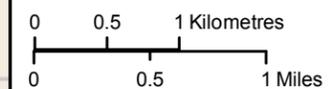
### Monitoring Location

-  Aquatics Monitoring Site 2017
-  Aquatics Monitoring Site 2017

### Landbase

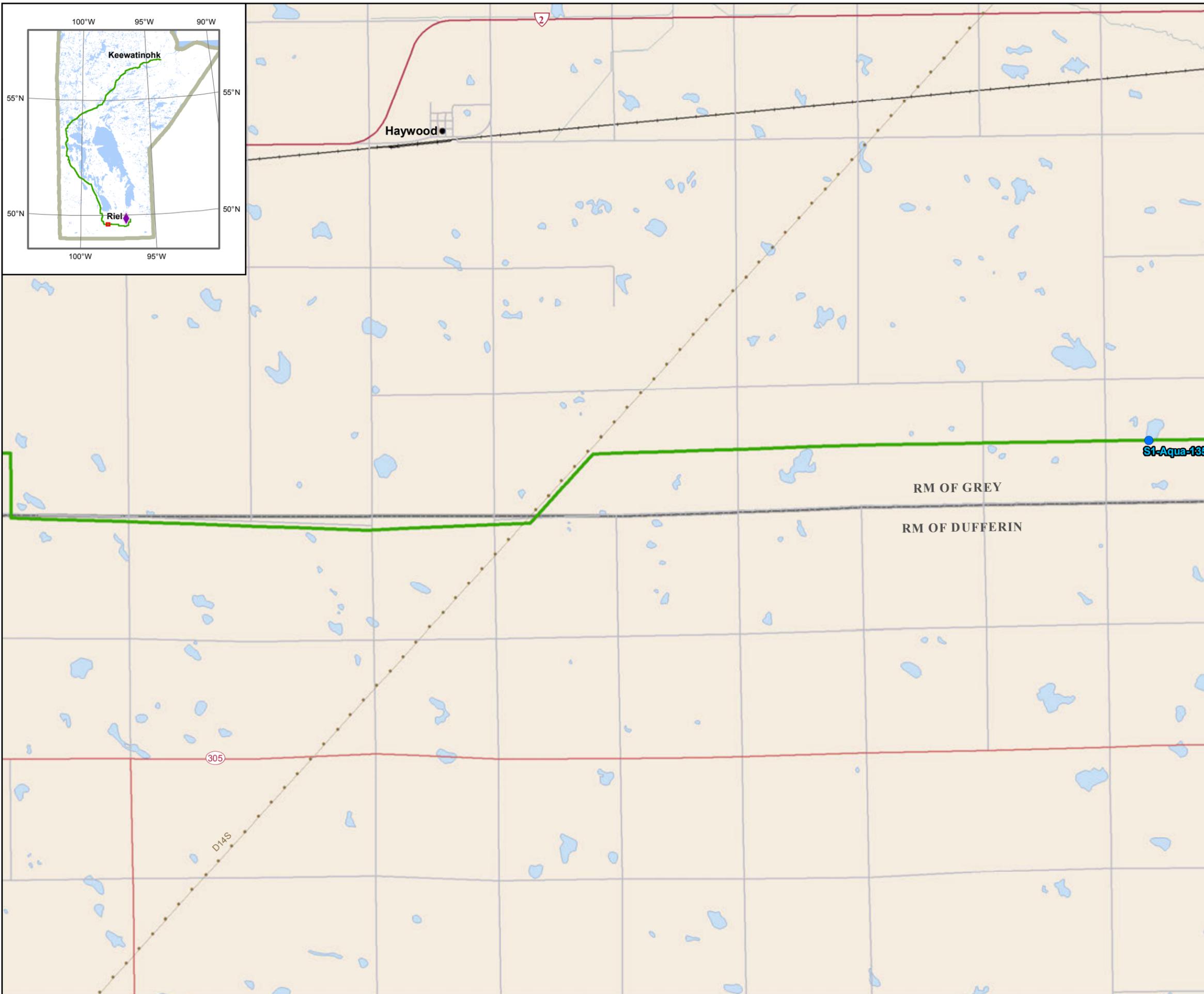
-  Community
-  City / Town
-  Rural Municipality
-  First Nation
-  National/Provincial Park

Coordinate System: UTM Zone 14N NAD83  
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# Stream Crossing Compliance Monitoring 2017

File Location: I:\CLIENTS\MANITOBA\_HYDRO\1494220\map\pin\gl\MXD\Aquaatics\North\South\consultants\Durcan\Burne\120170713\BPIIL\_TECHREP\_MapSeries100\_StreamCrossingMonitoring\_84k\_B\_20170713\_PAGES\_DRAFT.mxd



## Bipole III Transmission Project

### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

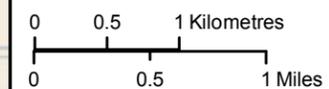
### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

### Landbase

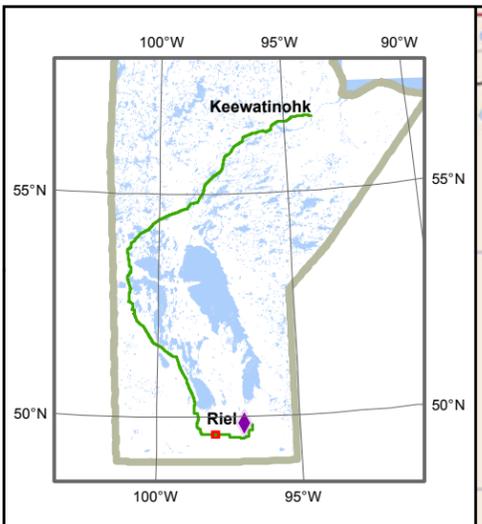
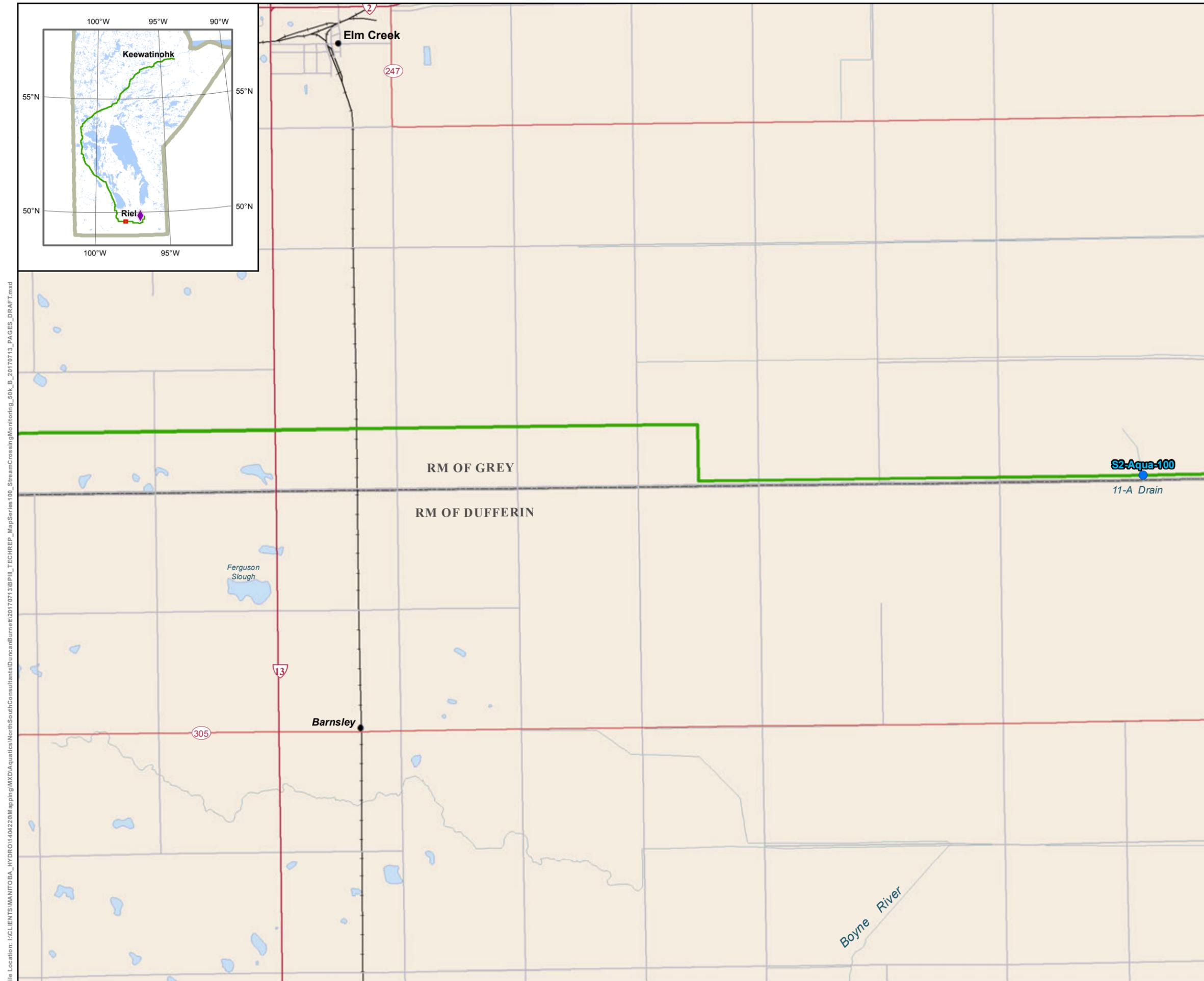
- Community
- City / Town
- Rural Municipality
- First Nation
- National/Provincial Park

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 Date Created: July 13, 2017



# Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
-  Ground Electrode Line
-  Ground Electrode Site
-  Construction Power (KN36)
-  Construction Power Site
-  Construction Camp Site

#### Infrastructure

-  Converter Station
-  Generating Station
-  Electrical Station

#### Monitoring Location

-  Aquatics Monitoring Site 2017
-  Aquatics Monitoring Site 2017

#### Landbase

-  Community
-  City / Town
-  Rural Municipality
-  First Nation
-  National/Provincial Park

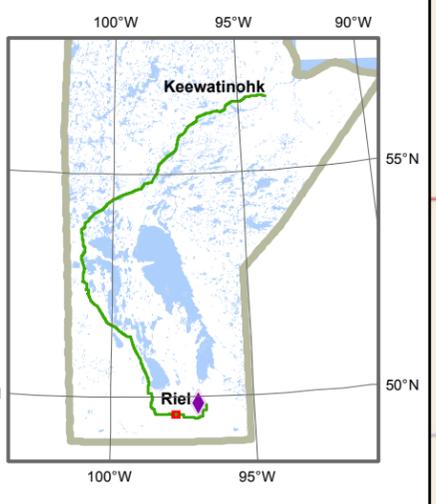
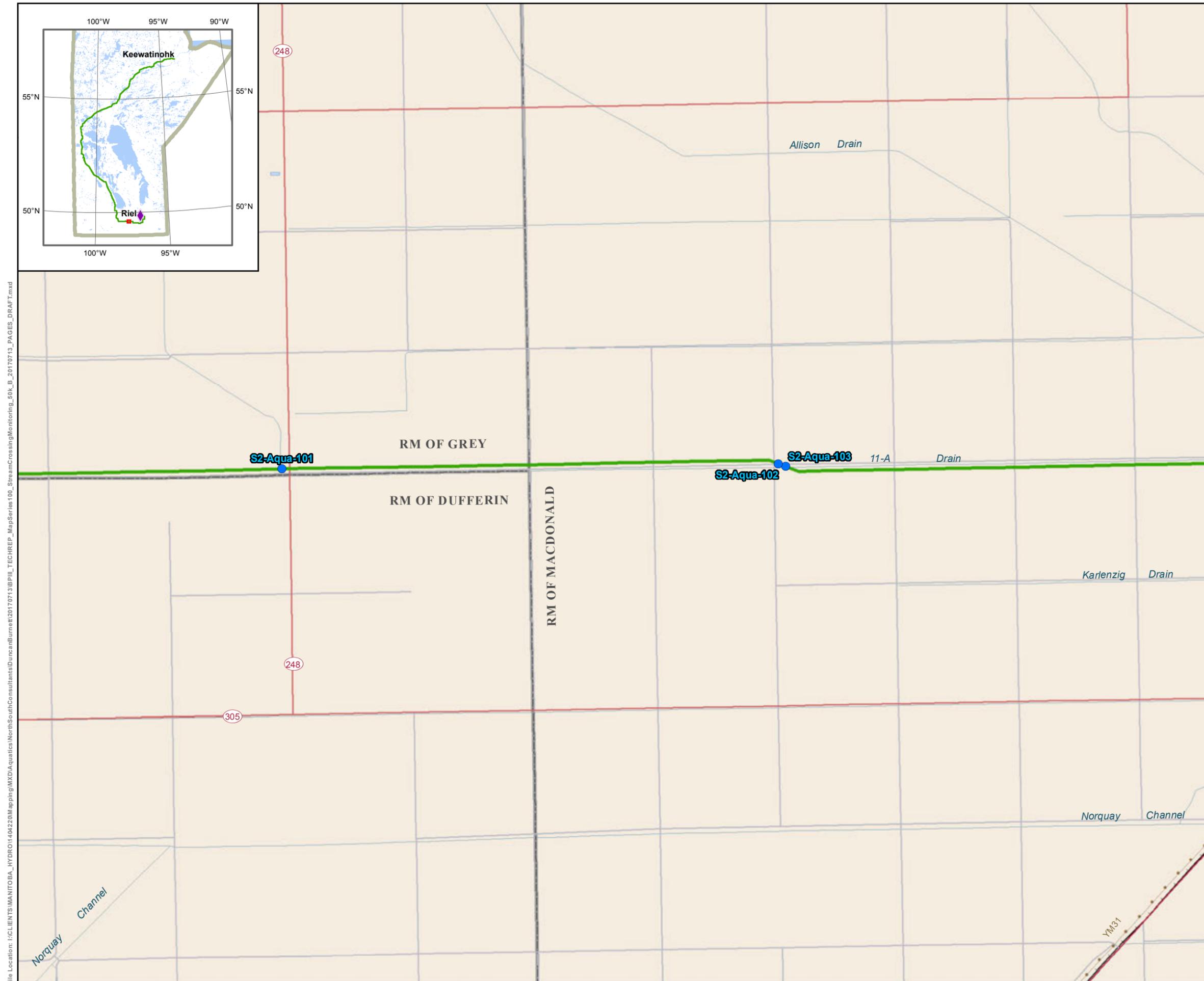
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## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

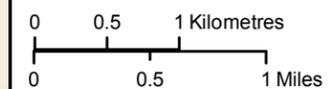
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

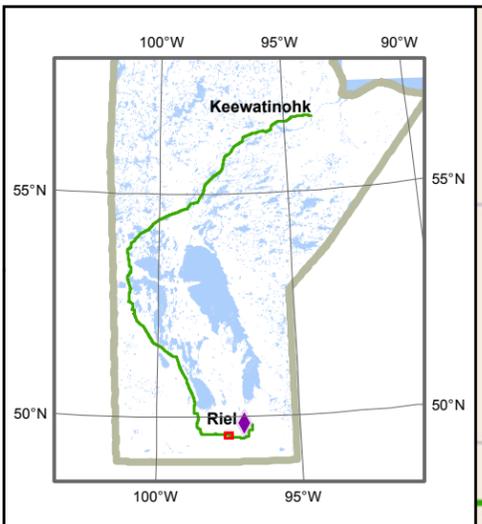
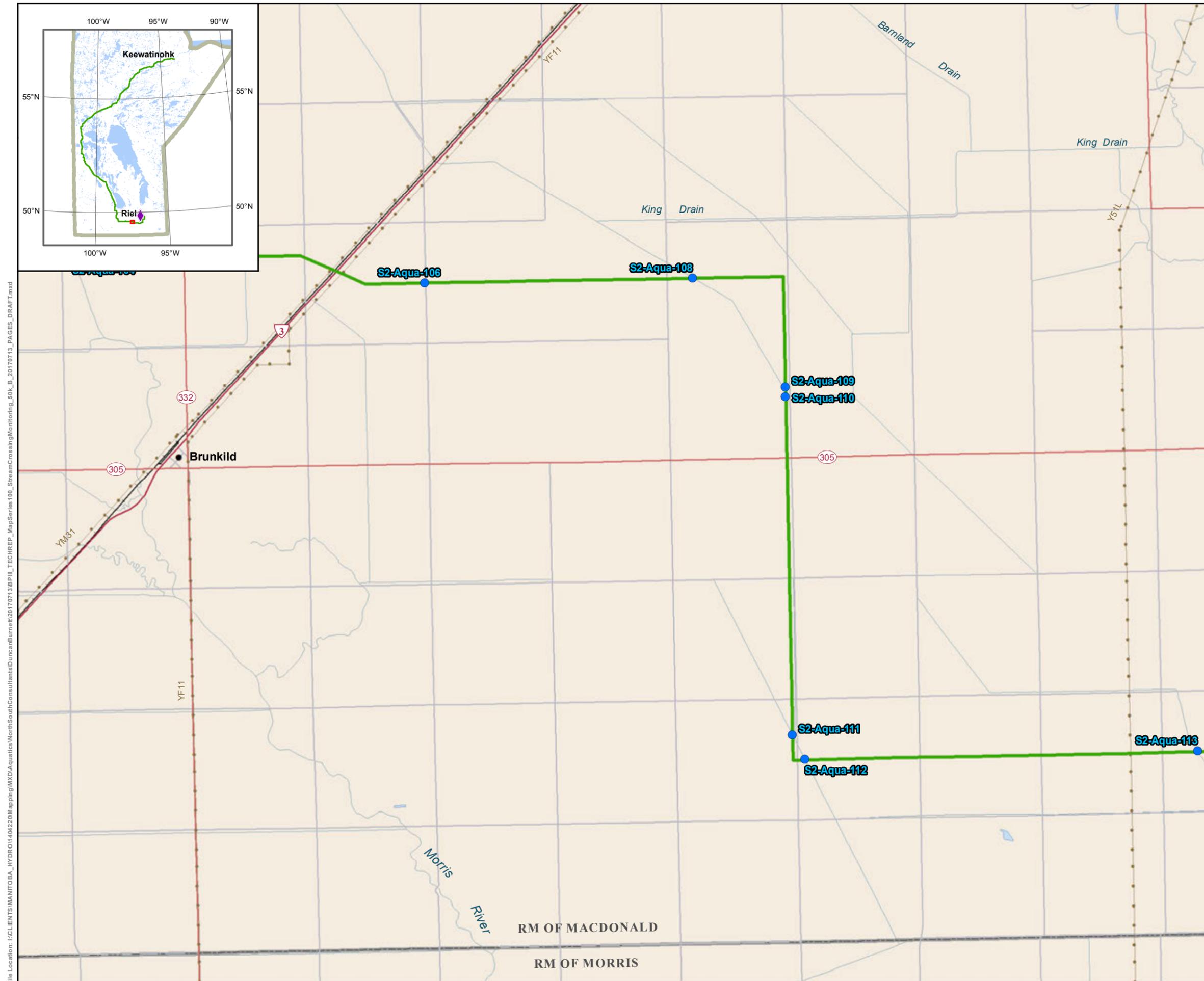
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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

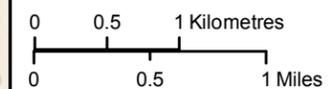
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

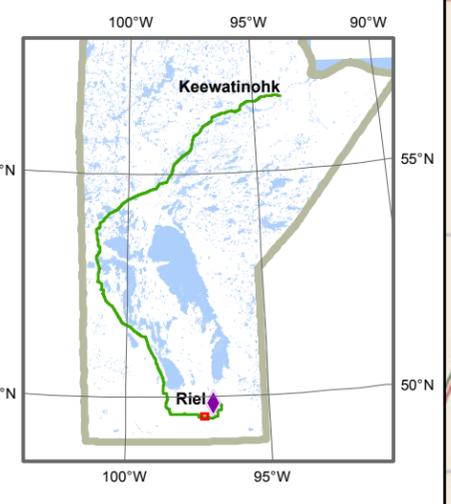
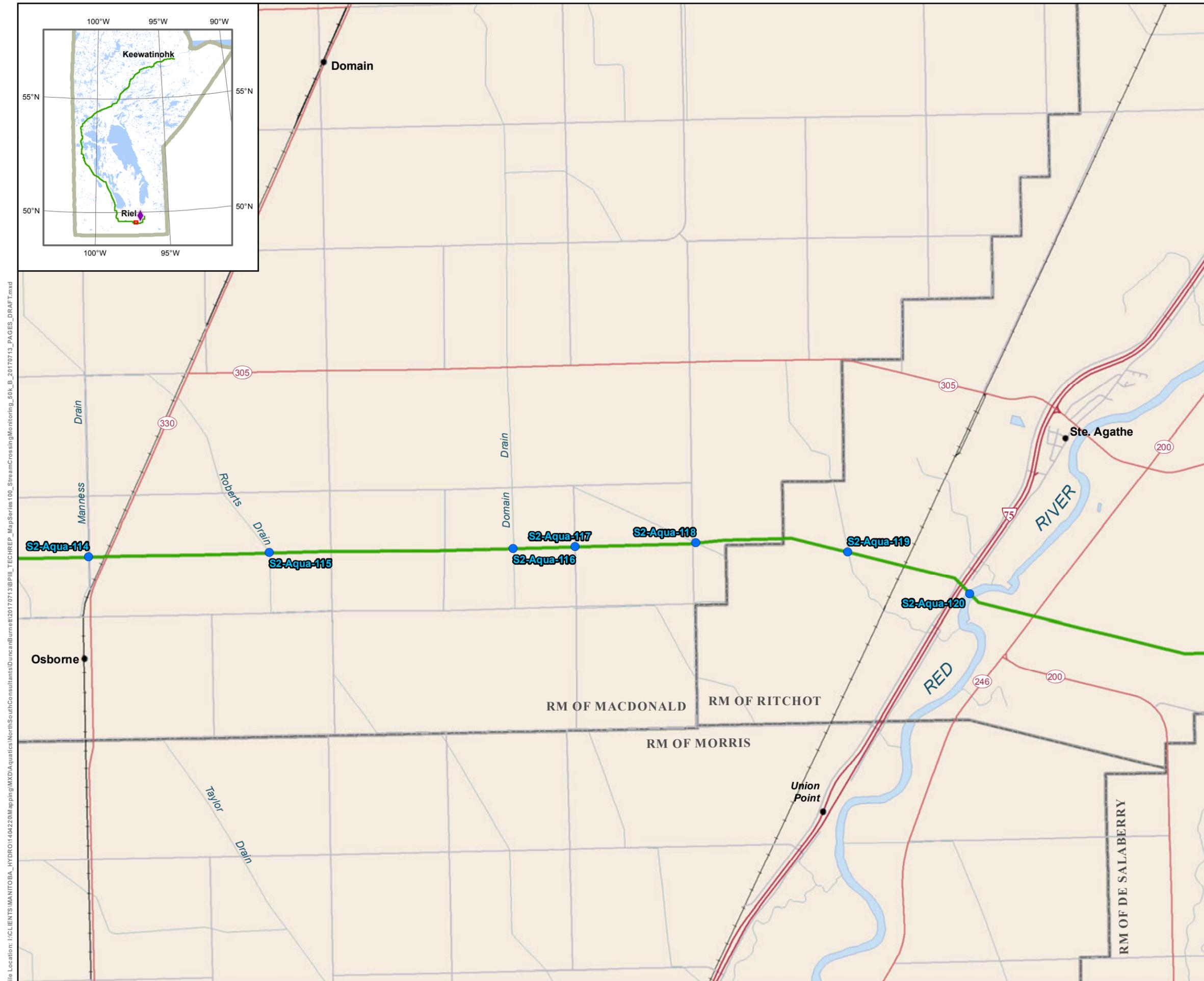
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Coordinate System: UTM Zone 14N NAD83  
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## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

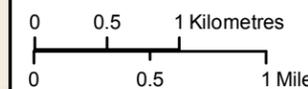
#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

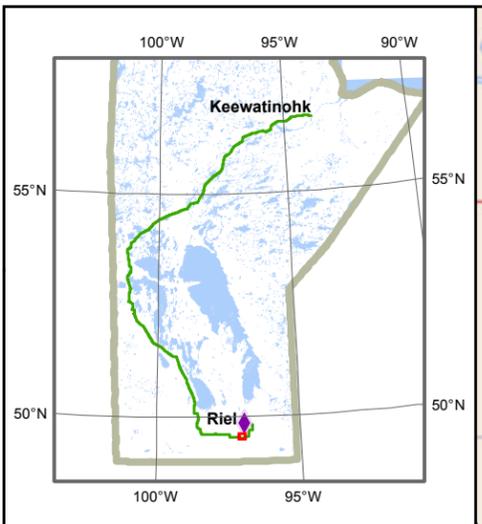
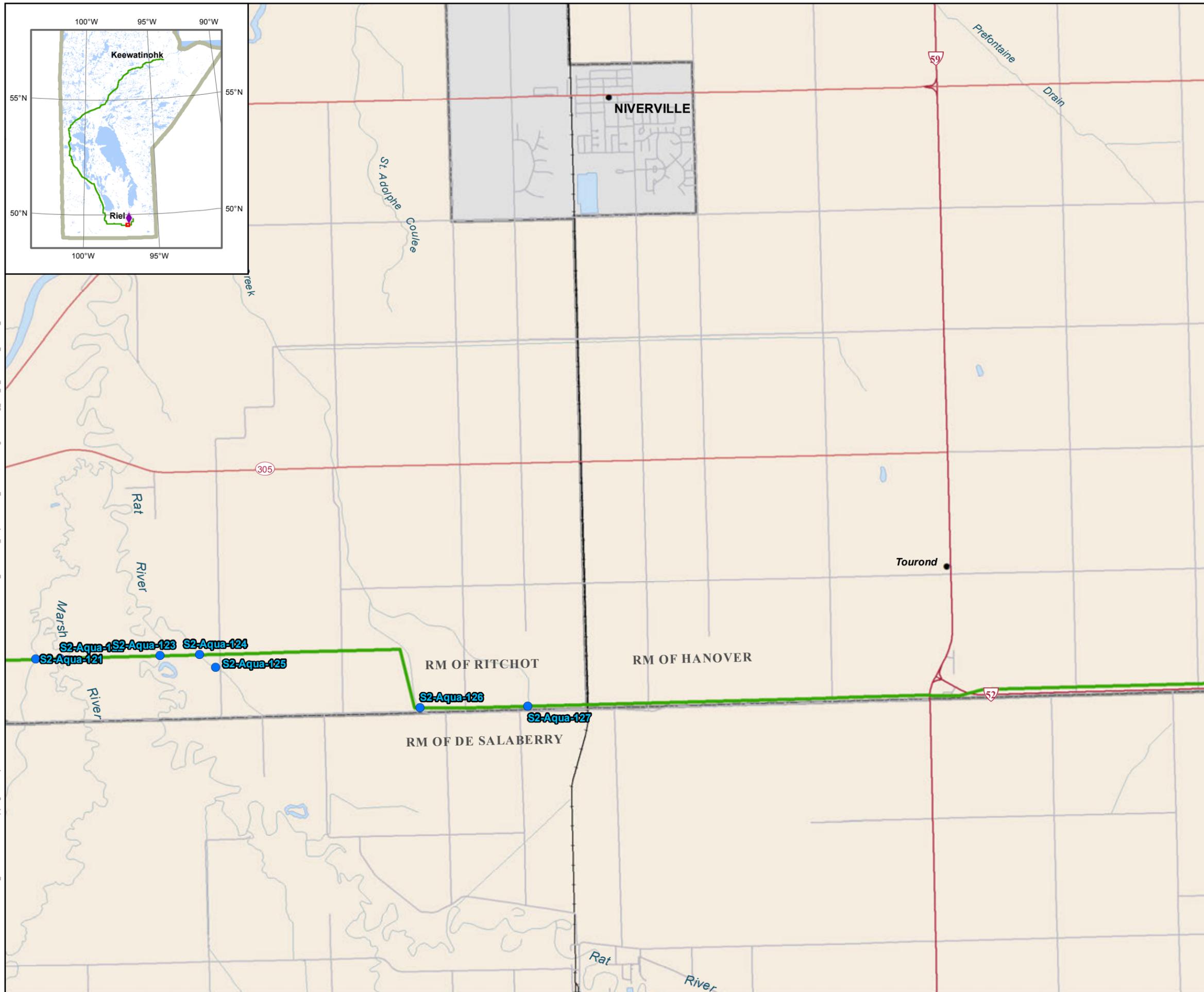
- Community
- City / Town
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- National/Provincial Park

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## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
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- Electrical Station

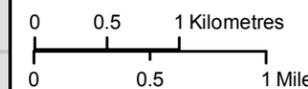
#### Monitoring Location

- Aquatics Monitoring Site 2017
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#### Landbase

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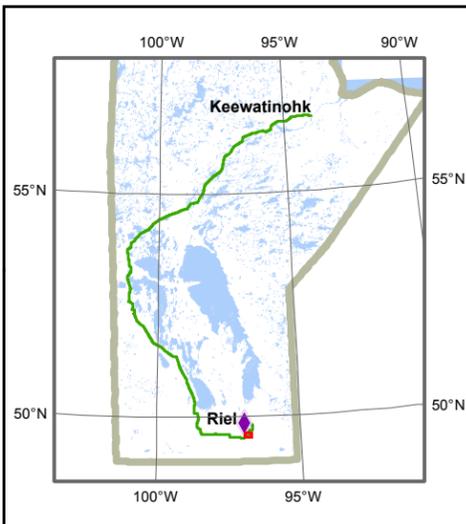
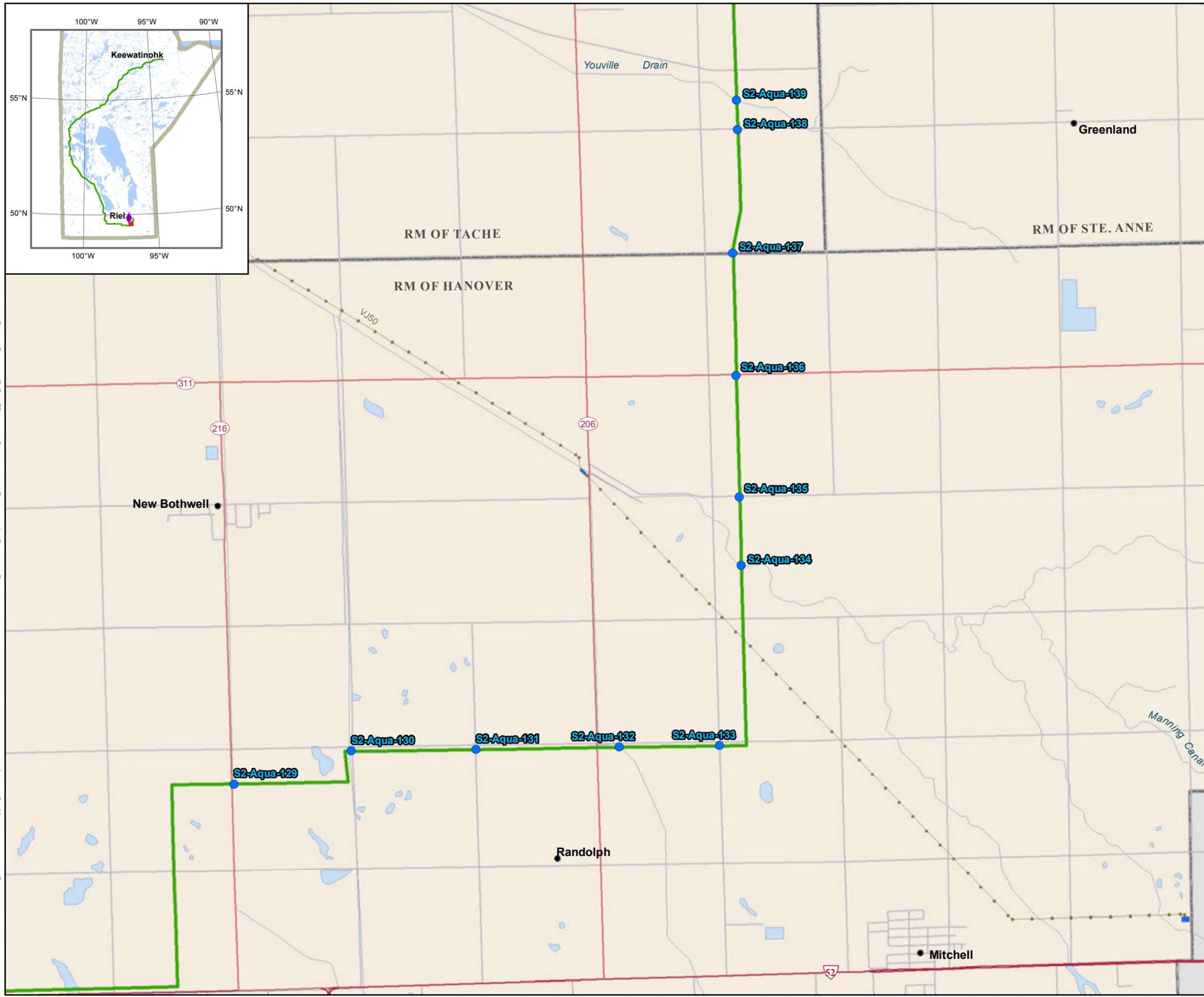
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## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site

#### Infrastructure

- Converter Station
- Generating Station
- Electrical Station

#### Monitoring Location

- Aquatics Monitoring Site 2017
- Aquatics Monitoring Site 2017

#### Landbase

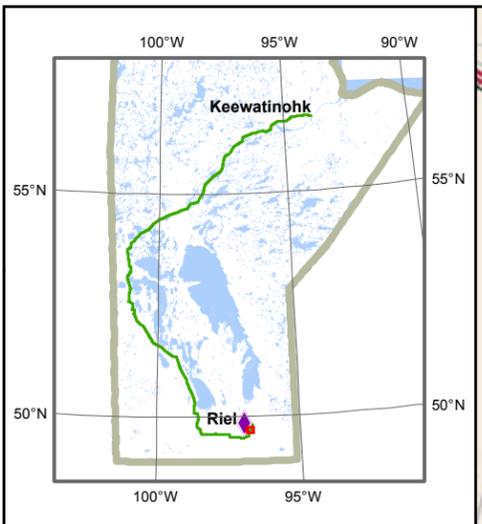
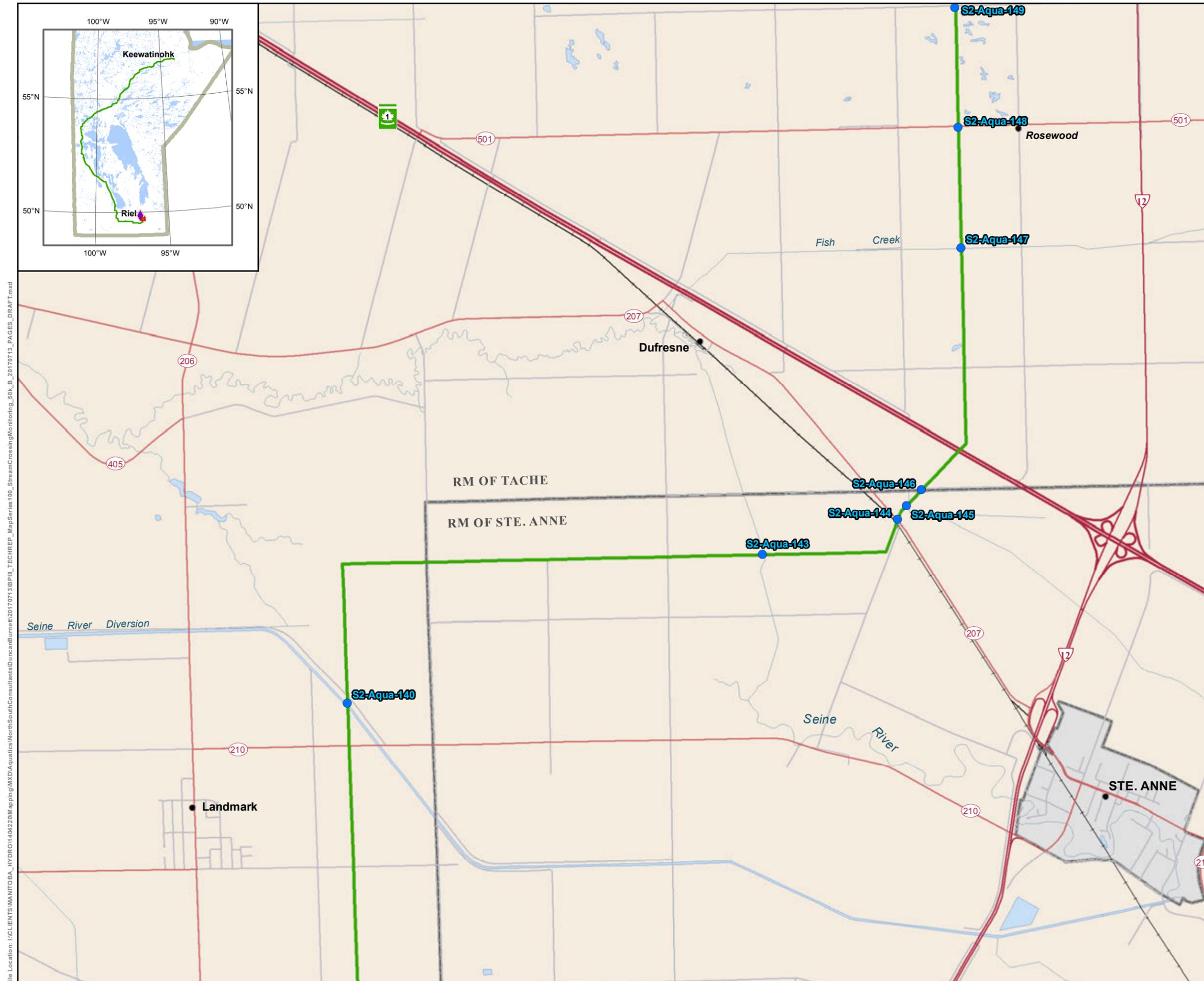
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### Bipole III Transmission Project

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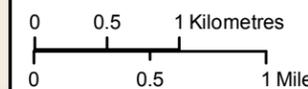
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#### Landbase

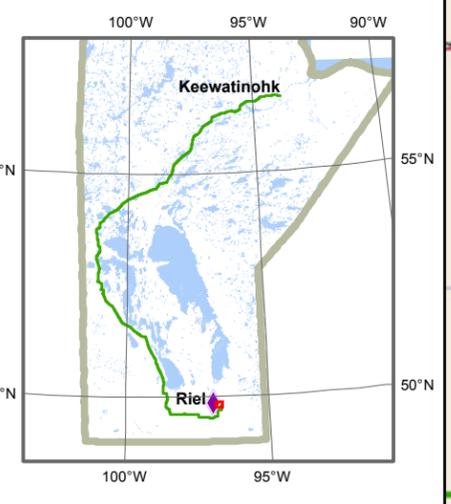
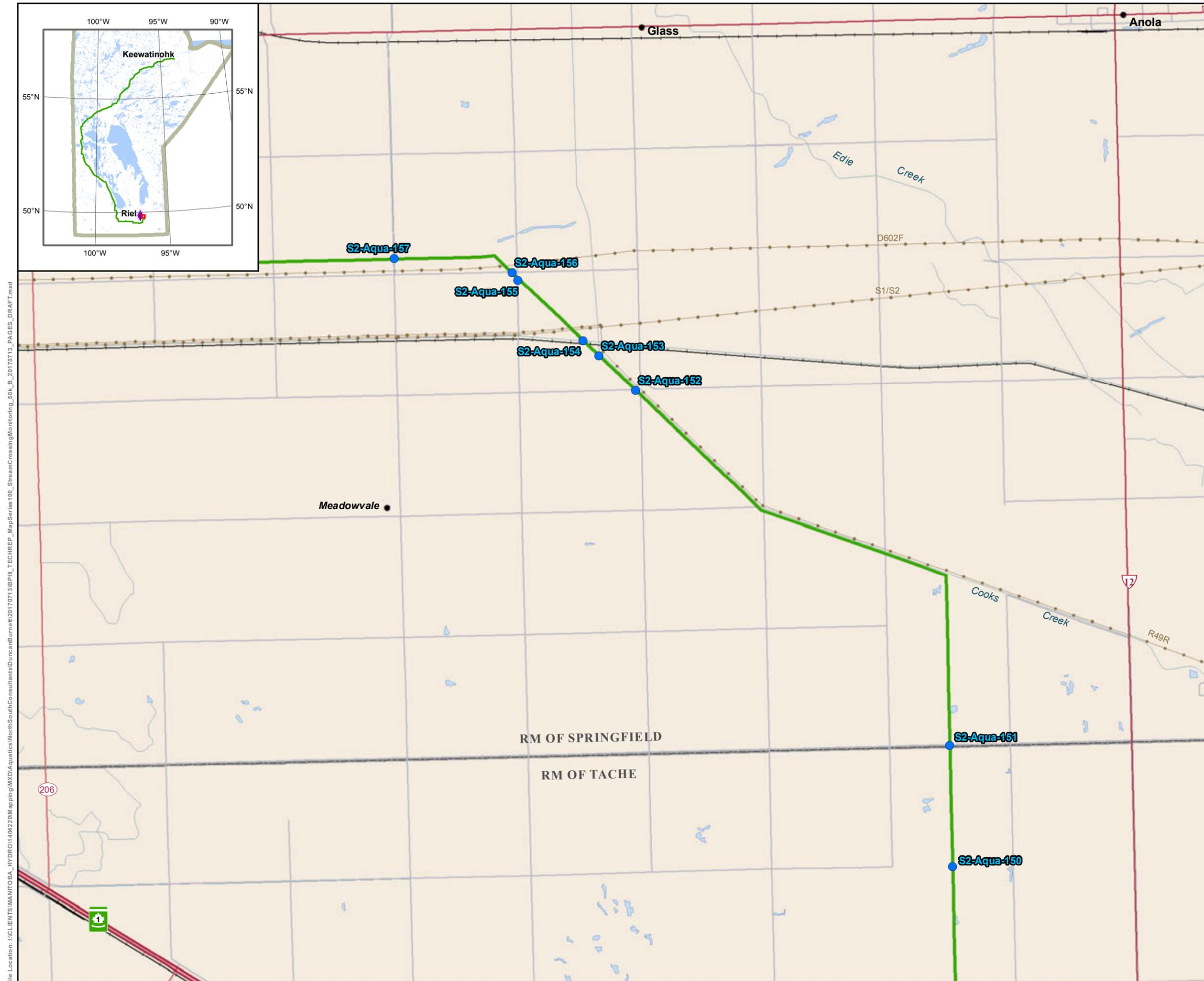
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## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

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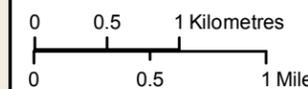
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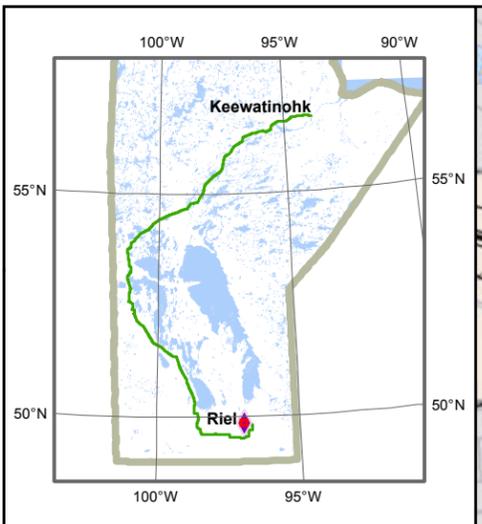
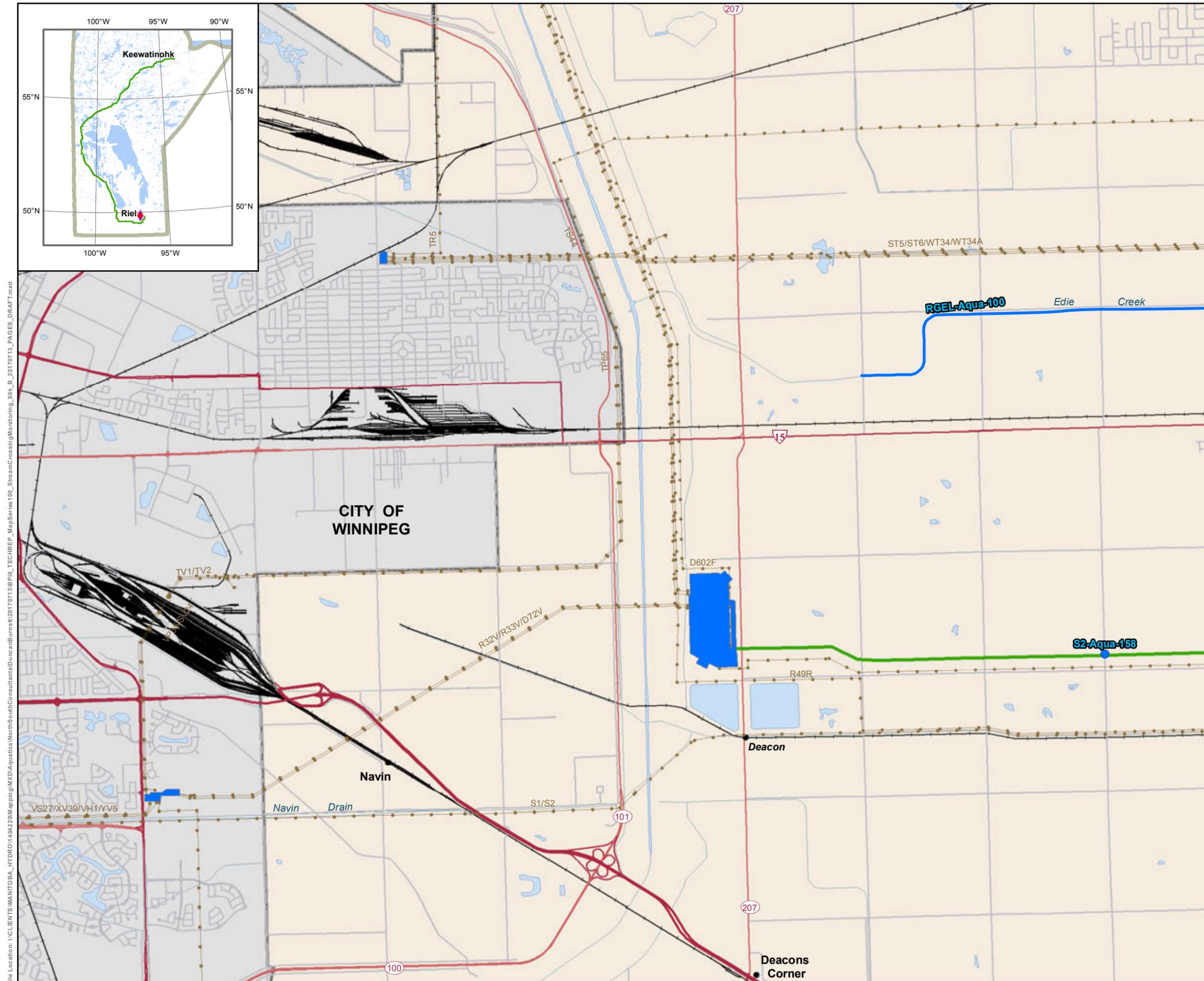
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## Stream Crossing Compliance Monitoring 2017

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### Bipole III Transmission Project

#### Project Infrastructure

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- Construction Camp Site

#### Infrastructure

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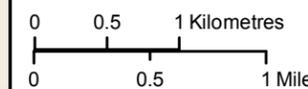
#### Monitoring Location

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- Aquatics Monitoring Site 2017

#### Landbase

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- City / Town
- Rural Municipality
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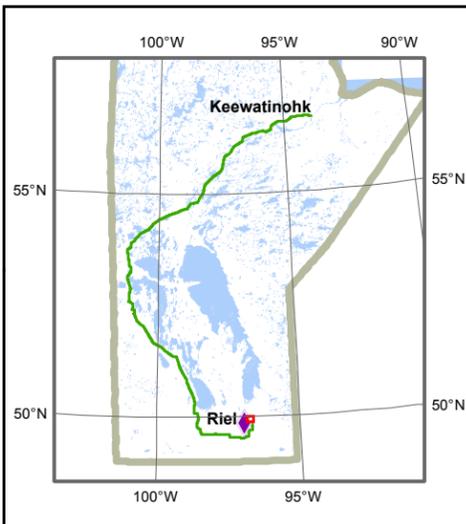
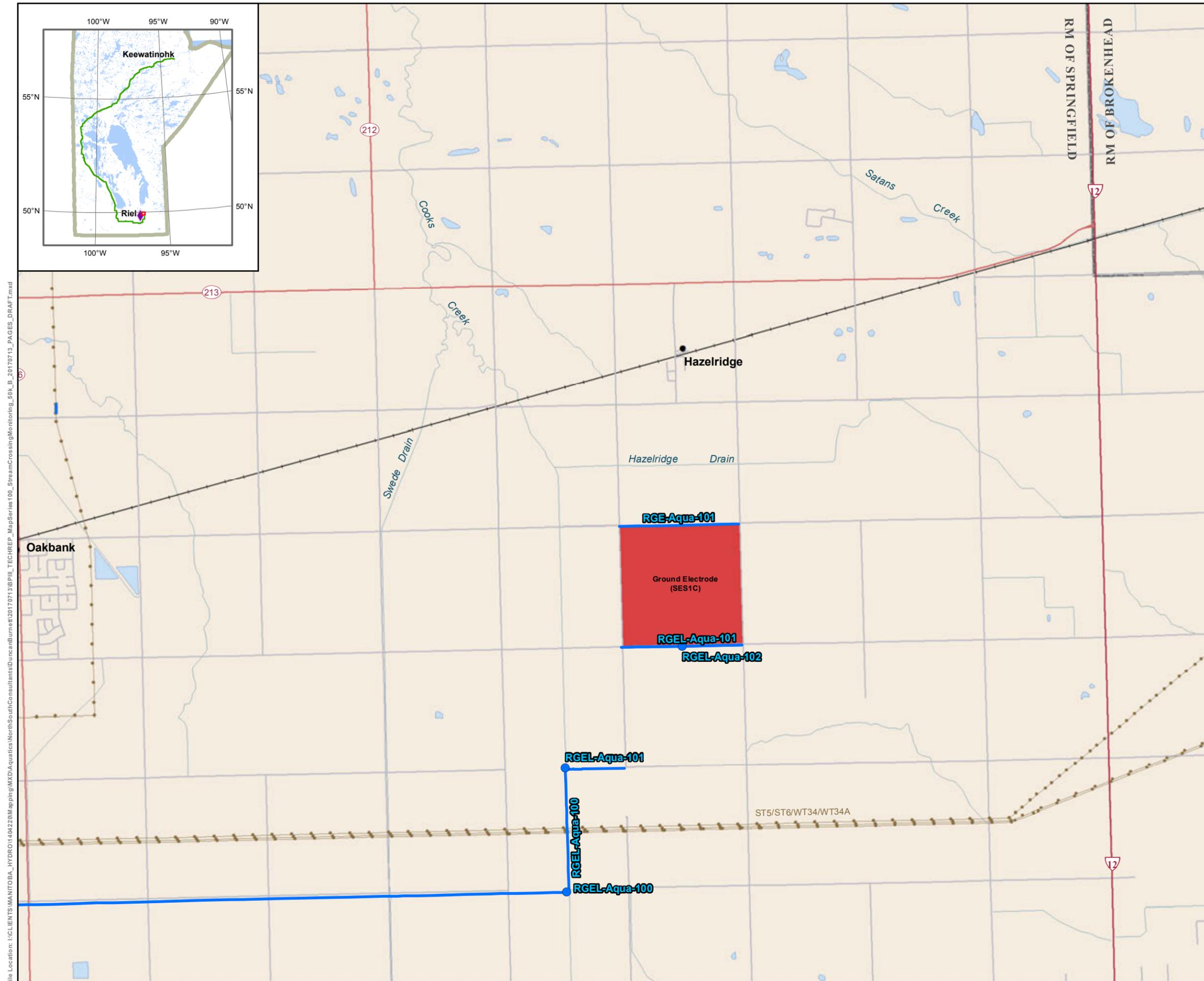
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## Stream Crossing Compliance Monitoring 2017

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## 6.0 PHOTOS



Photo 1. CL-Aqua-104 (Brooks Creek). Woody debris accumulated instream at the vehicle crossing, June 2016.



Photo 2. CL-Aqua-104 (Brooks Creek). Woody debris accumulated instream at the vehicle crossing, June 2017.



Photo 3. N1-Aqua-129 (Limestone River). Channel within RoW is subject to erosion, June 2015.



Photo 4. N1-Aqua-129 (Limestone River). Channel within RoW is subject to erosion, June 2017.



Photo 5. N1-Aqua-133 (unnamed tributary of South Moswakot River). Channel runs within the riparian buffer zone in the RoW, prone to erosion, June 2015.



Photo 6. N1-Aqua-133 (unnamed tributary of South Moswakot River). Channel runs within the riparian buffer zone in the RoW, prone to erosion, June 2017.



Photo 7. N1-Aqua-173 (Burntwood River). Erosion in RBZ and slumping of southern bank (segment N1), June 2015.



Photo 8. N1-Aqua-173 (Burntwood River). Erosion/slumping of the southern bank (segment N1) at the downstream side of the RoW, June 2016.



Photo 9. N1-Aqua-173 (Burntwood River). Recovery of the northern bank, June 2017.



Photo 10. N1-Aqua-173 (Burntwood River). Re-vegetation of the south bank of the Burntwood River RoW, June 2017.



Photo 11. N1-Aqua-135 (unnamed tributary of South Moswakot River). Woody debris in channel at the vehicle crossing, June 2017.



Photo 12. N1-Aqua-156 (unnamed tributary of Assean Lake). Woody debris in channel immediately downstream of the vehicle crossing, June 2017.



Photo 13. N1-Aqua-167 (unnamed tributary of the Burntwood River). Woody debris in channel at the vehicle crossing, June 2017.



Photo 14. N1-Aqua-169 (unnamed tributary of Odei River). Temporary crossing remains in place, June 2016.



Photo 15. N1-Aqua-169 (unnamed tributary of Odei River). Temporary crossing remains in place, June 2017.



Photo 16. N2-Aqua-103 (unnamed tributary of Brannigan Creek). Woody debris in channel at the vehicle crossing, June 2016.



Photo 17. N2-Aqua-119 (unnamed tributary of Partridge Crop Lake). Bucked wood in channel creating a partial blockage to water flow, June 2016.



Photo 18. N2-Aqua-103 (unnamed tributary of Brannigan Creek). Some woody debris remains in channel at the vehicle crossing, June 2017.



Photo 19. N2-Aqua-119 (unnamed tributary of Partridge Crop Lake). Bucked wood in channel creating a partial blockage to water flow, June 2017.



Photo 20. N2-Aqua-112 (Isbister Creek). Sediment accumulation instream and large plank functioning as a temporary bridge creating a partial blockage to water flow, June 2016.



Photo 21. N2-Aqua-112 (Isbister Creek) in 2017 with no board visible and no sediment accumulation instream.



Photo 22. N3-Aqua-102 bypass trail (tributary of the Mitishto River). Woody debris observed instream of a small tributary along the bypass trail, June 2016.



Photo 23. N3-Aqua-103 (Mitishto River). Excessive clearing in RBZ and exposed soil prone to erosion protected by erosion control matting, June 2015.



Photo 24. N3-Aqua-103 (Mitishto River). Shrubs and forbes becoming established on the steep eastern bank through erosion control matting, June 2016. No erosion was detected.



Photo 25. N3-Aqua-103 (Mitishto River). Shrubs and forbes becoming established on the banks through erosion control matting, June 2017. No erosion was detected.



Photo 26. N3-Aqua-103 (Mitishto River). Shrubs and forbes becoming established on the banks through erosion control matting, June 2017. No erosion was detected.



Photo 27. N3-Aqua-106 (unnamed tributary of the Mitishto River). Steep bank on the trail with mulch, June 2017.



Photo 28. N3-Aqua-107 (unnamed tributary of the Mitishto River). Steep bank on the trail with exposed soil, June 2017.



Photo 29. N3-Aqua-134 (Saskatchewan River). Excessive vegetation clearing in the RBZ, June 2015.



Photo 30. N3-Aqua-134 (Saskatchewan River). Shrubs and forbes becoming well established on the southern bank, June 2016. Slumping does not appear to have increased since June 2015.



Photo 31. N3-Aqua-134 (Saskatchewan River). Shrubs and forbes well established on the southern bank, June 2017. Due to 2017 being a high water year a significant area of the RoW was under water but no erosion was visible



Photo 32. N4-Aqua-112 (tributary of Lake Winnipegosis). Woody debris and an accumulation of sediment observed instream within the RoW, June 2016.



Photo 33. N4-Aqua-112 (tributary of Lake Winnipegosis). Woody debris and an accumulation of sediment observed instream within the RoW, June 2016.



Photo 34. C1-Aqua-125 (German Creek). Erosion of the stream at the vehicle and cattle crossing, June 2016.



Photo 35. C1-Aqua-125 (German Creek). High water year with no obvious erosion, June 2017.



Photo 36. KGEL-Aqua-111. Debris left in channel after winter work, June 2017.

**7.0 APPENDIX 1:  
STREAM CROSSING COMPLIANCE SUMMARY**

Table A1. Compliance with 21 mitigation measures for stream crossings on the 230 kV AC Collector Lines, 500 kV Line segments N1 through to S2, KGEL and RGEL.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
<i>Watercourse Crossings of the 230 kV AC Collector Lines</i>																								
CLCP-Aqua 100	unnamed trib. of Goose Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CLCP-Aqua-101	unnamed trib. of Tiny Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CLCP-Aqua-102	unnamed trib. to Swift Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CLCP-Aqua-103	unnamed trib. to Swift Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CLCP-Aqua-104	unnamed trib. to Swift Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CLCP-Aqua-105	unnamed trib. to Swift Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CLCP-Aqua-106	Swift Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CLCP-Aqua-107	unnamed trib. to Swift Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CLCP-Aqua-108	unnamed trib. to Beaver Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CLCP-Aqua-109	Beaver Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CLCP-Aqua-110	unnamed trib. to Sundance Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CLCP-Aqua-111	Sundance Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CLCP-Aqua-112	unnamed trib. to Raindance Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CLCP-Aqua-113	unnamed trib. to Raindance Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CLCP-Aqua-114	Raindance Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CLCP-Aqua-115	Limestone R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
CLCP-Aqua-300	N/A	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
KW-Aqua-116	N/A	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
KW-Aqua-117	unnamed trib. to Swift Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
KW-Aqua-118	unnamed trib. to Swift Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
KW-Aqua-111	N/A	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
KW-Aqua-110	N/A	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
KW-Aqua-305	N/A	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CP-Aqua-100	N/A	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CP-Aqua-101	N/A	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CP-Aqua-103	N/A	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CL-Aqua-100	unnamed trib. of the Nelson R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CL-Aqua-101	Nelson R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
CL-Aqua-102	unnamed trib. of the Nelson R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CL-Aqua-103	unnamed trib. of the Nelson R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CL-Aqua-104	Brooks Cr.	C	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	Y
CL-Aqua-105	unnamed trib. of the Nelson R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
CL-Aqua-106	unnamed trib. of the Nelson R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CL-Aqua-107	unnamed trib. of the Nelson R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CL-Aqua-108	Wilson Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CL-Aqua-301	N/A	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
CL-Aqua-302	N/A	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
<i>Watercourse Crossings of the 500 kV Transmission Line</i>																								
N1-Aqua-100	unnamed trib. of Goose Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-101	unnamed trib. of Goose Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-102	unnamed trib. of Tiny Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-103	unnamed wetland	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-104	unnamed trib. of Goose Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-105	unnamed trib. of Goose Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-106	Goose Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-107	unnamed trib. of Weir R.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-108	unnamed trib. of Weir R.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-109	unnamed trib. of 9-Mile Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-110	unnamed trib. of 9-Mile Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
N1-Aqua-111	unnamed trib. of 9-Mile Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-113	9-Mile Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-114	unnamed trib. of McMillan Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-115	unnamed trib. of McMillan Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-116	unnamed trib. of McMillan Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-117	unnamed trib. of McMillan Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-118	McMillan Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-119	unnamed trib. of McMillan Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-120	unnamed trib. of McMillan Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-121	unnamed trib.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-122	unnamed trib. of Limestone R.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-123	Limestone R.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-124	Limestone R.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-125	unnamed trib. of Limestone R.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-127	unnamed trib. of unnamed lake	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-128	unnamed trib. of unnamed Lake	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-129	Limestone R.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	Y
N1-Aqua-130	unnamed trib. of Limestone R.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
N1-Aqua-131	North Moswakot R.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-132	unnamed trib. of South Moswakot R.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	NA	N
N1-Aqua-133	unnamed trib. of South Moswakot R.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	Y
N1-Aqua-134	South Moswakot R.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-135	unnamed trib. of South Moswakot R.	TA	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-136	unnamed trib. of South Moswakot R.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	NA	N
N1-Aqua-137	unnamed trib. of Stephens Lake	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-138	unnamed trib. of Assean R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-139	unnamed trib. of Assean R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-140	unnamed trib. of Apetowachakamasik Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-141	unnamed trib. of Apetowachakamasik Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-142	unnamed trib. of Apetowachakamasik Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-143	unnamed trib. of Assean R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-144	Crying R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-145	unnamed trib. of Hunting R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-146	Hunting R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-148	Awaweyakamak Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-149	unnamed trib. of Hunting R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
N1-Aqua-150	unnamed trib. of Hunting R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-151	Misewaitay R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-153	unnamed trib. of Hunting Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-154	unnamed trib. of Hunting Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-155	unnamed trib. of Assean Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-156	unnamed trib. of Assean Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	Y
N1-Aqua-158	unnamed trib. of Clay R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-159	Clay R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-160	unnamed trib. of Burntwood R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-161	unnamed trib. of Burntwood R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-162	unnamed trib. of Burntwood R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-163	unnamed trib. of Burntwood R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-165	Orr Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-166	unnamed trib. of Orr Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-167	unnamed trib. of Burntwood R.	TW	Y	Y	NA	NA	Y	Y	Y	NA	N	NA	NA	Y	Y	Y	Y	N	NA	Y	Y	U	Y	Y
N1-Aqua-168	Odei R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-169	unnamed trib. of Odei R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	NA	Y	Y	U	Y	Y

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
N1-Aqua-170	unnamed trib. of Burntwood R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-171	unnamed trib. of Burntwood R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-172	unnamed trib. of Burntwood R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N1-Aqua-173	Burntwood R.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	Y
N2-Aqua-100	unnamed trib. of Burntwood R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-101	trib. of Burntwood R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-102	ponded area within wetland	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-103	trib. of Brannigan Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	Y
N2-Aqua-104	trib. of Brannigan Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-105	Brannigan Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-106	unnamed stream	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-107	unnamed stream	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-108	small, unnamed lake	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-109	trib. of Isbister Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-110	trib. of Isbister Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-111	trib. of Isbister Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-112	Isbister Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-113	trib. of Isbister Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
N2-Aqua-115	trib. of Partridge Crop Lake	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-116	unnamed trib. of Partridge Crop Lake	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-117	trib. of Partridge Crop Lake	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	NA	N
N2-Aqua-118	riparian buffer	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	NA	N
N2-Aqua-119	trib. of Partridge Crop Lake	C	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-120	trib. of Partridge Crop Lake	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-121	trib. of Partridge Crop Lake	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-122	Partridge Crop Lake	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-123	riparian buffer	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-124	Grass R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-125	unnamed trib. into Partridge Crop Lake	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	U	N
N2-Aqua-126	unnamed trib. into Partridge Crop Lake	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	U	N
N2-Aqua-127	unnamed trib. into Partridge Crop Lake	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	U	N
N2-Aqua-128	unnamed Pond	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	U	N
N2-Aqua-129	unnamed trib. into Partridge Crop Lake	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-130	unnamed trib. into Partridge Crop Lake	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-131	unnamed trib. into Partridge Crop Lake	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-132	unnamed trib. into Partridge Crop Lake	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
N2-Aqua-133	unnamed trib. into Partridge Crop Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-134	unnamed trib. into Partridge Crop Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-135	unnamed trib. into Partridge Crop Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-136	unnamed trib. into Partridge Crop Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-137	unnamed trib. into Partridge Crop Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-138	unnamed trib. into Partridge Crop Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-139	unnamed trib. into Partridge Crop Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-140	unnamed trib. into Partridge Crop Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-141	unnamed trib. into Teardrop Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-142	unnamed trib. connecting Gordon Brown Lake and Wintering Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-143	unnamed trib. of Wintering Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-144	unnamed trib. into Gordon Brown Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-145	unnamed trib. into Wintering Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
N2-Aqua-146	unnamed trib. into Wintering Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-147	unnamed trib. into Wintering Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-148	unnamed trib. into Wintering Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	NA	N
N2-Aqua-149	Patrick Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-150	Halfway R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
N2-Aqua-151	Halfway R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-152	unnamed trib. of Patrick Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-153	unnamed trib. of Thicket Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-154	unnamed trib. of Clarke Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-155	unnamed trib. of Clarke Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-156	unnamed trib. of Clarke Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-157	unnamed trib. of Clarke Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-158	Clarke Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-158A	unnamed pond	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-159	Unnamed trib. of Muningwari Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-160	unnamed pond	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-161	unnamed trib. of Tooth Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-162	unnamed trib. of Rocky Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-163	unnamed trib. of Monty lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N2-Aqua-164	unnamed trib. of Monty lake	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
N2-Aqua-165	unnamed trib. of Resting Lake	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
N2-Aqua-166	unnamed trib. of Gormley Lake	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N3-Aqua-100	unnamed trib. into Mitishtto R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018	
N3-Aqua-101	unnamed trib. into Mitishto R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N	
N3-Aqua-102	Mitishto R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N3-Aqua-103	Mitishto R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N3-Aqua-104	unnamed trib. into Mitishto R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N3-Aqua-105	unnamed trib. into Mitishto R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	NA	Y	Y	U	Y	N
N3-Aqua-106	unnamed trib. into Mitishto R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	NA	Y	Y	U	Y	Y
N3-Aqua-107	unnamed trib. into Mitishto R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	NA	Y	Y	U	Y	Y
N3-Aqua-108	unnamed trib. into Mitishto R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N3-Aqua-109	unnamed trib. into Mitishto R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N3-Aqua-110	unnamed trib. into Mitishto R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N3-Aqua-111	unnamed trib. into Mitishto R.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N3-Aqua-112	unnamed trib. into Dyce Lake	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N3-Aqua-113	unnamed trib. of Frog Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N3-Aqua-114	unnamed trib. into Frog Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N3-Aqua-115	Frog Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N3-Aqua-116	unnamed headwater or side tributaries into Frog Cr.	TW	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	U	U	N
N3-Aqua-117	unnamed headwater or side tributaries into Little Frog Cr.	TW	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	U	U	N
N3-Aqua-118	unnamed headwater or side tributaries into Little Frog Cr.	TW	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	NA	U	U	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
N3-Aqua-119	unnamed headwater or side tributaries into Little Frog Cr.	TW	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	NA	U	U	N
N3-Aqua-120	unnamed headwater or side tributaries into Little Frog Cr.	TW	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	NA	U	U	N
N3-Aqua-121	unnamed headwater or side tributaries into Little Frog Cr.	TW	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	NA	U	U	N
N3-Aqua-122	unnamed trib. into Little Frog Cr.	TW	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	NA	U	U	N
N3-Aqua-123	unnamed trib. into Little Frog Cr.	TW	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	NA	U	U	N
N3-Aqua-124	unnamed trib. of unnamed Lake	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N3-Aqua-125	unnamed trib. of Little Frog Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N3-Aqua-126	Little Frog Cr.	TW	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N3-Aqua-127	unnamed trib. of Little Frog Cr.	TW	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	NA	U	U	N
N3-Aqua-128	unnamed trib. of Little Frog Cr.	TW	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	NA	U	U	N
N3-Aqua-129	unnamed trib. of Little Frog Cr.	TW	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N3-Aqua-130	unnamed trib. of Little Frog Cr.	TW	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	NA	U	U	N
N3-Aqua-131	unnamed trib. of Little Frog Cr.	TW	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	NA	U	U	N
N3-Aqua-132	unnamed trib. of Little Frog Cr.	TW	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	NA	U	U	N
N3-Aqua-133	unnamed pond	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N3-Aqua-134	Saskatchewan R.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
N3-Aqua-136	unnamed trib. of the Saskatchewan R.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
N3-Aqua-137	unnamed trib. of the Saskatchewan R.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N3-Aqua-138	Ralls Cr.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N3-Aqua-139	unnamed pond	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-100	Iskwayanikakespeetik Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-101	Iskwayanikakespeetik Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-102	Iskwayanikakespeetik Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-103	Iskwayanikakespeetik Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-104	Iskwayanikakespeetik Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-105	Iskwayanikakespeetik Cr.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-106	unnamed trib. of Cedar Lake	TW	Y	NA	NA	NA	Y	Y	Y	NA	NA	NA	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-107	unnamed lake	TW	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
N4-Aqua-108	unnamed drain	TW	Y	NA	NA	NA	Y	Y	Y	NA	NA	NA	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-109	unnamed drain	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-110	Overflowing R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-111	unnamed trib. of Overflowing R.	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-112	unnamed trib. of Lake Winnipegosis	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-113	Red Deer R.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
N4-Aqua-114	unnamed trib. of Lake Winnipegosis	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
N4-Aqua-116	unnamed trib. of Lake Winnipegosis	TA	Y	NA	NA	NA	NA	U	Y	NA	NA	Y	NA	Y	Y	Y	Y	Y	NA	Y	NA	U	U	N
N4-Aqua-119	unnamed trib. of unnamed lake	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
N4-Aqua-121	unnamed trib. of unnamed lake	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-123	Steeprock R.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-124	unnamed trib. of Mafeking Cr.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	NA	NA	U	N
N4-Aqua-125	Bell R.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-126	unnamed agricultural drain	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-127	unnamed agricultural drain	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-128	unnamed trib. of Bell Cr.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-129	unnamed trib. of Bell Cr.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	NA	NA	U	N
N4-Aqua-130	Wawayanagan R.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
N4-Aqua-131	unnamed waterbody	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
N4-Aqua-132	unnamed waterbody	TA	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
N4-Aqua-133	unnamed agricultural drain	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
N4-Aqua-134	Swede Cr.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-135	unnamed agricultural drain	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
N4-Aqua-136	unnamed trib. of Woody R.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-137	Woody R.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
N4-Aqua-138	trib. of Woody R.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
N4-Aqua-139	trib. of Woody R.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
N4-Aqua-140	Poplar Cr.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
N4-Aqua-144	oxbow lake/wetland of Swan R.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-145	oxbow lake/wetland of Swan R.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-146	Swan R.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-147	Kitzul drain	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
N4-Aqua-148	unnamed agricultural drain	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
N4-Aqua-149	unnamed agricultural drain	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
C1-Aqua-100	North Duck R.	TW	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
C1-Aqua-102	unnamed trib. of North Duck R.	TW	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C1-Aqua-103	Sclater R.	TW	Y	NA	NA	NA	NA	U	Y	NA	NA	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C1-Aqua-104	unnamed trib. of Sclater R.	TW	Y	NA	NA	NA	NA	U	Y	NA	NA	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C1-Aqua-105	unnamed trib. of North Pine R.	C	NA	NA	NA	NA	NA	U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N
C1-Aqua-106	North Pine R.	C	NA	NA	NA	NA	NA	U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N
C1-Aqua-107	North Pine R.	C	NA	NA	NA	NA	NA	U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N
C1-Aqua-108	North Pine R.	C	NA	NA	NA	NA	NA	U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N
C1-Aqua-109	South Pine R.	C	NA	NA	NA	NA	NA	U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018	
C1-Aqua-110	unnamed pond	C	NA	NA	NA	NA	NA	U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N
C1-Aqua-111	unnamed trib. of Garland R.	C	NA	NA	NA	NA	NA	U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N
C1-Aqua-112	Garland R.	C	NA	NA	NA	NA	NA	U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N
C1-Aqua-113	Backwater of Garland R.	C	NA	NA	NA	NA	NA	U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N
C1-Aqua-114	Backwater of Garland R.	C	NA	NA	NA	NA	NA	U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N
C1-Aqua-115	unnamed trib. of Wellburns Cr.	C	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	Y	N
C1-Aqua-116	unnamed trib. of Wellburns Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	Y	N
C1-Aqua-117	Wellburns Cr.	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	Y	N
C1-Aqua-118	unnamed small lake	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	Y	N
C1-Aqua-119	Mossy R.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	Y	Y	N
C1-Aqua-120	Robinson Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	Y	N
C1-Aqua-121	unnamed trib. of Cork Cliff Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	Y	N
C1-Aqua-122	Cork Cliff Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N
C1-Aqua-124	unnamed trib. of Lake Winnipegosis	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	Y	N
C1-Aqua-125	German Cr.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	Y	N
C1-Aqua-127	unnamed pond	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N
C1-Aqua-128	unnamed agricultural drain	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
C2-Aqua-107	drain	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-108	unnamed trib. from Jarvies Lake	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-109	unnamed stream between Jarvies Lake and an unnamed lake	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-110	unnamed Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-111	Garrioch Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-112	Rocklan Drain	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-113	drain	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-114	unnamed waterbody	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-115	unnamed waterbody	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-117	small, unnamed lake	RC	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-119	unnamed road ditch	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-120	unnamed road ditch	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-121	small, unnamed waterbody	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-122	drain	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-123	drain	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-124	unnamed Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-125	drain	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-126	drain	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018	
C1-Aqua-129	unnamed agricultural drain	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N	
C2-Aqua-100	unnamed wetland	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N	
C2-Aqua-101	small unnamed waterbody	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
C2-Aqua-102	small unnamed waterbody	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
C2-Aqua-103	unnamed Cr.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-104	unnamed Cr.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-105	unnamed Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-106	unnamed trib. from Pedro Lake	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-107	drain	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-108	unnamed trib. from Jarvies Lake	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-109	unnamed stream between Jarvies Lake and an unnamed lake	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-110	unnamed Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-111	Garrioch Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-112	Rocklan Drain	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-113	drain	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-114	unnamed waterbody	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-115	unnamed waterbody	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-117	small, unnamed lake	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
C2-Aqua-119	unnamed road ditch	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-120	unnamed road ditch (wetland)	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-121	small, unnamed waterbody	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-122	drain (wetland)	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-123	drain	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-124	unnamed Cr.	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-125	drain	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-126	drain	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-127	drain	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-128	drain	TA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-129	drain	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-130	unnamed Cr.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-131	unnamed Cr.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-132	unnamed Cr.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-133	unnamed Cr.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-134	drain	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-135	drain	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
C2-Aqua-136	drain	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
S1-Aqua-101	small, unnamed waterbody (retention pond)	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-102	small, unnamed waterbody (retention pond)	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-103	unnamed drain	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-104	small, unnamed waterbody (retention pond)	TA	NA	NA	NA	NA	NA	U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N
S1-Aqua-106	small, unnamed waterbody (retention pond)	TA	NA	NA	NA	NA	NA	U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N
S1-Aqua-107	unnamed drain	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-108	unnamed drain	TA	NA	NA	NA	NA	NA	U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N
S1-Aqua-109	small, unnamed waterbody (retention pond)	TA	NA	NA	NA	NA	NA	U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N
S1-Aqua-111	unnamed drain	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-112	Whitemud R.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-113	Squirrel Cr.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-114	unnamed drain	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-115	unnamed drain	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-116	unnamed drain	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-117	unnamed drain	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-118	New Beaudin Drain	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-119	unnamed ditch	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-120	unnamed road ditch	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
S1-Aqua-121	Westbourne Drain	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-122	unnamed drain	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-124	unnamed trib. of Rat Cr.	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-125	Bagot Cr.	TA	Y	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Y	NA	NA	Y	N
S1-Aqua-126	Rat Cr.	TA	Y	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Y	NA	NA	Y	N
S1-Aqua-127	unnamed wetland	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	Y	NA	NA	N
S1-Aqua-128	Rossendale Drain	TA	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-129	unnamed trib. of Assiniboine R.	RC	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-130	Assiniboine R.	RC	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	U	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-131	small, unnamed waterbody	RC	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-132	small, unnamed waterbody	RC	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-133	unnamed small wetland area	RC	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-134	unnamed small wetland area	RC	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S1-Aqua-135	unnamed small lake	RC	Y	NA	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-100	unnamed drain	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-101	11-A Drain	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-102	11-A Drain	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-103	11-A Drain	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
S2-Aqua-104	11-A Drain	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-105	unnamed drain	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-106	unnamed drain	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-107	unnamed pond	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-108	Parker Drain	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-109	Parker Drain	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-110	unnamed drain	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-111	Garber Drain	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-112	Garber Drain	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-113	unnamed drain	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-114	Manness Drain	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	Y	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-115	Roberts Drain	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	Y	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-116	Domain Drain	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	Y	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-117	unnamed drain	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-118	unnamed drain	TW	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-119	La Pointe Coulee	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-120	Red R.	TA	Y	NA	NA	NA	NA	U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N
S2-Aqua-121	unnamed trib. of Marsh R.	TA	NA	NA	NA	NA	NA	U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
S2-Aqua-122	Marsh R.	TA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N
S2-Aqua-123	Rat R.	TA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N
S2-Aqua-124	unnamed drain	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N
S2-Aqua-125	unnamed drain	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N
S2-Aqua-126	Tourond Cr.	TW	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N
S2-Aqua-127	unnamed drain	TA	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N
S2-Aqua-128	unnamed wetland	TW	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N
S2-Aqua-129	Old South Lateral Drain	TW	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N
S2-Aqua-130	South Lateral Drain	C	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N
S2-Aqua-131	unnamed drain	TW	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N
S2-Aqua-132	Chorlitz Drain	TW	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N
S2-Aqua-133	unnamed drain	TW	Y	NA	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N
S2-Aqua-134	Manning Canal	TW	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N
S2-Aqua-135	unnamed drain	TW	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N
S2-Aqua-136	unnamed drain	TW	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N
S2-Aqua-137	unnamed drain	TW	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N
S2-Aqua-138	unnamed drain	TW	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N
S2-Aqua-139	Youville Drain	TW	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	NA	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas	Erosion Sediment Control Implemented	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
S2-Aqua-140	Seine R. Diversion	TW	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-143	Seine R.	C	Y	Y	Y	NA	NA	U	Y	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-144	unnamed drain	C	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-145	unnamed ditch/drain connected to Seine R.	C	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-146	unnamed ditch/drain connected to Seine R.	C	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-147	Fish Cr.	C	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-148	unnamed drain	C	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-149	unnamed drain	C	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-150	unnamed drain	C	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-151	unnamed drain	C	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-152	unnamed drain	TW	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-153	unnamed drain	TW	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-154	unnamed drain	C	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-155	unnamed drain	TW	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-156	unnamed drain	TW	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-157	Swede Drain	C	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
S2-Aqua-158	unnamed drain	C	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N

Table A1. Continued.

ESS	Name	Construction Status 2017	Cross Perpendicular to Channel	Structures Above Tree Line	Riparian Ground Cover Remain	Machine Free Zone 7 m	Riparian Buffer 30 m	Clearing Limits Marked	Construction on Frozen Ground	Riparian Vegetation Roots Intact	Slash Above the Tree Line	Revegetate Disturbed Areas Implemented	Erosion Sediment Control	Temp. Crossings Only As Needed	Appropriate Temp. Crossing Design	Existing Access Used	Temp. Crossings Perpendicular	Clean Material for Temp. Crossing Removed	One-time Fording	Timing Window for Instream Work	Fording Under Acceptable Conditions	Stream Bank Protection	Temp. Bridge As Needed	Follow-up Site Inspection 2018
KGEL-Aqua-110	Unnamed trib. Of the Nelson River	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
KGEL-Aqua-111	Unnamed trib. Of the Nelson River	C	Y	Y	Y	Y	Y	Y	Y	N	Y	NA	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	Y
KGEL-Aqua-113	Unnamed trib. Of the Nelson River	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
KGEL-Aqua-114	Unnamed trib. Of the Nelson River	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
KGEL-Aqua-115	Unnamed trib. Of the Nelson River	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	Y	Y	Y	Y	Y	Y	NA	Y	Y	U	Y	N
RGEL-Aqua-100	Unnamed drain	RC	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
RGEL-Aqua-101	Unnamed drain	RC	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N
RGEL-Aqua-102	Unnamed drain	RC	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	NA	NA	NA	Y	NA	NA	NA	Y	NA	NA	NA	N

Compliance: Y- compliant; N - non-compliant; NA - not applicable; U - uncertain

Construction Status 2017: NC - no clearing; CL - center line only cleared; RI - riparian buffer incomplete; RC -RoW clearing complete; TF- tower footprint cleared; TA - tower anchors installed; TW - towers complete;

Other: Cr. - creek; R. - River; Temp.- temporary; Trib. - trib.

