

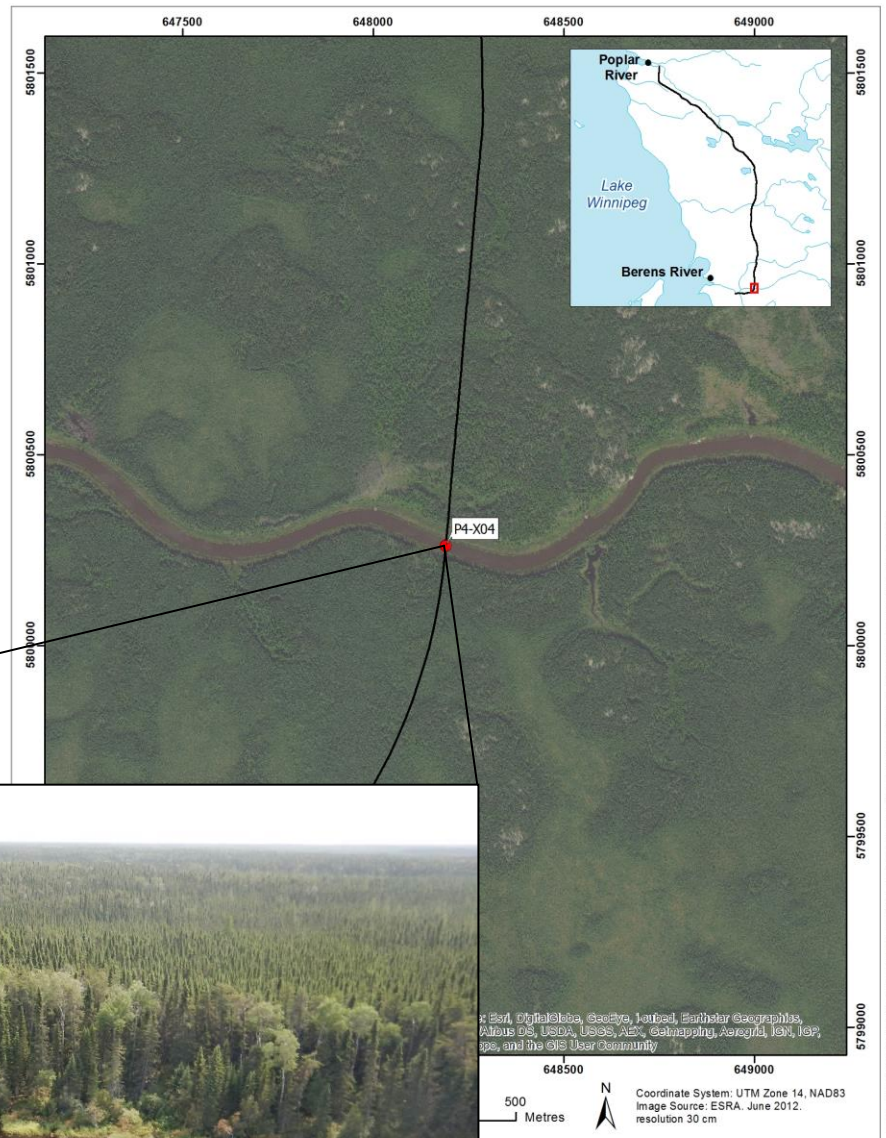
P4-X04 Etomami River

Location

Datum: NAD 83
UTM: 14U 648199 5800281

General Morphology

Type: River
Pattern: Sinuous
Channel Profile: U-shape
Sinuosity: 1.07
Confinement: Unconfined
Flow Regime: Perennial



Site Conditions

Survey Date: July 17, 2014
Discharge (m³/s): -
Stage: High



+ Physical Channel Data

Transect	1	2	3	4	5
Distance from Crossing ^a (m)	0	25 US	25 DS	-	-
Channel and Flow					
Open Channel Width (m)	46	45	46	-	-
Wetted Width (m)	80	86	81	-	-
Depth at 25% (m)	-	-	-	-	-
Depth at 50% (m)	-	-	-	-	-
Depth at 75% (m)	-	-	-	-	-
Maximum Depth (m)	-	-	-	-	-
Gradient (%)	-	-	-	-	-
Banks					
Left Bank Height (m)	-	-	-	-	-
Right Bank Height (m)	-	-	-	-	-
Left Bank Shape	-	-	slope	-	-
Right Bank Shape	-	slope	slope	-	-
Left Bank Materials	organic	organic	organic	-	-
Right Bank Materials	organic	organic	organic	-	-
Left Bank Stability	high	high	high	-	-
Right Bank Stability	high	high	high	-	-
Substrate Type and Distribution (%)					
Fines	-	-	-	-	-
Small Gravel	-	-	-	-	-
Large Gravel	-	-	-	-	-
Cobble	-	-	-	-	-
Boulder	-	-	-	-	-
Bedrock	-	-	-	-	-

a – US = upstream from crossing; DS = downstream from crossing.

Site Conditions Continued

+ Riparian Area/Floodplain

Transect	1	2	3	4	5
Floodplain Distance (m)					
Left Bank	22	16	22	-	-
Right Bank	16	18	13.7	-	-
Riparian Distance (m)					
Left Bank	22	16	22	-	-
Right Bank	16	18	13.7	-	-
Riparian Vegetation Type^a					
	GRA/ SHR	GRA/ SHR	GRA/ SHR	-	-
Canopy Cover (%)	0	0	0	-	-

a – GRA = grass; SHR = Shrub; DEC = deciduous; CON = coniferous; MIX = mixed

+ Habitat Type

Transect	1	2	3	4	5
Flat	100	100	100	-	-
Pool	-	-	-	-	-
Rapid	-	-	-	-	-
Riffle	-	-	-	-	-
Run	-	-	-	-	-
Backwater	-	-	-	-	-

+ Water Quality Data

Sample Date:	July 22, 2014
Habitat:	Flat
Temperature (°C):	20.9
pH:	5.18
Turbidity (NTU):	12.46
Specific Conductance (µS/cm):	36.9
DO (mg/L):	7.04



Cross channel (south) view of the crossing site (Transect 1).



Downstream view from crossing site (Transect 1).



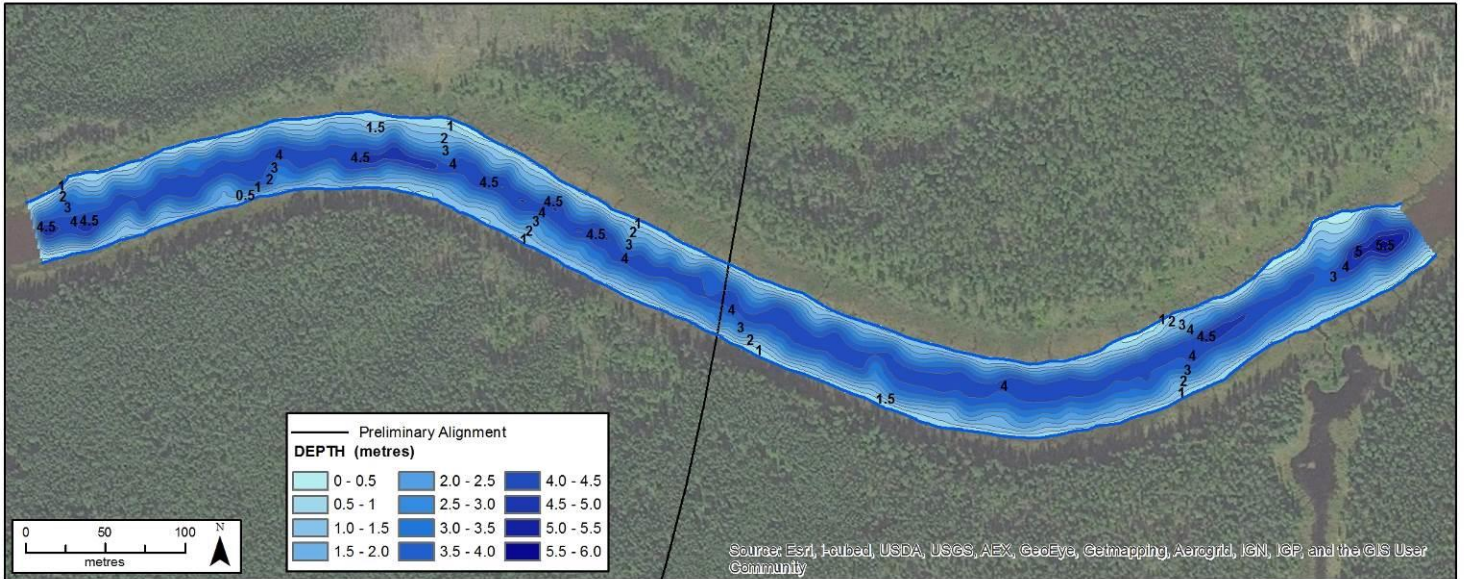
South bank at crossing site (Transect 1).



Upstream view from Transect 2, toward crossing site.

Site Conditions Continued

+ Bathymetric Map



Note: This map is intended for fish habitat assessments. It should not be used for navigation or design purposes.

+ Substrate Map



Note: This is a generalized substrate map, intended for fish habitat assessment. It should not be used for navigation or design purposes.

Site Conditions Continued

+ Cover

	US	DS
Total Cover Available (%)	20	20
Cover Composition (% of Total)		
Large Woody Debris	-	-
Overhanging Vegetation	-	-
Instream Vegetation	100	100
Pool	-	-
Boulder	-	-
Undercut Bank	-	-
Surface Turbulence	-	-
Turbidity	-	-

Fish Presence

+ Fish Habitat Potential

	US	DS
Forage Fish		
Spawning	High	High
Rearing	High	High
Overwinter	High	High
Migration	High	High
Large Bodied Fish		
Spawning	High	High
Rearing	Moderate	Moderate
Overwinter	High	High
Migration	High	High

Comments

The Etomami River is a moderate-size, perennial watercourse that provides important year-round fish habitat. The surveyed reach consists of a slow moving river with a uniform channel dominated by silt and clay substrates. Macrophyte beds located along shorelines provide instream cover for fish and are also suitable for spawning by Northern Pike. There are numerous falls and rapids located along the length of the river, including Makik Falls, 2.4 km downstream and Kinnapik Rapids, 3.7 km upstream from the crossing. In spring, CRA species, such as suckers and Walleye likely migrate past the crossing to spawning habitats at the base of rapids.

+ Fish Sampling Data

Methods: gillnetting

Fish Species Captured: Cisco, Emerald Shiner, Troutperch, and Walleye.

Existing Information: none

▼ Mussel Presence

+ Mussel Sampling Data

Methods: ponar

Mussel Species Captured: none.

Existing Information: none.

▼ Regional Context

+ Habitat

Upstream Drainage Area (km²): 753
Distance to Major DS Waterbody (km): 5.57 (Berens River)
Connectivity: Yes

Comments

The crossing provides a uniform, low velocity riverine habitat, dominated by fine substrates. This type of habitat is abundant within the Etomami River and other watercourses in the area and is not considered critical or limiting to CRA fishery species.

+ Fishery

Fishery Area: Etomami River, Berens River, Lake Winnipeg

Fishery Users:

Commercial Yes - Lake Winnipeg^a
Recreational Yes
Aboriginal Yes - Berens River First Nation^b

Comments

The Etomami River is a tributary of the Berens River and has downstream connectivity to Lake Winnipeg. These waterbodies support both recreational and Aboriginal fisheries, including Walleye. Lake Winnipeg also supports several commercial fisheries. The crossing area contributes to these fisheries by providing potential feeding, spawning and overwintering habitat; however the habitat not considered critical to CRA species populations.

Information Sources:

a – Manitoba Conservation (2014)
b – ESRA (2009)

↘ Crossing Information

+ Proposed Crossing

Type	Three-span bridge ^a
Diameter (mm)	-
Length (m)	TBD
Number of Barrels	-
Provision of Fish Passage	Yes

Information Sources:

a – pers. comm. ESRA

↘ Risk Assessment

+ Preliminary Considerations

Attribute	Rating	Comments
Supports a CRA Fishery	Yes	The habitat in the immediate crossing area provides cover for fish and potential spawning and rearing habitat for Northern Pike. Spawning habitat for Walleye and sucker is located up- and downstream of the crossing area well outside the project footprint.
Species at Risk Present	No	No known species at risk.

+ Impacts to Fish and Fish Habitat

Type	Multi-span bridge construction and operation
Minor Impact List	No
Residual Impact	Channel infilling from two instream piers Habitat alteration from rip rap placement at base of each pier

Attribute	Rating	Comment
Extent of Impact	Low	Infilling and rip rap placement will be limited to the footprint and immediate base of the piers.
Duration of Impact	High	The infill and rip rap will be in place for approximately 50 years.
Availability & Condition	Low	The affected habitat is common and widespread within moderately sized river systems in the region. The east side Lake Winnipeg area is largely undeveloped and the habitat within the river remains intact.
Impact on Relevant Fish	Low	The habitat at the crossing site provides suitable spawning and/or rearing habitat for Northern Pike and forage fish. This type of habitat is not considered to be critical or limiting as similar habitat is plentiful in the region, as are the affected species. Negative impacts to fish populations from rip rap placement are unlikely as it provides coarse substrate to supplement the fine substrates which currently dominate the reach. Habitat impacts are expected to result in no measureable effect to local fish populations.

+ Risk of Serious Harm to Fish

Risk Rating: LOW

Qualification: Based on the small area of impact, abundance of similar habitat within the system, and absence of critical or limiting habitat, bridge construction is expected to have minimal impact on the productivity of local fish populations.

Net Habitat Change

Habitat Change

Type of Structure: Three-span Bridge

Effect	Pathway of Effect	Proposed Area Affected	Existing Area Affected	Loss/Gain
Instream Alteration	None ¹	323 m ²	0 m ²	323 m ²
Instream Destruction	Footprint ²	11.68 m ²	0 m ²	-11.68 m ²

- 1 – Bridge design was unavailable at the time of assessment. Area calculated as the area rip rap armouring around the two piers and was estimated based on AECOM design drawings provided in Plans PR 304 to Berens River All Season Road Alignment Tender No. B5 Pigeon River Bridge, issued October 3, 2013.
- 2 – Bridge design was unavailable at the time of assessment. Habitat loss is estimated using the area of two piers from the Pigeon River bridge design (based on AECOM design drawings provided in Plans PR 304 to Berens River All Season Road Alignment Tender No. B5 Pigeon River Bridge, issued October 03, 2013)

P4-X05

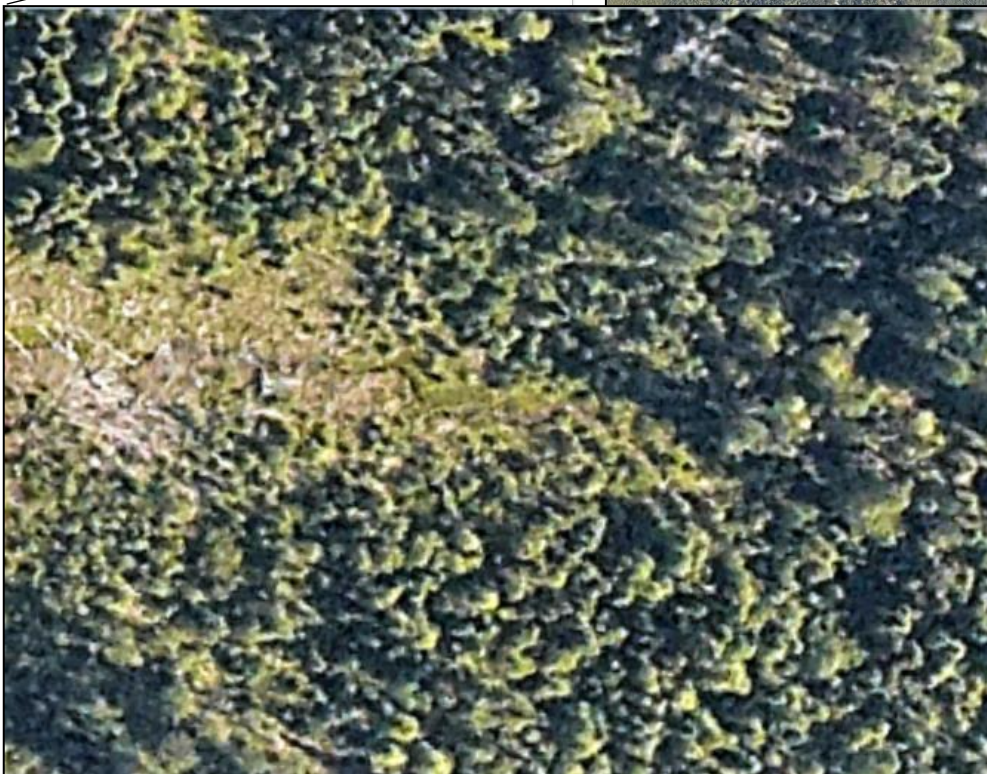
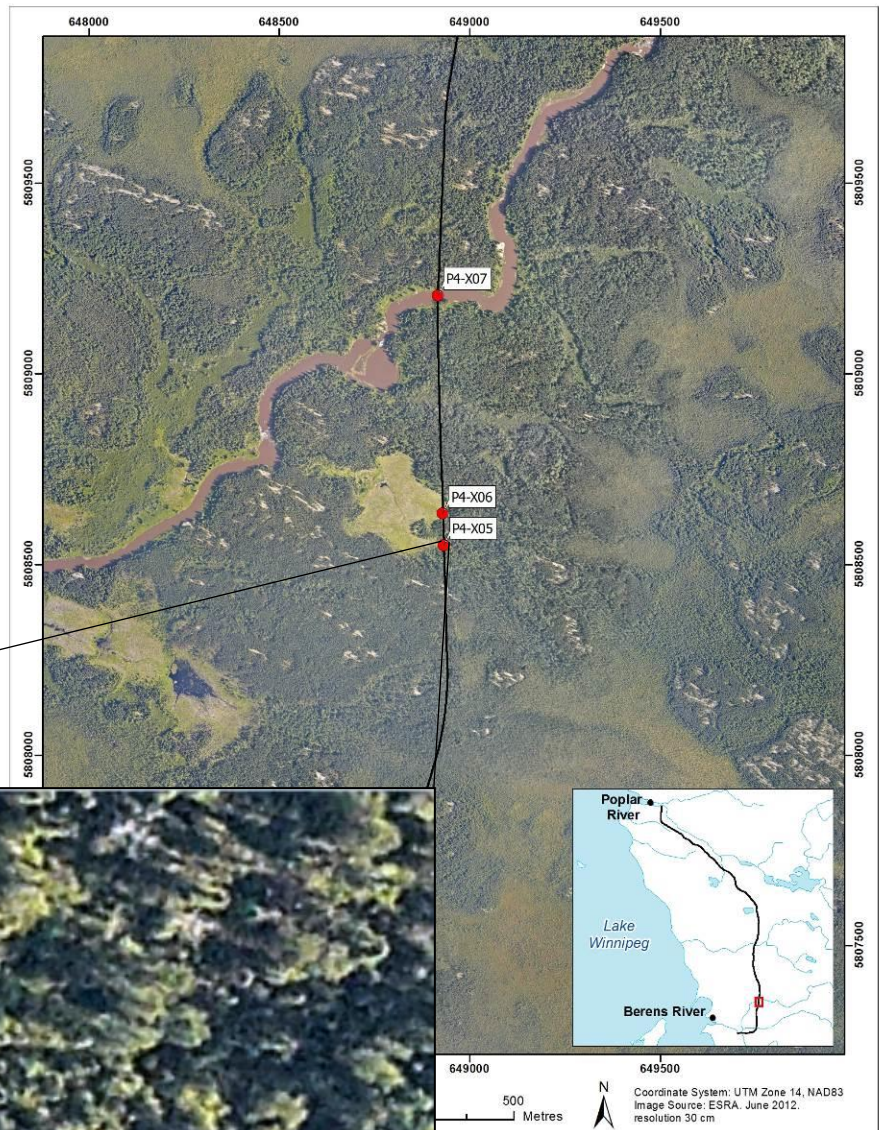
Unnamed North Etomami River Tributary

Location

Datum: NAD 83
UTM: 14U 648934 5808550

General Morphology

Type: Creek
Pattern: Irregular Wandering
Channel Profile: Notched
Sinuosity: -
Confinement: Unconfined
Flow Regime: Perennial



Site Conditions

Survey Date: July 20, 2014
Discharge (m³/s): 0.027
Stage: High



+ Physical Channel Data

Transect	1	2	3	4	5
Distance from Crossing ^a (m)	0	25 US ^b	25 US ^b	25 DS	-
Channel and Flow					
Channel Width (m)	1.02	0.99	0.56	1.1	-
Wetted Width (m)	-	0.99	0.56	1.1	-
Depth at 25% (m)	0.35	0.44	0.30	0.38	-
Depth at 50% (m)	0.37	0.43	0.25	0.7	-
Depth at 75% (m)	0.46	0.35	0.26	0.34	-
Maximum Depth (m)	0.46	0.47	0.30	0.40	-
Gradient (%)	-	-	-	-	-
Banks					
Left Bank Height (m)	flooded	0.08	0.08	0.12	-
Right Bank Height (m)	flooded	0.09	0.08	0.13	-
Left Bank Shape	vertical	vertical	vertical	vertical	-
Right Bank Shape	vertical	vertical	vertical	vertical	-
Left Bank Materials	organic	organic	organic	organic	-
Right Bank Materials	organic	organic	organic	organic	-
Left Bank Stability	high	high	high	high	-
Right Bank Stability	high	high	high	high	-
Substrate Type and Distribution (%)					
Fines	100	100	100	100	-
Small Gravel	-	-	-	-	-
Large Gravel	-	-	-	-	-
Cobble	-	-	-	-	-
Boulder	-	-	-	-	-
Bedrock	-	-	-	-	-

a – US = upstream from crossing; DS = downstream from crossing

b – two channels present at 25 m upstream from crossing.

Site Conditions Continued

+ Riparian Area/Floodplain

Transect	1	2	3	4	5
Floodplain Distance (m)					
Left Bank	7.36	2.65	4.38	13.2	-
Right Bank	5.46	4.38	8.75	12.5	-
Riparian Distance (m)					
Left Bank	7.36	2.65	4.38	14.6	-
Right Bank	5.46	4.38	5.15	19.5	-
Riparian Vegetation Type^a	MIX	MIX	MIX	GRA	-
Canopy Cover (%)	0	10	10	0	-

a - GRA = grass; SHR = Shrub; DEC = deciduous; CON = coniferous; MIX = mixed

+ Habitat Type

Transect	1	2	3	4	5
Flat	100	100	100	75	-
Pool	-	-	-	-	-
Rapid	-	-	-	-	-
Riffle	-	-	-	25	-
Run	-	-	-	-	-
Impoundment	-	-	-	-	-

+ Water Quality Data

Sample Date:	-
Habitat:	-
Temperature (°C):	-
pH:	-
Turbidity (NTU):	-
Specific Conductance (µS/cm):	-
DO (mg/L):	-



Downstream view at crossing site.



Upstream view from Transect 3 (25 m upstream).



Downstream view from Transect 4 (25 m downstream).



Downstream view of small channel downstream of beaver dam (240 m downstream from crossing).

↘ Site Conditions Continued

+ Cover

	US	DS
Total Cover Available (%)	15	20
Cover Composition (% of Total)		
Large Woody Debris	70	40
Overhanging Vegetation	30	-
Instream Vegetation	-	60
Pool	-	-
Boulder	-	-
Undercut Bank	-	-
Surface Turbulence	-	-
Turbidity	-	-

↘ Fish Presence

+ Fish Habitat Potential

Forage Fish	US	DS
Spawning	Low	Moderate
Rearing	Low	Moderate
Overwinter	None	Low
Migration	None	Low
Large Bodied Fish		
Spawning	None	None
Rearing	None	None
Overwinter	None	None
Migration	None	None

Comments

The crossing is located on the upper reach of a small first order stream. A defined continuous channel begins approximately 70 m upstream from the crossing site. The crossing lies where the channel transitions from a mixed forest reach to an open canopy reach dominated by grass/sedge riparian vegetation. The crossing provides flat habitat with fine substrates. The crossing site is not expected to support large-bodied fish. Four beaver dams were identified downstream from the crossing; however flow was visible underneath each one. Low flows due to lack of significant headwaters and small upstream drainage area are expected to limit fish use to forage fish species tolerant of low dissolved oxygen levels.

+ Fish Sampling Data

Methods: electrofishing

Fish Species Captured: none

Existing Information: none

↘ Mussel Presence

+ Mussel Sampling Data

Methods: Not sampled; unsuitable habitat.

Mussel Species Captured: -

Existing Information: -

↘ Regional Context

+ Habitat

Upstream Drainage Area (km²): 0.04

Distance to Major DS Waterbody (km): 0.54 (North Etomami River)

Connectivity: Yes - Unlikely

Comments

The crossing is located on the upper reach of a small tributary of the North Etomami River and provides low flow, flat habitat with fine substrates. This type of small stream habitat is common within the region.

+ Fishery

Fishery Area: North Etomami River, Etomami River, Berens River, Lake Winnipeg

Fishery Users:

Commercial Yes - Lake Winnipeg^a

Recreational Yes

Aboriginal Yes - Berens River First Nation

Comments

The unnamed watercourse is a tributary of the North Etomami River and has downstream connectivity to the Etomami River, Berens River and Lake Winnipeg. The importance of the habitat to these fisheries is considered low; habitat at the culvert site is considered marginal habitat for forage fish and does not provide direct habitat for CRA species.

Information Sources:

a – Manitoba Conservation (2014)

↘ Crossing Information

+ Proposed Crossing

Type	Culvert ^a
Diameter (mm)	TBD
Length (m)	TBD
Number of Barrels	TBD
Provision of Fish Passage	Yes

Information Sources:

a – pers. comm. ESRA.

↘ Risk Assessment

+ Preliminary Considerations

Attribute	Rating	Comments
Supports a CRA Fishery	No	The habitat does not directly support CRA fish species or key prey species of CRA fish species.
Supports Species at Risk	No	No known species at risk.

+ Impacts to Fish and Fish Habitat

Type	Culvert construction and operation
Minor Impact List	No
Residual Impact	Channel infilling within footprint of the culvert. Habitat alteration from rip rap placement at culvert inlet and outlet

Attribute	Rating	Comment
Extent of Impact	Low	The infill of the stream bed and rip rap placement is restricted to the culvert site.
Duration of Impact	High	The infill and rip rap will be in place for approximately 50 years.
Availability & Condition	Low	The affected habitat is common and widespread within boreal streams in the region. The east side Lake Winnipeg area is relatively undeveloped and small stream habitats remain largely intact.
Impact on Relevant Fish	Low	The habitat is expected to support only forage fish species. Ephemeral barriers downstream of the crossing site preclude direct access to the site for CRA fishery species. The small drainage basin and low flows render the habitat unsuitable for overwintering of most fish species. Habitat impacts are expected to result in no measureable effect to downstream fisheries.

+ Risk of Serious Harm to Fish

Risk Rating: LOW

Qualification: Based on the small area of impact, marginal habitat and absence of direct habitat for CRA fishery species, culvert construction and operation is expected to have no measureable impact on the productivity of local fish populations.

Net Habitat Change

Type of Structure: Culvert

Effect	Pathway of Effect	Proposed Area Affected	Existing Area Affected	Loss/Gain
Instream Alteration	None ¹	0 m ²	0 m ²	0 m ²
Instream Destruction	Footprint ²	30.6 m ²	0 m ²	-30.6 m ²

1 – Any habitat alterations due to rip rap included in footprint (i.e., destruction)

2 – Culvert design unavailable at the time of assessment. Area estimated based on the length of culvert crossings constructed as part of the Provincial Road 304 to Berens River All Season Road Project (30 m) and the channel width at the crossing (1.02 m).

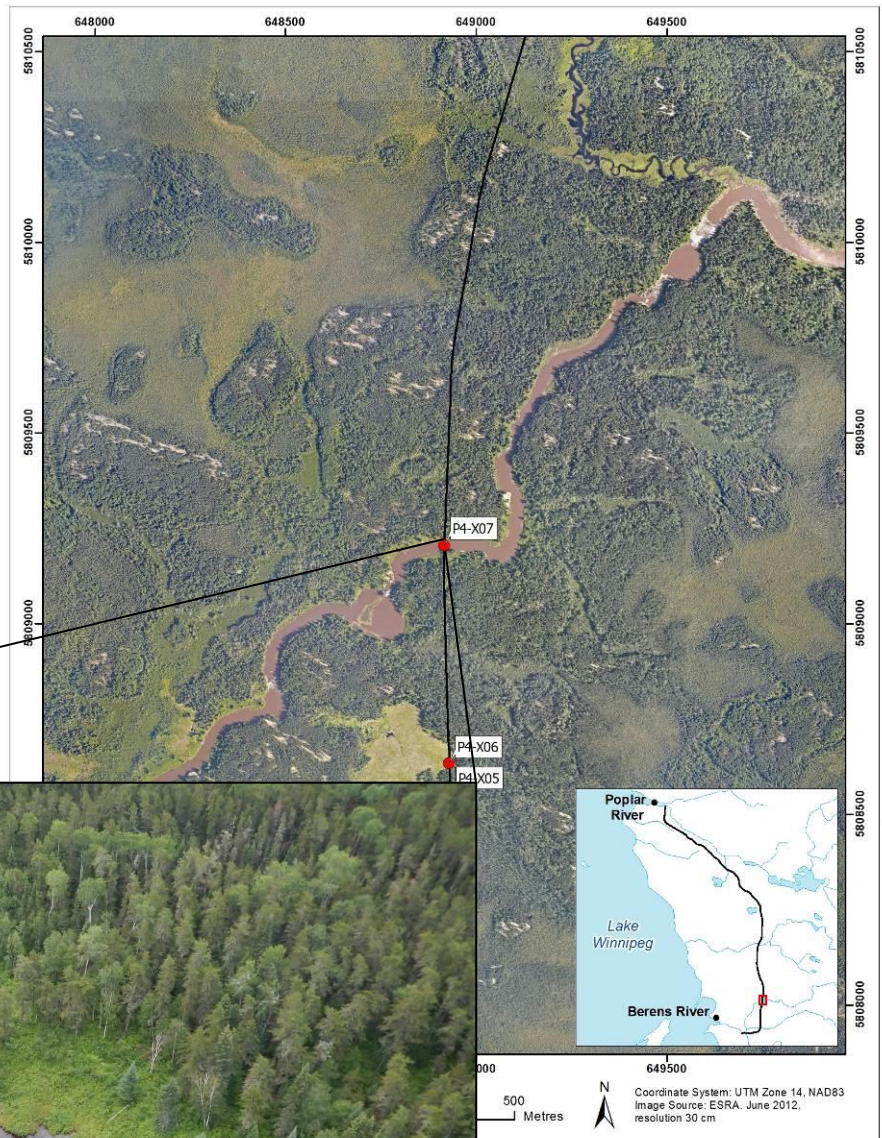
P4-X07 North Etomami River

Location

Datum: NAD 83
UTM: 14U 648918 5809218

General Morphology

Type: River
Pattern: Irregular, wandering
Channel Profile: U-shape
Sinuosity: 1.17
Confinement: Occ. confined
Flow Regime: Perennial



Site Conditions

Survey Date: July 18, 2014
Discharge (m³/s): -
Stage: High



+ Physical Channel Data

Transect	1	2	3	4	5
Distance from Crossing ^a (m)	0	25 US	25 DS	-	-
Channel and Flow					
Channel Width (m)	30	30	37	-	-
Wetted Width (m)	30	29	37	-	-
Depth at 25% (m)	-	-	-	-	-
Depth at 50% (m)	-	-	-	-	-
Depth at 75% (m)	-	-	-	-	-
Maximum Depth (m)	-	-	-	-	-
Gradient (%)	-	-	-	-	-
Banks					
Left Bank Height (m)	1.1	0.25	~3.5	-	-
Right Bank Height (m)	1.4	2.2	~4.0	-	-
Left Bank Shape	slope	slope	slope	-	-
Right Bank Shape	slope	undercut	slope	-	-
Left Bank Materials	organic/soil	organic/soil	organic/soil	-	-
Right Bank Materials	organic/soil	organic/soil/bed	organic/soil	-	-
Left Bank Stability	high	high	high	-	-
Right Bank Stability	high	moderate	high	-	-
Substrate Type and Distribution (%)					
Fines	-	-	-	-	-
Small Gravel	-	-	-	-	-
Large Gravel	-	-	-	-	-
Cobble	-	-	-	-	-
Boulder	-	-	-	-	-
Bedrock	-	-	-	-	-

a – US = upstream from crossing; DS = downstream from crossing.

Site Conditions Continued

+ Riparian Area/Floodplain

Transect	1	2	3	4	5
Floodplain Distance (m)					
Left Bank	5.4	3.9	-	-	-
Right Bank	2.6	0	-	-	-
Riparian Distance (m)					
Left Bank	5.3	3.9	~12	-	-
Right Bank	2.6	0	3.9	-	-
Riparian Vegetation Type^a	SHR	SHR	SHR	-	-
Canopy Cover (%)	0	0	0	-	-

a – GRA = grass; SHR = Shrub; DEC = deciduous; CON = coniferous; MIX = mixed

+ Habitat Type

Transect	1	2	3	4	5
Flat	-	-	-	-	-
Pool	-	-	-	-	-
Rapid	-	-	-	-	-
Riffle	-	-	-	-	-
Run	100	100	100	-	-
Backwater	-	-	-	-	-

+ Water Quality Data

Sample Date:	July 22, 2014
Habitat:	Flat
Temperature (°C):	20.7
pH:	5.30
Turbidity (NTU):	41.3
Specific Conductance (µS/cm):	47.5
DO (mg/L):	7.07



Upstream view from the crossing site (Transect 1).



Downstream view from crossing site (Transect 1).



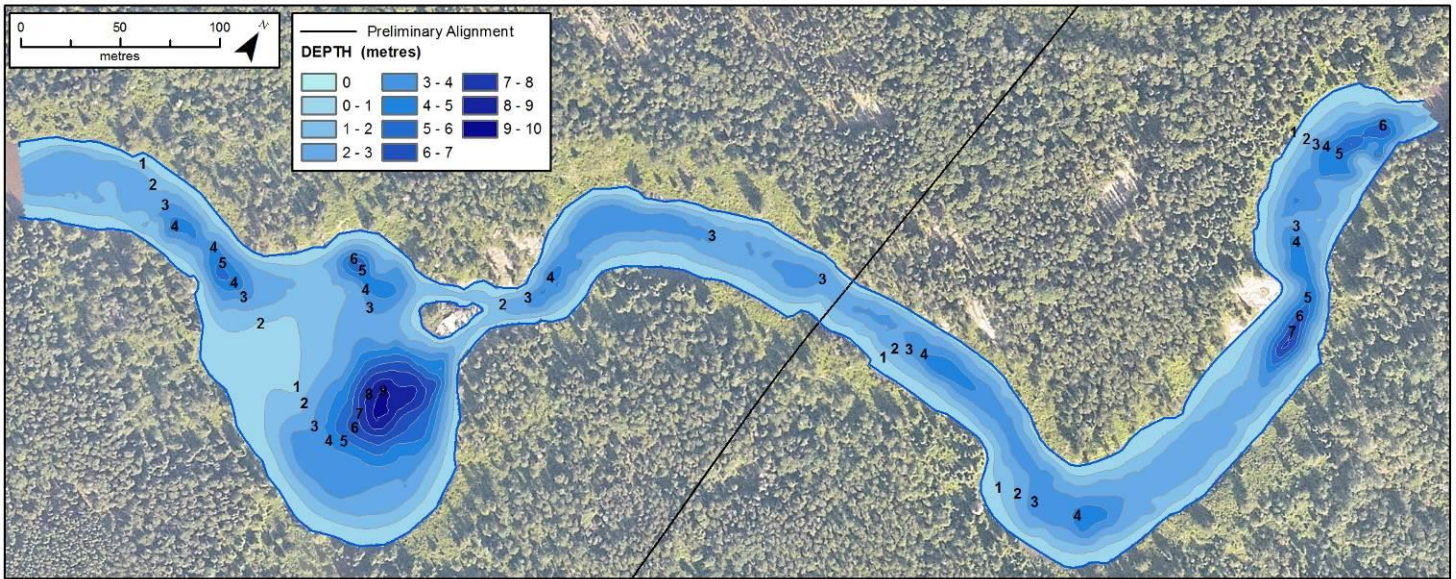
Cross channel view (south) at the crossing site.



Downstream view of shallow narrows and large bay downstream from crossing.

Site Conditions Continued

+ Bathymetric Map



Note: This map is intended for fish habitat assessments. It should not be used for navigation or design purposes.

+ Substrate Map



Note: This is a generalized substrate map, intended for fish habitat assessment. It should not be used for navigation or design purposes.

Site Conditions Continued

+ Cover

	US	DS
Total Cover Available (%)	15	15
Cover Composition (% of Total)		
Large Woody Debris	20	10
Overhanging Vegetation	-	-
Instream Vegetation	80	90
Pool	-	-
Boulder	-	-
Undercut Bank	-	-
Surface Turbulence	-	-
Turbidity	-	-

Fish Presence

+ Fish Habitat Potential

	US	DS
Forage Fish		
Spawning	High	High
Rearing	High	High
Overwinter	High	High
Migration	High	High
Large Bodied Fish		
Spawning	High	High
Rearing	High	High
Overwinter	High	High
Migration	High	High

Comments

The North Etomami River is a major perennial watercourse and is important fish habitat. The survey area provides a variety of habitat types, including: slow-flowing uniform reaches with rocky and fine substrates; bedrock narrows; off-current, deep water habitat (>9m) and; off-current, shallow habitat with extensive macrophyte beds.

Macrophyte beds in off-current areas and within a downstream backwater bay are suitable for spawning and rearing by Northern Pike. There are numerous falls and rapids located along the North Etomami River, including an unnamed set of rapids, 1 km upstream from the crossing. CRA species, such as Walleye and suckers may migrate through the site to spawning areas at the base of rapids in spring.

+ Fish Sampling Data

Methods: gillnetting

Fish Species Captured: Emerald Shiner, Spottail Shiner, Troutperch, Walleye, and White Sucker.

Existing Information: none

▼ Mussel Presence

+ Mussel Sampling Data

Methods: ponar

Mussel Species Captured: none.

Existing Information: none.

▼ Regional Context

+ Habitat

Upstream Drainage Area (km²): 614

Distance to Major DS Waterbody (km): 15.1 (Etomami River)

Connectivity: Yes

Comments

The immediate crossing area provides low velocity habitat dominated by bedrock/boulder/cobble substrates, with some areas of fines. No unique or sensitive habitats were identified. The habitat is common in the area and is not considered critical or limiting to CRA fishery species.

+ Fishery

Fishery Area: Etomami River, Berens River, Lake Winnipeg

Fishery Users:

Commercial Yes - Lake Winnipeg^a

Recreational Yes

Aboriginal Yes - Berens River First Nation

Comments

The North Etomami River has downstream connectivity to Lake Winnipeg via the Etomami and Berens rivers. These waterbodies support commercial, recreational and Aboriginal fisheries, including Walleye and suckers. The crossing area contributes to these fisheries by providing potential feeding, spawning and overwintering habitat; however the habitat not considered critical to CRA species populations.

Information Sources:

a – Manitoba Conservation (2014)

↘ Crossing Information

+ Proposed Crossing

Type	Two-span bridge ^a
Diameter (mm)	-
Length (m)	TBD
Number of Barrels	-
Provision of Fish Passage	Yes

Information Sources:

a – pers. comm. ESRA

↘ Risk Assessment

+ Preliminary Considerations

Attribute	Rating	Comments
Supports a CRA Fishery	Yes	The watercourse is known to support a variety of CRA fishery species.
Species at Risk Present	No	No known species at risk.

+ Impacts to Fish and Fish Habitat

Type	Multi-span bridge construction and operation
Minor Impact List	No
Residual Impact	Channel infilling from a single instream pier Habitat alteration from rip rap placement at base of the pier

Attribute	Rating	Comment
Extent of Impact	Low	Infilling and rip rap placement will be limited to the footprint and immediate base of the pier.
Duration of Impact	High	The infill and rip rap will be in place for approximately 50 years.
Availability & Condition	Low	The affected habitat is common and widespread within moderately sized river systems in the region. The east side Lake Winnipeg area is largely undeveloped and the habitat within the river remains intact.
Impact on Relevant Fish	Low	The habitat at the crossing site provides suitable habitat for CRA fishery species (i.e. Walleye, sucker, Northern Pike). This type of habitat is not considered to be critical or limiting as similar habitat is plentiful in the region, as are the affected species. Fish are expected to fulfill their life requisites using the habitats located outside of the footprint of the pier more suited to spawning and rearing. Negative impacts to fish populations from rip rap placement are unlikely as it provides a similar substrate to current conditions. Habitat impacts are expected to result in no measureable effect to local fish populations.

+ Risk of Serious Harm to Fish

Risk Rating: LOW

Qualification: Based on the small area of impact, abundance of similar habitat within the system, and absence of critical or limiting habitat, bridge construction is expected to have minimal impact on the productivity of local fish populations.

Net Habitat Change

Habitat Change

Type of Structure: Two-span Bridge

Effect	Pathway of Effect	Proposed Area Affected	Existing Area Affected	Loss/Gain
Instream Alteration	None ¹	161.5 m ²	0 m ²	161.5 m ²
Instream Destruction	Footprint ²	5.84 m ²	0 m ²	-5.84 m ²

- 1 – Bridge design was unavailable at the time of assessment. Area calculated as the area rip rap armouring around a single pier and was estimated based on AECOM design drawings provided in Plans PR 304 to Berens River All Season Road Alignment Tender No. B5 Pigeon River Bridge, issued October 3, 2013.
- 2 – Bridge design was unavailable at the time of assessment. Habitat loss is estimated using the area of a single pier from the Pigeon River bridge design (based on AECOM design drawings provided in Plans PR 304 to Berens River All Season Road Alignment Tender No. B5 Pigeon River Bridge, issued October 03, 2013).