

**Project 4**

**Proposed Road Alignments**

- Project 1: PR304 to Berens River
- Project 4: Berens River to Poplar River
- Project 4 Project Assessment Area (PAA)
- Project 4 Local Assessment Area (LAA)
- Project 4 Regional Assessment Area (RAA)

**River and Stream Crossings**

- Rivers and Streams Intersecting the P4 ASR

**Base Data**

- Community
- Provincial Highway
- Local Road
- Winter Road
- Transmission Line
- First Nation

MANITOBA  
**East Side Road**  
AUTHORITY

Joro  
Consultants

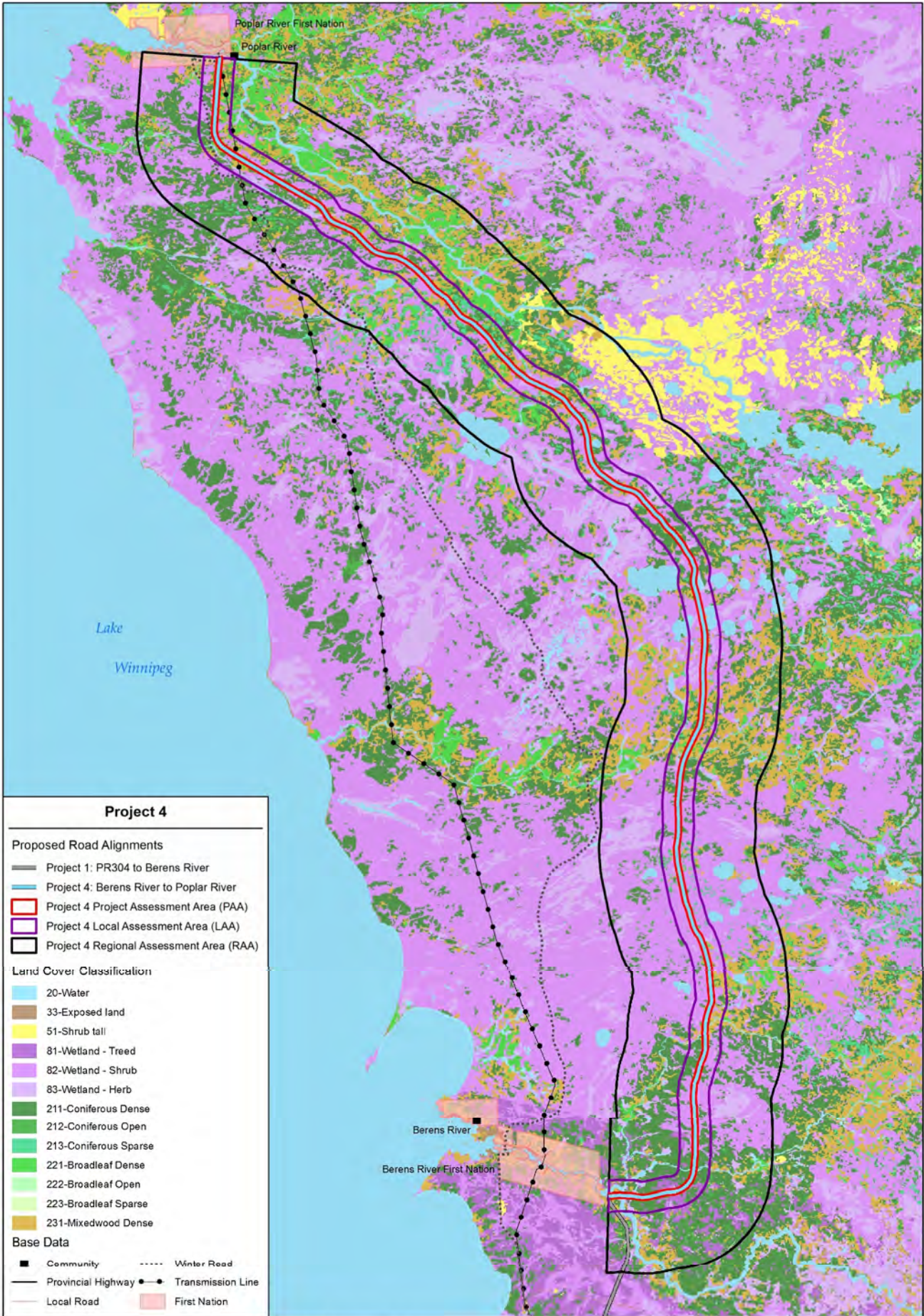
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Data Source: ESRA, Joro, MCWS  
Date Created: July 29, 2015

0 2 4 Kilometres  
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**Project 4 Vegetation Survey**  
River and Stream Crossings in the Project 4 Study Area





**Project 4**

**Proposed Road Alignments**

- Project 1: PR304 to Berens River
- Project 4: Berens River to Poplar River
- ▭ Project 4 Project Assessment Area (PAA)
- ▭ Project 4 Local Assessment Area (LAA)
- ▭ Project 4 Regional Assessment Area (RAA)

**Land Cover Classification**

- 20-Water
- 33-Exposed land
- 51-Shrub tall
- 81-Wetland - Treed
- 82-Wetland - Shrub
- 83-Wetland - Herb
- 211-Coniferous Dense
- 212-Coniferous Open
- 213-Coniferous Sparse
- 221-Broadleaf Dense
- 222-Broadleaf Open
- 223-Broadleaf Sparse
- 231-Mixedwood Dense

**Base Data**

- Community
- Provincial Highway
- Local Road
- Winter Road
- Transmission Line
- ▭ First Nation



Coordinate System: UTM Zone 14N NAD83  
 Data Source: ESRA, Joro, MCWS  
 Date Created: April 20, 2015

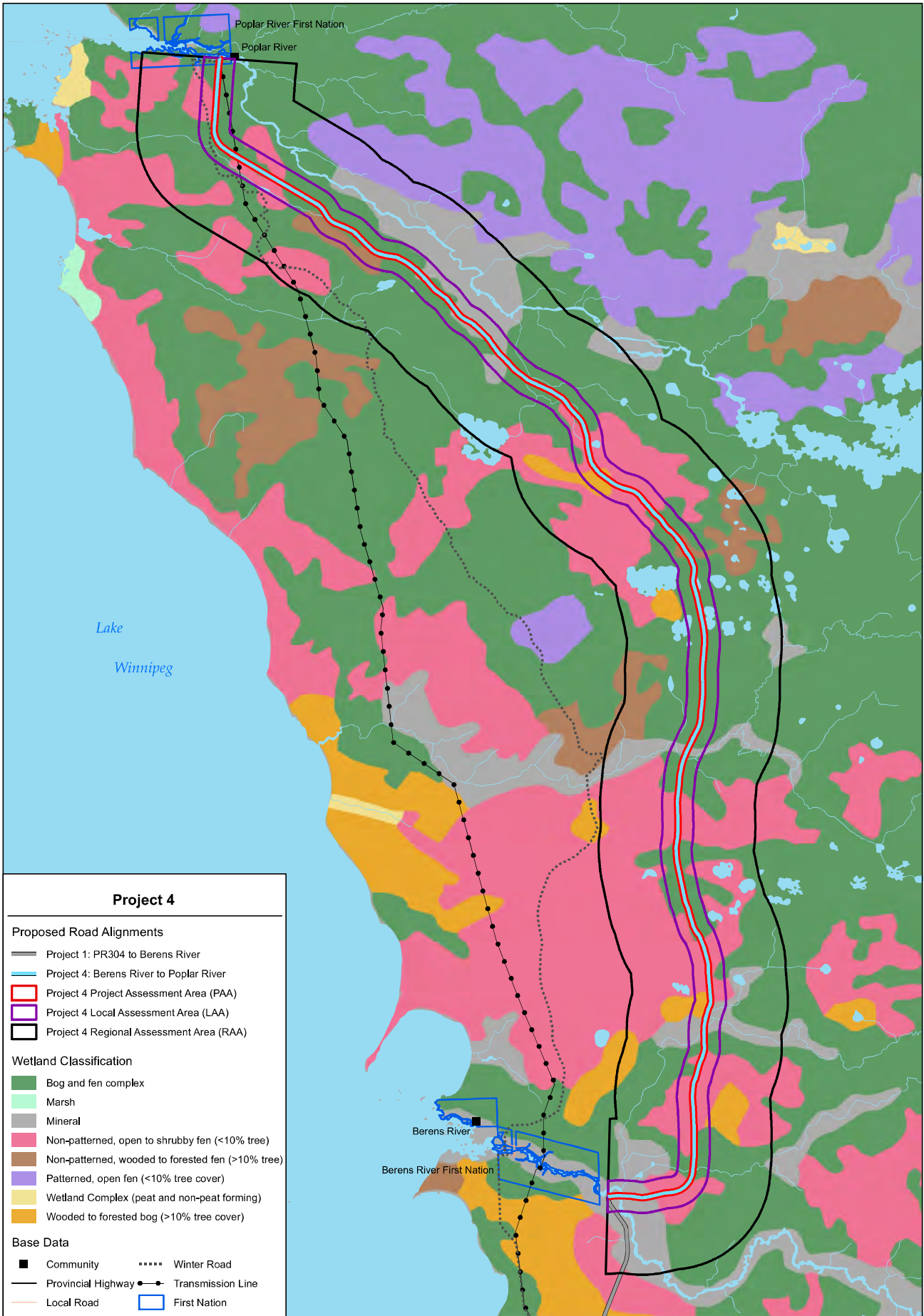
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**Project 4 Vegetation Survey**  
 Land Cover Classification in the Project 4 Study Area





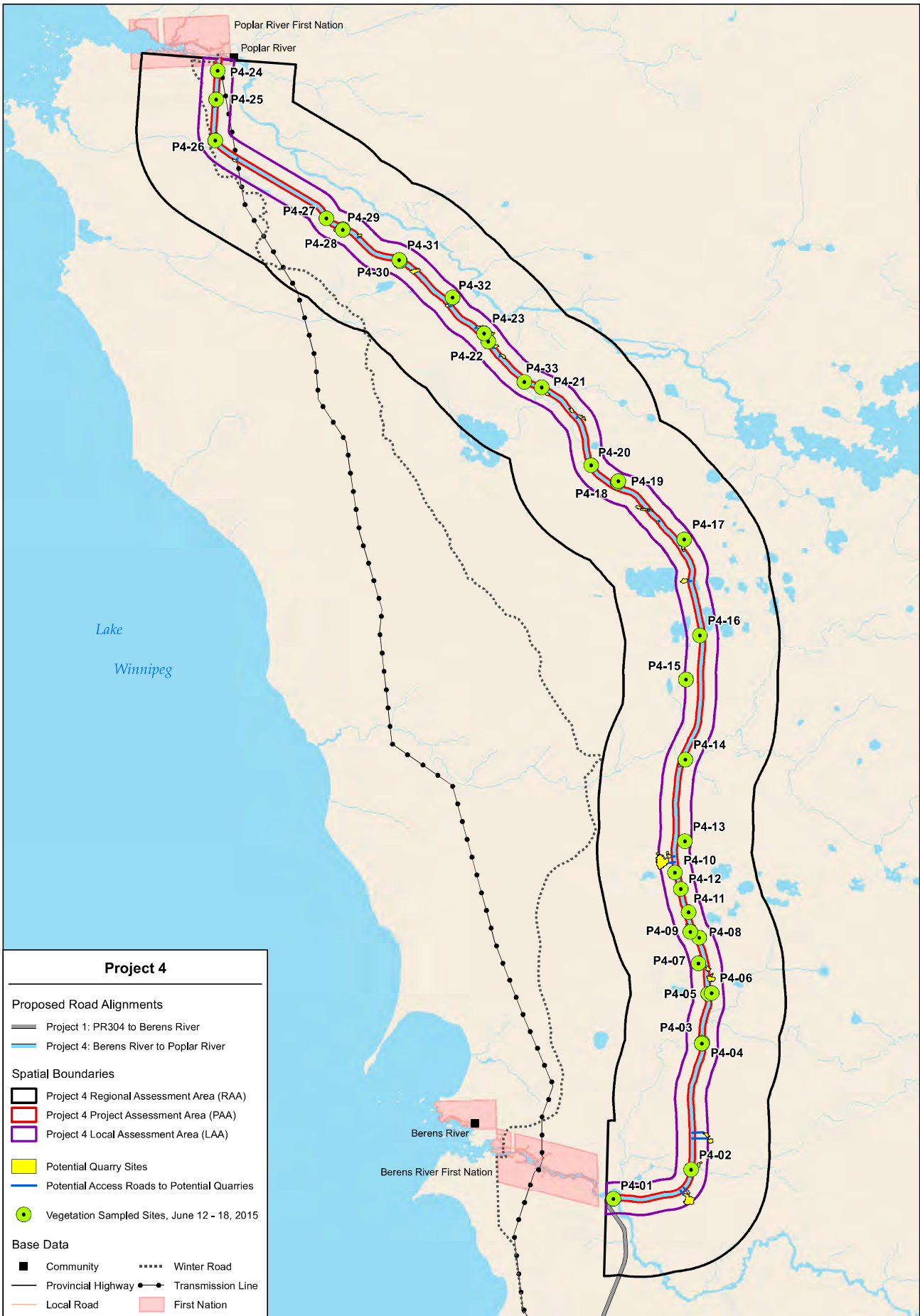
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 Date Created: July 29, 2015

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**Project 4 Vegetation Survey**  
**Wetland Classification in the Project 4 Study Area**



**Project 4**

**Proposed Road Alignments**

- Project 1: PR304 to Berens River
- Project 4: Berens River to Poplar River

**Spatial Boundaries**

- Project 4 Regional Assessment Area (RAA)
- Project 4 Project Assessment Area (PAA)
- Project 4 Local Assessment Area (LAA)

**Potential Quarry Sites**

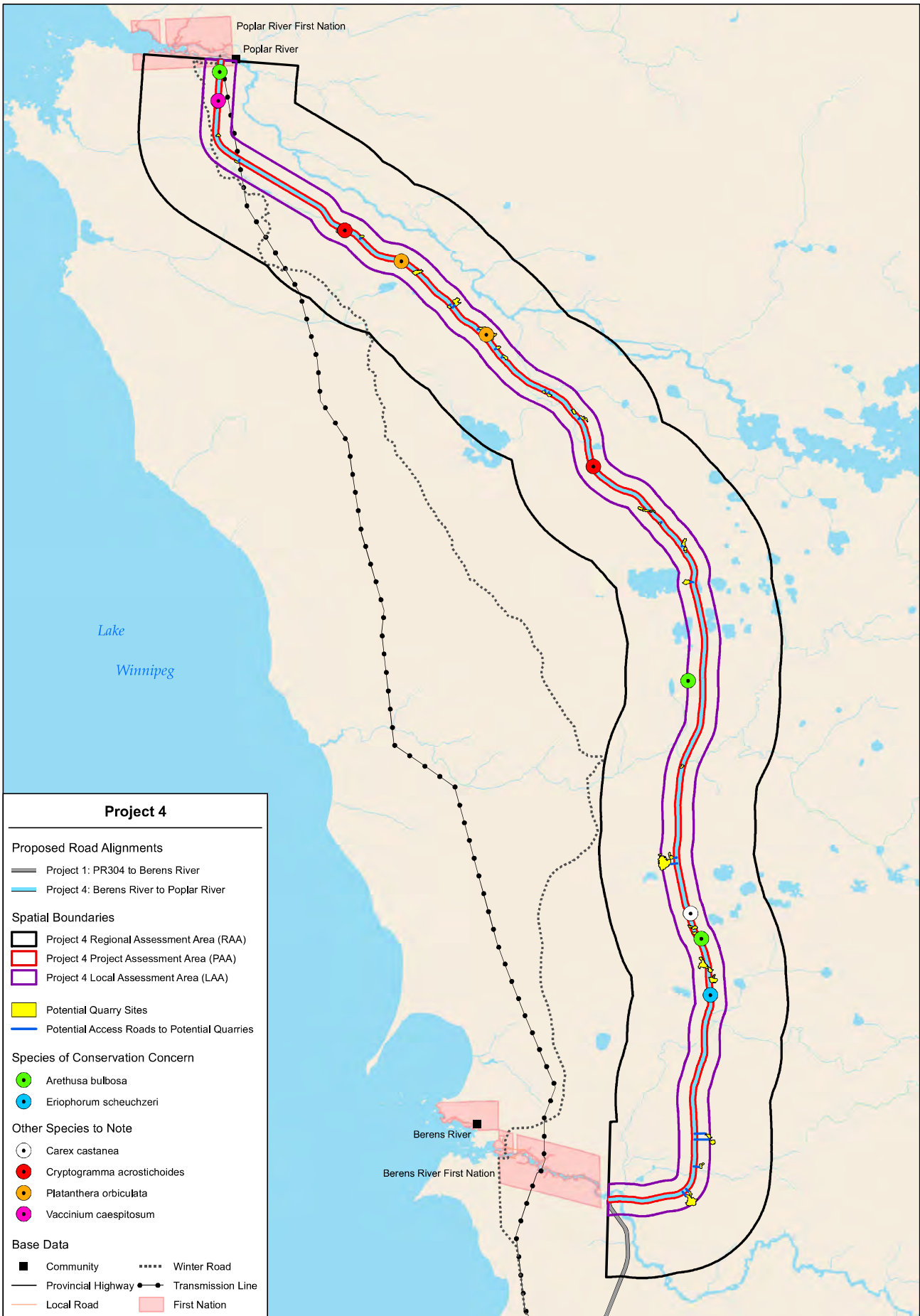
- Potential Quarry Sites
- Potential Access Roads to Potential Quarries

**Vegetation Sampled Sites, June 12 - 18, 2015**

- Vegetation Sampled Sites, June 12 - 18, 2015

**Base Data**

- Community
- Provincial Highway
- Local Road
- Winter Road
- Transmission Line
- First Nation





**APPENDIX III. Flora of Project 4 Field Studies.**

<b>FAMILY</b>	<b>SCIENTIFIC NAME</b>	<b>COMMON NAME</b>	<b>S RANK</b>
VASCULAR SPECIES			
PTERIDOPHYTES - FERNS AND ALLIES			
EQUISETACEAE - HORSETAIL FAMILY			
	<i>Equisetum arvense</i>	Common Horsetail	S5
	<i>Equisetum fluviatile</i>	Swamp Horsetail	S5
	<i>Equisetum sylvaticum</i>	Wood Horsetail	S5
LYCOPODIACEAE - CLUB-MOSS FAMILY			
	<i>Diphasiastrum complanatum</i>	Trailing Club-moss	S5
	<i>Lycopodium lagopus</i>	Running Pine	S4
PTERIDACEAE - MAIDENHAIR FERN FAMILY			
	<i>Cryptogramma acrostichoides</i>	Parsley Fern	S3S4
POLYPODIACEAE - POLYPODY FAMILY			
	<i>Polypodium virginianum</i>	Rock Polypody	S5
DRYOPTERACEAE - WOOD FERN FAMILY			
	<i>Cystopteris fragilis</i>	Fragile Fern	S5
	<i>Dryopteris carthusiana</i>	Spinulose Wood Fern	S5
	<i>Dryopteris cristata</i>	Crested Shield Fern	S4
GYMNOSPERMS			
PINACEAE - PINE FAMILY			
	<i>Abies balsamea</i>	Balsam Fir	S5
	<i>Larix laricina</i>	Tamarack	S5
	<i>Picea glauca</i>	White Spruce	S5
	<i>Picea mariana</i>	Black Spruce	S5
	<i>Pinus banksiana</i>	Jack Pine	S5
CUPRESSACEAE - CYPRESS FAMILY			
	<i>Juniperus communis</i>	Common Juniper	S5
ANGIOSPERMS - MONOCOTS			
ALISMATACEAE - ARROWHEAD FAMILY			

<b>FAMILY</b>	<b>SCIENTIFIC NAME</b>	<b>COMMON NAME</b>	<b>S RANK</b>
	<i>Sagittaria cuneata</i>	Arum-leaved Arrowhead	S5
TYPHACEAE - CAT-TAIL FAMILY			
	<i>Typha latifolia</i>	Common Cat-tail	S5
SPARGANIACEAE - BUR-REED FAMILY			
	<i>Sparganium angustifolium</i>	Narrow-leaved Bur-reed	S5
POACEAE - GRASS FAMILY			
	<i>Agrostis scabra</i>	Tickle-grass	S5
	<i>Bromus ciliatus</i>	Fringed Brome	S5
	<i>Calamagrostis canadensis</i>	Marsh Reed Grass	S5
	<i>Calamagrostis</i> sp.		
	<i>Danthonia spicata</i>	Poverty Oat Grass	S5
	<i>Deschampsia caespitosa</i>	Tufted Hairgrass	S5
	<i>Dichanthelium acuminatum</i> var. <i>fasciculatum</i>	Soft Millet	S4
	<i>Elymus</i> sp.		
	<i>Glyceria borealis</i>	Northern Manna Grass	S5
	<i>Oryzopsis asperifolia</i>	White-grained Mountain Rice Grass	S5
	<i>Phalaris arundinacea</i>	Reed Canary Grass	S5
	<i>Piptatherum pungens</i>	Northern Rice Grass	S5
	<i>Poa palustris</i>	Fowl Blue Grass	S5
CYPERACEAE - SEDGE FAMILY			
	<i>Carex aquatilis</i>	Water Sedge	S5
	<i>Carex atherodes</i>	Awned Sedge	S5
	<i>Carex aurea</i>	Golden Sedge	S5
	<i>Carex canescens</i>	Hoary Sedge	S5
	<i>Carex castanea</i>	Chestnut Sedge	S3
	<i>Carex chordorrhiza</i>	Prostrate Sedge	S5
	<i>Carex deflexa</i>	Bent Sedge	S5
	<i>Carex disperma</i>	Two-seeded Sedge	S5
	<i>Carex foenea</i>	Hay Sedge	S5
	<i>Carex gynocrates</i>	Northern Bog Sedge	S5
	<i>Carex lasiocarpa</i>	Hairy-fruited Sedge	S5
	<i>Carex magellanica</i>	Bog Sedge	S5
	<i>Carex pellita</i>	Woolly Sedge	S5



<b>FAMILY</b>	<b>SCIENTIFIC NAME</b>	<b>COMMON NAME</b>	<b>S RANK</b>
	<i>Carex richardsonii</i>	Richardson's Sedge	S4
	<i>Carex siccata</i>	Dry-spike Sedge	S5
	<i>Carex tenuiflora</i>	Thin-flowered Sedge	S5
	<i>Carex vaginata</i>	Sheathed Sedge	S5
	<i>Eleocharis palustris</i>	Creeping Spike-rush	S5
	<i>Eriophorum angustifolium</i>	Closed-sheathed Cotton-grass	S5
	<i>Eriophorum scheuchzeri</i>	One-spike Cotton-grass	S2?
	<i>Eriophorum viridi-carinatum</i>	Thin-leaved Cotton-grass	S4
	<i>Scirpus cyperinus</i>	Wool-grass	S5
	<i>Scirpus microcarpus</i>	Small Fruited-bulrush	S5
ARACEAE - ARUM FAMILY			
	<i>Calla palustris</i>	Water-arum	S5
JUNCACEAE - RUSH FAMILY			
	<i>Juncus arcticus</i> var. <i>balticus</i>	Baltic Rush	S5
	<i>Luzula parviflora</i>	Small-flowered Woodrush	S5
LILIACEAE - LILY FAMILY			
	<i>Lilium philadelphicum</i>	Wood Lily	S4
	<i>Maianthemum canadense</i>	Two-leaved Solomon's-seal	S5
	<i>Maianthemum trifolium</i>	Three-leaved Solomon's-seal	S5
ORCHIDACEAE - ORCHID FAMILY			
	<i>Arethusa bulbosa</i>	Arethusa	S2
	<i>Calypso bulbosa</i>	Calypso	S4
	<i>Corallorhiza trifida</i>	Early Coralroot	S5
	<i>Cypripedium acaule</i>	Stemless Lady's-slipper	S4
	<i>Cypripedium parviflorum</i> var. <i>pubescens</i>	Large Yellow Lady's-slipper	S5?
	<i>Cypripedium reginae</i>	Showy Lady's-slipper	S4
	<i>Platanthera orbiculata</i>	Round-leaved Bog Orchid	S3
ANGIOSPERMS - DICOTS			
SALICACEAE - WILLOW FAMILY			
	<i>Populus balsamifera</i>	Balsam Poplar	S5
	<i>Populus tremuloides</i>	Trembling Aspen	S5
	<i>Salix bebbiana</i>	Bebb's or Beaked Willow	S5
	<i>Salix exigua</i>	Sandbar Willow	S5

<b>FAMILY</b>	<b>SCIENTIFIC NAME</b>	<b>COMMON NAME</b>	<b>S RANK</b>
	<i>Salix maccalliana</i>	Velvet-fruited Willow	S4
	<i>Salix pedicellaris</i>	Bog Willow	S5
	<i>Salix planifolia</i>	Tea-leaved Willow	S5
	<i>Salix pseudomonticola</i>	False Mountain Willow	S4S5
	<i>Salix pyrifolia</i>	Balsam Willow	S5
<b>BETULACEAE - BIRCH FAMILY</b>			
	<i>Alnus incana</i>	Speckled Alder	S5
	<i>Alnus viridis</i>	Green Alder	S5
	<i>Betula papyrifera</i>	White Birch	S5
	<i>Betula pumila</i>	Dwarf Birch	S5
	<i>Corylus cornuta</i>	Beaked Hazelnut	S5
<b>URTICACEAE - NETTLE FAMILY</b>			
	<i>Urtica dioica</i>	Stinging Nettle	S5
<b>SANTALACEAE - SANDALWOOD FAMILY</b>			
	<i>Comandra umbellata</i>	Bastard Toadflax	S5
	<i>Geocaulon lividum</i>	Northern Comandra	S5
<b>POLYGONACEAE - SMARTWEED FAMILY</b>			
	<i>Fallopia cilinodis</i>	Fringed Black Bindweed	S5
	<i>Polygonum amphibium var. emersum</i>	Water Smartweed	S5
<b>CARYOPHYLLACEAE - PINK FAMILY</b>			
	<i>Stellaria longifolia</i>	Long-leaved Stitchwort	S5
<b>RANUNCULACEAE - CROWFOOT FAMILY</b>			
	<i>Actaea rubra</i>	Red Baneberry	S5
	<i>Anemone quinquefolia</i>	Wood Anemone	S5
	<i>Caltha palustris</i>	Marsh Marigold	S5
	<i>Ranunculus gmelini</i>	Small Yellow Water Buttercup	S5
	<i>Ranunculus lapponicus</i>	Lapland Buttercup	S5
	<i>Thalictrum dasycarpum</i>	Tall or Purple Meadow-rue	S5
	<i>Thalictrum venulosum</i>	Veiny Meadow-rue	S5
<b>FUMARIACEAE - FUMITORY FAMILY</b>			
	<i>Corydalis sempervirens</i>	Pink Corydalis	S5



<b>FAMILY</b>	<b>SCIENTIFIC NAME</b>	<b>COMMON NAME</b>	<b>S RANK</b>
<b>SARRACENIACEAE - PITCHER PLANT FAMILY</b>			
	<i>Sarracenia purpurea</i>	Pitcher Plant	S5
<b>DROSERACEAE - SUNDEW FAMILY</b>			
	<i>Drosera rotundifolia</i>	Round-leaved Sundew	S5
<b>GROSSULARIACEAE - CURRANT FAMILY</b>			
	<i>Ribes glandulosum</i>	Skunk Currant	S5
	<i>Ribes lacustre</i>	Bristly Black Currant	S4
	<i>Ribes oxycanthoides</i>	Bristly Wild Gooseberry	S5
	<i>Ribes triste</i>	Wild Red Currant	S5
<b>SAXIFRAGACEAE - SAXIFRAGE FAMILY</b>			
	<i>Mitella nuda</i>	Mitrewort	S5
<b>ROSACEAE - ROSE FAMILY</b>			
	<i>Amelanchier alnifolia</i>	Saskatoon	S5
	<i>Comarum palustre</i>	Marsh Five-finger	S5
	<i>Fragaria virginiana</i>	Smooth Wild Strawberry	S5
	<i>Potentilla norvegica</i>	Rough Cinquefoil	S5
	<i>Prunus pensylvanica</i>	Pin Cherry	S5
	<i>Prunus virginiana</i>	Choke Cherry	S5
	<i>Rosa acicularis</i>	Prickly Rose	S5
	<i>Rubus arcticus</i>	stemless raspberry	S5
	<i>Rubus chamaemorus</i>	Baked-apple-berry	S5
	<i>Rubus idaeus</i>	Wild Red Raspberry	S5
	<i>Rubus pubescens</i>	Dewberry	S5
	<i>Sibbaldiopsis tridentata</i>	Three-toothed Cinquefoil	S5
	<i>Spiraea alba</i>	Meadowsweet	S5
<b>FABACEAE - PEA FAMILY</b>			
	<i>Lathyrus ochroleucus</i>	Pale Vetchling	S4S5
	<i>Lathyrus palustris</i>	Marsh Vetchling	S5
	<i>Vicia americana</i>	Common Vetch	S5
<b>RHAMNACEAE - BUCKTHORN FAMILY</b>			
	<i>Rhamnus alnifolia</i>	Alder-leaved Buckthorn	S5

<b>FAMILY</b>	<b>SCIENTIFIC NAME</b>	<b>COMMON NAME</b>	<b>S RANK</b>
VIOLACEAE - VIOLET FAMILY			
	<i>Viola sp.</i>	a violet	
ELAEAGNACEAE - OLEASTER FAMILY			
	<i>Shepherdia canadensis</i>	Soapberry	S5
ONAGRACEAE - EVENING PRIMROSE FAMILY			
	<i>Chamerion angustifolium</i>	Fireweed	S5
	<i>Epilobium palustre</i>	Marsh Willowherb	S5
	<i>Epilobium ciliatum ssp. glandulosum</i>	Willow-herb	S5
ARALIACEAE - GINSENG FAMILY			
	<i>Aralia hispida</i>	Bristly Sarsaparilla	S5
	<i>Aralia nudicaulis</i>	Wild Sarsaparilla	S5
HIPURIDACEAE - MARE'S TAIL FAMILY			
	<i>Hippuris vulgaris</i>	Mare's-tail	S5
APIACEAE - CARROT FAMILY			
	<i>Cicuta bulbifera</i>	Bulb-bearing Water-hemlock	S5
	<i>Sanicula marilandica</i>	Snakeroot	S5
CORNACEAE - DOGWOOD FAMILY			
	<i>Cornus canadensis</i>	Bunchberry	S5
	<i>Cornus sericea</i>	Red Osier Dogwood	S5
PYROLACEAE - WINTERGREEN FAMILY			
	<i>Chimaphila umbellata</i>	Prince's-pine	S4S5
	<i>Orthilia secunda</i>	One-sided Pyrola	S5
	<i>Pyrola asarifolia</i>	Pink Pyrola	S5
	<i>Pyrola chlorantha</i>	Greenish-flowered Wintergreen	S5
ERICACEAE - HEATH FAMILY			
	<i>Andromeda polifolia</i>	Bog rosemary	S5
	<i>Arctostaphylos uva-ursi</i>	Common Bearberry	S5
	<i>Chamaedaphne calyculata</i>	Leather-leaf	S5
	<i>Gaultheria hispidula</i>	Creeping Snowberry	S5



<b>FAMILY</b>	<b>SCIENTIFIC NAME</b>	<b>COMMON NAME</b>	<b>S RANK</b>
	<i>Kalmia polifolia</i>	Bog-laurel	S5
	<i>Rhododendron groenlandicum</i>	Labrador-tea	S5
	<i>Vaccinium caespitosum</i>	Dwarf Bilberry	S3
	<i>Vaccinium myrtilloides</i>	Velvet-leaf Blueberry	S5
	<i>Vaccinium oxycoccos</i>	Small Cranberry	S5
	<i>Vaccinium uliginosum</i>	Bog Whortleberry	S5
	<i>Vaccinium vitis-idaea</i>	Bog Cranberry	S5
<b>MYRSINACEAE - MYRSINE FAMILY</b>			
	<i>Lysimachia thyrsoflora</i>	Tufted Loosestrife	S5
	<i>Trientalis borealis</i>	Northern Starflower	S5
<b>GENTIANACEAE - GENTIAN FAMILY</b>			
	<i>Menyanthes trifoliata</i>	Bogbean	S5
<b>APOCYNACEAE - DOGBANE FAMILY</b>			
	<i>Apocynum androsaemifolium</i>	Spreading Dogbane	S5
<b>BORAGINACEAE - BORAGE FAMILY</b>			
	<i>Mertensia paniculata</i>	Tall Lungwort	S5
<b>LAMIACEAE - MINT FAMILY</b>			
	<i>Lycopus asper</i>	Western Water-horehound	S4
	<i>Stachys palustris</i>	Marsh Hedge-nettle	S5
<b>SCROPHULARIACEAE - FIGWORT FAMILY</b>			
	<i>Melampyrum lineare</i>	Cow-wheat	S5
<b>LENTIBULARIACEAE - BLADDERWORT FAMILY</b>			
	<i>Utricularia macrorhiza</i>	Greater bladderwort	S5
<b>RUBIACEAE - MADDER FAMILY</b>			
	<i>Galium boreale</i>	Northern Bedstraw	S5
	<i>Galium triflorum</i>	Sweet-scented Bedstraw	S5
	<i>Galium labradoricum</i>	Ladie's Bedstraw	S5
<b>CAPRIFOLIACEAE - HONEYSUCKLE FAMILY</b>			
	<i>Diervilla lonicera</i>	Bush-honeysuckle	S5

<b>FAMILY</b>	<b>SCIENTIFIC NAME</b>	<b>COMMON NAME</b>	<b>S RANK</b>
	<i>Linnaea borealis</i>	Twinflower	S5
	<i>Lonicera dioica</i>	Limber or Twining Honeysuckle	S5
	<i>Lonicera oblongifolia</i>	Swamp-fly-honeysuckle	S4
	<i>Symphoricarpos albus</i>	Snowberry	S5
	<i>Viburnum edule</i>	Mooseberry	S5
	<i>Viburnum opulus</i>	Highbush-cranberry	S5
ASTERACEAE - ASTER FAMILY			
	<i>Achillea millefolium</i>	Common Yarrow	S5
	<i>Arctium minus</i>	Common Burdock	SNA
	<i>Petasites frigidus</i> var. <i>palmatus</i>	Palmate-leaved Colt's-foot	S5
	<i>Petasites frigidus</i> var. <i>sagittatus</i>	Arrow-leaved Colt's-foot	S5
	<i>Solidago hispida</i>	Hairy Goldenrod	S5
	<i>Symphyotrichum ciliolatum</i>	Alkali American-aster	SU
NON-VASCULAR SPECIES			
BRYOPHYTES			
	<i>Dicranum</i> spp.	Dicranum Moss	
	<i>Hylocomium splendens</i>	Splendid Feather Moss	
	<i>Pleurozium schreberi</i>	Schreber's Moss	
	<i>Ptilium crista-castrensis</i>	Knights Plume Moss	
	<i>Polytrichum</i> spp.	Polytrichum Moss	
	<i>Sphagnum</i> spp.	Peat Moss	
LICHENS			
	<i>Cetraria nivalis</i>	Crinkled Snow Lichen	
	<i>Cladina mitis</i>	Green Reindeer Lichen	
	<i>Cladina rangiferina</i>	Grey Reindeer Lichen	
	<i>Cladonia</i> spp.	Cladonia Lichen	
	<i>Cladina stellaris</i>	Northern Reindeer Lichen	
	<i>Peltigera</i> spp.	Pelt Lichen	
	<i>Stereocaulon tomentosum</i>	Woolly Coral Lichen	
	<i>Umbilicaria</i> sp.	Rocktripe Lichen	



**APPENDIX IV.** Site information for forested and wetland sites.

<b>Table A. Site information for forested sites sampled between Berens River and Poplar River, P4 2015.</b>										
<b>Plot ID</b>	<b>UTM E<sup>2</sup></b>	<b>UTM N</b>	<b>Vegetation Community</b>	<b>Soil</b>	<b>Aspect</b>	<b>Slope</b>	<b>Surface expression</b>	<b>Tree Age<sup>3</sup> (yr)</b>	<b>Tree Height<sup>3</sup> (m)</b>	<b>Tree DBH<sup>3</sup> (cm)</b>
P4-25	617420	5869731	V5	Luvisol	296 W	2	near level	TA 63	TA 22	TA 21.4
P4-31 <sup>1</sup>	629279	5859343	V5	Luvisol	120 E	2	undulating	TA 79	TA 22.5	TA 22.4
P4-09 <sup>1</sup>	648172	5815882	V8	Brunisol	180 S	20	hummocky	TA 52, BS 22	TA 16.5, BS 7	TA 17.8, BS 7.1
P4-11	648044	5817148	V8	Gleysol	286 W	1	undulating	TA 38, BS 18, BA 30	TA 19.5, BS 8, BA 14	TA 23.7, BS 9.5, BA 13.5
P4-23 <sup>1</sup>	634793	5854605	V15	Luvisol	352 NW	4	undulating	JP 82, BS 55, TA 64	JP 22.5, BS 17, TA 21.5	JP 27.1, BS 17.3, TA 24.5
P4-18	643454	5844939	V18	Luvisol	150 SE	7	undulating	BS 60, TA 57, TL 57	BS 19.5, TA 12.5, TL 15	BS 18.5, TA 14.9, TL 13.2
P4-27	624557	5862043	V18	Luvisol	4 N	4	undulating	BS 51, TA 57	BS 19.5, TA 20.5	BS 20, TA 21.8
P4-01 <sup>1</sup>	643178	5798619	V25	Brunisol	348 NW	5	undulating	JP 90, BS 29	JP 13.5, BS 9.5, TA 7.5, WB 7.5	JP 18.5, BS 14, TA 8.8, WB 7.4
P4-20	641734	5846065	V25	Brunisol	158 SE	5	undulating	JP 78, BS 72	JP 19.5, BS 18	JP 29.6, BS 19.6
P4-06	649545	5811927	V26	Bedrock	180 S	2	undulating	JP 60	JP 12.5	JP 17
P4-07	648685	5813837	V26	Folisol	150 SE	4	undulating	BS 55, JP 64	BS 15, JP 15	BS 14.5, JP 22
P4-17	647758	5841271	V26	Folisol	216 S	1	undulating	JP 80, BS 43	JP 12.5 BS 12.5	JP 19, BS 12.5
P4-21	638533	5851105	V26	Brunisol	148 SE	10	undulating	JP 77	JP 18	JP 20.8
P4-28	625625	5861344	V26	Bedrock		15	undulating	JP 67, BS 57	JP 17, BS 10.5	JP 22.5, BS 11.7

**Table A. Site information for forested sites sampled between Berens River and Poplar River, P4 2015.**

<b>Plot ID</b>	<b>UTM E<sup>2</sup></b>	<b>UTM N</b>	<b>Vegetation Community</b>	<b>Soil</b>	<b>Aspect</b>	<b>Slope</b>	<b>Surface expression</b>	<b>Tree Age<sup>3</sup> (yr)</b>	<b>Tree Height<sup>3</sup> (m)</b>	<b>Tree DBH<sup>3</sup> (cm)</b>
P4-29	625636	5861314	V27	Luvisol	148 SE	4	undulating	BS 54	BS 15	BS 10.7
P4-03	648938	5808735	V28	Luvisol	-	0	level	JP 104, BS 83	JP 19.5, BS 20.5	JP 25.7, BS 23.3
P4-02	648196	5800490	V29	Gleysol	300 W	1	near level	BS 91	BS 18.5	BS 19.9
P4-12	647529	5818654	V30	Gleysol	88 E	1	undulating	JP 42, BS 34	JP 14.5, BS 13	JP 16.3, BS 15
P4-32	632736	5856918	V30	Organic	88 E	1	undulating	BS 53	BS 16.5	BS 14.7

1: Forest tent caterpillar presence.

2: All UTMs are Zone 14 U, NAD 83.

3: Species include: balsam poplar (BA), black spruce (BS), jack pine (JP), trembling aspen (TA), white birch (WB), white spruce (WS).

**Table B. Site information for wetland sites sampled between Berens River and Poplar River, P4 2015.**

Plot ID	UTM E <sup>2</sup>	UTM N	Vegetation Community	Soil	Aspect	Slope	Surface expression	Tree Age <sup>3</sup> (yr)	Tree Height <sup>3</sup> (m)	Tree DBH <sup>3</sup> (cm)
P4-05	649325	5811864	Treed bog (V33)	Organic	-	0	level	BS 55	BS 7.5	BS 7.9
P4-24	617507	5871599	Treed bog (V33)	Organic	-	0	level	BS 50, JP 45	BS 5.5, JP 5.5	BS 6.4, JP 6.1
P4-26	617358	5867075	Treed bog (V33)	Organic	290W	0	slope in distance	BS 37	BS 8	BS 7
P4-13	647795	5821737	Shrub bog	Organic	-	0	level			
P4-19	643494	5845032	Treed poor fen	Organic	-	0	level	TL 87, BS 80	TL 7, BS 7	TL 9.5, BS 7.4
P4-16	648767	5835055	Shrub poor fen	Organic	-	0	level			
P4-08	648734	5815504	Graminoid fen	Organic	-	0	level			
P4-15 <sup>1</sup>	647872	5832198	Graminoid fen	Organic	-	0	level			
P4-30	629317	5859265	Shrub swamp	Gleysol	-	0	level	BS 50, TL 15	BS 9.5, TL 5.25	BS 9.3, TL 5.2
P4-33	637392	5851454	Shrub swamp	Gleysol	120 E	1	near level			
P4-14	647831	5827020	Riparian shrub	Gleysol	218 S		undulating	WS 26	WS 15	WS 32.9
P4-04	648911	5808651	Meadow marsh	Gleysol	-	0	level			
P4-10	647151	5819727	Meadow marsh	Gleysol	320 NW	1	near level			
P4-22	635055	5854071	Meadow marsh	Gleysol	-	0	level			

1: Forest tent caterpillar presence.

2: All UTM's are Zone 14 U, NAD 83.

3: Species include: black spruce (BS), jack pine (JP), tamarack (TL), white spruce (WS).

**APPENDIX V. Report Photographs.**



**PHOTOGRAPHS**



Photograph 1. Aspen hardwood



Photograph 2. Trembling aspen mixedwood/ tall shrub



Photograph 3. Jack pine mixedwood/ shrub rich



Photograph 4. Black spruce mixedwood/ feathermoss





Photograph 5. Jack pine/ feathermoss



Photograph 6. Jack pine- black spruce/ lichen



Photograph 7. Black spruce/ shrub- and herb- poor



Photograph 8. Jack pine- black spruce/ feathermoss





Photograph 9. Black spruce/ feathermoss



Photograph 10. Black spruce/ Labrador tea/ Sphagnum



Photograph 11. Treed bog



Photograph 12. Shrub bog





Photograph 13. Treed poor fen



Photograph 14. Shrub poor fen



Photograph 15. Graminoid fen



Photograph 16. Shrub swamp