

**Appendix D – Final Report - Supplementary Research Report Relating to Heritage  
Resource Impact Assessment for Little Tracadie River Bridge Little Tracadie, Parish of  
Saumarez, Gloucester County, New Brunswick – Patricia Allen (March 23, 2012)**

**Supplementary Research Report  
Relating to  
Heritage Resource Impact Assessment  
For  
Little Tracadie River Bridge  
Little Tracadie, Parish of Saumarez,  
Gloucester County, New Brunswick**



Little Tracadie River Bridge/*Pont d'Odilon* (March 17, 2012)

Report prepared for: NBDOT, Design Branch, Environmental Agency  
Attention: Melissa Cummings -Manager

By: Patricia Allen – Archaeologist  
628 Hwy, #730  
Durham Bridge, N.B.  
E6C 1N9  
(506)458-5354 or (506)440-3117

[paallen@nbnet.nb.ca](mailto:paallen@nbnet.nb.ca)

March 23, 2012.

## **ACKNOWLEDGEMENTS**

I would like to thank the following persons for their time, expertise, information and general assistance: Vincent Bourgeois; Etienne Brideau; Tanya Brown; Melissa Cummings; Sister Zelica Daigle; Allen Doiron; Albert Ferguson; Gisselle Gaudet; Michael Nicholas; Jessica Ryan; Allen Seaman; Brent Suttie; and Ed Torenvliet. All of those mentioned were most gracious and their help was very much appreciated. Other staff with the New Brunswick Provincial Archives; New Brunswick Museum; Musee Historique de Tracadie; Nepisiguit Museum (Bathurst Heritage Trust); New Brunswick Department of Natural Resources; New Brunswick Department of Transportation; and the New Brunswick Department of Wellness, Culture and Sport (Heritage Branch) were also helpful. A big *thank you* is extended to all. I wish to especially acknowledge the New Brunswick Department of Transportation, Design Branch, for entrusting me with the responsibility and opportunity to explore yet another piece New Brunswick heritage.

## TABLE OF CONTENTS

Acknowledgements	2
Introduction	5
All Sources Consulted During the Study	7
Section A	7
Section B	10
Proposed Project	11
Project Area	13
Results of Background Document Research and Consultation	13
Location	13
Physioigraphy and Ecology, Geography and Geology	14
Climate, Flora and Fauna	16
Past/Present Land Use Practices, Alterations and Condition	16
First Nation era	17
farming	17
forest fire	19
fishing	19
timber industry	20
bridges and roads	21
recreation	24
residential development	25
Predictive Modeling	26
Findings	28
Little Tracadie River Cultural Heritage	28
First Nations	28
European Heritage	31
Built Heritage, First Nation Consultation and Other Consultation	35
Resource Inventory	36
Summary	36
Recommendations	37
References Cited	38
Individuals Cited	41
List of Figures	
1. Location of Little Tracadie River Bridge	5
2. Little Tracadie River bridge with Stantec recommended areas for testing	6
3a. Looking south at Little Tracadie River causeways/bridge	12
3b. Little Tracadie River bridge (2002 Aerial)	12
4. Sketch of Elizabeth and Odilon Brideau	13
5. Location map- red arrow indicates proposed project location	15
6. Little Tracadie River proposed project area adjacent watercourses	15
7. Proposed project area, cleared farmlands 1944	18
8. Proposed project area, farming continues, cleared farmlands 1963	18
9a. Eel pots on the Tracadie 1970s	19
9b. Eel Fishing on the Tracadie 1970s	20
10. Crew of commercial vessel, port of Tracadie 1899	21
11. 1944 aerial Little Tracadie River early 20 <sup>th</sup> century bridge	22
12. 1955 Aerial of Little Tracadie River bridge built in 1949	23
13a. Looking southwest at south end of causeway	24

13b. Looking west at edge of old gravel pit SW quadrant	24
14. Looking east at new residences along <i>rue d'Odilon</i>	25
15. Looking northwest at recent gravel pile on river bank	26
16. Predictive Model: Archaeological Site Potential at Little Tracadie River Bridge	27
17. Early Tracadie maps (Ganong 1906)	28
18. Locations of archaeological sites within the lower Big Tracadie River	29
19. Distribution of archaeological sites Little Tracadie River	30
20. Ganong Map illustrating late 18 <sup>th</sup> and early 19 <sup>th</sup> century Tracadie area grantees	32
21. Copy of original Grant Plan proposed project area	33
22. NBPA Grant Map No. 30, area surrounding proposed bridge replacement	35

**List of Abbreviations**

<i>Guide</i>	Guidelines Conducting Heritage Impact Assessments in New Brunswick (2009)
NBDOT	New Brunswick Department of Transportation
NBPA	New Brunswick Provincial Archives
ROW	Right of Way

## INTRODUCTION

The New Brunswick Department of Transportation is considering replacing the Little Tracadie River bridge on Route 365, Little Tracadie, Parish of Saumarez, Gloucester County, New Brunswick. Built in 1949 (Melissa Cummings pers. comm. 2012), this bridge is locally referred to as *Pont d'Odilon* (Albert Ferguson pers. comm. 2012). Both the north and south approach causeways leading to the slightly more elevated bridge are under water almost annually during peak spring and fall tidal surges. The deck of the aging structure is often washed by waves but is usually spared inundation. Route 365 is often closed during such times (Etienne Brideau pers. comm. 2012).

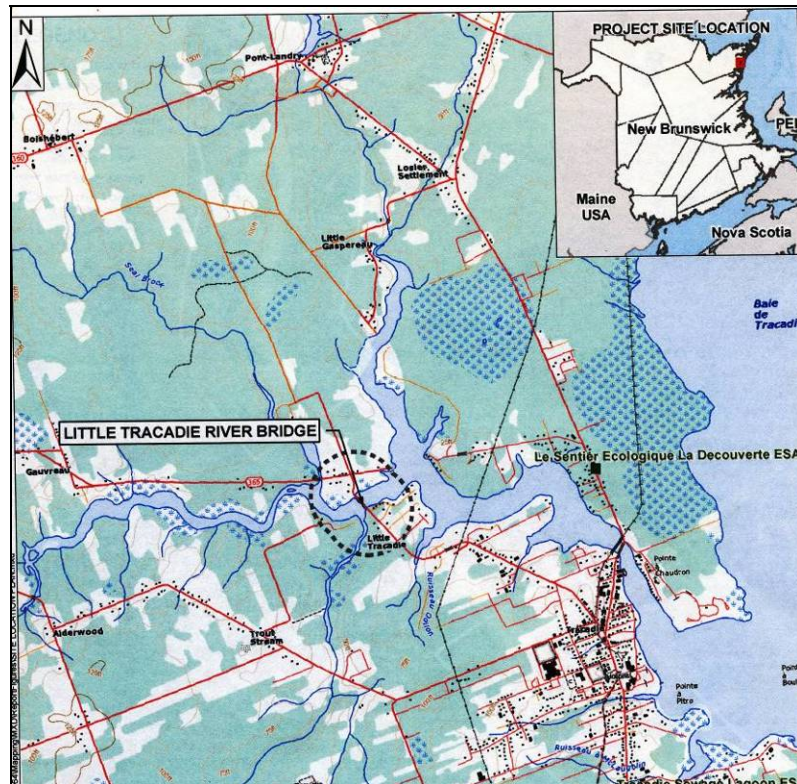


Figure 1: Location of Little Tracadie River Bridge, Little Tracadie, Saumarez Parish, Gloucester County, New Brunswick. (Illustration is reproduced from Stantec 2010a: Appendix A, Fig. 1).

As part of an environmental background study, a preliminary archaeological assessment of the proposed Little Tracadie River bridge project area was conducted in September of 2009. A report entitled *NBDOT Environmental Background Study – Archaeological Assessment at Little Tracadie River, Route 365, Little Tracadie, Gloucester County, NB* was produced (Stantec 2010a). The report summarizes the results of the Stantec document research, direct consultation and a preliminary field examination. While nothing of heritage significance was found during this study, areas were identified within all four quadrants surrounding the bridge as containing archaeological potential (Figure 2). It was recommended that these areas be considered for archaeological testing in the event that they could not be avoided during construction (Stantec 2010a:7).





Figure 2: Little Tracadie River bridge location with Stantec recommended areas (in yellow) for archaeological testing. The house is located in the lower left corner of the SW quadrant (Illustration reproduced from Stantec 2010a: Appendix A, Fig.2).

On January 20<sup>th</sup>, 2012 archaeologist Patricia Allen was contacted by NBDOT to conduct supplementary background research for the proposed Little Tracadie River bridge replacement project. The objective of this work would be to gather additional human heritage information that could possibly aid NBDOT and Archaeological Services in establishing parameters for any future heritage resource impact assessment work. The research would involve archival searches, attempts to contact persons knowledgeable in area history, and consultation with Archaeological Services personnel, site files, maps and other documentation.

It was agreed that a report summarizing the supplementary findings be produced and submitted to NBDOT on or before March 23, 2012. While a Permit was not required to conduct this work, the report here presented is arranged in a format similar to that suggested for the non-field portions of *Preliminary Investigations* by the *Guide To Heritage Resource Impact Assessment in New Brunswick* (2009:79). In an effort not to duplicate previously billed work two illustrations from the Stantec (2010a) document have been here reproduced. For the same reason and, because this information is requested as part of any *Preliminary Investigation* (*Guide* 2009:17), relevant sections of other recent Acadian peninsula HRIA studies have been drawn upon (Allen 2009; 2011).

## All Resources Consulted in Preparation for and during this Supplementary Study

**Section A:** Documents including: journal articles, books, manuscripts (published and non-published), maps, archival materials, various archaeological resource files, and web sites:

Allen, Patricia

- 1984 *Pointe aux Sable: A Small Ceramic Period Hunting Site in Baie Ste-Anne New Brunswick*. Manuscripts in Archaeology 9E, Archaeological Services, Heritage Branch, New Brunswick Culture and Sports Secretariat.
- 2006 *The Oxbow Site 1984 Metepenagiag Mi'kmaq First Nation, Miramichi, New Brunswick*. New Brunswick Manuscripts in Archaeology. No. 39, Fredericton.
- 2009 *Heritage Resource Impact Assessment At the Proposed Department of Transportation Duguayville Road Culvert Crossing Upgrade On a Tributary to Sewell Brook, Parish of Saint-Isidore,, Gloucester County New Brunswick*. On file Archaeological Services, Heritage Branch, New Brunswick Department Wellness Culture and Sport.
- 2011 *Final Report of Heritage Resource Impact Assessment / Systematic Sub-surface Testing At the Location of the proposed New Brunswick Department of Transportation Pokemouche River Bridge No.4 Replacement Project, Landry, Parish of Inkerman, Gloucester County, New Brunswick*. On-file Archaeological Services, New Brunswick Department of Wellness, Culture and Sport.

Basque, M. D. Kerry and R. Bourgeois.

- 1984 *Deux siecles de particularisme: une histoire de Tracadie*. Shediac , New Brunswick. (NBPA MC8/2391).

Bourgeois, Vincent and Brent Suttie.

- 2005 *Recent Archaeological Surveys on the Nashwaak, Big Tracadie and Magaguadavic Rivers*. New Brunswick Manuscripts in Archaeology, No.42, Fredericton.

Buxton-Keenlyside, Judy.

- 1971 *Northshore Survey: An Archaeological Reconnaissance of Northeastern New Brunswick*. Manuscript #816, National Museum of Man, Ottawa.

Ganong, W.F.

- 1896 *Place Nomenclature of New Brunswick*. Transactions of the Royal Society of Canada. Second Series 1896-1897 Volume II, Section I.
- 1899 *Monograph of Historic Sites in the Province of New Brunswick*. Transactions of the Royal Society of Canada, (English History, Literature, Archaeology Etc.) Series 2, Volume V.
- 1904 *A Momograph on the Origins of Settlements in New Brunswick*. Transactions of the Royal Society of Canada. Papers from 1904.



- 1905 *Notes on the Natural History and Physiography of New Brunswick – The Physiographic Characteristics of the Tracadie River.* Bulletin of the Natural History Society of New Brunswick No. XXIV, Volume V, pp 433-443.
- 1906 *The History of Tracadie.* Acadensis Volume VI, edited by David Russel Jack. pp.185-200.
- 1906-1907  
*Additions and Corrections to Monographs on the Place-Nomenclature, Cartography Historic Sites, Boundaries and Settlement Origins of the Province of New Brunswick.* Transactions of the Royal Society of Canada, Second Series, Vol.XII, Section II.
- 1948 *The History of Caraquet and Pokemouche.* Edited by Susan B. Ganong. Historical Studies No. 6, New Brunswick Museum, Saint John.
- Hoffman, Bernard
- 1956 *Historical Ethnography of the Micmac of the Sixteenth and Seventeen Century.* Phd. Thesis, Department of Anthropology, University of California.
- Kain, Samuel W. and Charles F. B. Fowe
- 1902 *Some Relics of the Early French Period in New Brunswick.* Bulletin of the Natural History Society of New Brunswick No. XIX, Volume IV, Part IV, pp. 305-312.
- Keenlyside, David and Judy Buxton-Keenlyside.
- 1976 *The Tracadie: Investigations into the Prehistory of a River System.* Manuscript on file - Archaeological Services Unit, Department of Wellness, Culture and Sport.
- Keenlyside, David L.
- 1990 *An Archaeological Survey of the Upper Reaches of the Tracadie Estuary, New Brunswick.* New Brunswick Manuscripts in Archaeology No.26, Fredericton.
- Martijn, Charles A.
- 1968 *The Archaeological Survey of the Northeast Coast of New Brunswick.* On File: Archaeological Services, Department of Wellness, Culture and Sport.
- Matthew, G. F.
- 1903 *Notes on the Discovery of a Small Cache of the French Period at Tracadie, New Brunswick.* Bulletin of the Natural History Society of New Brunswick, No. XXI Vol. 5, p.1-4.
- Mott, Robert J., Hélène Jetté and Joël Guiot
- 2004 *Postglacial Vegetation, Climate History and Land-Sea Interaction at Island Lake, Baie des Chaleurs, New Brunswick, as Documented by Palynological Analysis.* Géographie physique et Quaternaire Volume 58, numéro 1, 2004, p. 109-122.
- Rampton, V.N. with R.C. Gautier, J. Thibault and A.A. Seaman
- 1984 *Memoir 416 -Quaternary Geology of New Brunswick.* Geological Survey of Canada.

Smerthurst, Gamaliel

1905 *Historical Geographical Documents Relations to New Brunswick. Gamaliel Smerthurst's Narrative of his Journey from Nepisiguit to Fort Cumberland in 1761*. Edited by W.F. Ganong, 363-390. in Collections of the New Brunswick Historical Society No.6, Saint John.

Smith, A. C.

1886 Prehistoric Remains of Tabusintac – (Letters of A.C. Smith – M.D.) Bulletin of the Natural History Society of New Brunswick No. XIX, Volume V, pp. 14-20.

Stantec Consulting Ltd.

2010a *NBDOT Environmental Background Study – Archaeological Assessment at Little Tracadie River, Route 365, Little Tracadie, Gloucester County, NB*. Ms. on file with: Archaeological Services, New Brunswick Department of Wellness, Culture and Sport.

2010b *Environmental Study Pokemouche River Bridge No.4* Report on file - New Brunswick Department of Transportation.

Suttie, Brent, with Vincent Bourgeois and Michael Nicholas

2008 *Developing Localized Predictive Models for New Brunswick, Canada. The Sevogle River Test Plot*. Manuscript on file Archaeological Services, Heritage Branch, Department of Wellness, Culture and Sport

Upton, L. F. S.

1979 *Micmacs and Colonists: Indian-White relations in the Maritimes, 1713-1867*. University of British Columbia Press, Vancouver.

Warner, B.G., K. Tolonen, and M. Tolonen.

1991 *A Postglacial History of Vegetation and Bog Formation at Point Escuminac, New Brunswick*. Canadian Journal of Earth Sciences 28:1572-1582.

Zelazney, Vincent ed.

2007 *Our Landscape Heritage: the Story of Ecological Land Classification in New Brunswick*. Department of Natural Resources New Brunswick, Fredericton.

2009 *Guide To Heritage Resource Impact Assessment in New Brunswick*. Archaeological Services, Heritage Branch, New Brunswick Department of Wellness, Culture and Sport.

Aerial Photos: 1944 – 7347-70; 1955-3900-286; 1963-6430-58; 1984 6219 line1 (500061-061); 2002-512-118. New Brunswick Department of Natural Resources (Hugh John Flemming Forestry Complex).

Archival Photos: NBPA P13/109 and P13/110. Breakwater at Tracadie 1894 and Crew on deck of vessel at Tracadie 1899.

New Brunswick Provincial Archives Grant Map #30 Saumarez Parish, Gloucester County (Grants #334 and #43).

New Brunswick Provincial Grant Plan RS656/17G – microfiche.

New Brunswick Provincial Archives Land Petitions RS108 (1783-1918).

New Brunswick Provincial Archives Grant Book RS686 Index: A-J and Index: K-Z.

New Brunswick Provincial Archives Grant Plan Book RS687.

New Brunswick Museum Collection – A. C. Smith.

New Brunswick Provincial Archives Gloucester County Census 1861 (Part 1) District North Parish of Samurez – William Young Enumerator.

Private Collection Catalogues: (UXG) Ulysse Girouard and, (LS) Louis Savoie. On file: Archaeological Services, Heritage Branch. New Brunswick Department Wellness Culture and Sport.

MARI forms (CjDf, CkDf, CiDf) and archaeological sites maps: Tracadie, Pokemouche, Tabusintac and Little Tracadie River areas. On file: Archaeological Services, New Brunswick Department Wellness Culture and Sport.

Archival Photos: Tracadie River Survey -from Canadian Museum of Civilization (Archaeological Survey of Canada. On file Archaeological Services, New Brunswick Department Wellness Culture and Sport.

Predictive Model: Little Tracadie River bridge crossing, produced by Archaeological Services, New Brunswick Department Wellness Culture and Sport.

[http://en.wikipedia.org/wiki/Tracadie-Sheila,\\_New\\_Brunswick](http://en.wikipedia.org/wiki/Tracadie-Sheila,_New_Brunswick)

<http://geonb.snb.ca/geonb/>

<http://genforum.genealogy.com/brideau/messages/104.html>

<http://genforum.genealogy.com/cgi-bin/print.cgi?brideau::60.html>

<http://www.nbm-mnb.ca/index.php>

**Section B:** Individuals who provided information to the study

Etienne Brideau- Local Resident (circa 70 years of age), grandson of Odilon Brideau, descendant of project area original Grantee Francoise Bridaute Jr., Little Tracadie (meeting at his residence March 17, 2012)

Tanya Brown – Administrative Assistant, Archaeological Services, Heritage Branch, Department of Wellness, Culture and Sport. (Produced requested reports January 24 -March 15, 2012).

Vincent Bourgeois – Archaeologist. Archaeological Services, Heritage Branch, Department of Wellness, Culture and Sport. (in-office consult re MARI files, Private Collection files and Dug-out canoe find: January 30<sup>th</sup>, 2012; via e-mail January 31, 2012 )

Melissa Cummings – Design Branch, Manager Environmental Agency, New Brunswick Department of Transportation (In-office meeting: January 20, 2012).

Sister Zelica Daigle – Curator Musee Historique du Tracadie (circa 80 years of age) (via e-mails March 11-13; March 17 meeting at Museum/ home of Etienne Brideau in Little Tracadie.

Allen Dorion – Manager -Cartographic Unit, New Brunswick Provincial Archives, Supply and Services. (NBPA Consult February 3 and February 6, 2012)

Albert Ferguson – Provincial Archaeologist / Manager- Archaeological Services, Heritage Branch, Department of Wellness, Culture and Sport. (In-office consult February 3, 2012)

Charles McAleenan –Forestry Officer/Wildlife Technician retired. Bathurst Nuisance Wildlife Control. September 2010.

Michael Nicholas – Archaeologist. Archaeological Services, Heritage Branch, Department of Wellness, Culture and Sport (Office Consult: re Ganong’s Portage Routes Information and 1:50,000 Archaeological Site Maps. (January 2012)

Jessica Ryan, President- Bathurst Heritage Trust, Nepisiguit Museum, Bathurst (via telephone March 9, 2012)

Allen Seaman - Geologist – Geological Surveys. Lands, Minerals and Petroleum, New Brunswick Department of Natural Resources (in-office consult re Acadien Peninsula soil profiles) March 17, 2011.

Brent Suttie – Archaeologist. Archaeological Services, Heritage Branch, Department of Wellness, Culture and Sport (Archaeological Predictive Modeling request January 24, 2012; meeting March 12, 2012)

Ed Torenvliet – Biologist. Design Branch, Department of Transportation (January 20, 2012. in-office meeting, provided large scale photos of Stantec 2009 field work and responded to telephone question via e-mail March 6, 2012)

Manford Wasson - Retired Teacher Miramichi Regional High School (Discussion 1980s)

## **PROPOSED PROJECT**

NBDOT is proposing to replace the Little Tracadie River bridge which crosses the west to east flowing river on Route 365 at the community Little Tracadie, Gloucester County, New Brunswick. The existing rock filled causeway and pier supported wooden bridge is a 60+ year old structure whose approach causeways are flooded during exceptionally high tides. The flooding results in road closures. The lengthier portion of causeway, circa 110 m, extends from the north bank of the river. The total length of the crossing is circa 200 m, the bridge itself being circa 45 m (Figure 3a, b).

Design plans for the proposed replacement bridge are as yet unavailable. While it can be assumed that any bridge replacement will involve heavy machinery for the demolition and removal of the old and for the construction of the new structure, the extent of land disturbances to be expected on either landed end of the existing causeway is currently unknown. The typical duration time for construction of multi-span (ie. piers in water) bridge projects in New Brunswick is 9 to 30 months (substructure: 6 to 18 months, and superstructure: 3 to 12 months) (Ed Torenvliet pers. comm. 2010). A time-line for the proposed Little Tracadie River bridge replacement project has not yet been established.



Figure 3a. Looking south/southwest, Little Tracadie River bridge with longest portion of causeway in mid-foreground. Trout Stream enters the Little Tracadie River just to the right (west) of south bank causeway landing. Immediate foreground illustrates the extent of the fill deposit banking the east side of the *Thomas* curve (March 2012).



Figure 3b: Little Tracadie River bridge (2002 Aerial DNR 512-118) **North** at top of photo. Trout Stream enters the Little Tracadie River just west of the southern end of the causeway.



## PROJECT AREA

### Results of the Background Document Research and Consultation

#### Location

The Little Tracadie River bridge crosses the river at the village of Little Tracadie. Locally the bridge is referred to as *Pont d'Odilon*, Odilon being the given name of a grandson of the original south bank Grantee Francoise Bridaute Jr. Odilon Brideau was an industrious farmer (1862-1938). (<http://genforum.genealogy.com/brideau/messages/104.html>.) He had inherited the lands surrounding the south end of the bridge and he most likely helped build the original *Pont d'Odilon* (Etienne Brideau pers. comm. 2012). Route 365, once *rue Brideau*, divided the Brideau farm into east and west sections. When the earlier bridge was replaced in 1949, the *Odilon* name endured.



Figure 4. Elizabeth (post mistress) and Odilon Brideau (farmer)  
(Early 20<sup>th</sup> century family portrait photographed by courtesy of Etienne Brideau)

The farming community opposite Little Tracadie (on the north bank of the river) is locally referred to as *Thomas* (Alebrt Ferguson pers. comm. 2012). *Thomas* was the family name of the first Grantee, John Thomas, who received the lands surrounding the north side of the bridge in 1809. Today the community is mostly composed of descendants of John Thomas.

Little Tracadie village is located on the south bank of the Little Tracadie River circa 4 km upstream from the coastal town of Tracadie-Sheila (Figure 5). Although the coastal villages of Tracadie and the more southerly Sheila merged in 1991, the main portion of town, concentrated on the south bank of the mouth of the Little Tracadie River, is most often simply referred to as *Tracadie*. A new 21<sup>st</sup> century Route 11 bridge crosses the Little Tracadie River circa 1 km downstream from *Pont d'Odilon*. The former Route 11 Little Tracadie River bridge lies within the town near the rivers mouth.

### **Physiography and Ecology, Geography and Geology**

According to New Brunswick's ecological land classification system, the Little Tracadie River as well as its sister rivers the Pokemouche, Big Tracadie and Tabusintac, lie within the Caraquet Eco-district of the Eastern Lowlands Eco-region. The Eastern Lowlands covers a broad wedge of flat to gently rolling terrain that stretches from Bathurst to Sackville (Zelazny et al 2007).

The Caraquet Eco-district is a 10 km wide strip of coastal land that rims the Acadian peninsula. The area bears a delicate fringe of sand dunes, salt marshes, and lagoons that harbor extensive peatlands and host both common and rare plants and animal species (Zelazny et al 2007:269-279).

“All this part of New Brunswick slopes gently down to the sea... festooned from headland to headland lie great incurving sand beaches, enclosing shallow and marshy lagoons through which the rivers fend their devious ways to the sea through unstable and shifting gullies (openings)... these great barrier beaches enclose the shallow Tracadie Bay” (Figure 5) (Ganong 1906:185-186). Unlike the larger Big Tracadie River, the Little Tracadie has the advantage of being “connected to the principal gully by a channel navigable by boats... This feature in historic times made the mouth of the Little Tracadie “the natural (even though an indifferent) port for the district ” (Ganong 1906:187).

The Little Tracadie River opens into the extraordinarily attractive Tracadie Bay, a large lagoon outlined by marshlands within which fish, shellfish, shore birds, migratory waterfowl, land and aquatic mammals thrive (Allen 2011). Throughout its estuary the Little Tracadie River shorelines host both narrow and a few broader sections of salt-water marsh. Strips of salt marsh exist immediately northeast and northwest of the proposed project area and along the east shore of the mouth of Trout Stream (<http://geonb.snb.ca/geonb/>).

Unlike the neighboring Pokemouche, Big Tracadie and Tabusintac Rivers, the Little Tracadie is not a lengthy watercourse. Its tidal estuary reaches only circa 9 km inland and “above the head of tide the Little Tracadie is a rather insignificant stream” (Ganong 1906:185). Throughout its length the River is fed by brooks and streams. The most significant amongst these are Gaspereau Brook, Seal Brook and Trout Stream (Figure 6). Gaspereau Brook enters the Little Tracadie circa 350 m northeast of the proposed bridge project while Seal Brook enters the river circa 350 m to the northwest. The east bank of the mouth of Trout Stream meets the southwestern edge of the Little Tracadie River bridge causeway. The names of all three watercourses likely reflect local natural resource availability in recent times past.

The landscape surrounding each end of the Little Tracadie bridge is significantly different. Along the south shore the land rises abruptly from the river with a steep circa 4-5 m high bank edge. Although a gravel pit has removed the original land west of the road, what remains of east side shows that the from the top of the riverbank the land rises on a circa 40° incline to the south. Therefore, Route 365 presents a significant downhill approach to the south side causeway. On the north side of the river the land nearest the causeway is low, presenting a bank of only circa 1 m. In spring and fall this bank and adjacent land is often under water. Excepting on the slight point near the causeway end, areas east and west of the causeway/land junction are rimmed by salt marsh. To the north the land rises, although not nearly as steeply as on the south side.





Figure 5. Red arrow indicates proposed project location. The barrier beaches of New Brunswick's northeastern shores provide for an attractive series of protected river estuaries with micro-environments unlike any other in the province.



Figure 6. Little Tracadie River proposed project area adjacent watercourses (NBDNR 2002-512-118)

The Caraquet Eco-district is underlain entirely by Pennsylvanian age non-calcareous red and grey sandstone, inter-bedded with mudstone and conglomerate. From Late Wisconsinan and/or early Holocene time, blankets or plains of sand, silt, minor clay and gravel, with a patchy thin veneer of organic sediment are possible (Rampton et al 1984). Pennsylvanian rocks have produced relatively fertile soils. The soils range from fine textured, derived from red mudstone, to coarse textured associated with grey sandstone (Zelazny et al 2007:279).

The one test pit dug within the proposed project area (Stantec 2010a) presented a thin forest sod followed by light brown sandy soil underlain by grey leaching and orangish brown pebbly soil. The test was located near the terrace edge on the southwest side of the causeway at the mouth of Trout Stream (Stantec 2010a: Appendix A, C). The leaching, present at a depth of 14-19 cm, could indicate this particular area was undisturbed below circa 14 cm. Similar soil layering, grey leaching underlain by pebbly orangish brown soil, was encountered during the Pokemouche River Bridge No. 4 archaeological testing (Allen 2011). However, the basal layer of the Pokemouche testing produced 50%-75% sandstone shingle-type till in a fine orange soil matrix (Allen Seaman pers. comm. 2010) rather than a “compact orangy brown sandy layer of pebbles” (Stantec 2010a Appendix C).

### **Climate, Flora and Fauna**

The Caraquet Eco-district has 70% forest cover. A full 47% of non-forest cover is wetland. The average May to September precipitation is 350 – 400 mm. The cool dry climate of the Caraquet Eco-district resembles that of the inland Tabusintac district, but its summer wind velocity is double that of the interior areas. Combined with a history of forest fires, low elevation, poor soil drainage and high soil acidity, the districts forest cover is primarily boreal-looking with fire-adapted species such as trembling aspen, grey birch, red maple, jack pine, red pine, white pine, and black spruce (Zelazny et al 2007:279).

“Both the Big and the Little Tracadie Rivers abound in trout, bass, salmon, gaspereau and eels... formerly the oyster lived in the lagoons as is still evidenced by their shells of great size” (Ganong 1906:185). Ruffed Grouse and Spruce Grouse inhabit area woodlands while shoreline marshes are known for their good selection of migratory waterfowl. Wildlife species present in the area include moose, deer, beaver, muskrat, black bear, porcupine, snowshoe hare, red squirrel, mink, muskrat, otter and northern raccoon (Stantec 2010b; Charles McAleenan pers. comm. 2010). Several varieties of marshland plants produce starches and grains attractive to both animal and human foragers. Edible wild fruits and vegetables such as blueberries, cranberries, raspberries, blackberries, hazelnuts and fiddleheads can be found along brooks and in adjacent woodlands (Allen 2009).

### **Past and Present Land Use Practices and Associated Land Alterations and Conditions**

This is an important section which presents all that was gleaned regarding land use practices for the proposed project area. Both possibilities and facts are presented. Land alteration, disturbance, removal etc. not only provides particulars concerning cultural practices, it also often offers rationale for limiting or expanding the degree of sub-surface testing in a specific area.

From the beginning of New Brunswick’s human history (circa 11,000 years ago) our Maritime environment, and even the landscape itself, has changed dramatically- from late glacial sub-arctic tundra with elevated shorelines, to warm episodes with a higher level of nut-bearing trees, to drowned coasts and the modern mixed Acadian forests (Allen 2011). An Escuminac pollen diagram, the closest study of its kind, supports these general statements (Warner, Tolonen and

Tolonen 1991). A more recent study in the upper Bay of Chaleur region, illustrates how closely environmental changes in this area have been related to the isostatic adjustment of the landmass and eustatic sea-level rise throughout the last 11,000 years (Mott, Jetté and Guiot 2004). Ancient riverside human heritage sites in the Tracadie area can be expected to be either partly or totally lost due to the combination of erosion and coastal submergence.

### **First Nations era**

It bears noting that archaeologically identified Maritime First Nation cultural traditions (and the fishing, hunting, gathering peoples they represent) have, of necessity, each adapted to their own unique set of environmental circumstances. What we know of land use practices for all cultural periods must be considered when conducting any HRIA (Allen 2009:17). The most recent First Nations people to occupy the Tracadie system were the Mi'kmaq. Late 20<sup>th</sup> century archaeological studies within the Miramichi region have identified several instances where the landscape has been altered by the Mi'kmaq and/or their ancestors.

At least one circa 2300 year old burial mound has been identified and researched on the Northwest Miramichi near its head-of-tide. Also a large number of pit features have been mapped on upper terraces surrounding the community of Red Bank. Radio-carbon dates place the digging of one such feature at circa 1100 years ago. While the exact purpose of the pit features is unknown, it has been suggested that they could be sub-terranean storage vaults for surplus food stuffs (Allen 2006). Similar pit features have been noted by local history enthusiasts on riverside terraces within the Tracadie (Manford Wasson pers. comm. 1980) and Tabusinbtac river systems (Brent Suttie pers. comm. 2012). A discussion of the First Nation presence on adjacent river systems and the potential connection of pre-contact First Nations to the Little Tracadie project area will be presented within the Cultural Heritage section.

### **farming**

During the last quarter of the 18<sup>th</sup> century a combination of French speaking (mostly Acadian) and English speaking (Scots) arrived to take up residence at the mouth of the Little Tracadie River. These early settlers were at first subsistence farmers and cleared lands for agricultural purposes. By the turn of the century, when lands near the mouth of the River were already settled, upriver properties were also granted. Farms were established on both sides of the Little Tracadie surrounding the project area by 1820 (NBPA RS108 Land Petitions 1783-1918).

An 1861 census confirms all residents surrounding the project area were farmers. In general they grew hay, wheat, barley, oats, beans, peas, turnips and potatoes while owning horses and oxen and raising cattle, sheep, and swine. Some produced honey and gathered bee's wax. (NBPA 1861 Gloucester County Census). One descendant of John Thomas had a candle making business (Sister Zelica Daigle pers. comm. 2012).

In 1906 historian William F. Ganong noted Tracadie "farms are scattered over the uplands, especially along the coast of the sea and within the tide waters of the rivers..." (Ganong 1906:187). Aerial photos from 1944 and 1963 suggest that farming continued to be an important Little Tracadie/Thomas occupation throughout at least the first half of the 20<sup>th</sup> century (Figures 7, 8). A lengthy period of cultivation can be expected to have altered upper level natural soil horizons within the study area. In recent times old pasture lands and cultivated fields surrounding the south end of the bridge have been switched to commercial blueberry growing areas (Etienne Brideau pers. comm. 2012).





Figure 7. Extensive cleared farmlands surrounding *Pont d'Odilon* -1944 (NBDNR 19447347 70)



Figure 8. Farming continued to thrive into the 2<sup>nd</sup> half of the 20<sup>th</sup> century -1963 (NBDNR 6343-58)

### forest fire

In 1936 a forest fire raged through Little Tracadie burning homes and farm buildings. The old bridge was spared. The family of Odilon Brideau lost their house and barn but managed to save themselves and their farm stock. (Such a devastating fire can be expected to present itself in area soil profiles.) Mr. Brideau rebuilt his home (circa 1937) on the same foundation. His grandson Eteinne Brideau currently lives in this house (Figure 2). An interesting note: While the family stayed with relatives who had escaped the fire, Odilon Brideau and his sons rebuilt their farm, starting with the barn. The animals were of the greatest importance. Their shelter needed to be constructed before the new family home. After the new house was built it became the community post office with Elizabeth Brideau acting as post-mistress until 1960. The home also had the only telephone in the community and was used by neighbours for necessary calls (Etienne Brideau pers. comm. 2012).

### fishing

“Fishing, both recreational and commercial, is important to Tracadie. Eels, smelt, gaspereau, bass, trout and shellfish are taken... lobsters are trapped, collected and caught with lines ...The predominately good-fishing-locations of pre-contact sites attest to the importance of the river fishery to First Nations peoples (Buxton-Keenlyside 1971). In the mid-20<sup>th</sup> century Albert Ferguson remembers people fished for trout from *Pont d’Odilon* and eel-pots were attended to in the river (pers. comm. 2012) (Figures 9a, 9b). Etienne Brideau also mentioned people used to fish the river for eels and tom-cod in the winter (pers. comm. 2012). Sister Daigle mentioned ‘the day after Christmas used to see large numbers of people descend on the river with flash lights to attract eels which would be speared’ (pers. comm. 2012).

Even today the opening of the trout season on May 1<sup>st</sup> (and for two weeks following) sees a traffic jam along the Little Tracadie bridge approaches. “Cars line the roadsides, some park in the old gravel pit... as people descend on the river to fish... these are big trout from the sea... its always been that way” (Etienne Brideau pers. comm. 2012). Lack of a roadside shoulder for Parking on the north side curve sees RCMP getting people to move their vehicles for safety reasons. With driveways opening directly unto the blind uphill curve, this section of the road is dangerous (Sister Zelica Daigle pers. comm. 2012).



Figure 9a. Eel pots on Tracadie 1972 (Photo Courtesy Archaeological Survey, Canadian Museum of Civilization)



Figure 9b. Eel fishing at Tracadie 1972 (Photo Courtesy Archaeological Survey, Canadian Museum of Civilization)

Where Trout Stream and the main Little Tracadie meet appears to be the most popular trout fishing location within the entire river system. While landscape alterations associated with fishing are not likely to be observed, it is important to note that in addition to the potential for early fishing-related archaeological sites, artifacts such as net weights, or in-water features such as preserved posts or rock formations associated with weirs could be expected at particularly good-fishing locations.

### **timber industry**

“Of great importance to Tracadie has been the development of the lumber trade... originating circa 1800...both the Big Tracadie and the Little Tracadie... yielded large quantities of lumber...firstly the interest was in the white pine, shipped from the wharf at the mouth of the Little Tracadie (Figure 10) (Ganong 1906:185-198).

After the completion of the railway between Caraquet and Bathurst (1895) lumber from the area was carried via rail to Bathurst... villages grew up around the lumber mills that were located at the mouths of both ...rivers” (Ganong 1906:185-198). Although archival research has not determined that any mills were built within the proposed project area, it can be assumed that early timber harvesting did take place within the study area. More recently, the Tracadie area is known for Christmas tree production and commercial blueberry growing.



Figure 10. Crew of commercial vessel Port of Tracadie 1899 (NBPA P13/109).

### **Bridges and roads**

The current bridge at Little Tracadie was built in 1949. Its predecessor, an early 20<sup>th</sup> century structure, did not make use of extensive causeways. The earlier bridge was supported by multiple sets of pilings which allowed the water to flow under the structure across almost the complete breadth of the river. A 1944 aerial photo illustrates flow channels between the pilings (Figure 11). The pre-1949 bridge appears to have had only a short causeway section built from the north side. By comparison of aerial photos, it appears that the current bridge and approach routes cover a footprint very similar to the earlier structure.

Building and maintaining the bridges and approach roads at Little Tracadie have impacted surrounding lands. The 1944 aerial illustrates a light area adjacent the east section of Route 365. It appears to be fill- likely curve bracing material (Figure 11). Etienne Brideau agreed gravel was dumped there to hold the road (pers. comm. 2012) (Figure 3a). On the south side of the river, the 1944 photo shows the southwestern quadrant is cultivated farmland to the river bank edge (Figure 11). A 1955 aerial (Figure 12) illustrates a large gravel pit within this same quadrant. Leonard (Leo) Brideau (father of Etienne) sold this part of the farm to the government so they could use the rock and gravel for the building of the 1949 bridge causeways. It was a *big pit* and provided the material for both the north and south causeway sections (Etienne Brideau pers. comm 2012).

The gravel pit area continued to be used as it was not yet overgrown in 1955 (Figure 12). The Stantec team noted that “there is a road through the SW quadrant, to the NW is a dug out area into the terrace leading to a dumping area with cement and brush” (Stantec 2010a: Appendix C). This open dumping area would be what remains of the former extensive pit. The northern/riverside edge of this pit is still visible within circa 10 m of the river bank (Figure 13a, 13b).

Opposite this, on the southeast roadside, the 1955 photo (Figure 12) shows a lightly vegetated semicircular area. This area was forested with mature conifers in 1944 (Figure 11). When it was suggested (by this researcher) that this area could also have been mined for gravel, Etienne



Brideau said ‘No!’. It was probably that the large timber was cut by his father and sold for bridge construction purposes (pers. comm. 2012).



Figure 11. 1944 aerial Little Tracadie River early 20<sup>th</sup> century bridge. Arrow points to light area of road bracing fill. Note the position of the river channel and the cultivated field in the southwest sector (NBDNR 1944 7347-70) **North** at top of photo.

There is one last relevant note concerning the 1944 aerial. The photo shows that the deeper river channel, as it joined with the flow from Trout Stream, swept past the south shoreline around a slight point from which the bridge launched. There was a wide sandy beach good for swimming and boat launching (Etienne Brideau pers. comm. 2012). Combined with the confluence of the two watercourses, the “channel-close-to-shore” and the “good sand beach” attributes would make the location highly attractive as a pre-contact archaeological site location. The following would certainly explain why an archaeological survey in the 1970s found no evidence of First Nation use on the current shoreline.

After the installation of the 1949 bridge, with its narrow opening now located at distance of circa 50 m north of the confluence of the two watercourses, the environment of the Little Tracadie shoreline and the Trout Stream watercourse changed quite dramatically. The shoreline surrounding the bridge and the bottom of Trout Stream became clogged with mud. “We used to



run barefoot across firm sand...a nice beach was around the old bridge, but soon we were over our ankles in mud... and Trout Stream filled up too... my brothers and I used to pole a scow (flat bottomed boat) a long ways up (Trout Stream) but now its not deep at all (showing a depth with his hands)... tell them the new bridge opening needs to be longer and it needs to be closer to the mouth of Trout Stream so that the river can flush itself out and clean that mud away..." (Etienne Bridaeu pers. comm. 2012).



Figure 12. 1955 Aerial of Little Tracadie River bridge built in 1949. Note the new position of the river channel. (NBDNR 1955-3900-286) **North** at top of photo.



Figure 13a. Looking southwest at south end of causeway. Red arrow points to edge of gravel pit. (March 2012)



Figure 13b. Looking west from Rue Odilon at edge of old gravel pit. Red arrows illustrate the pit edge. (March 2012)

Finally, the 2002 aerial (Figure 3b) illustrates several relatively new access points to Route 365 on both the south and north sides of the river. The installation of these driveways/culverts/ditches as well as regular road maintenance (grading, plowing etc.) will have contributed to land disturbance within the proposed project area. It has been archaeologically demonstrated that regular upkeep of rural roadways can throw roadside debris (gravel/pieces of asphalt/garbage etc.) a considerable distance. Over time this debris can build up to the extent of providing an additional layer in soil profiles (Allen 2011).

### **recreation**

The Little Tracadie is a good river for fishing, canoeing and other smaller recreational watercraft use although (inland) the river becomes very shallow very quickly (Buxton-Keenlyside 1970).



Current landowners to the southeast of the bridge have built floating docks or small wharfs to facilitate easier river access. In the mid to latter half of the 20<sup>th</sup> century youth from the Tracadie area often traveled to swim from the bridge where the constricted channel provided an attractive pool. On warm summer days *Pont d' Odilion* was a popular destination for young people (Albert Ferguson pers. comm. 2012; Allen Dorion pers. comm. 2012). Sometime shortly before 2002 the shoreline property adjacent the bridge in the northwest quadrant was bulldozed and fill was added to create a level and slightly elevated campsite/picnic area. At the same time some heavier rock was dumped along the bank to help prevent erosion. Nothing much became of the project. (Etienne Brideau pers. comm. 2012). The area is visible on the 2002 aerial as a light colored (disturbed) area with a vehicle or trailer parker on the property (Figure 3b).

### **residential development**

Within the last decade the south shorefront property, for a 200 m distance east of the bridge, has been divided into nine residential lots (<http://geonb.snb.ca/geonb/>) (Figure 16). Although locally referred to as *cottages*, most of the residences appear to be all-season homes of significant size. Septic fields, basements, wells, driveways, access roads and all sorts of landscaping can be expected to have affected the sub-surface of these properties For example, the lot owner closest to the bridge on Rue Pont Odilon (PID 20156964) (Figure 14) recently removed (with heavy machinery) a circa 20+ m sq piece of hillside to create additional parking space south of his residence. The fill from this dredging appears to have been dumped along the bank edge near the southeast end of the bridge causeway (Figure 15). The houses on the north side of the river along Route 365 appear within circa 20 m of the road (Stantec 2010a). The second house north of the bridge was converted from a 20<sup>th</sup> century one-room school house to a residence (Sister Zelica Daigle pers. comm. 2012).



Figure 14. Looking east along *rue Pont Odilon*, the first residence is perched along the bank edge nearest Route 365. Area (not shown) opposite truck has recently (circa 2011) been mined to create additional parking space (March 2012).



Figure 15. Looking northwest (immediately west of the Figure 14 residence) large gravel pile on river bank (likely removed from the recently created parking area, possibly saved to spread as additional lawn base?) (March 2012)

### **PREDICTIVE MODELING**

From early pre-contact times Natives used rivers, lakes and streams for access to interior resources and as convenient travel routes to other locations, even in winter. Waterways allowed Native peoples, as well as later comers, to hunt, to fish, and to gather resources from and to traverse interior lands. More recent non-Native trails and roads often followed portage routes established by First Nations peoples (Ganong 1904). It is for this reason that shorelines of all watercourses are deemed to have elevated potential to hold archaeological sites associated with both historic and pre-contact periods.

The lands surrounding the Little Tracadie River bridge lie within an area defined as having *high* and *medium* potential for archaeological sites (Archaeological Services 2012) (Figure 16). The north side of the river/causeway juncture is defined as having a 50 m (river-inland) width of *high potential* defined by its proximity to the shoreline (Guide 2009:23) as well as by the existence of at least one historical reference to this particular area being the southern terminus for an early historic portage route between the Pokemouche River and the Little Tracadie River via Gaspereau Brook (Ganong 1904).

According to an 1811 map by William Ferguson, the Pokemouche to Little Tracadie portage originated at Waganchitch Brook (below Pokemouche bridge #4). It was labeled as the “old upper portage road to Tracadie”. The portage connected to Gaspereau Creek (Ganong 1948:49; Allen 2011). There is the possibility that this portage is also referred to in the 1761 diary of Gamaliel Smerthurst. Smerthurst, an English merchant who had become stranded at Nepisiguit (Bathurst), made a late fall journey from Nepisiguit to Fort Cumberland (Sackville) in the company of *Micmac* guides. The canoe party made their way through the interior lagoons, portages and waterways of the Pokemouche/Tracadie/Tabusintac systems in order to avoid the worst of some seasonal foul weather (Smerthurst 1905).



In keeping with the discussion re portages, it should also be noted that the more southerly fingers of Trout Stream almost touch the more northerly reaches of Comeau River, a waterway which empties into *The Lake* portion of the Big Tracadie River estuary. It would seem logical if travelers used the inland Pokemouche to Little Tracadie portage (which would bring them to the mouth of Gaspereau Creek) that they would continue along an inland route via another short portage to the Big Tracadie River.

In the predictive modeling illustration (Figure 16) an additional 30 m inland extension (on the north side) is identified as having medium potential for archaeological sites as defined by being within 80 m of the shoreline (Guide 2009:24).

The south side of the river/bridge juncture is defined as having a 100 m width of *high potential* for archaeological sites due to the river's confluence with Trout Stream (Guide 2009: 23). Please note: Figure 16 is a partly faulty graphic. The Geo NB computer has mistakenly taken the causeway as a natural piece of shoreline and has generated the *high potential* area based on the same. The light blue area should start where the causeway meets the actual shoreline. Beyond this a dark blue 30 m wide section is noted as *medium potential* (Figure 16). In reality the area would already exist within the 100 m wide *high potential* area. A discussion with Archaeological Services verified the above interpretation (Brent Suttie pers. comm. 2012).

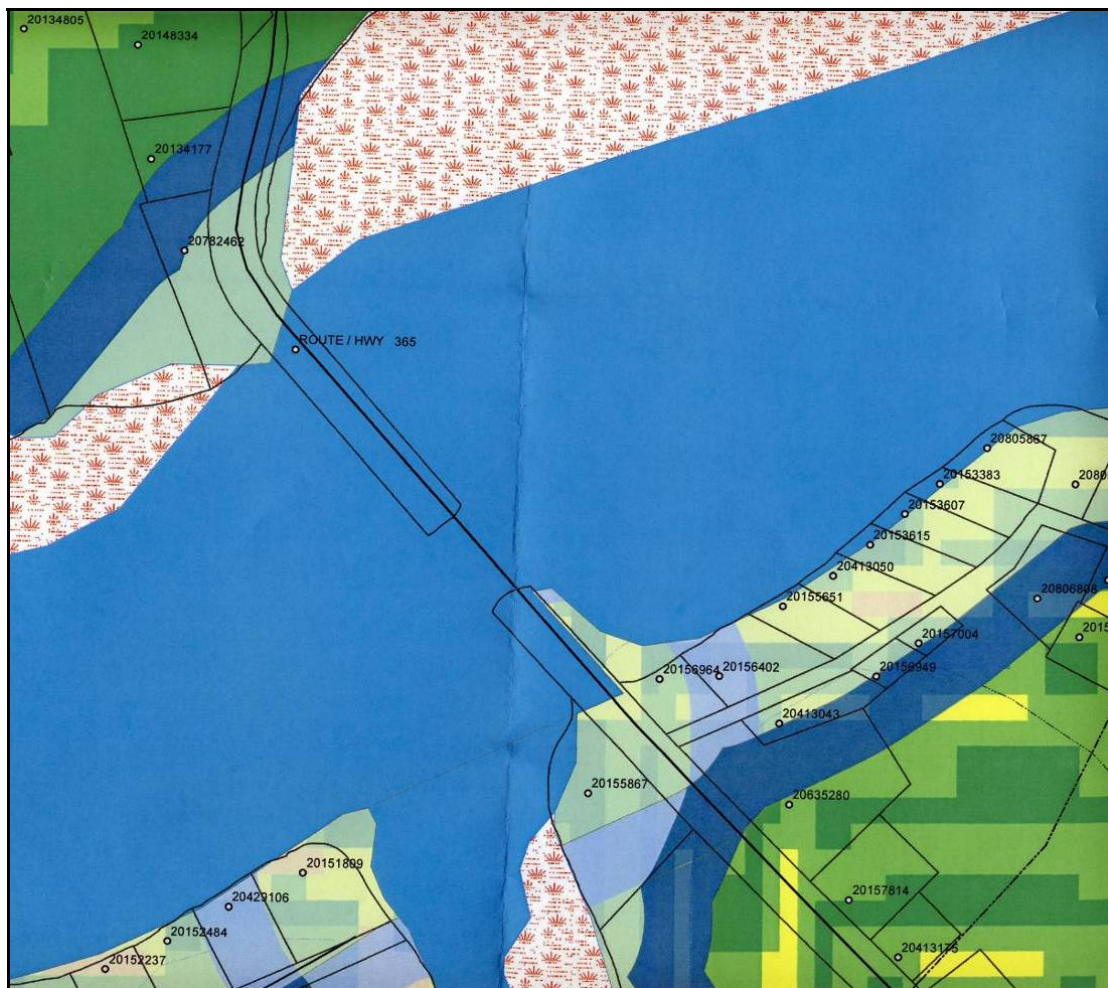


Figure 16. Predictive Model: Archaeological Site Potential at Little Tracadie River Bridge (Archaeological Services, Heritage Branch, Wellness, Culture and Sport 2012)



## FINDINGS

### Little Tracadie River Cultural Heritage

#### First Nations

Copies of the earliest maps of the Tracadie river system (with Tracadie spelled variously) were compiled by William F. Ganong for his *The History of Tracadie* (Ganong 1906) (Figure 17). Ganong wrote “Micmac Indians once lived on the Tracadie but have long since moved to villages near larger towns but there is every evidence that in early times Tracadie was a favorite resort of theirs. The closest occupied Mi’kmaq community is Burnt Church (*Eskinuopitijk*) circa 7 km south of Neguac.

The *Tracadie* name is of Micmac origin... meaning (by various authorities) “fishing place” or “wedge shaped” ...“camping ground” as though it were a favorite place of residence (Ganong 1904:188). Early linguist Silas Rand states that the Mi’kmaq name for the Little Tracadie River is *Tulakadeech* (Ganong 1906: 277). According to Ganong the earliest known European record of the Tracadie name, *Tregate*, was penned by Champlain in 1604. Overall Ganong describes the region as “pleasing to see, so prodigal in good campsites and so rich in fish and game... the locations of their many campsites and burial grounds... is the research of Dr. A. C. Smith of Tracadie” (Ganong 1904:188).”

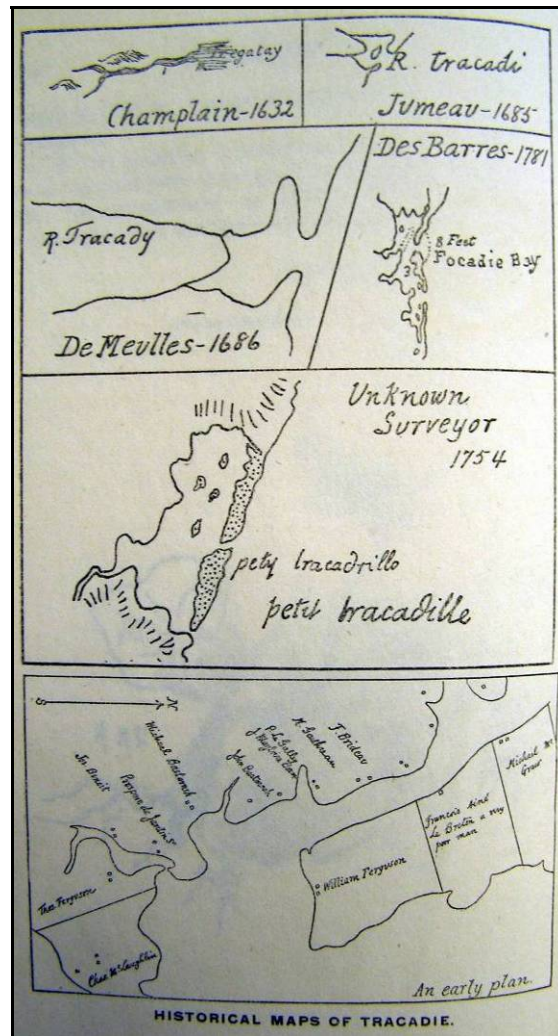


Figure 17. Early Tracadie maps (Ganong 1906).

The Pokemouche, Tracadie and Tabusintac River systems have historically been known as resource rich areas. The rivers are shallow but their barrier beaches, sand dunes and marshes offer excellent protection and, their inland travel routes appear made for lightweight craft such as bark canoes (Ganong 1948; Keenlyside 1990; Allen 2011). In the opinion of one archaeologist the Tracadie was the most important of the rivers pre-historically, supporting the greatest numbers of people and probably covering the broadest time range of occupations. “The general pattern of sites (on the Big Tracadie) is inland with a few generally located at the edge of the lagoon, very few on the lake and more upriver. Narrow necks of land and low points are popular locations for campsites. Almost exclusively we find sites at the waters edge though there appears a mild correspondence of locality with supplies of fresh water” (Buxton-Keenlyside 1971).

The Buxton-Keenlyside team surveyed both the Big and Little Tracadie rivers in the early 1970s. They test excavated several sites within the Big Tracadie system. Dozens of pre-contact archaeological sites were recorded on the Big Tracadie River (Figure 18) and a cluster of pre-contact sites were recorded on the Bay surrounding the mouth of the Little Tracadie (Figure 19).



Figure 18. Locations of archaeological sites within the lower Big Tracadie River system

Of the Little Tracadie Buxton-Keenlyside noted that “there is considerable topographic relief along this river but the water becomes very shallow very quickly. No sites were found along the Little Tracadie itself except at its mouth” (Buxton-Keenlyside 1971). These river mouth sites (referring to Figure 16 numbers 4a, b, c and 5a, b) opposite the town of Tracadie were determined to be of enormous size with great heritage potential (Figure 19) (Keenlyside 1990).

At this point it should be noted that while the Little Tracadie River was examined for sites survey methodologies have changed dramatically since the 1970s. Although this researcher would agree that the Little Tracadie is not an impressive river in comparison to its sisters the Big Tracadie, Tabusintac and Pokemouche, it does offer considerable points of interest for pre-contact users. It is the opinion of this archaeologist that there is a *very high probability* that pre-contact First



Nations sites do exist within the system, in particular in the area surrounding the proposed project: where three substantial tributaries merge with the main river; where food resources such as seal, trout and gaspereau were historically plentiful enough to have their names attached to these watercourses; and, where at least one historic portage terminus is recorded.

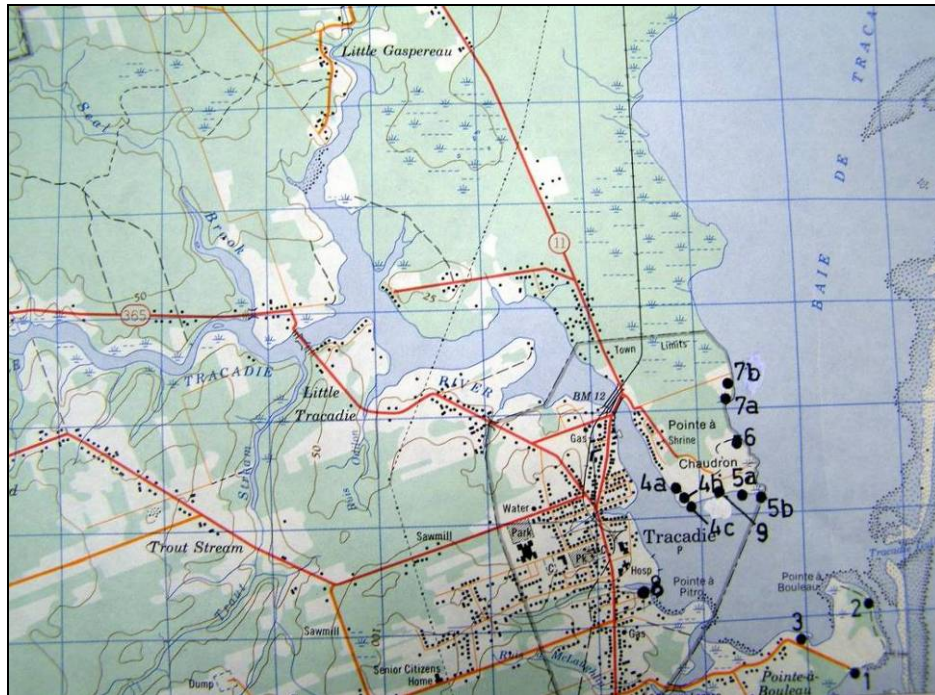


Figure 19. Distribution of archaeological sites Little Tracadie River (Archaeological Services 2012)

From the sites and associated assemblages reported by: Buxton-Keenlyside (1971); Buxton-Keenlyside and Keenlyside (1976); Keenlyside (1990); Bourgeois and Suttie (2005); as well as from local private collections such as those of Ulysse Girourd (UXG) and Louis Savoie (LS) (Archaeological Services Private Collectors Catalogues); Museum collections (New Brunswick Museum A. C. Smith collection); and, several individually reported sites, it can be offered that the Tracadie area was occupied by First Nations from at least the Late Archaic Period (circa 4000 years ago) throughout the Maritime Woodland Period (3000 to 400 years ago) and, well into the Historic Period (circa the late 18<sup>th</sup> century). Within the Tracadie system there are large village sites, small fishing camps, cemetery sites and isolated finds associated with the Mi'kmaq and their ancestors. The Mi'kmaq from the Miramich area including those from the settlements of the *Tlagatig*/Tracadie to Nipisiguit to the Restigouche identified themselves as being from the traditional Mi'kmaq district known as *Gespegeoag* or the 'last land'. This was the largest of the seven Mi'kmaq districts (Hoffman 1955:563).

Some very significant historical finds have been made in the Tracadie area. The following examples are offered. A unique circa 450 year old dug-out canoe (CiDf-33) was discovered at Val Comeau by Ella and Jean-Claude Robichaud (Vincent Bourgeois pers. comm. 2012). Eroded peat deposits were present on the shoreline where this artefact was found and it is assumed that the vessel was preserved within a peat environment. Indicating wide spread regional trade or exchange networks, rhama quartzite artefacts (stone material originating on the central Labrador coast) have been recovered from Big Tracadie sites (ie. CiDg-1) dating from circa 1000 years ago (Keenlyside 1990).

Around the turn of the 19<sup>th</sup> century artefacts relating to late 16<sup>th</sup> or early 17<sup>th</sup> century Mi'kmaq cemetery sites were excavated by Dr. A. C. Smith "in the area of the old Tracadie drive-in" at mouth of the Little Tracadie (Kain and Fowe 1902:305-312). Ferguson's Point was once known as *Pointe aux Chadron* because Mi'kmaq copper kettle burials were unearthed there (Ganong 1904). One early 18<sup>th</sup> century French artefact, a lead chalice perhaps belonging to a Recollet missionary by the name of Father Justinian Durand, was found during a foundation excavation near the center of the village of Tracadie. Father Durand is known to have ministered to the spiritual wants of the French inhabitants of Acadia and their Indian allies between 1704 and 1711 (Matthew 1903:3).

The above archaeological facts have been presented to underscore the extent to which First Nations once inhabited the Tracadie area (in particular the mouth of the Little Tracadie) and, to emphasize the variety of site types and the time range for sites and artefacts which could possibly be found within the Little Tracadie River system in the vicinity of the proposed project area. Unfortunately as is evidenced in other Maritime areas, Mi'kmaq populations dwindled dramatically within the first two centuries following European contact (Upton 1979). By 1785 only six or eight Mi'kmaq families remained at Tracadie (Basque, Kerry and Bourgeois 1984:8). Ganong noted that several Tracadie place names are solidly associated with Mi'kmaq families or Chief's names from times past (1904:190) and Sister Daigle recalls once hearing "that there has been some *mic-mak* living, long ago, on a point toward, Trout stream (Rivière à la Truite) or around the area" (pers. comm. 2012).

### **European Heritage**

The most comprehensive summary of European settlement at Tracadie was compiled by William Francis Ganong in 1906. He suggests that the first Europeans to actually live on the River system may have been Acadians who possibly "moved into the area between 1754 and 1764 during the Expulsion, using the shallow draft rivers as sheltered places of refuge ...Dr. A. C. Smith having recovered (French/Expulsion period?) relics/artifacts up the rivers" (Ganong 1904:191).

According to Ganong, prior to 1785 Francois Robert (dit Le Breton) with sons Rene Julian, Charles and Jean Batiste occupied sites around Tracadie but these individuals did not truly settle the land. The first *true settlers* were Acadians Michael Bastarash and Joseph Saulnier who arrived from Memoramcook in 1785. They took up lands at the mouth of the Little Tracadie and were soon joined by other Memoramcook families and additional French speaking settlers from places like Shediac, Neguac, and Paspebiac. Ganong states that a few of the late 18<sup>th</sup> century settlers were Canadians but mostly they were Acadians (1904:194-195).

One year later in 1786 disbanded Scottish soldiers William Ferguson, Thomas Ferguson and Charles McLaughlin also took up lands near the mouth of the Little Tracadie. Slightly later Irish and more English settlers arrived (Figure 20) (Ganong 1904:194-195). The original Grant map for the proposed project area illustrates the specific lands allotted to both the French and English settlers from circa 1786 to the early 19<sup>th</sup> century (Figure 21).

Intermarriage between French and English speakers occurred within the first generation of settlement. By the end of the 19<sup>th</sup> century the Tracadie community was mostly French speaking but with a large number of families holding English surnames. Ganong notes it is safe to say that this New Brunswick community was *jointly settled* by both French and English speakers who received their lands within a year of each other (1904:194). Farming was the initial occupation of all settlers with fishing a secondary pursuit. By 1800 the Tracadie district began participating in the timber industry and lumber mills were established on both the Big and Little Tracadie Rivers.





RS687 Gloucester Co.). A westerly portion of this 200 year old plan has been lost due to an early map storage practice of folding and gluing such documents into large books (Allen Dorion pers. comm. 2012). Unfortunately the proposed project area was within the misplaced part. If Ganong saw this plan before the fragment was lost is unknown. He marks a building on the eastern shore of the Francois Bridaute Grant (Figure 20) which is not included on the actual Grant Plan (Figure 21). If the Ganong map could be considered accurate, this building may perhaps illustrate the placement of the original Bridaute residence. Its position is opposite the mouth of the Gaspereau River far removed from the project area. The home of Odilon Brideau, grand-son of Francoise Bridaute Jr., was located on the same location of the present day home of Etienne Brideau, 30 m west of Route 365 just south of the 1949 gravel pit (Figure 12).

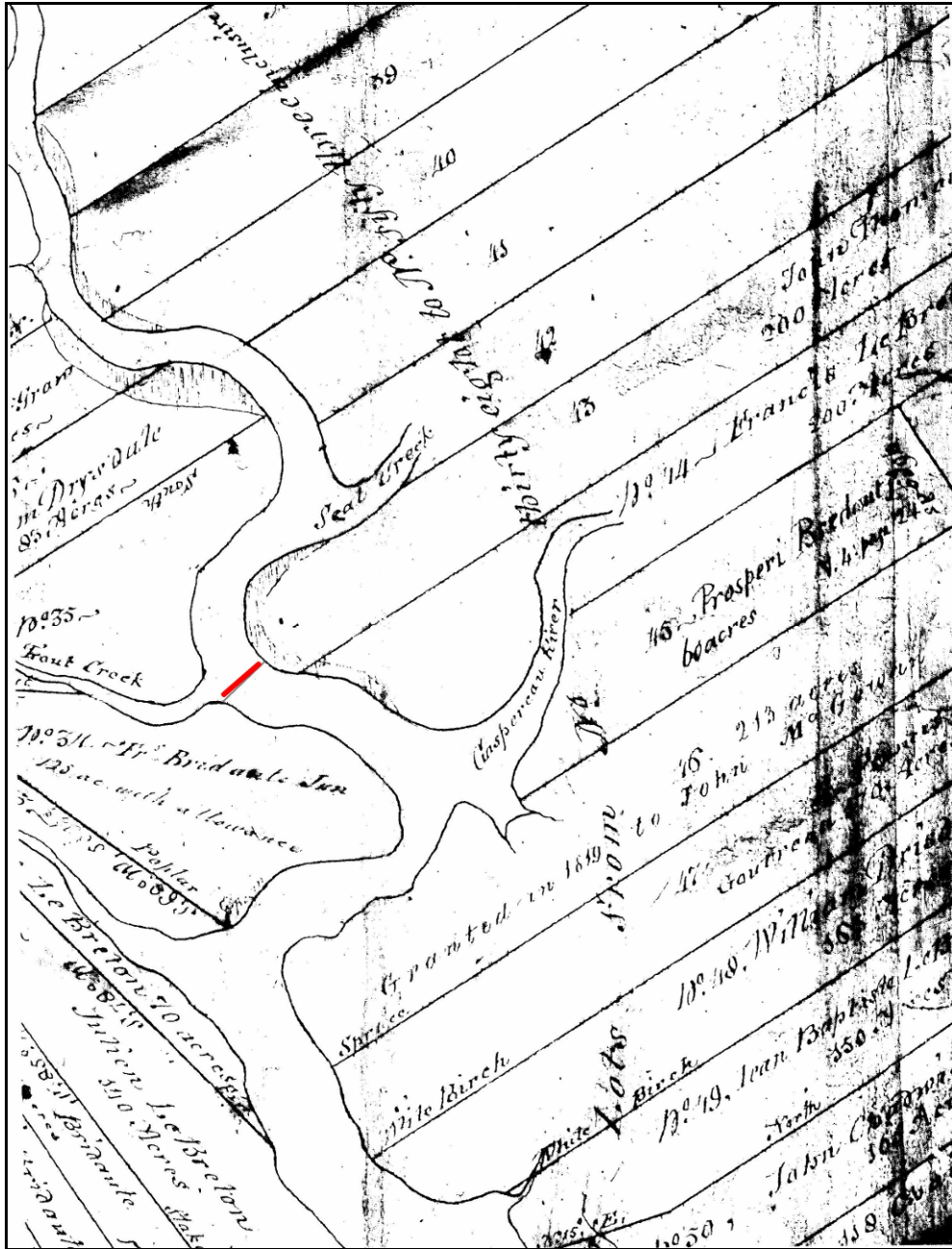




Figure 21. Copy of original Grant Plan (likely by David Sadler 1838 based on earlier Survey Plan by Campbell 1804) shows the No. 34 125 Acre Fr. Bridaute Jr. Grant (1824) as well as the John Thomas No.43 200 acre Grant (1809). (NBPA Grant Plan RS656/17G microfilm) (red line inserted by author in approximate bridge location)

Land surrounding the proposed project area on the north shore of the Little Tracadie was first granted to one John Thomas on June 30<sup>th</sup>, 1809. The Thomas Grant, #43, contained 200 acres (NBPA Grant Book RS686, Vol. D p.492). John Thomas was born *Jean Michael Thomas* in Charlottetown on February 11, 1787. He married Marguerite Brigitte McGraw of St. Isidore in 1815. The couple had nine children (<http://genforum.genealogy.com/cgi-bin/print.cgi?brideau::60.html>) . John Thomas was 76 years of age by the time of the 1861 Census. Mr. Thomas still lived on his granted lands with his wife Brigitte (spelled *Bridget* in the Census). John Thomas is recorded not only as a farmer but also as a cooper (barrel maker) (NBPA 1861 Gloucester County Census: North Parish of Saumarez District). John Thomas died at 83 years of age in 1875 (<http://genforum.genealogy.com/cgi-bin/print.cgi?brideau::60.html>). The community on the north side of *Pont d'Odilon* is still referred to as *Thomas*.

Nineteenth century trade and commerce relied heavily on barrels for shipping produce to market. In addition to the produce from the lumber mills and from the inshore and off-shore fishery, by the 19<sup>th</sup> century farmers in the Tracadie area had surpluses of wool, maple syrup, honey, bee's wax, flax, cloth, wheat, barley, oats, etc. A barrel maker would have been an important and contributing member of this community. A cooperage site, such as that which would have been located near the early residence of John Thomas, could be expected to produce certain types of artifacts relevant to that profession. As well, a dock or wharf near a deeper river channel from which the barrel-maker could deliver his product to the port at Tracadie could be expected.

The barrel making trade was passed from one generation to the next. Well into the 20<sup>th</sup> century the great grandsons of John Thomas carried on this trade. *Thomas* became known for its barrel making *factory* which operated until the mid-20<sup>th</sup> century. In the 1970s the Village Historique Acadien was gifted the *Thomas* factory tools and other traditional barrel making equipment (Sister Zelica Daigle pers comm. 2012; Albert Ferguson pers. comm. 2012).

While the original Grant Plan does not as-a-rule illustrate building locations, there are two rectangular marks at right angles to each other on the north side of the river within the more southerly section of the John Thomas Grant (Figure 21). These appear to be buildings, possibly the Thomas house and barn/cooperage. The Plan also illustrates the riverside salt marsh adjacent the Thomas lands. To the east, adjacent the Thomas farm and bordering on the Gaspereau River was the 200 acre #44 Grant (1809) of Francois LeBreton (Figure 21).

On the 29<sup>th</sup> day of November, 1824 Francois Bridaute Jr. was granted 125 acres (Grant #34) along the south shore of the Little Tracadie River in Saumarez Parish, County of Gloucester. His Grant was bounded on the west by the bank of Trout Brook and included both the east and west sides of the proposed project area (Figure 21) (NBPA Grant Book RS686. Vol. 6, No. 1764). Mr. Bridaute (age 66) was still living on the property in 1861. He was a farmer (NBPA 1861 Gloucester County Census: North Parish of Saumarez District).

Ganong's map includes a shoreline structure on the Bridaute Grant (Figure 20). As indicated on the earlier presented 1944 aerial photo, the Bridaute family continued to farm the original Grant until quite recently. A portion of the land southwest of Route 365 is still retained by Etienne Brideau, descendant of 1824 grantee Francois Bridaute Jr. The most easily accessible NBPA version of this original Grant Plan, with an overlay of 20<sup>th</sup> century names, roads, bridges etc., is illustrated (Figure 22).

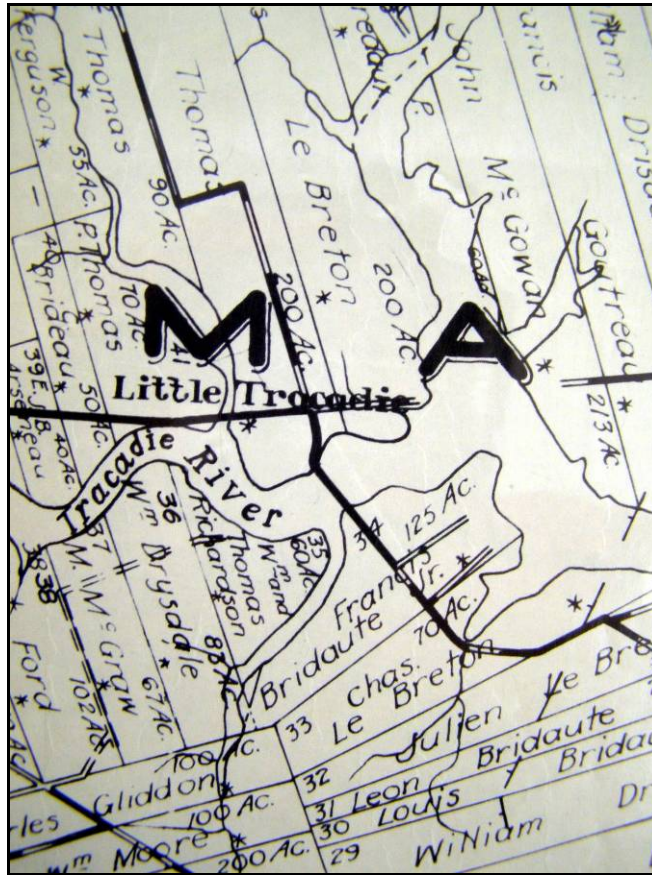


Figure 22. Grant Plan of area surrounding proposed bridge replacement (NBPA Grant Plan #30 Saumarez Parish)

### **Built Heritage, First Nation Consultation, Other Consultation**

This researcher made an effort not to duplicate work already completed. The reader is directed to the Stantec (2010a) report for references reviewed and a summary of findings concerning built heritage and historic properties (Stantec 2010a:4). Also please see the Stantec document for the reporting of direct consultation with First Nations (2010a: 4-5). No further attempts were made in either regard. The list of persons contacted/consulted during the supplementary research has been presented within the INTRODUCTION section. Several individuals were of special assistance and shall here be named.

Two well known provincial heritage resource specialists, Provincial Archaeologist Albert Ferguson and the Provincial Archives Manager of Cartographic Records Allen Doiron, were both born and raised in the Tracadie area. Both were more than willing to share their knowledge of Tracadie and of the proposed project area. Mr. Ferguson is a descendant of Tracadie settler William Ferguson (1786) and nephew of the late Cécile (Losier) Brideau (mother of Etienne Brideau). Mr. Ferguson's aunt lived on what was thought to be the old Brideau homestead (Albert Ferguson pers. comm. 2012). Mr. Doiron was also descended from one of the earliest Tracadie families. He took time to meet this researcher, to search for the missing portion of the 1804 Campbell Survey Plan, and to point out where the original Grant Plan microfiche was to be located.



Jessica Ryan, President of *Bathurst Heritage Trust/ Nepisiguit Museum*, and Sister Zelica Daigle of *Musee Historique de Tracadie* were also more than helpful. Both have been volunteers with their respective Museums for decades. These ladies could be expected to know if their museum had anything helpful in their files or if some community member might have information on any given location in their region. (Both museums belong to the 'North-East Zone' which involves 11 community museums ranging from Petit-Rocher to Tracadie-Sheila). To assist this researcher, Sister Daigle arranged a meeting at the home of Etienne Brideau in Little Tracadie. (Mr. Brideau lives near the bridge on the remaining parcel of the original 1824 Bridaute Grant. Sister Daigle knew the area well as she often spent time with members of her religious order at a cottage at the mouth of Gaspereau River.) Sister Daigle toured this researcher around the Thomas and Little Tracadie communities pointing out various historical facts and detailing family histories. Both Sister Zelica Daigle and Mr. Etienne Brideau are especially thanked for their time and information.

### **RESOURCE INVENTORY**

Stantec (2010a) reported no archaeological or built heritage sites were located within the proposed project area. No further built heritage inquiries were made by this researcher. Also in keeping with the Stantec report, to date no archaeological sites have been reported in the proposed project area.

### **SUMMARY**

The supplementary HRIA information here reported was gathered through document and consultative research only. The non-Permit project did not allow for a field examination although a few observations were noted, and photos taken, during a consultative visit to the area.

The Little Tracadie River proposed bridge replacement project was identified as having an elevated *medium to high* potential for archaeological heritage sites primarily because of its association with: the shorelines of an interior waterway; a reported historic portage route; and, because the area includes the confluence of two watercourses. In New Brunswick all of the aforementioned factors are known to indicate a higher incidence of usage by past peoples, both First Nations and others (Buxton-Keenlyside 1971; Allen 1984; Suttie, Bourgeois and Nicholas 2008; Allen 2009).

The brief review here presented of the environment, cultural history and archaeological evidence leaves no doubt that the proposed project area could produce First Nation heritage sites. While the exact location of the early 19<sup>th</sup> century homestead of John Thomas is unknown, it could be located in the vicinity of the proposed project. Mr. Thomas was a barrel maker so he also likely had a cooperage and a wharf from which he could ship his barrels downriver. The location of the 19<sup>th</sup> century homestead of Francois Bridaute Jr. is unknown.

While the proposed project area has an elevated potential for archaeological heritage sites, significant amounts of disturbance have taken place on the lands surrounding both ends of the bridge and along both sides of the Route 365 approaches. A large gravel pit existed on the southwest side of the bridge. The pit covered an area from very near the riverbank edge to a point circa 100 m to the south. The volume of aggregate removed was sufficient to build both the north and south side causeways (Etienne Brideau pers. comm. 2012). Areas southeast of the bridge have been treated to residential developments with driveways, homes and associated land alterations.

On the north bank of the river, the east side of the Route 365 curve is salt marsh. It was banked with fill during the 1940s (and possibly also more recently). The fill edge drops steeply into the

marsh/wetland. Circa 2002 a section of land to the immediate west of the north side land/causeway juncture was bulldozed level and subsequently filled-in to create a slightly elevated private campsite/picnic/fishing area. Just north of this area, a broad driveway separates the abandoned picnic site from the hillside/roadside residences. The hillside homes have short driveways and are separated from the road by narrow lawns and deep ditches. In conclude, one can state that the immediate area surrounding the existing bridge has been subjected to extensive (and in some instances archaeologically unforgiving) land alteration.

## **RECOMMENDATIONS**

Design plans for the proposed replacement bridge are as yet unavailable. While it can be assumed that any bridge replacement will involve the operation of heavy machinery for the demolition and removal of the old and for the construction of the new structure, the extent of land disturbances to be expected on either landed end of this proposed bridge project is currently unknown.

Generally when all other background information (such as this report's discussed land disturbances, historical facts, and predictive modeling information) has been considered, the project's detailed design plan and construction ROWs determine the final extent of archaeological testing to be required within any *medium* to *high* archaeological potential areas. At this stage of the proposed project, only the following can be offered.

Firstly, regardless of the design plan, it is strongly recommended that NBDOT use the area on the southwest side of the bridge, formerly part of the circa 1949 gravel pit, as their staging area of operations for the proposed project.

Secondly, once the proposed project design plan becomes available, it is recommended that an archaeologist, having thoroughly reviewed the background material here presented, be engaged to make a one-day visit to the area to gather the field observations and measurements necessary to propose *an informed project specific testing strategy* for any remaining lands that fall within the identified *high* to *medium* potential areas for archaeological sites.

Once the above is accomplished it is recommended that, in consultation with NBDOT and Archaeological Services, the proposed testing strategy be reviewed, revised if necessary, approved and carried out as per recommended in the *Guide* (2009).

## REFERENCES CITED

Allen, Patricia

2006 *The Oxbow Site 1984 Metepenagiag Mi'kmaq First Nation, Miramichi, New Brunswick.* New Brunswick Manuscripts in Archaeology. No. 39, Fredericton.

2009 *Heritage Resource Impact Assessment At the Proposed Department of Transportation Duguayville Road Culvert Crossing Upgrade On a Tributary to Sewell Brook, Parish of Saint-Isidore,, Gloucester County New Brunswick.* On file Archaeological Services, Heritage Branch, New Brunswick Department Wellness Culture and Sport.

2011 *Final Report of Heritage Resource Impact Assessment / Systematic Sub-surface Testing At the Location of the proposed New Brunswick Department of Transportation Pokemouche River Bridge No.4 Replacement Project, Landry, Parish of Inkerman, Gloucester County, New Brunswick.* On-file Archaeological Services, New Brunswick Department of Wellness, Culture and Sport.

Basque, M. D. Kerry and R. Bourgeois.

1984 *Deux siecles de particularisme: une histoire de Tracadie.* Shediac , New Brunswick. (NBPA MC8/2391).

Bourgeois, Vincent and Brent Suttie.

2005 *Recent Archaeological Surveys on the Nashwaak, Big Tracadie and Magaguadavic Rivers.* New Brunswick Manuscripts in Archaeology, No.42, Fredericton.

Buxton-Keenlyside, Judy.

1971 *Northshore Survey: An Archaeological Reconnaissance of Northeastern New Brunswick.* Manuscript #816, National Museum of Man, Ottawa.

Ganong, W.F.

1904 *A Monograph on the Origins of Settlements in New Brunswick.* Transactions of the Royal Society of Canada. Papers from 1904.

1906 *The History of Tracadie.* Acadensis Volume VI, edited by David Russel Jack. pp.185-200.

1948 *The History of Caraquet and Pokemouche.* Edited by Susan B. Ganong. Historical Studies No. 6, New Brunswick Museum, Saint John.

Hoffman, Bernard

1955 *Historical Ethnography of the Micmac of the Sixteenth and Seventeen Century.* Phd. Thesis, Department of Anthropology, University of California.

Kain, Samuel W. and Charles F. B. Fowe

1902 *Some Relics of the Early French Period in New Brunswick.* Bulletin of the Natural History Society of New Brunswick No. XIX, Volume IV, Part IV, pp. 305-312.

Keenlyside, David and Judy Buxton-Keenlyside.

1976 *The Tracadie: Investigations into the Prehistory of a River System.* Manuscript on file - Archaeological Services Unit, Department of Wellness, Culture and Sport.

Keenlyside, David L.

1990 *An Archaeological Survey of the Upper Reaches of the Tracadie Estuary, New Brunswick*. New Brunswick Manuscripts in Archaeology No.26, Fredericton.

Matthew, G. F.

1903 *Notes on the Discovery of a Small Cache of the French Period at Tracadie, New Brunswick*. Bulletin of the Natural History Society of New Brunswick, No. XXI Vol. 5, p.1-4.

Mott, Robert J., H  l  ne Jett   and Jo  l Guiot

2004 *Postglacial Vegetation, Climate History and Land-Sea Interaction at Island Lake, Baie des Chaleurs, New Brunswick, as Documented by Palynological Analysis*. G  ographie physique et Quaternaire Volume 58, num  ro 1, 2004, p. 109-122.

Rampton, V.N. with R.C. Gautier, J. Thibault and A.A. Seaman

1984 *Memoir 416 -Quaternary Geology of New Brunswick*. Geological Survey of Canada.

Smerthurst, Gamaliel

1905 *Historical Geographical Documents Relations to New Brunswick. Gamaliel Smerthurst's Narrative of his Journey from Nepisiguit to Fort Cumberland in 1761*. Edited by W.F. Ganong, 363-390. in Collections of the New Brunswick Historical Society No.6, Saint John.

Smith, A. C.

1886 Prehistoric remains of Tabusintac – (Letters of A.C. Smith – M.D.) Bulletin of the Natural History Society of New Brunswick No. XIX, Volume V, pp. 14-20.

Stantec Consulting Ltd.

2010a *NBDOT Environmental Background Study – Archaeological Assessment at Little Tracadie River, Route 365, Little Tracadie, Gloucester County, NB*. Ms. on file with: Archaeological Services, New Brunswick Department of Wellness, Culture and Sport.

2010b *Environmental Study Pokemouche River Bridge No.4* Report on file - New Brunswick Department of Transportation.

Suttie, Brent, with Vincent Bourgeois and Michael Nicholas

2008 *Developing Localized Predictive Models for New Brunswick, Canada. The Sevogle River Test Plot*. Manuscript on file Archaeological Services, Heritage Branch, Department of Wellness, Culture and Sport

Upton, L. F. S.

1979 *Micmacs and Colonists: Indian-White relations in the Maritimes, 1713-1867*. University of British Columbia Press, Vancouver.

Warner, B.G., K. Tolonen, and M. Tolonen.

1991 *A Postglacial History of Vegetation and Bog Formation at Point Escuminac, New Brunswick*. Canadian Journal of Earth Sciences 28:1572-1582.



Zelazney, Vincent ed.

2007 *Our Landscape Heritage: the Story of Ecological Land Classification in New Brunswick*. Department of Natural Resources New Brunswick, Fredericton.

2009 *Guide To Heritage Resource Impact Assessment in New Brunswick*. Archaeological Services, Heritage Branch, New Brunswick Department of Wellness, Culture and Sport.

Aerial Photos: 1944 – 7347-70; 1955-3900-286; 1963-6430-58; 1984 6219 line1 (500061-061); 2002-512-118. New Brunswick Department of Natural Resources (Hugh John Flemming Forestry Complex).

Archival Photos: NBPA P13/109 and P13/110. Breakwater at Tracadie 1894 and Crew on deck of vessel at Tracadie 1899.

New Brunswick Provincial Archives Grant Map #30 Saumarez Parish, Gloucester County (Grants #334 and #43).

New Brunswick Provincial Archives Land Petitions RS108 (1783-1918).

New Brunswick Provincial Archives Grant Book RS686 Index: A-J and Index: K-Z.

New Brunswick Provincial Grant Plan RS656/17G – microfiche

New Brunswick Provincial Archives Gloucester County Census 1861 (Part 1) District North Parish of Samurez – William Young Enumerator.

New Brunswick Provincial Archives Grant Plan Book RS687.

Private Collection Catalogues: (UXG) Ulysse Girouard and, (LS) Louis Savoie. On file: Archaeological Services, Heritage Branch. New Brunswick Department Wellness Culture and Sport.

MARI forms (CjDf, CkDf, CiDf) and archaeological sites maps: Tracadie, Pokemouche, Tabusintac and Little Tracadie River areas. On file: Archaeological Services, New Brunswick Department Wellness Culture and Sport.

*Predictive Model* for proposed Project Area. Archaeological Services, New Brunswick Department Wellness Culture and Sport.

Archival Photos- Canadian Museum of Civilization (Archaeological Survey of Canada) On file Archaeological Services, New Brunswick Department Wellness Culture and Sport.

<http://geonb.snb.ca/geonb/>

<http://genforum.genealogy.com/brideau/messages/104.html>

## **INDIVIDUALS CITED**

Etienne Brideau- Local resident , Little Tracadie

Vincent Bourgeois – Archaeologist. Archaeological Services, Heritage Branch, Department of Wellness, Culture and Sport.

Melissa Cummings – Design Branch, Manager Environmental Agency, New Brunswick Department of Transportation

Sister Zelica Daigle – Curator Musee Historique du Tracadie, Tracadie-Sheila.

Allen Dorion – Manager -Cartographic Unit, New Brunswick Provincial Archives, Supply and Services.

Albert Ferguson – Provincial Archaeologist / Manager- Archaeological Services, Heritage Branch, Department of Wellness, Culture and Sport.

Charles McAleenan –Forestry Officer/Wildlife Technician retired. Bathurst.

Allen Seaman - Geologist – Geological Surveys. Lands, Minerals and Petroleum, New Brunswick Department of Natural Resources.

Brent Suttie – Archaeologist. Archaeological Services, Heritage Branch, Department of Wellness, Culture and Sport.

Ed Torenvliet – Biologist. Design Branch, Department of Transportation.

Manford Wasson - Retired Teacher Miramichi.