ENVIRONMENTAL ASSESSMENT REGISTRATION STRANG'S SHORE CAMPGROUND

MURRAY CORNER

Our File No.: 278-17-C

September 2017

Prepared for:

Strang's Shore Seasonal Camping Inc.

Prepared by:



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ACRONYMS

ACCDC - Atlantic Canada Conservation Data Centre

ASU - Archeological Services Unit

CCME - Canadian Council of Ministers of the Environment

CEAA - Canadian Environmental Assessment Agency

CEAA 2012 – Canadian Environmental Assessment Act (2012)

CoA – Certificate of Approval

CoD – Certificate of Determination

COSEWIC - Committee on the Status of Endangered Wildlife in Canada

DELG - NB Department of Environment and Local Government

DPS – NB Department of Public Safety

DTI – NB Department of Transportation and Infrastructure

DFO - Department of Fisheries and Oceans Canada

EIA – Environmental Impact Assessment

ESA – Environmentally Significant Area

EMP – Environmental Management Plan

GPS – Global Positioning System

HDPE – High Density Polyethylene

IBA – Important Bird Areas

LAT – Latitude

LONG - Longitude

MBCA – Migratory Birds Convention Act

OWLS - Online Well Log System

PID – Real Property Parcel Identification Number

PDA – Project Development Area

ROW - Right-Of-Way

SAR - Species at Risk

SARA - Species at Risk Act

SOCC – Species of Conservation Concern

TRC – Technical Review Committee

VEC – Valued Environmental Component

EXECUTIVE SUMMARY

Linda and Jerry Strang operate a seasonal campground in Murray Corner, New Brunswick. The campground is located on three (3) waterfront parcels of land owned by the Strangs, and consists of 115 fully serviced lots, a communal potable groundwater supply, a secondary (back-up) water supply, a campground office and gate, laundry services consisting of two (2) washers and dryers, a communal septic tank and leaching field wastewater system, well pump house and storage shed. Strang's Shore Campground employs a summer student and a seasonal, full-time employee (Maintenance Manager).

As per Item p of Schedule A of the *Environmental Impact Assessment Regulation* "all major recreational or tourism developments, including developments which consist of changing the use of land so that it is used for recreational or tourism purposes," must undergo review to identify and if necessary, mitigate potential environmental impacts. Based on the estimated water consumption for the campground, the water supply capacity may exceed 50 cubic metres daily; therefore, a Water Supply Source Assessment was conducted as part of this Environmental Impact Assessment.

The proponent completed an Environmental Impact Assessment for the existing campground operation, as well as a proposed campground expansion consisting of 38 new RV camp sites and installation of four (4) new storage sheds. A future phase of development will consist of the addition of an in-ground swimming pool and 12 more RV camp sites. The EIA includes a Water Supply Source Assessment to determine the sustainable capacity of the existing water supply, to take place in the fall of 2017.

Based on a review of the site characteristics, the project's potential impacts and the recommended mitigation measures, no significant adverse environmental effects are anticipated from the project.

1. THE PROPONENT

1.1 NAME OF PROPONENT

The proponent is Strang's Shore Seasonal Camping Inc.

1.2 ADDRESS OF PROPONENT

Linda and Jerry Strang Owners/operators Strang's Shore Seasonal Camping Inc. 89 Moore Road Ext. Ottercreek, NB E4M 3V5

1.3 CHIEF EXECUTIVE OFFICERS

Linda and Jerry Strang

1.4 PRINCIPAL CONTACT PERSONS FOR THE PURPOSES OF THE ENVIRONMENTAL IMPACT ASSESSMENT

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1.5 PROPERTY OWNERSHIP

The project will be located on private property owned by Strang's Shore Seasonal Camping Inc.

2. THE UNDERTAKING

2.1 NAME OF THE UNDERTAKING

The name of the undertaking is Strang's Shore Campground.

2.2 BACKGROUND

Strang's Shore Campground (the "campground" or "project") is located in southeastern New Brunswick on the shore of the Northumberland Strait, in Westmorland County, New Brunswick. The campground is a private enterprise owned and operated by Jerry and Linda Strang.

The campground is located on private land owned by Strang's Shore Seasonal Camping Inc., and comprises 115 fully serviced RV lots, a communal potable water supply, a tank and leaching field wastewater treatment system and various outbuildings supporting the campground operation.

The campground is located approximately 10 km from the NB-PEI Confederation Bridge, 40 km from the Nova Scotia Border, 60 km from the City of Moncton and 45 km from Shediac on provincial local numbered highway Route 955.



Photo No. 1: Strang's Shore Seasonal Camping Entrance



Photo No. 2: Campground Entrance Gate and Office

The campground began as a small, private site with three friends' recreational campers (RVs) in 2010. However, due to the growing demand, in 2012 Strang's Shore Seasonal Camping was incorporated and began operating, and has expanded since then:

- 2012: 3 seasonal campers;
- 2013: 37 seasonal campers;
- 2014: 48 seasonal campers;
- 2015: 54 seasonal campers;
- 2016: 80 seasonal campers and
- 2017: 96 seasonal campers.

The communal septic system, including the first tanks and phase 1 of the leaching field, were installed and commissioned in 2012, and expanded in 2016.

The proponents would like to complete the proposed expansion of the park facilities in 2017-2018.

2.3 PROJECT OVERVIEW

Strang's Shore Seasonal Camping Inc. is conducting an environmental assessment of their campground development, as required by the *Environmental Impact Assessment Regulation*, to determine their current environmental footprint and to obtain compliance with the <u>Clean Environment Act</u>. The assessment will also identify, and propose mitigation for, potential impacts to neighbouring properties. Finally, the

proponent is also proposing to expand the campground, within their existing properties, to complete the campground.

At present, the campground consists of 115 serviced RV sites on three (3) properties owned by Strang's Shore Seasonal Camping Inc. The campground consists of the following components:

- <u>Campground</u>: 115 fully serviced seasonal RV camp sites, consisting of gravel pads, electrical, water and wastewater hook-ups and camp fire pits. Some long-term tenants have added wood decks or other structures;
- <u>Campground access road/driveways:</u> The campground has an entrance driveway approximately 200 m in length, with an access/security gate and an exit drive approximately 260 m in length. In addition to these, the campground has three roads connecting the camp site;
- Potable water supply: Potable water is supplied to the tenants from a 120-foot-deep 6-inch well located near the centre of the campground. The well is within a secured pump house with a pressure-monitoring system. Water is sampled and analyzed annually for bacteria and the results are submitted to the Department of Health for review. To date, no water treatment has been required;
- Wastewater treatment system: The wastewater treatment system was designed by a professional engineer and installed in 2012, at which time it consisted of five (5) tanks, a lift station and a septic leaching field. The system was expanded in 2016, and now consists of seven (7) tanks, a lift pump, an enlarged septic leaching field and associated PVC underground collection piping. The system was installed by a certified installer and approved by the Department of Health;
- Campground office building: A 12 x 12 wood-framed building located at the entrance gate;
- <u>Storage sheds</u>: There are three (3) storage sheds used for storing various campground equipment, decorations and tools, and,
- Grassed area and beach: The campground is located on the shore of the Northumberland Strait an approximately 30 m grassed buffer is located between the normal high-water mark and the nearest row of RV sites, which include picnic tables and horseshoe pits. Additionally, there is a small, rocky beach located along the shore which is used by campers.

The expansion phase of the project will consist of the following:

- Camp sites: The campground will add approximately 38 additional RV camp sites;
- Construction/installation of a 40' x 60' storage shed;
- Construction/installation of a 24' x 32' repair/storage shed:
- Construction/installation of a 12'x16' storage shed;
- Construction of a parking lot.

Future phases may include the following:

- The construction of an additional 12 40' x 60' camp sites;
- Construction of a fenced in 20' x 40' swimming pool;
- If necessary, the expansion of the existing leaching field;
- If necessary, based on the WSSA, the development of the second water supply.

Refer to Figure 2 for an overview of the campground project components.



Photo No. 3: Well Pumphouse (Left) and Shed

2.4 PURPOSE/RATIONALE/NEED FOR THE UNDERTAKING

Strang's Shore Campground is a private business that employs a summer student, a seasonal employee, provides income to the campground owners, and contributes to the local economy.

2.5 PROJECT LOCATION

The proposed project is located at civic address 1639, Route 955, Murray Corner, NB (Westmorland County). The campground consists of three private parcels, identified by Service New Brunswick PID Nos. 00837088, 70188826 and 70563457 (refer to project location Figure 1.0).

The parcel is located within the Southeast Regional Service Commission's (Tantramar Rural) planning area in the "Rural" zone, which permits the development of seasonal campgrounds.

The centre of the campground is geo-referenced at LAT 46°, 10', 45.77" N, LONG 63°, 58', 26.54" W.



Figure 1: Project Location

According to Service New Brunswick, the total area of the subject properties, which make up Strang's Shore Campground, is approximately 7.83 hectares in size. The property is bordered to the north by the Northumberland Strait, to the east by a cottage and a vacant parcel, to the south by Route 955, and to the west by a collection of cottages located on Cape Bruin Road. Also to the west is the Murray Beach Provincial Park beach and campground, which has 111 sites and eight (8) cabins.

No unmapped, regulated or Provincially Significant Wetlands or watercourses are located within or near the campground/subject properties.

2.6 SITING CONSIDERATIONS

The project site has a number of favourable elements:

- a. The subject properties are owned by the proponent;
- b. The property is correctly zoned for the intended use;
- c. The proponent has obtained the appropriate permits from the Regional Service Commission and Department of Health;
- d. The majority of the campground infrastructure is already in place;
- e. The site is outside of any municipal water supplies;

- f. The site contains no unique environmental features (wetlands, Environmentally Significant Areas, Species at Risk critical habitat, etc.), and
- g. There are no domestic water supplies downgradient of the site.

2.7 PHYSICAL COMPONENTS AND DIMENSIONS OF THE UNDERTAKING

Strang's Shore Seasonal Camping has been operating since 2012. The following sections describe the existing, as well as the proposed, components of the project and projected timelines for construction, where applicable.

2.7.1 Existing Campground

A. <u>Campground</u> – The existing campground houses 115 fully serviced RV camp sites, consisting of gravel parking spaces ("pads"), electrical, water and wastewater hook ups, and camp fire pits. Some long-term/annual tenants have added wood decks or other structures.

Construction of each site included the excavation and connection of the water and wastewater infrastructure, electrical entrance and the placing and spreading of crushed rock on the pad.

B. <u>Campground access roads:</u> The campground has an entrance driveway approximately 200 m in length, with an access/security gate and an exit drive approximately 260 m in length. In addition to these, the campground has three roads connecting the camp sites. All roadways are approximately 4 m (12 feet) wide. Water and wastewater infrastructure mainlines are located between the camp sites (not under the gravel roads).

Construction of the roads included the placement and spreading of crushed rock/gravel.

The total area of gravel roadway in the park is $3,675 \text{ m}^2$ (0.37 ha) out of a total area of 7.8 hectares.

C. <u>Potable water supply</u>: Potable water is supplied to the tenants from a 120-foot deep, 4-inch well located near the centre of the campground. The well is within a secured pump house with a pressure tank, pressure-monitoring system and electrical entrance. The well was drilled in 2010 by Charlie Herman Chappell Well Drilling.

Water is sampled and analyzed annually for bacteria and the results are submitted to the Department of Health for review. To date, water results have been negative and no water treatment has been required. For additional information on the water supply, please refer to Appendix H: Water Supply Source Assessment Step 1 Application.

- D. <u>Wastewater treatment system</u>: The wastewater treatment system was designed by Terry Cormier, P.Eng. of Mentra Consultants Ltd., and installed in two phases (2012 and 2016), and consists of:
 - 2 3,000 gal. tank;
 - 1 2,600 gal. tank;
 - 3 2,000 gal. tank;
 - 1,000 gal. pump chamber tank;
 - 150 mm PVC pipe wastewater collection system;

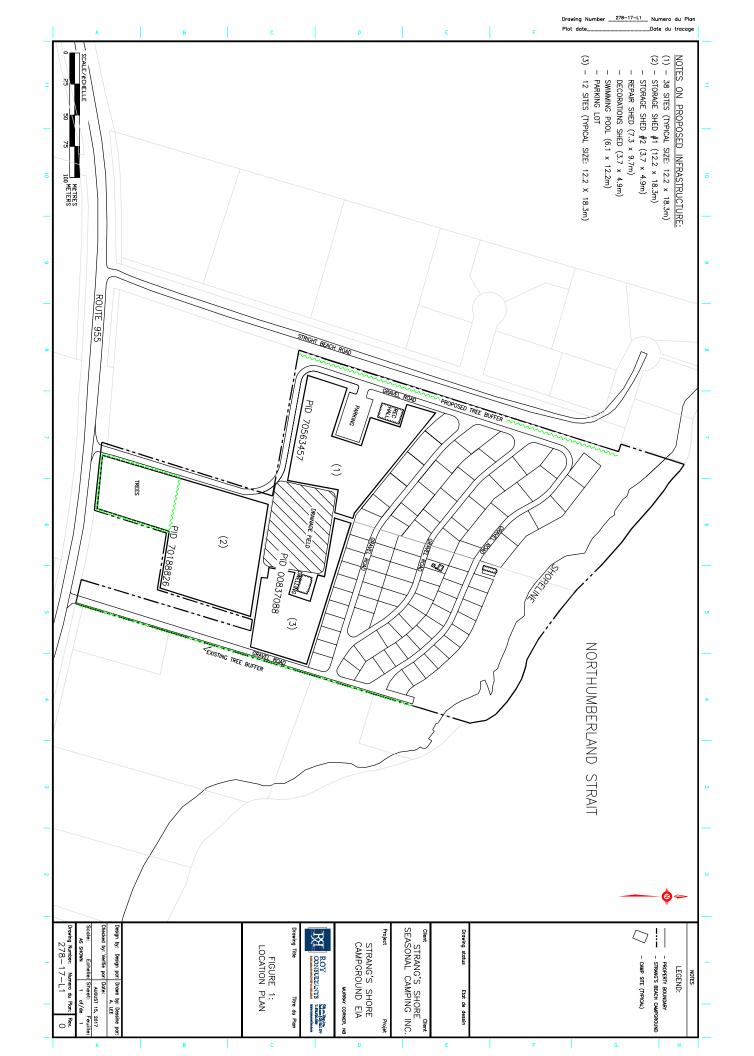
- 4 septic clean outs;
- Septic leaching field, and
- Hydrotek distribution valve (divides the leaching field into six zones).

Refer to the technical diagrams 2-4 in Appendix G.



Photo No. 4: Vacant Camp Site - Note Gravel Pad, Electrical Entrance and Septic Cover

E. <u>Campground Office Building</u>: A 12 x 12 wood-framed building located at the entrance gate houses the campground office, a small lending library and a fridge where snacks and drinks are sold.



- F. Well Pumphouse: The pump house consists of an 8' x 10' shed housing the following:
 - Domestic water well;
 - Pentek water pressure control system;
 - Water system pressure tank;
 - Electrical entrance, and
 - Miscellaneous tools and equipment.



Photo No. 5: Storage Shed near Campground Exit

- G. <u>Storage shed:</u> Three (3) existing storage sheds are located throughout the campground and consist of "baby barn" wooden sheds on blocks and are used for storing various campground decorations, tools and equipment.
- H. Other campground features: Other features of the campground include electrical power poles, GFL garbage and recycling bins, the 30+ metre-wide grassed area along the coast line and the small beach.

2.7.2 Proposed Additions

2.7.2.1 PID No. 70563457

- A. Construction of 38 additional RV camp sites (40' x 60' each), and
- B. Expansion of septic leaching field (only if necessary)

2.7.2.2 PID No. 70188826

- A. Construction of a 40'x60' wood frame storage shed;
- B. Construction of a 24'x32' wood frame equipment storage shed;
- C. Construction of a 12'x16' wood frame storage shed (campground decorations), and
- D. Development of the existing, secondary water supply (only if necessary).

FUTURE PHASE

The following project components are not anticipated to be completed within the next three (3) years, and are considered part of the "long-term" plans.

2.7.2.3 PID No. 00837088

- A. Construction of 12 additional RV camp sites, and
- B. Construction of a 20'x40' in-ground swimming pool.

2.8 CONSTRUCTION, OPERATION AND MAINTENANCE DETAILS

Refer to section 2.7.1 above for details of the development of the existing campground.

The Water Supply Source Assessment, consisting of deepening the observation well and conducting a step-test and pump test as per the requirements of the NB Department of Environment and Local Government *Water Supply Source Assessment Guidelines*, is scheduled to take place in late October, after the conclusion of the camping season.

The proposed expansion of the campground will be initiated, weather permitting, in the fall of 2017 and/or the spring of 2018.

2.9 REGULATORY APPROVALS

- i. The Province of New Brunswick's Department of Environment and Local Government (DELG) regulates the siting, construction, operation, maintenance and decommissioning of major tourism developments in New Brunswick under the <u>Clean Environment Act</u>:
 - Item p, Schedule A of the Environmental Impact Assessment (EIA) Regulation states: "all major recreational or tourism developments, including developments which consist of changing the use of land so that it is used for recreational or tourism purposes". As such, Strang's Shore Seasonal Camping requires registration and review under the EIA process.
- ii. The development of a seasonal campground business within the "Rural" zone of the rural plan is a permitted use and does not require a development permit. The Regional Service Commission planning authority requires development permits for new construction or installation of accessory buildings (i.e. the proposed new sheds). Strang's Shore Seasonal Camping Inc. obtained a building permit for the existing outbuildings and will obtain new permits for the proposed storage sheds (see permit in Appendix G).

- iii. The installation of a septic system for a commercial tourism development requires a permit from the Department of Health under the <u>Public Health Act</u> *General Regulation*. The proponent obtained a permit for the septic system in 2016 refer to Appendix G for a copy of the permits and septic system design.
- iv. The project does not require federal authorizations or permits.

3. DESCRIPTION OF THE EXISTING ENVIRONMENT

3.1 PHYSICAL AND NATURAL FEATURES

General

The subject site consists of three (3) connected parcels owned by Strang's Shore Seasonal Camping Inc. The subject properties consist of former agricultural fields, which extended to the edge of the Northumberland Strait. The majority of the site is open, with vegetation consisting primarily of grass (lawn) and shrubs along the east and west perimeters and some mature, common trees at the south edge of the campground. A portion of the site (PID No. 70188826) is comprised of mature vegetation between the campground and Route 955.

Geology

The subject site is underlain by Late Carboniferous-aged sedimentary rocks of the Pictou Group, Richibucto Formation (Smith, 2007). The Richibucto Formation is composed mainly of sandstone interbedded with red mud rock and has good aquifer potential with hydraulic conductivity varying from 1.4 x 10⁻⁶ to 1.9 x 10⁻⁴ m/s (Rivard et al, 2008). Based on a well log search of the area within 500 metres of PID 00837088, the local aquifer is comprised of fractured sandstone bedrock. From a review of seven (7) well logs, well depths range between 65 and 241 feet. Well yields ranged from 3 to 25 Igpm (19.6 to 163.6 m³/day).

Topography

The area in question is, in general terms, flat, with land gently sloping towards the Northumberland Strait (to the north). Surface water from the site typically flows towards the Northumberland Strait (northeast) via overland flow.

The site is approximately 3 m in elevation above the Northumberland Strait's normal high-water mark.

Surface Water

There are no unmapped or regulated wetlands or watercourses within the campground's footprint. The nearest watercourses are Trout Brook (1.05 km to the west) and Scott Brook (1.2 km to the east), which are freshwater watercourses with associated riparian coastal wetlands. Immediately adjacent and north of the project is the Northumberland Strait, which separates New Brunswick from Prince Edward Island. Prevailing currents are dependent on the tides; however, they are primarily from the northwest (Natural History of Nova Scotia, Volume 1).

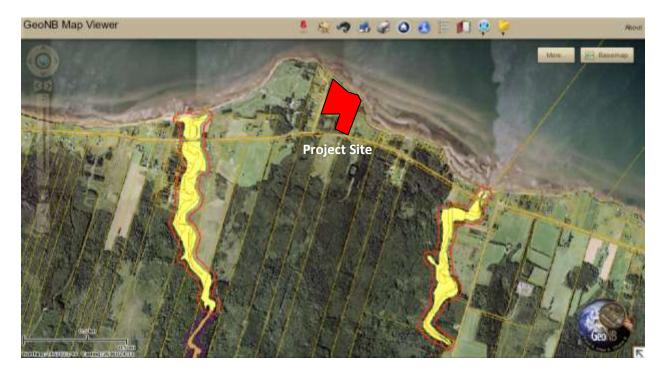


Figure No. 3: Provincially Significant Wetlands in the Vicinity of the Campground (GeoNB)

Groundwater

There are no municipal or industrial water supplies in proximity to the subject site. Residences in the region obtain their potable water from individual private wells. A review of the DELG Online Well Log System (OWLS) identified 33 domestic water supplies within 1,500 m of the subject site. For more detailed information, please refer to the Step 1 Water Supply Source Assessment application in Appendix H.

Vegetation

The subject property is sparsely vegetated. Prior to the installation of campsites, the subject site was primarily an agricultural (hay) field with a small area of mature, mixed conifers. The majority of the site is lawn/grass, with the southeast perimeter consisting of common shrubs and tree species, and a portion of the site near Route 955 onto which are found mature trees, consisting primarily of Black Spruce (*Picea glauca*), Trembling Aspen (*Populus tremuloides*), White Pine (*Pinus strobus*) and White Birch (*Betula papyrifera*). The majority of the perimeter shrub species are Wild Rose (*Rosa spp.*), Pin Cherry (*Prunus pensylvanica*), Speckled Alder (*Alnus rugosa*) and typical New Brunswick wildflower species.



Photo No. 6: Grassed Buffer Area between Campground and Northumberland Strait

Wildlife and Wildlife Habitat

The subject site is primarily an open field with RV campsites and outbuildings. Larger wildlife does not inhabit or transit the site. Common, smaller species such as racoons, rodents and amphibians are assumed to transit the campground area, but primarily inhabit the vegetated perimeter. Garbage and recycling bins are kept covered to prevent attracting wildlife and campers are encouraged to keep food and other attractants inside their RVs. As a recreational campground, the site property houses a number of RVs, vehicles and is inhabited with residents throughout the summer months; as such, the site is not considered suitable wildlife habitat.

Migratory Birds

Strang's Shore Seasonal Camping Inc. recognizes that migratory birds are an important consideration in any project. Environment Canada regulates the protection of migratory birds through the <u>Migratory Birds Convention Act</u> (MBCA), which protects migratory birds, their eggs, nests and their young through the *Migratory Birds Regulations* (MBR).

"Under Section 6 of the *Migratory Birds Regulations* (MBR), no person shall disturb, destroy or take a nest or egg of a migratory bird; or to be in possession of a live migratory bird, or its carcass, skin, nest or egg, except under authority of a permit. It is important to note that under the current MBR, no permits can be issued for the incidental take of migratory birds caused by development projects or other economic activities. Furthermore, Section 5.1 of the MBCA describes prohibitions related to deposit of substances harmful to migratory birds:

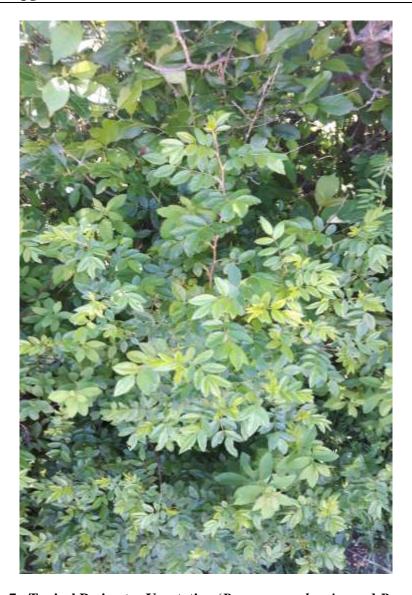


Photo No. 7: Typical Perimeter Vegetation (Prunus pensylvanica and Rosa carolina)

Migratory birds protected by the MBCA include all seabirds except cormorants and pelicans, all waterfowl, all shorebirds, and most landbirds (birds with principally terrestrial life cycles). Most of these birds are specifically named in the Environment Canada publication, *Birds Protected in Canada under the Migratory Birds Convention Act*, Canadian Wildlife Service Occasional Paper No. 1.

- "5.1 (1) No person or vessel shall deposit a substance that is harmful to migratory birds, or permit such a substance to be deposited, in waters or an area frequented by migratory birds or in a place from which the substance may enter such waters or such an area.
- (2) No person or vessel shall deposit a substance or permit a substance to be deposited in any place if the substance, in combination with one or more substances, results in a substance in waters or an area frequented by migratory birds or in a place from which it may enter such waters or such an area that is harmful to migratory birds."

Species at Risk

Canada's <u>Species at Risk Act</u> (SARA) is one of three major components in the Government of Canada Strategy for the Protection of Species at Risk. It is designed as a key tool for the conservation and protection of Canada's biological diversity and fulfills an important commitment under the United Nations Convention on Biological Diversity. New Brunswick also has a <u>Species at Risk Act</u>, which complements the federal Act.

The purpose of **SARA** is to:

Prevent wildlife species from becoming extinct or extirpated (lost from the wild in Canada);

Help in the recovery of extirpated, endangered or threatened species; and Ensure that species of special concern do not become endangered or threatened.

Information was requested from the Atlantic Canada Data Conservation Centre (ACCDC) for observations of rare and/or endangered wildlife species within a 5 km radius of the subject site (Tables 2, 3 and 4). Refer to table 1 for S-Rank Definitions.

A review of each species' habitat requirements was completed and compared with observations obtained during site visits. A summary of this analysis is presented in section 4.

A survey was conducted of the site, targeting Bank Swallow nests within the coastal section of the project site. Bank Swallow nesting cavities were identified on the adjacent properties to the east and west of the subject site, but not within the subject property. Refer to section 3.1.1.2 below and Appendix D for more information.

Strang's Shore Seasonal Camping Inc. has installed a number of Tree Swallow houses in the campground which are occupied by swallows during the summer months.

Table 1: ACCDC S-rank and Rarity Definitions

	Atlantic Canada Conservation Data Centre (ACCDC) S-Rank www.accdc.com/en/rank-definitions.html						
	S-RANK DEFINITIONS						
SX	Presumed Extirpated : Species or community is believed to be extirpated from the province. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.						
S1	Critically Imperiled - Critically imperiled in the province because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state/province.						
S2	Imperiled - Imperiled in the province because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state/province.						

S3	(often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.							
S4	Apparently Secure - Uncommon but not rare; some cause for long-term concern due to declines or other factors.							
S5	Secure - Common, widespread, and abundant in the province.							
SNR	Unranked - Nation or state/province conservation status not yet assessed.							
SU	Unrankable - Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.							
SNA	Not Applicable - A conservation status rank is not applicable because the species is not a suitable target for conservation activities.							
S#S#	Range Rank - A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species or community. Ranges cannot skip more than one rank (e.g., SU is used rather than S1S4).							
Not Provided	Not Provided Species is not known to occur in the province.							
	BREEDING STATUS QUALIFIERS							
N	Nonbreeding - Conservation status refers to the non-breeding population of the species in the province.							
В	Breeding - Conservation status refers to the breeding population of the species in the province.							
M	Migrant - Migrant species occurring regularly on migration at particular staging areas or concentration spots where the species might warrant conservation attention. Conservation status refers to the aggregating transient population of the species in the province.							
?	Inexact or uncertain: Denotes inexact or uncertain numeric rank.							
	SPECIES AT RISK (SARA) (CANADA AND NEW BRUNSWICK)							
Extirpated	A wildlife species that no longer exists in the wild in Canada, but exists elsewhere in the wild.							
Endangered (E)	A wildlife species facing imminent extirpation or extinction.							
Threatened (T)	reatened (T) A wildlife species that is likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction.							
Special Concern (SC)	A wildlife species that may become threatened or endangered because of a combination of biological characteristics and identified threats.							
NBDNR GENERAL STATUS OF WILDLIFE								

At risk	Species for which a formal assessment has been completed, and determined to be at risk of extirpation or extinction. To be described by this category, a species must be either listed as endangered or threatened by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), or the New Brunswick equivalent.							
May be at risk	Species or populations that may be at risk of extirpation or extinction, and are therefore candidates for a detailed risk assessment by COSEWIC or the New Brunswick equivalent.							
Sensitive	Species which are not believed to be at risk of extirpation or extinction, but which may require special attention or protection to prevent them from becoming at risk.							
Secure	Species that are not believed to be at risk, may be at risk, or sensitive. These are generally species that are widespread and/or abundant. Although some secure species may be declining, their level of decline is not felt to be a threat to their status in the province.							
COSEWIC								
Extinct	A wildlife species that no longer exists.							
Extirpated	A wildlife species that no longer exists in the wild in Canada, but exists elsewhere.							
Endangered	A wildlife species facing imminent extirpation or extinction.							
Threatened	A wildlife species that is likely to become an endangered if nothing is done to reverse the factors leading to its extirpation or extinction.							
Special Concern	Special A wildlife species that may become threatened or endangered because of a combination							
Not at Risk (NAR)	A wildlife species that has been evaluated and found not to be at risk of extinction given the current circumstances.							
Data Deficient (DD)	A category that applies when the available information is insufficient (a) to resolve a wildlife species's eligibility for assessment or (b) to permit an assessment of the wildlife species's risk of extinction.							

3.1.1.1 Species at Risk - Flora

The following three (3) species of rare flora were identified by the ACCDC scan as being present within a 5 km radius of the project site (Table 3). A comparison of the site characteristics with each species' habitat requirements was completed and the results detailed in section 4.

Table No. 2: Flora Species of Conservation Concern Observed Within a 5 km Radius of Site

Scientific Name	Common Name	COSEWIC Status	SARA Status	Provincial Legal Prot.	Prov. Rarity Rank	Prov. GS Rank	# Recs.	Distance from Site
	Legally Listed Taxa							
Atriplex	Frankton's	-	-	-	S2	4 Secure	1	1.4+/-
franktonii	Saltbush							1.0
		Speci	es of Conserv	vation Concer	n			
Liparis loeselii	Loesel's	-	-	-	S3	4 Secure	1	3.9+/-
	Twayblade							1.0
Rumex	Sea-Side	-	-	_	S3S4	4 Secure	1	1.0+/-
maritimus	Dock							0.0

<u>Frankton's Saltbush (Atriplex franktonii)</u>, also commonly known as Goosefoot, is an annual salt-tolerant plant typically found in nutrient rich coastal wetlands and along salt water shorelines.

Based on the habitat requirements of this species, the project is not anticipated to adversely impact the Frankton's Saltbush.

<u>Loesel's Twayblade</u> (*Liparis loeselii*), also commonly known as bog twayblade or fen orchid, is a small, bright green perennial member of the orchid family which is typically found in fens and bogs. It requires wet, organic soils, often in fens, bogs or along shores.

Based on the habitat requirements of this species, the project is not anticipated to adversely impact the Loesel's Twayblade.

<u>Seaside Dock (Rumex martimus)</u>, also known as the golden dock, is a rare plant previously introduced to North America which is typically found in alluvial, riparian and coastal wetlands, but can occasionally occur in upland, non-aquatic (terrestrial) habitat (wetland indicator code FACW). This species is commonly referred to as growing on recently disturbed ground (a "ruderal" species), such as clear cuts.

Based on the habitat requirements of this species, the project is not anticipated to adversely impact the Seaside Dock.

3.1.1.2 Species at Risk – Fauna

A request to the ACCDC returned a list of 21 birds and one (1) mammal SOCC observed within a 5 km radius of the subject site, including waterfowl, shorebird and songbird species, among others. Each species' breeding/nesting windows and habitat requirements were reviewed and compared to the characteristics of the subject site. Table 5 provides details of the 21 birds and one mammal species identified in the ACCDC report.

Table No. 3: Vertebrate Species of Conservation Concern within a 5 Km Radius of Site (ACCDC)

	Scientific Name	Common Name	COSEWIC	SARA	Provincial Legal Prot.	Provincial Rarity Rank	Provincial GS Rank	# of Recs.	Distance (km)
				Legally	Listed Taxa				
1	Hirundo rustica	Barn Swallow	Threatened	-	Threatened	S2B, S2M	3 Sensitive	11	0.4±1.0
2	Riparia riparia	Bank Swallow	Threatened	-	-	S2S3B, S2S3M	3 Sensitive	8	0.6±7.0
3	Wilsonia canadensis	Canada Warbler	Threatened	Threatened	Threatened	S3B, S3M	1 At Risk	1	0.6±7.0
4	Dolichonyx oryzivorus	Bobolink	Threatened	-	Threatened	S3B, S3M	3 Sensitive	9	0.4±1.0
5	Cocco- thraustes vespertinus	Evening Grosbeak	-	-	-	S3B, S3S4N, SUM	3 Sensitive	1	0.6±7.0

6	Contopus virens	Eastern Wood Pewee	Special Concern	-	Special Concern	S4B, S4M	4 Secure	1	1.9±3.0
7	Sterna hirundo	Common Tern	Not at Risk	-	-	S3B, SUM	3 Sensitive	1	3.8±2.0
8	Bartramia longicauda	Upland Sandpiper	-	-	-	S1B, S1M	3 Sensitive	8	0.6±7.0
9	Mimus polyglottis	Northern Mockingbird	-	-	-	S2B, S2M	3 Sensitive	5	0.6±7.0
10	Petrochelidon Pyrrhonota	Cliff Swallow	-	-	-	S2S3B, S2S3M	3 Sensitive	5	0.6±7.0
11	Cathartes aura	Turkey Vulture	-	-	-	S3B, S3M	4 Secure	1	4.6±2.0
12	Charadrius vociferous	Killdeer	-	-	-	S3B, S3M	3 Sensitive	2	4.6±2.0
13	Tringa semipalmata	Willet	-	-	-	S3B, S3M	3 Sensitive	3	0.6±7.0
14	Somateria mollissima	Common Eider	-	-	-	S3B, S4M, S3N	4 Secure	1	0.4±1.0
15	Dendroica tigrina	Cape May Warbler	-	-	-	S3B, S4S5M	4 Secure	1	0.6±7.0
16	Mergus serrator	Red- breasted Merganser	-	-	-	S3B, S5M, S4S5N	4 Secure	1	3.8±2.0
17	Bucephala albeola	Bufflehead	-	-	-	S3M, S3N	3 Sensitive	1	4.5±10.0
18	Tyrannus tyrannus	Eastern Kingbird	-	-	-	S3S4B, S3S4M	3 Sensitive	3	0.6±7.0
19	Actitis macularius	Spotted Sandpiper	-	-	-	S3S4B, S5M	4 Secure	3	0.6±7.0
20	Larus delawarensis	Ring-billed Gull	-	-	-	S3S4B, S5M	4 Secure	1	3.8±1.0
21	Morus bassanus	Northern Gannet	-	-	-	SHB, S5M	4 Secure	1	0.4±1.0
22	Puma concolor pop.1	Eastern Cougar	Data Deficient	-	Endangered	SU	5 Undetermined	1	3.3±1.0

<u>Barn Swallow</u> (*Hirundo rustica*) has a SARA/COSEWIC and NB Status of Threatened, a provincial rarity rank of S3B S2M and a S-rank of 3-Sensitive. Barn swallows typically require open areas such as fields and grassland for feeding and nest under the eaves of structures like barns. The project site is suitable for Barn Swallows to forage on flying insects, above the campground. No Barn Swallow nests were observed on the project site; however, the proponent has installed swallow houses, which may contain barn swallows. The project is not anticipated to adversely impact this species.

<u>Bank Swallow (Riparia riparia)</u> has a SARA/COSEWIC status of Threatened, a provincial rarity rank of S2S3B, S2S3M and a S-rank of 3-Sensitive. Bank Swallows typically require steep banks, such as riverbanks or ocean bluffs, stockpiled soil or gravel pits as nesting habitat, preferably near open terrestrial

habitat for hunting flying insects (grassland, meadows, pastures, etc.). The proposed project is an open area adjacent to the Northumberland Strait and neighbouring fields, which is suitable for Bank Swallow foraging.

Roy Consultants commissioned a survey by a qualified biologist on August 31st, 2017, to identify any Bank Swallow nesting cavities in the vicinity of the project. Although swallow species had already vacated the area for fall migration, Bank Swallow nest cavities were identified along the shoreline on the **adjacent** properties to the east and west of the subject site, but not within the project property. Refer to section Appendix D for the survey report.

The coastline of the site property contains large cobbles and boulders which were previously placed there for bank stabilization to counter-act shoreline erosion, and is therefore not suitable nesting habitat.

<u>Canada Warbler</u> (*Wilsonia Canadensis*) has a SARA/COSEWIC and NB status of Threatened, a rarity rank of S3B, S3M and a S-rank of 1-At Risk. Canada warblers prefer moist thickets or forested wetlands for breeding. The project does not have suitable Canada Warbler habitat and is therefore not anticipated to adversely impact suitable breeding habitat for this species.

<u>Bobolink (Dolichonyx oryzivorus)</u> has a SARA/COSEWIC and Provincial status of Threatened, a provincial rarity rank of S3B, S3M and a S-rank of 3-Sensitive. Bobolinks prefer to nest in tall grasslands and hayfields, particularly field remnants reverting back to taller vegetation/shrubs. The project site does not have suitable Bobolink habitat and therefore is not anticipated to adversely impact this species.

Evening Grosbeak (*Coccothraustes vespertinus*) has a NB status of Secure, a provincial rarity ranking of S3S4B/S4S5N and an S-Rank of 3-Sensitive. These birds often breed in Northern Canada in mature coniferous forests. The project does not have suitable Evening Grosbeak habitat and is therefore not anticipated to adversely impact this species.

<u>Eastern Wood-Pewee</u> (*Contopus virens*) has a COSEWIC and Provincial status of Special Concern, a provincial rarity rank S4B, S4M and an S-Rank of 4-Secure. It prefers deciduous forests and woodlands, but can be found in nearly any forest habitat, including small woodlots, provided they are relatively open. The project does not have suitable habitat for Eastern Wood-pewee and is therefore not anticipated to adversely impact this species.

Common Tern (*Sterna hirundo*) has a COSEWIC status of "Not at Risk", a provincial rarity rank of S3B, SUM, and S-rank of 3-Sensitive. The Common Tern is a small water bird that typically nests on the ground on shorelines, islands or artificial islands created for the purpose. Common terns do not typically venture over land, even for water, since they drink salt water from the ocean. The project site does not have suitable nesting habitat for the Common Tern and is therefore not anticipated to adversely impact this species.

<u>Upland Sandpiper (Bartramia longicauda)</u> has a provincial rarity rank of S1B, S1M and an S-rank of 3-Sensitive. The Upland Sandpiper is a ground forager, which prefers to nest in open, low-cut fields or plains, and can often be found around airports. The project site does not have suitable habitat for the Upland Sandpiper and is therefore not anticipated to adversely impact this species.

Northern Mockingbird (*Mimus polyglottos*) has a provincial rarity ranking of S2B, S2M and an S-rank of 3-Sensitive. The Northern Mockingbird can be found in a variety of habitats, including in among human habitations, suburbs, forest edges, etc. This species places its nests in trees or shrubs, up to 60 feet off the

ground. The project site may have suitable foraging habitat, but does not have suitable nesting habitat for this species and is therefore not anticipated to adversely impact this species.

<u>Cliff Swallow (Petrochelidon pyrrhonota)</u> has a provincial rarity rank of S2S3B, S2S3M and an S-rank of 3-Sensitive. The Cliff Swallow typically builds its nest along cliff sides, caves, buildings or bridges, and the nest is usually located at the juncture between a vertical wall and a horizontal overhang. Cliff Swallows generally forage over or near water, in open fields or grassland. The project is comprised of suitable foraging habitat for Cliff Swallows, but does not have suitable nesting habitat and is therefore not anticipated to adversely impact this species.

<u>Turkey Vulture (Cathartes aura)</u> has a provincial rarity rank of S3B, S3M and an S-rank of 4-Secure. The Turkey Vulture may be found in a variety of habitats, searching for carrion. This species' preferred nesting habitat is as varied as their foraging habitat and can include ground-nesting, nesting in caves, ledges, burrows or hollow logs, even abandoned nests of other large birds. Turkey Vulture nests are usually away from human disturbance/activities. The project site does not have suitable nesting habitat and is therefore not anticipated to adversely impact this species.

<u>Killdeer (Charadius vociferous)</u> has a provincial rarity rank of S3B, S3M and an S-rank of 3-Sensitive. The Killdeer prefers open areas with low vegetation (or none) such as golf courses, lawns, parking lots, pastures, fields, sandbars and mudflats. The Killdeer nest is a small scraped-out depression on the ground. The project site is comprised of suitable nesting habitat for the Killdeer. Refer to section 4 for more information.

<u>Willet (Tringa semipalmata)</u> has a provincial rarity rank of S3B, S3M and an S-rank of 4-Secure. The Willet is a large shorebird that prefers to nest in dunes, sandy beaches or coastal marshes. The project site does not have suitable nesting habitat and is therefore not anticipated to adversely impact this species.

<u>Common Eider (Somateria mollissima)</u> has a provincial rarity rank of S3B, S4M, S3N and an S-rank of 4-Secure. The Common Eider is a large sea duck, which typically nests in a depression on the ground, hidden in vegetation, on coastal islands or along ponds or lagoons near the ocean. The project site does not have suitable nesting habitat and is therefore not anticipated to adversely impact this species.

<u>Cape May Warbler (Dendroica tigrina)</u> has a provincial rarity rank of S3B, S4S5M and an S-rank of 4-Secure. A small songbird of the boreal forest, this species requires dense coniferous forest for breeding and nesting. The project site does not have suitable nesting habitat and is therefore not anticipated to adversely impact this species.

<u>Red-Breasted Merganser (Mergus serrator)</u> has a provincial rarity rank of S3B, S5M, S4S5N and an Srank of 4-Secure. This diving fish-eater can be found in fresh and saltwater waterbodies. The project site does not have suitable nesting habitat and is therefore not anticipated to adversely impact this species.

<u>Bufflehead (Bucephala albeola)</u> has a provincial rarity rank of S3M, S3N and an S-rank of 3-Sensitive. The Bufflehead's breeding range does not typically extend south of New Brunswick, and typically nests in tree cavities in mixed forest. During migration, the Bufflehead prefers shallow saltwater bays. The project site does not have suitable nesting habitat and is therefore not anticipated to adversely impact this species.

<u>Eastern Kingbird</u> (*Tyrannus tyrannus*) has a provincial rarity rank of Sensitive and an S-rank of S3S4B. Eastern Kingbirds prefer open habitats with patchy shrubs and trees such as yards, fields, wetlands and

orchards for breeding and nest in trees or large shrubs. The project site does not have suitable nesting habitat and is therefore not anticipated to adversely impact this species.

<u>Spotted Sandpiper (Actitus macularius)</u> has a provincial rarity rank of S3S4B, S3S4M and an S-rank of 4-Secure. This species is commonly found near fresh and salt water shorelines and requires an open area near a dense vegetation edge. The shoreline adjacent to the project site is suitable for foraging for the Spotted Sandpiper; however, the project site does not have suitable nesting habitat and therefore the project is not anticipated to adversely impact this species.

<u>Ring-Billed Gull (Larus delawarus)</u> has a provincial rarity rank of S3S4B, S5M and an S-rank of 4-Secure. This medium-sized gull can be found in estuaries, beaches, mudflats, coastal waters, inland agricultural land and urban areas. The project site houses no Ring-Billed Gulls or suitable nesting habitat and therefore the project is not anticipated to adversely impact this species.

<u>Northern Gannet (Morus bassanus)</u> has a provincial rarity rank of SHB, S5M and an S-rank of 4-Secure. This shorebird nests in a few offshore island colonies on inaccessible cliffs and forages offshore. The project site does not have suitable nesting habitat and is not anticipated to adversely impact this species.

<u>Eastern Cougar (Puma concolor)</u> has an "undetermined" status in New Brunswick – evidence of this species is primarily anecdotal, with the last confirmed evidence of a cougar in New Brunswick occurring in 1932 (Libby, 2000). Furthermore, the cougars' preferred habitat consists of densely forested habitat away from human intervention; based on this, the subject site is not considered suitable cougar habitat and therefore is not anticipated to adversely impact this species.

3.1.1.3 Species of Conservation Concern – Invertebrate

No invertebrate SOCC were identified in the ACCDC scan, and the project is not anticipated to impact invertebrate SOCC.

3.1.1.5 Location Sensitive Species of Conservation Concern

In addition to the species identified by ACCDC as occurring within a 5 km radius of the subject site, the following species are location-sensitive, meaning that they are known to occur within the region and therefore may occur within proximity to the project (Table 4).

Table 4: Loc	cation-Sen	sitive Sp	ecies of	Conservation	Concern
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Scientific	Common	COSEWIC	SARA	Provincial	Prov.	Prov. GS	#	Distance			
Name	Name	Status	Status	Legal	Rarity	Rank	Recs.	from			
				Protection	Rank			Site			
	Species of Conservation Concern										
Haliaeetus	Bald Eagle	-	-	Endangered	-	-	-	-			
leucocephalus											

<u>Bald Eagle (Haliaeetus leucocephalus)</u> typically nests in forested areas, in tall, mature trees (often mature white pine in New Brunswick) and prefer tall mature trees with a wide view of the surrounding area for perching. The project site is an open field with minimal mature vegetation. No suitable Bald Eagle nesting habitat is located within the project site, or on surrounding properties. The proposed project is not anticipated to adversely impact this species.

Atmospheric

No ambient air quality monitoring stations are located in the Murray Corner region. The nearest industrial emission sources are located over 30 km away in Sackville or Moncton. Murray Corner is a rural area with very low population density, adjacent to the Northumberland Strait. According to "Our Landscape Heritage" (New Brunswick, 2010), the prevailing winds in the summer are from the southwest, carrying the wind out over the Northumberland Strait.

No industrial air emissions are found in proximity to the project. Wood-burning fireplaces and campfires contributing particulate matter and PAHs, and vehicle emissions contributing VOCs, are the primary sources of air emissions in the region.

Based on the lack of industrial emitters and the prevailing wind direction, ambient air quality in the region can be assumed to be very good to excellent.

Environmentally Significant Areas

A review of the Nature Trust NB Environmentally Significant Area (ESA) database found one (1) ESA within a 5 km radius of the subject site:

• ESA #542 Grant Point:

This ESA, located approximately 3.2 kilometres northwest of the project site (Figure 4), is located at Cadman Corner, on the Northumberland Strait. This ESA is a known location of the rare plant Seaside Dock (*Rumex maritimus*), which is located along the upper sea shore.

Given the distance from the project site, the project is not anticipated to impact this ESA.



Figure No. 4: ESA Location Map

Important Bird Areas

IBACanada.ca was consulted to determine which, if any, Important Bird Areas (IBA) were located near the proposed project. No IBAs were identified within proximity of the project; the closest IBA is PE011, Bedeque Bay, in Prince Edward Island.

Archaeological Resources

An information request was made to the Archaeological Services Unit (ASU) of the NB Dept. of Tourism, Heritage and Culture to identify any known archaeological or heritage resource sites, or areas of high potential within the vicinity of the project. When this information is received, it will be forwarded to the Technical Review Committee for review.

Land Use

The project is on land owned by the proponent. The site is zoned as "Rural" and an RV campground is a permitted use in this area:

Policy 8.1: It is a policy to permit a range of commercial uses within the Rural Zone subject to standards contained within the zoning Regulations. These uses shall include, but not be limited to, resource-based activities, service businesses, tourism-related activities (B&Bs), arts and crafts, etc.

The edge of the coastline at the project site is also considered "coastal zone". The project does not impinge on the coastal zone, which is primarily a rocky beach at this location; however, park users do use the area during low tide for beachcombing, swimming, etc.

Refer to Appendix E: Southeast Regional Service Commission (formerly the Tantramar Rural Planning Authority) zoning map and map detail.

The subject property is bordered on the east by three (3) properties, one housing a small seasonal dwelling (cottage), another houses a vacant field used as a vegetable garden, and the third houses an older home (currently vacant), two outbuildings, and an unused field in the process of reverting to a natural state.

Route 955 borders the property to the southwest, beyond which is mixed forested/agricultural/residential land use. The property is bordered on the northeast by the Northumberland Strait.

The subject property is bordered to the west by Cape Bruin Road, a private access, public right-of-way road which accesses private parcels housing 15 dwellings, primarily seasonal cottages. No physical boundary delineates the subject property from Cape Bruin Road (refer to photo no. 8).

No Land Gazette environmental property flags exist for the subject properties.



Photo No. 8: Cape Bruin Road Looking North East

3.2 SOCIOECONOMIC CONDITIONS

Population and Economy

According to the Canada Census Bureau, the 2016 population of Murray Corner was 368, up from 356 in 2011. There are a total of 487 private dwellings, but only 165 private dwellings occupied by usual residents¹.

¹ – "'Private dwelling occupied by usual residents' refers to a private dwelling in which a person or a group of persons is permanently residing. Also included are private dwellings whose usual residents are temporarily absent on May 10, 2016."

As a rural community, there is little commercial and no industrial development in the community. Many workers travel outside the area for work, work in the trades as fishers or contractors, or are seasonally employed. The majority of residential development is ribbon development along major roadways. Murray Corner itself consists of the junction of Route 955 and Murray Road, and houses a gas station/convenience store, a craft shop, and First United Church. During the summer months, tourism is an economic generator: Murray Beach Provincial Park consists of a provincial campground and beach, and other tourism dollars are generated from private cottage rentals and two RV campgrounds (including the subject site).

Strang's Shore Seasonal Camping Inc. currently employs two (2) staff: a summer student and a seasonal maintenance manager.

Heritage Sites

A review of information provided by the ASU and the <u>www.Historicplaces.ca</u> and the New Brunswick Register of Historic Sites' Website shows there are no heritage sites in proximity to the proposed project.

Transportation

The project site is located on Route 955, a Local Numbered Highway as per the NB DTI 2012 Traffic Map. The site entrance and exits are located on a relatively straight and flat stretch of Route 955, with no sightline restrictions (curves or hills). The highway speed at this location is 80 km/h, and the 2012 annual average daily traffic (AADT) was 470 vehicles.

Refer to photos 9 and 10 for sightline images of the campground entrance/exit area of Route 955.



Photo No. 9: Route 955 Looking West from Campground Entrance



Photo No. 10: Route 955 Looking East from Campground Entrance

4. ENVIRONMNENTAL ASSESSMENT OF POTENTIAL IMPACTS

Based on the project description and the existing environment, the following potential Valued Environmental Components (VECs) were identified at the project location:

- a) Atmospheric Quality;
- b) Groundwater Quality;
- c) Surface Water Quality;
- d) Wildlife;
- e) Species at Risk;
- f) Migratory Birds;
- g) Aesthetics;
- h) Land Use;
- i) Economy and Jobs;
- j) Human Health;
- k) Transportation, and
- 1) Aboriginal Traditional Land Use.

A qualitative rating system was used to evaluate the potential for interactions between the project and the VECs above. A rating was given to each Valued Environmental Component (VEC) based on the potential interaction between the project and the each VEC, and a rating was applied to each according to the information gathered and the professional judgment and experience of the consultant.

- 0 = No interaction anticipated.
- 1 = Interaction occurs; however, it is unlikely to result in a significant environmental effect even without mitigation, or it is unlikely to be significant because of mitigation measures.
- 2 = Interaction could potentially result in an environmental effect.

Where there is a potential for project-VEC interaction (ratings of 1 or 2), further discussion is provided in the following sections. For issues where there is limited interaction (ratings 0 or 1), a rationale is provided and the issue is not discussed further in the present report. Potential project-environment interactions are presented in Table 8.

The potential VECs that have a rating of zero for all activities indicate that particular VEC is not present within or in proximity to the project's footprint. The rationales for excluding these VECs from further assessment are discussed in the following sections.

Significance of potential environmental effects is also evaluated in this section, based on a consideration of four (4) characteristics of the project-VEC interaction:

<u>Likelihood</u>: what is the likelihood of the impact on the VEC?

Severity of the impact (spatial and temporal scale), and

<u>Mitigation</u>: What mitigation measures can be employed to minimize the impact, and how efficient?

Table No. 5: Potential	Project-Environment	Interactions Matrix

Activities Potential VEC	Construction / Installation of the Physical Work	Operation / Maintenance of the Physical Work	Decommissioning / Abandonment of the Physical Work	Accidents and Unplanned Events
Biophysical				
Atmospheric Quality	0	1	0	0
Groundwater	0	1	0	0
Surface Water	0	1	0	0
Wildlife	0	0	0	0
Species at Risk	0	1	0	0
Migratory Birds	0	0	0	0
Socio-Economic				
Aesthetics	1	1	0	0
Land Use	0	0	0	0
Economy and Jobs	1	1	0	0
Human Health	0	0	0	0
Transportation	0	0	0	0
Aboriginal	0	0	0	0
Traditional Land Use				

4.1 ATMOSPHERIC QUALITY

Existing Conditions

The project is located in a rural area with no nearby industrial air emitters, minimal vehicular traffic on Route 955 and the atmospheric quality is considered very good/excellent. In general, winds during the camping season are from the southwest (going out over the Northumberland Strait).

There are few sources of noise in the vicinity of the project – the main source is vehicular traffic on Route 955. Noise can be generated from outdoor recreation, cottage use or the Murray Beach Provincial Park, but in general the background noise levels in the area are estimated to be consistent with a rural area.

Roy Consultants performed an abbreviated noise survey of the campground on Friday, August 25 between 5:30pm and 6:30pm. The timing of this survey was chosen due to the clear weather conditions for more accurate sound readings, and as it is a busy period at the campground when campers are returning and undertaking camping activities in anticipation of the weekend, such as playing music, enjoying outdoor activities, having camp fires or loud conversations between camp sites. The methods and results of the noise survey are presented in Table 6 hereafter.

The burning of wood in campfires is a camping tradition, which typically takes place in the evening. The particulate matter (TPM) from wood combustion can cause irritation to eyes and throat, and can cause

complications to individuals with chronic pulmonary disorders, such as asthma. Cottages and campgrounds in the area typically have campfires during the cottage season.

Project-VEC Interactions, Potential Environmental Effects:

Noise is generated by camping activities (including loud conversations, music, vehicles entering and leaving the campground, children playing) and campground maintenance activities (lawn mowing, carpentry, etc.).

Each campsite at the Strang's Shore Seasonal Camping has a metal fire pit for campfires. Campfires are prohibited in the campground when the Department of Energy and Resource Development issues a camp fire ban due to dry conditions. Fire bans are posted at the campground office and throughout the campground.

Based on the available climate information, campfire smoke typically will travel away from land, over the Northumberland Strait. The project site is not located in a valley or region where air movement is restricted/limited, or where air quality alerts occur; as such, no mitigation for smoke from campfires is recommended.

Description of Potential Impact 1: Campground Noise

During the camping season, the campsites will be active with campers and camping activities. Noise produced at the campground include intermittent vehicle noise, music, conversation, and other miscellaneous noise. The nearest sound receptors are the adjacent dwellings, located between 30 and 100 metres from the nearest campsite.

Noise can be an annoyance, and is considered a contaminant under the NB <u>Clean Environment Act;</u> however Health Canada does not have noise guidelines or enforceable noise thresholds or standards. The US Environmental Protection Agency (EPA) identifies an outdoor activity interference or annoyance limit as 55 decibels over a 24-hour average.

Roy Consultants recorded sound level readings at three locations within and near the project site, namely:

- Site 1: Baseline Reading (background noise levels from a similar physical site (i.e. an empty field located between Route 955 and the Northumberland Strait, near Murray Corner;
- Site 2a: Campground A: A location near the centre of the interior of the campground;
- Site 2b: Campground B: A location near the centre of the interior of the campground, and
- Site 3: Cape Bruin Road: A location immediately between the campground and the cottages on Cape Bruin Road, west of the project.

Sound levels were recorded on a LG[©] Android OS smartphone, using the Sound Meter[©] application. This application was chosen due to its rating as one of the more accurate and reliable sound-measuring applications available (Kardous and Shaw, 2014). Sound levels (instantaneous, maximum and average) were recorded in five-minute periods, following the methods proposed by Kardous and Shaw. The results of the abbreviated survey are presented in Table 6 hereafter. In general, the survey demonstrates that at a busy time of campground use, average noise levels are within the US EPA's acceptable level for outdoor enjoyment, including the adjustment of 10 dB for night time.

SAMPLE	DESCRIPTION	MINIMUM	MAXIMUM	AVERAGE
LOCATION		dB	dB	dB
		Day (Night)	Day (Night)	Day (Night)
Baseline	Open Field	15 (25)	$70^{1} (80)$	40 (50)
Campground	Campground	19 (29)	$70^2 (80)$	39 (49)
#1	Centre –			
	Driveway 1			
Campground	Campground	17 (27)	71 ² (81)	35 (45)
#2	Centre –			
	Driveway 2			
Campground	Campground	18 (28)	64 (74)	37 (47)
#3	Gate			
Cape Bruin	Cape Bruin	6 (16)	73^2 (83)	36 (46)
Road #1	Road: 170m			
	from Route 955			
Cape Bruin	Cape Bruin	14 (24)	$65^2 (75)$	36 (46)
Road #2	Road: 280m			
	from Route 955			

Table No. 6: Results of Abbreviated Noise Survey at Strang's Shore Campground

Recommended Mitigation 1: In addition to the abbreviated survey conducted at the project site, Strang's Shore Campground operates under Campground Rules, which are enforced by campground staff and are designed to minimize campground noise levels. Campground quiet time is between the hours of 11 p.m. and 8 a.m. On weekends (Friday and Saturday night), these hours are from 12 a.m. to 8 a.m. Other campground rules, which restrict noise are:

- 15 km/h speed limit;
- 1 vehicle per site;
- All playground areas are closed at 10 p.m. (22:00);
- Fireworks are not permitted;
- No golf carts permitted (staff only);
- No disorderly conduct or obscene language is permitted. No loud partying is permitted after 11 p.m. (12 a.m. on weekends), and management reserves the right to evict for infractions (3 infractions in any one season will result in automatic eviction), and
- Campground rules apply to guests, and guests are the responsibility of the campers.

Significance of Potential Impacts

With the enforcement of the above-noted campground rules, the likelihood of noise levels at nearby receptors exceeding 55d BA is not anticipated, and therefore the potential impacts are considered **not significant**.

^{1 -} Passing vehicle on Route 955

^{2 -} Vehicle passing by sound meter in campground

4.2 GROUNDWATER

Existing Conditions:

The project comprises two (2) water supply wells; a production well, which provides potable water to the current camp users, and a second well, which the proponent acquired with the purchase of property PID No. 70188826. At present, the campground is estimated to use 52 cubic metres of water daily; with the proposed additions, future water requirements are estimated to be approximately 68 cubic metres of water daily; **however, it should be noted** that the campground occupancy is dramatically reduced Monday – Friday, as many tenants only occupy their campers on the weekend. The above water consumption estimates are therefore considered high by the proponent.

In addition to providing water, the campground contains a tank and a leaching field system, which treats the sewage and grey water from the camp users. The system was installed in two phases, in 2012 and 2016, was designed by a professional engineer, installed by a licensed installer, and approved by the Dept. of Health.

Project-VEC Interactions, Potential Environmental Effects:

A production well can adversely impact nearby water supplies' quality and quantity if pumped at an unsustainable rate. Additionally, a wastewater treatment system can adversely impact groundwater (and surface water) quality if not functioning or designed properly.

Potential Environmental Impact 1: Impacts to Water Quantity of Nearby Water Wells

The campground water supply requires approximately 68 cubic metres of water daily. If a well-pumping rate exceeds its sustainable yield, or exceeds the sustainable yield of the aquifer, it can adversely impact water quality in nearby water supplies, or reduce the water quantity available to nearby wells.

Recommended Mitigation 1: Water Supply Source Assessment

Strang's Shore Camping Inc. will conduct a Water Supply Source Assessment (WSSA) to determine the sustainable yield of the production well. Based on the data obtained from WSSA, a maximum sustainable pumping rate will be established for the well, to avoid impacting nearby water supplies.

The proposed WSSA will establish the maximum safe yield (i.e. capacity) of the production well, and will include the following components:

- Deepening the existing secondary water supply (observation well) an additional 40 feet to ensure that it intersects the same water-bearing fracture zones as the production well;
- Conducting a 3-step Step-Test on the production well as per section 3.2 of the WSSA Guidelines;
- Conducting a 72-hour pump test as per Sections 3.3.1 and 3.5 of the NB DELG WSSA Guidelines, including continuous pumping, water quality sampling, and recording water level drawdown and recovery.

Potential Environmental Impact 2: Impacts to Water Quality of Nearby Water Wells

The Campground provides wastewater collection and treatment services for the campground users. If a wastewater treatment system is not designed to accept and treat the appropriate amount of leachate (i.e., the system is overloaded) or if the system is malfunctioning, the quality of the groundwater in the vicinity of the treatment system may be degraded, primarily with elevated fecal coliform and E. coli levels.

Recommended Mitigation 2: Installation of a Properly Designed, Installed and Maintained Septic System Strang's Shore Seasonal Camping Inc. contracted a professional engineering firm to design a septic treatment system consisting of:

- 2 3,000 gal. tank (2016);
- 1 2,600 gal. tank (2012);
- 3 2,000 gal. tank (2012);
- 1,000 gal. pump chamber tank (2012);
- 150 mm PVC pipe wastewater collection system (2012 and 2016);
- 4 septic clean outs (2016);
- Septic leaching field (2012 and 2016), and
- Hydrotek distribution valve (divides the leaching field into six zones)(2016).

The septic system was installed by a licensed plumbing contractor, and approved by the Department of Health.

Significance of Potential Impacts

With the establishment of a maximum sustainable yield and pumping rate for the production well, the installation of a properly sized and functioning septic system, and the ongoing water quality monitoring of the water supply, the likelihood of impacts to groundwater are minimal and therefore the potential impacts are **not significant**.

4.3 SURFACE WATER

Existing Conditions:

There are no freshwater watercourses within the project development area. The Northumberland Strait is adjacent to the campground. During precipitation events, surface runoff flows overland towards the Northumberland Strait.

Project-VEC Interactions, Potential Environmental Effects:

During intense precipitation events, exposed areas (such as gravel driveways) can erode and create sediment migration, which can adversely impact the water quality in surface watercourses.

Potential Environmental Impact 1:

The campground is comprised of gravel roadways and camp site pads, which can erode during extreme precipitation events and create sediment migration in the downgradient direction, towards the Northumberland Strait.

Recommended Mitigation 1:

A (minimum) 30-metre vegetated buffer is maintained between the campground and the Northumberland Strait. This area acts as a filter for overland flow, and captures sediment during precipitation events. Furthermore, the campground area is relatively flat with minimal slope.

Significance of Potential Impacts:

The campground vegetation buffer will remain in place and will act as a filter to overland sediment migration during heavy precipitation events. Based on this, impacts to surface water are considered unlikely and minimal; therefore, the potential impacts are considered **not significant**.

4.4 WILDLIFE AND WILDLIFE HABITAT

Existing Conditions:

The campground is an open area with little vegetation, and is actively inhabited by camp users during the summer camping months, and as such the site comprises little/no wildlife habitat. In general, wildlife species do not inhabit or transit the site, with the exception of smaller wildlife species, which may transit the site or inhabit the vegetation around the campground perimeter.

Project-VEC Interactions, Potential Environmental Effects:

Based on the lack of suitable wildlife habitat, the project is not anticipated to adversely impact wildlife species and therefore the potential impacts are considered **not significant**.

4.5 SPECIES AT RISK

Existing Conditions:

A scan of available information on Species at Risk (SAR) and Species of Conservation Concern (SOCC) of the area identified three (3) rare plant species, 22 vertebrate species, and one (1) location-sensitive vertebrate species, which may be found in the project area.

Project-VEC Interactions, Potential Environmental Effects:

The critical breeding/nesting habitat requirements for each species identified in the ACCDC scan was cross-referenced with the site characteristics to determine which species may be impacted by the proposed project. This analysis also took into account the breeding ranges for these birds.

The project area does not contain suitable habitat for bird Species at Risk except for one of the species identified for the project area (Killdeer).

The project site may comprise suitable habitat for Killdeer (the 30-metre grassed buffer along the Northumberland Strait, the gravel roads or camp sites), a migratory bird which has a provincial rank of S3B, S3M and an S-Rank of 3-Sensitive. No Killdeer were observed on site during site visits, and are not known to nest or inhabit the project site.

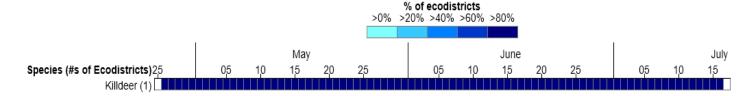


Figure No. 5: Killdeer Nesting Calendar for Northumberland Shore Eco-district

<u>Potential Environmental Impact 1</u>:

The project is a campground which opens in May, and is an active campground with anthropogenic activities throughout the summer camping season (May to October). These activities may impact any nesting Killdeer on site (Killdeer nesting can occur between late April and mid-July in the project area).

Recommended Mitigation 1:

The project site becomes active in the spring, once the site is no longer covered in snow. This includes mowing the lawns, performing necessary maintenance on the electrical, water and wastewater systems, and other general maintenance activities. Project activities on site are anticipated to discourage Killdeer from using the project site for nesting.

Significance of Potential Impacts

Given the timing of the Killdeer nesting season and the activities at the campground during this time, it is unlikely that Killdeer would establish nests within the project site. To date, no Killdeer have been observed nesting within the project site. Based on this and the proposed mitigation, the impact to Species at Risk is therefore considered **not significant**.

4.6 MIGRATORY BIRDS

The proposed site is an open field with campsites for RV. The site is not considered suitable habitat for the majority of migratory birds, although foraging for insects above the campground occurs by a variety of species. Furthermore, swallow houses are erected in the project which are occupied during the summer months.

Project-VEC Interactions, Potential Environmental Effects:

Given the lack of nesting habitat within the project footprint, no adverse environmental impacts to migratory birds are anticipated from this project.

4.7 **AESTHETICS**

Existing Conditions:

Strang's Shore Seasonal Campground is located on the shore of the Northumberland Strait, and includes a view scape of the PEI/NB Confederation Bridge. Cape Bruin Road is a public roadway with approximately 15 dwellings (seasonal cottages and homes) adjacent to the campground site.

Project-VEC Interactions, Potential Environmental Effects:

The project is in the line-of-sight of six (6) of the dwellings located on Cape Bruin Road.

Potential Environmental Impact 1:

Although not an environmental impact, the enjoyment of use of the nearby dwellings, by adding the project to the views cape, may be adversely impacted by the project.

Recommended Mitigation 1:

The Cape Bruin Road and adjacent properties are at a slightly higher elevation from the campground property. It is proposed to plant native vegetation ((shrubs such as the wild rose species already found on site) or small trees along the western edge of the campground, parallel to the Cape Bruin Road. This would create an aesthetic (and physical) buffer between the Cape Bruin Road and the campground. With the higher elevation, the cottages would still have a partial view of the Northumberland Strait, and a portion of the campground would be obscured (refer to Photo No. 11).

Significance of Potential Impacts:

Given the recommended mitigation, the campground would be entirely or partially obscured from view, and the Northumberland Strait would still be partially visible, depending on the line of sight of each cottage. This will mitigate the aesthetic concerns of the cottage owners. Based on the proposed mitigation, the aesthetic impact of the campground would be reduced, and the impact is considered **not significant**.

4.8 LAND USE

The project is located in an area zoned "Rural", which permits the use of land for tourism developments, including campgrounds. No development or building permits are therefore required.

Building permits are required for the addition of outbuildings. The proponent will obtain such permits before constructing or installing any of the proposed outbuildings.



Photo No. 11: Photo Showing Elevation Difference Between Cape Bruin Road and Western Property Boundary of Project Site

4.9 TRANSPORTATION

Existing Conditions:

The project site is located on Route 955, a Local Numbered Highway as per the NB DTI 2012 Traffic Map. The site entrance and exits are located on a relatively straight and flat stretch of Route 955, with no sightline restrictions (curves or hills). The highway speed at this location is 80 km/h, and the 2012 annual average daily traffic (AADT) was 470 vehicles.

<u>Project-VEC Interactions, Potential Environmental Effects:</u>

The project has separate entrance and exit access roads directly off of Route 955, located approximately 75 metres apart. Vehicles may be required to slow down to allow RV campers and campers' vehicles to enter and exit the project site from Route 955.

Based on the speed of this section of Route 955 (80 km/h) and the lack of sightline restrictions (no hills and the stretch of road is relatively straight), and the low traffic volume (470 AADT), the proposed project is not anticipated to adversely impact transportation and therefore no mitigation is recommended.

4.10 ECONOMY/JOBS

The project employs two (2) seasonal employees – a summer student and a maintenance manager. The project also creates direct revenue for the campground owners. Additionally, the campground will

contribute to the local economy directly and indirectly; campground users purchase food, gasoline and other supplies from local vendors, as well as undertake other tourism activities in the area.

As such, the project is a positive economic project for the area, and no mitigation is required.

Table 6: Environmental Effects and Recommended Mitigation Measures Summary

Significance of residual impacts rated as follows:

0=None, 1=Not Likely/ Not Significant, 2=Likely/Significant, 3=Unknown, +=Positive, -=Negative

Valued Engagetem/	Description of		Residual Ef	fects	Further Study or Follow- up
Ecosystem/ Social Component (VEC/VSC)	Potential Project Interaction with VEC/VSC	ction with Required Mitigation	Likelihood	Significance	
Atmosphere Campfire smoke may impact air quality	may impact air	Campfire smoke typically will travel away from land, over the Northumberland Strait. The project site is not located in a valley or region where air movement is restricted/limited, or where air quality alerts occur; as such, no mitigation for smoke from campfires is recommended.	1	1	0
	Noise from the campground may impact neighbouring properties. The nearest sound receptors are the adjacent dwellings, located between 30 and 100 metres from the nearest campsite.	 Roy Consultants performed an abbreviated noise survey of the campground during a busy camping period. Strang's Shore Campground operates under Campground Rules, which are enforced by campground staff and are designed to minimize campground noise levels. 	1	1	0
Groundwater	The campground water supply requires approximately 68 cubic metres of water daily. If a well-pumping rate exceeds its sustainable yield, or exceeds the sustainable yield of the aquifer, it can adversely impact water quality in nearby water supplies, or reduce the water quantity available to nearby	Strang's Shore Camping Inc. will conduct a Water Supply Source Assessment (WSSA) to determine the sustainable yield of the production well. Based on the data obtained from WSSA, a maximum sustainable pumping rate will be established for the well, to avoid impacting nearby water supplies. The proposed WSSA will establish the maximum safe yield (i.e. capacity) of the production well.	1	1	1

	wells.				
	The Campground provides wastewater collection and treatment services for the campground users. If a wastewater treatment system is not designed to accept and treat the appropriate amount of leachate (i.e., the system is overloaded) or if the system is malfunctioning, the quality of the groundwater in the vicinity of the treatment system may be degraded, primarily with elevated fecal coliform and E. coli levels.	Strang's Shore Seasonal Camping Inc. contracted a professional engineering firm to design a septic treatment system consisting of: • 2 – 3,000 gal. tank (2016); • 1 – 2,600 gal. tank (2012); • 3 – 2,000 gal. tank (2012); • 1,000 gal. pump chamber tank (2012); • 150 mm PVC pipe wastewater collection system (2012 and 2016); • 4 septic clean outs (2016); • Septic leaching field (2012 and 2016), and • Hydrotek distribution valve (divides the leaching field into six zones)(2016). The septic system was installed by a licensed plumbing contractor, and approved by the Department of Health.	1	1	1
Surface Water	The campground is comprised of gravel roadways and camp site pads, which can erode during extreme precipitation events and create sediment migration in the downgradient direction, towards the Northumberland Strait.	A (minimum) 30-metre vegetated buffer is maintained between the campground and the Northumberland Strait. This area acts as a filter for overland flow, and captures sediment during precipitation events. Furthermore, the campground area is relatively flat with minimal slope.	1	1	0
Wildlife and Wildlife Habitat	The project site is considered poor wildlife habitat.	No mitigation required.	0	0	0
Species at Risk	The project site may comprise suitable habitat for Killdeer (the 30- metre grassed buffer along the Northumberland Strait, the gravel	The project site becomes active in the spring, once the site is no longer covered in snow. This includes mowing lawns, performing necessary maintenance on the electrical, water and wastewater systems, and other general maintenance activities. Project activities on site are anticipated to discourage Killdeer from establishing nests on the project site.	1	1	0

	roads or camp sites).				
Migratory Birds	Given the lack of nesting habitat within the project footprint, no adverse environmental impacts to migratory birds are anticipated from this project.	No mitigation required.	0	0	0
Aesthetics	The project is in the line-of-sight of six (6) of the dwellings located on Cape Bruin Road.	Native vegetation (shrubs such as the wild rose species already found on site) will be planted along the western property boundary to create an aesthetic (and physical) buffer between the Cape Bruin Road dwellings and the campground.	1	1	0
Land Use	The project is located in an area zoned "Rural", which permits the use of land for tourism developments, including campgrounds.	 No Development Permit is required for a campground. Building permits will be obtained for accessory buildings. No mitigation recommended. 	0	0	0
Transportation	The project site is located on Route 955, a local numbered highway.	Based on the speed of this section of Route 955 (80 km/h) and the lack of sightline restrictions (no hills and the stretch of road is relatively straight), and the low traffic volume (470 AADT), the proposed project is not anticipated to adversely impact transportation and therefore no mitigation is recommended.	0	0	0
Economy / Jobs	Employs 2 staff and contributes to the local economy.	No mitigation required	1	1	0

5. ACCIDENTS AND UNPLANNED EVENTS

The project does not store or require large quantities of chemicals or hazardous materials for its operation. Domestic quantities of petroleum and cleaning products are stored in locked sheds.

Based on the minimal amount of chemicals stored on site and the absence of industrial or chemical processes, accidents and unplanned events are not anticipated and therefore the impacts from such events are not considered **significant**.

6. CUMULATIVE EFFECTS

The project is not anticipated to have adverse environmental impacts in the context of the project properties, the project vicinity or the region; therefore a cumulative effects assessment was not completed for this project.

7. IMPACT OF THE ENVIRONMENT ON THE PROJECT

The project is located adjacent to the Northumberland Strait, approximately 3 m above sea level (exact elevation to be determined during the water supply pump test). The project's proximity to the Northumberland Strait means the project property may be susceptible to flooding during storm surges or extreme weather events in the future, given the climate change sea-level rise predictions. This may also result in erosion of the land at the site during these events.

The Updated Sea-Level Rise and Flooding Estimates for New Brunswick Coastal Sections were reviewed, which indicate an average sea level rise of up to 1.53m (+error bar) from the current elevation by 2100 – Based on the IPCC 5th Assessment Report 2014 by R. J. Daigle Enviro.

The proponent is aware of the potential impacts of the environment on the project. Shoreline protection has been placed along the shore in the past to protect the shoreline from rising sea levels and wave action. Furthermore, the project property includes a 30m buffer zone along the entire length of the shoreline.

8. PUBLIC INVOLVEMENT

The public involvement activities proposed for this project registration will be conducted as per the requirements of Appendix C of the *Guide to Environmental Impact Assessment in New Brunswick (2012)*, and will involve the following public involvement activities, based on a program submitted to and approved by DELG:

- 1. The proponent (Roy Consultants on behalf of Strang's Shore Seasonal Camping) shall communicate directly with elected officials (i.e. the MLA and mayor), local service districts, community groups, environmental groups, and other key stakeholder groups (companies, agencies, interest groups, etc.) and First Nations as appropriate, enabling them to become familiar with the proposed project and ask questions and/or raise concerns.
- 2. The proponent shall provide direct, written notification (letter, information flyer, etc.) about the project and its location to potentially affected area residents, landowners and individuals (to be determined in consultation with Sustainable Development, Planning and Impact Evaluation Branch). The notification must include the following:
 - a. A brief description of the proposed project;
 - b. Information on how to view the Registration Document;
 - c. A description of proposed location (map is desirable);
 - d. The status of the Provincial approvals process (i.e.: "The project is currently registered for review with the Department of Environment and Local Government under the Environmental Impact Assessment Regulation, Clean Environment Act");
 - e. A statement indicating that people can ask questions or raise concerns with the proponent regarding the environmental impacts; Proponent contact information (name, address, phone number, E-mail); and
 - f. The date by which comments must be received (See Section 6.0 of the Registration Guide).
- 3. When the EIA report is finished, it will be submitted to DELG and placed on the DELG Website at http://www.gnb.ca/0009/0377/0002/0016-e.pdf and shall make the Registration Document (and any subsequent submissions in response to issues raised by the Technical Review Committee) available for public review at 20 McGloin Street, 2nd Floor, Fredericton, N.B.
- 4. The proponent shall make copies of the project registration document (and any subsequent submissions in response to issues raised by the Technical Review Committee) available to any interested member of the public, stakeholder or First Nation and shall deposit a copy of this document along with any subsequent revision with the appropriate DELG regional office, where it will be available for public review.
- 5. The proponent shall make the project registration document (and any subsequent submissions in response to issues raised by the Technical Review Committee) available in at least two locations local to the project area (e.g.: the proponent's offices, a public library, a municipal office, another public location).
- 6. Newspaper Advertisement: an advertisement will be placed in the Times and Transcript (provincial-English) and the Moniteur Acadien (provincial-French), and

7. Within 60 days of project registration, the proponent shall prepare and submit to the Department of Environment and Local Government a report documenting the above public involvement activities, and shall make this report available for public review.

The public involvement strategy will be submitted separately to the DELG Project Manager for approval, and a summary report outlining the strategy and its results will be submitted for review within 60 days of the date of registration.

9. FIRST NATIONS

The project is an existing campground located on privately owned land and is funded by the proponent. The nearest First Nation, Fort Folly First Nation, is located approximately 50 km southwest of the subject site.

Based on the ownership and current use of the site, and the anticipated lack of adverse environmental impacts both on and off-site, it is not anticipated that the project will infringe on Aboriginal Rights or traditional land use by a First Nation.

10. APPROVAL OF THE UNDERTAKING

The following permits, approvals and authorizations are anticipated for the project to include but not be limited to:

Provincial

Certificate of Determination – DELG Building Permit – Southeast Regional Service Commission (outbuildings)

Federal

No federal approval or authorization is anticipated for this project.

11. FUNDING

The project is a privately funded venture by the proponent, Strang's Shore Seasonal Camping Inc.

12. CLOSING STATEMENT

This environmental impact assessment identified Valued Environmental Components, which may potentially be impacted by the operation and expansion of the existing Strang's Shore Seasonal Camping Inc. campground, and identified potential adverse effects, which may occur from the development of the project. Significance was determined based on four criteria: *likelihood*, *scale*, *duration* and proposed *mitigation*.

Potential VECs were assessed and identified as either not impacted by the project, or the impacts were not considered significant based on the above criteria.

This report was prepared by Roy Consultants for the exclusive use of the proponent. The information contained herein may not be republished or relied upon for any other purpose or by any other third party without the express written notice of the author.

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