Special Events in the National Historic Sites of Canada in Cape Breton

Replacement Class Screening Report

August 2011

Parks Canada Parcs Canada

Canada

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Acronyms

COSEWIC – Committee on the Status of Endangered Wildlife in Canada

EA – Environmental Assessment

EERP – Environmental Emergency Response Plan

FA – Federal Authority

NHS – National Historic Site

RA – Responsible Authority

RCS – Replacement Class Screening

RCSR – Replacement Class Screening Report

RRFB NS – Resource Recovery Fund Board Nova Scotia

SAR – Species at Risk

SARA – *Species at Risk Act*

The Act – *Canadian Environmental Assessment Act*

The Agency – Canadian Environmental Assessment Agency

The Registry – Canadian Environmental Assessment Registry

VEC – Valued Environmental Component

1. Introduction

Parks Canada's Cape Breton Field Unit comprises six national historic sites (NHSs) (Alexander Graham Bell, Canso Islands, Grassy Island Fort, Fortress of Louisbourg, Marconi, and St. Peters Canal NHSs)[1]. The sites are located in various Cape Breton communities and Canso, Nova Scotia. Because they offer picturesque settings and convenient locations, the sites are frequently chosen for special events.

A special event is defined as a planned, temporary activity conducted for recreation, entertainment, or promotional purposes. Occurring in response to public demand, these events provide a distinctive site experience. The site's Management Plan, commemorative integrity, and Parks Canada's Cultural Resource Management principles are all considered prior to the event's approval to ensure it is appropriate for the site. The *Canadian Environmental Assessment Act Inclusion List Regulations* establish these events as activities not related to a physical work that may require an environmental assessment (EA). Parks Canada is a Federal Authority (FA)[2] that issues a licence of occupation granting authority to conduct special events at a NHS within the Cape Breton Field Unit. Parks Canada is therefore the Responsible Authority (RA) and must ensure that an environmental assessment is completed prior to issuing a licence to enable the project to be carried out.

As the special events are routine, repetitive events with predictable and mitigable environmental effects, a Replacement Class Screening (RCS) enables the EA process to be streamlined while ensuring the uniform approach remains consistent with existing legislation, policies, and procedures. The NHS Management Plans, National Historic Park Regulations, Historic Canal Regulations, and Cultural Resource Management Policy ensure the events are consistent with the site's management direction and do not compromise its commemorative integrity or the ecological values of the property. The Cape Breton Regional Municipality, Richmond County, Victoria County and Canso Solid Waste Resource Management and Noise by-laws and the *Canadian Environmental Assessment Act* (the Act) were also consulted. The Replacement Class Screening Report (RCSR) ensures proponents for all special events take appropriate measures to protect the environment and cultural resources, and ensures the safety of the visiting public.

Parks Canada has prepared a RCSR for special events in the Halifax Defence Complex, as well as an extension to this document for special events in the NHSs of Canada in Southwest Nova Scotia. These documents were declared by the Canadian

[1] The Cape Breton Field Unit also includes Cape Breton Highlands National Park of Canada; however, it is not included in this Replacement Class Screening Report.
[2] A Federal Authority is defined in Section 2 of the *Canadian Environmental Assessment Act* and has responsibilities as described in that legislation.

Environmental Assessment Agency (the Agency) in 2004 and 2005 respectively and each was subsequently re-declared in 2009. Experience gained during their preparation has been used to develop this RCSR for special events in the NHSs of Canada in Cape Breton.

1.1. *Class Screening and the Canadian Environmental Assessment Act*

The Act and its regulations set out the legislative basis for federal EAs. The legislation ensures that the environmental effects of projects involving the federal government are carefully considered early in project planning. The Act applies to projects which require a FA to make a decision or take an action, whether as a proponent, land administrator, source of funding or regulator (issuance of a permit or license). The FA then becomes a RA and is required to ensure that an EA of the project is carried out prior to making its decision or taking action.

Most projects are assessed under a screening type of assessment. A screening systematically documents the anticipated environmental effects of a proposed project, and determines the need to modify the project plan or recommend further mitigation to eliminate adverse environmental effects or minimize the significance of these effects.

The screening of some repetitive projects may be streamlined through the use of a class screening report. This kind of report presents the accumulated knowledge of the environmental effects of a given type of project and identifies measures that are known to reduce or eliminate any significant adverse environmental effects. The Agency may declare such a report appropriate for use as a class screening after taking into account comments received during a period of public consultation.

A RCS consists of a single report that defines the class of projects and describes the associated environmental effects, design standards and mitigation measures for projects assessed within the report. It includes a determination regarding significance of environmental effects for all projects assessed by the RCS. Once the Agency declares a RSCR and where an RA is satisfied that a project falls within the class described in the RCSR, no further action is required under sections 18 or 20 with respect to the project as long as the RA ensures that design standards and mitigation measures described in the RCSR are implemented.

1.2. *Replacement Class Screening and the Projects*

The applicability of the RCSR to the projects is based upon the following six criteria:

1. *Well-defined Class of Projects:* Special events at the Cape Breton NHSs as a class of projects are based on several common characteristics. The sites are located within various Cape Breton communities and Canso, Nova Scotia and have similar environmental settings. The special events share many activities, such as the set-up of temporary staging, lighting/sound equipment, portable washroom facilities, etc. have predictable, mitigable environmental effects, and are all triggered under the Act in the same manner.

2. *Well-understood Environmental Setting:* Parks Canada began acquiring responsibility for the NHSs in the Cape Breton Field Unit as early as 1925 and is familiar with each site's environmental setting. Events generally take place on paved and/or gravelled areas, therefore keeping the environmental settings relatively constant between properties. The slight variations in wooded area and water sources at each site are taken into consideration. Site-specific ecological information and commemorative integrity statements are available to complete environmental setting descriptions of each NHS.

3. *Unlikely to Cause Significant Adverse Environmental Effects, Taking into Account Mitigation Measures:* Based on previous experience with special events, no significant adverse environmental effects are likely to occur. Minor environmental impacts have occurred during the past and were successfully mitigated to ensure protection of ecological values and commemorative integrity. There is no evidence of significant cumulative effects to date and none are expected due to the short duration of the special events and limited environmental effects that result.

4. *No Project-Specific Follow-up Measures Required:* Project-specific follow-up programs are not required as there are no expected variations in predictions or effects to be monitored. A Parks Canada official must verify, however, that the property is returned to its natural state following a special event. This is applicable to all special events, regardless of the site.

5. *Effective and Efficient Planning and Decision-making Process:* Special event projects involve activities that are straightforward and routine in nature, so event planning is uncomplicated. As Parks Canada is usually the only RA involved in the assessments and the proponents are specialized and experienced in the delivery of such events, the planning and decision-making processes are straightforward.

6. *Public Concerns Unlikely:* Projects conducted over the past fifty years have not elicited any major public concerns. Complaints may be voiced regarding slower bus service at the Fortress of Louisbourg NHS and limited access to special event areas within a NHS. Given the residential setting of many of the NHSs,

community residents may be unhappy with any increase in noise and traffic associated with special events. Some complaints of this nature have occurred in the past, however, mitigation measures are outlined in the RCSR to minimize public disturbance. As a general rule, the public welcomes special events as they usually have a positive impact on the local economy.

As the project class meets the necessary six criteria, the RCSR is applicable. The RCSR streamlines the EA process based on the commonalities shared by the special events subject to the class and satisfies the requirements of the Act.

1.3. *Development of the Replacement Class Screening Report*

The following six steps summarize the development of the RCSR:

STEP 1: Writing the RCSR

Creation of the RCSR involved the following activities:

- Researched past land use at the Cape Breton NHSs during special events and the environmental settings of each site
- Described project activities associated with each type of special event and location
- Determined Valued Environmental Components (VECs)
- Identified potential environmental effects, mitigation measures, and residual environmental effects associated with each type of special event and location
- Considered possible cumulative effects

STEP 2: Preliminary Consultation

Interested organizations reviewed the draft RCSR and provided commentary. Draft revised based on feedback received.

STEP 3: The Agency Review

The draft RCSR was submitted for review by the Agency and revised as necessary.

STEP 4: Submit for Declaration and 30-Day Public Review

The draft was submitted to the Agency for a 30-day public review.

STEP 5: Finalize the RCSR

Ensured any concerns/comments expressed by the public were addressed in the RCSR and any necessary revisions were completed.

STEP 6: Declaration

The RCSR was submitted to the Agency for declaration.

1.4. *Consultation for Original and Re-declaration Purposes*

Commentary gathered through consultation with Cape Breton Field Unit Staff, Cape Breton/Canso community departments, environmental organizations, Environment Canada, Nova Scotia Department of Environment and Labour, Nova Scotia Department of Natural Resources and the public was used in the development of the RCSR and as well in reviewing the RCSR for re-declaration. Comments consisted of the following:

- Cape Breton Field Unit staff, including representatives from Resource Conservation, Archaeology, Communications, Program Coordinators, among others, should meet to discuss proposed events prior to occurrence. Public complaints about past special events were in regard to limited site access and increased traffic congestion. These mostly occurred in response to the first encampment, which involved a series of military and civilian interpretations performed by re-enactors, as it attracted large crowds. Subsequent encampments have not attracted as many visitors and have therefore not elicited public complaints. No new concerns were reported for the re-declaration of the RCSR during the initial period of RCSR use.

- Transport Canada, the Department of Fisheries and Oceans, Environment Canada, Cape Breton Regional Municipality, Town of Canso, Victoria County, Richmond County, Nova Scotia Department of Environment, Nova Scotia Department of Natural Resources, Resource Recovery Fund Board Nova Scotia (RRFB NS), Fortress of Louisbourg Association, and Alexander Graham Bell Museum Association were invited to comment on the draft RCSR. Environment Canada had minor suggestions to improve the clarity of the document. Cape Breton Field Unit staff also commented that the document, and especially mitigation measures could be more streamlined for clarity. The RRFB NS had minor suggestions regarding the waste management plan. No other suggestions were received.

  During the review of the RCSR for re-declaration, federal departments (Environment Canada, Department of Fisheries and Oceans and Transport Canada) were once again invited to comment on the draft RCSR. Comments from Environment Canada have been included in this report (other departments had nothing further to add).

- The Agency initially conducted a 30-day public consultation on the RCSR and subsequently provided opportunity for public participation prior to re-declaration of the RCSR. Comments received were taken into consideration before re-declaration of the RCSR, where appropriate.

Aboriginal Consultation

In the context of the Crown's legal duty to consult with Aboriginal groups, where it contemplates conduct that might adversely impact any potential or established Aboriginal and Treaty rights:

Parks Canada confirms that a preliminary assessment has been undertaken to determine if a legal duty to consult arises in respect of the declaration of the report as a class screening report. Parks Canada also confirms that based on its assessment, it is of the view that the declaration of this class of project does not give rise to a duty to consult.

Parks Canada undertakes to ensure that, as appropriate, an analysis consistent with the approach proposed in the Government of Canada's Updated Guidelines for Federal Officials to Fulfill the Duty to Consult (March 2011) is carried out when a project is assigned to the class within the proposed RCSR to determine if, in the particular circumstance, the Crown conduct related to that project gives rise to the legal duty to consult.

1.5. *The Canadian Environmental Assessment Registry*

The purpose of the Canadian Environmental Assessment Registry (the Registry) is to facilitate public access to records relating to EAs and to provide notice in a timely manner of assessments. The Registry consists of two components – an Internet site and a project file.

The Registry project file must include a copy of the RCSR. The RA maintains the file, ensures convenient public access, and responds to information requests in a timely manner.

The Registry Internet site is administered by the Agency. The RA and the Agency are required to post specific records to the Internet site in relation to the RCSR.

Upon declaration of the RCSR, the Act requires RAs to post on the Internet site of the Registry, at least every three months, a statement of projects for which a RCSR was used. The statement should be in the form of a list of projects, and will include:

- the title of each project for which the RCSR was used;
- the location of each project;
- RA contact information (name, phone number, address, email); and
- the date when it was determined that the project falls within the class of projects covered by the report.

Note: The schedule for posting a statement is:

- no later than July 15 - (for projects assessed from April 1 to June 30)
- no later than October 15 - (for projects assessed from July 1 to September 30)
- no later than January 15 - (for projects assessed from October 1 to December 31)
- no later than April 15 – (for projects assessed from January 1 to March 31).

2. Project Class Description

The candidate class for this RCSR is special events that require a license of occupation and occur at any of the NHSs within the Parks Canada Cape Breton Field Unit. Special events covered by this RCSR are not carried out on Parks Canada's behalf, but are held by businesses, not-for-profit corporations, and community groups that are responsible for advertising the event, equipment set-up and takedown, and the event itself.

2.1. *Projects Subject to the Canadian Environmental Assessment Act*

Special events are a project under the Act because they are captured under section 76 of the *Inclusion List Regulations*. Assessment of special event projects is triggered under Section 5(1)d of the Act because paragraph 4(2)a of the *Federal Real Property Regulations* is used to issue a license of occupation.

Some small community events held by non-profit organizations do not require a license of occupation and are therefore not subject to the Act. Some activities that are consistent with normal site use (i.e. small group of people at site for ceremony without tent (s), chairs, etc.) may not be issued a license of occupation and therefore may not require an EA under the Act. Whether an EA is required for an event will be determined on a project by project basis, in consultation with the Field Unit EA coordinator.

2.2. *Projects Subject to the Replacement Class Screening Report*

The projects subject to the RCSR include special events held at Alexander Graham Bell, Canso Islands and Grassy Island Fort, Fortress of Louisbourg, Marconi, or St. Peters Canal NHS. Six types of special events are addressed, including 1) Concerts, 2) Sporting and Community Events, 3) Filming, 4) Aquatic Ecotourism, 5) Terrestrial Ecotourism, and 6) Encampments. Representation in this manner ensures all activities associated with each type of special event are accounted for in the RCSR.

Sporting and community events, such as relay races or weddings, occur most frequently at the site and total about 12 events per year. Film shoots average about 8 per year and

range from small events to large scale productions. Small community concerts occur about 5 times per year. Ecotourism events, averaging 4 per year, include guided tours such as kayaking or hiking expeditions. During encampments, re-enactors camp at the site and present military and civilian interpretations. These occur about once annually and range in size.

2.3. *Projects Not Subject to the Replacement Class Screening Report*

Projects that are not suitable for application of the replacement class screening include those that are likely to have an adverse effect on a species at risk (SAR), either directly or indirectly, such as by adversely affecting their habitat*, and/or that would require a permit under the *Species at Risk Act* (SARA). For the purposes of this document, SAR include:

- species identified on the List of Wildlife Species at Risk set out in Schedule 1 of SARA, and the critical habitat or the residences of individuals of that species, as those terms are defined in subsection 2(1) of SARA.
- species that have been recognized as "at risk" by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) or by provincial or territorial authorities.

* if, after reviewing the project description using the class screening report, it becomes known or reasonably suspected that species at risk could be adversely affected by the proposed project, do not use the replacement class screening report. The project requires an individual environmental assessment under the Act. Note, the contents of the replacement class screening report may be used in the preparation of the individual screening report to the extent appropriate.

Red and yellow provincially-listed rare species were considered during the preparation of this RCSR. Extremely sensitive areas are closed to special events under this document. Other sensitive areas or those containing rare species are open to supervised special events provided that the associated activities pose little or no risk to the resources.

Any projects which may adversely affect cultural and/or natural resources, either directly or indirectly, will not be permitted under this RCSR. Special events not categorized as Concerts, Sporting and Community Events, Filming, Aquatic Ecotourism, Terrestrial Ecotourism, or Encampments are not addressed by this RCSR and therefore require individual EAs.

In the context of the Crown's legal duty to consult with Aboriginal groups, where it contemplates conduct that might adversely impact any potential or established

Aboriginal and Treaty rights: those projects for which issues raised during Aboriginal consultation remain to be adequately addressed or are addressed in such a way that the project no longer fits in the class as defined in the RCSR.

2.4. *Typical Activities*

Project activities vary between special events, however, all share common elements. Due to this variation, the candidate class is divided into six types of special events (listed in Table 1 below) for the purpose of identifying activities associated with each type of special event.

Table 1. Project activities associated with special events at national historic sites in the Cape Breton Field Unit, per event type and phase.

Event Type	Event Phase	Associated Project Activities																		
		Equipment/Crew Transportation (both terrestrial and aquatic)	Equipment Storage	Mooring/Parking	Set up/Dismantle Temporary Staging, Fencing, Tents, etc.	Installation/Removal of Portable Washrooms	Prepare/Remove Stands/Promotional Displays	Food Preparation, Sales, & Clean-up; Merchandise Sales	Set up/Removal of Waste Facilities, Waste Generation, and Waste Removal	Install/Use/Removal of Generators	Set up/Use/Removal of Sound/Lighting Equipment	Use of Camera Equipment	Use of Props	Set construction/deconstruction	Campfires	Special Event (performances, sporting event, etc)	Use of Special Effects and/or Black Powder	Attendance between 0-500	Attendance between 0-2000	Attendance between 0-10 000
Concerts	Site Preparation	✓	✓	✓	✓	✓	✓		✓	✓	✓									
	Event	✓	✓	✓				✓	✓	✓	✓					✓	✓			✓
	Site Restoration	✓	✓	✓	✓	✓	✓		✓	✓	✓									
Sporting & Community Events	Site Preparation	✓		✓	✓	✓	✓		✓	✓	✓									
	Event	✓		✓				✓	✓	✓	✓					✓			✓	
	Site Restoration	✓		✓	✓	✓	✓		✓	✓	✓									

Event Type	Event Phase	Associated Project Activities																		
		Equipment/Crew Transportation (both terrestrial and aquatic)	Equipment Storage	Mooring/Parking	Set up/Dismantle Temporary Staging, Fencing, Tents, etc.	Installation/Removal of Portable Washrooms	Prepare/Remove Stands/Promotional Displays	Food Preparation, Sales, & Clean-up; Merchandise Sales	Set up/Removal of Waste Facilities, Waste Generation, and Waste Removal	Install/Use/Removal of Generators	Set up/Use/Removal of Sound/Lighting Equipment	Use of Camera Equipment	Use of Props	Set construction/deconstruction	Campfires	Special Event (performances, sporting event, etc)	Use of Special Effects and/or Black Powder	Attendance between 0-500	Attendance between 0-2000	Attendance between 0-10 000
Filming	Site Preparation	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓						
	Event	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓		✓	✓	✓		
	Site Restoration	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓						
Aquatic Ecotourism	Site Preparation	✓																		
	Event		✓	✓					✓							✓		✓		
	Site Restoration	✓																		
Terrestrial Ecotourism	Site Preparation	✓																		
	Event			✓					✓							✓		✓		
	Site Restoration	✓																		
Encampments	Site Preparation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓							
	Event	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓		✓	✓	✓		✓	
	Site Restoration	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓							

2.5. *Typical Seasonal Scheduling and Duration of Projects*

Special events take place at the NHSs in Cape Breton throughout the year. The majority of events, however, typically occur during the summer and fall. Event duration varies from one day to several months, depending on the type of activity. Film productions

can span several months and therefore tend to have a longer duration than the other events assessed by this RCSR.

3. Environmental Review Methods

The purpose of this section is to detail the methodology used to ensure potential project activity effects are consistently addressed, regardless of location or type of special event. To accomplish this, VECs and the boundaries of the environmental review are determined. The rationale used to identify potential environmental, cumulative, and residual effects is explained. Also, the basis for determining potential effects of the environment on the project and accidents and/or malfunctions associated with the project is outlined. Finally, the process for selecting mitigation measures is discussed.

3.1. *Issue Scoping and Valued Environmental Components Selection*

In keeping with Parks Canada's commitment to protect natural and cultural heritage, VECs were selected based on the potential for special events and all associated activities as covered by the RCSR to affect the environment.

Issue scoping consisted of thorough analysis of project activities associated with each type of special event and identification of their potential environmental effects. Potentially affected resources were then used to determine the VECs. The results of the scoping process are summarized in Section 4.3, Table 3. Management Plans, Commemorative Integrity Statements, Parks Canada Guiding Principles and Operational Policies (Parks Canada, 1994), and background information on each site's ecosystem were reviewed to ensure all VECs were identified. Targeted consultation with key interest groups confirmed their appropriateness and did not identify any additional VECs.

As a result of issue scoping, VECs in this EA were identified as the following:

Cultural Resources
Cultural resources include cultural landscapes, archaeological sites, structures, engineering works, artifacts, and associated records assigned historic value (Parks Canada, 1994). They are valued for their association with aspects of human history and their contribution to understanding and communicating past events. Many cultural resources within the NHSs of Canada are commemorated under provisions of the *Historic Sites and Monuments Act* and are therefore nationally important. In accordance with Section 16(1)(e) of the Act which specifies that the RA may include any matter that

it considers relevant, Parks Canada has determined that as a matter of policy, it will assess effects on cultural resources whether or not they result from changes to the biophysical environment. As such, cultural resources are considered a VEC.

Forests and Managed Vegetation
A priority for Parks Canada is to ensure ecological values and cultural integrity are maintained for the long-term (Parks Canada, 1994). A significant portion of the Fortress of Louisbourg NHS contains forested areas which are key ecological values of the site. The NHSs in Cape Breton have areas of managed vegetation that are valued not only as an ecological resource, but also because they form part of the cultural landscape and historic viewplane. As the loss of rare or uncommon flora has the greatest potential to affect ecological values, special attention is given to individuals of such species. Forests and Managed Vegetation are therefore included as a VEC.

Bog and Heathland Vegetation
The Government of Canada is committed to conserving Canada's wetlands, a source of carbon, oxygen and key habitat (Government of Canada, 1991). In addition, the acidic nature of bog water has been shown to preserve archaeological and human remains (Barbier et al, 1997). Heathlands provide a unique ecological environment for many floral species (Fortress of Louisbourg, 1990). As both bogs and heathlands are prevalent within the Fortress of Louisbourg NHS, they have an important ecological value and are therefore considered a VEC.

Fauna
Parks Canada is committed to preserving ecological values on the lands it manages. Special attention is given to rare or uncommon fauna occurring within the NHSs in Cape Breton since loss of individuals of such species has the greatest potential to affect ecological values. Fauna is therefore included as a VEC.

Land Resources
Land resources are key elements of protected cultural and ecological landscapes within NHSs. Land resources within various Cape Breton communities and Canso are under stress from current land use, potential development, and other forms of land use change and are therefore considered a VEC.

Water Resources
Parks Canada, as a general principle, is committed to maintain and protect waters under its jurisdiction (Parks Canada, 1998). Water resources are therefore included as a VEC.

Visitor Experience and Public Safety
Positive visitor experience is valued because it ensures that Parks Canada achieves its objective to foster public understanding, appreciation, and enjoyment of the NHSs. As visitor experience influences public perception of the importance of NHSs, Parks

Canada regulates activities occurring within the site to prevent negative effects on visitor experience. Public safety is also of concern as the Parks Canada Management Directive 3.1.3 – Public Safety Measures for NHSs and Canals (Parks Canada, 1991) states that reasonable care must be taken to avoid undue risk of harm to the public from any potential source of danger on the premises. Visitor experience and public safety are therefore considered a VEC.

Socio-Economic Aspects
Inclusion of socio-economic aspects as a VEC allows Parks Canada to address any past public concerns regarding special events and ensure proper mitigation is applied to reduce any negative effects special events may have on the community.

Air Quality
Air quality is valued because it influences both human health and the environment. Its selection as a VEC is also important to the Government of Canada's efforts to reduce its contribution to greenhouse gas emissions.

3.2. *Boundaries*

Project boundaries are identified as part of the EA process to ensure consistency when assessing expected environmental effects within the scope of the project. Temporal and spatial characteristics depend on the nature of each special event planned at a NHS within the Cape Breton Field Unit. Given the ephemeral nature of the project activities, the time in which the set-up, event, site restoration, and environmental recovery occurs determines the temporal boundary for each VEC. Specific details are provided in Section 4.2, Valued Environmental Components and Boundaries.

Ecological boundaries have been considered during issues scoping and the identification of potential environmental effects. Significance ratings have been assigned based on consideration of the range or extent of the VEC that could be affected by the project.

In considering the effects of the project under the Act, socioeconomic effects are considered only principally as they derive from any change that the project may cause on the environment. Socio-economic boundaries have been considered during issues scoping and the identification of potential environmental effects. Significance ratings have been assigned based on consideration of the scope or extent of the VEC that could be affected by project development.

Administrative boundaries have been considered during the development of the RCSR and are established as the NHS boundaries. Federal, provincial, and municipal requirements have been addressed in the RCSR.

3.3. *Defining Environmental Effects*

As there are six types of special events being considered in this RCSR, each project type is studied on an individual basis. Typical activities are identified for each project and the resulting interactions with the VECs are identified to determine potential environmental effects. (Specific details are provided in Section 4.3, Table 3.)

Given the differences in environmental settings of each NHS in the Cape Breton Field Unit, the project activities are considered on a site-specific basis to ensure all possible interactions between the project and VECs are identified.

3.4. *Effects of the Environment on Project Activities*

Determination of possible effects of the environment on project activities is based on potential magnification of project activity effects because of weather conditions and knowledge of environmental effects associated with poor weather conditions. See details in Section 4.4.

3.5. *Accidents and Malfunctions*

Accidents and equipment malfunctions affecting the VECs are determined based on a survey of project activities, the potential for an environmental emergency, and prior experience with all project types at the NHSs in Cape Breton. See details in section 4.5.

3.6. *Mitigation Measures*

Mitigation measures lessen the environmental effects caused by project activities. Accomplished through preventative actions, preparation, and proper site restoration, application of mitigation measures results in residual environmental effects with less or no significance. See details in section 4.6.

Based on identified potential environmental effects, mitigation measures were developed using the following sources:

Duggan, Rebecca. 1999. *Cultural Resource Impact Report from Film Project: La Veuve de Saint Pierre*.

Fortress of Louisbourg. Not Dated. *Camp Rules*.

Fortress of Louisbourg. 1999. *Canadian Heritage Canadian Environmental Assessment Act Screening – Film Project: Le Veuve de St. Pierre.*

Fortress of Louisbourg. 2003. *Film Production Activities – La Nouvelle France – Natural Resource Mitigating Measures*.

Gorman, J. 2000. *Cape Breton Highlands National Park of Canada Canadian Heritage Screening Form – Gaboteux Tours*. Internal Index #CBH-2000-03.

Gorman, J. 2004a. *Cape Breton Highlands National Park of Canada Environmental Screening Report – Triathlon Event*. Internal Index # CBH-04-05.

Gorman, J. 2004b. *Parks Canada Agency Screening Report – Cabot Trail Relay Race*. CEAR# 04-01-2605; Internal Index #CBH-04-09.

Government of Nova Scotia. 2007. *Solid Waste-Resource Management Regulations (as amended)*. Retrieved from the World Wide Web on June 1, 2010 at http://www.gov.ns.ca/just/regulations/REGS/envsolid.htm.

Nova Scotia Department of the Environment. October 27, 1995. *Solid Waste-Resource Management Strategy*. Retrieved from the World Wide Web on June 1, 2010 at http://www.gov.ns.ca/nse/waste/docs/SolidWasteStrategyFinalReport1995.pdf.

Parks Canada. 2009b. *Parks Canada Environmental Management Directive*. March 2009.

Parks Canada. 2009c. *Replacement Class Screening Report: Special Events in the Halifax Defence Complex*.

Parks Canada. 2009d. *Replacement Class Screening Report Extension: Special Events in the Southwest Nova Scotia National Historic Sites*.

Resource Recovery Fund Board (RRFB) NS and Bluenose Atlantic Coastal Action Program (Bluenose ACAP). *Event Greening – Managing Waste, Recyclables, & Organics at Events & Festivals*. RRFB NS and Bluenose ACAP.

3.7. *Analysis and Prediction of Significance of Residual Environmental Effects*

Analysis of the significance of residual environmental effects is based on several criteria including magnitude, geographic extent, duration, frequency, reversibility, and the ecological context of the effect (see Table 2). The criteria are combined to determine whether or not an activity's effect is significant. See details in section 4.7.

Table 2. Rating system used to determine the significance of residual environmental effects caused by special event activities at the national historic sites in Cape Breton, following the application of mitigation measures.

	Importance Level Rating		
Criteria	**Negligible**	**Minor**	**Major**
Magnitude	▪ Negligible levels of disturbance and/or damage	▪ Minor levels of disturbance and/or damage	▪ Major levels of disturbance and/or damage
Geographic Extent	▪ Limited to project area	▪ Extends beyond project area, but remains within NHS	▪ Extends beyond NHS
Duration of Effect	▪ Within 24 hour period	▪ Days to weeks	▪ A month or longer
Frequency of Effect	▪ Occurs on a monthly basis or less frequently	▪ Occurs on a weekly basis	▪ Occurs on a daily basis or more frequently
Reversibility	▪ Effects reversible over short term without active management	▪ Effects reversible over short term with active management	▪ Effects reversible over extended term with active management or effects are irreversible
Ecological and Historical Context	▪ Little risk to ecological values and commemorative integrity	▪ Minor effect on ecological values and/or commemorative integrity	▪ Ecological values and/or commemorative integrity at risk

These criteria are combined to determine whether or not a residual environmental effect is significant based on the following definitions:

Significant
A residual environmental effect is considered significant when it induces frequent, major levels of disturbance and/or damage and the effects, lasting a month or longer, extends beyond the NHS boundaries following the application of mitigation measures. The effect is either reversible with active management over an extended term or irreversible and threatens ecological values and/or commemorative integrity.

Not Significant
A residual environmental effect is considered not significant when it has infrequent, minor or negligible levels of disturbance and/or damage and the effects, lasting less than a week, are contained within the NHS boundaries following the application of

mitigation measures. The effect is reversible with or without short-term active management and there is little risk to ecological values and commemorative integrity.

3.8. *Cumulative Effects*

It is necessary to consider past, present, and likely future projects to determine the full extent of potential environmental effects associated with each project's activities. Although the effects associated with one project may be negligible, other projects can compound those effects to produce more significant ones.

Consideration of the cumulative effects associated with projects covered in this RCSR includes all activities and projects flowing from the current management plans for NHSs within the Cape Breton Field Unit. Potential interactions between a special event and activities outside a NHS are also assessed for potential cumulative effects. Based on knowledge of potential environmental effects and past experience, it is possible to predict the cumulative effects that might result from the combination of projects or repeated special events known at the time of declaration of this RCSR. See details in section 4.8.

4. Environmental Review

4.1. *Environmental Setting*

The NHSs in Cape Breton fall within the Nova Scotia Highlands Ecoregion and the Atlantic Coast Ecoregion, both of which are located in the Atlantic Maritime Ecozone (Environment Canada, 2005).

Alexander Graham Bell and Marconi NHSs are found within the Nova Scotia Highlands Ecoregion. This area is characterized by warm, rainy summers, and mild to cold, snowy winters. Mean annual precipitation amounts range from 1000mm to 1600mm and the mean annual temperature is 6 °C. Land use in the area includes forestry, farming on the lowlands, and localized blueberry and maple syrup production (Environment Canada, 2005).

The Fortress of Louisbourg NHS and Canso Islands and Grassy Island Fort NHSs are found within the Atlantic Coast Ecoregion. The Atlantic Ocean has a strong influence over the climate in this area which is characterized by cool, wet summers and mild, wet winters. High winds, high humidity and fog are prevalent during the summer and fall. The mean annual temperature is 6.5°C and the mean annual precipitation ranges from 1200mm to 1500mm. Fishing, agriculture, and seashore recreation all take place in this region (Environment Canada, 2005). St. Peters Canal NHS falls between the two ecoregions.

Cultural resources are identified for each NHS in its Commemorative Integrity Statement. As per Parks Canada's Guiding Principles and Operational Procedures (Parks Canada, 1994), cultural resources of historic value are deemed either Level I or Level II resources. Level I resources are given the highest possible value as they are directly linked to the Statement of Commemorative Intent for the site and are therefore nationally significant (Parks Canada, 1997b). Level II resources have historical value because of historic, aesthetic, or environmental qualities, but are not considered nationally significant. Other resources not identified as Level I or II are exempted from the Cultural Resource Management Policy (Parks Canada, 1994). Until determined otherwise by research and archaeological investigation, any unidentified remains are considered Level II resources (Parks Canada, 1997b).

The following subsections contain site-specific environmental setting and cultural resource descriptions for each of the NHSs within the Cape Breton Field Unit. Maps of the NHSs in Cape Breton are found in Appendix 3. Each map provides the site layout of the NHS and outlines the area proposed for special events.

4.1.1. Alexander Graham Bell National Historic Site

Alexander Graham Bell NHS was established as a historic museum in 1954. The reason for its national significance is that the memorabilia housed at the site are associated with Alexander Graham Bell, teacher, scientist and inventor, a person of national historic significance (Parks Canada, 2002).

Alexander Graham Bell NHS is located in Baddeck, Nova Scotia (see map in Appendix 3). The site encompasses approximately 10 hectares of land which overlooks Baddeck Bay and Beinn Bhreagh, Alexander Graham Bell's summer home (Parks Canada, 2002). The site is located in a residential area and is situated approximately 2km from the Trans Canada Highway (105) (Parks Canada, 2005). The Alexander Graham Bell museum was declared a NHS in 1954.

The site is found in the lowland plains of Cape Breton Island and is underlain by Carboniferous rocks (Cann et al, 1963). Topography in the region ranges from gently to strongly rolling. Soils are of the Millbrook series and are characterized by dark reddish-brown gravely clay loam till and imperfect drainage. Alexander Graham Bell NHS is situated across from Baddeck Harbour. There is a large pond at the base of the site next to the Highway (205).

Based on a recent site visit, native flora and fauna at Alexander Graham Bell NHS are rather limited. Grass covers the majority of the landscaped property. There are few flower gardens surrounding the entrance to the museum and several trees are present on the property. Fauna consists of that found within the village of Baddeck such as

common bird species and small mammals. No rare or endangered species are known nor expected to be present at the site because the property is fully landscaped.

The Alexander Graham Bell NHS Commemorative Integrity Statement (Parks Canada, 2002) provides details on the cultural resource inventory on site. Level I cultural resources include the original and subsequent donations from Bell's daughters of artifacts related to Bell, memorabilia associated with Bell that are on permanent loan to the Government of Canada, artifacts donated by non-family members, and the contents of Bell's library. Level II cultural resources consist of approximately 7 artifacts dealing with the scientific and engineering work of Frederick W. "Casey" Baldwin, 6 medals awarded to J. A. D. McCurdy, approximately 35 replicas of early telephones, a full-sized replica of the HD-4 (a hydrofoil craft), the exhibit building, and reproduced documentary material, photographs, and transcribed/edited correspondence between Bell and his family (Parks Canada, 2002).

Visitor hours vary throughout the year, however the museum is open to the public year round. During the off-season, personal services are available upon request and are subject to staff availability. In addition to the museum exhibits, the site features a gift shop, roof top garden, and picnic tables. Between 2009-2010, visitors to the site totalled approximately 73 959 people (Parks Canada, 2010).

4.1.2. Canso Islands and Grassy Island Fort National Historic Sites

Canso Islands and Grassy Island Fort NHSs were commemorated for the following reasons:

- "it was an important fishing base that was developed first in the 16th century by the French and subsequently, during the first half of the 18th century, by the British when it became the economic mainstay of Nova Scotia and a key centre for the English cod fishery;
- it was a point of contention and the scene of several combats between the British and the French and Mi'kmaq in the first half of the 18th century; and,
- it was the staging point for the British and New England expedition led by Sir William Pepperrell and Sir Peter Warren against the French stronghold of Louisbourg in 1745." (Parks Canada, 2003a)

Canso Islands and Grassy Island Fort NHSs are located just off the coast of Canso, Nova Scotia in the Atlantic Ocean (see map in Appendix 3). The site is comprised of the visitor reception centre located in the town of Canso and a series of islands. Altogether, the 39 islands that compose Canso Islands and Grassy Island Fort NHSs comprise approximately 200 hectares (Beach, 2004). Parks Canada only administers Grassy Island (12 hectares). The other islands are either privately owned or the property of the province of Nova Scotia. Grassy Island Fort NHS was declared of national historic significance in 1962. This RCSR only applies to activities occurring on the Parks Canada

administered property of Grassy Island Fort NHS and the Visitor Reception Centre in Canso.

Soils on Grassy Island Fort NHS are composed of the Wolfville series and coastal beach. The Wolfville soil series is characterized by dark brown friable loam over dark grayish brown sandy clay loam and has moderately slow drainage (Hilchey et al, 1964). Sandy to gravelly coastal beach surrounds the perimeter of the island. Grassy Island Fort NHS is composed of easily erodible material and is subject to erosion, particularly at the cemetery and Heron site (Beach, 2004). There are no water bodies present on the island, however, it is surrounded by the Atlantic Ocean.

Vegetation on Grassy Island Fort NHS is heavily influenced by past use of the site for agricultural purposes (Beach, 2004). The island is being recolonized by alders and is in the early stages of succession. An ecological inventory of the flora and fauna has not been completed, however, rare and/or endangered species are not expected to be present. A variety of sea birds are commonly found on and near the site. The island also forms a stopover point for many migratory birds.

The Canso Islands and Grassy Island Fort NHSs Commemorative Integrity Statements (Parks Canada, 2003a) provide details on the cultural resource inventory on site. The designated place consists of most of the area that was historically referred to as Canso Islands. The footprint of the ramparts defines the designated place for Grassy Island Fort NHS. Level I cultural resources on site include various archaeological sites and the artifact collection. Level II cultural resources include a small precontact Aboriginal archaeological site, archaeological sites whose remains relate to the post 1745 period, 9 precontact Aboriginal artifacts, approximately 100 artifacts which relate to site occupation following 1745, and approximately 4000 artifacts found during underwater surveys (Parks Canada, 2003a). Artifacts are stored off-site.

The site features 18th century fortifications and the remains of a colonial England fishing station. Services include a Visitor Reception Centre, boat service from the visitor centre to Grassy Island, and an interpretive hiking trail around the island. Canso Islands and Grassy Island Fort NHSs of Canada are open daily from June 1 through September 15. Approximately 2000 people visit the sites each year (Parks Canada, 2010).

4.1.3. Fortress of Louisbourg National Historic Site

"Fortress of Louisbourg is of national historic significance because, between 1713 and 1768, it was a place of profound significance in the great France – British struggle for empire" (Parks Canada, 1997b).

The Fortress of Louisbourg NHS is located in the Cape Breton Regional Municipality, Nova Scotia (see map in Appendix 3). The site encompasses approximately 6000 hectares of land and contains valuable cultural and ecological resources (Parks Canada,

2001). Louisbourg Harbour and the Atlantic Ocean border the Fortress of Louisbourg NHS. The modern town of Louisbourg is located northeast of the reconstructed town site and contains both residential and commercial buildings. The Fortress of Louisbourg was designated a NHS in 1928.

The lands found within Louisbourg NHS are characterized by undulating to strongly rolling topography (Environment Canada, 1980). Soil series commonly found within the park include Thom, Mira, and Arichat. The moderately-well drained Thom soil series is derived from a greyish brown sandy loam fill. The Mira soil series is associated with Thom, however it has imperfect drainage. The poorly drained mineral soils that characterize the Arichat soil series can be found interspersed with the Thom and Mira soil series (Environment Canada, 1980). The rocky and rugged coastline contains cliffs that average 15m in height. Kennington Cove has the only sandy beach found within the park.

Water resources are abundant within the Fortress of Louisbourg NHS. There are six lakes on site (Mathieson, Kelly, Cavanagh, Munroe, Spectacle, and Twelve Mile), as well as several inland ponds (Environment Canada, 1980). The Kelly Lake watershed, which borders the site, forms the water supply source for the community of Louisbourg and the NHS (Parks Canada, 2001). Artificial lagoons are found near the reconstructed Fortress of Louisbourg. Drainage occurs through the three major streams found on site (Kennington Cove, Gerard, and Landing Cove Brooks). Several smaller, unnamed streams drain the uplands. Approximately 10% of the site is comprised of wetlands, most of which are bogs.

Vegetation on site is predominately boreal forest with balsam fir and white spruce being dominant (Parks Canada, 2001). Williams (1996) identified ten plant species as being rare within the Fortress of Louisbourg NHS. Of those ten, the Atlantic Canada Conservation Data Centre has only nine listed as being rare throughout their range in Nova Scotia. These plants, all of which are believed to be secure globally, include Narrow or Willow-leaved dock (*Rumex salicifolius var. triangulivalvis*), Dwarf blueberry (*Vaccinium boreale*), Swedish Cornel (*Cornus suecica*), Spurred gentian (*Halenia deflexa var. brentoniana*), Bog bedstraw (*Galium labradoricum*), Bog rush (*Juncus stygius var. americanus*), Howe Sedge (*Carex atlantica var. capillacea*), Blue sedge (*Carex livida*), and Northern Bur-reed (*Sparganium hyperboreum*).

Fauna on site is consistent with those species found throughout Cape Breton, Nova Scotia. A survey conducted by Jacques Whitford (1996) identified many birds on site including the Red breasted nuthatch (*Sitta Canadensis*), White-winged crossbill (*Loxia leucoptera*), Boreal chickadee (*Poecile hudsonica*), Dark-eyed junco (*Junco hyemalis*), and Golden-crowned kinglet (*Regulus satrapa*). The inventory also identified the presence of several bird SAR as ranked by the COSEWIC, however none were recorded as breeding in the park. Observed species included those of special concern such as the Harlequin

duck (*Histrionicus histrionicus*) and Long billed curlew (*Numenius americanus*), as well as the threatened Peregrine Falcon (*Falco peregrinus anatum*) and endangered Loggerhead shrike (*Lanius ludovicianus migrans*). These species were most likely migrants or vagrants (Jacques Whitford, 1996).

Twenty-seven species of mammals were identified including the American beaver (*Castor canadensis*), Lynx (*Lynx canadensis*), bobcat (*Lynx rufus*), White-tailed deer (*Odocoileus virginiana*), and Snowshoe hare (*Lepus americanus*). No rare or endangered mammals were identified within the NHS. The Garter snake (*Thamnophis sirtalis*), Green snake (*Opheodrys vernalis*), and Northern red-bellied snake (*Storeria occipitomaculata*) were observed during the survey.

Amphibians found within the NHS included the Green frog (*Rana clamitans*), Pickerel frog (*Rana palustrus*), Leopard frog (*Rana pipiens*), Spring peeper (*Hyla crucifer*), Wood frog (*Rana sylvatica*), American toad (*Bufo americanus*), Eastern red-backed salamander (*Plethodon cinereus*), and Yellow spotted salamander (*Ambystoma maculatum*). No rare or endangered reptiles or amphibians have been identified. A variety of fish species are also present within the various water sources in and around the Fortress of Louisbourg NHS. These include, but are not limited to, the Atlantic salmon (*Salmo salar*), Rainbow smelt (*Osmerus mordax*), and American eel (*Anguilla rostrata*) (Jacques Whitford, 1996).

The Fortress of Louisbourg NHS Commemorative Integrity Statement (Parks Canada, 1997b) provides details on the cultural resource inventory on site. The historic place consists of the site itself, part of the modern town of Louisbourg, the harbour, and the coastal and immediate hinterland areas. Level I cultural resources on site include the in-situ archaeological resources (both terrestrial and underwater sites), 98% of the archaeological collection, and the cultural landscapes which consist of the battlefield sites, unreconstructed portions of townsite, the Fauxbourg and North Shore, and cemeteries, roads, and trails. The museum building, caretaker's house, 19th and 20th century archaeology sites, 2% of the archaeological collection, monuments, cemeteries from after 1768, and the cultural landscapes associated with the 19th and 20th centuries comprise the Level II cultural resources. The curatorial collection contains both Level I and Level II resources (Parks Canada, 1997b).

The Fortress of Louisbourg attracts a large number of visitors each year. Between 2009-2010, 88 374 people were recorded to visit the site (Parks Canada, 2010). Services on site include the visitor centre, several trails, site animation programs, ruins walk, picnic areas, swimming, and fishing areas. Animated re-enactments of Louisbourg in 1744 occur during the visitor season. The park area is accessible year round and guided tours of the Fortress can be arranged during the off-season.

4.1.4. Marconi National Historic Site

"Marconi NHS of Canada was designated a NHS in 1985. The reasons for designation, as derived from the 1938 HSMBC minutes and the ministerial agreement of 1985, are that it is the site of the first exchange of radio messages across the Atlantic, an event of national historic significance, and that it commemorates the efforts and accomplishments of Guglielmo Marconi in the field of wireless communication." (Parks Canada, 2007)

Marconi NHS is situated at Table Head on Timmerman Street in Glace Bay, Nova Scotia (see map in Appendix 3). The site is comprised of approximately 5 acres of land and is bounded by 18m cliffs. Table Head is a residential community composed of homes constructed for coal mine workers (Parks Canada, 2007). Marconi NHS was designated a NHS in 1985.

The topography of the site is undulating to gently rolling. Soils on site are composed of the Springhill soil series and are characterized by pale brown to greyish brown sandy loam till (Cann et al, 1963). There is a risk of ground subsidence due to past mining activity below the site. There are no bodies of water immediately on site, however, the Atlantic Ocean borders the steep cliffs.

Vegetation at Marconi NHS is rather limited. The landscape is grassed and there are few trees/shrubs present on site. Rare or endangered flora or fauna species are not known nor expected.

The management plan for the site provides details on its cultural resource inventory (Parks Canada, 2007). Level I cultural resources include the designated place and the concrete foundations for two of the towers that supported the antenna. The foundations of the two buildings, the receiving room and powerhouse, are also considered Level I resources and are situated at the square formed by the two towers. Level II cultural resources include the documented, but unexcavated, archaeological remains of the foundations for the stays that supported the towers, as well as a marble bust of Marconi and two pieces of early wireless equipment similar to those used at the Table Head station (Parks Canada, 2007).

The site is open daily between 10am and 6pm between June 1st and September 15th. The site features a visitor centre and a path to the original transmission station. Visitation to the site was recorded as approximately 4865 individuals in 2009-2010 and 3236 in 2008-2009 (Parks Canada, 2010).

4.1.5. St. Peters Canal National Historic Site

St. Peters Canal NHS was commemorated because "it is part of Canada's system of canals" (Parks Canada, 2003d).

The site is located in the village of St. Peters in Cape Breton, Nova Scotia (see map in Appendix 3). St. Peters Canal NHS is situated across from Battery Provincial Park and provides a link between the Atlantic Ocean and the Bras d'Or Lakes. The surrounding area is low-density urban, composed mainly of residential and commercial buildings and vacant lands. St. Peters Canal was designated a NHS in 1929 (Parks Canada, 2009e).

St. Peters Canal NHS is situated in the lowland plains of Cape Breton Island and is part of the Avalon Terrane of Nova Scotia (Stapleton and Bridgland, 1999). Soils are part of the Woodbourne series and are characterized by dark reddish-brown gravely clay loam till and have good drainage (Cann et al, 1963). Water resources on site consist of that contained within the canal which functions as a link between the Atlantic Ocean and Bras d'Or Lakes.

Vegetation on site is typical of disturbed land in the area. A large portion of the site is covered by grass and weedy forbes. Forested slopes dominated by Speckled alder (*Alnus incana*) and White spruce (*Picea glauca*) are found on site (Stapleton and Bridgland, 1999). Fauna on site is predominately avian in nature and includes Goldfinch (*Carduelis sp.*), Bald eagle (*Haliaeetus leucocephalus*), and a variety of seabirds. Red squirrel (*Tamiasciurus hudsonicus*) is common at the site and red fox (*Vulpes vulpes*), coyote (*Canis latrans*), and white-tailed deer (*Odocoileus virginiana*) have frequented the area. A number of marine species can be found within the canal waters (Stapleton and Bridgland, 1999). No rare or endangered species have been recorded and none are expected.

The St. Peters Canal NHS Commemorative Integrity Statement (Parks Canada, 2003c) provides details on the cultural resource inventory on site. The designated place is the only Level I cultural resource associated with the site and consists of the administrative boundaries of the site, including the landscape associated with the construction and operation of the canal (Parks Canada, 2003c). Level II cultural resources consist of the Lockmaster's house, Nicholas Denys' Trading Post remains, Bridge house base and storage building structures, canal engineering works, swing bridge, Level I resources associated with St. Peters NHS, the archaeological collection which is stored in Halifax, and the Historic Sites and Monuments Board of Canada plaques.

The canal is used by pleasure crafts during the summer months. In 2009-2010, the site saw approximately 14 354 visitors (Parks Canada, 2010). The site features a small interpretive centre, administrative building, and picnic tables. St. Peters Canal NHS is open from mid-May to mid-October. The lockmaster's house is also located on site, however, it is not open to the public.

4.2. *Valued Environmental Components and Boundaries*

Each VEC is assessed within specified boundaries set by the EA. Spatial and administrative boundaries and the likely duration of effects for each VEC are discussed below.

Cultural Resources
Items assigned historical value are contained within the boundary of each NHS. Although special events are limited to a specified area, the potential for participants to venture beyond the event boundaries exists. To accommodate this, the NHS borders act as the spatial boundary for the assessment. The effects of the project activities will be felt for no longer than 3 months, the duration of the longest special event, as any damage incurred will be temporary and repaired within this time period.

Forests and Managed Vegetation
The NHS forms both the administrative and spatial boundaries for this assessment. Direct effects are expected only on areas managed for human use within the designated areas of the event. Mitigation measures take into consideration the protection of any rare species found within the spatial boundaries. The effects of project activities will be felt for no longer than two years and encompass any necessary natural recovery of species disturbed by the special events.

Bog and Heathland Vegetation
The NHS forms both the administrative and spatial boundaries for this assessment. Direct effects on the bog vegetation have the potential to impact water quality beyond the immediate vicinity of the site. Mitigation measures take into consideration the protection of any rare species found within the spatial boundaries of the site, as well as the protection of the bog and heathland vegetation itself. Activities permitted in this area will be subject to supervision by Parks Canada staff and are therefore not expected to produce long-term environmental effects. The effects of project activities will therefore be felt for no longer than two years and encompass any necessary natural recovery of species disturbed by the special events.

Fauna
The NHS forms both the administrative and spatial boundaries for this assessment. Direct effects are expected only on areas managed for human use within designated areas of the event. Mitigation measures take into consideration any rare species and protection of species found outside event sites within spatial boundaries and outside the NHS borders. The effects of project activities will be felt for no longer than two years and encompass any necessary natural recovery of species disturbed by the special events.

Land Resources
Soil compaction and waste production is limited to the designated special event areas, however the effects of waste generation extend beyond the site to receiving landfill

space. To accommodate for increased waste being sent to landfills, the land resources spatial boundary for this RCSR is Cape Breton Island and Guysborough County. The NHS forms the administrative boundary. The effects of the special events will be felt for no longer than two years to allow for decomposition of waste.

Water Resources

Project activities can occur in the immediate vicinity of water sources, so there is a possibility of effects extending beyond the immediate special event location. As such, the spatial boundary for this RCSR is set as Cape Breton and Canso. The NHS forms the administrative boundary. The effects of project activities will not extend beyond three months duration, which includes natural recovery from sedimentation, should it occur.

Visitor Experience and Public Safety

Spatial and administrative boundaries are the NHS borders since a special event potentially affects the overall visitor experience at any area within the site, as well as increases the public safety risks. Project activities, in particular increased noise and vegetative damage, may have a negative impact on visitor experience. Potential public safety risks are expected to occur within the immediate vicinity of the special event itself or as a result of activities directly and/or indirectly related to the event. Project activities causing disruption to visitor experience and risks to public safety, both as individuals and a collective group, will be felt for no longer than a month after the event. This allows natural recovery of vegetation to occur and visual evidence of the event to fade.

Socio-Economic Aspects

As the noise, increased traffic, and demand for services affects residents within the immediate vicinity of the site, the spatial boundary is set as Baddeck for Alexander Graham Bell NHS, Canso for Canso Islands and Grassy Island Fort NHSs, District 1 of the Cape Breton Regional Municipality for the Fortress of Louisbourg NHS, Table Head, Glace Bay for Marconi NHS, and St. Peters for St. Peters Canal NHS. The NHS forms the administrative boundary for this RCSR. Activities associated with special events range from a few days duration to several months. Individual irritation amongst community residents is not expected, however, it would likely last no longer than a few days following the end of the event should it occur.

Air Quality

As project activities potentially affect air quality within the local community, the spatial boundary for this RCSR is set as Baddeck for Alexander Graham Bell NHS; Canso for Canso Islands and Grassy Island Fort NHSs; Louisbourg for the Fortress of Louisbourg NHS; Table Head, Glace Bay for Marconi NHS; and St. Peters for St. Peters Canal NHS. The administrative boundary is the borders of the NHS. The direct effects of project activities will be felt for no longer than the event itself, assuming any environmental effects disperse with wind.

4.3. *Identification of Project Environmental Effects*

Project environmental effects vary, depending on the special event and its location. As a result, potential environmental effects are described per special event type, taking into account any site-specific factors, in Table 3 below.

Table 3. Identification of potential environmental effects associated with each valued environmental component (VEC), listed per special event type.

			Applicable Special Event Types					
VEC	**Project Activities**	**Potential Environmental Effects**	Concerts	Sporting and Community Events	Filming	Aquatic Ecotourism	Terrestrial Ecotourism	Encampments
Cultural Resources – Level I & Level II	Equipment/Crew Transportation (both terrestrial and aquatic)	Damage to in-situ cultural resources	✓	✓	✓	✓	✓	✓
		Damage to reconstructed buildings	✓	✓	✓			✓
	Equipment Storage	Damage to in-situ cultural resources	✓		✓	✓		✓
	Mooring/Parking	Damage to shoreline in-situ cultural resources			✓	✓		
		Damage to wharf infrastructure			✓	✓		
		Damage to in-situ cultural resources (either underwater or terrestrial)	✓	✓	✓	✓	✓	✓
	Set up/Dismantle Temporary Staging, Fencing, Tents, etc.	Damage to in-situ cultural resources	✓	✓	✓			✓
		Damage to reconstructed buildings	✓	✓	✓			✓
	Installation/Removal of Portable Washrooms	Damage to in-situ cultural resources	✓	✓	✓			✓
	Prepare/Remove Stands/Promotional Displays	Damage to in-situ cultural resources	✓	✓				✓
	Set up/Removal of Waste Facilities	Damage to in-situ cultural resources	✓	✓	✓			✓

			Applicable Special Event Types					
VEC	**Project Activities**	**Potential Environmental Effects**	Concerts	Sporting and Community Events	Filming	Aquatic Ecotourism	Terrestrial Ecotourism	Encampments
	Installation/Use/Removal of Generators	Damage to in-situ cultural resources	✓	✓	✓			✓
	Set up/Use/Removal of Sound/Lighting Equipment	Damage to in-situ cultural resources	✓	✓	✓			✓
	Use of Camera Equipment	Damage to in-situ cultural resources			✓			✓
	Set Construction/Deconstruction	Damage to in-situ cultural resources			✓			
	Campfires	Damage to reconstructed buildings						✓
	People attending Special Event	Damage to reconstructed buildings	✓	✓	✓	✓	✓	✓
	Use of Special Effects and/or Black Powder	Damage to in-situ cultural resources	✓		✓			✓
		Damage to reconstructed buildings	✓		✓			✓
Forests and Managed Vegetation	Equipment/Crew Transportation (terrestrial)	Trampling/destruction of vegetation	✓	✓	✓	✓	✓	✓
	Equipment Storage	Trampling of grass	✓		✓	✓		✓
	Mooring/Parking	Trampling/Destruction of vegetation	✓	✓	✓	✓	✓	✓
Forests and Managed Vegetation	Set-up/Dismantle Temporary Staging, Fencing, Tents, etc.	Destruction of grass	✓	✓	✓			✓
	Installation/Removal of Portable Washrooms	Trampling of grass	✓	✓	✓			✓
	Set up/Removal of Waste Facilities	Trampling of grass	✓	✓	✓			✓
	Use of Vegetative Props	Introduction of invasive species			✓			
	Set construction/deconstruction	Destruction of grass			✓			
	Campfires	Destruction of vegetation						✓
	People Attending Special Event	Trampling of grass	✓	✓	✓	✓	✓	✓
Bog and Heathland Vegetation	Equipment/Crew Transportation (terrestrial)	Trampling/destruction of vegetation			✓		✓	
	Equipment Storage	Trampling of vegetation			✓			
	Mooring/Parking	Trampling/Destruction of vegetation			✓		✓	
	Set-up/Dismantle Temporary Staging, Fencing, Tents, etc.	Destruction of vegetation			✓			
	Use of Vegetative Props	Introduction of invasive species			✓			

			Applicable Special Event Types					
VEC	**Project Activities**	**Potential Environmental Effects**	Concerts	Sporting and Community Events	Filming	Aquatic Ecotourism	Terrestrial Ecotourism	Encampments
	Set construction/deconstruction	Destruction of vegetation			✓			
	People Attending Special Event	Trampling of vegetation			✓		✓	
Fauna	Use of Animal Props	Risk of infection from imported livestock			✓			
	Set construction/deconstruction	Potential chemical use harmful to wildlife			✓			
	Special Event and People Attending	Disruptive to wildlife	✓	✓	✓	✓	✓	✓
Land Resources	Equipment/Crew Transportation & Parking	Soil contamination from accidental fuel/oil leak or spill	✓	✓	✓	✓	✓	✓
		Soil compaction resulting in reduced water/soil infiltration rates, erosion from rain	✓	✓	✓		✓	✓
	Mooring/Parking	Increased risk of shoreline erosion			✓	✓		
	Installation/Removal of Portable Washrooms	Soil contamination from accidental spill/leak of human waste	✓	✓	✓			✓
		Soil contamination from accidental spill/leak of odour control chemicals	✓	✓	✓			✓
Land Resources	Food Preparation and Clean-up	Soil contamination from food waste water	✓	✓	✓			✓
	Generation of Waste During Event	Soil contamination from refuse	✓	✓	✓	✓	✓	✓
	Disposal of Waste Produced	Refuse adds to waste stream and ultimately consumes more landfill space	✓	✓	✓	✓	✓	✓
	Installation/Use/Removal of Generators	Soil contamination from accidental fuel/oil spill or leak	✓	✓	✓			✓
Water Resources	Equipment/Crew Transportation & Parking	Surface/ground water contamination from accidental fuel/oil leak or spill	✓	✓	✓	✓	✓	✓
		Soil compaction resulting in reduced water/soil infiltration rates, increased surface runoff, and siltation of surface water	✓	✓	✓		✓	✓
	Equipment/Crew Transportation & Parking	Disruption of water movement patterns and filtering capacity in bogs, as well as overall water quality			✓		✓	
	Installation/Removal of Portable Washrooms	Surface water contamination from accidental spill/leak of human waste	✓	✓	✓			✓
		Surface water contamination from accidental spill/leak of odour control chemicals	✓	✓	✓			✓
	Food preparation & Clean-up	Surface water contamination from food waste water	✓	✓	✓			✓
	Generation of Waste During Event	Surface water contamination from refuse	✓	✓	✓	✓	✓	✓

			Applicable Special Event Types					
VEC	**Project Activities**	**Potential Environmental Effects**	Concerts	Sporting and Community Events	Filming	Aquatic Ecotourism	Terrestrial Ecotourism	Encampments
	Set construction/deconstruction	Alteration of fish habitat			✓			
	Installation/Use/Removal of Generators	Surface/ground water contamination from accidental fuel/oil spill or leak	✓	✓	✓			✓
Visitor Experience and Public Safety	Special Event	Limited accessibility to the site	✓	✓	✓			✓
		Limited services in town available for visitors	✓		✓			✓
		Activities enhance visitor experience	✓	✓	✓			✓
	Use of Sound Equipment; Special Event	Noise disrupts site's historical atmosphere	✓	✓	✓			
	Use of Special Effects/Black Powder	Noise distracts from site's historical atmosphere	✓		✓			
		Reduced air quality	✓		✓			✓
	Special Event and Associated Activities	Increased risk to public safety	✓	✓	✓	✓	✓	✓
Socio-economic Aspects	People Attending Special Event	Increased traffic makes travel more difficult for community residents	✓	✓	✓			✓
	People Attending Special Event	Increased economic benefit to local community businesses	✓	✓	✓	✓	✓	✓
	Use of Sound Equipment; Special Event	Increased noise affects peace and enjoyment of property by some community residents	✓	✓	✓			✓
	Use of Special Effects/Black Powder	Increased noise affects peace and enjoyment of property by some community residents	✓		✓			✓
Air Quality	Use of Special Effects/Black Powder	Reduced air quality	✓		✓			✓
	Special Event and People Attending	Increased greenhouse gas emissions from people travelling to and from special event, as well as from equipment (i.e. generators, refrigerators, vehicles, etc.) used during activities associated with special events	✓	✓	✓	✓	✓	✓

4.4. *Effects of the Environment on Project Activities*

Potential effects of the environment on project activities are weather-related. Heavy rain will likely increase disruption of the turf cover, erosion, siltation of surface water, and volume of surface water runoff. In addition, heavy rains could augment the effects of an accidental spill. The effects of heavy precipitation are addressed through event

planning and the application of mitigation measures (see Section 4.6). Since interactions between the VECs and the environment are minimal and special events are of short duration, it is unlikely that heavy precipitation will result in residual adverse environmental effects.

4.5. *Accidents and Malfunctions*

As most special events do not require a great deal of site preparation prior to the event, accidents with an environmental impact are infrequent. The use of vehicles and generators during special events creates the potential for a fuel/oil leak or spill that could contaminate soil and ground/surface water sources. In addition, installation and removal of the portable washroom facilities could result in an accidental odour control chemical and/or human waste leak or spill that contaminates soil and ground/surface water sources. The impact of any of these potential accidents is easily reduced through preventative measures. In order to minimize soil and ground/surface water contamination, environmental emergency response plans (EERPs) shall be available, along with the necessary equipment, to ensure a quick response and proper clean up (see Appendix 4 for the Environmental Emergency Response Plan Guidelines and Template). In addition, a proper procedure for the removal of the portable washroom facilities reduces the spill risk. For an assessment of the significance of residual effects resulting from an accidental spill, see Section 4.7, Table 5.

4.6. *Mitigation Measures*

Mitigation measures are developed for each special event type for each potential environmental effect, with consideration of any possible site-specific effects. Despite the application of mitigation measures wherever possible, it is not feasible to reduce all environmental effects to zero. Clients will be encouraged to manage their operations to the same environmental standards as Parks Canada.

In the case of using pyrotechnics during concerts, reduction of air quality is a potential environmental effect. Although fireworks contribute ground-level ozone (Johnson, 2001), a respiratory irritant, infrequent occurrence makes their overall contribution to air pollution insignificant. In a similar study, Dutcher et al (1999) concluded that although particulate concentrations originating primarily from black powder were initially quite high in an indoor facility, they rapidly dissipated due to a ventilation system. As special events will take place outdoors, dispersal will be rapid. As a result, mitigation measures will not be included for the use of fireworks or black powder as the air quality reduction will be small, quickly dissipate, and be of very short duration.

Mitigation measures for all special events are summarized in the table below. Site-specific mitigation measures are located in Appendix 1.

Table 4. Mitigation measures associated with each Valued Environmental Component (VEC) for special events occurring within the national historic sites in Cape Breton (Client must meet these measures).

VECs	Mitigation Measures
Cultural Resources	• Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager • Access restricted to designated area(s) (See maps in Appendix 3) • Provide security procedures to keep participants in designated special event area • Place and maintain approved barricades in those areas designated by Parks Canada • Access routes used to and from the special event area must be pre-approved by Parks Canada • Must comply with the National Fire Code of Canada, as well as site specific fire control plans and fire orders • Location of temporary structures must avoid sensitive areas as indicated by a Parks Canada archaeologist • Excavation of any sort is prohibited • Special event equipment must be stored at a location approved by Parks Canada • Anchors must not be deployed in the 'no anchoring' zones (see maps in Appendix 3) • Use of mooring blocks must be coordinated with Parks Canada and Transport Canada
Forests and Managed Vegetation; Bog and Heathland Vegetation	• Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager • Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications • Provide security procedures to keep participants in designated special event area • Access restricted to designated areas (see maps in Appendix 3) • Vehicles restricted to approved paved and gravelled surfaces • Special event equipment must be stored at a location approved by Parks Canada • Must comply with the National Fire Code of Canada,

VECs	Mitigation Measures
	as well as site specific fire control plans and fire orders • Use of chemicals must be pre-approved by Parks Canada and stored/disposed of in accordance with applicable legislation and guidelines; WHMIS labelling is required • Access routes to and from the special event area must be pre-approved by Parks Canada • Any viable vegetation imported for use during special event must consist of native species
Fauna	• Notify warden service immediately of any problem wildlife encounters • Feeding, enticement, or harassment of wildlife is prohibited • Toxic materials and any materials which may pose a hazard to wildlife must be stored in secured buildings or containers • All livestock transported to the site must have a current health certificate from a certified veterinarian ensuring that each animal has been vaccinated and dewormed • It should be understood that under Section 6 of the *Migratory Birds Regulations* (MBR), it is forbidden to 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.

VECs	Mitigation Measures
Land Resources; Water Resources	• Rapid response to any spill is required • Storage of hazardous materials must comply with the *Canadian Environmental Protection Act* • EERP and appropriate containment/clean-up equipment and training required (see Appendix 4) • Vehicles restricted to approved paved and gravelled surfaces • Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications • Provide procedures for proper installation and removal of portable washroom facilities • All construction materials must be pre-approved for use at the NHS • Proper disposal of waste water in designated areas under the direction of Parks Canada staff • Must comply with community's Solid Waste By-Law and Provincial Landfill Material Bans • Provide a waste disposal plan for review by the Resource Conservation Manager • Properly separate and remove all waste from site daily • Provide and label waste-separation/recycling containers • Encourage the use of reusable, recyclable, and/or compostable food service packaging and serving materials • Follow Solid Waste Resources Management Guide for Special Events (see Appendix 2) • Necessary clearances and permits must be obtained through the Department of Fisheries and Oceans, Transport Canada Navigable Waters Protection Branch, Environment Canada, the Province of Nova Scotia and/or any other regulatory authority prior to proceeding with work in water courses • Materials must not be disposed of via water courses, storm, or sanitary sewers • All manure from imported livestock must be cleaned-up and disposed of in existing livestock areas as directed by the Heritage Presentation Specialist

VECs	Mitigation Measures
Visitor Experience and Public Safety	• Reduce volume on sound equipment during visitor hours • Must comply with all statutory and regulatory requirements including, but not limited to, the *Canada National Parks Act*, National Historic Park regulations, and Historic Canals regulations under the *Department of Transport Act* • Use of special effects/black powder must comply with community's Noise By-Law and National Historic Park regulations • Use of special effects/black powder must comply with the *Explosives Act* and regulations under the direction of the Parks Canada Black Powder Specialist • Hold special events after visitor hours whenever possible • All activities must be in compliance with the *Occupational Health and Safety Act* and Canada Labour Code • All activities must be in compliance with the National Fire Code of Canada, as well as site specific fire control plans, fire orders, and evacuation procedures • Structures, equipment, etc. located within the NHS must be made safe (barricaded, signed, etc.) • Must provide qualified flag persons in accordance with procedures outlined in the NS Traffic Control Manual whenever normal traffic flow pattern is interrupted • Schedule events which require traffic interruption to avoid peak times • Rescue capability for events that occur in/near water • All activities subject to review by the Cape Breton Field Unit Public Safety Specialist and the Fortress of Louisbourg NHS of Canada Safety Officer

VECs	Mitigation Measures
Socio-economic Aspects	• Must comply with all statutory and regulatory requirements including, but not limited to, the *Canada National Parks Act*, and National Historic Park regulations, and Historic Canals regulations under the *Department of Transport Act* • Use of special effects/black powder must comply with the *Explosives Act* and regulations under the direction of the Black Powder specialist • Traffic will not be stopped for longer than five minutes to accommodate filming
Air Quality	• Vehicles must not idle while parked

4.7. *Evaluation of Residual Environmental Effects*

Following the application of mitigation measures, residual environmental effects are not expected to be significant. Residual environmental effects were evaluated for significance using the criteria to determine significance detailed in Section 3.8, Table 2. Due to the simplicity and repetitive nature of the project activities, the project phases have been combined to form a summary of the residual environmental effects. As shown in Table 5, the criteria for significance were negligible, with a few exceptions, and the residual effects will therefore not be significant. Although waste disposal extends beyond the site boundary and has a longer duration, the project activity is a normal operation within the community and waste management efforts will be in place. Residual effects will therefore not be significant. Socio-economic aspects and air quality were both affected beyond the NHS boundaries. As mitigation measures will be in place to minimize these effects and disruptions will be of short duration, residual environmental effects will not be significant.

Table 5. Summary of the residual environmental effects across all project phases for each Valued Environmental Component (VEC) following the application of mitigation measures.

			Importance Level Rating						
VEC	**Project Elements**	**Residual Environmental Effects**	**Magnitude**	**Geographic Extent**	**Duration of Effect**	**Frequency of Effect**	**Reversibility**	**Ecological & Historical Context**	**SIGNIFICANCE**
Cultural Resources	Vehicles; Temporary Structures	Minor damage to reconstructed buildings	1	1	2	1	2	1	**Not Significant**
	Mooring	Minor damage to wharf infrastructure	1	1	2	1	2	1	**Not Significant**
	Event Attendees	Minor damage to reconstructed buildings	1	1	2	1	2	1	**Not Significant**
Forests and Managed Vegetation; Bog and Heathland Vegetation	Vehicles; Equipment Storage; Temporary Structures; Portable Washrooms; Event Attendees	Minor short-term disruption of vegetation	1	1	2	1	1	1	**Not Significant**
Fauna	Event	Minor disruption to wildlife	1	2	1	1	1	1	**Not Significant**
Land Resources	Vehicles	Possibly some increase in sediment concentration of surface runoff	1	2	2	1	1	1	**Not Significant**
	Refuse	Some landfill space used for waste disposal	1	1	2	1	1	1	**Not Significant**
	Vehicles; Portable Washrooms; Generators	Possibly some residual soil contamination from accidental spill	1	1	3	1	3	1	**Not Significant**
Water Resources	Vehicles	Possibly some increase in sediment concentration of surface runoff	1	2	2	1	1	1	**Not Significant**
	Vehicles; Portable Washrooms; Generators	Possibly some residual water contamination from accidental spill	1	1	2	1	1	1	**Not Significant**
Visitor Experience	Sound Equipment; Pyrotechnic/ Black Powder Special Effects	Some visitors may find event distracts from site's historical atmosphere	1	2	2	1	1	1	**Not Significant**
Socio-economic Aspects	Vehicles	Some residents may find increased traffic makes commuting difficult	1	3	1	1	1	1	**Not Significant**
	Sound Equipment; Pyrotechnic/ Black Powder Special Effects	Some people will be deprived of peace and enjoyment of property	1	3	1	1	1	1	**Not Significant**
Air Quality	Vehicles	Increase in greenhouse gas emissions	1	3	1	1	1	1	**Not Significant**

1 – Negligible 2 – Minor 3 – Major

5. Cumulative Effects

Cumulative effects can result when VECs are affected by interactions between multiple projects. Special events have the potential to interact with; 1) other special events addressed by this RCS; 2) NHS operational activities and; 3) projects occurring outside the sites' boundaries.

5.1.1. Interactions between Special Events

Over a five-year period, approximately 150 special events covered by this RCSR are expected to occur at the NHSs in Cape Breton. Annually, these special events are composed of about five concerts, twelve sporting and community events, eight film shoots, four ecotourism ventures (both aquatic and terrestrial), and one encampment. There are potential interactions of environmental effects for the seven following VECs: Forests and Managed Vegetation; Bog and Heathland Vegetation; Fauna; Land Resources; Water Resources; Socio-economic Aspects; and Air Quality.

5.1.2. Interactions between Special Events and Operational Activities at the National Historic Sites in Cape Breton

Interactions between special events and operational activities within each NHS must be factored into the consideration of cumulative effects. Three types of activities occur at the NHSs in Cape Breton: 1) Infrastructure and Ground Maintenance; 2) Heritage Presentation, Historical Re-enactments, Administration Activities, and Public Visitation and; 3) Small Parks Canada and Community Events.

Infrastructure and Ground Maintenance

Building maintenance and repair occur periodically at the NHSs in Cape Breton, in addition to regular ground maintenance. There are potential interactions of environmental effects for six VECs: Forests and Managed Vegetation; Bog and Heathland Vegetation; Fauna; Land Resources; Water Resources; and Visitor Experience and Public Safety.

Heritage Presentation, Historical Re-enactments, Administration Activities, and Public Visitation

Heritage presentation, historical re-enactments, administration activities, and public visitation are routine activities at each of the NHSs in Cape Breton and are generally conducted in coordination with existing programs. Experience has shown that negative environmental effects are not associated with their occurrence. Interactions between normal operational activities and special events are small scale and very localized and therefore should not produce cumulative effects.

Small Community Events

Some community events at the NHSs in Cape Breton are very small and do not require a license of occupation (see section 2.1 Projects Subject to the Canadian Environmental Assessment Act). Those events that do not require a license of occupation are excluded

from this RCSR. Environmental effects from these events are analogous with those associated with normal operational activities. Because of their very small scale, cumulative effects due to interactions between special events and Parks Canada/community events are not likely.

5.1.3. Interactions between Special Events Occurring Outside the National Historic Sites

Consideration should be given to special events and activities that occur outside the NHSs in relation to cumulative effects. Community events in Cape Breton may occasionally result in interaction with events taking place within the boundaries of NHSs. Indoor events include theatrical performances and concerts at various locations within each community. Outdoor events include sailing regattas in Baddeck and St. Peters Canal, the Stan Rogers Festival in Canso, the Tall Ships in Louisbourg, and many others. Such outside events typically lead to increased waste production, increased traffic within communities & NHS's and thus elevated greenhouse gas emissions and reduced visitor experience due to increased traffic congestion. Consequently, four VECs stemming from outside events include (1) socio-economic aspects; (2) visitor experience and public safety, (3) land resources, and (4) air quality (refer to Table 6, Section 4.8.4 and Table 4, Section 4.6 for further information).

5.1.4. Summary of Cumulative Effects

Interactions between a special event and repeated special events, operational activities within the NHS, and activities outside the NHS could result in limited cumulative effects. If present, these cumulative effects will not be significant as shown in Table 6. Although the environmental effects associated with waste disposal extend beyond the site boundary and have a longer duration, the activity is part of normal community operations and waste management efforts will be in place. Any cumulative effects will not be therefore significant. Anticipated socio-economic environmental effects also extend beyond the site boundary in terms of effects on socio-economic aspects and air quality. As major special events are not likely to coincide and any cumulative effects produced will be of short duration, no significant cumulative effects are expected.

If cumulative effects beyond those listed in Table 6 are noted, Parks Canada will request the RCSR be amended to reflect the newly identified cumulative effects and associated mitigation measures.

Table 6. Summary of the potential cumulative effects and their significance as produced by interactions between a special event and repeated special events, operational activities within the national historic sites, and activities outside the national historic sites in Cape Breton.

VEC	Project Elements	Potential Cumulative Environmental Effects	Criteria Ratings						
			Magnitude	Geographic Extent	Duration of Effect	Frequency of Effect	Reversibility	Ecological & Historical Context	SIGNIFICANCE
Forests and Managed Vegetation; Bog and Heathland Vegetation	Vehicles; Equipment Storage; Temporary Structures; Portable Washrooms; Event Attendees; Building and Ground Maintenance	Limited recovery time for vegetation re-establishment	1	1	2	1	1	1	**Not Significant**
Fauna	Event	Minor disruption to wildlife	1	2	1	1	1	1	**Not Significant**
Land Resources	Vehicles	Possibly some increase in sediment concentration of surface runoff	1	2	2	1	1	1	**Not Significant**
	Refuse	Some landfill space used for waste disposal	1	3	3	1	1	1	**Not Significant**
Water Resources	Vehicles	Possibly some increase in sediment concentration of surface runoff	1	2	2	1	1	1	**Not Significant**
Visitor Experience and Public Safety	Event	Some visitors may find event distracts from site's historical atmosphere	1	2	2	1	1	1	**Not Significant**
Socio-economic Aspects	Vehicles	Some residents may find increased traffic makes commuting difficult	1	3	1	1	1	1	**Not Significant**
	Sound Equipment	Some people will be deprived of peace and enjoyment of property	1	3	1	1	1	1	**Not Significant**
Air Quality	Vehicles	Increase in greenhouse gas emissions	1	3	1	1	1	1	**Not Significant**

1 – Negligible 2 – Minor 3 – Major

5.2. *Monitoring*

As part of a license of occupation, NHSs must be returned to their original condition following a special event. Pre and post event inspections are conducted to ensure this stipulation of the license of occupation is met.

All adverse environmental effects must be identified and mitigation measures must be successful for this RCSR to be effective. Success of the mitigation measures is assessed through the evaluation of any residual environmental effects. Cumulative effects will be noted through routine property maintenance and condition reports.

Public complaints, especially those related to impacts on visitor experience and socio-economic aspects, will be recorded and tallied.

6. Roles and Responsibilities

Parks Canada is the only RA involved in issuing a license of occupation for special events covered by this RCSR. Other federal departments are not expected to be involved in the EA process. The RCSR can be applied, where appropriate, by Parks Canada until such time as the Agency declares the RCSR not to be a class screening report or the declaration period expires.

To ensure protection of both the environmental and cultural resources at the NHSs, Parks Canada has developed a set of mitigation measures to be incorporated in the NHSs in Cape Breton License of Occupation. Licensees are held legally responsible for the implementation of the mitigation measures through the standard Licence of Occupation.

It will be the responsibility of Parks Canada to:

- ensure that projects are properly identified as class-applicable;
- ensure that applicable mitigation is implemented;
- place a regular statement on the Registry Internet site describing the extent to which the RCSR has been used, as identified in section 2;
- maintain the Registry project file, ensure convenient public access, and respond to information requests in a timely manner; and
- provide annual confirmation of the continuing validity of cumulative effects assessment conditions to the Agency.

7. Procedures for Revising the Replacement Class Screening Report

The RA will notify the Agency in writing of its interest to revise the RCSR as per the terms and conditions of the declaration. It will discuss the proposed revisions with the Agency and affected federal government departments and may invite comment from stakeholders on the proposed changes. For a re-declaration of the RCSR, a public consultation period will be required. The RA will then submit the proposed revisions to the Agency, along with a statement providing a rationale for each revision proposed as well as a request that the Agency amend or re-declare the RCSR.

7.1. *Amendments*

The purpose of an amendment is to allow for minor modifications to the RCSR after experience has been gained with its operation.
Amendments do not require public consultation and do not allow for changes to the term of application. In general, amendments to the RCSR can be made if the Agency is satisfied that changes:

- represent editorial changes intended to clarify or improve the document and procedures screening process;
- streamline or modify the planning process and/or
- do not materially alter either the scope of the projects subject to the RCSR or the factors to be considered in the assessment required for these projects.

7.2. *Re-declaration*

The purpose of a re-declaration is to allow substantial changes to the RCSR after experience has been gained with its operation. Re-declarations require a public consultation period. A re-declaration of an RCSR may be undertaken for the remaining balance of the original declaration period or for a new declaration period if the changes:

- extend the application of the RCSR to projects or environmental settings that were not previously included, but are similar or related to projects included in the class definition;
- represent modifications to the scope of the projects subject to the RCSR or the factors to be considered in the assessment required for these projects;
- reflect new or changed regulatory requirements, policies or standards;
- introduce new design standards and mitigation measures;
- modify the federal coordination notification procedures;

- extend the application of the RCSR to RA(s) who were not previously declared users of the report;
- remove projects that are no longer suitable for the class; and/or
  extend the term of application of the RCSR.

8. Terms of Application

This RCSR will be in effect for a five year period. The Parks Canada Agency will notify the Agency six months prior to the end of the declaration period of its intention to renew the RCSR, renew the RCSR with modifications, or not to renew the RCSR, therefore allowing the declaration to expire.

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Appendix 1 – Environmental effects and mitigation measures associated with the projects

Table 1. CONCERTS – Summary of potential environmental effects, mitigation measures, and the significance of residual environmental effects for the national historic sites in Cape Breton. (7 pages).

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Cultural Resources – Level I & Level II	Equipment/Crew Transportation (both terrestrial and aquatic)	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager - Access restricted to designated area(s) (See maps in Appendix 3) - Place and maintain hay or straw bales or other approved barricades in those areas designated by Parks Canada - Access routes used to and from the special event area must be pre-approved by Parks Canada	None	Not Significant
		Damage to reconstructed buildings		Minor damage to reconstructed buildings	Not Significant
	Equipment Storage	Damage to in-situ cultural resources	- Special event equipment must be stored at a location approved by Parks Canada	None	Not Significant
	Mooring/Parking	Damage to in-situ cultural resources (terrestrial)	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant Not Significant Not Significant
	Set up/Dismantle Temporary Staging, Fencing, Tents, etc.	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager - Location of temporary structures must avoid sensitive areas as indicated by a Parks Canada archaeologist	None	Not Significant
		Damage to reconstructed buildings		Minor damage to reconstructed buildings	Not Significant
	Installation/Removal of Portable Washrooms	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	Prepare/Remove Stands/Promotional Displays	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	Set up/Removal of Waste Facilities	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	Installation/Use/Removal of Generators	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	Set up/Use/Removal of Sound/Lighting Equipment	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	People attending special event	Damage to reconstructed buildings	- Provide security procedures to keep participants in designated special event area	Minor damage to reconstructed buildings	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Cultural Resources	Use of Special Effects and/or Black Powder	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
		Damage to reconstructed buildings		None	Not Significant
Forests and Managed Vegetation	Equipment/Crew Transportation (terrestrial)	Trampling/destruction of vegetation	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3) - Vehicles restricted to approved paved and gravelled surfaces - Access routes to and from the special event area must be pre-approved by Parks Canada - It is recommended that equipment be cleaned (e.g., use of pressure water hose to clean vehicles prior to transport) and inspected prior to transport from elsewhere to ensure that no matter is attached to the machinery that could introduce an invasive species into the area. - Fuelling and servicing of equipment should not take place within 30 m of sensitive habitats. - It is recommended that equipment be regularly inspected prior to, during and immediately following in areas found to support Purple Loosestrife to ensure that vegetative matter is not transported from one site to another.	Minor short-term disruption of vegetation	Not Significant
	Equipment Storage	Trampling of grass	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Special event equipment must be stored at a location approved by Parks Canada	Minor short-term disruption of vegetation	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
	Mooring/Parking	Trampling/Destruction of vegetation	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3) - Vehicles restricted to approved paved and gravelled surfaces	None	Not Significant
Forests and Managed Vegetation	Set up/Dismantle Temporary Staging, Fencing, Tents, etc.	Destruction of grass	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3) - It is recommended that a variety of species of plants native to the general area be used in revegetation efforts. Should seed mixes for herbaceous native species for the area not be available, it should be ensured that plants used in revegetation efforts are known to be non-invasive.	Minor short-term disruption of vegetation	Not Significant
	Installation/Removal of Portable Washrooms	Trampling of grass	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications	Minor short-term disruption of vegetation	Not Significant
	Set up/Removal of Waste Facilities	Trampling of grass	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
	People Attending Special Event	Trampling of grass	- Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Provide security procedures to keep participants in designated special event area	Minor short-term disruption of vegetation	Not Significant
Fauna	Special event and people attending	Disruptive to wildlife	- Notify warden service immediately of any problem wildlife encounters - Feeding, enticement, or harassment of wildlife is prohibited - Avoid high disturbance activities during the breeding season for migratory birds in the region (i.e. May 1st to August 31st). - Activities such as cleaning, application and removal of protective coatings (e.g. paints), and demolition should not take place during the breeding season on structures where migratory birds are known to nest (e.g. gutters, ledges, under bridges) since there is a risk of disturbing or destroying eggs or nestlings. - If a nest is found, risks can be minimized by measures such as the establishment of vegetated buffer zones around nests and minimization of activities in the immediate area until nesting is complete and chicks have naturally migrated from the area.	Minor disruption to wildlife	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Land Resources	Equipment/Crew transportation & Parking	Soil contamination from accidental fuel/oil leak or spill	- Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant
		Soil compaction resulting in reduced water/soil infiltration rates, erosion from rain	- Vehicles restricted to approved paved and gravelled surfaces - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications	Possibly some increase in sediment concentration of surface runoff	Not Significant
	Installation/Removal of Portable Washrooms	Soil contamination from accidental spill/leak of human waste	- Provide procedures for proper installation and removal of portable washroom facilities - Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant
		Soil contamination from accidental spill/leak of odour control chemicals			Not Significant
	Food Preparation and Clean-up	Soil contamination from food waste water	- Proper disposal of waste water in designated areas under the direction of Parks Canada staff	None	Not Significant
	Generation of Waste During Event	Soil contamination from refuse	- Properly separate and remove all refuse from site daily	None	Not Significant
	Disposal of Waste Produced	Refuse adds to waste stream and ultimately consumes more landfill space	- Must comply with community's Solid Waste By-Law and Provincial Landfill Material Bans - Provide a waste disposal plan for review by the Resource Conservation Manager - Properly separate and remove all refuse from site daily - Provide and label waste-separation/recycling containers - Encourage the use of reusable, recyclable, and/or compostable food service packaging and serving materials - Follow Solid Waste Resources Management Guide for Special Events (see Appendix 2)	Some landfill space used for waste disposal	Not Significant
	Installation/Use/Removal of Generators	Soil contamination from accidental fuel/oil spill or leak	- Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Water Resources	Equipment/Crew Transportation & Parking	Surface/ground water contamination from accidental fuel/oil leak or spill	- EERP and appropriate containment/clean-up equipment and training required (see Appendix 4) - Rapid response to any spill is required - It is the responsibility of the proponent to ensure that all reasonable measures are conducted to prevent the release of substances that are deleterious to fish from their proposed activities. In general, compliance is determined at the last point of control of the substance before it enters waters frequented by fish, or, in any place under any conditions where a substance may enter such waters.	None	Not Significant
		Soil compaction resulting in reduced water/soil infiltration rates, increased surface runoff, and siltation of surface water	- Vehicles restricted to approved paved and gravelled surfaces	Possibly some increase in sediment concentration of surface runoff	Not Significant
	Installation/Removal of Portable Washrooms	Surface water contamination from accidental spill/leak of human waste Surface water contamination from accidental spill/leak of odour control chemicals	- Provide procedures for proper installation and removal of portable washroom facilities - Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant
	Food preparation & clean up	Surface water contamination from food waste water	- Proper disposal of waste water in designated areas under the direction of Parks Canada staff	None	Not Significant
	Generation of waste during event	Surface water contamination from refuse	- Properly separate and remove all refuse from site daily - Materials must not be disposed of via water courses, storm, or sanitary sewers	None	Not Significant
	Installation/Use/Removal of Generators	Surface/ground water contamination from accidental fuel/oil spill or leak	- Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant
Visitor Experience	Special Event	Limited accessibility to the site	- Hold special events after visitor hours whenever possible	Some visitors may find event distracts from site's historical atmosphere	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
		Limited services in town available for visitors	- None	None	Not Significant
	Use of Sound Equipment; Special Event	Noise disrupts site's historical atmosphere	- Reduce volume on sound equipment during visitor hours - Must comply with all statutory and regulatory requirements including, but not limited to, the *Canada National Parks Act*, National Historic Park regulations and Historic Canals regulations under the *Department of Transport Act*	Some visitors may find event distracts from site's historical atmosphere	Not Significant
Visitor Experience and Public	Use of Special Effects/Black Powder	Noise distracts from site's historical atmosphere	- Use of special effects/black powder must comply with community's Noise By-Law and National Historic Park regulations	Some visitors may find event distracts from site's historical atmosphere	Not Significant
		Reduced air quality	- None		

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
	Special Event and Associated Activities	Increased risk to public safety	- All activities must be in compliance with the *Occupational Health and Safety Act* and Canada Labour Code - All activities must be in compliance with the National Fire Code of Canada, as well as site specific fire control plans, fire orders, and evacuation procedures - Structures, equipment, etc. located within the NHS must be made safe (barricaded, signed, etc.) - Must provide qualified flag persons in accordance with procedures outlined in the NS Traffic Control Manual whenever normal traffic flow pattern is interrupted - Schedule events which require traffic interruption to avoid peak times - Rescue capability for events that occur in/near water - Use of special effects/black powder must comply with the *Explosives Act* and regulations under the direction of the Parks Canada Black Powder specialist - All activities subject to review by the Cape Breton Field Unit Public Safety Specialist and the Fortress of Louisbourg NHS of Canada Safety Officer	None	Not Significant
Socio-economic Aspects	People attending special event	Increased traffic makes travel more difficult for community residents	- None	Some residents may find increased traffic makes commuting difficult	Not Significant
		Increased economic benefit to local community businesses	- None	None	Not Significant
Socio-economic Aspects	Use of Sound Equipment; Special Event	Increased noise affects peace and enjoyment of property by some community residents	- Must comply with all statutory and regulatory requirements including, but not limited to, the *Canada National Parks Act*, National Historic Park regulations, and Historic Canals regulations under the *Department of Transport Act*	Some people will be deprived of peace and enjoyment of property	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
	Use of Special Effects/Black powder		- Use of special effects/black powder must comply with the *Explosives Act* and regulations under the direction of the Black Powder specialist		
Air Quality	Use of Special Effects/Black Powder	Reduced air quality	- None	None	Not Significant
	Special Event and People attending	Increased greenhouse gas emissions from people travelling to and from special event, as well as from equipment (i.e. generators, refrigerators, vehicles, etc.) used during activities associated with special events	- Vehicles must not idle while parked	Small increase in greenhouse gas emissions	Not Significant

Table 2. SPORTING AND COMMUNITY EVENTS – Summary of potential environmental effects, mitigation measures, and the significance of residual environmental effects for the national historic sites in Cape Breton. (7 pages).

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Cultural Resources – Level I & Level II	Equipment/Crew Transportation (both terrestrial and aquatic)	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager - Access restricted to designated area(s) (See maps in Appendix 3) - Place and maintain hay or straw bales or other approved barricades in those areas designated by Parks Canada - Access routes used to and from the special event area must be pre-approved by Parks Canada	None	Not Significant
		Damage to reconstructed buildings		Minor damage to reconstructed buildings	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Cultural Resources – Level I & Level II	Mooring/Parking	Damage to in-situ cultural resources (either underwater or terrestrial)	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager - Anchors must be not be deployed in the 'no anchoring' zones (See maps in Appendix 3) - Use of mooring blocks must be coordinated with Parks Canada and Transport Canada	None	Not Significant
	Set up/Dismantle Temporary Staging, Fencing, Tents, etc.	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager - Location of temporary structures must avoid sensitive areas as indicated by a Parks Canada archaeologist	None	Not Significant
		Damage to reconstructed buildings		Minor damage to reconstructed buildings	Not Significant
	Installation/Removal of Portable Washrooms	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	Prepare/Remove Stands/Promotional Displays	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	Set up/Removal of Waste Facilities	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	Installation/Use/Removal of Generators	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	Set up/Use/Removal of Sound/Lighting Equipment	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	People attending special event	Damage to reconstructed buildings	- Provide security procedures to keep participants in designated special event area	Minor damage to reconstructed buildings	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Forests and Managed Vegetation	Equipment/Crew Transportation (terrestrial)	Trampling/destruction of vegetation	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3) - Vehicles restricted to approved paved and gravelled surfaces - Access routes to and from the special event area must be pre-approved by Parks Canada - It is recommended that equipment be cleaned (e.g., use of pressure water hose to clean vehicles prior to transport) and inspected prior to transport from elsewhere to ensure that no matter is attached to the machinery that could introduce an invasive species into the area. - Fuelling and servicing of equipment should not take place within 30 m of sensitive habitats. - It is recommended that equipment be regularly inspected prior to, during and immediately following in areas found to support Purple Loosestrife to ensure that vegetative matter is not transported from one site to another.	Minor short-term disruption of vegetation	Not Significant
Forests and Managed Vegetation	Mooring/Parking	Trampling/Destruction of vegetation	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3) - Vehicles restricted to approved paved and gravelled surfaces	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
	Set up/Dismantle Temporary Staging, Fencing, Tents, etc.	Destruction of grass	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3) - It is recommended that a variety of species of plants native to the general area be used in revegetation efforts. Should seed mixes for herbaceous native species for the area not be available, it should be ensured that plants used in revegetation efforts are known to be non-invasive.	Minor short-term disruption of vegetation	Not Significant
	Installation/Removal of Portable Washrooms	Trampling of grass	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications	Minor short-term disruption of vegetation	Not Significant
	Set up/Removal of Waste Facilities	Trampling of grass	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications	None	Not Significant
	People Attending Special Event	Trampling of grass	- Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Provide security procedures to keep participants in designated special event area	Minor short-term disruption of vegetation	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Fauna	Special event and people attending	Disruptive to wildlife	- Notify warden service immediately of any problem wildlife encounters - Feeding, enticement, or harassment of wildlife is prohibited - Avoid high disturbance activities during the breeding season for migratory birds in the region (i.e. May 1st to August 31st). - Activities such as cleaning, application and removal of protective coatings (e.g. paints), and demolition should not take place during the breeding season on structures where migratory birds are known to nest (e.g. gutters, ledges, under bridges) since there is a risk of disturbing or destroying eggs or nestlings. - If a nest is found, risks can be minimized by measures such as the establishment of vegetated buffer zones around nests and minimization of activities in the immediate area until nesting is complete and chicks have naturally migrated from the area. - Avoid concentrations of seabirds, waterfowl and shorebirds when accessing a project site from water or land. Engines should be properly maintained, and well muffled to reduce disturbance due to noise. - Reduce vessel speed when in the vicinity of flocks of birds and use alternative travel routes. -	Minor disruption to wildlife	Not Significant
Land Resources	Equipment/Crew transportation & Parking	Soil contamination from accidental fuel/oil leak or spill	- Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant
		Soil compaction resulting in reduced water/soil infiltration rates, erosion from rain	- Vehicles restricted to approved paved and gravelled surfaces - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications	Possibly some increase in sediment concentration of surface runoff	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
	Installation/Removal of Portable Washrooms	Soil contamination from accidental spill/leak of human waste	- Provide procedures for proper installation and removal of portable washroom facilities - Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant
		Soil contamination from accidental spill/leak of odour control chemicals			Not Significant
	Food Preparation and Clean-up	Soil contamination from food waste water	- Proper disposal of waste water in designated areas under the direction of Parks Canada staff	None	Not Significant
	Generation of Waste During Event	Soil contamination from refuse	- Properly separate and remove all refuse from site daily	None	Not Significant
	Disposal of Waste Produced	Refuse adds to waste stream and ultimately consumes more landfill space	- Must comply with community's Solid Waste By-Law and Provincial Landfill Material Bans - Provide a waste disposal plan for review by the Resource Conservation Manager - Properly separate and remove all refuse from site daily - Provide and label waste-separation/recycling containers - Encourage the use of reusable, recyclable, and/or compostable food service packaging and serving materials - Follow Solid Waste Resources Management Guide for Special Events (see Appendix 2)	Some landfill space used for waste disposal	Not Significant
Land Resources	Installation/Use/Removal of Generators	Soil contamination from accidental fuel/oil spill or leak	- Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Water Resources	Equipment/Crew Transportation & Parking	Surface/ground water contamination from accidental fuel/oil leak or spill	- Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4) - It is the responsibility of the proponent to ensure that all reasonable measures are conducted to prevent the release of substances that are deleterious to fish from their proposed activities. In general, compliance is determined at the last point of control of the substance before it enters waters frequented by fish, or, in any place under any conditions where a substance may enter such waters.	None	Not Significant
		Soil compaction resulting in reduced water/soil infiltration rates, increased surface runoff, and siltation of surface water	- Vehicles restricted to approved paved and gravelled surfaces	Possibly some increase in sediment concentration of surface runoff	Not Significant
	Installation/Removal of Portable Washrooms	Surface water contamination from accidental spill/leak of human waste Surface water contamination from accidental spill/leak of odour control chemicals	- Provide procedures for proper installation and removal of portable washroom facilities - Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant
	Food preparation & clean up	Surface water contamination from food waste water	- Proper disposal of waste water in designated areas under the direction of Parks Canada staff	None	Not Significant
	Generation of waste during event	Surface water contamination from refuse	- Properly separate and remove all refuse from site daily - Materials must not be disposed of via water courses, storm, or sanitary sewers	None	Not Significant
	Installation/Use/Removal of Generators	Surface/ground water contamination from accidental fuel/oil spill or leak	- Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Visitor Experience and Public Safety	Special Event	Limited accessibility to the site	- Hold special events after visitor hours whenever possible	Some visitors may find event distracts from site's historical atmosphere	Not Significant
	Use of Sound Equipment; Special Event	Noise disrupts site's historical atmosphere	- Reduce volume on sound equipment during visitor hours - Must comply with all statutory and regulatory requirements including, but not limited to, the *Canada National Parks Act*, National Historic Park regulations, and Historic Canals regulations under the *Department of Transport Act*	Some visitors may find event distracts from site's historical atmosphere	Not Significant
	Special Event and Associated Activities	Increased risk to public safety	- All activities must be in compliance with the *Occupational Health and Safety Act* and Canada Labour Code - All activities must be in compliance with the National Fire Code of Canada, as well as the site specific fire control plans, fire orders, and evacuation procedures - Structures, equipment, etc. located within the NHS must be made safe (barricaded, signed, etc.) - Must provide qualified flag persons in accordance with procedures outlined in the NS Traffic Control Manual whenever normal traffic flow pattern is interrupted - Schedule events which require traffic interruption to avoid peak times - Rescue capability for events that occur in/near water - All activities subject to review by the Cape Breton Field Unit Public Safety Specialist and the Fortress of Louisbourg NHS of Canada Safety Officer	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Socio-economic Aspects	People attending special event	Increased traffic makes travel more difficult for community residents	- None	Some residents may find increased traffic makes commuting difficult	Not Significant
		Increased economic benefit to local community businesses	- None	None	Not Significant
	Use of Sound Equipment; Special Event	Increased noise affects peace and enjoyment of property by some community residents	- Must comply with all statutory and regulatory requirements including, but not limited to, the *Canada National Parks Act*, National Historic Park regulations, and Historic Canals regulations under the *Department of Transport Act*	Some people will be deprived of peace and enjoyment of property	Not Significant
Air Quality	Special Event and People attending	Increased greenhouse gas emissions from people travelling to and from special event, as well as from equipment (i.e. generators, refrigerators, vehicles, etc.) used during activities associated with special events	- Vehicles must not idle while parked	Small increase in greenhouse gas emissions	Not Significant

Table 3. FILMING – Summary of potential environmental effects, mitigation measures, and the significance of residual environmental effects for the national historic sites in Cape Breton. (11 pages).

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Cultural Resources – Level I & Level II	Equipment/Crew Transportation (both terrestrial and aquatic)	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager - Access restricted to designated area(s) (See maps in Appendix 3) - Place and maintain hay or straw bales or other approved barricades in those areas designated by Parks Canada - Access routes used to and from the special event area must be pre-approved by Parks Canada	None	Not Significant
		Damage to reconstructed buildings		Minor damage to reconstructed buildings	Not Significant
	Equipment Storage	Damage to in-situ cultural resources	- Special event equipment must be stored at a location approved by Parks Canada	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Cultural Resources – Level I & Level II	Mooring/Parking	Damage to shoreline in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager - Anchors must be not be deployed in the 'no anchoring' zones (See maps in Appendix 3) - Use of mooring blocks must be coordinated with Parks Canada and Transport Canada	None	Not Significant
		Damage to wharf infrastructure		Minor damage to wharf infrastructure	Not Significant
		Damage to in-situ cultural resources (either underwater or terrestrial)		None	Not Significant
	Set up/Dismantle Temporary Staging, Fencing, Tents, etc.	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager - Location of temporary structures must avoid sensitive areas as indicated by a Parks Canada archaeologist	None	Not Significant
		Damage to reconstructed buildings		Minor damage to reconstructed buildings	Not Significant
	Installation/Removal of Portable Washrooms	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	Set up/Removal of Waste Facilities	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	Installation/Use/Removal of Generators	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	Set up/Use/Removal of Sound/Lighting Equipment	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	Use of Camera Equipment	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	Set Construction/Deconstruction	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager - Excavation of any sort is prohibited	None	Not Significant
	People attending special event	Damage to reconstructed buildings	- Provide security procedures to keep participants in designated special event area	Minor damage to reconstructed buildings	Not Significant
	Use of Special Effects and/or Black Powder	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
		Damage to reconstructed buildings		None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Forests and Managed Vegetation	Equipment/Crew Transportation (terrestrial)	Trampling/destruction of vegetation	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3) - Vehicles restricted to approved paved and gravelled surfaces - Access routes to and from the special event area must be pre-approved by Parks Canada - It is recommended that equipment be cleaned (e.g., use of pressure water hose to clean vehicles prior to transport) and inspected prior to transport from elsewhere to ensure that no matter is attached to the machinery that could introduce an invasive species into the area. - Fuelling and servicing of equipment should not take place within 30 m of sensitive habitats. - It is recommended that equipment be regularly inspected prior to, during and immediately following in areas found to support Purple Loosestrife to ensure that vegetative matter is not transported from one site to another.	Minor short-term disruption of vegetation	Not Significant
	Equipment Storage	Trampling of grass	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Special event equipment must be stored at a location approved by Parks Canada - Storage of hazardous materials must comply with the *Canadian Environmental Protection Act*	Minor short-term disruption of vegetation	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
	Mooring/Parking	Trampling/Destruction of vegetation	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3) - Vehicles restricted to approved paved and gravelled surfaces	None	Not Significant
	Set up/Dismantle Temporary Staging, Fencing, Tents, etc.	Destruction of grass	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3) - It is recommended that a variety of species of plants native to the general area be used in revegetation efforts. Should seed mixes for herbaceous native species for the area not be available, it should be ensured that plants used in revegetation efforts are known to be non-invasive.	Minor short-term disruption of vegetation	Not Significant
Forests and Managed Vegetation	Installation/Removal of Portable Washrooms	Trampling of grass	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications	Minor short-term disruption of vegetation	Not Significant
	Set up/Removal of Waste Facilities	Trampling of grass	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
	Use of Vegetative Props	Introduction of invasive species	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Any viable vegetation imported for use during special event must consist of native species	None	Not Significant
	Set construction/deconstruction	Destruction of grass	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3) - Use of chemicals must be pre-approved by Parks Canada and stored/disposed of in an appropriate manner	Minor short-term disruption of vegetation	Not Significant
	People Attending Special Event	Trampling of grass	- Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Provide security procedures to keep participants in designated special event area	Minor short-term disruption of vegetation	Not Significant
Bog and Heathland Vegetation	Equipment/Crew Transportation (Terrestrial)	Trampling/destruction of vegetation	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3) - Vehicles restricted to approved paved and gravelled surfaces - Access routes to and from the special event area must be pre-approved by Parks Canada	Minor short-term disruption of vegetation	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
	Equipment storage	Trampling of vegetation	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Special event equipment must be stored at a location approved by Parks Canada - Storage of hazardous materials must comply with the *Canadian Environmental Protection Act*	Minor short-term disruption of vegetation	Not Significant
	Mooring/Parking	Trampling/destruction of vegetation	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3) - Vehicles restricted to approved paved and gravelled surfaces	None	Not Significant
	Set up/Dismantle Temporary Staging, Fencing, Tents, etc.	Destruction of vegetation	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3)	Minor short-term disruption of vegetation	Not Significant
Bog and Heathland Vegetation	Use of Vegetative Props	Introduction of invasive species	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Any viable vegetation imported for use during special event must consist of native species	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
	Set construction/deconstruction	Destruction of vegetation	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3) - Use of chemicals must be pre-approved by Parks Canada and stored/disposed of in accordance with applicable legislation and guidelines; WHMIS labelling is required	Minor short-term disruption of vegetation	Not Significant
	People attending special event	Trampling of vegetation	- Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Provide security procedures to keep participants in designated special event area	Minor short-term disruption of vegetation	Not Significant
Fauna	Use of Animal Props	Risk of infection from imported livestock	- All livestock transported to the site must have a current health certificate from a certified veterinarian ensuring that each animal has been vaccinated and dewormed	None	Not Significant
	Set construction/deconstruction	Potential chemical use harmful to wildlife	- Toxic materials and any materials which may pose a hazard to wildlife must be stored in secured buildings or containers	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Fauna	Special event and people attending	Disruptive to wildlife	- Notify warden service immediately of any problem wildlife encounters - Feeding, enticement, or harassment of wildlife is prohibited - Avoid high disturbance activities during the breeding season for migratory birds in the region (i.e. May 1st to August 31st). - Activities such as cleaning, application and removal of protective coatings (e.g. paints), and demolition should not take place during the breeding season on structures where migratory birds are known to nest (e.g. gutters, ledges, under bridges) since there is a risk of disturbing or destroying eggs or nestlings. - If a nest is found, risks can be minimized by measures such as the establishment of vegetated buffer zones around nests and minimization of activities in the immediate area until nesting is complete and chicks have naturally migrated from the area. - Avoid concentrations of seabirds, waterfowl and shorebirds when accessing a project site from water or land. Engines should be properly maintained, and well muffled to reduce disturbance due to noise. - Reduce vessel speed when in the vicinity of flocks of birds and use alternative travel routes. - Task lights (e.g. film lights) should be shielded to shine down and only used where needed. The operation of exterior decorative lights, such as spotlights and floodlights, should be minimized or avoided in cases where such lights are only intended to highlight features of structures, or to illuminate an entire structure. The glow of such lights can draw birds from considerable distances, especially on humid, foggy or rainy nights. In the interest of protecting birds, it would be best if these lights were turned off, at least during the migratory season when the risk to birds is the greatest.	Minor disruption to wildlife	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Land Resources	Equipment/Crew transportation & Parking	Soil contamination from accidental fuel/oil leak or spill	- Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant
		Soil compaction resulting in reduced water/soil infiltration rates, erosion from rain	- Vehicles restricted to approved paved and gravelled surfaces - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications	Possibly some increase in sediment concentration of surface runoff	Not Significant
	Mooring/parking	Increased risk of shoreline erosion	- Vehicles restricted to approved paved and gravelled surfaces - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications	None	Not Significant
	Installation/Removal of Portable Washrooms	Soil contamination from accidental spill/leak of human waste	- Provide procedures for proper installation and removal of portable washroom facilities - Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant
		Soil contamination from accidental spill/leak of odour control chemicals			Not Significant
	Food Preparation and Clean-up	Soil contamination from food waste water	- Proper disposal of waste water in designated areas under the direction of Parks Canada staff	None	Not Significant
	Generation of Waste During Event	Soil contamination from refuse	- Properly separate and remove all refuse from site daily	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Land Resources	Disposal of Waste Produced	Refuse adds to waste stream and ultimately consumes more landfill space	- Must comply with community's Solid Waste By-Law and Provincial Landfill Material Bans - Provide a waste disposal plan for review by the Resource Conservation Manager - Properly separate and remove all refuse from site daily - Provide and label waste-separation/recycling containers - Encourage the use of reusable, recyclable, and/or compostable food service packaging and serving materials - Follow Solid Waste Resources Management Guide for Special Events (see Appendix 2)	Some landfill space used for waste disposal	Not Significant
	Installation/Use/Removal of Generators	Soil contamination from accidental fuel/oil spill or leak	- Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant
Water Resources	Equipment/Crew Transportation & Parking	Surface/ground water contamination from accidental fuel/oil leak or spill	- Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4) - It is the responsibility of the proponent to ensure that all reasonable measures are conducted to prevent the release of substances that are deleterious to fish from their proposed activities. In general, compliance is determined at the last point of control of the substance before it enters waters frequented by fish, or, in any place under any conditions where a substance may enter such waters.	None	Not Significant
		Soil compaction resulting in reduced water/soil infiltration rates, increased surface runoff, and siltation of surface water	- Vehicles restricted to approved paved and gravelled surfaces	Possibly some increase in sediment concentration of surface runoff	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
		Disruption of water movement patterns and filtering capacity in bogs, as well as overall water quality	- Vehicles restricted to approved paved and gravelled surfaces	None	Not Significant
	Installation/Removal of Portable Washrooms	Surface water contamination from accidental spill/leak of human waste Surface water contamination from accidental spill/leak of odour control chemicals	- Provide procedures for proper installation and removal of portable washroom facilities - Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant
	Food preparation & clean up	Surface water contamination from food waste water	- Proper disposal of waste water in designated areas under the direction of Parks Canada staff	None	Not Significant
Water Resources	Generation of waste during event	Surface water contamination from refuse	- Properly separate and remove all refuse from site daily - Materials must not be disposed of via water courses, storm, or sanitary sewers - All manure from imported livestock must be cleaned-up and disposed of in existing livestock areas as directed by the Heritage Presentation Specialist	None	Not Significant
	Set construction/deconstruction	Alteration of fish habitat	- Necessary clearances and permits must be obtained through the Department of Fisheries and Oceans, Transport Canada Navigable Waters Protection Branch, Environment Canada, the Province of Nova Scotia and/or any other regulatory authority prior to proceeding with work in water courses - All construction materials must be pre-approved for use at the NHS	None	Not Significant
	Installation/Use/Removal of Generators	Surface/ground water contamination from accidental fuel/oil spill or leak	- Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Visitor Experience and Public Safety	Special Event	Limited accessibility to the site	- Hold special events after visitor hours whenever possible	Some visitors may find event distracts from site's historical atmosphere	Not Significant
		Limited services in town available for visitors	- None	None	Not Significant
	Use of Sound Equipment; Special Event	Noise disrupts site's historical atmosphere	- Reduce volume on sound equipment during visitor hours - Must comply with all statutory and regulatory requirements, including, but not limited to, the *Canada National Parks Act*, National Historic Park regulations, and Historic Canal regulations under the *Department of Transport Act*	Some visitors may find event distracts from site's historical atmosphere	Not Significant
	Use of Special Effects/Black Powder	Noise distracts from site's historical atmosphere	- Use of special effects/black powder must comply with the community's Noise By-Law and National Historic Park regulations	Some visitors may find event distracts from site's historical atmosphere	Not Significant
		Reduced air quality	- None		
	Special Event and Associated Activities	Increased risk to public safety	- All activities must be in compliance with the *Occupational Health and Safety Act* and Canada Labour Code - All activities must be in compliance with the National Fire Code of Canada, as well as site specific fire control plans, fire orders, and evacuation procedures - Structures, equipment, etc. located within the NHS must be made safe (barricaded, signed, etc.) - Must provide qualified flag persons in accordance with procedures outlined in the NS Traffic Control Manual whenever normal traffic flow pattern is interrupted - Schedule events which require traffic interruption to avoid peak times - Rescue capability for events that occur in/near water - All activities subject to review by the Cape Breton Field Unit Public Safety Specialist and the Fortress of Louisbourg NHS of Canada Safety Officer	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Socio-economic Aspects	People attending special event	Increased traffic makes travel more difficult for community residents	- Traffic will not be stopped for longer than five minutes to accommodate filming	Some residents may find increased traffic makes commuting difficult	Not Significant
		Increased economic benefit to local community businesses	- None	None	Not Significant
	Use of Sound Equipment; Special Event	Increased noise affects peace and enjoyment of property by some community residents	- Must comply with all statutory and regulatory requirements including, but not limited to, the *Canada National Parks Act*, National Historic Park regulations, and Historic Canals regulations under the *Department of Transport Act*	Some people will be deprived of peace and enjoyment of property	Not Significant
	Use of Special Effects/Black powder		- Use of special effects/black powder must comply with the *Explosives Act* and regulations under the direction of the Black Powder Specialist		
Air Quality	Use of Special Effects/Black Powder	Reduced air quality	- None	None	Not Significant
	Special Event and People attending	Increased greenhouse gas emissions from people travelling to and from special event, as well as from equipment (i.e. generators, refrigerators, vehicles, etc.) used during activities associated with special events	- Vehicles must not idle while parked	Small increase in greenhouse gas emissions	Not Significant

Table 4. AQUATIC ECOTOURISM – Summary of potential environmental effects, mitigation measures, and the significance of residual environmental effects for the national historic sites in Cape Breton. (4 pages).

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Cultural Resources – Level I & Level II	Equipment/Crew Transportation (both terrestrial and aquatic)	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager - Access restricted to designated area(s) (See maps in Appendix 3) - Place and maintain hay or straw bales or other approved barricades in those areas designated by Parks Canada - Access routes used to and from the special event area must be pre-approved by Parks Canada	None	Not Significant
	Equipment Storage	Damage to in-situ cultural resources	- Special event equipment must be stored at a location approved by Parks Canada	None	Not Significant
	Mooring/Parking	Damage to shoreline in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager - Anchors must be not be deployed in the 'no anchoring' zones (See maps in Appendix 3) - Use of mooring blocks must be coordinated with Parks Canada and Transport Canada	None	Not Significant
		Damage to wharf infrastructure		Minor damage to wharf infrastructure	Not Significant
		Damage to in-situ cultural resources (either underwater or terrestrial)		None	Not Significant
	People attending special event	Damage to reconstructed buildings	- Provide security procedures to keep participants in designated special event area	Minor damage to reconstructed buildings	Not Significant
Forests and Managed Vegetation	Equipment/Crew Transportation (terrestrial)	Trampling/destruction of vegetation	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3) - Vehicles restricted to approved paved and gravelled surfaces - Access routes to and from the special event area must be pre-approved by Parks Canada	Minor short-term disruption of vegetation	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Forests and Managed Vegetation	Equipment Storage	Trampling of grass	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Special event equipment must be stored at a location approved by Parks Canada	Minor short-term disruption of vegetation	Not Significant
	Mooring/Parking	Trampling/Destruction of vegetation	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3)	None	Not Significant
	People Attending Special Event	Trampling of grass	- Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Provide security procedures to keep participants in designated special event area	Minor short-term disruption of vegetation	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Fauna	Special event and people attending	Disruptive to wildlife	- Notify warden service immediately of any problem wildlife encounters - Feeding, enticement, or harassment of wildlife is prohibited - Avoid high disturbance activities during the breeding season for migratory birds in the region (i.e. May 1st to August 31st). - Activities such as cleaning, application and removal of protective coatings (e.g. paints), and demolition should not take place during the breeding season on structures where migratory birds are known to nest (e.g. gutters, ledges, under bridges) since there is a risk of disturbing or destroying eggs or nestlings. - If a nest is found, risks can be minimized by measures such as the establishment of vegetated buffer zones around nests and minimization of activities in the immediate area until nesting is complete and chicks have naturally migrated from the area. - Avoid concentrations of seabirds, waterfowl and shorebirds when accessing a project site from water or land. Engines should be properly maintained, and well muffled to reduce disturbance due to noise. - Reduce vessel speed when in the vicinity of flocks of birds and use alternative travel routes.	Minor disruption to wildlife	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Land Resources	Equipment/Crew transportation & Parking	Soil contamination from accidental fuel/oil leak or spill	- Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4) - It is recommended that equipment be cleaned (e.g., use of pressure water hose to clean vehicles prior to transport) and inspected prior to transport from elsewhere to ensure that no matter is attached to the machinery that could introduce an invasive species into the area. - Fuelling and servicing of equipment should not take place within 30 m of sensitive habitats. - It is recommended that equipment be regularly inspected prior to, during and immediately following in areas found to support Purple Loosestrife to ensure that vegetative matter is not transported from one site to another.	None	Not Significant
	Mooring/parking	Increased risk of shoreline erosion	- Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications	None	Not Significant
	Generation of Waste During Event	Soil contamination from refuse	- Properly separate and remove all refuse from site daily	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Land Resources	Disposal of Waste Produced	Refuse adds to waste stream and ultimately consumes more landfill space	- Must comply with community's Solid Waste By-Law and Provincial Landfill Material Bans - Provide a waste disposal plan for review by the Resource Conservation Manager - Properly separate and remove all refuse from site daily - Provide and label waste-separation/recycling containers - Encourage the use of reusable, recyclable, and/or compostable food service packaging and serving materials - Follow Solid Waste Resources Management Guide for Special Events (see Appendix 2)	Some landfill space used for waste disposal	Not Significant
Water Resources	Equipment/Crew Transportation & Parking	Surface/ground water contamination from accidental fuel/oil leak or spill	- Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4) - It is the responsibility of the proponent to ensure that all reasonable measures are conducted to prevent the release of substances that are deleterious to fish from their proposed activities. In general, compliance is determined at the last point of control of the substance before it enters waters frequented by fish, or, in any place under any conditions where a substance may enter such waters.	None	Not Significant
	Generation of waste during event	Surface water contamination from refuse	- Properly separate and remove all refuse from site daily - Materials must not be disposed of via water courses, storm, or sanitary sewers	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Visitor Experience and Public Safety	Special Event and Associated Activities	Increased risk to public safety	- All activities must be in compliance with the *Occupational Health and Safety Act* and Canada Labour Code - All activities must be in compliance with the National Fire Code of Canada, as well as site specific fire control plans, fire orders, and evacuation procedures - Structures, equipment, etc. located within the NHS must be made safe (barricaded, signed, etc.) - Rescue capability for events that occur in/near water - All activities subject to review by the Cape Breton Field Unit Public Safety Specialist and the Fortress of Louisbourg NHS of Canada Safety Officer	None	Not Significant
Socio-economic Aspects	People attending special event	Increased economic benefit to local community businesses	- None	None	Not Significant
Air Quality	Special Event and People attending	Increased greenhouse gas emissions from people travelling to and from special event, as well as from equipment (i.e. generators, refrigerators, vehicles, etc.) used during activities associated with special events	- Vehicles must not idle while parked	Small increase in greenhouse gas emissions	Not Significant

Table 5. TERRESTRIAL ECOTOURISM – Summary of potential environmental effects, mitigation measures, and the significance of residual environmental effects for the national historic sites in Cape Breton. (5 pages).

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Cultural Resources – Level I & Level II	Equipment/Crew Transportation (both terrestrial and aquatic)	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager - Access restricted to designated area(s) (See maps in Appendix 3) - Place and maintain hay or straw bales or other approved barricades in those areas designated by Parks Canada - Access routes used to and from the special event area must be pre-approved by Parks Canada	None	Not Significant
	Mooring/Parking	Damage to in-situ cultural resources (either underwater or terrestrial)	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	People attending special event	Damage to reconstructed buildings	- Provide security procedures to keep participants in designated special event area	Minor damage to reconstructed buildings	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Forests and Managed Vegetation	Equipment/Crew Transportation (terrestrial)	Trampling/destruction of vegetation	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3) - Vehicles restricted to approved paved and gravelled surfaces - Access routes to and from the special event area must be pre-approved by Parks Canada - It is recommended that equipment be cleaned (e.g., use of pressure water hose to clean vehicles prior to transport) and inspected prior to transport from elsewhere to ensure that no matter is attached to the machinery that could introduce an invasive species into the area. - Fuelling and servicing of equipment should not take place within 30 m of sensitive habitats. - It is recommended that equipment be regularly inspected prior to, during and immediately following in areas found to support Purple Loosestrife to ensure that vegetative matter is not transported from one site to another.	Minor short-term disruption of vegetation	Not Significant
	Mooring/Parking	Trampling/Destruction of vegetation	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3) - Vehicles restricted to approved paved and gravelled surfaces	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
	People Attending Special Event	Trampling of grass	- Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Provide security procedures to keep participants in designated special event area	Minor short-term disruption of vegetation	Not Significant
Bog and Heathland Vegetation	Equipment/Crew Transportation (Terrestrial)	Trampling/destruction of vegetation	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources - Access restricted to designated areas (see maps in Appendix 3) - Vehicles restricted to approved paved and gravelled surfaces - Access routes to and from the special event area must be pre-approved by Parks Canada	Minor short-term disruption of vegetation	Not Significant
	Mooring/Parking	Trampling/destruction of vegetation	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3) - Vehicles restricted to approved paved and gravelled surfaces	None	Not Significant
	People attending special event	Trampling of vegetation	- Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Provide security procedures to keep participants in designated special event area	Minor short-term disruption of vegetation	Not Significant
Land Resource	Equipment/Crew transportation & Parking	Soil contamination from accidental fuel/oil leak or spill	- Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
		Soil compaction resulting in reduced water/soil infiltration rates, erosion from rain	- Vehicles restricted to approved paved and gravelled surfaces - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications	Possibly some increase in sediment concentration of surface runoff	Not Significant
Land Resources	Generation of Waste During Event	Soil contamination from refuse	- Properly separate and remove all refuse from site daily	None	Not Significant
	Disposal of Waste Produced	Refuse adds to waste stream and ultimately consumes more landfill space	- Must comply with community's Solid Waste By-Law and Provincial Landfill Material Bans - Provide a waste disposal plan for review by the Resource Conservation Manager - Properly separate and remove all refuse from site following event - Provide and label waste-separation/recycling containers - Encourage the use of reusable, recyclable, and/or compostable food service packaging and serving materials - Follow Solid Waste Resources Management Guide for Special Events (see Appendix 2)	Some landfill space used for waste disposal	Not Significant
Water Resources	Equipment/Crew Transportation & Parking	Surface/ground water contamination from accidental fuel/oil leak or spill	- Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4) - It is the responsibility of the proponent to ensure that all reasonable measures are conducted to prevent the release of substances that are deleterious to fish from their proposed activities. In general, compliance is determined at the last point of control of the substance before it enters waters frequented by fish, or, in any place under any conditions where a substance may enter such waters.	None	Not Significant
		Soil compaction resulting in reduced water/soil infiltration rates, increased surface runoff, and siltation of surface water	- Vehicles restricted to approved paved and gravelled surfaces	Possibly some increase in sediment concentration of surface runoff	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
		Disruption of water movement patterns and filtering capacity in bogs, as well as overall water quality	- Vehicles restricted to approved paved and gravelled surfaces	None	Not Significant
	Generation of waste during event	Surface water contamination from refuse	- Properly separate and remove all refuse from site daily - Materials must not be disposed of via water courses, storm, or sanitary sewers	None	Not Significant
Visitor Experience and Public Safety	Special Event and Associated Activities	Increased risk to public safety	- All activities must be in compliance with the *Occupational Health and Safety Act* and Canada Labour Code - All activities must be in compliance with the National Fire Code of Canada, as well as site specific fire control plans, fire orders, and evacuation procedures - Structures, equipment, etc. located within the NHS must be made safe (barricaded, signed, etc.) - Must provide qualified flag persons in accordance with procedures outlined in the NS Traffic Control Manual whenever normal traffic flow pattern is interrupted - Schedule events which require traffic interruption to avoid peak times - Rescue capability for events that occur in/near water - All activities subject to review by the Cape Breton Field Unit Public Safety Specialist and the Fortress of Louisbourg NHS of Canada Safety Officer	None	Not Significant
Socio-economic Aspects	People attending special event	Increased economic benefit to local community businesses	- None	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Air Quality	Special Event and People attending	Increased greenhouse gas emissions from people travelling to and from special event, as well as from equipment (i.e. generators, refrigerators, vehicles, etc.) used during activities associated with special events	- Vehicles must not idle while parked	Small increase in greenhouse gas emissions	Not Significant

Table 6. ENCAMPMENTS – Summary of potential environmental effects, mitigation measures, and the significance of residual environmental effects for the national historic sites in Cape Breton. (7 pages).

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Cultural Resources – Level I & Level II	Equipment/Crew Transportation (both terrestrial and aquatic)	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager - Access restricted to designated area(s) (See maps in Appendix 3) - Place and maintain hay or straw bales or other approved barricades in those areas designated by Parks Canada - Access routes used to and from the special event area must be pre-approved by Parks Canada	None	Not Significant
		Damage to reconstructed buildings		Minor damage to reconstructed buildings	Not Significant
	Equipment Storage	Damage to in-situ cultural resources	- Special event equipment must be stored at a location approved by Parks Canada	None	Not Significant
	Mooring/Parking	Damage to in-situ cultural resources (terrestrial)	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	Set up/Dismantle Temporary Staging, Fencing, Tents, etc.	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager - Location of temporary structures must avoid sensitive areas as indicated by a Parks Canada archaeologist	None	Not Significant
		Damage to reconstructed buildings		Minor damage to reconstructed buildings	Not Significant
	Installation/Removal of Portable Washrooms	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
	Prepare/Remove Stands/Promotional Displays	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	Set up/Removal of Waste Facilities	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	Installation/Use/Removal of Generators	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	Set up/Use/Removal of Sound/Lighting Equipment	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
	Use of Camera Equipment	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
Cultural Resources	Campfires	Damage to reconstructed buildings	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager - Must comply with the National Fire Code of Canada, as well as site specific fire control plans and fire orders	None	Not Significant
	People attending special event	Damage to reconstructed buildings	- Provide security procedures to keep participants in designated special event area	Minor damage to reconstructed buildings	Not Significant
	Use of Special Effects and/or Black Powder	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
		Damage to reconstructed buildings		None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Forests and Managed Vegetation	Equipment/Crew Transportation (terrestrial)	Trampling/destruction of vegetation	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3) - Vehicles restricted to approved paved and gravelled surfaces - Access routes to and from the special event area must be pre-approved by Parks Canada - It is recommended that equipment be cleaned (e.g., use of pressure water hose to clean vehicles prior to transport) and inspected prior to transport from elsewhere to ensure that no matter is attached to the machinery that could introduce an invasive species into the area. - Fuelling and servicing of equipment should not take place within 30 m of sensitive habitats. - It is recommended that equipment be regularly inspected prior to, during and immediately following in areas found to support Purple Loosestrife to ensure that vegetative matter is not transported from one site to another.	Minor short-term disruption of vegetation	Not Significant
	Equipment Storage	Trampling of grass	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Special event equipment must be stored at a location approved by Parks Canada	Minor short-term disruption of vegetation	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
	Mooring/Parking	Trampling/Destruction of vegetation	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3) - Vehicles restricted to approved paved and gravelled surfaces	None	Not Significant
Forests and Managed Vegetation	Set up/Dismantle Temporary Staging, Fencing, Tents, etc.	Destruction of grass	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Access restricted to designated areas (see maps in Appendix 3) - It is recommended that a variety of species of plants native to the general area be used in revegetation efforts. Should seed mixes for herbaceous native species for the area not be available, it should be ensured that plants used in revegetation efforts are known to be non-invasive.	Minor short-term disruption of vegetation	Not Significant
	Installation/Removal of Portable Washrooms	Trampling of grass	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications	Minor short-term disruption of vegetation	Not Significant
	Set up/Removal of Waste Facilities	Trampling of grass	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
	Campfires	Destruction of vegetation	- Provide plan detailing proposed use of NHS for review by the Resource Conservation Manager - Must comply with the National Fire Code of Canada, as well as site specific fire control plans and fire orders	None	Not Significant
	People Attending Special Event	Trampling of grass	- Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications - Provide security procedures to keep participants in designated special event area	Minor short-term disruption of vegetation	Not Significant
Fauna	Special event and people attending	Disruptive to wildlife	- Notify warden service immediately of any problem wildlife encounters - Feeding, enticement, or harassment of wildlife is prohibited - Avoid high disturbance activities during the breeding season for migratory birds in the region (i.e. May 1st to August 31st). - Activities such as cleaning, application and removal of protective coatings (e.g. paints), and demolition should not take place during the breeding season on structures where migratory birds are known to nest (e.g. gutters, ledges, under bridges) since there is a risk of disturbing or destroying eggs or nestlings. - If a nest is found, risks can be minimized by measures such as the establishment of vegetated buffer zones around nests and minimization of activities in the immediate area until nesting is complete and chicks have naturally migrated from the area.	Minor disruption to wildlife	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Land Resources	Equipment/Crew transportation & Parking	Soil contamination from accidental fuel/oil leak or spill	- Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant
		Soil compaction resulting in reduced water/soil infiltration rates, erosion from rain	- Vehicles restricted to approved paved and gravelled surfaces - Promptly return property to its natural state in accordance with Parks Canada's Resource Conservation and Cultural Resources specifications	Possibly some increase in sediment concentration of surface runoff	Not Significant
	Installation/Removal of Portable Washrooms	Soil contamination from accidental spill/leak of human waste	- Provide procedures for proper installation and removal of portable washroom facilities - Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant
		Soil contamination from accidental spill/leak of odour control chemicals			Not Significant
	Food Preparation and Clean-up	Soil contamination from food waste water	- Proper disposal of waste water in designated areas under the direction of Parks Canada staff	None	Not Significant
	Generation of Waste During Event	Soil contamination from refuse	- Properly separate and remove all refuse from site daily	None	Not Significant
	Disposal of Waste Produced	Refuse adds to waste stream and ultimately consumes more landfill space	- Must comply with community's Solid Waste By-Law and Provincial Landfill Material Bans - Provide a waste disposal plan for review by the Resource Conservation Manager - Properly separate and remove all refuse from site daily - Provide and label waste-separation/recycling containers - Encourage the use of reusable, recyclable, and/or compostable food service packaging and serving materials - Follow Solid Waste Resources Management Guide for Special Events (see Appendix 2)	Some landfill space used for waste disposal	Not Significant
Land Resources	Installation/Use/Removal of Generators	Soil contamination from accidental fuel/oil spill or leak	- Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Water Resources	Equipment/Crew Transportation & Parking	Surface/ground water contamination from accidental fuel/oil leak or spill	- Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4) - It is the responsibility of the proponent to ensure that all reasonable measures are conducted to prevent the release of substances that are deleterious to fish from their proposed activities. In general, compliance is determined at the last point of control of the substance before it enters waters frequented by fish, or, in any place under any conditions where a substance may enter such waters.	None	Not Significant
		Soil compaction resulting in reduced water/soil infiltration rates, increased surface runoff, and siltation of surface water	- Vehicles restricted to approved paved and gravelled surfaces	Possibly some increase in sediment concentration of surface runoff	Not Significant
	Installation/Removal of Portable Washrooms	Surface water contamination from accidental spill/leak of human waste Surface water contamination from accidental spill/leak of odour control chemicals	- Provide procedures for proper installation and removal of portable washroom facilities - Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant
	Food preparation & clean up	Surface water contamination from food waste water	- Proper disposal of waste water in designated areas under direction of Parks Canada staff	None	Not Significant
	Generation of waste during event	Surface water contamination from refuse	- Properly separate and remove all refuse from site daily - Materials must not be disposed of via water courses, storm, or sanitary sewers - All manure from imported livestock must be cleaned-up and disposed of in existing livestock areas as directed by the Heritage Presentation Specialist	None	Not Significant
	Installation/Use/Removal of Generators	Surface/ground water contamination from accidental fuel/oil spill or leak	- Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4)	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Visitor Experience and Public Safety	Special Event	Limited accessibility to the site	- Hold special events after visitor hours whenever possible	Some visitors may find event distracts from site's historical atmosphere	Not Significant
		Limited services in town available for visitors	- None	None	Not Significant
	Use of Special Effects/Black Powder	Reduced air quality	- None	Some visitors may find event distracts from site's historical atmosphere	Not Significant
	Special Event and Associated Activities	Increased risk to public safety	- All activities must be in compliance with the *Occupational Health and Safety Act* and Canada Labour Code - All activities must be in compliance with the National Fire Code of Canada, as well as site specific fire control plans, fire orders, and evacuation procedures - Structures, equipment, etc. located within the NHS must be made safe (barricaded, signed, etc.) - Must provide qualified flag persons in accordance with procedures outlined in the NS Traffic Control Manual whenever normal traffic flow pattern is interrupted - Schedule events which require traffic interruption to avoid peak times - Rescue capability for events that occur in/near water - All activities subject to review by the Cape Breton Field Unit Public Safety Specialist and the Fortress of Louisbourg NHS of Canada Safety Officer	None	Not Significant
Socio-economic Aspects	People attending special event	Increased traffic makes travel more difficult for community residents	- None	Some residents may find increased traffic makes commuting difficult	Not Significant
		Increased economic benefit to local community businesses	- None	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Socio-economic Aspects	Use of Sound Equipment; Special Event	Increased noise affects peace and enjoyment of property by some community residents	- Must comply with all statutory and regulatory requirements including, but not limited to, the *Canada National Parks Act*, National Historic Park regulations, and Historic Canals regulations under the *Department of Transport Act*	Some people will be deprived of peace and enjoyment of property	Not Significant
	Use of Special Effects/Black powder		- Use of special effects/black powder must comply with community's Noise By-Law and National Historic Park regulations		
Air Quality	Use of Special Effects/Black Powder	Reduced air quality	- None	None	Not Significant
	Special Event and People attending	Increased greenhouse gas emissions from people travelling to and from special event, as well as from equipment (i.e. generators, refrigerators, vehicles, etc.) used during activities associated with special events	- Vehicles must not idle while parked	Small increase in greenhouse gas emissions	Not Significant

Appendix 2 – Waste Resource Management Guide

Solid Waste Resources Management Guide for Special Events

May 2011

Parks Canada Parcs Canada

Canada

Table of Contents

1 Background

The province of Nova Scotia strives to maximize diversion of all recyclables and organic material from landfills on an on-going basis. As part of this effort, certain materials have been banned from landfills under the Solid Waste-Resource Management Regulations found under Section 102 of the *Environment Act*. These banned materials include such items as redeemable beverage containers, corrugated cardboard, newsprint, compostable organics, and steel/tin/glass food containers (Government of NS, 2007).

Special events tend to have multiple areas generating a significant amount of waste, mostly from packaging and food services. Efforts must be made to ensure that the amount of waste produced during special events is not only minimized, but also properly diverted to save landfill space. In addition, these efforts will help preserve our natural resources and reduce environmental burdens through the use of recycled materials, increased economic opportunities for Nova Scotians, and creation of value added products.

This Solid Waste Resources Management Plan will provide guidelines on how to "green" special events, through four key components of waste diversion: source reduction and material reuse, recycling, and composting.

2 Objectives

The objectives of this plan are as follows:

- Reduce the amount of disposed waste through provision of containers for the separate collection of recyclables, organics, and waste that are available for public/vendors/staff use
- Reduce the amount of disposed waste through provision of corrugated cardboard recycling containers for vendor/staff use
- Encourage vendors/staff to purchase supplies that are reusable, recyclable, or compostable where possible
- Educate public/vendors/staff about properly separating organics and recyclables from refuse to ensure active participation

3 Meeting the Objectives

Steps to meet the objectives described in this plan will vary depending upon the size of the event. The following categories offer suggestions to help ensure the Waste Management Plan objectives are met, however all items may not be applicable, especially in the case of small special events.

3.1 Organization

- Identify someone responsible for coordinating the Waste Management Plan
- Recruit staff/volunteers to carry out the plan under the guidance of the Waste Management Coordinator
- Ensure that the necessary arrangements have been made for waste-separation/recycling containers, proper labelling, and waste removal
- Ensure waste separation/recycling containers are monitored and emptied as necessary

3.2 Waste Separation System

- Based on the size of the special event, set up an appropriate number of waste-separation/recycling containers to collect organics, recyclables, and regular refuse
- Ensure that three-stream waste stations are placed in convenient locations for public/vendor/staff use
- Have corrugated cardboard recycling containers available for staff/vendor use
- If paper/flyers will be generated during the event, ensure that paper recycling containers are available

3.3 Communication

- Post signs on or above receptacles to ensure waste is being sorted properly
- Use familiar colours to represent each waste stream (Blue – Recycling; Black – Regular Refuse; Green – Organics)
- Encourage vendors to reduce their impact on the environment through:
    - Reduced packaging and limited use of Styrofoam
    - Using refillable containers for dispensing food/condiments (ie. milk, ketchup, etc.) rather than single-serving packages

    - Using dishes/utensils that are compostable, recyclable, or reusable
    - Limiting use of unnecessary disposable items such as stir sticks, straws, Styrofoam products, etc.
    - Using environmentally-friendly products
- Have volunteers promote waste management goals and encourage public participation
    - Announcements during special event
    - Solid Waste Resources Educators will set up informative booth displays at special events

3.4 Monitoring

- Empty waste, recycling, and organics containers as necessary to ensure that waste sorting occurs throughout the event
- Record number of bags collected and approximate average weight of bags in each waste stream

3.5 Follow-up

- Calculate the following:
    - Average weight per bag x Total number of bags = Total waste weight
        - Calculation done for each waste stream
    - (Sum of waste weights for recyclables and organics/Total waste weight of all waste streams) x 100 = Percent of waste diverted
- Inform Parks Canada of any additions that would help to achieve the Waste Management Plan objectives

3.6 Contacts

The Resource Recovery Fund Board (RRFB) provides a current, searchable directory of waste haulers in Nova Scotia. If an Internet connection is available, use the website listed below to access the Directory of Solid Waste, Reuse, Recycling and Composting Contacts in NS. Search for recyclable and organic collection services under the category "haulers" and select the region that corresponds with the special event location. Click on the "search" button to find a list of possible contacts. If Internet access is not available, please contact RRFB NS for a list of local haulers.

- RRFB NS 1-877-313-7732
  www.rrfb.com
- Directory of Solid Waste, Reuse, Recycling and Composting Contacts in NS: http://www.rrfb.com/directory/s_search.cfm

The following organizations may also be of use for accessing waste management information, as well as contact numbers for waste management facilities, haulers, and suppliers of source-separation/recycling containers:

- Nova Scotia Environment 902-424-3600
  Solid Waste Resource Management
  http://www.gov.ns.ca/nse/waste/
- Clean NS 902-420-3474
  www.clean.ns.ca
- Local municipality's solid waste management department
  Cape Breton Regional Municipality
  http://www.cbrm.ns.ca/solidwaste.html
  Solid Waste Management Hotline 902-567-1337
  solidwaste@cbrm.ns.ca

4 Conclusion

Although special events vary within the national historic sites in Cape Breton, the Waste Management Plan objectives remain constant. Participants can adjust the guidelines to suit their project, provided the objectives are still being met, and as a result, Nova Scotia's goal to divert waste will be achieved. It is therefore important to consider waste management when planning your event.

5 References

Government of Nova Scotia. 2007. *Solid Waste-Resource Management Regulations* (as amended). Retrieved June 1, 2010 from the World Wide Web at http://www.gov.ns.ca/just/regulations/REGS/envsolid.htm

Halifax Regional Municipality (HRM) Waste Resources. 2003. *Apartment Recycling/Composting Program – Resource List for Building Owners*. Halifax Regional Municipality.

Nova Scotia Department of the Environment. October 27, 1995. *Solid Waste-Resource Management Strategy*. Retrieved June 1, 2010 from the World Wide Web at http://www.gov.ns.ca/nse/waste/docs/SolidWasteStrategyFinalReport1995.pdf

Resource Recovery Fund Board (RRFB) NS and Bluenose Atlantic Coastal Action Program (Bluenose ACAP). *Event Greening – Managing Waste, Recyclables, & Organics at Events & Festivals*. RRFB NS and Bluenose ACAP.

Waste Resource Analyst with HRM Solid Waste Resources. Halifax Regional Municipality. August 2003. Personal Communication.

Appendix 3 – Site Maps of the Cape Breton Field Unit National Historic Sites

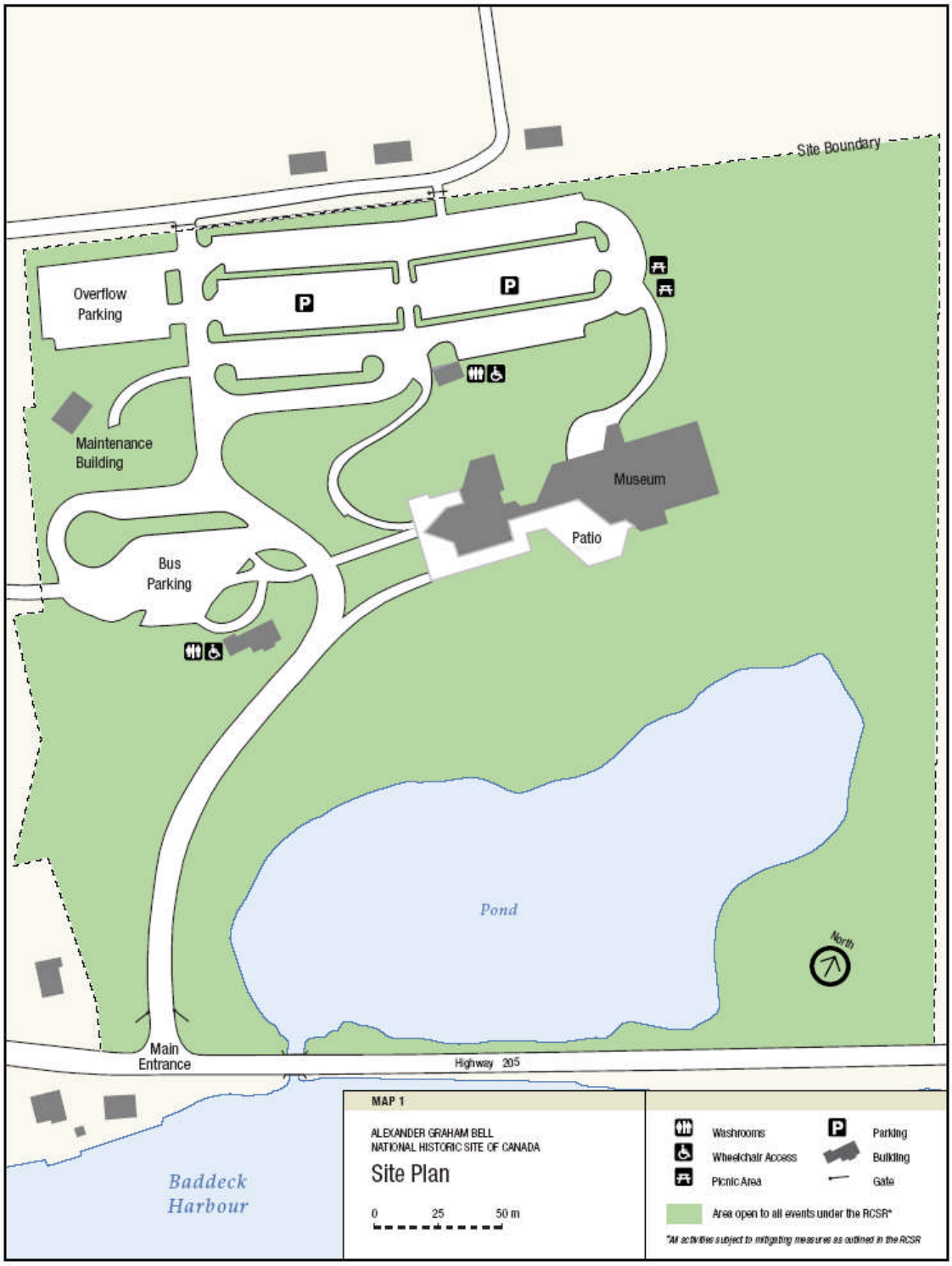


Figure 1. Map of Alexander Graham Bell National Historic Site of Canada.

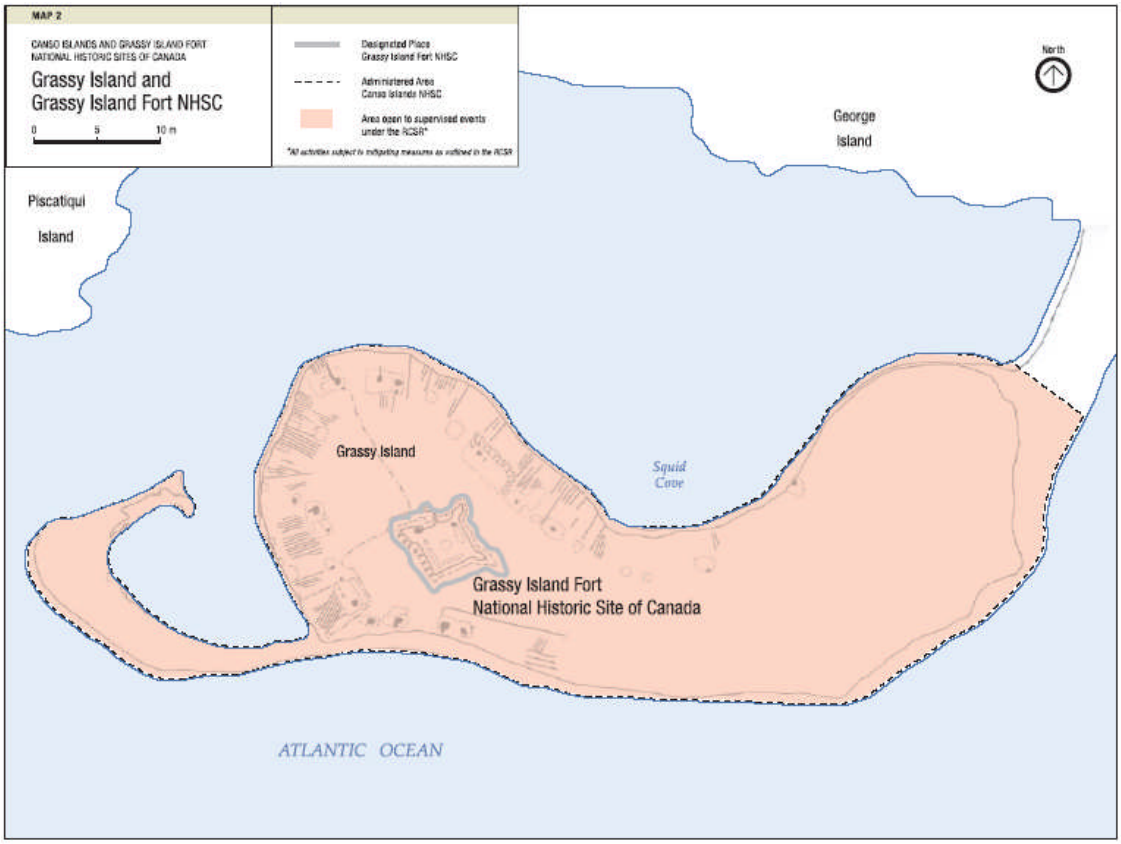


Figure 2. Map of Grassy Island Fort National Historic Site of Canada - Please note area is open to supervised events under this RCSR.

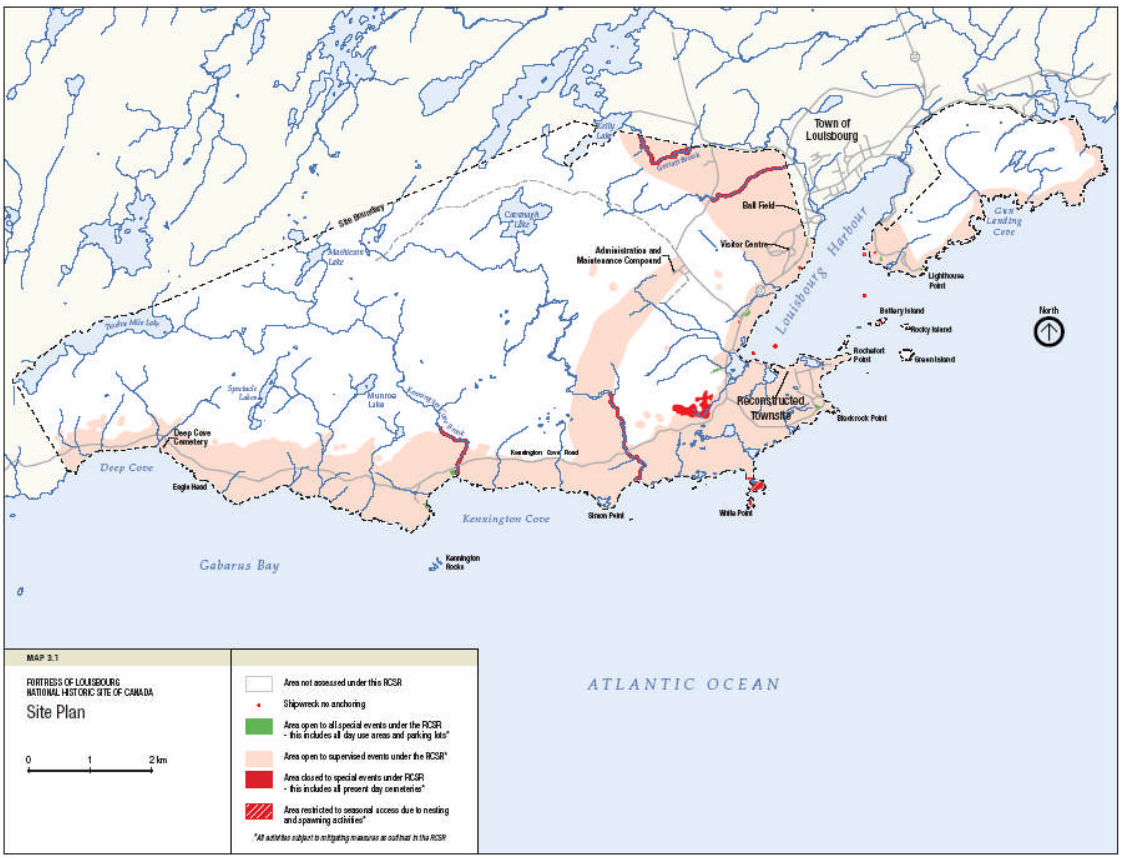


Figure 3.1. Map of the Fortress of Louisbourg National Historic Site of Canada - Please note areas with restricted access under this RCSR.

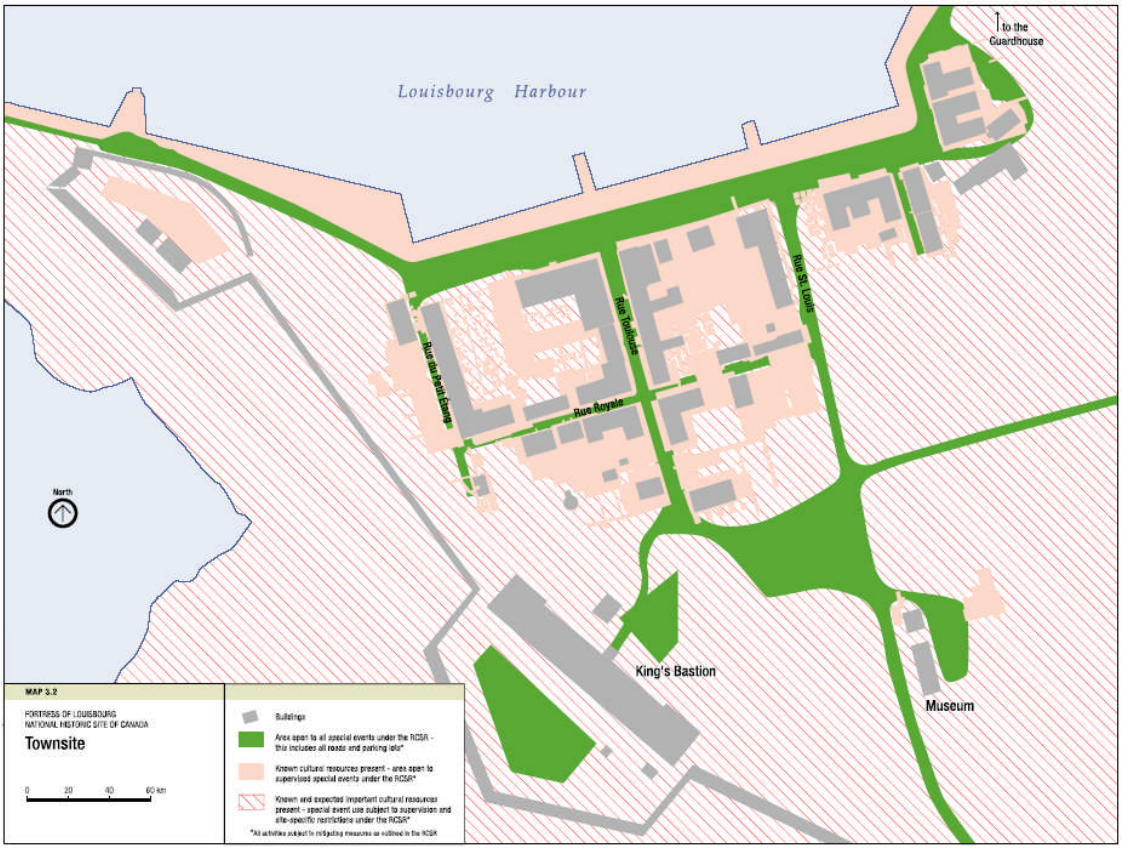


Figure 3.2. Map of the Fortress of Louisbourg National Historic Site of Canada townsite – Please note areas with restricted access under this RCSR.

Figure 4. Map of Marconi National Historic Site - Please note areas with restricted access under this RCSR.

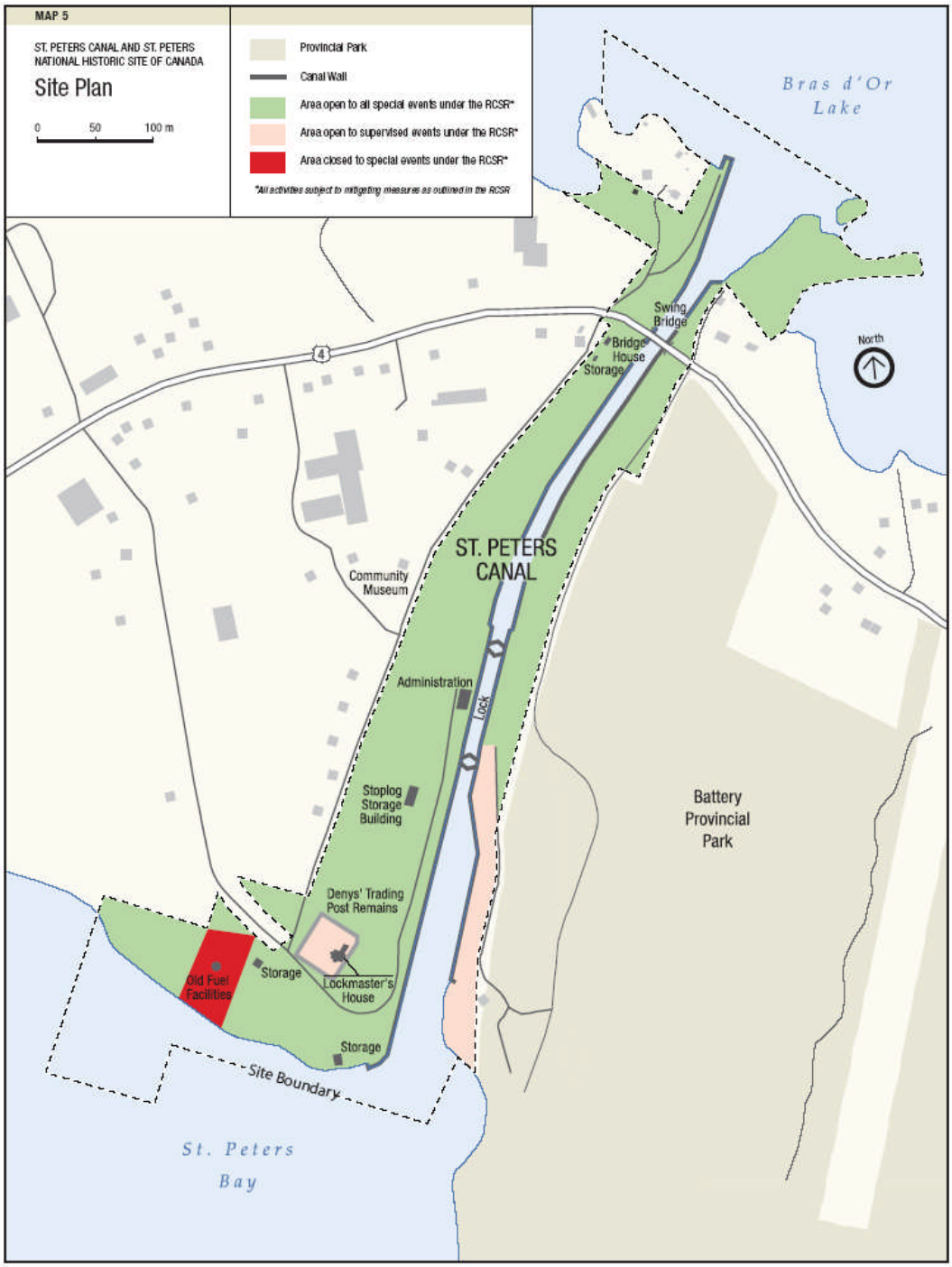


Figure 5. Map of St. Peters Canal National Historic Site of Canada - Please note areas with restricted access under this RCSR.

Appendix 4 – Environmental Emergency Response Plan Guidelines and Template

Guidelines for Preparing an Environmental Emergency Response Plan for Special Events in the Cape Breton Field Unit National Historic Sites of Canada

Parks Canada Parcs Canada

Canada

Background

An environmental emergency is defined as an uncontrolled, unplanned, or accidental release of a harmful substance into the environment or the reasonable likelihood of such a release that may adversely affect the environment and/or human health. The potential for such an emergency has been identified through the declared replacement class screening report (RCSR) and is mitigated through the development of an Environmental Emergency Response Plan (EERP).

An EERP identifies all potential spill sources and describes the preventative measures used to reduce the likelihood of an environmental emergency. The plan includes a detailed response protocol which assigns responsibilities to individuals and provides step-by-step instructions to handle a spill.

To aid individuals holding special events within the national historic sites in Cape Breton, Parks Canada has developed an EERP format that allows each event to individualize its plan while ensuring the necessary response procedures are addressed. This guide clarifies the steps required to complete an EERP using the electronic template provided.

It is the responsibility of the Licensee to ensure the EERP covers all potential environmental emergencies associated with his/her project.

Steps to Complete an Environmental Emergency Response Plan

Step 1: Open the template document

The document template (saved as "Special Event CB-NHS EERP Template") will automatically open as a new document when you double click on the icon and will need to be saved under a new title.

Please do not open the template from Microsoft Word as it will open as the template rather than a new document based on the template.

Step 2: Section 1.3 – Site Description

There are several areas within this section that are shaded. The shaded areas, found throughout the document, represent "fields" that need to be filled in or have a response selected. Pressing F1 while in one of these fields opens a help box detailing the required information.

In this section, choose the type of event from the drop-down menu. Next, choose the location of the event. Finally, select the relevant environmental settings by clicking on the appropriate check boxes (located beside each descriptor). If the setting is not listed, please specify under "Other".

Step 3: Section 2.1- Environmental Emergency History

This section provides details on any environmental emergencies that occurred during past special events, either on Parks Canada properties or elsewhere. Please enter the current date in the first field, in the format "month day, year" (ie. January 1, 2004). In the next field, select whether there "has" or "has not" been any environmental emergencies. If there have been environmental emergencies associated with the event, please describe each one in detail in the last field provided. Include such information as the cause of the spill, substance type and quantity, response procedures, success of the cleanup, and corrective measures now taken to prevent its recurrence.

Step 4: Section 2.2 – Potential Environmental Emergencies

This section addresses the potential environmental emergencies that have been identified for the special events covered in the declared RCSR. Some special events have more risk of an environmental emergency than others based on each project's activities. For each subsection, please identify whether the indicated spill is possible on site. If the potential spill substance is present, provide the location, type (if possible), quantity, and where and how it is stored in the blank fields under each potential spill heading. Certain events may have additional risks, so please take the time to consider all possible areas where an environmental leak/spill could occur. If any additional risks are identified, please include the details under "Other".

Step 5: Section 2.3 – Preventative Measures

This section lists the preventative measures in place to reduce the likelihood of an environmental leak/spill. Please describe the actions taken to prevent an environmental

emergency in the field provided. (If fuel/oil is being transferred from containers to equipment, drip trays must be used.)

Step 6: Section 3.1 – Roles and Responsibilities

Roles and duties have been assigned to the personnel responsible for the successful implementation of the EERP. The duties can be rearranged between individuals if necessary, however they must remain in the plan.

Step 7: Section 3.2 – Contact Information

The Emergency Response Crew (Subsection 3.2.1) identifies those individuals involved with the special event who are responsible for implementing the EERP. Please provide the name, work title (if required), and contact number(s) for each position.

Include contact information for local resources that would be helpful in the event of an Environmental Emergency under Subsection 3.2.4. Names and phone numbers for two excavating contractors must be provided. Please enter the company name in the first field and phone number in the third field. If additional resources are added to the table, please use the second column to provide information regarding the company's function (ie. Environmental Consultant).

Under Location of Emergency Resources (Subsection 3.2.5), please identify the location of the emergency resources listed. The remaining subsections already contain information, but additional names and numbers can be added if useful.

Step 8: Section 4 – Emergency Action Guidelines

Environmental emergency response guidelines are listed in this section and need to be reviewed to ensure their applicability to your circumstances. (Contact numbers listed in the emergency response procedures must remain.) The response plan for a portable washroom contents spill is not complete. Please contact your supplier and determine the best response procedures to follow based on their recommendations. Update the procedures as required. If any other potential spill sources were identified, response procedures must be developed for those sources as well.

Step 9: Section 5 – Post-Emergency Operations

Review the post-emergency response procedures. Add any steps that you feel are necessary or beneficial.

Step 10: Section 6 – Flowchart of Emergency Actions

Update the flowcharts to reflect the step-by-step response protocol outlined in Section 4. The response procedures for a portable washroom leak/spill must be updated to reflect the recommendations of your supplier. If any other spill sources were identified, creation of a corresponding flowchart is required. Please ensure that the necessary contacts are made as modelled in the prepared flowcharts.

Step 11: Table of Contents

Please update the Table of Contents. To do this, hold the cursor over the existing Table of Contents. Right click and choose "Update Field". (If you receive another prompt, select "Update Entire Table".)

Step 12: Review

Your individualized EERP is now complete. Please review the plan with a Parks Canada Official to ensure its accuracy.

Environmental Emergency Response Plan for Special Events at the National Historic Sites in Cape Breton

1 Introduction

1.1 Scope

The goal of this plan is to provide all individuals associated with the special event, such as staff, volunteers, suppliers, and vendors, with a detailed course of action for specific environmental accidents that could occur on site. Duties and responsibilities are assigned to designated individuals as detailed in the Special Event Environmental Emergency Response Plan. Contact information for appropriate support agencies is provided.

1.2 How to Use this Document

As an individual involved in a special event within the national historic sites in Cape Breton, you should be familiar with this document well in advance of any emergency. In the event of an emergency, use the flowchart in Section 6 to guide your actions. After the danger has passed, review the entire document to ensure no steps were missed. Follow up with the post-emergency operations.

1.3 Site Description

This Environmental Emergency Response Plan pertains to Special Events taking place within the Cape Breton Field Unit National Historic Sites, as covered by the declared replacement class screening. The (type of special event) is held within (name of the site) and the following environmental settings are relevant to the event's location:

- ☐ Pavement
- ☐ Grassed surface
- ☐ Gravelled area
- ☐ Wooded area
- ☐ Near water (stream, river, bog, etc.)
- ☐ Other: _____
  Please specify

2 Hazard Analysis

2.1 Environmental Emergency History

As of , this special event has had Environmental Emergencies associated with the project activities.

2.2 Potential Environmental Emergencies

2.2.1 Fuel Spill

2.2.2 Oil Spill

2.2.3 Spill from Portable Washrooms

2.2.4 Other

2.3 Preventative Measures

3 Emergency Response

3.1 Roles and Responsibilities

On-Scene Commander

- Advise Parks Canada Asset Management of spill and the emergency operations that are taking place
- Coordinate any media releases regarding emergency operations
- Complete a report for Parks Canada Asset Management detailing the spill, emergency response, and cleanup procedures
- Recommend any changes required to the Environmental Emergency Response Plan

Emergency Response Coordinator

- Act as the Emergency Coordinator or delegate this responsibility to another capable individual
- Assess the situation and activate the Environmental Emergency Response Plan
- Coordinate activity of the Response Crew
- Ensure that the necessary federal departments are notified of spill and emergency operations

Response Crew

- Responsible for containment and clean up of spill

Contact Information

3.2.1 Emergency Response Crew

Name	Environmental Emergency Response Position	Work Title	Contact Number	
	On-Scene Commander			
	Emergency Response Coordinator			
	Response Crew			
	Response Crew			
	Response Crew			
	Response Crew			

	Response Crew			

3.2.2 Key Parks Canada Staff

Name	Title	Work
Audrey Buchanan	Manager, Asset Management	902-733-3520
Chip Bird	Field Unit Superintendent	902-733-3500
Pauline Kelly	Client Services Officer	902-733-3502
Brent Baker	Fire/Security Supervisor, Fortress of Louisbourg National Historic Site	902- 733- 2280

3.2.3 Outside Agencies

Agency	Contact Person	Phone Number
Fire department		911
RCMP		911
Environment Canada, Environmental Emergencies		1-800-565-1633
Environment Canada, Regional Environmental Emergency Coordinator		902-426-2576 or 902-426-6200 (24hrs)
Nova Scotia Emergency Measures Organization		902-563-2093

3.2.4 Local Resources

	Excavating Contractor	
	Excavating Contractor	

3.2.5 Location of Emergency Resources

Resource	Location
First aid kit	
Telephone	
Fire extinguisher	
3 portable emergency lights	
3 shovels	
3 pairs of disposable coveralls	
3 pairs of rubber boots	
3 pairs of disposable rubber gloves	
1 case of heavy duty garbage bags	
25 kg of absorbent material (e.g. cat litter; sand)	
Yellow Caution Tape	

4 Emergency Action Guidelines

When an emergency is reported, the designated Emergency Coordinator shall immediately go to the scene to make an initial assessment. The first priority while approaching the scene should be personal safety. Activate the plan, following the guidelines for the appropriate type of accident. As much of the following information should be gathered:

- Type of accident
- Time/location of the accident
- Material involved and quantity
- Number of deaths/injuries
- Size of area affected
- Weather conditions
- Assistance required

The procedures to be followed are outlined below and are in the attached flowchart.

In case of fuel or oil spill

1. Initial assessment by Emergency Coordinator
2. Ensure safety of public and site staff (protective clothing, first aid, etc)
3. If necessary, contact the Emergency Measures Organization (NS) (902-563-2093)

4. Contact Audrey Buchanan, Manager, Asset Management, Parks Canada (902-733-3520)
5. Contact Environmental Emergencies (1-800-565-1633)
6. If significant, contact the RCMP (911)
7. Contact Brent Baker, Fire/Security Supervisor, Fortress of Louisbourg National Historic Site (902-733-2280)
8. Contain spill
9. If possible, stop leak
10. Cleanup with absorptive materials (sand)
11. If necessary, excavate the area under the supervision of an Environmental Specialist
12. Proper disposal of contaminated absorptive materials
13. Complete Summary Report

In case of portable washroom contents leak or spill

14. Initial assessment by Emergency Coordinator
15. Ensure safety of public and site staff (protective clothing, first aid, etc)
16. If necessary, contact the Emergency Measures Organization (NS) (902-563-2093)
17. Contact Audrey Buchanan, Manager, Asset Management, Parks Canada (902-733-3520)
18. Contact Environmental Emergencies (1-800-565-1633)
19. If significant, contact the RCMP (911)
20. Contact Brent Baker, Fire/Security Supervisor, Fortress of Louisbourg National Historic Site (902-733-3541 or 902-733-3542)
21. Contact supplier of Portable Washroom Facilities
22. Follow recommendations of supplier
23. Complete Summary Report

5 Post-Emergency Operations

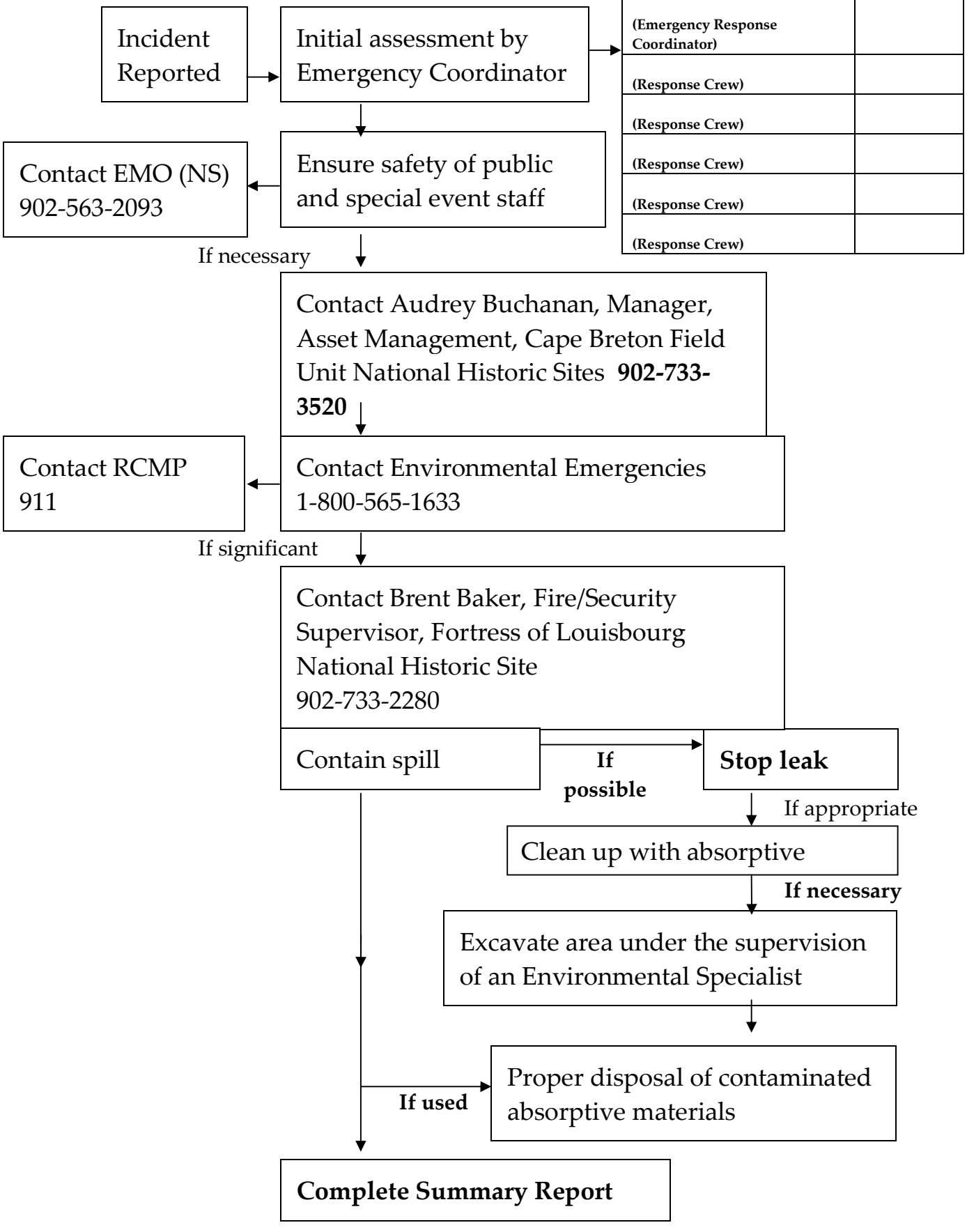
Complete Summary Report, including information gathered during the initial assessment, a description of response activities, description of any injuries, and the date and time of clean up completion. Recommend any changes to the Environmental Emergency Response Plan.

Submit report to Audrey Buchanan, Manager, Asset Management, Fortress of Louisbourg National Historic Site.

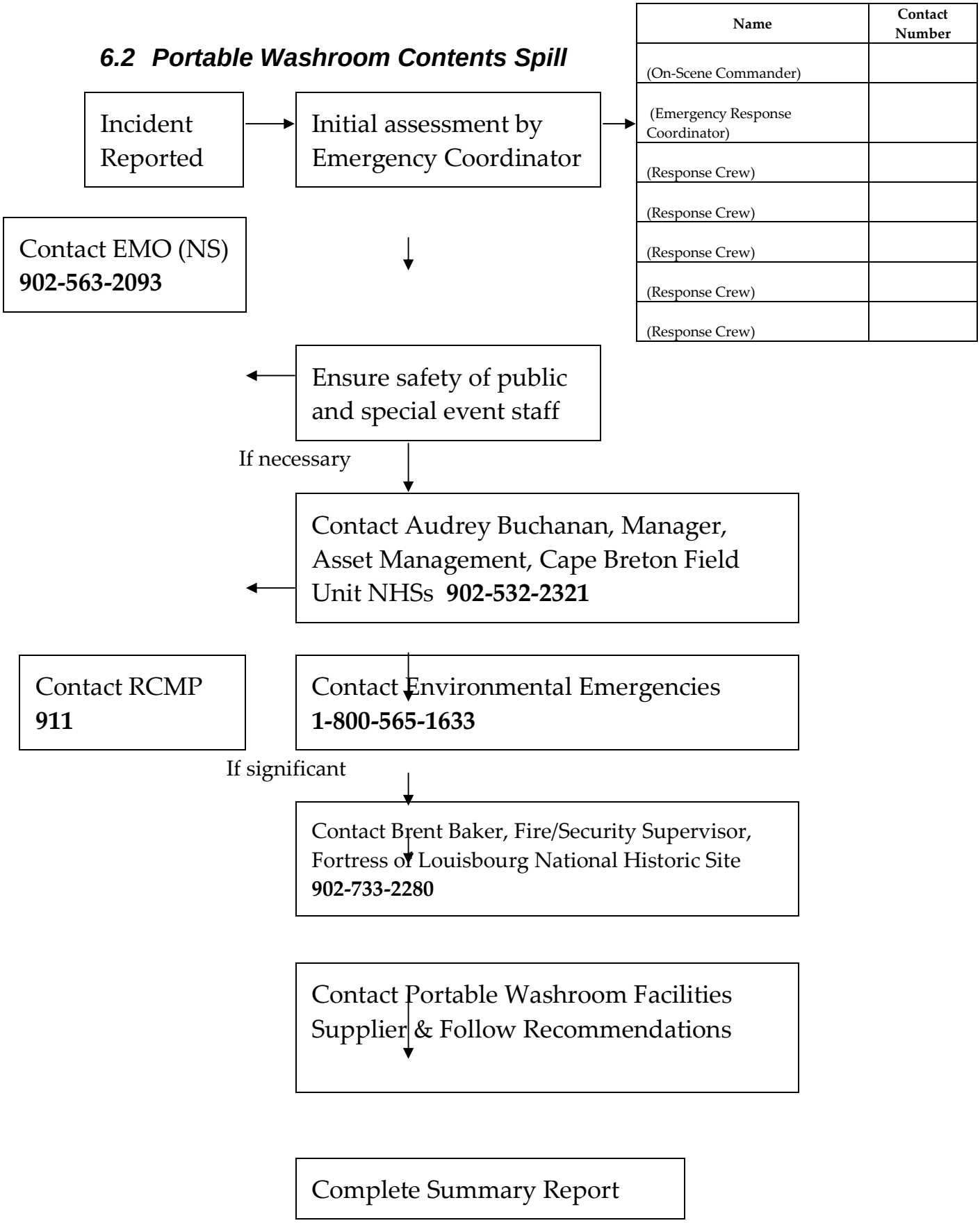
6 Flowchart of Emergency Actions

6.1 Fuel/Oil Spill

Name	Contact Number
(On-Scene Commander)	
(Emergency Response Coordinator)	
(Response Crew)	
(Response Crew)	
(Response Crew)	
(Response Crew)	
(Response Crew)	



6.2 Portable Washroom Contents Spill



Name	Contact Number
(On-Scene Commander)	
(Emergency Response Coordinator)	
(Response Crew)	
(Response Crew)	
(Response Crew)	
(Response Crew)	
(Response Crew)	

Appendix 5- Summary of Mitigation Measures for Special Events in National Historic Sites of Cape Breton

Summary of Mitigation Measures for Special Events in National Historic Sites (NHSs) of Cape Breton:

[To be provided to proponent before special event: concerts, sporting and community events, filming, encampments, aquatic ecotourism, and terrestrial ecotourism]

A. Pre-event Planning

1. The Cultural Resource Manager will be provided a plan of proposed activity or event. The larger the event or activity, the greater the detail
2. All activities will be subject to review by the Cape Breton Field Unit FOL Safety representative
3. A waste disposal plan shall be provided for review by the Ecosystem Scientist and the Solid Waste Resources Management Guide for Special Events shall be followed (See Appendix 2 of RCSR)
4. An environmental emergency response plan and appropriate containment/cleanup equipment and training is required (see appendix 4 of RCSR) Rapid response to any spill is required, depending on kind of fuel that may be on site (i.e., gas containers for generators)
5. The proponent must comply with all statutory and regulatory requirements including, but not limited to, the Canada National Parks Act, National Historic Park regulations and Historic Canals regulations under the Department of Transport Act
6. All activities must be in compliance with the Occupational Health and Safety Act, Canada Labour Code, and National Fire Code of Canada, including awareness of site specific fire control plans
7. Storage of hazardous materials must comply with the Canadian Environmental Protection Act
8. Use of special effects/black powder must comply with the Explosives Act and regulations under the direction of the Black Powder specialist
9. Use of special effects/black powder must comply with community's Noise By-Law and National Historic Park regulations

B. Site Preparation (I.e. Equipment/Crew transportation and parking; set up temporary staging, fencing, tents, stands, promotional displays, etc.; installation of portable washrooms; installation of generators, and sound/lighting equipment)

10. Excavation of any sort is prohibited
11. Equipment movements are restricted to gravelled & paved roadways. Uses of other access routes subject to permission only
12. Special event equipment must be stored at a location approved by Parks Canada

13. Location of temporary structures must avoid sensitive areas as indicated by Parks Canada archaeologist and ecosystem scientist
14. Structures, equipment, etc. located within the NHS must be made safe (barricaded, signed, etc.)
15. Access shall be restricted to designated area(s) (See maps in Appendix 3 of RCSR)
16. Approved barricades shall be placed and maintained in those areas designated by Parks Canada to ensure that nearby vegetation is not trampled. This would also act as crowd control and definition
17. Access routes used to and from the special event area must be pre-approved by Parks Canada
18. It is recommended that equipment be cleaned (e.g., use of pressure water hose to clean vehicles prior to transport) and inspected prior to transport from elsewhere to ensure that no matter is attached to the machinery that could introduce an invasive species into the area.
19. Fuelling and servicing of equipment should not take place within 30 m of sensitive habitats.It is recommended that equipment be regularly inspected prior to, during and immediately following in areas found to support Purple Loosestrife to ensure that vegetative matter is not transported from one site to another.
20. Procedures shall be provided for proper installation and removal of portablwashroom facilities
21. Use of chemicals must be pre-approved by Parks Canada and stored/disposed of in an appropriate manner and in accordance with applicable legislation and guidelines; WHMIS labelling is required.
22. Toxic materials and any materials which may pose a hazard to wildlife must be stored in secured buildings or containers
23. All livestock transported to the site must have a current health certificate from a certified veterinarian ensuring that each animal has been vaccinated and dewormed
24. All manure from imported livestock must be cleaned-up and disposed of in existing livestock areas as directed by the Heritage Presentation Specialist
25. Any viable vegetation imported for use during special event must consist of native species
26. Fire hall shall be notified immediately of any problem wildlife encounters at 733 - 3415/ or 733-2338
27. Feeding, enticement, or harassment of wildlife is prohibited
28. Avoid high disturbance activities during the breeding season for migratory birds in the region (i.e. May 1st to August 31st).
29. Activies such as cleaning, application and removal of protective coatings (e.g. paints), and demolition should not take place during the breeding season on

structures where migratory birds are known to nest (e.g. gutters, ledges, under bridges) since there is a risk of disturbing or destroying eggs or nestlings.

30. If a nest is found, risks can be minimized by measures such as the establishment of vegetated buffer zones around nests and minimization of activities in the immediate area until nesting is complete and chicks have naturally migrated from the area.

C. Implementation (I.e. People attending special event, use of special effects and/or black powder)

31. Volume on sound equipment shall be reduced during visitor hours
32. Task lights (e.g. film lights) should be shielded to shine down and only used where needed. The operation of exterior decorative lights, such as spotlights and floodlights, should be minimized or avoided in cases where such lights are only intended to highlight features of structures, or to illuminate an entire structure. The glow of such lights can draw birds from considerable distances, especially on humid, foggy or rainy nights. In the interest of protecting birds, it would be best if these lights were turned off, at least during the migratory season when the risk to birds is the greatest.
33. Special event participants are restricted to designated areas. Security shall be provided to keep participants in designated special event area
34. Events which require traffic interruption shall be scheduled to avoid peak times
35. Special event parking will be permitted on gravelled and/or paved surfaces only
36. Vehicles must not idle while parked
37. Certified flag persons must be provided in accordance with procedures outlined in the NS Traffic Control Manual whenever normal traffic flow pattern is obstructed
38. Anchors shall not be deployed in 'no anchoring' zones (See maps in Appendix 3 (hot link or include map with this doc.)
39. Use of mooring blocks must be coordinated with Parks Canada and Transport Canada
40. If activities occur near water, rescue capabilities required
41. Avoid concentrations of seabirds, waterfowl and shorebirds when accessing a project site from water or land. Engines should be properly maintained, and well muffled to reduce disturbance due to noise.
42. Reduce vessel speed when in the vicinity of flocks of birds and use alternative travel routes.

D. **Decommissioning and Clean-up** (I.e. Dismantle temporary staging, fencing, tents, stands, promotional displays, etc.; Removal of waste facilities disposal of waste generated from event)

43. Community's Solid Waste By-Law and Provincial Landfill Material bans must be complied with
44. Waste-separation/recycling containers shall be provided and labelled and the use of reusable, recyclable, and/or compostable food service packaging and serving materials shall be encouraged
45. Materials shall not be disposed of via water courses, storm, or sanitary sewers and waste water shall be properly disposed of in designated areas under the direction of Parks Canada staff
46. It is recommended that a variety of species of plants native to the general area be used in revegetation efforts. Should seed mixes for herbaceous native species for the area not be available, it should be ensured that plants used in revegetation efforts are known to be non-invasive.
47. It is the responsibility of the proponent to ensure that all reasonable measures are conducted to prevent the release of substances that are deleterious to fish from their proposed activities. In general, compliance is determined at the last point of control of the substance before it enters waters frequented by fish, or, in any place under any conditions where a substance may enter such waters.
48. Prior to departure, property shall be promptly returned to its natural state in accordance with pre-existing conditions. All refuse shall be properly separated and removed from site daily