



Special Events in the National Historic Sites of Canada in Eastern Newfoundland

Replacement Class Screening Report

December 2007



Parks Canada Parcs Canada

Canada

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Acronyms

CEAA – *Canadian Environmental Assessment Act*

CEA Agency – Canadian Environmental Assessment Agency

CEAR – Canadian Environmental Assessment Registry

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

SAR – Species at Risk

SARA – *Species at Risk Act*

VEC(s) – Valued Environmental Component(s)

WHMIS – Workplace Hazardous Materials Information System

1 Introduction

The Parks Canada Eastern Newfoundland Field Unit is comprised of the following National Historic Sites (NHS): Cape Spear; Castle Hill; Hawthorne Cottage; Ryan Premises; and Signal Hill NHSs. The sites are located in St. John's and nearby communities in eastern Newfoundland. Because they offer picturesque settings and convenient locations, the sites are frequently chosen for special events.

A special event is a planned, temporary activity conducted for recreation, entertainment, or promotional purposes. The special events evaluated in this document 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. Special events subject to this RCSR include: 1) Concerts, 2) Community & Corporate Events, 3) Weddings, 4) Filming, 5) Theatrical performances, 6) Military encampments, and 7) Terrestrial ecotourism. Occurring in response to public demand, these events provide a distinctive Site experience.

Over a five-year period, approximately 140 special events covered by this RCSR are expected to occur at the National Historic Sites of Canada in the Eastern Newfoundland Field Unit. Annually, these special events are composed of about approximately three concerts, five community and corporate events, eight weddings, six film shoots, three theatrical performances, one military encampment, and two terrestrial ecotours

Parks Canada is a Federal Authority (FA)¹ that issues a licence of occupation granting authority to conduct special events at a NHS within the Eastern Newfoundland Field Unit². Such events are prescribed as projects under the *Canadian Environmental Assessment Act (CEAA) Inclusion list Regulations* (see s. 5.3 and s.76 of the schedule). Such projects are triggered under the *CEAA Law List Regulations* (see item 8, Part II, Schedule I). Parks Canada is therefore the Responsible Authority (RA) and must ensure that an EA is completed prior to issuing a licence to enable the project to be carried out.

As the special events are routine, repetitive events of a similar nature 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,

¹ A FA is defined in Section 2 of the CEAA and has responsibilities as described in that legislation.

² Note that Hawthorne Cottage National Historic Site of Canada is under lease with The Newfoundland Historic Parks Association until February 2015. Although a licence of occupation cannot be issued given the existing lease, the site is included in case the lease is not renewed and to provide mitigating guidance for the site supervisor.

National Historic Park 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 Newfoundland and Labrador Waste Management Regulations, City of St. John's Noise by-law and the CEAA were also taken into account. The Replacement Class Screening Report (RCSR) ensures that 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, a RCSR for special events occurring in the NHSs in Southwest Nova Scotia, which is an extension of the previous document, and a RCSR for special events in the NHSs in Cape Breton. These three documents were declared by the Canadian Environmental Assessment Agency in 2004, 2005, and 2006 respectively. Experience gained during their preparation has been used to develop this RCSR for special events in the Eastern Newfoundland Field Unit NHSs.

1.1 Class Screening and the CEAA

The CEAA 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 CEAA 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 licence). 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 or minimize 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 the likely adverse environmental effects. The Canadian Environmental Assessment Agency (CEA 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 conclusion regarding significance of environmental effects for all projects assessed by the RCS. Once the CEA Agency declares a RCSR, no further EA regarding the significance of the environmental effects is required for projects within the class, provided that design standards and mitigation measures described in the RCSR are implemented, for the period of its application.

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 Eastern Newfoundland Field Unit NHSs as a class of projects are based on several common characteristics. The sites are located within St. John's or nearby communities and have similar environmental settings. The special events share many activities and design standards in common, 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 CEAA in the same manner.
2. *Well-understood Environmental Setting:* Parks Canada began acquiring responsibility for the NHSs in the Eastern Newfoundland Field Unit as early as 1951 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 occurring at the sites over the past 25 years, 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 25 years have not elicited any major public concerns. Complaints may be voiced regarding any increase in noise and traffic. Complaints of this nature have occurred sparingly 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 and community well-being

As the project class meets the six criteria, the RCS is applicable. .

1.3 Development of the RCSR

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 NHSs in the Eastern Newfoundland Field Unit 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 (VEC)
- 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: Canadian Environmental Assessment Agency Review

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

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

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

STEP 5: Finalize the RCSR

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

STEP 6: Declaration

The RCSR was submitted to the CEA Agency for declaration.

1.4 Consultation

Commentary gathered through consultation with the Eastern Newfoundland Field Unit Staff, eastern Newfoundland communities, environmental organizations, Environment Canada, Government of Newfoundland and Labrador Department of Environment and Conservation, and the public was used in the development of the RCSR. Comments consisted of the following:

- The Site Supervisor for Signal Hill and Cape Spear NHSs, Guide Supervisor for Ryan Premises NHS, Guide Supervisor for Castle Hill NHS, and the Communications & Events Coordinator for Hawthorne Cottage provided information regarding the types of special events that occur in the Eastern Newfoundland Field Unit, associated environmental effects, and VECs. Infrequent public complaints have been expressed in the past concerning increased noise and traffic congestion. The Site Supervisor for Signal Hill and Cape Spear NHSs also noted potentially sensitive areas and possible environmental effects that should be carefully mitigated.
- The CEA Agency conducted a 30-day public consultation on the RCSR that closes on December 5, 2007. The CEA Agency has not received any comments on the RCSR.

1.5 The Canadian Environmental Assessment Registry (The 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 Internet site is administered by the CEA Agency. The RA and the CEA Agency are required to post specific records to the Internet site in relation to a class screening report.

Upon declaration of the class screening report, the CEEA 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;
- contact information (name or number); and
- the date when it was determined that the project falls within the category of projects covered by the report.

Note: The schedule for posting a statement is:

- July 15 - (for projects assessed from April 1 to June 30)
- October 15 - (for projects assessed from July 1 to September 30)
- January 15 - (for projects assessed from October 1 to December 31)
- April 15 – (for projects assessed from January 1 to March 31).

The RA must also provide annual confirmation of cumulative effects assessment conditions to ensure no new projects cause any significant adverse environmental effects.

The project file component is a file maintained by the RA during an EA. The project file must include a copy of the RCSR. The RA must maintain the file, ensure convenient public access, and respond to information requests in a timely manner.

Further information regarding the Registry can be found in “The Canadian Environmental Assessment Registry”, prepared by the CEA Agency.

2 Project Class Description

The candidate class for this RCSR is special events that require a licence of occupation and occur at any of the NHSs within the Parks Canada Eastern Newfoundland 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 CEAA

Parks Canada is a Federal Authority (FA)³ that issues a licence of occupation granting authority to conduct special events at a NHS within the Eastern Newfoundland Field Unit⁴. Such events are prescribed as projects under the *Canadian Environmental Assessment Agency (CEAA) Inclusion list Regulations* (see s. 5.3 and s.76 of the schedule). Such projects are triggered under the *CEAA Law List Regulations* (see item 8, Part II, Schedule I). Parks Canada is therefore the Responsible Authority (RA) and must ensure that an EA is completed prior to issuing a licence to enable the project to be carried out.

2.2 Projects Subject to the RCSR

The projects subject to the RCSR include special events held at Cape Spear, Castle Hill, Hawthorne Cottage, Ryan Premises, and Signal Hill NHSs. Seven types of special events are addressed in this RCSR, including:

1. **Concerts**
 - Cover musical performances featuring any number of musicians/singers;
2. **Community and Corporate Events**
 - Include tented events, corporate trade shows, cultural events, athletic contests, and lectures;
3. **Weddings**

³ A FA is defined in Section 2 of the CEAA and has responsibilities as described in that legislation.

⁴ Note that Hawthorne Cottage National Historic Site of Canada is under lease with The Newfoundland Historic Parks Association until February 2015. Although a licence of occupation cannot be issued given the existing lease, the site is included in case the lease is not renewed and to provide mitigating guidance for the site supervisor.

- *Consist of a civil or religious marriage ceremony and/or reception, although the sites are most frequently used solely for the ceremonial aspects of weddings⁵;*
- 4. Filming**
 - *Includes the commercial filming of movies, television shows, advertisements, etc.;*
- 5. Theatrical performances**
 - *Consist mainly of plays;*
- 6. Military encampments**
 - *Involve re-enactors performing various military re-enactments and possibly establishing a base camp on site; and*
- 7. Terrestrial ecotourism**
 - *Covers commercially organized guided hikes to learn about a site's natural features.*

Accordingly, all activities associated with each type of special event are accounted for in the RCSR.

2.3 Projects Not Subject to the RCSR

Projects that are not subject to the RCS are those that:

- require a permit, approval or authorization from another federal department (i.e. an RA other than Parks Canada,
- require a referral to another federal department,
- require a provincial environmental assessment, and;
- may adversely affect species at risk, either directly or indirectly, such as by adversely affecting their habitat. For the purposes of this document, species at risk include:
 - species identified on the List of Wildlife Species at Risk set out in Schedule 1 of the *Species at Risk Act (SARA)*, and including the critical habitat or the residences of individuals of that species, as those terms are defined in subsection 2(1) of the *Species at Risk Act*.
 - species that have been recognized as "at risk" by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) or by provincial authorities under Newfoundland and Labrador's *Endangered Species Act*.

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. (See environmental setting descriptions (Section 4.1) and site maps (Appendix 3) for more detail.) No federally listed species at risk are known to be present at the

⁵ Weddings that are consistent with normal site use (i.e. small group of people at site for ceremony without tent(s), chairs, etc.) will not be issued a license of occupation and therefore do not require an EA under CEEA.

Eastern Newfoundland Field Unit NHSs. 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, Community and Corporate Events, Weddings, Filming, Theatrical Performances, Military Encampments, and Terrestrial Ecotourism are not addressed by this RCSR and therefore require individual EAs.

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 seven 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 NHSs in the Eastern Newfoundland Field Unit, per event type and phase.

Event Type	Event Phase	Associated Project Activities																		
		Equipment/Crew Transportation	Equipment Storage	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	Set up/Dismantle Props	Theatrical 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	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							✓		
and Corporate	Site Preparation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						✓		
	Event	✓	✓	✓				✓	✓	✓	✓	✓				✓				✓

Event Type	Event Phase	Associated Project Activities																	
		Equipment/Crew Transportation	Equipment Storage	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	Set up/Dismantle Props	Theatrical 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
Weddings	Site Restoration	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓		
	Site Preparation			✓	✓				✓	✓	✓						✓		
	Event			✓					✓	✓	✓	✓				✓		✓	
Filming	Site Restoration	✓	✓	✓	✓	✓			✓	✓	✓						✓		
	Site Preparation	✓	✓	✓		✓			✓	✓	✓	✓	✓			✓	✓	✓	
	Event	✓	✓	✓					✓	✓	✓	✓	✓			✓	✓	✓	
Theatrical Performances	Site Restoration	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓				✓		
	Site Preparation	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓				✓		
	Event	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓			✓	✓		✓
Military Encampments	Site Restoration	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓					✓		
	Site Preparation	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓					✓		
	Event	✓	✓	✓	✓			✓	✓	✓	✓	✓		✓		✓	✓		✓
Terrestrial Ecotourism	Site Restoration								✓										
	Site Preparation			✓							✓								
	Event								✓							✓		✓	

2.5 Typical Seasonal Scheduling and Duration of Projects

Special events take place at the Eastern Newfoundland Field Unit NHSs throughout the year. Event duration varies from a few hours to a few days, depending on the type of activity.

3 Environmental Review Methods

This section presents the methodology used to ensure potential project activity environmental 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

In keeping with Parks Canada's commitment to protect natural and cultural heritage, and to encourage public understanding and enjoyment of this 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 National Historic Sites 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 CEAA 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

The first priority of Parks Canada is to ensure ecological values and cultural integrity are maintained for the long-term (Parks Canada, 1994). Castle Hill NHS of Canada contains forested areas which form the ecological values of the site. All of the NHSs in the Eastern Newfoundland Field Unit 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 Fen 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). As both bogs and fens are prevalent within the Cape Spear and Signal Hill NHSs, they have 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 Eastern Newfoundland Field Unit NHSs 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 the nearby communities, including St. John's, Bonavista, Brigus, and Placentia 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

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. It is therefore considered a VEC.

Public Safety

Public safety is also of concern as the Parks Canada Management Directive 3.1.3 – Public Safety Measures for National Historic Sites 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. Public safety is 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 Eastern Newfoundland Field Unit: the time in which the set-up, event, site restoration, and environmental recovery occurs determines the temporal boundary for each VEC; spatial characteristics are determined by the area in the NHS that may be affected by the special event. Specific details are provided in Section 4.2, Valued Environmental Components and Boundaries.

Ecological boundaries have been considered with respect to each VEC 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 CEAA, socioeconomic effects are considered as they result both directly and indirectly from project activities and corresponding environmental changes. 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 include the area of a NHS to which Parks Canada is accountable for protecting and managing, however, they may not encompass the entire designated place of a NHS. These 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 seven 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 their interactions with the VECs 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 Eastern Newfoundland 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 the Eastern Newfoundland Field Unit. Accidents and malfunctions considered in this RCSR include spills and/or leaks of fuel/hazardous materials, fires, etc.

3.6 Mitigation Measures

Mitigation measures control, reduce or eliminate the environmental effects caused by project activities. Accomplished through preventative actions, preparation, and proper site restoration, application of mitigation measures can result in residual environmental effects with less or no significance.

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

- City of St. John's. (1998). By-Law No. 1405: Noise By-Law. Retrieved April 20, 2006 from the World Wide Web at <http://www.stjohns.ca/ByLaws.nsf/wByLawNum/1405>.
- Government of Newfoundland and Labrador. (2003, 59, 03). *Waste Management Regulations*. Retrieved April 20, 2006 from the World Wide Web at <http://www.hoa.gov.nl.ca/hoa/regulations/rc030059.htm>.
- Parks Canada. 2000. *Film Shoot at Cape Spear National Historic Site*. CEAA Screening Report. File # TN-2000-11.
- Parks Canada. 2002. *Recreation Activities at Signal Hill and Cape Spear National Historic Sites*. Generic Screening. File # TN-2002-05.
- Parks Canada. 2003. *Occupation of Visitor Centre Parking Lot by Tracy's Soft Serve*. CEAA Screening Report. File # TN-2003-07.
- Parks Canada. 2004b. *Coalfire and sales kiosk at Signal Hill Tattoo, Signal Hill National Historic Site*. CEAA Screening Document. File # TN2004-02.
- Parks Canada. 2004d. *Replacement Class Screening Report: Special Events in the Halifax Defence Complex*.
- Parks Canada. 2005. *Replacement Class Screening Report Extension: Special Events in the Southwest Nova Scotia National Historic Sites*.
- Parks Canada. 2006. *Replacement Class Screening Report: Special Events in the National Historic Sites of Canada in Cape Breton*.
- Parks Canada. 2006b. *Signal Hill National Historic Site Film Shoot for Visitor Centre Video*. CEAA Screening Document. File # TN-2006-01.

3.7 Analysis and Prediction of Significance of Residual 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 residual effect is significant.

Table 2. Rating system used to determine the significance of residual environmental effects caused by special event activities at the Eastern Newfoundland Field Unit NHSs, following the application of mitigation measures.

Criteria	Importance Level Rating		
	Negligible	Minor	Major
Magnitude	<ul style="list-style-type: none"> Negligible levels of disturbance and/or damage 	<ul style="list-style-type: none"> Minor levels of disturbance and/or damage 	<ul style="list-style-type: none"> Major levels of disturbance and/or damage
Geographic Extent	<ul style="list-style-type: none"> Limited to project area 	<ul style="list-style-type: none"> Extends beyond project area, but remains within NHS 	<ul style="list-style-type: none"> Extends beyond NHS
Duration of Effect	<ul style="list-style-type: none"> Within 24 hour period 	<ul style="list-style-type: none"> Days to weeks 	<ul style="list-style-type: none"> A month or longer
Frequency of Effect	<ul style="list-style-type: none"> Occurs on a monthly basis or less frequently 	<ul style="list-style-type: none"> Occurs on a weekly basis 	<ul style="list-style-type: none"> Occurs on a daily basis or more frequently
Reversibility	<ul style="list-style-type: none"> Effects reversible over short term without active management 	<ul style="list-style-type: none"> Effects reversible over short term with active management 	<ul style="list-style-type: none"> Effects reversible over extended term with active management or effects are irreversible
Ecological and Historical Context	<ul style="list-style-type: none"> Little risk to ecological values and commemorative integrity 	<ul style="list-style-type: none"> Minor effect on ecological values and/or commemorative integrity 	<ul style="list-style-type: none"> 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, extend 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 and their significance. 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 the Eastern Newfoundland Field Unit NHSs. 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.

4 Environmental Review

4.1 Environmental Setting

The Eastern Newfoundland Field Unit NHSs are found in the Boreal Shield Ecozone (the largest ecozone in Canada) and, more specifically, the maritime barrens ecoregion (Environment Canada, 2005). This area is characterized by foggy, cool summers and short, relatively moderate winters. Mean annual precipitation amounts range from 1200 to over 1600mm and the mean annual temperature is about 5.5°C. Fishing and recreational activities are dominant in this ecoregion which is populated by approximately 311 500 individuals (Environment Canada, 2005).

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, 1997). 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, 1997).

The following subsections contain site-specific environmental setting and cultural resource descriptions for each of the Eastern Newfoundland Field Unit NHSs. Maps of the Eastern Newfoundland Field Unit NHSs 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 Cape Spear National Historic Site

“The Cape Spear lighthouse has been designated to be of national historic importance by reason of its age and architecture.” (Parks Canada, 1999).

Cape Spear National Historic Site of Canada is located on a ridge overlooking St. John’s Bay in St. John’s, Newfoundland. As the most eastern point in Canada, the site encompasses 49 hectares of rugged coastline on the Avalon peninsula and is located at the end of Route 11 (Cape Spear Drive), just outside the city centre (Parks Canada, 2004a). Cape Spear National Historic Site of Canada was declared a NHS in 1962. Parks Canada acquired the site in 1964 and restored the lighthouse to its original appearance in the late 1970s. The site was officially opened in 1983 by the Prince and Princess of Wales (Parks Canada, 2004a).

Cape Spear NHS is situated in the highlands of the Avalon peninsula and is underlain mainly by Precambrian Rock (Heringa, 1981). Topography in the region is steeply sloping. Soils are of the Red Cove soil series and are characterized by reddish-grey, very firm, very stony, sandy loam and are moderately well-drained.

The long, narrow ridge that forms the NHS is bordered by large water sources on three sides. Cape (Spear) Bay is located northwest of the site, the Atlantic Ocean is to the north, and Broad Cove is to the southeast. A small brook marks the western boundary of the site (Northland Associates Ltd., 1978).

An ecological inventory of Cape Spear National Historic Site of Canada was compiled by Northland Associates Ltd in 1978. Flora on site consists of a combination of introduced and native species, mostly in the form of dense shrub vegetation resulting

from successive fires in the area. A variety of vegetative communities exist within the NHS, however the area is predominated by rock barrens and alder barrens. The rock barrens consist primarily of bare soil and rock, along with carpets of vegetation consisting primarily of Purple Crowberry (*Empetrum eamesii*). A more recent resource description completed by Andrews (2003) confirms that crowberry species (*Empetrum nigrum* and *Empetrum eamesii*) are the dominate flora at Cape Spear National Historic Site of Canada. The alder barrens are comprised of sweet bayberry (*Myrica gale*) and dwarf alder (*Alnus crispa*) mixed with tufts of grass and herbs. Basin bogs and seepage fens are also found on site and consist primarily of sphagnum species. Andrews (2003) noted the presence of Stecker's willowherb (*Epilobium steckerianum*), a provincially listed rare species, on the north side of the trail situated between the lookout and the most easterly point of the site. The plant has not been observed elsewhere, however, it could exist in areas not frequented by visitors. Local residents have also noted the presence of Alpine bearberry (*Arctostaphylos alpina*), a provincially listed rare species, however, its location is unknown (Andrews, 2003). It is unlikely that it is located in areas frequented by visitors as it has not been observed to date.

Resident fauna is limited to smaller mammals such as rodents and lagomorphs, with medium and large mammals passing through the site on occasion. Many bird species can be found in Cape Spear National Historic Site of Canada, including the horned lark (*Eremophila alpestris*), savannah sparrow (*Passerculus sandwichensis*), willow ptarmigan (*Lagopus lagopus*), American robin (*Turdus migratorius*), various sandpiper (*Calidris sp.* and *Actitis macularia*) and snow bunting (*Plectrophenax nivalis*). Commonly sighted sea birds include murre (*Uria sp.*), shearwater (*Puffinus sp.*), black guillemot (*Cepphus grylle*), herring gull (*Larus argentatus*), greater black-backed gull (*Larus marinus*), and black-legged kittiwake (*Rissa tridactyla*) (Andrews, 2003; Northland Associates Ltd., 1978). Marine species are abundant beyond the site boundaries and include, but are not limited to, such species as Atlantic cod (*Gadus morhua*), Atlantic salmon (*Salmo salar*), humpback whales (*Megaptera novaeangliae*), minke whales (*Balaenoptera acutorostrata*), and fin whales (*Balaenoptera physalus*).

The Cape Spear National Historic Site of Canada Commemorative Integrity Statement (Parks Canada, 1999) provides details on the cultural resource inventory on site. The designated place includes the footprint of the original 1835 lighthouse building. Level I cultural resources include the 1835 lighthouse and any structural remains of the original lighthouse on site. Level II cultural resources include the contemporary lighthouse complex, World War II Battery, the structural remains of the lighthouse additions, fence and privy, footprints of additions to the original lighthouse, footprints and remains of ancillary structures, evidence of pathways/roadways and agricultural activities, the Historic Sites and Monuments Board Plaque, Memorial Cross, and the plaque commemorating the site's opening. In addition, the archaeological collection and curatorial collection are also valued as level II resources.

The site features the first coastal lighthouse in Newfoundland which was built in 1835. Cape Spear NHS is a popular attraction, drawing approximately 110 000 visitors to the area each year (Parks Canada, 2004a). Services include a Visitor Reception Centre, Heritage Gift Shop (operated by the Historic Sites Association of Newfoundland and Labrador), and an art gallery (operated by the Canadian Coast Guard Alumni). The site also features picnic facilities and several hiking trails. The grounds of Cape Spear National Historic Site of Canada are accessible year round. The restored lighthouse is open to visitors between 10am – 6pm from May 15 to October 15. The Visitor Interpretation Centre and gift shop are open from 9:30am – 8pm from May 15 to Labour Day and then 10am – 6pm after Labour Day until October 15.

4.1.2 Castle Hill National Historic Site

“From 1692 to 1811, the defences of Castle Hill played an important role in the defence of Placentia and the larger economic and strategic interests of France and Britain in what is now Atlantic Canada.” (Parks Canada, 2003)

Castle Hill NHS is located between Jerseyside and Placentia in Newfoundland. The site encompasses approximately 23.89 hectares situated just beyond the town. Castle Hill National Historic Site of Canada was declared a NHS in 1968.

The site is located on the Avalon peninsula which is mainly underlain by Precambrian Rocks (Heringa, 1981). Topography in the region is steeply sloping, with some areas being rapidly to well drained and others being imperfectly to poorly drained. Soils are of the Patrick’s Cove and Bauline series and are characterized by brown cemented, very gravelly and stony sandy loam till and olive, very firm, very stony, loamy sand till (Heringa, 1981). Castle Hill National Historic Site of Canada overlooks Placentia Bay.

Castle Hill National Historic Site of Canada consists of boreal forest dominated by balsam fir. Much of the site is disturbed by roads, trails, and cleared fields (Rose, 2001). A floral inventory of the site identified a total of 107 plant species, with 32 of those being exotic. Examples of native species include white spruce (*Picea glauca*), black spruce (*Picea mariana*), larch (*Larix laricina*), balsam fir (*Abies balsamea*), Labrador tea (*Rhododendron groenlandicum* Oeder), blueberry (*Vaccinium angustifolium*), and partridgeberry (*Vaccinium vitisidaea*) (Rose, 2001). No rare or threatened plant species were identified. Bog habitat is present along the access road leading into the site, however, it falls outside the historic site’s administered property. No rare or threatened plant species were found in this area.

Although a faunal inventory has not been conducted, mammals expected to be present at Castle Hill NHS include native species such as lynx (*Lynx canadensis*), red fox (*Vulpes vulpes*), ermine (*Mustela erminea*), meadow vole (*Microtus pennsylvanicus*), and little

brown bat (*Myotis lucifugus*). Non-native species are also expected to be found at the site including moose (*Alces alces*), coyote (*Canis latrans*), red squirrel (*Tamiasciurus hudsonicus*), house mouse (*Mus musculus*), snowshoe hare (*Lepus americanus*) and masked shrew (*Sorex cinereus*). Various songbirds would also be found at the site. No rare or endangered species are expected to be present.

The Castle Hill National Historic Site Commemorative Integrity Statement (Parks Canada, 2003) provides details on the cultural resource inventory on site. The designated place consists of irregular polygons which link 30m circles which encompass the extremities of Fort Royal and its defensive walls, the detached redoubt, Gaillardin redoubt, but excludes any lands which fall outside the administered property (see map in Appendix 3). Level I resources on site include the defensive walls, stabilized remains of the three defence works and the pathway that links Castle Hill with the town below. The artifact collection, which is composed of approximately 8000 artifacts and 2000 faunal remains, the archaeological sites, and such landscape features as the Fort Royal glacia, free-fire zone, strategic viewscape towards the water and surrounding terrain, and the pathway are all considered Level I resources. The archaeological sites include the stabilized remains of the walls of Gaillardin Redoubt, detached redoubt, and Fort Royal, the stabilized remains of the defensive walls, the remains of the well outside Fort Royal, and the unexcavated remains of Horseshoe Battery and La Fontaine Battery. Level II resources include the smooth bore cannons located on site and the Historic Sites and Monuments Board of Canada plaque.

The grounds of Castle Hill National Historic Site of Canada are accessible year round. Services on site include a visitor interpretation centre, a gift shop operated by the Historic Sites Association of Newfoundland and Labrador, live theatre performances in July and August, several hiking trails and picnic areas. The visitor interpretation centre is open between May 15 and October 15, from 10am to 6pm.

4.1.3 Hawthorne Cottage National Historic Site

Hawthorne Cottage NHS was commemorated for the following reasons:

- “This cottage in the Picturesque mode provides a good example of a gentleman’s modest suburban residence in 1830s eastern British North America;
- It was the Brigus home of Captain Bob Bartlett, captain on a number of arctic expeditions
- The interior furnishings are of particular value.” (Parks Canada, 2004c)

Hawthorne Cottage National Historic Site of Canada is located in Brigus, Newfoundland. Encompassing approximately 0.24 hectares of land, the site is situated

between South Street and Irishtown Road. Hawthorne Cottage National Historic Site of Canada was commemorated in 1978.

The site is located on the Avalon peninsula and is therefore underlain by Precambrian Rocks (Heringa, 1981). Topography in the area is gently rolling and the soils are moderately well drained. Soils are of the Cochrane series and are characterized by dark olive grey, very firm, very stony, loamy sand till (Heringa, 1981). Water sources on site include a small brook which runs along the northwest side of the property (Gribbin, 1996).

Hawthorne Cottage NHS is a very manicured property as vegetation is pruned to maintain the historic atmosphere of the site (Gribbin, 1996). Grass on the property is kept mowed, with the exception of patches of rough grass/scrub around its perimeter. Trees are concentrated around the perimeter of the site, with a few trees and shrubs scattered across the site's interior. Species on site include rose shrubs (*Rosa sp.*), elder (*Sambucus canadensis 'Aurea'*), *Spirea bumalda*, *Viburnum cassandoides*, red osier dogwood (*Cornus sericea*), Hack's red honeysuckle (*Lonicera tatarica*), arctic willow (*Salix arctophila*), chuckly pear service berry (*Amelanchier bartramiana (Tausch) Roem.*), peegee hydrangea (*Hydrangea paniculata grandiflora*), potentilla (*Potentilla sp.*), and waxberry (*Symphoricarpos albus (L.) Blake*). Gravelled paths provide walkways around the site. Gardens, consisting of various perennials and annuals, are also found in the site's interior. Given the manicured nature of the property and its location, no rare or endangered flora species are expected to be present on site.

Fauna onsite consists of those species normally found in the area such as the native meadow vole (*Microtus pennsylvanicus*), and non-native house mouse (*Mus musculus*), masked shrew (*Sorex cinereus*) and Norway rat (*Rattus norvegicus*). Various songbirds are likely to be present at the site. No rare or endangered species are expected to be present.

The Commemorative Integrity Statement for Hawthorne Cottage National Historic Site (Parks Canada, 2004c) provides details on the cultural resource inventory on site. The designated place is represented by the property's boundary at the time of designation. Level I cultural resources include the landscape and landscape features, archaeological site, and artifact collection. The remains of a well house, barn, chicken run, dairy/ice house and privies comprise the archaeological site. Over 3000 items are represented in the artifact collection, including books, textiles, domestic items, memorabilia, and other miscellaneous items. Level II cultural resources include the archaeological remains of the retail store and the Historic Sites and Monuments Board of Canada Plaque.

The site features the Heritage Gift Shop operated by the Historic Sites Association of Newfoundland and Labrador, guided tours through the site, "Live...on the Lawn" theatrical performances during the summer months, and heritage gardens. The grounds

are accessible year round. The cottage itself is open from 10am to 6pm, from mid-May to mid-October. During the off-season, arrangements can be made to view the interior of the cottage.

4.1.4 Ryan Premises National Historic Site

Ryan Premises NHS was commemorated for the following reasons:

- “It is the site which best combines thematic associations with Canada’s Atlantic fisheries with extant resources;
- The Ryans, whose headquarters it was, were deeply involved in the whole range of the fisheries over a long period; and
- The richness of the fisheries-related resources in the community of Bonavista contributes to the overwhelming sense of history.” (Parks Canada, 2002)

Ryan Premises NHS is located in the town of Bonavista, on the east coast of Newfoundland. The site was designated as being of national historic significance in 1987 and acquired by Parks Canada in 1991. It consists of approximately 2.14 hectares of land located at the intersection of Ryan’s Hill and Old Catalina Road, overlooking Bonavista Harbour. Situated on a historic harbour front, it consists of domestic and industrial structures typical of a 19th century mercantile complex. A provincial highway separates the residential and commercial buildings, with the latter located on the harbour front.

Situated in the well-preserved Avalonian sedimentary basins of Eastern Bonavista peninsula, Ryan Premises NHS is underlain by Neoproterozoic sedimentary rock (O’Brien and King, 2002). Topography of the area is rugged coastline. The site lies on bedrock composed of fluvial and shallow maritime siliciclastic sedimentary rocks, including limestone and bimodal volcanic rocks (Colman-Sadd et al., 1990). Soil in the area is characterized by rockland with little capability for arable culture or permanent pasture.

The site once included a forest of fir which has been replaced by stands of sparse black and white spruce (*Picea mariana*, *Picea glauca*), balsam fir (*Abies balsamea*) and mixed ericaceous shrubs. Although a floral inventory has not been conducted, much of the site has been disturbed by fires and human activities. The site is characterized by roads, commercial and residential buildings, and cleared fields. Species at risk are therefore not expected to be present.

Although a faunal inventory has not been completed, mammals commonly found in the area include native species such as meadow vole (*Microtus pennsylvanicus*) and ermine (*Mustela erminea*). Non-native mammals are also found in the area, including house mouse (*Mus musculus*), masked shrew (*Sorex cinereus*) and Norway rat (*Rattus*

norvegicus). The site is not considered significant with regard to avian habitat. Species at risk are not expected to be present at Ryan Premises NHS.

The Commemorative Integrity Statement for Ryan Premises National Historic Site (Parks Canada, 2002) provides details on valued cultural resources associated with the site. The designated place consists of the Retail Shop, Retail Store, Fish Store, Salt Store, Wharf, Proprietor's House, Carriage House, Tenement House, and their cultural landscape setting. Other level I cultural resources include the artifact collection, archaeological sites, and landscape. The artifact collection consists of domestic furnishings, retail merchandise, furnishings, and equipment and fish processing equipment. Archaeological sites include the remains of two wharves, harbour-side fish flake, saw mill, barn, old small barn, McCarthy's garage, telegraph office, and powder magazine. Beyond the designated place, the administered property contains the remains of the cooperage, lumberyard area, and landside fish flake. Level II cultural resources include the Historic Sites and Monuments Board of Canada plaque.

Ryan Premises NHS features an art gallery, local history museum, gift shop (operated by the Historic Sites Association of Newfoundland and Labrador), handcrafted furniture store, and an exhibit on the role of the codfish industry in Newfoundland's history. Ryan Premises NHS attracts about 7000 to 8000 visitors to the area each year. The site operates daily from 10:00 am to 6:00 pm, May 15 to October 15.

4.1.5 Signal Hill National Historic Site

“Signal Hill National Historic Site was designated a National Historic Site in 1951. The reason for national significance in the 1998 Historic Sites and Monuments Board of Canada minute is:

- it is importantly associated with Canada's defence and communications history.” (Parks Canada, 2001)

Signal Hill NHS is located in St. John's, Newfoundland on the north side of the entrance to St John's Harbour. The site was designated as a NHS in 1951 and then as a Newfoundland National Historic Park in 1958. Signal Hill consists of approximately 98.25 hectares of land and is elevated 165 metres above sea-level. The following environmental setting summary is based upon information gathered from a 1984 preliminary natural resource inventory prepared for Parks Canada by David Lacey et al., unless otherwise referenced.

Signal Hill is of considerable geological interest (Heringa, 1981). It consists of three distinct geological formations: the Gibbet Hill formation composed of buff weathering, green-grey sandstone, the Quidi Vidi formation composed of red sandstone, and the Cuckold formation composed of red sandy conglomerate. The effect of glaciations is

quite prominent on Signal Hill. Erosion features, such as glacial striae and grooved bedrock are obvious at North Head and other sites (Heringa, 1981). The Hill is a rocky outcropping, much altered by glacial action. George's Pond is located just north of the visitor centre.

At one time, Signal Hill was heavily forested, with white and black spruce (*Picea mariana*, *Picea glauca*), being the dominant species. There are still some white and black spruce on the Hill, but more than 85 percent of the tree cover is now deciduous, with mountain alder (*Alnus viridus* ssp. *crispa*) being the most common species. With the cutting of trees for building and firewood, soil was exposed and many areas are now barren. A preliminary inventory identified more than 150 species of plants at Signal Hill NHS (Parks Canada, 1984). In addition, the site includes bog and fen habitat, which, while stable, are very sensitive to change (Parks Canada, 1984). Species at risk are not expected to be present.

Given its location and exposure, Signal Hill is generally not hospitable to large terrestrial fauna. However, the preliminary inventory of the site revealed more than 50 faunal species. Infrequent sightings of moose (*Alces alces*), as well as hare (*Lepus americanus*) and meadow vole (*Microtus pennsylvanicus*) have occurred at the site. Short-tailed weasel (*Mustela erminea*) and red fox (*Vulpes vulpes*) are present at Signal Hill NHS and are native to the area. Both the Norway Rat (*Rattus norvegicus*) and the house mouse (*Mus musculus*) may occur within the boundaries of the site. Masked shrew (*Sorex cinereus*) and little brown bats (*Myotis lucifugus*) are common in the surrounding area and are able to enter the site freely. A small number of songbirds and shorebirds are expected to be present at the site. Species at risk are not expected to be present at the site.

The Commemorative Integrity Statement for Signal Hill National Historic Site (Parks Canada, 2001) identifies significant cultural resources. The designated place includes the land encompassed by the administered boundary of Signal Hill, and fortification and communication sites on the south side of the Narrows, including Noone Room, South Castle, Frederick's Battery, and Fort Amherst. The Level 1 structures at Signal Hill NHS include the Imperial Powder Magazine, Cabot Tower, Quonset hut, Second World War Magazine, portions of Queen's Battery Barracks and Queen's Battery Gun Positions, and Chain Rock Battery. Beyond the administered boundary, Level I cultural resources include the Second World War Fort Amherst battery, Fort Amherst gun and searchlight emplacements and Fort Amherst Lighthouse Tower.

Archaeological sites within Parks Canada's administration include Chain Rock Battery, the summit ridge, Ladies' Lookout, Queen's Battery, the Artificer's Yard, remains of the Blockhouse and George's Barracks, and various other remains at Gibbet Hill, Ross's Valley, Cuckold Cove and Carronade Hill. Archaeological sites beyond the administered boundary include Fort Amherst, Frederick's Battery, South Castle, and undefined 19th century military structures on south side of the Narrows. Artifact collections include the

curatorial collection held at the visitor reception centre, the archaeological collection held at the Atlantic Service Centre in Halifax, NS, and the private collection on display at the Fort Amherst Museum and Tea Room.

Level II cultural resources include the reconstructed portions of the Queen's battery, the Queen's battery barracks, and the Imperial Powder Magazine. Level II archaeological resources are comprised of the remnants and remains of Prowse's Folly Quarantine Hospital, George's Pond Hospital, Signal Hill Hospital and other medical facilities (excluding those parts used by military or for communication) and remnants of fishing establishments in the Cuckold Cove area. Other Level II resources include items in the archaeological collection associated with the site's medical and law enforcement history, original artillery not historically connected to the site, artifacts in the curatorial collection that are not original to the site, and 11 plaques located at various locations within the NHS.

Beyond the site's administered boundaries, level II resources are comprised of the built heritage structures located on the south side of the Narrows including Fort Amherst lightkeeping residence, Fort Amherst museum and tea room, and the townscape of the community known as Fort Amherst, as well as the Historic Sites and Monuments Board of Canada plaque at the Fort Amherst Lighthouse, provincial historic site marker at Frederick's Battery and much of the privately administered artifact collection on display at the Fort Amherst museum and tea room.

The grounds of Signal Hill NHS are open to the public year around. The visitor interpretation centre is accessible from 8:30am – 4:30pm daily between May 15th and October 15th, and Monday to Friday between October 16th and May 14th. Visitor hours are extended to 8pm from June 15th to Labour Day. The Cabot Tower is open daily from 8:30am – 9pm from June 1st until Labour Day and 9am – 5pm the remainder of the year.

4.2 Valued Environmental Components and Boundaries

Each VEC is assessed within specified boundaries set by the EA. Spatial, temporal and administrative boundaries 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 within the NHS, 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 temporal boundary is set as 3 months, the likely duration of the longest special event.

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. Particular attention is given to the protection of rare species found within the spatial boundaries. As the effects of project activities will likely be felt for no longer than two years, this temporal boundary should encompass any necessary natural recovery of species that may be disturbed by the special events.

Bog and Fen 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. Particular attention is given to the protection of rare species found within the spatial boundaries of the site, as well as the protection of the bog and fen 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 temporal boundary for this assessment is therefore set as two years to encompass any necessary natural recovery of species that may be 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. Particular attention is given to the protection of any rare species within the NHS boundaries and outside the administered area. The temporal boundary for this assessment is therefore set as two years and should encompass any necessary natural recovery of species that may be 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 set as St. John's for Cape Spear and Signal Hill NHSs, Placentia for Castle Hill NHS, Brigus for Hawthorne Cottage NHS and Bonavista for Ryan Premises NHS. The NHS forms the administrative boundary. The temporal boundary for this assessment is set as two years to accommodate the decomposition of any waste resulting from the special event.

Water Resources

Project activities can occur in the immediate vicinity of water sources in the NHS of Canada in Eastern Newfoundland, 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 St. John's for Cape Spear and Signal Hill NHSs, Placentia for Castle Hill NHS, Brigus for Hawthorne Cottage NHS and Bonavista for Ryan Premises NHSs. The NHS forms

the administrative boundary. The temporal boundary for this assessment is set at three months, which includes time for natural recovery from sedimentation, should it occur.

Visitor Experience

Spatial and administrative boundaries are the NHS borders since a special event potentially affects the overall visitor experience at any area within the site. Project activities, in particular increased noise and vegetative damage, may have a negative impact on visitor experience. Project activities causing disruption to visitor experience, both as individuals and a collective group, will likely be felt for no longer than a month after the event. This temporal boundary allows for natural recovery of vegetation to occur and visual evidence of the event to fade.

Public Safety

Special event activities potentially increase public safety risks within the site. Spatial and administrative boundaries are therefore the NHS borders. 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. The temporal boundary for this assessment is set as the duration of the event itself.

Socio-Economic Aspects

As the potential noise, increased traffic, and demand for services affects residents within the immediate vicinity of the site, the spatial boundary is set as St. John's for Cape Spear and Signal Hill NHS, Placentia for Castle Hill NHS, Brigus for Hawthorne Cottage NHS, and Bonavista for Ryan Premises NHS. The NHS forms the administrative boundary for this RCSR. Activities associated with special events usually range from a few hours to a few days duration, however, could last up to several months for film productions. 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. The temporal boundary therefore corresponds with the duration of the event.

Air Quality

As project activities potentially affect air quality within the local community, the spatial boundary for this RCSR is set as St. John's for Cape Spear and Signal Hill NHSs, Placentia for Castle Hill NHS, Brigus for Hawthorne Cottage NHS, and Bonavista for Ryan Premises NHS. The administrative boundary is the borders of the NHS. The temporal boundary is set as the duration of the event itself as any environmental effects associated with the project activities are assumed to 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.

VEC	Project Activities	Potential Environmental Effects	Applicable Special Event Types						
			Concerts	Community and Corporate Events	Weddings	Filming	Theatrical Performances	Military Re-enactments	Terrestrial Ecotourism
Cultural Resources – Level I & Level II	Equipment/Crew Transportation	Damage to in-situ cultural resources	✓	✓		✓	✓	✓	
	Set up/Dismantle Temporary Staging, Fencing, Tents, etc.	Damage to in-situ cultural resources	✓	✓	✓			✓	
	Theatrical Set Construction/Deconstruction	Damage to in-situ cultural resources				✓	✓		
	Campfires	Damage to cultural resources	✓	✓				✓	
	People attending Special Event	Damage to cultural resources	✓	✓	✓	✓	✓	✓	
Forests and Managed Vegetation	Equipment/Crew Transportation	Trampling/destruction of vegetation	✓	✓		✓	✓	✓	
	Equipment Storage	Trampling of grass	✓	✓		✓	✓	✓	
	Parking	Trampling/Destruction of 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				✓	✓		
	Theatrical set construction/deconstruction	Destruction of grass				✓	✓		
	Campfires	Destruction of vegetation	✓					✓	
	People Attending Special Event	Trampling of grass and/or trail braiding causing damage to vegetation	✓	✓	✓	✓	✓	✓	✓

VEC	Project Activities	Potential Environmental Effects	Applicable Special Event Types						
			Concerts	Community and Corporate Events	Weddings	Filming	Theatrical Performances	Military Re-enactments	Terrestrial Ecotourism
Bog and Fen Vegetation	Equipment/Crew Transportation	Trampling/destruction of vegetation				✓			
	Equipment Storage	Trampling of vegetation				✓			
	Parking	Trampling/Destruction of vegetation				✓			
	Set-up/Dismantle Temporary Staging, Fencing, Tents, etc.	Destruction of vegetation				✓			
	Use of Vegetative Props	Introduction of invasive species				✓			
	Theatrical set construction/deconstruction	Destruction of vegetation				✓			
	People Attending Special Event	Trampling of vegetation				✓			
Fauna	Use of Animal Props	Risk of infection from imported livestock				✓			
	Theatrical 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	✓	✓		✓	✓	✓	
	Installation/Removal of Portable Washrooms	Soil contamination from accidental spill/leak of human waste	✓	✓		✓	✓	✓	
		Soil contamination from accidental spill/leak of odour control chemicals	✓	✓		✓	✓	✓	
	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	✓	✓		✓	✓	✓	✓

VEC	Project Activities	Potential Environmental Effects	Applicable Special Event Types						
			Concerts	Community and Corporate Events	Weddings	Filming	Theatrical Performances	Military Re-enactments	Terrestrial Ecotourism
Water Resources	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	✓	✓	✓	✓	✓	✓	✓
	Installation/Use/Removal of Generators	Surface/ground water contamination from accidental fuel/oil spill or leak	✓	✓	✓	✓	✓	✓	
	Theatrical set construction/deconstruction	Disruption of water movement patterns and possible damage to fish habitat				✓			
Visitor Experience	Special Event	Limited accessibility to the site	✓	✓	✓	✓	✓	✓	
		Limited services in town available for visitors	✓	✓				✓	
	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	✓			✓	✓	✓	
Public Safety	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	✓	✓	✓		✓	✓	
	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	✓	✓	✓	✓	✓	✓	✓

If not checked off, no potential measurable environmental effect will occur to the VEC in question.

4.4 Effects of the Environment on Project Activities

Potential effects of the environment on project activities are weather-related. Minor trampling of grass leading to increased risk for soil erosion occurs during most special events. Heavy rain will likely increase disruption of the turf cover, erosion, siltation of surface water, and volume of surface water runoff. Trail braiding may become more of an issue during wet weather conditions. 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). Restricting vehicles to paved and/or gravelled surfaces and promptly returning the grounds to their natural state minimize erosion and siltation, therefore reducing the effects of heavy rains. Environmental Emergency Response Plans (EERP) ensure rapid response to any spills, thus minimizing the spread of an accidentally spilt substance during heavy rains. 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 significant adverse environmental effects. Given good management practices before and during all phases of the special event activities, all potential significant adverse environmental effects are mitigable. In most cases, in any event, special events are cancelled due to poor weather conditions.

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, emergency response plans 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. To date, there have been no reported accidents and/or malfunctions associated with special event activities at the NHSs in the Eastern Newfoundland Field Unit.

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. As the potential environmental effects identified in this RCSR are relevant to all the NHSs in the Eastern Newfoundland Field Unit, the mitigation measures apply to all sites. Despite the application of mitigation measures wherever possible, it is not feasible to reduce all environmental effects to zero. Clients will be required to manage their operations to the same environmental standards as Parks Canada and are responsible for implementing the mitigation measures outlined in this document.

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 table 4. Activity-specific mitigation measures associated with each type of special event are summarized in Appendix 1.

Table 4. Mitigation measures associated with each Valued Environmental Component (VEC) for special events occurring within the National Historic Sites of Canada in the Eastern Newfoundland Field Unit.

VECs	Mitigation Measures
Cultural Resources	<ul style="list-style-type: none"> ▪ Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager ▪ Access shall be restricted to designated area(s) if necessary (See maps in Appendix 3) ▪ Provide security procedures to keep participants in designated special event area ▪ 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 provincial regulations and site specific fire control plans and fire orders ▪ Location of temporary structures must avoid sensitive

VECs	Mitigation Measures
	<p>areas as indicated by a Parks Canada archaeologist</p> <ul style="list-style-type: none"> ▪ Excavation of any sort is prohibited ▪ Special event equipment must be stored at a location approved by Parks Canada ▪ Any artifacts, cultural, archaeological or historical resources discovered during special event shall be reported to Parks Canada immediately.
Forests and Managed Vegetation; Bog and Fen Vegetation	<ul style="list-style-type: none"> ▪ 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 shall be restricted to designated areas if necessary (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, as well as provincial regulations and 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; Workplace Hazardous Materials Information System (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

VECs	Mitigation Measures
Fauna	<ul style="list-style-type: none"> ▪ 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
Land Resources; Water Resources	<ul style="list-style-type: none"> ▪ Rapid response to any spill is required ▪ Storage of hazardous materials must comply with the <i>Canadian Environmental Protection Act</i> ▪ 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 approved by Parks Canada 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)
Water Resources ^[v1]	<ul style="list-style-type: none"> ▪ Materials must not be disposed of via water courses, storm, or sanitary sewers

VECs	Mitigation Measures
	<ul style="list-style-type: none"> ▪ All manure from imported livestock must be cleaned-up and disposed of in existing livestock areas as directed by the Heritage Presentation Specialist ▪ Refuelling of equipment must be off slopes and away from waterbodies/aquatic habitats (100 metres)
Visitor Experience and Public Safety	<ul style="list-style-type: none"> ▪ Reduce volume on sound equipment during visitor hours ▪ Must comply with all statutory and regulatory requirements including, but not limited to, the <i>Canada National Parks Act</i>, and National Historic Park regulations ▪ 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 <i>Explosives Act</i> and regulations under the supervision of Parks Canada Black Powder Specialist ▪ Hold special events after visitor hours whenever possible ▪ All activities must be in compliance with the <i>Occupational Health and Safety Act</i> 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 whenever normal traffic flow pattern is interrupted ▪ Schedule events which require traffic interruption to avoid peak times ▪ Provide rescue capability for events that occur in/near water ▪ All activities subject to review by the National Historic Site of Canada Public Safety Specialist
Socio-economic Aspects	<ul style="list-style-type: none"> ▪ Must comply with all statutory and regulatory requirements including, but not limited to, the <i>Canada National Parks Act</i>, and National Historic Park regulations ▪ Use of special effects/black powder must comply with the <i>Explosives Act</i> and regulations under the direction

VECs	Mitigation Measures
	of Parks Canada Black Powder specialist <ul style="list-style-type: none"> <li data-bbox="634 279 1292 352">▪ Traffic shall not be stopped for longer than five minutes to accommodate filming
Air Quality	<ul style="list-style-type: none"> <li data-bbox="634 359 1149 392">▪ Vehicles must not idle while parked

4.7 Analysis of the Significance of Residual Environmental Effects

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 ratings 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. Socio-economic aspects and air quality would both be 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 are not expected to 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.

VEC	Project Elements	Residual Environmental Effects	Importance Level Rating						SIGNIFICANCE
			Magnitude	Geographic Extent	Duration of Effect	Frequency of Effect	Reversibility	Ecological & Historical Context	
Cultural Resources	Vehicles; Temporary Structures	Minor damage to cultural resources	1	1	2	1	2	1	Not Significant
	Event Attendees	Minor damage to cultural resources	1	1	2	1	2	1	Not Significant
Forests and Managed Vegetation; Bog and Fen 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 small increase in sediment concentration of surface runoff	1	2	2	1	1	1	Not Significant
	Vehicles; Portable Washrooms; Generators	Minor residual water contamination from accidental spill possible	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	Minor short-term deprivation of peace and enjoyment of local properties	1	3	1	1	1	1	Not Significant
Air Quality	Vehicles	Minor increase in greenhouse gas emissions	1	3	1	1	1	1	Not Significant

1 – Negligible 2 – Minor 3 – Major or significant when a potential measurable environmental effect on the VEC in question extends outside the boundaries of the special event and is considered unacceptable within the strategic goals and management direction for the NHS.

4.8 Cumulative Effects

Cumulative effects can result when VECs are affected by interactions between multiple projects, including past, present, and future 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.

4.8.1 Interactions Between Special Events

Over a five-year period, approximately 140 special events covered by this RCSR are expected to occur at the National Historic Sites of Canada in the Eastern Newfoundland Field Unit. Annually, these special events are composed of about approximately three concerts, five community and corporate events, eight weddings, six film shoots, three theatrical performances, one military encampment, and two terrestrial ecotours. There are potential interactions of environmental effects for the eight following VECs: Forests and Managed Vegetation, Bog and Fen Vegetation, Fauna, Land Resources, Water Resources, Visitor Experience, Socio-Economic Aspects and Air Quality. These are evaluated for significance in Table 6, Section 4.8.4. Appropriate mitigation measures are those detailed in Table 4, Section 4.6.

4.8.2 Interactions Between Special Events and Operational Activities

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 National Historic Sites of Canada in the Eastern Newfoundland Field Unit: 1) Infrastructure & 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 National Historic Sites of Canada in the Eastern Newfoundland Field Unit, in addition to regular ground maintenance. There are potential interactions of environmental effects for five VECs: Forests and Managed Vegetation; Bog and Fen Vegetation; Land Resources; Water Resources; and Fauna. These are evaluated for significance in Table 6, Section 4.8.4. Appropriate mitigation measures are those detailed in Table 4, Section 4.6.

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 National Historic Sites of Canada in the Eastern Newfoundland Field Unit and are generally conducted in coordination with existing programs. Experience has shown that adverse 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 Parks Canada and Community Events

Small internal and community events at the National Historic Sites of Canada in the Eastern Newfoundland Field Unit are very small scale activities and do not require a licence of occupation. These events are not within the scope of 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.

4.8.3 Interactions Between Special Events and Outside Activities

Finally, the interactions between special events and activities outside the Eastern Newfoundland Field Unit NHSs must also be factored into the consideration of cumulative effects. Based on analysis of routine activities within each site, two are relevant; 1) Construction & Repair; and 2) Other Special Community Events. Other activities are not expected to interact with the special events covered in this RCSR.

Construction and Repair Projects in Eastern Newfoundland Communities

Many construction and maintenance projects occur in the eastern Newfoundland communities, but outside the NHSs boundaries. There are potential interactions of environmental effects for two VECs: Land Resources and Socio-Economic Aspects. These are evaluated for significance in Table 6, Section 4.8.4. Appropriate mitigation measures are those detailed in Table 4, Section 4.6.

Other Special Community Events

Community events in eastern Newfoundland are held both inside and outdoors. These include a variety of theatrical productions, sporting events, concerts, festivals, and regattas. Some of these events may interact with special events at the National Historic Sites of Canada in the Eastern Newfoundland Field Unit to affect socio-economic aspects as there will be an increased demand on services within the community. Special events will likely increase the waste normally produced, thus affecting land resources. Traffic will likely increase when community events and special events coincide, affecting air quality through elevated greenhouse gas emissions and visitor experience due to increased traffic congestion. There are therefore potential interactions of environmental effects for four VECs: Socio-Economic Aspects; Visitor Experience; Land Resources; and Air Quality. These are evaluated for significance in Table 6, Section 4.8.4. Appropriate mitigation measures are those detailed in Table 4, Section 4.6.

4.8.4 Summary of Cumulative Effects on VECs

Interactions between a special event and repeated special events, operational activities within the NHS, and activities outside the NHS could result in limited potential cumulative effects (refer to Table 6), which will not be significant. 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 potential cumulative effects will not be significant. 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 NHSs, and activities outside the National Historic Sites of Canada in the Eastern Newfoundland Field Unit.

VEC	Project Elements	Potential Cumulative Environmental Effects	Criteria Ratings						SIGNIFICANCE
			Magnitude	Geographic Extent	Duration of Effect	Frequency of Effect	Reversibility	Ecological & Historical Context	
Forests and Managed Vegetation; Bog and Fen 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 small 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	Minor short-term deprivation of peace and enjoyment of local properties	1	3	1	1	1	1	Not Significant
Air Quality	Vehicles	Minor increase in greenhouse gas emissions	1	3	1	1	1	1	Not Significant

1 – Negligible 2 – Minor 3 – Major or or significant when a potential measurable environmental effect on the VEC in question extends outside the boundaries of the special event and is considered unacceptable within the strategic goals and management direction for the NHS.

4.9 Monitoring

As part of a licence 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 licence of occupation is met.

Success of the mitigation measures is assessed through the evaluation of the significance 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 Parks Canada will consider whether amendments to the RCSR are warranted in light of any public complaints.

5 Roles and Responsibilities

Parks Canada is the only RA involved in issuing a licence of occupation for special events covered by this RCSR. Other federal departments are not expected to be involved in the EA process. If a project requires a referral, permit, approval or authorization from another federal department it is not subject to this RCSR and requires an individual screening under the CEAA.

To ensure protection of both the environmental and cultural resources at the NHS, Parks Canada has developed a set of mitigation measures (refer to Appendix 1) to be incorporated in the Eastern Newfoundland Field Unit National Historic Sites Licence of Occupation. Licensees are held legally responsible for the implementation of the mitigation measures through the standard Licence of Occupation.

6 Term of Application

This RCSR will be in effect for a five year period. Parks Canada will notify the CEA 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.

7 Procedures for Amending the RCSR

The purpose of an amending procedure is to allow for modification of the RCSR after experience has been gained with its operation. The reasons for such modification may include:

- clarification of document and procedures;
- streamlining or modifying the planning process in areas where problems may have arisen;
- minor modifications and revisions to the factors to be considered in the assessment to reflect new or changed regulatory requirements, policies or standards;
- extension of the application of the RCSR to RAs who were not previously declared users of the report; and
- new procedures and environmental mitigation practices that have been developed over time.

The RA will notify the CEA Agency in writing of its interest to amend the RCSR. It will discuss the proposed amendments with the CEA Agency and affected federal government departments and may invite comment from stakeholders and the public on the proposed changes. The RA will then submit the proposed amendments to the CEA Agency, along with a statement providing a rationale for each amendment proposed.

The CEA Agency may amend the RCSR without changing the declaration period if the changes:

- are minor;
- represent editorial changes intended to clarify or improve the screening process;
- do not materially alter either the scope of the projects subject to the RCSR or the factors to be considered in the assessment for these projects; and
- do not reflect new or changed regulatory requirements, policies or standards.

The CEA Agency may initiate a new declaration for the RCSR for the remaining balance of the original declaration period or for a new declaration period if the changes:

- are considered to be substantial; or
- represent modifications to the scope of the projects subject to the class or the factors to be considered in the assessment for these projects.

8 References

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Appendix 1 – Environmental effects and mitigation measures associated with the project categories

Table 1. CONCERTS – Summary of potential environmental effects, mitigation measures, and the significance of residual environmental effects for the Eastern Newfoundland NHSs. (6 pages).

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Cultural Resources – Level I & Level II	Equipment/Crew Transportation	Damage to in-situ cultural resources	<ul style="list-style-type: none"> - Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager - Access shall be restricted to designated area(s) if necessary (See maps in Appendix 3) - Access routes used to and from the special event area must be pre-approved by Parks Canada 	None	Not Significant
				None	Not Significant
	Set up/Dismantle Temporary Staging, Fencing, Tents, etc.	Damage to in-situ cultural resources	<ul style="list-style-type: none"> - 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
				None	Not Significant
	Campfires	Damage to cultural resources	<ul style="list-style-type: none"> - 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 provincial regulations and site specific fire control plans and fire orders 	None	Not Significant
	People attending special event	Damage to cultural resources	<ul style="list-style-type: none"> - Provide security procedures to keep participants in designated special event area 	None	Not Significant
Forests and Managed Vegetation	Equipment/Crew Transportation	Trampling/destruction of vegetation	<ul style="list-style-type: none"> - 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 if necessary (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
	Equipment Storage	Trampling of grass	<ul style="list-style-type: none"> - 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
Forests and Managed Vegetation	Parking	Trampling/Destruction of vegetation	<ul style="list-style-type: none"> - 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 if necessary (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	<ul style="list-style-type: none"> - 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 if necessary (see maps in Appendix 3) 	Minor short-term disruption of vegetation	Not Significant
	Installation/Removal of Portable Washrooms	Trampling of grass	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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
	Campfires	Destruction of vegetation	<ul style="list-style-type: none"> - 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 provincial regulations and site specific fire control plans and fire orders 	None	Not Significant
	People Attending Special Event	Trampling of grass	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Notify warden service immediately of any problem wildlife encounters - Feeding, enticement, or harassment of wildlife is prohibited 	Minor disruption to wildlife	Not Significant
Land Resources	Equipment/Crew transportation & Parking	Soil contamination from accidental fuel/oil leak or spill	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Land Resources	Installation/Use/Removal of Generators	Soil contamination from accidental fuel/oil spill or leak	<ul style="list-style-type: none"> - Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4) 	None	Not Significant
	Equipment/Crew Transportation & Parking	Surface/ground water contamination from accidental fuel/oil leak or spill	<ul style="list-style-type: none"> - Refuelling of equipment must be off slopes and away from waterbodies/aquatic habitats (100 metres) - 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, increased surface runoff, and siltation of surface water	<ul style="list-style-type: none"> - Vehicles restricted to approved paved and gravelled surfaces 	Possibly some increase in sediment concentration of surface runoff	Not Significant
Water Resources	Installation/Removal of Portable Washrooms	Surface water contamination from accidental spill/leak of human waste	<ul style="list-style-type: none"> - 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
		Surface water contamination from accidental spill/leak of odour control chemicals			
	Food preparation & clean up	Surface water contamination from food waste water	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4) - Refuel generators off slopes and away from waterbodies/aquatic habitats (100 metres) 	None	Not Significant
	Visitor Experience	Special Event	Limited accessibility to the site	<ul style="list-style-type: none"> - Hold special events after visitor hours whenever possible 	Some visitors may find event distracts from site's historical atmosphere
Limited services in town available for visitors			<ul style="list-style-type: none"> - None 	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Visitor Experience	Use of Sound Equipment; Special Event	Noise disrupts site's historical atmosphere	<ul style="list-style-type: none"> - Reduce volume on sound equipment during visitor hours - Must comply with all statutory and regulatory requirements including, but not limited to, the <i>Canada National Parks Act</i> and National Historic Park regulations 	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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - None 		
Public Safety	Special Event and Associated Activities	Increased risk to public safety	<ul style="list-style-type: none"> - All activities must be in compliance with the <i>Occupational Health and Safety Act</i> 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 <i>Explosives Act</i> and regulations under the direction of the Parks Canada Black Powder specialist - All activities subject to review by the NHS's Public Safety Specialist 	None	Not Significant
Socio-economic Aspects	People attending special event	Increased traffic makes travel more difficult for community residents	<ul style="list-style-type: none"> - None 	Some residents may find increased traffic makes commuting difficult	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 <i>Canada National Parks Act</i> , and National Historic Park regulations	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 <i>Explosives Act</i> 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. COMMUNITY AND CORPORATE EVENTS – Summary of potential environmental effects, mitigation measures, and the significance of residual environmental effects for the Eastern Newfoundland NHSs. (6 pages).

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Cultural Resources – Level I & Level II	Equipment/Crew Transportation	Damage to in-situ cultural resources	<ul style="list-style-type: none"> - 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
				None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Cultural Resources – Level I & Level II	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	None	Not Significant
				None	Not Significant
	Campfires	Damage to cultural resources	- 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 cultural resources	- Provide security procedures to keep participants in designated special event area	None	Not Significant
Forests and Managed Vegetation	Equipment/Crew Transportation	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 if necessary (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
	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 <i>Canadian Environmental Protection Act</i>	Minor short-term disruption of grass	
	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 if necessary (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
Forests and Managed Vegetation	Set up/Dismantle Temporary Staging, Fencing, Tents, etc.	Destruction of grass	<ul style="list-style-type: none"> - 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 if necessary (see maps in Appendix 3) 	Minor short-term disruption of vegetation	Not Significant
	Installation/Removal of Portable Washrooms	Trampling of grass	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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 grass	Not Significant
Fauna	Special event and people attending	Disruptive to wildlife	<ul style="list-style-type: none"> - Notify warden service immediately of any problem wildlife encounters - Feeding, enticement, or harassment of wildlife is prohibited 	Minor disruption to wildlife	Not Significant
Land Resources	Equipment/Crew transportation & Parking	Soil contamination from accidental fuel/oil leak or spill	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Land Resources	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
Water Resources	Equipment/Crew Transportation & Parking	Surface/ground water contamination from accidental fuel/oil leak or spill	- Refuelling of equipment must be off slopes and away from waterbodies/aquatic habitats (100 metres) - 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, 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

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Water Resources	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
	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, and National Historic Park regulations	Some visitors may find event distracts from site's historical atmosphere	Not Significant
		Limited services in town available for visitors	- None	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Public Safety	Special Event and Associated Activities	Increased risk to public safety	<ul style="list-style-type: none"> - All activities must be in compliance with the <i>Occupational Health and Safety Act</i> and Canada Labour Code - All activities must be in compliance with the National Fire Code of Canada, as well as the provincial regulations and 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 NHS Public Safety Specialist 	None	Not Significant
Socio-economic Aspects	People attending special event	Increased traffic makes travel more difficult for community residents	<ul style="list-style-type: none"> - None 	Some residents may find increased traffic makes commuting difficult	Not Significant
	Use of Sound Equipment; Special Event	Increased noise affects peace and enjoyment of property by some community residents	<ul style="list-style-type: none"> - Must comply with all statutory and regulatory requirements including, but not limited to, the <i>Canada National Parks Act</i>, and National Historic Park regulations 	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	<ul style="list-style-type: none"> - Vehicles must not idle while parked 	Small increase in greenhouse gas emissions	Not Significant

Table 3. WEDDINGS – Summary of potential environmental effects, mitigation measures, and the significance of residual environmental effects for the Eastern Newfoundland NHSs. (3 pages).

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Cultural Resources – Level I & Level II	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	None	Not Significant
	People Attending Special Event	Damage to cultural resources	- Provide security procedures to keep participants in designated special event area	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 if necessary (see maps in Appendix 3)	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 grass	Not Significant
Fauna	People Attending Special Event	Disruptive to wildlife	- Notify warden service immediately of any problem wildlife encounters - Feeding, enticement, or harassment of wildlife is prohibited	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
	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	<ul style="list-style-type: none"> - 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
	Installation/Use/removal of Generators	Soil contamination from accidental fuel/oil spill or leak	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Refuelling of equipment must be off slopes and away from waterbodies/aquatic habitats (100 metres) - Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4) 	None	Not Significant
	Generation of waste during event	Surface water contamination from refuse	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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 and Associated Activities	Limited accessibility to the site	<ul style="list-style-type: none"> - 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
Visitor Experience	Use of Sound Equipment; Special Event	Noise disrupts site's historical atmosphere	<ul style="list-style-type: none"> - Reduce volume on sound equipment during visitor hours - Must comply with all statutory and regulatory requirements including, but not limited to, the <i>Canada National Parks Act</i>, and National Historic Park regulations 	Some visitors may find event distracts from site's historical atmosphere	Not Significant
Socio-economic Aspects	People attending special event	Increased traffic makes travel more difficult for community businesses	<ul style="list-style-type: none"> - None 	Some residents may find increased traffic makes commuting difficult	Not Significant
	Use of Sound Equipment; Special Event	Increased noise affects peace and enjoyment of property by some community residents	<ul style="list-style-type: none"> - Must comply with all statutory and regulatory requirements including, but not limited to, the <i>Canada National Parks Act</i>, and National Historic Park regulations 	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	<ul style="list-style-type: none"> - Vehicles must not idle while parked 	Small increase in greenhouse gas emissions	Not Significant

Table 4. FILMING – Summary of potential environmental effects, mitigation measures, and the significance of residual environmental effects for the Eastern Newfoundland NHSs. (9 pages).

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Cultural Resources	Equipment/Crew Transportation	Damage to in-situ cultural resources	<ul style="list-style-type: none"> - 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) - Access routes used to and from the special event area must be pre-approved by Parks Canada 	None	Not Significant
				None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Cultural Resources – Level I & Level II	Theatrical set Construction/ Deconstruction	Damage to in-situ cultural resources	<ul style="list-style-type: none"> - Provide plan detailing proposed use of NHS for review by the Cultural Resource Conservation Manager - Excavation of any sort is prohibited 	None	Not Significant
	People attending Special Event	Damage to cultural resources	<ul style="list-style-type: none"> - Provide security procedures to keep participants in designated special event area 	None	Not Significant
Forests and Managed Vegetation	Equipment/Crew Transportation	Trampling/destruction of vegetation	<ul style="list-style-type: none"> - 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 if necessary (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
	Equipment Storage	Trampling of grass	<ul style="list-style-type: none"> - 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 <i>Canadian Environmental Protection Act</i> 	Minor short-term disruption of vegetation	Not Significant
	Parking	Trampling/Destruction of vegetation	<ul style="list-style-type: none"> - 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 if necessary (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	<ul style="list-style-type: none"> - 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 if necessary (see maps in Appendix 3) 	Minor short-term disruption of vegetation	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Forests and Managed Vegetation	Installation/Removal of Portable Washrooms	Trampling of grass	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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
	Use of Vegetative Props	Introduction of invasive species	<ul style="list-style-type: none"> - 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
	Theatrical set construction/deconstruction	Destruction of grass	<ul style="list-style-type: none"> - 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 if necessary (see maps in Appendix 3) - Use of chemicals must be pre-approved by Parks Canada and stored/disposed of in an appropriate manner; WHMIS labelling required - Must comply with Film Crew Guidelines 	Minor short-term disruption of vegetation	Not Significant
	People Attending Special Event	Trampling of grass	<ul style="list-style-type: none"> - 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 Fen Vegetation	Equipment/Crew Transportation	Trampling/destruction of vegetation	<ul style="list-style-type: none"> - 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 if necessary (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
Bog and Fen Vegetation	Equipment storage	Trampling of vegetation	<ul style="list-style-type: none"> - 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 <i>Canadian Environmental Protection Act</i> 	Minor short-term disruption of vegetation	Not Significant
	Parking	Trampling/destruction of vegetation	<ul style="list-style-type: none"> - 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 if necessary (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	<ul style="list-style-type: none"> - 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 if necessary (see maps in Appendix 3) 	Minor short-term disruption of vegetation	Not Significant
	Use of Vegetative Props	Introduction of invasive species	<ul style="list-style-type: none"> - 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
	Theatrical set construction/deconstruction	Destruction of vegetation	<ul style="list-style-type: none"> - 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 if necessary (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 - Must comply with Film Crew Guidelines 	Minor short-term disruption of vegetation	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Bog and Fen Vegetation	People attending special event	Trampling of vegetation	<ul style="list-style-type: none"> - 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
	Use of Animal Props	Risk of infection from imported livestock	<ul style="list-style-type: none"> - 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
Fauna	Theatrical set construction/deconstruction	Potential chemical use harmful to wildlife	<ul style="list-style-type: none"> - Toxic materials and any materials which may pose a hazard to wildlife must be stored in secured buildings or containers - Must comply with Film Crew Guidelines 	None	Not Significant
	Special event and people attending	Disruptive to wildlife	<ul style="list-style-type: none"> - Notify warden service immediately of any problem wildlife encounters - Feeding, enticement, or harassment of wildlife is prohibited 	Minor disruption to wildlife	Not Significant
Land Resources	Equipment/Crew transportation & Parking	Soil contamination from accidental fuel/oil leak or spill	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Provide procedures for proper installation and removal of portable washroom facilities 	None	Not Significant
		Soil contamination from accidental spill/leak of odour control chemicals	<ul style="list-style-type: none"> - Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4) 		Not Significant
	Generation of Waste During Event	Soil contamination from refuse	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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) - Must comply with Film Crew Guidelines 	Some landfill space used for waste disposal	Not Significant
	Installation/Use/Removal of Generators	Soil contamination from accidental fuel/oil spill or leak	<ul style="list-style-type: none"> - Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4) 	None	Not Significant
	Theatrical set construction/deconstruction	Disturbance to soil, microfauna and microflora	<ul style="list-style-type: none"> - All construction materials must be approved by Parks Canada for use at the NHS 	Temporary disturbance to Soil	Not Significant
Water Resources	Equipment/Crew Transportation & Parking	Surface/ground water contamination from accidental fuel/oil leak or spill	<ul style="list-style-type: none"> - Refuelling of equipment must be off slopes and away from waterbodies/aquatic habitats (100 metres) - 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, increased surface runoff, and siltation of surface water	<ul style="list-style-type: none"> - Vehicles restricted to approved paved and gravelled surfaces 	Possibly some increase in sediment concentration of surface runoff	Not Significant
		Disruption of water movement patterns and filtering capacity in bogs, as well as overall water quality	<ul style="list-style-type: none"> - Vehicles restricted to approved paved and gravelled surfaces 	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
	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	<ul style="list-style-type: none"> - 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
Water Resources	Generation of waste during event	Surface water contamination from refuse	<ul style="list-style-type: none"> - 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 - Must comply with Film Crew Guidelines 	None	Not Significant
	Installation/Use/Removal of Generators	Surface/ground water contamination from accidental fuel/oil spill or leak	<ul style="list-style-type: none"> - Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4) 	None	Not Significant
	Theatrical set construction/deconstruction	Disruption of water movement patterns and possible damage to fish habitat	<ul style="list-style-type: none"> - 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 Newfoundland and Labrador and/or any other regulatory authority prior to proceeding with work in water courses. - All construction materials must be approved by Parks Canada for use at the NHS 	Temporary disruption of fish habitat and water movement	Not Significant
Visitor Experience	Special Event	Limited accessibility to the site	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Reduce volume on sound equipment during visitor hours - Must comply with all statutory and regulatory requirements, including, but not limited to, the <i>Canada National Parks Act</i> and National Historic Park regulations 	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
	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		
Public Safety	Special Event and Associated Activities	Increased risk to public safety	<ul style="list-style-type: none"> - All activities must be in compliance with the <i>Occupational Health and Safety Act</i> and Canada Labour Code - All activities must be in compliance with the National Fire Code of Canada, as well as provincial regulations and 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 NHS Public Safety Specialist 	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 <i>Canada National Parks Act</i> and National Historic Park regulations	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 <i>Explosives Act</i> 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 5. THEATRICAL PERFORMANCES – Summary of potential environmental effects, mitigation measures, and the significance of residual environmental effects for the Eastern Newfoundland NHSs. (5 pages).

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Cultural Resources – Level I & Level II	Equipment/Crew Transportation	Damage to in-situ cultural resources	<ul style="list-style-type: none"> - Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager - Access shall be restricted to designated area(s) if necessary (See maps in Appendix 3) - Access routes used to and from the special event area must be pre-approved by Parks Canada 	None	Not Significant
				None	Not Significant
	Theatrical set Construction/Deconstruction	Damage to in-situ cultural resources	<ul style="list-style-type: none"> - Provide plan detailing proposed use of NHS for review by the Cultural Resource Conservation Manager - Excavation of any sort is prohibited 	None	Not Significant
	People attending special event	Damage to cultural resources	<ul style="list-style-type: none"> - Provide security procedures to keep participants in designated special event area 	None	Not Significant
Forests and Managed Vegetation	Equipment/Crew Transportation	Trampling/destruction of vegetation	<ul style="list-style-type: none"> - 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 if necessary (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
	Equipment Storage	Trampling of grass	<ul style="list-style-type: none"> - 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
Forests and Managed Vegetation	Set up/Dismantle Temporary Staging, Fencing, Tents, etc.	Destruction of grass	<ul style="list-style-type: none"> - 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 if necessary (see maps in Appendix 3) 	Minor short-term disruption of vegetation	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
	Installation/Removal of Portable Washrooms	Trampling of grass	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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
	Use of Vegetative Props	Introduction of invasive species	<ul style="list-style-type: none"> - 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
	People Attending Special Event	Trampling of grass	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Notify warden service immediately of any problem wildlife encounters - Feeding, enticement, or harassment of wildlife is prohibited 	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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Provide procedures for proper installation and removal of portable washroom facilities 	None	Not Significant
		Soil contamination from accidental spill/leak of odour control chemicals	<ul style="list-style-type: none"> - Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4) 		Not Significant
	Food Preparation and Clean-up	Soil contamination from food waste water	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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 4) 	Some landfill space used for waste disposal	Not Significant
	Installation/Use/Removal of Generators	Soil contamination from accidental fuel/oil spill or leak	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Refuelling of equipment must be off slopes and away from waterbodies/aquatic habitats (100 metres) - 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, increased surface runoff, and siltation of surface water	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Provide procedures for proper installation and removal of portable washroom facilities - Rapid response to any spill is required 	None	Not Significant
		Surface water contamination from accidental spill/leak of odour control chemicals	<ul style="list-style-type: none"> - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4) 		
	Food preparation & clean up	Surface water contamination from food waste water	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Reduce volume on sound equipment during visitor hours - Must comply with all statutory and regulatory requirements, including, but not limited to, the <i>Canada National Parks Act</i> and National Historic Park regulations 	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
Visitor Experience	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
	Use of Special Effects/Black Powder	Reduced air quality	- None		
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
	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 <i>Canada National Parks Act</i> and National Historic Park regulations	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

Table 6. MILITARY ENCAMPMENTS – Summary of potential environmental effects, mitigation measures, and the significance of residual environmental effects for the Eastern Newfoundland NHSs. (7 pages).

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Cultural Resources	Equipment/Crew Transportation	Damage to in-situ cultural resources	- Provide plan detailing proposed use of NHS for review by the Cultural Resource Manager	None	Not Significant
			- Access restricted to designated area(s) (See maps in Appendix 3) - Access routes used to and from the special event area must be pre-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	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	None	Not Significant
			- Location of temporary structures must avoid sensitive areas as indicated by a Parks Canada archaeologist	None	Not Significant
	Campfires	Damage to cultural resources	- 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 provincial regulations and site specific fire control plans and fire orders	None	Not Significant
	People attending special event	Damage to cultural resources	- Provide security procedures to keep participants in designated special event area	None	Not Significant
Forests and Managed Vegetation	Equipment/Crew Transportation	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 if necessary (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
	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
	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 if necessary (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
Forests and Managed Vegetation	Set up/Dismantle Temporary Staging, Fencing, Tents, etc.	Destruction of grass	<ul style="list-style-type: none"> - 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 if necessary (see maps in Appendix 3) 	Minor short-term disruption of vegetation	Not Significant
	Installation/Removal of Portable Washrooms	Trampling of grass	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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
	Campfires	Destruction of vegetation	<ul style="list-style-type: none"> - 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 provincial regulations and site specific fire control plans and fire orders 	None	Not Significant
	People Attending Special Event	Trampling of grass	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Notify warden service immediately of any problem wildlife encounters - Feeding, enticement, or harassment of wildlife is prohibited 	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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Provide procedures for proper installation and removal of portable washroom facilities 	None	Not Significant
		Soil contamination from accidental spill/leak of odour control chemicals	<ul style="list-style-type: none"> - Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4) 		Not Significant
	Food Preparation and Clean-up	Soil contamination from food waste water	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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 4) 	Some landfill space used for waste disposal	Not Significant
	Installation/Use/Removal of Generators	Soil contamination from accidental fuel/oil spill or leak	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Refuelling of equipment must be off slopes and away from waterbodies/aquatic habitats (100 metres) - 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, increased surface runoff, and siltation of surface water	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Provide procedures for proper installation and removal of portable washroom facilities - Rapid response to any spill is required 	None	Not Significant
		Surface water contamination from accidental spill/leak of odour control chemicals	<ul style="list-style-type: none"> - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4) 		
	Food preparation & clean up	Surface water contamination from food waste water	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - None 	None	Not Significant

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Visitor Experience	Use of Sound Equipment; Special Event	Noise disrupts site's historical atmosphere	<ul style="list-style-type: none"> - Reduce volume on sound equipment during visitor hours - Must comply with all statutory and regulatory requirements, including, but not limited to, the <i>Canada National Parks Act</i> and National Historic Park regulations 	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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - None 		
Public Safety	Special Event and Associated Activities	Increased risk to public safety	<ul style="list-style-type: none"> - All activities must be in compliance with the <i>Occupational Health and Safety Act</i> and Canada Labour Code - All activities must be in compliance with the National Fire Code of Canada, as well as provincial regulations and 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 NHS Public Safety Specialist 	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
	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 <i>Canada National Parks Act</i> , National Historic Park regulations, and Historic Canals regulations under the <i>Department of Transport Act</i>	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

Table 7. TERRESTRIAL ECOTOURISM – Summary of potential environmental effects, mitigation measures, and the significance of residual environmental effects for the Eastern Newfoundland NHSs. (3 pages).

VEC	Project Activities	Potential Environmental Effects	Mitigation Measures	Residual Environmental Effects	Significance
Forests and Managed Vegetation	Parking	Trampling/Destruction of vegetation	<ul style="list-style-type: none"> - 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 if necessary (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
Forests and Managed Vegetation	People Attending Special Event	Trampling of grass and /or trail braiding causing damage to vegetation	<ul style="list-style-type: none"> - 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	People Attending Special Event	Disruptive to wildlife	<ul style="list-style-type: none"> - Notify warden service immediately of any problem wildlife encounters - Feeding, enticement, or harassment of wildlife is prohibited 	Minor disruption to wildlife	Not Significant
Land Resources	Equipment/Crew transportation & Parking	Soil contamination from accidental fuel/oil leak or spill	<ul style="list-style-type: none"> - Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4) 	None	Not Significant
	Generation of Waste During Event	Soil contamination from refuse	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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

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	<ul style="list-style-type: none"> - Refuelling of equipment must be off slopes and away from waterbodies/aquatic habitats (100 metres) - Rapid response to any spill is required - EERP and appropriate containment/clean-up equipment and training required (see Appendix 4) 	None	Not Significant
	Generation of waste during event	Surface water contamination from refuse	<ul style="list-style-type: none"> - 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
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	<ul style="list-style-type: none"> - 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

June 2006



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1 Background

The province of Newfoundland and Labrador 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 Waste Management Regulations and Waste Diversion Regulations of the *Environmental Protection Act*. These disposal bans include such wastes as used tires, oil, corrugated cardboard, newsprint, bond paper, and organic material (Newfoundland and Labrador Department of Environment, 2002).

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 Newfoundlanders and Labradorians, 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, 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 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:

- Newfoundland & Labrador Dept. Environment & Conservation
Pollution Prevention 709-729-2556
http://www.env.gov.nl.ca/env/Env/PollPrev/waste_management.asp

- Multi-Materials Stewardship Board (MMSB)
www.mmsb.nl.ca 1-800-901-6672
- Greater Avalon Regional Waste Management Committee
www.avalonwaste.com 709-729-1744
- Local community's solid waste management department

4 Conclusion

Although special events vary within the Eastern Newfoundland Field Unit NHSs, the Waste Management Plan objectives remain constant. Clients can adjust the guidelines to suit their project, but must ensure the objectives are still met. Through this, Newfoundland and Labrador's goal to divert waste will be achieved. It is therefore important to consider waste management when planning your event.

5 References

Government of Newfoundland and Labrador. 2003. *Waste Management Regulations*. Retrieved April 20, 2006 from the World Wide Web at <http://www.hoa.gov.nl.ca/hoa/regulations/rc030059.htm>.

Government of Newfoundland and Labrador. 2005. *Waste Diversion Regulations*. Retrieved May 16, 2006 from the World Wide Web at <http://www.canlii.com/nl/laws/regu/c2005r.57/20051121/whole.html>.

Newfoundland and Labrador Department of Environment. 2002. *Waste Management Strategy*. Retrieved May 16, 2006 from the World Wide Web at http://www.env.gov.nl.ca/env/Env/PollPrev/WasteManagementStrategy_apr2002.pdf.

Parks Canada. 2006. Solid Waste Resources Management Guide for Special Events. In *Replacement Class Screening Report: Special Events in the National Historic Sites of Canada in Cape Breton* (Appendix 2).

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.

Appendix 3 – Site Maps of the NHSs in the Eastern Newfoundland Field Unit

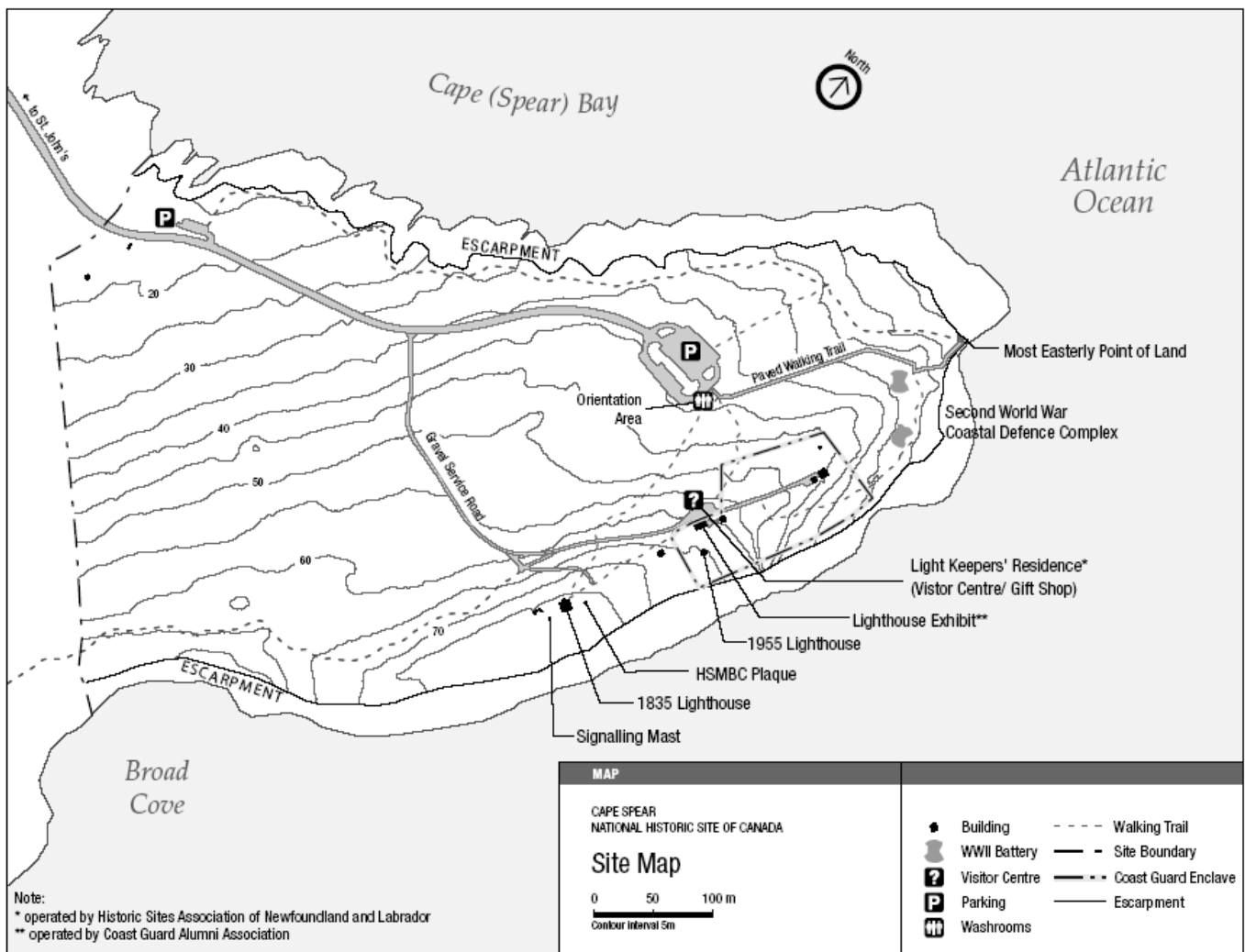


Figure 1. Map of Cape Spear National Historic Site of Canada.

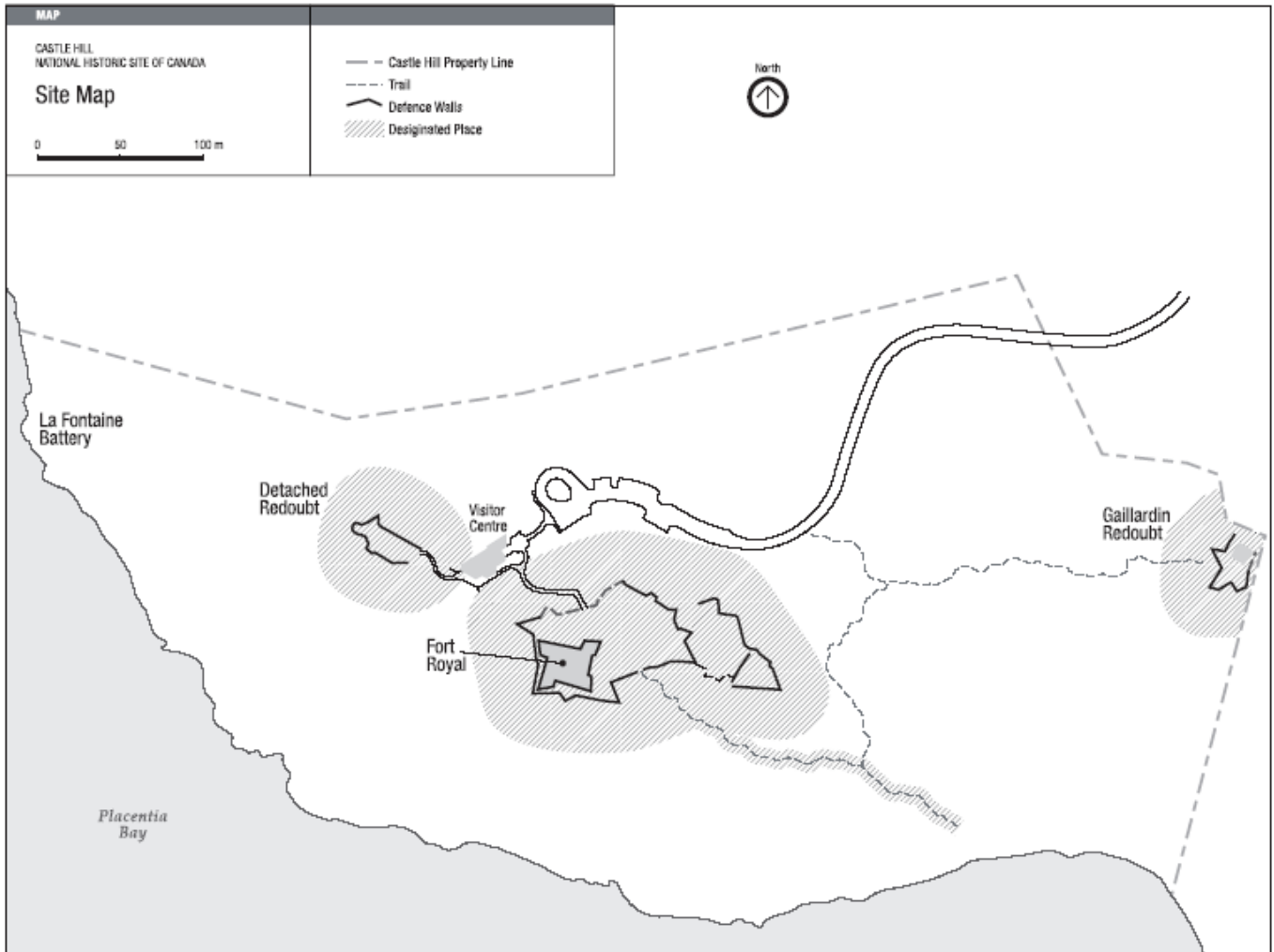


Figure 2. Map of Castle Hill National Historic Site of Canada.

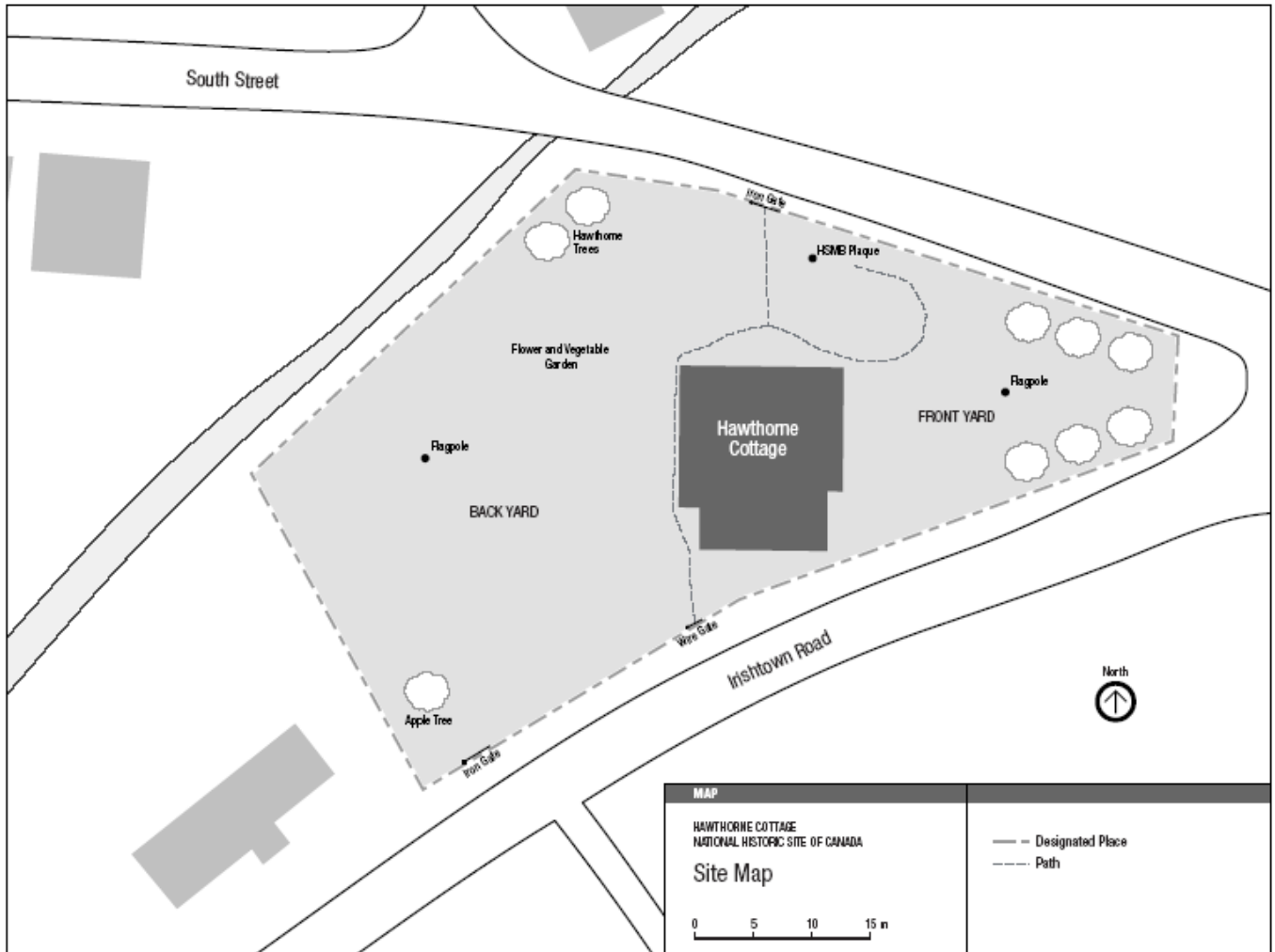


Figure 3. Map of Hawthorne Cottage National Historic Site of Canada.

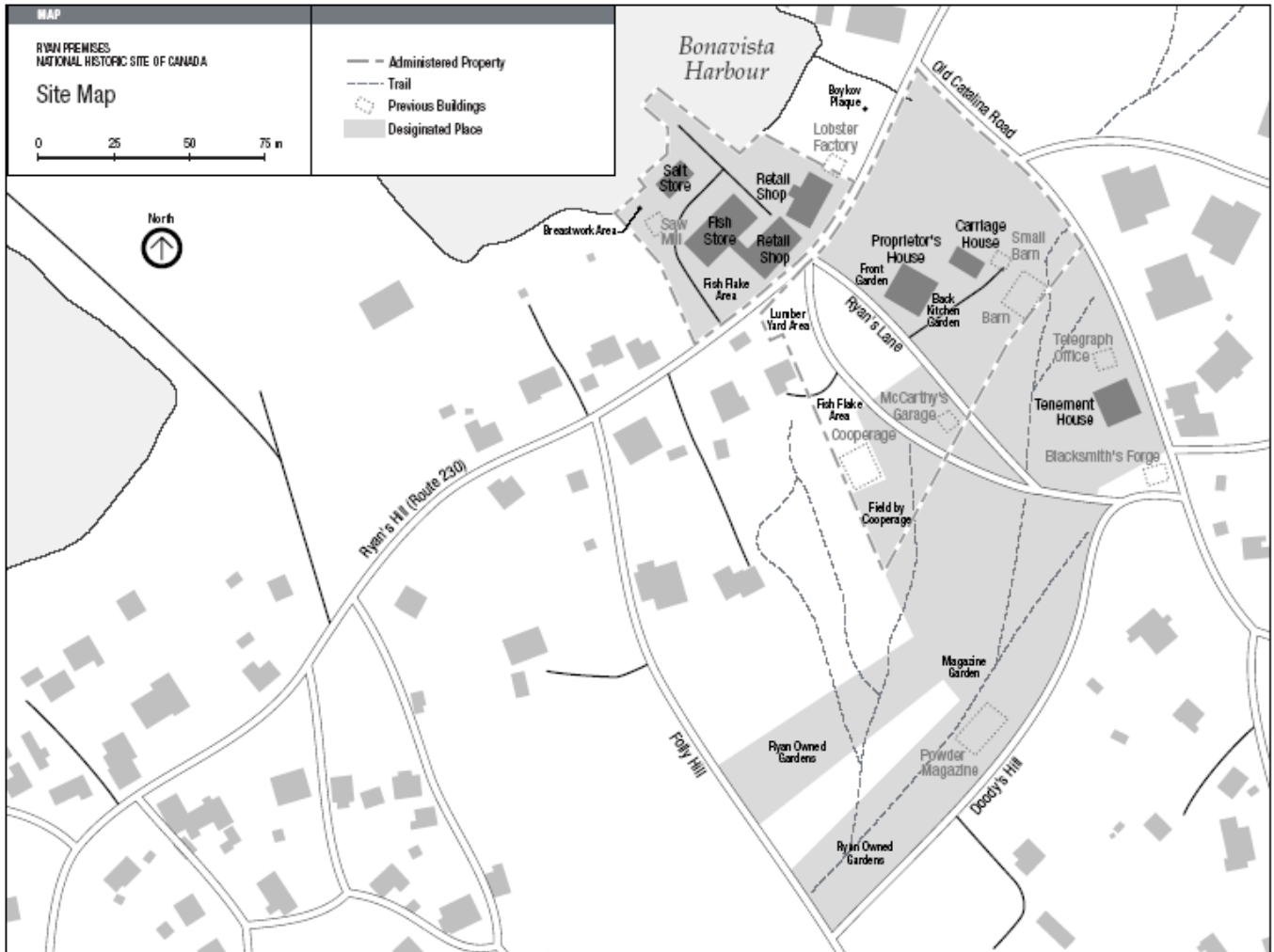


Figure 4. Map of Ryan Premises National Historic Site of Canada.

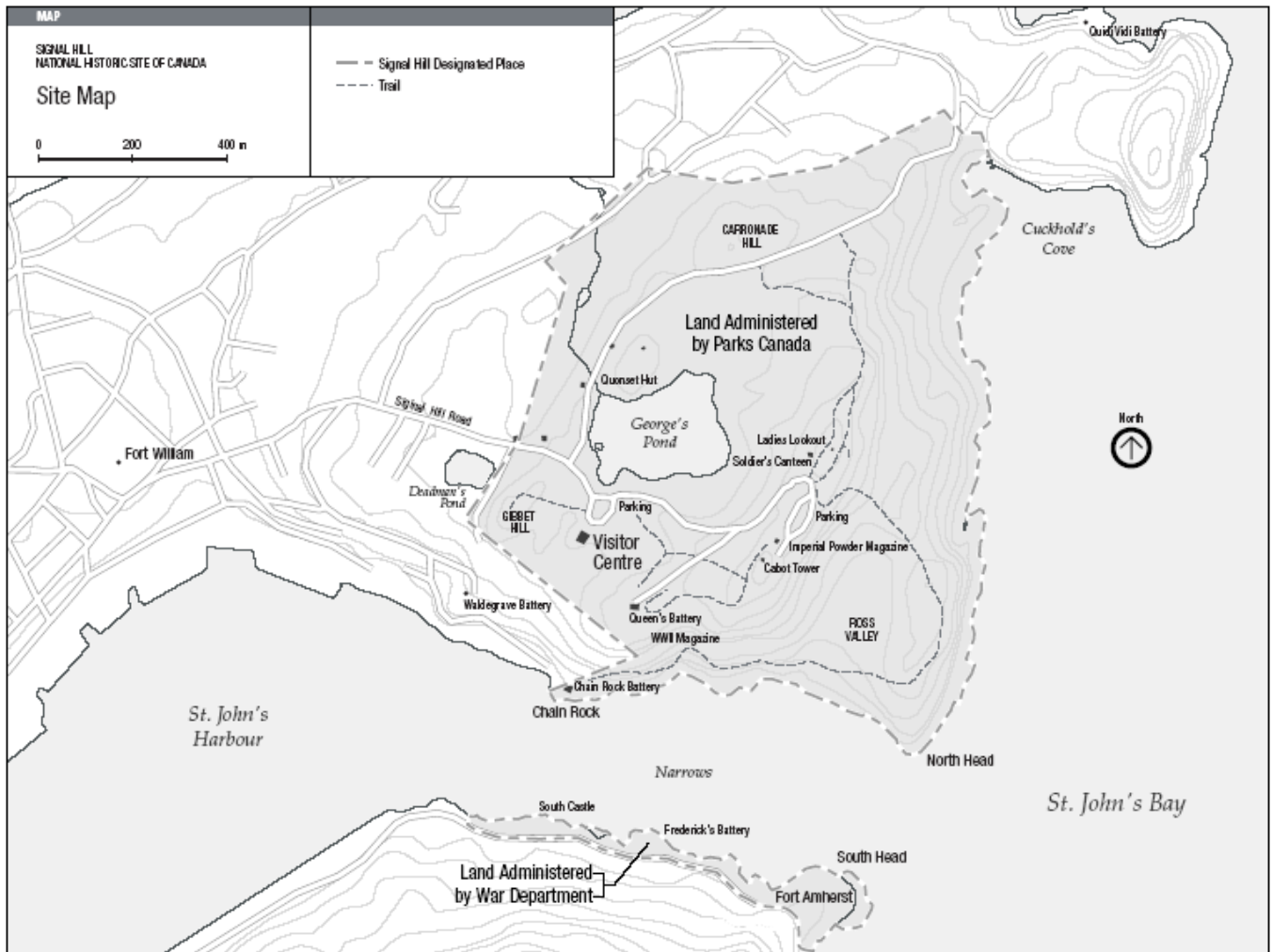


Figure 5. Map of Signal Hill National Historic Site of Canada.

Appendix 4 – Environmental Emergency Response Plan Guidelines and Template



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

September 2006



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 (*Canadian Environmental Protection Act*, 1999, c. 33). 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.

An Environmental Emergency Response Plan (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 Eastern Newfoundland Field Unit National Historic Sites, Parks Canada has developed an Environmental Emergency Response Plan 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 Environmental Emergency Response Plan using the electronic template provided.

It is the responsibility of the Licensee to ensure the Environmental Emergency Response Plan covers all potential environmental emergencies associated with his/her special event.

Steps to Complete an Environmental Emergency Response Plan

Step 1: Open the template document

The document template (saved as “Special Event NL-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, 2006). 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 Environmental Emergency Response Plan. 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 Environmental Emergency Response Plan. 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 Environmental Emergency Response Plan 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 Eastern
Newfoundland Field Unit
National Historic Sites of
Canada**

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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 Eastern Newfoundland Field Unit National Historic Sites, 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 Eastern Newfoundland Field Unit National Historic Sites, as covered by the declared RCSR. The concert is held within Cape Spear National Historic Site of Canada and the following environmental settings are relevant to the event's location:

- | | |
|--|--|
| <input type="checkbox"/> Pavement | <input type="checkbox"/> Wooded area |
| <input type="checkbox"/> Grassed surface | <input type="checkbox"/> Near water (stream, river, bog, etc.) |
| <input type="checkbox"/> Gravelled area | <input type="checkbox"/> 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 the Parks Canada Site Supervisor of spill and the emergency operations that are taking place
- Coordinate any media releases regarding emergency operations
- Complete a report for the Parks Canada Site Supervisor 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

3.2 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
Scott Andrews	Site Supervisor – Signal Hill & Cape Spear National Historic Sites	709-772-5367
Ella Heneghan	A/Site Supervisor – Ryan Premises & Castle Hill National Historic Sites	709-468-1601
Bill Brake	Field Unit Superintendent, Newfoundland East	709-533-3161
Dave Taylor	Marketing, Alliances & Public Relations Officer	709-772-0285
Warden Service	Terra Nova National Park	709-533-6090

3.2.3 Outside Agencies

Agency	Contact Person	Phone Number
Fire department		911
RCMP		911
Environment Canada, Environmental Emergencies		709-772-2083 or 1-800-563-9089
Environment Canada, Regional Environmental Emergency Coordinator	Roger Percy	902-426-2576 or 902-426-6200 (24hrs)
Newfoundland Emergency Measures Organization	Fred Hollett	709-729-3703

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 (NL) (709-729-3703)

4. Contact Scott Andrews, Site Supervisor of Signal Hill and Cape Spear National Historic Sites (709-772-5367) or Ella Heneghan, A/Site Supervisor of Ryan Premises and Castle Hill National Historic Sites (709-468-1601)
5. Contact Environmental Emergencies (709-772-2083 or 1-800-563-9089)
6. If significant, contact the RCMP (911)
7. Contact the Warden Service, Terra Nova National Park (709-533-6090)
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

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 (NL) (709-729-3703)
4. Contact Scott Andrews, Site Supervisor of Signal Hill and Cape Spear National Historic Sites (709-772-5367) or Ella Heneghan, A/Site Supervisor of Ryan Premises and Castle Hill National Historic Sites (709-468-1601)
5. Contact Environmental Emergencies (1-800-563-9089)
6. If significant, contact the RCMP (911)
7. Contact the Warden Service, Terra Nova National Park (709-533-6090)
8. Contact supplier of Portable Washroom Facilities
9. Follow recommendations of supplier
10. Complete Summary Report

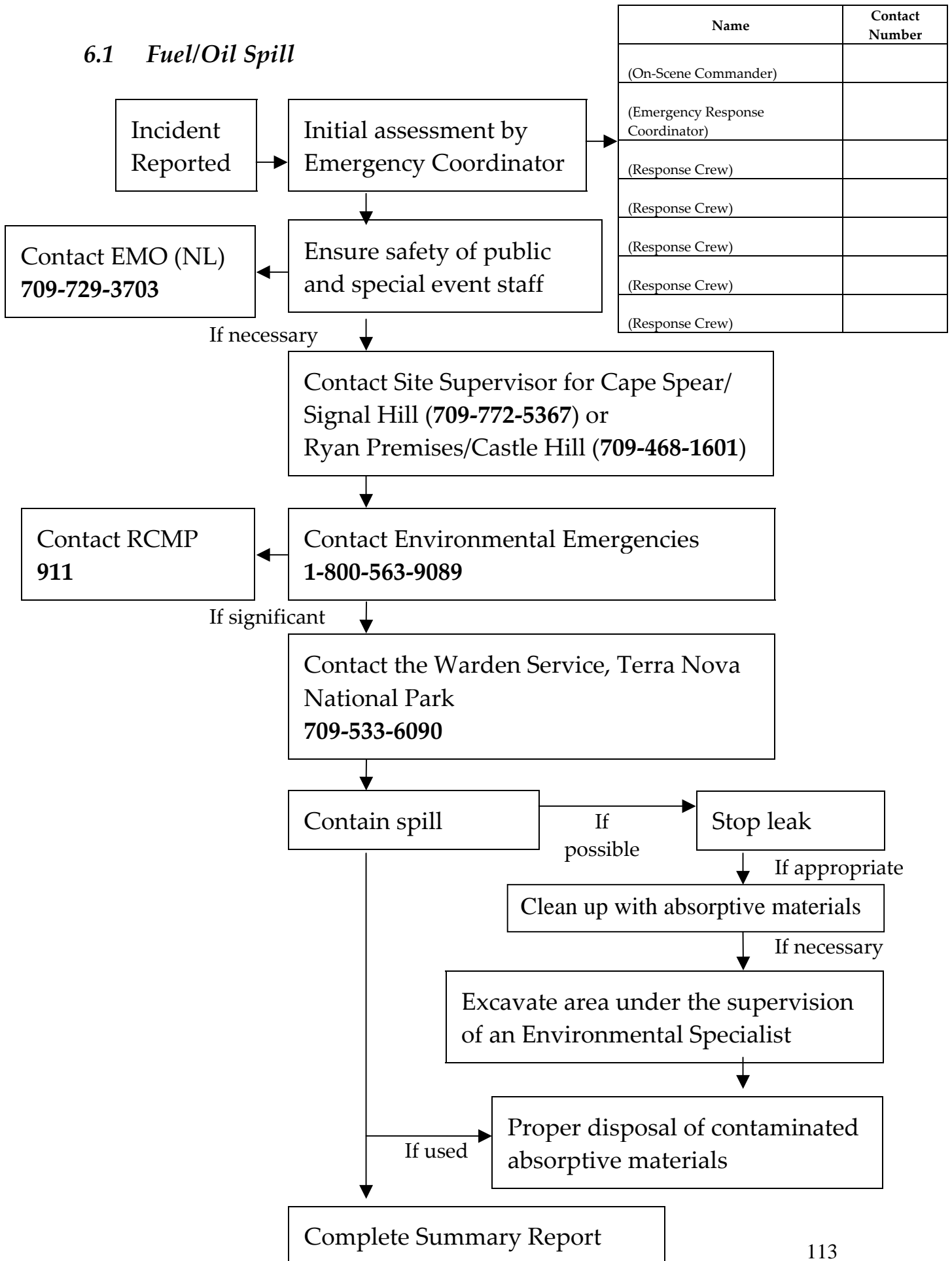
5 Post-Emergency Operations

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.

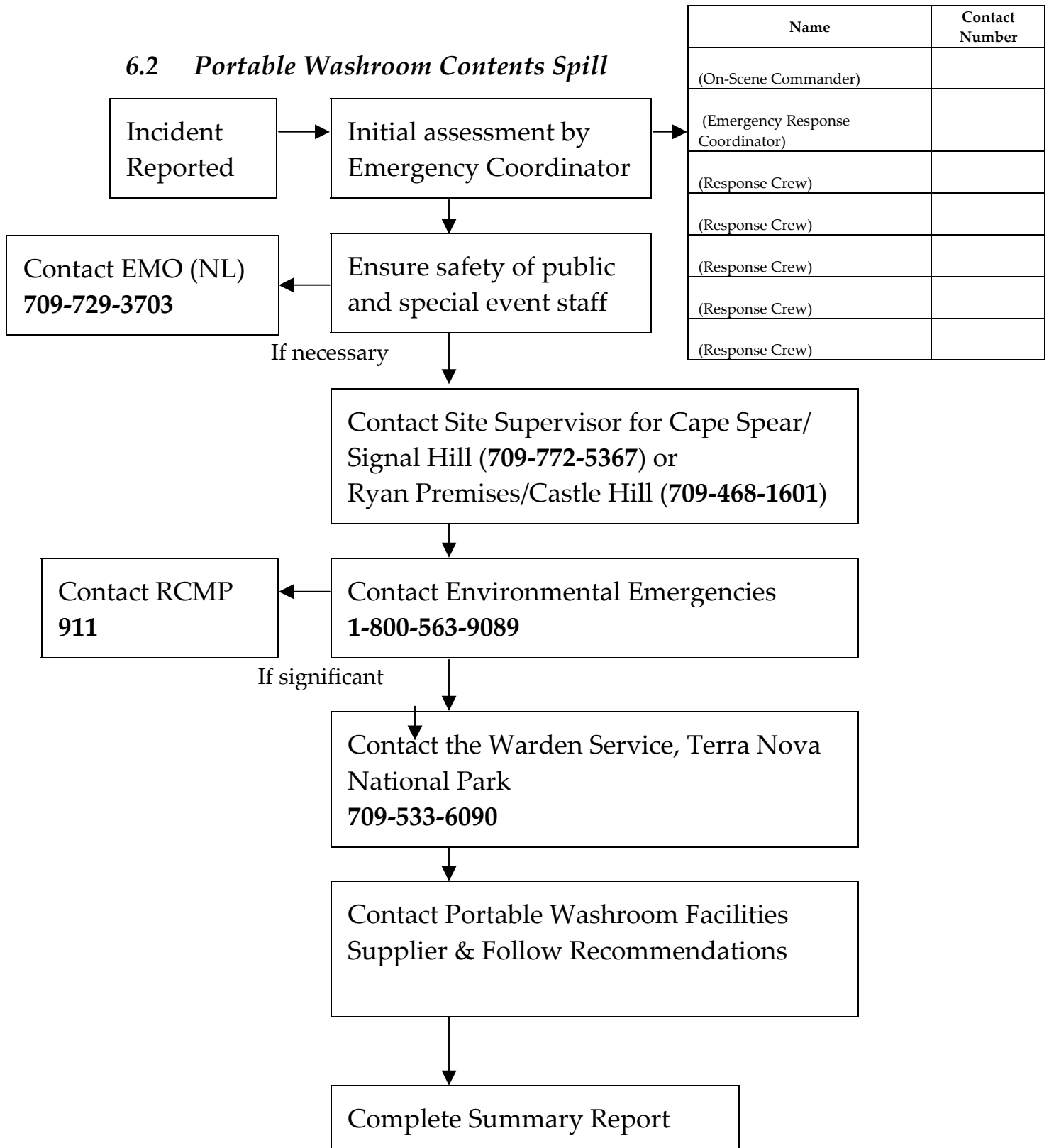
Submit report to the appropriate site supervisor (Scott Andrews for Cape Spear and Signal Hill National Historic Sites and Ella Heneghan for Castle Hill and Ryan Premises National Historic Sites).

6 Flowchart of Emergency Actions

6.1 Fuel/Oil Spill



6.2 Portable Washroom Contents Spill



6.3 *Other*