

Johnstone Strait Recreation Project

Status Report

March 2008

*A cooperative project focused
on improving the management of
sea kayaking and camping in
Johnstone Strait*

Acronyms Used

BRIM Backcountry Recreation Inventory Monitoring
DFO Department of Fisheries and Oceans (Canada)
ILMB Integrated Land Management Bureau, MAL
LAC Limits of Acceptable Change
MAL Ministry of Agriculture and Lands (BC)
MOE Ministry of Environment (BC)
MOFR Ministry of Forests and Range (BC)
MTSA Ministry of Tourism, Sports and Arts (BC)

Contents

Acknowledgements	3
1. Introduction	5
Overview of LAC Process	6
Purpose of Report.....	6
Methods.....	7
Workshops	7
Targeted Survey	8
Sea Kayaking Survey	8
Reports	9
2. Key Findings	9
1. Identify Issues and Concerns.....	9
2. Define Opportunity Classes.....	10
3. Identify Indicators of Resource and Social Conditions.....	10
4. Identify Sources of Inventory Information.....	12
5. Specify Standards	12
6. Identify Opportunity Classes.....	13
7. Identify Management Actions	15
8. Address Opportunity Classes	17
9. Implementation and Monitoring.....	18
3. Project Status	22
Appendices	23
Appendix 1: LAC Indicators, Standards & Inventory Sources	23
Appendix 2: LAC Indicators and Management Actions	30
Appendix 3: BRIM Recreation Impact Rating System	37
Appendix 4: Group size standards of the Sea Kayak Guides Alliance of BC.....	39
Appendix 5: Regulatory Tools for Managing Campsites and Recreation Use on Crown lands	40
Appendix 6: Background Material related to Land Use Plans, Policies and Guidelines (separate document).....	42

Johnstone Strait Recreation Project website

<http://ilmbwww.gov.bc.ca/rcsd/lac/index.html>

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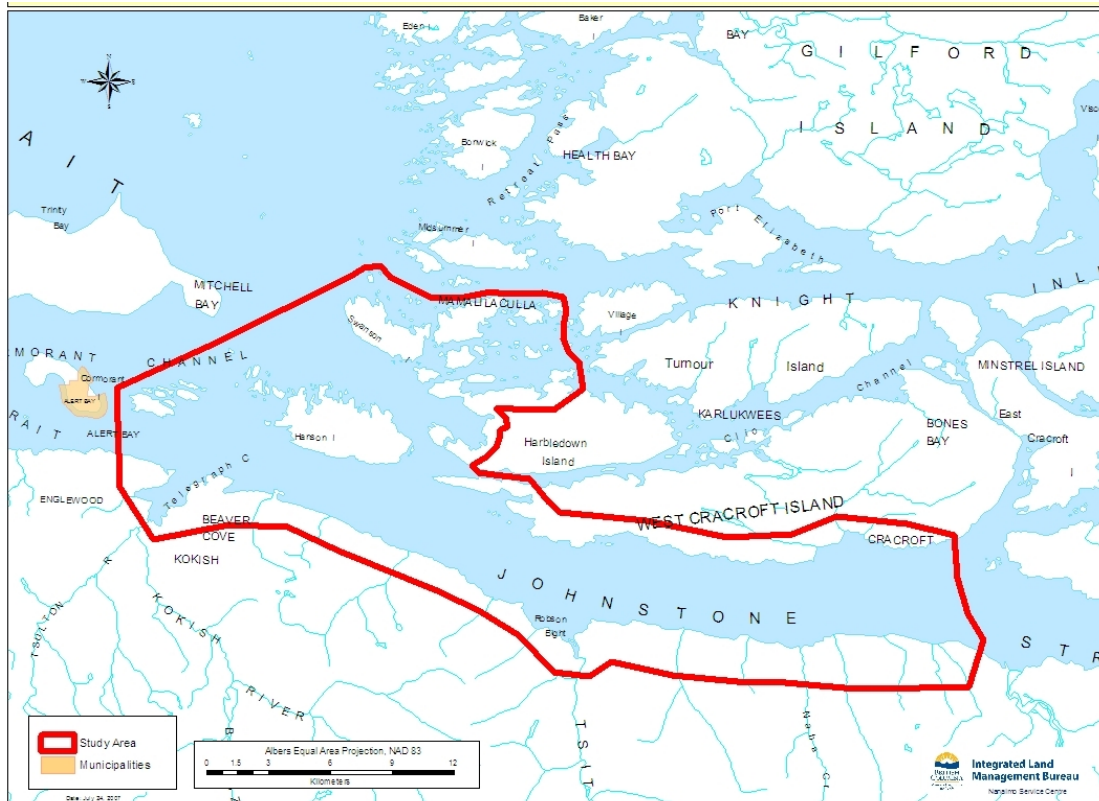
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1. Introduction

The Johnstone Strait Recreation Project is a cooperative initiative focused on improving the management of sea kayaking and camping in Johnstone Strait, through pilot testing of the Limits of Acceptable Change (LAC) recreation planning process. Johnstone Strait is a marine environment off the northeast coast of Vancouver Island and one of the most popular kayaking destinations in North America, largely because of the opportunity to observe Orca whales in a natural setting.

Figure 1: Johnstone Strait Recreation Project - study area boundary



The objectives of the project are:

1. To develop management recommendations aimed at fostering the sustainability of environmental and social conditions desired for sea kayaking and associated whale watching and camping activities in the Johnstone Strait area.
2. To test the utility of the Limits of Acceptable Change process in an area that is highly valued for its tourism and recreation opportunities, and where there is relatively little guidance for management of these activities in existing plans;
3. To provide an assessment of the utility of using this process to create management strategies for recreation and tourism in other areas of the province.

The Johnstone Strait recreation project has been led by ILMB in cooperation with MTSA with support from a Working Group representing a diversity of government agencies, First Nations, and public and commercial recreation stakeholders. Government agencies will consider the findings of this project in ongoing management of Johnstone Strait.

This project is one of two endeavours to pilot test the LAC process for recreation management; the other project is located in the mountain environment of Windy Creek area, near Golden, BC, with guidance from existing land use plans and the Golden Backcountry Recreation Access Plan. For more information about the pilot projects, see <http://ilmbwww.gov.bc.ca/rcsd/lac/index.html>.

For more information about the Johnstone Strait recreation project, see <http://ilmbwww.gov.bc.ca/rcsd/lac/johnstonestraitpp.html>.

Regulatory tools for managing recreation in Johnstone Strait

For detailed discussion of the regulatory tools used in managing recreation in Johnstone Strait see the following Appendices: Appendix 5: Regulatory Tools for Managing Campsites and Recreation Use on Crown lands; and Appendix 6: Background Material related to Land Use Plans, Policies and Guidelines (separate document).

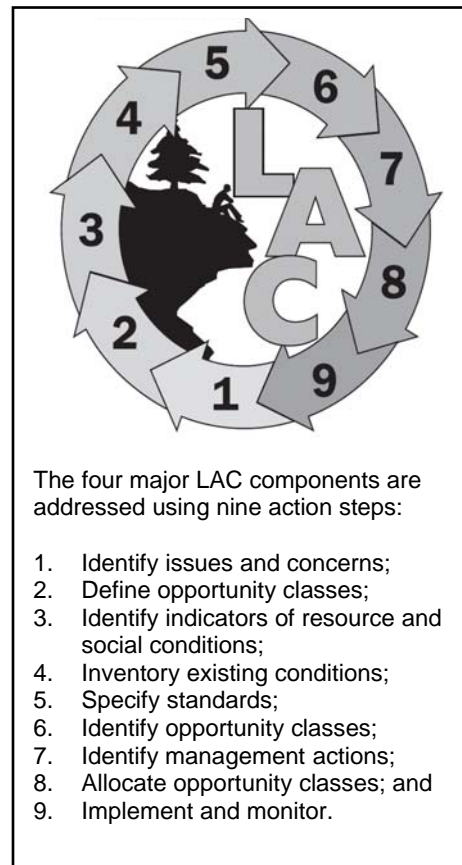
Overview of LAC Process

The LAC process has been successfully applied in a variety of jurisdictions around the world as a means to address recreation user conflicts and protect environmental values.

The LAC approach recognizes that recreational activities will inevitably incur some level of impact or change. The LAC process focuses on identifying acceptable levels of change and the management actions required should unacceptable change occur. Instead of asking, “How many visitors are too many?” (i.e., recreational carrying capacity), LAC focuses on “What conditions are acceptable and what actions are needed to help maintain or restore acceptable conditions?”

The LAC process consists of four major components:

1. Specifying acceptable and achievable resource and social conditions, defined by a series of measurable parameters
2. Analyzing of the relationships between existing conditions and those judged acceptable,
3. Identifying management actions necessary to achieve these conditions, and
4. A program of monitoring and evaluating management effectiveness.



Purpose of Report

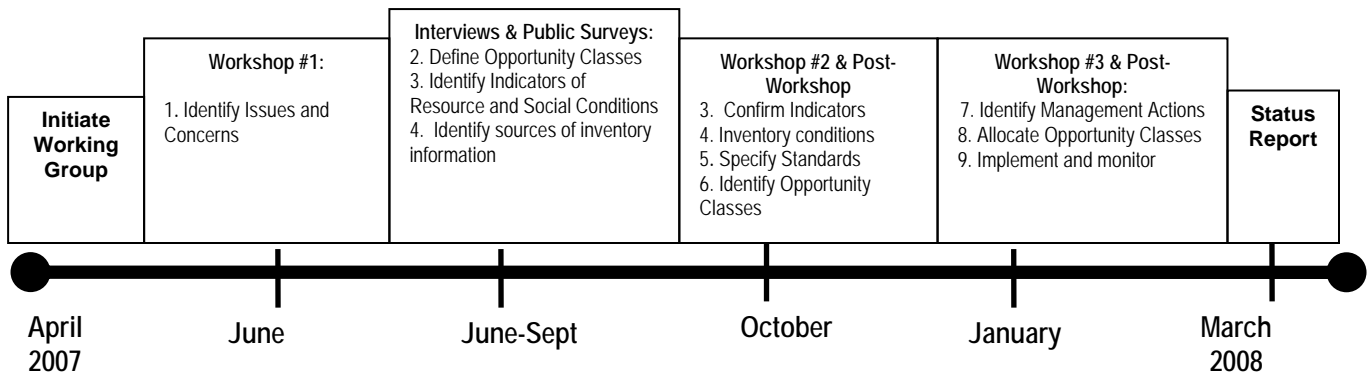
This report describes the methods used to undertake the Johnstone Strait recreation project and presents the findings of the LAC pilot. The project is focused on improving the management of sea kayaking and camping in Johnstone Strait, by piloting an approach known as the Limits of Acceptable Change (LAC) process. This report is a ‘Status Report’ (rather than a ‘final report’) for a variety of reasons including:

- Not all the steps in the LAC process were completed (e.g. step 8 re: allocation of opportunity classes);
- There has been no formal public review and comment process; and
- Although the Status Report has greatly benefited from the feedback provided by First Nations participants, there needs to be government-to-government consultations with First Nations before a plan can be completed.

As a consequence, this Status Report represents an initial important phase in the project. If the project proceeds, a subsequent phase can move towards the development of a final plan.

Methods

The figure below identifies the steps involved in the LAC process (as summarized in this report) as well as the timeframe for the pilot project.



Workshops

Three stakeholder workshops were undertaken for this project as shown below. Following each workshop, ILMB staff and the consulting team developed a Workshop Summary, reviewed by working group members and workshop attendees (copies available at <http://ilmbwww.gov.bc.ca/rcsd/lac/johnstonestraitpp.html>).

Table 1: Johnstone Strait Workshop Dates and Objectives

Workshop	Objectives
#1 June 5, 2007 Port McNeil	<ul style="list-style-type: none"> • Introduce purpose and objectives for the project • Learn from each other about their respective interests, values, issues, and concerns related to recreational use in the Johnstone Strait Pilot area (Step 1 in LAC process) • Introduce LAC methodology aimed at improving recreational management of Crown Land in Johnstone Strait Pilot area.

<p>#2</p> <p>Oct. 30, 2007</p> <p>Campbell River</p>	<ul style="list-style-type: none"> • Define opportunity classes (Step 2), identify indicators (Step 3), and identify sources of inventory information (Step 4) • Specify standards (that define limits of acceptable change) for resource and social conditions using the indicators (Step 5) • Identify proposed set of opportunity classes (Step 6)
<p>#3</p> <p>Jan 23, 2008</p> <p>Courtenay</p>	<ul style="list-style-type: none"> • Identify alternative management actions (Step 7) should standards be breached (i.e. if resource and social conditions become unacceptable) • Address allocation of opportunity classes throughout the pilot area (Step 8); and • Provide recommendations for implementation and monitoring (Step 9).

Targeted Survey

In addition to the first workshop and a meeting with First Nations on July 18, 2007, a follow-up survey was distributed to the invitees to gather additional feedback, and in some cases phone interviews were conducted at the request of the interviewee. Twenty-eight invitations were extended to complete the survey with thirteen respondents. The survey was available between June 22 and July 31st. A copy of the survey is available.

The survey was designed to seek feedback on:

- a list of potential indicators that relate to each of the issue themes;
- information that could be used to inventory current conditions in the area using the indicators; and
- suggested opportunity classes for land-based camping and ocean sea kayaking.

The feedback received proved very helpful in refining the issues and developing a proposed set of LAC Indicators. A consolidation of feedback received (unattributed) is also available.

Sea Kayaking Survey

An associated survey of guided and non-guided sea kayakers was conducted in support of the Johnstone Strait recreation project, in collaboration with the School of Resource and Environmental Management, Simon Fraser University.

The sea kayaking survey was designed to support and compliment the Johnstone Strait recreation project, primarily by providing techniques for identifying the numbers and strength of preferences of existing and potential



Have you paddled Johnstone Strait sometime in the past 5 years?
November 15, 2007

The School of Resource and Environmental Management of Simon Fraser University is currently looking for kayakers who paddled Johnstone Strait sometime in the past five years. If you have, please visit their web-site at www.kayaking.rem.sfu.ca for their on-line survey. By supporting this research your experience and your opinions will be considered in the ongoing, community based, Johnstone Strait Recreation project, which focuses on improving the management of sea kayaking and camping in Johnstone Strait. Both the research and the management project are sponsored by the BC Ministry of Agriculture and Lands, the Ministry of Tourism, Sports and the Arts and the Integrated Land Management Bureau.

online sea kayaking survey

tourism and recreation users. There were two components of the public survey: 1) intercept surveys conducted with kayakers in the field, and 2) an online web survey posted at <http://www.kayaking.rem.sfu.ca/>.¹

Reports

A series of background documents and reports have been prepared during the course of this pilot project and several are posted on the project website at <http://ilmbwww.gov.bc.ca/rcsd/lac/johnstonestraitpp.html>. Key reports include:

Progress Report (September 2007) –highlights key feedback from the first Johnstone Strait project workshop and subsequent survey. Proposed indicators, and opportunity classes were included in the report to inform participants at the second workshop.

Status Report – this document.

Status Report Appendix 6: Johnstone Strait Recreation Project Background Material related to Land Use Plans, Policies and Guidelines – provides background material for the Johnstone Strait pilot project. The report includes a description of existing land use plans, including the Vancouver Island Land Use Plan and North Island Straits Coastal Plan, and applicable policies and guidelines, including MTSA policy regarding public and commercial recreation and DFO Whale Watching Guidelines for BC.

2. Key Findings

Pilot project findings are organized in this section according to the nine steps of the LAC planning process.

1. Identify Issues and Concerns

This section presents the key issues identified for the Johnstone Strait LAC pilot. Project participants noted that the main attraction to the Johnstone Strait area for sea kayakers is the excellent opportunity to see whales² in a wilderness-like setting. Maintaining the whale population and the natural setting is key to the vitality of the area.

The main issue themes identified are:

- Campsite availability – for public and commercial use
- Campsite condition – sanitation, garbage, facilities
- Impacts on whales – implementing appropriate guidelines
- Respect for First Nations values and interests
- Safety (boating, food caching, search and rescue)
- Economic viability for operators and local communities
- Communications (operators, recreationists, other users)
- Public information /Education (with links to marketing)

¹ For further information on the public survey contact: Wolfgang Haider, Associate Professor, School of Resource and Environmental Management, Simon Fraser University, whaider@sfu.ca

² Primarily Orca whales, but also humpback whales and other whale species

- Access – infrastructure e.g. launch sites

2. Define Opportunity Classes

Opportunity classes are intended to describe the diversity of potential conditions that are acceptable in the Johnstone Strait area. Opportunity classes provide a framework to help create a “shared vision” for future conditions by:

- Describing the mix of desired settings in a specific area for the future
- Delineating areas where different resources, and social and managerial conditions will be maintained

Participants in the Johnstone Strait recreation project collaborated to describe a range of opportunity classes. During step 2 of the planning process, the opportunity classes were conceptually described (mapping is considered later in the process, in step 8).

The preferred set of opportunity classes for Johnstone Strait reflects a distinction between:

- A) Camping opportunities along the foreshore strip, and
- B) Recreation opportunities on the open water, where sea kayaking occurs.

In subsequent steps in the LAC process, the preferred set of opportunity classes is finalized to best reflect the local conditions and requirements. Section 6 of this report provides the recommended set of opportunity classes; however, the pilot project did not allow sufficient time to finalize and map opportunity classes.

3. Identify Indicators of Resource and Social Conditions

The main purpose of indicators in the context of this LAC project, given the sea kayaking and camping scope, is to develop standards (limits of acceptable change) that can be monitored. If a standard is breached, then pre-determined management actions would be taken to once again achieve acceptable conditions for sea kayaking and camping.

Project participants developed 16 core LAC indicators to address the issues identified

Project participants developed the following set of 16 core LAC indicators to address the issues raised in step 1. This list is based on extensive input and discussion, including the targeted surveys, in balance with pragmatic considerations regarding availability of data, having a manageable number of indicators, and practicality of monitoring.

There may be additional ‘contextual’ indicators of interest to monitor outside the LAC framework in order to address other or broader management issues. The results of the sea kayak survey help provide insight regarding key contextual indicators that could augment management-oriented LAC indicators. Some of the ‘optional’ indicators noted below may serve as important contextual indicators.

Table 2: LAC Indicators

Core indicators (16)
Optional indicators (shaded boxes) (8)

Issue	LAC Indicator
A. Whales & potential impacts of sea kayakers ³	Reported incidents of sea kayakers failing to comply with “Be Whale Wise” guidelines ⁴
	# of days whales not observed in LAC project (core) area
B. Condition of camp sites & day use sites	% of sites with significant to serious impacts by Opportunity Class (using “BRIM Plus” ⁵)
	% of campsites below waste management standards established by Opportunity Class
C. Campsite availability	% of parties making unsuccessful attempts to find a campsite suitable to accommodate their group size during June-September
D. Recreation Experience	% of kayakers indicating dissatisfaction with experience in Johnstone Strait and reason(s) why
	% of kayakers reporting conflicts with other users, including other sea kayakers
	% of kayakers in large organized groups (> 14) ⁶
E. Respect for First Nations Interests and values	% of operators with formal agreements with First Nations
	# of incidents reported where cultural heritage artefacts are disturbed or removed
	% of guides who undertake training in First Nations culture and history
	% of kayakers participating in First Nations interpretive programs
F. Safety	# of search and rescues
	# of cougar or bear incidents at campsites (damage to tents, etc)

³ The intent is not to single out kayakers as the primary source of impacts on whales; this indicator is tailored to the requirements of the LAC project which is focused on kayaking and camping in Johnstone Strait.

⁴ The BWW Guidelines are well accepted and have been adopted by DFO, BC PARKS, NOAA, the Washington Department of Fish and Wildlife, and the US Coast Guard. See www.straitwatch.org/downloads/Be_Whale_Wise_brochure.pdf.

⁵ BRIM is “BC Parks’ Backcountry Recreation Impact Monitoring” process, and would be adapted slightly as necessary (see Appendix 1).

⁶ In accordance with group size standards of the Sea Kayak Guides Alliance of BC; see Appendix 2.

Issue	LAC Indicator
	# of potentially hazardous campfires (e.g. unattended; too large; under dry canopy)
G. Viability of commercial operators, local communities, and First Nations	# of local residents, including First Nations, employed in sea kayaking operations
	# and % of guides that are certified
	# of kayakers and % repeat kayakers
	# clients and total revenues of commercial sea kayaking operators
	# of operators by base location
H. Effective Communication to review project implementation	# of, and attendance at, formal meetings involving stakeholders (e.g. commercial operators and public kayakers), First Nations, and other government agencies (municipal, provincial, federal)
I. Public information / Education of users	% of users provided with accurate comprehensive information package prior to trip (<i>including information on campsites, low impact practices, First Nations, and 'Be Whale Wise' Guidelines</i>)
J. Access	#, location, and capacity of road accessible launch access sites
	#, location, and capacity of 'Water Taxis' (including boat kayak transportation)

4. Identify Sources of Inventory Information

Appendix 1 provides a list of potential sources for inventory data; and also contains a very limited amount of actual data. While potential sources of data were identified, the pilot project did not involve a comprehensive inventory. If the recommendations from the pilot are adopted, this will be a key post-pilot implementation step related to those indicators that should be monitored to help verify standards and/or to determine if standards are breached.

5. Specify Standards

The standards outlined in this section apply to the entire Johnstone Strait pilot area unless noted otherwise (i.e., those applying only to specific opportunity classes). The standards were developed after considering the feedback received at Workshop #2 and revised at the final Workshop #3. The proposed standards should be viewed as a 'first approximation' where their use will lead to improved refinements.

Standards establish the "limits of acceptable" change using the indicators designed to specifically address key issues. Standards are trigger mechanisms that provide a means of evaluating where and what management actions are needed. Standards are not optimal desired conditions, but

represent the ‘outer bounds’ of what is acceptable before corrective management actions are required.

In most (but not all) cases, the assumption in developing a standard is that current conditions are likely acceptable but should not be allowed to deteriorate significantly. Where feedback suggests otherwise, the standard could vary, for example, that current conditions are already unacceptable, and standards need to be ‘higher’ thereby triggering need for immediate management actions. The LAC standards for the Johnstone Strait pilot are presented in Appendix 1.

6. Identify Opportunity Classes

This section provides the preferred set of LAC Opportunity Classes for Johnstone Strait.

Over the past two decades, the original LAC process has been improved and adapted in many jurisdictions throughout the world.⁷ Accordingly, the LAC process implemented in this pilot project has been slightly adapted to better match existing land use planning and management processes in British Columbia. In particular, the working group placed greater emphasis on collaboratively developing a preferred allocation of Opportunity Classes, rather than on developing alternative, potentially competing scenarios.

Participants in the Johnstone Strait recreation project developed Opportunity Classes using an iterative approach whereby the potential classes were tentatively described in Step 2 and further refined based on stakeholder input during the targeted survey and Workshop #2. The final proposed set of Opportunity Classes for the Johnstone Strait pilot (Step 6) is described below:

A) *Camping Opportunity Classes:*

Common to all camping opportunity classes

- Assume no drinking water available at any campsite; must pack in drinking water
- ‘Pack In and Pack Out’ all garbage
- Do not remove anything natural from campground or the Johnstone Strait area (i.e. take only pictures, leave only footprints)

1. C-1a: No camping class:

- Not appropriate for camping either for environmental and cultural heritage reasons or by regulation (e.g., Parks under 2,000 ha – camping allowed only at designated sites)
- Not environmentally suitable (e.g. too close to sensitive whale use, sensitive vegetation)
- Not considered suitable by First Nations (e.g. cultural heritage or traditional use values)
- Note: there may be existing campsites that need to be removed

C-1b: Camping extremely difficult

- Not physically suited to most sea kayakers due to terrain difficulties such as steep bedrock to shoreline)
- Conveys the lack of camping opportunities for most users

⁷ For example, see Cole, David N.; McCool, Stephen F. 1998. The Limits of Acceptable Change Process: Modifications and Clarifications. In: McCool, Stephen F.; Cole, David N., comps. 1998. *Proceedings: Limits of Acceptable Change and related planning processes: progress and future directions*; 1997 May 20-22; Missoula, MT. Gen. Tech. Rep. INT-GTR-371. Ogden, UT: USDA, Forest Service, Rocky Mountain Research Station. Available online at <http://leopold.wilderness.net/confwork/limits.htm>.

2. C-2: Natural/ pristine camping class

- Based on “leave no trace” approach
- No visible campsites, but camping is acceptable
- Party size – no more than 4 people
- Waste management: No toilets; pack out human waste⁸
- Likely beach camping
- Very seldom patrolled

3. C-3: Rustic camping class

- Small campsites available for one small party (e.g. 2-4 kayakers)
- Waste management: No or rustic (to be defined) toilets appropriate; be prepared to pack out human waste should toilets not be provided
- Campsites may or may not be present (i.e. there may be room for additional campsites)
- Negligible to Low impact campsite conditions expected (see Appendix 1)
- Seldom patrolled

4. C-4: Moderately developed campsite class

- Medium to large campsites available for one or two small groups (2-4 kayakers each) or one large group (4-10 kayakers)
- Waste management: Toilets should be available; be prepared to pack out human waste should toilets not be provided
- Campsites may or not be present (i.e. there may be room to expand existing rustic campsite or develop a new campsite)
- Low to Moderate impact campsite conditions expected (see Appendix 1)
- Seasonal campsite warden may patrol several campsites in this zone

5. C-5 Intensively developed campsite class

- (e.g. on launch sites at key access points)
- Large developed campsites possibly with tent pads
- For public use, associated with road access
- May also be associated with commercial operator’s base camp
- Waste management: Toilets available
- Moderate impact campsite conditions expected (see Appendix 1)
- May have running water
- Seasonal campsite warden and/or commercial operator likely present

B) Sea Kayaking Opportunity Classes on open water

Pilot project participants recommend that sea kayaking opportunity classes be developed for open water in Johnstone Strait, to reflect the desired range of recreation opportunities. These classes will require further refinement during subsequent phases of recreation planning for the area. The first opportunity class would include those areas where entry by sea kayaks to some areas is discouraged or prohibited for a variety of reasons, including sensitive whale habitat (e.g. Robson Bight). The second opportunity class would include those areas where there is a lower expectation of frequent interactions with other vessels, including other kayakers and motorized

⁸ Further research and collaboration can help identify a suitable approach for Johnstone Strait. Recent research is available online at <http://www.nols.edu/resources/research/humanwaste.shtml>.

craft. The third class would include areas where there is a high expectation of frequent to very frequent interactions with other vessels, including whale watching boats and cruise ships. A fourth class might involve the identification of marine sea kayak trail routes.

7. Identify Management Actions

One feature of LAC is the collaborative nature of the process; with First Nations, stakeholders and agency staff all working together to develop a range of possible management actions if standards are breached. There is a continuum of management actions for each standard, usually beginning with education and potentially moving up the spectrum towards regulatory action, if required. If conditions remain at an unacceptable level relative to a standard, the response is to move further on the continuum towards a stricter management action. LAC provides a framework for assessing whether management actions are effective (i.e. in response to the question “are standards being achieved if specified actions taken?”)

Management actions are typically undertaken when a standard has been exceeded. Participants in the Johnstone Strait recreation project have come to the conclusion that certain management actions, notably communication and education, are considered key to improving recreation management in the area and should be undertaken immediately. Therefore, the recommendation is that the management actions proposed in the table below be undertaken proactively, without waiting for any standard to be breached (while acknowledging that some are likely already exceeded – notably incidents of cultural heritage artefacts being disturbed or removed, and sea kayakers failing to comply with “Be Whale Wise” guidelines).

Appendix 2 provides additional management actions associated with the LAC standards developed during the Johnstone Strait pilot process. The management actions in Appendix 2 are a “first approximation” that should be revised and improved based on experience.

Proactive Management Actions

1. Comprehensive Information Package and Website:

Effective, proactive communication is considered essential to maintaining and achieving acceptable resource and social conditions related to kayaking and camping in Johnstone Strait. Effective education may reduce the need for further management actions.

Specific management actions include:

- Establish an Implementation Team to organize meetings and develop accurate information packages
- Formally recognize one individual or organization to act as lead in coordinating development of accurate information packages
- Prepare a Comprehensive Information Package – one of the key recommendations is to develop a comprehensive website as the foundation for this package. The website should be designed to:
 - act as a portal for those seeking information on sea kayaking and camping in Johnstone Strait, with links to commercial and tourism operators in the area, relevant guidelines (i.e., ‘Be Whale Wise’), paddler kayak clubs, First Nations information, government agencies, including Tourism BC, tides, campsite information – i.e. EVERYTHING
 - be easy to ‘google’ and find on the internet

<ul style="list-style-type: none"> ○ be a collaborative project between government, First Nations, public groups, and commercial operators ○ include awareness about <i>Heritage Conservation Act</i> and need to protect cultural heritage artefacts (as defined in the Act) <ul style="list-style-type: none"> • Provide an up-to-date, accurate map at launch sites • Provide hard copies of key information for distribution at kayak rental establishments, access points, etc (perhaps associated with map) • Offer relevant educational programs, on-site and off-site (i.e., best practices, including “no-trace camping” and “pack-in, pack-out”) • Develop a video to be made available on the internet or during pre-trip orientation sessions for kayakers
<p>2. Respect for First Nations:</p> <p>Establish formal communication between operators and First Nations:</p> <ul style="list-style-type: none"> • Commercial operators are expected to sign a protocol agreement with the appropriate First Nation by or before 2009; the protocol agreement indicates how the parties will work together to develop a formal agreement • A formal agreement is considered mandatory for commercial operators by 2010 (see Appendix 2) • Front Country BC within ILMB can assist commercial operators determining what First Nations to contact
<p>3. Stakeholder involvement:</p> <p>Undertake formal meetings on a regular basis involving stakeholders (e.g. commercial operators and public kayakers) , First Nations, other government agencies (municipal, provincial, federal)</p> <p>Assign one individual or organization to act as coordinator of meetings</p> <ul style="list-style-type: none"> • Establish a project Implementation Team to organize meetings and keep all parties informed
<p>4. Commercial operators:</p> <ul style="list-style-type: none"> • Commercial operators to follow established industry standards and certification requirements on provincial crown land • Commercial operators to contact First Nations to establish protocol agreements within one year and formal agreements within two years • Potential to explore viability of sustainable resource management certification systems such as ISO for operators
<p>5. Campgrounds:</p> <ul style="list-style-type: none"> • Additional campsites and day use sites may need to be identified, designated, and constructed, in keeping with strategic direction and guidance provided by existing land use plans, including an approved version of the Johnston Strait LAC plan. • Develop a process for reporting on campsite conditions (consider feedback provisions on website)

- Operator reports
- Public reports
- Ranger reports (may need to hire or contract staff to assist with this management action; also potential role for First Nations)

6. Monitoring Recreation Use:

- Develop a Survey Program (to guide development and implementation of visitor use surveys and information sharing with stakeholders)

8. Address Opportunity Classes

The allocation of Opportunity Classes reflects the evaluation of managers, stakeholders, and concerned citizens about the best mix of recreation opportunities and settings for the project area. There is no simple formula for making such decisions.

Questions that can help to guide this assessment include:

1. Are any user groups adversely affected?
2. What values are promoted and what values are diminished?
3. What is the feasibility of managing the areas as prescribed, given constraints of personnel, budgets, managerial skills, etc.?

In the analysis of potential allocations, a variety of costs need to be considered. These include: the financial costs (personnel, materials); information costs (costs for acquiring information needed to implement actions); opportunity costs for not carrying out a proposed action; and other resource and social costs. These latter costs are difficult to quantify, particularly in monetary terms, but they are important to consider.

In the process of addressing camping Opportunity Classes, the Johnstone Strait project had the benefit of the “North Island Straits Campsite Assessment” which provides a comprehensive campsite inventory for the project area.⁹ Project participants were requested to review the campsite spreadsheet (along with an associated map and campsite photos) and to provide feedback regarding the sites that they were familiar with, including the following:

- An indication of the appropriate campground opportunity class for each campsite (class 1 to 5) using the class definitions (see Step 6), with supporting rationale where possible; and,
- An estimate of campsite condition using the BRIM rating system (see Appendix 3).

Feedback received from participants on the potential allocation of opportunity classes in Johnstone Strait was very limited, largely due to the time limitations of the pilot project.

The allocation process is intended to map the distribution of each opportunity class. Given the compressed timeframe of the LAC pilot project, this step will need to be addressed further during subsequent implementation of the results, if and when that occurs.

⁹ See www.rdmw.bc.ca/pdf/nistraits/Marine%20Campsite%20Assessment.pdf

This important outstanding step in the LAC process is identified under “Implementation and Monitoring” below as a key implementation task. The most effective way to address the allocation of Opportunity Classes will likely be a workshop with participants familiar with the area aided by the existing inventory information.

9. Implementation and Monitoring

Step 9 in the LAC process features both implementation and monitoring components. The first involves overall implementation of this *Johnstone Strait Recreation Project Status Report* (or “Status Report”). The second component includes an evaluation of the indicators to determine if the standards are being exceeded and management actions are needed, and also the effectiveness of management actions to determine what is and what isn’t working.

The overall aim of Step 9 is:

- Identify implementation actions needed to move the project forward;
- to evaluate (via monitoring) whether the management actions are needed, and if so, whether they are effective in achieving acceptable conditions, and
- to develop recommendations for improvements in indicators, standards and management actions to foster continuous improvement.

Implementation

The LAC pilot project is completed with this Status Report, however an additional completion phase of the project will be needed to move to a final report. The actions noted below are needed should a subsequent project completion phase be approved such as completing the opportunity class allocations. The Adventure Tourism Joint Steering Committee and government will need to consider the findings contained in this report before making a decision on whether to proceed to a completion phase. If the completion phase proceeds, there will need to be a period of public review and comment, and government-to-government consultations between the province and First Nations, before a final report is approved..

An additional completion phase will be needed to move to a final report

The following table sets out the recommended course of action for approving and implementing this Status Report should a completion phase to the project proceed. Many of these actions reflect the proposed proactive management actions previously identified in Section 7. If these recommendations are followed, overall success will, of course, require the dedication of sufficient resources by responsible agencies and organizations.

The implementation actions are grouped as follows:

1. those actions needed to determine if a completion phase should proceed;
2. if a completion phase proceeds, those actions needed to complete the project (i.e. develop a final report); and
3. once the project is completed, those actions needed to implement the final report.

Table 3: Implementation actions

Actions	Target Date	Comments
1. Actions needed to determine if a completion phase should proceed		
Status Report goes to ILMB, MTSA and Inter-Agency Management Committee (IAMC) for approval decision, and to Adventure Tourism Joint Steering Committee regarding utility of the LAC pilot	2008	The Adventure Tourism Joint Steering Committee sponsored the LAC projects including both pilots and are responsible for assessing lessons learned from the pilots. IAMC represents all of the key provincial government resource agencies with responsibilities in the Johnstone Strait.
Government decision on whether the Project should continue to a completion phase		This may involve government-to-government discussions with First Nations as well
2. If completion phase proceeds, following actions needed to complete project		
Form Implementation Team	2008	Implementation Team to be chaired by ILMB including MTSA, BC Parks, First Nations, commercial operators and public recreationists (similar to Working Group)
Complete allocation of Opportunity Classes	2008	Implementation Team
Complete assessment of campsite suitability for commercial and/ or public recreation and allocation (including campsite designation tool)	2008	Implementation Team to assess and provide recommended allocation
Prepare draft Final Report	2008	Implementation Team
Public review and comment Government-to-Government Consultations	2008	Implementation Team
Final report for government approval	2008	Report would go to IAMC
3. Actions needed to implement final report, if approved		
Incorporate implementation actions and monitoring plan in respective business plans	Annually	Identify resources via annual budget requests and commitments (agencies, First Nations, commercial operators, and organizations)
Undertake proactive management actions focused on communication/ education	2008	Implementation Team to oversee development of Comprehensive Information Package on dedicated website
Develop Communications Strategy, including Comprehensive Information Package (<i>e.g., information on campsites, low impact practices, First Nations, and 'Be Whale Wise' Guidelines</i>)	2008	Implementation Team
Develop Survey Program (to guide development and implementation of visitor use surveys and information sharing with stakeholders)	2008	Implementation Team
Implement monitoring plan and revise roles and responsibilities as needed (<i>see following section on monitoring</i>)	Annually	Implementation Team oversees monitoring effort and prepares an annual monitoring report

Review the Final Report, including indicators, standards, and monitoring plan; and revise as needed	2012 (every 5 years)	Implementation Team to review
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Monitoring

The monitoring component of LAC focuses on the indicators of resource and social conditions. Using the current condition of indicators, any standards that have been exceeded are evaluated. Corrective management actions are then evaluated to see if acceptable conditions are being restored; if not, appropriate actions are implemented tied to a schedule for completion.

Monitoring for the Johnstone Strait project will be based on the following objectives:

- to complete the inventory process for the project area;
- to identify changes in resource and social conditions;
- to identify where standards have been exceeded and consequently where management actions are required; and,
- to assess the effectiveness of management actions in maintaining or restoring conditions to acceptable levels.

The following table provides a proposed list of core indicators developed for the Johnstone Strait Recreation Project, along with the suggested frequency of monitoring. The Implementation Team would oversee delivery of the monitoring plan and particular organizations are identified as taking a lead role for a specific indicator as noted below. The province has assigned responsibilities for recreation management on Crown land to the following agencies: the Ministry of Tourism, Sports and the Arts, responsible for public recreation; Integrated Land Management Bureau, responsible for commercial recreation (now referred to as Guided Adventure Tourism); and BC Parks, responsible for recreation within parks and protected areas.

Table 4: Monitoring Plan: Core indicators with associated monitoring frequency

Issue	Indicator	Monitoring Frequency	Lead Role
A. Whales & potential impacts of sea kayakers	Reported incidents of sea kayakers failing to comply with "Be Whale Wise" guidelines"	Annually	Straitwatch and DFO
B. Condition of campsites & day use sites	% of sites with significant to serious impacts by Opportunity Class (using "BRIM Plus")	Annually	MTSA, ILMB, and BC Parks
C. Campsite availability	% of parties making unsuccessful attempts to find a campsite suitable to accommodate their group size during June-September	Annually	MTSA, ILMB, and BC Parks
D. Recreation Experience	% of kayakers indicating dissatisfaction with experience in Johnstone Strait and reason(s) why	Annually	MTSA, ILMB, and BC Parks
	% of kayakers reporting conflicts with other users, including other sea kayakers	Monthly June-Sept	MTSA, ILMB, and BC Parks

E. Respect for First Nations Interests and values	% of operators with formal agreements with First Nations	Annually	First Nations and commercial operators
	% of guides who undertake training in First Nations culture and history	Annually	First Nations and commercial operators
	# of incidents reported where cultural heritage artefacts are disturbed or removed	On Occurrence	First Nations and MTSA
F. Safety	# of search and rescues	Annually	RCMP
	# of cougar or bear incidents at campsites (damage to tents, etc)	Annually	MOE
G. Viability of commercial operators, local communities, and First Nations	# of local residents, including First Nations, employed in sea kayaking operations	Annually	Commercial operators and ILMB
	# and % of guides that are skill certified	Annually	Commercial operators
H. Effective Communication to review project implementation	# of, and attendance at, formal meetings involving stakeholders, First Nations, and other government agencies (municipal, provincial, federal), as well as commercial operators and public kayakers	Annually	ILMB
I. Public information / Education of users	% of users provided with accurate comprehensive information package prior to trip (<i>including information on campsites, low impact practices, First Nations, and 'Be Whale Wise' Guidelines</i>)	Annually	ILMB, MTSA, and BC Parks
J. Access	#, location, and capacity of road accessible launch access sites	Annually	ILMB and MTSA
	#, location, and capacity of 'Water Taxis' (including boat kayak transportation)	Annually	Commercial operators

LAC standards are chosen with the best available information, however, they may not prove to be the best for every given situation. Managers must retain the flexibility to modify standards based on monitoring. At the same time, managers should be advised to consider the effects of revised standards on user groups, values, and management constraints.

Situations that call for more frequent monitoring include:

- areas where standards are close to being violated;
- situations where change is likely to be rapid;
- areas where data is poor or nonexistent;
- situations where the ability to predict the effects of management actions is low; and,

- areas where the conditions have suddenly changed (for instance, where a new access point is provided).

3. Project Status

The project managers greatly appreciate the willingness of participants in this pilot project to give of their time to help improve the management of sea kayaking and camping in Johnstone Strait. The results of this project are not only significant locally, but expected to be of provincial significance as the process is evaluated for potential application in other areas of the province.

To assist in this evaluation the project managers asked participants for their assessment of the LAC process, including its strengths and weaknesses from their perspective. This feedback is reflected in the final report for the Limits of Acceptable Change Project.

This report reflects the status of the Johnstone Strait Recreation Project as of March 2008. The status report, along with the companion status report for the Golden pilot and the final report for the full LAC project, will be assessed and considered by government in deciding on the next steps to be taken.

Thank You!

The Project Managers would like to extend their sincere appreciation to project participants in recognition of the essential role played in helping to improve recreation management in Johnstone Strait.

Appendices

Appendix 1: LAC Indicators, Standards & Inventory Sources

Issue	LAC Indicator	LAC Standard ¹⁰	Potential Inventory sources
A. Whales & potential impacts of sea kayakers ¹¹	Reported incidents of sea kayakers failing to comply with “Be Whale Wise” guidelines ¹²	<ul style="list-style-type: none"> • % of scans per year with recorded incidents <p><i>Note: Although a baseline has not yet been established, the current rate of recorded incidents is already considered unacceptable and therefore management actions are called for¹³</i></p>	<ul style="list-style-type: none"> • Straitwatch runs 20 minute incident scans every 2 hours; data for 2004-2007 is currently being analyzed • There is also some data from the RB Warden Program¹⁴ that might be useful.
	# of days whales not observed in LAC project (core) area	<ul style="list-style-type: none"> • XX days (TBD) per year without whale sightings by Straitwatch within the core area 	<ul style="list-style-type: none"> • Straitwatch collects directly • <i>The ‘core’ area refers to the area within the pilot where Straitwatch collects data</i>

¹⁰ Note: Standards are not goals; they provide thresholds that, if reached, trigger management actions. The standards in this table are worded accordingly.

¹¹ The intent is not to single out kayakers as the primary source of impacts on whales; this indicator is tailored to the requirements of the LAC project which is focused on kayaking and camping in Johnstone Strait.

¹² The BWW Guidelines are well accepted and have been adopted by DFO, BC PARKS, NOAA, the Washington Department of Fish and Wildlife, and the US Coast Guard. See www.straitwatch.org/downloads/Be_Whale_Wise_brochure.pdf.

¹³ Straitwatch considers the current # of incidents to be unacceptable in LAC terms, calling for management actions to reduce the number of incidents (Doug Sandilands & Nic Dedeluk)

¹⁴ Final reports for several years of the Warden Program have provided a summary of their intercept findings, along with a thorough methodology.

Issue	LAC Indicator	LAC Standard ¹⁰	Potential Inventory sources
B. Condition of campsites & day use sites	% of sites with significant to serious impacts by Opportunity Class (using “BRIM Plus” ¹⁵)	<ul style="list-style-type: none"> Any %¹⁶ (as soon as a site is rated BRIM class 3-5 (significant or serious impacts), management actions are triggered) 	<ul style="list-style-type: none"> BRIM assessment will be required, beginning with “problem sites” to establish baseline data The campsite database includes record of the level of usage at many campsites (may be out of date) MTSA database exists for 3 recreation sites Beach classification inventory exists in Coastal Atlas (Charlie Cornfield)
	% of campsites below waste management standards established by Opportunity Class	<ul style="list-style-type: none"> 10% of campsites triggers management action <p><i>Note: once Opp Class waste mgmt guidelines approved, it may take time to achieve (e.g., to install toilet facilities)</i></p>	<ul style="list-style-type: none"> The campsite database includes record of campsites that have waste facilities (toilets) although it may not be complete MTSA database for the 3 recreation sites
C. Campsite availability	% of parties making unsuccessful attempts to find a campsite suitable to accommodate their group size during June-September	<ul style="list-style-type: none"> 10% or more triggers management action <p>(Note: initial results from the MAL/SFU survey indicate that 25% of respondents moved on, however the question posed in the survey did not identify reasons why. Therefore it is difficult to say if sites were overcrowded or kayakers simply preferred fewer people or a different setting.)</p>	<ul style="list-style-type: none"> Using MAL/SFU kayaker survey to establish benchmark; long term monitoring could be based on sampling, rather than total number of kayakers Question #25 on the MAL/SFU survey: “On your trip, did you ever need to move on to another campsite because the campsite you first targeted was occupied already?”

¹⁵ BRIM is “BC Parks’ Backcountry Recreation Impact Monitoring” process, and would be adapted slightly as necessary (see Appendix 1)

¹⁶ May want to consider even tighter standards for the ‘natural/pristine camping class’ where sites are ‘basically undisturbed’ or ‘minor site disturbance’ only (i.e., BRIM Standard is Rating of 2 instead of 3-4)

Issue	LAC Indicator	LAC Standard ¹⁰	Potential Inventory sources
D. Recreation Experience	% of kayakers indicating dissatisfaction with experience in Johnstone Strait and reason(s) why	<ul style="list-style-type: none"> 5% or more indicating very negative influences on their sea kayaking experience triggers management action <p><i>Note: initial management action likely would involve assessing the reason(s) for dissatisfaction; if reasons are beyond recreation mgt control (e.g. bad weather; not seeing whales), then no further actions may be deemed necessary</i></p>	<ul style="list-style-type: none"> Use MAL/SFU user survey to establish benchmark; long term monitoring to be based on sampling, rather than total number of kayakers Question #33 on the MAL/SFU survey: <i>"Please indicate how each item in the following list influenced your <u>on the water experience</u> in Johnstone Strait."</i> Question #34 on the MAL/SFU survey: <i>"Please indicate how each item in the following list influenced your <u>camping experience</u> in Johnstone Strait."</i>
	% of kayakers reporting conflicts with other users, including other sea kayakers	<ul style="list-style-type: none"> 10% or more of kayakers reporting conflicts, based on sampling, triggers management action 	<ul style="list-style-type: none"> Long term monitoring could be based on sampling, rather than total number of kayakers
	% of kayakers in large organized groups (> 14) ¹⁷	<ul style="list-style-type: none"> Any % triggers management action (i.e., organized groups > 14 not acceptable) 	<ul style="list-style-type: none"> This can be derived from the vessel traffic information from the Warden Program. Straitwatch could collect this data - currently record number of kayakers in the vessel scan, but not group size.

¹⁷ In accordance with group size standards of the Sea Kayak Guides Alliance of BC; see Appendix 2.

Issue	LAC Indicator	LAC Standard ¹⁰	Potential Inventory sources
E. Respect for First Nations Interests and values	% of operators with formal agreements with First Nations	<ul style="list-style-type: none"> < 100% in 2 years (2010) <i>(i.e., less than 100% by 2010 triggers management action)</i> 	<ul style="list-style-type: none"> Consult directly with First Nations Front Counter BC should be able to assist operators in determining which First Nation(s) to contact Protocol agreements between operators and First Nations that indicate how the parties will work together to complete a formal agreement should be completed by 2009.
	# of incidents reported where cultural heritage artefacts are disturbed or removed	<ul style="list-style-type: none"> Any incident triggers management action (i.e. zero tolerance) <p><i>Note: this likely sets up the need for continuous actions that promote low impact practices but could be addressed as part of the on-going comprehensive information package noted later</i></p>	<ul style="list-style-type: none"> Incidents reported to government agencies or First Nations including observations made by agencies and First Nations
	% of guides who undertake training in First Nations culture and history	<ul style="list-style-type: none"> < 80% in 10 years (2018) <i>(i.e., less than 80% by 2018 triggers management action)</i> 	<ul style="list-style-type: none"> Consult directly with First Nations Front Counter BC should be able to assist operators in determining which First Nation(s) to contact
	% of kayakers participating in First Nations interpretive programs	<ul style="list-style-type: none"> < 50% in 10 years (2018) <i>(i.e., less than 50% by 2018 triggers management action)</i> 	<ul style="list-style-type: none"> Consult directly with First Nations This includes First Nations staff visiting campsites and providing interpretive opportunities to kayakers

Issue	LAC Indicator	LAC Standard ¹⁰	Potential Inventory sources
F. Safety	# of search and rescues	<ul style="list-style-type: none"> 10% increase from 'benchmark' triggers management action (based on latest 3 year average information from RCMP, DFO and other enforcement officials) 	<ul style="list-style-type: none"> Search and Rescue Coordination Centre Commercial operators Straitwatch and Warden Data record this info directly (and are usually first on scene during an incident)
	# of cougar or bear incidents at campsites (damage to tents, safety-related incidents, etc)	<ul style="list-style-type: none"> Any incident triggers management action (i.e. zero tolerance) 	<ul style="list-style-type: none"> RCMP MoF Recreation/ MTSA Recreation MoF Compliance and Enforcement MoE Conservation Officer Service Question #34 on the MAL/SFU survey: “% who report negative or very negative influences from wildlife”
	# of potentially hazardous campfires (e.g. unattended; too large; under dry canopy)	<ul style="list-style-type: none"> Any # triggers management action (hazardous campfires are not acceptable) 	<ul style="list-style-type: none"> Possibly RCMP, DFO and maybe kayak guides can provide an idea of how many unattended campfires Forest Service Protection Branch
G. Viability of commercial operators, local communities, and First Nations	# of local residents, including First Nations, employed in sea kayaking operations	<ul style="list-style-type: none"> No standard, but monitor 	<ul style="list-style-type: none"> First Nations, MWRD records/surveys SWAT & TOSS study – MTSA, Namgis, Bruce White Sam Bawlf study – increasing tourism on north island – Bruce White??
	# and % of guides that are certified	<ul style="list-style-type: none"> < 100% within 3 years (by 2011) (i.e., less than 100% by 2011 triggers management action) 	<ul style="list-style-type: none"> Track through Sea Kayak Guides Alliance for those members; Sea Kayak Guides of Canada

Issue	LAC Indicator	LAC Standard ¹⁰	Potential Inventory sources
	# of kayakers and % repeat kayakers	<ul style="list-style-type: none"> No standard, but monitor 	<ul style="list-style-type: none"> Commercial Guided and rental operations may be able to provide this information. MAL/SFU user survey should be able to provide a representation for 2007 Straitwatch count the number of kayakers b/w Telegraph Cove and Robson Bight, but could also track kayaker in other areas.
	# clients and total revenues of commercial sea kayaking operators	<ul style="list-style-type: none"> No standard, but monitor 	<ul style="list-style-type: none"> Commercial Guided and rental operations may provide this information.
	# of operators by base location	<ul style="list-style-type: none"> No standard, but monitor 	<ul style="list-style-type: none"> Consult directly with operators
H. Effective Communication to review project implementation	# of, and attendance at, formal meetings involving stakeholders, First Nations, and other government agencies (municipal, provincial, federal) as well as commercial operators and public kayakers	<ul style="list-style-type: none"> Less than one meeting per year triggers management action 	<ul style="list-style-type: none"> Attendance target is at least one representative from each of the following groups: First nations, Provincial Government, Commercial kayak guide operators, and public sea kayak perspective.
I. Public information / Education of users	% of users provided with accurate comprehensive information package prior to trip (including information on campsites, low impact practices, First Nations, and 'Be Whale Wise' Guidelines)	<ul style="list-style-type: none"> < 80% of users receive package within 5 years (by 2013) (i.e., less than 80% by 2013 triggers management action) 	<ul style="list-style-type: none"> Kayak operators/rental outlets do offer 'Coastal Waters Recreation' site information maps Question #22 on the MAL/SFU survey: "How adequate do you consider the information provided about each of the following issues prior to your trip to the Johnstone Strait"

Issue	LAC Indicator	LAC Standard ¹⁰	Potential Inventory sources
J. Access	#, location, and capacity of road accessible launch access sites	<ul style="list-style-type: none"> • +/- 10% from baseline triggers management action 	<ul style="list-style-type: none"> • North Island Straits maps show number and location of launch sites –confirm maps with operators • Telegraph Cove – keeps records of launches for commercial operators? • Taxi operators keep records of where they deliver • MTSA has data on launches at Naka Creek
	#, location, and capacity of 'Water Taxis' (including boat kayak transportation)	<ul style="list-style-type: none"> • No standard, but monitor 	

Appendix 2: LAC Indicators and Management Actions

ISSUE	Camping & Day Use Site Classes					Conceptual Sea Kayaking Classes (Open Water)		
	CORE INDICATOR							
<i>Management actions to be taken if LAC standards exceeded (from less intrusive to more intrusive)¹⁸</i>	C 1 No Camping	C 2 Natural/ Pristine	C 3 Rustic	C 4 Moderate Dev	C 5 Intensive Dev	No Kayaking	Low # Users	High # Users
A. Whales & Potential Impacts of Sea Kayakers								
Reported incidents of sea kayakers failing to comply with “Be Whale Wise” guidelines								
Additional DFO and volunteer patrols to improve compliance						X	X	X
Require compliance with key aspects of guidelines (by regulation and/or condition of tenure)						X	X	X
Increased enforcement of existing regulations						X	X	X
Kayakers develop “no-whale-contact” zones and/or seasonal closures & self-police						X	X	X
Amend the mix of opportunity classes by creating more “no kayaking” zones (SKA)						X	X	X
Authorities introduce new regulations						X	X	X

¹⁸ In all cases where a management action requires regulatory authority, the management actions listed here are only applicable in locations under the jurisdiction of the relevant authority, i.e., closure of campsites is only feasible in locations being managed under FRPA or by BC Parks. For a list of relevant regulatory authorities see Appendix 5.

ISSUE	Camping & Day Use Site Classes					Conceptual Sea Kayaking Classes (Open Water)		
	CORE INDICATOR	C 1 No Camping	C 2 Natural/ Pristine	C 3 Rustic	C 4 Moderate Dev	C 5 Intensive Dev	No Kayaking	Low # Users
<i>Management actions to be taken if LAC standards exceeded (from less intrusive to more intrusive)</i> ¹⁸								
B. Condition of Campsites & Day Use Sites								
% of sites with significant to serious impacts by Opportunity Class (as soon as a site is rated BRIM class 3-5, management actions are triggered) ¹⁹								
Provide caretakers at various sites				X	X			
Rehabilitate sites to reach desired conditions, including waste management		X	X	X	X			
Seasonal closure of sites** (e.g. during wet season in May and June, or times of high fire danger)		X	X	X	X			
Allow camping at designated campsites only; close non-designated campsites**		X	X	X	X			
Ban fires** (e.g., all sites or designated sites)	X	X	X	X	X			
Establish additional campsites if suitable locations exist, subject to direction provided by existing plans and policies			X	X	X			
Introduce use permits** (possibly charge a fee)			X	X	X			
Authorities regulate use & establish "no camping" zones**	X	X						
** where regulatory authority exists (e.g., FRPA S.58 on crown land outside of parks and protected areas)								
C. Campsite availability								
% of parties making unsuccessful attempts to find a campsite suitable to accommodate their group size during June-September								
Establish formal means of daily coordination between commercial operators		X	X	X	X			
Introduce formal group size limits	X	X	X	X	X	X	X	X
Increase patrols by DFO, BC Parks, and volunteers								
Regulate use at specific campsites**			X	X	X			

¹⁹ The accompanying list of management actions is specific to this standard; as such, it does not include an overall assessment of campsites. Such an assessment process may be required to determine the appropriate status and designation of sites; e.g., designating some sites as recreation sites under FRPA might further management objectives for Johnstone Strait. Similarly, such an assessment may recommend formal recognition of base camps through tenuring, etc.

ISSUE	Camping & Day Use Site Classes					Conceptual Sea Kayaking Classes (Open Water)		
	CORE INDICATOR	C 1 No Camping	C 2 Natural/ Pristine	C 3 Rustic	C 4 Moderate Dev	C 5 Intensive Dev	No Kayaking	Low # Users
Management actions to be taken if LAC standards exceeded (from less intrusive to more intrusive)¹⁸								
Develop reservation system for designated sites			X	X	X			
Introduce use permits for designated sites (commercial and/or public use) (possibly charge a fee)			X	X	X			
** Where regulatory authority exists (e.g., FRPA S.58 on crown land outside of parks and protected areas)								
D. Recreation Experience								
% of kayakers indicating dissatisfaction with experience in Johnstone Strait and reason(s) why								
First find out source of dissatisfaction and monitor trends; then take appropriate actions	X	X	X	X	X	X	X	X
% of kayakers reporting conflicts with other users, including other sea kayakers								
Volunteer patrols	X	X	X	X	X	X	X	X
Introduce formal group size limits	X	X	X	X	X	X	X	X
Change LAC class & infrastructure standards at certain sites			X	X	X			
Designate sites for commercial operators / public use			X	X	X			
Develop reservation system for designated sites			X	X	X			
Introduce use permits for sites and/or by area (SK Class) (commercial and/or public use) (possibly charge a fee)			X	X	X	X	X	X
E. Respect for First Nations Interests and values								
% of operators with formal agreements with First Nations (less than 100% by 2010 triggers management action)**								
ILMB promotes awareness among operators that agreements are needed and supports those efforts	X							
First Nations certify operators who have agreements	X	X	X	X	X	X	X	X
Formal agreement with First Nations becomes a requirement for commercial operation in project area (by regulation and/or	X	X	X	X	X	X	X	X

ISSUE	Camping & Day Use Site Classes					Conceptual Sea Kayaking Classes (Open Water)		
	CORE INDICATOR	C 1 No Camping	C 2 Natural/ Pristine	C 3 Rustic	C 4 Moderate Dev	C 5 Intensive Dev	No Kayaking	Low # Users
Management actions to be taken if LAC standards exceeded (from less intrusive to more intrusive)¹⁸								
condition of tenure and/or certification)								
** Front Counter BC should be able to assist operators in determining which First Nation(s) to contact								
# of incidents reported where cultural heritage artefacts are disturbed or removed (any incident triggers action) ²⁰								
Enforcement action under authority of <i>Heritage Conservation Act</i> ; (enforcement can include administrative tickets with penalty)	X	X	X	X	X	X	X	X
Provide First Nations caretakers at various sites				X	X			
Mandatory pre-season First Nations orientation session for commercial operators and guides**	X	X	X	X	X	X	X	X
Mandatory pre-trip First Nations orientation session for kayakers (commercial tours and/or public kayakers)**	X	X	X	X	X	X	X	X
** legal requirements would augment <i>Heritage Conservation Act</i>								
% of guides who undertake training in First Nations culture and history (less than 80% by 2018 triggers action)**								
First Nations provide formal training to operators upon request	X	X	X	X	X	X	X	X
First Nations certify operators with proper training	X	X	X	X	X	X	X	X
Formal training becomes a requirement for commercial operation (by regulation and/or condition of tenure)	X	X	X	X	X	X	X	X
**Yukusam Heritage Society that represents all First Nations in Johnstone Strait project area could provide the training								

²⁰ Damaging, altering or excavating a heritage site or object without a site alteration permit is an offence under the *Heritage Conservation Act* (HCA). Heritage sites and objects are defined in the HCA and include any object or feature in use before 1846, all aboriginal paintings (pictographs) and rock carvings (petroglyphs) and any burial place with historical or archaeological value, and any designated heritage site or object. Given HCA and experience with violations that have not been prosecuted, the appropriate management response in this case is enforcement and not education or information. Appropriate supporting actions however would include education, volunteer patrols, First Nations caretakers at various sites, mandatory pre-season First Nations orientation session for commercial operators and guides, and mandatory pre-trip First Nations orientation session for kayakers (commercial tours and/or public kayakers).

ISSUE CORE INDICATOR	Camping & Day Use Site Classes					Conceptual Sea Kayaking Classes (Open Water)		
	C 1 No Camping	C 2 Natural/ Pristine	C 3 Rustic	C 4 Moderate Dev	C 5 Intensive Dev	No Kayaking	Low # Users	High # Users
<i>Management actions to be taken if LAC standards exceeded (from less intrusive to more intrusive)¹⁸</i>								
F. Safety								
# of search and rescues								
Increase Volunteer patrols	X	X	X	X	X	X	X	X
Undertake safety education program; i.e., video available on the internet or pre-trip orientation sessions for kayakers	X	X	X	X	X	X	X	X
Search and Rescue officials (RCMP, SARC) provide safety training program for operators and guides	X	X	X	X	X	X	X	X
Formal safety training becomes a requirement for commercial operation (by regulation)	X	X	X	X	X	X	X	X
Formal safety training becomes a requirement for public kayakers (by regulation and/or condition of tenure)	X	X	X	X	X	X	X	X
# of cougar or bear incidents at campsites (damage to tents, etc)								
Increase Volunteer patrols	X	X	X	X	X	X	X	X
Undertake wildlife safety education program; e.g., pre-trip orientation sessions for kayakers	X	X	X	X	X	X	X	X
Ban pets at campsites		X	X	X	X			
Require bear/cougar 'proof' food and garbage handling techniques (e.g. violation ticket can be issued if not undertaken)		X	X	X	X	X	X	X
G. Viability of commercial operators, local communities, and First Nations								
# of local** residents, including First Nations, employed in sea kayaking operations								
No Standards, but monitor								
** Local is determined by FN traditional territories, blended with Regional District boundaries								
# and % of guides that are certified (less than 100% by 2011 triggers management action)								

ISSUE	Camping & Day Use Site Classes					Conceptual Sea Kayaking Classes (Open Water)		
	CORE INDICATOR							
<i>Management actions to be taken if LAC standards exceeded (from less intrusive to more intrusive)¹⁸</i>	C 1 No Camping	C 2 Natural/ Pristine	C 3 Rustic	C 4 Moderate Dev	C 5 Intensive Dev	No Kayaking	Low # Users	High # Users
Certification of guides becomes a requirement for commercial operation (by regulation and/or condition of tenure)	X	X	X	X	X	X	X	X
No tenure granted without certification	X	X	X	X	X	X	X	X
H. Effective Communication to review project implementation								
# of, and attendance at, formal meetings involving stakeholders, First Nations, and other government agencies (municipal, provincial, federal) as well as commercial operators and public kayakers (less than 1 per year triggers action)								
<i>See section 7 for a list of proactive management actions.</i>								
If a meeting does not occur at least once per year, the Implementation Team or Steering Committee will contact each invitee directly to confirm an appropriate venue and meeting date which is suitable to a majority of participants								
I. Public information / Education of users								
% of users provided with accurate comprehensive information package prior to trip (including information on campsites, low impact practices, First Nations, and 'Be Whale Wise' Guidelines) (less than 80% by 2013 triggers action)								
<i>See section 7 for a list of proactive management actions.</i>	X	X	X	X	X	X	X	X
If the standard is exceeded, the Implementation Team or Information/ Education steering committee will develop targeted communication pieces in response to priority issues.	X	X	X	X	X	X	X	X
J. Access								
#, location, and capacity of road accessible launch access sites								

ISSUE CORE INDICATOR	Camping & Day Use Site Classes					Conceptual Sea Kayaking Classes (Open Water)		
	C 1 No Camping	C 2 Natural/ Pristine	C 3 Rustic	C 4 Moderate Dev	C 5 Intensive Dev	No Kayaking	Low # Users	High # Users
<i>Management actions to be taken if LAC standards exceeded (from less intrusive to more intrusive)¹⁸</i>								
(+/- 10% from baseline triggers action)								
Formally recognize one individual or organization to act as lead in coordinating access roads and launch sites	X	X	X	X	X	X	X	X
Formalize regular communication between authorities and the agencies and companies involved in developing and/or decommissioning roads and launch sites	X	X	X	X	X	X	X	X
#, location, and capacity of 'Water Taxis' (including boat kayak transportation)								
No Standards, but monitor								
Potential management action to support standard: Water Taxi operators establish a protocol to record their activities involving kayakers and maintain accurate statistics regarding campsite drop-offs, # of kayakers, etc.	X	X	X	X	X	X	X	X

Appendix 3: BRIM Recreation Impact Rating System

Overview

BC Parks has developed a Backcountry Recreation Impact Monitoring (BRIM) process²¹ to enable rapid and consistent assessment and to document subsequent changes. It provides a standard methodology that can be used by field staff and others (e.g. volunteer groups, commercial operators) to enable informed decision-making. It is a tool that can be used to focus on key areas so that resources can be allocated efficiently and effectively to address negative impacts on the environment and the recreation experience.

BC Parks Backcountry Recreation Impact Monitoring (BRIM)²² ratings:

- <1 – Negligible Impact Basically undisturbed**
- 1-2 – Discernable evidence of impact Minor site disturbance**
- 2-3 – Low to moderate impact Closely monitor site & develop management options**
- 3-4 – Significant impact Management action necessary**
- 4-5 – Large scale & serious impact Intensive management required immediately**

Details

BRIM was first developed in 1997. It was based on a review of existing models and refined to fit the needs of BC Parks and the protected areas system. The purpose of the process is to enable rapid and consistent initial assessment and to document subsequent changes. It provides a standard methodology that can be used by field staff and others (i.e. volunteer groups, educational institutions) to enable informed decision making. It is a tool that can be used to focus on key areas so that resources can be allocated efficiently and effectively. One of the important characteristics of BRIM is that it allows for comparison between sites. Comparison highlights areas that are most degraded and in need of priority management.

BRIM monitors changes caused by recreational use in natural environments outside of formally developed areas. The process includes qualitative and quantitative assessments using indicators for the most typical impacts. Currently, there are two modules that have been developed for monitoring the most common impacts in backcountry areas, one for campsites and one for trails. Adaptation of forms or completely different monitoring/sampling approaches may be required for deviating situations, e.g. portage trails, canoe launch areas, viewpoints, etc. An adapted version, referred to in this document as BRIM Plus, is recommended for campgrounds in Johnstone Strait.

Below is a summary of the process as it applies to campsites.

²¹ See BC Parks and Protected Areas Conservation Management. *Part 3. Conservation Program Guidelines*. May 2003. Backcountry Recreation Impact Monitoring.

²² From *Parks And Protected Areas Conservation Management Part 3: Conservation Program Guidelines - Backcountry Recreation Impact Monitoring*, May 2003. BC Ministry of Environment, Parks and Protected Areas Branch.

BRIM Campsite Indicators

Indicator#	Score: 1	Score: 2	Score: 3	Score: 4	Score: 5
Vegetation density/wear*	Same density/ slight wear	Similar density	Slightly less dense	Moderately less dense	Considerably less dense
Vegetation type*	Almost similar	Slightly dissimilar	Moderately dissimilar	Considerably dissimilar	Extremely dissimilar
Bare soil area	<10%	10-24%	25-49%	50-75%	>75%
Litter and surface soil	Part of litter worn off	Most of litter worn off	Surface soil slightly worn	Surface soil partly mucked/pulverized	Surface soil considerably mucked/pulverized
Tree damage	1 or 2 minor occurrences	>2 minor occurrences	1 or 2 major occurrences	>2 major occurrences	Extensive damage
Root exposure	<10%	10-24%	25-49%	50-75%	>75%
Natural fuels*	Dead wood mostly in place	Some dead wood removed	Considerable dead wood removed	Most dead wood removed	All dead wood removed
Site alteration (unauthorized)	Scattered fire debris	Existing fire rings & scar	Existing seats, benches, etc	Several facilities developed	Extensive facilities developed
Clean & Sanitary**	1 or 2 occurrences**	3 to 5 occurrences	6 to 9 occurrences	10 to 20 occurrences	Extensive occurrences
Social trails	1 trail discernable	2 trails discernable	1 trail well developed	2 trails well developed	>2 trails well developed

a riparian damage indicator is applied where applicable

* relative to un-impacted areas nearby

** amount of litter, trash, human and domestic animal waste, etc

The scores are added up and divided by the number of indicators used to arrive at a campsite impact rating. For example, if using the above 10 indicators the overall score sums to 40, then the impact rating is 4. The following rating chart applies:

Rating chart

<1	Negligible impact	Basically undisturbed
1-2	Discernable evidence of impact	Minor site disturbance
2-3	Low to moderate impact	Closely monitor site and develop mgt options
3-4	Significant impact	Management action necessary
4-5	Large scale and serious impact	Intensive management required immediately

Appendix 4: Group size standards of the Sea Kayak Guides Alliance of BC

Guide⁽¹⁾ To Client Ratios And Group Size Limits

Trip Classification	Doubles Only ⁽²⁾	Singles Only	Singles & Doubles ⁽³⁾	Maximum Group Size
Class 1 and 2	1:6	1:4	1:5	14
	or 2:7-12	or 2:5-8	or 2:6-10	
Class 3	1:5	1:4	1:5	12
	or 2:6-10	or 2:5-8	or 2:6-10	

⁽¹⁾ All guides used for ratio purposes are required to be an appropriately certified SKGABC Guide or a guide with equivalent certification recognized by the SKGABC to lead or assist in the appropriate trip classifications.

⁽²⁾ All guests must use double kayak at all times, guides may be in single kayaks. If a guest is ever in a single kayak then “Singles & Doubles” ratios and group size limits apply.

⁽³⁾ A minimum of 1 double kayak for trips of 5 or less guests and a minimum of 2 double kayaks with 6 to 10. If fewer double kayaks are used then the “Singles Only” ratio and group size limits apply.

Note: Operators should be aware of other operating standards that are required by government agencies ([i.e. Parks Canada](#)) and may require alternate guide to client ratios or maximum group sizes.

The waters of Johnstone Strait are classified as CLASS 2 waters by the SKGABC. A Level II guide can lead these trips with a maximum group size of 14 people. However if during the course of a trip the group was to cross Johnstone Strait from the Vancouver Island shore to the mainland side, or visa-versa, it would be considered a CLASS III trip, and a maximum group size of 12 is specified. Guide certification is related to trip (water) classification. Therefore a trip in CLASS III waters would require at least one Level III guide.²³

²³ Brian Collen – Representative, Sea Kayak Guides Alliance of BC (SKGABC) www.skgabc.org

Appendix 5: Regulatory Tools for Managing Campsites and Recreation Use on Crown lands

Primary tools – outside parks and protected areas

A Protocol Agreement entitled *Crown Land Administration and Forestry Activity between BC Forests and BC Lands* signed in 1993 provides a framework for deciding when to use authorities under the *Land Act* and when to use forest-related legislation.

Land Act

1. Commercial use tenure. A commercial recreation operator is responsible for managing the campsite under the terms and conditions of their tenure under the *Land Act*. This involves the preparation of a management plan that is tied to the tenure, and would be consistent with *Land Use Policy: Guided Adventure Tourism*; www.al.gov.bc.ca/clad/index.html (currently being updated)
2. Community or institutional use tenure. A community or institution is responsible for managing the campsite under the terms and conditions of their tenure under the *Land Act*. This would be issued consistent with *Land Use Operational Policy: Community and Institutional Land Use*; www.al.gov.bc.ca/clad/index.html A community organization includes a registered charity or non-profit organization incorporated under the *Society Act*. An institution includes a municipality, regional district or First Nations acting as a local government for the purposes of the above policy, and other incorporated organizations expressly authorized to provide a specific community service.
3. Prohibit use. The Lieutenant Governor in Council may, by regulation, prohibit a specific use of Crown land in a designated area. This tool has been used to prohibit specific types of recreation use and could be used to prohibit camping in designated areas. (Also see #7 below)

Forest and Range Practices Act (FRPA)

4. Recreation site. Established under section 56 of FRPA. Part 4 of the *Forest Recreation Regulation* www.for.gov.bc.ca/tasb/legsregs/frpa/frparegs/forrec/frf.htm applies to recreation sites that address campsite use, environmental protection and commercial and industrial use, and allow MTSA the ability to establish additional rules that when posted have legal effect. There is an ability to charge public use fees at recreation sites consistent with a cost-recovery fee formula in Part 5 of the regulation. MTSA may enter into a partnership agreement under s. 118 of FRPA with First Nations, local government, or other organization regarding the management of the site. Minimal cost liability insurance can be issued to the partnering organization.
5. Authorized recreation facility. Authorized under s. 57 of FRPA. Part 3 of the *Forest Recreation Regulation* specifies how and when authorization can be obtained. MTSA can authorize an organization including First Nations, local government, a recreation club or others to manage an authorized campsite subject to terms and conditions including a management agreement under s. 118 of FRPA. There is no ability to charge fees at an authorized facility for cost-recovery. Minimal cost liability insurance however can not be issued to the partnering organization The *Trails and Recreation Facilities Guidebook* prepared in 1995 generally applies www.for.gov.bc.ca/tasb/legsregs/fpc/fpcguide/trail/trailtoc.htm. MTSA has a complaint form that can be used to report illegal unauthorized use www.tsa.gov.bc.ca/sites_trails/reporting.htm

6. Facility not needing authorization. Under Part 2 of the *Forest Recreation Regulation*, the development or maintenance of a campsite that only involves the minor clearing of brush, downed trees or repairs to a pre-existing facility does not need to be authorized. There is no ability however to enter into a management agreement.
7. Restrict or prohibit use: Under s. 58 of FRPA, MTSA can restrict or prohibit recreation use if it is determined it is necessary to protect a recreation or range resource or to manage recreation use on Crown land. This provision could be used to prohibit or to restrict campground use in specified areas. (Also see # 3 above.)

For Further guidance re: 4-7 also see:

- *Outdoor Recreation and the FRPA* www.tsa.gov.bc.ca/sites_trails/library.htm
- *Recreation Manual* www.tsa.gov.bc.ca/sites_trails/manual/

Primary tools – inside parks and protected areas

Park Act

Parks and protected areas provide opportunities for both commercial and recreational camping. BC Parks has the authority to regulate/control/authorize use within provincial parks under the *Park Act*. A site-by-site evaluation is used to determine suitability of camping on any protected area lands, whether it is recreational or commercial.

In some locations a Management Plan will direct where camping is appropriate, in other locations camping is only allowed in designated sites. In all cases campsites are determined through an Impact Assessment process that, among other things, looks at the potential of impact of such activities on natural and/or cultural values.

Ecological Reserves Act

Camping is not permitted in ecological reserves based on the Act.

Secondary tools

Several other legislative tools exist that can be used to help manage recreation use on campsites for a variety of reasons including fire prevention, pollution, and protection of heritage values. For example, under the *Heritage Conservation Act*, heritage sites or objects can not be damaged, altered or excavated without a site alteration permit on all lands including campsites.

Appendix 6: Background Material related to Land Use Plans, Policies and Guidelines (separate document)

Overview:

The Johnstone Strait Recreation project will be guided by existing land use plans, policies and guidelines, including:

I. Vancouver Island Summary Land Use Plan

- VILUP Summary Document – Land Use Zones and Management Direction
- VILUP Higher Level Plan Objectives

II. Central Coast Land Use Decision (2006)

- Central Coast Land and Resource Management Plan (CCLRMP) Land Use Zones
- KNT Land Use Agreement-in-Principle (AIP)

III. Protected Area Management Direction

- Robson Bight Ecological Reserve
- Lower Tsitika River Provincial Park
- Broughton Archipelago Provincial Park
- Cormorant Channel Marine Provincial Park
- Qwiquallaaq/Boat Bay Conservancy

IV. North Island Straits Coastal Plan

- Planning Unit Management Direction

V. Visual Quality Objectives and other legal orders

VI. Applicable Regulations, Policies, and Guidelines

It will also be guided by applicable policies and guidelines including:

- MTSA policy regarding public and commercial recreation (Guided Adventure Tourism), including Provisions for Recreation under FRPA
- Other Regulations with Relevance to Recreation
- Wildlife Guidelines for Backcountry Tourism/Commercial Recreation
- DFO Whale Watching Guidelines for BC, and
- Other Public and Commercial Recreation Guidelines.

These land use plans, policies and guidelines are described in Appendix 6, available online at: <http://ilmbwww.gov.bc.ca/rcsd/lac/index.html>.