Current Use of Lands and Resources December 12, 2014

21.0 CURRENT USE OF LANDS AND RESOURCES

The assessment of potential effects of the Project on current use of land and resources for traditional purposes was provided in Section 21 of the EIS. A replacement chapter for Section 21 is included in Appendix B of this EIS Addendum.

Appendix B provides:

- An update to the potential project and cumulative effects on current use of land and resources for traditional purposes as a result of the Project changes
- Responses to requests for additional information from the federal government (August 15 and September 11, 2014).

This section of the EIS Addendum provides:

- An updated list of all mitigation measures
- Conclusions on the assessment of effects on Current Use of Land and Resources for Traditional Purposes, taking into account project changes and the requested additional information.

Table 21-1 lists the documents applicable to current use of land and resources for traditional purposes submitted by PNW LNG as part of the environmental assessment process to date and identifies if information is either *updated by EIS Addendum, superseded, not relevant,* or *not affected* by information in the EIS Addendum. The updated Section 21 (see Appendix B) contains information that updates the documents classified as *updated by EIS Addendum* or *superseded* in Table 21-1.

Table 21-1 Status of Previously Submitted Documents

Document Name	Status
Section 21 of the EIS (February 2014)	Superseded
Technical Memorandum: Inclusion of Gitga'at First Nation in EIS	Superseded
Technical Memorandum: Methods for Assessing Current Use	Superseded
Responses to the Working Group Comments (June 2014)	Updated by EIS Addendum



Current Use of Lands and Resources December 12, 2014

21.1 PROJECT EFFECTS ASSESSMENT UPDATE

21.1.1 Baseline Conditions

See Appendix B.

21.1.2 Effects Assessment

See Appendix B of this EIS Addendum.

21.2 CUMULATIVE EFFECTS ASSESSMENT UPDATE

See Appendix B of this EIS Addendum.

21.3 RESPONSES TO THE OUTSTANDING INFORMATION REQUESTS

Responses to the following outstanding information requests for Current Use of Land and Resources for Traditional Purposes have been integrated into Appendix B. This includes:

- Aboriginal Issues IR #3
- Aboriginal Issues IR #6
- Aboriginal Issues IR #9

21.4 MITIGATION

21.4.1 Changes to Mitigation Measures Presented in the EIS/Application

See Sections 6, 8, 9, 10, 11, 12, 13, 15, 17, and 20 of the EIS Addendum.

21.4.2 Complete List of Current Mitigation Measures

All of the technically and economically-feasible mitigation measures currently being presented by PNW LNG to address potential effects to Current Use of Land and Resources for Traditional Purposes are listed below. This includes those originally presented in the EIS that remain relevant, as well as those that have been revised or added as a result of feedback received during the environmental assessment process or as a result of the project changes. By implementing this full set of mitigation measures, PNW LNG is confident that the Project will not result in significant adverse effects to Current Use of Land and Resources for Traditional Purposes.

21.4.2.1 Mitigation Measures for Pathway Valued Components

Mitigation measures for access to traditional use sites include:

Measures to reduce changes to Aboriginal marine navigation (Section 15).



Current Use of Lands and Resources December 12, 2014

Mitigation measures for potential effects on quantity of lands, waters, and resources for traditional purposes include measures to reduce:

- The potential for project related changes in water quality from the disturbance of existing marine sediments(Section 13)
- Changes to fish habitat (Section 13)
- The potential for injury or mortality to fish and marine mammals (Section 13)
- Changes in behaviour of fish and marine mammals (Section 13)
- Terrestrial habitat for wildlife and marine birds, including wetland compensation and fish habitat offsetting (Section 11)
- Mortality risk to terrestrial wildlife and marine birds (Section 11)
- Alteration of movement of terrestrial wildlife and marine (Section 11)
- Or identify, record, and recover data for heritage features, including culturally modified trees (Section 20).

Mitigation measures for potential effects on quality of lands, waters and resources for traditional purposes include:

• Measures to reduce changes to marine resources due to changes in water quality from the disturbance of existing marine sediments (Section 13).

Mitigation measures for potential effects on the sensory environment for traditional activities include measures to reduce changes to:

- Air quality (Section 6)
- Acoustic environment (Section 8)
- Ambient light (Section 9)
- Visual quality (Section 17).

21.4.2.2 Mitigation Measures for Current Aboriginal Use

21.4.2.2.1 Current Fishing Practices

- The marine terminal design mitigation, including a suspension bridge and relocated trestle and berth, results in no infrastructure located on Flora Bank and eliminates the need for dredging on Agnew Bank.
- The marine terminal design mitigation reduces the effects of infrastructure construction and dredging upon navigation. The jetty length (including the suspension bridge and trestle) will be approximately 300 m longer; however vessels will continue to be able to pass underneath it.
- The marine terminal design mitigation will result in a much reduced volume of sediment for ocean disposal.
 The resulting dispersal area is significantly reduced, reducing the impact, or perceived impact, on Brown Passage.
- Section 13 contains a description of mitigation measures relating to marine resources, including those for:
 - The potential for project related changes in water quality from the disturbance of existing marine sediments
 - Changes to fish habitat



Current Use of Lands and Resources December 12, 2014

- The potential for injury or mortality to fish and marine mammals
- Changes in behaviour of fish and marine mammals.

21.4.2.2.2 Current Hunting and Trapping Practices

- Mitigations related to impacts to current hunting and trapping practices included those related to:
 - Relative abundance, quality and geographic distribution of resources (Sections 10, 11, 13).
 - Potential contamination of country foods (Section 13).
 - Acoustic environment (Section 8)
 - Air quality (Section 6)
 - Ambient light (Section 9)
 - Visual quality (Section 17)
 - Archaeological resources (Section 20).
- In addition to these, PNW LNG has consulted with Metlakatla, Lax Kw'alaams, Gitxaala, Kitsumkalum, Kitselas, and Gitga'at regarding restricted access to Lelu Island and the resulting effects on their cultural practices.
- PNW LNG plans shift rotation during construction as well as recreational facilities at work camps to help reduce the impacts of increased workers on local recreation and resources.

21.4.2.2.3 Current Gathering Practices

- Mitigations related to impacts to cultural practices included those related to:
 - Relative abundance, quality and geographic distribution of resources (Sections 10, 11, 13)
 - Potential contamination of country foods (Section 13)
 - Acoustic environment (Section 8)
 - Air quality (Section 6)
 - Ambient light (Section 9)
 - Visual quality (Section 17)
 - Archaeological resources (Section 20).
- In addition to these, PNW LNG has consulted with Metlakatla, Lax Kw'alaams, Gitxaala, Kitsumkalum, Kitselas, and Gitga'at First Nations regarding restricted access to Lelu Island and the resulting effects on their cultural practices.

21.4.2.2.4 Current Use of Spiritual Sites and Cultural Practices

- Mitigations related to impacts to cultural practices included those related to:
 - Relative abundance, quality and geographic distribution of resources (Sections 10, 11, 13)
 - Potential contamination of country foods (Section 13)
 - Acoustic environment (Section 8)
 - Air quality (Section 6)
 - Ambient light (Section 9)
 - Visual quality (Section 17)
 - Archaeological resources (Section 20).
- In addition to these, PNW LNG has consulted with Metlakatla, Lax Kw'alaams, Gitxaala, Kitsumkalum, Kitselas, and Gitga'at regarding restricted access to Lelu Island and the resulting effects on Metlakatla's cultural practices.



Current Use of Lands and Resources December 12, 2014

Mitigation measures specific to Metlakatla and Lax Kw'alaams include:

- Of the 431 CMTs recorded on Lelu Island approximately 50% are located outside the project development area and will not be removed.
- Removal of CMTs on Lelu Island will be conducted as articulated in the jointly developed Archaeological and Heritage Resource Management Plan (Section 24)
 - A chance find protocol will be used during project construction in the event that unrecorded CMTs are encountered.

21.5 CONCLUSION

The Project is not expected to result in a significant adverse residual effect on current use of spiritual sites and cultural landscapes due to the complete removal of Lelu Island as a traditional use site. The entire island is to be leased to PNW LNG by the Port of Prince Rupert. Even though green space and many culturally modified trees within this buffer zone will be retained around most of the circumference of Lelu Island, the aboriginal traditional use of this area is not practical due to LNG Plant safety and security reasons.

With the exception of Lelu Island, and with planned mitigations applied, the Project is not expected to create any other significant adverse residual effect on Current Aboriginal Use. Almost all residual effects are characterized as low in magnitude. Adverse residual effects will occur in the project marine infrastructure areas adjacent to Lelu Island while some effects extend out into the LAA. Most relevant effects will be for the medium term and will occur continuously or regularly during the construction and operations phases, with some residual effects also taking place during decommissioning if commissioning of a Port industrial site is ever implemented. The majority of effects will be reversible except for the elimination of Lelu Island as a traditional use site.

Confidence in this prediction is moderate. While the assessment is based on detailed, site-specific current use information, the quality and depth of this information varies between the aboriginal groups who supplied the information. PNW LNG has not been provided current traditional use information from the Lax Kw'alaams First Nation. In addition, despite the quality of information used by this assessment, human behavior is changeable and difficult to predict.

Summary tables for the characterization of residual effects for Current Use of Land and Resources for Traditional Purposes are provided in Sections 21.6.9, 21.7.9, 21.8.9, 21.9.9, 21.10.9, and 21.11.9 of Appendix B.

Summary information for the characterization of cumulative effects for Current Use of Land and Resources for Traditional purposes is provided in Section 21.12.9 of Appendix B.

Pacific NorthWest LNG