2019 Annual Knowledge Plan

June 2019

Prepared by Eclipse Geomatics
for the Skeena Knowledge Trust

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Skeena Knowledge Trust
2019 Annual Knowledge Plan

1.0 Introduction

The Skeena Knowledge Trust (SKT) was formed in September 2017 following a multi-year collaboration between the Bulkley Valley Centre for Natural Resource Research and Management Society, the Wet'suwet'en Treaty Office Society, SkeenaWild Conservation Trust, and the Pacific Salmon Foundation to address the need for greater knowledge management and more informed decision-making pertaining to salmon and salmon habitat within the Skeena River watershed and estuary. A trust model was adopted as the governing framework, as it provides the necessary structure to ensure high quality, unbiased data is gathered, stored, and disseminated in an objective and impartial manner. This level of data governance was considered to be essential in order for the SKT to become a trusted source of data for local First Nations, community members, and decision makers.

The purpose of the SKT as defined in Section 4.1 of the trust agreement is the advancement of public education and other purposes beneficial to the community by educating the public on the wild salmon populations, their genetic diversity, and their ocean and freshwater habitats in the Skeena Watershed and Ocean Approaches, and the implementation and effectiveness of broadly supported plans and policies by collecting and disseminating information on such populations and habitats, through the decision-making procedures set out in the Annual Knowledge Plan Process (Schedule "C" of the trust agreement).

2.0 Objective

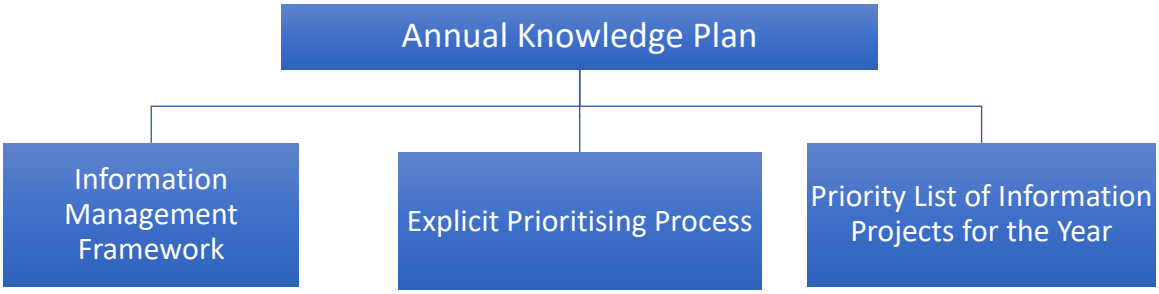
The objective of the Annual Knowledge Plan is to establish an annual data and knowledge acquisition, compilation, and communication plan in order to further public education on wild salmon in the Skeena watershed.

3.0 Accessibility

In order to maximize the accessibility of data relevant to Skeena salmon, the SKT has developed two principal tools to store and deliver information. The Skeena Salmon Data Centre (SSDC, https://data.skeenasalmon.info/) is a publicly-accessible, online data warehouse and library based on open-source CKAN software, and provides users with access to a comprehensive collection of relevant reports, data, and spatial files. The Skeena Maps Portal (SMP, http://maps.skeenasalmon.info/) was developed based on an open-source GeoNode platform, and allows users to search, view, and download spatial files, as well as create maps.

4.0 Annual Knowledge Plan Framework

The Skeena Knowledge Trust Annual Knowledge Plan is outlined by the Skeena Knowledge Trust Agreement Schedule "C" (SKT, 2017) and consists of the following components:



4.1. Information Management Framework

The information management framework consists of the following (summarized from Schedule 'C' Part 4a of the Trust Agreement):

1) A list of salmonid policy documents, provincial land-use plans and First Nations land-use plans that apply to the Skeena Watershed and Ocean Approaches and that have demonstrated broad support from the affected public;
2) A compilation of salmon-related objectives from the plans and policies organized into the following objective classes:

    a. maintain wild salmon populations;
    b. maintain wild salmon genetic diversity;
    c. for all salmon life stages, maintain habitat in:
        i. the ocean;
        ii. the estuary;
        iii. freshwater;
    d. maintain hydroriparian ecosystem integrity;
    e. maintain hydrology (water quantity);
    f. maintain water quality, including:
        i. chemistry
        ii. sedimentation
        iii. temperature
    g. manage salmon fisheries for sustainable benefits.

3) Relevant pressure indicators of management activities (Table 1); and
4) Relevant geographic areas (shown in Schedule 'A' of the Trust Agreement).

The identified objective classes have been distilled into the following topics for the purposes of information prioritization and data management:

- **Habitat** (objective c)
- **Populations** (objectives a, b and g)
- **Ecology/Vegetation** (objective d)
- **Water quality and quantity** (objectives e and f)
- **Climatology** (relates to objectives c and f)
- **Land use and development** (relates to objectives c, d, e and f)
- **Infrastructure** (relates to objectives c, d, and f)
- **Spatial data** (may be related to any objective, has specific data management requirements)

Indicators used by the SKT information management framework comprise the pressure indicators of management activities developed in support of Canada's Policy for Conservation of Wild Pacific Salmon (Fisheries and Oceans Canada, 2005) by Stalberg et al. (2009) presented in Table 1.

Table 1: Refined indicator list (Table 3.4 from Stalberg et al., 2009)

Habitat Type	Indicator Type	Indicator
Stream	Pressure	Total land cover alterations
Stream	Pressure	Watershed road development
Stream	Pressure	Water extraction
Stream	Pressure	Riparian disturbance
Stream	Pressure	Permitted waste management discharges
Stream	State	Suspended sediment
Stream	State	Water Quality
Stream	State	Water temperature: juvenile rearing – stream resident species
Stream	State	Water temperature: migration and spawning – all species
Stream	State	Stream discharge
Stream	Quantity	Accessible stream length based on barriers
Stream	Quantity	Key spawning areas (length)
Lake	Pressure	Total land cover alteration
Lake	Pressure	Watershed: road development
Lake	Pressure	Riparian disturbance
Lake	Pressure	Permitted waste management discharges
Lake	State for sockeye lakes	Coldwater refuge zone
Lake	State for sockeye lakes	Lake productive capacity
Lake	Quantity	Lake shore spawning area (length)
Estuary	Pressure	Marine vessel traffic
Estuary	Pressure	Estuary habitat disturbance
Estuary	Pressure	Permitted waste management discharges
Estuary	State	Estuary chemistry and contaminants (e.g. Nitrogen (N), Phosphorus (P), N:P, Metals, Polycyclic Aromatic Hydrocarbons & PCBs)
Estuary	State	Estuary dissolved oxygen
Estuary	Quantity	Estuarine habitat area (riparian, sedge, eelgrass and mudflats)

The information management framework is reviewed and maintained on an annual basis.

4.2. Explicit Prioritising Process

Incoming information is prioritized according to the following parameters (summarized from Schedule 'C' Part 4b of the Trust Agreement):

1) Its relevance to Skeena salmon;
2) Its credibility;
3) Its value for assessing risk to an objective;
4) Its accessibility; and
5) Its clarity of presentation.

4.3. Priority List of Information Projects

A priority list of information projects for the year is established using the prioritizing process to:

1) Canvas existing information and select and rank candidate information by its value in assessing risk to an objective;
2) Where information is found not to exist, rank candidate information projects by the value of newly-generated information to assess risk to an objective by a pressure indicator; and
3) Rank previously acquired information projects by the need to improve the accessibility and clarity of existing presentation.

Information projects on the priority list are further ranked by:

4) Relative cost in obtaining the information; and
5) Changes in the relative priorities of each type of project over time.

The above ranking process is summarized from Schedule 'C' Part 4c of the Trust Agreement (SKT, 2017).

5.0 Results of the 2019 Annual Knowledge Plan Process

Salmon-related objective classes are assessed and prioritized annually based on current activities within the Skeena watershed, research objectives and findings, and public interest. High-priority objective classes and related threats identified for 2019 include:

- Wild salmon populations
  - Harvesting pressure
  - Climate change
- Wild salmon habitat
  - Development within the Skeena River estuary
  - Climate change
- Hydroriparian ecosystem integrity
  - Land use activities (forestry, agriculture, energy production, mining)

    - Transportation corridors
    - Impacts from recent wildfires within the Skeena River watershed
- Water quality
    - Pollution
    - Climate change (i.e. temperature)
- Salmon fisheries
    - Harvesting pressure

Refer to Appendix A "Economic Activities and Priority Concerns within the Skeena Watershed and Estuary that Inform the 2019 Skeena Knowledge Trust Annual Knowledge Plan: Working Paper" (Eclipse Geomatics, 2019) for additional discussion of priority objective identification.

A priority list of information projects was prepared by ranking existing information sources by objective class, value for assessing risk to an objective, and relative cost (Section 3.3), and is presented in the following Table 2. Individual datasets within the prioritized information projects will be evaluated for relevance to Skeena salmon, credibility, and clarity of presentation (Section 3.2) as they are acquired.

A gap analysis to identify new information required to provide further clarity on specific objectives and pressure indicators was not performed for 2019 as existing high priority information sources have yet to be assembled for inclusion in a gap analysis.

Table 2: 2019 priority list of information projects

Knowledge Item	Q1	Objectives[1]								Q2			Q3	Q4		Cost Estimate Ranking	Calculated Rank	Specific Funding Allocations
	Is knowledge item an existing current assessment?	Habitat	Populations	Ecology/ Vegetation	Water Quality & Quantity	Climatology	Land Use & Development	Infrastructure	Spatial Data	Is knowledge referenced in an existing and current assessment?	Does assessment rank knowledge as high priority due to high risk?	Does assessment rank knowledge as moderate priority?	Does knowledge relate an objective to an indicator[2]?	Does knowledge provide current or historical status of objective?	Does knowledge provide value of an indicator?			
Assessment Reports																		
Watershed Assessment Reports including Fisheries Sensitive Watersheds, Salmon Habitat Assessments, Aquatic Reviews)	Yes	All Assessment Reports are considered a High Priority to include in the SSDC.														Low	HP	
Land Use Plans	Yes															Low	HP	
Salmon Recovery Plans	Yes															Low	HP	
Water Quality/Quantity Reports	Yes															Low	HP	
Fish Passage/Culvert Assessments	Yes															Low	HP	
IUCN Red Listed Sockeye Assessments	Yes															Low	HP	
Knowledge Items																		
Populations																		
Salmon Population Status			x							Yes	Yes					Low	HP	
Escapement Data			x							Yes	Yes					Low	HP	
DFO Research/Other research on salmon populations and genetics			x							Yes	Yes					Low	HP	
Reconstructed cannery reports (Shepherd)			x							No			No	Yes		Low	MP	
Alaskan harvest of Skeena salmon			x							No			Yes			Low	HP	
Historical DFO Reports			x							Yes						High	HP with specific budget item approval	

Knowledge Item	Q1	Objectives[1]								Q2			Q3	Q4		Cost Estimate Ranking	Calculated Rank	Specific Funding Allocations
	Is knowledge item an existing current assessment?	Habitat	Populations	Ecology/ Vegetation	Water Quality & Quantity	Climatology	Land Use & Development	Infrastructure	Spatial Data	Is knowledge referenced in an existing and current assessment?	Does assessment rank knowledge as high priority due to high risk?	Does assessment rank knowledge as moderate priority?	Does knowledge relate an objective to an indicator[2]?	Does knowledge provide current or historical status of objective?	Does knowledge provide value of an indicator?			
Climate Change																		
NOAA						x				Yes	Yes					Low	HP	
Climate WMA at Uvic						x				Yes	Yes					Low	HP	
BC MOE (F. Foorde)						x				Yes	Yes					Low	HP	
seatemperature.org						x				No			No	No	Yes	Low	MP	
Dan Selby (Babine Lake)						x				Yes	Yes					Low	HP	
Kitimat-Stikine Climate Model						x				Yes	Yes					Low	?	
J of Climate Change						x										Low	?	
Forestry Activies																		
Stream sedimentation reports		x			x		x			No			Yes			Low	HP	
Stream crossing reports/data		x		x	x		x		x	No			Yes			Low	HP	
Road GIS data					x		x	x	x	No			No	Yes		Low	MP	
Energy Production and Mining																		
Telkwa Coal Mine - past and present information					x		x			Yes	No	No	No	Yes		Low	MP	
Equity Silver Mine					x		x			Yes	No	No	No	Yes		Low	MP	
Morrison Mine					x		x			Yes	Yes					Low	HP	
Silver Queen proposed mine					x		x			Yes	No	No	No	Yes		Low	MP	
Upper Skeena coal proposals					x		x			No			No	No	Yes	Low	MP	
Upper Bulkley Nadina Community Futures Library		x	x	x	x		x		x	Yes	Yes					High	HP	
Infrastructure GIS Data		x					x	x	x	Yes						Moderate	HP	MWMT/SkeenaWild
Agriculture and Aquaculture																		
Disease transfer from Atlantic to Pacific salmon			x				x			No			No	Yes		Low	HP	
Agricultural impacts to salmon habitat within Upper Bulkley including water allocation		x		x	x		x			Yes	Yes					Low	HP	
Rangelands and riparian impacts on salmon habitat		x		x	x		x			Yes	Yes					Low	HP	

Knowledge Item	Q1	Objectives[1]								Q2			Q3	Q4		Cost Estimate Ranking	Calculated Rank	Specific Funding Allocations
	Is knowledge item an existing current assessment?	Habitat	Populations	Ecology/ Vegetation	Water Quality & Quantity	Climatology	Land Use & Development	Infrastructure	Spatial Data	Is knowledge referenced in an existing and current assessment?	Does assessment rank knowledge as high priority due to high risk?	Does assessment rank knowledge as moderate priority?	Does knowledge relate an objective to an indicator[2]?	Does knowledge provide current or historical status of objective?	Does knowledge provide value of an indicator?			
Residential and Commercial Development																		
Development focused on Lelu island/Flora Bank		x	x	x			x	x		Yes	Yes					Low	HP	
Prince Rupert bulk liquids tank storage and marine export facility		x	x		x		x	x		No	Yes		No	No	No	Low	MP	
Pollution																		
Pesticide treatments along rail line adjacent to Skeena River and tributaries		x					x	x		No			No	No	Yes	Low	MP	
Fire retardent in wildfire areas					x					No	No	No	No	No	No	Low	LP	
Transportation and Service Corridors																		
Chevron Pacific Trail Pipeline/Kitimat LNG		x					x	x	x	Yes	No	Yes				Low	MP	
Transcanada Prince Rupert Gas Transmission Project		x					x	x	x	Yes	Yes					Low	HP	
TransCanada Coastal GasLink /LNG Canada		x					x	x	x	Yes	No	Yes				Low	MP	
PNG Looping Project		x					x	x	x	No	No	Yes				Low	MP	
Enbridge Westcoast Connector Gas Transmission Project		x					x	x	x	No	No	Yes				Low	MP	
Wildfires																		
Research or assessment reports relating to the impact of wildfires on aquatic habitat		x		x	x					No	No	Yes	Yes			Low	MP	
Fire perimeter GIS data		x		x	x				x	No	No	Yes	No			Low	MP	

[1] Skeena Knowledge Trust Objectives (Section 4.1)
[2] Pressure indicators (Table 1)

6.0 Skeena Knowledge Trust Proposed Activities for 2019

A budget was established by the Skeena Knowledge Trust trustees for 2019 in support of the following proposed activities.

6.1. Governance

The SKT was granted charitable status with the Canadian Revenue Agency in August 2018, and has begun transitioning towards operational independence. SKT operations for 2019 will continue to be supported in part by the final year of a grant from the Gordon and Betty Moore Foundation administered by the Bulkley Valley Centre for Natural Resource Research and Management Society. The SKT continues to diversify its funding base with grants from the Real Estate Foundation of BC and the Tides Canada Dragonfly Fund.

6.2. Communications

New information projects will be publicly accessible on the Skeena Salmon Data Centre (SSDC) and Skeena Maps Portal (SMP). Social media platforms and the main SKT website will be used to promote releases. The SKT tools will be the focus of a series of workshops to be held in various locations within the Skeena River watershed, facilitating connection with new potential users and identification of new sources of information. An informational brochure and press release will also be prepared in conjunction with the workshop delivery.

6.3. Data Curation

High priority information identified in Section 5.0 and Table 2 will be uploaded into the SSDC and SMP first, followed by medium priority and low priority items as resources allow.

6.4. Technical Development

A major upgrade to the SMP platform is anticipated to be completed in early 2019, and the addition of new features are planned for the SSDC platform. Ongoing issues and bugs will be addressed as required.

6.5. Educational Activities

Workshops on using the SSDC and SMP to access and search information for user groups and the public will be developed and delivered in addition to on-going outreach and engagement with stakeholders.

7.0 Evaluation and Reporting

A summary of data acquisition and curated information will be prepared after the SKT year end of December 31st and presented to the trustees for review.

8.0 References

Fisheries and Oceans Canada. 2005. Canada's Policy for Conservation of Wild Pacific Salmon DFO. 49p. Retrieved from http://waves-vagues.dfo-mpo.gc.ca/Library/315577.pdf.

Skeena Knowledge Trust. 2017. Skeena Knowledge Trust Agreement. Retrieved from https://data.skeenasalmon.info/dataset/skt-trust-agreement-documents.

Stalberg, H. C., Lauzier, R. B., MacIsaac, E. A., Porter, M. and C. Murray. 2009. Canada's Policy for Conservation of Wild Pacific Salmon: Stream, Lake, and Estuarine Habitat Indicators. Canadian Manuscript Report of Fisheries and Aquatic Sciences 2859: 135pp Retrieved from: http://publications.gc.ca/collections/collection_2014/mpo-dfo/Fs97-4-2859-eng.pdf

APPENDIX A

Economic Activities and Priority Concerns within the Skeena Watershed and Estuary that Inform the 2019 Skeena Knowledge Trust Annual Knowledge Plan: Working Paper

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Introduction

The Skeena Knowledge Trust (SKT) was formed in September 2017 following a multi-year collaboration between the Bulkley Valley Centre for Natural Resource Research and Management Society, the Wet'suwet'en Treaty Office Society, SkeenaWild Conservation Trust, and the Pacific Salmon Foundation to address the need for greater knowledge management and more informed decision-making pertaining to salmon and salmon habitat within the Skeena River watershed and estuary. A trust model was adopted as the governing framework, as it provides the necessary structure to ensure high quality, unbiased data is gathered, stored, and disseminated in an objective and impartial manner. This level of data governance was considered to be essential in order for the SKT to become a trusted source of data for local First Nations, community members, and decision makers.

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This document outlines the SKT information project prioritizing process in support of the 2019 SKT Annual Knowledge Plan.

Project Background

In order to provide public access to information on wild salmon in the Skeena, the SKT maintains and populates the Skeena Salmon Data Centre (SSDC, an online data warehouse) and the Skeena Maps Portal (SMP, an interactive mapping tool for sharing and viewing spatial information). The information uploaded to the SSDC and SMP is guided by international, national, and regional conservation policies and guidelines. On the international level, the SKT aims to incorporate the Open Standards for the Practice of Conservation (OSPC) as it applies to the Skeena Watershed. Nationally, the SKT is guided by the Wild Salmon Policy, specifically Strategy 2 - Assessment of Habitat Status and Strategy 3 - Inclusion of Ecosystem Values and Monitoring. On a regional level the SKT's Annual Knowledge Plan reflects the various objectives tied to regional land use plans including First Nations land use plans and salmon recovery plans.

Wild Salmon Policy and Regional Land Use Plans

On a national level the contents of the SSDC are guided by the federal Wild Salmon Policy. Of particular focus is cataloging and warehousing information relevant to Strategy 2 - Assessment of Habitat Status and Strategy 3 - Inclusion of Ecosystem Values and Monitoring.

On a regional and sub-regional level the contents of the SSDC are guided by a wide range of land use plans and salmon recovery plans as outlined in Schedule "C" of the Skeena Knowledge Trust Agreement.

The SKT information priorities are organized below by topic as they relate to the OSPC direct threats classification and further expanded upon based on their relevance to the Wild Salmon Policy as well as regional and sub-regional land use plans.

International Conservation Standards

A joint effort by the International Union for Conservation of Nature (IUCN) and Conservation Measures Partnership (CMP) to create a global standard classification system of direct threats to conservation has led to the creation of the OSPC. The SKT aims to incorporate the OSPC as it applies to the contents of the SSDC and SMP. Our focus is specifically centered on the Direct Threats Classification Version 2.0 created as a key component of the Open Standards[1], included as Appendix B. Of the eleven threats identified through the OSPC, the SKT has identified seven of these threats as relevant to the Skeena watershed and estuary environment for 2019.

The seven threats defined by the CMP and IUCN identified as relevant to the Skeena watershed include:

- Residential and Commercial Development (Threat 1)
- Agriculture and Aquaculture (Threat 2)
- Energy Production and Mining (Threat 3)
- Transportation and Service Corridors (Threat 4)
- Biological Resource Use (Threat 5)
- Natural System Modifications (Threat 7)
- Pollution (Threat 9)
- Climate Change (Threat 11)

The threats listed above are not ranked by priority as their significance to the Skeena watershed varies by geographical scope and activity. They are all relevant for different reasons outlined below.

Salmon Populations

The highest priorities within the Skeena sub-watersheds and estuary are to understand the status of different salmon populations and the impact of climate change across the watershed and estuary. These two priorities align with the CMP Classification Threat 5: Biological Resource Use and Threat 11: Climate Change and Severe Weather and apply to the entire Skeena watershed and estuary.

The knowledge base relevant to understanding the status of different salmon populations is continually growing and to date includes sockeye, chinook, coho, pink and steelhead summaries provided by Fisheries and Oceans Canada and the Pacific Salmon Foundation. The SKT continually searches for additional up-to-date information on harvesting pressure and population status with respect to Skeena salmon. Any knowledge relevant to the status of salmon populations and salmon harvesting is considered a high priority knowledge item to be included in the SSDC.

Forestry Activities

Knowledge items cataloged under Threat 5: Biological Resource Use also include habitat concerns with respect to resource-based activities such as forest harvesting. Information relevant to sedimentation, the status of stream crossings, road density, and expanding harvesting activities into previously unlogged areas are all high priority knowledge to include in the SSDC.

Climate Change

The impacts of Threat 11: Climate Change with respect to salmon fisheries and water quantity are relevant across the entire Skeena watershed and estuary. Specifically, main knowledge concerns are focused on:

- Sea temperature increase resulting in changes to zooplankton communities and negatively impacting salmon survival at sea
- Atmospheric warming resulting in changes in weather patterns, increase of severe weather events including drought (related to low stream flow conditions and reduced access to smaller streams) and extreme rainfall events (resulting in high stream flow and turbidity conditions)
- Stream temperature increase
- Glacial melting

Information added to the SSDC will focus on increasing the current knowledge base with respect to current projected climate impacts at a regional and sub-watershed level scale. Select information items will be also included as they relate to the broader climate change scenario within the Pacific Northwest.

Agriculture and Aquaculture

Concerns with respect to Threat 2: Agriculture and Aquaculture include disease transfer from Atlantic farmed salmon to Pacific wild salmon populations. Sea lice are less of a concern on the northern coast of British Columbia due to the smaller number of aquaculture operations than on the southern coast. Agricultural concerns are mostly focused within the Upper Bulkley River sub-watershed, in particular fish-related impacts related to range lands and maintaining and restoring riparian areas.

Energy Production and Mining

All information relevant to the assessment of Threat 3: Energy Production and Mining including current, proposed and past mining activity within the Skeena watershed and estuary is a priority knowledge item, particularly as it pertains to water quality. Currently, particular projects of interest are the proposed Telkwa coal mine, proposed Morrison mine, several upper Skeena coal proposals, exploration activities at Silver Queen mine, and maintenance at Equity Silver mine.

Residential and Commercial Development

Key Threat 1: Residential and Commercial Development concerns are centered on development within the Skeena River estuary, in particular Lelu Island and Flora Bank. Also of interest as it relates to salmon habitat is the proposed bulk liquids tank storage and marine export facility development within the Prince Rupert harbor.

Pollution

Current concerns pertaining to Threat 9: Pollution include the application of pesticides along rail lines due to a recent blanket application along the rail line between Terrace and Prince Rupert and the proximity of the rail line to the Skeena River and its tributaries. Fire retardants dispersed across wildfire areas also represent a concern.

Transportation and Service Corridors

Threat 4: Transportation and Service Corridors including resource road development and pipeline development are of interest within the Skeena watershed due to their impact on fish habitat. Of particular relevance are the TransCanada Pacific Trails Pipeline, the Coastal GasLink Pipeline, the Prince Rupert Gas Transmission Line, and the PNG Looping Project. In addition, increased volumes of dangerous goods transported by rail (i.e. propane and other petroleum products) are anticipated with the expansion of marine export facilities in Prince Rupert.

Wildfires

The 2018 season was the worst on record for wildfires in British Columbia, with a larger burn area than the previous record set in 2017. Increased severity and frequency of wildfires are related to Threat 7: Natural System Modifications through fire suppression and reduction in the natural resilience of ecosystems to wildfires and Threat 11: Climate Change with respect to increases in seasonal air temperatures and frequency of drought conditions. Impacts to salmon and salmon habitat from wildfire activity include increased sedimentation from access road and fire guard construction, impacts to water quality and quantity from hydrophobic soils, fire retardant application, and mass wasting events, and impacts to riparian habitat in burn areas and from salvage harvesting.

Summary

The Skeena watershed and estuary are constantly experiencing pressures and threats to salmon and these pressures will change over time based on a variety of reasons including the unpredictable nature of climate change and new economic activities initiated both locally and from agents outside the watershed. To ensure the information available in the SSDC reflects current pressures on Skeena salmon, the SKT will revisit the high priority concerns within the watershed on an annual basis.

References

1. Conservation Measures Partnership. 2016. Classification of Conservation Actions and Threats. Version 2.0. Retrieved from http://cmp-openstandards.org/tools/threats-and-actions-taxonomies/ on June 14, 2018.

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APPENDIX B

Conservation Direct Threats Classification Version 2.0

Conservation Measures Partnership