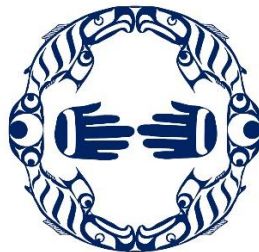


We Can't Keep Treating Mother Earth This Way¹: Indigenous Knowledge Engagement and Aquatic Species at Risk in the Pacific Region

Discussion Paper

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FIRST NATIONS
FISHERIES COUNCIL

¹ The title of the report came from a passionate participant in a FNFC SARA workshop, who has given permission for use.

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1.0 EXECUTIVE SUMMARY

The First Nations Fisheries Council (FNFC) works with and on behalf of First Nations to protect, reconcile, and advance the rights and titles of First Nations as it relates to fisheries. With this mandate, FNFC has over the years engaged with First Nations on the topics of Indigenous Knowledge (IK)² and aquatic species-at-risk providing opportunities to share information and gather feedback from First Nation participants. The purpose of this discussion paper was to insight into improving First Nations engagement in aquatic species at risk in the Pacific region, particularly through the engagement of Indigenous Knowledge (IK). This discussion paper grew out of research and First Nation perspectives shared in various FNFC-supported species at risk and IK-related workshops, policy and legislative analysis and through the exploration of a case study of the Thompson River Steelhead.

First Nations do have existing mechanisms to be involved in SARA processes, particularly due to commitments to engage IK. In fact, there is growing demand for IK engagement, as made evidence by the recent and various program, policy and legislative changes related to aquatic species-at-risk engagement and management. Though there are challenges within the current process, there is also the opportunity for First Nations and DFO to leverage these mechanisms and demand moving from consultation and engagement towards collaboration between First Nations and crown agencies on IK engagement and application for species-at-risk stewardship.

FIRST NATIONS SHOULD BE SUPPORTED TO LEAD AND COLLABORATE ON HOW IK ENGAGED, INTERPRETED, AND IMPLEMENTED IN SPECIES AT RISK ASSESSMENT AND STEWARDSHIP

The passion expressed by First Nation participants was evidence of the need to create holistic systems based on IK to ensure sustainable fisheries and aquatic beings.

Participants were very passionate and concerned about the destruction of their food, social, economic, and cultural ways. They emphasized the urgency to protect species from further destruction by having adequate engagements, relationship maintaining with effective communication, and inclusion of IK.

First Nations are open to sharing their IK but need to be involved in the processes and protocols for IK sharing and utilization. The processes and protocols need to be developed with First Nation involvement or by the First Nations themselves with adequate funding. IK needs to have the same weight as western science with accountability mechanisms to ensure knowledge and species are truly being protected. IK cannot be separated from First Nations stewardship, and First Nations are seeking to move beyond engagement and consultation approaches to lead and co-develop how IK is engaged, interpreted and implemented in aquatic species at risk stewardship.

First Nations and crown governments appear to have a common goal of protecting aquatic species-at-risk. There is a need to tie IK and western science together ensuring species are protected. This can only be done with adequate funding to First Nations to engage IK and stewardship, relationship maintenance through continued meaningful collaboration. Relationships with the federal government and its departments, including DFO, are important to maintain when sharing IK and working with First Nations. Region-specific cultural learning opportunities alongside ongoing, clear communication and a focus on reciprocity are foundational in relationship maintenance.

² IK is commonly known as Indigenous Knowledge. In the SARA, the term Aboriginal Traditional Knowledge (ATK) is used. Therefore, the report uses ATK when explaining processes directly related to SARA.

2.0 INTRODUCTION

First Nations in present-day British Columbia have been living and governing their relationships to the lands for thousands of years. Hundreds of generations of First Nation Peoples have been observing and analyzing habitat, animal behaviours, species distribution, and population changes which guided their communities' reliance on fish and other aquatic beings for food, social, economic, and cultural purposes. First Nations have a worldview that is based on relationships, responsibilities, and reciprocity. These principles are embedded in their knowledge systems. The knowledge systems developed from living on the lands have sustained the First Nation Peoples and have formed governance systems to ensure future generations will also be able to live sustainably on the land. With the introduction of a colonialism system, fish and aquatic species have become at risk of jeopardizing First Nations' relationships with the food, their social, economic, and cultural ways. In various forums, BC First Nations have articulated a vision of a fishery that focuses on the health and sustainability of ecosystems and species as well as the equitable sharing of fisheries and aquatic resources among Aboriginal and non-Aboriginal people.

FIRST NATIONS WANT TO ENSURE MECHANISMS ARE IN PLACE TO PROTECT IK

More recently, changes to colonial legislation have now been amended so that Indigenous Knowledge (IK) must be considered when making decisions about fish and their habitat. This change has created opportunities for First Nations to share their IK. Unfortunately, many experiences of First Nations sharing their IK have been blanketed

in mistrust due to IK being misused and not acknowledged to the full extent. First Nations are seeking to develop mechanisms to protect their IK and when they decide to share it. Considerations need to be made on what is shared, how it is stored, who is using it, and how it is used.

This discussion paper grew out of research and First Nation perspectives shared in various FNFC-supported species at risk and IK-related workshops. First Nations have expressed and continue to express their concerns with legislation developed to protect fisheries including species at risk. With these types of legislation seeking IK, First Nations want to ensure mechanisms are in place to protect their IK building trustful relationships with governments.

2.1 Species at Risk

The federal *Species at Risk Act*³ (SARA) is the legislative basis for the Government of Canada's strategy for the protection of wildlife species at risk. The Act received Royal Assent on December 12, 2002, and came fully into force on June 1, 2004. SARA is an important tool for conserving and protecting Canada's biological diversity. The purposes of the Act are:

1. To prevent wildlife species from being extirpated or becoming extinct.
2. To provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity; and
3. To manage species of special concern to prevent them from becoming endangered or threatened.

³ More information on SARA can be accessed at <https://laws-lois.justice.gc.ca/eng/acts/S-15.3/>

Canada uses SARA to carry out its obligations under the United Nations Convention on Biological Diversity.⁴ It affirms the Government of Canada's commitment to preventing species extirpation or extinction; recover extirpated, endangered or threatened species; and manage species of special concern.

The SARA applies to all federal lands and waters, for example, National Parks and National Historic Sites, Reserve Lands, as well as the freshwaters and territorial sea of Canada, including Marine Protected Areas. The SARA requires that the best available knowledge be used, which includes Aboriginal Traditional Knowledge (ATK), scientific information and community knowledge.

The SARA identifies several government entities, committees, and independent organizations with specific roles and responsibilities in the implementation of the Act:

- Governor-in-Council (GIC): The Federal Cabinet is responsible for initiating SARA timelines and makes final decisions on listings based on a recommendation from the Responsible Minister (Minister of the Environment).
- Environment Canada: The Minister of Environment is the Responsible Minister for the Act as a whole, and the Competent Minister for the protection and recovery of migratory birds and species at risk on federal lands other than aquatic species.
- Fisheries and Oceans Canada: The Minister of Fisheries and Oceans is the Competent Minister for the protection and recovery of aquatic species at risk.
- Parks Canada Agency: The Agency is responsible for the management and recovery of species at risk found in National Parks and lands administered by Parks Canada.
- Canadian Endangered Species Conservation Council (CESCC): Comprised of the Ministers of Environment Canada, Fisheries and Oceans Canada, and Ministers of the Provincial / Territorial governments that are responsible for the conservation and management of wildlife in their province or territory, the role of CESCC is: to provide general direction on the activities of COSEWIC; coordinate the activities of governments represented on the Council relating to the protection of species at risk; and, to consider advice and recommendations from NACOSAR.
- Committee on the Status of Endangered Wildlife in Canada (COSEWIC): The Act designates COSEWIC as an independent body of experts responsible for assessing and identifying species at risk and requires COSEWIC to form an Aboriginal Traditional Knowledge Sub-Committee (COSEWIC ATK Sub-Committee).
- National Aboriginal Council on Species at Risk (NACOSAR): Established under Section 8.1 of the Act, the role of NACOSAR is to advise the Minister of Environment on the administration of SARA and to provide advice and recommendations to the CESCC.

There are five basic phases of the SARA Conservation Cycle, each having its own set of processes and activities:

⁴ More information on the United Nations on the Convention on Biological Diversity can be accessed at <https://www.cbd.int/>

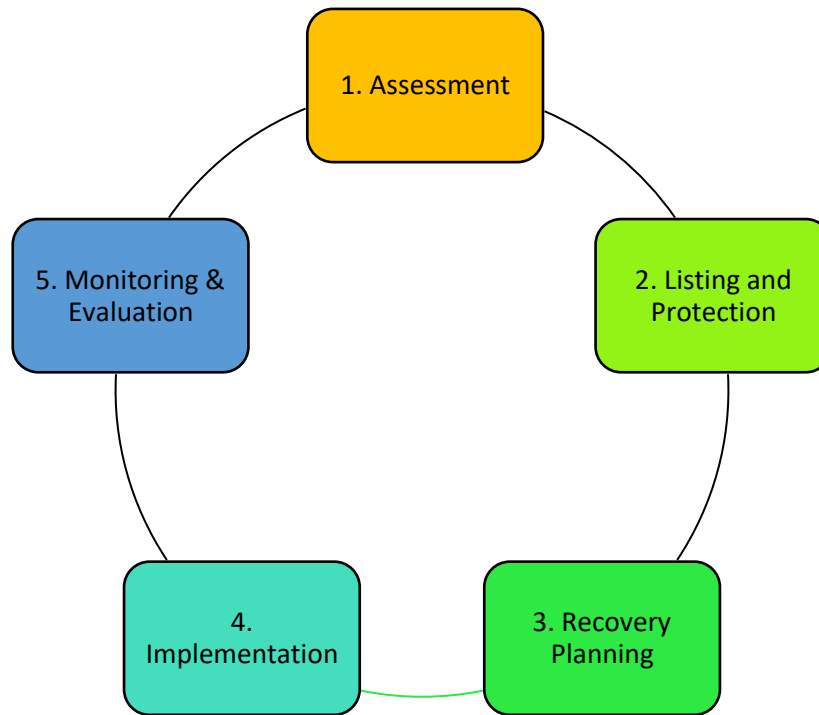


Figure 1. SARA Conservation Cycle

1. **ASSESSMENT:** The species assessment process is conducted by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). Based on the status report, they use a committee of experts to conduct a species assessment and assign the status of a wildlife species, or designatable unit of a wildlife species, believed to be at some degree of risk. The COSEWIC ATK Sub-Committee is also charged with assisting COSEWIC to incorporate ATK into the assessment phase of the SARA Conservation Cycle.
2. **LISTING and PROTECTION:** In response to a COSEWIC assessment and status designation, the Minister of Environment issues a Response Statement indicating how the Minister intends to respond to the COSEWIC assessment, including timelines for action. During the listing phase for aquatic species assessed as Extirpated, Endangered, or Threatened, DFO will also complete a Recovery Potential Assessment, develop a Management Scenario(s), conduct a Socio-Economic Analysis (SEA) and undertake listing consultations, all of which inform the DFO listing recommendation to the Minister of Environment. Once these steps are complete, the Minister will send the GIC a copy of the COSEWIC assessment along with a listing recommendation. Once the GIC acknowledges receipt of the COSEWIC assessment, the 9-month timeline is triggered for the GIC to decide, based on the Minister’s recommendation, to add or remove a species from Schedule I (the legal list of species at risk). A species added to Schedule I will benefit from protection commensurate with its designation.
3. **RECOVERY PLANNING:** For listed species, a recovery document is prepared which outlines what is scientifically required for the successful recovery or conservation of a species at risk. For species listed as Extirpated, Endangered or Threatened, prohibitions are put in place to prevent the killing, harming, harassing, capturing, taking, possessing, collecting, buying, selling or trading an individual or its derivative and to prevent damage or destruction of a species’ residence. Recovery planning for Extirpated, Endangered or Threatened species includes the development of a recovery strategy that should identify threats and, to the extent possible, critical habitat. An action plan will be prepared to

identify the specific actions needed to help in the species recovery, as identified in the recovery strategy. This includes a summary of the various projects and activities needed to meet recovery objectives and goals, with associated timelines, as well as an examination of socio-economic issues. For species listed as Special Concern, automatic prohibitions and identification of critical habitat do not apply, however, a management plan is developed.

4. **IMPLEMENTATION:** The implementation phase of the SARA Conservation Cycle focuses on implementing recovery and management actions to ensure a species at risk is not furthered imperilled and to ensure its long-term survival or recovery.
5. **MONITORING and EVALUATION:** The objectives of the monitoring and evaluation phase of the SARA Conservation Cycle are to determine the effectiveness of protection and recovery measures, to measure progress toward achieving recovery or management objectives, and to detect changes in the status of a species.

COSEWIC

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) is an independent advisory panel to the Minister of Environment and Climate Change Canada that meets twice a year to assess the status of wildlife species at risk of extinction. They are the authority for assessing the conservation status of wildlife species. Assessment of wildlife species status is based on the best available scientific, Aboriginal and community knowledge. COSEWIC comprises members from each provincial and territorial government wildlife agency, four federal entities (Canadian Wildlife Service, Environment Canada; Parks Canada; Fisheries and Oceans Canada; and the Federal Biodiversity Information Partnership, chaired by the Canadian Museum of Nature), three non-government science members, and the ten co-chairs of the Species Specialist Subcommittees and the ATK SC. Jurisdictional members are nominated by the Ministers internally on behalf of the department. The ATK SC members are nominated by five national Aboriginal organizations. All members of COSEWIC, including the members of the ATK SC, are appointed by the Minister of Environment Canada.

Assessment Process of Species by COSEWIC

The COSEWIC process is divided into three sequential steps, each of which has a tangible outcome.

1. Selection of wildlife species requiring assessment - the COSEWIC Candidate List⁵
2. Compilation of available data, knowledge, and information - the COSEWIC status report⁶
3. Assessment of a wildlife species' risk of extinction or extirpation and subsequent designation - the record of COSEWIC assessment results.

ATK SC

The Aboriginal Traditional Knowledge Subcommittee (ATK SC) was established in 2000 to facilitate access to the best available Aboriginal traditional knowledge and the incorporation of that knowledge into the COSEWIC species status assessment and classification processes. There are two individuals from each of the National Aboriginal Organizations that sit on the ATK SC. All members are appointed by the Minister of the Environment based on their experience with ATK. The information provided by the ATK

⁵ More information on the COSEWIC Candidate list can be accessed at <https://www.cosewic.ca/index.php/en-ca/assessment-process/wildlife-species-assessment-process-categories-guidelines/candidate-wildlife-species>

⁶ More information on the COSEWIC status and assessment reports can be accessed at <https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/cosewic-assessments-status-reports.html>

SC thus is integrated into the COSEWIC status report writer activities as part of the assessment component of SARA the SARA processes (see Figure 1).

In 2017, ATK Process and Protocol Guidelines for gathering ATK⁷ were adopted by COSEWIC. The ATK Process and Protocol Guidelines were developed based on input from a series of workshops held across the country with knowledge holders. The ATK Process and Protocol Guidelines are used when an Indigenous community does not have its own process and protocol guidelines. The ATK SC Process and Protocol Guidelines lists eight steps and guiding principles for gathering ATK.

The current ATK process for including ATK in status reports are:

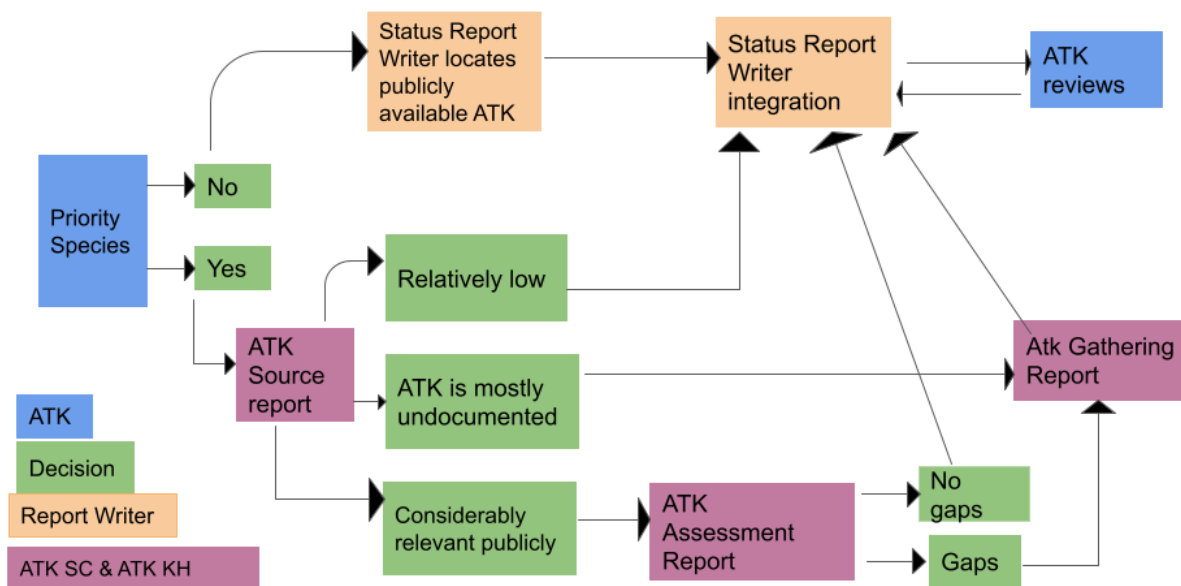


Figure 2. Process of ATK Collection and Integration from ATK SC to the COSEWIC Status Report Writer from COSEWIC.

The Decision Matrix guides the ATK SC in making decisions on species. A species is put through the Decision Matrix to determine how the ATK SC will proceed. The ATK SC considers ATK for all species and puts each species from the Amphibians and Reptiles, Arthropods, Birds, Freshwater Fish, Marine Fish, Marine Mammals, Mollusks, Mosses and Lichens, Terrestrial Mammals, and Vascular Plants COSEWIC Special Subcommittees through the Decision Matrix.

Criterion	Scores		
Number of Aboriginal Communities and Organizations	Few (+1)	Some (+2)	Many (+3)

⁷ For more information on the ATK SC process and protocols guidelines see this website: <https://cosewic.ca/index.php/en-ca/assessment-process/atk-guidelines>

Spatial Distribution (Approximate # of Ecozones)	Local (+1)	Regional (+2)	National (+3)
Harvest Significance (e.g., food, clothing, trade, commercial)	Not often used. (+1)	Secondary use (+2)	Primary use (+3)
Medicinal, Ritual or Spiritual Significance	Not often used. (+1)	Secondary use (+2)	Primary use (+3)
Accessibility of ATK	Low (-3)	Medium (+1)	High (+3)
ATK Benefit to Assessment	Low (+1)	Medium (+2)	High (+3)
Subtotal			
Total			

Score 2-9 = little effort is recommended. For budgeting purposes, assume that no ATK Review Reports will be produced.

Score 10 -12 = some effort is recommended. Develop ATK Source Report.

Score 13 -15 = moderate effort is recommended. Develop ATK Source Report and ATK Assessment Report.

Score 16-18 = extensive effort is recommended. Develop ATK Source Report, ATK Assessment Report and a Gathering Report.

An ATK Source Report is used to identify sources of already documented publicly available ATK on the species in question. Source Reports also contain a “Source Assessment Tool” which assists the ATK Subcommittee to determine if the species will continue to the second level of review, and ATK Assessment Report.

The ATK Assessment Report summarizes ATK from sources identified in the ATK Source Report and categorizes that knowledge per the COSEWIC criteria using the same structure as a Status Report. This step is an assessment of the available ATK including the impact of ATK on designation; potential impacts of ATK on designatable unit structure, an analysis of gaps in ATK; and a recommendation to proceed to an ATK Gathering.

The ATK Gathering Report is a report compiled based on knowledge provided by knowledge holders from an ATK gathering project on a specific species.

Once the Reports are completed, the ATK SC reviews them, sends them to the COSEWIC Status Report writers, and reviews the COSEWIC Status Report to ensure ATK is used appropriately. COSEWIC status reports are progressed through a request for proposals, open to First Nations, public, or private entities and individuals.

3.0 METHODS

3.1 Existing policy and legislative mechanisms and gaps

Research was conducted into key legislation and policies to provide insight into the current mechanisms and gaps for Indigenous Knowledge engagement in species at risk processes. This included analysis and insight from SARA, BC DRIPA, and the recent amendments to the Fisheries Act.

3.2 FNFC IK and SARA related workshops

The FNFC has hosted workshops, produced reports, and submitted recommendations to DFO regarding species at risk. These workshops intended to have First Nation participation addressing issues on First Nation engagement in SARA and how to build stronger networks with the First Nations regarding Aboriginal Traditional Knowledge (ATK) on species. For this discussion paper, the following FNFC reports were analyzed:

1. *Summary Report: Species at Risk Act & Aquatic Species Workshop, January 16 (Tier 1) & 17 (Tier 2), 2013, Richmond, BC*

In 2013, the FNFC organized and hosted a two-day SARA & Aquatic Species Workshop focused on addressing foundational issues regarding First Nations engagement in the SARA process. The workshop included a review of the SARA and its processes, a review of case studies of First Nations' experience with aquatic species listings, and the assessment of the benefits and challenges with hopes of identifying potential opportunities. Workshop participants identified practical ways for DFO to improve communications and consultation approaches that could lead to increased engagement of First Nations in SARA listing and recovery phases.

2. *Fisheries Indigenous Knowledge Forum Proceedings and Discussion Paper. First Nations Fisheries Council of British Columbia, October 2019.*

In 2019, the FNFC and Aboriginal Traditional Knowledge Subcommittee (ATK SC) hosted a two-day workshop titled "Committee on the Status of Endangered Wildlife in Canada Aboriginal Traditional Knowledge Subcommittee 2019 Workshop". The workshop hoped to build a stronger network with Indigenous communities in B.C while gathering ATK regarding the status of thirteen pre-identified aquatic and terrestrial species. The workshop provided discussion mechanisms for how Indigenous communities can be included in the COSEWIC process and the ATK related to COSEWIC species assessment criteria and threats. Participants noted recommendations that included building relationships, using Indigenous perspectives in the COSEWIC process, increased Indigenous participation and the recognition of spiritual and cultural significance. Both workshops generated discussion on issues along with recommendations. Appendix A has the table highlighting key recommendations.

3. *Aquatic Species At Risk in the Pacific Region Virtual Workshop Series Report. First Nations Fisheries Council of British Columbia, March 2021.*

In 2020, the First Nations Fisheries Council of British Columbia began a collaboration with Fisheries and Oceans Canada's (DFO) Species at Risk Program focused on sharing information and foster conversations to improve First Nation engagement in BC regarding aquatic species at risk processes under the *Species at Risk Act* (SARA). As part of this collaboration, the FNFC organized and hosted a 5-part virtual workshop series open to First Nations province-wide to attend. These included opportunities for Tier 1 (First Nations only) sessions as well as Tier 2 sessions with DFO Species at Risk Program staff. The FNFC's 2021 *Aquatic Species At Risk in the Pacific Region Virtual Workshop Series Report*, provides further details about the workshop series. For this discussion paper, the third workshop was held on January 20, 2021, to generate discussion and feedback for improving First Nation and IK engagement in SARA. This workshop provided an overview of SARA, COSEWIC and IK engagement by an FNFC contractor. To prepare the participants, a briefing note was provided in the invitation with a general overview and analysis of previous FNFC work and policies and legislation related to IK engagement in SARA (see Section 4).

3.3 Case Study Development

To gain insight into BC First Nation experiences with Indigenous Knowledge in SARA, COSEWIC, and ATK, invitations were sent to specific people and First Nations organizations to participate in a case study. Invitees were selected for those who previously been involved in FNFC-supported workshops and activities regarding aquatic species at risk under SARA.

4.0 ANALYSIS OF POLICIES AND LEGISLATION

The colonial government of Canada continues to introduce and implement legislation for environmental protection. Included in this legislation is the SARA, DFO & SARA, the BC DRIPA, and the Fisheries Act. Each Act has specific purposes and responsibilities. Described below are the SARA, BC DRIPA, and the Fisheries Act. Additional resources to consider can also be found in Appendix B.

SARA states “for greater certainty, nothing in this Act shall be construed so as to abrogate or derogate from the protection provided for existing aboriginal or treaties rights of the aboriginal peoples of Canada”.

4.1 SARA

The Preamble to the SARA proclaims, “the roles of the aboriginal peoples of Canada and of wildlife management boards established under land claims agreements in the conservation of wildlife in this country are essential” and “the traditional knowledge of the aboriginal peoples of Canada should be considered in the assessment of which species may be at risk and in developing and implementing recovery measures”.⁸ The SARA also states under section 3: Aboriginal and Treaty Rights, “For greater certainty, nothing in this Act shall be construed so as to abrogate or derogate from the protection provided for existing aboriginal or treaty rights of the aboriginal peoples of Canada by the recognition and affirmation of those rights in section 35 of the Constitution Act, 1982.”⁹ The Preamble to SARA also expresses that socio-economic interests should be considered in developing and implementing recovery measures.

SARA includes work conducted by COSEWIC. Their purpose is to provide a single, scientifically-sound classification of wildlife species at risk. As an independent, arms-length advisory panel to the Minister of Environment and Climate Change Canada, members are wildlife biology experts drawn from academia, government, non-governmental organizations and the private sector. COSEWIC has specialist subcommittees including the ATK SC. Participation as experts in COSEWIC activities and particularly the ATK SC are open to First Nations.

If a species is listed under SARA as Extirpated, Endangered, or Threatened, it is afforded legal protection. Several prohibitions are triggered to protect the species and its habitat, and recovery planning requirements are triggered. An Extirpated, Endangered, or Threatened species at risk must have a recovery strategy and one or more action plans developed that “to the extent possible” identify critical habitat. SARA’s general prohibitions, as well as protection of critical habitat, are not applied for species

⁸More information on SARA can be accessed at <https://laws-lois.justice.gc.ca/eng/acts/S-15.3/>

⁹ IBID

listed as Special Concern. Recovery planning for a species listed as Special Concern takes the form of a management plan. The SARA also provides that “to the extent possible” all recovery planning documents (i.e., recovery strategy, action plan, and management plan) “must be prepared in cooperation”¹⁰ with every affected Aboriginal organization that the competent minister considers will be directly affected by the recovery document.

COSEWIC

By establishing the species candidate list, COSEWIC identifies species for which status reports are desirable. In addition, any person may apply to COSEWIC for an assessment of the status of a wildlife species. COSEWIC commissions the preparation of Status Reports for candidate species based on resources and time. COSEWIC monitors species previously designated as being at risk and an updated Status Report will be commissioned at least every 10 years.

A Status Report contains the best-available information on the basic biology of a wildlife species. Status reports are prepared based on COSEWIC’s species candidate list and a species’ priority for assessment. This includes information on population sizes and trends, distribution in Canada, and habitat availability. Commissioned by the COSEWIC through an open competition process (i.e request for proposal process) where First Nations are encouraged to apply, Status Reports form the basis for a species assessment and status designation. COSEWIC status reports are progressed through a request for proposals, which limits the ability for First Nations to author status reports due to capacity constraints.

COSEWIC assesses the Status Reports and makes decisions on how the species should be listed - Extirpated, Endangered, Threatened, or Special Concern. COSEWIC’s decision is sent to the Minister of Environment who issues a Response Statement indicating how the Minister intends to respond to the COSEWIC assessment.

ATK Subcommittee

First Nations can participate in the ATK subcommittee to COSEWIC through a nomination process. The ATK SC typically has 12 members nominated by the 5 National Aboriginal Organizations (NAO) on the Subcommittee. There are many instances when there are only 8 to 10 members, depending on the NAO’s response to appointing a committee member and the timely response from the Minister to appoint the member. The ATK SC is expected to review every candidate species on COSEWIC’s list providing ATK on the following:

- species distribution
- habitat
- species interactions
- population size
- body condition
- species interaction
- potential threats
- trends over time & space
- existing management
- Indigenous names



THE ATK SC USES PUBLICLY AVAILABLE ATK

¹⁰ IBID

The ATK SC uses readily publicly available ATK to provide input into a Status Report. On numerous occasions, there is no readily publicly available ATK on a species.

The ATK SC does not regularly share the ATK Source, Assessment, and Gathering reports for three reasons. First, the ATK reports are designed specifically to address COSEWIC assessment criteria and not socio-economic or species recovery (or other aspects of SARA). The reports are also designed to help Status Report writer and/or ATK SC identify potential sources of ATK that are used by ATK SC members during the review of Status Reports. Secondly, even though many of the sources are publicly available there are concerns that groups, not related to COSEWIC, may contact the communities identified within the reports. Fourth, the ATK SC cannot verify all of the publicly available sources are collected and published under protocols and guidelines similar to what the ATK SC has developed. There are also some cases where the published sources indicate that permission must be granted from the author before it can be used, in which case the ATK SC has worked with communities to gather ATK and the reports will specifically indicate how they can be used and shared. Finally, the ATK SC is comprised of only a few members, and therefore cannot be considered experts of all the IK related to all species being considered.

The ATK Process and Protocol Guidelines approach to receiving ATK acknowledges that ATK is a significant gift and needs to be treated with respect and integrity and used only for its intended purposes. The ATK Process and Protocol Guidelines support an Ecosystem approach based on the advice of Elders and knowledge holders as ATK is typically interconnected and interrelated to multiple species including the species habitat. The Process and Protocol Guidelines are used when an Indigenous community does not have their own process and protocol.

4.2 DFO & SARA

DFO participates in assessments; provides recommendations on listing and critical habitat protection advice; implements and enforces protection and certain recovery measures applicable to listed aquatic species (e.g., Critical Habitat Orders and Prohibitions); prepares recovery documents; implements recovery measures through science, collaboration with external stakeholders (i.e., Grants and Contribution programs), and management efforts; and monitors and reports on the progress of recovery activities. The departmental support is informed by science advice and peer-reviewed scientific information outlining status, and what is necessary to recover species. DFO considers socio-economic considerations through an analysis of socio-economic impacts of species recovery and protection activities, as well as the costs and benefits of stated recovery and protection measures. DFO is to consult on a broad set of advisory processes to determine views on conservation and management efforts which includes Indigenous consultations and meaningful engagement on potential decisions.

The DFO SARA Listing Policy and Directive for “Do Not List” Advice has been developed by DFO to operationalize the Species at Risk Act. Policy instruments establish consistent approaches; identify how to manage significant risks; and put into action-guiding principles for implementation. The DFO SARA Listing Policy and Directive for “Do Not List” Advice (the Policy and Directive) support the implementation of SARA which seeks to conserve Canada’s biological diversity. DFO must ensure that the SARA requirements for listing advice are met when developing such advice for the DFO Minister to provide when consulted by the Minister of the Environment. To develop this advice, DFO must:

1. Take into account the COSEWIC assessment.
2. Consult any other competent minister.
3. Consult the appropriate wildlife management board.

DFO is responsible for the protection and conservation of aquatic species but also has responsibilities for regulating activities that may harm aquatic species (e.g., fishing) or fish habitat (e.g., hydro-electric). The constitutional division of powers makes the federal government responsible for “seacoast and inland fisheries”; however, overlap with provincial jurisdiction necessitates involvement from both orders of government (e.g., water use, forestry).

4.3 BC DRIPA

The provincial *Declaration on the Rights of Indigenous Peoples Act* (DRIPA)¹¹ is the legislative basis for the Government of British Columbia’s alignment of BC’s laws with the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP)¹² along with an action plan that includes consistent public reporting. The Act received Royal Assent and came into full force on November 28, 2019. The purposes of this Act are:

1. to affirm the application of the UNDRIP to the laws of British Columbia.
2. to contribute to the implementation of the UNDRIP.
3. to support the affirmation of, and develop relationships with, Indigenous governing bodies.

UNDRIP was adopted by the United Nations General Assembly on September 13, 2007, by a majority of 144 states in favour, 4 votes against and 11 abstentions. Since the adoption of the Declaration, Canada has reversed their original position of against and have expressed support for the Declaration. The Declaration establishes a universal framework of minimum standards for survival, dignity and well-being of Indigenous peoples of the world. It also elaborates on existing human rights standards and fundamental freedoms as they apply to Indigenous peoples.

The Province worked with the First Nations Leadership Council (BC Assembly of First Nations, First Nations Summit and Union of BC Indian Chiefs), who have been directed by First Nations chiefs of BC, to develop the BC DRIPA legislation. It will create a framework for reconciliation in BC, in keeping with the Calls to Action of the Truth and Reconciliation Commission.

The legislation sets out a process to align BC’s laws with the UNDRIP. It mandates the government to bring provincial laws into harmony with the UNDRIP. It requires the development of an action plan to achieve this alignment over time – providing transparency and accountability. It requires regular reporting to the Legislature to monitor progress. In addition, the legislation allows for flexibility for the Province to enter into agreements with a broader range of Indigenous governments. The DRIPA provides a framework for decision-making between Indigenous governments and the Province on matters that impact their citizens.

4.4 Fisheries Act

The *Fisheries Act*¹³ received royal assent and became law on June 21, 2019. The sustainability of Canada’s marine resources will be better supported through the new provisions and protections the Act contains. The purpose of this Act is to provide a framework for:

¹¹ More information on BC DRIPA can be accessed at

<https://www.bclaws.ca/civix/document/id/complete/statreg/19044>

¹² More information on UNDRIP can be accessed at

<https://www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenous-peoples.html>

¹³ More information on the *Fisheries Act* can be accessed at <https://laws-lois.justice.gc.ca/eng/acts/f-14/page-1.html>

1. the proper management and control of fisheries; and
2. the conservation and protection of fish and fish habitat, including by preventing pollution.

There were several changes to the Act that provide improved mechanisms for the role of Indigenous peoples in project reviews, monitoring and policy development, including IK engagement¹⁴. For example, Indigenous traditional knowledge (ITK), when provided, be considered in habitat decisions. The Act now has a requirement to consider the adverse effects of DFO decisions on the rights of Indigenous Peoples. There are also protection mechanisms for ITK when it is provided. The Act added the ability to enter into agreements with Indigenous governing bodies to facilitate cooperation and communication between parties.

THE FISHERIES ACT HAS A REQUIREMENT TO CONSIDER INDIGENOUS KNOWLEDGE AND ADVERSE EFFECTS OF DFO DECISIONS ON THE RIGHTS OF INDIGENOUS PEOPLES

The Act states that the constitutional rights of Indigenous peoples cannot be abrogated or derogated, and the Minister 'shall' consider adverse effects their decisions may have on the rights of Indigenous Peoples. These statements are typical in many government legislations and more often than not, it is the First Nations that have to determine the effects on their rights.

5.0 WORKSHOP FEEDBACK: ASSESSING CHALLENGES

The following section lists the challenges gathered from the participants from the various FNFC workshops related to IK and SARA. A summary of key findings from the 2013 and 2019 workshops is summarized in Appendix A, which were also presented to First Nations participants in the 2020-21 workshop. First Nations have been involved in species-at-risk programs. Several case studies have been presented in previous reports outlining First Nation involvement. Regardless of First Nation involvement, challenges remain:

5.1 General IK engagement challenges

- First Nations have voiced concern that IK has been deemed as secondary to western science even though it is a requirement in the *Fisheries Act*, and increasingly been part of DFO and other colonial department mandates to engage with.
- Lack of communication and coordination between Canadian government policy staff and 'on-the-ground' personnel.
- Systemic issues such as political structures and racism consistently undermine the ability of IK and First Nations to inform the decision-making process.
- It is not adequate or appropriate to just to be asked to "provide" IK to provincial and federal agencies, there needs to be a process where First Nations are collaboratively working with these agencies to understand IK and apply where relevant and appropriate
- Lack of transparency, commitment, and accountability mechanisms related to IK engagement, which makes it difficult for First Nations to want to participate and provide recommendation on IK engagement best practices, principles, and frameworks
- Concerns around data sovereignty, privacy, and protection

¹⁴ More information on changes to the *Fisheries Act* can be accessed at <https://www.dfo-mpo.gc.ca/campaign-campagne/fisheries-act-loi-sur-les-peches/introduction-eng.html>

- Lack of support for long-term capacity (i.e. staff) for IK engagement. First Nations need to be supported in having biologists and technologists that support IK engagement internally and provide insight to leadership.
- Lack of common understanding of IK and how IK is defined and engaged by individuals and First Nations. This contributes to IK ‘misinterpretation’, misuse, and cherry-picking of information

5.2 SAR process-specific Challenges

- COSEWIC status reports are progressed through a request for proposals, which limits the ability for First Nations to author status reports due to capacity constraints.
- High turn-over rate of DFO staff and the ability to create long-term relationships which is integral for meaningful Indigenous engagement and IK to adequately inform the SARA process.
- Incorporation of IK and a formalized framework have been missing from COSEWIC and SARA.
- There are concerns over the Indigenous Cultural Significance (ICS) Framework development and its implications for IK engagement
 - There is an AFN/DFO process to develop IK protocols where there has been significant work being done by AFN/DFO within the Fisheries Act on how to include IK; this seems to be a duplication of efforts to develop a framework.
 - There is concern for an ICS Framework developed by third party consultants that have not engaged extensively with First Nations in BC and do not share the same familiarity or expertise
 - The scoping and development of the ICS framework should be collaboratively done with First Nations instead of through a third-party consultant
 - There is concern about data sovereignty: who will hold the data, who will protect it, and how will the data be used in SARA processes
 - The ICS process appears to run independently from other federal initiatives around the inclusion of IK and the protection of Indigenous sites of significance.
- Lack of engagement and opportunity for DFO staff to learn and be part of ceremony. IK and species stewardship, including the recovery of species, is inherently tied to ceremony.
- Lack of transparency and understanding of what how DFO/Canada defines ‘consideration of IK’ in the SARA process
- Unequal distribution of costs and benefits through the sharing of IK. First Nations often do not receive any benefits from sharing IK and hold the majority of the costs and risk. Third-party consultants are paid but not First Nations for the interviews and engagements for determining ICS, and IK interpretation.
- Current SARA processes are too narrow to consider the breadth and depth of IK, its stewardship, and application.
 - IK is often holistic whereas SARA is species-specific
 - ‘Silo-ing’ of governmental agencies and the separation of discussions between terrestrial and aquatic SARA.
 - The government needs to consider cumulative impacts in SAR processes.
 - Medicines are missing in the evaluation of species.
 - Archeology should be a part of the SARA process but there needs to be coordination between government departments.
 - There are no mechanisms for the development or consideration of First Nation-centered or -led cultural and socio-economic quantification and qualification

- Separation of IK and its relation to Indigenous stewardship. First Nations are asked to provide IK to the government but First Nations have little involvement after the fact.
- SARA can be seen by First Nations as a poor management tool for protecting species and their habitats. There is little communicated evidence that SARA has successfully contributed to species recovery. This includes where IK was provided.
 - There is concern about the cultural impact of not being able to harvest, about the community health and food security, and the lack of re-building salmon populations (notably, salmon), especially as others are still 'allowed' to fish
 - DFO methodology for assessing aquatic SAR continues to have issues. For example, the assessment of Bull Trout in BC and Alberta was completed as one population which does not accurately reflect how the two populations interact. This assessment methodology resulted in a lower risk designation.
 - There has been no evidence that SARA or IK provided has been used by Canadian agencies to protect salmon-bearing streams from industrial development.
 - There is a need to do something now to protect these stocks because DFO's management regime is not sufficient or is viewed as occurring too late.
- Lack of transparency, and involvement in, the weighting of First Nations knowledge, interests and cultural values to socio-economic components. There was a general concern regarding the overall lack of First Nations participation within the SARA process. As a result, First Nations concerns and impacts have not been adequately considered and it has damaged communities
 - Disappointment and lack of trust has arisen because stocks have not been listed, example is Steelhead, even when First Nations knowledge and engagement is provided
 - Concerns arose around the prioritization of socio-economic values over First Nations knowledge, interests, and species health. SEA continues to play a huge role in 'did not list' outcomes because of the economic value of recreational or commercial fisheries.
- Current SARA funding does not adequately address capacity needs for First Nations to fully be engaged in SARA, including sharing IK information. First Nations are not supported to do their own investigating to collate IK and evaluate impacts of SARA.
 - No funding for 'deep consultation' even though Canada has infringed on First Nations' rights, i.e. the loss of species, without any justification.
 - There is a lot of time and commitment within the process in discussing how First Nations and IK are going to be engaged without the actual funding support to do so.

CURRENT SARA ACTIVITIES THAT SEEK FIRST NATIONS AND IK ENGAGEMENT ARE LIMITED IN SCOPE, CAPACITY SUPPORT, AND TRANSPARENCY

6.0 CASE STUDY: A FIRST NATION EXPERIENCE WITH SARA AND INDIGENOUS KNOWLEDGE ENGAGEMENT

6.1 Thompson River Steelhead – Secwepemc Fisheries Commission


The Secwepemc Nation was invited to provide IK to COSEWIC for assessing the Thompson River Steelhead. The Secwepemc Fisheries Commission (SFC), therefore, decided to develop a more formal framework for providing IK and, also for protecting it. Steelhead was an emergency listing, and SFC was contacted by an ATK SC member to share their information. SFC was not provided any funding by COSEWIC or DFO to directly conduct this work, and it was uncertain how SFC would be compensated for

sharing IK on Steelhead. SFC created a living document and template to guide Secwepemc communities as they assess the benefits and risks of providing IK and as they determine when what and how to share their information. The project identified four steps in planning for IK engagement:

1. Research the process that requires IK. They developed a background document for the Secwepemc communities to better understand the SARA and COSEWIC processes.
2. Survey communities to identify their research capacity. The project leads gathered information about the Secwepemc communities' staff, data gathering systems, financial resources, project coordination methods, and their needs for project management and funding.
3. Develop IK tools specific to fisheries. Working with Simon Fraser University, a research methodology and information sharing protocol were developed. These were published in October 2019 as a document titled "A Planning Framework for Accessing and Using Aboriginal Traditional Knowledge for Secwepemc Community Fisheries".
4. Work with communities to add IK to their databases so they are ready for future opportunities to apply the IK tools when requests come in. In addition, a standardized interview template was developed.

Feedback provided to FNFC on the lessons learned and recommendations from this work are summarized into four thematic categories below:

1. SARA: Communication with First Nations on action plans and recovery strategies is important. When the cost-benefit analysis was being conducted, they were not invited to participate, and they only listed the impacts on commercial fisheries, not First Nations. There is a lack of how they evaluate the First Nation reports including First Nation values in assessments. There is a lack of funding for First Nation involvement in SARA. There is a need to have First Nation involvement in COSEWIC criteria which includes adequate funding for involvement. The contracting process under SARA is inadequate. B.C recovery plans are not aligned with COSEWIC, SARA, or the Fisheries Act. There is no alignment process or tracking process to see how the listing is working.
2. Relationships: DFO needs to respond to First Nations to establish a reciprocal relationship. Relationships are stressed because of a lack of engagement overall. There is typically not much response from DFO. Continuous engagement is key in relationship maintenance. Governments working in silos affect our relationships. When advice is provided, First Nations need to be involved as part of relationship building.
3. Engagement: There are no clear processes or procedures for engagement with First Nations through COSEWIC or SARA processes. There is a lack of consultation on the development of action plans or how they are implemented. The province of BC lacks communication on the progress of implementation of recovery plans. DFO needs to regularly communicate after the assessment process by engaging First Nations in explaining how they are doing the assessments. Canadian Gazette does not work for First Nations. There is very limited engagement on providing IK for species. DFO needs to consult at the gathering stage for SAR. First Nations want to be engaged after the species is listed.
4. IK protocols: There are no clear processes on how to implement IK inclusion or how to accommodate when IK is shared. The IK provided to SARA needs to be assessed by the First



RELATIONSHIPS SHOULD CENTER RECIPROCITY,
TRANSPARENCY, COLLABORATION, AND
CONSISTENT COMMUNICATION

Nations providing it. First Nations have IK for assessments. There is a lack of protocols for IK inclusion. The ATK SC has a process on how IK would be used, and this came with funding. This process needs to be standardized. First Nations need to review literature for IK such as source reports and gathering reports. The IK shared for the Steelhead was specific to a contract.

7.0 KEY LEARNINGS AND COMMON THEMES

Below is a summary of key learnings from the analysis from policy and legislation, workshop feedback, and the case study.

7.1 Funding is inadequate, short-term, and forces First Nations to compete for funding.

Since colonization and subsequent the enforcement of a colonial economic-driven governance system, access to adequate financial resources has been an issue. Funding programs established by governments are competitive and have stringent short-term timelines. Short-term support cannot support long-term strategies and activities to build on progress, monitoring and evaluation of work to determine efficacy needed for species at risk assessment and management. Additionally, these funding programs pit First Nations against each other to compete for resources and the timelines may not be in agreement with the work the First Nations want to do. The funding programs require specific expertise to compile the proposal and the reporting is time-consuming. Many funding programs require a percentage of matching funds which is a challenge for First Nations. These types of issues have been raised in the past with little to no solutions.

Funding for First Nations to participate in SAR and processes remain inadequate, including for meaningful consideration and engagement of IK. These funding issues inhibit First Nation participation in SAR and collaborative work around IK engagement. The case study also identified funding issues with SARA and recovery plans.

First Nations science and technical staff are critical to the process, as they can play a key role in engaging and bridging IK to western science processes. Some communities are fortunate to have science and technical staff to support their work and provide recommendations to leadership. Leadership needs their insight to push initiatives forward. There is a need to provide capacity funding for First Nation communities. This support would assist with engagement processes, relationship building, and IK engagement. Coordination among government agencies is required to address IK engagement in SARA which will reduce duplication efforts and burdens on First Nations.

7.2 SAR lacks processes for the meaningful engagement of IK, including First Nation cultural and socio-economic impacts and cumulative impacts.

First Nations continue to express numerous inadequacies with SAR. For example, the ATK SC structure with its few members cannot be expected on all species and related IK, and how the ATK SC is engaged to inform reports does not conform to First Nations relationships with their Indigenous Knowledge. Furthermore, the SAR process lacks First Nations cultural and socio-economic impacts which affect species that First Nations are reliant on and causes issues with species being listed under SAR categories. Participants explained that it does not address cumulative impacts which affect how the species is listed. SAR is currently backlogged on species due to timelines. This continued lack of SARA needs to consider other environmental factors and cumulative impacts. First Nations' socio-economic values and cultural values are important in assessing species. These challenges continue to impact First Nations trust and interest in collaboration with DFO, and critical implications for meaningful First Nation and IK

engagement. Finally, many of the current engagement mechanisms for First Nations to lead in drafting documents to inform SARA are done through nominations, request for proposal processes which limit First Nations authorships due to capacity constraints (e.g. sitting on ATK SC to review documents, COSEWIC Status Reports, ICS Scoping Framework). There is a rising call for DFO alongside the other agencies involved in SARA do directly collaborate and resource First Nations impacted by species loss to do this work.

7.3 IK is as important as western science.

IK can inform and should be used in COSEWIC decisions and research of species distribution, habitat, population size, body condition, species interactions, potential threats, temporal and spatial trends, existing management and Indigenous names. However, there is no Indigenous stewardship in SAR or First Nation participation which implies that IK is not weighted the same as western science. The SAR Designatable Unit system creates issues with the listing of species since First Nations understand the interconnectedness of species. Governments continue to work in silos on SAR cause communication and relationship issues with First Nations. The case study identified a lack of meaningful engagement in all SARA processes.

In many instances, IK is viewed as secondary or in addition to western science. Participants expressed the need for their involvement in the development of frameworks for the inclusion of IK including in the COSEWIC and SARA processes. There is a lack of understanding on exactly what “should consider IK” means in the different legislative documents which means it can get misinterpreted and only certain components of IK are included. Participants expressed the lack of commitment from the government making it difficult for First Nations to participate and provide recommendations on IK best practices. Governments are in silos causing a lack of communication and coordination with “on-the-ground” personnel. IK needs to be given the same weight as western science and compensated fairly when it is shared. Sustained meaningful relationships are a challenge due to the high turn-over of government staff which causes a lack of meaningful engagement for IK to inform the SARA process. The case study provided information on relationship maintaining as a key for IK inclusion in SARA processes. Participants stated that there is a big gap in engagement and opportunity for ceremony. Systemic issues such as political structures and racism consistently undermine the ability of IK and First Nations to inform the decision-making process.

Firm commitments by governments to incorporate IK with a formalized framework need to be developed with First Nations. A component of this commitment requires government staff to continuously participate in cultural education, ceremonies, and community events maintaining relationships with the First Nation communities. The case study had experience with providing IK and asserted the need for protocols and agreements. Mechanisms need to be developed to hold DFO accountable which includes being able to challenge western science in SARA processes. It is incumbent upon governments to coordinate and collaborate with other departments on SAR as other departments may be developing best practices for IK inclusion within SAR. Ultimately, First Nations need to be adequately funded to participate in the development of IK protocols and guidelines for SARA.

7.4 Collaboration between First Nations is key.

Participants are grateful for the work FNFC continues to implement. The work is important and needs to be on-going including collaboration with Canadian governments to reduce replication efforts. Investment in time and resources to collaborate between First Nations elevates the importance and value of IK, Indigenous stewardship, and the development of First Nation IK protocols. With current

legislation and policies related to IK and SARA, alongside commitments to UNDRIP and reconciliation, there are ‘windows of opportunity’ for First Nations to be involved in how IK is engaged, and continue to advocate for the importance of First Nations-led activities and support for co-design, co-development, and co-implementation of activities to manage species at risk. There is a strong demand and need for DFO and other Canadian agencies to move away from colonial practices towards IK, whereby First Nations are requested to provide it as part of engagement. Rather, First Nations should be supported to directly collaborate with agencies involved in SARA processes to ensure that IK is adequately understood, and implemented in ways that respect Indigenous Rights and stewardship responsibilities.

7.5 Interconnectedness of IK to First Nations rights and stewardship of aquatic species

Since First Nations understand the interconnectedness of all life, other issues of Nation-to-Nation relationships, including IK engagement, rights and title, consultation, and First Nation leadership are all intertwined with species at risk management. These are often political issues outside the scope of the workshop series but are important components of how First Nations are involved with SAR and how they determine their path forward.

8.0 RECOMMENDATIONS

The following section lists the recommendations within and outside the current SARA process related to IK engagement. Recommendations are provided to DFO and First Nations. It is important to note that many of these recommendations to DFO have been already been provided in the past and that in many instances, the First Nations remain unclear on how their recommendations have been applied, and if not applied, why not. It is understood that different government departments have their processes, but to ensure respectful relationships, communication between First Nations and governments is essential.

FIRST NATIONS NEED TO BE ENGAGED EVERY STEP OF THE WAY... AND BE GIVEN THE SUPPORT TO STEWARD THE RELATIONSHIP AND IK ENGAGEMENT

8.1 DFO

- ❖ DFO should support First Nations in the stewardship of their knowledge including being involved in how the knowledge is being used to inform SARA processes, including decision-making. The meaningful engagement of IK cannot happen without First Nations being involved in how it is interpreted and considered in decision-making and its implementation for species recovery. There should be a coordinated process with regional First Nations where IK engagement and decision-making responsibilities are shared.
 - DFO needs to make a firm commitment to co-develop and co-implement IK with First Nations in SARA processes. This can include co-develop the listing recommendations sent to the GIC and to collaboratively develop and implement recovery strategies
 - DFO should support First Nations to be collaborators *every step of the way*, beyond writing and implementing IK protocol, and be given the support to steward the relationship and IK engagement. This includes DFO advocating for First Nations collaboration within other SARA crown agencies.
- ❖ DFO and First Nations need IK is holistic and cannot be adequately considered within SARA’s silo-ed considerations of SEA and potentially ICS. DFO needs to expand their analysis and recovery planning to include environmental factors that impact species such as cumulative impacts, climate change,

pollution, human encroachment, development are things that should be considered in recovery plans.

- There is a need for the use of a multi-faceted approach (e.g., fisheries management, water quality) across government agencies and departments to increase the efficiency of protecting species. DFO should champion this shift alongside other SARA crown agencies.
- IK may also contain historic information on people's consumption of the local stock and how impacts have affected communities. DFO must justify and communicate impacts to those components.
- ❖ DFO needs to reframe the way they approach IK engagement and change their overall perceptions about IK and incorporate Indigenous values into their governance structure, decision-making processes and legislation. This is especially in light of recent legislative changes to recognize UNDRIP, DRIPA, and case law.
 - DFO should be transparent about what "considering" IK means, and how it is weighted/used in decision-making processes and recovery planning.
 - DFO and First Nations need to move beyond the development of principles and best practices regarding IK engagement. There is a need for the co-development of accountability mechanisms aligning with established principles and practices
 - First Nations can develop their own IK protocols and guidelines to assert their interests and better guide DFO personnel and processes. DFO personnel and processes then need to follow and use the protocol and guidelines in their day-to-day activities.
 - Though DFO SARP activities are mandated by SARA, as part of DFO it is also governed by the Fisheries Act. As such, DFO SARP must champion changes to the SARA process to better align with the amendments to the Fisheries Act that provide stronger equitable opportunities for First Nations and IK engagements, and protection of IK.
- ❖ There is a lack of DFO trust and accountability that impacts First Nations' willingness to engage in SARA, including sharing of IK. This is also tied to limited action on species listing and recovery. There should be a process where dialogue can happen to improve timelines for listing species and a co-developed expedited process to listing species with First Nations.
- ❖ DFO SAR program should coordinate and collaborate with other departments to
 - Determine where similar processes are occurring related to IK engagement in SARA to reduce the duplication of efforts and burden on First Nations.
 - Champion changes throughout the SARA process with other SARA crown agencies, including equitably resourced opportunities for First Nations to lead and/or co-develop and co-implement key management documents and decision-making (e.g. COSEWIC Status reports)
 - DFO should build in capacity funding to support engagement and participation throughout the SARA processes so First Nation communities are not having to fund this process
- ❖ DFO should consider producing a thorough literature review of the utilization of IK with western science in environmental decision-making and reviewing ecosystem approaches to management. Several scholars have drafted articles providing important principles and processes for the inclusion of IK in environmental management. This work could also inform mechanisms of accountability for IK engagement
- ❖ DFO should invest in *long-term* region-specific cultural educational opportunities for staff. This includes support for engaging in cultural ceremonies and community events to facilitate cultural understanding and improve relations. Not only will this foster community engagement and healthy

relationship building, but it will also improve the facilitation of understanding IK and First Nations' way of life. Mother Earth *is* kin.

- ❖ ICS, including scoping and subsequent framework for engagement, needs to be defined by First Nations and not by a third-party consultants or crown agencies. This work should be provided to and/or co-developed with Nations.
- ❖ DFO should review and improve SARA processes and policies to reflect and respect Indigenous Rights and Title, including UNDRIP implementation. This could include, but is not limited to, supporting First Nations-led co-development and implementation processes mentioned in the previous recommendations.

FIRST NATIONS HAVE TO ARGUE FOR THEIR RIGHTS AND TITLE BY ANY MEANS POSSIBLE

8.2 First Nations

- ❖ First Nations have the knowledge to manage and recover fisheries. First Nations need to continue to work together on sharing and stewarding that knowledge to impact fisheries management. There is an immediate need to collaborate on multi-scalar strategies for fisheries management outside of SARA processes to recover species.
- ❖ First Nations need to continue to, internally and with each other, elevate the importance and value of IK. First Nations and their knowledge need to be able to support, monitor, and challenge the science DFO is using.
- ❖ First Nations should use IK requirements to advocate for Indigenous stewardship and take opportunities to demonstrate how IK is conceptualized, defined and utilized, rather than DFO defining IK values and use within SARA.
- ❖ First Nations have to argue for their rights and title by any means possible and how they tie to urgently needed action on species recovery. First Nations have some tools within the current SARA processes and legislation, especially around IK engagement, for this advocacy.
- ❖ First Nations need to continue to demand collaboration between governmental and organizational processes to reduce demand/replication of efforts on IK engagement.
- ❖ First Nations should develop their IK protocols to better prepare themselves for when DFO solicits input on DFO-IK protocols. This will help ensure that First Nations' definition of IK and interests are being incorporated.
- ❖ First Nations should advocate for the Government of Canada to show the Regulatory Impact Analysis Statements, which are telling documents that show how the government of Canada is justifying their decisions.
- ❖ First Nations need to continue to define terms and frameworks before engagement with DFO. What defines IK engagement, ICS, SEA to First Nations must be defined *by* First Nations.
 - First Nations should and can demand 'deep consultation' and Free, Prior and informed Consent as provisioned under UNDRIP. First Nations should collectively lead in defining what these terms means.

FIRST NATIONS SHOULD DEVELOP THEIR IK PROTOCOLS TO ENSURE THAT FIRST NATIONS' DEFINITION OF IK AND INTERESTS ARE BEING INCORPORATED

- First Nations should continue to work together in defining and advocating for what ‘meaningful engagement of IK’ means
- ❖ FNFC should connect with the regional DFO and AFN staff to determine how national-level IK-related processes are being implemented at a regional level.
- ❖ First Nations should consider the creation and use of a data sovereignty framework that is funded by government agencies and is co-developed with First Nations in BC. This framework must include guidelines for compensating the participating First Nations Peoples sharing the knowledge and must cover how the knowledge will be stored, shared, protected, managed, and cared for.

9.0 CONCLUSION

It is a well-known fact that IK systems have sustained Indigenous Peoples. Indigenous Peoples never relinquished their responsibility to manage their lands, the waters, and all of the beings. So often, passion is at the forefront of meetings about the management of species. This passion stems from the

responsibilities Indigenous Peoples have for creation. With the invasion of the settlers and their worldview of domination and control, species have suffered immensely along with Indigenous values and presence. IK can inform environmental decision-making as it has sustained Indigenous Peoples for thousands of years. With the growing recognition that IK can offer pathways for effective and socially just conservation and resource management. It is incumbent upon Canadian governments to meaningfully collaborate with First Nation Peoples regarding the use of IK.



IK CAN INFORM ENVIRONMENTAL DECISION-
MAKING AS IT HAS SUSTAINED INDIGENOUS
PEOPLES FOR THOUSANDS OF YEARS

10. APPENDICES

Appendix A: Summary of discussions and recommendations from past FNFC Workshops on Species At Risk Act (SARA) processes and Indigenous Knowledge (IK) by theme

Comments	Recommendations
<i>SARA</i>	
<ul style="list-style-type: none"> - May impact s.35 Aboriginal & Treaty rights. - Funding issues including multi-year. - Designable Units of sub-species populations not in line with FNs. - The sequence of steps is not consistent (e.g. Eulachon RPA). - Lack of First Nation values in the socio-economic analysis. 	<ul style="list-style-type: none"> - First Nations-centered discussions are needed on how IK will be integrated into government decisions. - DFO SARA needs to clarify on how IK will be integrated into government decisions.
<i>Aboriginal Traditional Knowledge (ATK)</i>	
<ul style="list-style-type: none"> - ATK on distinct populations may not be recognized by western science. It is not taken seriously. - Short time frames hinder ATK gathering. - Lack of adequate funding. - Intellectual Property Rights as it pertains to the collection, analysis, interpretation and sharing of ATK. - Lack of internal and external protocols that guide the collection, recording, interpretation and use of knowledge (ATK, scientific data, community knowledge). - Governments cannot guarantee the confidentiality of ATK. - No single person holds all the information; instead, each piece of information from different people and different groups contributes to making a whole picture. - Gathering, interpreting, and sharing ATK takes time and resources. 	<ul style="list-style-type: none"> - ATK is very holistic and not necessarily species-specific, so knowledge holders must be engaged for any interpretation - Requests for ATK needs to be clarified (e.g. habitat use, animal behaviour, population dynamics). - Each Nation will have to decide and communicate its Indigenous Knowledge-sharing protocol - Government staff need to appreciate and respect the differences between communities when soliciting Indigenous Knowledge for decision making processes.
<i>Relationships</i>	
<ul style="list-style-type: none"> - Often First Nations have implemented their own management. - Difficult to determine how FN advice is used or not used. - First Nations and the Canadian Government may have different value systems and objectives for species conservation, biodiversity and management, and species recovery making it difficult to reconcile potential SARA actions. - FNs are frustrated (not directly involved in assessments, listings, and recovery plans). - Collaboration is necessary. 	<ul style="list-style-type: none"> - DFO SARA teams are encouraged to continue connecting with their colleagues in the area offices for help in facilitating dialogue and relationship building for SARA assessments, listing and recovery efforts. - DFO should develop government-to-government relationships with First Nations and build co-management arrangements. - Success hinges on building a joint process and developing trust. Be accountable.
<i>Engagement / Communication</i>	
<ul style="list-style-type: none"> - Inadequate - Lack of information on timelines. - Lack of meaningful government to government. - It is not clear to First Nations how the government (DFO) modifies its management practices for species that are not listed for protection under SARA. - First Nations are suffering from consultation fatigue; they receive many letters from DFO and other governments on a variety of topics that they may not have the time or resources to address, and eventually, the volume of referrals and consultation requests becomes “white noise” and gets forgotten or ignored. 	<ul style="list-style-type: none"> - First Nations need to be consulted on proposed changes or the process for consultation. - Some consultations need to take longer depending on the geographical area. - Open communication and consent are critical. - First Nations should be helping to identify research questions, plan and conduct the research, and analyze and interpret the data, as well as be acknowledged as writers of and contributors to published research

Appendix B: Additional Resources regarding IK and SARA processes

Documents are available through COSEWIC's website at:

http://www.cosewic.gc.ca/eng/sct6/index_e.cfm.

DFO's Strategic Plan for Aboriginal Involvement in the Aquatic Species at Risk Program (2009-2014) is available at: http://publications.gc.ca/collections/collection_2011/mpo-dfo/Fs49-8-2011-eng.pdf.

COSEWIC's Incorporating Community Knowledge into COSEWIC Assessment Process backgrounder is available at: http://www.cosewic.gc.ca/eng/sct6/sct6_7_e.cfm

BC Declaration on the Rights of Indigenous Peoples Act

<https://www2.gov.bc.ca/gov/content/governments/indigenous-people/new-relationship/united-nations-declaration-on-the-rights-of-indigenous-peoples>

Aquatic species at risk, Fisheries and Oceans Canada <https://www.dfo-mpo.gc.ca/species-especes/sara-lep/index-eng.html>

Aboriginal Traditional Knowledge: process and protocols guidelines

<https://cosewic.ca/index.php/en-ca/assessment-process/atk-guidelines>