



Perspectives on environmental assessment in Yukon

A collection of essays from Yukon College's
RRMT 238/RENR307 winter 2017 course



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Yukon Research Centre, Yukon College
500 College Drive, PO Box 2799
Whitehorse, Yukon Y1A 5K4
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PROJECT TEAM

Contributing Authors

Cheyenne Bradley	Yukon College, Whitehorse, YT
Christine Spencer	Yukon College, Whitehorse, YT
David Silas	Yukon College, Whitehorse, YT
Faith Green	Yukon College, Whitehorse, YT
Frederic Carmichael	Yukon College, Whitehorse, YT
Huey O’Leary-Baikie	Yukon College, Whitehorse, YT
Jessica Norris	Yukon College, Whitehorse, YT
Kate Titterington	Yukon College, Whitehorse, YT
Nathaniel Hamlyn	Yukon College, Whitehorse, YT
Nina Vogt	Yukon College, Whitehorse, YT
Sahara Dove	Yukon College, Whitehorse, YT
Sonny Parker	Yukon College, Whitehorse, YT

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EXECUTIVE SUMMARY

Environmental assessment in the Yukon is multifaceted. The goal of RRMT 238 is to give students a well-rounded perspective on the many players and their roles in the assessment process. This includes the Yukon Environmental and Socio-Economic Assessment Board, the Yukon Water Board, The Yukon Government, First Nations governments, consulting companies, industry proponents, and non-governmental organizations. Students were asked to summarize the role of an organization and discuss the challenges and opportunities of environmental assessment based on information provided during class and by invited speakers. The results are compiled in the following document. In addition, they were challenged to suggest improvements to the environmental assessment process in the Yukon. Improvements suggested by the students include:

- A better integration between YESAB and the Yukon Water Board when it comes to the assessment of impact to water
- Set guidelines to assess the impact of cumulative impacts, including across boundaries
- Improved consultation practices with First Nations people
- Assigning a monetary value on ecosystem components
- Improved dissemination of lessons learned during socio-economic impact assessments
- Give more power to the recommendations that YESAB produces
- Having land plans across the entire Yukon

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1. YUKON ENVIRONMENTAL ASSESSMENT

By Sahara Dove

1.1. BACKGROUND

The Yukon environmental and socio-economic assessment process is one that identifies potential environmental and socio-economic effects of proposed activities in the Yukon before they are carried out (YESAB, 2017c). The assessment process is meant to ensure transparency, as well as public participation and input.

Residents of the Yukon have the opportunity to voice their opinions and become a part of decision making in terms of proposed development in the territory during step three of the assessment process. This input can be made through the Yukon Environmental and Socio-economic Assessment Board (YESAB) registry website at <http://www.yesabregistry.ca> or by visiting a physical Designated Office in either Dawson City, Haines Junction, Mayo, Teslin, Watson Lake, or Whitehorse. In the Yukon, Friday's newspaper also has advertisements listing which projects are open for comment (Rifkind, 2016).

There are six general steps in the assessment process of proposed development activities in the Yukon:

1. YESAB has an adequacy review to ensure that they have all of the information that they need in order to make an informed decision.
2. YESAB undergoes an assessment process incorporating the opinions of Yukon First Nations, interested persons, and the public.
3. YESAB makes a recommendation to the Decision Body (the federal, territorial or First Nation government that regulates and permits the proposed activity) to "proceed", "proceed with terms and conditions", "not proceed" or to refer the project to a higher level of assessment.
4. A decision document is produced by the Decision Body.
5. Regulators issue permits (potentially). A proponent submits permit applications to the Regulators (for example, the Yukon Water Board could potentially issue a water license for various activities for the use of water and/or the deposit of waste to water). A completed assessment by YESAB is often required before a permit or authorization is granted.

Whenever a company, organization or individual wants to proceed on a project that involves disturbing the surface of the land, they must have their project evaluated (Rifkind, 2016). This means that any project in the name of economic development that includes extracting or harvesting of natural products from the earth (such as in agriculture, mining or forestry - to name a few), will need to be evaluated by YESAB. Energy production (hydro, wind, or diesel combustion), hunting (guided trips for sport), and tourism (wildlife or cultural site viewings and recreation) are a few other examples of proposed activities that may be required to go through the environmental and socio-economic assessment process before approval.

1.2. MINING AND ENVIRONMENTAL ASSESSMENT

In 1898, there was the discovery of gold in the Yukon. The Klondike Gold Rush (between 1897 and 1899) put the Yukon on the world map (Government of Yukon, 2017a). Presently, mining is still an important economic sector within the Yukon. While this is true, mining exploration and development do disturb the land and often the flora and fauna. There are certain steps that a mine needs to take in order to prevent or mitigate any adverse effects. There are 6 general steps in a mines life cycle; exploration, feasibility, planning, construction, operations, and site cleanup.

The exploration phase includes locating deposits, sampling, drilling, and logging core samples. This step also includes monitoring activities (from the very beginning) for environmental risk, getting permits, and starting baseline studies. The purpose of a baseline study is to gain a comprehensive understanding of the physical, chemical, biological, and social environment (an information base), against which to monitor and assess during and after the activity (mining) is completed (Knight Piesold, 2017).

In the feasibility phase, a decision is made about the economic feasibility of the proposed mine site based on the exploration findings and logged core/samples. This is an important aspect to consider. There may be a substantial amount of mineral, but it could be determined that the mineral resource cannot be mined economically based on mineral to waste rock ratio, etc. Other environmental factors will also be applied to determine if the project is feasible, such as potential impacts on water bodies, effects on wildlife, and the level of social support for the development. Baseline studies would continue during this phase.

Planning a mine involves environmental planning, social planning, environmental assessment, environmental permits, and continued baseline studies. The planning phase is very important from an environmental perspective. All required environmental assessments must be conducted and all relevant environmental permits must be obtained before the project can proceed. In addition, a broad range of plans are developed covering all aspects of environmental operations at a site.

The construction phase of a mine includes clearing, stripping, building access, and building structure. It also consists of construction monitoring and reporting, starting operational monitoring, ensuring that transportation to and from the site is safe, training contractors and new employees about the environmental policies and rules, spill response, and making sure the plans from the planning stage are followed.

The operations stage is the time of ore extraction and processing. It includes operational monitoring and reporting, water treatment and management, training and awareness, environmental audits, and progressive reclamation (the act of returning the land to its former state every step of the way as opposed to leaving it all to the end). Closure of the mine involves site clean-up, reclamation, and environmental monitoring, which can sometimes last for years after the mine has closed.

1.3. BENEFITS AND CHALLENGES OF ENVIRONMENTAL ASSESSMENTS

As you might have noticed, environmental assessment is incorporated into every single stage of a mining cycle. The Yukon is a role model in land management as there is consultation with affected First Nations, stakeholders, and communities prior to submitting a project proposal. Then, before anything even happens, there are baseline field studies conducted. There is often hiring of consultants for environmental assessment guidance. Baseline reports and effects assessment methodology as well as valued components are determined. A mine continuously has baseline updates (fish, water, wildlife, vegetation) throughout its entire cycle.

Cumulative effects or impacts are changes to the environment that are caused by an action in combination with other past, present and future human actions (Government of Canada, 2017). Cumulative impacts (CIs) are another aspect that should be considered during the YESAB assessment (along with direct and indirect impacts) during the significance determination portion of the environmental assessment process. However, CIs are not always thoroughly addressed. They may not receive detailed attention due to either the absence of specific requirements or uncertainty as to what to address, especially in a transboundary context.

1.4. PROPOSED IMPROVEMENTS

Unfortunately, environmental threats do not respect national borders, and cumulative impacts are often addressed in a qualitative manner without a clear picture of spatial and temporal study boundaries, and without guidelines or methodologies (Burriss & Canter, 1997). A collaborative, cross-border approach to assessing regional cumulative effects in a transboundary context, as well as improved transboundary cumulative effects management might improve the Yukon environmental and socio-economic assessment process in the future.

Although the Yukon is on the right track, there is still a lot to learn in terms of a successful environmental assessment process.

2. YUKON ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT BOARD

By Nina Vogt

2.1. BACKGROUND

The Yukon Environment and Socio-Economic Assessment Board (YESAB) conduct environmental and socio-economic assessments of projects being carried out in the Yukon. YESAB is an independent assessment board that follows the regulations of the Yukon Environment and Socio-Economic Assessment Act (YESAA). This act was developed in 2003, in response to Chapter 12 of the Umbrella Final Agreement, which gives Yukon First Nations the right to self-governance. YESAA was negotiated between three parties: the Yukon Government, Yukon First Nations, and the Federal Government. The resulting document is federal legislation which guides the environmental assessment process across the entire Yukon (YESAB, 2017j).

2.2. THE ASSESSMENT PROCESS

A YESAB assessment is required if a proponent applies for a permit or license and the activity is in the Yukon, the activity is in the activity regulations and is not accepted, and the activity is in the list of YESAA s47(2) triggers. If these conditions are met, proponents must submit a proposal to YESAB. The proposal will be reviewed to ensure there is adequate information to conduct the assessment. Information is gathered from many different sources, including the Territorial Government, First Nations Governments, experts, and the public. Once a YESAB assessment is complete, recommendations are made on whether the project should proceed, proceed with terms and conditions, or not proceed. These recommendations are passed on to the Decision Body, who can accept the recommendations, accept with a variation of the recommendations, or reject the recommendations.

There are three levels of assessment carried out by YESAB. Smaller, straightforward projects go through a Designated Office (DO) evaluation. There are six DOs throughout the Yukon, allowing for regional assessment of projects. If a project's scope is above a certain threshold, or a DO feels that it requires a more stringent evaluation, it must go through an executive committee screening. If a project is deemed to potentially have significant adverse effects or cause major public concern, then it must go through a Panel Review (YESAB, 2017c). This is the most intensive level of screening, and the only project to undergo this is the Casino Mine, which is currently in the assessment process

2.3. BENEFITS AND CHALLENGES OF YESAB

YESAB benefits the environmental assessment process by acting as an arm's length assessment body. It ensures that First Nations and the public are given the opportunity to participate in the assessment of projects that might affect them (YESAB, 2017d). This fosters beneficial change in the Yukon while taking into consideration the environmental and socio-economic values of those affected by these changes. The YESAB process can be followed on the YESAB online registry, where all documentation associated with an assessment can be publicly viewed. Comments from the public can be submitted through this online registry, or in person at a YESAB DO. It is YESAB's mandate that scientific knowledge, traditional knowledge, and public input are "fully and fairly considered" (YESAA, 2003) when making an assessment decision.

One of the major challenges faced during the YESAB process is access to people with the knowledge required to answer an assessment question. Due to lack of capacity in the Yukon, there are often very few people who can provide information on a specific topic and they may not be readily available. First Nations Governments also face capacity issues, and when there are multiple assessments that require their attention, it can be difficult for an affected First Nation to put the resources they would like towards a particular project. Another challenge faced by YESAB is that the recommendations they provide do not have to be accepted by a Decision Body and are often varied. However, the Decision Body must provide solid reasoning as to why a recommendation was varied or rejected.

2.4. PROPOSED IMPROVEMENTS

The Yukon has only one land use plan in place, which complicates and slows the assessment process. When a project is proposed, acceptance of the proposed activity in an area must be determined before the environmental and socio-economic effects can be assessed. If land use planning were in place throughout the Yukon, guidelines on land use in a potential development area would be available. An assessment of the environmental and socio-economic effects of a project would still be required, but assessors could consult land use plans to determine if the proposed project was acceptable, streamlining the assessment process. These plans could also be used to guide proponents in designing their projects in a way that conforms to land use plans for the area (Yukon Land Use Planning Council, 2017).

3. ROLE OF THE YUKON WATER BOARD IN THE YESAB PROCESS

By Christine Spencer

3.1. BACKGROUND

The Yukon Environmental and Socio- Economic Assessment Board (YESAB) and the Yukon Water Board are both independent bodies established as part of the historical Umbrella Final Agreement (UFA). Chapter 2 of the UFA outlines a variety of boards to be established, and Chapter 14 delves into water management roles and responsibilities. Conversely, the entirety of Chapter 12 of the UFA is devoted to the establishment of an environmental and socio-economic assessment process. Following the development of the UFA and devolution, both the Yukon Environmental Socio-Economic Assessment Act (YESAA) and the Yukon Water Act came into effect in 2003. Chapter 8 of the UFA establishes the corresponding boards in both Acts (Council of Yukon First Nation, 1993).

3.2. A COMPARE AND CONTRAST: YESAB VS. THE YUKON WATER BOARD

The water license process is similar to the YESAB process, however, there are two key differences. When a proponent applies for a water license or for project approval through YESAB, the process is similar in that the proponent must have a specific plan, including mitigation and consultation with any stakeholders. The biggest difference is that The Water Board's scope of authority is limited to the impacts of water usage projects on water quality, whereas YESAB assesses the entire project and its impacts on all valued socio-economic and environmental components. All projects which require a water license must first receive a final decision document from YESAB, however, not all projects require water use licenses. The most impactful difference is that YESAB's decision documents are not legally binding, whereas water licenses are. The Water Board has set penalties and fines outlined in its regulations (Salvin, 2017). In effect, both boards are independent bodies whose main objective is to assess impacts but, The Water Board's scope is limited to water use licensees, whereas YESAB's scope encompasses all valued environmental and socio-economic components.

3.3. HOW THE YUKON WATER BOARD IS INVOLVED IN THE YESAB PROCESS

The Yukon Water Board is not directly intertwined with the YESAB process; it is the next step towards taking a project from the planning stage to implementation. YESAB will assess impacts of the proposed project on all valued environmental and socio-economic components, including

water. In order to proceed with water licensing, a YESAB final decision document must be completed. The Yukon Water Board members read the terms of YESAB's final decision document (Yukon Water Board, 2015). Most terms related to water are included in the terms of the water license. Once a water license is issued, it is legally binding. Any terms of the YESAB final decision document (if put onto the water license) will become legally binding. The Water Board Members have a good working relationship with YESAB as they consider its decisions very carefully when writing the terms of a water license (Salvin, 2017).

3.4. CHALLENGES AND BENEFITS OF THE YESAB PROCESS FOR THE YUKON WATER BOARD

The Yukon Water Board faces many challenges in dealing with proponents as they navigate the lengthy and costly YESAB and water licensing processes. Water licenses are legally binding so often stakeholders put more money and effort into the licensing process rather than the YESAB process. This leaves proponents frustrated when issues come up in the water licensing process that did not come up during the environmental socio-economic assessment process (Salvin, 2017). Sometimes proponents can receive more restrictive terms in their water license than in the YESAB final decision document. This was the case with Northern Exposures Inc. when the decision body (Yukon Government) overturned YESAB's recommendations to not allow placer mining on undisturbed wetlands. The Water Board agreed with YESAB's original decision and issued a license which did not allow placer mining on undisturbed wetlands. The Yukon Government then took The Yukon Water Board to the court of appeals, implicating that the Board had stepped outside the bounds of its authority (Croft, 2016).

The Yukon Water Board also benefits from the YESAB assessment process, as a result of the extensive research and documentation of impacts that are required. Like the water licensing process, the YESAB process is documented publicly online. Every document submitted can be seen by any member of the public. Stakeholders are given an opportunity to comment on the proposed project. This gives Yukon Water Board members a great deal of information about the scope of a project and any concerns impacting water which may arise. Board members can also contact YESAB assessors to answer questions about the final decision document. Overall, it saves The Yukon Water Board time and resources to have access to the scope of information which the YESAB process provides.

3.5. PROPOSED IMPROVEMENTS

There are several key actions that would improve both the environmental and socio-economic and water licensing processes in the Yukon. The first step is to integrate The Yukon Water Board into the assessment process, which would save time, money, and foster better

relationships between the boards, stakeholders, and proponents. If The Yukon Water Board assessed the water values during the YESAB process, it would help to eliminate some frustrations that proponents must go through while still maintaining an impartial decision-making body for water. The Yukon Water Board should retain its authority as a decision body over all water use and terms within the YESAB process. As The Yukon Water Board is supposed to be an independent body, its board members and staff should not be Yukon Government employees as this creates a conflict of interest. Overall, if the Yukon Water Board integrated into the YESAB process and eliminated its conflicts of interest, the water licensing and YESAB process would be less time consuming and more economically viable for all stakeholders.

3.6. CONCLUSION

The Yukon Water Board's role is to assess impacts to water as they relate to projects requiring water use licenses. It has many similarities to YESAB, except that its scope is limited to water and its licenses are legally binding. The Yukon Water Board works closely with YESAB and benefits from the information gleaned in its process. However, the many tiers of approval and inconsistency with decisions cause proponents and stakeholders much frustration. If the Water Board Integrated into the YESAB process while maintaining its status as an independent body it would save all stakeholders time and money.

4. YUKON WATER BOARD

By David Silas

4.1. THE ROLE OF THE YUKON WATER BOARD AND ENVIRONMENTAL ASSESSMENT IN YUKON

For environmental assessment in the Yukon, the Water Board works under the objective to provide for the conservation, development, and utilization of waters. This is done in a manner that will provide optimum benefits for all Canadians, including residents of the Yukon. Although the membership of the water board calls for 1/3 of appointees to be represented by Yukon First Nations, it is not primarily for First Nations. The board's membership consists of a representation from all 3 major levels of government, including 1/3 Federal Government and 1/3 Territorial Government. Additionally, the "The Minister, in Consultation with the Board, shall appoint a chairperson and vice-chairperson from among the Board's members" (Council of Yukon First Nation, 1993).

The Water Board of Yukon is a quasi-judicial board and that "refers to the power vested in the commissions established by law, administrative officers, or bodies to determine the rights of those who appear before it" (Salvin, 2017). Further, these powers give the board and its members the authority to investigate and ask questions to which conclusions could be drawn from. These inquiries are often complex and can lead to public hearings as directed by the Waters Act. "The Board may, where satisfied that it would be in the public interest, hold a public hearing in connection with any matter relating to its objects" (Government of Yukon, 2003). These hearings are usually required for major developments like the Minto Mine, which holds a Type A license. There are two types of licenses that can be issued by the board. From the Yukon Water Regulations, there are thresholds that have been established to determine which type of license to issue. "The Water Board is responsible for issuing a variety of licenses for various undertakings that use water and/or deposit of waste into water" (Salvin, 2017).

In 1973, a delegation of Yukon First Nations chiefs journeyed to Ottawa with a grievance document in hand to meet with Prime Minister Trudeau. From this document, they were able to convince the Canadian Government of the importance of land claims and self-government, which led to the creation of a framework to get that work done. This framework was the Umbrella Final Agreement, an agreement that would recognize aboriginal rights and title to the land and the need to include them in major decisions facing the land, water, and environment. This led to co-management of Yukon's water resources, guided by rules and regulations and constitutionally protected through the final agreements. The Umbrella Final Agreement (UFA) states under Chapter 14 the purpose of "maintaining water in its natural state while providing

for sustainable use” (Council of Yukon First Nation, 1993) and further defines First Nations rights as traditional use. This means the use of water without substantially altering the quality, quantity or rate of flow, including seasonal rate of flow, by a Yukon Indian Person for trapping and non-commercial harvesting, including transportation relating to such trapping and harvesting or for traditional heritage, cultural and spiritual purposes (Council of Yukon First Nation, 1993).

The Yukon environmental and socio-economic assessment process complements this by clearly stating and identifying triggers that will cause the undertaking of water use to require legislative authority. However, the UFA is only one agreement that works closely with other acts, policies, and regulations to govern the issuance of licenses in the Yukon. With all of these acts and regulations working so closely together, administrative assistance is needed to help coordinate, orientate, and inform board members. Board members are aided by a secretariat to make factual, knowledge-based decisions that accept First Nations Traditional Knowledge as equal to scientific knowledge, and give it equal weight and consideration. This helps Yukon First Nations feel confident in their contributions and involvements in the process, thus promoting capacity within the communities and individual governments.

4.2. HOW ENVIRONMENTAL ASSESSMENT BENEFITS YUKON’S WATER BOARD

Through the Land Claim and Self-Government process, the Yukon First Nations have retained full jurisdiction over vast areas of land. Approximately 8.6% of the Yukon has become settlement land under the UFA process. By having autonomy over these lands and a deep-rooted connection to the land and environment, the First Nations have been able to have their rights to a traditional economy identified in YESAA under “12.1.1.1 which recognizes and enhances, to the extent practicable, the traditional economy of Yukon Indian People and their special relationship with the wilderness Environment” (YESAA, 2003). The water board, through their secretariat, can identify possible projects that have applied for a license and are in need of an environmental assessment under section 49(1). Some other ways that YESAB and the Yukon Water Board can be connected are by the Water Board “providing Designated Offices with administrative guidance and by clarifying the Boards information requirements” (Salvin, 2017). The Water Board also provides “feedback to assessors on mitigation wording and participates in joint technical training” while “discussing how to improve assessment/regulatory interface” (Salvin, 2017). The Yukon Water Board is an essential and vital service for all of the Yukon. The inclusive process in the essence of good governance through co-management has proved to be productive and valuable to Yukon First Nations and Non-First Nations interests groups. We all live here and it is important that we find some common ground and strive for inclusivity when it comes to decisions impacting us all.

5. A CONSULTANTS ROLE IN ENVIRONMENTAL ASSESSMENT

By Faith Green

5.1. BACKGROUND

Environmental consultants have many roles in the face of environmental assessments such that they are often hired by proponents to establish baseline data (environmental and socio-economical), determine any potential effects that may result from a project, and propose mitigation methods that can be used to minimize the impact to the environment or cost to the proponent (Alexo Environmental, 2015). Consultants are the field workers who go to the sites, collect data, and conduct an analysis of environmental conditions such as fish and wildlife habitat potentials and water and soil analysis. Consultants also provide assistance to proponents with the regulatory and authorization processes, permitting and compliance measures, and remediation services (YESAB, 2017g). Consultants offer a multidisciplinary approach to environmental assessment, encompassing all values and impacts that could be associated with the proponent's project (Hemmera, 2017). They specialize in helping the proponent face the challenges of environmental guidelines and legislation in an adaptive, economical, and a proactive manner so they can proceed with their project with limited restrictions.

5.2. BENEFITS AND CHALLENGES

Environmental assessment in the north can be challenging as there is limited baseline data (for hydrology and soils for example) and this can pose a temporal issue in obtaining enough baseline data to provide to the Yukon Environmental and Socio-Economic Assessment Board to make a decision from. Consultants can assist proponents with this by helping gather data as is required by the YESAA process and provide a significance statement of the effects the project will have on a site. This includes information on residual effects such as magnitude, geographic extent, duration, socio-economic context, frequency and reversibility of an effect (YESAB, 2017g). The assessors, depending on the level of the project, can then better make an informed decision for the project to proceed, proceed with terms and conditions or to not proceed at all (YESAB, 2017c). A consultant is essential to the environmental assessment process for the ease of their clients to complete their forms in a way that attempts to minimize time in the decision process.

5.3. PROPOSED IMPROVEMENTS

Environmental assessment in the Yukon is well established and works in a specific process that incorporates a vast amount of people's values and input. This being said, I believe the error lies in the decision body. I think the decision body should be at arm's length from the proponent. Having the proponent also be the decision maker seems like a conflict of interest, such that the proponent will have an interest in the success of the project and will likely act with some sort of bias in the decision process. Additionally, cumulative downstream effects should be better represented in the environmental effects assessment process. Currently, the cumulative effects in a water basin downstream of impact sites are not recognized. One site may be in compliance for example, but several sites in a row adding nutrients to a system can put the water basin out of a natural range of variation and be harmful to aquatic life downstream.

6. CASINO MINE

By Cheyenne Bradley

6.1. BACKGROUND

The Casino Mine will be the largest mine in the history of the Yukon Territory and one of the largest mines in Canada. It is owned by Western Gold Corporation which took control of the company in 2006, but the mine itself has been around since 1917. During its production, it will produce copper, gold, molybdenum, and silver. The mine is located 150km northwest of Carmacks, Yukon and 400 km northwest of Whitehorse, the Yukon's capital city (Ronson, 2014). The mine is expected to have a lifespan of 22 years.

The scale of the project has triggered an assessment by the Yukon Environmental and Socio-economic Assessment Board (YESAB) Panel Review, and this is a first in the assessment's board history. It will be conducted by the Panel of the Board, whose members are nominated by the Council of Yukon First Nations, the Territorial Government, and the Federal Government. Any project can be referred to a panel review by the Executive Committee. The reason for the referral could be a) the project has technology that is controversial in the Yukon i.e. wet tailings management b) the project may contribute significantly cumulative adverse environmental or socio-economic effects in the Yukon i.e. to the Klaza caribou herd. The mine is controversial because of its impact on the aboriginal people of the area and its potential effects on the environment, water, and caribou. The Little Salmon Carmacks First Nation has also filed a lawsuit to stop the YESAB proceedings until they have been properly consulted as outlined in their modern-day treaty. The First Nation has other concerns they say must be dealt with before the project can proceed (Joannou, 2014). The Klaza caribou herd has approximately 1,200 individuals in its population and is listed under the Species at Risk Act. The caribou herd will be going through two different assessment process, an effects assessment and a cumulative effects assessment. The effects assessment will look at factors such as environmental and socio-economic values, spatial and temporal boundaries, characterization of effects, identification of mitigation measures, and determining the significance of residual effects. The cumulative effects assessment looks at identifying valued components, spatial and temporal boundaries, characterization of residual effects, characterization of cumulative effects, identification of mitigation measures, and determination of the significance of residual cumulative effects. The company will look at mitigations such as signage, reducing speed limits by having GPS trackers in company trucks, plowing snow routes, reporting caribou sightings (by radio communication), and reporting and investigating caribou mortalities.

6.2. BENEFITS OF AN ENVIRONMENTAL ORGANIZATION ON CASINO MINE

Some benefits to an environmental organization are that the mine would have to employ 600 people during its lifetime, and this would include environmental consultants and people who are familiar with the Klaza caribou herd range. The mine must go to higher evaluation during the assessment process (Panel Review), therefore, the assessment will be more thorough because there are more people assessing the project. YESAB has never evaluated a project like the Casino Mine in the Yukon and will ensure that there will not be anything harmful in the project that will damage the environment. Casino has researched ways to improve the mine with new technology, such as building the tailings dam while the tailings are being produced, but this is still a very controversial topic to the public.

6.3. OPPORTUNITIES FOR INPUT

Decision bodies from First Nations Governments, the Territorial Government, and the Federal Government have the opportunity for input at a primary location of effects, panel terms of reference, technical review of the ESE statement, and public hearings.

6.4. PROPOSED IMPROVEMENTS

The Little Salmon Carmacks First Nations says they haven't been properly consulted on the project. I recommend the Honorable Minister of Resources reach out to the First Nations affected to improve the consultation process. I recommend the Minister reach out to affected First Nations about the crown's legal obligations that stem from their modern-day treaties.

7. THE COFFEE GOLD PROJECT

By Frederic Carmichael

7.1. BACKGROUND

Goldcorp is a Canadian owned company headquartered in Vancouver, BC that is “committed to responsible mining practices and well positioned to deliver long-term value” (Dobson, 2017). It counts 15,000 employees across many mining projects throughout both North and South America. Their primary product is gold, but they also mine silver, copper, zinc, and lead. On February 7, 2017, Jasmine Dobson from Goldcorp came into Yukon College’s Environmental Protection and Impact Assessment class to lecture on the assessment that the corporation was about to undergo for the Coffee Gold Project. The “Coffee” gold deposit is located 130 km south of Dawson City, Yukon and covers an area of 60,000 hectares where gold deposits were identified (Goldcorp, 2017). The project is intended to be an open pit mine with an access road from Dawson City with four pits, a heap leach facility, and waste rock facilities. It is currently undergoing an executive committee assessment under YESAB.

7.2. ENVIRONMENTAL IMPACT ASSESSMENT OF THE COFFEE GOLD PROJECT

The typical life cycle for a mine is as follows: exploration, feasibility, planning, construction, operations, and closure. The environment and socio-economic impact assessment process takes place under the planning stage. Goldcorp was preparing the project proposal as of the date of the guest lecture, and the Coffee Gold Project is now being assessed by YESAB’s executive committee. Many consultants were hired, and baseline studies were undertaken prior to submitting the project proposal ranging from ground and surface water quality to air quality, wildlife, and vegetation. Then, effects assessments were done in order to determine the impacts that the mine would have on the identified valued components (Dobson, 2017). The mine is expected to have an initial life of ten years, would hire around 430 employees during operations, and is expected to bring \$2 billion to the Yukon’s gross domestic product (MiningTechnology.com, 2017)

7.3. BENEFITS AND CHALLENGES OF ENVIRONMENTAL ASSESSMENT

The mine will have beneficial impacts on the Territory’s gross domestic product and employment. It will most likely attract more people to Yukon. On the other hand, the Coffee Gold Project will adversely impact the wildlife frequenting the area and its surroundings, including water bodies, potentially affecting aquatic organisms as well. Also, hunting pressure

will potentially increase on game animals with the construction of a new access road to the site. The mine will have to resubmit a reclamation and closure plan every two years during operations. Goldcorp has to look at social support for the development of the Coffee Gold Project to help decide whether public hearings are required, and if so, how many. Consultation with First Nations whose traditional territory will be affected by the construction of the mining project and associated road and operations is mandatory under YESAA (YESAA, 2003).

The environmental and socio-economic impact assessment process is time and money consuming for mining companies. For this reason, it is important for proponents to be sure of what they want and include the project in its whole, potentially even including future projects, when applying for assessment with YESAB. The assessment process benefits Goldcorp by allowing them to know what to expect and to be careful with the environment, but also with their relationship with the decision body. Environmental assessment benefits mining companies by forcing them to build the “best” projects possible in regards to the environment, but also the human population impacted.

7.4. PROPOSED IMPROVEMENTS

In my own personal opinion, the environmental assessment process in the Yukon should include both positive and negative impacts that projects could have outside of the Territory; i.e., impacts on air and water quality outside of Yukon, impacts on GDP and tax income at the federal level, impacts on employment on a nationwide level, etc.

8. YUKON ENERGY

By Nathaniel Hamlyn

8.1. BACKGROUND

Yukon Energy recognizes some effects of power generation and supply, both on the environment and society. In Whitehorse, the company supplies power with 99% renewable energy but also requires diesel generator backup, while in the communities diesel is the primary power source (Ritchie, 2017). Assessment and monitoring is an essential component of operations at Yukon Energy. Environmental assessments are essential since baseline data from areas where projects are proposed will later be used to gauge effects when the project is initiated, as well as gauge the sensitivity of the environment to a project. Monitoring programs help managers realize what changes are occurring and allow thresholds to be set which, when not surpassed, curb the influence of the project on the environment.

8.2. METHODS OF ENVIRONMENTAL ASSESSMENT

There are four main assessment methods or guidelines that Yukon Energy has adopted. These include holistic and precautionary approaches, interests/value-based judgments, the use of different knowledge bases, and cyclic feedbacks (Ritchie, 2017). These environmental assessments are important to the company since without submitting a plan to YESAB which details how an operation will impact the environment, projects will not go ahead. Once in operation, licenses (such as the water license) need to be renewed, and monitoring data allows Yukon Energy to continue drawing or dropping water from reservoirs in order to provide power. By monitoring and performing assessments, public opinion is influenced which allows Yukon Energy to propose projects and implement ideas based on their positive track record of past operations.

On the monitoring front, Yukon Energy commits to managing uncertainty to ensure healthy/sustainable human and biophysical interactions. The company does this by recognizing constraints and setting thresholds that are recognized as the acceptable level of change allowed without action. The adaptive management framework also lays out what to do if a threshold has been exceeded.

8.3. CHALLENGES OF ENVIRONMENTAL ASSESSMENT

There are a few key challenges that the company faces when it comes to incorporating environmental work into regular operation of a power supply company. Primarily, the dialogue required to have informed conversations with the public and stakeholders can be challenging

due to the required level of technical knowledge. Supplying power to a territory requires knowledge about both the power sources and the grid. This can be high-level technical knowledge and in many cases needs to be broken down into plain language. The challenge of having a backup power supply on an isolated grid requires fossil fuel generation which can be hard to sell to the public as a suitable power source. On top of this, the rate base in the territory is low, influencing project feasibility, size, and usefulness.

8.4. PROPOSED IMPROVEMENTS

The environmental assessment process in the Yukon, which involves the YESAB board, can be improved. The territory has the “bleakest” economic outlook in Canada (Tukker, 2016). This is due to massive transfer payments from the federal government which skims money from the coffers of other provinces, as well as a slow industrial economy. Environmental assessments that favor conservation and hinder mining in the territory hurt the economy overall. Two recommendations I have are to shorten the time frame of the process and allow valued ecosystem components to be quantified if the service is deemed “required” or will benefit Yukoners substantially. Putting a value on ecosystem components or ecosystem services is a strategy in economics. The services are known as “natural capital” and should be measured in the assessment process (Schwartz, 2010). This would help with reclamation cost recognition as well as allow companies to provide required services (such as jobs) while financially paying into the environment in other areas, for example, disturbed wildlife or habitat.

8.5. CONCLUSION

Overall, Yukon Energy’s approach to project effects assessment is aligned with the territory's goals to protect the environmental and social integrity of the Yukon, while fostering responsible development in the territory that reflects the values of Yukoners, and respects the contributions of First Nations (Haefele, 2017).

9. YUKON FIRST NATIONS GOVERNANCE: NA-CHO NYAK DUN

By Huey O'Leary-Baikie

9.1. BACKGROUND

The First Nation of Na-Cho Nyak Dun's traditional territory is located in the area surrounding Mayo, Yukon. Their name means the Big River People, which refers to their reliance on the Stewart River during the pre-contact era. Na-Cho Nyak Dun is also the most northerly First Nation that is culturally affiliated with the Northern Tutchone people (First Nation of Na-Cho Nyack Dun, 2017). As of February 14, 1994, Na-Cho Nyak Dun has had a settled land claim agreement with the Government of Canada and the Government of the Yukon (Hope, 2017). This agreement was a major milestone in the history of the Na-Cho Nyak Dun people, giving them complete ownership over 4,739.68 km² of traditional lands (First Nation of Na-Cho nyak Dun, 2017). This means complete management of all natural (minerals, oil, water, etc.) and living (wildlife and fish) resources. Additionally, it positively affected socio-economic conditions for the Na-Cho Nyak Dun (Canada, 2011). Environmental assessments such as the Yukon Environmental and Socio-Economic Assessment Act (YESAA) benefit the Na-Cho Nyak Dun people through providing the appropriate scientific information, as well as incorporating Traditional Knowledge, to assess whether development projects are beneficial or not (Government of Yukon, 2016).

9.2. BENEFITS AND CHALLENGES TO NA-CHO NYAK DUN

There are many reasons why YESAA directly relates to and benefits the Na-Cho Nyak Dun people. A few of the benefits of YESAA are to protect environmental and heritage resources, protect and promote the well-being of First Nations people, their societies, and Yukon residents, and to recognize and enhance the traditional economy of Yukon First Nations and their special relationship with the wilderness environment (YESAB, 2017h). YESAA also helps the First Nations groups protect culturally important species, such as salmon, moose, caribou and other endangered or threatened species (Urquhart, 2010).

Although YESAA and the Yukon Environmental and Social Assessment Board (YESAB) are great assets in assisting Na-Cho Nyak Dun with on-going development projects, sometimes it can be a little overwhelming for the First Nation. The entire assessment process relies on appropriate consultation to First Nations. However, the consultation is often poorly managed and negotiations can come to an impasse. If a development goes through or an agreement is made upon the grounds of poor consultation, then a court challenge could be made which means

heavy financial losses on both sides. Consultation must be tailored to each individual situation. In order to address this, the government has placed vague definitions on consulting to ensure all fields are covered. This vague definition of consultation leads to a heavy amount of confusion for both parties; it places responsibility on the First Nations to identify all components of the consultation themselves, and many times the First Nations consultants are unsure of how to proceed due to inexperience in creating guidelines (Urquhart, 2010).

Na-Cho Nyak Dun is currently conducting a major development project through a company called Victoria Gold Corp. which will build a large gold mine at Dublin Gulch, 85km away from Mayo, Yukon. Victoria Gold Corp. has signed a Comprehensive Cooperation and Benefits Agreement with Na-Cho Nyak Dun and will produce 350-400 jobs for the Yukon (Victoria Gold Corp, 2017). We will have to wait and see if this is an example of good consultation.

9.3. CONCLUSION

Na-Cho Nyak Dun has benefitted quite a bit from the settled land agreements and through the introduction of YESAA and YESAB. Even if there are still some weak points I believe that with the appropriate government, such as the current Liberal government under Sandy Silver, we can continue to improve on these assessment processes for the benefit of First Nations such as Na-Cho Nyak Dun.

10. THE YUKON GOVERNMENT'S ROLES AND RESPONSIBILITIES UNDER YESAA

By Kate Titterington

10.1. BACKGROUND

Who protects the land, water, and air of the Yukon? In the Territory, the Environment Act provides a legislative basis for the protection of these rudimentary necessities. This Act and its regulations apply directly to the land and throughout the Yukon (including private property, government land, municipal boundaries and First Nation settling lands where no equivalent laws reside). Certain activities need certain permits and on occasion, these permits need an assessment under the Yukon Environmental and Socio-economic Assessment Act (YESAA) (Government of Yukon, 2017b). The Yukon Environmental and Socio-economic Assessment Board (YESAB) is directed by YESAA (YESAB, 2017a). They protect the environment and the social integrity of the Yukon while nurturing responsible development in the territory (YESAB, 2017b).

10.2. YUKON GOVERNMENTS ROLE IN THE ASSESSMENT PROCESS

YESAB has decision bodies and the Yukon Government (YG) is one of them, but that's not all YG does under YESAA. YG helps fund projects that require assessments, submits and manages YG projects that require a YESAA assessment, provides technical knowledge and advice during all phases of an assessment, and as previously stated, helps with the decision making on projects/issuing of authorization for projects. YG's assessment input is an essential task in YESAA assessments; "it's YG's number one role." (Derhart & Chatterton, 2017). YG helps identify potential adverse effects of a project and provides more information on project areas and pertinent legislative/regulatory requirements.

The Yukon government is usually, but not always, the decision body on projects." (Rifkind, 2017). The development Assessment Branch (DAB) helps bring the project through the YESAA process, and guarantees that YG's role is proven to be consistent with corporate processes and that YG provides an expressive contribution from all departments with responsibilities or interest in the project itself (Derhart & Chatterton, 2017).

Yukoners understand that the land is not a playground for experimental projects and do not support the unnecessary disturbance of its natural habitat. Because it is often the decision body, one might think that YG has great pull with respect to decisions on proposed projects that are environmentally threatening, but this comes with challenges. "It must be noted that it is

somewhat unusual for YESAB to be completely overruled by the Yukon government. When it does happen it tends to make a splash in the media and can cause embarrassment for some of the parties concerned.” (Rifkind, 2017).

Environmental assessment is a process designed to foresee the environmental effects of a proposed project before it takes place. It recognizes potential adverse environmental effects, proposes measures to mitigate these effects, predicts the potential of significant adverse environmental effects after mitigations are implemented and provides follow-up information outlining if the environmental assessment in fact worked.

10.3. BENEFITS AND CHALLENGES OF ENVIRONMENTAL ASSESSMENT TO YG

It may seem a little conflicting that the YG is usually the main decision body for YESAB assessments. From the Peel Watershed to Casino Mine, Yukoners have had a hard time seeing the YG as the good guy, as it is understood that they make most of the decisions on proposed projects assessed by YESAB. However, environmental assessments benefit the YG because they are carried out by YESAB. The goal of an environmental assessment is to avoid or minimize negative environmental effects, so if the YG accepts a recommendation made by YESAB and the mitigation fails, the YG isn't the only one responsible. The assessment process also helps the YG become more connected with the wants and needs of Yukoners regarding their environmental and socio-economic values. The YG has to dedicate time to looking over public comments and debates. They are being forced to hear people out and listen to different points of view, and this is positively progressive.

Some challenges could (and probably often do) arise when early engagement doesn't happen. Early engagement of the YG during the YESAB process helps resolve disagreements when they first come up. When disagreements arise and aren't dealt with, issues surface during the assessment stage rather than in the proposal phase. This can spoil the whole process if not dealt with, and people and organizations start getting blamed: YG in particular.

10.4. PROPOSED IMPROVEMENTS

The Yukon's environmental assessment process is unique. It puts the people first and YESAB seems to really care about the outcome of the projects they assess. Some improvements to the environmental assessment process in the Yukon would be to start looking at a new regime consisting of regulations and policies to deal with current and future generation's threats and environmental impacts. There's something called "The Climate Test" which has been circulating in the Yukon. Its function is to understand if, and how far the greenhouse gas emissions of a proposed project will move the Territory towards or away from its climate goals and

international commitments (like the Paris Climate Agreement). This may already be in effect on a National level, but the provinces are what make up Canada as a whole.

10.5. CONCLUSION

The Yukon Government works with the Yukon Environmental and Socio-Economic Assessment Board, which is an environmental assessment body that carries out the Yukon Environmental and Socio-Economic Assessment Act in the Yukon assessment process. The Government of Yukon and YESAB aim to protect the land, water, and air of Yukon and the people who reside within it.

11. THE YUKON CONSERVATION SOCIETY

By Jessica Norris

11.1. BACKGROUND

The Yukon Conservation Society (YCS) is an independent organization that is focused on protecting what is important to the public in the Yukon. They are based on volunteers advocating for the main interests that the Yukon Territory and the people living in it thrive on. Established in 1986, they have since been a main advocating outlet for many environmental matters. Everything from land use, sustainable energy, wildlife, and mining programs - the Yukon Conservation Society is the unique way for the people of the Yukon to put their love for the territory in their own hands as volunteers (Yukon Conservation Society, 2016)

11.2. ENVIRONMENTAL ASSESSMENT IN THE YUKON

The environmental assessment that occurs within the Yukon develops from an independent board called the Yukon Environmental and Socio-Economic Assessment Board (YESAB) which was derived from the Yukon Environment and Socio-Economic Assessment Act (YESAA). This was established in 1993 as per the Umbrella Final Agreement (UFA). This act enabled the decision and government bodies of the Yukon to make decisions on a detailed recommendation done by YESAB. Before a recommendation is made, YESAB goes through an extensive thorough process which evaluates all different types of environmental effects based on the type of project being assessed. The individual and/or company behind a project must prepare a submission based on the comprehensive requirements from YESAB, outlining all potential risks and benefits to the environment, as well as socio-economic factors. Before anything is done with the submission, it is open to the public to give input and state their opinions about the purposed submission. With this information, YESAB goes through one of three levels of assessment depending on the scale of the project and makes a final recommendation to the governing decision body. From there, the decision body decides to either accept the recommendation, modify the recommendation or completely reject the recommendation (Rifkind, 2016).

11.3. THE ROLE OF YCS IN ENVIRONMENTAL ASSESSMENT

The role of YCS is quite simple, yet they have a significant voice in environmental assessment in the Yukon Territory. YCS works with a number of different bodies such as Yukon First Nations, Yukon Government, general stakeholders, and the public, who all have shared interests in environmental matters. Because of this, they are able to independently assess what impacts a

project may have and potentially work towards a unanimous view on what benefits both the decision body as well as the values of YCS. During the public review and commenting stage, YCS has the opportunity to put in a full opinion and reasoning why they either support or disagree with a project going through. I believe that this is where YCS stands strong. They are built on many years and perspectives of Yukon volunteers that share their beliefs on how the territory should be conserved and protected.

A great example of this is the Protect the Peel campaign. The Peel River is a main watershed that flows between the Yukon and Northwest Territories, Canada (See Figure 1). Unfortunately, it is an area that is at risk due to potential development that the Yukon Government had initially authorized. This has been an on-going issue in the Yukon as many people believe it should be protected from development. YCS has been one of the main advocates for this, along with Canadian Parks and Wilderness Society (CPAWS) and together they started the Protect the Peel campaign, an effort to spread knowledge of the potential environmental issues that could arise if this development were to be approved. Today, it is one of the most well-known environmental movements in Canada, thanks to the Yukon Conservation Society (Protect the Peel, 2017).



Figure 1 – Map showing the peel watershed planning region within the Yukon Territory (Protect the Peel, 2017)

11.4. CHALLENGES OF THE YUKON CONSERVATION SOCIETY

There are some challenges to YCS. Being able to spread the word, either through published work or running a website, costs money. Running off of donations may limit what YCS can do, and funding could be a potential issue. Another challenge may be that because YCS is a volunteer based group and not a decision body, their voices may get lost in the assessment process or may not hold as much power.

11.5. PROPOSED IMPROVEMENTS

The YESAB process itself could be changed in a few different ways. This review process is a great one, and the requirements for projects are detailed and cover a lot of ground. However, at the end of the process, we are left with a recommendation. I believe that if there was a way for the board to have more power over the resulting decisions rather than handing the evaluations on to the governmental bodies, it could benefit the process and avoid situations where their recommendation may be rejected.

11.6. CONCLUSION

Overall, I believe the environmental assessment process through YESAB is a really great way of incorporating the public, stakeholder, and governmental groups' opinions all in one. Especially when it comes to hearing the aspects from advocacy groups like the Yukon Conservation Society. Since it was established, the work done by the society has changed the Yukon and in my opinion, they will continue to do great advocacy work in protecting what is important to the beautiful Yukon Territory.

12. YUKON CONSERVATION SOCIETY – WHAT IS ITS ROLE IN THE YUKON?

By Sonny Parker

12.1. BACKGROUND

The Yukon Conservation Society (YCS) is a non-profit, non-governmental organization focused on promoting education and research on environmental issues within the Yukon. YCS, formed in 1968, currently consists of a board of analysts and volunteers that aims to ensure that the development of energy, mining, and other projects are carried out in a responsible manner. Environmentally sustainable management of Yukon's natural resources is at the core of YCS's mandate. YCS has five different programs including land use; sustainable energy; wildlife; mining; and connecting and exploring. Within each program lie core values of advocating for and educating the public on awareness of issues and best practices for development (Yukon Conservation Society, 2016)

12.2. THE ROLE OF YCS IN ENVIRONMENTAL ASSESSMENT

To achieve their goals of conservation education and public policy input, YCS relies largely on the scientific data and traditional knowledge gained through research and environmental assessments (Yukon Conservation Society, 2016). The Yukon Environmental and Socio-economic Assessment Board (YESAB) and the Yukon Water Board (YWB) are the main players in processing new project proposals in the Yukon. YESAB analyzes proposals through a formal process which results in a recommendation for the respective decision body to either accept, modify, or reject (YESAB, 2017c). YWB differs in that it only deals with issues surrounding impacts of water use and disposal, but decisions are legal in nature and final (Yukon Water Board, 2017). Public input is allowed during certain stages of the formal process carried out by YESAB and the YWB (YESAB, 2017c). During these public comment periods, YCS is able to submit its opinions.

12.3. BENEFITS AND CHALLENGES OF THE YUKON CONSERVATION SOCIETY

There are pros and cons to being a mostly volunteer based organization. Although any member of the public is able to comment on YESAB projects, presumably all YCS comments will be very well informed and backed by both scientific data and public support. Due to the otherwise beneficial factors of being a volunteer based NGO, there are also certain limitations of YCS's capability as a conservation organization. Funding is limited and therefore the ability to staff many professionals is reduced. YCS gains most of its funding by creating a membership system

for any member of the public (Yukon Conservation Society, 2016). This is a good thing in many ways because public backing is key for credible recommendations to be made for YESAB's consideration, however, it may also promote a biased opinion from a large and like-minded membership group. The biggest shortcoming is that YCS comments do not officially hold more weight than an uninformed member of the public when being considered by YESAB during public comment stages. However, in theory, YCS comments will be well supported.

Some challenges that YCS and YESAB have to deal with in terms of the Yukon's environmental assessment process include having potentially biased decision bodies. For example, most mining project proposals (not including those on First Nations Settlement Land) have the Yukon Government's Department of Energy, Mines, and Resources as the main decision body. Therefore, the current views and values of the government at the time may play a bigger role in decision making than the objective and independent guidelines that are stated within YESAA.

12.4. PROPOSED IMPROVEMENTS

The biggest improvement to a relatively good and inclusive environmental assessment process in the Yukon would be the formation of an independent and well-funded decision body board that could review YESAB proposals and make unbiased decisions in the most well-informed way possible.

12.5. CONCLUSION

YCS will continue to promote Yukon's responsible development of resources, advocate for environmental issues where they deem necessary, and be a good public education platform. They play an important role in the democratic process that underlines YESAB's review of project proposals.

13. PUBLIC PARTICIPATION IN ASSESSMENTS UNDER YESAA

By Emilie Hamm

13.1. BACKGROUND

Environmental Assessment in the Yukon is carried out under the Yukon Environmental and Socio-economic Assessment Act (YESAA), which is a product of the Umbrella Final Agreement. The Yukon Environmental and Socio-economic Assessment Board (YESAB) ensures that there is one Yukon-wide process that is consistent, transparent, and at arm's length from government. Core values of this process include meaningful participation by First Nations, consideration of Traditional Knowledge equal to scientific knowledge, opportunities for public participation and inclusion of socio-economic assessment (YESAB, 2017d). These values contribute to a full and fair assessment of the impacts of projects being considered for the Yukon.

There are a number of parties that participate in the assessment process. These include the assessor, proponent, decision bodies, First Nations, regulators, and concerned public citizens (i.e., public participation). Public participation occurs at specific milestones during the assessment process. During a Designated Office Evaluation, the 'Seeking Views and Information' period is included in the Evaluation stage and lasts between 14 and 35 days (YESAB, 2017e). In an Executive Committee Screening, there are two mandatory public comment periods, lasting between 30 and 60 days (YESAB, 2017f). Comments compiled during these periods are posted on the YESAB Online Registry (YOR) and are given fair consideration during the assessment; YESAB may request additional information from the proponent in order to satisfy the questions that arise during the commenting stages. Public participation can include comments from a wide variety of sources, including the territorial and federal governments, First Nations, residents of the project area, or other non-government bodies.

One such non-government body that has a consistent presence in comment submissions is the Yukon Conservation Society (YCS). YCS is a "grassroots environmental non-profit organization" whose mandate is to "pursue ecosystem well-being throughout the Yukon and beyond" (Yukon Conservation Society, 2016). YCS was established in 1968 and holds a membership base of over 250 members and volunteers, including the YCS staff and board (Yukon Conservation Society, 2016). The benefit of the society is that it exists solely to advocate for the environment and advance environmental knowledge and research.

13.2. THE ROLE OF YCS IN ENVIRONMENTAL ASSESSMENT

YCS attempts to exert influence on the assessment process via the public participation stage of assessments under YESAA. A search of the YOR will indicate that YCS is active in comment submissions on most types of projects, particularly on mining projects. On one hand, YCS acts as a voice that speaks for those unfamiliar with the assessment process or those who do not have the resources to participate. On the other hand, the comments are often reflective of one opinion and do not necessarily speak for the entire membership base. The public commenting period is essential to YESAB's mandate of transparency, and indeed YCS has the right to submit comments under the umbrella of the society. YCS is valuable to the public commenting period due to their knowledge base, experience in the assessment process, and advocacy for the environment.

13.3. CHALLENGES AND OPPORTUNITIES FOR ENVIRONMENTAL ASSESSMENTS

Certainly, the assessment process is not perfect and would benefit from an independent review to identify areas where it could be improved. Research conducted by (Noble, 2013) indicate that assessors should be wary of weakening environmental assessment processes where government influence on timelines compromises regulatory approvals in the face of economic development initiatives. It is vital to continue assessment at arm's length from government; although, government ultimately has the final say as a frequent decision body. In order to address procedural concerns, minimize environmental degradation due to development, and enhance the benefits provided by development, it is essential to understand the lessons learned from all of the participants in the assessment process (e.g., government, First Nations, proponent, Assessor, etc.). Frequently, assessments of large scale projects yield important lessons, yet these are not shared, resulting in lost opportunity to improve the process (Noble, 2013). Perhaps this could be incorporated into the YOR, or included in YESAB's annual reports, in order to advance assessment in the Yukon. In the end, it is evident that the public plays an important role in the assessment process, and can provide valuable insights to the process and specific projects that have the potential to improve environmental and socio-economic assessment in the Yukon

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