

EXPLORING THE ROLE OF ALBERTA'S ABORIGINAL WOMEN IN ENVIRONMENTAL
IMPACT ASSESSMENTS

By

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ABSTRACT

The role of women is still not considered important in discussions about sustainable development so it would seem unlikely that Aboriginal women would be consulted on environmental impact assessment activities in Alberta. Through an examination of five Aboriginal women involved in environmental impact assessment (EIA) activities in Alberta, this research explores some of their roles in EIAs, how they are exerting leadership in the process, and what some of their successes and challenges are. The results indicate that women involved in EIAs have largely navigated the complexities of the EIA process on their own with little access to tools or formal supports. In some instances, women have accessed experienced mentors in the EIA process, while some have experienced challenges with sexism, conflicts with their traditional women's roles, and with government EIA processes. Finally, this research provides some recommendations on how Aboriginal women can be supported in their involvement in EIAs.

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List of Abbreviations

EIA – Environmental Impact Assessment

TEK – Traditional Ecological Knowledge

TK – Traditional Knowledge

TLU – Traditional Land use

TLUS – Traditional land Use Studies

EA – Environmental Assessment

IBA – Impact Benefits Agreement

CEAA – Canadian Environmental Assessment Agency

FN – First Nation

NWAC – Native Women's Association of Canada

IAIA – International Association for Impact Assessment

IISD – International Institute for Sustainable Development

AANDC – Aboriginal Affairs and Northern Development Canada

AESRD – Alberta Environment and Sustainable Resource Development

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Introduction

Building on the Brundtland Commission (Our Common Future, 1987), the International Institute for Sustainable Development (IISD, 2013) defines sustainable development as one in which “development meets the needs of the present without compromising the ability of future generations to meet their own needs.” IISD (2013) also notes that achieving gender equity is important to sustainable development because in any society men and women’s roles are different. Given that the role of women in Aboriginal communities are an integral component within the economic, social and ecological fabric of the Aboriginal community, the voice and participation of Aboriginal women are integral to the Environmental Assessment process. This was affirmed by the International Association for Impact Assessment (IAIA) in a special publication focused on integrating Traditional Knowledge (TK) in the Impact Assessment (IA) process, where further to this, they emphasized that a best practice for integrating TK means that women must be involved as well as men. IAIA acknowledges that women and men play different roles and that they each have something uniquely different from one another and have different responsibilities; thus it is important to take both perspectives into account when integrating TK into IAs (April 2012).

Throughout the research I use the term “EIA” to refer to those aspects of the EIA process that includes research, gathering, collecting, writing and reviewing the EIA report. While on the other hand, when I refer to the EA process I am referring to those aspects that are much broader including that of the developing the EIA, the public interest decision, the government decision and compliance. The term “impact assessment” is still a much broader and general term used to describe the process of identifying the future or proposed consequences of an action (IAIA,

2009) and includes many different types of IA's, however in this research we will focus primarily on the environmental impact assessment or EIA.

Research Objectives

The objectives of this thesis is to investigate the role of Aboriginal women in the EIA process in Alberta with a view on learning from their experiences about how to increase the role of women in environmental stewardship (natural or applied sciences) more broadly, and to encourage other women to participate in EIAs in their regions. My specific research questions include:

What are the roles of Aboriginal women in the EIA process in Alberta?

Where, and in what instances are Aboriginal women participating in EIAs and what are some of their successes and challenges?

Through an examination of five Aboriginal women involved in environmental impact assessment (EIA) activities in Alberta and three EIA consultants involved with Aboriginal communities, this research explores some of the roles these and other women have in EIAs, how they're exerting leadership in the process, and what some of their successes and challenges are.

Background and Significance of Research

At the community level it is largely unknown how Aboriginal women are participating in the EIA process in Alberta and there are few studies that focus on this area of research. For those Aboriginal women that are involved it may be beneficial to understand how meaningful these experiences are and whether this information could contribute to a better understanding of how women's participation in EIA's can be improved. While this research provides only a snapshot of Aboriginal women in the field of environmental stewardship, it also provides a

glimpse into what some of the challenges and successes Aboriginal women are faced with while participating in the natural and applied sciences sector. Furthermore, this research could prompt policy and program developers at national and provincial levels in supporting further research with a view to increasing the role of Aboriginal women in environmental stewardship or in creating educational programs.

Literature Review

This literature review is organized into four distinct sections. The first section deals with Aboriginal women in Canada and Alberta, the second section highlights how colonization has shaped gender challenges for Aboriginal women today, the third section provides an overview of the EIA process in Alberta, while the last section reviews literature focusing on the role of Aboriginal women in EIA's.

There are few qualitative studies focusing on the experiences of Aboriginal women in Alberta who have participated, contributed to and have been involved in EIAs. As I investigate the role of Aboriginal women in EIA processes in Alberta I rely on three bodies of research: EIAs, gender issues and challenges for equality in Aboriginal communities, and studies focusing on Aboriginal women in EIA's.

Overall in my research, I found the research on gender and feminist ideas in resource development activities to be quite current. Major research include the works of O'Shaughnessy (2011) and Brown (1996), which I found to be quite useful to name a few, and their research included foundational works from Suzanne E Tallichet (1995, 2000), Penny Davidson and Rosemary Black (2001), and Robyn Mayes and Barbara Pini (2010). These women contributed

research on the topic of women impacted by resource development and how such impacts changed women.

In my research on the topic of the role of Aboriginal women in the EIA process I relied on two major bodies of research by David Cox and Ciaran O'Faircheallaigh. Both Cox (2013) and O'Faircheallaigh's (2012) research is also fairly recent. Cox's research is focused exclusively on women's roles in EIA's and Impact Benefits Agreements (IBA) while O'Faircheallaigh's research is focused on gender inequality in resource development and its impacts on Indigenous societies. Other bodies of research I relied on include research on the role of Aboriginal people in the EIA process (Booth & Skelton, 2012, Deleon & Ventriss, 2010, Lajoie, 2006), however little of it focused on gender roles and challenges in resource development. However, these researchers provided a good understanding of what's important when involving Aboriginal people in the EA process—something that applies to Aboriginal women as well

Aboriginal Women in Canada and Alberta

Aboriginal women in the northern half of Alberta region are either Cree, Dene or Metis compared to the southern half of Alberta which is comprised primarily of the Stoney, Blood and Blackfoot tribes. Of the 188,365 that identify as having Aboriginal identity in Alberta, 51.3 % (96,625) are females, and generally speaking, Aboriginal women in Canada are a relatively young population (Aboriginal Affairs and Northern Development Canada, 2012). Aboriginal women are also more likely to report working in administrative and sales and service jobs than their male counterparts (O'Donnell and Wallace, 2011). O'Donnell et al (2011) also note that First Nation women living on reserve reported employment in 'social science, education,

government service, and religious occupations' compared to non-Aboriginal women. Another interesting fact that O'Donnell et al (2011) highlight in their report is that Aboriginal women are slightly more likely to have a degree than Aboriginal men.

While O'Donnell et al (2011) do not specifically report on the participation of Aboriginal women in the natural and applied sciences sector they do note that the occupational distribution of total Aboriginal people (aged 15 years and over) within this sector is 1.6 per cent. Another study by Aboriginal Affairs and Northern Development (AANDC, 2012, p. 32) notes that "very few Aboriginal women (less than 2%) have qualifications in physical and life sciences and agriculture and natural resources" a similar theme among the various Aboriginal identity groups; First Nations, Metis and Inuit women.

In Canada, Aboriginal women are more likely to experience disparities than non-Aboriginal women. Aboriginal people in Canada, women included, only won the right to vote in 1960, while non-Aboriginal women won the right to vote in 1918 (The Nellie McClung Foundation). The patriarchal attitudes of the day where 'men were the rulers of the household' was central to social organization. Men made all the decisions about political systems, held moral authority and could own property while women could not. Women were not allowed to voice their concerns, vote, or participate in politics.

Another reality that exists is that Aboriginal women share a common legacy of marginalization and oppression. In addition to having higher health risks, Aboriginal women also do not often get to choose the lifestyle they want to live. They are more susceptible to environmental hazards and conditions because of marginalization in their own communities.

The Assembly of First Nations (2009) asserts that Aboriginal women who are more aware of environmental conditions and hazards can have multiple impacts on the health of the community

It is not surprising then that Aboriginal women are still behind when it comes to participating in environmental activities, let alone EIA's. Goudie and Kilian (2011) argue that impact assessments are generally gender blind and are located within an environment that is strongly sexist and patriarchal. Goudie et al (2011) further add that the consideration of gender in impact assessments is a prerequisite for truly sustainable decisions. However in the Aboriginal community, I suspect that more pressing social and economic issues supersede the desire to become involved in environmental activities.

Dale (2012) highlights that the participation of women in environmental industries is poor and she adds that almost 90 per cent of environmental industry employees are male. This must be so much more pronounced then for Aboriginal women because of the reality of marginalization and oppression. In her book, *At the Edge*, (2012) Dale notes that not only is women's participation in academic faculty low but women are "underrepresented in disciplines that have direct environmental significance, such as ecology, biology, economics, and geography."

Dale, Dushenko and Robinson (2012, p.140) highlight two things must be in place before a marginalized community can see sustainable development in action. First, connections among people in the community must be increased and secondly, progressive policy interventions that enhance social capital must be in place. In the case of Aboriginal women in Aboriginal communities the connections already exist. Through these networks, Aboriginal women can play an important role in enhancing sustainable development. Giving an Aboriginal woman the

tools, education and awareness and ability to participate in EIA's is another avenue that can only increase the multiplicity of these impacts on others who are in and outside of her circle.

Gender Issues and Challenges for equality in Aboriginal Communities

As Aboriginal people came under Canadian law and rule, the changes faced by matriarchal societies had huge impacts on Aboriginal women (The Aboriginal Justice Implementation Commission, AJIC, 1999). Colonization has been largely responsible for reducing an Aboriginal woman's ability to participate in economic and political aspects of their communities. While some communities are reclaiming their matriarchal roots and participating in economic and political systems, this process has been rather slow (Native Women's Association of Canada, 2007).

In Brown's article (1996) on the impacts of the oil and Gas sector on the Lubicon Lake Cree Women the experience of women as a result of this exploitation was described as a negative and stressful period of time; one in which the roles and relationships of men and women changed. Brown argues that gender roles were largely egalitarian prior to the 1980's and that the exploitation of oil and gas added to the list of other impositions to the Traditional lifestyle. These economic changes added to the growing list of other influences such as politics in the form of band governance and ideological thoughts influenced by religion, churches and residential schools. Brown (1996) makes a key point when she writes about the experiences of the women who developed a variety of strategies in response to the destruction of traditional hunting, trapping, and gathering economy. Brown notes that "the women took paid jobs, pursued educational opportunities or job training, or turned to welfare" (1996, p.6). The strategy of the

Lubicon women was to adapt to the situation by taking on these “new” economic roles in addition to their social roles of food preparation, cooking, cleaning, and childcare.

O’Shaughnessy (2011) also highlights a similar thought in her research on women’s experiences from rapid resource development in Fort McMurray. She adds that the women of Fort McMurray turned challenges into opportunities and adapted to their new surroundings. They took jobs in non-traditional sectors as truck drivers and machine operators in addition to retail and administrative sectors. However these new roles did not come without its challenges. O’Shaughnessy and other researchers (Tallichet 1995, 2000; Davidson and Black 2001; Mayes and Pini 2010) note that the women who enter these industries were often met with discriminatory hiring practices, limited opportunities for advancement, sexist type casting and even sexual harassment. Regardless of these challenges, both Brown and O’Shaughnessy suggest that women have adopted various roles and have benefited from the economic advantages in Alberta and have adapted and adjusted in order to meet the current economic and social climate.

A similar parallel can be drawn for Aboriginal women in that they may be experiencing similar challenges with sexism and gender discrimination in their own communities. Recent policy changes indicate that gender issues are alive and well in Aboriginal communities. The most recent example, Canada’s passing of Bill C3 in March 2011, indicates that gender equality issues can be traced first and foremost to the Indian Act. Bill C-3, the Gender Equity in Indian Registration Act, “modified the Indian Act in order to comply with the British Columbia Court of Appeal’s 2009 McIvor decision, which found aspects of the current registration provisions in

violation of section 15 of the Canadian Charter of Rights and Freedoms on the basis of sex” (Parliament of Canada, 18, March, 2010, para. 1).

Aboriginal women's roles have changed and evolved over time (Assembly of First Nations, 2009) and Brown's research provides a fairly recent example of this in her research with the Lubicon Cree women in Alberta. Traditionally, Aboriginal women participated in gathering, harvesting, preparing food, child bearing and rearing, caring for the elders and keeping the fire going. Today the Aboriginal woman may hold down a full time job or getting an education. Even with these changes Aboriginal women play a hugely important role in sustainable development through her networks with other women, kinship relationships and social networks with women from other communities.

Aboriginal women are becoming involved in feminist movements. In some cases Aboriginal women are joining organized Aboriginal women's groups, which are becoming more common Aboriginal governance features in Canada. Aboriginal women in Canada are challenging gender inequity in their own communities and have influenced policies for change in Canada such as Bill C3 and Bill C31. Bill C31 was an act passed in 1985 that removed discrimination policies under the Indian Act and repatriated First Nation women with treaty rights and privileges (NWAC, 1986). Under the Indian Act, the policy was that if a First Nation woman married a man who did not have status or was not an Indian, she became disenfranchised of her rights and benefits.

With media and Internet access increasing, Aboriginal women have changed immensely over the past 20 years and awareness of environmental issues is increasing. The most recent environmental awareness campaign launched by four women under the banner of Idle No More

(INM) changed the minds and attitudes of Aboriginal and non-Aboriginal Canadians about the impacts of environmental decisions on Canadian society. Two of the women, armed with graduate and law degrees, came together with two other First Nation women with strong activist backgrounds to raise awareness and call on government to stop the passing of two legislations referred to as Bills C45 and C38. The women used the INM forum to raise awareness and harness the collective voice of Aboriginal people across Canada to stand up against this legislation, which the women argued would affect First Nations people, their lands and waters. Although the rallies have simmered down across Canada and globally, the INM movement helped raise awareness of environmental issues for Aboriginal people across Canada, especially women.

Increasing access to education and creating awareness about environmental issues can have a profound impact on Aboriginal women in Canada. While it may be the case that urban Aboriginal women have much more access to the media and organizations and are much more aware of environmental issues, it is unknown how isolated and remote Aboriginal communities are faring on awareness of environmental issues. In smaller remote Aboriginal communities, the experiences of Aboriginal women in environmental stewardship or environmental issues are largely unknown and undocumented. However AFN (2009) notes that First Nations women's exposure to environmental stewardship is being experienced because of immediate environmental hazards or events in or near the community with health implications for children, elders and to the community at large.

EIAs in Alberta

Alberta's Environmental Protection and Enhancement Act (EPEA), define what types of activities trigger an EIA. For example, the mandatory list includes such activities as oil, gas, coal, pulp and paper mills, mines, chemical manufacturing plants, large dams and water diversions. The exempted list includes such activities as concrete plants, small sweet gas processing plants, manufacturing plants of plastics, metals, seeds, furniture, water works systems, sewage disposals, and small pipelines and transmission lines, water wells, recreation sites, and water management projects (EPEA Regulation 111/1993).

The majority of major oil, gas and coal activities occur in the northern and central part of Alberta. Alberta is home to a diverse population of Aboriginal people. There are three Treaty areas (six, seven and eight), eight Metis settlements and a number of Metis communities in Alberta. Treaty six and eight and the Metis settlements and communities covering much of the northern central part of the province are touched by some form of industrial activity and are impacted by numerous oil, gas and coal development projects, almost always requiring an EIA. The Treaty seven areas have also been impacted by the occasional EIA but not as often as the northern part of Alberta (Alberta Environment and Sustainable Resource Development, AESRD).

Traditional Land Use (TLU) studies and Traditional Ecological Knowledge (TEK) are important components of the EIA process in the Government of Alberta's EA process and are critical measurements of how major projects are impacting the local Aboriginal people. The role of TLU and Traditional Knowledge (TK) has also gained increased prominence over the past thirty years since the Berger inquiry on the McKenzie Valley Pipeline. Legislation (Canadian

Environment Assessment Act, CEAA, 2012) and recent policy decisions such as the Government of Alberta's First Nations Consultation Policy on Land Management and Resource Development (2005) have also helped to ensure that Aboriginal peoples are consulted on major resource extraction projects and included in EIAs across Canada.

Measuring the impact of resource extraction or other major projects such as highways and pipelines on Aboriginal people involves understanding the intricacies of their relationship to the land and their livelihoods. For those who live in remote and rural communities, sustainability from an Aboriginal point of view represents a land capable of supporting the social, economic, and cultural fabric of their society. A healthy ecosystem translates to sustainable communities, one in which the social and health aspects of the people who live with and within it are not compromised by the economic development activities in their regions (Bayley and Strange, 2008).

Environmental impact assessments examine the capacity of local and regional areas to sustain projects that might have significant environmental, social, economic and health impacts. An environmental impact assessment should achieve outcomes that are positive on all these levels, not just focused on one area. As much of the literature suggests, a healthy balance in measuring these factors is integral to the sustainability of a region and thus the people of the region who may be potentially affected should be involved in the EIA (Strange et al, 2008). For most jurisdictions in Canada, Alberta included, consideration is being given to TLU studies and TK in EIAs. Alberta has gone so far as to include the two areas of study in the standardized terms of reference for conducting EIAs (AESRD, January 23, 2013).

The EIA process is a tool utilized to assess the impacts of a project by examining the balance of needs for economic development and its potential damage to social, health and environmental aspects, both now and in the future. The impact assessment tool was first introduced in the United States in the 70's through the National Environmental Policy Act (NEPA) and since then has evolved into a multitude of various tools (IAIA, April 2012). Impact assessments were introduced in Canada under the Environmental Assessment and Review Process (EARP) (Sadar and Stolte, 1996) and since then Canada has gained a wealth of experience in EIA methodologies, practices, and processes. Elizabeth May (2012) in commenting about the proposed Omnibus Bills (bill C 38 & 45) noted that environmental assessment requirements in Canada would be drastically weakened if the bills passed. One of the biggest changes resulting from the Omnibus bill passed in 2013 is that projects supported by Federal monies no longer require an EIA (CEAA). In spite of these recent changes, the impact assessment (IA) tool is still a useful tool, for both procedural and technical assessments (IAIA).

Aboriginal Women in the EIA Process

Mackintosh (2012) in describing the United Nations Conference on Sustainable Development in June 2012 highlighted the fact that there is minor and trivial focus on women and sustainability, something that is still a global issue. The conference brought together more than 100 state leaders to identify sustainable development goals that would reduce poverty while still preserving the environment. Inadequate acknowledgement of the need for investing in women and sustainability as key to achieving sustainable development and reducing poverty were pervasive themes. Mackintosh (2012) noted that the role of women's support to families through wage labour, maintaining and preserving traditional knowledge, biodiversity, and

ensuring household food security and nutrition was sadly absent. The conference lacked any recognition of the global gender disparity that exists for women who are largely marginalized in society and are often the ones who suffer the effects of poor healthcare, education, and discriminatory policies (Mackintosh, 2012).

At the United Nations Conference on Environment and Development (1992) Agenda 21 (Section 23) identified as one of its goals the need to increase women's roles in sustainable development. The agenda encouraged countries to consider developing strategies that eliminate constitutional, legal, administrative, cultural, social and economic obstacles for women's full participation in sustainable development and public life (UNCED, 1992). It was further acknowledged that countries should increase the proportion of women decision makers and provide post-secondary training for women in sciences and technology (UNCED, 1992). Another section of Agenda 21 (Section 26) speaks to the need for increasing the role of Indigenous people in decision-making. Governments were encouraged to recognize the values, traditional knowledge and resource management practices of Indigenous peoples and apply this to areas where development was taking place.

In my research on the role of Aboriginal people in the EIA process there was a moderate amount of material to rely on, however the role of women was largely absent in much of the research. In Booth and Skelton's (2012) research on the West Moberly First Nations versus First Coal Corporation, they provided a good foundation of things that are important when involving Aboriginal people in the EA process and in achieving meaningful inclusion of First Nations in the EA process. While they did note that First Nations must participate in the study and be involved in the research methodology, the six recommendations lacked any specific reference to

involving Aboriginal women or ensuring gender equality. The recommendations focused on the importance of taking First Nations seriously, fixing the relationship between First Nations and government, mutual education, the need for prioritizing the procedural issues, respecting treaty and Aboriginal rights and reconsidering the process itself (Booth and Skelton, 2012).

David Cox's (2013) research was heavily focused on the social and economic outcomes of the EIA and the extent to which Aboriginal women were able to secure employment at the Voisey's Bay Mine. Cox's research pointed out that "the process was more progressive in sustainability and participation than previous EIA processes in Canada" and adds "that few of these studies mention the importance that the impact benefits agreements (IBA) played in the EIA negotiation" (p. 63). Cox's research concluded that Aboriginal women influenced the outcomes of the IBA process in the Voisey's Bay Mine EIA and that this only occurred because Aboriginal women were included in the EIA through formal and informal processes. While Cox draws on the work of O'Faircheallaigh (2013), Cox does not agree with O'Faircheallaigh's conclusion that women are more involved in EIAs than what the literature acknowledges.

O'Faircheallaigh (2012, p.1794) argues that while much of the academic literature and publications of non-governmental organizations exclude indigenous women from negotiation of agreements between mining companies and indigenous peoples, it does not mean they are excluded. O'Faircheallaigh (2012, p. 1795) concludes that women choose to "absent themselves from negotiation" and that their absence should not mean to imply that they are excluded. For the Voisey's Bay Mine in Canada and the Argyle Diamonds Ltd in Australia, O'Faircheallaigh notes that in both situations the chief negotiators were women, women were involved in setting

and controlling the negotiation agenda, and that because of this the result was either gender equality provisions or equal distribution of income between men and women.

In 2009, the Native Women's Association of Canada developed a toolkit called "Finding your Voice: Environmental Toolkit for Aboriginal Women" (NWAC, Dec 2009) through a regional partnership. The project to develop the toolkit came about as a result of an environmental roundtable meeting in July 2008 (NWAC, 2009). The graduate students in the Resource and Environmental Management (MREM) Program at Dalhousie University volunteered to produce the toolkit with guidance from both NWAC and the Nuclear Waste Management Organization (NWMO). Its contents includes information for Aboriginal women on how to proactively address an environmental concern, provide them with some basic research skills and guide them on how to organize Aboriginal women to promote sustainable development in their communities. The toolkit also provides Aboriginal women with information about environmental assessment processes, procedures, and decisions.

Some of the strengths of the NWAC toolkit includes detailed information on public participation processes, how to lead the community in creating a sustainable vision for the environment, how to identify an environmental issue and identify its impacts to the community, and request action or mitigation through letter writing or by using the media to get action. The toolkit provides examples of how Aboriginal women might influence the process of collection and presentation of TEK data. It also emphasizes the importance of requiring the presentation of the community's TEK knowledge from a community member to an environmental panel during the review process, rather than handing it over to the proponent. The toolkit also included a

facilitator's guide for women interested in taking a lead role in environmental stewardship (NWAC, 2009).

Methodology

This research involved a qualitative inquiry into the role of Aboriginal women in the EIA process in Alberta. The research involved the use of semi-structured interviews with eight individuals: five Aboriginal women and three EIA Consultants working for companies that are consulting with Aboriginal communities. While a quantitative study on the number of Aboriginal women involved in the EIA process in Alberta would prove to be valuable it would not capture the meaning of these experiences for the participants. Without community involvement, capturing data on the number of Aboriginal women involved in the EIA process would be difficult. This type of study would have to be managed and completed by the Aboriginal community and possibly further supported by gender equity policies towards ensuring the equal participation of women in the EIA process. A similar policy could also be compulsory for companies who are responsible for conducting EIAs that are consulting with Aboriginal communities to ensure that Aboriginal women are fairly represented in EIAs.

Semi Structured In-Depth Interviews

A standardized semi-structured interview was used to capture information about the detailed experiences of Aboriginal women involved in EIAs in Alberta drawn from two sources—directly from Aboriginal women and from EIA consultants working with women in Aboriginal communities. Five women and three EIA consultants agreed to participate in the research. The qualitative inquiry of each of the five women's experiences in EIAs focused on who, where, and what the quality of the experience was reported by each. While on the other

hand, three EIA Consultants who also agreed to participate and share their experiences and perspectives of Aboriginal women involved in EIAs through their direct interaction with Aboriginal communities on EIAs.

The interviews with the women included some closed questions used to capture some basic demographic information and a set of six open-ended questions. The closed questions focused on age, community, education, EIA experience and Aboriginal status. The open ended questions used for direct interviews with the five women were targeted to obtain information about each woman's experience in the EIA process and were designed to seek out behaviours, opinions, feelings, and any other supplementary information that might be relevant to understand their experiences. The same set of interview questions were used with the EIA consultants but were targeted to obtain information about numerous Aboriginal women they interacted with on EIAs, either currently or in the past. Each interview took approximately 20 to 30 minutes to complete.

The interview guide was standardized in that the same questions were asked of each woman and EIA consultant, however with slight deviations on questions for EIA Consultants who provided their perspectives from a third person point of view. This was done in order to avoid casting doubt on the findings and avoid any attempts to influence the outcomes of the research. All interviews were completed within the spring and summer of 2014. Each interview was reviewed and summarized within 24 to 48 hours after the interview to avoid memory loss of information and details. All interviews, except for one, were conducted by phone and the responses and differences between interviewed subjects were taken into account in the analysis of the responses.

The five women were selected using a snowball approach because the community of Aboriginal women involved in EIAs in Alberta is quite small and many of the women were assumed to be socially connected and/or network sporadically. The first woman I invited to participate was an acquaintance of mine who I had met through a work function. She provided me with the names of three other Aboriginal women whom she knew and thought would be interested in participating in the research. Women selected to participate in the interview must also have participated in EIAs on major projects within the last five years or must be currently involved in an EIA.

My primary goal in bringing in the EIA Consultant viewpoints into the research was to supplement the small sampling of Aboriginal women interviewed and add to the richness of the research and its results. The small sampling size limits how the results of the research can be used therefore the findings from this research should not be construed as generalizations and considered statistically valid. This research intends to only provide insight into the process for some Aboriginal women who are or have been involved in EIAs and the focus of this study is on the meaning of the process for a few individuals who can provide insight into the process.

The consultants interviewed were either currently participating or had recently participated in an EIA in Alberta. The individuals were selected based on my own personal interactions with each through past EIA work situations and projects. The interviews were conducted using the same open-ended questions however designed to capture their perspectives of numerous Aboriginal women whom they had or currently were interacting with on EIAs. These interviews provide supplementary perspectives on Aboriginal women's experience, in general, and provide some insight into what the EIA consultants viewed as being the meaning of

the process for a broad-spectrum of women they have interacted with. The women referred to in these interviews is not analyzed to the same extent as the direct interviews with the selected Aboriginal women because the information provided is not personal and from an Aboriginal woman's point of view, is based on third party perspectives and experiences, far too general to provide specific insight. This information is still valuable in that it provides additional support and insight from a general nature to any specific categories that are drawn from the direct interviews with women.

Once all of the data received from the women was evaluated the results were shared with the women interviewed. The women had an opportunity to clarify information shared in the interview, make corrections to the transcribed interview, and add any other information they felt was important to share. Through this second opportunity, one woman came back with some changes but the other women did not provide any further clarification to the original interview. The objective for sharing the interview results was important to me in that I felt it important that what I heard from each was correctly transcribed and that I would not use their information in a way that was not accurate. The data obtained from the interviews with women were evaluated and compared against the EIA consultant interviews.

Data Analysis

In my data analysis I followed a five-step process. The first step involved placing the transcribed interviews into a matrix for easy comparison between the five women interviewed. The other three interviews with EIA consultants were also placed into a separate matrix to compare their responses to each other and to the interviews with the five women. This first step

involved the task of reading and rereading the transcripts to become familiar with the content, making notes as I read.

The second, third and fourth steps in the analysis involved establishing labels and categories based on the interview sets, organizing the information from each interview set that were most relevant and connected in some way to an established category, looking for any repetition in words or phrases. In the process of achieving step two I analyzed the data using specific labels focusing on the specific activities, and in this case the various “roles” women took on in the EIA process and their experiences. I also created the following labels, which I used to examine the interviews: successes, challenges, feelings, behaviors, sensory responses and opinions (Responses by Category and Codes, Table A1). Finally I attempted to seek out any words or phrases that were repeated, highlight any surprises or interesting points, similar ideas in reports or research, and focused on anything that reminded me of an important theory or a concept related to this topic in order to establish codes (Responses by Category and Codes, Table A1). The codes were used to create new categories either by bringing several codes together or to create new codes. The fifth step involved assigning some form of hierarchy among the main categories, which emerged from step two to four. The categories were assigned based on their order of importance and the results were summarized into a matrix. Finally the results were written up and interpreted based on the data analysis method described in this section.

Results and Discussion

In this section I present the results of my study in four sections. First I describe the women interviewed, provide a sampling of the data from the interviews with the women yielded to each question and a summary of the data captured from the interviews with EIA consultants,

and then I present the results of my data analysis, matrix, and themes. The small sampling size limits how the results of the research can be used therefore the findings from this research should not be interpreted to be generalizations and considered statistically valid. This research intends to only provide insight into the process for some Aboriginal women who are or have been involved in EIAs and this study focuses merely on the meaning of the process for a few individuals who provide insight into the process.

In my research on exploring the role of Aboriginal women in the EIA process in Alberta I was not surprised to find that Aboriginal women have largely maneuvered their way through the EIA process and have taken on a variety of roles within this field. The Aboriginal women and EIA Consultants I interviewed revealed that overall Aboriginal women are the “movers and shakers of the community” (Sam, personal communication, , Feb. 26, 2014). Yet another EIA Consultant (Henry, personal communication, Feb. 7, 2014) indicated that “women are the ones to make things happen.” Further, the words of one woman (Elissa) I interviewed really summarized for me why Aboriginal women are so heavily involved in EIA activities in their communities when she shared this statement “in the Blackfoot culture it is understood that women are the neck and men are the head.”

A “Snapshot” of the Women

The five women I interviewed represent a small cross section of Aboriginal women in Alberta, ranging by age, community, Aboriginal status, education, EIA experience and territory, as illustrated in Table 1.

Table 1

Aboriginal Women by age, community, status, education, and EIA experience

Name	Age	Community /territory	Aboriginal status	Education Degree	Diploma	EIA Experience
Sherry	40-49	Treaty 6	First Nation	BA		>5 years
Elissa	30-39	Treaty 7	First Nation	BA		<5years
Michelle	30-39	Treaty 7	First Nation	MSc		>5 years
Monica	30-39	Treaty 8	First Nation	BSc		>10 years
Shannon	30-30	Treaty	Metis		Diploma	<5 years

The five women I interviewed ranged in age from 30 years to 49 years. All the women I interviewed have degrees and diplomas and are focused on sciences except for two whose studies included Native Studies and management. One woman received her diploma from a technical college and the other four women graduated from universities. The EIA experience of each woman ranged from one to ten years. Of the five women, two are members of the Treaty seven territory, one woman is a member of Treaty six, another from Treaty eight, and the fifth woman is of Metis heritage.

In this snapshot, pseudonyms are used to conceal each woman’s identity. I have also taken the precaution of not including the real names of the communities women describe and the places where they work or have worked in the past. I have retained the information on which

Treaty/Metis area each woman is from since the areas are large enough and personal identities will not be revealed.

Sherry is a woman of Cree descent in her late 40's, First Nations, living in a bedroom community just outside of Edmonton, Alberta. She is a proud member of the Treaty 6 area and has spent a lot of her time working with the Federal government, First Nations and most recently with the provincial government. Sherry has a BA and her EIA experience spans more than five years.

Sherry was the first woman I interviewed and the only one I interviewed in person. We met over coffee at her office in a large downtown building in Edmonton. During the course of the interview I gathered that the interview questions I was using were too rigid and did not provide enough opportunity to allow her to provide open-ended answers. I could sense that she was uncomfortable with the format of the interview and I felt it was necessary to abandon my closed-ended questions and open up the questions to allow more expression and experiential responses. Sherry was patient with my process and I explained that I might have to come back and re-interview her if I felt that there was not enough information for me to draw on. Sherry gladly agreed.

My second interview with Sherry occurred about a month later and was also in person. Sherry seemed rushed and I felt that she wanted to get the interview out of the way and asked if she could just fill out the interview guide. I agreed. I gathered from the interviews that Sherry, a Traditional Cree woman working with the federal government in the 70s and 80s, would have experienced some challenges since her early career in government predated the Bill C31 (1985) and Bill C3 (2011) timelines.

My second interview occurred by phone with a Blackfoot woman, in her mid-thirties, from the Treaty 7 areas. Elissa is a First Nations woman with a BA in Management with less than five years' experience in EIAs. I gathered from the interview that Elissa values the TLU and TEK information included in EIAs and that much of this value originates from her upbringing in a Traditional Blackfoot community.

Michelle, a Blackfoot woman in her late thirties is a deeply spiritual First Nation woman who has more than five years' experience in EIAs. Michelle holds a graduate degree in science and maintains a strong connection to her Blackfoot traditional teachings. In my encounter with Michelle I sensed a deep commitment to building the capacity of her community and discovered that Michelle's thesis in graduate school was on the topic of preparing the community to understand an EA and design how an EA works.

Monica is a woman from a northern community in the Treaty 8 territory with more than ten years' experience in EIAs. What impressed me about Monica was her incredible understanding of the EIA process drawn from her direct interaction and experience with her community's involvement in EIAs. Although Monica was one of the younger women in her early thirties she came across as a confident and capable young woman who seemed far beyond her years. In my interview with Monica I learned that she had overcome many obstacles at a young age including being an unwed teenage mom. I gathered from the interview that this experience was something that helped her to strive towards her goal of getting an education and being a role model to Aboriginal youth in her community.

Similar to Monica, another younger woman barely thirty, Shannon, graduated with a diploma from a technical college in and is employed with a well-established environmental

company in Edmonton. Shannon is a Metis woman with less than five years' experience in EIAs however she too impressed upon me her energy and drive as she described to me her experience working for a company deeply involved and active in EIAs.

Results of My Research Questions

Six open-ended questions were used to obtain information about each woman's experience in the EIA process. The following provides a snapshot of how some of the women responded to questions.

Question 1: Tell me about a time when you were involved in an EIA in as much detail as possible? What was your role?

I can tell you about my first experience doing an EIA. I was working for the federal government and was new to the process. I completed all the paperwork and researched the topic on the mitigation of geese in the lake picnic area. I was under the supervision of a Senior Advisor. I researched the biology of the geese, their habits and uses and knew that the area was predominantly Cree and Blackfoot traditional areas. As an Aboriginal woman working in a male dominated work place I felt challenged (to bring this up) and there was little interest in working with Aboriginal people at the time. (Sherry, personal communication, January 29 & April 16, 2014)

I was involved in reviewing EIA applications requiring TEK, making sure it was complete and that it met the terms of reference. I reviewed the consultation logs, identified any concerns and looked for documentation looking at how their (First Nation) concerns are being mitigated. I also looked at how willing First Nations were at looking at mitigating impacts. Initially when I first got involved in EIAs some people were

reluctant about TLUs and TEK and I noticed that they're not really used. I didn't see the TLU and TEK adding value. It was just an administrative check off. (Elissa, personal communication, January 31, 2014)

Question 2: How were other Aboriginal women involved?

There are very few women involved in EIAs in the community. I review an enormous amount of technical information and there's not enough capacity to engage women in the community at a technical level. Whoever is working in the office is involved. But at the community level the community participation is lacking and the consultation process is severely flawed and does not consider community engagement. There's not enough time to get involved and the capacity is not there. There's nothing in government policies to get women involved. (Monica, personal communication, April 4, 2014)

I can't recall a single Aboriginal woman working on that project (an EIA for a new facility using new technology). Our client was from South Africa and I was educating a lot about Aboriginal history. For the communities I've worked with there's been very few Aboriginal women involved in the EIA. Usually there's a male working alongside the women in technical roles but very few instances where an Aboriginal woman is in a lead role. The communities that come to mind where women are leads on EIAs are Fort McKay, Montana, Samson and Louis Bull tribes. (Shannon, personal communication, June 3, 2014)

Question 3: What kinds of supports did you get while you were involved in the EIA?

(Coworkers, employers, technical staff, or from contractor/consultant)

There was a great amount of support from my Supervisor but it was limited. I felt some support and acceptance as a woman of Aboriginal ancestry but I also felt I would not get support and it would jeopardize any potential for future employment. (Sherry, personal communication, January 29 & April 16, 2014)

EIA Leads provided support at kick off meetings, on reviewing the EIA section by section, and the review team provided support. If I didn't understand something they'd explain it in detail. Lots of guidance provided. (Elissa, personal communication, January 31, 2014)

Still other women noted:

I networked with others. I met with grandfather David ~~ (from CEAA) and had a brief discussion. He guided our work in designing the EA process for our community.

(Michelle, personal communication, February 4, 2014)

A woman who was a former director and someone who hired me told me 1) you're the most important person I hire because you're eager to learn, and 2) my job is to work myself out of a job. She left at the end of two years and passed on to me the responsibility of managing consultation. (Monica, personal communication, April 4, 2014)

Not a ton of support from my employer. I had to figure it out on my own. I did a lot of research on my own. (Shannon, personal communication, June 3, 2014)

Question 4: Are there any resources, tools or guides that supported your success in the EIA process?

I spent a lot of time reading Alberta government documents and regulators documents—even on other projects, reviewing EIAs. When I had a chance to review an EIA I took it as an opportunity to learn from different types of companies. (Shannon, personal communication, June 3, 2014)

Question 5: What kinds of challenges did you experience while involved in EIA?

Lack of support by staff, lack of awareness of the importance of Aboriginal culture and ceremony. The biggest challenge was being a woman in a male dominated work industry...and felt as though there would be more acceptance if I was male. (Sherry, personal communication, January 29 & April 16, 2014)

As a woman I really had to establish my role and speak to Elders. (Michelle, personal communication, February 4, 2014)

The biggest challenge for me was my lack of confidence. It was like being thrown into a shark tank and having to learn how to swim. No one gave me a handbook. (Monica, personal communication, April 4, 2014)

Had a lot of research along with a high stress job with strict deadlines and immediate results. (Shannon, personal communication, June 3, 2014)

Question 6: Is there anything else you would like to add that you feel is important or should be highlighted that would add to what you have said?

The lack of respect and acceptance of women must change. If we are not given the same credit as men in this field we will never feel valued and be able to create a community of change. (Sherry, personal communication, January 29 & April 16, 2014)

Women in EIAs is critical for women in the community—to have a venue to share that information whether it's tree planting, fish rescue, talking circles, community clean ups, water ways, ceremonies or sweats. (Elissa, personal communication, January 31, 2014)

As far as the community developing its own process, the legislation is grey so it makes it difficult to have a role in EIAs. (Michelle, personal communication, February 4, 2014)

In the role of an Aboriginal woman involved in EIAs—the sense of caring and compassion is intuitive but it is also a Traditional role to be a caregiver. This gets overlooked. Many more women who are involved in EIAs need to give themselves a pat on the back. (Monica, personal communication, April 4, 2014)

Having an Aboriginal woman with an environmental background was rare. It inspired me to do well, go speak at schools, attend career days, and speak on environmental sciences. (Shannon, personal communication, June 3, 2014)

EIA Consultants and Interactions with Aboriginal Women

EIA Consultants who have interacted with Aboriginal women on EIAs indicated some common themes compared to the interviews with Aboriginal women but there are also slight differences. The three EIA consultants I interviewed possessed extensive experience working on EIAs in Alberta. The first gentleman I interviewed whom I will call Sam for the purpose of this paper held more than 30 years' experience in EIAs and was preparing to retire. Sam had spent much of his EIA work in the northeast part of Alberta where the majority of Alberta's EIAs occur. The second interview was with another gentleman whom I will refer to as Henry is a middle-aged man who is currently involved heavily in EIAs in the west-central areas of Alberta. The third gentleman I interviewed, a younger man, whom I will refer to as Jim, is currently

involved in EIAs in the northeast part of Alberta. Overall, I would guess that the three consultants hold approximately more than 40 years' experience in EIAs in Alberta and are quite experienced with EIA processes in Alberta. All 3 consultants are or have been leading the Aboriginal consultation aspects for companies going through regulatory processes.

The same six questions used with the direct interviews with Aboriginal women were used however designed to capture the EIA consultant's perspectives of numerous Aboriginal women whom they had or currently were interacting with on EIAs. The following provides a snapshot of how the EIA consultants responded to questions.

Question 1: Tell me about a time when you were involved in an EIA in as much detail as possible?

I have been a professional engineer since 1996. My background is in the oil and gas industry but I worked for company B for 25 years where I was stationed to manage places like Estevan Saskatchewan. So when public relations issues came up I was the guy to resolve it. Later company B got involved in oil sands projects and they needed someone to supervise the construction and they asked me to talk to communities about what they were doing. This is where I first met the people in the communities. Getting involved with Aboriginal people – my older sister adopted a couple of Aboriginal boys in Saskatchewan and both were First Nations so getting to know them helped me to understand the issues Aboriginal people have in Canada...women involved in EIAs really depends on the community we're talking about. In many communities—the women are the dominant force in the communities. Even though the Chiefs and Councilors are men, women continue to be the dominant political force...Even though the men are presented

as leaders the women are the driving force. But in some communities the women are the leaders. (Sam, personal communication, Feb. 26, 2014)

Question 2: How were other Aboriginal women involved?

I've been involved in EIAs since 1996 and have interacted with a lot of Aboriginal women, neat and powerful women. I wish the Elders I first interacted with were still alive, a number have passed on. One woman (name withheld), before IRCs (Industry Relations Committee) would have been good to interview. She was with a First Nation that wanted to engage with industry but nothing existed (no policy to ensure consultation) that ensured this happened. However her personality was stubborn, and even though she didn't know what she was doing, neither did I, remember. This was 20 years ago.

Another woman (name withheld) was the very first person I met in 1996. You'd never guess she was Aboriginal but she married a Newfoundlander. She was a Metis lady from ~ (town withheld). But she was a lady who made a great impression on me. After I left company x and joined company y I met her again and her husband was working for company y. She was working for the community and decided to create Liaison Officers and she was the first. She helped me organize an open house in her community. (Sam, personal communication, Feb. 26, 2014)

Aboriginal women are involved at every stage, as Elders, Study Coordinators responsible for TLUs, regulators and working for clients in an Aboriginal Relations capacity. On occasion some of the females are Chiefs. All women seemed to have some sort of education or had access to special training. All women seemed to have some sort of education or had access to special training. (Jim, personal communication, July 4, 2014)

Question 3: What kinds of supports did women get while they were involved in EIAs?

There have been times where I have found myself in the position of where I've had to explain the EIA process but have met women with knowledge. The Metis women from MNA Zone 4 were very knowledgeable about the EIA process. (Henry, personal communication, Feb. 7, 2014)

Many companies like Company B recognized that having good relations with your neighbors is important like a good neighbor policy or social responsibility. (Sam, personal communication, Feb. 26, 2014)

The women were supported by Chief and Council and were well respected. (Jim, personal communication, July 4, 2014)

Question 4: Are there any resources, tools or guides that supported the success of Aboriginal women in the EIA process?

I can't say that I have encountered a situation where someone followed a process unless they were locally developed. One woman I worked with really tried to rely on Elder guidance while she was running and coordinating TLU. It seemed to be internal procedures and protocols. (Henry, personal communication, Feb. 7, 2014)

CEMA (Cumulative Environmental Management Association) and its resources is a popular one. Also Terry Tobias' work on TEK and also there is Traditional support. (Jim, personal communication, July 4, 2014)

Question 5: What kinds of challenges did women experience while involved in EIAs?

The biggest challenge was the generalized lack of respect women got in their communities. But I've met one or two really powerful women. Sometimes-Traditional

women's roles caused issues~~women's problems were women's problems, and not man's problems. (Henry, personal communication, Feb. 7, 2014)

In some communities the women have tried to be like the men—having the negative qualities, like addictions. Some of the women are moving that way too. (Sam, personal communication, Feb. 26, 2014)

I viewed that there were struggles with leadership, proponents, dealing with a lot of different agendas. Many of the women I have encountered have strong personalities—which they need. I'm unsure if the challenges are because they are women or because they are advocates. (Jim, personal communication, July 4, 2014)

Question 6: Is there anything else you would like to add that you feel is important or should be highlighted that would add to what you have said?

EIA work from community to community varies. The women are the ones that facilitate the things happening, arrange the meetings, make sure things happen, but I see a direct parallel to non-Aboriginal communities. Women are also the keepers of traditional medicine—but that's the woman's role to be caregivers. Men can talk about the wildlife trapping but women could to but they would talk about in different perspectives...Some of the first EIAs and TLUs it was the women who led the process—they coordinated the knowledge of the community whether it was male or female elders. (Sam, personal communication, Feb. 26, 2014)

It's funny. I've seen a range of Aboriginal women's roles. In some communities they're not afforded the respect they deserve. Sexism is a big challenge. I'm grossly generalizing here but if anything gets done there's a strong woman making it happen.

Maybe men make the decisions but it's the women taking the task on. Again one Aboriginal woman I worked with called me in utter tears because she was put in her place as a woman and it was a problem for her. It does seem to me that the greatest hindrance is the Traditional woman's role. (Henry, personal communication, Feb. 7, 2014)

Women bring different perspectives and experience to this work. When working with TLU it's subjective, qualitative and women bring a different approach. Women have the ability to mediate between different agendas or tensions. They're able to mediate or negotiate differently. Women work from a different perspective, different backgrounds and understanding. They work between roles more frequently than men do. There are lots of women negotiating European role and many of them are recognizing that there's been an imposition of European roles on Aboriginal women. (Jim, personal communication, July 4, 2014)

All three interviews identified that when dealing with First Nations on EIA's their interaction has been predominantly with the women in the community who are involved at every stage from Elders involved in TEK, TLU study coordinators to working for either the regulator or client (industry), or women who are elected councilors. In addition to noting women's roles in various capacities, another common theme was the fact that women were described as "powerful women." One participant noted that the women in the Aboriginal communities he worked with were the "movers and shakers" in the community while another participant who has worked within EIA processes in Alberta since 1996 noted that he has "interacted with lots of neat and powerful women" in the span of his career. Another participant noted that many of the women he encountered have strong personalities and emphasized, "which they need." He also

added that he was unsure whether women's challenges and struggles with leadership or proponents were because they were women or because they were advocates.

While all three participants noted that women were the dominant force in their communities when getting things done, be it EIAs or other aspects of band governance or community program delivery, two of the three participants highlighted the fact that they view Aboriginal women are conflicted with trying to maintain their traditional women's roles while being in a leadership positions. One participant highlighted the fact that women bring different perspectives and experience to the EIA work. He commented that because of the subjective and qualitative nature of the TLU work it makes sense that women are involved in this work and have the ability to mediate between different agendas or tensions and they negotiate differently than men—something that works for them.

Major Themes and Results from Data Analysis

Roles of women in EIAs.

The roles each woman held within the EIA process, either currently or in the past varies with each woman. Primary roles included project management, reviewing TEK or TLU aspects of EIA's as part of their other jobs, conducting Aboriginal consultation, and in coordinating, writing, or mapping TEK and TLUs with the community involved to fulfill these aspects of the EIA. Secondary roles included building community capacity or as an Elder in training. Some of the common experiences faced by women while participating in an EIA process, whether it was working in their own communities or with government agencies, included challenges with sexism, lack of support in training or other, and in negotiating their Traditional women's roles while employed in a Managerial/technical leadership capacity in their own communities.

Another common theme that surfaced was the lack of formal supports such as training or resources. While one woman noted the NWAC toolkit *Finding Your Voice: Environmental Toolkit for Aboriginal Women* (2009) as a resource used to help her maneuver through the EIA process in her work capacity, no other reference was made about this toolkit by any other woman. When asked if they were aware of the toolkit, neither the women I interviewed nor the industry participants had ever heard of it.

There was a direct correlation for all women between the EIA and TLU or TEK. Aboriginal women are involved in TLUs at the community level and are primarily responsible or have taken responsibility for coordinating TK at the community level. In almost every situation, except for Shannon, the women identified that their role in the EIA was primarily to coordinate the TEK of the community on the proposed activity or project requiring an EIA and review it. Of the five interviews, three women noted that their work was directly on behalf of the First Nation community while a fourth woman worked on behalf of government to review the TLU and TEK submissions of the EIA.

Lack of formal supports in resources or training.

The lack of resources or educational materials on participating in EIAs was also a major theme however in many cases most women were provided with support through Supervisors and coworkers. Yet in other cases, women had access or sought out mentors to help them navigate their way through the EIA process. When asked about mentors, three of the five women identified a mentor. Monica was formally mentored by a more seasoned and experienced Supervisor, Michelle sought out a mentor who was male but someone who possessed immense

experience in the EIA process, and in Shannon's case the mentor was a coworker, also female, but with extensive experience.

Leaders and advocates for change.

Each of the five women interviewed are leaders and advocates for change in their own way. Many find themselves to be the only Aboriginal women involved in EIAs where the predominant participants in EIAs are male. These five women recognized the challenges in participating in EIAs and faced those challenges head on by seeking out mentors, doing research through support from coworkers and mentors. Specific challenges each woman faced included one or more of the following:

- Lack of self confidence
- Conflict between their roles as professionals and as Traditional Aboriginal women
- Political challenges
- Racism, sexism and patriarchal attitudes
- Lack of support from others, and
- An undervaluing of the system (government and industry) for TLU and TEK.

The resilience of each woman either through direct interviews or the women we learned about through the EIA Consultants cannot be denied. Their stories include stories of success for many reasons from contributing to an EIA process to reintroducing a lost species on traditional lands to overcoming the challenge of being a young teenage mom in high school. These examples are drawn from five interviews with women and three interviews with EIA Consultants, which begs me to question whether these are common challenges and frustrations being felt by other Aboriginal women involved in EIAs.

Sexism, racism and patriarchal attitudes.

Sherry who is in her late forties shared her experience with sexist and racist attitudes both in and outside of the Aboriginal community. While all the other women did not directly call out such sexist or racist attitudes on other people while being involved in EIAs, the EIA Consultants saw similar things. Sherry pointed out specifically that she felt working in a male dominated work environment where there was little interest in working with Aboriginal people. In this case, Sherry also pointed out that she was afraid that if she spoke up she would lose any future employment opportunities. While Sherry received support from one Supervisor, overall she said that as an Aboriginal person she did not feel free to ask for help on the subject matter (EIA) or to push the boundary too far on involving Aboriginal people in the EIA process. She highlighted the fact that had she been a male she would have been more accepted since her work environment was a male dominated industry.

While Sherry's experience focused on EIA experiences while working with the federal government, the attitudes she faced while working for First Nations seemed far more pronounced. She shared one particular incident in which a Chief reprimanded her in front of two other female Aboriginal Managers and stated that women had no place in management. Although this is only one story, other interviews with women hinted similar challenges in their communities. EIA Consultants also indicated that generally sexism in First Nation communities is prevalent. Elissa alluded to the resilience of the woman to overcome such challenges in her interview when she stated, "things are getting better and women are becoming leaders and taking on the tough jobs such as Executive Directors, Consultation Advisors, and Environmental Managers."

Furthermore, EIA Consultants who shared their observations and experiences revealed that sexism seems to be an underlying challenge. One surprise for me came from an interview with an EIA Consultant who added that the “biggest challenge is the generalized lack of respect for women in the communities I worked with.” This comment reflected the views of the majority of the women and EIA Consultants interviewed.

Flawed EIA process.

Both Michelle and Monica highlighted the fact that the EIA process is flawed to the extent that it does not provide any capacity for women to become more involved in the EIA process. Monica noted that there's nothing in government policies to get women involved and added that if government created a policy that directs companies to involve more Aboriginal women instead of ramming in applications too quickly to make it meaningful. In yet another interview with an EIA consultant, the point was made that women bring different perspectives and experience to the EIA work and are able to mediate or negotiate differently.

Women's conflicts between traditional women's roles and leadership roles.

Another pervasive theme throughout the interviews was the problem that Aboriginal women have when negotiating their Traditional women's roles while being employed in a professional capacity. An EIA Consultant commented that he viewed the traditional roles of women caused issues for them—“women's problems were women's only and not man's problems” meaning that traditional values of Aboriginal men and women were clearly separate. This challenge may be partly due to the Euro-centric imposition of the woman's role on Aboriginal communities and its sexist ideology on Aboriginal views of family and in particular, women's roles (Bourassa, McKay-McNabb & Hampton, 2004). NWAC (1991) contends that

the patriarchal system is so ingrained within our communities that "patriarchy" is seen as a "traditional trait". Bourassa et al (2004) point out that this and the Indian Act was a direct disruption to traditional Aboriginal definitions of family because the Indian Act defined what an *Indian* was and what "Indianness" meant. The Indian Act legislation only solidified the fact that Aboriginal women were not granted the benefit of full Canadian citizenship when it enfranchised *Indians* to become Canadian citizens and give up their ties to their *Indian* communities (Bourassa et al, 2004).

Conclusion and Recommendations

While I agree that Aboriginal women's contributions to TK are a valued component of any EIA, it is not the only role that Aboriginal women have in EIA's. In my research I discovered that Aboriginal women, as in mainstream societies, are now more likely to take on additional employment opportunities brought about by increasing economic development in their communities. The booming oil and gas sector in Alberta accounts for a majority of these opportunities and Aboriginal women are adapting to new and challenging economic situations, learning new skills and acquiring new knowledge. For instance, my view into the role of Aboriginal women in the EIA process reveals that women are assuming roles beyond TLU and TK. In addition to the more traditional role of hunter, gatherer, healer, trapper and primary care giver the opportunity for paid labour and employment is adding to the list of other roles Aboriginal women have in their communities (Brown, 1996).

In my research, I set out to explore the role of Aboriginal women in Alberta's EIA process. Through my interviews and research I discovered for the women I interviewed and the ones I learned about through other interviews that Aboriginal women are the dominant force

when it comes to taking leadership in EIAs in their communities. Women have largely figured out the EIA process with little or no access to resources or training. For the women there have been many challenges and many successes. Aboriginal women are taking on such roles as consultation managers, EIA technical reviewers, facilitators, mentors, Elders, environmental advocates and activists, trainers, coaches and role models, to name a few. The women I interviewed were educated and held degrees from universities or colleges, most likely one of the primary reasons they are all so successful with the EIA process. The feelings, behaviours and opinions of the women I interviewed varied with each woman—feelings of anger, frustration, pride, enjoyment, satisfaction and gratitude resonated for each at some point.

Two women highlighted the fact that the EIA process in Alberta is flawed because there is no policy for ensuring women are involved in EIAs. In yet another instance, one woman commented that women are more involved in EIAs because they are more nurturing in their approach to land, and they view it from caregiver viewpoint—like a mother caring for her child. Patel (1996) would argue that women do not have special relationship or affinity with the environment, but rather this relationship has been structurally imposed upon women. Patel (1996) views that it is through this “forced association” between women and the environment that has often become the argument for women’s increased participation in environmental management. While Patel (1996) views that there are serious risks with adding ‘environment’ to the long list of women’s roles she does note in her research on women that women are the predominant users and managers of the environmental resources and any policy changes should take this into account. While Patel’s research was about women in third world countries, the

same argument can be made for women in some Aboriginal communities where conditions are similar

Recommendations

Based on my findings, I recommend that:

1. Governments undertake further research on understanding gender gaps in careers in the sciences and technology fields, with a specific focus on EIA's;
2. Governments develop a gender equity policy that removes obstacles for women in the science and technology fields;
3. Governments provide adequate resources and tools for Aboriginal women to become involved in the EIA process (such as the NWAC EIA toolkit);
4. Schools and universities promote and increase the participation of Aboriginal girls in the sciences and technology fields, with adequate funding from governments.

I conducted eight interviews with five Aboriginal women and three EIA Consultants with the sole purpose of exploring the role that Aboriginal women have in Alberta's EIA process.

What I discovered is that one of the most important things governments can do is to understand the career gaps within the science and technology career sectors. The Gender Working Group of the United Nations Commission on Science and Technology for Development (Miroux, 2011) highlighted this very point, that obstacles for women should be removed from science and technology fields. As for providing adequate resources and tools for Aboriginal women in EIAs NWAC has developed an excellent tool to be used, adapted or revised depending on the circumstance and regulatory process. Finally, schools, universities and businesses should be

encouraged to promote and increase the participation rate for Aboriginal girls and women in the science and technology fields, with appropriate resources and support from governments.

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Appendix 1 Responses by Category – Aboriginal Women

Table A1

Responses by Category and Code – Aboriginal Women

Category	Code	Responses
Behaviours	Build community capacity	<ul style="list-style-type: none"> • Looking at how willing First Nations were to look at mitigating impacts • Preparing the community to understand an EA and design how an EA would work • Set up the monitoring program on my reserve, conservation program, and did outreach with the community, building capacity within the community • Transfer knowledge so we are obligated to share • I hold elders meetings
	Environmentally conscious	<ul style="list-style-type: none"> • Reintroducing the swift fox and involved in conservation program for burrowing owls
	Committed	<ul style="list-style-type: none"> • The longer I stay the harder it is to leave
	Resilient	<ul style="list-style-type: none"> • Many of us have obstacles and barriers but we cannot give up • I had to figure it out on my own
	Responsible	<ul style="list-style-type: none"> • Those that choose to stay—I try to value them • Organized and on top of the game • Time oriented and meticulous • I did a lot of research on my own • I spent a lot of time reading • Completed all my paperwork and research on the topic, mitigation of geese in the lake. • I researched the biology of the geese, their habits and uses.
	Role models	<ul style="list-style-type: none"> • Go speak at schools on career days and speak on environmental sciences

	Traditional	<ul style="list-style-type: none"> • Also a Traditional role to be a caregiver • As a woman of water carriers
Feelings	Anger	<ul style="list-style-type: none"> • Government rams in applications too quickly to make it meaningful • The lack of respect and acceptance of women in doing EIAs must change • Even in ceremonies in my culture I feel the contributions of women are minimal • We cook and clean and pray. We never lead the ceremony. Why? Was this truly our culture? A male dominated culture? We can't drum. Don't our hearts beat as well?
	Enjoyment and satisfaction	<ul style="list-style-type: none"> • I don't take it for granted • I liked the structure of it • I liked the most was submitting the information and the feeling of accomplishment • I enjoyed one lady I worked with—she was good to work for
	Frustration	<ul style="list-style-type: none"> • I got so frustrated because of this • Staff retention in FNs is difficult • I felt challenged being in a male dominated job • I also felt some prejudice and racism
	Pride and gratitude	<ul style="list-style-type: none"> • I don't take it for granted • I feel a sense of pride
Roles	Primary Roles	<ul style="list-style-type: none"> • Involved in reviewing the EIA applications requiring TEK • Making sure it was complete, that it meets the Terms of reference, review the consultation log and that any concerns are documented and looking at how these concerns are being mitigated • Consultation Officer • Set up the monitoring program on my reserve, conservation program, and did outreach with the community, building capacity within the community • Managing consultation for my FN • Even other projects, reviewing EIAs
	Secondary Roles	<ul style="list-style-type: none"> • Reintroducing the swift fox onto our lands • Involved in conservation program for burrowing owls.

		<ul style="list-style-type: none"> • An Elder in training
	Observations of other women	<ul style="list-style-type: none"> • Aboriginal women involvement really depends on the community. • In Hobbema—the women are the Consultation Advisors, land and environmental managers • In the south-Treaty 7 area it’s the same thing—the women are the Consultation coordinators or managers and environmental managers—working with the land
Successes	Open to learning, credibility and respect	<ul style="list-style-type: none"> • Set up the monitoring program on my reserve, conservation program, and did outreach with the community, building capacity within the community • Reintroducing the swift fox onto our lands • Involved in conservation program for burrowing owls • Thesis was on preparing the community to understand an EA and design how an EA would work • CIER—they became interested in our software program—which was eventually shared with other FN’s across Canada • Gained a body of knowledge and I’m always adding to it • An Elder in training • Transfer knowledge • Managing consultation for my FN • Participated in hearings against major oil sands projects • Spoke at a community school to the graduating class of 8 grads • I was a young teenage mom—a single parent, and I overcame obstacles and barriers • The community supports me in my work--the elders, my family, etc • My leadership believes in me • I hold elders meetings • I can review the hydrology section • Had to figure it out on my own • I did a lot of research • Spent a lot of time reading Alberta government documents • Even other projects, reviewing EIAs • When I had a chance to review an EIA I took on any opportunity to learn from different types of companies • Lady became a mentor to me

Challenges	1) Lack of self confidence	<ul style="list-style-type: none"> • Reluctant about TLU and TEK and they did not really use it • You didn't see the TEK/TLU adding value—it was just a check off administratively speaking
	2) Conflicting roles	<ul style="list-style-type: none"> • The attitudes are out there about TEK/TLU • Hearing from women as part of TLU/TEK needs more respect –as to its role
	3) Political challenges	<ul style="list-style-type: none"> • Faced political challenges • As far as the community developing its own process—the legislation is very grey. So that it makes it difficult to have a role in EA's
	4) Racism, sexism and patriarchal attitudes	<ul style="list-style-type: none"> • Not enough capacity to engage women in the community at a technical level nothing in the government policies to get women involved • Government rams in applications too quickly to make it meaningful
	5) Lack of support from others	<ul style="list-style-type: none"> • I was a young teenage mom—a single parent, and I overcame obstacles and barriers. • Biggest challenge for me was my lack of confidence
	6) TLU and TEK undervalued	<ul style="list-style-type: none"> • Like being thrown into a shark tank and having to learn how to swim • No one gave me a handbook on EIAs • Retaining staff has been an issue • Being an Engagement Coordinator was really hard because I wore two hats. I was a member of the community and the company • My company did not provide me with any support on the EIA part. I had to figure it out on my own and I did a lot of research on my own • Had to do a lot of research created a lot of high stress for me because of the strict timelines • The results were immediate • A lot of times I had to give myself a pep talk that I knew what I was talking about • I felt challenged being in a male dominated job • There was little interest in working with Aboriginal people • One time a Chief flat out told me in front of two female managers that women had no place in management • At ceremonies the women cook and feed men and can participate in coed sweats, but other than that, women are not involved in Sundance ceremonies • At a regional level there were fewer women involved in the technical level • At the community level the technical staff, who were women, designated to do the work did not get the support from the Chief and Council

		<ul style="list-style-type: none"> • Some prejudice and racism • Never expressed my concerns about these feelings because I thought I would not get support and it would jeopardize any potential for future employment • Lack of support by staff • Lack of awareness of the importance of Aboriginal, First Nations, culture and ceremony • Being a woman in a male dominated industry • Challenged in my awareness and understandings of the subject matter • Felt as though there would be more acceptance if I was male
Opinions	1) Community capacity lacking	<hr/> <ul style="list-style-type: none"> • Aboriginal women involvement really depends on the community • The role of women in the sciences is also increasing • Women are beginning to take their roles back or take a larger role
	2) Dual roles as Traditional women	<ul style="list-style-type: none"> • Women's values have been so diminished because of the Indian Act—tied to patriarchal influences • Lots of lateral violence—lack of resources, not healthy
	3) System failures and Lack of formal policies	<ul style="list-style-type: none"> • Things are getting better, women are becoming leaders • They've got better planning skills which naturally come to them • You didn't see the TEK/TLU adding value—it was just a check off administratively speaking • Hearing from women as part of TLU/TEK needs more respect –as to its role • Women in EIA's is critical for women in the community—to have a venue to share that information whether it's tree planting, fish rescue, talking circles, community clean ups, water ways, ceremonies and sweats, etc.
	4) Women are resilient/leaders	<ul style="list-style-type: none"> • Women's voices are coming back • Other" files they fell through the cracks • The community shied away from using federal programs and INAC had no agreement in place
	5) Sexism and patriarchal attitudes, racism	<ul style="list-style-type: none"> • The system failed • Consultation process is severely flawed and does not consider community engagement • There's not enough time to get involved and the capacity is not there
	6) Some	<ul style="list-style-type: none"> • Nothing in the government policies to get women involved. If the policy emphasized and or prescribed to industry that Aboriginal women must be involved or included then maybe women <hr/>

<p>support from others</p> <p>7) TLU/TEK not valued</p> <p>8) Importance of women's involvement in EIAs</p>	<hr/> <p>would be more involved</p> <ul style="list-style-type: none"> • No one is going to judge you if you get pregnant • No one is perfect • Education makes things easier • It gives me the tools I need to do the work I do • In the role of an Aboriginal woman involved in EIAs the sense of caring and compassion is intuitive • It is also a Traditional role to be a caregiver • More women who are involved in EIAs need to give themselves a pat on the back If we could have a policy shift and change in direction that more women are involved in EIAs that would make a change • I viewed the role of women is taking ownership of environmental stewardship • The communities I worked in there's been very few Aboriginal women involved in the EIA • Usually there's a male working alongside the women in technical or consultation roles • Have been very few instances where an Aboriginal woman is in a lead role • Having an Aboriginal woman environmental background was rare • Males highly involved in the EIA process in many communities -very patriarchal attitudes • If you say something as a contractor the men wouldn't ever listen you • There's this attitude "ignoring women's voices" which happens 75% of the time • If we are not given the same credit as men in this field we will never feel valued and be able to create a community of change • Even in ceremonies in my culture I feel the contributions of women are minimal <hr/>
<p>Other Relevant</p> <p>Importance of education, role of mentors, role modelling</p>	<hr/> <ul style="list-style-type: none"> • My educational background is Environmental Sciences • My mentor was there by phone -like a support line • Ones I recall where a woman is lead are Fort McKay, Montana, Samson and Louis Bull FN's • This inspired me to do well, go speak at schools on career days and speak on environmental sciences. Having a mentor/leader like (Aboriginal woman named here) inspired me to pursue in this field • Recently at the Onion Lake Treaty gathering -the women who came to the gathering - asked the men to start listening to them again. This was the Treaty 6 gathering. In this Traditional territory— <hr/>

this attitude is pretty common, even at assemblies, Tribal councils and meetings

- At ceremonies the women cook and feed men and can participate in coed sweats, but other than that, women are not involved in Sundance ceremonies
 - At the national level, the women represented on the technical teams had the background and background
-

Appendix 2 - Information letter and Consent Form

Research Title: Exploring the Role of Alberta's Aboriginal Women in EIAs

Researcher: Donna Hovsepian

You are invited to participate in this research investigating how Aboriginal women are involved in environmental impact assessment (EIA) activities in Alberta. I plan to explore what roles Aboriginal women have when participating in EIA's in Alberta, where, and in what instances they are participating, and explore what some of the successes and challenges experienced by women while participating in EIA's.

You are asked to participate in an interview of 20 – 30 minutes by telephone or at a location of your choice. Questions will be asked to capture basic demographic information, such as age, marital situation, education and work experience, along with some open ended questions targeted to obtain information about your experience in the EIA process and will focus on what the experience(s) was, how you were involved, when were you involved in an EIA, who was there, and who or what helped you be successful and what were some of the challenges.

I hope to use the results from this study to fulfill part of the requirement for an MA in Environment and Management at Royal Roads University. My credentials with Royal Roads University can be established by emailing Chris Ling at chris.ling@royalroads.ca and by phone at (250) 391-2600 Ext 4171. In addition to submitting my final report to Royal Roads University in partial fulfillment for a MEM, I will also be sharing my research findings with those women I interview and the Native Women's Association of Canada. A copy of the final report will also be published and archived in the RRU Library.

The information you provide will be recorded in hand-written format, summarized in anonymous format, in the body of the final report. At no time will any specific comments be attributed to any individual unless your specific agreement has been obtained beforehand. All documentation will be kept strictly confidential. The raw data will be stored in a locked cabinet for a period of Four years and subsequently destroyed.

Your participation on this study is voluntary and you can withdraw from this research now or just before the interview, and without prejudice. If you plan to withdraw, I would kindly ask that you provide a letter or email formally withdrawing from the research and within it some instructions on how you would like the data to be handled.

I would like to also make you aware that I am employed by the Aboriginal Relations and am an EIA practitioner involved in the review of Aboriginal consultation and TLU/TEK's as part of my work. Although I am part of a work unit that may be involved in EIA reviews, the information I gain through my research will not be used in any way, shape or form to inform my work in government or to assist government in anyway. This research belongs solely to me and will be used to fulfill my thesis requirements at RRU.

As part of the ethical procedures established by RRU, I require a consent form signed by you indicating your agreement to be interviewed. I will need your email address. Once you sign the consent form, send it back to me via email at ~. I will sign it also and send you back a copy for your files.

Consent

I have read the information provided in the information letter about the research being conducted by Donna Hovsepien to fulfill her requirements for an MA in Environment and Management. I

have had the opportunity to ask questions about my involvement in this research and inquire about additional questions on the details of this study. I understand that I may withdraw now or just before the interview, if I choose to do so, and that I must send a letter or email indicating that I would like to withdraw, with instructions on how I want the data handled. I agree to participate in this study. I have been given a copy of this form.

I agree to participate in the interview Y or N

Signature _____

Date _____

Researcher Signature _____

Date _____