



FORT MCKAY
FIRST NATION

**Fort McKay
Sustainability Department**

Activity Report

2014-2016

April 2014- November 2016



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1 INTRODUCTION



Welcome to the 2014-2016 Fort McKay Sustainability Department Activity Report.

The Report demonstrates the commitment of the Sustainability Department staff to the Fort McKay First Nation community. There continues to be a need to balance the growth of industry within Fort McKay's Traditional Territory with the cultural, social, environmental and economic needs of the community.

We continue to put the community members first in all of our actions. Engagement and consultation continue to occur with industry, government and community members to ensure that the Fort McKay Community is aware of new project applications, as well as technical and scientific improvements for minimizing impacts that industrial development plans and projects may create.

We are able to ensure the information community members receive is technically sound and includes a comprehensive analysis of the facts as well as the pros and cons to the issues raised. The FMSD staff play an important role in listening and documenting community concerns related to these consultation and engagement sessions so that they can be represented in an accurate and relevant format.

Industry has contributed funding to the FMSD that has enabled existing and new important community social, educational, environmental and health programs to continue.

Over the past two years, the environmental and regulatory review team has worked with industry and government to review applications, consult the community, and develop mitigation plans for projects within Fort McKay's Traditional Territory. In partnership with Environment Canada, Fort McKay now hosts one of the most comprehensive air monitoring stations in Canada, which provided vital data to an Air Quality and Odour Recurrent Human Health Complaint Process conducted by the Alberta Energy Regulator (AER) and Alberta Health in 2015-2016. The recent installation of a second air monitoring station near Moose Lake continues to allow Fort McKay to be self-reliant, to ensure that a proactive approach to monitoring can be taken, and that baseline air quality data can be collected.

The Sustainability Department continues to provide reliable and consistent services in the Fort McKay community and will continue to dedicate resources to ensure that Fort McKay's concerns are considered. We continue to press the government for changes to protect Fort McKay's rights, under the leadership of Chief and Council. The FMSD continues to adapt and respond to regulatory change.

I want to take this opportunity to extend my gratitude and appreciation to the participation and commitment from community members in their involvement in consultation meetings, as well as for all of their feedback and guidance, which helps us to improve our communication and consultation

processes. I would also like to thank the Fort McKay leadership, administration and co-workers, for their full support and confidence they entrust in the Sustainability Department. I also want to thank all the FMSD Industry partners as their sponsorship is fundamental to the FMSD operations and continuation of the key community and environmental programs led by the Department. Finally, I want to recognize and thank the amazing Sustainability Department team for their competence, dedication, support, professionalism and passion for their work and for the community of Fort McKay. The work we do at the Sustainability Department would not be able to run so efficiently without each and every one of you working together as a team.

A handwritten signature in black ink, appearing to read 'Alvaro Paes Pinto', with a long horizontal line extending to the right.

Alvaro Paes Pinto, Ph.D.

Executive Director, Strategy & Sustainability

Fort McKay First Nation

November, 2016

2 FORT MCKAY SUSTAINABILITY DEPARTMENT

2.1 VISION

To develop an informed and capable community to work with industry and government in order to maximize the benefits and minimize the negative impacts of development.

2.2 PURPOSE

To represent Fort McKay through a one-window approach for consultation among industry, government and the community on matters of resource development, land use, and protection of Aboriginal and Treaty Rights.

2.3 MANDATE

The FMSD has a mandate to:

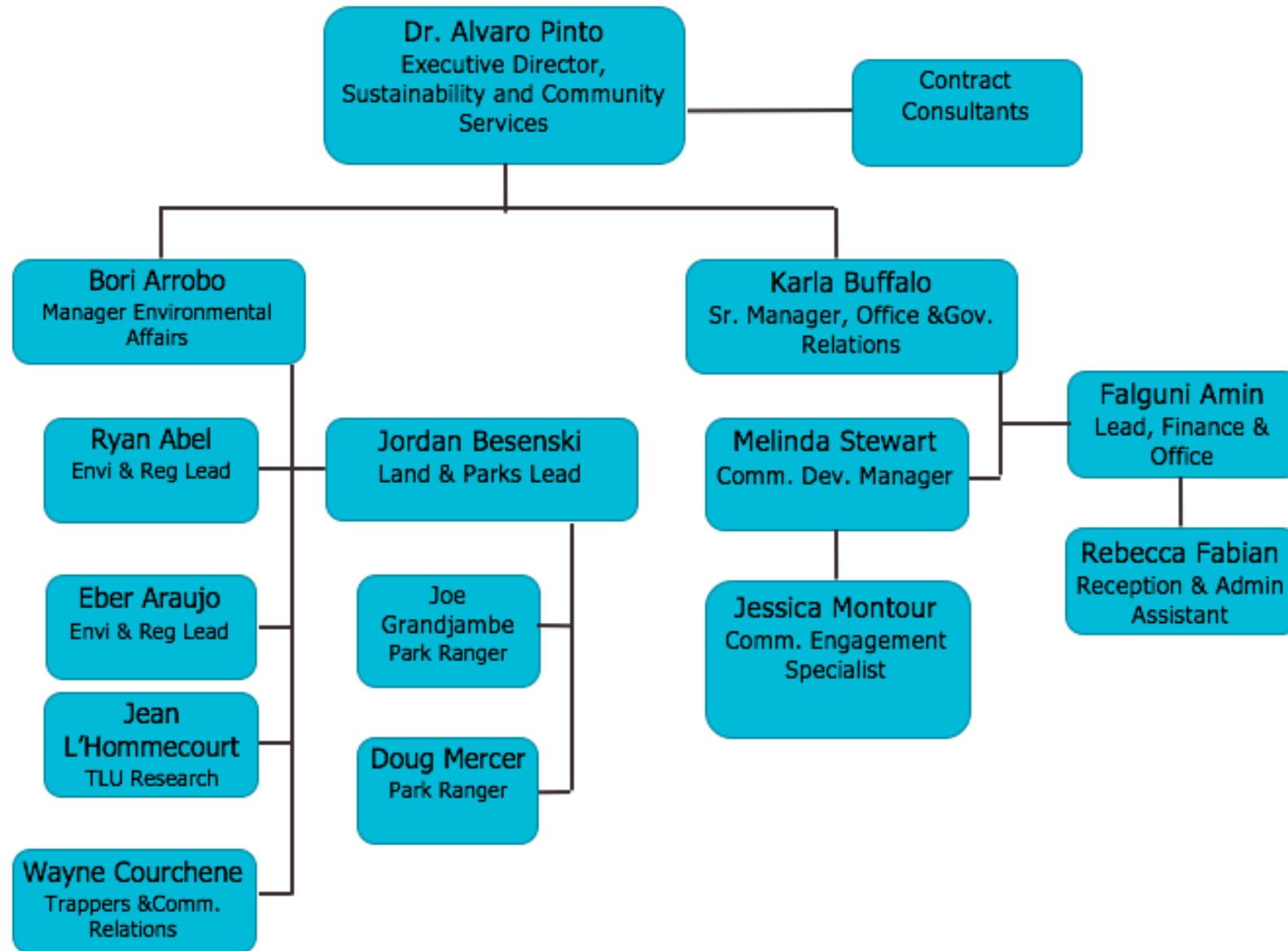
- **Review** resource development applications, environmental impact assessments and other regulatory documents to ensure that the environmental issues important to Fort McKay are addressed and mitigated;
- **Facilitate** on-going consultation within the Community so Fort McKay residents know how their traditional lands are being affected by industrial development and to obtain advice and input from residents;
- **Interface** continuously with utility, timber harvest, and conventional oil and gas companies, with heavy oil and oil sands developers and government with respect to social, economic and environmental matters, and to provide industry with a reliable contact point; and
- **Develop** in community knowledge and capacity for addressing environmental social, economic and technical matters relating to resource development.
- **Negotiate** Impact Benefit Agreements with project proponents.

2.4 DEPARTMENT ORGANIZATION

Approved by Chief and Council, the Sustainability Department organizational structure provides the community with the added capacity to manage industry project applications, engage in changes to the provincial regulatory system, to consult and communicate with community members, and to ensure capacity and resources are shared throughout the community.

The Sustainability Department takes pride in its work and ability to move initiatives forward in the community. Because of the capacity, capabilities and commitment of the staff at the Sustainability Department, many new roles and sub-departments have come under the FMSD's wing. The FMSD operational funding by industry remains independent while other department units are fully funded by Fort McKay's own resources. The next page presents an updated FMSD organizational chart as of November, 2016.

3 FMSD ORGANIZATIONAL CHART



3.1 MEET THE SUSTAINABILITY DEPARTMENT TEAM!

The Sustainability Department team works closely together in many areas, including community relations, industry relations, regulatory and environmental affairs and government relations.

Alvaro Pinto, M.Sc., MBA, Ph.D., Executive Director – Strategy & Sustainability

Under the direction of Chief and Council and the CEO, Dr. Pinto oversees the FMSD operations and has a key role as a liaison with industry and government. He advocates on behalf of Fort McKay in matters relating to environmental protection, social and economic development, protecting Treaty and Aboriginal rights, and is also the chief negotiator for Long-term Sustainability Agreements. With the recent restructuring of the Fort McKay administration and organizational chart, Dr. Pinto is now responsible for overseeing the Community Services, OH&S and Education Departments.



Falguni Amin- Lead, Finance and Office

Falguni started to work with Fort McKay First Nation in August 2013. She was transferred to the FMSD in August 2015 and currently leads the Finance and Office management at the Sustainability Department. She was born and raised in India and came to Canada in 2005. She has a B.Sc. in Microbiology from India and changed her career path to Accounting after studying 4 years in Toronto.

Rebecca Fabian- Administrative Assistant

Rebeca is the FMSD Receptionist and is responsible for providing administrative support by answering telephones, greeting visitors and handling all front desk administration details required by the Sustainability Department. She works closely with the FMSD team in providing administrative support in community consultation sessions, the Elders Christmas party and industry/government meetings.



Karla Buffalo, Senior Manager- Government Relations

Karla is a liaison with the federal and provincial governments on key government initiatives, especially the ones involving policy or legislative changes that can threaten Fort McKay community members Aboriginal and Treaty Rights. She is the primary contact for any government –related activity as it relates to land use and industrial development. She is also responsible for the overall management of the FMSD office, community development and engagement.

Melinda Stewart- Manager, Community Engagement

Melinda was born and raised in Fort McKay and started as a part time employee with the Sustainability Department in 2014, helping to coordinate and organize community meetings and other community related activities Melinda feels that by being a community member who works for the Sustainability Department she can help spread the knowledge and information to the community and she can connect with community members on a different level because of the relationships she has developed over time. She became the Manager of Community Engagement in 2015 and is participating on a career development program within the FMSD.



Jessica Montour- Community Engagement Specialist

Jessica has recently left the FMSD, where she worked as the community liaison and ensured that key communication was passed through the appropriate channels, such as ensuring the community was aware of issues related to the FMSD, the environment, regulators and trappers, as well as community –specific issues and events. Jessica was the primary contact for community engagement, which is conducted through focus group meetings to address regulatory and community development issues or concerns. We thank Jessica for her dedication during the five years she worked at the FMSD, and wish her success in her new career pursuits.

Bori Arrobo M.Sc.- Manager, Environmental and Regulatory Affairs

Bori joined the FMSD in 2012 as Environmental Coordinator. In March 2016, Bori was promoted to Manager, Environmental and Regulatory Affairs. He represents the FMSD in technical and regulatory discussions with industry and government and works on developing appropriate environmental mitigation options to protect and benefit the community of Fort McKay. He also leads on and off reserve environmental initiatives and participates on external environmental committees. He has a M.Sc. in Energy and Environment from the University of Calgary and works hard to develop community-based programs.



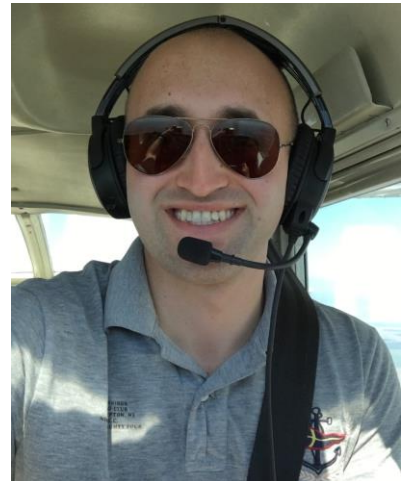


Wayne Courchene- Trapper and Community Consultation Specialist

Wayne plans and coordinates Fort McKay's Trappers' programs to ensure key messages regarding industrial development impacts and mitigation measures are addressed. Wayne's work focuses on supporting relations between Trappers and industry, identifying and organizing specific training programs for the trappers. His role was expanded to include community engagement, which involves planning and facilitating in Community Advisory Group activities, sharing information with community members about oil-sands regulatory applications and community-specific issues and events.

Ryan Abel- Lead, Environment and Regulatory

Ryan joined the FMSD in September 2013, and his day-to-day duties involve maintaining the Oski-ôtin Air Monitoring Station in partnership with Environment and Climate Change Canada, as well as managing the Fort McKay owned Namur Lake Air Monitoring Station, to better monitor air quality and odours in the community and the Moose Lake region. Ryan is also heavily involved in interacting with companies on environmental components of their projects, sits on the board of the WBEA, and is the Chair of the WBEA's Odour Monitoring Program. He grew up on Vancouver Island and is also a commercial pilot. His background is in organic chemistry and he is also a certified BC high school teacher. Prior to joining the FMSD he was teaching chemistry and science in Kunming, China.



Eber Araujo- Lead, Environment and Regulatory

Eber joined Fort McKay in the spring of 2016 as an Environment and Regulatory Lead. His job includes interfacing with community, regulators and industry that have projects in Fort McKay's Traditional Territory. He has actively worked in Brazil and Canada, focusing on issues related to water and communities surrounded by mining activities. Some of his daily tasks relate to minimizing environmental impacts from industrial activities and developing new studies to understand the water surrounding the community and Moose Lake areas. He loves people, playing drums and the outdoors. He holds a bachelor degree in Geology, as well as an MBA.

Jean L’Hommecourt, Traditional Land Use Researcher

Jean is responsible for providing in-community support to all Traditional Land Use Studies (TLUS) on behalf of the FMSD. Jean is responsible for setting up and conducting TLU interviews based in geo-spatial formatting with audio and video components. The data is then transcribed, labelled, and archived in the Fort McKay Community Knowledge Keeper (FM-CKK). TLU Studies are conducted by Fort McKay, Industry, Government and third parties such as CEMA. This work is critical to the Community of Fort McKay as it strives to maintain a record of its cultural heritage, land use activities, language, traditional knowledge and environment



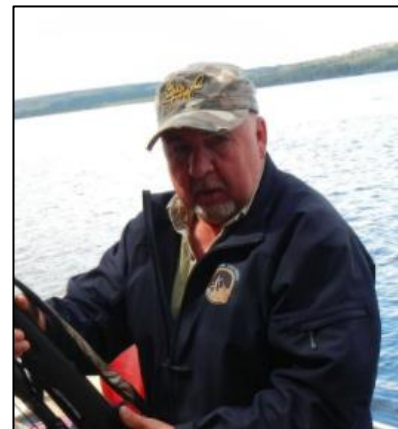
Jordan Besenski- Land and Parks Lead

Jordan has recently joined the FMSD is directly responsible for the newly created Fort McKay Park Ranger Program. He started his career in natural resource enforcement as a Park Ranger in the Willmore Wilderness area of the Grande Cache Mountains with Alberta Parks. With a combined knowledge for natural resource management and enforcement Jordan’s goal is to develop and deliver management plans and programs to preserve and protect Fort McKay’s traditional land use areas, especially the Moose Lake Reserves. In Jordan’s free time he can be found enjoying the outdoors by fishing, hunting, trapping or simply exploring new areas.



Joe Grandjambe- Park Ranger

Joe was born in Fort McMurray but raised in Fort McKay, his mother got sick right after he was born so he was raised by his grandparents until he was a teenager. He then moved out on his own. When he was growing up he left grade school to learn about the outdoors and started trapping and hunting and made that his way of life. Joe has two sons and 7 grandchildren all of which are in Fort McKay. Joe just retired from Syncrude, where he worked for over thirty years as heavy equipment operator. He spends a lot of time at his cabin at Moose Lake and will start as a park ranger in December 2016.





Doug Mercer- Park Ranger

Doug is originally from Upper Island Cove, Conception Bay in Newfoundland. He has spent 30 years working in the Fort McMurray area and has been married to Clara, a Fort McKay community member for 16 years. Doug is also a community member. Doug has hunted and fished since he was a teenager and has been trapping for the past 4 years. He likes to hunt for Moose and fish for trout. Doug's also enjoys spending time at his cabin by Namur Lake and doing carpentry and mechanical work. In his free time, he helps Clara in their herb collection. Doug will start as a park ranger in December 2016.

3.2 PARTNER COMPANIES

From 2014-2016, the 23 partner companies had several opportunities to meet with the Sustainability Department team members to provide updates, discuss current emerging issues, consult on project activities, steward agreement commitments, and deal with regulatory issues.

The core operations of the Sustainability Department are funded by these companies through a bilateral agreement, or a Long Term Sustainability Agreement (LTSA). Bilateral agreements are being renegotiated to LTSAs, but separate Sustainability Department funding is also included so that the funding to the Sustainability Department (for departmental operations) is maintained.

Partner Companies Include:

- Alberta Pacific Forest Products
- Athabasca Oil Corporation
- BP Canada
- Brion Energy
- Canadian Natural
- Cenovus Energy
- Enbridge
- Hammerstone
- Husky
- Imperial
- Interpipelines
- Koch
- Parsons Creek Aggregate
- Pembina Pipeline
- Royal Dutch Shell (Shell)
- Suncor Energy
- Sunshine
- Syncrude
- Total E&P
- Teck Resources
- TransCanada
- Value Creations
- Williams Energy

4 LONG TERM SUSTAINABILITY AGREEMENTS

Since 2012, the FMSD has been directly involved in leading the negotiations of Long-Term Sustainability Agreements (LTSA) with industry.

The objectives of negotiating LTSAs with industry are:

- To develop a long term relationship, based on trust, cooperation and support;
- To establish appropriate mechanisms to deal with our differences in an amicable, proactive and respectful manner;
- To provide a clear process for meaningful and timely engagement and consultation between the Community and the industry partners;
- Enhancing environmental protection on the Fort McKay Traditional Territory beyond what is required by regulations, by establishing mutually acceptable best practices on environmental protection and performance measures.
- To secure a long term source of revenue stream of fiscal benefits needed to implement the Fort McKay long-term Community Development Plan; and
- To promote and support growth and development of Fort McKay business by providing specific business development and investment opportunities.

LTSAs are made up of four main components, which include:

- **Environmental-** The department has a major responsibility, making sure that the environmental impacts of a proposed or existing project are properly managed and mitigated, therefore ensuring that impacts to the environment are minimized (to the extent possible). The agreement also includes the role Fort McKay plays in monitoring industry activities to ensure industry is standing by its commitments.
- **Fiscal-** This involves a fiscal or financial payment to a Fort McKay-Métis Trust, and is based on the size, trust, location, and production of the proposed project. The fiscal payments made into the Trust can only be used for Community infrastructure, social, educational, and environmental programs that benefit the entire community.
- **Business/ Job Opportunities-** This is to ensure that appropriate jobs, business opportunities and priorities for work and services is given to Fort McKay companies, so that more business can be created by community members that provide quality services to industry. Through this type of agreement, Fort McKay might be able to get exclusive sole-sourcing bidding opportunities on projects.
- **Socio-Cultural-Educational** –In some cases, Fort McKay (or the company) may also express interest in specific support for a project in the socio-cultural, educational, or environmental areas. Fort McKay might, therefore, ask a company to commit funding to a specific project in this category of the agreement.

As of October 2016, Fort McKay has signed LTSAs with Brion Energy, Williams Energy, ATCO Electric, Cenovus, Shell, Sunshine, Suncor Energy Oil Sands Limited, Hammerstone Corporation, Enbridge Pipelines, TransCanada, Husky Oil Operations Limited, and Total E&P Canada Ltd. Further agreements currently under negotiation include, Alberta Power Line, Teck, Imperial, Syncrude, and additional agreements with Sunshine and TransCanada.

5 COMMUNITY DEVELOPMENT REPORT

The past three years have been challenging for the Community Development Team as a result of staff turnover; nevertheless, much has been accomplished.

5.1 CHANGE IN PERSONNEL

Community Development Manager, Eddison Johnson left the Sustainability Department in April 2015. This provided the Sustainability Department the opportunity to promote a community member into a managerial role. Melinda Stewart was appointed Manager, Community Development. Although not an experienced community development worker, Melinda demonstrates the aptitude, interest and work ethic that will enable her to grow into the position and to serve the community well.

To support her, Ken Shipley, a long-time consultant with the First Nation, was retained to provide mentoring support. Together, Ken and Melinda developed a Professional Development Plan and a professional development position description that includes both the Community Development Manager position job requirements and professional development components.

Melinda is also a member of the Board of Directors of the Community Enhancement Society, an important organization funded by Industry with the objective to promote and fund important social programs in the community.

5.2 FORT MCKAY COMMUNITY ENHANCEMENT SOCIETY

The Fort McKay Community Enhancement Society (CES), a community-based organization, provides for the systematic distribution of funds to recognized community groups.

Suncor Energy, Syncrude Canada and CNRL provide financial contribution to the Society. Representatives from the three companies sit on the CES Board of Directors. The Metis and First Nation also provide a Board representative, as does the Sustainability Department, represented by Melinda Stewart.

The CES also provides the opportunity for corporations who fund the CES to interface with community leaders and workers. This interface provides the corporation with an understanding of how their funds are being utilized and how their contributions benefits Fort McKay. This also provides community leaders the opportunity to demonstrate their commitment to the service groups that provide on-the-ground programs to the people of Fort McKay.

Melinda Stewart believes there is an opportunity to secure funding from additional companies that currently do not make corporate contributions to Fort McKay and who have not signed long-term benefits agreements. This opportunity will be presented in the near future if Chief and Council decide to support the continuation of the CES into 2017.

2015 Activities

The following community groups were provided with financial support as follows:

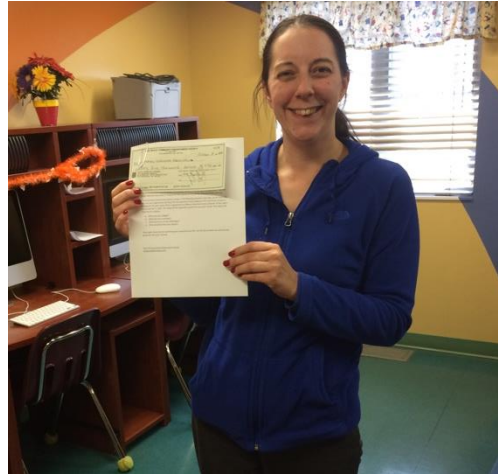
○ Fort McKay Hockey Society.....	<u>\$ 20,000</u>
○ Mother of McKay (Day Care).....	<u>\$100,000</u>
○ Fort McKay School.....	<u>\$ 75,000</u>
○ Wellness Centre.....	<u>\$100,000</u>
○ Moose Lake Summer Camps.....	<u>\$ 35,000</u>
○ Metis Garden Enhancement.....	<u>\$ 15,000</u>

Note that the above amounts exceed the annual corporate contributions due to the 2014 funds not being distributed.

2016 Activities

- The following community groups were provided with financial support. The funding amounts are as follows:

○ Fort McKay Hockey Society.....	<u>\$ 16,000</u>
○ Mother of McKay (Day Care).....	<u>\$ 50,000</u>
○ Fort McKay School.....	<u>\$ 75,000</u>
○ Wellness Centre.....	<u>\$ 75,000</u>
○ Moose Lake Summer Camps.....	<u>\$ 36,000</u>
○ Metis Culture Retention Project....	<u>\$ 15,000</u>



The Daycare and Julia from the Wellness Centre

5.3 RECYCLING PROGRAM

On April 20, 2016 Fort McKay launched its community-wide Recycling Program. The Program, called the *Green Eye Recycling Program*, is funded through a joint financial contribution from Syncrude Canada Ltd. and the Fort McKay First Nation.

The Program implementation is a joint effort by the Sustainability Department and the Fort McKay administration. The Community Development Team organized meetings, identified key tasks to be completed and facilitated planning meetings.

Although the Program is not fully operational as yet due to the disruption caused by the summer's wild fires, key activities completed or underway are as follows:

- Recycling Awareness Program for Fort McKay School students.
- Formal program launch, attended by Chief Boucher, Syncrude executive, community members and Fort McKay School students held April 20th.
- Policies and procedures drafted to guide the use and protection of the Recycling Ranger; use of the Ranger by community groups to support their fund raising efforts; and management of funds derived from recycled products.
- Choosing members of the Recycling Committee.



Recycle Awareness Program

In the near future, the Community Development Team will facilitate advancing the Project as follows:

- To ensure the above-cited policies and procedures are completed;
- To ensure community groups are aware of the fund-raising opportunities available to them through the use of the Recycling Ranger (a large recycling storage container);
- To distribute an educational brochure to the community to ensure the program is understood and valued;
- To ensure all recycling bins are placed throughout the community for optimal use;
- To initiate the implementation of the Recycling Committee so the program is managed with support from the community; and

- To facilitate meetings with First Nation staff to ensure all roles and responsibilities is well defined, understood and accepted to ensure that the Program is well managed.

5.4 BRION ENERGY SUPPORT OF WELLNESS CENTRE SUPPER PROGRAM

In 2015, Brion Energy approached the Community Development Team and asked the Team to provide guidance as how specific available funds for community programs could best serve the community of Fort McKay. Melinda Stewart made community groups aware of the opportunity, and then on their behalf submitted potential programs to Brion for its consideration.

The Corporation chose to donate the funds to the Wellness Centre's Supper Program. The funds are to be used in the Centre's 2016-2017 fiscal year, and will cover approximately a third of the program's total costs.

The Supper Program provides much more than just meals to Fort McKay children. The children participate in meal preparation, learn about safety and food hygiene and about making healthy food choices; and even are introduced to new foods. In 2015-2016 fiscal year the Wellness Centre served 5,811 supper meals.



Opening the Youth Centre 2016

5.5 COMMUNITY PLAN WORKSHOP

In 2002, Chief and Council and Board of Directors of the Metis Local instructed the Industry Relations Corporation (IRC) to meet with all sectors of the Fort McKay community to a conduct a needs assessment.

The Plan, entitled "*Planning Our Future Together*", allowed leadership to establish a vision for establishing community development strategies and action plans, and served as a guiding document for community service providers and industry when addressing the needs, and advancing the development of Fort McKay.

This Plan, and its subsequent 2004 update, entitled, "*Building Our Future Together By the People of Fort McKay, Alberta, A Plan for Moving Forward*", focused on the following areas:

- Health & Wellness
- Environment
- Culture
- Community Location
- Infrastructure
- First Nation Laws and Administration
- Education & Training
- Job & Careers

On November 15, 2015, the Community Development Manager met with members of the various Fort McKay departments and service providers to update the Plan - specifically, to review the Plan's progress and current relevance, update the Plan's Issues and Themes sections, to list initiatives currently in place to address the themes and issues cited. The work accomplished by the group has been compiled into a draft report. Once the report has been completed, it will be presented to the Fort McKay CEO and then Chief and Council for their approval.

Chief and Council have requested that a community consultation process be undertaken in 2017, to discuss the existing plan with the community, identify new community needs, redefine priorities and realign the plan according to the recommendations made by the community during the consultation process.

5.6 MOOSE LAKE ACTIVITIES

Due to the 2016 wildfires, the early summer trips to and from Moose Lake, sponsored by Suncor, started later than usual in the season, and not as many community members were able to make the trips. Eighty (80) participants visited Moose Lake Paradise Bay Cabins and approximately eighty (80) residents visited their personal cabins.

In total, 27 flights were scheduled to fly to Moose Lake. Every year, efforts are made to arrange times for Family Support Services, the Recreation Department, the Elder Centre and the Youth Centre clients to use Moose Lake. However, in 2016 due to budget restrictions, only children, parents and volunteers from the Wellness Centre were able to visit Moose Lake for the first time.



Moose Lake Camp

5.7 TRAPPER RELATIONS PROGRAM

The Trapper Relations Program seeks to maintain positive communication and promote mutually beneficial collaboration among Fort McKay Trappers, industry and municipal, provincial, and federal government departments. The Program also encourages sustainable trapping among community members as a traditional activity.

The following activities were undertaken through the Trapper Relations Program from April 2014 to October 2016:

5.7.1 Compensation Matrix Update

The Matrix determines the level of compensation given to Trappers for the disturbance on their trap line due to industrial development. The original Trap Line Compensation Agreement between Fort McKay and industry was formalized in 2009 and is updated annually to meet Alberta's inflation rate. The Matrix takes into the account the types of disturbances created by oil sands mining operations and foresees the level of disruption to trapping created by SAGD operations. A step-by-step plan was presented to the Trappers in March 2014. The Trappers accepted the plan to reopen negotiations on the Matrix. However, due to the current economic downturn, negotiations with industry were rescheduled. Trappers were consulted about economic conditions and agreed to postpone further negotiations until market conditions improve.



Trappers Training

5.7.2 Training

Trappers Training, in partnership with the Alberta Trappers' Association, continued but at a slower pace due to the number of people who had already completed the course in previous years. Twenty-one community members graduated with certificates in 2014-2015. Trappers training has been difficult to arrange in 2016 because of the Alberta Trappers' Association is undergoing changes. Courses will be chosen and planned by the Trapper Relations Coordinator for 2017.

Twenty-seven community members took the Firearms Safety Course by the end of 2015, and another 20 community members participated in two courses run in 2016. The non-restricted firearms course allows community members to acquire a certificate which they can use to apply for a Possession and Acquisition License from the federal government. This training equips trappers with the knowledge of safety precautions and government regulations for owning, using, and transporting restricted firearms.

5.7.3 Trapper-Industry Consultation

Due to economic conditions and slowdown in project activities the number of consultations with trappers decreased compared to previous years. Trappers and hunters are most active when hunting season opens (September-March 2016). They have encountered barricades/ controlled access on their trails in the

hunting and trapping areas. The Trapper consultations that occurred in 2014-2016 have largely related to these types of access issues.

5.7.4 Trapping Contracts

Local trappers were hired to conduct rodent control on company leases. Four companies, Suncor, Husky, Interpipeline and TransCanada, have changed the practice of hiring beaver control consultants from as far away as Edmonton to hiring local trappers to conduct. As a result, trappers have been employed as short term contracts to deal with rogue beavers.

5.7.5 Trap Line Ownership

Alberta Environment and Sustainable Resource Development (AESRD) has reassigned duties to work with Trappers from Fish and Wildlife officers to Senior Wildlife Biologists in each of the district offices. Trappers under review have been assigned their trap lines.

5.7.6 Treaty 8 First Nations Alliances

A Treaty 8 Trappers' Association has been formally established. The newly formed organization requested a start-up financial contribution from each Treaty 8 member First Nation. The new organization will be based out of the Treaty 8 office in Edmonton and will address the following priorities:

- Treaty rights to hunt, fish, and trap
- Aboriginal Consultation Policy
- Trapping regulations review
- Trappers' compensation
- Current trap lines review process (by Alberta's Fish and Wildlife)
- Affiliation with Alberta Trappers' Association

5.7.7 Trap Line Succession

The Trappers' Succession policy has been developed and is near completion. The policy document will be reviewed and approved by Chief and Council. The policy will help promote and maintain trapping as an important aspect of Fort McKay's culture, history, and long-term sustainable plans.



Firearms Course



Trappers Training

6 REGULATORY AND ENVIRONMENTAL

6.1 COMMUNITY REGULATORY CONSULTATION

The FMSD continues to facilitate consultations among community members and industry on regulatory projects. These consultation meetings and focus groups provide information about project location, size, type, scale of production, main impacts, proposed mitigation measures and potential benefits.

From April 2014-March 2015, regulatory consultation included nine projects. These projects and their current regulatory consultation status are listed below in the following tables. From April 2015 to October 2016 no new regulatory consultations were done in the community due to the small number of new projects proposed in the traditional lands and several months' interruption of regular activities due to the Fort McMurray wildfire.

2014-2016 Regulatory Consultations

1. Imperial Oil Resources- Aspen SA-SAGD			
162,000 bpd	1,800 ha	25 km east of Fort McKay	2016-2020 40 year estimated lifespan
<p>Key Features/ Impacts:</p> <ul style="list-style-type: none"> • 9 river crossings, • New access road onto East Athabasca Highway and potential upgrade of existing Canterra road as alternate access, • Cogen water source and disposal wells, • Solvent use, • Pipelines and associated surface infrastructure, • Significant TLU impacts and land use impacts • Habitat fragmentation, wildlife impacts & caribou impacts, • Traps of Stephen Ganter, Mary Tourangeau, Rose Beaton & Andrew Boucher impacted, • Access groundwater, • Traffic concerns, and • Cumulative effects. 			
<p>Regulatory Submissions</p> <ul style="list-style-type: none"> • Letter on proposed ToR sent Oct 7/14 • SOC letter sent on July 15/14 • Technical review completed • Imperial Aspen provides responses to Fort McKay technical review February 2016 • Fort McKay does a technical review of Imperial responses on March 2016 • Fort McKay and Imperial have 2 technical workshops to discuss impacts and mitigations options arising from the technical review in June and July 2016 • Number of letters sent to Alberta Energy Regulator (AER), Imperial and Federal Minister regarding Fort McKay concerns with solvent use in the extractive process and concerns with the regulatory and consultation process with the AER and the Alberta Consultation Office (ACO). 			

2. Prosper Petroleum Ltd. Rigel SAGD			
10,000 bpd	98 ha	70km WNW, immediately SW of Namur Lake IR174b	2015-2017 24 year est. lifespan
Key Features/ Impacts:			
<ul style="list-style-type: none"> • The project is located with the 10km priority zone of the Moose Lake Access Management Plan area, • The whole project is within 5 km of the Moose Lake Reserves and within the 10 km priority zone that Alberta has committed to protecting under the Moose Lake Access Management Plan. • Groundwater withdrawals will pull about 60% from nearby surface waters including Ells River where Fort McKay draws its water supply at Fort McKay and which already has a lessened water supply. • Located within the trapline of John Ahyasou. 			
Regulatory Submissions			
<ul style="list-style-type: none"> • Prosper's EPEA (November 2013) and Water Act (August 2015) applications filed separately. • EPEA SOC (May 9, 2014) and Technical Review filed (August 5, 2014) • Water Act SOC (September 3, 2015) and Technical Memos (October 6, 2015) • AER suspended consideration of Application in May 2016 until the Moose Lake Special Management Zone Plan is complete as the Plan would have direct outcome on the Project. • AER reversed this decision on November 8, 2016. • Fort McKay has asked AER not to proceed with the Application. If request is declined, a hearing will be called in 2017. 			

3. Husky Oil Operations Limited - Sunrise Thermal -Phase 2 and DA3 Amendment. SAGD			
Total 200,000 bpd	1309 ha	35 km east of Fort McKay	Phase 1 2014, Phase 2 2016, full opp. 2020 40 years est. lifespan
Key Features/ Impacts:			
<ul style="list-style-type: none"> • Water, groundwater impacts, • Process water pipeline integrity • Traplines of M. L'Hommecourt, D. Shott, S. Ganter, M.Tourangeau, A. Boucher impacted 			
Regulatory Submissions			
<ul style="list-style-type: none"> • Project approved, • Long Term Agreement finalized. • Project currently in operation. 			

4. Enbridge Pipelines (Athabasca Inc.) –Norlite Pipeline – Diluent Pipeline			
	489 km	Crosses Athabasca River, runs from Stonefell site to Suncor East Tank Farm	2015-2017
Key Features/ Impacts: <ul style="list-style-type: none"> • Safety and spill concerns, • Habitat Fragmentation, • Biodiversity Effects and impacts on wildlife, caribou, • Traplines of Maurice McDonald impacted, • Concerns for wetlands and water 			
Regulatory Submissions <ul style="list-style-type: none"> • SOC and technical review sent June 26, 2014 • SOC response received July 11, 2014. • Project was approved by the AER • Environmental Schedule & Agreement Finalized in 2015 			

5. Total E& P Canada Ltd. Joslyn North Mine Expansion			
100,000 bpd application to 157,000 bpd	6423 ha	11 km NW, 50 km E. of Moose Lake, near Ells River and Joslyn Creek	Clearing started in 2011
Key Features/ Impacts: <ul style="list-style-type: none"> • Wildlife habitat, wetlands, habitat fragmentation, air quality and odours, • Traplines of J. Grandjambe and H. Lacorde impacted, • Impacts on Joslyn Creek, • Mining to eventually affect the route of Moose Lake Trail- Total has committed to providing unimpeded and safe access to the Moose Lake Trail and through the lease throughout the project. • Total committed to minimum 5km buffer from the Community, 100 m setback from Ells River • Additional environmental management commitments regarding air quality 			
Regulatory Submissions <ul style="list-style-type: none"> • Project was approved in 2011. FMSD funding agreement (2013) • May 2014, Total announced the project will not proceed due to rising industry costs making the project not feasible. • Fort McKay and Total in discussion about potentially including full lease development south and west of Ells River within agreement • The application was abandoned in 2015 when the project was suspended • Land was cleared, no reclamation commenced • 2016 interim agreement that is terminable in 5 years if the project does not proceed within this timeline 			

6. Teck Frontier			
277,000 bpd	29,335 ha	51 Km N. of Fort McKay	2014/2021 est. 36 year life of mine
Key Features/ Impacts: <ul style="list-style-type: none"> • Mine pits, tailings ponds, plant, roads, camp, aerodrome, compensation lake, • Huge surface disturbance, • Water and Wetlands, uplands, stream contamination, • Bison herd impacts, • 2 Caribou herd locations, • Trails, hunting areas, cabins and campsites impacted, • Traplines impacted, J. Boucher, H. Lacorde, M. Grandjambe, 			
Regulatory Submissions <ul style="list-style-type: none"> • SOC sent June 4, 2012, • Technical review June 29, 2012, • Consultations March/April 2012 • SoC Response Feb. 28, 2013, • SoC reviewed and in the process of signing a Long Term Benefits Agreement. 			

7. TransCanada White Spruce			
72 km Pipeline	328.35 ha (area of new disturbance: 59.88ha)	Begins at tie in point near Fort McKay and terminates 45 km west of Fort McMurray	Q4-2015: stakeholder engagement Q1 2016: survey and field results Q3 2016: application filed with AER Q4 2016/2017: subject to regulatory app. Q1 2018: anticipated in-service
Key Features/ Impacts: <ul style="list-style-type: none"> • Trapline #1027- R. Ahyasou • Trapline # 2894- Z. Powder • Trapline # 587- M. McDonald • Trapline #965- J. Grandjambe 			
Regulatory Submissions <ul style="list-style-type: none"> • Application Submission September, 2016 • SoC's and Technical Memos-Submitted October, 2016 • Consultation is still ongoing 			

8. Syncrude Canada Ltd. Mildred Lake Expansion (MLX)			
Expansion of East and West Mine	5133-9500 ha	15km from Fort McKay	MLX- West 2017-2027 MLX- East 2023-2040
Key Features/ Impacts:			
<ul style="list-style-type: none"> • Increased disturbance bridge construction over the McKay River, • Decreased wildlife populations, • Increased air pollution and odours & reduced Water Quality, • Increased Noise and Traffic, • Increased land use conflict and competition, • Traplines of M. McDonald and F. Orr and Z. Powder impacted. 			
Regulatory Submissions			
<ul style="list-style-type: none"> • ToR comments sent on Nov. 1, 2013 • Fort McKay Letter requesting CEAA review submitted on April 1, 2014 • Fort McKay Technical review of the application and SoC submitted on August 2015 • Syncrude provides responses to Fort McKay's technical review on October 2016 • Fort McKay reviews Syncrude's responses on November 2016 • Fort McKay and Syncrude to meet at technical workshops to evaluate impacts and mitigation options arising from the technical review on January 2017. 			

9. ATCO/APL Fort McMurray West 500 kV Transmission Line			
Approx. 40 km of new transmission line in FMFN's traditional territory.	Much of the line will follow existing right-of-ways; approx.316 ha of primary easement will be needed, plus an additional 36 ha for the proposed Thickwood Hills substation.	Approximately 400 km of new transmission line to connect the Sunnybrook substation (NW36-50-3 W5M) to the existing Livock substation and 100km of new transmission line to connect the Livock substation (SW19-85-9 W4M) with the planned Thickwood Hills substation (north west of Fort McMurray)	2015-2016
Key Features/ Impacts:			
<ul style="list-style-type: none"> • No FMFN member traplines directly disturbed. • Routing is along very southern edge of FMFN's traditional territory. • Linear disturbance increases in FMFN's traditional territory. • 14 documented TLU sites within 1km; 6 TLU sites within 2km. • Project within a Caribou Range. 			
Regulatory Submissions			
<ul style="list-style-type: none"> • APL submitted application to AUC in December 2015. • FMFN filed a statement of concern and technical review with the AUC in April 2016. • Hearings were delayed due to wildfire in Fort McMurray during summer 2016. • Q2-2016 – FMFN filed SOC & Tech. Review 			

6.2 SUMMARY OF REGULATORY APPLICATIONS REVIEWED

The FMSD has reviewed or is in the process of reviewing a number of regulatory applications that were submitted from April 2015 to October 2016.

Some of the project applications submitted include:

- Teck Resources- Fort McKay Cultural Impact Assessment
- Canadian Natural Resources Limited (CNRL) – Application for use of Coke in Dyke Drains and EPEA Renewal
- Suncor Energy Services Inc. Fort Hills Oilsands and Process Plant EPEA Renewal

Additional submissions are listed below.

Regulatory Submissions 2016

Date	Company	Application
November 2, 2016	Imperial Oil Resources Ventures Ltd.	Notice of Application - Tailings Management Plan Kearl Oil Sands Mine
November 2, 2016	Imperial Oil Resources Ventures Ltd.	Notice of Application - Tailings Management Plan Kearl Oil Sands Mine
November 1, 2016	Syncrude Canada Ltd.	Notice of Application - Tailings Management Plan Aurora North Mine
October 18, 2016	Shell Canada Energy	Notice of Application - Tailings Management Plan Muskeg River Mine
October 18, 2016	Shell Canada Energy	Notice of Application - Tailings Management Plan Jackpine Mine
September 29, 2016	Canadian Natural Resources Ltd.	Notice of Application - Tailings Management Plan for Horizon Mine
August 17, 2016	Teck Resources Ltd.	CEAA Public Comment Period - Frontier Oil Sands Mine Project
April 26, 2016	Suncor Energy Ltd.	Notice of Application - Millennium Operational Amendment and Fluid Tailings Management Plan

6.2.1 Shell Access Management Plan

Shell oil sands mining leases include the Jackpine Mine and Muskeg River (Albian) Mine. These leases are located adjacent to Fort McKay First Nation Reserves, within the traditional lands of Fort McKay First Nation. The area contains portions of traditional trails and routes utilized by FMFN for access to lands and resources for hunting, fishing, trapping and other traditional activities, and associated cabins. Shell and

the FMSD are working together to agree on an Access Management Plan to establish a process and procedures to facilitate convenient and safe access through Shell's Mine Sites by Fort McKay members.

Some of the details included in the agreement are:

- **Notice for Access** - Fort McKay members are requested to contact Shell's security in advance before requesting access to Shell Albian Sands site;
- **Vehicle/Transportation** - Access to the Mine Sites will only be granted to Members or their Visitors who are travelling in vehicles which are registered and legally allowed to travel on highways in Alberta;
- **Arriving at Shell** - Members have to present photo identification such as: The Shell Fort McKay Access ID, Indian Status Card (FMMN 467), Valid Alberta Licence; and
- **Safety** - Shell will provide safe and reasonable access and minimize waiting time or other delays for Members who request access through the Mine Sites. The agreement also defines limit for wait times, routes, safety requirements, firearms safety and Member responsibilities. It is expected that the Agreement will be signed and implemented early 2017.



Jackpine Lake on the Shell Albian Sands Site Tour

6.3 COMMUNITY ADVISORY GROUPS (CAG)

For a number of years, community members have participated in Community Advisory Groups (known as CAGs). The purpose of a CAG is to ensure a consistent group of community members stays involved with the same company for many years. The objective for doing this is so that community members participating can get to know the particular company and its representatives well, feel more comfortable over time expressing their concerns, and develop a better understanding of a project, its impacts and

proposed mitigation. Occasionally the FMSD needs to change the membership at CAGs, but for the most part the FMSD aims to keep the same people with the same company for a long period of time.

From 2015 and 2016, there was a noticeable decrease in the number of In-Situ operators seeking regulatory approval for their projects, especially as it pertained to the smaller companies not yet



Suncor Plant Workshop

producing. In 2016, several CAG meetings with industry were postponed due to the forest fire, which impacted planned meetings from late spring to summer. As a result, the CAG meetings were concentrated in the late summer and fall of 2016.

Companies shared information related to potential traffic, road construction, reclamation on both current and planned activities, new technologies, planned development and other site construction. CAG participants' concerns varied depending on the company and the type of activity. Main concerns that were expressed related to the proposed use of solvent at existing and new SAGD facilities, tailings toxicity odours, noise from site locations, employment opportunities, industrial development near Moose Lake, groundwater contamination, and decreased wildlife habitat. CAG members appreciated going on tours to the site locations, as it allowed them to see company activity first-hand.

CAG meetings from 2014-2016 were as follows:

- In 2014, 28 CAGs and tours were held with Alpac, Brion, Cenovus, CNRL, East Access, Enbridge, Hammerstone, Husky, Imperial, Koch, Shell, Suncor, Sunshine, Syncrude, and Teck, Total, TransCanada.
- In 2015, 40 CAGs and tours were held with Alpac, Brion, Cenovus, CNRL, Enbridge, Hammerstone, Imperial, Interpipeline, Koch, Shell, Suncor, Sunshine, Syncrude, and Teck.
- In 2016 23 CAGs and tours were held with Alpac, Brion, Cenovus, CNRL, Enbridge, Hammerstone, Imperial, Koch, Shell, Suncor, Sunshine, Syncrude, and Teck.

The FMSD is constantly working on ways to improve the organization and structure of the CAGs to ensure community members all have an equal opportunity to be a part of these consultation meetings, and also to ensure that the information shared within the CAGs is shared throughout the community.

6.4 COMMUNITY KNOWLEDGE KEEPER (CKK)

The CKK is designed to provide the FMSD with both a public website and confidential system for tracking consultation, industrial development, traditional land use information, and environmental data. The public website allows industry to submit spatial data and information on proposed industrial developments. The CKK website also provides an easy means of communicating with community members, industry, government, and the public.

2014 to 2015 saw the completion of Phase 4 that modified the CKK so that the review of Environmental Impact Assessments will be tracked in the system. These are the large-scale applications that industry has to file in order to start the process for their projects. Hard copies of these documents can be found in the FMSD storage room. The CKK now has over 1000 consultation reviews and has captured over 8000 Traditional Land Use values. Currently, a number of projects are still under review in the system.

The consultations the FMSD has processed for 2015 and 2016 are as follows:

2015	2016
FNC# Partner Company: 59	FNC# Partner Company: 34
FNC# Non-Partner Company: 24	FNC# Non-Partner Company: 14
D56 Notifications: 27	D56 Notifications: 9
Forestry: 4	Forestry: 3
Major Projects: 2	
Total: 123	Total: 61

6.5 PARK RANGER PROGRAM



Moose Lake Cabin

Fort McKay First Nation is unique in that there are multiple reserve locations spread across the Traditional Territory. The reserves at Buffalo (Namur 174A) Lake and Moose (Gardiner 174B) Lake (known to the community as Moose Lake) include some of the last remaining culturally significant areas unaffected by industrial development. The total area of these reserves equals about 7,700 hectares. Moose Lake has been an area for community members to practice their culture and traditional activities for many generations. Many cabins are built along the shores of these lakes, and the communal camp area typically hosts a variety of camps

and activities throughout the year. The remote location of Moose Lake has contributed to ensuring this area stays untouched.

Fort McKay seeks to ensure that the lands at Moose Lake are free from any form of industrial development in order to remain a sanctuary for community members and wildlife. The Park Ranger Program will ensure that industry and community members alike respect property and nature.

Fort McKay recognizes the value that community members hold to the land for the uses of conservation, recreation, cultural preservation, and knowledge translation. It is important to the community that the benefits that coincide with conservation and protection are maximized through active community participation and working together to make informed decisions. The Park Ranger program seeks to reallocate responsibility and ownership to the community for the management of its reserve lands. The program has been established with the intention of:

- Protecting Fort McKay's natural and cultural heritage,
- Enhancing community experiences;
- Developing wildlife habitat and management programs;
- Engaging the community in conservation and heritage appreciation;
- Providing a safety and security presence;
- Checking the winter road and travelers along the road;
- Checking ice thickness in the winter for safety, and
- Responding to human/ wildlife conflicts.

In order to introduce the program and ensure it runs well, the Park Ranger Program will initially work in the Moose Lake area only. Once the program is running well and staff have been trained, the park rangers may also provide a Fort McKay presence at other culturally important areas and reserve locations.



Old Cabin at Moose Lake

There is a need to continue inspiring respect for the land, cabins, property, plants and animals in the Moose Lake area throughout the generations of community members. Having a Park Ranger Program opens up the opportunity to educate people on the importance of the environment around them and to

establish a discipline procedure for times when education on respect for land and property is not successful. The Park Ranger Program will allow Fort McKay to establish a presence in the Moose Lake area and ensure that the community is being represented through all decision making pathways. Without a system or plan in place to regulate activity at Moose Lake, it becomes difficult to ensure that conservation and sustainability remain the focus of the landscape.

6.5.1 Recent Activity

The Parks and Land Lead position was recently filled by Jordan Besenski, the newest staff member to the FMSD. Jordan has experience as a fish and wildlife officer and will help to lead two other park rangers; as the program grows, more park rangers will be added. Park Ranger interviews were conducted for 7 community members on October 20th and 26th. Out of the 7 interviewed, 2 community members, Joe Grandjambe and Doug Mercer, were selected and will start working with the FMSD in the beginning of December. More training will be required for the Park Rangers once they start working. Training will continue throughout the coming months to ensure the park rangers are fully prepared and well equipped to work and hold the necessary authority.



Wilderness First Aid Training

In November, the FMSD Staff, the Parks and Land Lead and community members who had interviewed for the park ranger positions took an extensive Wilderness First Aid Training course. This course ensures that the staff traveling to and from remote locations have the knowledge and understanding necessary to work and deal with emergency situations in remote areas. This training will continue to be offered for future park rangers hired into the program.

The Park Ranger Lead is participating with the Ronald Lake Bison Technical Team to assist in delivering programs that will benefit Fort McKay First Nation. Park Rangers will also be attending monthly meetings

with Fort McMurray Search and Rescue to learn more about developing emergency response protocols for anyone that has been injured or lost in the Fort McKay area. The Fort McMurray Search and Rescue will be able to provide some training to the Park Rangers to assist in enhancing daily work skills such as ice water and swift water rescue as well as the fundamentals of search and rescue.

Jordan continues to work at the Program's start up, by purchasing the necessary equipment and making sure all the proper regulations, authorities and training courses are in place. More specifically, Jordan has been developing the safe working practices for the park ranger program, designing and organizing work on the cabin construction, developing trip and work plans, and creating policies for the park rangers to adhere to. Equipment for the park ranger program, such as generators, quads, snowmobiles, a truck and towing equipment has been ordered.

The Namur Lake cabin design has been developed and supplies have already been purchased for the build to take place in early 2017. Capital Projects will be constructing the cabin and the Park Rangers will assist.

Once the Program is more developed, there will be a community meeting that will discuss how community members can be more involved. This will also be a chance for community members to provide information to the park rangers, on their issues and concerns in the Moose Lake area so the rangers can develop a more customized work plan for the area.

6.6 AIR MONITORING STATIONS

6.6.1 Fort McKay Air Monitoring Station- Environment Canada (CAM1 Air Monitoring Station)

Since the last Activity Report in 2014, there have been some changes made to the air monitoring station located in Fort McKay. Fort McKay discontinued the use of the eNoses and the Logistically Enabled Sampling System (LESS) sampling unit as data validation and QA/QC review indicated that the eNose was not sensitive enough to reliably trigger the LESS sampler during the odour events in the community. The WBEA has also discontinued their use of the eNose for the same reasons, as the eNose is not able to report accurately enough when odours are present in the ambient environment, and also differentiate between non-odour related events.

Fort McKay worked with the WBEA to help assess the efficacy of the sorbent tubes that came with the LESS sampling unit and compared against the sorbent tubes that the WBEA had purchased for use in their system, which was setup to be triggered for collections by a TRS (Total Reduced Sulfur) analyzer. Since Fort McKay is not using the LESS unit as originally planned, the FMSD is actively seeking opportunities to work with the WBEA and Environment and Climate Change Canada to use this technology to help better identify odour causing compounds. The WBEA also discontinued its use of the eNose as part of the Human Exposure Monitoring Program (HEMP), as they were seeing similar challenges with using this technology in the ambient environment, further away from emissions sources.



Aerial View of the Oski-Otin Air Monitoring Site

6.6.2 Meetings with industry on odours and air quality events affecting Fort McKay

On October 16, 2014 the Fort McKay Sustainability Department (FMSD) and their technical staff and consultants met with a number of industry members to present to them some of the canister data Fort McKay had collected between 2010 and 2013, as well as share some of the preliminary raw data coming out of Environment Canada's CAM-1 Air Monitoring Station located at the Oski-ötin Air Monitoring Site and the eNoses being used in Fort McKay (presentation given to industry is available at the FMSD). Fort McKay also contrasted some of the data with that which had come out of the AER hearing on industry odours in the Peace River area.

The FMSD pointed out to industry that the majority of odour events that Fort McKay experiences occur when the wind is from the South/Southeast and along the river valley (Suncor and Syncrude sources), but that other operators to the Northwest and Northeast of Fort McKay also impact Fort McKay's air quality, albeit to a less significant/less frequent extent than experienced due to Suncor's and Syncrude's operations.

It was also discussed the need to have emergency response plans that appropriately consider Fort McKay and potential evacuation/notification protocols if there were to be a significant plant upset resulting in immediately hazardous releases to atmosphere that have a possibility of impacting human health and safety.

Fort McKay asked companies at the October 16, 2014 meeting to take back the information that the FMSD had shared and have further internal discussions as to mitigation and odour source characterization that could potentially be done on project sites, to help better understand the odour issues and attempt to more responsibly manage them.

On March 5, 2015 Fort McKay met again with the industry odour group. FMSD's expectation at this meeting was that companies would have had enough time to review Fort McKay's information and consider the request for mitigation options and an open discussion would take place about a process that could begin addressing the causes of odours in Fort McKay, including improving the ability to trace odour events to sources. Unfortunately, companies were not prepared to speak to many of these requests. Rather the discussion that took place focused more on emergency response planning. The AER representative also discussed the desire to develop improved modelling to help assess odour events and better determine sources.

The FMSD reiterated the need for meaningful action to be taken at both industry and government tables to address these on-going issues, and everyone agreed to participate in an emergency response planning meeting that took place in Fort McKay on May 13, 2015.

These meetings eventually culminated in the AER leading a year-long investigation, and Alberta health co-authoring a report with the AER that finally acknowledged the air quality and odour issues that Fort McKay faces as a result of industry and oil sands operations near the community. A list of 17 recommendations has been identified through this report, and a task force, including Fort McKay, will soon be established to address these recommendations.¹



Oski-ôtin Air Monitoring

6.6.3 Fort McKay's Air Quality Index (FMAQI)

Fort McKay's air quality is affected by industrial emissions in the region. Many community members are very concerned about the quality of the air and often ask their scientists and the SD the question: "what is the quality of our air?" To attempt to answer this type of question, Fort McKay's air and health scientists have developed a "community-specific" Fort McKay air quality index (FMAQI). This index provides a general indication and measure of the air quality in the Community based on continuously measuring a

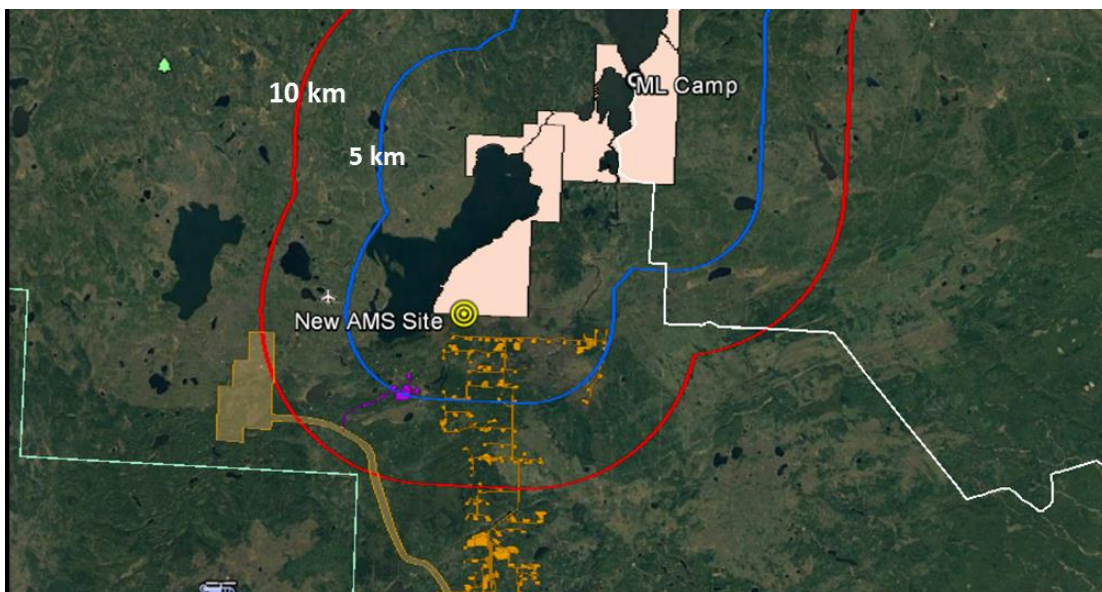
¹ See section 7.1.1 for more details

number of common air contaminants. These contaminants are measured at the Wood Buffalo Environmental Association (WBEA) Air Monitoring Station #1 (Bertha Ganter Station) located at the north end of the Community and are considered by Fort McKay's scientists to be generally representative of average air quality in the Community. The FMAQI is now streaming live on the WBEA's website (WBEA.org), where it can be seen on the main page. The FMAQI is typically higher than the AQHI during odour events because the AQHI does not incorporate TRS (Total Reduced Sulfur), SO₂ (Sulfur Dioxide), or THC (Total Hydrocarbons) measurements into its calculation. The AQHI does not give a good representation of air quality in the oil sands region, and the Sustainability Department is proud to have persuaded the Government of Alberta to allow Fort McKay and the WBEA to enter into a pilot project and implement the FMAQI. Early results have been promising and the FMAQI appears to be operating as a much more reliable tool to measure impacts to Fort McKay's air quality.

The Sustainability Department has been working closely with technical personnel from Environment and Parks in an attempt to have Alberta adopt Fort McKay's draft Air Quality Bylaw ambient air quality parameters for its Reserve lands in an effort to keep clean areas clean. The FMSD is refining the details of the Air Quality Bylaw, and it will soon be ready to be submitted to Fort McKay Chief and Council for consideration and approval. Discussions are on-going in this endeavor.

6.6.4 Moose Lake Air Monitoring Station

Due to the likelihood of SAGD and potentially other types of *in situ* development operating in the Southern regions of Namur Lake in the near future, the FMSD felt that it was very important to establish an air monitoring station on reserve land in advance of proposed and planned development. This will allow Fort McKay to establish a strong baseline prior to development to show what the current air is in and around the Moose Lake area, and allow the community to measure potential changes that may arise as a result of development.



Moose Lake Air Monitoring Station (AMS)

On September 27th, 2016, after more than a year of planning, all station equipment was flown by helicopter to the remote location at Moose Lake. The station utilizes an Airpointer® system that is completely self-contained and allows for remote diagnostics, so that if there is ever an issue with one of the many analyzers within the Airpointer®, we would be aware of the problem before getting to the site to do maintenance. One of the goals of our station is for it to be as sustainable and low-impact as possible given its remote location. We have therefore designed the system to run off of solar/battery power and when our batteries are fully charged, the station will be able to operate for roughly 4 days without sunlight. In the event of long periods of low sunlight and cold temperatures in the winter, a small back-up generator will automatically start when the system's battery voltage is detected to drop to a given threshold. The station seen below, is currently accessible only by helicopter, and monthly calibrations are planned to ensure the station meets the Alberta Air Monitoring Directive (AMD). The Airpointer's analyzers measure: NO/NO₂/NO_x, SO₂, H₂S, O₃, and BTEX, which are pollutants commonly emitted by *in situ* oil sands operations. Measuring the pollutants' concentrations near Namur Lake will give Fort McKay a good understanding of impacts to air quality, as well as a good prediction of potential odours resulting from an increase in industrial development near Fort McKay's reserve lands in the Moose Lake area. During the winter months, access to the station will be by land, and the FMSD Specialists and Park Rangers will be responsible for the operation and security of the station.



Remote AMS Location

6.7 WATER AND SEDIMENT MONITORING

6.7.1 Water- A Holistic Approach

The Fort McKay community is concerned about the health of the lands and waters in their Traditional Territory. The area known as Moose Lake includes Moose (Upper and Lower Gardiner) Lake and Buffalo (Namur) lakes. These areas are of extreme importance to the community of Fort McKay, being close to a pristine condition, thus allowing for cultural, spiritual and subsistence traditional practices.

Existing baseline information has intermittently been collected by government, academics, and regional monitoring groups. There is a need to compile, organize and build a comprehensive database of both western science and traditional knowledge for the Moose Lake area because of the advancement of industrial projects. Knowledge about the lands and water prior to any development in this area will provide comparative information about changes that may occur in the future as a result of industrial development. A multi-year research and monitoring plan (Lake Health Assessment) is intended to assess the environmental health and produce reliable data for the evaluation of environmental changes as the neighboring region is subject to industrial development. This multi-year plan started in 2016 and is set to continue in the coming years.

This multi-year plan includes acquisition of sampling gear and equipment required for field surveys as well as resources for new monitoring activities to be developed as the results from previous years provide a clear picture of areas that need further research.

Preliminary results suggest the need for future studies to understand the source of nutrients and concentration of elements and compounds in the lakes. These studies will be incorporated into the next phase of the multi-year plan.

6.7.2 Water 2016 Program/Results

With the Lake Health Assessment objective in mind, two programs, the base sediment analysis at Moose Lake, completed in 2016 and the water quality and volume analysis for the Moose Lake area, initiated in 2016 will be continuing in 2017.

BASELINE SEDIMENT CORING/QUALITY

In 2014 an agreement was signed between the FMSD and the University of Alberta (UofA) in order to understand the baseline aspects of composition and quality of sediments including Moose (Upper and Lower Gardiner) Lake and Buffalo (Namur) Lake. Sediment cores (paleolimnology) can provide historical watershed information for decades of lake history. They can separate conditions like chemical contamination that occurred naturally (before industrial development; deep in the core) from those that occurred during industrial development (shallow in the core) in the region.

The data obtained by the proposed coring study will provide valuable information on the following:

- Amounts of oil sands-related and other atmospheric contaminants (PAHs, mercury, etc; listed below) that have been deposited over many decades in each lake basin;
- Historical baseline water and sediment quality to compare with current and future changes;

- How lake nutrient inputs, primary productivity and algal communities have changed over time;
- How climate change may have affected the lakes over time;
- Whether hydrologic changes have occurred in the lakes over time; and
- In the absence of historical monitoring, sediment cores are the best way to see integrated change in the watershed over time.

The scope of the study was divided into 3 main steps:

- A. Lake coring of 15 samples of sediment from 3 different sites,
- B. Sample preparation/analytical distribution/data management including the following parameters:
 - a. Total mercury
 - b. Target parent & alkylated polycyclic aromatic hydrocarbons Diatom/paleo-fossil/pigment reconstructions
 - i. Diatom paleo-fossil counts
 - ii. HPLC paleo pigment reconstruction
 - iii. Near-Infrared spectroscopy (indicator of level of total primary production)
 - c. Sediment core dating
 - d. Carbon content
 - e. 15N and 13C (for food-chain reconstruction and contaminant tracing to large fish)
 - f. Physical variables
 - g. Organics
 - h. Total metals
- C. Integration & Write-up

Sampling was initially planned during the open-water season of 2014, however delays in contract signing, changes in logistics, impacts on budget associated with the changes of seasons and changes in external costs lead to a late start, only in early Spring of 2015 (March, 5) when Step A (field coring) took place.

The majority of the analyses has now been completed, as described in Step B. Some issues were identified during analyses, which has required adapted approaches. Dating analyses will continue as data are produced and once the data for all variables have been delivered from the various labs to which sediment samples were sent, a full data analysis, integration, and write-up will be able to advance quickly.

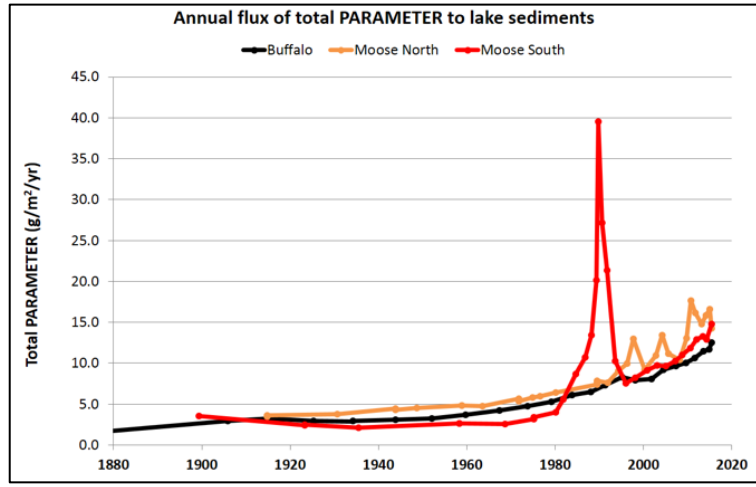
Interim results show a trend of increased concentration of all parameters analyzed (from late 1800 to 2016) starting on the 60's and exponentially growing to date.

Final results are expected to come on the third week of December, 2016 in an integrated and final report, including the analysis and conclusions of sediment baseline study.

The resulting information will be integrated in the plans for the 2017 Lake Health Assessment, which will provide important background on the next steps of investigation and evaluation. It will indicate key parameters, concentration, and sources used in the monitoring program and will aim to identify possible relation with oil sands development in the region.



(a)



(b)

Field Coring at Moose Lake (a) and Analysis Results (b)

WATER MONITORING PROGRAM AT MOOSE LAKE

In February 2016, Fort McKay First Nation (FMFN) retained Associated Environmental Consultants Inc. (Associated) to provide hydrometric monitoring and water quality sampling services within the Moose Lake area. Moose Lake consists of two separate basins connected by a small surface channel called “the Narrows”. The northern and southern basins of Moose Lake are referred to as Upper and Lower Moose Lake, respectively. Moose and Buffalo Lakes are the headwaters of the Ells River (a tributary of the Athabasca River).



Water Sampling

The overall objective of the program is to implement a scientifically defensible water quality and quantity through a hydrometric monitoring program to determine baseline conditions for comparison to existing

regional monitoring data and assess against future change.

The program includes the installation of hydrometric monitoring stations on the lakes and major inflow and outflow watercourses, as well as conducting background water quality sampling at selected locations to add to the baseline of lake water quality. Three field surveys are included in the existing scope of the program, as follows:

Reconnaissance Trip (September 2016) to determine specific hydrometric station locations and collect necessary station installation information requirements, install temporary benchmarks, conduct water level and discharge measurements at each station location (where applicable), and complete water quality sampling at representative locations.

Installation Trip (Spring-Summer 2017) to install each hydrometric station, install benchmarks and complete benchmark elevation surveys, conduct water level and discharge measurements at each hydrometric station (where applicable), and complete additional water quality sampling.

Monitoring Trip (Spring-Summer 2017) to complete water level and discharge measurements at each hydrometric station (where applicable), download data and complete station winterization at each hydrometric station, and complete water quality sampling.

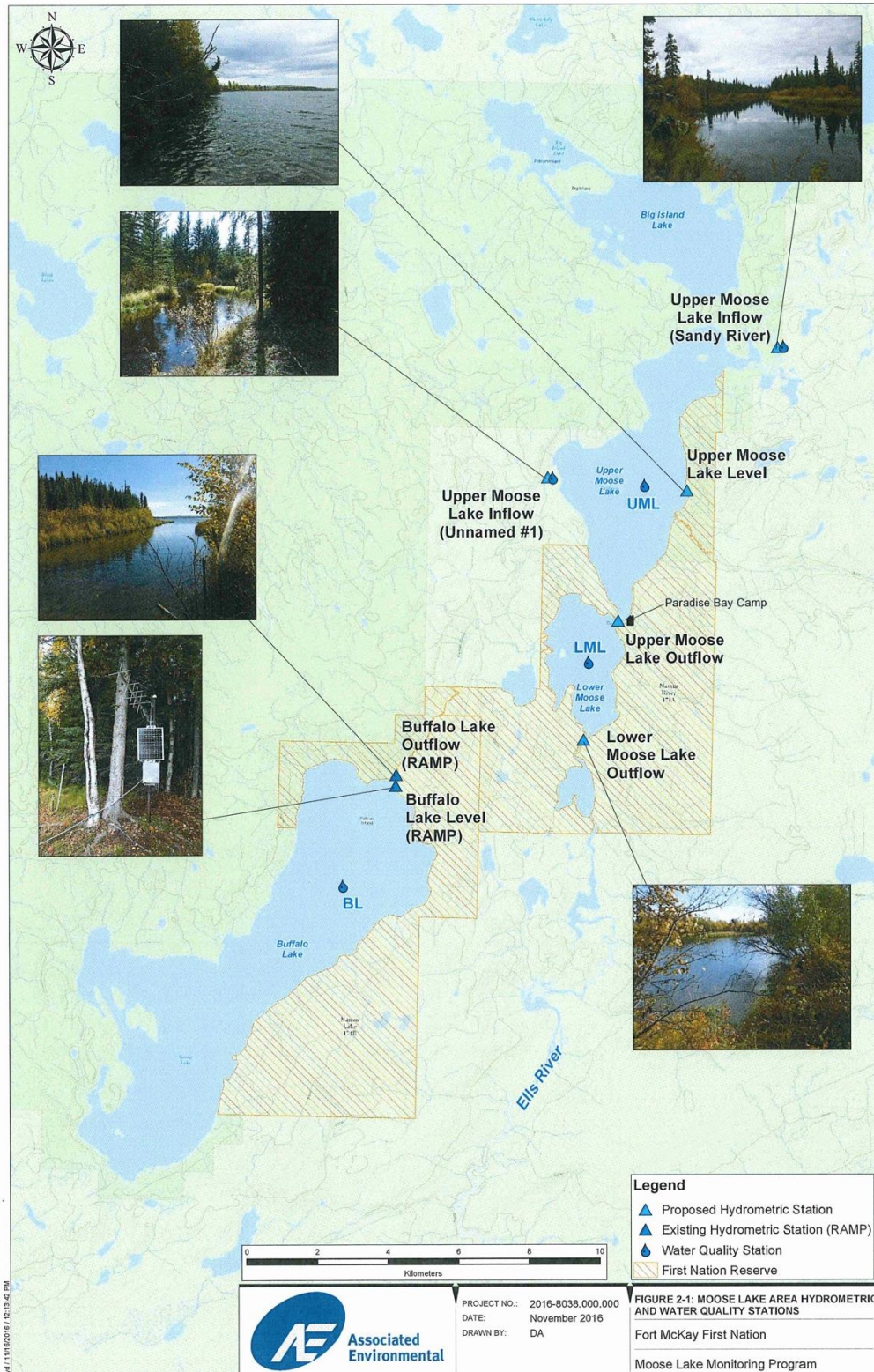
The first field survey (i.e., the Reconnaissance Trip) was completed in September 2016², by float plane from Fort McMurray. The field team flew to Paradise Bay camp and water quality sampling and hydrometric reconnaissance was completed on Upper and Lower Moose Lakes as well as Buffalo Lake.

Access to all locations around Moose and Buffalo Lake Lakes was completed by boat. All the samples were taken as planned.

For the hydrometric stations, the planned locations were confirmed/revised considering field observations combined with knowledge gained from FMFN community members, the following criteria:

- Accessibility to station locations under all flow conditions;
- Presence and stability of anchoring point on lake/channel bank;
- Presence of vegetation clearing for siting of telemetry equipment; and
- Sufficient depth of water for monitoring equipment.

² This first phase of the program was planned to start in May 2016 but was delayed due to the Fort McMurray Wildfires of May and June 2016.



Hydrometric Stations and Water Sampling Locations at Moose Lake

The results from this campaign demonstrated notable differences between the lakes. It included water clarity, algal abundance, and total phosphorus (nutrient) levels. Upper and Lower Moose lakes had evidence of high nutrients and algae compared to Buffalo Lake. Buffalo Lake had greater water clarity than the Moose Lake basins.

Using several parameters allows for a calculation of the Carlson Trophic State Index (TSI) for each lake. This is useful to estimate the trophic state of the lakes over time, because it is a relatively easy way to evaluate the health of the lake with a single value.

- Upper Moose Lake (UML) – TSI = 58.2 (high algal productivity, elevated phosphorus, eutrophic);
- Lower Moose Lake (LML) – TSI = 57 (high algal productivity, elevated phosphorus, eutrophic); and
- Buffalo Lake (BL) – TSI = 46.4 (lower algal productivity, moderately high phosphorus, mesotrophic).

Under the current plan, water quality sampling is planned during the two trips described for 2017 as well as installation of hydrometric station equipment in chosen locations. Community Based Monitoring will be implemented as soon as practical to continue with baseline data collection in conjunction with support from the Park Ranger Program.

The next steps to the Program will consist of a bibliographical review of public information coming from government, community, multi-stakeholder organizations and industry sources to help understand the regional context of lake health, which we can be then compared to the Moose Lake Area to understand the possibility of a local anomaly or a regional trend. Additionally, an integration of 2016 studies and the bibliographical review will provide a clear path of areas requiring further investigation, including eutrophication, water balance, lake turn over, potential identification of concentration sources or mechanisms affecting the water quality, and in consequence the lake's Health. These steps will be part of a long range, multi-year plan.

6.8 FORT MCKAY BERRY PICKING GROUP- COLLABORATION WITH WBEA



The Fort McKay Berry Picking Group and the Wood Buffalo Environmental Association (WBEA) have collaborated since 2010 on this project. Originally, the Fort McKay Berry Picking Group met to share and discuss observations and concerns about traditional berry uses and wild berries contamination related to industrial development around Fort McKay. Recent meetings have been seeking to also understand how Aboriginal people “understand and identify wild food contamination related to industrial development and how does their perception of contamination inform their choices in berry harvesting”³. The sharing of

³ Poster by Janelle Baker: [Eating Berries in the Oil Sands: Fort McKay's Observations of Berry Contamination in their Traditional Territory](#) (2013)

information and knowledge from the berry picking group has been collected through observation and plant harvesting, and berry quality monitoring. Janelle Baker, a Ph.D. candidate at McGill University and a consultant working with WBEA and Fort McKay, has helped to facilitate much of the research and knowledge/ data collection towards this initiative. Berry picking in areas close to the Fort McKay community has been hindered by industrial development activity. Remaining berry patches near development are not trusted by community members to be healthy to pick or eat. Locations more distant from industrial development, such as Moose Lake or Saskatchewan are more trusted by community members for berry picking; however, these locations are harder to access and not all community members have the same opportunity to continue to pick berries and pass on these traditions to the younger generations. These berry patches farther away also do not carry the same spiritual meaning to community members.



(a)



(b)

Berry Picking- Monitoring⁴

In collaboration with WBEA, passive air monitoring stations were set up in 2014 to monitor ozone, nitrogen dioxide, and Sulphur dioxide at different sites selected by Fort McKay community members participating in the berry picking group.

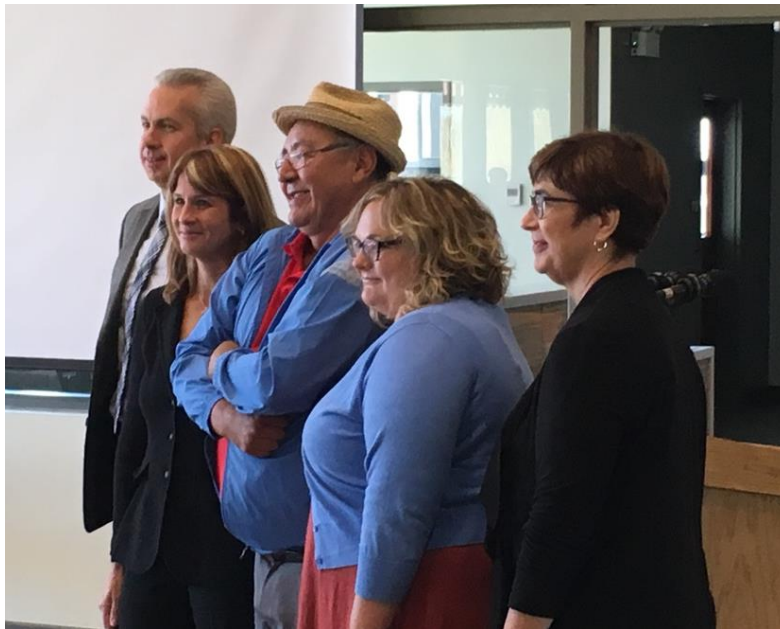
In 2016 the Berry Picking Group's regular program was interrupted by the Fort McMurray wildfire. Typically, the group would start field visits in May and go every month to replace the Passive monitors until September. However, this year, the group's visits to the berry picking sites started in July. An initial visit was done to assess if any sites had been affected by the wildfires and no damage was found. The Berry Picking Group also visited Moose Lake in August 2016 to pick berries to be sent to a specialized laboratory for testing. In 2017, it is planned that we will resume activities as in previous years.

⁴ Photo (a) taken from www.wbea.org

7.1 ALBERTA ENERGY REGULATOR (AER)

7.1.1 Recurrent Human Health Complaint Process

The community of Fort McKay has for many years, experienced significant odours and air quality issues in the community; from time to time they are a daily occurrence. In response to odour and air quality concerns raised by the FMSD and community members, the Alberta Energy Regulator (AER) in May 2015 launched a “Recurrent Human Health Complaint Process” assessment. Through this investigation, the AER discovered that 172 complaints related to odour had been made by the FMSD and community members over a 5-year period from 2010-2014. The AER identified the need to understand potential health concerns with air quality and odours and asked Alberta Health to join the assessment; the FMSD and industry supported the process.



(From Left to Right) Executive Vice President CAPP-Terry Abel, Chief Environmental Scientist AER-Monique Dube, FMFN Chief- Jim Boucher, Deputy Premier of AB and Minister of Health-Sarah Hoffman, and Chief Medical Officer of Health- Dr. Karen Grimsrud

This investigation and development of a report took over a year to complete with ongoing support and involvement from the Sustainability Department and industry. Chief and Council had met with representatives from AER and AB Health twice during this time for updates. The FMSD also completed a technical review of the report and its recommendations and supports the report’s findings and its recommendations.

The report recognizes that the community has experienced real impacts due to odour and poor air quality events. The report's findings identify a number of actions that are needed to address Fort McKay's concerns and to improve air quality in the community. There are 17 recommendations⁵ that cover a range of air related health, monitoring, policy and emission management issues. Important recommendations include:

- Better management of industry air pollution (which the report confirms is the major contributor to the odours and poor air quality in Fort McKay);
- Obtaining better information about how odour complaints are responded to;
- Obtaining better information on the cause of poor air quality events;
- Expanding air quality and odours policy and guidelines;
- A better system to notify community members when an emergency occurs, especially when there are unusual emissions from industry related to when an emissions event occurs; and
- Reviewing the current system of air monitoring, as it is difficult to identify the source of odours and poor air quality (such as which company is the emission source).

On September 21, 2016 the Fort McKay First Nation hosted a joint press release with AER and AB Health to officially release the report, publicly recognize that Fort McKay does indeed have issues with air quality



AER, Alberta Health and Fort McKay at the Fort McKay Youth Centre hold the press release on the Recurring Human Health Complaint Process

and odours, and to talk about next steps for following through on the 17 report recommendations made in the report. In preparation for the press release, a Community Notice that summarized the findings in the report was delivered to each community household. The press release was also broadcast live on the local radio station 106.3. Following the press release, the radio station held a brief question and answer period with Chief Jim Boucher, the Minister of Health, Sarah Hoffman, and Monique Dube, the Chief Environmental Scientist from the AER.

Since the press release, the FMSD called together a focus group, held on Oct 12, 2016, where 30 community members participated in learning more about the investigation itself and the 17 recommendations. There will be a task force meeting on December 7th with the Government of Alberta, AER, and Fort McKay First Nation, Fort McKay Metis and industry to start the implementation process. In

⁵ See Appendix for the recommendations

2017, Fort McKay will put together a CAG with members of the community who are interested in providing input on the implementation of the recommendations.

7.1.2 Multi-Stakeholder engagement advisory committee (MSEAC)

As part of Fort McKay Sustainability Department's ongoing engagement with the Alberta Energy Regulator, the FMSD has been participating in the AER's Multi-Stakeholder Engagement Advisory Committee (MSEAC). This committee consists of invited participants from First Nations, Metis Groups, environmental organizations, municipalities and land-owner organizations. At these bi-monthly, two-day meetings, the AER presents on changes in operation, and committee members provide feedback on these projects and issues of importance to stakeholders. Some of AER's projects include: Area Based Regulation, which is a method for planning groups of projects rather than approving projects individually, and the Regulatory Excellence Project, which is the AER's ongoing efforts to improve its processes. Fort McKay has been able to provide feedback on how engagement during the regulatory process is lacking, and push for improved consideration of Aboriginal and Treaty Rights. Fort McKay just presented its position to the committee on the November 29th meeting, and pushed for improvements to the way that projects are considered in the Athabasca region.

7.2 ENVIRONMENTAL MONITORING

Fort McKay Sustainability Department continues to be actively involved in environmental monitoring in the Athabasca Region. In February of 2012, the Governments of Alberta and Canada established the Joint Oil Sands Monitoring Program, which was designed to detect cumulative environmental effects of oil sands development in the region. The results of these studies are beginning to be published; in general, the results support Fort McKay's residents' concerns regarding periodic poor air quality, and suggest that deposits of dust and pollution from oil sands refining can be detected in air, snow and dust within roughly 50km of the refineries. It is not yet clear from those monitoring studies how this is affecting the wildlife, fish and birds in this area. Fort McKay continues to monitor results as they are published.

In April of 2014, the Government of Alberta established the Alberta Environmental Monitoring, Evaluation and Reporting Agency (AEMERA). This arm's length agency was responsible for planning and executing environmental monitoring in the oil sands region, and was intended to eventually monitor the environment throughout Alberta. Fort McKay observed the formation of the Agency, but like the other Athabasca Tribal Council First Nations, did not formally re-engage, as we did not believe that the new agency would allow Fort McKay to be meaningfully involved in deciding what to monitor and how to monitor it.

AEMERA struggled to become fully established, thus the new government decided to dissolve the agency and move monitoring back into the Department of Environment and Parks. In June of 2016, AEMERA was dissolved and the new Environmental Monitoring and Science Division (EMSD) was established. We continue to meet with the Chief Scientist and head of monitoring, Dr. Wrona, to discuss Fort McKay's priorities in oil sands monitoring, including how Fort McKay would like to be involved in decision making, as well as funding the Fort McKay monitoring programs by the EMSD.

Rather than waiting for the province to establish environmental monitoring studies that meet Fort McKay's needs, the community is moving forward with performing its own air and water quality monitoring in the Moose Lake area. Although the installation of air and water monitoring equipment at Moose Lake was delayed due to the wildfires in Fort McMurray in the fall of 2016, equipment for a new air monitoring station and water quality and quantity monitoring was installed at Moose Lake, as planned.

In early 2016 Alberta Environment and Parks (AEP) completed an aerial survey of WMU 531 to determine moose populations. At the request of FMSD, AEP flew additional transects within the 10 km Moose Lake buffer area including 46 full/partial transects that totaled 344 km in length. We have been working with neighbouring First Nations to coordinate monitoring efforts. We are currently working to establish an agreement with the Mikisew Cree First Nation and the Government of the Northwest Territories to harmonize water monitoring protocols and share data. This would increase our ability to detect changes, and provide a united front in discussions regarding environmental quality in the Athabasca region.

Finally, Fort McKay is also working with researchers to address issues of concern to the community. Fort McKay has partnered with Dr. Phil Thomas, of Environment Canada, to see whether wildlife provided by Fort McKay trappers contain higher levels of oil-sands related contaminants. Last year, the FMSD provided Phil with a selection of muskrats and beaver. Phil travelled to Fort McKay to dissect beavers with the community, and has taken the livers and some other tissue samples with him. He has spent the last year analyzing the samples, and will provide a report to the community in the winter 2016-2017.

7.3 LAND USE FRAMEWORK: LOWER ATHABASCA REGIONAL PLAN (LARP)

Since LARP came into force in September 2012, AEP has issued two progress reports. The progress report for 2013 was issued in July 2014 and progress report for 2014 in July 2016. A progress report for 2015 is still outstanding. The following sets out a summary of the progress taken on LARP 2014-2016. The only plans that have been completed since 2014 are the Tailings Management Plan (March 2015) and the Updated Surface Water Quantity Management Framework (February 2015).

➤ *Creation of New Conservation - implementation incomplete and ongoing.*

The Conservation Areas have yet to be formally designated. AB says this is because not all oil and gas dispositions have been cancelled. So far AB Energy has cancelled and compensated for 76 oil sands leases and mines and minerals agreements. AB says Birch Mountain Expansion was expected to be designated in 2015, but this has not yet happened.

➤ *Biodiversity Management Framework - a draft was completed in 2014, no final plan approved.*

AB says stakeholder consultation occurred on the framework in November/December 2014 and based on this consultation, a final plan for approval and implementation is planned for 2015, but one is not yet finalized or approved.

➤ *Landscape Management Plan – completion has been planned to 2016 but one is not yet done.*

The Plan is to manage cumulative effects of human activities and will have strategies to coordinate and manage linear footprint, land disturbance and motorized public access in key "sub-regional land areas". Engagement on proposed LMP began in 2014 and continues for a draft to be completed in late in 2016, which has yet to occur.

➤ *Tailings Management Framework – Approved in March 2015 and implementation is ongoing.*

Its objective is to minimize fluid tailings accumulation by ensuring the treatment and progressive reclamation of fluid tailings during the life of the project, achieving ready to reclaim condition within 10 years of the end-of-mine life.

As a result of the TMF, the AER developed a new directive – Directive 085: Fluid Tailings Management for Oil Sands Mining Projects, which sets out the new application and performance reporting requirements for fluid tailings volume, management plans are part of the phased approach. The new Directive Came into force July 2016.

Since then, companies have been submitting tailings management plans for approval by the AER. Fort McKay has reviewed Suncor's plan for the Millennium and North Steepbank, and is currently reviewing Shell's and CNRL's.

➤ *Progressive Reclamation Strategy – AB says the implementation is ongoing.*

CEMA's report on Criteria and Indicators Framework for Oil Sands Mine Reclamation Certification, was submitted to the government in 2013 but work on implementing it is ongoing.

➤ *Air Quality Management Framework – Annual reports released in 2014 and 2015 showed triggers exceedances at 10 monitoring stations for NO₂ and SO₂ in 2012 and in 2013, trigger exceedances at 11 stations.*

In July 2016, AB issued an update on a management response to the exceedances as of May 2015. These responses were: to verify and investigate exceedances identify management responses–Sulphur Emissions Reduction Project; develop improved trend assessment methodology; assess and improve monitoring networking; compile data on non-point source emissions to better understand sources and identify potential gaps.

➤ *Surface Water Quality – Annual reports releases in 2014 and 2015 showed triggers exceeded for 3 out of 38 indicators in 2012 and 5 out of 38 in 2013.*

In July 2016, AB issued an update on a management response to the exceedances as of May 2015. These responses were: to verify the exceedances but investigations of the exceedances for uranium and nitrogen. Accordingly, no management responses have yet to be identified.

➤ *Groundwater Management Framework – was due in 2014 and is delayed until 2017.*

A Regional Groundwater Monitoring Evaluation and Reporting Group was established for each of the North and South Athabasca Oil Sands areas to get input from industry, consultants, academia and First

Nations to advise AEP regarding the expansion of regional monitoring networks, programs and thresholds in each area. The work is ongoing but delayed due to the scale and complexity of groundwater systems and resources required to understand the systems. Triggers at some wells in the North Oil Sands are expected to be finalized in 2017.

- *Surface Water Quantity Management Framework – was due in 2012 and the update approved in February 2015.*

In 2014, discussions were held with a three-day final workshop in July 2014. Input received was used to draft the final updated framework which was approved in 2015.

- *Public Land Areas for Recreation and Tourism ("PLART)*

Progress on formal designation was paused in 2014 – but no reasons is provided why. This includes the Athabasca River PLART just outside of Fort McMurray.

- *Regional Parks Plan – due in 2013 but AB says delayed to 2015 with no indication that it has been completed.*

The Plan is to provide a broad management direction to achieve integrated recreation and conservation mandate of the Alberta Provincial Parks program. The draft plan is expected to be released in 2015 and summarizes current recreation and conservation values on a site by site basis, provides broad management direction and further planning required.

- *Regional Trail System – Implementation is ongoing*

Alberta TrailNet Society did an inventory of existing trails in 2014, and the next phases involves developing a plan through consultation with stakeholders dependent on funding available.

- *Continued Consultation with Aboriginal People*

AB says implementation is ongoing and "on track" as demonstration through consultation on BMF, LMP and MLAMP. Fort McKay has numerous concerns with the consultation process, policies and overall lack of engagement and progress.

- *LARP Review – The Panel submitted its report to AEP June 2015.*

AEP quietly publicly disclosed the report in May 2016 during the forest fire evacuation. AEP's response was conveyed to Fort McKay in September 2016 proposing "LARP Indigenous Table" to discuss continued consultation and incorporation of TK and TLU in land use planning decisions. Fort McKay submitted a letter to the Minister of Environment in November 2016 expressing our lack of support for LARP and their proposed process moving forward. The five regional First Nations have requested a meeting with the Deputy Minister of Environment and Parks. We are hoping to establish a process that will lead to substantive changes in LARP that will more meaningfully protect Aboriginal and Treaty Rights.

7.4 MOOSE LAKE PROTECTION AND ACCESS MANAGEMENT PLAN (MLAMP)

The FMSD has been in discussion with the Government of Alberta since 2003 to protect the value of the Moose Lake Area and to ensure that community members can continue to exercise their Aboriginal and Treaty Rights in an area less impacted by industrial development.

Alberta has committed to develop and implement the Moose Lake Access Management Plan in an expedited fashion in a Letter of Intent of March 2015 signed among the late- Premier Prentice, Chief Boucher and the then Minister of Alberta Environment and Parks and by signing a renewed collaboration agreement in January of 2016, which sets out the process and timelines for the development of the MLAMP. The process contemplates the selection of a lead on behalf of Fort McKay and Alberta to prepare joint recommendations for consideration by the parties, followed by a draft plan to receive public consultation before approval by Cabinet.

In April 2015, Fort McKay and Alberta formed a planning team to work jointly on the development of the Moose Lake Access Management Plan and this team worked over the next several months to lay the foundations of the draft plan. FMSD invited the Alberta planning team to the community for a cultural awareness session to visit a trapline and Moose Lake, which was hosted by community members. This gave Alberta a better understanding of the challenges that Fort McKay faces in accessing their traditional lands and in the need for management and protection of traditional values and opportunities in the Moose Lake area.

FMSD held community focus group sessions in July 2015 seek input from community members on key issues and specific concerns associated with access, on specific access routes, and on key planning strategies related to land disturbance limits, presence of camps, setbacks of infrastructure, surface water and groundwater, wildlife abundance and management, traditional activities and cultural values.



Grave Crib Burial Grounds Moose Lake

Since the beginning of 2016 the FMSD has worked with Alberta through negotiations and recommendations for the development of a Special Management Zone around the Moose Lake area. One lead contact was chosen by each Government of Alberta and Fort McKay to develop a set of recommendations for the overall planning area and an area called the Special Management Zone (SMZ), which is a 10 km zone encompassing the Moose Lake Reserves, Moose and Buffalo Lakes. Part of the Lead's Mandate is to present their recommendations jointly to Chief and Council and the Ministers. The goal of having a Special Management Zone is to ensure that community members will have the ability to use and enjoy the Moose Lake Area by ensuring resource development in the Moose Lake area is done

so in a controlled, orderly and phased manner and that impacts of development on Fort McKay are minimized. Between April and June 2016 the joint leads consulted with industry who have leases in the 10km zone of the Moose Lake area, receiving written submissions. Extensions to the timelines set out in the renewed collaboration agreement were granted to accommodate industry consultation and the Fort McMurray wildfires.

In July 2016, the FMSD Lead and a Government of Alberta Lead submitted their recommendations which included; minimizing the resource development footprint in the Moose Lake and surrounding area, and limited large-scale industrial infrastructure. The Ministers of Environment, Indigenous Relations, Energy, and Fort McKay Chief and Council will be meeting on December to review and discuss the joint recommendations to begin the next steps in implementing the plan.

7.5 PROSPER LITIGATION

Prosper Petroleum Ltd is the only proponent in the Moose Lake area seeking approval of its application for an oil sands development before the completion of the Moose Lake Access Management Plan. Prosper will not agree to wait for the completion of MLAMP before it receive its Project approvals although it states it will modify its Project to adhere to the Plan when finalized.

This has led to litigation. Fort McKay has challenged, in the Courts, Alberta's decision to find consultation with Fort McKay adequate on the Project before fulfilling its promise to protect the Moose Lake area through the Moose Lake Access Management. This matter is before the Courts now and is scheduled to be heard in February 2018. Alberta has delayed the litigation by failing to file the record of its decision yet preventing scheduling of the hearing. Prosper and Fort McKay ultimately had to file a joint application to compel Alberta to take steps in the action.

The AER in May 2016 suspended processing Prosper's application to respect the ongoing negotiations on the Moose Lake Access Management Plan between Alberta and Fort McKay. On November 8, 2016 the AER informed Fort McKay of its decision to proceed with the Prosper regulatory application process due to the fact the Government of Alberta has not yet made a decision about the Moose Lake Access Management Plan. The AER could no longer delay Prosper's application indefinitely. The hearing panel members have already been appointed and the hearing is expected to happen in the first quarter of 2017.

8 CLOSING REMARKS

This Activity Report provides an update on the current and planned projects, programs and community initiatives the FMSD has been working on from 2014-2016. It is with great knowledge and dedication that the FMSD staff are able to achieve results and strive for a sustainable future for the Fort McKay First Nation. As we continue to work in the areas of community engagement, trapper relations, environment and regulatory, government relations and long term agreements, we look forward to continuing to update you on our future activities.



Sunset at Moose Lake

Recommendations in the Alberta Energy Regulator (AER) and Alberta Health Report Entitled: “Recurrent Human Health Complaints Technical Information Synthesis – Fort McKay Area”

<p><i>#1 – “Ambient air quality monitoring for acute concentrations of H₂S and SO₂ should be instituted for the purposes of emergency response (including potential evacuation) in the community of Fort McKay within one year. Monitoring should be conducted by EP, funded by industry, and acute thresholds for H₂S and SO₂ concentrations approved by Alberta Health in discussion with Fort McKay. Review of this monitoring program, including the need for additional parameters, should be conducted annually.”</i></p>
<p><i>#2 – “Policy guidance is needed on the appropriateness of odour thresholds for emergency response purposes in the community of Fort McKay.”</i></p>
<p><i>#3 - “Oil sands industry ERPs (or relevant sections) should be shared with the community of Fort McKay through a regulatory mechanism or instrument to be determined.”</i></p>
<p><i>#4 - “An AER odour complaint response protocol specific to the community of Fort McKay and consistent with odour management policy of the Government of Alberta is required. The protocol must consider the outcomes of this report, be transparent, establishes lines of communication between the AER, industry, and the community of Fort McKay, and improve current complaint closure and resolution rates. The protocol must also consider use of the most appropriate ambient monitoring datasets.”</i></p>
<p><i>#5 - “A standardized checklist for operating conditions be developed and used as a best practice by industry when an odour complaint is received by the AER and industry is contacted by the AER. The checklist should be developed collaboratively with the AER, industry, and Fort McKay, be filed by the AER with the complaint, and be included in the odour response protocol described in recommendation 4. Transparency and access to this checklist as part of complaint closure should be considered in protocol development.”</i></p>
<p><i>#6 - “Policy guidance is needed on the use and application of odour thresholds in the community of Fort McKay and to clarify the use of Environmental Protection Orders (EPOs) under EPEA by the AER to address offensive odours.”</i></p>
<p><i>#7 - “All parties should have access to real-time monitoring data collected by Environment Canada in the community of Fort McKay.”</i></p>

#8 - *“Accountability for supporting complaint response and notification of ground-level concentration exceedances through ambient monitoring should be clarified and included in the odour response protocol described in recommendation 4”.*

#9 - *“Assessment of fixed and fugitive emission sources focused on the parameters in the Air Quality Focal Parameter List (Section 6.6.4) is required based on the findings of this report. Polycyclic aromatic hydrocarbons must also be considered. The intent is to develop a roadmap outlining a systematic process for examination of the dominant emission sources for the parameters in the Air Quality Focal Parameter List for further consideration and refinement. Further work related to odours may be required pending direction from the Government of Alberta”.*

#10 - *“A targeted examination of emissions control through best management practices should be conducted on the basis of findings from Recommendation 9. A multiyear continuous-improvement program for implementation is required.”*

#11 - *“Air dispersion modelling conducted in EPEA approval applications and environmental impact assessments should consider odours generated during project activities.*

Additional guidance or review of the Air Quality Model Guideline to improve consistency across operators and applications for air dispersion modelling for odours is needed.”

#12 - *“Based on the findings of this report, reporting requirements for oil sands*

EPEA approvals with respect to air emissions should be reviewed to improve consistency across operators for monthly and annual reporting, units of measure, quality assurance and quality control to reduce reporting errors, and inclusion of additional parameters with AAAQOs. Consideration should also be given to transparency and public access to monthly and annual industry reports.”

#13 - *“Assessment of the health implications of the ambient monitoring results in this report to the community of Fort McKay. This assessment should consider the results of this report, specifically the Air Quality and Odorant Focal Parameter Lists (Section 6.6.4) where concentrations greater than standards, limits, objectives, and thresholds have been demonstrated. The assessment must consider data limitations and distributions, applicability of thresholds and the context of parameters exceeding thresholds in relation to background concentrations and other areas of Alberta.”*

#14 - *“Establish an integrated, consistent approach to air quality monitoring from source (industry emissions), to fence-line [Mildred Lake (AMS02), Mannix (AMS05) and Lower Camp (AMS11)] to ambient monitoring stations (AMS01 and Oski-ôtin). Changes to monitoring should initially consider contaminants on the Air Quality Focal Parameter List (Section 6.6.4.) Polycyclic aromatic hydrocarbons should also be considered in future monitoring plans.”*

#15 - *“Using the best available knowledge, improve consistency of H₂S and TRS monitoring, including examination of individual Sulphur compounds in the ambient air monitoring network in the oil sands;*

#16 - *“Development and application of ambient air quality policy for parameters that do not have AAAQOs in areas of odour, ecological and human health.”*

#17 - *“A Fort McKay Odour and Air Quality Task Force is required to oversee implementation of the recommendations in this report. The task force would be chaired by the AER; include the Government of Alberta, Alberta Health, and EP; and involve participation of industry, Fort McKay, WBEA, Environment Canada, and other parties as required.”*