

In cooperation with First Nations (Peace District), and the Oil and Gas Commission of British Columbia

"Healing the Land-An Elders Prospective"

Final Report









Submitted to OGC



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Project Overview - "Healing the Land - An Elders Prospective"

This project will play an important role in the integration of First Nations Traditional Knowledge into the oil and gas reclamation process. By providing first hand data collection and Traditional Knowledge information through elder site visits, this information can be used to design reclamation methods and techniques that reflect the Traditional Knowledge. The end result would be reclaimed sites that are utilizable by the First Nation Communities and/or reclaimed sites that reflect the Traditional Knowledge of that area.

The project will achieve its objectives through the following process:

- · First Nations Elder field visits to project well sites
- Designed Feedback Survey Document completed by each Band Elder
- Data Collated by area and ecological factors
- Develop reclamation methods and techniques based on Traditional Knowledge
- Report back to First Nations and get feedback
- Implement these methods and techniques in some of our operational trials
- Monitor the trial plots, and potentially incorporate portions of the data collection process where economically feasible

In carrying out the above process, we will find the most suitable reclamation methods and techniques to incorporate First Nations Traditional Knowledge, based on the area and/or ecological factors. Creating sites that are utilizable by First

Nations and/or reflect Traditional Knowledge in that area will benefit all parties involved including First Nations, Oil and Gas Companies, and the OGC.

Healing the Land - An Elders Prospective

Introduction

Many people feel that current reclamation practices leave oil and gas sites in an unusable state for First Nations Communities. Cumulatively these sites degrade and could potentially remove First Nations Traditional Knowledge from these areas of importance to the First Nations.

The process proposed in this project will use the information from the elder site visits to assess and compile a working solution to integrate these First Nations concerns in the development of reclamation methods and techniques.

Identification of Problems and Issues

As the oil and gas industry and First Nations are linked in their use of the landbase, and interaction is critical and growing for both parties, a process is required immediately to adapt actions such as reclamation to be sensitive to the needs of First Nations and their Traditional Knowledge. This can be achieved with a minimal impact on today's regulatory structure and application process, and there is a positive opportunity to integrate some of this need into present process.

This project will look to gain information on First Nations Traditional Knowledge and its retention, and will provide recommendations of how this need can be addressed and considered in such a way that both First Nations and the oil and gas industry can work hand in hand.

Project Rationale

This project is directly related to the SCEK fund. As oil and gas activity increases, and the interaction between First Nations and the industry proportionally increase, impacts on the interaction of the two parties must be strategically planned. The "Healing the Land – An Elders Perspective" project will be a first step in attaining community and First Nations input this

coordinated approach in Traditional Knowledge data collection, and what is critical to be retained and recorded.

By addressing these issues with a recommended process, and by working towards integrating them into oil and gas activity, potential conflict between industry and First Nations can be both addressed and potentially removed. This can be done with existing processes and has the potential to be integrated into today's protocols with little or no economic or time loss issues.

This project fits well into the goals and objectives of the SCEK fund. Traditional Knowledge data collection and understanding how the oil and gas industry affects disturbed areas in regards to traditional plants and wildlife habitat, is directly related to the "Community Environmental Knowledge", "Health and Safety" and "Eco System and Cumulative Impact Management" envelopes of the SCEK fund.

Benefits to Stakeholders

This project has many benefits to the stakeholders (First Nations Communities, and the Oil and Gas Industry) involved. By taking advantage of this opportunity to access the vast knowledge base of the First Nations Elders in regards to Traditional Knowledge in respect to oil and gas development, this project will provide vital information that can be useful to the OGC and the oil and gas industry in decision making. This will provide the OGC with credible community local knowledge that is area specific, which can then be properly and effectively managed for through simple "add on" strategies to existing processes.

First Nations, Government, and the Oil and Gas Industry will all benefit from learning more in regards to "real" traditional knowledge and the perceived impacts of oil and gas activities on local communities and First Nations. As all stakeholders are required to work in the same ecological and geographical areas, the need to fully understand each other's concerns is critical. If a solution is available that will meet both parties needs, it can be implemented. In order to reach this stage, the need to understand is the first step.

Purpose

To obtain input from First Nations Groups on what Traditional Knowledge data that needs to be collected at a pre-development stage. This information will provide a framework of what could be incorporated into reclamation methods and techniques to ensure abandoned oil and gas sites are reclaimed in such a way that they protect the environment, minimize impact, and are usable to First Nations Communities. By researching the data that could be collected on sites before they are disturbed, a true reflection of Traditional Knowledge impacts can be attained.

Objectives

This project aims to collect the commonly identified Traditional Knowledge of First Nations that can be incorporated into the oil and gas reclamation process. A template for collecting Traditional Knowledge information will be incorporated into the template from our existing project for collecting important ecological data on oil and gas sites before they are developed.

This project will also test operational methods and techniques for incorporating this information in the reclamation process, with the end goal of creating sites that are usable to the First Nations Communities and/or creating sites that reflect the Traditional Knowledge of the area the sites are in.

Within our current project and budget, some of these methods and techniques for integrating the Traditional Knowledge into the reclamation process will be tested through trial plots on a variety of oil and gas sites. These trial plots will test the feasibility of implementing these "critical needs" into the reclamation process.

Methods

- Step 1 Contact each of the First Nations stakeholders to provide an overview of our project and objectives we are seeking to accomplish. This has been completed.
- Step 2 Attain a quote for services of First Nations Elders to provide the time of one day to visit local sites, and give feedback to us on the "Critical Needs" of items that need to be addressed from a Traditional Knowledge point of view. This is completed.
- Step 3 Each Band will be scheduled to spend one day completing a field visit to sites that are geographically located within the traditional area identified for each band. A Monashee Resources Ltd crew will accompany the Elders providing information on our reclamation trial treatments that are occurring on the sites, and will also record all vital information that the Elders provide in relationship to TEK.

This step will allow for showcasing of our projects goals and actions that are being looked at to be put in place to mitigate impact on traditional lands, and will provide opportunity for First Nations direct input into the process as it is researched and developed. This data and information will be assessed and incorporated into our final deliverable at the "Pre Site Assessment" stage Part 3 of the Prosperity Through Unity Research Project.

Step 4 Following the completion of all field visits, each attending Elder will provide input on the information recorded by Monashee that was deemed pertinent to the individual group. This will be provided to Monashee Resources Ltd by way of a <u>designed</u> feedback survey document.

The designed feedback document will be created following the field visits to ensure that all areas of concern are noted on this form, and to focus, direct, and manage the scope of the varied responses. Each Elder will complete and sign this form, and submit to MRL, where it will be compiled with the feedback from all of other community representatives.

- Step 5 The designed feedback survey documents will be collated and a report of the findings will be completed. The information will be presented in such a way that one will not be able to link it to the individual elder that made the contribution.
- Step 6 This project will give an opportunity for the First Nations to see the efforts of the OGC and the oil and gas industry in regards to Traditional Knowledge integration into reclamation. This will also provide an opportunity for the First Nations to give feed back into our process.
- Step 7 The commonly identified Traditional Knowledge will be applied to our current reclamation research trials in the "Prosperity Through Unity Project". This will test the feasibility and techniques of implementing Traditional Knowledge into the reclamation process.



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"Healing the Land - An Elders Prospective" Project Summary

Funded through the Science and Community Environmental Knowledge Fund, Monashee Resources is piloting an additional component to their Prosperity through Unity Research Project. This project entitled "Healing the Land – An Elders Perspective" will have First Nations Traditional Knowledge input through participation from Doig River First Nation, Blueberry River First Nation, West Moberly First Nation, Saulteau First Nation, Fort Nelson First Nation, Prophet River First Nation, Halfway River First Nations, Kelly Lake First Nation, Kelly Lake Metis Settlement, Kelly Lake Cree Nation, and Mcleod Lake Indian Band.

This project will play an important role in the integration of First Nations Traditional Knowledge into the oil and gas reclamation process. By providing first hand data collection and Traditional Knowledge information through elder site visits, this information can be used to design reclamation methods and techniques that reflect the Traditional Knowledge. The end result would be reclaimed sites that are utilizable by the First Nation Communities and/or reclaimed sites that reflect the Traditional Knowledge of that area.

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In carrying out the above process, we will find the most suitable reclamation methods and techniques to incorporate First Nations Traditional Knowledge, based on the area and/or ecological factors. Creating sites that are utilizable by First Nations and/or reflect Traditional Knowledge in that area will benefit all parties involved including First Nations, Oil and Gas Companies, and the Oil and Gas Commission.

The process carried out was a field meeting on existing well sites with Monashee Resources Ltd explaining our present processes being completed within our SCEK Prosperity Through Unity Project.

Each participant was asked both in the field visit and via a questionnaire, what each group deemed an important step that they would like to see incorporated into the existing reclamation of well sites as seen from the First Nations Community perspective. This questionnaire has been attached to this final report with the most common answers from all groups. (Appendix 1)

Interest in this process across the board of participants was accepted and produced a high level of interest in the project.



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Appendix 1.

Appendix 1 – Cumulative Responses to our Questionnaire.

Healing The Land - An Elders Perspective Questionnaire

- 1) The current COR guidelines require: downhole securement, recontouring, drainage pattern restoration, contaminant testing, and 80% vegetation cover with an OGC approved grass/legume seed mix. Do you feel these requirements meet the communities' needs for restoring these sites?
 - We do not forsee these requirements to be an issue at this time.
 - No. We feel that it is important that the forest and vegetation cover taken be reinstated to try and create the original natural state the area was in prior to development.
 - Yes, however we would like to see more native species seeded.
- 2) Some of the Identified end-land use objectives for these sites include: reforestation, traditional uses, forage production, and recreation. What are some of the end-land uses your community feels are important?
 - Measuring species composition change in treated ecosystems by completing wildlife assessments, breeding bird surveys, amphibian counts, vegetation cover (vascular and non-vascular plants).
 - The harvesting of medicinal and spiritual plants, roots, and berries.
 Along with trying to bring back the animal population that was utilized in this area prior to disturbance.
 - Reforestation of spruces, poplar and birch.
 - Traditional Uses and Reforestation.
- 3) What treatments could be done to achieve the above end-land use objectives and what role could community member's play?
 - Environmental monitoring by the community. Also being a oart of the pre and post site assessment process.
 - It is important to keep the elders involved. They are the people that used this land for sustainability long before there were roads or development.

- Replanting seismic lines.
- Monitoring and inspecting from drilling to reclamation.

4) Are there any current issues your community has with Oil and Gas development on your traditional lands? If yes, please provide example(s).

- Yes. Road building and soil conservation. Soil disturbance is an issue for stream damage and for vegetation and reforestation. Need to ensure restoration projects preserve important habitats instead of grass seeding. (ie-preserve moose trails, etc.)
- Yes. Lack of proper cumulative impact assessment.
- Yes. Are being brought forth through due process.

5) If there are any current issues listed above, could reclamation techniques be considered as a mitigating intervention?

 Yes. Restoring keystone species (lodgeploe pine, spruce) to offset overall negative impacts in one area by undertaking reclamation in one area to makeup for losses in another area.

6) What species of trees, shrubs, and herbs are important for food and/or medicinal purposes?

- Mountain Ash, bear root, alder, choke cherry, yarrow, black snake root.
- This is a sensitive question. Try to restore the vegetation that was originally there.
- Tamarack, poplar trees, berries, willow
- All species were used by the group for centuries before development.

7) What species of trees, shrubs, and herbs are important for wildlife in you traditional area?

- Huckle berries, willow, low and high-bush cranberry, raspberry stems, bear berries.
- All of the trees, shrubs, and herbs that were there prior to development.
- Saskatoon berries, birch trees.
- All species are part of the eco-system. Impacting one species impacts the eco-system.

8) Is their wildlife in your traditional area that is being impacted by industrial development? If yes, please provide example(s).

- Yes. Loss of habitat and disruption in the area leads to change in the number and behaviour of wildlife. Reclamation of disturbed areas – however species return at different rates and times.
- Yes. Elk, moose, deer, fur bearing animals, bears, rodents and birds are all being impacted.
- Yes. Deer, moose, and bear.
- Yes. Moose licks, Wildlife habitat and feeding areas.

9) Are there any recommended strategies your community has for mitigating impacts on the wildlife, wildlife features, and/or important vegetation? If yes, please provide example(s).

- Identify species at risk, making sure there is special consideration in the planning process. (ie-willow restoration)
- Utilize and create more wildlife coradores. This will require cooperation
 of all ministries and industries involved in the day to day development in
 these areas.
- Stay away from mineral licks.
- Minimize impacts on trap lines.
- Respecting the habitat and gathering areas.

10) Was the site visit with Monashee Resources informative and seen as a value to your community?

- Yes. We were satisfied with the information provided to us.
- Cannot comment at this time. Can comment when reports and findings are stated.
- Yes.
- Yes. Most definitely.

11) What do you think about Monashee Resources' pre-site / post-site assessment process, for restoring the site to what was originally there?

- Provided that the environment/habitat is properly rehabilitated at the completion of the development to ensure natural indigenous species are returned and/or used in the reclamation.
- Great.
- The best idea you people have come up with. We believe it will work.



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In summation, the project was completed with a positive outcome and response. Scheduling of groups was extensively time consuming, however, our overall response was exceptional.

We have taken this data and will incorporate as much of it as possible into our Pre site assessment development that we are completing for Part III of our Prosperity Through Unity Project.