

ABSTRACT

Presenter: Diane Brent,

Development Assessment Coordinator
Energy & Corporate Policy Branch
Department of Energy Mines & Resources
Government of Yukon

Title: Yukon's Development Assessment Process (DAP) – Status and Implications to the Oil & Gas Industry

The Yukon is entering an entirely new development assessment regime as set out in the Yukon Land Claims agreements. The *Yukon Environmental and Socio-economic Assessment Act* (YESAA) and its regulations establish a process implemented by an independent Board and Designated Offices (DOs) located in six Yukon communities. The DOs and the Board will conduct environmental and socio-economic assessments of projects, which will result in recommendations to government Decision Bodies. Implementation planning continues at all levels, to be ready for full implementation of the legislation anticipated this Fall. The DAP is designed as a single assessment process which will serve federal, territorial and First Nations governments. Projects which currently require an environmental assessment under existing federal and territorial legislation, namely the *Canadian Environmental Assessment Act* and the Yukon's *Environmental Assessment Act*, will require an assessment under the YESAA. Most oil & gas activities will be subject to YESAA. The change to the oil & gas management regime will be at the environmental assessment phase of the permitting process. Currently, the assessments are generally done by government regulators; under the YESAA, they will be done by independent assessors.

PRESENTATION ABSTRACTS

Presenter: Ian Scott, CAPP (2 Abstract Presentations)

Abstract Title: An Oil and Gas Perspective on a Changing Environment

As an introduction to my presentation I will provide a high level overview of the oil and gas industry in the context of the international and North American market places, i.e. what is driving the demand for hydrocarbons? I will also focus initially on what industry's needs are for exploration and development such as a clear regulatory framework, a clear, consistent and timely EA process and consistent environmental standards. The presentation will address the regulatory framework in which industry operates. I will address CAPP's "Stewardship" program which is a compulsory for CAPP membership and which is based in part continuous improvement. In this context I will highlight some of the key best management practices that CAPP developed for its members.

Abstract #2 Title: Evolving Approaches to Minimize the Footprint of the Canadian Oil and Gas Industry" Ian Scott CAPP

An overview of new technologies and techniques to minimize the footprint of oil and gas activity. A look at best practices applied in new and innovative ways and creative responses to unique conditions.

Abstract Title: Barriers to the Deployment of Environmental Technologies in the Upstream Oil and Gas Industry

Presenter: Denis Gaudet, PTAC

This project set out to identify and assess barriers to environmental technology deployment in the Canadian upstream oil and gas industry, and to propose ways and means of overcoming these barriers.

The study found that:

- Deployment of environmental technology in upstream oil and gas is more difficult than in other sectors.
- Deployment of environmental technology is more difficult than for other types of technology.
- Deployment of environmental technology in Canada is more difficult than in other countries.

Barriers to increased deployment of environmental technology in upstream oil and gas include: Perception of environmental technology solutions as a "cost" as opposed to cost savings

- . Non-competitive returns on investment

- Small scale of many of the environmental technology solutions
- The short-term focus of the industry and financial markets
- Industry's reluctance to foot the up-front costs of environmental technology.
- Time required to implement the technology
- Regulatory inconsistency and uncertainty
- Measurement challenges
- Insufficient enforcement
- Prevailing attitudes

Despite all this, the upstream oil and gas industry has made progress in recent years. Reductions are occurring in several emissions categories. Flaring is perhaps the industry's greatest success story. It is clear, nevertheless, that there is room for improvement. In particular, there may be "low-hanging fruit" where environmental benefits are available using existing technology for no or minimal financial detriment to industry.

A "best-practice technology" theme is suggested in order to encourage deployment of environmental technologies without invoking an onerous regulatory or enforcement regime. The recommendations are essentially a series of enablers that will see best-practice environmental technologies not only developed and demonstrated but validated, deployed, shared and monitored, with the resulting "good news" better communicated.

**Abstract Title: Oil and Gas Development on Alaska's North Slope:
The Role of the U.S. Fish and Wildlife Service.**

Presenter: Jim Zelenak, Project Planning Branch,
Fairbanks Fish and Wildlife Field Office.
101 12th Ave., Room 110, Fairbanks, AK 99701.
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The U.S. Fish and Wildlife Service works with Federal and State agencies, regional and local governments, industry, private landowners and the public to avoid or minimize development-related impacts to public trust resources. Laws that guide the Service's participation include the Fish and Wildlife Coordination Act, Migratory Bird Treaty Act, Endangered Species Act, Marine Mammal Protection Act, Clean Water Act and National Environmental Policy Act. In accordance with these laws, the Service acts in an advisory role to encourage appropriate consideration of fish, wildlife and habitat resources during oil and gas leasing, exploration, permitting and development activities on Alaska's North Slope. By providing current resource information, evaluating potential impacts of proposed projects and alternatives, recommending alternatives that minimize impacts and proposing mitigation measures to offset project impacts, the Service tries to insure that fish and wildlife resources are factored equally into overall project planning. Service efforts focus on conserving biodiversity, high value habitats and subsistence resources; minimizing development footprint, oil spill potential, and infrastructure redundancy;

maintaining hydrological function, fish passage and migration corridors; restoring and re-using gravel from abandoned roads, airstrips and drill pads; and recovering listed and candidate species. As oil and gas activities expand across the North Slope and offshore in the Beaufort Sea, future challenges include landscape level planning, developing truly adaptive management strategies, filling critical data gaps with sound science, cumulative impact assessment and management of internationally important resources.

Abstract: The Development of an Ecological Landscape Model for Yukon Oil and Gas Best Management Practices.

Presenter: Kirstie Simpson, Sustainable Development Coordinator,
Oil, Gas & Mineral Resources Division, Energy Mines & Resources,
Yukon Government

The Oil and Gas and Mineral Resources Division of the Yukon Government is currently developing an Ecological Landscape Model for oil and gas exploration and development Best Management Practises. It is being developed as a web based product linking resource information, identified resource values, resource management objectives and Best Practices for the different regions in the Yukon. The model will allow the integration of a viable economic oil and gas industry with the conservation of Yukon's biodiversity, as well as ensure that competitive economic, and subsistence interests are considered in the planning, management and implementation of oil and gas activity. Utilising this model will also help ensure that the standards of care being applied in the north are at a landscape level that can reflect regional ecological, social, cultural and economic values.

The intent of the Best Practices Guide is also to:

- improve the efficiency, consistency and defensibility of planning and regulatory decisions based on current scientific understanding and public policy objectives;
- allow industry, government and stakeholders to identify issues, and propose mitigative strategies in a value-free or pre-project setting;
- assist in the long term planning for research and development initiatives and cumulative effects modeling;
- focus information gathering and assessment on the issues of most concern from a scientific and public policy perspective;
- help industry focus on creative and innovative approaches that will protect values that are important to northerners.

Abstract Title: TransCanada and Environmental Stewardship in the Boreal Forest

Presenter: Karen Etherington, Senior Environmental Leader,
Community Safety & Environment, TransCanada Pipelines

TransCanada is a leading North American energy company. The 41,000km TransCanada gas transmission system includes over 20,000km of pipelines and almost 1,000 facility sites in the Boreal Forest. In our experience, a conversation about environmental stewardship in the boreal forest needs to include the concepts of responsibility, performance, respect, quality, commitment, and protection. We recognize these concepts as being fundamental to our role as a gas transmission pipeline company and only one of the many activities on this landscape. Some of the challenges for a pipeline company include interfaces with numerous other users and resource management interests. Our experience has also included harmonization of multiple policy directions from federal and provincial authorities to local interested groups. To address these issues, TransCanada has seen success in multi-stakeholder initiatives, our own corporate programs, as well as project-specific activities. As we continue to be a part of the boreal forest landscape, TransCanada is committed to ongoing participation in efforts to protect the integrity of the boreal forest we all share.

Presenter: Mark Major (2 Abstract Presentations)
Senior Environmental Coordinator
ConocoPhillips, Alaska, Inc.
P. O. Box 100360, Anchorage, AK 99510-0360, U. S. A.

Abstract #1 Title: Footprint Reduction in Alaska North Slope Oil and Gas Exploration and Development

This presentation discusses the evolution of Alaska North Slope exploration drilling operations and development operations and how technological changes and improvements have resulted in a reduction of the environmental footprint associated with these activities. After providing background information about Alaska's North Slope, an overview of past vs. current exploration drilling technology and practices is shown. The presentation then switches to development activities, with a time line and pictorial view of development drill sites provided. The advancements in drilling technology that have led to a major reduction in development drill site size are discussed. Photos of the Alpine oilfield, which is the newest North Slope onshore oilfield, are shown. The presentation concludes with drawings of two Alpine satellite drill sites that are under construction this winter season and other drill sites planned in future years.

Abstract #2 Title: Understanding, Evaluation and Application of Indigenous Knowledge in Oil and Gas Exploration: Applicant and Regulatory/Affected Party Perspectives

Authors: Gordon Brower
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Planning Department
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Mark Major
Senior Environmental Coordinator
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P. O. Box 100360, Anchorage, AK 99510-0360, U. S. A.

This presentation discusses how ConocoPhillips Alaska, Inc. (CPAI) goes about factoring in local knowledge (LK) and traditional knowledge (TK) into its oil and gas exploration activities on the North Slope of Alaska and how well it has worked. It provides information on LK/TK data and information sources, exploration drilling preparatory actions and activities, and cites regulations associated with Alaska North Slope oil and gas exploration operations. CPAI's exploration drilling field operations are discussed, with a focus on the Puviaq exploration well, which was drilled in a remote area of the National Petroleum Reserve-Alaska (NPR-A) in the winter of 2003. The results of the use of LK/TK in exploration operations are discussed. The paper concludes with summary viewpoints from a regulator/affected party's perspective and CPAI's (i.e. the applicant's) perspective.

Abstract Title: How Songbirds Are Affected by Seismic Lines

Presenter: Craig Machtans, Canadian Wildlife Service, Environment Canada
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Seismic lines are linear clearings of forest created for the purpose of locating hydrocarbon reserves. The lines are often pervasive across landscapes with oil or gas potential. While the visual impact of seismic lines is obvious and long lived, there have not been any studies on how these narrow openings affect birds in the boreal forest. A detailed two year study was conducted near Fort Liard, NWT, to assess the impact of seismic lines on forest songbirds. The study design included data from plots before and after seismic lines were cut, and also from plots with no activity. Two seismic lines (6 m wide), perpendicular to each other, were cut through the centre of half of the twelve study plots. The location and extent of each territory of each bird on all plots was determined (>1800 territories), 230 birds were captured and banded with colour leg bands, and 211 observations of individual birds were made while they were near seismic lines. The presence of two seismic lines in each plot (~5.7km of seismic lines per km² of forest) had

no detectable effect on the overall density of the bird community. Overall, there were no fewer territories overlapping seismic lines than comparable forest. Species that nest on the ground or in shrubs did significantly increase the size of their territories when they were directly over a seismic line. This likely indicates the birds perceived the seismic line as sub-optimal habitat within their territory, but not so poor as to move the entire territory away from the disturbance. The only species that showed a consistent, negative response to the seismic lines was a warbler called the Ovenbird. Ovenbirds moved their territories away from seismic lines and had significantly fewer territories on study plots once seismic lines were cut. Many other species showed no consistent response. Much of the data on other species, including behavioral observations, confirmed that their territories overlap the seismic lines. We did not compare reproductive success between birds that lived over seismic lines and those that did not, so some effects may have gone undetected. However, nests of several species, found incidentally immediately adjacent to seismic lines, successfully hatched and fledged. It appears that seismic lines are not as critical an impact for many songbirds as other types of development in the boreal forest that either permanently remove or alter larger areas of forest habitat.

Abstract Title: The Boreal Caribou Committee and the Hay Zama Wetlands Committee – a Multiparty Collaborative Approach to the Development of Industrial Guidelines for Woodland Caribou Habitat and Operation in a Sensitive Wetland in Northern Alberta:

Presenter: Pat Cabezas
Program Manager of the Boreal Caribou Committee, Co-chair of the Hay-Zama Committee, and President of the Alberta Arbitration and Mediation Society

Very often, the key for the successful implementation of industrial guidelines for activities in sensitive areas, due to environmental/cultural concerns, is the development of a relevant process. Stephen R. Covey told us that sometimes ‘The way we see the problem **is** the problem’. But most of the time, the way we approach the problem **is** the solution.

We shall informally discuss this concept by using two successful examples, in the Province of Alberta, of collaborative approach to the development of industrial guidelines generated ‘from the neighbourhood’: The Hay-Zama Wetlands Committee and the Boreal Caribou Committee.

Presenter: **Dr. Fiona Schmiegelow (2 Abstract Presentations)**
University of Alberta

Abstract #1 Title: **Woodland Caribou – Use of Empirical Models to Maintain and Restore Habitat and Mitigate Risks**

Woodland caribou are a threatened species throughout Canada, and special management is required to ensure that sufficient habitat is maintained. Quantifying habitat requirements for caribou requires reliable data on animal use of landscapes and response to human activities. I will discuss the development and application of habitat-based models to land-use planning, with an emphasis on how they can inform efforts by the energy sector to maintain and restore caribou habitat.

Abstract #2 Title: **Regional Response of Boreal Birds to the Energy Sector Footprint**

A number of boreal bird species are sensitive to the amount and spatial distribution of habitat in forested landscapes. Infrastructure associated with energy sector activities, such as seismic lines, pipelines, roads and well sites can result in both loss and fragmentation of habitat for forest birds, and compound the effect of other disturbances. I will discuss the results of recent research designed to better understand such relationships, and to build predictive models for use in landscape projections, exploration of ecological thresholds and the design of adaptive management experiments.

Abstract Title: **Caribou and Development in the Carcross Winter Range**

Presenter: **Rob Florkiewicz, Regional Biologist,**
Department of Environment, Government of Yukon

The winter range of the Carcross Woodland Caribou Herd encompasses the most densely human populated area of the Yukon. While industrial activity occurring within the Southern Lakes region is currently low, land disposition is relatively high constraining where additional human activity can occur. The incremental expansion of residential development, the associated transportation infrastructure and recreational pressures within the Carcross caribou herd winter range has become a concern. The combined influence of all disturbances may interact negatively resulting in possible adverse effects on this caribou herd. This work was initiated as a first step in identification of the key issues and evaluation of possible development thresholds for this area. We determined the direct human footprint of 4% of the winter range and estimated a zone of influence ranging from 16.7% to 21.3% under the existing land uses. Because the distribution of caribou and their key habitats are not uniform within this range, the ranking of habitat value is required to ensure meaningful contrasts with other assessments. Implications for additional development within this range will be discussed.

Abstract Title: Flying in Sheep Country

Presenter: Jean Carey, Sheep and Goat Biologist,
Department of Environment, Government of Yukon

Sheep traditionally live their lives in a very predictable environment. Citizens of “Sheep Country” have a clearly defined code of “good manners” and appropriate reactions to visitors in their mountain home. My presentation will give an overview of life in sheep country and offer suggestions about how we can be on our best behaviour when we visit.

Abstract Title: Preventing Wildlife Injuries from Right-of-Way Brushing

Presenter: Morris George, Environmental Assessment Analyst
Department of Environment, Yukon Government

Wildlife may be sustaining injuries from long, splintered stumps left after brushing the secondary growth of vegetation along highway and power line right-of-ways. Members of the Carcross Tagish First Nation and the Southern Lakes Caribou Steering Committee have found moose and caribou with long splinters of wood imbedded in their lower legs.

Although there is no direct evidence, it is conceivable for example, that during winter, such stumps would be under snow cover and stepped on blindly by these larger animals, while passing through or foraging on the right-of-ways.

Yukon Department of Environment is recommending a pro-active approach to reduce this potential hazard, by brushing in a manner that cleanly cuts vegetation near to or at ground level.

Abstract Title: Environmental Study Programs and Research Sponsored by ConocoPhillips Alaska, Inc.

Presenter: Caryn Rea, Sr. Staff Biologist, ConocoPhillips Alaska, Inc.
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ConocoPhillips Alaska (CPA) has been operating on the North Slope of Alaska for more than 30 years. CPA has supported an environmental studies program since the discovery of Prudhoe Bay. Angus Gavin, an ecologist from Winnipeg, Manitoba, was the first “ecologist in residence” at Prudhoe Bay, from 1969 through 1977. He spent the entire spring and summer of those years (April through September) documenting wildlife use of the areas as well as monitoring camps for litter or spills. Gavin produced a 1973 publication documenting his 5 years worth of research on baseline conditions in Prudhoe Bay and responses of wildlife to activities occurring with pipeline construction. This

program continues today and supports scientific data collection to support exploration and development decisions, in an effort to minimize the effects of our activities on the environment and local communities. CPA encourages collaboration with federal, state, and local regulatory agencies, as well as universities to collect data that will assist land managers and regulatory staff with decision making. With expansion of activities to the west into the National Petroleum Reserve-Alaska, the importance of collaboration in research is imperative in order for all stakeholders to have the information necessary for development with minimal impacts. This talk will present an overview of the environmental studies program supported by ConocoPhillips in Alaska.

Abstract Title: The Use of Biophysical Mapping in Integrated Land Use Planning and Resource Management: the North Yukon Biophysical Mapping Project

Presenter: Shawn Francis, M.Sc., P.Bio.
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The North Yukon Planning Region encompasses 67,000 km² of the Taiga Cordillera Ecozone. The Planning Region is the Traditional Territory of the Vuntut Gwitchin First Nation. Oil and gas exploration and development is an important land use issue within the planning region - much of the area is underlain by geological conditions considered appropriate for hosting relatively high oil and gas potential.

To assist in the development of the North Yukon regional land use plan, a regional biophysical map was created for the entire planning area. The North Yukon biophysical mapping project is part of a broader territorial initiative and a variety of partnerships were created to develop the North Yukon mapping. This is the first regional planning exercise in Yukon to have consistent regional biophysical mapping available at scales appropriate to land management decision-making. The purpose of this presentation is to discuss how the North Yukon Planning Commission and its many plan partners intend to use regional biophysical mapping in the context of integrated land use planning and resource management.

**Abstract Title: The Oil & Gas Business From a Forester’s Point of View:
Changes and best practices we are seeing on the ground**

Presenter: Myles Thorpe, Yukon Government Forestry Branch

The petroleum industry (mainly natural gas exploration and production) has been operating in the Fort Nelson area for over 50 years. With limited (winter) access into the gas fields, known as the “patch”, the industry was largely left alone to do its business. Over time the footprint of the gas industry, as well as other resource or “dirt” industries, has accumulated; and the public expectations have become more demanding, both in the existing gas fields and in particular, the new exploration areas. We have seen some major improvements in the Fort Nelson Forest District.

This paper will discuss the oil and gas business from a forester’s point of view. I will give you a brief history of the petroleum development in this district, our resource strategic planning, and some cultural differences between the forestry and oil and gas business. The visual (and other) impacts of the industry are noticeable but my intent is to show you some of the changes or perhaps best practices we are seeing on the ground.

**Abstract Title: Enbridge Norman Wells to Zama Pipeline Monitoring: An
Overview of Monitoring Results Since Construction in 1981**

**Presenter Shaun Kavajecz Supervisor, Environment Business Development
Enbridge Energy Company Inc.**

Enbridge owns and operates a 323.9 mm (12.75 inch) outside diameter crude oil pipeline from Norman Wells, Northwest Territories, Canada to Zama, Alberta, Canada. The Norman Wells pipeline is approximately 869 kilometers in length, and is the first underground crude oil pipeline to be constructed and operated in a discontinuous permafrost environment.

Environmental protection and mitigation measures were incorporated into early design and construction strategies. On-going monitoring programs were defined prior to two years of winter construction and an April 1985 in-service date. Over the past twenty years, Enbridge has implemented a long-term monitoring program to assess the ongoing impacts of the pipeline on the environment and vice-versa. This presentation will focus on the monitoring and surveillance programs that Enbridge has implemented over this time, key learnings from these programs, and the pursuit of new advancements in science, technology and understanding, and their application to the Norman Wells Pipeline.

Abstract Title: Best Management Practices Associated with Stream Crossings

**Authors: P. Tobler, R.P.Bio. (BC), CPESC¹ and
R.J. Redden, R.P.Bio (BC), CPESC¹
EDI Environmental Dynamics Inc.**

Stream crossings (both pipeline and access roads) have the potential to cause significant impacts to the aquatic environment. Potential impacts include obstruction of fish passage (habitat alienation), as well as short and long-term (chronic) water quality impacts (i.e. sedimentation).

Within recent years, the oil and gas industry has been developing and using Best Management Practices (BMPs) to mitigate the impacts of linear development on the environment. *Environmental Dynamics*, a natural resource consultant with extensive experience in fisheries biology and erosion & sediment control, has worked for numerous oil and gas companies in northern Canada to mitigate the impact of their stream crossing works. We propose to share some of our experiences during this symposium.

The first step in implementing BMPs with regard to stream crossings is to determine the fisheries and aquatic values in the area. Methods to determine the fisheries and aquatic values include gathering existing information (including Traditional Knowledge), completing watershed inventories, and collecting site-specific information. Utilizing this knowledge, BMPs can be developed on a site-specific basis to ensure that fish populations are not significantly impacted by linear developments.

Best Management Practices include selection of appropriate crossing structures, construction techniques and location selection. An overview of factors that should be considered during project planning will be provided. In addition, various BMP's to control erosion/sediment and protect fisheries values during the actual on the ground construction works will be presented.

¹ CPESC: Certified Professional in Erosion and Sediment Control

Abstract Title: Mackenzie Delta Low Ground Pressure Vehicle Trial

Presenter: ConocoPhillips Canada

ConocoPhillips Canada (North) Limited (CPC) and its joint venture partner ExxonMobil Canada Properties (EMC) have proposed development of the Parsons Lake sweet gas (Significant Discovery Licences (SDLs) 32 and 30). This gas field is located midway between Inuvik and Tuktoyaktuk and is one of three anchor fields identified for the Mackenzie Gas Project. CPC conducted a research program in this area during late winter 2003/2004 that included a low ground pressure vehicle (LGPV or CATCO) trial. The

program was designed to evaluate the technical viability of LGPVs for accessing landlocked Mackenzie Delta sites such as Parsons Lake and confirm that they cause minimal damage to soil, permafrost, and vegetation.

A monitoring program was conducted by IMG-Golder to document effects of LGPV passage on snow, soil, permafrost, and vegetation at 500 to 600 m intervals along the 50 kilometre route. Wildlife surveys were also flown in the program area during the trial by Kavik-Axys in cooperation with GNWT Resources, Wildlife and Economic Development to document barren-ground caribou distribution and relative abundance.

The winter trial confirmed that CATCOs are a technically viable option for winter hauling without surface preparation in the Parsons Lake area. CATCO units initially had difficulties in areas with steep slopes or deep snow, but no resulting surface disturbance was observed. CATCO performance and speed improved as the trail was filled and packed with blown snow.

As expected, snow densities were significantly higher in the CATCO tracks when compared to snow outside the tracks, but winter ground hardness (as measured by slide hammer penetrometer) did not appear to change in the CATCO tracks. Caribou remained in the Parsons Lake wildlife survey area during the entire winter program. Little vegetation damage was documented, and government and company representatives had difficulty locating the CATCO trail from the air in summer 2004. Soil temperature, soil resistance, active layer depth measurements and plant vigour observations of in-track plots were not significantly different from those outside the tracks. Regulators concluded that tundra damage had not occurred as a result of the trial.

Abstract Title: Soil Bioengineering for Restoration of Difficult Sites

**Presenter: David F. Polster, M.Sc. R.P.Bio.,
Polster Environmental Services Ltd.¹**

Soil bioengineering is the use of living plant materials to perform some engineering function. In its simplest form, soil bioengineering can be the use of seeding to control erosion. However, soil bioengineering is also used to treat steep, unstable slopes as well as a wide variety of erosion problems. Retaining walls built of living cuttings provide an effective solution to over-steepened slopes while drains built of bundles of cuttings treat sites where excess soil moisture is causing stability problems. Filters can be constructed of living cuttings to hold soil on thawing permafrost. By using pioneering plants (willows, cottonwood and red-osier dogwood) in soil bioengineering systems, treated sites are re-established in the natural successional trajectory that will lead to a self-sustaining vegetation cover. Soil bioengineering can be used anywhere that these species grow. This paper presents a variety of cost-effective soil bioengineering techniques that for control of erosion and treatment of unstable slopes. Examples come from over 25 years of experience of the author in the use of soil bioengineering in Western Canada.

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Abstract Title: Yukon Oil and Gas: Where have we been ... where are we going?

**Presenter: Debra Wortley, Land Manager
Oil and Gas Management Branch, Yukon Government**

This presentation provides a short background on the management of Yukon's oil and gas resource, legislations, history of oil and gas activities, northern pipelines and current activities. The responsibility for the management of the territories petroleum resources was transferred from the federal government in 1998 and since then the Yukon and First Nation's governments have made great strides in developing a common regime to manage those resources. Yukon Government expects that the potential construction of the Mackenzie and Alaska Highway pipelines will result in a greater demand on Yukon's petroleum resources. Until this occurs however, we have an opportunity to conclude the development of Yukon legislation as well as best management practices.