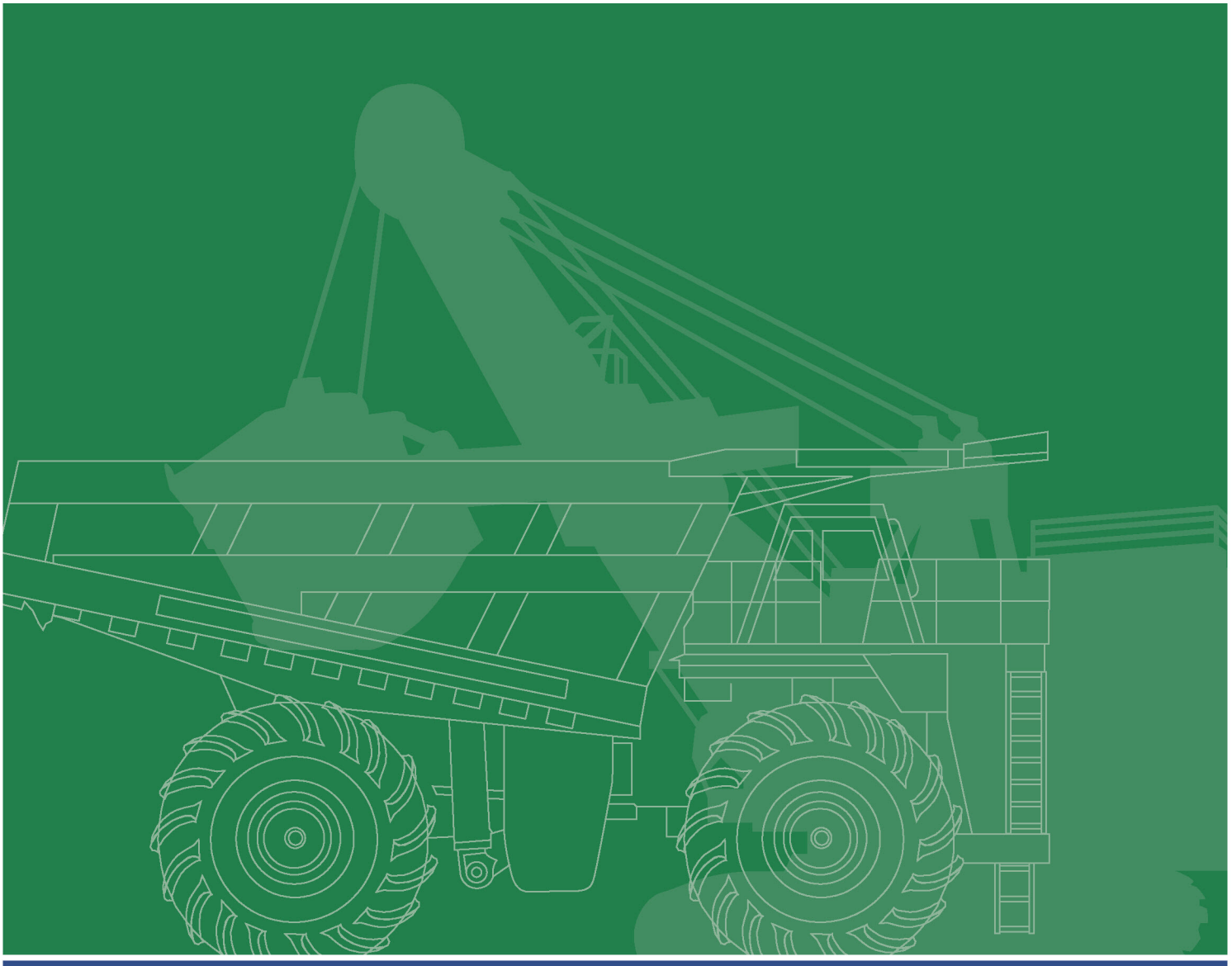
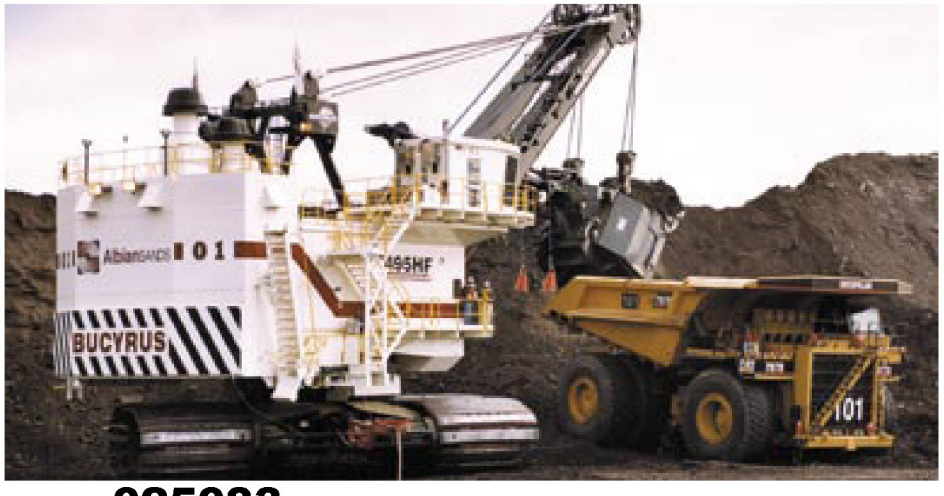


Jackpine Expansion & Pierre River Mining Areas

Project Description



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General Information

Shell Canada Limited's (Shell) oil sands business is held by a wholly owned partnership, Shell Canada Energy, which is the majority owner and project administer of the Athabasca Oil Sands Project. The Athabasca Oil Sands Project (AOSP) is a joint venture among Shell Canada Energy (60%), Chevron Canada Limited (20%) and Western Oil Sands L. P. (20%). Shell has been involved in the Athabasca region of northeastern Alberta since 1956 and is currently constructing Albian Sands Expansion 1, which consists of mining and extraction facilities at Jackpine Mine, and expansion of froth treatment facilities at the existing Muskeg River Mine. Albian Sands Energy Inc., a company created by the joint venture, operates the Muskeg River Mine.

Shell, as the proponent, is proposing to:

- expand the Jackpine Mine - Phase One (JP1) mining area (JP Expansion), increasing approved production capacity from 200,000 barrels per calendar day (bbls/cd) to 300,000 bbls/cd; and
- develop new mining areas known as Pierre River Mining (PRM) Areas, with production capacity of approximately 200,000 bbls/cd.

Project Description and Public Disclosure

A project description was disclosed to a variety of stakeholders through distribution of a public disclosure document on 24 January 2007. Stakeholders include federal, provincial and municipal government agencies, and directly affected First Nations, Métis communities, environmental non-government organizations, community groups and industry participants. Appendix 1 contains a detailed list of the government departments, groups, and associations who received the Public Disclosure and who will also receive this Project Description.

Public Consultation

Shell's consultation program for the JP Expansion and the PRM Areas will utilize Shell's existing ongoing consultation processes and will build upon existing relationships with neighbouring communities, including First Nations and Métis groups, special interest groups and non-government organizations representing broader public interests, and the many multi-stakeholder forums and initiatives within the Regional Municipality of Wood Buffalo. The objective of the consultation program will be to engage all interested parties in open and substantive discussion about their respective concerns, in an attempt to address these concerns through negotiation, and where possible, accommodation and agreement. Timely and comprehensive information on the JP Expansion and PRM Areas will be provided through a variety of means including documents, one-on-one meetings, newsletters, a toll-free telephone number, websites and open houses.

Early consultations with key stakeholders, including First Nations, have been held to provide them with an overview of the proposed expansion plans. These ongoing discussions also reviewed the future consultation processes to be used to provide these stakeholders with the necessary information and resources to review the potential impacts associated with the development of the JP Expansion and PRM Areas. Future consultations will focus on the development of long term beneficial mitigation strategies.

In addition, Shell continues to be actively involved in initiatives in the Regional Municipality of Wood Buffalo. These initiatives provide excellent opportunities for further consultation with multi-stakeholder groups and communities. These regional multi-stakeholder initiatives include the Cumulative Environmental Management Association (CEMA), the Regional Aquatics Monitoring Program (RAMP), the Wood Buffalo. Environmental Association (WBEA), the Athabasca Tribal Council/Industry Working Group, the Regional Infrastructure Working Group (RIWG) and others. Shell will continue to take an active role in these initiatives as part of its consultation program.

Environmental Assessment Process

The proposed JP Expansion and PRM Areas are subject to the Alberta environmental assessment process as outlined in the Alberta Environmental Protection and Enhancement Act. A full environmental impact assessment including socio-economic impacts and cumulative effects will be completed and filed as part of the Project approval application. Alberta Environment will develop the Terms of Reference by which the assessment will be undertaken. The Terms of Reference will be finalized based on input from other parties, including Federal regulators, the public and interested parties. The environmental assessment will then be prepared in accordance with the Terms of Reference.

Subsequent to the environmental impact assessment being deemed complete by Alberta Environment, the Alberta Energy and Utilities Board (EUB) will be notified, and the Project applicant. The EUB's mandate is to determine whether the project is in the public interest having regard to the purposes set out in its governing legislation, which includes a consideration of the Project's social and economic effects and its effects on the environment. Dependant upon any outstanding public concerns, the EUB may initiate a public hearing process. This process may also be the subject of a co-ordinated Federal – Provincial joint review panel.

Contacts

All correspondence relating to the JP Expansion and PRM Areas should be addressed to:

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Federal Involvement

There is no federal government financial support anticipated for the JP Expansion and PRM Areas.

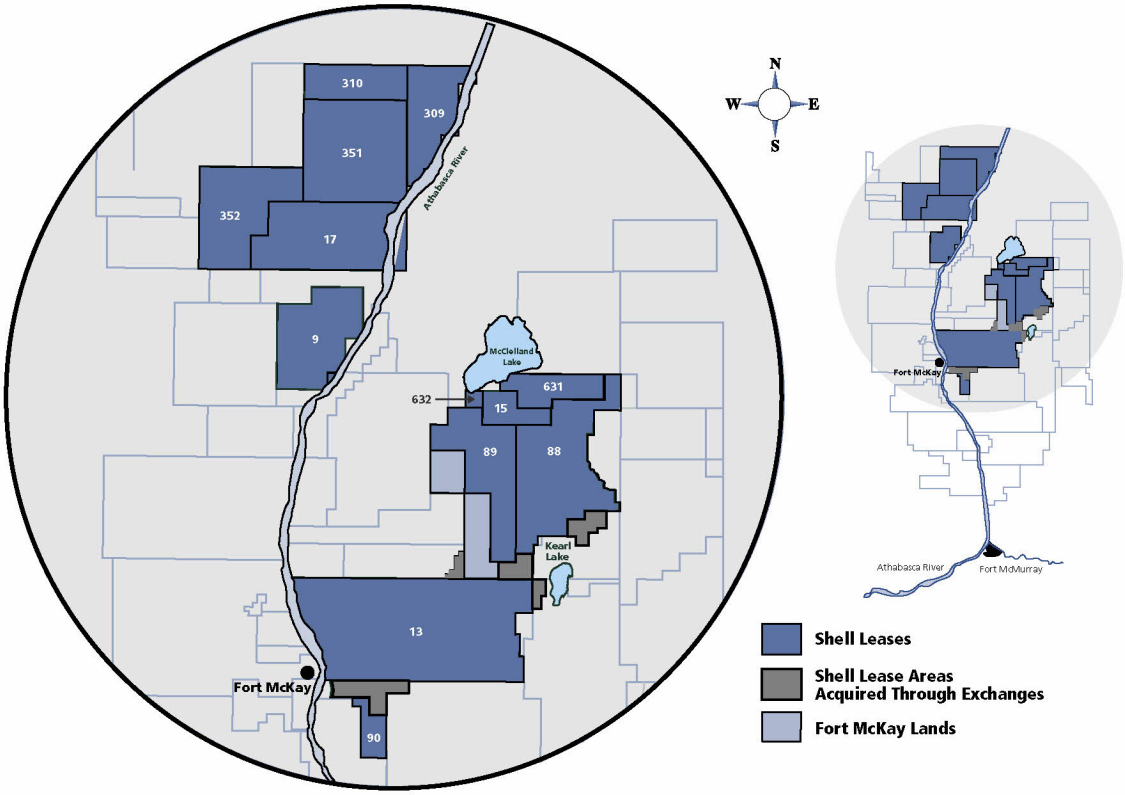
Ownership of the Land

All land included in the proposed JP Expansion and PRM Areas fall within provincial crown lands that are administered by Alberta Sustainable Resource Development, Land Division. The Division is located at Petroleum Plaza, South Tower, 9915 - 108 Street Edmonton, Alberta, T5K 2G8.

First Nations Crown Lands

Subject to the conclusion of satisfactory commercial arrangements and a tripartite oil sands lease between Fort McKay First Nation band council, the Minister of Indian Affairs and Northern Development, and Shell, the JP Expansion has the potential to include Block 1 of the Fort McKay Indian Reserve No. 174C. See Figure 1.

Jackpine Expansion Project Area Map – Figure 1



AUTHORIZATIONS REQUIRED

This section describes the various government approvals that will be required from provincial and federal authorities.

Provincial Approvals

Alberta Energy and Utilities Board

Approvals for the proposed JP Expansion and PRM Areas are required from the Alberta Energy and Utilities Board (the "EUB") under sections 10 and 11 of the Oil Sands Conservation Act (the "OSCA"), which concern the construction and operation of facilities and activities in respect to the recovery of oil sands or crude bitumen, and the construction and operation of oil sands processing plants. Approvals will also be required from the EUB under the Oil Sands Conservation Regulation (the "OSCR") for the mine site plan, waste storage and disposal, and abandonment activities.

Alberta Environment

The construction, operation and reclamation of oil sands processing plants, mines and associated infrastructure are activities that are designated in the Activities Designation Regulation as activities requiring approval under the Environmental Protection and Enhancement Act (the "EPEA"). Accordingly, an approval will be required from Alberta Environment for the construction and operation of the mine and processing plants. As the JP Expansion and PRM Areas are a "mandatory activity" pursuant to the Environmental Assessment (Mandatory and Exempted Activities) Regulation, they will also require the preparation of an environmental impact assessment pursuant to the EPEA and its regulations. Additional approvals will be required from Alberta Environment for reclamation activities of disturbed areas. Those approvals are given at the time of reclamation. Initial approval of conceptual reclamation plans is also required.

Approvals and licenses will also be required from Alberta Environment pursuant to the Water Act for any activities that alter or divert the flow or level of water, the location or direction or flow of water, or affect the aquatic environment such as

(a) the impoundment of surface water and groundwater for process water use;
(b) diversion of natural surface waters around or away from the lease area;
(c) muskeg drainage and overburden dewatering; (
(d) ditching for tailings water recovery;
(e) granular resource dewatering; (f
(f) depressurization of surface and basal water sands;
(g) water withdrawal from the Athabasca River;
(h) impoundment of structures as required for tailings; and
(i) closed-circuit drainage and collection of surface flows in contact with oil sands.

FEDERAL APPROVALS

Fisheries and Oceans Canada

Any work or undertaking that causes the harmful alteration, disruption or destruction of fish habitat, such as the removal or diversion of fish-bearing waterbodies as outlined herein, will require approval from the Department of Fisheries and Oceans pursuant to section 35(2) of the Fisheries Act. Shell anticipates that Fisheries and Oceans Canada would assume the role as a Responsible Authority pursuant to the Canadian Environmental Assessment Act.

Transport Canada

Certain works that may be built or placed in, on, over, under, through or across any navigable water will require approval under section 5 of the Navigable Waters Protection Act. Shell anticipates that Transport Canada would assume the role as a Responsible Authority pursuant to the Canadian Environmental Assessment Act.

Indian and Northern Affairs Canada

As referenced in the January 24, 2007 Public Disclosure document, the Project may potentially include development on adjacent Fort McKay First Nation Lands. This potential alternative Project component would be undertaken pursuant to the recently proclaimed First Nations Commercial and Industrial Development Act (FNCIDA), and the Fort McKay First Nation Oil Sands Regulation (Fort McKay Regulations).

Pursuant to the FNCIDA, the Fort McKay Regulations, and the Fort McKay Oil Sands Intergovernmental Agreement, Indian and Northern Affairs Canada has effectively delegated the administration, enforcement and regulation of oil sands mining development and on certain portions of Fort McKay Indian Reserve No. 174C (Fort McKay Lands) to various provincial regulators.

In the event that the Fort McKay Lands are included in the ultimate application for the JPME Project, Shell would expect that the Minister of Indian Affairs and Northern Development would assume a role as a Responsible Authority pursuant to the Canadian Envirionmental Assessment Act. As such, the Minister of Indian Affairs and Northern Development would be required to ensure that the Canadian Environmental Assesment Act was complied with.

In the event that the Fort McKay First Nation oil sands lands are not included in the ultimate application for the JPME Project, Shell anticipates that INAC would still serve a role as a federal authority, and provide expert evidence and advice to the Joint Review Panel as needed, given the proximity of the JPME Project to Fort McKay First Nation lands, and possibility that Shell may need to access those lands during the assessment and development of the JPME Project.

The Joint Federal - Provincial Environmental Impact Assessment Process

The above-mentioned approvals are triggers under the Canadian Environmental Assessment Act and will require assessment pursuant to that act. Pursuant to the Harmonization Agreement between the Federal Government and the Province of Alberta, those parties have agreed to cooperate and coordinate the environmental assessment of projects in order to minimize duplication and make the process more efficient.

Other Approvals

Other approvals that may be required from provincial and municipal authorities may include the following:

- Approvals will be required from the EUB pursuant to the Pipeline and /or Electrical Utilities Act for pipelines and electrical transmission and distribution that may be constructed in respect of the proposed JP Expansion and PRM. Approval of changes to the Industrial System Designation pursuant to the Hydro Electric Energy Act may also be required.
- Surface Dispositions will be required under the Alberta Public Lands Act.
- Historical Resource Clearance will be required under the Alberta Historical Resources Act.
- A development permit must be obtained from the Minister of Transportation and Utilities under the Public Highways Development Act for any roads connecting to any highway or and structures built over a controlled highway.
- A development permit will be required from the Regional Municipality of Wood Buffalo.

Some of these approvals will be sought after the conclusion of any public hearings that may be held into the proposed JP Expansion and PRM Areas, in the event that the EUB and other primary regulators determine that is in the broad public interest, having consideration for potential socio-economic and environmental effects.

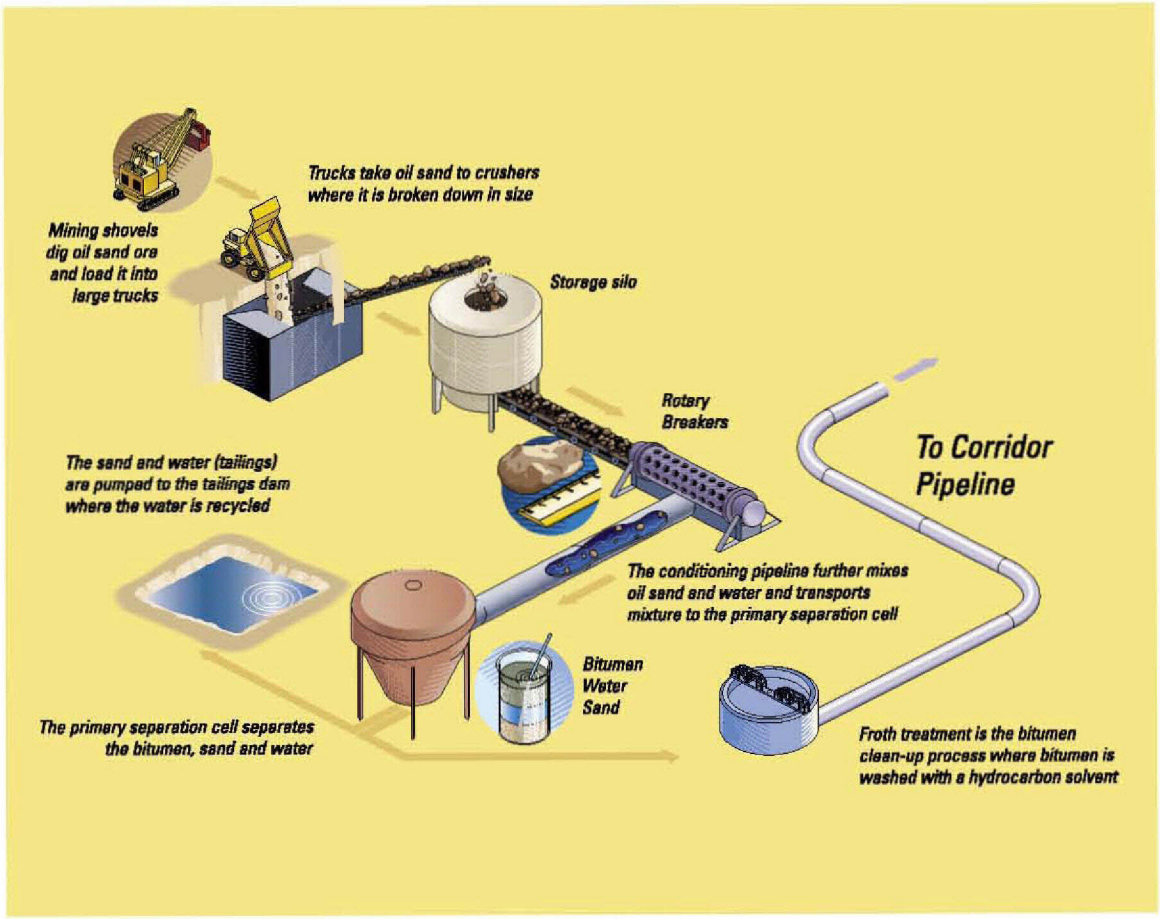
PROJECT INFORMATION

Project Components/Structures

The development of the JP Expansion and the PRM Areas will utilize an open pit mining and extraction processes to recover bitumen from the McMurray Formation (oil sands). Mining methods will utilize large-scale truck and shovel equipment similar to that approved at JP1.

The produced bitumen will be transported by pipeline to an upgrader for further processing. The following provides a more detailed description of each proposed projects.

Process Diagram



Jackpine Expansion

The JP Expansion proposes to increase total approved bitumen production at JPM1 to 300,000 barrels a day. The approved JPM1 mine plan will be modified to integrate mining over this proposed expansion area. The JP Expansion will include the following components:

Mining Operations

The proposed JP Expansion will include Lease 88, Lease 89, Lease 15 and Lease AT36, which was acquired in a Lease boundary swap. Future flexibility to include Leases 631 and 632 for facilities is available, if required.

Mine development will follow current industry practices and incorporate improvements identified from the operation of the Muskeg River Mine. The mine area will be cleared and dewatered, the reclaimable coversoil and muskeg salvaged as required. Overburden removal will take place before oil sands mining commences. To minimize the amount of disturbance to the surface area the mine would be cleared in a staged approach. Separate storage sites for overburden materials and reclamation material would be utilized on site.

Proposed mining operations would integrate the approved JPM1 with the JP Expansion. This would allow for efficient use of the existing mining facilities and materials, and a reduction in initial oil sands mining transportation costs.

As well, subject to regulatory and band approval of commercial agreements and a tripartite oil sands lease between Shell, the Fort McKay First Nation band council, and the Minister of Indian Affairs and Northern Development, the JP Expansion may include portions of Fort McKay Indian Reserve No. 174C. This would include an additional area of approximately 2077 ha of mining area.

The following watercourse diversions would be required in support of mining operations:

- Muskeg Creek, already approved for diversion as part of JP1,
- Portions of Wapasu Creek
- The upper reaches of the Muskeg River located on Lease 88 would be diverted through JP Expansion mining area to rejoin the Muskeg River.

In addition, watercourse diversions from adjacent approved oil sands developments would also be accommodated across JP Expansion as required during operation and post closure of the mine.

Extraction Plant

The JP Expansion will utilize the JP1 plant, located on Lease 13 that was originally approved as 3 processing trains with a total capacity of 200,000 bbl/cd. The JP expansion will add additional capacity of 100,000 bbl/cd for a total production capacity of 300,000 bbl/cd. The extraction plant will consist of the following:

- Ore crushing, secondary sizing, and ore conditioning;
- Primary and secondary extraction;
- Froth treatment and secondary recovery;
- Solvent Recovery Units; and
- Cogeneration plant.

Each train will include warm water bitumen extraction followed by a two-stage high-temperature froth treatment circuit, solvent recovery unit and a tailing solvent recovery unit.

Heat (for steam) and electricity for the JP Expansion will be provided by a combination of natural gas co-generation, natural gas-fired auxiliary boilers, and combustion of asphaltenes in an asphaltene-fired cogeneration unit. The approved natural gas-fired co-generation unit (160 MW) will be replaced with two 85-MW cogeneration units. The two approved 1300-GJ/hr auxiliary boilers will be replaced with three 675-GJ/hr auxiliary boilers. An 1800-GJ/hr asphaltene-fired cogeneration unit will be added.

The JP Expansion will require 1 additional diluted bitumen product tank and 1 additional solvent tank.

Tailings Management

Tailings management will be consistent with those provided in the Muskeg River Mine Expansion (MRME) and JP1 regulatory applications (i.e. initial use of external tailings facilities (ETFs) followed by in-pit deposition of non-segregating tailings (NST)).

The existing JP1 ETF will be modified (increased in capacity from 650 to 750 Mm^3) and a new ETF on Lease 88 with a capacity of approximately 290 to 350 Mm^3 will be required in support of the JP Expansion.

Infrastructure

The JP Expansion will require upgrades to existing infrastructure such as roads, power, communications systems and pipelines. Where possible, opportunities to build incrementally from the infrastructure base currently being developed for JP1 will be pursued. The Project will make best use of the following existing infrastructure:

- Highway 63, Canterra Road and the Muskeg River Mine access road;
- existing water intake facilities at the Athabasca River;
- solid waste disposal and hazardous waste storage facilities;

Shell is prepared to provide infrastructure for JP Expansion on an independent basis, and is also prepared to explore options for cooperation with other area operators.
Corridors and Access

No new corridor disturbances will be required to accommodate natural gas, power, bitumen product, or solvent as part of the JP Expansion (beyond existing approved boundaries). Utility corridor disturbances are only anticipated within the existing approved areas. The Project will utilize existing pipeline connections to the Corridor Pipeline product and solvent storage facility and connection to the pipeline that will be used to transport produced bitumen to market and/or Scotford upgrading facilities.

In order to better integrate JP Expansion with JP1, the location of the approved JP1 Haul Road Bridge will be relocated downstream of its approved location, pending regulatory approval.

Pierre River Mining Areas

The PRM Areas will consist of 200,000 barrel per day mining and bitumen processing facilities, including supporting facilities and infrastructure located on the west side of the Athabasca River. PRM Areas are anticipated to produce a total of 1.30 billion barrels of bitumen over the project life. Development of the PRM Areas will include the following components:

Mining Operations

The PRM Areas operation will be located on Leases 9, 17, 351 and 309. The opportunity to include Lease 352 and Lease 310 for future development is available if required.

PRM Areas development will be similar to JP Expansion and would also follow current industry practices and incorporate improvements from the operation of the MRM and JP Expansion. The mine will be cleared and dewatered, the reclaimable coversoil and muskeg salvaged as required. Overburden removal will take place before oil sands mining commences. To minimize the amount of disturbance to the surface area the mining areas will be cleared in a staged approach. Separate storage sites will be provided for overburden and reclamation materials.

To deliver the necessary ore to accommodate 200,000-bbl/day of production, the PRM Areas mining fleet will utilize truck and shovel mining methods using large-scale equipment similar to that proposed for the approved JP1. The mining fleet is proposed to consist of approximately 8 mining shovels, 40 haul trucks, and a contractor fleet.

The following watercourse diversions will be required in support of mining:

- Eymundson Creek and Asphalt Creek will be diverted around the northern boundary of Lease 9 and into the Athabasca River.
- First Creek and Big Creek will be diverted around the external tailings facility and into the lower reaches of Big Creek.
- Pierre River and an unnamed creek will be diverted around the west and south boundaries of Lease 9.

Extraction Plant

The PRM Areas plant, located on Lease 9, will operate 2 trains with a production capacity of 100,000 bbl/cd/train. Total production capacity will be 200,000 bbl/day.

Each train will include warm water bitumen extraction followed by a two-stage high-temperature froth treatment circuit, solvent recovery unit and a tailing solvent recovery unit.

Heat (for steam) and electricity will be provided by a natural gas co-generation unit (85 MW). The opportunity to include the combustion of asphaltenes in an asphaltene-fired cogeneration unit (1800 GJ/hr).

PRM Areas will utilize water from the Athabasca River through a proposed new water intake. The water intake structure will be bank-style and utilize proven fish protection technology, and will be located adjacent to Lease 17. The water line corridor will follow an established corridor between ETF and Lease 9 plant site.

PRM Areas will require 2 diluted bitumen tanks and 1 solvent tank.

Tailings Management

Tailings management methods will be similar to those described in the MRME and JP1 regulatory applications (i.e. initial use of ETFs followed by in-pit deposition of NST). A new ETF with a capacity of approximately 650 Mm^3 will be located on a portion of Lease 17 and Lease 351.

Corridors, Access and Accommodations

New utility corridors will be required as part of PRM Areas development to accommodate natural gas, power, bitumen product, and solvent pipelines. New pipeline right of way(s) connecting the product and solvent storage facility to the product pipeline infrastructure that will be used to transport the product to market will also be required.

Access to the PRM Areas will be provided by a 4-5 km road linking Lease 9 to the Regional Municipality of Wood Buffalo's Fort Chipewyan Winter Road (approximately 16 km north of the end of Highway 63). This will require construction of a bridge crossing the Athabasca River.

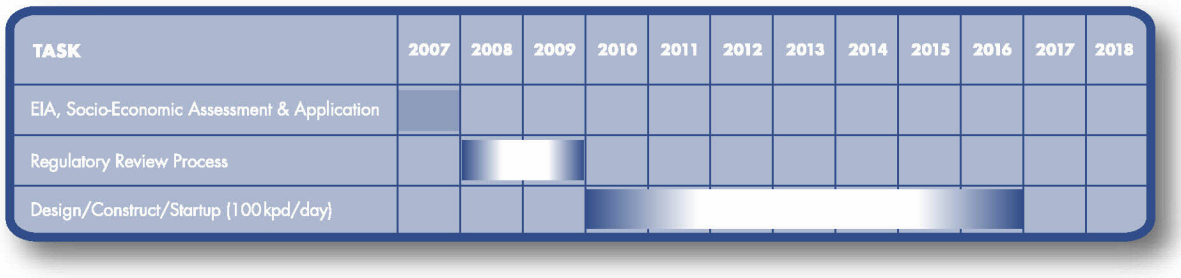
The PRM Areas development will utilize a Camp on Lease 9 to support construction. Operations will utilize a local workforce primarily sourced from Fort McMurray. PRM Areas will use alternative work shift rotations such that the Albian Aerodrome facility can manage the additional air traffic.

PROJECT ACTIVITIES

Project Schedule

It is anticipated the submission of an Application to the EUB incorporating an Environmental Impact Assessment (EIA) will be submitted by year-end 2007. Subject to the receipt of necessary regulatory approvals and a decision to proceed with construction could begin in late 2010, with operational start-up scheduled for 2012 for JP Expansion. For PRM Area construction could begin in 2012, with operational start-up scheduled for 2014 (see Figure 2 below). The production life of JP Expansion is thirty-four (34) years with decommissioning starting 2049. For the PRM Areas the production life is twenty-two (22) years with decommissioning starting in 2039.

Project Schedule – Figure 2



Bitumen Extraction

The process begins with oil sands crushing, sizing and conditioning. Primary separation follows using a warm water process to produce bitumen froth. The bitumen froth is then cleaned to produce a product suitable for pipeline transportation. Each aspect of the extraction process is designed for energy efficiency, including the use of low temperature extraction, mobile crushers, heat recovery and enhanced water recycling.

Fresh Water Requirements and Management

Effective water management is essential to the bitumen extraction process and opportunities to maximize process water recycling while minimizing fresh water requirements will continue to be pursued. Surface areas required for out of pit tailings storage will be minimized through the use of tailings thickeners, consolidated tailings and placement of tailings into the mined pits as soon as practical. A pond will be used to recover the process water for recycling.

The JP Expansion will obtain process water from the Athabasca River through the existing Albian water intake as well as that from closed-circuit site runoff, Basal Aquifer groundwater and Pleistocene Channel Aquifer groundwater.

PRM Areas development will utilize water from the Athabasca River through a proposed new water intake, as well as that from closed-circuit site runoff, and Basal Aquifer groundwater. The PRM Areas Athabasca River water intake structure will be located adjacent to Lease 17.

JP Expansion and PRM Areas operations will endeavour to reduce the initial peak withdrawal rate from the Athabasca River by implementing a closed-circuit water recovery system for operational use as early as possible. Water storage (or equivalent mitigation) will be such that dependence on Athabasca River withdrawals can be offset during extreme low flow periods. A risk analysis will be performed that will determine an appropriate amount of storage (or equivalent mitigation), recognizing the regulatory framework for fresh water withdrawals from the Athabasca River, and to provide a cost-effective and timely solution.

Depressurization of the aquifer at the base of the McMurray Formation (basal aquifer) will begin early in the mining operation to ensure safe mining conditions. There may not be sufficient storage for the basal water at the beginning of mining and appropriate methods of disposal will be implemented. All methods of disposal considered will meet regulatory requirements.

Project Effluents and Wastes: Sources, Treatment and Disposition

A preliminary list of the primary effluents and wastes and their disposition is provided below:

EFFLUENT OR WASTE	SOURCES	TREATMENT	DISPOSITION or DISPOSAL
Air emissions (NOx, SO_2, CO, CO_2, PM_{10}, $PM_{2.5}$, THC, VOC, TRS, etc.)	Short Term Clearing and burning of brush to expose mine surfaces Construction fleet exhaust Fugitive emissions from road and plant site construction Long Term Point sources at the plant site (e.g. natural gas fired heaters, boilers, flare pilot, space heaters) Fugitive emissions (e.g. from mine fleet, extraction plant and utility operations, froth treatment area, and tailings disposal surface)	Short Term Minimize amount of organics burned, increase salvage Use latest emission control technology Water roadways and exposed plant site areas where appropriate Long Term Use low NOx burners where appropriate, minimize flaring, reduce process temperature, and improve energy efficiency Optimize mine fleet to reduce travel distance, revegetate overburden, water roadways, blanket froth treatment with nitrogen, use floating roofs on storage tanks, use appropriate emission control technology.	Released to atmosphere
Muskeg and overburden drainage	Dewatering mine area, plant site, overburden disposal sites and tailings disposal site	During initial construction period, direct waters to sedimentation ponds. During operations, reuse in process	Release waters once confirmed to meet regulatory criteria
Extraction tailings	Process plant	Maximize bitumen recovery in extraction and forth treatment processes; develop tailings management plans to ensure best use of tailings in providing reclaimed landscape	Placed in mining areas as the foundation of reclaimed landscape.
Aquifer dewatering fluids	Depressurization / dewatering wells	During initial construction period, direct waters to sedimentation ponds. During operations, reuse in process	Release waters once confirmed to meet regulatory criteria
Seepage from tailings disposal site and deposited tailings	Tailings disposal site and deposited tailings	Collect seepage with interceptor ditch and divert to process or tailings disposal site	Pump back to the tailings disposal site or reuse in the process
Mine water	Precipitation that collects in the mining areas, seepage and aquifer water	Collect mine water and treat for suspended solids	Reuse in the process

EFFLUENT OR WASTE	SOURCES	TREATMENT	DISPOSITION or DISPOSAL
Tailings disposal site water	Tailings disposal site	Allow solids to settle out	Reuse in the process
End-pit lake release	Non-toxic tailings water	Treat for toxicity if necessary	Discharge to the appropriate waterbody
Industrial water runoff	Precipitation in the plant area	Collect and direct to process	Reuse in the process
Process wastewater	Steam boilers, glycol heaters, vehicle and equipment wash	Remove hydrocarbons	Reuse in the process
Solid wastes	Construction camp, offices, kitchen and cafeteria, maintenance shops, laboratory, first aid, vehicles	Store in appropriate containers or area	Recycle, treat, or dispose of at an approved landfill
Hazardous waste	Laboratory and maintenance shops	Stored temporarily in marked containers	Send to an approved offsite disposal centre
Sanitary sewage	Construction camp, laundry, administration offices, laboratory kitchens, and maintenance shops	Primary and secondary treatment then directed to recycle pond	Reuse in the process

A program to reduce the potential of migratory bird mortality due to exposure to ponds containing process affected water will be designed and implemented. The program will include:

- minimizing the attractiveness of ponds as habitat, booming of tailings outlets, and the capture and recycle of bitumen;
- the construction and operation of bird deterrents; and/or
- implementation of a monitoring program to assess the effectiveness of the program.

PROJECT SITE INFORMATION

Project Location

JP Expansion will be located on the following leases:
Lease 88 (OSL 728808AT88)
Lease 89 (OSL 7288080T89)
Lease 36 (OSL 7281010T36)
Lease 15 (OSP 7405120015)
Lease 631 (OSP 7405090631)
Lease 632 (OSP 7405090632)
Lease BT31 (OSL 728010BT31)

Subject to conclusion of satisfactory commercial arrangements, this proposed expansion may potentially include the adjacent Fort McKay First Nations Land (Block 1 and Block 2) as shown on the Plan Showing Survey of Fort McKay Settlement (Oil Sands Lands) recorded in the Canada Lands Surveys Records under number 90264 and registered at the Land Titles Office in Edmonton under number 052 2726.

PRM Areas development will be located on the following leases:

Lease 09 (OSL 07400120009)
Lease 17 (OSL 07401100017)
Lease 352 (OSL 7405080352)
Lease 351 (OSL 7405080351)
Lease 310 (OSL 7405120310)
Lease 309 (OSL 309 7405120309)

Legal Land Description

The legal land description is as follows:

JP Expansion will be located in Townships 95 to 97, Ranges 8 and 9, W4M. More specifically:

Twp 95-8 W4M: All or portions of sections 29 and 32;

Twp 96-8 W4M: All or portions of sections 6, 7, 14-22 and 25-36;

Twp 96-9 W4M: All or portions of sections 1, 11-14, 253-26 and 34-36,

Twp 97-8 W4M: All or portions of sections 2-11, 14-23, 25-36

Twp 97-9 W4M: All or portions of sections 1-3, 8-17, 21-27 and 36

PRM Areas development will be located in Townships 97 to 100, Ranges 10 and 11, W4M. More specifically:

Twp 97-10 W4M: All or portions of sections 31 and 32;

Twp 97-11 W4M: All or portions of sections 35 and 36;

Twp 98-10 W4M: All or portions of sections 5-8, 16-21 and 28-30;

Twp 99-10 W4M: All or portions of sections 1- 36;

Twp 100-10 W4M: All or portions of sections 1- 36;

Twp 99-10 W4M: All or portions of section 31;

Twp 100-10 W4M: All or portions of sections 5-8, 16-21 and 28-34;

Twp 98-11 W4M: All or portions of sections 1, 2, 11-14, 23 and 24;

Twp 99-11 W4M: All or portions of sections 1- 36;

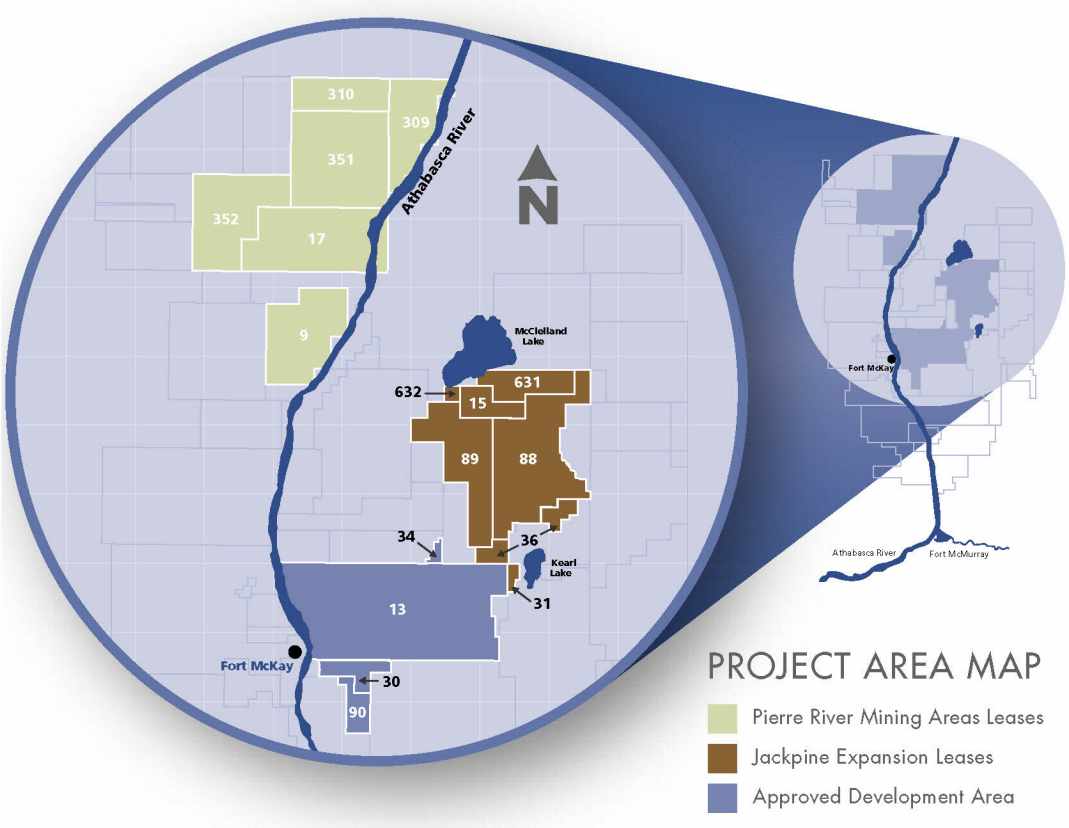
Project Boundaries

JP Expansion is bounded to the east by Imperial Oil/ExxonMobil approved Kearl Oil Sands Project, to the north by McClelland Lake, on the west by the Fort McKay First Nations land and to the south by Lease 13.

PRM Areas are bounded to the east by the Athabasca River, to the north by northern boundary of Leases 309 and 310, to the west by the western boundary of Lease 352 and leases held by UTS/Teck and CNRL, and to the South by leased held by CNRL. UTS/Teck also hold Lease 14 between Lease 9 and 17.

Figure 3 identifies the JP Expansion and PRM Areas boundaries.

Project Area Map – Figure 3



ENVIRONMENTAL FEATURES

Existing Environment

JP Expansion and PRM Areas are located in an area of low relief glaciated landscape characterized primarily by a gently undulating to gently rolling glacial till plain with undulating glaciofluvial and aeolian features, and level to depressional organic deposits. Due to the topographic relief present in the area, there are a wide diversity of soils, landforms and vegetation communities present within short distances.

JP Expansion and PRM Areas are located in the Central Mixedwood Subregion of the Boreal Forest Natural Region of Alberta, which is also referred to as the Mid Boreal Mixedwood Ecoregion. It is characterized by broad leaved and coniferous species such as trembling aspen, balsam poplar, willows, white and black spruce, balsam fir and jack pine. Typically the dominant species is trembling aspen in this ecoregion. The vegetation in upland areas will be characterized by a mixedwood forest consisting of coniferous and deciduous tree species. Well drained sandy areas typically support jackpine while less elevated and drier landforms usually support trembling aspen. Low lying depressions, and poorly drained areas support the development of peatlands and muskeg which are typically characterized by black spruce, willows, sedges and mosses. These wetland areas are present throughout the area are primarily bogs and fens, but also include wetlands (swamps, marshes and shallow open water).

Also included in the region, but outside of the JP Expansion development is the McClelland Lake Complex comprising fens and wetlands which are currently being considered for protection under the draft CEMA Terrestrial Management framework. Shell is working with stakeholders to protect this area.

The area provides suitable habitat for a wide variety of wildlife species, including a low density of large ungulates such as moose and deer. Economically important wildlife species common in the region include fisher, marten, weasels and snowshoe hares. Aquatic species such as beaver, muskrat and amphibians are also present in the area. Various species of songbirds, waterfowl, raptors and owls also inhabit the area.

A closure and reclamation plan will be developed to provide a reclaimable landscape to equivalent land capability classes as required by AENV regulations.

Waterbodies and Watercourses

The JP Expansion and PRM Areas contain several named and unnamed waterbodies and watercourses ranging in size from small ponds to lakes and from small ephemeral drainage streams to rivers.

The named waterbodies adjacent to surrounding the JP Expansion are Kearl Lake located approximately 1 km east and McClelland Lake adjacent to the northern boundary. While PRM Areas the following named waterbodies: Cranberry Lake, Crooked Lake, Oakley Lake, Small Sandy Lake and Kelly Lake on or adjacent to it.

Watercourses on or adjacent to the JP Expansion are the upper reaches of the Muskeg River including several unnamed tributaries and Wapasu Creek.

Watercourses on or adjacent to the PRM Areas are the Pierre River, Asphalt Creek, Eymundson Creek, Big Creek, First Creek and Redclay Creek, and unnamed tributaries.

The area provides suitable habitat for a wide variety of fish species, including several sports fish. From previous fish surveys 24 species of fish have been identified in the Athabasca River and Muskeg River watershed. The more common fish species include; walleye, lake whitefish, goldeye, longnose sucker, white sucker, flathead chub, burbot, emerald shiner, lake chub, northern pike, trout-perch, artic grayling, brook stickleback, and bull trout.

The Athabasca River supports a wide variety of fish habitat for spawning, rearing, feeding, and overwintering. Fish habitat is highly variable for the tributaries of the Athabasca River and typically decreases in quality further upstream.

The common fish species typically found in the lakes located in the area are: brook stickleback, fathead minnow, lake chub, longnose sucker, northern pike, walleye, white sucker. Fish habitat is also variable and limited by water quality, connectivity and overwintering potential.

The larger lakes, such as Kearl Lake, provide waterfowl staging areas.

Investigations to evaluate the fishery resource and the fish habitat in the area will be undertaken.

During the development of JP Expansion and PRM Areas several of the streams will be diverted including upper reaches of Muskeg River, Wapasu Creek, Muskeg Creek, Eymundson Creek, Asphalt Creek, Big Creek, First Creek and Pierre River. Options for diversion are currently being evaluated and will be reviewed with stakeholders including Fisheries and Oceans Canada. Shell will develop a "No Net Loss" plan for fish habitat to mitigate for fish habitat loss as a result of the Project development.

Land Use

JP Expansion and PRM Areas are located within the oil sands development area, which, includes the Albian Sands Energy Inc. Muskeg River Mine (approved), the Shell JP1 (approved), the Syncrude Aurora North (approved) and Aurora South Mines (approved), the Imperial Oil/ExxonMobil Kearl Oil Sands Project (approved) and the PetroCanada/UTS/Teck Fort Hills Project (approved).

The nearest population center is Fort McKay, which is approximately 15 km south of the south boundary of the Pierre River Mining Area. Fort McMurray is located about 110 km south (shown in Figure 3).

Lands Used for Traditional Purposes

Both the JP Expansion and the PRM Areas are located on lands used for traditional purposes by members of the 'Fort McKay First Nation, Athabasca Chipewyan First Nation, Mikisew Cree First Nation and Métis of the region. Ongoing discussions will continue with members of the communities

regarding their traditional land use activities. Shell will continue its support of a number of community-specific and regional initiatives underway regarding traditional use of the land and will incorporate recommendations from these initiatives, where appropriate.

ADDITIONAL REQUIREMENTS RELATED TO FISH, FISH HABITAT AND NAVIGABLE WATERS

Use of Waterways

The only known navigable watercourse on or adjacent to JP Expansion or PRM Areas is the Athabasca River, Jackpine Creek and lower reaches of the Muskeg River.