

Application of Federal Legislation to Alberta's Mineable Oil Sands

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Oil Sands Research and Information Network

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This document has been prepared for information purposes only. It is not a substitute for any of the legislation reviewed or statutes or regulations under these acts. This report in no way constitutes a legal opinion. It represents an interpretation of legislation, statutes, and regulations based on the reading of the author(s). Individuals with specific questions about legislation are urged to seek legal advice.

REPORT SUMMARY

This report examines the Government of Canada's legislation that may impact oil sands environmental management in Alberta. It focuses on the evolution, and current state of, pertinent federal legislative Acts in the environmental, natural resource, and energy policy sectors. As detailed below, five Acts form the core of the review. A limited number of additional Acts, policies, and Canada-Alberta agreements are examined given their direct applicability to oil sands activity. In particular, the report focuses on descriptively setting out the implications and potential impacts stemming from recent legislative changes spurred by the passage of the 2011 and 2012 federal 'omnibus' budget implementation bills (Bills C-38 and C-45, respectively). These bills not only amended a large existing suite of legislation in the environmental, energy, and natural resources sectors, they also created *new* legislation with direct implications for oil sands environmental management. This report reviews and assesses these changes.

The five Acts that form the core of this examination are: the *Fisheries Act* (FA, 1985), the *Canadian Environmental Protection Act* (CEPA, 1999), the *Canadian Environmental Assessment Act* (CEAA, 1999 and 2012), the *Species at Risk Act* (SARA, 2002), and the *Migratory Birds Convention Act* (MBCA, 1994). The study takes a 'project life cycle approach' to descriptively examine if, and how, federal legislation applies to oil sands environmental management in relation to (1) the pre-construction phase; (2) the operational phase; and, (3) the reclamation and post-certification phase.

The focus of this study is *exclusively* on federal legislation. However, the constitutional division of powers in Canada's federal system necessitates some attention to intergovernmental and multi-level governance issues. As such, the report includes a brief overview of federalism and its continued relevance for legislation in the environmental, natural resources, and energy sectors with a focus on environmental management.

Passed in 2011 and 2012, Bill C-38 and Bill C-45 are recent Acts and have yet to be subjected to few, if any, descriptive or analytical scholarly examinations. The dearth of studies is even more extreme from an environmental management perspective. This study therefore uses primary document analysis of the above listed Acts as its core method. This is supplemented with reference to secondary academic sources, Government of Canada policy documents and audits, media sources, access to information requests, and recent joint panel reviews conducted as part of the environmental assessment of some existing oil sands projects. Finally, a series of informal consultations were also conducted with senior federal officials from multiple departments to seek comment and clarification on the legislation examined and for technical clarifications as required.

The findings detailed in this study suggest that Bills C-38 and C-45 are watersheds in environmental and natural resources policy sector governance in Canada. The Acts fundamentally reorient the Government of Canada's approach to environmental regulation, Canada-Alberta environmental assessment processes and represent a clear shift towards greater Ministerial discretion for regulation under several Acts amended by the two omnibus budget

implementation bills. The report documents that, from a federal perspective, only a few provisions in each of the Acts are directly applicable to environmental management. The general pattern identified in amendments is a clear attempt to devolve, delegate, and harmonize federal activity in the policy sector with the Government of Alberta. From a project life cycle perspective, federal legislation was found to be most pronounced at the pre-construction phase (front-end) through project applications for permitting under federal legislation and the environmental assessment processes. However the permitting and environmental assessment regimes reviewed also included some provisions requiring monitoring, reporting, and enforcement that have implications for the operational and reclamation and post-certification phases.

The current federal administration has made its explicit intention to reduce if not remove regulatory delay, duplication, and burden to expedite economic and resource development. As this report emphasizes, a review of pertinent legislation and consultations with government officials reveals a considerable degree of uncertainty remains related to environmental management. Not all new potential regulations under the amended budget implementation bills have been brought into force. In some instances, transitional provisions apply while in others regulations are expected but had not yet been publicly disclosed. As such, officials and official government documents were unclear as to their applicability to environmental management.

The report concludes that recent legislative changes have increased uncertainty related to the application of federal legislation to oil sands development. This is due to the lack of precedent by which to understand its application, and because not all regulations have been brought into force. The report concludes this uncertainty is particularly acute for the reclamation and post-certification phase because of the limited reclamation and certification that has occurred to date.

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1 INTRODUCTION

At the outset of this report it is imperative to emphasize that virtually all of the oil sands rights in Canada are owned by the Government of Alberta, with only 3% held by the federal government or freehold title (Perry and Saloff 2012, p. 279). This report provides a review of the current state, and evolution of, federal legislation pertaining to these issues as they relate to mineable oil sands development in Alberta.

As the House of Commons committee report and leading texts on Canadian federalism emphasize, environmental and natural resource policy in Canada has generally been undertaken through a cautious approach whereby federal government largely defers to the provinces as primary natural resources managers (House of Commons 2007a, MacKay 2004, p. 34, Morton 1996, Skogstad 1996). The Government of Alberta is the level of government primarily responsible for environmental management activities including water use regulation, wetland protection, “except where there are issues that cross boundaries or otherwise have national significance for fisheries or biodiversity; they then fall under joint or federal jurisdiction” (Alberta Environment 2008, p. 19). As will be reviewed at the outset of this study, the constitutional division of powers in Canada and the historical practices of Canadian federalism continue to shape resource extraction processes and will likely influence how the federal government applies legislation in force related to environmental management.

As Vlavianos (2007) concludes in his review of oil sands legislative and regulatory frameworks, “Many oil sands operations impact fisheries or navigable waters or have interprovincial impacts that could trigger federal jurisdiction. The actual and potential overlaps in federal and provincial jurisdiction add a layer of complexity and uncertainty to an already complicated provincial legislative and regulatory framework”.

The five core federal Acts chosen for examination in this report were selected based on the Government of Canada's stated responsibilities as per the two recent reports *A Foundation for the Future: Building an Environmental Monitoring System for the Oil Sands* submitted to the Minister of the Environment in 2010 (Dowdeswell et al. 2010) and a 2007 report of the House of Commons Standing Committee on Natural Resources *The Oil Sands: Towards Sustainable Development* (House of Commons 2007a)¹.

The Standing Committee report notes²:

“The Government of Canada's role in the oil sands for the most part pertains to protection of the environment, the protection of waterways and fisheries, and Indian lands. Relevant laws that may be used by the federal government to exercise jurisdiction over certain aspects of oil sands projects include the *Fisheries Act*, the *Canadian Environmental Protection Act*, 1999 (CEPA 1999), the *Canadian Environmental Assessment Act*, the *Navigable Waters Protection Act* and the *Indian Act*. For example, CEPA, 1999 gives the federal government powers to regulate harmful emissions. The *Fisheries Act* grants the Government of Canada the authority to impose restrictions on any activity that could harm fisheries” (House of Commons 2007a, p. 14).

Federal legislation that may impact oil sands development has evolved dramatically, tied to differences in natural resources, energy, and environmental policy paradigms. Most recently, in 2011 and 2012 the Government of Canada introduced two budget implementation bills that dramatically reorganized and amended several Acts that affect how the federal government engages with the Province of Alberta related to environmental oversight and monitoring. For example Bills C-38 and C-45 introduced major amendments to the *Fisheries Act* and repealed both the *Navigable Waters Protection Act* and the *Canadian Environmental Assessment Act (1999)*, replacing them with new legislation. The five principal Acts listed above all have potential implications for environmental management. However, the official government documents and scholarly sources consulted in the review of legislation clearly emphasize that the

¹ It should be noted that s. 4 of the federal *Department of Environment Act* sets out the duties and responsibilities of the Department as including: (1) The powers, duties and functions of the Minister extend to and include all matters over which Parliament has jurisdiction, not by law assigned to any other department, board or agency of the Government of Canada, relating to: (a) the preservation and enhancement of the quality of the natural environment, including water, air and soil quality; (b) renewable resources, including migratory birds and other non-domestic flora and fauna; (c) water; (d) meteorology; (e) notwithstanding paragraph 4(2)(g) of the *Department of Health Act*, the enforcement of any rules or regulations made by the International Joint Commission, promulgated pursuant to the treaty between the United States of America and His Majesty, King Edward VII, relating to boundary waters and questions arising between the United States and Canada, in so far as they relate to the preservation and enhancement of the quality of the natural environment; and (f) the coordination of the policies and programs of the Government of Canada respecting the preservation and enhancement of the quality of the natural environment”. However, this Act was not the focus of the request from OSRIN. Nor was it the focal point of attention subsequent to Bills C-38 and C-45 ‘omnibus’ budget implementation bills, and is thus not examined in this report.

² Section 11.1 of this report provides citations for the current Acts and regulations discussed. Older Acts and regulations are cited in footnotes.

main thrust of amendments has been to encourage and expedite economic development, produce clarity with respect to regulatory and legislative obligations for project proponents, and to the extent possible, harmonize federal-provincial regulatory and legislative activity in the natural resources and energy sectors typically through delegation and devolution to the provinces (Environment Canada 2012b, Gibson 2012). This report descriptively assesses what legislative amendments and new Acts introduced by omnibus budget implementation Bills C-38 and C-45 and their implication for environmental management in Alberta. The new CEAA 2012 and *Navigable Waters Act* along with other amended Acts are examined to clarify when and how such legislation applies.

1.1 Oil Sands Context

Oil sands development, operation and reclamation have been ongoing since development began in the 1960s (Perry and Saloff 2012). With the accelerating pace and scale of development in the twenty-first century greater scrutiny and attention has been cast towards environmental impacts (e.g., air, water, land, fish, wildlife), environmental monitoring, emissions (air and water), greenhouse gases, tailings and reclamation (Commissioner of the Environment and Sustainable Development 2011).

A 2007 report of the House of Commons Standing Committee on Natural Resources noted:

The very nature of oil sands means that developing them, whether by mining or the in situ method, causes incredible disruption to land and landscape over immense areas. For oil sands mining, the forest needs to be cleared and the covering layer of earth removed before the sands can be excavated. Estimates show that the disturbed area could be as extensive as 3,000 km. For in-situ operations, landscape degradation may appear less severe, but the need to dig several wells and to build roads, pipelines and transmission lines requires the clearing of a considerable portion of the boreal forest. The impact on the landscape may seem to be less drastic, but the most serious impact is the fragmentation of habitat for both flora and fauna. This form of development could affect tens of thousands of square kilometres of boreal forest over the long term. (House of Commons 2007a, p. 47)

As shown in Figure 1, oil sands development not only involves the disturbance of significant land for mining purposes, but also results in considerable solid and liquid tailings by-products, as well as air emissions from the processing plant, vehicle fleets and tailings ponds. The mineable oil sands reclaimed landscape is expected to be considerably altered from the original state with less wetlands, additional (man-made) lakes, and no peatlands (National Energy Board 2006, p. 40). The particular methods used for reclamation, particularly in the management and treatment of the tailings, remain controversial with the ability of tailings ponds and end-pit lakes to become biologically productive ecosystems still uncertain (Hrynyshyn 2012, National Energy Board 2006).

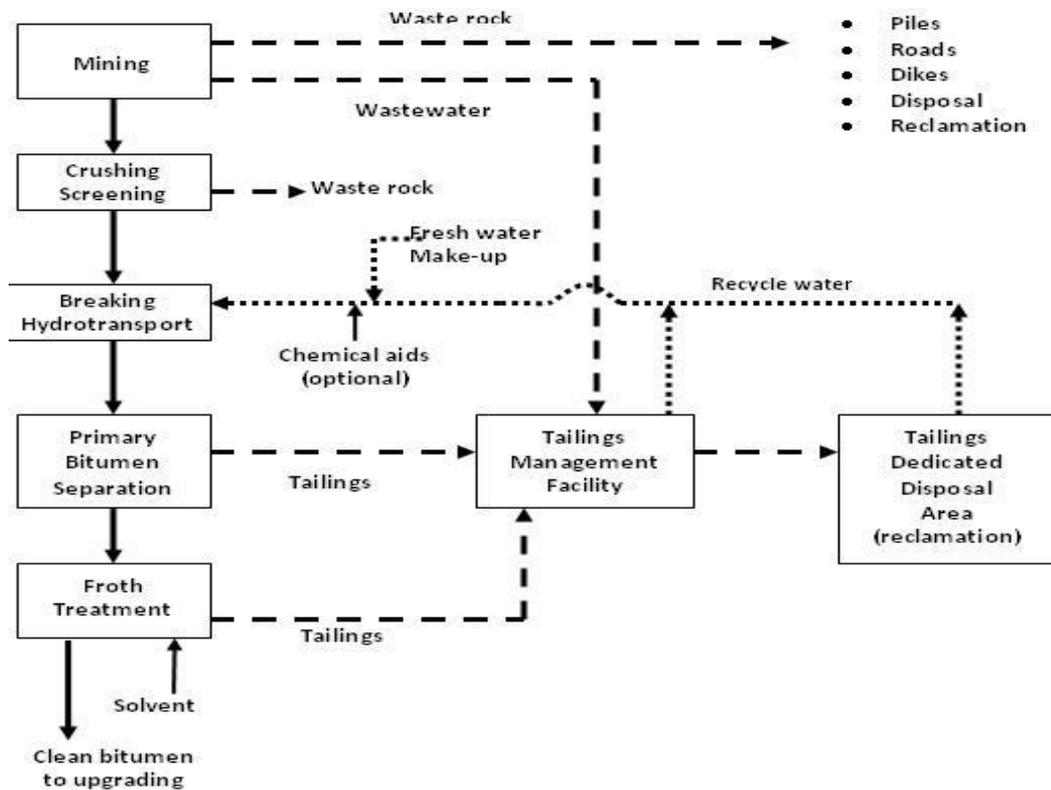


Figure 1. Typical Activities of the Bitumen Mine Operations Phase.

For the purposes of this review oil sands development is considered in three phases (see Figure 2 for an overview of the mining sequence):

- pre-construction (which includes environmental assessment, applications for authorization, public hearings and issuance of authorizations);
- operations (which includes construction, operation of the mine and plant, waste and tailings production and disposal, and monitoring of emissions and ambient environmental impacts); and,
- reclamation and post-certification (which includes abandonment/decommissioning, remediation, reclamation, assessment of reclamation success, reclamation certification, custodial transfer of lands to the Crown, and post-certification use of the land).

While these are presented as a time-series of events it is important to note that at any given mine site two or all three of the phases could be occurring: oil sands may be mined and processed, an amendment to add a new pit may be working its way through the regulatory process and a portion of the mine may be undergoing reclamation and certification.

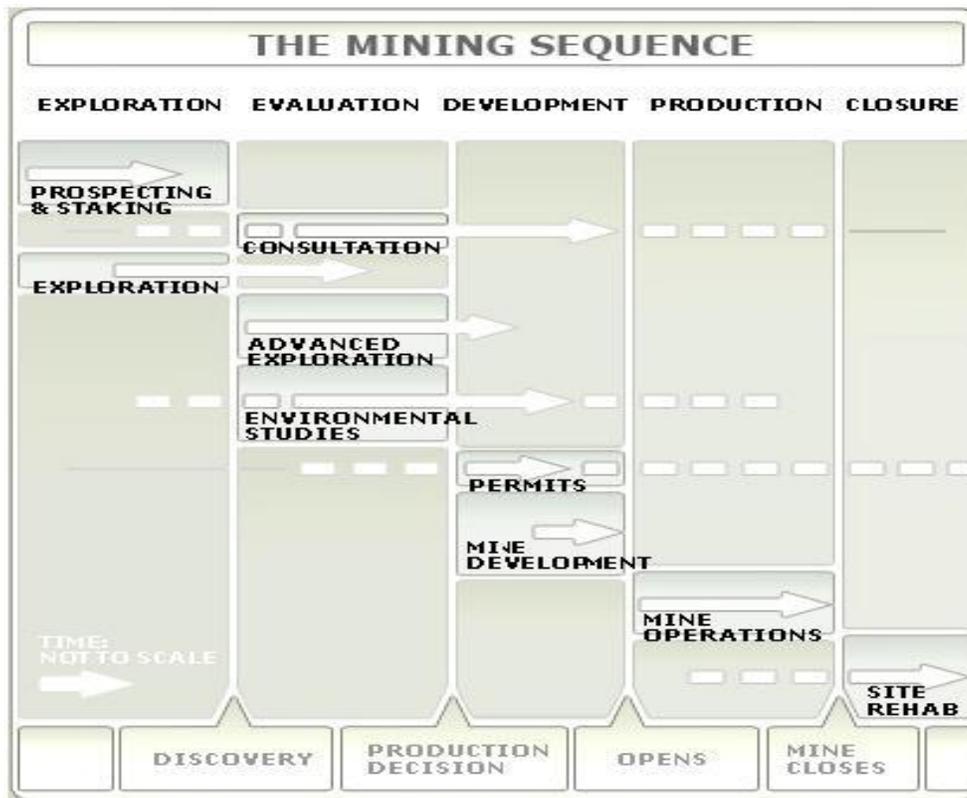


Figure 2. The Mining Sequence.
Adapted from Environment Canada (2012d).

A review of the literature suggests that application of federal legislation is best understood for activities during pre-construction (environmental assessment and authorization) or operational phases, with little information on its applicability to the reclamation and post-certification phases. As defined by the Government of Alberta reclamation is “The return of land and environmental values to a mining site after resources have been extracted. The process commonly includes recontouring or reshaping land to a natural appearance, replacing topsoil and planting native grasses, trees and ground covers” (Government of Alberta 2012a). Reclamation is a long-term project potentially consisting of both ongoing or ‘progressive’ reclamation and end of project reclamation activities associated with the termination and decommissioning of mining (Government of Alberta 2012b, House of Commons 2007a, p. 48, Morton et al. 2011). As Foote (2012) highlights, despite growing resources aimed at addressing the need for reclamation of oil sands developments, several key questions remain: Is the investment sufficient to reclaim the area? Who decides when reclamation is achieved? How is this decision made and enforced into the future?

1.2 Previous Reviews

A 2009 report of the Commissioner of the Environment and Sustainable Development makes clear that under the *Canadian Environmental Assessment Act (1999)*, “Eligible projects include

the construction, operation, modification, decommissioning, or abandonment of a physical work, or other physical activities specified by regulation” (Commissioner of the Environment and Sustainable Development 2009, p. 61). While the report’s focus was on cumulative environmental effects it raises clear implications for environmental management. For example, the report highlights air, wildlife, and water quality as issues. The Commissioner noted:

Water quality. In 2004, Environment Canada noted deficiencies in baseline information as well as data gaps in on-site water quality sampling. That same year, Fisheries and Oceans Canada noted that the impact of water quality on local fish populations was poorly understood, in particular fish tainting and overall fish health. Further, Fisheries and Oceans Canada flagged the risk of possible seepage of tailings ponds (containing oil sands byproducts) into Jackpine Creek as well as overall uncertainties about whether the water quality in end-pit lakes – engineered lakes to be created in mined-out pits – could be high enough to produce viable ecosystems (Commissioner of the Environment and Sustainable Development 2009, p. 72).

The report points to an overwhelming lack of baseline data related to wildlife, air, and water quality. However the report is narrow in that it consists of an evaluation of the *Canadian Environmental Assessment Act (1999)* and five major Alberta oil sands projects.

One of the only available reviews of oil sands regulation involving both federal and provincial levels of government concludes that in most respects the federal government’s role in oil sands development is unclear and lacks predictability (Vlavianos 2007, p. 68). The review of legislation undertaken for this report found little, if any direct references to reclamation activity. In those instances where it was detected, it was from examinations of policies developed by departments to support legislation.

While this report provides some additional clarity on recent legislative changes its conclusions are similar. That is, the federal government’s legislative purview for oil sands development and management remains unclear. This is, paradoxically, compounded by recent amendments aimed at clarifying federal legislative and regulatory requirements for the sector. Part of the complexity is rooted in the constitutional division of powers related to the environment.

2 CONSTITUTIONAL DIVISIONS OF POWERS AND ENVIRONMENTAL MANAGEMENT IN ALBERTA

While oil sands development occurs within provincial boundaries it is subject to legislation at both the federal and provincial levels. The division of powers formally entrenched in Canada's *Constitution Act* (as amended)³, sets out discrete and concurrent areas of federal and provincial authorities and competence. This section provides a concise overview of the division of powers that are formally entrenched as well as the key jurisprudence and informal practices that have developed for the governance of concurrent or shared policy areas. Where possible some analysis is included to examine the broader implications of federalism for environmental, energy, and natural resources sectors as well the legislative Acts therein that form the core of this review.

2.1 Formal Constitutional Division of Powers

A return to the constitution and its division of powers since confederation may seem like an unnecessary depth of analysis. The following section and ensuing review of the core Acts identified however reveals the importance of the original constitutional division of powers, and subsequent amendments, and how they continue to exert influence in the environmental management policy sphere. The *Constitution Act* has been subject to various amendments. It is thus important to note that the *Constitution Act, 1867* only applied to the original partners in confederation: Ontario, Quebec, New Brunswick and Nova Scotia. This is relevant for oil sands development, as the federal government maintained ownership (and control) over provincial natural resources in Alberta until 1930. Through the 1930 Natural Resource Transfer Agreement, a constitutional amendment, Alberta was given ownership and control over its natural resource (it was extended the same authorities as the other provinces as provided for by Section 92 of the *Constitution Act* (as amended)).

The *Constitution Act* (as amended) provides for 29 clearly defined 'express' federal powers in s. 91⁴, and 17 provincial powers are set out ss. 92, 92A, and 93. Federal powers as set out in s. 91 include particular federal competences relevant to oil sands development including but not limited to:

- Navigable waters/Shipping
- Sea Coast and Inland Fisheries
- Indians/Indian reserves

³ See http://laws-lois.justice.gc.ca/PDF/CONST_E.pdf for the *Consolidation of Constitution Acts, 1867 to 1982* which contains the text of the *Constitution Act, 1867* (formerly the British North America Act, 1867), together with amendments made to it since its enactment (<http://www.canlii.org/en/ca/const/const1867.html>), and the text of the *Constitution Act, 1982*, as amended since its enactment (<http://www.canlii.org/en/ca/const/const1982.html>). **Unless otherwise specified in the text any reference to the *Constitution Act* (as amended) refers to this consolidation.** For more information on the history of *Constitution Act* amendments see <http://www.uottawa.ca/constitutional-law/docs.html>

⁴ In this report, s. refers to a section in an Act or regulation while ss. refers to more than one section.

- Works connecting provinces; beyond boundaries of one province; within a province but to the advantage of Canada/or more than one province

Federal powers also consist of emergency and declaratory powers and treaty powers that have implications for environmental management as will be explored below. Further, the federal government also has direct ownership along with responsibility for and equivalent powers to those of s. 92 for vast federal lands (the North and offshore). Section 35 also clearly provides for sole federal authority over federal crown lands as well as a federal responsibility for ‘Indians and lands reserved for Indians’.

The *Constitution Act* (as amended) also enumerates clear exclusive powers of Provincial legislatures. Specifically, s. 109 of the Act confers all lands, mines, minerals, and royalties to the provinces. The implications of Provincial ownership is reinforced by the property and civil rights clause (92(13)), the power to levy direct taxes (92(2)), and the authority over management and sale of public lands (92(5)) among others. Those that pertain to oil sands development are as follows:

- Direct Taxation within Province
- Management/Sale of Public Lands belonging to Province
- Municipalities
- Property and Civil Rights
- Natural Resources
- Matters of a merely local or private nature

The repatriation of the constitution in 1982 saw some changes, through s. 92A, including the provision of exclusive provincial legislative authority related to the exploration, development, conservation and management of non-renewable resources and provided the provinces with new powers to impose indirect taxation on resources and inter-provincial trade in resources provided the federal legislation in the same area is paramount.

The clear division of powers detailed above masks the concurrent and residual federal powers that can complicate environmental and natural resource governance in Canada. Concurrent, or shared powers, involve domains where both levels of government are provided for explicitly as entrenched in ss. 94A and 95. For example, both levels of government have specific concurrent powers over taxation, agriculture, and natural resources exports among others.

Of the residual powers conferred to the federal government under s. 91 of the *Constitution Act* (as amended), s. 91(29) provides for the federal Parliament to legislate for the “Peace, Order and Good Government of Canada, in relation to all Matters not coming within the Classes of Subjects by this Act assigned exclusively to the Legislatures of the Provinces”. This power is "residuary" in the sense that any matter that does not come within the power of provincial legislatures comes within the power of the federal Parliament. Further, as is explored in detail below, the courts have interpreted this as including areas of ‘national concern’. For example, transboundary air and water pollution, wildlife, and other areas that may be pertinent to oil sands development.

The result of the constitutional division of powers, concurrent jurisdictions, and federal residual powers has evolved in the context of both constitutional interpretations by the Supreme Court of Canada but has also been shaped by the *practice* of federalism which impacts how federal legislation has been developed and implemented in policy sectors with implications for reclamation.

2.2 Key Constitutional Jurisprudence on Environmental Legislation, Cooperative Federalism, and the Shift Towards a Stronger Federal Role in Environmental Legislation

A literature review makes clear that while the courts have traditionally discouraged federal unilateralism through traditional recognition of the concurrent nature of the environmental policy sphere (Morton 1996), there has been an ebbing and flowing of federal legislative activism and involvement in the environment sphere. Skogstad (1996, p. 107) for instance, described the longstanding approach as consisting of proposing national environmental guidelines and standards by the federal government but their reliance on provincial governments for formal legislation, regulation, and enforcement. However, as far back as the 1970s scholars began to debate what the ‘residual powers’ could mean for federal involvement in the environmental sphere. For example, Gibson (1973) and Lundquist (1974) each underscore the division of powers limiting effect on unilateral federal environmental action of standards setting. Gibson however noted that while traditionally not the practice, the federal residual powers could empower the federal government to assert itself in the environmental sphere. Others, like Aulh riti re (1972), while sharing Gibson’s and Lundquist’s view of the constraints on the federal jurisdiction, argued the federal jurisdiction over the criminal code and the federal spending power were potential instruments for increased federal environmental involvement.

Both were in part correct in their predictions. There is widespread agreement that two court cases (*R. v. Crown Zellerbach* and *R. v. Hydro-Qu bec*) resulted in a considerable strengthening of federal claims to environmental jurisdiction. These cases are not only important to contextualize the constitutional division of authority and federal environmental legislative interpretation; they raise several implications for environmental management.

More specifically, the judicial interpretation of the federal residual powers (Peace, Order, and Good Government) has resulted in a more prominent role for the federal government in environmental matters. Scholarly assessments seem to concur that a weaker federal role in environmental legislation was primarily due to a perceived weak federal constitutional mandate in the sphere. MacKay (2004) in his review of environmental policy and federalism argues that three factors – constitutional constraint, provincial resistance, and external pressure on the federal government – have led to the historically weak federal role punctuated by periods of heightened federal intervention. As he puts it:

“Overall, the literature in this field concludes that the federal government has been historically restrained in exercising authority in the environmental field. However, there were times when the federal government took a more active role in environmental policy. Initially, scholars explained federal involvement in the environmental field as reflective

of the constitutional restraints placed on the federal government by the constitution. Gradually, however, as federal powers in this area were expanded by constitutional decisions, academics observed a shift in the basis of federal timidity from fear of constitutional toe stepping to a fear of provincial resistance. More recently, scholars have noted that the lack of federal action is based on the waxing and waning of external pressure on the federal government to take action. These three distinct explanations provide reasons for the historically weak federal role interspersed by periods of federal intervention” (MacKay 2004, p. 30).

The first case is *R. v. Crown Zellerbach* in which the federal government applied its *Ocean Dumping Control Act* to provincial waters and charged a company with marine dumping without the proper permit. The respondent argued that the legislation was *ultra vires*⁵. British Columbia and Quebec intervened to oppose the federal government's claim to jurisdiction over provincial waters. However in a majority decision, the Supreme Court upheld the Act and in the process affirmed the newly emerging "national concern" justification for federal legislation passed pursuant to the peace, order and good government clause of the *Constitution Act, 1867*. That is, the court's decision meant that the provincial failure, or more broadly its inability, to deal effectively with internal aspects that could have an adverse impact on interests outside the provincial boundaries was a constitutionally justifiable reason for the federal government to intervene for protection in the national interest. As this report will detail, this raises considerable opportunities for federal legislation to impact and govern the oil sands given federal authority to deal with issues such as transboundary water and air pollution, and wildlife habitat protection and management.

R. v. Hydro-Québec is a second case that is directly relevant to federal jurisdiction and the oil sands. The case involved the Supreme Court ruling on the criminal enforcement provisions (Part II, the toxic substances provisions) of the *Canadian Environmental Protection Act* (CEPA). The case was spurred by the charging of Hydro-Québec for alleged dumping of toxins, polychlorinated biphenyls (PCBs) into a river, contravening an order issued by the federal government under then s. 34 of CEPA. The Court found that the provisions were a valid exercise of the federal government's criminal power. According to the Court, protection of the environment through prohibitions against toxic substances was a legitimate public objective. Because the legislation issued precise prohibitions against specific toxic substances, it was founded on a legitimate criminal objective and therefore valid. The relevance for environmental management is clear in relation to the federal jurisdiction related to toxic substances through CEPA and the criminal code.

The above review emphasizes that judicial interpretation of the constitutional division of powers, particularly in concurrent areas, has profoundly impacted the federal government's ability to assert its powers or engage in activity in concurrent policy areas. However, it is crucial to recognize important differences related to the federal government's ability versus its practice in

⁵ Meaning “Beyond the scope or in excess of legal power or authority” (Merriam Webster, <http://www.merriam-webster.com/dictionary/ultra%20vires>).

such regards. That is, scholars and legal experts emphasize the importance of ‘federal-provincial diplomacy’ or cooperative federalism as a key determinant of environmental and natural resource policy regimes in Canada (Hawke 2002, Lazar 1997, MacKay 2004). For example, Morton (1996) cites the numerous administrative level agreements between orders of government as the real ‘centre of action’ for federal-provincial deliberation over environmental sphere regulation and governance.

The relevance for the oil sands is demonstrated through the practice of bilateral agreements such as the 2005 Canada-Alberta Agreement for Environmental Assessment Cooperation (Environment Canada 2005) and the more recent 2012 Joint Canada-Alberta Implementation Plan for Oil Sands Monitoring (Environment Canada 2012a). The former intimately connected to the environmental assessment process and the latter including components that explicitly deal with air and water quality monitoring, aquatic ecosystem health, and wildlife and terrestrial biodiversity and habitat (Environment Canada 2012a). The relevance of both of these agreements will be reviewed as components of formal environmental legislation and informal cooperation amongst levels of government.

The environment as broadly understood is a concurrent constitutional jurisdiction. Canadian federalism and constitutional division of powers also affect other particular policy sectors that are relevant to environmental management.

2.3 Federalism and Water Policy

The constitution does not provide a clear legislative ‘head’ for water. That is, it represents yet another policy sphere whereby both levels of government have powers and jurisdiction, which are both discrete and overlapping. Water is considered a natural resource and thus the provinces maintain the primary jurisdiction over most areas of water management and protection. However, the federal government has explicit powers and responsibilities for water on federal lands (for example national parks and federal Crown lands) as well as First Nations reserves, and two of Canada's three territories – Nunavut and the Northwest Territories (Côté 2006, p.5). Water again demonstrates the importance of constitutional division of powers and the sequential nature of amendments. This can be seen through the 1909 International Boundary Waters Treaty – a so-called Empire treaty – as it was signed prior to the constitutional changes brought about by the 1931 Statute of Westminster. This treaty allows the federal government to implement legislation that would (if implemented today) infringe on provincial legislative authority. Specifically, it establishes principles and mechanisms concerning the quantity and quality of water along the boundary between Canada and the United States and includes pollution provisions in Article IV. However, constitutionally, the federal government has to be much more aware of provincial powers for any other water treaty it now concludes in light of the changed constitutional environment since 1931.

The 2010 Royal Society of Canada report on the oil sands notes “Given the major involvement of water in the oil sands, the latter two areas of federal jurisdiction (navigation and inland fisheries) provide substantial scope for federal involvement in regulating environmental aspects of oil sands development” (Gosselin et al. 2010, p. 65). As this report will explore, the federal

involvement, through legislation, engages in water related activity that may have implications through its discreet authority (for example over navigation, fisheries, and transboundary imperatives). It also engages in collaborative agreements with Alberta under the *Canada Water Act* (R.S.C. 1985, c. C-11), the 1997 Mackenzie River Basin Transboundary Waters Master Agreement, and the 2012 Joint Canada-Alberta Implementation Plan for Oil Sands Monitoring.

2.4 Federalism and Wildlife Legislation

Wildlife is another category of natural resources that were not explicitly provided for in the distribution of powers in the *Constitution Act* (as amended). Rather, it again represents a policy sphere in which constitutional authority and competences exist at both levels of government. Kennedy and Donihee's analysis suggests that wildlife, from a constitutional perspective, is generally considered as part of the land and thus typically considered a provincial matter governed by the 'property' provisions given to provinces under s. 109 of the *Constitution Act, 1867* (Kennedy and Donihee 2006, p. 4). Donihee's (2000) comprehensive review of wildlife policy in Canada argues that federal authority over wildlife is in part a function of several broad constitutional authorities provided for under s. 91 including trade and commerce, aboriginal jurisdiction, and criminal law.

Federal involvement in wildlife policy also flows in part from s. 132 of the *Constitution Act, 1867* governing international treaties. For example, Canada is a signatory to the 1916 Migratory Birds Convention. As will be detailed below, this raises a potential host of environmental management related considerations under the *Migratory Birds Convention Act* (MBCA).

As wildlife is an expansive category, additional federal Acts such as the federal *Fisheries Act* and the *Species at Risk Act* govern subsidiary aspects of wildlife activity that may be related to oil sands development such as migratory bird patterns, fisheries pollution control, and species at risk considerations.

2.4.1 Fisheries

The *Fisheries Act* is the subject of a detailed review below. It is however important to note that the constitutional division of powers and federalism impact oil sands development. The federal government is constitutionally responsible for 'Sea Coasts and Inland Fisheries' as per s. 91(12) of the *Constitution Act, 1867*. However, the federal authority for fisheries ends where the provincial authority over property and civil rights begins. In the *Provincial Fisheries Reference*⁶, the judicial interpretation distinguished between rights of property and legislative jurisdiction. The courts found that s. 91 conferred the latter on the federal Parliament and that only the provinces were competent to deal with the private right of fisheries in inland waters under s. 92(5), Management and Sale of Public Lands, or under s. 92(13), Property and Civil Rights. The result being that provinces, through the issuing of fishing licenses could establish the rights for individuals to fish, the quota of fish allowable per person, etc. However, and

⁶ Attorney General of Canada v. Attorney General of Ontario, [1898] A.C. 700 (P.C.) ("Provincial Fisheries Reference").

importantly for oil sands development, the federal government retained the right in inland waters for the preservation, management, and protection of the fisheries. This included the right to set the maximum amount of fish to be harvested, and to impose gear restrictions and limitations on locations. The federal government also retained the right to legislate with respect to the protection of fish habitat and waters frequented by fish. This has been operationalized in federal legislation, as detailed below, and has significant consequences for oil sands development at multiple project stages. Both federal and provincial governments have thus sought to exercise their authority in the fish resource sector. To ensure coordination between levels of governments within the federal framework there is a tradition of delegated administrative authority through federal-provincial agreements and legislative mechanisms in the federal *Fisheries Act* to allow for the administrative delegation of power to provincial Ministers (or their officials) for matters such as conservations and enforcement.

2.4.2 *Species at Risk*

From a wildlife policy perspective, the protection of species at risk (as listed in Schedule 1 of the *Species at Risk Act* – SARA) is another important example of the impact the constitutional division of powers exercises in the policy sphere. In 1992 the Government of Canada, exercising its international treaty power, became a signatory and ratified the United Nations’ Convention on Biological Diversity (CBD). The SARA legislation was the culmination of several attempts to legislate for the protection of species at risk. Its significance is related to the implications it raises for habitat and animal populations in areas that are subject to oil sands development.

Domestically, the protection of listed species on *non-federal* lands falls to the provincial and territorial governments. However, SARA provides so-called federal “safety net” clauses that require the competent federal Minister (there are three listed in the Act) to take action if a jurisdiction is not providing effective protection. As will be explored below the SARA prohibitions apply to those species listed in Schedule 1 but also to all migratory birds covered by the *Migratory Birds Convention Act* and aquatic species as covered by the *Fisheries Act*.

Federal-provincial cooperation on the issue is secured through the 1996 *Accord for the Protection of Species at Risk* (Environment Canada 1996). As Environment Canada (2010a, p. 3) notes, the Accord “outlines commitments by federal, provincial and territorial (F/P/T) Ministers to designate species at risk, protect their habitats, and develop recovery plans as well as complementary legislation, regulations, policies and programs (including stewardship). Under the Accord, it is understood that the provinces and territories will undertake actions and enforce prohibitions for the conservation of species at risk under their jurisdiction. The Canadian Endangered Species Conservation Council (CESCC)⁷, comprising F/P/T Ministers responsible for conservation and management of species at risk, was established under the Accord and provides general direction on the activities of Committee on the Status of Endangered Wildlife in

⁷ See http://www.ec.gc.ca/media_archive/press/2001/010919-3_b_e.htm

Canada (COSEWIC)⁸, the preparation of recovery strategies and the preparation and implementation of actions plans. Provinces and territories have policies and legislation frameworks in place regarding species at risk”.

2.5 Constitutional Rights of Aboriginal Peoples

While this section does not provide a comprehensive or detailed review of Aboriginal constitutional rights it does highlight some key provisions and divisions of power that are relevant to oil sands development. Canada’s Constitution recognizes the existing Aboriginal and treaty rights of First Nations, Inuit and Métis in Canada. In fact, Canada has a legal duty to consult and, where appropriate, accommodate Aboriginal groups if it has been determined that treaty and Aboriginal rights could be adversely impacted⁹. This legal duty also applies to provinces and territories as representatives of the ‘Crown’. Part I of the *Constitution Act, 1982* includes provisions in the Charter that pertain directly to Aboriginal peoples rights. It reads:

25. The guarantee in this Charter of certain rights and freedoms shall not be construed so as to abrogate or derogate from any aboriginal, treaty or other rights or freedoms that pertain to the aboriginal peoples of Canada including

(a) any rights or freedoms that have been recognized by the Royal Proclamation of October 7, 1763; and

(b) any rights or freedoms that may be acquired by the aboriginal peoples of Canada by way of land claims settlement.

Additional rights are included in Part II, s. 35, of the Act, which reads:

35. (1) The existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed.

(2) In this Act, "aboriginal peoples of Canada" includes the Indian, Inuit, and Metis peoples of Canada.

(3) For greater certainty, in subsection (1) "treaty rights" includes rights that now exist by way of land claims agreements or may be so acquired.

(4) Notwithstanding any other provision of this Act, the aboriginal and treaty rights referred to in subsection (1) are guaranteed equally to male and female persons.

⁸ See http://www.cosewic.gc.ca/eng/sct5/index_e.cfm

⁹ According to a 2011 Guide, “The common law duty to consult is based on judicial interpretation of the obligations of the Crown (federal, provincial and territorial governments) in relation to potential or established Aboriginal or Treaty rights of the Aboriginal peoples of Canada, recognized and affirmed in section 35 of the Constitution Act, 1982. *The duty cannot be delegated to third parties*” (emphasis added, Minister of the Department of Aboriginal Affairs and Northern Development Canada 2011, p. 6)

35.1 The government of Canada and the provincial governments are committed to the principal that, before any amendment is made to Class 24 of section 91 of the "Constitution Act, 1867", to section 25 of this Act or to this Part,

(a) a constitutional conference that includes in its agenda an item relating to the proposed amendment, composed of the Prime Minister of Canada and the first ministers of the provinces, will be convened by the Prime Minister of Canada; and

(b) the Prime Minister of Canada will invite representatives of the aboriginal peoples of Canada to participate in the discussions on that item.

The Supreme Court of Canada (SCC) in 1990 issued a landmark decision in the *Sparrow*¹⁰ case establishing an initial interpretive framework for s. 35. This has been refined but largely supported by a number of subsequent SCC judgments (Minister of the Department of Aboriginal Affairs and Northern Development Canada 2011). In its decision regarding the *Sparrow* case the SCC characterized s. 35 as a “solemn commitment that must be given meaningful content”, and emphasized that its inclusion in the Constitution represented “the culmination of a long and difficult struggle in both the political forum and the courts for the constitutional recognition of aboriginal rights”. The *Sparrow* ruling however noted that s. 35 rights, like most rights, are not absolute. Under *Sparrow*, the Crown may enact legislation infringing existing Aboriginal and treaty rights, provided it can satisfy the justification test articulated by the Court and established by *Sparrow*. As a recent Senate committee report on aboriginal constitutional rights and the duty to consult summarized:

“Reduced to its essence, the Sparrow justification test requires the Crown to establish that any infringing measures serve a “valid legislative objective” – such as natural resource conservation – and that they are in keeping with the special trust relationship and responsibility of the government vis-à-vis Aboriginal peoples. Further questions to be addressed, depending on the circumstances, include: whether the infringement has been minimal, whether fair compensation has been available in a context of expropriation, and whether the affected Aboriginal group has been consulted (House of Commons 2007b, p. 6).

From an oil sands development perspective this involves a considerable requirement for the federal government to ensure appropriate consultations and engagement with aboriginal peoples at all project development stages. Aboriginal communities in close proximity to oil sands developments have for some time voiced their concerns and expectations regarding oil sands development, and reclamation specifically (Buffalo et al. 2011).

The omnibus implementation Bills reviewed in this report have generated considerable reaction from aboriginal peoples with some taking legal action (MacKinnon 2013).

¹⁰ R. v. Sparrow, [1990] 1 S.C.R. 1075.

2.5.1 *Indian Act and Aboriginal Issues*

Many of the Acts reviewed for this report emphasize or include provisions related to the ‘duty to consult’ with Aboriginals. This duty to consult is a constitutional requirement as detailed above. Bill C-45 has attracted considerable protest and litigation from aboriginal communities that argue the Crown has failed to consult sufficiently with aboriginal communities on the amendments included in the Bill (MacKinnon 2013). The consultation requirement under s. 35 of the *Constitution Act* (as amended) is a broad provision and thus can be argued to apply to federal legislation and amendments that raise implications for aboriginal communities. For example:

- SARA (2012 amended): Includes a provision under s. 73(5) that compels consultation with aboriginals if “the species is found in a reserve or any other lands that are set apart for the use and benefit of a band under the *Indian Act*, the competent Minister must consult the band before entering into an agreement or issuing a permit concerning that species in that reserve or those other lands”.
- Section 6.0 of the *2012 Guide to Preparing a Description of a Designated Project* under the *Canadian Environmental Assessment Act, 2012* (Canadian Environmental Assessment Agency 2012b), states that project description “provide the following information to the extent that it is available or applicable
 1. A list of Aboriginal groups that may be interested in, or potentially affected by, the designated project, including contact information (location, name, mailing address, email address, and fax and telephone numbers).
 2. A description of the engagement or consultation activities carried out to date with Aboriginal groups, including:
 - a. names of Aboriginal groups engaged or consulted to date with regard to the project;
 - b. date(s) each Aboriginal group was engaged or consulted; and
 - c. means of engagement or consultation (e.g., community meetings, mail or telephone).
 3. An overview of key comments and concerns expressed by Aboriginal groups identified or engaged to date, including any responses provided to these groups.
 4. An overview of information on current use of lands and resources for traditional purposes by Aboriginal groups or peoples (e.g., information provided verbally or in writing, and past or present studies).
 5. A consultation and information-gathering plan that outlines the ongoing and proposed Aboriginal engagement or consultation activities, the general schedule for these activities and the type of information to be collected (or, alternatively, an indication of why such engagement or consultation is not required). The proponent is encouraged to provide background information on Aboriginal groups’ potential or established Aboriginal or treaty rights. The proponent is also encouraged to provide

information on the impact area of the designated project and how it overlaps with uses by Aboriginal groups that have potential or established Aboriginal or treaty rights” (Canadian Environmental Assessment Agency 2012b, p. 9-10).

Research conducted for this report suggests that the principle function of the federal government at the pre-construction phase is to consult with aboriginal communities. Urquhart’s (2010) historical review of Aboriginal participation in project planning and development suggests “They did not participate at all, in other words, in five prior major mining project proposals (all of them upstream from Mikisew traditional lands); the terrestrial and aquatic impacts of the mining projects the Mikisew never objected to in regulatory hearings prior to 2003 constitute one reason for their current concern and opposition to exploiting the oil sands”. As per Table 1, Urquhart also charts the confidential agreements between proponents and aboriginal communities that are essential to securing their ‘approval’.

Table 1. Regulatory Interventions/Confidential Agreements with Oil Sands Companies, Mikisew Cree and Athabasca Chipewyan First Nations, 1997 to 2007.

	Mikisew Cree First Nation		Athabasca Chipewyan First Nation ¹¹	
	Intervention at Regulatory Hearing	Confidential Agreement with Company	Intervention at Regulatory Hearing	Confidential Agreement with Company
Syncrude Aurora (1997)	No	No	No	No
Suncor Steepbank (1997)	No	No	Yes	No
Suncor Millennium (1999)	No	No	Yes	Yes
Shell Muskeg River (1999)	No	No	Yes	No (but Shell funds EIA participation)
True North Energy Fort Hills (2002)	No	No	No	No
CNRL Horizon (2004)	Yes	Yes (two months after the hearing)	Yes	Yes

¹¹ The Athabasca Chipewyan were called the Athabasca Fort Chipewyan First Nation when they intervened during the 1997 Suncor Steepbank application (Urquhart 2010).

	Mikisew Cree First Nation		Athabasca Chipewyan First Nation ¹¹	
	Intervention at Regulatory Hearing	Confidential Agreement with Company	Intervention at Regulatory Hearing	Confidential Agreement with Company
Shell Jackpine (2004)	Yes	Yes	Yes	Yes
Suncor Voyager (2006)	Yes	Partial	Yes	Yes
Shell Albian Sands (2006)	Yes	Partial (Environment) Still objects	Yes	Yes
Imperial Kearn (2007)	Yes	Partial	Yes	Yes

Source: Adapted from Urquhart (2010).

Given the limited amount of reclamation and certification that has occurred it is unclear what role, if any, federal legislation may have for the reclamation and post-certification phase. From a reclamation perspective it is likely that most of the legislative requirements will involve monitoring and compliance negotiated with aboriginal communities or on behalf of aboriginal communities to ensure preservation of their treaty and constitutional rights.

A review of recent literature on oil sands development more broadly suggests that aboriginal communities are increasingly using legal tools to challenge governments related to the discharge of their obligations for aboriginal peoples. Aboriginal communities have already publicly declared their intention to file, and/or have filed, legal challenges to components of Bills C-38 and C-45 (McKinnon 2013). There is therefore a potential for jurisprudence that could impact the application of federal legislation. Further, the Government of Canada has signaled its intention to consult with aboriginal communities related to the finalization of regulations flowing from the omnibus legislation reviewed herein. As this report underscores, the amended *Fisheries Act* and SARA include provisions that define aboriginal fisheries and protected species that have significance for aboriginal communities (Buffalo et al. 2011, Urquhart 2010).

A review of federal legislation is revealing as to the extent to which the duty to consult requires the federal government to continue to engage on reclamation issues, despite attempts to harmonize and devolve to provincial levels of government. One recent analysis of the aboriginal community and reclamation in Alberta puts it succinctly, “In any case, care will be required to ensure that Aboriginal traditional use of the reclaimed land, regardless of the assigned class, is considered in establishing the appropriate guideline” (Buffalo et al. 2011). Existing studies note that aboriginal communities in close proximity to oil sands developments have had considerable

effects on the reclamation process including certification and the post-certification activity. For example, Buffalo et al. (2011) suggest:

“Fort McKay has certainly had a strong voice which has helped lead to a number of changes in approval conditions. Changes which we have seen over recent years include improved regulations for salvage and replacement of topsoil, recent changes to the management of fluid fine tailings and the requirement to initiate large scale trials of techniques to reclaim land to peat accumulating wetlands (fens and bogs). In the future, Fort McKay will continue to strive for faster reclamation that will restore the land to pre-mining conditions, will seek the complete eliminate on of fluid fine tailings especially those which will be stored under a water cap in an end pit lake, will seek to ensure that acceptable water quality will be achieved within a reasonable timeframe following closure and will seek to ensure that the reclaimed landscape will support the full range of traditional uses including medicinal plants, berries, hunting, fishing and trapping”.

This is but one example that points to the continued requirement of the federal government to meet constitutional obligations related to treaties and aboriginal communities with direct implications for oil sands development and reclamation¹².

3 FISHERIES ACT

The *Fisheries Act*, 31 V. c.60, received Royal Assent in 1868. The Act repealed and replaced several pre-confederation statutes. The *Fisheries Act* has, since its enactment, been amended seventeen times. It does not contain a section that explicitly sets out the purpose of the legislation requiring full reading of the Act and regulations to be understood. The three principle purviews covered in the legislation are: (1) the proper management and control of the fisheries, (2) the conservation and protection of fish, and the protection of fish habitat and (3) prevention of pollution. Thus the *Fisheries Act* provides for the management and control of fisheries on the one hand and for the protection of fish habitat on the other. The provisions with respect to the protection of fish habitat are contained in the Act while control over harvesting appears largely in the regulations in the form of prohibitions.

The *Fisheries Act* provides the legal framework for regulating impacts on fish and fish habitat associated with works, undertakings, operations and activities occurring in or around Canadian fisheries waters (e.g., freshwater and estuaries). The *Fisheries Act* assigns the Minister a wide range of powers, authorities and duties to regulate impacts to fish and fish habitat in relation to:

- Fish passage (s. 20);
- In-stream flow needs of fish (s. 22);
- Destruction of fish by any means other than fishing (s. 32);

¹² For detailed analysis, legal cases, background and guides on how the department discharges its duty to consult please see House of Commons (2007b) and Minister of the Department of Aboriginal Affairs and Northern Development Canada (2011).

- Harmful, alteration disruption or destruction of fish habitat (s. 35); and
- Pollution of fish-frequented waters (s. 36)

The Act is pertinent to oil sands development given that since 1976 it has included a prohibition against “harmful alteration, disruption or destruction” (HADD) of fish habitat. The HADD provision has applied routinely since to provide habitat and fish protection. Until amended by Bill C-38, as will be examined below, the Act centered on the protection and conservation of fish *and fish habitat*. That is, the Act placed a clear emphasis on measures designed to provide habitat protection and pollution prevention for fish and fisheries. Specifically, the *Fisheries Act* includes provisions (ss. 20 through 22, 26 through 28, 30, 32, and 34 through 42) that were intended to protect fish and fish habitat from harm caused by physical alteration or pollution (Environment Canada 2001, p. 1).

The Minister of Fisheries and Oceans holds the administrative and legislative responsibility for the Act and reports to parliament annually. However, the Prime Minister assigned to the Minister of the Environment responsibility for administration and enforcement of the pollution prevention provisions of the *Fisheries Act* in 1978 that deal with the deposit of deleterious substances into water frequented by fish. A subsequent Memorandum of Understanding between the Department of Fisheries and Oceans (DFO) and the Department of the Environment (DOE) was signed in 1985 that outlined their respective responsibilities for the administration and enforcement of the pollution prevention provisions of the *Fisheries Act*. Both departments jointly developed the ensuing Compliance and Enforcement Policy (Environment Canada 2002).

Until the legislative changes introduced by Bill C-38 and *Fisheries Act* amendments are brought into force, the Act provides for the protection of fish habitat in ss. 34 to 43. It confers upon fish habitat inspectors’ powers to enter locations for the purpose of conducting an inspection where it appears that any work or undertaking has resulted in the deposit of a deleterious substance.

Section 43 empowers the Governor in Council to make regulations. Multiple regulations are listed but based on a reading of the Act only two appear pertinent to oil sands. They provide for the regulation and control of fisheries and protection of fish:

1. for the proper management and control of fisheries;
2. respecting the conservation and protection of fish;

The Act previously provided a range of enforcement measures that could have direct implications for oil sands development activities that involved deleterious substances. That is:

i) directions by Minister - s. 36(6)

Where a person is authorized under the regulations to deposit a deleterious substance, the Minister may direct that person to conduct tests, install equipment, comply with procedures or report information to determine whether the deposit is being done in the manner authorized.

ii) requirement for plans and specifications - s. 37(1)

Where a person carries on any work that results or is likely to result in the destruction of fish habitat or in the deposit of a deleterious substance in water frequented by fish, the Minister may require the production of plans or specifications relating to such work as will enable the Minister to determine whether an offence has been committed and what measures might be taken to prevent the deposit or to mitigate the effects.

iii) powers of the Minister - s. 37(2)

The Minister or a person designated by the Minister, having formed the opinion that an offence has been or is likely to be committed, may require modifications or additions to the work or undertaking or restrict the operation thereof.

A review of legislation and the departmental policies suggest that the 1986 *Policy for the Management of Fish Habitat* (reprinted in 2001) remains the current policy for the protection of fish habitat¹³. The Policy established a long-term objective of a net gain of habitat for Canada's fisheries resources. It also set out policy goals and strategies for the management of fish habitat supporting freshwater and marine fisheries. Environment Canada's administration of the Act's pollution prevention provisions is set out in the Habitat Policy, but it primarily focuses on Fisheries and Oceans Canada. Consultations with officials and the departmental website indicate that the policy was in the process of being reviewed for alignment with the changes in legislation through Bills C-38 and C-45.

3.1 2012 Amendments to Fisheries Act

On June 29, 2012, Bill C-38 the *Jobs, Growth and Long-term Prosperity Act* received Royal Assent. Bill C-38 involves a 'staged' amendment process with a first round of amendments coming into force with Royal Assent. A second 'wave' of amendments will come into force on a date to be fixed by order of the Governor in Council. Prior to detailing the particular changes introduced (and potentially brought into force) by Bills C-38 and C-45 it is crucial to note that under the new CEEA (2012), as detailed below, DFO is no longer a responsible authority meaning that it cannot trigger an environmental assessment (EA) which greatly reduces its role in 'front-end' regulatory activity. However, it remains a federal authority required to enforce the provisions included in the *Fisheries Act* itself (e.g., authorizations as noted above). Based on a review of existing joint panel reviews and consultations with DFO officials however, DFO will continue to exercise its responsibilities as a Federal authority under the Act and provide subject matter expertise as requested by other responsible authorities during an EA process. Three key aspects of the *Fisheries Act* that were amended include: (1) habitat provisions and approach, (2) increased Ministerial discretion, and (3) devolution and delegation to provincial governments.

¹³ For a thorough historical review and discussion of key policies see also the Cohen commission's policy and practice report, *Enforcement of the Habitat Protection and Pollution Prevention Provisions of the Fisheries Act*: <http://www.cohencommission.ca/en/pdf/PPR/PPR9-HabitatEnforcement.pdf#zoom=100>. [Last Accessed March 12, 2013).

The first set of amendments to the *Fisheries Act* includes an amendment to s. 35(1) to add the word “activity”, which broadens the HADD prohibition. The second set of amendments will significantly alter s. 35(1) by prohibiting works, undertakings or activities that result in “serious harm to fish”. The fish that are the subject of s. 35 prohibition must be part of a commercial, recreational or Aboriginal fishery, or to fish that support such a fishery. The term “serious harm to fish”, defined in s. 2(1), will include the death of fish or the permanent alteration to, or destruction of, fish habitat. The term “serious harm to fish” does not prohibit the “disruption” (e.g., temporary alteration) of fish habitat as currently provided for in s. 35(1). As a result, some activities prohibited under the current legislation will no longer be covered by the definition of “serious harm”. The anticipated amendments, yet to be fully brought into force, reorient the focus of the Act to the protection of recreational, commercial, and Aboriginal fisheries. That is, the government has made a clear policy and legislative shift from broad habitat protection to narrower fisheries protection. As the Department of Fisheries and Oceans puts it:

“The *Fisheries Act* is about managing fisheries. We are moving away from reviewing all projects on all waters to focusing on those that may significantly impact Canada’s fisheries. We will strengthen our focus on the management of threats to Canada’s recreational, commercial and Aboriginal fisheries to ensure their long-term productivity and sustainability” (Department of Fisheries and Oceans 2012b).

This is a substantial departure from the previous iteration of the legislation that emphasized the protection of fish habitat. The amendments are consequential because they impact the permitting process that was previously required when proponents sought to engage in activity that involved the ‘deposit’ of deleterious substances into bodies of water that may impact fish habitat. Previously, proponents would be required to apply for a permit to engage in depositing of deleterious materials and such an application would *automatically* trigger an environmental assessment. Under the revised Act this is no longer the case.

The main point of contention raised is that the proposed amended Act results in a loss of protection to fish ‘habitat’ (Gibson 2012). However, as detailed above the term ‘habitat’ is still explicitly included in the definition of harm. Consultations with a DFO official suggested that any oil sands development activities involving ‘serious harm’ which includes fish habitat would require DFO authorization¹⁴. As the DFO website explicitly states, should the amendments included in Bill C-45 be brought into force, authorizations will no longer be required for all projects, but only for projects causing harm to fisheries:

“Authorizations will not be required for projects occurring in waters that do not support the recreational, commercial or Aboriginal fisheries. New tools will be available to manage smaller impacts to recreational, commercial and Aboriginal fisheries” (Department of Fisheries and Oceans 2012a).

At the time this report was being written only some of the amended provisions of the new *Fisheries Act* applied with other regulatory measures, such as those associated with the new

¹⁴ Consultation with DFO Official January 30, 2013.

serious harm provisions as well as those specifying the types of fisheries had *not* been brought into force. As the Department has put it, the amendments introduced by Bill C-38 include “purpose” and “factors” sections that are aimed at providing direction to decision makers related to the new *Fisheries Act* provisions. The “Purpose section states that the fisheries protection provisions of the *Fisheries Act* aim to provide for the sustainability and ongoing productivity of commercial, recreational and Aboriginal fisheries” (Department of Fisheries and Oceans 2012b). Further, it details the four factors that the Minister will take into account when making regulations or considering whether to issue an authorization:

- The contribution of the relevant fish to the ongoing productivity of commercial, recreational or Aboriginal fisheries;
- Fisheries management objectives;
- Whether there are measures and standards to avoid, mitigate or offset serious harm to fish that are part of a commercial, recreational or Aboriginal fishery; and
- The public interest (Department of Fisheries and Oceans 2012b).

The new Fisheries Protection Program contains a new prohibition that combines the current s. 32 (killing of fish by means other than fishing) and s. 35 (harmful alteration, disruption or destruction of fish habitat) (Department of Fisheries and Oceans 2012b). Until this new ‘serious harm’ prohibition comes into force, the current ss. 32 and 35 (with modest amendments through Bill C-38) will continue to apply” (Department of Fisheries and Oceans 2012b).

The Bill C-38 amendments were created to provide increased Ministerial discretion and expedite the regulatory process for proponents. As the Department acknowledges, the amended Act provides the Minister the ability to develop regulations for compliance with the provisions to be created by the amended Act. The amendments to the Act also include regulatory tools to facilitate regulatory streamlining and increase efficiency, including:

- “Information Requirements will be set out in regulations to clearly spell out for proponents the information the Department requires to issue an authorization, if one is required;
- Once the information is received, the Department will be bound by set timelines for the issuance of an authorization, if required.
- Incorporation by reference into regulations will allow the Department to recognize externally developed standards (i.e., not developed by Fisheries and Oceans Canada), as appropriate to guide activities in and near waters that require our management.
- Equivalency of regulatory regimes could be established if the provincial regime “meets or beats” provisions of the *Fisheries Act* or of its regulations” (Department of Fisheries and Oceans 2012b).

Further, the Minister and Cabinet (Order in Council) have gained increased ability to exempt projects from the HADD provisions. As such, it is unclear how some of the amendments will be defined, interpreted, or affect DFO policies related to regulation involving bodies of water developed on mine sites.

Bill C-38 amendments to the *Fisheries Act* include a clear attempt to devolve or delegate considerable regulation and fisheries stewardship to the provincial level. This is germane to oil sands development as the amended Act includes a provincial equivalency stipulation. That is, the federal government may (through Order in Council) deem provincial regulations ‘equivalent’ and exempt projects from amended fisheries regulations (which have yet to be developed). This is particularly clear through ss. 4.1 and 4.2 “Agreements, Programs and Projects”. Section 4.1, for example, allows the Minister of Fisheries and Oceans to enter into an agreement with a province or territory to further the purposes of the Act to foster harmonization and reduce overlap. Section 4.2 is also quite clearly aimed at securing harmonization given its inclusions of provisions for Cabinet (through Order in Council) to order the provisions of the *Fisheries Act* non-applicable if it deems provincial standards or practices to be of ‘equivalent effect’.

It remains unclear how existing provincial provisions can be deemed to be “equivalent” under Bill C-38 given that provincial governments have no constitutional authority or enforcement powers related to fisheries. Further, s. 35(2)(4) would exempt regulations prescribing anything under s. 35(2) from s. 3 of the *Statutory Instruments Act*. This is important as that provision requires regulations to be reviewed by the Clerk of the Privy Council for conformity with such matters as the enabling legislation and the Canadian Charter of Rights and Freedoms¹⁵. As such, proponents or oil sands developments may be subject to constitutional charter challenges or other forms of litigation.

Further amendments have been brought to bear through the second budget implementation Act, *The Jobs and Growth Act, 2012, S.C. c.31* (C-45). The Act was given Royal Assent on December 14, 2012. The amendments to the *Fisheries Act* are contained in Part 4, Division 4, and ss. 173 to 178. Bill C-45 included so-called ‘technical’ amendments to the *Fisheries Act* regulations previously introduced in Bill C-38. It is important to note that, similar to Bill C-38, the amendments that are included in Bill C-45 were not yet in force at the time this report was written, only coming into force upon an Order in Council (Cabinet) decision. There are two amendments in Bill C-45 that are likely applicable to oil sands development.

First, amendments included changes to s. 2 of the Act to clarify the Bill C-38 amendments related to the definition of the “Aboriginal Fisheries” provision (see Table 2 below). Secondly, Bill C-45 introduced so-called ‘transitional provisions and authority’ aimed at providing certainty to holders of s. 32 and s. 35(2) exemptions. That is, s.177(2) of Bill C-45 allows the Minister to cancel or amend *Fisheries Act* s. 32 and/or s. 35(2) authorizations that were issued prior to the introduction of Bill C-38. Transitional s. 177(3) makes the offence provisions of s. 40(3) inapplicable for 90 days after the coming into force of s. 142(2) of the *Jobs, Growth and Long-term Prosperity Act* regardless of whether an exemption is to be granted for the authorization. This is again indicative of efforts to amend the legislation to provide greater discretion to the executive.

¹⁵ See Bill C-38, s. 142(4), which will not be of legal force until Cabinet so orders.

3.2 Summary of Fisheries Act Amendments

The recent amendments to the *Fisheries Act* that may have an impact on oil sands development have yet to be fully finalized. However, a reading of the Act and departmental documents supports a dramatic reduction in regulatory and legislative burden for oil sands proponents compared to previous versions of the Act. The implications for the pre-construction phase are such that previously required permitting for *any* deposit of deleterious substance no longer applies. That is, the new legislation only applies to fisheries or activity that affects fisheries and the previous automatically triggered environmental assessment will no longer be a reality for proponents unless activities involve one of the four types of fisheries as defined by the revised Act. The 2012 amendments to the *Fisheries Act* have reoriented the legislation away from broader protection of fish habitat to a more narrow emphasis on activities impacting fisheries. A further narrowing can be gleaned from the above replacement of the longstanding HADD provision to a narrower and more subjective ‘serious harm’ principle (Table 2). The likely effect being a reduction in the number of environmental assessments triggered automatically and increased discretionary authority for the Minister to grant exemptions (Gibson 2012).

Table 2. The Evolution of Section 35 of the *Fisheries Act*.

Prior to Bill C-38	Bill C-38 Amendments	Bill C-45 Amendments
Harmful alteration, etc., of fish habitat 35. (1) No person shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat.	Alteration, disruption or destruction of fish habitat 35. (1) No person shall carry on any work, undertaking or activity that results in the harmful alteration or disruption, or the destruction, of fish habitat.	Serious harm to fish 35. (1) No person shall carry on any work, undertaking or activity that results in serious harm to fish that are part of a commercial, recreational or Aboriginal fishery, or to fish that support such a fishery.

Prior to Bill C-38	Bill C-38 Amendments	Bill C-45 Amendments
<p>Alteration, etc., authorized</p> <p>(2) No person contravenes subsection (1) by causing the alteration, disruption or destruction of fish habitat by any means or under any conditions authorized by the Minister or under regulations made by the Governor in Council under this Act.</p>	<p>Exception</p> <p>(2) A person may carry on a work, undertaking or activity without contravening subsection (1) if</p> <p>(a) the work, undertaking or activity is a prescribed work, undertaking or activity, or is carried on in or around prescribed Canadian fisheries waters, and the work, undertaking or activity is carried on in accordance with the prescribed conditions;</p> <p>(b) the carrying on of the work, undertaking or activity is authorized by the Minister and the work, undertaking or activity is carried on in accordance with the conditions established by the Minister;</p> <p>(c) the carrying on of the work, undertaking or activity is authorized by a prescribed person or entity and the work, undertaking or activity is carried on in accordance with the prescribed conditions;</p> <p>(d) the harmful alteration or disruption, or the destruction, of fish habitat is produced as a result of doing anything that is authorized, otherwise permitted or required under this Act; or</p> <p>(e) the work, undertaking or activity is carried on in accordance with the regulations.</p>	<p>Exception</p> <p>(2) A person may carry on a work, undertaking or activity without contravening subsection (1) if</p> <p>(a) the work, undertaking or activity is a prescribed work, undertaking or activity, or is carried on in or around prescribed Canadian fisheries waters, and the work, undertaking or activity is carried on in accordance with the prescribed conditions;</p> <p>(b) the carrying on of the work, undertaking or activity is authorized by the Minister and the work, undertaking or activity is carried on in accordance with the conditions established by the Minister;</p> <p>(c) the carrying on of the work, undertaking or activity is authorized by a prescribed person or entity and the work, undertaking or activity is carried on in accordance with the prescribed conditions;</p> <p>(d) the serious harm is produced as a result of doing anything that is authorized, otherwise permitted or required under this Act; or</p> <p>(e) the work, undertaking or activity is carried on in accordance with the regulations.</p>

Prior to Bill C-38	Bill C-38 Amendments	Bill C-45 Amendments
		<p>Regulations</p> <p>(3) The Minister may, for the purposes of paragraph (2)(a), make regulations prescribing anything that is authorized to be prescribed.</p> <p>Statutory Instruments Act</p> <p>(4) Regulations made under subsection (3) are exempt from section 3 of the Statutory Instruments Act.</p>
<p>Note: “fish habitat” is defined in s. 34(1) as “spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes”.</p>	<p>Note: “fish habitat” is defined (as before) in s. 34(1) as “spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes”.</p>	<p>Note: the old definition of “fish habitat” is repealed and replaced with the following slightly different definition:</p> <p>““fish habitat” means spawning grounds and any other areas, including nursery, rearing, food supply and migration areas, on which fish depend directly or indirectly in order to carry out their life processes”</p> <p>And the following provision is added as s. 2(2):</p> <p>“For the purposes of this Act, serious harm to fish is the death of fish or any permanent alteration to, or destruction of, fish habitat.”</p> <p>See also the new transitional provisions regarding Fisheries Act authorizations in s. 177 of Bill C-45, which will come into force on the passage of that bill.</p>

Source: Adapted from Richler (2012).

3.3 Application of the Act to the Mineable Oil Sands

From a pre-construction phase perspective a key activity that DFO undertakes is the authorization of exemptions for compensation. An authorization under the *Fisheries Act* is the main regulatory approval issued on behalf of the Minister of Fisheries and Oceans for the administration of authority established under s. 35(2) and s. 32 of the *Fisheries Act*. As the department's *Practitioners Guide to Writing an Authorization for the Habitat Protection Provision of the Fisheries Act* explains:

“DFO exercises its authorities primarily through reviewing proposed developments and monitoring data relative to existing and new developments and providing advice on appropriate mitigation measures to avoid impacts on fish and fish habitat. DFO's Habitat Management Program (HMP) administers responsibilities for the application of the habitat protection provisions of the *Fisheries Act* through the preparation and issuance of Authorizations” (Department of Fisheries and Oceans 2010, p. 1).

Consultations with DFO indicated that their typical interaction with an oil sands proponent involves interactions around the proponent's request for authorization for exceptions from the *Fisheries Act*. That is, when proponents expect their projects to cause harm to fish habitat or have an impact on fish habitat they must seek out authorization from the Department. According to the Practitioners Guide, conditions in an Authorization are related to various plans and information *provided by the proponent* and are organized according to: the proponent's proposed development plan, specific fish and fish habitat impact mitigation measures, reporting of mitigation monitoring results, the habitat compensation plan; reporting of habitat compensation monitoring results; and estimates for financial security (Department of Fisheries and Oceans 2010, p. 12). Detailed review of DFO policies and consultations with DFO officials emphasize the determination made by the Department is governed by the 'no net loss' principle. The goal of the DFO policy is to attempt to “balance unavoidable habitat losses with habitat replacement on a project-by-project basis so that further reductions to Canada's fisheries resources due to habitat loss or damage may be prevented” (Department of Fisheries and Oceans 2001, p. 7).

The 'no net loss' principle applies to proposed works and undertakings and it will not be applied retroactively to approved or completed projects. The Practitioners Guide elaborates that the Department will be guided by *hierarchy of preferences* procedure for large-scale development projects. The net benefit process is captured in Figure 3 (Department of Fisheries and Oceans 2001, p. 23).

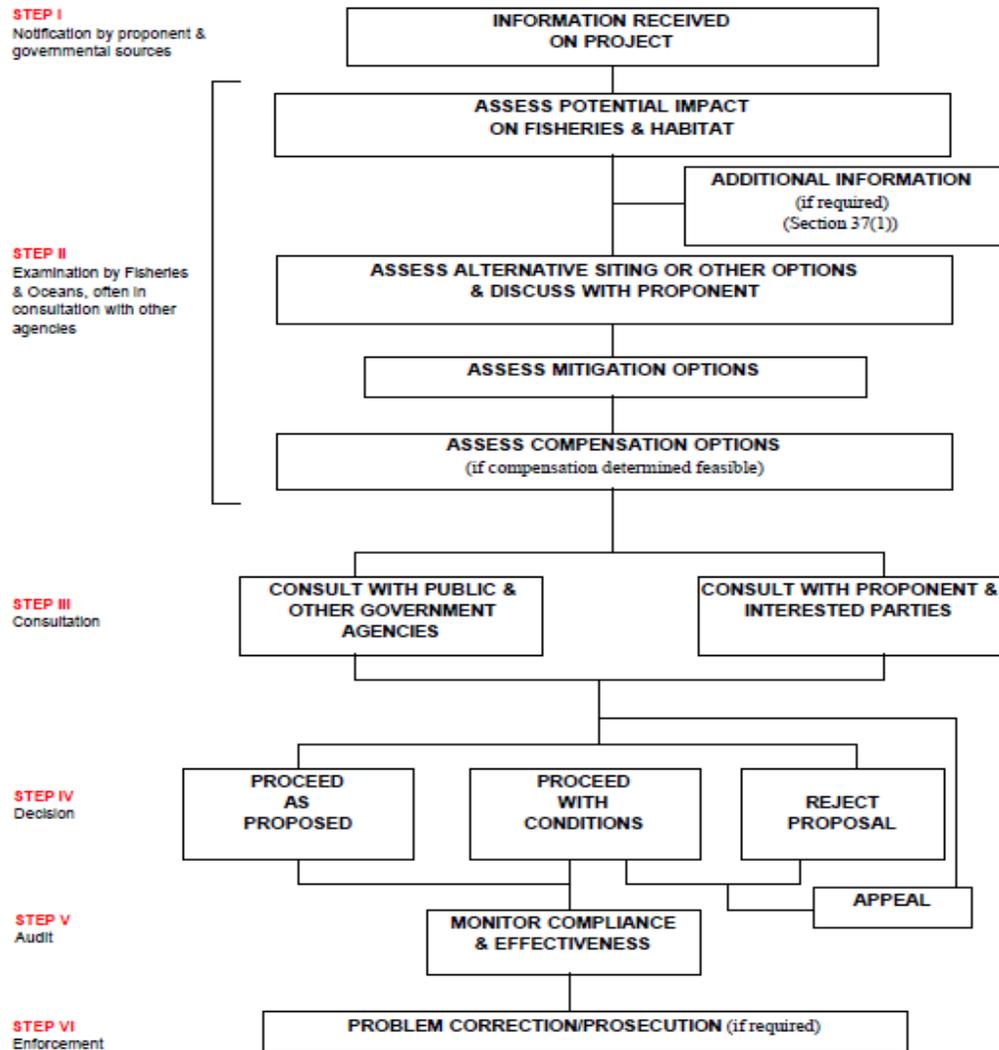


Figure 3. Procedural Steps to Achieve Net Loss Policy.

The net benefit process consists of the following 4 steps:

- For the application of the no net loss principle, the first preference of the Department will be to maintain without disruption the natural productive capacity of the habitat(s) in question by avoiding any loss or harmful alteration at the site of the proposed project or activity. This will be especially important where local communities rely on specific fisheries stocks. It may be achieved by encouraging the proponent to redesign the project, to select an alternate site, or to mitigate potential damages using other reliable techniques, such as by installing adequate pollution control equipment.
- Only after it proves impossible or impractical to maintain the same level of habitat productive capacity using the approaches outlined above would the Department

accede to the exploration of compensatory options. First of all, the possibilities for like-for-like compensation should be assessed; that is replacing natural habitat at or near the site. Should this not be feasible, then secondly it might be possible to consider either moving off-site with the replacement habitat, or increasing the productivity of existing habitat for the affected stock, if reliable techniques are available. Compensation options will not be possible as a means of dealing with chemical pollution and contamination problems; reliable control techniques must be installed and operated to mitigate such problems from the outset.

- In those rare cases where it is not technically feasible to avoid potential damage to habitats, or to compensate for the habitat itself, the Department would consider proposals to compensate in the form of artificial production to supplement the fishery resource, provided the following conditions are met:
 - such a solution will be in accordance with the objectives established in the local fisheries management plan, assuming one is available;
 - genetic and other biological factors are satisfied; and,
 - practical and proven techniques are available.
- The costs associated with providing facilities or undertaking measures to mitigate and compensate for potential damages to the fisheries resource will be the responsibility of proponents, as will the costs to operate and maintain such facilities. (Department of Fisheries and Oceans 2001, p. 21-22).

The Department makes clear that the authorization process includes 6 steps as follows:

- “Step I – Notification: Information and requests for Departmental approval of works or undertakings in or near the water will come to the attention of the Department in the following ways: (a) through established interagency referral systems, (b) inquiries from the proponent, (c) inquiries from concerned citizens, (d) public announcement of the project, and (e) in response to requests from the Department of Fisheries and Oceans to proponents for information about their projects. The majority of notifications come to the Department's attention through interagency referral mechanisms. These mechanisms have proved to be very effective in the past and the Department intends to continue using them.
- Step II – Examination: Once information on a proposal is received, the Department undertakes an examination of the potential implications of the work or undertaking to the fisheries resource. For chemical hazards, information is needed on the physico-chemical properties of the suspect chemical and its by-products, its toxicity and pathology to fish, and the routes and rates of entry into the natural environment. For minor projects involving physical activities (e.g., stream crossings) which disrupt important fish habitat, Fishery Officers and fish habitat management staff will assist operators to the extent feasible in identifying the biological impacts of the work or undertaking and will make a biological assessment of the requirements

necessary to meet fisheries operational objectives. For major projects, obtaining and presenting relevant information on the project or the chemical compounds involved, and on the fish habitat that is likely to be affected, is the responsibility of the proponent under Section 37(1) of the Act. This step will take varying amounts of time to complete, depending on the size of the project, and it will be in the interest of proponents to provide assessments on a timely basis. Staff of the Department will assess the information obtained and if necessary visit the site and undertake studies to complete their assessments. As part of the examination step, the hierarchy of preferences will be used to guide both the Department and proponents; the amount of detail and time required will depend again on the size of the work or undertaking, and its potential impact on fish habitats.

- Step III – Public Consultation: The Department recognizes the need to provide opportunities for public review and input to decisions on developments that have broad social, economic or environmental implications. In the case of major development projects, where avoidance of habitat loss or damage is not feasible, and where mitigation and compensation measures cannot be implemented to fully avoid losses to the productive capacity of habitats, and particularly where special regulations to allow the project to proceed are contemplated under the *Fisheries Act*, no decision to proceed with the project in question will be taken by the Minister of Fisheries and Oceans without public consultation and a thorough review and assessment of all factors.
- Step IV – Decision: Following its examination of the proposed work or undertaking and the results of any public consultation, the Department will decide whether the project is likely to result in a net loss of productive habitat capacity. If a loss is likely, the Department will then have to decide if the proponent's plans to mitigate and compensate are acceptable. In cases involving chemical hazards, adverse effects must be controlled by mitigation measures to avoid potential damage to the productive capacity of fish habitats. For those cases, compensation in-kind is not an acceptable option.

The Department will give due consideration to the economic benefits and costs associated with the development of alternative solutions to achieve no net loss of productive capacity. Depending on the outcome of the Department's deliberations, it could decide directly, or through a recommendation to the Minister in cases involving major development projects, as follows:

- to permit the proposal to proceed as proposed (no harm expected to the productive capacity of fish habitat);
- to permit the proposal to proceed with fixed conditions (often with respect to schedule, methods, equipment, environmental control and mitigation measures, compensation, follow-up monitoring, possible need for corrective adjustments by proponent after start-up, the training of company personnel, and other conditions);
or

- to reject the proposal (potential losses to the fisheries judged unacceptable).

In cases where the Department has to advise a proponent that the work or undertaking is unacceptable, the Department will present information to support the following conclusions:

- that despite the best efforts to control adverse effects, unacceptable net loss of habitat will take place if the project proceeds;
 - that this potential loss of habitat will cause demonstrable harm to fisheries resources; or
 - that there is an unacceptable level of uncertainty involved in forecasting the potential effects on fish habitats and the fisheries resources.
- Step V – Audit: As explained in this policy, compliance monitoring and effectiveness evaluation are important components of habitat management policy.
 - Step VI – Enforcement: The Department will enforce the legislation for which the Minister of Fisheries and Oceans is accountable, using trained personnel” (Department of Fisheries and Oceans 2001, p. 22-24).

A review of the *Fisheries Act* and consultations with officials suggests that the Act would likely apply most predominantly to the operations phase for compensation, monitoring and compliance of permits issued for oil sands operations. The *Fisheries Act* includes objectives for a sustainable aquatic habitat including the “spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes” (Hrynshyn 2012, p. 48).

The DFO Practitioners Guide to Habitat Compensation includes clear guidelines for the monitoring and enforcement provisions that exist and their application to oil sands development can be inferred. The monitoring assesses the compensation provided to ensure that baseline information is available and to report on the completed compensation and maintenance program results (Department of Fisheries and Oceans n.d.). The regime includes:

- Compliance monitoring: determine whether the conditions of the compensation plan have been met and whether the physical structures required in the Authorization were actually built.
- Effectiveness monitoring: measures how well the new habitat is working and the extent to which compensation is functioning or will function as intended. (Department of Fisheries and Oceans n.d.)

The Guide further details that, in accordance with the terms and conditions of the Authorization, DFO can require adjustments to meet the expected implementation of the compensation plan. The Guide does not however specify the duration of monitoring instead it suggests monitoring “should continue long enough to determine whether the compensation will or is functioning properly” (Department of Fisheries and Oceans n.d.). Should DFO officers or staff determine that the compensation plan and activities are not in compliance with the authorization conditions

they would then subject the proponent to the enforcement provisions in the Act. Therefore in the operational phase the emphasis, under the *Fisheries Act* will rest on population and habitat provisions of the Act. These will apply until the proposed amendments and associated regulations brought forward by 2012 amendments to the Act are brought into force.

The previously detailed HADD provisions would require a permit for the discharge or depositing of deleterious substances into fish habitat. At the reclamation and post-certification phase this section would apply to end pit lakes in terms of any releases to natural surface waters or if lakes are to be considered fish habitat, as defined by the Act (Westcott and Watson 2007, p.7).

The *Fisheries Act* could potentially impact the post-certification phase – should EPLs become fish habitat or be linked through hydrological connections with other bodies of water that impact fish habitat they could be subject to the fisheries habitat provisions under *the current Fisheries Act*. Consultations with a DFO official revealed that an end pit lake deemed one of the four types of fisheries under proposed amendments could be subject to DFO regulatory oversight. At this point it is unclear when the declaration of bodies of water constituting a fishery would be made.

Further, compensation agreements could require post-certification monitoring and compliance activity. These compensation agreements would clearly delineate what proponents would be responsible for, setting clear parameters for rehabilitation or compensation measures expected.

As with many of the Acts reviewed, the limited reclamation and certification that has occurred combined with potential changes related to how and when proposed regulations may be brought into force make interpretations of the impacts to the post-certification phase difficult.

4 CANADIAN ENVIRONMENTAL PROTECTION ACT

The *Canadian Environmental Protection Act* (CEPA) was passed in 1988. It is one of the principal federal environmental statutes governing environmental activities falling within the federal jurisdictions (MacKay 2004). The Act is administered by Environment Canada. CEPA consolidated a number of federal environmental Acts such as the *Environmental Contaminants Act*, *Ocean Dumping Control Act* and the *Clean Air Act*. CEPA also included new provisions for the federal government to exercise authorities over the regulation of toxic substances that had previously been largely the purview of provincial governments only (MacKay 2004, p. 32). CEPA provides for both the evaluation and regulation of toxic substances. That is, its legislation sets out a system for evaluating and regulating toxic substances as well as a matrix for the prevention of pollution and planning and emergency planning requirements. CEPA also contains provisions that govern the movement of hazardous materials both within Canada on an inter-provincial basis as well as the international movement of hazardous goods.

The Act was substantially revised in 1999. A substantial portion of the 1988 Act dealt with the identification, control and/or prevention of toxic substances in the environment, and the promotion of life cycle management of toxic substances. CEPA 1999 expanded the Act's purview to also include persistent and bioaccumulative substances in the environment. CEPA 1999 also includes additional legal tools and obligations including fulfilling Canada's

international and national obligations for air and ocean pollution as well as improved coordination and consistency of regulations pertaining to activities on federal (Crown) lands. CEPA 1999 includes twelve key Parts.

As Doelle (2005) notes these deal with administration, public participation, information gathering, pollution prevention plans, categorization and control of toxic substances, biotechnology, and specific pollution control.

CEPA includes a broad set of environmental regulatory functions that potentially apply to oil sands development. A legislative review by Douglas and Hébert (1999) put it succinctly:

“CEPA’s chief importance is that it provides a framework for the management and control of toxic substances at each stage of their life cycle, from development and manufacturer/importation through to transportation, distribution, use, storage and ultimate disposal as waste. CEPA also provides the federal government with authority to enter into intergovernmental environmental agreements; establish environmental quality objectives, guidelines and codes of practice; regulate the content of fuels; regulate the nutrient concentration in cleaning agents and water conditioners; control ocean dumping through a permit system; regulate waste handling and disposal practices; improve, by means of guidelines and regulations, its own environmental performance and standards in relation to its operations and lands, including Indian reserves; and take action in cases of international air pollution”.

The CEPA 1999 amendments provided new authorities with respect to hazardous wastes and hazardous recyclable materials, including the authority to:

- prohibit exports, imports or transits of wastes and recyclable materials where required by Canada's international obligations;
- develop criteria to assess the environmentally sound management (ESM) of transboundary wastes and recyclable materials, and to refuse permits for exports, imports or transits if these criteria are not met;
- issue permits for the "equivalent level of environmental safety", allowing for variances from the regulations under specific conditions; and
- require the preparation and implementation of plans to reduce or phase out exports of wastes destined for final disposal. (Environment Canada 2001)

Under CEPA 1999, companies are required to report annually, by June 1st, through the National Pollutant Release Inventory (NPRI) on pollution they release to the environment. CEPA 1999 establishes the authorities for environmental protection measures as well as restrictions related to contaminants (e.g., air and water pollution). The Act requires that Environment Canada maintain and publicly disclose the NPRI, which it does through its online registry system¹⁶. Under the Act, proponents that use or process NPRI-listed substances must do so under certain prescribed

¹⁶ See <http://www.ec.gc.ca/inrp-npri/default.asp?lang=En&n=4A577BB9-1>

conditions and must report releases (including off-site transfers of the substances) to Environment Canada. In 2009, the NPRI requirements were amended (retroactively to 2006) to include “quantities of NPRI-listed substances that were disposed of in tailings and waste rock” (Environment Canada 2010d)¹⁷. Table 3 provides a comparison of the pre- and post-2009 NPRI requirements.

Table 3. Comparison of 2006-2008 and 2009 NPRI Reporting Requirements for Tailings and Waste Rock.

Description	Details of Applicability for 2006-2008 NPRI Reporting of Tailings and Waste Rock	Details of Applicability for 2009 NPRI Reporting of Tailings and Waste Rock
Legislative requirements	Published on December 5, 2009 in the Canada Gazette Part I Notice with respect to tailings and waste rock reporting under the National Pollutant Release Inventory for 2006 to 2008	Published on December 5, 2009 in the Canada Gazette Part I Notice with respect to substances in the National Pollutant Release Inventory for 2009
Compliance deadline?	June 1	June 1
Substances required to be reported for disposals in tailings and waste rock management areas?	Only substances from Parts 1 and 2 are included in the 2006-2008 notice. A substance report, including information on disposals to tailings and waste rock management areas, is required for each of the above NPRI substances for which the applicable mass reporting threshold is met or exceeded.	For 2009, NPRI substances in Parts 1, 2, and 3 are applicable for reporting on tailings and waste rock. A substance report, including information on disposals to tailings and waste rock management areas, is required for each of the above NPRI substances for which the applicable mass reporting threshold is met or exceeded.

¹⁷ See 2009 NPRI Tailings and Waste Rock Data (OSRIN 2011) at <http://www.osrin.ualberta.ca/Resources/DidYouKnow/2011/October/2009NPRI TailingsandWasteRockData.aspx> for oil sands data.

Description	Details of Applicability for 2006-2008 NPRI Reporting of Tailings and Waste Rock	Details of Applicability for 2009 NPRI Reporting of Tailings and Waste Rock
Which sectors are required to report NPRI substances in tailings and waste rock?	The 2006-2008 notice is limited to facilities from the bitumen, coal, diamonds, metals, and potash sectors that generated or disposed of tailings or waste rock during at least one of those years.	For 2009 reporting, facilities from other industry sectors beyond mining are subject to the tailings and waste rock requirements. As such, if a facility from any sector disposes of waste rock or tailings, they would need to report on it (provided they meet thresholds and have information on NPRI substances in the waste rock or tailings, and subject to the exclusions for inert materials).
What facilities are subject to the notice?	Facilities are subject to the 2006-2008 notice if, during one or more of the 2006-2008 calendar years: employees at the facility worked 20 000 hours or more; and the facility generated or disposed of tailings or waste rock as a result of the extraction or recovery of bitumen, coal, diamonds, metals or potash, or the extraction or beneficiation of metallic ore or ore concentrate.	The general NPRI requirements apply for the 2009 notice – this would include facilities beyond the mining sector.
Who is required to report?	The owner or operator of the facility as of December 31, 2009 is required to report for the 2006-2008 years. If the facility closed during that period, the last owner or operator of the facility is required to report.	The owner or operator of the facility as of December 31, 2009 is required to report for the 2009 NPRI.

Description	Details of Applicability for 2006-2008 NPRI Reporting of Tailings and Waste Rock	Details of Applicability for 2009 NPRI Reporting of Tailings and Waste Rock
<p>Are there any exclusions specific to tailings and waste rock that should be considered in the determination of the mass reporting thresholds?</p>	<p>NPRI substances contained in the following materials should be excluded from the determination of the mass reporting threshold:</p> <ul style="list-style-type: none"> Unconsolidated overburden Component of tailings that are inert, inorganic and have not been crushed or otherwise altered. Inert waste rock – refer to Guide for more details about what is inert and what is not 	<p>NPRI substances contained in the following materials should be excluded from the determination of the mass reporting threshold:</p> <ul style="list-style-type: none"> Unconsolidated overburden Component of tailings that are inert, inorganic and have not been crushed or otherwise altered. Inert waste rock – refer to Guide for more details about what is inert and what is not

Description	Details of Applicability for 2006-2008 NPRI Reporting of Tailings and Waste Rock	Details of Applicability for 2009 NPRI Reporting of Tailings and Waste Rock
<p>Once a facility has met the reporting threshold for reporting mine wastes, what information is required to be reported to the NPRI?</p>	<p>The general information requirements for the 2006-2008 notice include the following:</p> <ul style="list-style-type: none"> information is based on information the person has reasonable access to; there is a requirement to use monitoring data, if required under other legislation; the person is not required to report quantities if they are excluded from threshold calculations (i.e., overburden, etc.); certification of the report is required; and quantities would be reported in tonnes or kg as normal for that substance. <p>The owner or operator of a facility subject to the notice, and which met the criteria for one or more listed substances during one or more of the reporting years, would be required to submit a report.</p>	<p>The general information requirements for the 2009 notice include the following:</p> <ul style="list-style-type: none"> information is based on information the person has reasonable access to; there is a requirement to use monitoring data, if required under other legislation; the person is not required to report quantities if they are excluded from threshold calculations (i.e., overburden, etc.); certification of the report is required; and quantities would be reported in tonnes or kg as normal for that substance. <p>The owner or operator of a facility subject to the notice, and which met the criteria for one or more listed substances during one or more of the reporting years, would be required to submit a report.</p>

Source: Environment Canada (2012d).

A January 2009 memorandum to the federal Minister of Environment titled ‘Oil Sands Tailings Ponds’ made public through access to information requests indicates that the operation of tailings ponds could be, but is not currently subject to regulation. As the memorandum explains:

“In addition releases of toxic substances from tailings ponds (either to the air or water) could be covered by the *Canadian Environmental Protection Act*. Many toxic substances found in tailing ponds (e.g., VOCs, PAHs, benzene) are on Schedule 1 of CEPA, but currently there are no federal regulations to control their releases from tailings ponds.

Under the Clean Air Regulatory Agenda, the feasibility of a regulated code of practice or reducing fugitive emissions from tailings ponds is to be assessed” (Environment Canada 2010b).

4.1 2012 CEPA Amendments

CEPA has also been affected by the introduction of the *Environmental Enforcement Act* (EEA). Specifically, sections of the EEA came into force on June 22, 2012 that amended certain offence, penalty and sentencing provisions of the *Canadian Environmental Protection Act, 1999*. The regulations setting out the new enforcement regime for CEPA were published in the July 4, 2012 edition of Canada Gazette Part II [SOR/2012-134]. The regulations are a component of the new enforcement regime introduced under EEA and identify the new fines that could be applied from contravention of the provisions of CEPA. Section 272 of CEPA 1999 was amended to include clear minimum and maximum fines for the most serious statutory and regulatory offences. As per Table 4 they range from \$5,000 for a first offence by an individual to \$6 million for a large corporation. The fines are doubled for second and subsequent offenders. In cases involving minor situations of non-compliance, a warning, compliance order, ticket or administrative monetary penalty may be appropriate, the fine scheme described in Table 4 would not apply.

Table 4. Fines for Designated Offences under CEPA

Offender	Summary conviction		Conviction on indictment	
	Minimum fine	Maximum fine	Minimum fine	Maximum fine
Individuals	\$5,000	\$300,000	\$15,000	\$1,000,000
Small revenue corporations or ships under 7,500 tonnes of deadweight	\$25,000	\$2,000,000	\$75,000	\$4,000,000
Corporations or ships of 7,500 tonnes deadweight or over	\$100,000	\$4,000,000	\$500,000	\$6,000,000

Source: Adapted from July 4, 2012 edition of Canada Gazette Part II [SOR/2012-134].

4.2 Application of the Act to the Mineable Oil Sands

Bitumen extraction is subject to Environment Canada’s NPRI regulations. The *Guidance on the Reporting of Tailings and Waste Rock to the National Pollutant Release Inventory Addendum* (March, 2012) indicates that the owner/operator “is required to provide the information which he/she possesses or may reasonably be expected to have access to, and should take reasonable steps to acquire the information to comply with the requirements set out in the Notice”

(Environment Canada 2012d). For NPRI purposes a mining operation is deemed a “facility” once it is in the development phase and “construction of a pit or access ramps etc. have commenced” (Environment Canada 2012d).

The Guidance further explains that “During the development phase, large quantities of waste rock would be generated and the mines are expected to be able to readily obtain sufficient data on substances contained in waste rock for ‘reasonable’ reporting as a result of the sampling and analysis activities required for the environmental assessment and permit approvals” (Environment Canada 2012d).

The Guidance goes on to further detail the oil sands tailings and by product reporting requirements under the NPRI. The Guidance indicates that “The accumulated MFT [mature fine tailings] can be sent to a large tailings dedicated disposal area (DDA) constructed at the oil sands mining site to facilitate the reclamation of the tailings. The oil sands mining facility, for the purposes of NPRI reporting of the tailings disposal, should therefore not only consider the content deposited into the tailings pond, but also determine the volume and composition of the dry fines captured in the tailings DDA” (Environment Canada 2012d).

Lastly, the Guidance notes that the reporting requirements for selenium and its compounds have been changed. Previously that threshold was 10 tonnes. However, from 2011 on the NPRI ‘mass reporting threshold’ for selenium has been reduced to 100 kg. Another change is how that threshold is calculated. As per the guidelines, “the quantity of selenium contained in waste rock must be considered for both the threshold calculation and the disposal calculation regardless of the concentration. The removal of the concentration criteria for selenium in waste rock might lead to the increase of selenium reports associated with waste rock disposals” (Environment Canada 2012d)¹⁸.

As the recent *End Pit Lake Guidance* document (Hrynyshyn 2012) produced by the Cumulative Environmental Management Association (CEMA) suggests, the federal government’s authority under CEPA (1999) extends to “the entire aquatic environment, including lake bed sediment. An ultimate objective of any EPL bioremediation plan will likely involve creating a lake ecosystem bed that supports the aquatic ecosystem or, through the food web, human health. This implies a distinction between the objectives of an EPL during the filling stage and the post-certification phase, at which time hydraulic communication will be established with the greater watershed” (Hrynyshyn 2012, p. 46). The likely impact of federal legislation on post-certification reclamation is tied to the water monitoring programs, NPRI reporting requirements that may remain, as well as the monitoring and compliance provisions through CEPA and the *Canadian Water Act*.

¹⁸ See for example the Syncrude Mildred Lake 2011 selenium numbers at http://www.ec.gc.ca/inrp-npri/donnees-data/index.cfm?do=facility_substance_summary&lang=en&opt_npri_id=0000002274&opt_report_year=2011

5 CANADIAN ENVIRONMENTAL ASSESSMENT ACT

Environmental Assessment (EA) has been, and remains, a key process by which the Government of Canada exercises authority over environmental policy and regulation. As Doelle explains, “At the most basic level, EA is a process designed to predict the consequences of proposed action, to consider alternative actions, to evaluate the options, and to make appropriate decisions as to whether and under what conditions to permit the activity proposed” (Doelle 2008, p. 2-3). Even a cursory review of Federal environmental assessment in Canada reveals considerable evolution in the approach and substantive aspects of legislation.

This section is limited to a concise review of the former CEEA regime (1995 to 2012). Further, it focuses on the general approach, key processes, and recognized ‘responsible authorities’ or principle government of Canada participants under CEEA 1995. This facilitates subsequent comparative descriptive analysis with the new CEEA 2012¹⁹ along the same categories.

‘The *Canadian Environmental Assessment Act, 1995* received legislative approval in 1992 but the change of government subsequent to the federal election of 1993 saw the Act only brought into force in 1995. The Canadian Environmental Assessment Agency is responsible for administering the Act and maintaining a public Registry Internet site of environmental assessments²⁰. The Act delineates the specific steps to be followed in the federal environmental assessment process. This process has essentially five phases. As shown in Figure 4, these flow from planning the environmental assessment to implementing mitigation measures or a follow-up program as a result of environmental assessment decisions.

As Gibson (2012, p. 181) usefully summarizes, under the original CEEA, the application rule was generally ‘all in unless exempted out’ – all projects involving federal initiative, or federal lands or funding, or requiring permits under listed laws were covered. Of these, the vast majority (approaching 99%) were subject to minimally demanding self-assessment requirements that at least ensured some attention to environmental considerations and were tracked in a way that allowed for public scrutiny”.

¹⁹ For a complete and authoritative review of environmental assessment in Canada see Doelle (2008) or Gibson (2002).

²⁰ See <http://www.ceaa-acee.gc.ca/050/index-eng.cfm>

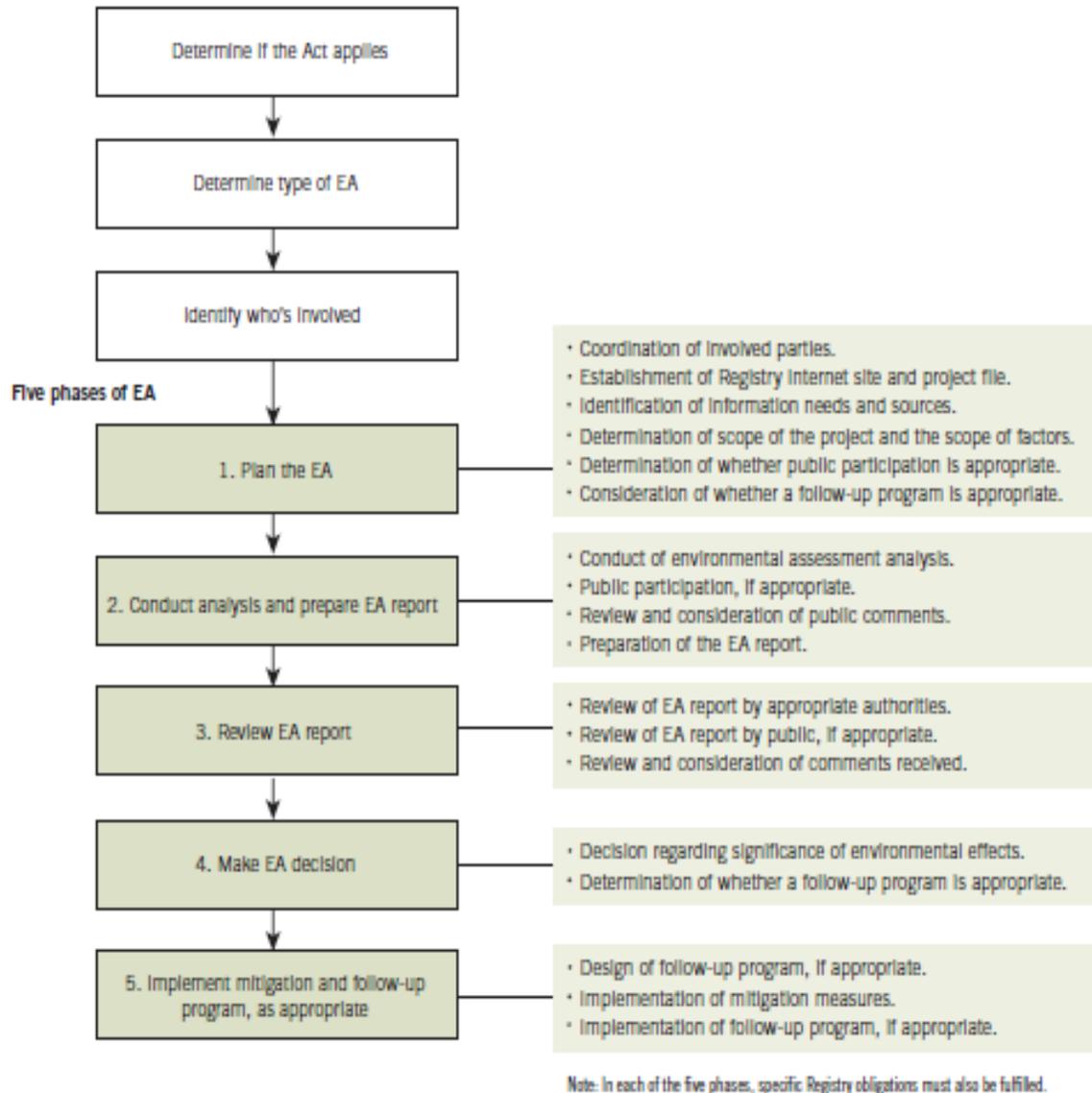


Figure 4. Five Phases of Previous Canadian Environmental Assessment Act.
 Source: Commissioner of the Environment and Sustainable Development (2009, p. 16).

Under the previous Act two conditions were paramount:

1. The proposed project had to meet the definition of a project as set out in the Act. This included the construction, operation, modification, demolition, or abandonment of a physical work, or other physical activities specified by regulation.
2. A federal 'responsible authority' had to exist within the federal government. That is, there had to be a federal department or agency that had a legislative or regulatory decision making authority related to the project. Several 'triggers' could see the EA process under CEEA 1995 be launched including: federal funds were provided to a

proponent to develop a project, a proponent proposed to carry out a project, a land administrator disposed (e.g., sold or leased lands) that would result in a project being carried out or proposed on those lands, the prescribed Law List Regulations under the Act would result in the issuance of a permit or license or other project approval (Commissioner of the Environment and Sustainable Development 2009, p. 4-5).

Once the EA process was ‘triggered’ the previous CEAA (1995 to 2013) included four primary environmental assessments ‘processes’: screenings, comprehensive studies, mediation, or panel reviews. These are important to understand because they have changed under CEAA 2012, however transitional provisions may result in some continued application. Screenings and comprehensive studies were, as Doelle (2012) puts it, “alternative forms of self-assessment, whereas mediation and panel reviews could either replace or follow the screening or comprehensive study process”. The processes (Table 5), as summarized by the Commissioner of the Environment and Sustainable Development (2009, p. 5-6) include:

- **Screenings:** These are conducted if proposed projects are not explicitly listed on the *Comprehensive Study List Regulations*²¹ that detail projects that may potentially cause ‘significant’ adverse environmental effects. As such, screenings can be used for small to large scale projects but were more typically used for smaller ones. The Commissioner for the Environment and Sustainable Development (2009) found that these are the most frequent form of EA covering 99% of all assessments. Between 2003 and 2009 more than 32,000 screenings were initiated with some 6,000 screenings a year. Further, various ‘classes’ of screenings or standardized templates have been developed and applied most notably for agricultural related assessments or those pertaining to works in national parks.
- **Comprehensive studies:** Comprehensive studies are typically used for large-scale or complex projects likely to have significant adverse environmental effects. The *Comprehensive Study List Regulations* identify the types of projects that must be assessed through a comprehensive study. Examples include large-scale oil and natural gas developments, nuclear power developments, electrical-generation projects, industrial plants, and certain projects in national parks. On average, approximately eight comprehensive studies are initiated each year. Since 1995, responsible authorities have initiated 105 comprehensive studies. Early on in the comprehensive study, the Minister of the Environment has to decide whether the project should continue to be assessed as a comprehensive study, or whether it should be referred to a mediator or review panel. If the Minister decides the project should continue as a comprehensive study, the project can no longer be referred to a mediator or review panel.

²¹ SOR/94-638 – <http://laws-lois.justice.gc.ca/PDF/SOR-94-638.pdf>

- **Panel reviews.** A review panel consisting of independent experts may be appointed by the Minister of the Environment where:
 - it is uncertain that a project may cause significant adverse environmental effects and
 - it is uncertain if these effects are justified in the circumstances, or
 - there is public concern

Table 5. Features and Types of Assessment under the Previous (Pre-2012) CEAA.

Feature	Environmental Assessment Type		
	<i>Screening</i>	<i>Comprehensive Study</i>	<i>Panel Review</i>
Determination of environmental assessment	Default	<i>Comprehensive Study List Regulations</i>	Referred to panel review by Minister of the Environment (usually following request by responsible authority)
Scope	Determined and issued by responsible authority	Determined and issued by responsible authority	Issued by the Minister of the Environment
Responsibility for assessment analysis	Self-directed assessment by responsible authority	Self-directed assessment by responsible authority	Independent review panel

Feature	Environmental Assessment Type		
	<i>Screening</i>	<i>Comprehensive Study</i>	<i>Panel Review</i>
Factors to consider in the environmental assessment, as required by s. 16 of the Act	Environmental effects of the project, including <ul style="list-style-type: none"> • Cumulative effects and effects of accidents and malfunctions • Significance of the environmental effects • Comments from the public • Mitigation measures • Any other matter relevant to the screening 	<ul style="list-style-type: none"> • Environmental effects of the project, including cumulative effects and effects of accidents and malfunctions • Significance of the environmental effects • Comments from the public • Mitigation measures • Purpose of the project • Alternative means of carrying out the project • Need for and requirements of any follow-up program in respect of the project • Capacity of renewable resources likely to be affected by the project • Any other matter relevant to the comprehensive study or panel review 	
Public participation	Discretionary	Mandatory	Mandatory
Follow-up program	Discretionary	Mandatory	Mandatory
Responsibility for environmental assessment decision	Responsible authority	Responsible authority	Responsible authority

Source: Adapted from Commissioner of the Environment and Sustainable Development (2009, p. 8).

5.1 CEAA 2012

Prior to reviewing the new CEAA 2012, a few comments are warranted on earlier amendments. In 2003, a series of amendments to the 1999 Act included the creation of an Internet registry site, the creation of a federal environmental assessment coordinator, and creation of “a requirement for the Agency to establish and lead a quality assurance program for assessments conducted under the Act” (Commissioner of the Environment and Sustainable Development 2009, p. 10). Additional amendments were brought to bear through the 2010 Bill C-9, An Act to implement certain provisions of the budget tabled in Parliament on March 4, 2010 and other measures. A major change was the amendment of s. 7.1 that provided for the exemption of infrastructure

projects, or classes of projects as listed in s.7.2. However, these were related to stimulus infrastructure spending through existing projects. More pertinent to oil sands, s. 7.1 (1) replaced the definition of body of water with the following, “‘water body’ includes a lake, a canal, a reservoir, an ocean, a river and its tributaries and a wetland, up to the annual high-water mark, *but does not include a sewage or waste treatment lagoon, a mine tailings pond, an artificial irrigation pond, a dugout or a ditch that does not contain fish habitat as defined in subsection 34(1) of the Fisheries Act*” (emphasis added). This again reinforces the interconnection between *Fisheries Act* legislation (particularly provisions governing habitat) and environmental assessments processes. From an oil sands perspective, the question for end pit lakes, reconstructed streams and tailings ponds is essentially whether they do, or might in the future, include fish populations or impact habitat as defined in the *Fisheries Act* (both pre- and post-2012 amendments).

Bill C-38 introduced a new *Canadian Environmental Assessment Act, 2012* (CEAA 2012) and repealed the former Act. Using the same triadic framework established above (key approach, main processes, and responsible authorities) clear and important differences can be traced between the two Acts. Gibson (2012) underscores the difference in approach from the ‘all in’ system of the previous Act in summarizing the CEAA 2012 approach as ‘*all out unless specifically included*’. That is, only those projects or activities that are explicitly covered by the new ‘project list regulations’ or as requested by the Minister of the Environment will be subjected to the EA process. Gibson (2012) also points to the immediate impact this has had with the number active assessments in the first month subsequent to the new Act being 70 as compared to the approximately 3,000 that were active in the same month in 2010 under the previous Act. Given that transitional provisions apply to some projects impacted by the transition to a new Act, Gibson in fact suggests that 70 active projects is likely an inflated number.

CEAA (2012) re-orientes all three of the categories explored above (approach, process, and key authorities). It changes when environmental assessments are required; it amends the environmental assessment process itself, and significantly reduces the number of responsible authorities. Additionally, it provides greater discretion for the Minister and Cabinet (Order in Council), introduces deadlines, timeframes, and penalties for non-compliance, and delegates and devolves much to the provinces while narrowing who can petition to participate as an ‘interested party’. On a general level CEAA 2012:

- Provides an entirely new approach to federal environmental assessment (EA);
- Reduces the number of federal project EAs;
- Includes only two EA tracks (environmental assessment and panel review);
- Is project based – there is no more self-assessment;

- Limits responsible authorities to three federally²²;
- Has replaced harmonization with substitution; and
- Includes a time line for all federal EAs.

CEAA 2012 effectively creates two streams for environmental assessments: (1) Projects covered by the ‘designated projects’ list, and (2) those that are not. The change is important as it results in only those activities under the legislative and regulatory purview of the Canadian Nuclear Safety Commission (CNSC) and the National Energy Board (NEB) automatically requiring assessments. The remaining projects and activities that are listed would fall under the purview of the Canadian Environmental Assessment Agency²³. For projects not listed as ‘designated projects’, the determination of whether to require an environmental assessment is at the discretion of the Minister as provided for by s.14(2) of the Act (see Figure 5).

Crucially, CEAA 2012 does not require automatic environmental assessments for those ‘designated projects’ that fall under the legislative and regulatory authority of the Canadian Environmental Assessment Agency. That is, the Agency has the discretion upon review of the proponent’s project information to determine if an EA will be required. As Doelle (2012) summarizes:

“Whether an environmental assessment of a registered project is required will then be decided by government officials based on information filed at registration. In other words, the federal triggering process would become very similar to many provincial EA processes, essentially a combination of a project list for registration and broad discretion to decide whether an environmental assessment is to be carried out for a given a registered project”.

²² This is a dramatic change as the previous Act provided for more than 40 Federal Agencies as potential as actors able to be tasked with this function. The Canadian Environmental Assessment Agency explains that “The responsibility for conducting an environmental assessment rests with: the Canadian Nuclear Safety Commission (for nuclear projects); the National Energy Board (for international and interprovincial pipelines and transmission lines); or the Canadian Environmental Assessment Agency (for all other designated projects) (Canadian Environmental Assessment Agency, 2012a). As such, this report focuses on the EA process as it pertains to the agency and not for interprovincial or pipeline issues. However, s. 15(c) of CEAA, 2012 does also include other potential bodies to conduct EAs. Allowing for “the federal authority that performs regulatory functions, that may hold public hearings and that is prescribed by regulations made under paragraph 83(b), in the case of a designated project that includes activities that are linked to that federal authority as specified in the regulations made under paragraph 84(a) or the order made under subsection 14(2)”. See Figure 5.

²³ As noted above the Act does include the potential for other regulatory agencies to conduct reviews but the intention of the Act seems to be that the Canadian Environmental Assessment Agency conducts the non-NEB and CNSC reviews (Doelle 2012).



Figure 5. Flow Chart of EA Process under CEAA 2012.
Source: The Canadian Environmental Network (2013)

Proponents of registered projects are required to provide the Canadian Environmental Assessment Agency with a considerable amount of information. The specific requirements are set out in the *Prescribed Information for the Description of a Designated Project Regulations*. These regulations and the 2012 Canadian Environmental Assessment Agency’s 2012 *Guide to Preparing a Description of a Designated Project under the Canadian Environmental Assessment Act, 2012* provide detailed requirements for proponents (Canadian Environmental Assessment Agency 2012b).

Under s. 2.3 of the 2012 Guide, proponents are required to supply information related to the *Construction, operation, and decommissioning and abandonment phases and scheduling*.

Proponents must “Provide a description of the timeframe in which the development is to occur and the key project phases, including the following:

- a. Anticipated scheduling, duration and staging of key project phases, including preparation of the site, construction, operation, and decommissioning and abandonment.
- b. Main activities in each phase of the designated project that are expected to be required to carry out the proposed development (e.g., activities during site preparation or construction might include, but are not limited to, land clearing, excavating, grading, de-watering, directional drilling, dredging and disposal of dredged sediments, infilling, and installing structures) (Canadian Environmental Assessment Agency 2012b, p. 6).

However the Guide does not provide detail with respect to requirements related to ‘decommissioning’ (Canadian Environmental Assessment Agency 2012b, p. 6).

Pursuant to the requirements under s. 10 and Schedule I of the regulations, the 2012 Guide, indicates proponents must include descriptions of “any solid, liquid, gaseous or hazardous wastes likely to be generated during any phase of the designated project and of plans to manage those wastes, including the following:

- a. Sources of atmospheric contaminant emissions during the designated project phases (focusing on criteria air contaminants and greenhouse gases, or other non-criteria contaminants that are of potential concern) and location of emissions.
- b. Sources and location of liquid discharges.
- c. Types of wastes and plans for their disposal (e.g., landfill, licensed waste management facility, marine waters, or tailings containment facility) (Canadian Environmental Assessment Agency 2012b, p. 6).

Additionally, ss. 4 and 5 of the Guide also compel applicants to provide detailed information with respect to environmental effects and federal legislation. Section 4.0(3) requires proponents to “Detail any federal legislative or regulatory requirements that may be applicable, including a list of permits, licenses or other authorizations that may be required to carry out the designated project” (Canadian Environmental Assessment Agency 2012b, p. 8). Section 5.0 on environmental effects states that “A description of the physical and biological setting, including the physical and biological components in the area that may be adversely affected by the project (e.g., air, fish, terrain, vegetation, water, wildlife, including migratory birds, and known habitat use). Section 5 of the Guide includes further subsections that are relevant including:

2. A description of any changes that may be caused as a result of carrying out the designated project to:
 - a. fish and fish habitat, as defined in the *Fisheries Act*;
 - b. aquatic species, as defined in the *Species at Risk Act*; and
 - c. migratory birds, as defined in the *Migratory Birds Convention Act, 1994*.

3. A description of any changes to the environment that may occur, as a result of carrying out the designated project, on federal lands, in a province other than the province in which the project is proposed to be carried out, or outside of Canada.
4. A description of the effects on Aboriginal peoples of any changes to the environment that may be caused as a result of carrying out the designated project, including effects on health and socio-economic conditions, physical and cultural heritage, the current use of lands and resources for traditional purposes, or any structure, site or thing that is of historical, archaeological, paleontological or architectural significance” (Canadian Environmental Assessment Agency 2012b, p. 8-9).

Additional details on the extent and type of aboriginal consultations undertaken by the proponents are also listed under the Guide in s. 6.

Once the Agency has determined that the project information supplied is sufficient, it has *45 days to determine whether a federal EA will be required*. As noted above this suggests *even designated projects may not be subject to a federal assessment*, which emphasizes the discretion, provided to the Agency.

If the review of the proposed project leads to a recommendation for an environmental assessment CEAA 2012 includes two EA options – a “standard environmental assessment” or a review panel assessment. It should be noted that the Minister also has the discretion to require a panel assessment. Following completion of the EA, the relevant body (the Agency, the CNSC, or the NEB) is required to produce an EA report based on a list of considerations and determine whether the project is likely to cause significant environmental effects. If it is, Cabinet must make a decision as to whether the project is nevertheless justified under the circumstances. A decision will be issued informing the proponent that the project may or may not proceed or may proceed with modifications. Projects subject to assessments will produce an ‘EA decision statement’. These decision statements include the conditions regarding mitigation measures and follow-up programs and are required to be publicly disclosed under s. 54 of CEAA 2012. These statements provide comment on the project’s environmental significance and conditions for its approval.

From a pre-construction perspective this means that federal decisions, such as *Fisheries Act* authorizations, no longer automatically trigger an assessment. CEAA 2012 has also been further narrowed though changes introduced to the environmental effects that are factored into EA decision making. Specifically, s. 5(1) of CEAA 2012, explains that federal authorities will only consider environmental changes that are “within the legislative authority of Parliament,” including changes affecting:

- fish as defined in s. 2 of the *Fisheries Act* and fish habitat as defined in s. 34(1) of that Act (the latter being a provision that will be amended by another section of Bill C-38)
- aquatic species as defined in s. 2(1) of the *Species at Risk Act*
- migratory birds as defined in s. 2(1) of the *Migratory Birds Convention Act, 1994*

- any other component of the environment that may be set out in Schedule 2 at some time in the future.

As detailed above, the new Act relies heavily on a "designated projects" system as spelled out in regulation or order of the Minister and includes incidental physical activity. This represents a departure from the previous Act, which required an environmental assessment whenever a federal authority exercised certain powers or performed certain functions, such as providing financial assistance. Close inspection of the new regulations reveals that mine tailings ponds are exempted from the definition of water body. That is, the regulations continue to use the 2010 definition noted above in defining a 'water body' as not including "a sewage or waste treatment lagoon or a mine tailings pond" (see S.C. 2012, c. 19, s. 52(1), *Emphasis Added*). However, pursuant to s. 84(a) and (e) of the *Canadian Environmental Assessment Act, 2012*, the Minister makes the annexed *Regulations Designating Physical Activities* (RDPA) that include references to oil sands activities (As of May 9, 2013 proposed revisions to the original regulation were under public review²⁴). The following physical activities directly related to oil sands developments are listed in the proposed regulation amendments:

8. The construction, operation, decommissioning and abandonment of a new oil sands mine with a bitumen production capacity of 10 000 m³/day or more.
9. The expansion of an existing oil sands mine that would result in an increase in the area of mine operations of 50% or more and a total bitumen production capacity of 10 000 m³/day or more.
13. The construction, decommissioning and abandonment of a new
 - (a) oil refinery, including a heavy oil upgrader, with an input capacity of 10 000 m³/day or more;
 - (e) petroleum storage facility with a storage capacity of 500 000 m³ or more;
14. The expansion of an existing
 - (a) oil refinery, including a heavy oil upgrader, that would result in an increase in input capacity of 50% or more and a total input capacity of 10 000 m³/day or more;
 - (e) petroleum storage facility that would result in an increase in storage capacity of 50% or more and a total storage capacity of 500 000 m³ or more;

Finally, if an activity is not identified in RDPA but has the potential to cause adverse environmental effects, CEAA 2012 allows the Minister of the Environment to designate that project for a federal environment assessment. CEAA 2012 also includes new *Cost Recovery Regulations* to enable the recovery (from the proponent of a project) of certain costs incurred during the course of an environmental assessment.

²⁴ See <http://www.ceaa-acee.gc.ca/default.asp?lang=En&n=87EAF61E-1>

CEAA 2012 demonstrates the clear efforts to harmonize regulations and EA processes across levels of government. To do so, CEAA 2012 provides for substitution and equivalency. That is, s. 32 of the Act includes a provision requiring a Minister to substitute a provincial EA process and findings on request by the province. It reads:

“if the Minister is of the opinion that a process for assessing the environmental effects of designated projects that is followed by the government of a province – or any agency or body that is established under an Act of the legislature of a province – that has powers, duties or functions in relation to an assessment of the environmental effects of a designated project would be an appropriate substitute, the Minister must, on request of the province, approve the substitution of that process for an environmental assessment”.

Section 37 of the Act provides the equivalency provisions and permits the Governor in Council to exempt projects from the application of CEAA if the Governor in Council (Cabinet) is satisfied that:

- (a) after the completion of the assessment process, the government or the agency or body determines whether, taking into account the implementation of any mitigation measures that it considers appropriate, the designated project is likely to cause significant adverse environmental effects;
- (b) the government or the agency or body ensures the implementation of the mitigation measures that are taken into account in making the determination and the implementation of a follow-up program; and
- (c) any other conditions that the Minister establishes are or will be met.

Again it is important to note that (c) provides considerable discretion for the Minister to exempt or attach conditions to EA.

The new Act does however include new federal compliance and enforcement provisions. These include increased power for enforcement agents (e.g., compliance officers and others as included in the Act for such activities as search and seizure related to projects under assessment) as well as potential fines for non-compliance with the Act. In the latter case, upon summary conviction fines can be as high as \$400,000. These would likely apply, if at all, to activities occurring during the operations and/or post-certification phases.

Lastly, as with several of the other Acts examined in this report the new CEAA 2012 has required ‘transitional provisions’ to cover projects/activities impacted by the repeal of replacement of the previous Act. CEAA 2012 therefore includes transition provisions for EAs that were already underway when the new legislation came into force. The new Act and associated timelines will apply to ongoing review panels. Comprehensive studies begun since July 2010 will continue under the former Act in accordance with the tighter timelines imposed by regulation in 2011. For those launched prior to July 2010, a comprehensive study report must be provided to the Minister within six months. Sixteen projects that were being assessed as screenings will be concluded under the former CEAA. Pursuant to ss. 14(2) and 124(2) of CEAA 2012, the 16 projects that “may cause adverse environmental effects” are listed in

Schedule 1 of the Order Designating Physical Activities issued by the Minister on July 6, 2012. *All other screening assessments have been permanently suspended.*

5.2 Summary of CEAA 2012 Changes

Similar to the *Fisheries Act* amendments, while CEAA 2012 has received Royal Assent, the government is still finalizing the various regulations such as the designated project list, EA procedures and requirements to operationalize the Act. Bill C-45 was in part an exercise in amending the transitional provisions that had been set out under Bill C-38. However some discernible differences are clear between the approaches of the pre- and post-2012 Acts. Notably:

- Screenings were the lowest level of review and comprised the vast majority of assessments under the former Act. They have been eliminated under CEAA 2012, with the result that far fewer projects are required to undergo any type of federal assessment.
- Responsibility for carrying out federal assessments has been narrowed from a significantly broader number of ‘federal authorities’ to now be concentrated in three government bodies: the Canadian Environmental Assessment Agency, the National Energy Board, and the Canadian Nuclear Safety Commission.
- Environmental assessments focus on federal aspects of ‘designated projects’ listed in the regulations based on the definition of environmental effects which has also been narrowed to specify areas of clear federal jurisdiction.
- The new Act imposes time limits for EAs with most to be completed in one year and panel reviews in two years.
- CEAA 2012 gives greater authority and ability for the federal government to defer to provincial EA processes and results (Doelle 2008, 2012, Gibson 2012).

5.3 Application of the Act to the Mineable Oil Sands

The impact of CEAA 2012 is felt mostly in the pre-construction phase. However, similar to the *Fisheries Act* Authorizations monitoring and enforcement regime, the EA process under CEAA 2012 includes monitoring and ‘follow-up’ provisions which would occur mostly in the operations phase. Follow-up programs are mandatory after all environmental assessments. Section 2(1) of the Act defines the "follow-up program" as a program for:

- verifying the accuracy of the environmental assessment of a project, and
- determining the effectiveness of any measures taken to mitigate the adverse environmental effects of the project.

Section 19(e) of CEAA 2012, in the ‘factors of consideration’ section, reads “the requirements of the follow-up program in respect of the designated project” indicating that the follow-up program required to verify and determine effectiveness as defined above are taken into account

during the decision making of EA under the 2012 Act. Follow-up program considerations are also a legislated component of the Joint Review Panel EA process as well. Section 43(1) of the Act requires that the panel provide a report including “the review panel’s rationale, conclusions and recommendations, including any mitigation measures and follow-up program”. Finally, under CEAA 2012 the Minister’s increased discretion also extends to the ‘follow-up’ program design as s. 84(c) reads that “respecting the procedures, requirements and time periods relating to environmental assessments, including the manner of designing a follow-up program”. The Canadian Environmental Assessment Agency has an operational policy statement *Follow-up Programs under the Canadian Environmental Assessment Act* however that document is no longer applicable as it deals with the operationalization of follow up programs under the previous CEAA. Consultations with officials revealed that an updated version is expected in the near term.

At the time this report was written officials had yet to provide the authors with responses to technical questions related to federal involvement in the post-certification phase. Informal consultations with several officials however suggest that the federal role is likely to be limited. As canvassed above, the provincial level of government undertakes the bulk of the determinations relate to reclamation certification. Moreover, this report has emphasized the explicit intention and practice of the Government of Canada towards increased delegation and devolution through harmonization and equivalency provisions. However the federal government will remain responsible for its obligations to aboriginal communities as well as specific provisions under CEAA 2012 tied to the ‘follow up’ and compliance provisions of the Act. Again, the new nature of the Act does not provide sufficient experience by which the federal government’s obligations or practices can be evaluated.

6 SPECIES AT RISK ACT

Bill C-5, the *Species at Risk Act* (SARA), was the government’s fourth attempt at passing endangered species legislation. The Act received Royal Assent on December 12, 2002, and was fully brought into force on June 1, 2004. The Act is one part of a three-part Government of Canada strategy for the protection of wildlife species at risk. The two other components are the *Accord for the Protection of Species at Risk*²⁵ and activities under the *Habitat Stewardship Program for Species at Risk*²⁶. According to the Environment Canada, the Act’s purpose is “to prevent wildlife species from being extirpated or becoming extinct, to provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity, and to manage species of special concern to prevent them from becoming endangered or threatened” (Environment Canada 2012b, p. 1).

²⁵ See http://www.ec.gc.ca/media_archive/press/2001/010919_b_e.htm

²⁶ See <http://www.ec.gc.ca/hsp-pih/>; for a detailed review of the legislative process for SARA see Douglas (2002).

More specifically, the Act (Government of Canada n.d.):

- establishes the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) as an independent body of experts responsible for assessing and identifying species at risk;
- requires that the best available knowledge be used to define long- and short-term objectives in a recovery strategy and action plan;
- creates prohibitions to protect listed threatened and endangered species and their critical habitat;
- recognizes that compensation may be needed to ensure fairness following the imposition of the critical habitat prohibitions;
- creates a public registry to assist in making documents under the Act more accessible to the public; and
- is consistent with Aboriginal and treaty rights and respects the authority of other federal ministers and provincial governments.

Sections 32 and 33 of the *Species at Risk Act* are likely the most relevant and applicable to oil sands development. They provide that it is an offence, under the Act, to:

- kill, harm, harass, capture or take an individual of a listed species that is extirpated, endangered or threatened;
- possess, collect, buy, sell or trade an individual of a listed species that is extirpated, endangered or threatened, or its part or derivative; and
- damage or destroy the residence of one or more individuals of a listed endangered or threatened species or of a listed extirpated species if a recovery strategy has proposed its reintroduction into the wild in Canada.

When the species is found within national parks of Canada, or other lands administered by the Parks Canada Agency, it is protected or managed under the *Canada National Parks Act*.

The primary responsibility to protect any species listed under SARA's registry on provincial or territorial lands falls to those levels of government, respectively. However, the Governor in Council (federal Cabinet) on the advice of the federal Minister of the Environment may order the SARA prohibitions under ss. 32 and 33 apply for species *not on federal lands* (or under the responsibility of a federal department or agency) if, after consulting with that government, "the Minister finds that the species or its residence is not effectively protected by the laws of the province or territory" (Environment Canada 2012b).

Similar to the *Fisheries Act*, the emphasis is on the avoidance of impact on both animal populations as well as habitat. Moreover, three SARA provisions directly apply to the conduct of environmental assessments in the pre-construction phase:

- (a) Section 79(1): Requires that every person who is required by or under an Act of Parliament to ensure that an assessment of the environmental effects of a project is conducted must, without delay, notify the competent Minister or Ministers in writing of the project if it is likely to affect a listed wildlife species or its critical habitat.
- (b) Section 79(2): Requires that, where a federal environmental assessment is being carried out in relation to a project that may affect a listed wildlife species or its critical habitat, the person responsible for ensuring the assessment is conducted must:
 - identify potential adverse effects on the listed wildlife species and its critical habitat; and
 - if the project is carried out:
 - ensure that measures are taken to avoid or lessen those adverse effects and to monitor them, and
 - ensure that such measures are consistent with any applicable recovery strategy and action plans. (Government of Canada 2010, p. 4-5).

The *Species at Risk Act Policies and Guideline Series, Addressing Species at Risk Act Considerations Under the Canadian Environmental Assessment Act for Species Under the Responsibility of the Minister responsible for Environment Canada and Parks Canada* explains that a responsible authority must send a notification to the competent department reporting to the competent Minister responsible for the listed wildlife species (Government of Canada 2010, p. 4-5). As per s. 2(1) of the Act, the competent Ministers and their purviews are as follows:

- (a) the Minister responsible for the Parks Canada Agency with respect to individuals in or on federal lands administered by that Agency;
- (b) the Minister of Fisheries and Oceans with respect to aquatic species, other than individuals mentioned in paragraph (a); and
- (c) the Minister of the Environment with respect to all other individuals.

Notification must be sent by the proponent subject to the EA and be sent to the applicable Minister as per s. 2(1). Notifications are required, as soon as a project is found to likely to affect one or more wildlife species or its habitat. That is, notify Parks Canada for wildlife species found exclusively or partly in or on federal lands administered by Parks Canada, DFO for aquatic species and their critical habitat, Environment Canada for migratory birds protected by the *Migratory Birds Convention Act, 1994* and their critical habitat, and all other species and critical habitat (Government of Canada 2010, p. 4-5).

Thirdly, under s. 80(2) of the Act, the Governor in Council may declare an emergency order to provide protection for a listed wildlife *species or its habitat* on federal lands or on non-federal lands. This is particularly relevant to oil sands development as there have been recent documented cases of groups seeking judicial action to compel the Minister to issue such orders. For example, the Beaver Lake Cree Nation, Enoch Cree Nation, Chipewyan Prairie Dene First Nation, and Athabasca Chipewyan First Nation (First Nations) and the Alberta Wilderness Association, the Pembina Institute and the Sierra Club Prairie, through the courts, sought to compel the Minister of the Environment to recommend an emergency order be issued for the protection of boreal caribou in north eastern Alberta. This species was listed as “threatened” under Schedule 1 of SARA. The Minister concluded that the survival and recovery of the boreal caribou was not at risk but the decision was overturned, under appeal, by a subsequent Federal Court decision which set aside the Minister’s decision, ruling the Minister’s decision failed to take into account the First Nations Applicants’ Treaty Rights and the honour of the Crown²⁷. The Minister was forced to reconsider, but again came to similar conclusions.

The Government of Canada then issued the *Recovery Strategy for the Woodland Caribou (Rangifer tarandus caribou), Boreal Population, in Canada* which requires 65% of habitat in a species’ range (the total geographic area where the caribou live) to be protected undisturbed. In ranges where less than 65% of boreal caribou habitat remains undisturbed, the strategy requires the disturbed habitat to be restored to meet the 65% protection threshold for the range (Environment Canada 2012f). This is pertinent to oil sands development given, again, the emphasis placed on the protection of habitat rather than simply population levels of endangered species: proponents with oil sands development leases that include the ranges and travel corridors of species at risk, such as the Boreal Caribou, will be compelled to take action that assures the protection of the *habitat* of the caribou. As shown in Table 6, several companies are known to have in-situ oil sands lease rights that will likely be affected by the 2012 Recovery Strategy.

Table 6. In-Situ Oil Sands Leases in Caribou Ranges That Do Not Meet the Federal Recovery Strategy Critical Habitat Threshold.

Oil Sands Development Company	Leases in caribou habitat (km²)
Sunshine	3,155
Cenovus	3,050
Canadian Natural	2,847
Athabasca	2,740
Koch	2,226
ConocoPhillips	1,975

Source: Adapted from Dyer (2012).

²⁷ See *Allan Adam et al. v. Minister of the Environment et al.*, 2011 FC 962.

A second clear example was the 2011 petitioning for an emergency order for the protection of the Greater Sage-grouse. It was argued that the species was impacted from oil and gas development activities in Alberta. This petition was followed by the filing of a Notice of Application for judicial review on February 23, 2012 seeking an order compelling the Minister to comply with s. 80(2) of SARA and recommend to the Governor in Council that an emergency order be made to provide for the protection of the Greater Sage-Grouse in Canada. This matter remains before the Court.

A final dimension of SARA legislation that warrants mention is the temporal duration of permits and agreements. Prior to 2012 SARA amendments, permits were issued for a period of up to three years while agreements could be for a maximum of a five-year period. All permits and agreements were also required to be posted in the Species at Risk Public Registry and accompanied by an explanation of why the permit/agreement had been issued (Government of Canada 2010, p. 50). Application of SARA provisions to the EA process, prior to Bill C-38 and C-45 amendments is summarized in Figure 6.

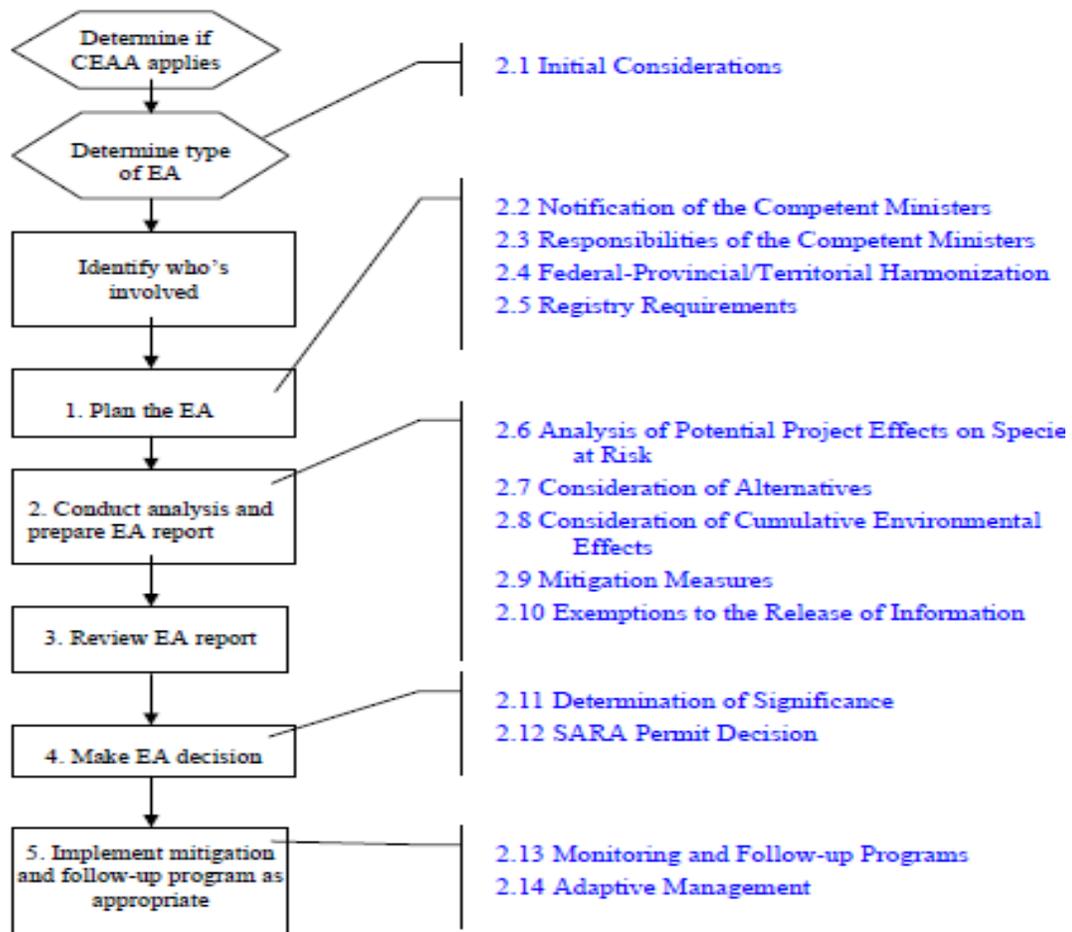


Figure 6. Major Phases of Environmental Assessment and when SARA-related (pre-2012 Amendments) Considerations may Typically Apply.

Source: Reproduced from Government of Canada (2010, p. 22).

6.1 Summary of 2012 SARA Amendments

Bill C-38 amended SARA resulting in two potentially significant changes for the pre-construction phase through the requirements of the EA process.

The first is a removal of maximum terms for SARA permits or agreements. Under the previous legislation, permits under s. 73 were limited to a five-year term (but could be subject to renewal). As such, the Minister could provide projects with ‘exemptions’ to the Act’s prohibition measures designed to protect those species and their habitat listed in the SARA registry. The 2012 Amendments have removed the maximum term for such permitting and/or agreements entered into to provide SARA exemptions. The Minister is required to publicly disclose (through the SARA registry system detailed in s. 73(3.1) of the Act) that a permit/agreement has been granted. Permits can now be issued for exemptions beyond the five-year period but an expiry date of the permit must be specified. Section 73(3) sets out the pre-conditions for such permitting/agreements that remain as detailed above.

The second key change exempts the National Energy Board from the requirement to ensure that reasonable measures have been taken to minimize impacts on the critical habitat of species at risk when it issues approvals for pipelines and other major infrastructure.

Environment Canada, summarizing the 2012 amendments to SARA, underscores the overarching goal of federal provincial harmonization in explaining the amendments, “With longer durations, authorizations can be issued for a time-period better suited to large projects and can be aligned with provincial/territorial permits, where appropriate. The amendments, which allow legally-binding timelines to be set in regulation, will ensure a consistent approach across Federal statutes with respect to timelines for issuing and renewing permits” (Environment Canada n.d.(a)).

6.2 Application of the Act to the Mineable Oil Sands

SARA legislation has direct implications for pre-construction phase activities given its incorporation into the EA process as well as the permitting requirements that exist under the legislation. In a similar fashion to the *Fisheries Act* provisions, a proponent whose project is undergoing an environmental assessment that includes activities that may potentially contravene the SARA provisions (e.g., habitat or population risks for species under Schedule 1) will be required to obtain a permit. Sections 73, 74 and 78 of SARA detail the permitting, agreements, licenses, and orders that can be issues for otherwise prohibited activities. These include:

- scientific research related to conserving a listed species, conducted by qualified persons;
- activities that benefit a listed species or enhance its chances of survival in the wild; and,
- activities that incidentally affect a listed species.

Three pre-conditions must be met before such permits can be issued or agreements made: (1) all reasonable alternatives to the activity that would reduce the impact on the listed wildlife species have been considered and the best solution has been adopted; (2) all feasible measures will be

taken to minimize the impact of the activity on the listed wildlife species or its critical habitat or the residences of its individuals; and (3) the activity will not jeopardize the survival or recovery of the listed wildlife species. However, some additional details are warranted which may potentially apply. First, the ‘competent’ or responsible Ministers under the Act issue the permits for their policy jurisdictions. For example, DFO would issue permits related to aquatic species, and the Minister responsible for Parks Canada would issue those related to activities in national parks or lands under Parks Canada ‘control’. The 2011 annual SARA report discloses that Environment Canada, the Parks Canada Agency, and Fisheries and Oceans Canada issued a total of 185 SARA permits in 2011 for purposes of research, conservation, and monitoring of listed species. More precisely, Environment Canada issued 5 permits for activities that may incidentally affect a species and Parks Canada issued 6. No figures were provided for DFO (Environment Canada 2012b, p. 17).

The SARA legislation’s applicability to the operations phase appears to be similar to the permitting regime requirements (e.g., monitoring, compliance) set out under *Fisheries Act* authorizations. Again, it is important to note the overlapping nature of several Acts within the wildlife policy sector. That is, the SARA, Fisheries, and Wildlife Acts, all include similar approaches to regulating environmental impacts on the populations and habitat of wildlife and aquatic species.

DFO is responsible for the administration of SARA as it applies to aquatic species other than those on federal lands administered by Parks Canada Agency. A specific example can be found in DFO’s 2010 *Practitioners Guide to Writing an Authorization for the Habitat Protection Provisions of the Fisheries Act* (Department of Fisheries and Oceans 2010, p. 18). That document includes a ‘post authorization considerations’ section directly tied to the Act’s responsibilities under SARA. It advises:

“the Proponent must be informed of the monitoring requirements in subsection 79(2) which requires monitoring of adverse effects of the proposed development on the listed species and its critical habitat. The details for monitoring of SARA-related conditions should be detailed in the Proponent’s Monitoring and Reporting Plan. Practitioners must consult with their regional HMP SARA representative to coordinate monitoring and reporting of SARA-related conditions. Consistent with the legal requirement in SARA (s. 73 (3.1)), explanations for all SARA permits and *Fisheries Act* Authorizations with SARA conditions must be published on the SARA Public Registry. DFO must verify that the mitigation measures and any requirement relevant to fish and fish habitat considered during any relevant EAs are satisfied” (Department of Fisheries and Oceans 2010, p. 18).

This excerpt of the Guide makes clear that the applicable legislative provisions of SARA, as seen through the DFO Guide, are likely to be related to the proponent’s Monitoring and Reporting Plan. That is, until the proposed amendments to the *Fisheries Act* are fully in force any ongoing development activities that may impact a species at risk (either population or habitat) will continue to require permits and authorizations.

Given that post-certified lands are returned to their ‘natural state’ the *Species at Risk Act* and *Migratory Birds Convention Act* would apply to any reclaimed lands or water bodies as they apply normally. That is, the legislation and the respective acts enforcement provisions would be applied ‘as normal’. However, any permits issued under either of the legislation that included monitoring provisions or those monitoring requirements set out, as part of the environmental assessments conducted, would apply to proponents. If applicable, those would be highly project-specific given the migratory nesting patterns or species populations or habitat developed through reclamation.

7 MIGRATORY BIRDS CONVENTION ACT

The MBCA is, like the *Fisheries Act*, a longstanding piece of federal legislation. The MBCA was implemented in Canada in 1917 subsequent to the 1916 signing of the Migratory Birds Convention, a treaty signed by the United States and the United Kingdom (on behalf of Canada). Designed to protect migratory birds and their nests, the Act established the Government of Canada's jurisdiction over coastal and inland bird habitats. The Act was repealed and replaced with a new act, the *Migratory Birds Convention Act (1994)*. Donihee (2000) argues that there was little change in the federal legislation until 1994. The new Act saw an emphasis on habitat and included clearer acknowledgement of Aboriginal rights flowing from s. 35 amendments in the *Constitution Act, 1982* as well as an updating to the management and enforcement of the Act related to ‘protected areas’ (Donihee 2000, p. 62). Similar to other Acts examined in this report, multiple departments have responsibilities under the Act. For example, Parks Canada and Environment Canada are mandated and/or have legislative obligations under the MBCA.

The legislation includes broad definitions related to species as set out in s. 2 of the Act. For example, it defines “bird” as including “the sperm, eggs, embryos, tissue cultures and parts of the bird” and extends to more than seven hundred bird species. Similar to the *Fisheries Act* (prior to amendment as reviewed above), the MCBA includes conservation principles that emphasize both populations and habitat. That is, the Act includes conservation provisions “to provide for and protect habitat necessary for the conservation of migratory birds”. The Act applies to all lands and bodies of water in Canada and to the activities of all organizations, industries and individuals. This is particularly relevant to oil sands development as regulations under the MBCA provide for the conservation of migratory birds as well as protection of their nests and eggs, again providing the federal government with the required authority to intervene in provincial, territorial, private, or aboriginal lands for the protection of habitat. In particular, regulations and prohibitions listed under s. 5.1(1) and (2) of the Act include:

5.1 (1) No person or vessel shall deposit a substance that is harmful to migratory birds, or permit such a substance to be deposited, in waters or an area frequented by migratory birds or in a place from which the substance may enter such waters or such an area.

(2) No person or vessel shall deposit a substance or permit a substance to be deposited in any place if the substance, in combination with one or more substances, results in a substance – in waters or an area frequented by migratory birds or in a place from which it may enter such waters or such an area – that is harmful to migratory birds.

A review of the legislation and Environment Canada policies and guidelines reveals that the Minister of the Environment has the legislative authority to permit activities related to migratory birds in accordance with the following Acts and regulations: *Migratory Birds Convention Act, 1994*, *Migratory Bird Sanctuary Regulations*²⁸ C.R.C., c. 1036 (ss. 9(1), (2), (3), (4) and 10), and *Migratory Birds Regulations*²⁹ C.R.C., c. 1035 (ss. 4(7) and 6). This suggests that proponents would be required to apply for a permit to undertake activities that are described in s. 3 or s. 10 of the *Migratory Bird Sanctuary Regulations* in any “migratory bird sanctuary”³⁰.

Further, s. 12 of the MBCA sets out the regulations that the Governor in Council can undertake, many of which have direct implications for oil sands development. The regulations include:

- providing for the periods during which, and the areas in which,
 - migratory birds may be killed, captured or taken,
 - nests may be damaged, destroyed, removed or disturbed, or
 - migratory birds or nests may be bought, sold, exchanged, given or made the subject of a commercial transaction;
- for limiting the number of migratory birds that a person may kill, capture or take in any period when doing so is permitted by the regulations, and providing for the manner in which those birds may then be killed, captured or taken and the equipment that may be used;
- respecting the possession of migratory birds and nests that have been killed, captured, taken or removed in accordance with the regulations;
- for granting permits to kill, capture, take, buy, sell, exchange, give or possess migratory birds, or to make migratory birds the subject of a commercial transaction;
- for granting permits to remove or eliminate migratory birds or nests where it is necessary to do so to avoid injury to agricultural interests or in any other circumstances set out in the regulations;
- respecting the issuance, renewal, revocation and suspension of permits;
- for regulating the shipment or transportation of migratory birds from one province to another province or country and providing for the imposition of conditions governing international traffic in migratory birds;

²⁸ See http://laws-lois.justice.gc.ca/PDF/C.R.C.,_c._1036.pdf

²⁹ See http://laws-lois.justice.gc.ca/PDF/C.R.C.,_c._1035.pdf

³⁰ Section 9(2) of the *Migratory Bird Sanctuary Regulations* (C.R.C., c. 1036) reads, “Every person who applies for a permit shall, if requested by the Minister, furnish such information in respect of the purpose for which the permit is requested as the Minister may require”. Further, s. 3 of the regulations (the schedule, Part VIII) explicitly lists sanctuaries in Alberta including: (1) Inglewood Bird Sanctuary, (2) Red Deer Bird Sanctuary, (3) Richardson Lake Bird Sanctuary.

- for prohibiting the killing, capturing, injuring, taking or disturbing of migratory birds or the damaging, destroying, removing or disturbing of nests;
 - respecting the conditions and circumstances under which migratory birds may be killed, captured, injured, taken or disturbed, or nests may be damaged, destroyed, removed or disturbed;
- for charging fees for permits, leases, stamps or other authorizing documents required to carry on any activity under this Act or the regulations, and for determining the amount of the fees and the terms and conditions under which they are to be paid;
- authorizing the Minister to vary or suspend the application of any regulation made under this Act if the Minister considers it necessary to do so for the conservation of migratory birds.

This results in a requirement to *ensure compliance with permitting requirements* such as the need for development to not involve any disturbance to nests or nesting birds during breeding and nesting periods (generally early April to late August in most parts of Canada) among others. Consultations with officials from the Canadian Environmental Assessment Agency included acknowledgement that Environment Canada provides a range of ‘expert advice’ related to its MBCA mandate. For example, EC provides timing restrictions as general guidelines for industry to protect the great majority of migratory birds while realizing the practicalities of development activities on the landscape. However the onus remains with the proponent to comply with the legislation.

A review of legislation found that Bills C-38 and C-45 did not amend the MBCA. The complete permitting process that relates to MBCA is detailed in Appendix 1 based on the 2011 Environment Canada policy *Considering Permitting or Authorizing Prohibited Activities in Protected Areas Designated Under the Canada Wildlife Act and Migratory Birds Convention Act, 1994*.

7.1 Application of the Act to the Mineable Oil Sands

The MBCA provisions that are likely to be most applicable to the operational stage are again those that relate to the compliance and monitoring requirements related to activities that have been approved through permits. Compliance monitoring indicates whether activities governed by the legislation are carried out in accordance with the acts and regulations. Monitoring activities include:

- conducting regular inspections of documents and relevant places, such as migratory bird sanctuaries, national wildlife areas, and Canada's ports of entry;
- inspecting and obtaining samples of wildlife for species inspection and identification; and
- monitoring other regulatory requirements, such as those concerning permits for the possession of migratory birds (Environment Canada 2010c).

Environment Canada is clear that the frequency of inspections will depend on various issues such as how threatened the species is, the harm that could be done to Canadian ecosystems should specimens escape, and the compliance record of the individual or company (Environment Canada 2010c).

Given that post-certified lands are returned to their ‘natural state’ the *Species at Risk Act* and *Migratory Birds Convention Act*, and their respective enforcement provisions, would apply to any reclaimed lands or water bodies as they apply normally. However, any permits issued under either of the Acts that included monitoring provisions or those monitoring requirements set out, as part of the environmental assessments conducted, would apply to proponents. If applicable, those would be highly project specific given the migratory nesting patterns or species populations or habitat.

8 NAVIGABLE WATERS PROTECTION ACT

Enacted in 1882, The *Navigable Waters Protection Act* (NWPA) was one of Canada’s oldest pieces of legislation. The Act is administered by Transport Canada.

Two key points are essential to understanding this Act. First, the Act protects the right of Canadians to navigable waters it does not *create* that right. That is, navigation is a common law right. This is significant for, as reviewed below, there is no explicit definition of navigable water – instead, it has evolved through common law cases. The widely accepted threshold for navigability has been the aptly titled “floating canoe” test³¹. Second, the federal government has exclusive constitutional authority over navigation and shipping as per s. 91(10) of the *Constitution Act* (as amended). As will be detailed in the next section, Bill C-45 was explicitly stated to be intended to modernize legislation that had been perceived to have caused considerable administrative burden and delay with a spectrum of small to large projects (e.g., a personal cottage dock to a large bridge construction) all requiring authorization.

Under the NWPA prior to its recent amendment the approval for works in s. 5(1) ensured that “No work shall be built or placed in, on, over, under, through or across any navigable water without the Minister’s prior approval of the work, its site and the plans for it” without proper authorization. Where a project falls into the definition of “work”, the federal government must approve it before it is undertaken. Work is defined in s. 2 as including:

- (a) Any man-made structure, device, or thing, whether temporary or permanent, that may interfere with navigation; and
- (b) Any dumping or filling of any navigable water, or any excavation of materials from the bed of any navigable water, that may interfere with navigation.

³¹ See *Quebec (Attorney General) v. Fraser* (1906), 37 S.C.R. 577 (S.C.C.); affirmed [1911] A.C. 489 (P.C.)

More specifically, s. 22 of the general provisions of NWPA includes further prohibitions on the depositing of materials:

“22. No person shall throw or deposit or cause, suffer or permit to be thrown or deposited any stone, gravel, earth, cinders, ashes or other material or rubbish that is liable to sink to the bottom in any water, any part of which is navigable or that flows into any navigable water, where there are not at least twenty fathoms of water at all times, but nothing in this section shall be construed so as to permit the throwing or depositing of any substance in any part of a navigable water where that throwing or depositing is prohibited by or under any other Act”.

From an oil sands perspective, the NWPA is important for several reasons. The first is that the Act has direct bearing over the determination of ‘navigable’, which could have significant implications for the applicability of the Act to end pit lakes and constructed waterways, and perhaps to eventual discharge of process-affected waters to receiving water bodies. Second, prior to its amendment the Act was linked to the *Canadian Environmental Assessment Act (1999)*. That is, the above requirement for approval would trigger the environmental assessment process under the old CEAA. Thirdly, it sets out clear provisions related to the ‘dumping’ of materials into bodies of water *and water that flows into navigable waters*. This may have implications for post-construction management of reclaimed land and end pit lakes.

8.1 2009 Amendments to the NWPA

It would appear that the 2009 amendments, rather than those included in Bill C-45, are the most consequential to oil sands development. Through the Minor Works and Waters Order³² (*Navigable Waters Protection Act*) the 2009 amendments set out three specific classes of Minor Works and Minor Navigable waters that do not require an application or approval because they are “minor” in nature. The Order specifies the following three classes: (1) private lakes, (2) artificial irrigation channels and drainage ditches, (3) minor navigable waters (Canada Gazette Part I on May 9, 2009). Given the definitions below, the private lake provisions are not likely to apply (because of the public land exemption). The other two classes may apply depending on size of the waterway.

- Private Lakes: refer to lakes that measure *5 hectares or less in area* and must meet the following established criteria in order to be exempt from the application provisions of the NWPA:
 - All land abutting the navigable water is owned by one person or company *other than the federal or provincial government*.
 - No navigable waters enter or exit the lake.
 - There is no current or past public access to the lake.

³² See <http://www.tc.gc.ca/eng/marinesafety/oep-nwpp-minorworks-menu-1743.htm> and the Minor Waters User Guide <http://www.tc.gc.ca/eng/marinesafety/tp-tp14838-3092.htm>

- There are no easements or servitudes that allow access to the lake. (Canada Gazette 2009, p. 1411, emphasis added)
- Section 12 establishes ‘Artificial Irrigation Channels and Drainage Ditches’ as a class, defined as: “Artificial irrigation channels and drainage ditches, other than ones created or built in whole or in part from a natural body of water, that have an average width of less than 3.00 m are established as a class of navigable waters for the purposes of subsection 5.1(1) of the Act” (Canada Gazette 2009, p. 1411, emphasis added).
- Sections 11.2 to 11.4 set out the Minor Navigable Waters class and specifications:
 - (2) Sections of navigable waters are established as a class of navigable waters for the purposes of subsection 5.1(1) of the Act if
 - the average width of the navigable waters measured at the high-water level is less than 1.20 m; or
 - the average depth of the navigable waters measured at the high-water level is less than 0.30 m.
 - (3) Sections of navigable waters are established as a class of navigable waters for the purposes of subsection 5.1(1) of the Act if the average width of the navigable waters measured at the high-water level is 1.20 m or more but not more than 3.00 m and
 - the average depth of the navigable waters measured at the high-water level is 0.30 m or more but not more than 0.60 m;
 - the slope of the navigable waters measured at the high-water level is greater than 4%;
 - the sinuosity ratio is greater than 2; or
 - there are more than two natural obstacles in the navigable waters, at least one of which is upstream and another of which is downstream from the midpoint of the centre line of the navigable waters.
 - (4) For the purposes of subsection (3),
 - the slope of the navigable waters is the differential elevation of the water surface from the upstream end of the centre line of the navigable waters to the downstream end of that line; and
 - the sinuosity ratio is the ratio of the length of the centre line of the navigable waters to the length of a straight line that starts and ends at the same points as the centre line.

Finally, the 2009 amendments also provide the Minister with increased authority and discretion to add to the list of exempted works or waterways. The various amendments are worth noting as they largely remain and have been further elaborated through proposed amendments in 2012.

8.2 2012 Amendments to NWPA

Bill C-45 amends the name of the NWPA to *Navigation Protection Act* (NPA). The amended Act has a similar narrowing effect as reported above for those related to the *Fisheries Act* and *Canadian Environmental Assessment Act 2012*. That is, approvals issued under the NWPA no longer trigger a federal environmental assessment. Secondly, the NPA maintains the 2009 tiered or tripartite classification system of ‘classes’ as detailed above providing the Minister with authority to exempt works and waterways from the NPA approval process.

Further narrowing results from the major change whereby the NPA restricts the protections afforded under the Act to those bodies of water that are explicitly listed in Schedule 2 of the Act. Specifically, the approvals process that traditionally applied to *any* body of water deemed navigable would now only apply to the 97 lakes and 62 rivers across Canada that have been listed³³. It should be noted that as per the *Fisheries Act*, the NWPA remains in force as the regulations that would govern the application of the NPA have not yet been brought into force. As such, the NWPA and its 2009 amendments under the Ministerial Order would still apply. The 2012 amendments do provide authority for the Minister to add bodies of water by regulation in cases where the Minister of Transport deems them to be in the national, regional, or public interest – or where a province or municipality requests. When the NPA, and its regulations, are fully in force the construction of any works in a lake or river not included in Schedule 2 would not require an approval under the NPA (though such works would still be subject to any other approvals required by applicable laws).

Section 317(4) replaces the definition of work in s. 2 of the Act with the following: “work includes any structure, device or thing, whether temporary or permanent, that is made by humans. It also includes the dumping of fill or the excavation of materials from the bed of any navigable water”. Further, the ‘dumping provisions’ contained in the existing NWPA are retained in the NPA with slight modifications to update the language³⁴. Of note, the ‘dumping’ prohibitions apply *to all navigable waters*, and are not limited to those waters listed in the schedule to the NPA. Additionally, Bill C-45 amends the Act to introduce a new prohibition against dewatering of any navigable water. The dumping and dewatering provisions are pertinent should any bodies of water, such as end pit lakes or connecting streams, be deemed navigable under the Act. The amendments also provide for stronger administrative monetary penalties and new offences and include amendments to related legislation for enforcement.

Finally, given that the NPA is not fully in force the NWPA and transitional provisions are applicable. Consultation with Transport Canada officials revealed that a secretariat had been

³³ For the entire proposed list of ‘scheduled waters’, see http://www.tc.gc.ca/media/documents/mediaroom/proposed_list_of_scheduled_waters.pdf; the list includes Lake Athabasca and the Athabasca River.

³⁴ Sections 21 and 22 of the proposed NPA.

established to finalize the regulatory elements required but that until that work is done the NWPA and transitional provisions apply³⁵.

8.3 Summary of NWPA and NPA

In sum, the amended Act (NPA) will no longer trigger environmental assessments and has a much narrower application. The 2009 and 2012 amendments signal the shift away from environmental protection or regulation through the NWPA to a much clearer focus on navigation under NPA. However, as reviewed above until fully in force the NWPA will continue to apply with some potential impact on current oil sands development involving ‘work’ on bodies of water deemed navigable (under the new classes) or with respect to the dumping of materials into navigable bodies of water. Further, the amended NPA also provides for proponents of works in unlisted waters to “opt in” and to benefit from the additional certainty provided by the regulatory regime applied to listed waters. However, as reviewed above navigation is a common law right and thus may be subject to judicial case law or interpretations regardless of whether waters are ‘listed’ under the NPA schedule or not.

8.4 Application of the Act to the Mineable Oil Sands

Consultations with Transport Canada officials revealed that NWPA legislation applies to either natural or man-made bodies of water. Officials advised that no NWPA approvals (permits, etc.) are needed for the construction of end-pit lakes under the NWPA provisions. However, should those lakes be deemed ‘navigable’ then they would be subject to the NWPA. At the time of writing no official response had yet been received related to the application of transitional provisions or the specific technical requirements and processes associated with determinations of navigability that may apply to end-pit lakes or connecting streams.

9 OTHER LEGISLATION

The following Acts may be applicable to oil sands development.

9.1 Environmental Enforcement Act and Environmental Violations Administrative Monetary Penalties Act

The *Environmental Enforcement Act* was assented to on June 18, 2009. The bulk of the Act was brought into force by Order in Council in December of 2010. The Bill, when fully implemented, will amend nine existing statutes that are administered by Environment Canada and Parks Canada: the *Canadian Environmental Protection Act, 1999*; the *Canada Wildlife Act*; the *Migratory Birds Convention Act, 1994*; the *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act*; the *Antarctic Environmental Protection Act*; the *International River Improvements Act*; the *Canada National Parks Act*; the *Canada National Marine Conservation Areas Act*; and the *Saguenay-St. Lawrence*

³⁵ Consultation with Transport Canada Official, January 23, 2013.

Marine Park Act (Environment Canada n.d.(b)). The *Fisheries Act* and *Species at Risk Act* were not amended by this legislation.

As per Environment Canada, the changes introduced by the Act, when all regulations are finalized will include:

- Establishing minimum fines for the most serious offences and increasing maximum fines
- Creating different fine scales for different types of offenders. For example, corporations would be subject to higher fines than individuals
- Providing sentencing guidance to courts so that environmental damages, prior convictions and other relevant factors are taken into account and treated as aggravating factors
- Establishing administrative penalties to address less serious environmental offences that are often not pursued because of the complexity and high costs of prosecution
- Directing fines towards the Environmental Damages Fund³⁶, from which they can be used by community based groups for environmental restoration or research projects (Environment Canada, n.d.(c))

The EEA, through its specification of a spectrum of fines, establishes an explicit range of fines for various environmental offences and actors. For example, setting minimum fines for the most serious offences, and increased the maximums for fines. Further, it doubled the penalties (fines) for second and subsequent offences. The EEA created a new statute, the *Environmental Violations Administrative Monetary Penalties Act* that came into force December 10, 2010 and is reviewed separately below.

In addition, the EEA amended the penalty provisions of the nine Acts to clarify the liability and duty provisions of directors, officers, agents and mandataries of corporations (those to whom a mandate has been given). The EEA also amended the sentencing provisions of the Acts by specifying aggravating factors that, if associated with an offence, must contribute to higher fines; by requiring courts to add profits gained or benefits realized from the commission of an offence to fine amounts; by requiring courts to order corporate offenders to disclose details of convictions to their shareholders; and by expanding the power of the courts to make additional orders having regard to the nature of the offence and the circumstances surrounding its commission.

The EEA also added and/or amended additional types of orders that a judge may impose for an environmental offence, including directing the offender to:

- Implement an environmental management system, pollution prevention plan or environmental emergency plan;

³⁶ See <http://www.ec.gc.ca/edf-fde/default.asp?lang=en&n=C5BAD261-1>

- Pay the Crown an amount for environmental conservation or protection; and
- Compensate any person for the cost of any remedial or preventative action (Becklumb 2009).

Other types of orders a judge might impose include:

- Requiring periodic environmental audits;
- Requiring an offender to provide information on the offender's activities;
- Directing a person to perform community service;
- Directing a person to pay an amount to environmental or other groups to assist in their work in the area;
- Requiring an offender to pay an amount for research on protection, conservation or restoration; and/or
- Directing an offender to pay an amount to an educational institution, including for scholarships for students enrolled in studies related to the environment (Becklumb 2009).

The Act provides for a new enforcement and compliance structure with greater specificity in how fines are levied. That is, the Act includes fine 'classes' for individuals, corporations, and ships. Further, the Act directs all funds collected through fines to the Environmental Damages Fund. The Act also provides for amended (new) sentencing provisions. Finally, the Act provides for a range of enforcement tools including the creation of a registry for corporate offenders and grants authority to develop 'administrative monetary penalties'. The intention being, officials could fine offenders (for minor offences) as a means to increase deterrence and reduce court action for 'minor' offences (Environment Canada n.d.(b)).

As per other amendments (e.g., Fisheries) the amendments for the EEA are 'staged'. That is, as indicated in Table 7, amendments will be undertaken in three stages. A 2013 Order in Council and regulations bringing into effect the amended fine regime for the MBCA and the *Wildlife Act* is expected.

Table 7. Schedule for Coming into Force of EEA Amendments (2010 to 2013).

Stage	Key Amendments
<p>Stage 1 (December 2010)</p>	<p>Amendments to the three Acts administered by Parks Canada as well as the <i>Antarctic Environmental Protection Act (AEPA)</i>, and the <i>International River Improvements Act (IRIA)</i> came into force on December 10, 2010.</p> <p>Some amendments to CEPA 1999, MBCA, <i>Canadian Wildlife Act (CWA)</i> and the <i>Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act (WAPRIITA)</i> also came into force on December 10, 2010. Notably, the new fine schemes in those Acts were not brought into force in this stage.</p> <p>The <i>Environmental Violations Administrative Monetary Penalties Act</i> was also brought into force on this date.</p>
<p>Stage 2 (July)</p>	<p>An Order in Council bringing the EEA amendments to CEPA 1999 into force and regulations designating which CEPA offences are subject to the higher fine range came into force on June 22, 2012. Details of those regulations and the effect of the changes (including which offences are now subject to mandatory minimum fines and increased maximum fines) are available on-line.</p>
<p>Stage 3 (2013)</p>	<p>The final three steps will occur at approximately the same time in 2013:</p> <ul style="list-style-type: none"> • an Order in Council and regulations bringing into effect the amended fine regime under the MBCA and the CWA; • an Order in Council bringing the remaining provisions of WAPRIITA into force; and • the coming into effect of the AMPs system under EVAMPA.

Source: Adapted from Environment Canada (n.d.(b))

Administrative monetary penalty (AMP) provisions are part of the *Environmental Violations Administrative Monetary Penalties Act (EVAMPA)* that was created by the EEA. The AMP includes penalties that are civil or administrative in nature, not penal or criminal as others under the EEA (Environment Canada n.d.(b)). Section 5, ‘regulations’ reads for example that the Governor in Council, “may make regulations (a) designating as a violation that may be proceeded with in accordance with this Act”, including “(i) the contravention of any specified provision of an Environmental Act or of any of its regulations, (ii) the contravention of any order or direction, or of any order or direction of any specified class of orders or directions, made under any provision of an Environmental Act or of any of its regulations, (iii) the failure to comply with any obligation, or with any obligation of any specified class of obligations, arising from an Environmental Act or any of its regulations, or (iv) the failure to comply with any

condition of a permit, licence or other authorization, or any condition of any specified class of conditions of permits, licenses or other authorizations, issued under an Environmental Act or any of its regulations”.

Section 14 of EVAMPA limits the time within which a violation may be deemed to have occurred, “No notice of violation in respect of a violation may be issued more than two years after the day on which the subject matter of the violation arises”. Further, s. 27 (2) states, “No proceedings by way of summary conviction in respect of an offence under this Act may be instituted more than five years after the day on which the subject matter of the proceedings arose, unless the prosecutor and the defendant agree that they may be instituted after the five years”. This provides some level of certainty regarding post-certification liability.

9.2 Canada Water Act

The *Canada Water Act* (R.S.C., 1985, c. C-11) was proclaimed on September 30, 1970. The Act states that it is intended to “provide for the management of the water resources of Canada, including research and the planning and implementation of programs relating to the conservation, development and utilization of water resources”. As noted above it is the provinces that have the primary jurisdiction over most areas of water management and protection. However, the Government of Canada does have jurisdiction and responsibility for managing water on federal lands (e.g., national parks), federal facilities (e.g., office buildings, labs, penitentiaries, military bases), First Nations reserves, and two of Canada's three territories (Nunavut and the Northwest Territories). Further, the Act also deals with “inter-jurisdictional waters” which it defines as “any waters, whether international, boundary or otherwise, that, whether wholly situated in a province or not, significantly affect the quantity or quality of waters outside the province” (for example, Lake Athabasca and the Athabasca River). In general the Act is structured into four sections:

- Part I, section 4, provides for the establishment of federal-provincial arrangements for water resource matters. Sections 5, 6 and 8 provide the vehicle for co-operative agreements with the provinces to develop and implement plans for the management of water resources. Section 7 enables the Minister, either directly or in co-operation with any provincial government, institution or person, to conduct research, collect data and establish inventories associated with water resources.
- Part II provides for federal-provincial management agreements where water quality has become a matter of urgent national concern. It permits the joint establishment and use of federal or provincial incorporated agencies to plan and implement approved water quality management programs. The application of alternative co-operative approaches and programs has resulted in Part II never having been used.
- Part III, which provided for regulating the concentration of nutrients in cleaning agents and water conditioners, has been repealed. It was incorporated into the *Canadian Environmental Protection Act* in 1988 and later into sections 116 to 119

(Part VII, Division I) of the *Canadian Environmental Protection Act, 1999*, which came into force on March 31, 2000.

- Part IV contains provisions for the general administration of the Act, including annual reporting to Parliament. In addition, Part IV provides for inspection and enforcement, allows the Minister to establish advisory committees, and permits the Minister, either directly or in cooperation with any government, institution or person, to undertake public information programs. (Environment Canada 2012e)

From an oil sands perspective several parts of the Act may be important. Section 9 of Part II, Water Quality Management deals with various forms of pollution. It further forbids dumping wastes in any place, or under any conditions, such that the waste or the derivatives of that waste might flow into the waters of the protected area. The Act does provide for exceptions but s. 12 requires those to be set out in bilateral agreements and include compensation in a similar fashion to the *Fisheries Act* permitting provisions. Specifically, s. 12(e) explains, “the proportions in which any compensation awarded or agreed to be paid to any body or person suffering loss as a result of the program is to be paid by the Minister and the provincial government or governments”.

As a 2006 National Energy Board report makes clear, bitumen extraction through typical methodologies requires considerable water use. The report underscores “Both mining and in situ operations use large volumes of water for extracting bitumen from the oil sands. Between 2 to 4.5 barrels of water are withdrawn, primarily from the Athabasca River, to produce each barrel of synthetic crude oil (SCO) in a mining operation. Currently, approved oil sands mining projects are licensed to divert 370 million cubic metres (2.3 billion barrels) of freshwater per year from the Athabasca River. Planned oil sands mines would push the cumulative withdrawal to 529 million cubic metres (3.3 billion barrels) per year. Despite some recycling, almost all of the water withdrawn for oil sands operations ends up in tailings ponds” (National Energy Board 2006, p. 38). Given the current high levels of water use, and expected increases, this will result in considerable volumes of water requiring treatment and whose storage may raise seepage issues related to the various natural waters raises considerable challenges for operational project stage activity and reclamation. For example, a 2012 study conducted by federal officials and others has found evidence that “substantial levels of mining-related organic acids were detected in progressively decreasing concentrations in groundwater up to 1.6 kilometres (km) away from a sample long-established, out-of-pit tailings pond” (Natural Resources Canada 2012). This type of current and expected water use suggests continued, and potentially additional engagement, by the federal government through legislation and bilateral agreements with the Government of Alberta pertaining to water pollution monitoring, enforcement, and compliance activity.

Post-certification these provisions and exemptions with corresponding compensation could be applicable to failures of management facilities tied to tailings ponds and end-pit lakes such as the discovery of unauthorized pollution into water governed by the Act.

In 2012 the Federal government and the Government of Alberta announce the Joint Canada-Alberta Implementation Plan for Oil Sands Monitoring (Environment Canada 2012a)³⁷. At this point the initiative is industry funded and set to run from 2012 to 2015. The Canada-Alberta agreement addresses a broad range of environmental and ecological components beyond water quality/quantity, including:

- Air quality
- Acid sensitive lakes and accumulated aerial deposition
- Aquatic ecosystem health – Fish status and health, benthic invertebrates and other aquatic biota
- Wildlife toxicology
- Terrestrial biodiversity and habitat disturbance

This monitoring could potentially result in enforcement or compliance activities under the *Canadian Water Act* or other legislation (for example CEPA or the EEA if it is for NPRI listed chemicals as detailed above).

9.3 Canada Wildlife Act

The *Canada Wildlife Act* was passed in 1973 with the intention of setting out federal research and conservation provisions for wildlife in Canada. The Act was amended in 1994 to include all land species of flora and fauna and all species found within 200 nautical miles of the Canadian coast. The Act, in a similar fashion to the migratory birds and fisheries Acts, protects the habitats of all the species protected by the Act. The legislation provides mechanisms for protecting endangered wildlife. For example, the Act provides the ability for the responsible Minister to create and govern the management and protection of wildlife areas that are specified in the *Wildlife Area Regulations*³⁸ (C.R.C., c. 1609) – none are located in the oil sands region. Section 8 of the Act reads “The Minister may, in cooperation with one or more provincial governments having an interest therein, take such measures as the Minister deems necessary for the protection of any species of wildlife in danger of extinction”.

Additionally the Minister has the legislative authority to refuse to issue a permit or other authorization or may suspend or cancel a permit or other authorization (*Canada Wildlife Act* (section 18.2), *Wildlife Area Regulations* (section 7), *Migratory Birds Convention Act, 1994* (section 18.22), and the *Migratory Bird Sanctuary Regulations* [section 9(4)]) and include conditions on permits (*Migratory Bird Sanctuary Regulations* [section 9(3)]) (See Environment Canada 2011, p. 2).

³⁷ See the new monitoring portal at <http://www.jointoilsandsmonitoring.ca/pages/home.aspx?lang=en>

³⁸ Wildlife Area Regulations. http://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._1609/page-1.html. Regulations are current to 2013-03-18. See Appendix 2 for the permitting process in a Designated Wildlife Area.

9.4 1930 Natural Resource Transfer Agreement

As detailed in the introductory section on the constitutional division of powers, the 1930 *Natural Resource Transfer Agreement* was a constitutional amendment. This provided the constitutional authority (equivalence with provisions under s. 92) for Alberta over resources matters. However the Act also explicitly sets out that national parks in Alberta will remain under federal jurisdiction including the resources therein (ss. 14 and 15). Further, s. 16 includes clear language related to the impact of activities on adjacent provincial lands and the parks. It reads:

“16. The Government of Canada will introduce into the Parliament of Canada such legislation as may be necessary to exclude from the parks aforesaid certain areas forming part of certain of the said parks which have been delimited as including the lands now forming part thereof which are of substantial commercial value, the boundaries of the areas to be so excluded having been heretofore agreed upon by representatives of Canada and of the Province, and *the Province agrees that upon the exclusion of the said areas as so agreed upon, it will not, by works outside the boundaries of any of the said parks, reduce the flow of water in any of the rivers or streams within the same to less than that which the Minister of the Interior may deem necessary adequately to preserve the scenic beauties of the said parks.*” (Emphasis added)

Proponents will have to ensure that planning takes into consideration activities, *including those outside of the boundaries of national parks*, which may impact the flow of water in national parks. Here again, there is considerable discretion for the Minister to make such decisions as implied in the above extract of the Act.

10 SUMMARY AND CONCLUSIONS

The federal Acts examined provide legislated authorities for the Government of Canada to insert itself into oil sands environmental management. This is most clearly demonstrated in relation to the application of provisions under the *Fisheries Act*, CEPA, and various wildlife Acts.

Five key findings emerged from the review undertaken:

1. There has been a narrowing of the federal scope in terms of the application of legislation in many cases;
2. There has been an increase in the legislated discretion for Ministers or delegated authorities under several of the Acts;
3. There has been a clear attempt to amend legislation to devolve and/or harmonize federal environmental legislation and regulatory regimes with those of the provinces;
4. Considerable uncertainty remains related to the final regulatory regime to be implemented and how it might apply to oil sands projects; and,
5. The federal legislation is focused predominantly on the pre-construction and operational phases rather than the reclamation and post-certification phase.

The amendments introduced by Bills C-38 and C-45 have resulted in significant changes that have, in many cases, resulted in a narrowing of the applicability of legislation. This was particularly evident in relation to the *Fisheries Act*, *Navigation Protection Act*, and *Canadian Environmental Assessment Act, 2012*. In each instance the Acts were amended to reorient definitions, processes, or the potential applications of provisions to narrower terms. For example, the shift towards ‘serious harm’ from habitat destruction in the *Fisheries Act*, and a list-based system to explicitly list bodies of water that will be governed by the NPA, and the shift to a designated list system for the EA process under CEAA 2012. Further, CEAA 2012 has also narrowed the responsible authorities who could conduct EAs to three from over forty under the previous Act and also narrowed the definition of ‘environmental effects’ from that of the previous Act (Becklumb and Williams 2012, p. 3). That is, as Gibson puts it, “CEAA 2012 is not designed to ensure comprehensive or integrated attention to environmental considerations broadly or narrowly defined. Only effects on a tightly restricted range of ‘environmental components’ under federal legislative authority are to be considered – biophysical effects on fish, aquatic life and migratory birds, effects on federal lands and Aboriginal communities, transboundary effects and ‘changes to the environment that are directly linked to or necessarily incidental to any federal decisions about a project’ – plus whatever may be recognized in a Schedule 2 in which Cabinet may identify additional components” (Gibson 2012, p. 182).

The report findings confirm the Government of Canada’s current favoured approach is one of devolution and regulatory harmonization with sub-national levels of government in dealing with the environmental and natural resource policy sectors. The clearest example of this was found in the new CEAA 2012: the Act provides for substitution and equivalency among federal and provincial EA processes to ensure that projects/activities are subject to one EA process. A leading expert on environmental assessment has argued the implications are significant for the federal EA process and also the provinces. Doelle (2012) summarizes the implications for federalism and environmental assessment in stark terms, writing:

In summary, when it comes to harmonization, CEAA 2012 has shifted from a cooperative approach designed to encourage one comprehensive environmental assessment process, involving all jurisdictions with decision making responsibilities, to one that sees delegation to the provinces and narrowing of federal EAs as the primary tools for avoiding duplication among jurisdictions involved in project EAs. The result is a federal process that can no longer be considered EA, but rather is a process of gathering information already required for existing federal regulatory decisions, such as decisions under the *Fisheries Act*, the *Species at Risk Act* and the *Migratory Birds Convention Act*. This will place significant new burdens on provincial and other EA processes in Canada, such as those carried out under Aboriginal self-government agreements, to ensure a comprehensive consideration of the environmental, social and economic implications of proposed new developments.

The devolution and harmonization sought in Bill C-38 and C-45 amendments has limits. In particular the federal government’s clear constitutional authority over aboriginal issues will compel the Government of Canada to continue to meet its obligations on a duty to consult basis.

Recent reactions from some aboriginal communities to the omnibus budget implementation bills, particularly Bill C-45, demonstrate the important need for continued consultations and engagement with aboriginal communities. The potential impacts of oil sands development to the traditional way of life of aboriginal communities as well as potential environmental consequences to the aboriginal communities in close proximity to oil sands sites has and will likely continue to animate their advocacy and requests for consultative participation (Buffalo et al. 2011, Urquhart 2010).

Further, recent studies undertaken by federal scientists and recently released access to information requests confirm seepage from tailings ponds and oil sands developments and provide new evidence of the human versus natural occurrences of environmental effects (Natural Resources Canada 2012, Savard et al. 2012). Such findings will likely force the federal government to monitor and perhaps deploy the new enforcement mechanism through legislation like the EEA. How reclaimed sites, for example using end-pit lakes, are able to contain toxics will likely be an issue that Environment Canada and Natural Resources Canada will continue to monitor, particularly since the technologies have yet to be conclusively demonstrated on a large scale (Hrynyshyn 2012).

As has been emphasized in this report there have been clear increases to the discretion available to both agencies and Ministers that has been built into many of the Acts (and their regulations). This was particularly clear in the introduction of the new *Canadian Environmental Assessment Act, 2012* that increases the discretion for the Canadian Environmental Assessment Agency and the Minister of the Environment. Other Acts such as those requiring permits and authorizations (Fisheries and MBCA for example) have also been amended to provide greater authority for the Minister to make regulations under the Act(s) or provide exemptions. This further complicates determinations of potential legislative applicability to oil sands. For example, it adds uncertainty related to potential regulations made by the Minister of the Environment or the addition of conditions attached to approvals associated with the EA process.

Uncertainty also results from the lack of all regulations having been brought into force, for example the proposed regulations under the *Fisheries Act* for changes from HADD to “serious harm”. Additional uncertainty related to the application of federal legislation is associated with the unknowns involved in the reclamation practices. For example the development and operationalization of end pit lakes. Will such end-pit lakes be deemed navigable under the federal NPA? Could they eventually sustain fish habitat or be linked to other waterways and thus be subject to *Fisheries Act* provisions? This suggests that the application of existing and proposed regulations and legislation may only be determined when projects reach operational or reclamation and post-certification phases. As Foote (2012) puts it “The long-term reclamation success will not be known until long after the final decommissioning agreement and bond renegotiation are settled. This creates a very difficult situation for policy setting”.

Finally, the review of legislation conducted for this report has identified, from a project life cycle perspective, federal legislation appears to be most prominently applicable at pre-construction and operational phases. This was clearly the case with respect to requirements for proponents to provide information and project descriptions during applications for permits, authorizations,

agreements, or as part of an environmental assessment. Several of the authorization and permitting processes include requirements for proponents to submit information related to how they will mitigate or offset potentially harmful effects from oil sands activity including ‘decommissioning’ of projects. For example, the application of DFO’s ‘No Net Loss’ policy in determining the compensation plan requirements for those seeking authorizations for activities that may impact fish populations or habitat.

CEPA’s provisions require the ongoing reporting and compliance with the NPRI registry reporting and monitoring activities associated with potential pollution. As detailed above the *Fisheries Act* and CEAA require reporting and monitoring activities which are agreed upon during fish compensation management planning and environmental assessment processes respectively. Again, this emphasizes that the application of legislation will likely be project specific.

EEA and EVAMPA have both seen increases to monetary penalties, broadening of the scope of who can be subject to penalties and liabilities.

There was however much less applicability to the reclamation and post-certification phase. Given that reclamation certification is a provincial process there were no explicit references to reclamation certificates or legislative requirements pertaining to post-certified projects. In short, those lands that had been certified reclaimed would be subject to federal laws and regulations in a similar manner to any other lands or projects. As more lands are reclaimed the potential role of federal legislation to the post-certification development phase will likely become clearer.

The findings from the Auditor General of Canada, the federal Commissioner of the Environment and Sustainable Development, the Royal Society of Canada, and the federal Oilsands Advisory Panel have all expressed concerns regarding the limited regulatory capacity of the federal government. Both primary document analysis and consultations with officials in multiple departments was met with very limited information, and in some cases uncertainty, about how federal legislation applies (or could apply). This was clearly demonstrated in a 2010 Departmental memo to the Minister of Environment regarding tailings ponds. It notes:

Because the tailings ponds do not discharge into fish-bearing bodies of water, Environment Canada has not regulated tailings ponds through the *Fisheries Act* (although it might be able to if there was seepage from the tailings ponds into fish-bearing bodies of water). As a result, the department does not actively monitor tailings management systems or the ponds themselves. However, Environment Canada administers and enforces a number of acts and regulations which *could impose some requirements over oil sands tailing ponds*. These are the *Fisheries Act*, the *Species at Risk Act*, and the *Migratory Birds Convention Act* and its associated regulations. In addition, releases of toxic substances from tailings ponds (either to the air or to water) could be covered by the *Canadian Environmental Protection Act*. Many toxic substances found in tailing ponds (e.g., VOCs, PAHs, benzene) are on Schedule 1 of CEPA, but currently there are no federal regulations to control their release from tailings ponds (Environment Canada 2010b, emphasis added).

This excerpt of the memo and the report more generally underscore that there is legislative ‘room’ for the federal government to enter insert itself into aspects of oil sands development. While this review has identified some significant changes precipitated by the passage of Bills C-38 and C-45 with potential impact on oil sands development, it is contingent to a certain degree on how development and reclamation is undertaken. One thing is clear, the amendments introduced through recent budget implementation Acts has involved significant changes to longstanding legislation and will likely require the passage of some time before determinations of its applicability and consequences are fully known.

11 REFERENCES

Alberta Environment, 2008. Guideline for wetland establishment on reclaimed oil sands leases: Revised (2007) Edition. Prepared by Harris, M.L. of Lorax Environmental for the Wetlands and Aquatics Subgroup of the Reclamation Working Group of the Cumulative Environmental Management Association, Fort McMurray, Alberta. 330 pp.

<http://environment.gov.ab.ca/info/library/8105.pdf> [Last accessed May 10, 2013].

Aulh riti re, D., 1972. Les probemes constitutionnelles de la lutte contre la pollution de l'espace atmospherique au Canada. La Revue de Barreau Canadian (50): 561-579.

Becklumb, P., 2009. Legislative Summary of Bill C-16: Environmental Enforcement Act. Industry, Infrastructure and Resources Division 1 April 2009, Revised 19 June 2009. Parliamentary Information and Research Service. Publication Number LS-636E. Ottawa, Canada: Library of Parliament. 42 pp.

Becklumb, P. and T. Williams, 2012. Canada’s New Environmental Assessment Process. Industry, Infrastructure, Resources Division. Parliamentary Information and Research Service. Publication No. 2012-36-E. Library of Parliament, Ottawa, Ontario. 14 pp.

Buffalo, K., C.E. Jones, J.C. Errington and M.I.A. MacLean, 2011. Fort McKay First Nation's involvement in reclamation of Alberta's oil sands development. IN: Mine Closure 2011. Fourie, A., M. Tibbett and A. Beersing (Eds.). Proceedings of the Sixth International Conference on Mine Closure, September 18-21.

Canadian Environmental Assessment Agency, 2012a. ‘Overview’, Canadian Environmental Assessment Act, 2012. <http://www.ceaa-acee.gc.ca/default.asp?lang=En&n=16254939-1> [Last accessed May 10, 2013].

Canadian Environmental Assessment Agency, 2012b. Guide to Preparing a Description of a Designated Project under the Canadian Environmental Assessment Act, 2012. Her Majesty the Queen in Right of Canada. ISBN: 978-1-100-20957-9. 12 pp.

<http://publications.gc.ca/site/eng/425214/publication.html> [Last accessed May 10, 2013].

Canadian Environmental Network, 2013. Canadian Environmental Assessment Act 2012 flow chart. http://rcen.ca/sites/default/files/vittal_ceaa_2012_flowchart.jpg [Last accessed May 10, 2013].

Commissioner of the Environment and Sustainable Development, 2009. Chapter 1, Applying the Canadian Environmental Assessment Act. IN: 2009. Fall Report of the Commissioner of the Environment and Sustainable Development to the House of Commons. Her Majesty the Queen in Right of Canada, represented by the Minister of Public Works and Government Services. 35 pp.

Commissioner of the Environment and Sustainable Development, 2011. Chapter 2 Assessing Cumulative Environmental Effects of Oil Sands Projects. IN: 2011 Report of the Commissioner of the Environment and Sustainable Development to the House of Commons. Her Majesty the Queen in Right of Canada, represented by the Minister of Public Works and Government Services. 28 pp.

Côté, F., 2006. Freshwater Management in Canada: IV. Groundwater. Library of Parliament, Parliamentary Information and Research Service, Ottawa, Ontario. PRB 05-54E. 14 pp.

Department of Fisheries and Oceans, n.d. Practitioners Guide to Habitat Compensation. <http://www.dfo-mpo.gc.ca/habitat/role/141/1415/14155/compensation/index-eng.asp> [Last accessed May 10, 2013].

Department of Fisheries and Oceans, 2001. Policies for the Management of Fish Habitat. Minister of Supply & Services Canada, Ottawa, Ontario. ISBN 0-662-15033-3. 32 pp.

Department of Fisheries and Oceans, 2010. Practitioners Guide to Writing an Authorization for the Habitat Protection Provisions of the Fisheries Act. Her Majesty the Queen in Right of Canada. ISBN 978-1-100-14681-2. 24 pp.

Department of Fisheries and Oceans, 2012a. Frequently Asked Questions - New Fisheries Protection Measures. <http://www.dfo-mpo.gc.ca/media/back-fiche/2012/hq-ac12b-eng.htm> [Last accessed May 10, 2013].

Department of Fisheries and Oceans, 2012b. Changes to the Fisheries Act. <http://www.dfo-mpo.gc.ca/habitat/changes-changements/index-eng.htm> [Last accessed May 10, 2013].

Doelle, M., 2005. Canadian Environmental Protection Act & Commentary. LexisNexis Canada, Markham, Ontario.

Doelle, M., 2008. The Federal Environmental Assessment Process: A Guide and Critique. LexisNexis Canada, Markham, Ontario.

Doelle, M., 2012. CEEA 2012: The end of the road for federal environmental assessment. Journal of Environmental Law and Practice, in press.

Donihee, J., 2000. The Evolution of Wildlife Law in Canada. CIRL Occasional Paper #9. Canadian Institute for Resources Law, University of Calgary. 80 pp. <http://dspace.ucalgary.ca/bitstream/1880/47200/1/OP09Wildlife.pdf> [Last accessed May 10, 2013].

Douglas, K., 2002. Bill C-5: The Species at Risk Act. Legislative summary LS 438E. Law and Government Division, Library of Parliament.

http://www.parl.gc.ca/About/Parliament/LegislativeSummaries/bills_ls.asp?lang=E&ls=C5&Parl=37&Ses=2&source=Bills_House_Government [Last accessed May 10, 2013].

Douglas, K. and M. Hébert, 1999. Bill C-32: The Canadian Environmental Protection Act, 1999. Law and Government Division, Parliamentary Research Branch of the Library of Parliament. LS-285E.

http://www.parl.gc.ca/About/Parliament/LegislativeSummaries/bills_ls.asp?ls=C32&Parl=36&Ses=1 [Last accessed May 10, 2013].

Dowdeswell, L., P. Dillon, S. Ghosal, A. Miall, J. Rasmussen and J. Smol, 2010. A Foundation for the Future: Building an Environmental Monitoring System for the Oil Sands. A report submitted to the Minister of Environment. 49 pp.

<http://www.ec.gc.ca/pollution/default.asp?lang=En&n=E9ABC93B-1> [Last accessed May 10, 2013].

Dyer, S., 2012. Federal recovery strategy confirms protecting habitat is key to protecting caribou. Pembina Institute. <http://www.pembina.org/blog/651> [Last accessed May 10, 2013].

Environment Canada, n.d.(a). Fact Sheet: Amendments to the Authorization Regime under the Species at Risk Act as part of the Responsible Resource Development Plan.

http://www.sararegistry.gc.ca/virtual_sara/files/gen_info/fs_c38_0812_e.pdf [Last accessed May 10, 2013].

Environment Canada, n.d.(b). Environmental Enforcement Act Background.

<http://www.ec.gc.ca/alef-ewe/default.asp?lang=En&n=A72F150D-1> [Last accessed May 10, 2013].

Environment Canada, n.d.(c). Overview of the Environmental Enforcement Bill.

<http://www.ec.gc.ca/default.asp?lang=En&xml=2ADA2898-0852-46C6-97CF-C27DF9FF8D00>. [Last accessed May 10, 2013].

Environment Canada, 1996. National Accord on the Protection of Species at Risk.

http://www.sararegistry.gc.ca/approach/strategy/Accord_e.pdf. [Last accessed May 10, 2013].

Environment Canada, 2001. Amendment of the Export and Import of Hazardous Wastes Regulations: Initial Discussion Paper. <http://www.ec.gc.ca/lcpe-cepa/default.asp?lang=En&n=78D61A69-1> [Last accessed May 10, 2013].

Environment Canada, 2002. Compliance and Enforcement Policy for the Habitat Protection and Pollution Prevention Provisions of the Fisheries Act. Her Majesty the Queen in Right of Canada (Environment Canada).

Environment Canada, 2005. Canada-Alberta Agreement on Environmental Assessment Cooperation. <http://www.ceaa-acee.gc.ca/default.asp?lang=En&n=F93B8BF6-1> [Last accessed May 10, 2013].

Environment Canada, 2010a. Species at Risk Program: results-based management and accountability framework and risk-based audit framework. ISBN 978-1-100-16391-8. 79 pp.

Environment Canada, 2010b. Memorandum to the Minister (Min-118731). Oil Sands Tailing Ponds. Access to Information Report A14/SEM/10-002/01/ASUB.

http://cec.org/Storage/83/8361_ASUB-II.pdf [Last accessed May 10, 2013].

Environment Canada, 2010c. Compliance and Enforcement Policy for Wildlife Legislation.

<http://www.ec.gc.ca/Publications/default.asp?lang=En&xml=E4DA69B6-1108-4E8A-A173-3468CC0D12E0> [Last accessed May 10, 2013].

Environment Canada, 2010d. 2009 NPRI Reviewed Facility Data Release.

<http://www.ec.gc.ca/inrp-npri/default.asp?lang=En&n=AA15BC7D-1> [Last accessed May 10, 2013].

Environment Canada, 2011. Canada Water Act Annual Report for April 2010 to March 2011. Her Majesty the Queen in Right of Canada, represented by the Minister of the Environment. ISSN 0227-4787. 45 pp.

Environment Canada, 2012a. Joint Canada Alberta Implementation Plan for Oil Sands Monitoring. Her Majesty the Queen in Right of Canada, represented by the Minister of the Environment. 27 pp.

http://www.ec.gc.ca/Publications/47789FA4-67E0-4334-A850-15FFA1F8E8F2/COM1519_Final-OS-Plan_02.pdf [Last accessed May 10, 2013].

Environment Canada, 2012b. Species at Risk Act Annual Report for 2011. Her Majesty the Queen in Right of Canada, represented by the Minister of the Environment. ISSN 1926-4135. 100 pp.

Environment Canada, 2012c. Policy when Considering Permitting or Authorizing Prohibited Activities in Protected Areas Designated Under the Canada Wildlife Act and Migratory Birds Convention Act, 1994. Her Majesty the Queen in Right of Canada, represented by the Minister of the Environment. ISSN 978-1-100-20495-6. 13pp.

<http://www.ec.gc.ca/Publications/default.asp?lang=En&xml=CEA0F36C-9E24-4AF6-881B-39A66EA68ED3> [Last accessed May 10, 2013].

Environment Canada, 2012d. Guidance on the Reporting of Tailings and Waste Rock to the National Pollutant Release Inventory Addendum (March, 2012).

<http://www.ec.gc.ca/inrp-npri/default.asp?lang=En&n=E38E61E8-1> [Last accessed May 10, 2013].

Environment Canada, 2012e. Canada Water Act Annual Report for April 2011 to March 2012.

<http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=9E0D4BC1-1&printfullpage=true> [Last accessed May 10, 2013].

Environment Canada, 2012f. Recovery Strategy for the Woodland Caribou (*Rangifer tarandus caribou*), Boreal population, in Canada. Species at Risk Act Recovery Strategy Series.

Environment Canada, Ottawa. 138 pp.

Foote, L., 2012. Threshold considerations and wetland reclamation in Alberta's mineable oil sands. *Ecology and Society* 17(1): 35. <http://www.ecologyandsociety.org/vol17/iss1/art35/>

[Last accessed May 10, 2013].

- Gibson, D., 1973. Constitutional Jurisdiction over Environmental Management in Canada. *University of Toronto Law Journal* 23: 54-87.
- Gibson, R., 2002. From Wreck Cove to Voisey's Bay: the evolution of federal environmental assessment in Canada. *Impact Assessment and Project Appraisal* 20(3): 151-159.
- Gibson, R.B., 2012. In full retreat: the Canadian government's new environmental assessment law undoes decades of progress. *Impact Assessment and Project Appraisal* 30(3): 179-188.
- Gosselin, P., S.E. Hrudey, M.A. Naeth, A. Plourde, R. Therrien, G. Van Der Kraak and Z. Xu, 2010. Environmental and Health Impacts of Canada's Oil Sands Industry. The Royal Society of Canada, Ottawa, Ontario. 414 pp. <http://rsc-src.ca/sites/default/files/pdf/RSC%20Oil%20Sands%20Panel%20Main%20Report%20Oct%202012.pdf> [Last accessed May 10, 2013].
- Government of Alberta, 2012a. Reclaiming Alberta's Oil Sands. <http://www.environment.alberta.ca/02012.html> [Last accessed May 10, 2013].
- Government of Alberta, 2012b. Oil Sands Reclamation Fast Facts. http://www.oilsands.alberta.ca/FactSheets/Reclamation_FSht_June_2012_Online.pdf [Last accessed May 10, 2013].
- Government of Canada, n.d. Species At Risk Act Public Registry. http://www.sararegistry.gc.ca/approach/act/purpose_e.cfm. [Last accessed May 10, 2013].
- Government of Canada, 2010. SARA-CEAA Guidance Working Group (Canada). Addressing Species at Risk Act considerations under the Canadian Environmental Assessment Act for species under the responsibility of the Minister Responsible for Environment Canada and Parks Canada: a federal guide. Her Majesty the Queen in Right of Canada. ISBN 978-1-100-14749-9. 72 pp. <http://www.ec.gc.ca/Publications/0EA3B9D2-731B-4DC8-8BCF-30F9F8C203ED%5CAddressingSARAConsiderations.pdf> [Last accessed May 10, 2013].
- Hawke, N., 2002. Canadian Federalism and Environmental Protection. *Journal of Environmental Law* 14(2):185-196.
- House of Commons, 2007a. The Oil Sands: Towards Sustainable Development. Report of the Standing Committee on Natural Resources. 82 pp.
- House of Commons, 2007b. Taking Section 35 Rights Seriously: Non-derogation Clauses relating to Aboriginal and treaty rights. Final Report of the Standing Senate Committee on Legal and Constitutional Affairs. 40 pp. <http://www.parl.gc.ca/Content/SEN/Committee/392/lega/rep/rep05dec07-e.pdf> [Last accessed May 10, 2013].
- Hrynshyn, J. (Ed.), 2012. End pit lakes guidance document 2012. Cumulative Environmental Management Association, Fort McMurray, Alberta. CEMA Contract No. 2010-0016 RWG. 43 pp. http://cemaonline.ca/index.php/administration/doc_download/174-end-pit-lake-guidance-document [Last accessed May 7, 2013].

- Kennedy, P. and J. Donihee, 2006. Wildlife and the Canadian Constitution. Canadian Wildlife Project, Paper #4. Canadian Institute of Resources Law, University of Calgary. 36 pp. <http://dspace.ucalgary.ca/bitstream/1880/47560/1/CIRL-WL-KennedyDonihee-Report-4w.pdf> [Last accessed May 10, 2013].
- Lazar, H., 1997. The Federal Role in a New Social Union, in Canada: The State of the Federation. Institute of Intergovernmental Relations, Queen's University, Kingston, Ontario.
- Lundquist, L.J., 1974. Do Political Structures Matter in Environmental Problems? The Case of Air Pollution Control in Canada, Sweden, and the United States. Canadian Public Administration 17(1): 119-141.
- MacKay, W.R., 2004. Canadian Federalism and the Environment: The Literature. Georgetown International Environmental Law Review 25:46-50
- MacKinnon, L., 2013. Native bands challenge omnibus budget bill in court. Canadian Broadcasting Corporation. Canadian Broadcasting Company News, January 7, 2013. <http://www.cbc.ca/news/politics/story/2013/01/07/pol-two-bands-duty-to-consult-court-challenge.html> [Last accessed May 10, 2013].
- Minister of Aboriginal Affairs and Northern Development Canada, 2011. Aboriginal Consultation and Accommodation Updated Guidelines for Federal Officials to Fulfill the Duty to Consult. ISBN 978-1-10 0 -20350 -8. 67 pp. <http://www.aadnc-aandc.gc.ca/eng/1100100014664/1100100014675> [Last accessed May 10, 2013].
- Morton, F.L., 1996. The Constitutional Division of Powers with Respect to the Environment in Canada. IN: Holland, K.M., F.L. Morton and B. Galligan (Eds), Federalism and the Environment: Environmental Policy Making in Australia, Canada, and the United States. Greenwood Press. pp. 37-54.
- Morton Sr., M., A. Mullick, J. Nelson and W. Thornton, 2011. Factors to consider in estimating oil sands plant decommissioning costs. Oil Sands Research and Information Network, University of Alberta, School of Energy and the Environment, Edmonton, Alberta. OSRIN Report No. TR-16. 62 pp. <http://hdl.handle.net/10402/era.24630> [Last accessed May 10, 2013].
- National Energy Board, 2006. Canada's Oil Sands Opportunities and Challenges to 2015: an Update. Her Majesty the Queen in Right of Canada as represented by the National Energy Board. ISBN 0-662-43353-X.
- Natural Resources Canada, 2012. Memorandum to the Minister. Pending Release by Natural Resources Canada of Reports on Natural vs. Human-Caused Contamination in the Oil Sands Region of the Athabasca River, Alberta. Access to Information Report # N12-133327, June 19, 2012. <http://www.scribd.com/doc/125689533/Oilsands-groundwater-contamination> [Last accessed May 10, 2013].
- Perry, C. and C. Saloff, 2011. Oil Sands Reclamation in Alberta: A Discussion of the Prior Regime and the New Mine Financial Security Program. Alberta Law Review 49 (2): 277-304.

Richler, I., 2012. Fisheries Act Amended – Again! Ontario Bar Association 22(2). http://www.oba.org/en/pdf/sec_news_env_dec12_Fisheries_Richler.pdf [Last accessed May 10, 2013].

Savard, M.M., J.M.E. Ahad, P. Gammon, A.I. Calderhead, A Rivera, R. Martel, M. Klebek, J.V. Headley, R. Lefebvre, B. Welsh, A. Smirnoff, H. Pakdel, N. Benoit, S. Liao, J. Jautzy, C. Gagnon, J. Vaive, I. Girard and K. Peru, 2012. A local test to distinguish natural from anthropogenic groundwater contaminants near an Athabasca oil sands mining operation. Geological Survey of Canada, Quebec, Quebec. Open File Report 7195. 124 pp. http://ftp2.cits.rncan.gc.ca/pub/geott/ess_pubs/292/292074/of_7195.pdf [Last accessed May 10, 2013].

Skogstad, G., 1996. Intergovernmental Relations and the Politics of Environmental Protection in Canada. IN: Holland, K.M., F.L. Morton and B. Galligan (Eds.), *Federalism and the Environment: Environmental Policy Making in Australia, Canada, and the United States*. Greenwood Press.

Urquhart, I., 2010. *Between the Sands and a Hard Place?: Aboriginal Peoples and the Oil Sands*. Buffett Center for International and Comparative Studies Working Paper: Energy Series. Working Paper No. 10-005. http://www.bcics.northwestern.edu/documents/workingpapers/Energy_10-005_Urquhart.pdf [Last accessed May 10, 2013].

Vlavianos, N., 2007. The Legislative and Regulatory Framework for Oil Sands Development in Alberta: A Detailed Review and Analysis. Canadian Institute of Resources Law. Occasional Paper #21. 84 pp. <http://dspace.ucalgary.ca/bitstream/1880/47188/1/OP21Oilsands.pdf> [Last accessed May 10, 2013].

Westcott, F. and L. Watson, 2007. End Pit Lakes Technical Guidance Document. Prepared by Clearwater Environmental Consultants for CEMA End Pit Lakes Subgroup, Cumulative Environmental Management Association, Fort McMurray. CEMA Contract No. 2005-0024 RWG. 51 pp. plus appendix.

11.1 Key Acts and Regulations

Canada Water Act (R.S.C., 1985, c. C-11). Act current to 2013-03-18. <http://laws-lois.justice.gc.ca/eng/acts/C-11/> [Last accessed May 10, 2013].

Canada Wildlife Act (R.S.C., 1985, c. W-9). Act current to 2013-03-18. <http://laws-lois.justice.gc.ca/eng/acts/W-9/> [Last accessed May 10, 2013].

Wildlife Area Regulations. SOR/2003-226, SOR/78-408, & SOR/94-594, s. 2(F). http://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._1609/page-1.html. Regulations are current to 2013-03-18. [Last accessed May 10, 2013].

Canadian Environmental Protection Act, 1999 (S.C. 1999, c. 33). Act current to 2013-03-18. <http://laws-lois.justice.gc.ca/eng/acts/c-15.31/>. [Last accessed May 10, 2013].

Canadian Environmental Assessment Act, 2012 (S.C. 2012, c. 19, s. 52). Act current to 2013-03-18. <http://laws-lois.justice.gc.ca/eng/acts/C-15.21/>. [Last accessed May 10, 2013].

Cost Recovery Regulations. SOR/2012-146. <http://laws-lois.justice.gc.ca/eng/regulations/SOR-2012-146/>. Regulations are current to 2013-03-18. [Last accessed May 10, 2013].

Prescribed Information for the Description of a Designated Project Regulations. SOR/2012-148. <http://laws-lois.justice.gc.ca/eng/regulations/SOR-2012-148/>. Regulations are current to 2013-03-18. [Last accessed May 10, 2013].

Regulations Designating Physical Activities. SOR/2012-147 - are listed in SOR/2012-147 <http://laws-lois.justice.gc.ca/eng/regulations/SOR-2012-147/FullText.html>. Current to February 6, 2013. [Last accessed May 10, 2013].

Environmental Enforcement Act (S.C. 2009, c. 14). http://laws.justice.gc.ca/eng/AnnualStatutes/2009_14/page-1.html [Last accessed May 10, 2013].

Environmental Violations Administrative Monetary Penalties Act (S.C. 2009, c. 14, s. 126). Act current to 2013-03-18. <http://laws-lois.justice.gc.ca/eng/acts/E-12.5/FullText.html>. [Last accessed May 10, 2013].

Fisheries Act (R.S.C., 1985, c. F-14). Act current to 2013-03-18. <http://laws-lois.justice.gc.ca/eng/acts/F-14/>. [Last accessed May 10, 2013].

Jobs and Growth Act, 2012 (Bill C-45) (S.C. 2012, c. 31). http://www.parl.gc.ca/content/hoc/Bills/411/Government/C-45/C-45_4/C-45_4.PDF [Last accessed May 10, 2013].

Jobs, Growth and Long-term Prosperity Act (Bill C-38) (S.C. 2012, c. 19). Act current to 2013-04-16. <http://laws-lois.justice.gc.ca/PDF/J-0.8.pdf> [Last accessed May 10, 2013].

Indian Act (R.S.C., 1985, c. I-5). Act current to 2013-03-18. <http://laws-lois.justice.gc.ca/eng/acts/I-5/> [Last accessed May 10, 2013].

Migratory Birds Convention Act (S.C. 1994, c. 22). Act current to 2013-03-18. <http://laws-lois.justice.gc.ca/eng/acts/M-7.01/>. [Last accessed May 10, 2013].

Navigable Waters Protection Act (R.S.C., 1985, c. N-22). Act current to 2013-03-18. <http://laws-lois.justice.gc.ca/eng/acts/N-22/> [Last accessed May 10, 2013].

Species at Risk Act (S.C. 2002, c. 29). Act current to 2013-03-18. <http://laws-lois.justice.gc.ca/eng/acts/S-15.3/>. [Last accessed May 10, 2013].

Statutory Instruments Act (R.S.C. 1985 c. S-22). Act current to 2013-04-16. <http://laws-lois.justice.gc.ca/PDF/S-22.pdf> [Last accessed May 10, 2013].

12 ACRONYMS

12.1 Legislation

AEPA	<i>Antarctic Environmental Protection Act</i>
CEAA	<i>Canadian Environmental Assessment Act</i>
CEPA	<i>Canadian Environmental Protection Act</i>
CNMCAA	<i>Canada National Marine Conservation Areas Act</i>
CNPA	<i>Canada National Parks Act</i>
CWA	<i>Canadian Wildlife Act</i>
DPR	<i>Designated Project Regulations</i>
EEA	<i>Environmental Enforcement Act</i>
EVAMPA	<i>Environmental Violations Administrative Monetary Penalties Act</i>
IRIA	<i>International River Improvements Act</i>
MBCA	<i>Migratory Birds Convention Act</i>
NPA	<i>Navigation Protection Act</i>
NRTA	<i>Natural Resources Transfer Agreement</i>
NWPA	<i>Navigable Waters Protection Act</i>
RDPA	<i>Regulations Designating Physical Activities</i>
SARA	<i>Species at Risk Act</i>
SSLMPA	<i>Saguenay-St. Lawrence Marine Park Act</i>
WAPRIITA	<i>Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act</i>

12.2 Other

AMP	Administrative Monetary Penalty
CBD	Convention on Biological Diversity
CEMA	Cumulative Environmental Management Association
CESCC	Canadian Endangered Species Conservation Council
CESD	Commissioner of the Environment and Sustainable Development
CNSC	Canadian Nuclear Safety Commission
COSEWIC	Committee on the Status of Endangered Wildlife in Canada

DDA	Dedicated Disposal Area
DFO	Department of Fisheries and Oceans
DOE	Department of the Environment
EA	Environmental Assessment
EC	Environment Canada
EPL	End Pit Lake
ESM	Environmentally Sound Management
F / P / T	Federal / Provincial / Territorial
HADD	Harmful alteration, disruption or destruction
HMP	Habitat Management Program
MBS	Migratory Bird Sanctuary
MFT	Mature Fine Tailings
NAs	Naphthenic Acids
NEB	National Energy Board
NPRI	National Pollutant Release Inventory
OSRIN	Oil Sands Research and Information Network
PAHs	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyls
PSC	Primary Separation Cell tailings
SCC	Supreme Court of Canada
SCO	Synthetic Crude Oil
SEE	School of Energy and the Environment
SH	Serious Harm
UNCBD	United Nations' Convention on Biological Diversity
VOC	Volatile organic compounds

APPENDIX 1: Permitting Process for a Migratory Bird Sanctuary

Should an area in the oil sands region be designated a migratory bird sanctuary under s. 9(2) of the *Migratory Bird Sanctuary Regulations*, proponents wishing to conduct activities in these would follow the process below to obtain the necessary permit.

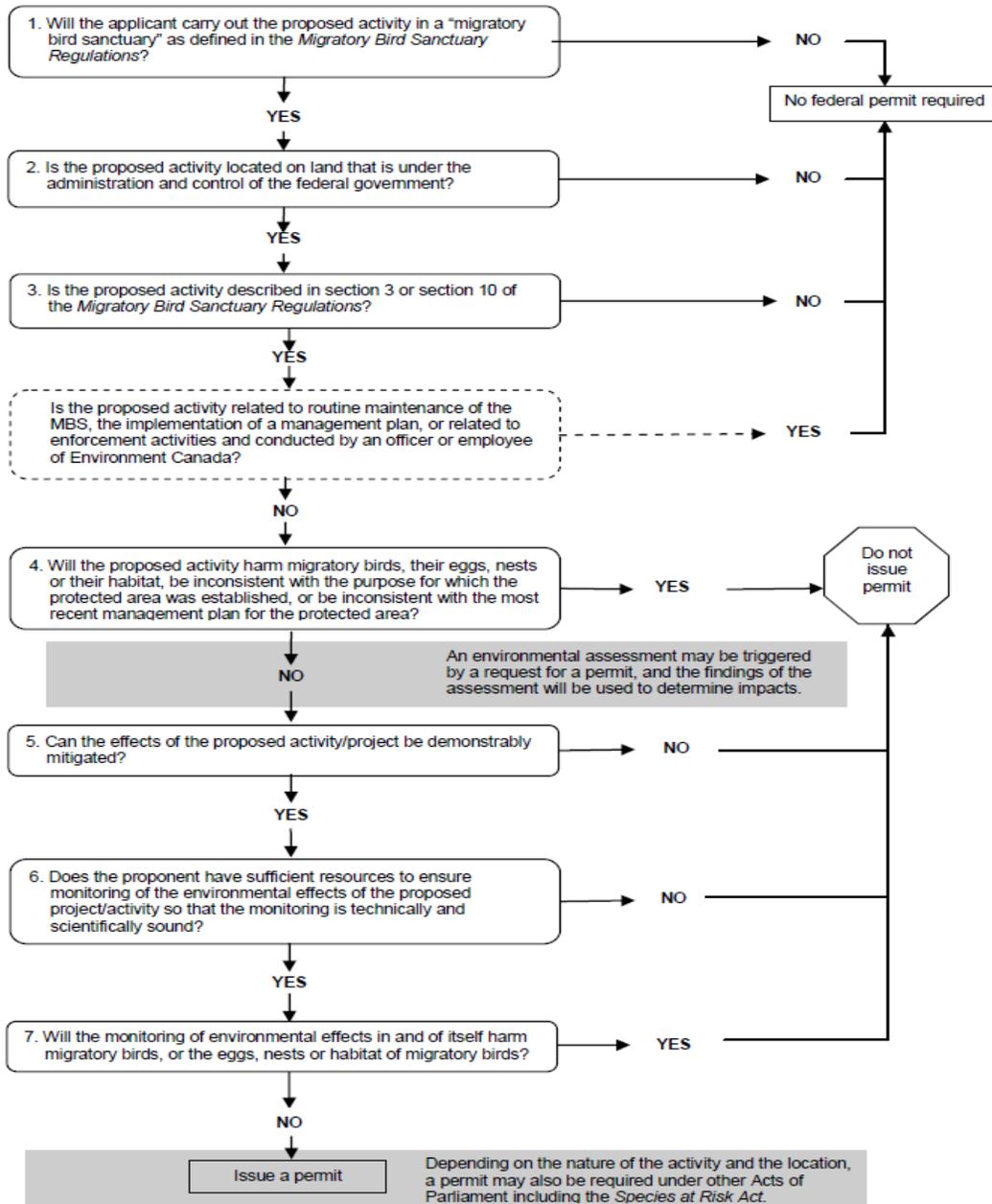


Figure 7. Decision Making Framework for Migratory Bird Sanctuary Permit Issuance. Source: Environment Canada (2012b, p. 12).

APPENDIX 2: Permitting Process for Designated Wildlife Areas

Should an area in the oil sands region be designated a Wildlife Area pursuant to Schedule 1 of the *Wildlife Area Regulations*, proponents wishing to conduct activities in these would follow the process below to obtain the necessary permit.

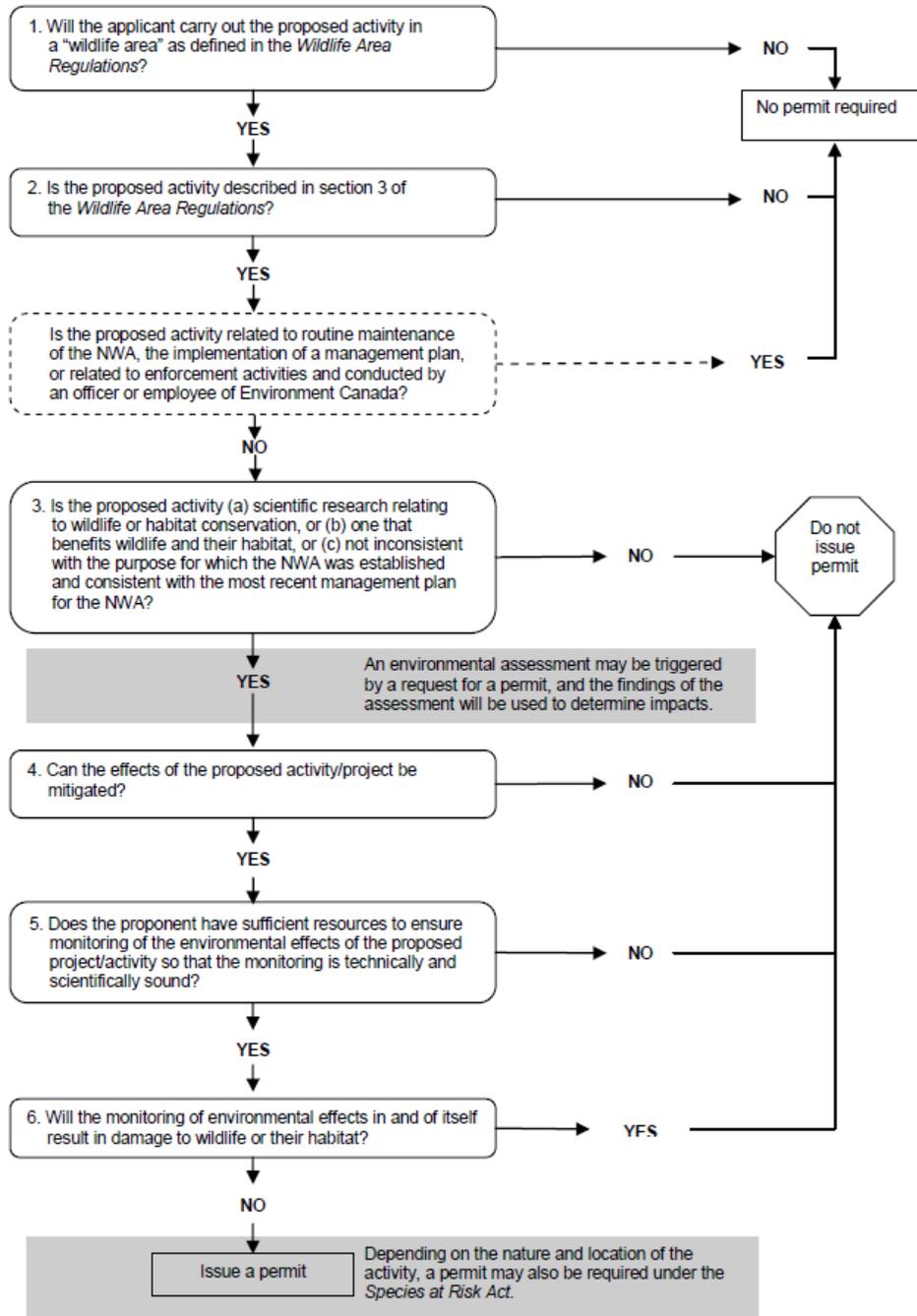


Figure 8. Decision Making Framework for National Wildlife Area Permit Issuance. Source: Environment Canada 2012c, p. 11

LIST OF OSRIN REPORTS

OSRIN reports are available on the University of Alberta's Education & Research Archive at <https://era.library.ualberta.ca/public/view/community/uuid:81b7dcc7-78f7-4adf-a703-6688b82090f5>. The Technical Report (TR) series documents results of OSRIN funded projects. The Staff Reports series represent work done by OSRIN staff.

OSRIN Technical Reports – <http://hdl.handle.net/10402/era.17507>

BGC Engineering Inc., 2010. Oil Sands Tailings Technology Review. OSRIN Report No. TR-1. 136 pp. <http://hdl.handle.net/10402/era.17555>

BGC Engineering Inc., 2010. Review of Reclamation Options for Oil Sands Tailings Substrates. OSRIN Report No. TR-2. 59 pp. <http://hdl.handle.net/10402/era.17547>

Chapman, K.J. and S.B. Das, 2010. Survey of Albertans' Value Drivers Regarding Oil Sands Development and Reclamation. OSRIN Report TR-3. 13 pp. <http://hdl.handle.net/10402/era.17584>

Jones, R.K. and D. Forrest, 2010. Oil Sands Mining Reclamation Challenge Dialogue – Report and Appendices. OSRIN Report No. TR-4. 258 pp. <http://hdl.handle.net/10402/era.19092>

Jones, R.K. and D. Forrest, 2010. Oil Sands Mining Reclamation Challenge Dialogue – Report. OSRIN Report No. TR-4A. 18 pp. <http://hdl.handle.net/10402/era.19091>

James, D.R. and T. Vold, 2010. Establishing a World Class Public Information and Reporting System for Ecosystems in the Oil Sands Region – Report and Appendices. OSRIN Report No. TR-5. 189 pp. <http://hdl.handle.net/10402/era.19093>

James, D.R. and T. Vold, 2010. Establishing a World Class Public Information and Reporting System for Ecosystems in the Oil Sands Region – Report. OSRIN Report No. TR-5A. 31 pp. <http://hdl.handle.net/10402/era.19094>

Lott, E.O. and R.K. Jones, 2010. Review of Four Major Environmental Effects Monitoring Programs in the Oil Sands Region. OSRIN Report No. TR-6. 114 pp. <http://hdl.handle.net/10402/65.20287>

Godwalt, C., P. Kotecha and C. Aumann, 2010. Oil Sands Tailings Management Project. OSRIN Report No. TR-7. 64 pp. <http://hdl.handle.net/10402/era.22536>

Welham, C., 2010. Oil Sands Terrestrial Habitat and Risk Modeling for Disturbance and Reclamation – Phase I Report. OSRIN Report No. TR-8. 109 pp. <http://hdl.handle.net/10402/era.22567>

Schneider, T., 2011. Accounting for Environmental Liabilities under International Financial Reporting Standards. OSRIN Report TR-9. 16 pp. <http://hdl.handle.net/10402/era.22741>

Davies, J. and B. Eaton, 2011. Community Level Physiological Profiling for Monitoring Oil Sands Impacts. OSRIN Report No. TR-10. 44 pp. <http://hdl.handle.net/10402/era.22781>

Hurndall, B.J., N.R. Morgenstern, A. Kupper and J. Sobkowicz, 2011. Report and Recommendations of the Task Force on Tree and Shrub Planting on Active Oil Sands Tailings Dams. OSRIN Report No. TR-11. 15 pp. <http://hdl.handle.net/10402/era.22782>

Gibson, J.J., S.J. Birks, M. Moncur, Y. Yi, K. Tattrie, S. Jasechko, K. Richardson, and P. Eby, 2011. Isotopic and Geochemical Tracers for Fingerprinting Process-Affected Waters in the Oil Sands Industry: A Pilot Study. OSRIN Report No. TR-12. 109 pp. <http://hdl.handle.net/10402/era.23000>

Oil Sands Research and Information Network, 2011. Equivalent Land Capability Workshop Summary Notes. OSRIN Report TR-13. 83 pp. <http://hdl.handle.net/10402/era.23385>

Kindziarski, W., J. Jin and M. Gamal El-Din, 2011. Plain Language Explanation of Human Health Risk Assessment. OSRIN Report TR-14. 37 pp. <http://hdl.handle.net/10402/era.23487>

Welham, C. and B. Seely, 2011. Oil Sands Terrestrial Habitat and Risk Modelling for Disturbance and Reclamation – Phase II Report. OSRIN Report No. TR-15. 93 pp. <http://hdl.handle.net/10402/era.24547>

Morton Sr., M., A. Mullick, J. Nelson and W. Thornton, 2011. Factors to Consider in Estimating Oil Sands Plant Decommissioning Costs. OSRIN Report No. TR-16. 62 pp. <http://hdl.handle.net/10402/era.24630>

Paskey, J. and G. Steward, 2012. The Alberta Oil Sands, Journalists, and Their Sources. OSRIN Report No. TR-17. 33 pp. <http://hdl.handle.net/10402/era.25266>

Cruz-Martinez, L. and J.E.G. Smits, 2012. Potential to Use Animals as Monitors of Ecosystem Health in the Oil Sands Region. OSRIN Report No. TR-18. 52 pp. <http://hdl.handle.net/10402/era.25417>

Hashisho, Z., C.C. Small and G. Morshed, 2012. Review of Technologies for the Characterization and Monitoring of VOCs, Reduced Sulphur Compounds and CH₄. OSRIN Report No. TR-19. 93 pp. <http://hdl.handle.net/10402/era.25522>

Kindziarski, W., J. Jin and M. Gamal El-Din, 2012. Review of Health Effects of Naphthenic Acids: Data Gaps and Implications for Understanding Human Health Risk. OSRIN Report No. TR-20. 43 pp. <http://hdl.handle.net/10402/era.26060>

Zhao, B., R. Currie and H. Mian, 2012. Catalogue of Analytical Methods for Naphthenic Acids Related to Oil Sands Operations. OSRIN Report No. TR-21. 65 pp. <http://hdl.handle.net/10402/era.26792>

Oil Sands Research and Information Network and Canadian Environmental Assessment Agency, 2012. Summary of the Oil Sands Groundwater – Surface Water Interactions Workshop. OSRIN Report No. TR-22. 125 pp. <http://hdl.handle.net/10402/era.26831>

Valera, E. and C.B. Powter, 2012. Implications of Changing Environmental Requirements on Oil Sands Royalties. OSRIN Report No. TR-23. 21 pp. <http://hdl.handle.net/10402/era.27344>

Dixon, R., M. Maier, A. Sandilya and T. Schneider, 2012. Qualifying Environmental Trusts as Financial Security for Oil Sands Reclamation Liabilities. OSRIN Report No. TR-24. 32 pp. <http://hdl.handle.net/10402/era.28305>

Creasey, R., 2012. Workshop on the Information that Professionals Would Look for in Mineable Oil Sands Reclamation Certification. OSRIN Report No. TR-25. 52 pp. <http://hdl.handle.net/10402/era.28331>

Alberta Innovates – Technology Futures, 2012. Investigating a Knowledge Exchange Network for the Reclamation Community. OSRIN Report No. TR-26. 42 pp. <http://hdl.handle.net/10402/era.28407>

Dixon, R.J., J. Kenney and A.C. Sandilya, 2012. Audit Protocol for the Mine Financial Security Program. OSRIN Report No. TR-27. 27 pp. <http://hdl.handle.net/10402/era.28514>

Davies, J., B. Eaton and D. Humphries, 2012. Microcosm Evaluation of Community Level Physiological Profiling in Oil Sands Process Affected Water. OSRIN Report No. TR-28. 33 pp. <http://hdl.handle.net/10402/era.29322>

Thibault, B., 2012. Assessing Corporate Certification as Impetus for Accurate Reporting in Self-Reported Financial Estimates Underlying Alberta's Mine Financial Security Program. OSRIN Report No. TR-29. 37 pp. <http://hdl.handle.net/10402/era.29361>

Pyper, M.P., C.B. Powter and T. Vinge, 2013. Summary of Resiliency of Reclaimed Boreal Forest Landscapes Seminar. OSRIN Report No. TR-30. 131 pp. <http://hdl.handle.net/10402/era.30360>

Pyper, M. and T. Vinge, 2013. A Visual Guide to Handling Woody Materials for Forested Land Reclamation. OSRIN Report No. TR-31. 10 pp. <http://hdl.handle.net/10402/era.30360>

Mian, H., N. Fassina, A. Mukherjee, A. Fair and C.B. Powter, 2013. Summary of 2013 Tailings Technology Development and Commercialization Workshop. OSRIN Report No. TR-32. 69 pp. <http://hdl.handle.net/10402/era.31012>

OSRIN Videos – <http://hdl.handle.net/10402/era.29304>

Rooney Productions, 2012. [Assessment Methods for Oil Sands Reclamation Marshes](#). OSRIN Video No. V-1. 20 minutes. Also available on the [University of Alberta You Tube Channel](#) (recommended approach).

Rooney Productions, 2012. [Assessment Methods for Oil Sands Reclamation Marshes](#). OSRIN Video No. V-1. Nine-part mobile device version. Also available on the University of Alberta You Tube Channel ([link to Part 1](#) - recommended approach).

OSRIN Staff Reports – <http://hdl.handle.net/10402/era.19095>

OSRIN, 2010. Glossary of Terms and Acronyms used in Oil Sands Mining, Processing and Environmental Management - January 2013 Update. OSRIN Report No. SR-1. 119 pp. <http://hdl.handle.net/10402/era.17544>

OSRIN, 2010. OSRIN Writer's Style Guide - December 2012 Update. OSRIN Report No. SR-2. 27 pp. <http://hdl.handle.net/10402/era.17545>

OSRIN, 2010. OSRIN Annual Report: 2009/2010. OSRIN Report No. SR-3. 27 pp. <http://hdl.handle.net/10402/era.17546>

OSRIN, 2010. Guide to OSRIN Research Grants and Services Agreements - June 2011 Update. OSRIN Report No. SR-4. 21 pp. <http://hdl.handle.net/10402/era.17558>

OSRIN, 2011. Summary of OSRIN Projects – November 2012 Update. OSRIN Report No. SR-5. 74 pp. <http://hdl.handle.net/10402/era.20529>

OSRIN, 2011. OSRIN Annual Report: 2010/11. OSRIN Report No. SR-6. 34 pp. <http://hdl.handle.net/10402/era.23032>

OSRIN, 2011. OSRIN's Design and Implementation Strategy. OSRIN Report No. SR-7. 10 pp. <http://hdl.handle.net/10402/era.23574>

OSRIN, 2012. OSRIN Annual Report: 2011/12. OSRIN Report No. SR-8. 25 pp. <http://hdl.handle.net/10402/era.26715>

OSRIN, 2013. OSRIN Annual Report: 2012/13. OSRIN Report No. SR-9. 56 pp. <http://hdl.handle.net/10402/era.31211>