

Expert Panel: Review of Environmental Assessment Processes for ENVI 5504  
Under What Circumstances Should Federal Environmental Assessment Be Required?  
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## **Abstract**

Since 1972, EA has evolved into the current CEAA 2012, by reducing requirements through streamlining. The 2012 repeal drastically reduced the number of projects required to undergo an EA. Many projects which are no longer required to undergo screening still have known adverse effects. The previous version, CEAA 1995, obliged nearly all projects to be screened. This system allowed for tiered decision-making, focus on cumulative impacts, and an overall integrative framework. We believe that once CEAA has been returned to pre-2012 changes, through the removal of the regulatory list, and updating the definitions of project, federal jurisdiction, and environment will broaden the EA process to include more factors and include all potential environmental effects. Improving upon CEAA 2012 will reduce variability, discretion and adverse environmental effects by encompassing all factors, through once again, screening most projects.

## **Introduction**

In Canada, environmental assessment (EA) laws and processes have been in place since 1972. Throughout the 44 years since, EA has evolved significantly (Gibson 2002; Gibson 2012). The Environmental Assessment and Review Process (EARP) was replaced by the Canadian Environmental Assessment Act (CEAA) in 1995 (Gibson 2002). In 2012, CEAA was repealed and replaced with a new version (CEAA 2012) as part of the mandatory five-year review, and now is undergoing its second by the federal government.

As part of the review, the federal government is calling for submissions from the public. Our submission focuses on the planning EA section outlined in the expert panel's suggested themes

for discussion. We have chosen to investigate under what circumstances a federal EA should be required.

The objective of this paper is to provide suggestions for improving upon CEAA 2012, focused on what should be outlined for the projects that require an EA. Current literature on the topic will be used to reinforce the ideas in this paper.

We will start with a review of the literature on EA, specifically on the current requirements. This will be followed by a summary of how federal EA practice has evolved in Canada since 1972. Then we outline the problems in CEAA 2012 with respect to when a federal EA should be required. We will also discuss the options that should be implemented to fix the problems we have identified within the current CEAA. We will conclude with our final recommendations and any practical limitations to the proposed solution.

### **Literature Summary**

The objective of EA is to improve the decision-making process of projects by evaluating potential adverse environmental effects and mitigation measures, in an efficient, cost-effective manner (Hickey et al. 2010). However, poor understanding of legislation between overlapping jurisdictions has led to intergovernmental conflict, impeding the developmental objectives of the EA (Hickey et al. 2010).

One of the first projects to undergo an EA in Canada was the Wreck Cove Hydroelectric Project in Cape Breton (Gibson 2002). This project was subject to a detailed review; however, by the time the review was completed, the project was well underway. This EA was more reactive, attempting to mitigate effects after they happened (Gibson 2002). EA has since evolved into a

more proactive impact identification approach, which integrates many environmental concerns into each project and increases public involvement (Gibson 2002; Ogunba 2004).

Major failings in early forms of EA were related to the amount of discretion given to governing bodies (Gibson 2002). The CEAA 2012 changes brought EA back to this large variation in the implementation of EA across all departments (Gibson 2002). Currently, many federal EAs are overseen by the Canadian Environmental Assessment Agency (CEA Agency), with some covered by the National Energy Board (NEB), and the Canadian Nuclear Safety Commission (CNSC). Before 2012, many federal departments were designated as responsible authorities (RAs) to oversee federal EAs relevant to their department (Gibson 2002). These RAs were required to ensure an EA was completed when appropriate, but could determine independently the focus of the EA. CEAA 2012 drastically reduced the involvement of governmental departments to the CEA Agency, NEB, and CNSC (Doelle 2012).

Furthermore, the definitions of federal jurisdiction, project, and environmental effects were updated in 2012. The new definitions were much narrower, limiting the projects which would require an EA. In the previous version of CEAA, federal jurisdiction had been any federal authority that is the proponent of a project, and any project which receives federal funding, on federal lands, or which will require a federal permit or license (Hanna 2009). The previous version of CEAA also required projects falling under the the Inclusion List Regulations to undergo an EA (Hanna 2009). Within the CEA Act, a project is defined as any undertaking which will require physical work including any construction, operation, modification, decommissioning, or abandonment activities (Noble 2006; Hanna 2009). The previous version of CEAA defines environmental effects as changes caused by the project to the environment, including changes to wildlife species listed under the Species at Risk Act (SARA), or their critical habitat (CEAA 2010). When the five-year review to CEAA was completed in 2012, these

definitions were changed. Currently, an EA is required when a proposed project under federal jurisdiction is believed to have significant adverse environmental effects (CEAA 2012).

Environmental effects are now considered to be any changes in the environment caused by the project to fish or fish habitats covered by the Fisheries Act, to aquatic species listed under SARA, and any amendments made by the Minister of the Environment (CEAA 2012). Federal jurisdiction occurs now when any of the above species are involved, a project is on federal land, projects which will cross provincial or international boundaries, environmental changes which are directly linked to any federal decisions on a project, and any effects which affect Indigenous peoples. A project still refers to undertakings which include physical activities that affect federal jurisdictions; however, only those listed on the designated project list and projected to have significant adverse environmental effects are subject to CEAA (CEAA 2012).

The present EA process has been described as too narrow, implemented too late in the decision-making process, and has too short-term a perspective to be effective (Gibson et al. 2010). The lack of guidance and planning in the regime allows for mediocre quality assessment. Moreover, the language of CEAA 2012 created vague expectations which are neither well-established nor transparent (Gibson et al. 2010). The policy and legislation reform as listed in the recommendations would provide the tools and motivation necessary to allow for the values and management strategies within sustainable development to be encompassed for a cultural change in the decision-making process (Gibson et al. 2010; Hickey et al. 2010).

### **Evolution of Practice**

EA has evolved over the past 44 years; from a federal agenda in the early stages, to a mandatory, comprehensive, open, highly monitored process, pre-CEAA 2012 (Gibson 2002). After WWII, the environmental effects and consequences of projects began to be recognized; however, this was an afterthought, rather than preventative (Canada 2016). In the 1960s, public

interest grew, and the United States enacted its *National Environmental Policy Act* in 1969, unfortunately, the Canadian federal government showed no enthusiasm (Gibson 2002). It was not until 1973, that cabinet made the commitment to review environmental effects caused by federal decisions (Canada 2016). This was a self-assessment screening which ensured the “least possible damage to our natural environment” on federal lands and jurisdiction, where significant effects were reviewed by Environment Canada (Canada 2016). This agreement included a restrictive definition of “environmental”, screening for potential pollution affects, and public panel review with informal hearings (Gibson 2002). But, this policy was largely unwritten and vague (Canada 2016).

In 1983, Beanlands and Duinker published “An Ecological Framework for Environmental Impact Assessment in Canada” which critiqued the quality of the assessments and how the science of ecology could improve upon its methods and procedures. Following this work, in 1984, the non-binding *Environmental Assessment and Review Process Guidelines Order* (EARPGO) was adopted by the Canadian government as an update to the 1974 policy. In 1984 the Federal Environmental Assessment Review Office was officially assigned as the responsible authority for federal EAs (Canada 2016).

In the late 1980s, public interest reemerged and the Canadian Council of Ministers of the Environment (excluding Quebec) signed an accord in 1998 (Canada 2016). This was to broaden assessment scope, specify categories, provide funding to facilitate public involvement, and monitoring plans to improve cooperation and protection across Canada (Gibson 2002).

In 1990, CEAA was introduced as Bill C-78, and brought into force as CEAA in 1995 as a legally-binding, and regulated order (Gibson 2002; Canada 2016). Within the Act, the socio-economic and cultural effects had once again been omitted, and it embodies inconsistency

“between an explicit purpose of promoting sustainable development and a general focus only on mitigating serious adverse environmental effects” (Gibson 2002, pg. 155).

The first review of the Act was by the Minister of the Environment in 1999 (Canada 2016). This review focused on the provisions and operations of CEAA. The review resulted in a discussion paper and several background studies published by the minister; and in 2001, Bill C-19 was introduced to amend the CEAA, which took effect in 2003 (Canada 2016). In 2010 further amendments were made to CEAA, which made the CEA Agency responsible for the majority of federal EAs (Canada 2016). In 2012, Bill C-38 repealed CEAA 1995 and replaced it with the *Canadian Environmental Assessment Act, 2012* (Canada 2016).

### **Statement of Problem**

The 2012 repeal streamlined the previous CEAA and has deteriorated the overall quality of the process. The current screening process allows for significant discretion on whether an EA will be undertaken, whereas the previous version included the clear majority of federal projects in some form (Bond et al. 2014). The discretion provided to the decision-makers has led to inconsistencies within the restricted list which is described as a mere “information gathering exercise” for the federal government (Doelle 2012, pg. 9; Gibson 2012). Many see these changes as a focus on stimulating economic growth by reducing regulations and creating an easier path for more projects to receive approval (Kirchoff et al. 2013). Unfortunately, this is often done at the expense of the environment.

The previous version of CEAA approached EA with the mindset that all projects relating to the federal government must be evaluated unless they were specifically exempted (Gibson 2012; Bond et al. 2014). The definitions of federal jurisdiction, project, and environmental effects were broader, covering more projects. Under this system the clear majority of projects did not have to

complete a full EA, but all projects were required to evaluate potential effects to some extent (Gibson 2012; Bond et al. 2014). After the changes in 2012, the new approach to EA drastically limits federal jurisdiction and environmental effects. Projects are only evaluated if they could potentially impact aquatic species under SARA, fish and fish habitats under the Fisheries Act, and migratory birds (CEAA 2012; Gibson 2012). Projects are only considered for an EA if they fall on the registered project list and meet the jurisdiction and environmental effects criteria (Gibson 2012). This has been crafted to reduce the number of projects requiring a federal EA.

The regulatory list of projects exempts some projects completely from federal EAs. For example, *in-situ* steam assisted-below-surface bitumen extractions, which have exceptionally high greenhouse gas emissions are not required to undergo screening (Gibson 2012; Plecash 2012). Projects that are included on the list are on a large-scale projects and are must surpass extremely high thresholds. Overall, the updates of CEAA in 2012 have drastically reduced projects undergoing EA: 3000 projects underwent an EA in April 2010, whereas only 70 underwent an EA in the first month of CEAA 2012. The current process focuses on streamlining the approval process rather than reducing adverse environmental effects (Bond et al. 2014).

### **Options to Address the Problem**

One common theme in all proposed solutions is to create a transparent EA process with clear guidelines for proponents to follow (Gibson et al. 2015). This solution will limit confusion among proponents and help the EA process move towards fostering sustainable development. Within the new version of CEAA, a set of categories should be outlined for specific projects which are likely to cause significant adverse environmental effects (Gibson et al. 2015). Any project which falls within these categories should be required to participate in the EA process from its inception. This will increase EA quality, and ensure that each involved party fully understands their obligations (Gibson 2012; Gibson et al. 2015).

Furthermore, federal jurisdiction should be for all projects which fall under federal purview. Any project within federal jurisdiction should be required to undergo screening for the potential of significant adverse environmental impacts, reminiscent of the previous version of CEAA (Morgan 2012). Before 2012, any project which obtained federal funds, permits, or licenses, or for which a federal department was the proponent was required to undergo the screening process, unless otherwise specified. By implementing the requirement that all projects must complete at the very least, a lite form of EA before receiving approval, EA will begin to be an integral part of project development (Morgan 2012).

The definition of environmental effects should also be evaluated. Under the previous version of CEAA, environmental effects included all effects the project had on the environment (Doelle 2012). CEAA 2012 restricted environmental effects to only those relating to fish and fish habitats, aquatic species listed under SARA, and migratory birds. Since CEAA 2012 only requires an EA when significant adverse environmental effects are present, limiting the definition of environmental effects reduces the number of projects that face EA (Doelle 2012). Most concerning perhaps, is the absence of environmental effects on terrestrial species listed under SARA. These species are extremely vulnerable; however, significant impacts to them will not trigger a federal EA. The solution to this problem is to create a comprehensive definition of environmental effects. One option is to return to the definition in the previous version of CEAA, which would allow for a step forward from this baseline.

In conjunction with this, the issue of environment should also be evaluated. As of present, CEAA has failed to clearly cover all ecological, social, cultural, economic, or other environmental effects (Hanna 2009). One major objective of CEAA is to promote sustainable development (Noble 2006). True sustainable development requires ecological, social, and



economical considerations (Sikdar 2003). The past and current forms of CEAA only acknowledge cultural, social, health, and economic issues when they are related to a potential environmental effect (Noble 2006). Therefore, it is suggested that the definition of environment be amended to include more than just biophysical aspects. By doing so, CEAA will take one step closer to fulfilling its objective of fostering sustainable development.

Another issue with CEAA 2012 is increased discretion within the process (Doelle 2012). Discretion given to EA decision-makers to warrant and EA, has been a problem from the beginning, but it took an additional step backwards with CEAA 2012 (Gibson 2002; Doelle 2012). Under CEAA 2012, it is up to the discretion of the CEA Agency to determine if an EA is required for projects under their jurisdiction, as such, projects are not automatically assessed for significant impacts (Doelle 2012). To reduce the discretion within the current CEAA, specific guidelines need to be implemented outlining when an EA is required (Doelle 2012; Gibson et al. 2015).

Finally, CEAA has, from its inception, limited EA to decisions at the project level (Noble 2006). Currently, within Canada there is no legislative requirements to complete an SEA for policy or planning issues (Noble 2006; Hanna 2009). A cabinet directive did succeed in widespread implementation; however, with no legislation and few guidelines there is a lot of variability (Hanna 2009). To improve the policy-based SEA, inclusion of legislation will force procedural obligations to be met. This combination will allow for flexibility, consistency, transparency, and important implications for the environment and sustainability through Cabinet commitment and enforcement (Gibson et al. 2010).

Current compliance EA is treated as a final hurdle to get over before project implementation. This mindset prevents impact assessors from working as constructively as possible with

proponents (Morgan 2012; Gibson et al. 2015). CEAA can be an integral tool in ensuring that all developers consider more thoroughly environmental impacts of their projects, from the beginning. This in turn will foster sustainable development within Canada.

### **Recommendations and Practical Limitations**

The common theme throughout the solutions listed above is that the previous version of CEAA was a much better framework for requiring an EA when a federal project would have potential environmental impacts. Returning to circumstances like the previous version of CEAA will create a legal test for whether or not an EA is required (Doelle 2012). This will eliminate the discretion currently in place in CEAA 2012. Significance of the effects can be seen as different levels by different people. Outlining what significant effects are in black and white reduces this variability. In addition to reducing discretion and variability in the process, it has the bonus of requiring most federal projects to undergo project screening.

Moreover, the previous version of CEAA had a much broader focus. Under CEAA 2012, environmental effects are very narrow, limiting the projects which trigger an EA. Combined with the list of designated projects, which included few projects with large thresholds, few projects undergo an EA (Doelle 2012). By eliminating the list of designated projects, requiring that any project related to a federal jurisdiction be screened, and expanding the definition of environmental effects, federal EA will become more effective. Furthermore, an update to the definition of environment to include socio-economic aspects will provide a foundation for the EA process to foster sustainable development.

Additionally, SEA needs to be implemented within the legislation. The ideal way to achieve this is to update the scope of CEAA to include policies, plans, and practices, in addition to projects. Many decisions made by the federal government end up affecting the environment (Noble

2006). These decisions can alter the types of projects which are proposed and subsequently covered under CEAA. Failure to assess these decisions is detrimental to sustainable development. By including them under the scope of CEAA, it can ensure that no decision will cause unexpected adverse effects.

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