The Enigmatic Pursuit of Significance

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Introduction

Determination of the significance of environmental effects is a fundamental aspect of Environmental Impact Assessment (EIA) in Canada. Although central to decision-making, significance determination is “enigmatic” as it remains an undefined term in legislation, guidance is out of date and non-prescriptive (FEARO 1994), and practice diverse. Practitioners, reviewers, the public and decision-makers continuously struggle with the concept. The fact that significance is not well understood is acknowledged by several authors such as Wood (2008) and Lawrence (2007). Often, determinations of significance in EIA are the focus of outrage and adversarial debate.

Focusing on federal EIA, this paper explores the pivotal nature of significance in decision-making in Canada, the implications of its meaning, and the subjective nature of its determination. These explorations suggest that it may be beneficial to abandon current practice of having proponents determine significance in Environmental Impact Statements (EISs) and defer the determination of significance to recommendations by responsible authorities and ultimately decision-makers who rely upon that advice. The governing legislation does not define significance. In law, the context of its determination is one of subjective evaluation of all of the considerations of EIA made by the decision maker, a Minister of Cabinet, in concluding whether he or she should approve the project or refer the decision to his or her colleagues in Cabinet! Ehrlich and Ross (2015) note appropriately that significance is a “...subjective judgement informed by a body of evidence compiled through a fair process and reflective of a set of societal values is not only credible, but it is in fact a mainstay of some of the most important decisions made in society – by the courts.” However it is argued here in the specific context of Canadian law, that it may be an option to eliminate significance determination completely from EIA.

Determining Significance in Canada

Federal environmental assessment in Canada is conducted under the Canadian Environmental Assessment Act, 2012 (CEAA 2012). Under CEAA 2012 (and its predecessor), the significance of environmental effects is a mandatory factor that must be considered in all environmental assessments of projects designated to require screening that are determined to require a full EIA. Significance is not a defined term in the legislation, yet the significance of environmental effects is pivotal in decision-making under CEAA 2012. Under Section 52, the decision-maker must decide, taking into account the implementation of any mitigation measures that the decision-maker considers appropriate, if the designated project is likely to cause significant environmental effects. The decision-maker under CEAA 2012 is the Minister of the responsible authority. If the decision-maker decides the project is likely to cause significant adverse environmental effects, the project must be referred to the Governor in Council (the federal Cabinet) to determine whether those effects are justified in the circumstances. Implicitly, the law prohibits the decision-maker from allowing a designated project to proceed if there are significant environmental effects without referring the matter to Cabinet to determine if they are justified.

Barnes, et al. (2013) argued that close reading of the legislation shows that significant adverse environmental effects were intended by Parliament to be very important in character or extent (e.g., at the ecosystem or societal level). In Canada, the CEAA 2012 requires that the significance of environmental effects is to be determined by the decision-maker in consultation with the responsible authority. However, in practice, the significance of environmental effects is often determined by the proponent in the Environmental Impact Statement (EIS) and referred by the responsible authority to the appropriate Minister for approval or referral to the Cabinet. This practice has been criticized for being non-transparent and non-accountable, and for allowing proponents to influence the determination of significance in their favor.

In conclusion, the significance of environmental effects in Canada is a complex and challenging issue that requires careful consideration. While the current practice of having proponents determine significance may be the most feasible option, it is important that the decision-making process is transparent, accountable, and based on a comprehensive evaluation of all relevant factors. Future research and policy development should focus on improving the process of determining significance in EIA to ensure that it is based on sound scientific principles and reflects the views of stakeholders, including the public, industries, and policymakers.
level), beyond which those effects would be unacceptable from a legislative, societal, or environmental perspective. The inferred importance of a significant adverse environmental effect is that it is truly beyond a high “threshold” or “benchmark” of acceptability from an environmental or societal perspective—not in the public interest. Such Ministerial and Cabinet decisions are political and subjective, informed by the results of the EIA.

It is standard practice for proponents to evaluate the significance of environmental effects in their EISs. This is done for review and consideration by the responsible authority and also the public. Ultimately, the determinations of significance are recommended by the responsible authority to the decision-maker, their Minister. In practice, determination of the significance of environmental effects is thus effectively delegated initially and primarily to the proponent, for public and regulatory review, and ultimately acceptance by the responsible authority through recommendations to the decision-maker.

The Canadian Environmental Assessment Agency (CEA Agency) is currently (April 2015) preparing new guidance for the determination of significance under CEAA 2012. Guidance is presently provided in the document Determining Whether a Project is likely to Cause Significant Adverse Environmental Effects (FEARO 1994). In that guidance, the CEA Agency outlines a three-step process for addressing environmental effects: 1) are the environmental effects adverse; 2) are those effects significant; and 3) if they are significant, are they likely to occur? The guidance describes criteria that should be taken into account when deciding if adverse environmental effects are significant: magnitude; geographic extent; duration and frequency; degree to which the environmental effects are reversible or irreversible; and ecological context. The guidance speaks to various methods and considerations for the determination of significance but regardless states that whatever methods are employed, they should at minimum be based on these criteria. As a result of this 20-year old guidance, Barnes, et al. (2012) described what has emerged as standard practice in Canada where these criteria are considered tangibly in all determinations of significance as a matter of legal and public defensibility. Barnes, et al. (2000) argued however that while these criteria are helpful in characterizing environmental effects, they may or may not be relevant considerations in establishing the threshold or benchmark of significance or “rating criteria.” In this respect we have seen with some practitioners, the emergence of diverse approaches for the determination of significance that are based on selected criteria that may or may not include the prescriptive considerations of guidance, and may include other objective, measurable parameters that may better characterize significance such as legislative standards or other thresholds or benchmarks of acceptability.

Barnes et al. (2012) classified significance criteria into seven categories: legislative authorization; standards or objectives; policy or planning; compensatory; statistical or technical; multi-level complex; and no significance threshold. In essence, practice has morphed into several different approaches to the determination of significance, many of which have little or no relation to the criteria established in guidance, that provide logical expressions of the threshold or benchmark beyond which environmental effects should be unacceptable to the decision-maker thus, requiring justification through Cabinet approval.

The Trouble with Significance in EIA

Proponents and their consultants strive to clearly define the threshold or benchmark beyond which environmental effects would be significant. Recognizing that a Minister must decide whether environmental effects are significant and Cabinet must decide whether significant environmental effects can be justified in the circumstances, practitioners tend to consider significant environmental effects as those that would be unacceptable from an environmental or societal perspective without a government decision that such effects could be justified and in the interest of the public. Setting the threshold or benchmark at a high level can result, however, in outrage from the neighbour or opponent of a project. From that perspective, applying their own values, the project may be unacceptable, regardless of objective measurement, and the environmental effects therefore not only significant, but also not justifiable. Wood (2008) observed that EIA is characteristically an
adversarial system within which the ultimate responsibility for providing appropriate environmental information rests with the proponent, thereby exerting considerable control over the analysis supplied to the decision-making process. Frequently, the public do not understand the context of the determination. Responsible authorities who administer the process for decision-makers find this polarity problematic; they are between a rock and a hard place. Although it is technically not their decision to judge whether significant environmental effects are justifiable, it is their role however to bring forward the information to inform an EIA decision, including recommendations on significance in consideration of the evidence and the arguments of all parties involved. It is at times a judgment that most administrators would prefer not to make in the face of the polarity of views between proponent and opponent, and the uncertainty around the political implications for their masters.

In public consultation and engagement, and during the review of EIA documentation, interveners often dedicate extraordinary efforts to debate a determination of not significant by proponents. The author has observed that there is a commonly held belief among interveners that the determination of significance is a central battle for opposing projects; if one can influence the discussion to a point where it results in conclusions that environmental effects are significant, a political decision must be made to determine whether those effects are justifiable in the circumstances. In the public domain of modern society and its media, this affords the opportunity to declare moral outrage if a government concludes that a project could proceed with significant environmental effects. Such outrage needn’t be confused by mitigating fact, especially in the media, and governments can be accused of being the lap dogs of industry and destroyers of the environment for jobs and big business. Indeed, Wood (2008) observed that EIAs have been strongly criticized in the UK as comprising advocacy exercises that are inherently vulnerable to communicative distortion. In making such decisions, politicians (represented by Cabinet) are held accountable at the highest level for making a decision that if favourable for the project and deemed in the public interest, would supersede the concerns or views of interveners. Consequently, arguing about significance is a key point of contention in EIA in Canada. However the initiation of the debate is through standard practice effectively delegated to proponents who are not responsible to make what are ultimately politically subjective decisions. Faced with this, proponents and, particularly, responsible authorities strive to make the determination of significance objective and unassailable to the extent possible. For responsible authorities, this is critical for avoiding debate and any personal accountability or risk for a decision that their masters must ultimately make under their recommendation.

It is the author’s view that this focus on significance may be inappropriate and a distraction that is not helpful for EIA. It frequently transforms the tenor of public consultation and engagement into one of adversity and disagreement, pitting proponents, the public and responsible authorities against one another. Reflecting on the fact that the legislation does not define significance, it could be argued that the drafters of the legislation and Parliament understood that significance was an enigmatic concept that related to judging the acceptability of a project—that the project is in the public interest and can be justified in the circumstances. Lawrence (2007) concluded that impact significance, as a concept, is quite simple—it is an importance-related judgement. Such weighty decisions are inherently subjective and balance the abundance of facts and considerations, both objective and subjective, brought forward in the EIA. Despite this, practitioners, encouraged by guidance and responsible authorities, strive diligently to establish thresholds or benchmarks for the determination of significance, and as noted, it is the subject of exhaustive, contentious consideration by the participants in EIA. Practitioners strive to introduce objectivity into determinations even though the concept as defined by legislation is subjective. This would appear to be a ludicrous situation when seen in this light, even though practically, the determination of significance informs decision-making and subsequent measures to be implemented following the EIA decision.

A close reading of the law would suggest there is a case for removing the determination of significance from purview of the participants in EIA and placing it back in the hands of the decision-maker. There is room for objective characterization of environmental effects, and for the views and opinions of the public in EIA—the legislation requires it. Can a proponent reasonably be expected to argue for the acceptability of its project solely
on the basis of objective criteria, when the determination of significance is a subjective consideration of a wide area of subjective considerations? Is it constructive or helpful to force debate on significance criteria proposed by the proponent on how decision-makers should make a subjective decision regarding the project? Does this not establish an adversarial context that places a proponent in an awkward situation and distracts discourse to evaluation of appropriateness of the threshold or benchmark of significance, rather than the mitigation or follow-up that may be required, or the appropriateness of various alternatives? It must be remembered that by legal context, significance determination is really a decision-making concept where significant environmental effects merely triggers a referral of decision-making to the ultimate authority of Cabinet. Practice would appear to be a “significant” transgression from this simple legal requirement! Regardless, it is no doubt helpful for responsible authorities to understand where the different parties are coming from to help them formulate recommendations to decision-makers. However, is the formulation truly informed by the views of significance held by the parties at interest?

From this it is argued that the role of the proponent should be to describe the characteristics of the environmental effects, as factually, transparently, and objectively as possible. They should also lay out other factors that must be considered in a similar manner, such as uncertainty, the planned mitigation and its anticipated effectiveness, the follow-up and monitoring it proposes, and adaptive management strategies it contemplates, and the merits of various alternatives considered. From this “evidence” the public can, through the EIA process, make its concerns and issues known and the proponent can take steps to explain and discuss its plans with the public. Often with the assistance of the proponent, the input of the public is documented as “evidence” of one of the key factors that must be considered in the EIA. The responsible authority can certainly bundle this evidence for the decision-maker and make recommendations to the decision-maker. Although the responsible authority does not have the authority or the perspective of the decision-maker who is a Minister, a member of Cabinet, it may be reasonable for the responsible authority to make recommendations on significance for consideration by the Minister. It is argued that on objective matters, it may be able to do so. But does an administrator really have the mandate or perspective to evaluate subjectively the merit of public views or opinion in the context of what significance means in the law for the decision-maker?

Conclusions and Recommendations

It is suggested that the determination of significance under CEAA 2012 could be considered a decision-making conclusion by those having the authority to make that subjective determination. Hence, the significance of environmental effects might only be determined by those decision-makers at the end of an EIA, making a subjective decision as to whether the environmental effects were of a nature that would cause them to refrain from making a positive decision regarding the project (i.e., significant), and referring a decision to Cabinet to determine if they can be justified in the circumstances. It is conceded that in preparing its EIA Report, the responsible authority could make recommendations for consideration by the decision-maker, but argued that it is not helpful or appropriate for the proponent to determine significance in the EIA, being held responsible for distracting and adversarial debate with the motivated intervener regarding a matter that is within the purview of the decision-maker.

The benefit of this, beyond the obvious that this is what really is contemplated by the legislation is that proponents, the public and possibly the responsible authorities would no longer be mired in distracting and polarizing debate around significance. Proponents would continue to characterize environmental effects in objective terms that are of relevance for understanding their nature, and the need for and requirements for both mitigation and follow-up much as they do now, but without coming to a conclusion they are not responsible for or in a position to make regarding significance. The proponent might even argue why it is of the view that its environmental effects are with mitigation, acceptable, and argue the benefits the project may afford, without necessarily sliding into the significance debate.
It remains that under the suggested approach, interveners may continue to argue their perspective that the environmental effects are significant and why. However, such intervention would be directed at the decision-maker who has the authority to make the subjective determination of significance, rather than the proponent who prepares the EIS, or the administrator of the process, except to the extent that they provide advice to the Minister.

In the “new world” foreseen here, one could see a proponent stating that its project will result in the loss of 100 ha of terrestrial ecosystem habitat. It may argue that while important to the individual plants and animals that live in that habitat, there are no endangered species or critical habitat there, and that regionally and nationally, the habitat and affected species are secure and will not experience substantive declines in abundance at the population level. The proponent may also describe how it will mitigate the environmental effects on terrestrial ecosystems in a variety of ways. An intervener may argue that locally, this habitat is important and in short supply, and that the habitat is proximal to their neighbourhood providing recreational, educational and biodiversity functions that are important to the quality of life in the community, and in their view “significant” or unacceptable.

While in the present, the proponent would have argued the environmental effects were not significant in view of established, objective criteria for determining significance, and this may have been an affront to the values of the intervener and contentious, if not offensive. In the future this would not occur. The role of the administrator of the process could be to, in the EIA Report that it writes for the decision-maker, bring forward the two views and include the views of government experts on the subject. Ultimately, the decision-maker must determine subjectively if the environmental effects are significant, warranting a referral to Cabinet, or if the project should proceed with conditions they deem appropriate. What is gone in the future scenario is the need for the administrator to broker an objective conclusion or recommendations about significance when it is the subjective authority of the decision-maker in consideration of all of the factors considered in the EIA.

In support of this the CEA Agency could rescind current guidance for proponents and reissue it with amendment to outline the type of information required by decision-makers in making decisions. This could include the old standard criteria for characterizing significance, e.g., magnitude, frequency, duration, etc., but also any other salient information or data that characterize the environmental effect including whether or not a law or policy is being broken, if critical habitat will be lost, or if a population will be locally or regionally sustainable, to inform the decision. Other guidance could also provide advice or direction on how to bring forward the views of the public and Aboriginal communities, and also how to characterize the benefits of a project that might help inform a decision. Importantly, these actions would re-focus parties at interest on what the environmental effects are, their nature and extent, how they will be mitigated, and on the concerns of the public and Aboriginal people, as well as the benefits of the project. The fixation on significance would be eliminated or at least reduced in the preparation of the EIS and its review. Hence it may be time to give significance “the boot” from EIA in Canada, except perhaps as it relates to ultimate decision-making required by law.

A parting thought in view of all of this is the oddity of a Minister, a member of Cabinet, referring a decision to their colleagues. Surely, no Minister would make the weighty decision of approving a major project without consulting Cabinet. If Canada were to eliminate this bump-up decision-making requirement, then in fact the significance of environmental effects would no longer be required by law as currently its sole legal purpose is as a determinant to cause referral to Cabinet. If this were done, EIA would not require significance determination at all, and the entire process would be around gathering evidence for the decision-maker regarding the mandatory factors that must be considered in making an informed but subjective decision about the environmental effects that matter most.

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