

Confronting Already Significant Existing Cumulative Impacts

- Marcus Eyre, May 2022

Introduction

From the original 1992 *Canadian Environmental Assessment Act* through the most recent 2019 *Impact Assessment Act*, Canadian federal legislation has consistently required the consideration of cumulative effects (CEs) in project IAs. In the legislations CEs have been described as those, likely to result from the (designated) project in combination with other (projects or) physical activities that have been or will be carried out. Central to this is the temporal notion of past, present and future impacts.

Much effort and expenditure is required to gather baseline environmental information for the project assessment, including for modelling scenarios to better understand future impacts. Such information on the current state of the environment often reflects past changes, although in not being related to a current proposal, those past and ongoing changes usually are not the focus of much attention. However, even if these past changes are not necessarily probed in depth, the present state of the environment can still be compared to current standards and research. Moreover, it may often be that public concerns with new proposals are aggravated by and may arise from concern with existing CEs and the failure to address current issues. The New Prosperity Review Panel for example noted public mistrust of government in dealing with impacts from ongoing land uses (CEAA 2013).

Therefore, consistent with the IAIA 2022 conference theme of “Building Confidence in IA”, this paper proposes that IAs should be more consistent in addressing existing CEs that are already significant and that there are simple and defensible, policy and practical improvements that should be made. These include, making clear and consistent statements on the significance of existing CEs; and when they are significant, requiring offsets for any additional project residual impacts, as well as also proposing conditions to responsible government agencies. These could serve to improve transparency in IAs and improve environmental outcomes.

Scope

In addition to being concerned with past and ongoing impacts rather than future scenarios, in the context of Canadian federal assessments, the focus here is on biophysical valued components (VCs). While the ideas proposed here may also be applicable to social VCs (e.g., traditional use), social values likely add some further complexity not elaborated on at this time. Also potentially interesting but not addressed here are differing scenarios around existing CEs that are not yet significant and how those might be addressed.

Assumptions

On multiple scales we humans have substantially altered our environment, often resulting in significant adverse CEs. Further, global human population is projected to add over another 1.5 billion people (Vollset et al., 2020). As such there will continue to be demand for projects and further impacts.

Notwithstanding calls to sometimes deny projects, many will continue to be approved, including projects with significant impacts. One analysis of project EAs found that of sixty completed EAs, eleven had significant adverse effects and of those, eight were approved as justified (Orenstein 2018).

Notwithstanding substantial recent changes to the Canadian federal IA regime, project-based assessments remain the foundation, CE assessments are still required, and significance still needs to be considered in decision making and by Federal Authorities for numerous non-designated projects.

Finally, it is noted that the extent of existing impacts also means there is much potential for restoration of degraded environments, for example with the UN having declared 2021-2030 to be a Decade on Ecosystem Restoration.

Scenarios

There are essentially two scenarios for how existing CEs and contributions from an additional new project may interact to cross a threshold of significance for any particular VC or receptor. Either existing CEs are already significant regardless of a new proposal. Or alternatively, existing CEs are not significant and it is the additional contributions from a specific new proposal that crosses the significance threshold.

This distinction is relevant in terms of identifying relative responsibilities between a project proponent mitigating impact contributions from a new proposal as compared to the responsibility of government agencies to address existing CEs.

Ambiguous CE conclusions

A scan of EA/IA reports over time reveals frequent CE assessment conclusions that are often unclear as to whether existing CEs for particular VCs are already significant, or whether it is contributions from the project under review that cross the significance threshold. For examples, the project:

- *“is likely to cause significant cumulative adverse effects... in combination with other physical activities that have been or will be carried out” - Murray River EA (CEAA 2016)*
- *“in combination with other existing, approved, and planned projects, is likely to result in significant adverse cumulative environmental effects...” – Teck Frontier EA (ABAER 2019)*
- *“alone would not cause a significant adverse effect... but is likely to cause a significant adverse cumulative environmental effect in combination with the effects of past losses... and future effects” – Milton Hub Summary EA (CEAA 2020)*

Sometimes the answer can be inferred from discussion in the text, but not always. The frequent ambiguity raises an appearance of possibly avoiding the difficult issue of accountability for ongoing CEs.

Further, a 2018 interim CEA Agency report noted that:

“practitioners identified challenges related to determining the significance of cumulative effects in already disturbed areas and mitigating project effects in this context. To date, the Agency has not articulated expectations in relation (to this).”

The report did not make any firm conclusions, only noting that some projects “may” require offsets and that actions “may” be needed by more than just the proponent. To date guidance remains lacking and the issue remains a challenge.

Such unclear wording is not limited to government EA/IA reports. Other common examples include: proponents’ EIS reports noting that “the project contribution to CEs is not significant” (which is not the issue); and expert departments providing sometimes unclear significance determinations to Panels.

It is questionable whether determinations worded this way provide any real value. It may be worth noting that while the practice of making significance determinations for effects on each particular VC makes sense for direct project-only effects, it is arguably inappropriate to apply this convention to *cumulative* effects.

Clarify CEs conclusions

Having gathered information for CEs assessments a key question that should be answered clearly is, are existing CEs already significant, or not? An early example comes from the Suffield Joint Review Panel (JRP) (CEAA 2009):

“the cumulative impact of existing human activities is already significant and adverse. The project contribution is modest..., but it does make the effect (slightly) worse.”

The Suffield JRP also noted that “*cumulative effects require cumulative solutions*”. This raises various potential questions including, who might be responsible for which impacts? The phrase was also cited in the EA for the Wyndwood project (NEB 2017) in which the Panel noted that all parties agreed on the significance of existing CEs but disagreed on the extent of proponent responsibility around CEs. The Panel wrote that:

“the EA is responsible to ensure that the proposed project does not add any new contribution to cumulative effects. (and) ... past contributions are best addressed through the appropriate government agencies responsible”

Proponent responsibility

Not adding any new contribution to CEs can only be achieved by denying a project or by requiring offsets for any project residual impacts. Beyond IA legislation a proponent’s responsibility for its project impacts is founded on a common law principle that an imposition of harm onto another’s property or the public commons must be compensated. Otherwise it amounts to a trespass.

Project IAs commonly have leftover residual adverse impacts after mitigation, especially if the impacts are deemed unavoidable, not technically or economically feasible to mitigate, or not significant. They are often accepted (and often implicitly) as a necessary trade-off in exchange for a project’s benefits. However, where and when existing CEs are already significant then it

would seem prudent to revisit that acceptance and the terms of a trade-off. Already significant existing CEs is arguably a threshold at which other project benefits *alone* are not a sufficient trade-off. The Mitigation Hierarchy suggests that if project residual effects cannot be avoided or fully mitigated, then offsetting might be an option. The aim should be to reduce existing CEs elsewhere to avoid any worsening of already significant CEs. Note that the intent here is directly related offsets and not an alternative form of compensation. Whether any particular offsetting is sufficient to satisfy sustainability assessment criteria and trade-off rules (Gibson 2006) would depend on the specific details, but regardless, setting this standard would be a tangible and incremental improvement towards sustainability.

Notwithstanding critiques of offsets and restoration and the challenges with both (Maron et al., 2012), the context here is around already significant existing CEs *and* projects being approved anyway. With proper offset design, long-term monitoring for effectiveness and proper regulatory oversight, offsets can incentivize further impact avoidance and help restore degraded environments.

Government responsibility

IA reports sometimes note a possible role for government in mitigating CEs. As with proponent responsibility, there are also deep foundations for why governments would be responsible for addressing CEs, including the notion of a fiduciary obligation and the Public Trust Doctrine originating back to Roman law.

Practical and ethical reasons why governments should take responsibility to rectify CEs include:

- Where and when no one else can be identified as responsible (for any number of potential reasons). This is likely a government responsibility regardless of significance, but when significant then the responsibility to act should be even greater;
- Instances where and when it may not be possible for the proponent to offset or restore a particular VC and only government intervention may rectify the circumstances; and
- When government as the decision-maker chooses to approve a project with residual effects that are not fully mitigated or offset and that contribute to already significant CEs. In taking such a decision the decision-maker essentially takes on the responsibility.

IAs making recommendations to governments is likely a sensitive topic with many potential pitfalls and little guidance. The recent Milton Hub Project (CEAA 2020) had one recommendation to government; many have none. Lack of public confidence in government action was noted earlier, yet IAs have the potential to better communicate the need for government action while making constructive recommendations. Despite the Mackenzie Gas Project (MGP) JRP (2009) writing that it had more faith in the proponent's fulfillment of conditions than in government's commitment to implementation, nonetheless the MGP report was perhaps the most ambitious in making the majority of its recommendations to governments rather than to the proponent. The high number of recommendations whose intent was accepted (even if not as drafted), along with those which governments would not agree to, suggests a need to learn how to write effective recommendations to governments, and Government Responses to Panels could help with that learning feedback.

Conclusion

Addressing already significant existing CEs in project IAs presents an opportunity to improve CEs assessments as well as incrementally move towards sustainability. Given the resources already being put into documenting project study areas and time spent consulting stakeholders, it is an under-used opportunity with conceptually simple and incremental policy and practical improvements that could be made, including for IAs:

- to clearly state the significance (or not) of existing CEs;
- where and when existing CEs are already significant for a particular VC, then:
- to set an expectation of no net increase in CEs and require project proponents to offset all unavoidable residual impacts that cannot be otherwise mitigated; and
- to make clear recommendations to responsible government agencies on actions needed to deal both with reducing existing CEs and to offset any project residual effects which government takes responsibility for.

Finally, there is a need for guidance to set a standard and improve consistency in Canadian federal IAs. Until then it is worth noting that IA practitioners and stakeholders in project IAs can begin to make these changes by writing them into project IA submissions. In time this may encourage the development of guidance as well as improve accountability and reduce impacts.

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