

Federal EA Panel Review

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About Me

- Consultant on EA, cumulative effects, and economics matters
- Senior socio-economic specialist at largest engineering firm in Canada in the impact assessment group
- PhD on EA in the oil sands
- 2015 article "Good practices for environmental assessment" in journal *Impact Assessment and Project Appraisal*
- Testified to NEB re Enbridge Northern Gateway
- Work for First Nations, governments, proponents

Four Big Weaknesses of Federal EA (in my mind)

1. Proponent self-assessment and associated bias
2. Black box significance determinations
3. Economic benefit misinformation
4. Lack of venue for broader topics

Crude Model of EA Process



What Impacts?

Problem #1: Proponent Self-Assessment

- Self-assessment model: proponent hires consultants to study and make conclusions about whether or not the project will cause any significant effects
 - Benefit: project designers work with assessors to come up with best project
 - But how can there not be bias?
 - Proponent wants their project approved, and consultants want repeat clients and to establish a reputation for getting projects done

Table 2. Rankings of different models for who conducts and pays for impact assessment studies.

Impact assessment body and payee	Mean ranking ^a	SD	Respondents who ranked first (%)
IA done by independent body with proponent paying	2	1.15	39%
IA done by independent body with government paying	2.8	1.21	14%
IA done by proponent's consultants with proponent paying (self-assessment model)	3.1	1.74	30%
IA done by government with proponent paying	3.3	1.1	7%
IA done by government with government paying	3.7	1.37	10%

^a Respondents ranked the five options from most preferred (1) to least preferred (5).

Are Impacts Significant?

Problem #2: Black Box Significance Determinations

- EA process revolves around whether impacts deemed “significant”, but how to judge significance?
 - We have criteria – magnitude, duration, reversibility, etc. – but how much is too much? How long is too long? Etc.?
 - Significance thresholds: notion that there is a point at which a level of change is not acceptable
 - Problem: arbitrary, ambiguous, and/or absent significance thresholds
 - Critiques: hard to define, poor science on the systems in question, not agreed upon
 - But these are standard challenges in EA! You do what you can with what you have.
- reject black box significance determinations, and require value-based, unambiguous significance thresholds

Are Impacts Justified?

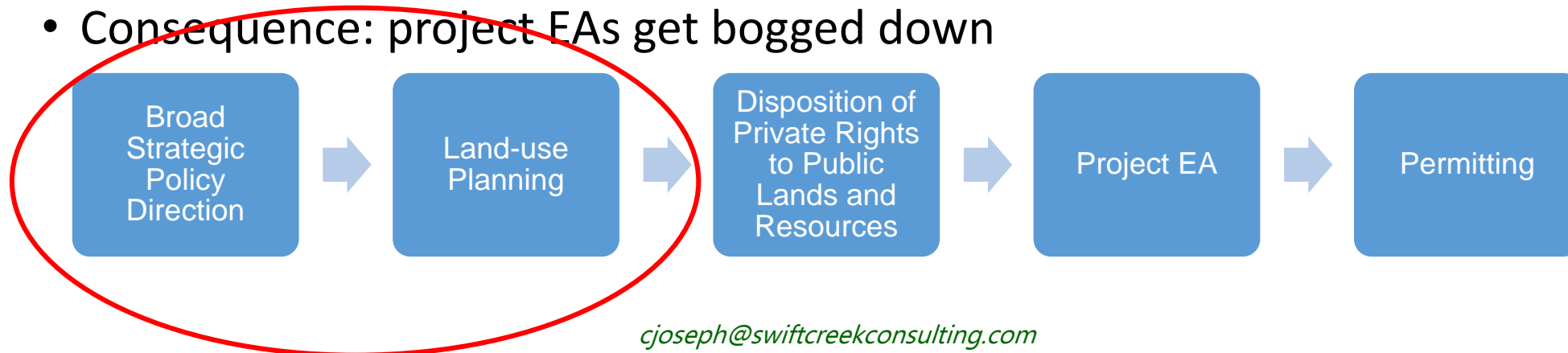
Problem #3: Economic Benefit Misinformation

- Economic benefits play a key role in major project decision-making, but is the information good? Can we make justification decisions based upon the information we get?
- “Economic Impact Analysis”, i.e., input-output models, multipliers and the like: well-known to misrepresent economic benefits
- Main problem: assesses gross benefits, not net
 - ignores many costs (e.g., health care costs of air pollution, burdens on government)
 - Ignores offsetting effects, e.g., re jobs
 - Net benefits = value → want to know actual value to society
- Why are existing methods used?
 - convention, relatively easy, few know any better, proponents want their project to look good (governments too?), and everyone generally assumes that development must be a good thing
- Yet it is standard to examine net economic benefits elsewhere in world
- Repeated calls for better economic benefit studies, and we’ve done them and submitted them to EA processes and gotten traction... but bad methodology remains standard

Bigger Picture

Problem #4: Lack of Venue for Broader Topics

- EA is designed to look at questions such as:
 - has the proponent adequately assessed air pollution? are mitigation plans adequate?
- EA is not designed to examine broader policy questions such as:
 - should oil sands development expand? Should oil be exported to Asia?
- But people have no other venue to express themselves, and so they get involved in EA processes to debate the broader issues
 - Consequence: project EAs get bogged down



Federal EA: Important, and Can be Done Much Better

My suggestions:

1. Shift away from proponent self-assessment and the bias that inevitably comes with it
2. Don't put up with black box analysis (and guide practitioners on how to overcome)
3. Care about the real value of projects
4. Provide a genuine means to engage people on the broader policy questions