Workshop on *Socio-economic Effects Assessment in the Yukon*
Whitehorse, 2 February 2005

Notes for presentation

Sustainability assessment as an approach to the integration of socio-economic effects considerations under the *Yukon Environmental and Socio-economic Assessment Act*

Robert B. Gibson
Environment and Resource Studies
University of Waterloo
rbgibson@uwaterloo.ca

Preface

• the discussion so far has reviewed the old approaches that consider environmental, social and economic effects more or less separately
• while such studies are useful, it is unrealistic to imagine that the three areas are actually separate
• they are treated separately for the convenience of breaking things into pieces for easier examination (and to follow usual divisions of government agency mandates and academic fields)
• but in reality
  - the effects are intertwined and interdependent (ecological damage hurts economic possibilities, pollution damages health, community cooperation enables economic initiatives and ecological protection, and so on)
  - people who identify their own concerns and aspirations don't often use the old categories: most often they say they are interested in health, security, being on the land, having new opportunities, and other things that are not just social or ecological or economic
  - the whole package is what affects communities and makes proposed undertakings desirable or undesirable
• hence integrated approaches are needed and the key question is "what is the best way to integrate consideration of these intertwined effects?"

• even by themselves environmental, social and economic effects assessments involve substantial complexities (major differences in context, multiple intersecting factors, non-quantifiable gains and losses, unavoidable role of values and priorities, etc.)
• additional difficulties emerge when the various overlapping kinds of effects are considered together
• hence the added need for an approach to integration that is not just comprehensive and coherent but also comprehensible and manageable?

• this presentation suggests sustainability-based assessment as a promising solution

Why integration of socio-economic considerations in assessment is crucial

• assessment of both environmental and socio-economic effects is required in the Yukon Environmental and Socio-economic Assessment Act (YESAA) because of the comprehensive approach to development assessment adopted in chapter 12 of Umbrella Final Agreement (UFA)

• chapter 12 of the UFA (and other similar agreements and laws) took this approach because of

- concern for overall long-term effects
- commitment to gaining durable benefits for communities,
- understanding of interdependence/inseparability of social, cultural, economic, ecological considerations
- recognition that assessments are typically the main accessible public process for examining future options

Efforts so far to integrate socio-economic considerations in assessments

• the integration challenge is not new

- earliest environmental assessment laws required attention to social, economic, cultural as well as biophysical effects and their interrelations (first law: National Environmental Policy Act in the US 1969; first Canadian law: Environmental Assessment Act in Ontario 1975)

• weak record of integration

- tradition of separate ecological, social and economic evaluations based on different training and expertise
- integration using staples (environmental assessment, socio-economic assessment, economic/financial assessment, technical assessment)

• record of integration better in the North (probably because of the traditions of Aboriginal culture; long term commitment to viability of life in that place; more direct relations with the land; focus on a few big future-defining projects)

• record also relatively good in very poor third world villages where small scale development assistance is provided through sustainable livelihood approaches

• and relatively good in very wealthy urban regions facing growth pressures (Vancouver, Victoria, etc.) where residents know they have a high quality of life to preserve

• integration best built on framework of the real problems of real people and communities; these generally don't fall neatly into the usual academic or assessment categories of economic, social, environmental, etc.

Sustainability as the rising framework concept for integration

• progress towards sustainability (or sustainable development) is explicitly stated as a purpose of the Canadian Environmental Assessment Act, and as an objective of development assessment in UFA ch12, etc., and is common in a wide range of new legislation and policy

• popularized by the 1987 report of the World Commission on Environment and Development
• the basic concept rests on two entwined factors:
  - that ecological sustainability is not likely to be possible where many people are desperate and insecure
  - that desperation and insecurity cannot be overcome if ecological sustainability is lost
• current use of "sustainability": a comprehensive term for the pursuit of overall durable improvements based on an understanding of the interdependence of social, economic, ecological, cultural and other factors

• Voisey's Bay panel application
  - nickel mining project with rich orebody but limited life expectancy
  - basic test is set out in the panel's guidelines to the proponent for preparing the environmental impact statement: the panel said it would be considering *"the extent to which the Undertaking may make a positive overall contribution towards the attainment of ecological and community sustainability, both at the local and regional levels."*
  - in other words, leave the communities and ecosystems in better shape than you found them (i.e. net gains for sustainability)
• key elements
  - net gains (versus mere mitigation of negative effects) over long term
  - durable enhancements
  - integrated consideration of relevant factors
  - explicit rationales for the inevitable trade-offs

Using sustainability assessment as a means of integration

• there are three main steps to be taken to establish a reasonably clear and predictable context for sustainability-based approach to integrated assessment
(i) specify the "contribution to sustainability" test (in general, for the Yukon, and for particular regions and cases)
(ii) determine rules for trade-offs (in general, for Yukon and if necessary for particular applications)
(iii) anticipate application of the test not just in evaluation of submitted proposals but throughout the process, e.g. in
  identifying the key issues/questions to be addressed
  identifying the options
  designing the studies
  evaluating the anticipated effects and the implications for choices among the options, and for mitigations and enhancements
  designing monitoring and other follow-up

Specifying the "contribution to sustainability" test

• general requirements for sustainability (requirements that apply globally and anywhere in the world) can be reasonably easily identified and serve well as basic sustainability assessment decision criteria (see the list in appendix A)

• the main components are socio-ecological system integrity, sufficiency and opportunity, intragenerational equity, intergenerational equity, efficiency, democracy and civility, precaution and adaptation, all of which need to be considered and pursued together as mutually reinforcing immediate and long term objectives
  - note that none of them is purely ecological, social, economic, etc.
  - the objective is mutually reinforcing gains on all fronts
  - the reality is priorities and trade-offs (see the trade-off discussion below)

• specification for the Yukon: specific conditions and priorities may be set out in
  - territorial vision/scenario/policy initiatives (e.g. Yukon 2000)
  - regional and/or community plans (as anticipated in YESAA)
  - case specific initiatives that anticipate major project proposals and provide appropriate early guidance
  - efforts to identify local conditions and priorities included in assessment processes for individual undertakings

• efforts to clarify locally adjusted sustainability criteria would involve a better integrated and more advanced version of conventional work to identify valued social and ecosystem components plus understanding of current and anticipated conditions, stresses, objectives for the future (perhaps targets and indicators), needs for improvement

How to deal with trade-offs

• while progress on meeting all of the sustainability requirements is needed, trade-offs are inevitable
• it is possible to identify some general rules for trade-off decision making anywhere (see appendix B)
• the main rules involve always ensuring net gains, imposing the burden of argument on the proponent of the trade-off, always avoiding significant adverse effects, prohibiting future damaging trade-offs, requiring explicit justification, and providing an open process

• more specific guidance centred on significance judgments will be needed for the Yukon and for particular cases

Implications for Yukon and YESAA implementation

• it would be valuable to have a territorial vision/scenario/policy initiative that specifies sustainability requirements for the territory in light of an assessment of
  - current and anticipated conditions,
  - stresses,
  - objectives for the future (perhaps targets and indicators),
  - needs and priorities for improvement

• regional and community plans would provide an additional valuable basis for more specific guidance on the “contribution to sustainability” test and for the identification of appropriate regional and local trade-off rules for subsequent decision making on particular undertakings, including ones subject to YESAA (see YESAA s44)

- in any event YESAA guidance will be needed
  - to clarify the commitment to applying the "contribution to sustainability" test (and expecting attention to enhancements as well as mitigations, justification of preferred alternatives and proposed trade-offs),
  - to outline the general sustainability requirements/criteria and clarify how these are or can be specified for the territorial and regional context
  - to explain how "significance" judgements are to be made in light of sustainability requirements in context
  - to assist proponents and other participants in identifying, considering and justifying trade-offs in light of sustainability criteria
  - to assist proponents and other participants in carrying out comparative evaluation of alternatives in light of sustainability criteria
  - to provide appropriate frameworks for the preparation of project proposals and other assessment document contents
  - to assist the design of studies
  - to clarify appropriate means of ensuring suitable representation of interests
  - to establish approaches to implementation monitoring that contribute to regular review and adjustment of the criteria as well as the monitored undertakings

- the overall results should include
  - greater early clarity about the expectations to be met and the test to be applied
  - a more consistent foundation for decisions that also respects regional and local differences
  - an effective means of integrating attention to the relevant considerations that also applies the commitment to sustainability
  - better decisions and better undertakings

Appendix A: Sustainability requirements as decision criteria

Socio-ecological system integrity
Build human-ecological relations that establish and maintain the long term integrity of socio-biophysical systems and protect the irreplaceable life support functions upon which human as well as ecological well-being depends.

Sufficiency and opportunity
Ensure that everyone and every community has enough for a decent life and opportunities to seek improvements in ways that do not compromise future generations' possibilities for sufficiency and opportunity.

Intragenerational equity
Ensure that sufficiency and effective choices for all are pursued in ways that reduce dangerous gaps in sufficiency and opportunity (and health, security, social recognition, political influence, etc.) between the rich and the poor.

Intergenerational equity
Favour present options and actions that are most likely to preserve or enhance the opportunities and capabilities of future generations to live sustainably.

Efficiency
Provide a larger base for ensuring sustainable livelihoods for all while reducing threats to the long term integrity of socio-ecological systems by reducing extractive damage, avoiding waste and cutting overall material and energy use per unit of benefit.

Democracy and civility
Build the capacity, motivation and habitual inclination of individuals, communities and other collective decision-making bodies to apply sustainability principles through more open and better informed deliberations, greater attention to fostering reciprocal awareness and collective responsibility, and more integrated use of administrative, market, customary, collective and personal decision-making practices.

Precaution and adaptation
Respect uncertainty, avoid even poorly understood risks of serious or irreversible damage to the foundations for sustainability, plan to learn, design for surprise and manage for adaptation.

Immediate and long term integration
Attempt to meet all requirements of sustainability together as a set of interdependent parts, seeking mutually supportive benefits.

Appendix B: General trade-off rules

Net gains
Any acceptable trade-off or set of trade-offs must deliver net progress towards meeting the requirements for sustainability; must seek mutually reinforcing, cumulative and lasting contributions; and must favour achievement of the most positive feasible overall result, while avoiding significant adverse effects.

Burden of argument
Trade-off compromises that involve acceptance of adverse effects in sustainability-related areas are undesirable unless proven (or reasonably established) otherwise; the burden of justification falls on the proponent of the trade-off.

Avoidance of significant adverse effects
No trade-off that involves a significant adverse effect on any sustainability requirement area (for example, any effect that might undermine the integrity of a viable socio-ecological system) can be justified unless the alternative is acceptance of an even more significant adverse effect.

- Generally, then, no compromise or trade-off is acceptable if it entails further decline or risk of decline in a major area of existing concern (for example, as set out in official international, national or other sustainability strategies or accords or as identified in open public processes at the local level), or if it endangers prospects for resolving problems properly identified as global, national and/or local priorities.

- Similarly, no trade-off is acceptable if it deepens problems in any requirement area (integrity, equity, etc.) where further decline in the existing situation may imperil the long term viability of the whole, even if compensations of other kinds, or in other places are offered (for example, if inequities are already deep, there may be no ecological rehabilitation or efficiency compensation for introduction of significantly greater inequities).

- No enhancement can be permitted as an acceptable trade-off against incomplete mitigation of significant adverse effects if stronger mitigation efforts are feasible.

Protection of the future
No displacement of a significant adverse effect from the present to the future can be justified unless the alternative is displacement of an even more significant negative effect from the present to the future.

Explicit justification
All trade-offs must be accompanied by an explicit justification based on openly identified, context specific priorities as well as the sustainability decision criteria and the general trade-off rules.

- Justifications will be assisted by the presence of clarifying guides (sustainability policies, priority statements, plans based on analyses of existing stresses and desirable

futures, guides to the evaluation of ‘significance’, etc) that have been developed in processes as open and participative as those expected for sustainability assessments.

Open process
Proposed compromises and trade-offs must be addressed and justified through processes that include open and effective involvement of all stakeholders.

• Relevant stakeholders include those representing sustainability-relevant positions (for example, community elders speaking for future generations) as well as those directly affected.

• While application of specialized expertise and technical tools can be very helpful, the decisions to be made are essentially and unavoidably value-laden and a public role is crucial.