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# Get Ready For a Whale of a Time: Northern Gateway and Species at Risk

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**Decision commented on**: *Report of the Joint Review Panel for the Enbridge Northern Gateway Project*

In December 2013 federal authorities recommended the construction of the Enbridge Northern Gateway pipeline to transport bitumen from the Alberta oil sands to the west coast. Professor Martin Olszynski has previously commented on Northern Gateway here, and my comment adds to his by investigating in particular how species at risk factor into the Northern Gateway report. But prior to getting there, I can't resist a few general remarks.

There is little doubt the scale of bitumen mining, processing and transportation now has very significant socio-ecological effects which are experienced and observed far beyond the boundaries of a mine or the right of way of a pipeline. Years from now when others look back on this era I think they will be astounded by our willingness to throw caution aside and go ahead with such a magnitude of projects despite the local and widespread consequences of developing massive carbon-based energy resources for worldwide distribution. It was all about the $$$ for the overall good of society they will say. Or was it? Why then does Alberta struggle to fund basic public goods like health care and education despite having access to such an economically valuable resource? Clearly we are open for business as the discount warehouse for global energy shoppers.

The scale of bitumen mining also polarizes discussion about its merits into a 'friend or foe' confrontation or a 'with us or against us' clash. Even the rhetoric can strain relationships. So it can be difficult to have reasoned debate about the oil sands. Or is it tar sands? Our government and associated legal institutions are supposed to provide the procedural tools we need to overcome these difficulties. But as we see here even our government leaders have succumbed to the 'with us or against us' rhetoric.

We establish regulatory institutions – in this case the Northern Gateway Joint Review Panel – with authority and obligation to consider the socio-ecological effects of a project in an objective manner supposedly removed from partisan politics and individual preferences. We have rules backstopped with the force of law to ensure these regulators perform their role. The public law is concerned with the process by which a recommendation or decision is made – taking into account whether the process was fair, impartial and otherwise in accordance with fundamental justice – as well as ensuring the recommendation or decision itself is reasonable and justified. But law and politics are never far from each other in disputes concerning resource development and environmental protection.

Just before the Northern Gateway review panel commenced formal hearings in January 2012, the federal Minister of Natural Resources issued an open declaration that Canada needs more access to Asia-Pacific

markets for resource exports and that the regulatory process takes too much time because of environmental and other 'radical' groups who participate only to stall projects. In the words of Minister Oliver himself:

> These groups threaten to hijack our regulatory system to achieve their radical ideological agenda. They seek to exploit any loophole they can find, stacking public hearings with bodies to ensure that delays kill good projects. They use funding from foreign special interest groups to undermine Canada's national economic interest. They attract jet-setting celebrities with some of the largest personal carbon footprints in the world to lecture Canadians not to develop our natural resources. Finally, if all other avenues have failed, they will take a quintessential American approach: sue everyone and anyone to delay the project even further. They do this because they know it can work. It works because it helps them to achieve their ultimate objective: delay a project to the point it becomes economically unviable (See his Open Letter here).

Amendments to applicable federal legislation followed, which were intended to reduce regulatory review time for resource projects and keep out the 'radicals' – including a complete overhaul of federal environmental assessment legislation. These politics alone make one question how the Northern Gateway panel could objectively consider and assess the Enbridge application.

The Northern Gateway pipeline project consists of two pipelines approximately 1200 kilometers in length connecting Bruderheim, Alberta with Kitimat, British Columbia, as well as associated infrastructure such as storage tanks, pumping stations and a marine terminal. One line will carry diluted bitumen west to Kitimat for loading onto tankers, and the other line will carry condensate east to Bruderheim. The project is designed to access Asia-Pacific markets with estimates of more than 200 tanker ships berthing in the Douglas Channel near Kitimat annually to receive bitumen.

While the risk of pipeline ruptures and the linear disturbance associated with pipeline construction and operation is cause for concern, the notion of another pipeline moving oil products across Alberta does not seem very alarming in the grand scheme of things. Likewise the construction of the Bruderheim terminus in what Alberta calls its 'Industrial Heartland' is unlikely to find many detractors. Indeed, the Northern Gateway Panel Report states no person objected to this location (Panel Report volume 2 at 180). The fight to preserve the rich agricultural lands along the North Saskatchewan River in the Bruderheim region was lost years ago.

The politics of Northern Gateway is more firmly placed in British Columbia where the line crosses more undisturbed public land, the risk of a marine oil spill weighs heavily, and the economic benefits are more elusive and indirect. Indeed the imbalance between environmental risks and economic benefits led the BC government to initially oppose construction of the line and demand certain conditions be met (See here). The volume of tanker traffic that will berth in the Douglas Channel near Kitimat to receive bitumen or deliver condensate will have significant socio-ecological impacts on the region. History shows the tar sands have drastically changed every socio-ecological system they've encountered. That being said, Kitimat itself is no stranger to heavy industry. It was incorporated in the mid-20$^{th}$ century as a planned town for employees of a smelter constructed and operated by Alcan Aluminum (now owned by Rio Tinto). The presence of abundant hydro power and the deep waters of the Douglas Channel have and will continue to attract heavy industry to the region (As an aside, Eden Robinson wrote an excellent novel based in this region that I highly recommend: *Monkey Beach* (Alfred A Knopf, 2000)).

The Northern Gateway Panel conducted its environmental assessment review under both the *National Energy Board Act*, RSC 1985, c N-7 (NEBA) and the *Canadian Environmental Assessment Act, 2012*, SC 2012, c 19, s 52 (CEAA 2012). The panel was responsible for making a recommendation under section 52 of NEBA as to whether the Northern Gateway pipeline should receive regulatory approval from the Governor in Council, having regard for its socio-ecological effects and including an assessment of the environmental effects listed in section 5 of CEAA 2012. The panel was to include any terms or conditions on construction or operations necessary in the panel's view to mitigate adverse socio-

ecological effects of the project and to ensure the pipeline is in the public interest. The panel issued its recommendation for project approval on December 19, 2013. The matter of legal approval now rests with the Governor in Council (i.e. the federal cabinet) who pursuant to section 54 of NEBA and section 31 of CEAA 2012 is the authority that decides whether the project is likely to cause significant adverse effects and if so whether such effects are justified in the circumstances such that the project can go ahead subject to the terms and conditions set by the panel.

Early in the process the panel heard submissions on and ultimately set the issues for consideration in its May 2011 Hearing Order. Public participation in the process was extensive – presumably some 'radicals' managed to get in – with several options available to interested persons to give evidence to the panel and question Enbridge. The panel began to hear oral evidence in January 2012 and concluded the hearing in Terrace, British Columbia on June 24, 2013. In sum, the panel reports that there were 206 formal intervenors, 12 government participants (e.g. Fisheries and Oceans and Environment Canada), and 1179 oral statements before it. The panel received over 9000 letters of comment. The hearing itself consisted of 180 days, of which 72 days were for hearing oral statements and evidence. Hearing locations were spread across the pipeline route in British Columbia and Alberta. The entire hearing record is available on the National Energy Board website.

The key preliminary step in assessing project impact on species at risk is selecting the spatial and temporal scope of the assessment. The applicant provides its preferred or chosen spatial and temporal boundaries to the regulator, these are open to question, and ultimately the regulator agrees or disagrees with the applicant and sets the boundaries of assessment which govern evidence and analysis on species impacts. For the Northern Gateway pipeline, spatial considerations include the location of the terminus and marine terminal, pipeline routing, and tanker approaches.

Enbridge identified 4 temporal phases for assessment: baseline pre-construction; construction; operations; decommissioning. There can be – and was in this case – extensive disagreement amongst participants on what information on species impacts is needed and/or relevant within each temporal phase, however baseline information seems most contentious because an accurate assessment of incremental project impacts depends on accurate baseline data. For example, many participants including the federal Department of Fisheries and Oceans argued that Enbridge failed to conduct an adequate or proper survey of marine mammals to accurately assess project impacts such as vessel strikes from tanker traffic. Enbridge asserted it would conduct more detailed surveys and gather more baseline data on marine mammals if the project receives regulatory approval (Panel Report volume 2 at 231). Similarly, several participants and Environment Canada argued that Enbridge failed to conduct an adequate survey of marine birds, and Enbridge committed to conduct further surveys prior to construction (Panel Report volume 2 at 254).

Baseline information also provides the applicant with a basis upon which to decide which species to consider in its project application. It is generally accepted to be impractical to require a project proponent to assess every known species that may be affected by a project, so it is typical for an applicant to select key indicator species for assessment individually and as proxies for the ecosystems as a whole. These selections can be subject to disagreement – as was the case here where intervenors questioned the rigour and suitability of species chosen by Enbridge as key indicator species (Panel Report volume 2 at 183). The choices made by Enbridge were accepted by the panel, although intervenor questions did lead Enbridge to commit to further species monitoring during the preconstruction phase which may lead to additional species assessments (Panel Report volume 2 at 185).

It is noteworthy to observe that Enbridge selected some species at risk as key indicator species for ecosystem effects, and that the panel endorsed this methodology with positive remarks including a statement that this method reflects a precautionary approach to the assessment (Panel Report volume 2 at 185). I think this illustrates the growing importance of identifying the presence of endangered species in or near the footprint of a resource development project in resource project assessments. Failure to do so may require a project proponent to subsequently redesign its project.

The regulatory assessment must also have a methodology to provide guidance to the applicant and other participants on the type of evidence concerning project impacts that the regulator deems relevant. For the Northern Gateway pipeline and its impact on species at risk, the evidence and assessment of project impacts is categorized by the panel as impact on species habitat and impact on species mortality.

There is no provision in the *Species at Risk Act*, SC 2000, c 29 (SARA) that prohibits a federal authority from approving or authorizing an activity that will jeopardize the existence of a species at risk or adversely harm its habitat. Section 77 of SARA does, however, require federal authorities to consider harm to critical habitat in issuing a project authorization and to be of the opinion that all reasonable alternatives to the project that would reduce the impact have been considered, the best solution has been adopted, and all feasible measures to reduce the harm to a critical habitat will be taken. But one of the legislative amendments that followed Minister Oliver's open declaration in 2012 was to exempt the National Energy Board from these obligations concerning a pipeline approval under NEBA (of course, here there is yet to be an approval).

Section 79 of SARA requires the panel to identify adverse project impacts to listed species at risk and ensure measures are taken to mitigate those impacts as well as monitor them. The following table summarizes the panel findings in this regard. I've also included a cross reference to critical habitat provisions in an applicable recovery strategy (if any since section 79 of SARA also requires mitigation measures to be consistent with an applicable recovery strategy.

| Species | Listing | Critical Habitat | Impact | Mitigation | Reference |
|---|---|---|---|---|---|
| Whitebark Pine | endangered | No recovery strategy | Destruction from clearing for project construction<br>Localized impact | Site specific avoidance<br>Transplants<br>Reclamation | 192,194 |
| Woodland caribou boreal population | threatened | Little Smoky range (65% undisturbed) | Loss of habitat and fragmentation from cleared right of way during life of project<br><br>Increased risk of mortality from human and predator access following right of way during life of project<br><br>Changes to migratory patterns because of right of way during life of project | Pipeline to follow existing disturbances<br><br>Pipeline to follow existing right of way little smoky range<br><br>Control human/predator access to right of way<br><br>no net gain in linear feature density<br><br>habitat offsets | 204-212 |
| Woodland caribou southern mtn population | threatened | No recovery strategy | | | |
| Coastal tailed frog | Special concern | n/a | Sensory disturbance during construction at watercourse crossings<br><br>Individual mortality during construction | Avoid disturbing wetlands<br><br>Use measures to prevent crossing right of way<br><br>Salvage and relocate eggs and individuals found before construction | 220-222 |
| Western toad | Special concern | n/a | Loss of wetland habitat in right of way during life of project<br><br>Individual mortality during construction | | |
| Northern leopard frog | endangered | No recovery strategy | | | |
| Northern goshawk | threatened | No recovery strategy | Loss of nesting sites from clearing during construction<br><br>Mortality of chicks and eggs in nests during construction<br><br>Collision with power lines<br><br>Sensory disturbances from tanker traffic for marine birds | Pre-construction surveys to identify active nests of marbled murrelet<br><br>Setbacks from active nests for marbled murrelet<br><br>Cover power lines to prevent electrocution of birds<br><br>Avoid clearing at sensitive times | 217-220<br>254-257 |
| Marbled murrelet | threatened | No recovery strategy | | | |
| Common nighthawk | threatened | No recovery strategy | | | |
| Olive-sided flycatcher | threatened | No recovery strategy | | | |
| Sprague's pipit | threatened | Outside project area | | | |
| Canada warbler | threatened | No recovery strategy | | | |
| Pacific great blue heron | Special concern | n/a | | | |

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|---|---|---|---|---|---|
| Yellow rail | Special concern | n/a | | Limit night lighting | |
| Long-billed curlew | Special concern | n/a | | | |
| Band-tailed pigeon | Special concern | n/a | | | |
| Western screech owl | Special concern | n/a | | | |
| Short-eared owl | Special concern | n/a | | | |
| Peale's peregrine falcon | Special concern | n/a | | | |
| Ancient murrelet | Special concern | n/a | | | |
| Short-tailed albatross | threatened | No critical habitat identified | | | |
| Black-footed albatross | Special concern | n/a | | | |
| Rusty blackbird | Special concern | n/a | | | |
| Nechako river white sturgeon | Endangered | Proposed recovery strategy | Increased sediment and turbidity in water crossings | Trenchless crossings on stuart and endako rivers known to be habitat for the sturgeon | 222-229 |
| Harbour porpoise | Special concern | n/a | Individual mortality from vessel strikes during life of the project<br><br>Individual displacement and psychological stress from underwater vessel noise | impose tanker speed and lane restrictions<br><br>Avoid humpback whale critical habitat<br><br>Use whale monitoring vessels in core humpback areas to set site specific measures when whales present<br><br>Use acoustic monitoring for whales in poor visibility | 230-244 |
| Northern resident killer whale | threatened | Outside project area | | | |
| Transient killer whale | threatened | No critical habitat identified | | | |
| Offshore killer whale | threatened | No critical habitat identified | | | |
| Humpback whale | threatened | Waters surrounding Gil Island<br><br>Adequate prey<br>Acoustics<br>Physical space<br>Water/air quality | | | |
| Grey whale | Special concern | n/a | | | |
| Fin whale | threatened | No critical habitat identified | | | |
| Blue whale | endangered | | | | |
| Sei whale | endangered | | | | |

By my count the panel considered 34 SARA listed species, and of those, 20 species are listed as either threatened or endangered. An 'endangered' species is one facing imminent risk of extinction; a 'threatened' species is one likely to become endangered if nothing is done to halt its demise (SARA, s 2). Remarkably, the panel concludes that after taking proposed mitigation measures by Enbridge into account there will be no significant project impacts for any of these species except for woodland caribou.

Another observation is the high number of threatened or endangered species for which there is no recovery strategy and/or no identified critical habitat. The federal government is failing to adhere to the legislated timeframes for implementing recovery strategies (up to 4 years after listing – SARA, s 42) which identify critical habitat, the key measure of protection under SARA. In September 2012 several environmental groups and foundations commenced proceedings seeking a mandamus order from Federal Court requiring federal authorities to file recovery strategies for 4 of the species affected by the northern gateway project: humpback whale; marbled murrelet; woodland caribou (southern population); Nechako river white sturgeon.

The legal battle between northern gateway and species at risk will be fought over species with established recovery planning. In the table above, these species include whales, the Nechako river sturgeon, and woodland caribou. The panel report makes little work of recovery strategies (both proposed or final), placing considerable doubt on whether the northern gateway panel complied with its SARA s 79 obligation to ensure mitigation measures for species at risk are consistent with recovery strategies. In January 2014 several environmental groups and foundations commenced legal proceedings seeking, among other remedies, an order from Federal Court declaring that the panel erred by failing to comply with section 79 of SARA.

The most intense legal battle between the northern gateway pipeline and species at risk will likely occur in identified critical habitat for the North Pacific Humpback Whale. This is because the tanker route into the Kitimat terminal goes through identified critical habitat for the humpback whale. You can see the overlap on waters surrounding Gil Island by comparing the tanker route on page 179 of the Panel Report with the critical habitat map on page 34 of the Recovery Strategy for the whale (See here). Avoidance of humpback whale critical habitat would not appear to be an option for the project with a terminal in Douglas Channel.

It is important to recall that critical habitat is defined in section 2 of SARA as habitat that is necessary for the survival of the species, and also that critical habitat includes the biophysical functions, features and attributes of habitat (*Environmental Defence Canada v Canada*, 2009 FC 878 at para 54). So in the case of the humpback whale, these functions or attributes include adequate prey (e.g. herring), adequate physical space, and the absence of underwater noise pollution in the identified areas. These whales – like all other marine mammals – are also vulnerable to vessel strikes and toxic pollution (for threats to individuals and critical habitat see pages 16-23 and 35-42 of the Recovery Strategy). Humpback whale critical habitat identified in the Recovery Strategy (both geophysical and attributes) is under federal jurisdiction and will be protected by a Ministerial protection order under section 58 of SARA because legal protection under SARA means mandatory protection rather than protection under the discretionary powers of Fisheries and Oceans (*David Suzuki Foundation v Canada*, 2012 FCA 40 at paras 110-125).

It is obvious from reading pages 230-244 of the Panel Report where the impacts of the project on marine mammals are discussed that this issue was a focal point of disagreement between Enbridge and various participants. Enbridge submitted that knowledge on whales is sparse, vessel strikes and other impacts on whales are unavoidable, and that if the project goes ahead it will conduct more research to confirm the presence of whales in the waters affected by the project and implement a marine mammal protection plan to manage and minimize project impacts on whales. The panel accepted these submissions to conclude the project would not have a significant adverse impact on the humpback whale.

Is this a reasonable and justifiable conclusion in light of the evidence heard by the panel and the applicable law? I think not.

In my view the panel erred by accepting that known threats to the humpback whale will occur from tanker traffic in critical habitat and by concluding that this will not be a significant adverse effect on the species. It is unreasonable to rely on further studies by Enbridge to manage and mitigate these known project impacts on a threatened species. It is unreasonable because the panel fails to have due regard for the threatened status of the humpback whale and the location and attributes of its critical habitat under SARA. This is particularly so in light of the evidence that persons who conduct these activities (foreign tankers) will be difficult to prosecute under SARA when (not if) their ships strike individual whales or otherwise harm critical habitat in violation of sections 32 and 58 of SARA. The foreseeable difficulties we will face prosecuting foreign tankers under SARA further emphasizes the importance of real legal protection for critical habitat now. Management and mitigation does not amount to legal protection of critical habitat, and it is an error in law to conclude otherwise.

The panel purports to have taken a precautionary approach and applauds Enbridge for doing likewise. But how is it precautionary to accept harm to a threatened species and its critical habitat? A species categorized in law as likely to become endangered if nothing is done to halt its demise. It is hardly precautionary to then recommend more activities which are known to inflict harm to the species. And how is it precautionary for the panel to wrap up proceedings before the humpback whale recovery strategy is published, knowing full well from the evidence placed before it that the project will have unavoidable impacts on the threatened species?

I suspect the conflict between protecting humpback whale critical habitat and approving Northern Gateway has been apparent to federal officials and Enbridge for years. It is hard not to link this conflict to the 2012 amendments to SARA that exempt federal authorities from having to opine that all reasonable alternatives to the project that would reduce the impact to critical habitat have been considered and the best solution has been adopted. Because a reasonable alternative and the best solution for the humpback whale is a different marine terminal location – requiring perhaps the more costly Prince Rupert terminal alternative identified at the hearing. But then again, law and politics are never far from each other in disputes concerning resource development and environmental protection.