

# **Geography 412**

*Water Management: Theory, Policy, and Practice*

## **Ontologically Pluralistic Environmental Governance**

*Anthropocentrism to Eco-centrism*

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## 1.0 An Ontological Conflict

Governance of the natural world today has been primarily directed by a neoliberal mandate that operates based on the extracted resource's utility to capitalist markets. This exclusive appropriation of the environment by the markets has led to disparities in both nature and society. In treating nature as a resource, its commodification has made it susceptible to unchecked market forces that, in seeking to maximize extractive potential for profits, remain in inherent conflict with the environment. In society, such one-sided governance, exemplified by recurrent conflicts at sites of resource extraction, has led to the marginalization of Indigenous populations by challenging their subsistent lifestyles that strive to maintain a cohesive, symbiotic, and respectful relationship with the natural world. Thus, current governance is not receptive to the ontological differences that modern-settler and Indigenous communities assume with the environment, in turn leading to a capitalistic dominance. This essay calls for a rejuvenation of the Environmental Governance (EG)<sup>1</sup> mandate, which by effectively incorporating Indigenous Knowledge Systems (IKS)<sup>2</sup> into its current mechanisms, can realise two successes: a reconciliation with Indigenous populations and an eco-centric counter to neoliberal imperialism.

Although this analysis will specifically discuss EG in context of water, its argument is deemed applicable to the commons as a whole. Water is an element that is fundamental to the sustenance

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<sup>1</sup> *“Environmental governance has emerged as a discrete area of policy and research, particularly concerning the expansion of theoretical knowledge regarding environmental justice and sustainability. The decentralisation of decision-making powers from governments, downwards towards local institutions, NGOs and communities, is an important feature of the environmental governance approach because it is intended to improve accountability, accessibility, and a voice for local people and their representatives”* (Savage, Hudson, & Osborne, 2020).

<sup>2</sup> *“Indigenous knowledge systems (IKS) comprise knowledge systems that have developed within various societies’ independent of, and prior to, the advent of the modern scientific knowledge system”* (Tharakan, 2015).

of all life. Yet, despite its diverse uses, its social, cultural, and environmental values are often overshadowed by its value as an economic good (Day, 1996). Water conflicts are therefore a function of the ontological differences in society, as while Indigenous populations treat water as a living entity that they are responsible for, capitalist settler-societies perceive water as an exploitable resource (Wilson, 2018). Hence, the prevailing paradigm of EG, focused purely on consumptive water use, has rendered its value one-dimensional, consequentially leading to widespread exploitation, degradation, and scarcity.

Market environmentalism, aimed at mitigating such negative externalities whilst allowing for capitalist growth, has been largely unsuccessful as, *“private actors—particularly those motivated by profit—fail to conserve resources and cause negative environmental impacts over the long term”* (Bakker, 2014). Moreover, current regulatory instruments like Environmental Impact Assessments (EIAs), rather than fostering genuine environmentalism, remain restricted by their primary pursuit of neoliberal agendas. Accordingly, in focusing on the rights to nature and not the rights of nature, market environmentalism is rendered anthropocentric. With that, relatively eco-centric environmentalist perspectives, such as ones that Indigenous populations may hold, are sidelined. Contemporary environmental issues like climate change, that threaten the very existence of humans, can therefore be attributed to this dominant and disingenuous environmentalism. Hence, such myopic neoliberal imperialism in EG threatens not just Indigenous lifestyles, but all of society and nature.

With a contextualisation in Canada, this argument will first contrast neoliberal ontologies with IKS’, highlighting their assumed relationships with water, and outlining the how their ontological conflict manifests in current EG. Next, it will examine how incorporating IKS into

current instruments of EG can facilitate Indigenous reconciliation and eco-centric environmentalism. Later, using the case-study of a mine development in the Tłı̨ch̨o First Nation's region, it will assess the deployment of instruments that enable environmental co-governance. Finally, in critiquing some stereotypical assumptions about Indigenous lifestyles, it will probe the idea of absolute eco-centric environmentalism. The essay will conclude with recommendations regarding intervention and leverage points to initiate such a change and propose other guiding philosophies that future research agendas and policy mandates may pursue.

## **2.0 Anthropocentrism to Eco-centrism**

The neoliberal interpretation of water, informed by its utilitarian and positivist underpinnings, tends to abstract water from its social context by rendering its conceptualisation technical and characterising it as a resource available for human consumption, management, and manipulation (Wilson, 2018). However, to foster a shift from anthropocentric to eco-centric environmentalism, it is critical to comprehend water in non-capitalist terms. In treating water as a more-than-human and living entity, IKS bestow Indigenous populations with the duty to 'respect' the environment that sustains them. The Indigenous notion of respect entails a strong sense of relationality, reciprocity, and responsibility towards nature. Relationality posits water as a living entity that, *"actively participates in relationships across the human and non-human world"* (Wilson, 2018). Responsibility towards water entails its use for appropriate purposes, not contaminating it, and preserving the pristine condition that it was found in. Reciprocity is about, *"engaging with water according to determined protocols to ensure mutual survival"* (Wilson, 2018).

The eco-centric IKS essentially allude to living and interacting with the environment in a subsistent manner, as opposed to the anthropocentric consumption-focused worldview interested in maximising utility. Therefore, the IKS frame successfully accounts for water's complex social, political, economic, cultural, and environmental dimensions. However, these distinct worldviews largely remain in conflict as is most evident at indigenous-inhabited sites of natural resource extraction. The growing industrial extraction at these frontiers has been countered by an increased political mobilization of Indigenous populations, seeking to assert and preserve their way-of-life (Kuokkanen, 2019). In Canada, such Indigenous counters to the extractive industry have manifested through participation in settler-government led Environmental Impact Assessments (EIAs) or corporate-driven Community Benefit Agreements (CBAs) - both of these instruments have been devised to uphold the *Crown's Duty to Consult*. While the purpose of, "*EIAs is to assess and mitigate environmental impacts of a proposed development, CBAs involve Indigenous communities engaging directly with industry through negotiations to receive benefits from economic development on their territories and to foster a collaborative vision for more sustainable resource development*" (Kuokkanen, 2019).

Although these instruments of EG seem quite promising in theory, their actualisation has remained controversial. In addition to being structurally and systematically skewed in favour of the government and industry, their current attempts to comprehend and incorporate IKS have been characterised as reductionist, wherein, "*Indigenous ontologies are frequently cast as cultural constructions and relegated to the realm of myth or belief*" (Wilson, 2018). Moreover, despite the inclusion of Indigenous populations through such mechanisms, their participation has remained ineffective. This is due to a systemic disregard for their way-of-life as, "*they are participating in structures and procedures designed, constructed and executed by others (often governments or*

*industry itself) that may have very little, if any, deeper or contextual understanding of the scope of impacts extractive industries have on Indigenous peoples' lives” (Kuokkanen, 2019).*

Therefore, despite the existence of such mechanisms, the agency of Indigenous peoples is not fully realised, thus maintaining their social exclusion. Furthermore, the Canadian government's natural resource developmental agendas have often taken precedence over Indigenous claims of territorial sovereignty, despite substantial guarantees and assertions as specified in the *Royal Proclamation of 1763* and *United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)* (Henderson & Bell, 2006). Such violations are evident even through pre-developmental schemes like Canada's *Free Entry System* for mineral exploration that permits environmentally degrading activities to be undertaken by the industry with little to no consultation of proximal Indigenous populations (Caine & Krogman, 2010). Therefore, in addition to undermining their right to self-determine, Indigenous populations are not even allowed to make meaningful decisions regarding such developments in their own territory.

Recent scholarship has emphasised that positivist science lacks the bandwidth and openness to consider factual something it cannot comprehend i.e., the sentiment-based cultural value system of IKS. Thus, current neoliberal EG has been largely dismissive of differing ontologies, ignoring how its own belittling scientific frames often tend to overlook the intricacies of nature. This implies that the effective and equitable governance of water can only be realised through ontologically pluralistic EG with a decision-making framework that is either capable of incorporating diverse and inter-disciplinary perspectives to enable co-governance or confident enough to devolve decision-making power to local stakeholders (Norman & Bakker, 2016).

### 3.0 The Dual Success

EG that incorporates IKS genuinely and effectively can certainly achieve both Indigenous reconciliation and an eco-centric counter to neoliberal imperialism. In recognising IKS as legitimate as science, to inform the EG of their territories, an initial step towards recognising Indigenous sovereignty can be made. This may serve as the first meaningful step towards recognising the, *“historical legacies and injustices of exclusion, racism and other forms of discrimination, and improve the position of Indigenous minorities”* (Jackson, 2018). Prevalent modes of recognition materialise through political projects premised on multiculturalism, reconciliation, constitutional recognition, and the granting of specific resource rights. Yet, several critics argue that current, *“liberal logics underpinning recognition strategies actually constrain the more substantive political aspirations of Indigenous peoples, and that they are being used to conceal new and incipient modes of dispossession”* (Jackson, 2018).

IKS can also offer an eco-centric counter to neoliberal imperialism by virtue of the sacred value they attribute to and the ‘respectful’ relationships they compel Indigenous populations to assume with water.<sup>3</sup> However, current neoliberal modes of EG render, *“Indigenous peoples’ relationships with their lands and waters virtually invisible”* (Wilson, 2018), hence denying the agency that IKS inherently attribute to nature. Consequentially, Indigenous contestations for self-determination have manifested through political resistance as a, *“battle over resources and legitimacy: the legitimacy to formulate and enforce water rights and to exist as water user collectives, to have sufficient control over one's own future”* (Jackson, 2018).

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<sup>3</sup> The assumption of this argument, especially in natural resource development-approved contexts, is that even though indigenous populations may participate in the extraction of resources from their lands, their tolerance to environmental harms would be much lower than the industry’s, hence minimising environmental degradation in comparison to un-checked industrial excavation.

Therefore, a recognition of the imperial nature of contemporary EG since the colonial eras, really points to the need for Legal Pluralism<sup>4</sup> in order to facilitate collaborative EG. Accordingly, these two successes can only be realised if genuine efforts are made to comprehend and incorporate IKS into current modes of EG. The following section will discuss a case-study that exemplifies such EG successes in both community-government and community-industry arrangements.

#### **4.0 Ontologically Pluralistic Environmental Governance**

Canada's EIAs process has still not been conducive to Indigenous populations as their engagement has largely remained a mere formality with no realisation of actual decision-making power. Consequently, as Indigenous rights and IKS have not been recognised or incorporated effectively in current EIAs, they have been characterised as, *“being designed less to protect Indigenous rights and the environment they rely upon, than to expedite economic growth through major industrial development”* (Gibson, Hoogeveen, & MacDonald, 2018). In response to the shortcomings of conventional EIAs, proactive Indigenous communities have devised Indigenous-led Impact Assessments (IIAs) that integrate EIA frameworks with Indigenous governance systems and IKS (Gibson, Hoogeveen, & MacDonald, 2018). Accordingly, IIAs have been described as instruments that, *“recognize the legitimacy and power of Indigenous knowledge and authority to manage resources that affect their livelihoods”* (Gibson, Hoogeveen, & MacDonald, 2018). Owing to the recent adoption of principles like *Free, Prior, and Informed Consent (FPIC)*, *UNDRIP*, legislative changes in modern land-claim agreements, and various legal precedents,

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<sup>4</sup> *“Legal pluralism refers to situations of legal coexistence in a single social field. Initially described in colonial situations, in which the colonial power superimposed a European legal system over an existing indigenous system, legal pluralism is now understood as a fundamental characteristic of all legal systems”* (Merry & Canfield, 2015).

EIAs have increasingly integrated IKS. Moreover, the new *Impact Assessment Act* of 2019 itself seems quite promising in light of its claims to treat IKS, “*alongside Western scientific knowledge*” (Canada, 2019).

The Tłı̨chǫ Indigenous population resides in the resource-rich Northwest Territories of Canada. In 2012, in light of a newly proposed mining project, an IIA was conducted in co-management with the Crown wherein the terms of engagement were premised around the FN’s consent. The Tłı̨chǫ Government, as a legislated decision maker, participated in an EIA that was governed by the *Mackenzie Valley Resource and Management Act (MVRMA)* and the *Tłı̨chǫ Land Claim & Self-Government Agreement (Tłı̨chǫ Agreement)*. “*Ultimately, the Tłı̨chǫ Government’s central role assured the appropriate involvement of both traditional knowledge and western scientific methods in the assessment and conditions for project approval and made a final decision on the project*” (Gibson, Hoogeveen, & MacDonald, 2018).

The Tłı̨chǫ First Nation (FN) was an active and equal participant throughout the process, retaining decision-making powers that ranged from approving the final EIA report, to specific decisions regarding the management of their land and water resources. For instance, because the *MVRMA* established IKS on par with western scientific systems, the levels and sites of effluent discharge from the mine were adjusted to protect the FN’s cultural uses of the K’eagoti (Hislop) lake. The lake had significant intergenerational value for the FN as the waters held indisputable cultural values i.e., preferred fishing sites, harvesting areas, and transportation corridors. Moreover, “*reliable, peaceful, and unimpeded access to preferred areas that were historically known and personally familiar was also integral to the transmission and current and future practice of Tłı̨chǫ knowledge*” (Olson, 2012). Hence, these IKS-informed decisions, that also

required annual cultural monitoring for compliance, were critical in protecting the FN's rights, lifestyle, and environment. In respecting the FN's consent, this community-government co-governance model enabled a recognition of the FN's sovereignty and established a threshold to minimise environmental damages. Therefore, this is a fine illustration of how IKS can be effectively and legitimately incorporated into legislative instruments of EG, like EIAs, to co-govern water resources.

Once the EIA was approved, the community began engaging with the proponent to co-govern the operations of the mine itself. To ensure compliance to the criteria established through the IIA, the Tłı̄chq FN is currently in the process of negotiating an Impact Benefit Agreement (/Community Benefit Agreement) with the proponent, Fortune Minerals. As the FN's IIA highlighted that there would be significant environmental impact, consent for the project was contingent on imposition of 13 mitigation conditions (Gibson, Hoogeveen, & MacDonald, 2018). Of these 13 measures, 7 are focused exclusively on water with clauses to govern and maintain its traditional uses, flow, quality, marine-life, and control for other impacts during and after the project's operations (Kuntz, 2016). Moreover, the *Tłı̄chq Agreement's* access provisions ensure that the *Mackenzie Valley Land and Water Board* is involved in issuing all water licenses and land use permits. For instance, Chapter 21 - Sheet 1 of the agreement's implementation plan states that proponents must, "*seek consent from the Tłı̄chq to use waters which are on or flow through Tłı̄chq lands, unless provided for through other provisions of the agreement and Exercise use of water only if consent given, and subject to legislation*" (Council, 2003).

Therefore, this community-industry co-governance model builds off of the foundations established by the initial community-government IAA. In that sense, the FN first reviewed all

potential impacts of the project on local waters in light of their uses for it, subsequently controlled for and established acceptable tolerances to its degradation, and only then engaged with the proponent - from a position of power. Hence, this strategy successfully maintained FN sovereignty and ensured that negotiations with the proponent occurred on their rather eco-centric terms.

This case-study is an excellent example of ontologically pluralistic EG as it exemplifies the power of collaborative governance in fostering both development and sustainability. However, it is vital to recognise that such models have not always been deployed successfully owing to various factors regarding their fiscal costs of implementation, the FN's ability to mobilise and reach an agreement with the government, or their ability to advocate for their interests when dealing with the proponents (Gibson, Hoogeveen, & MacDonald, 2018). Hence, this points to the need for a system-wide legislated framework that standardises such models, that by virtue of integrating IKS, reconcile with Indigenous populations and provide an eco-centric counter to neoliberal EG universally.

## **5.0 An Absolute Eco-centrism**

As the case-study has clearly illustrated, Indigenous environmentalism itself seems to be limited by their position of having to decide upon acceptable environmental concessions in exchange for benefits from natural resource developments. In that sense, by virtue of existing in a neo-liberal context, perhaps IKS have themselves been rendered relatively anthropocentric. The 'Ecologically Nobel Indian' is a stereotype premised on the assumption that Indigenous people live in absolute harmony with their environments. It casts them as populations that hold ecological wisdom which must serve as an inspiration for society's environmentally sustainable

transformation. With that, their rich culture and lifestyle is reduced to a, “*one-dimensional caricature*”, wherein critics note that, “*ecological nobility is an unattainable ideal*”, as in reality, “*Indigenous people have always altered their environments according to their needs, sometimes quite dramatically*” (Nadasdy, 2005). In that sense, it is critical to understand that it is only by virtue of being relatively more eco-centric than neoliberal ontologies, that the integration of IKS in EG may offer a meaningful counter to anthropocentrism.

Hence, an absolute eco-centric counter to neoliberal EG may require an independent ‘voice’ of nature, with no conflicts of interest. The new paradigm of Regenerative Sustainability, “*is explicitly designed to engage with a living world through its emphasis on a co-creative partnership with nature based on strategies of adaptation, resilience, and regeneration*” (Robinson & Cole, 2014). In that sense, owing to its pluralistic and procedural underpinnings, in theory, it has the ability to establish an EG model where nature itself can be made an active participant. For instance, granting legal personhood to nature would enable its independent agency in decision making processes, thus neutralising the topic of ownership. So while advanced technology can be employed for the continuous monitoring of environmental conditions and change, legal stewardship could be assumed by independent bodies with genuine environmentalist agendas. Although this idea is beyond the scope of this analysis, it certainly merits further research.

## **6.0 Conclusion**

As evident, the effective incorporation of IKS into current EG mechanisms would successfully offer both successes: a reconciliation with Indigenous populations and an eco-centric counter to neoliberal imperialism. Moreover, it is also clear that the intervention points to initiate this process, at least in Canada, are at sites of natural resource extraction. Hence, it is certainly

viable to restore the balance of power by revitalising the instruments of EG, like EIAs and CBAs, through a genuine incorporation IKS. Given its fundamental value to all members of society and the diverse worldviews that dictate its use, water serves as an excellent leverage point to explore the deployment of ontologically pluralistic environmental governance. If society can learn to effectively govern an element as complex as water, such practises can be comfortably applied elsewhere.

Finally, while the eco-centric checks provided by IKS might not be absolutely environmentalist, there certainly are other ideologies that may enable this. Apart from Regenerative Sustainability, perhaps the age-old Gandhian philosophies of Swadeshi and Trusteeship, that preach sustenance through subsistence, could be probed to facilitate a fundamental re-evaluation of society's attitude towards, interaction with, and governance of nature.

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