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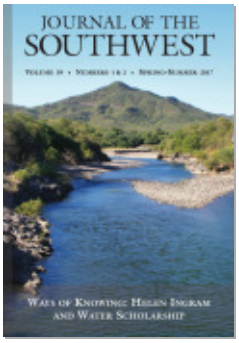

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Jeremy J. Schmidt

In February 2011, Helen Ingram resigned from a high-level panel that had been created to establish a "world-class environmental monitoring system" for Alberta's massive bitumen extraction industry—the oil sands or tar sands. In Canada, Dr. Ingram's resignation was national news. Major outlets like *The Globe and Mail* (Wingrove 2011) and the Canadian Broadcasting Corporation (McIntosh 2011) recounted her concerns regarding how few scientists were on the panel and how confidentiality clauses created barriers to engagement with indigenous peoples. To opponents of Alberta's extractive resource sector, it was yet another blow to provincial credibility (see, generally, Black et al. 2014). In the years prior to the panel's creation, several scientific studies had revealed serious flaws in Alberta's environmental monitoring system (e.g., Kelly et al. 2009, 2010). And barely a month before the panel was announced, Alberta's Regional Aquatic Monitoring Program (RAMP) had been excoriated for its inability to detect regional or cumulative effects of oil sands activities, to establish baseline data, or to collect and compare data for environmental impact assessments (Burn et al. 2011). In this context, Rob Renner, the Alberta government's minister of environment, announced the 12-member expert panel to enhance the credibility and legitimacy of governmental oversight of the oil sands. Yet the composition of the panel, which included several prominent industry figures and a former advisor to Canada's pro-oil-sands prime minister, Stephen Harper, was criticized as a token political gesture that was unlikely to yield substantive change.

For scholars, Dr. Ingram's resignation can be read in different ways. It is a clarion example of her commitment to ensuring rigor, equity, and fairness in the institutions and policies governing water (see Ingram et al. 1986, Ingram and Oggins 1992). However, it also opens interesting questions about Alberta's longer history of wielding international

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expertise in water policy. Pursuing the latter, this article takes its cue from Schneider and Ingram's (1993) argument that the "social construction of target populations" is an oft-overlooked aspect of how cultural norms, shared metaphors, and common stories affect policy design in ways that advantage certain groups and disadvantage others. Indeed, those groups disadvantaged through policy design have been central to Dr. Ingram's concerns with how subaltern networks sustain themselves through alternative narratives (Ingram et al. 2015, Lejano et al. 2013). These joint concerns—with the official (social) construction of target populations and the persistence of alternatives under (often) disadvantaged conditions—help to situate Dr. Ingram's resignation. In short, the co-production of power and knowledge through expert networks and the effects of those networks on those who are marginalized due to policy design are precisely what must weigh on considerations of how academic expertise intersects with governance institutions (see also Ingram 2008, Brugnach and Ingram 2012).

This paper examines two eras of water policy in Alberta in order to identify how policy design has structured the recognition of "target populations." The first made water instrumental to a social construction of the political community that served the Canadian project of western settlement. The second shifted from constructions of the "community" toward a combination of water markets and shared governance—a deployment of economic and cultural capital that displaced efforts to revisit political questions regarding *for whom* water should be managed. In both eras, Alberta drew on international experiences and expertise in ways that established and entrenched state claims. The article uses material from archives, legislative debates, and court documents to show how both eras structurally marginalized indigenous claims to water. *Pace* settler-colonial structures of dispossession in Canada (see Coulthard 2014, Simpson 2014, Harris 2002), the shift from community to capital co-produced a "target population" that continuously aligned water policy with land policies that excluded, though did not extinguish, indigenous claims to water in Alberta.

Alberta's Imagined Water Community

Between 1857 and 1859, John Palliser led a survey of western Canada to assess its economic prospects on behalf of British interests. When he arrived in present-day southern Alberta, Palliser (1860) described it as

intolerably dry, and the "least valuable" portion of Canada's prairies. What Palliser surveyed, however, was not the *terra nullius* found in the theories of property that British philosophers, like John Locke, had imagined. Rather, it was a complex political and economic landscape shaped by indigenous peoples—both First Nations and Metís—through relationships with one another, the land, and the colonial companies that claimed territorial rule (Cavanagh 2011, Hogue 2015). When the Dominion of Canada was created in 1867, it began in earnest to clear this crowded landscape.

Canada passed the Dominion Lands Act in 1872 and, as it began to establish its southern border with the United States, was confronted by the complex set of indigenous claims to the western prairies (see Hogue 2015). The act provided for the division of 720,000 km^2 of western Canada (then the North-west Territories) into the largest contiguous property grid of its kind in the world.[1] The grid followed the American model developed by Thomas Jefferson to create a vast checkerboard of mile-by-mile (1.6 km^2) sections of land that were then quartered into 160-acre (65-hectare) plots for settlement (cf. Scott 1998). Canada's settlement project, however, had no viable infrastructure with which to move goods or people west. As a result, Canada partnered with industrialists to pursue its nationalist vision. In the beginning, Canada made considerable use of American railroads and trade networks to "clear the plains" of indigenous peoples through a variety of tactics. Officially, the government began negotiating treaties and settling land claims but, in practice, these were often combined policies of forced resettlement and strategic starvation that layered injustices on communities already decimated by diseases introduced through trade (Asch 2014, Daschuk 2013).

The use of American railroads was not conducive to Canadian nation building, which led officials to engage a syndicate of railroad barons to build a transcontinental railroad. The syndicate was granted $25 million in capital, and an additional 25 million acres (10 million hectares) of land, which they could in turn sell to settlers once the railroad was complete (Hedges 1939). James J. Hill, the syndicate's leader, initially attempted to route the railroad through his existing American rail line. But Canadian officials, including Canada's prime minister, forced Hill out of the syndicate before deciding to push the railroad along Canada's southern boundary—straight through the semi-arid regions Palliser had deemed of little value—in order to "stop Hill from gaining a foothold north of the 49th parallel" (Mitchner 1971: 9). In sum, Canada's transcontinental railroad combined industrial partnerships, land settlement

policies, and sovereignty ambitions that, collectively, structured its settler-colonial policies in the western prairies.

By 1883, the railroad stretched across southern Alberta, and the time had come to start granting land to railroad companies. By then, however, large cattle ranchers had already secured leases for much of the area. The ranchers were well connected politically, and worried that granting settlers private property rights would cut off their own access to water, which was based on a riparian system where rights accrued to those with land abutting a watercourse. The solution came a decade later when the federal government passed the 1894 North-west Irrigation Act (NIA). The NIA grandfathered existing riparian rights before creating a system of prior appropriation that was, in several respects, a bureaucratized version of an American model (Percy 1977). In the western United States, a system of "first-in-time, first-in-right" water rights had emerged based on actual water use. Canada, however, created a bureaucratic system where the priority of rights was based on the date of application for a water license. This subtle difference would have significant repercussions for indigenous peoples. In 1909, for instance, the U.S. Supreme Court recognized a prior right to water for Native Americans based on their existing water uses. In Canada, the bureaucratization of water rights structurally dispossessed indigenous peoples of water rights because they weren't the first to apply for a license (see Bartlett 1986).

The rationale for Canada's system of prior appropriation appealed to a particular imagination of the political community for its legitimacy (cf. Anderson 2006). William Pearce, a key figure in Canada's Department of the Interior in the late 19th century, drafted the bulk of the NIA together with J. S. Dennis, the deputy minister of Canada's Department of the Interior who had traveled throughout the United States to observe irrigation projects (Mitchner 1967). A former surveyor, Dennis helped convince the Canadian prime minister to follow the American homestead model. For his part, Pearce (1891) was especially concerned with how basing water rights on the actual use of water had forced the United States into a situation of having to "evolve order from chaos" as individuals and firms rushed to use water first. After also studying colonial experiences in India and Australia, Pearce decided that the NIA should eliminate the property rights of all "private persons" to water. On this point Pearce (1891) was adamant and uncompromising, stating that "there is one important preliminary principal which should without delay be established, without recognition of which no comprehensive scheme can be carried on. This principal is that water is the property of the public."

Pearce's justification for declaring water public property fits remarkably well with what Charles Taylor (2004) later described as the modern social imaginary, where a pre-existing political community is imagined as the legitimate basis for a state that is both sovereign and self-constituted. For Pearce, water was a resource that appertained to the community that legitimated the Canadian government. As such, the state had a duty to govern water for *that* community. To wit: Pearce (1891) argued that "water in a country dependent on irrigation is so precious that it is a duty the Government owes to the community, or, in other words, that the community owes to itself, to prevent its being captured by monopolists." This view was explicitly designed to confront the notion that water was private property, which Pearce (1891) believed would not result in "anything like the best advantage" because individual owners would not maximize national wealth. Similar anti-monopolist sentiments prevailed in the United States, and helped to usher in "wise use" philosophies of resource conservation that tied water to state management (Schmidt 2017). In this, Pearce again mirrored American models where the principle of prior appropriation created rights designed to prevent capitalist speculation on water (Schorr 2012).

Governing water for the community formed three key elements of Albertan water policy (see Percy 1977): First, the NIA vested all water in the property of the Crown. Until 1930, the federal government represented this public interest, after which it passed to Alberta under the Natural Resources Transfer Act (excluding rights to fishing and navigation, which remained under federal jurisdiction). Second, to gain water rights landowners needed to prove a "beneficial use" of water that ensured net benefits to the community. Third, approved water rights were tied to land such that acquiring an existing water license required acquiring the land to which it was affixed. Joseph Sax (1994: 15) has argued that this practice, known as the doctrine of appurtenance, values community over efficiency in recognition that "water in place is a type of wealth." Yet, by constructing the NIA to the target population of Canada's political "community," water rights also operated to exclude indigenous water rights—first by creating bureaucratic formulae to identify legitimate water rights and then by tying water rights to a land tenure system that dispossessed indigenous peoples of their territory for incoming settlers. These kinds of bureaucratic techniques not only produce social indifference (see Herzfeld 1992), they were also an active part of Canada's settler-colonial project (Neu 2000). Then, in an effort

to undermine indigenous practices, the First Nations consigned to reserves were often required to perform operations and maintenance on irrigation works at times scheduled to displace their cultural practices (Matsui 2009).

Community Problems

Despite being designed to support Canadian sovereignty through western settlement, irrigation in southern Alberta proceeded only in fits and starts in the late 19th and early 20th centuries, and until the federal government invested heavily in infrastructure (de Loë 2005). Money was often channeled through the Western Canada Irrigation Congress, which Glenn (1999: 21) describes as a "happy band of politicians, railway officials, land developers, and government engineers [that] reached its prime in the years immediately before and after the First World War." Initially, however, the government refused to grant the lands owed to railroad companies in contiguous blocks, preferring instead to grant every other square in its checkerboard land tenure system. This anti-monopolist sentiment, however, proved very inefficient for irrigation, since miles of unused infrastructure (i.e., canals) had to be built across lands railroad companies didn't own. Eventually, railroad companies convinced the government to grant contiguous blocks of land in part due to the role of Mormon irrigation expertise brought to Alberta by settlers from the United States (Hedges 1939, Palmer and Palmer 1990). As a result, some incredibly large grants were settled—the largest was for 3 million acres (1.2 million hectares), an area double the size of Canada's smallest province, Prince Edward Island.

Alberta passed the Water Resources Act in 1931, which largely carried over the existing water rights framework. At the time, however, Alberta did not have significant revenue streams and continued to rely on federal funding, which led to conflicts over investment and fed into sentiments of western alienation from the eastern federal government (Richards and Pratt 1979). These tensions sharpened when an extended drought took hold in the 1930s. The compromise was the creation of the Prairie Farm Rehabilitation Administration (PFRA) in 1934, a federal program designed to rehabilitate the drought-riddled areas of the southern prairies through capital investment and expert committees (Alberta Irrigation Projects Association 2002). Alberta had a contentious relationship with the PFRA, with disputes turning on the fact that Alberta had its own

irrigation expertise and, though it needed federal investments, did not like the accompanying federal influence (Marchildon 2009). In 1943, Alberta and the federal government agreed to heavy federal investments to increase capacity for irrigation with Alberta promising to eventually take over infrastructure maintenance (Alberta Environment 2004a). This arrangement led to intense irrigation expansion after 1950. In 1968, Alberta passed its Irrigation Act and, shortly thereafter, its final irrigation district was created. All told, Alberta now has 13 irrigation districts that have collectively amassed licenses to 75% of the allocated water in southern Alberta (Alberta Environment 2005). None of these licenses have expiry dates—they are vestiges of policies designed to secure the "community" interest by tying land and water to settler-colonial notions of Canadian sovereignty. In the early 1970s, Alberta took sole responsibility for irrigation infrastructure (Alberta Irrigation Projects Association 2002). Coincidentally, new technologies enabled Alberta's irrigation economy to further expand from 279,877 hectares (691,591 acres) in 1970 to 419,730 hectares (1,037,175 acres) by 1980. Irrigation dominated, but did not exhaust Alberta's water sector, particularly as growing municipalities and industries required more water. Like many North American jurisdictions, Alberta solved demand problems by increasing supply, often through dams and reservoirs (Percy 2005, Armstrong et al. 2009).

Eventually, Alberta's reliance on supply-side solutions ran squarely into problems regarding *for whom* water was to be managed. On the one hand, growing environmental awareness led Alberta to pass its Clean Water Act in 1971 (Wood et al. 2010). But, when it came to allocating water, Alberta had no mechanism to connect water rights to hydrological reality. In fact, the only limits on water allocation were known as "Instream Objectives," which were designed to ensure that all water license holders received water but which did not take environmental considerations into account (Alberta Environment 2005). The result was a staggering over-allocation of water, with water allocations topping out at 118% of the median annual flow of one southern Alberta river and others being heavily subscribed (Alberta Environment 2005). Supply-side solutions also produced political conflicts that were refracted through contests between the federal and provincial governments over the interests of the "community" and which also brought to the fore long-standing indigenous claims to water that both levels of governments refused to recognize.

The End of "Community"

In 1977, at the United Nations Conference on Water in Mar del Plata, global experts declared water was scarce (Biswas 1978). Shortly thereafter, in 1982, Alberta hosted a conference on water scarcity in western Canada (Sadler 1983). Yet Alberta's response to water scarcity continued to rely on increasing supply and, in 1986, it began construction of the Oldman Dam. Amidst the ensuing conflicts over the dam described below, the explicit tie of water to the "community" was sundered. This set the stage for policy reforms that aligned new forms of economic and cultural capital with water policy through both water markets and new forms of shared governance. Alberta's shifts mirrored neoliberal trends of re-regulating water elsewhere, such as in the United States (see Ingram et al. 1984). Reforms in Alberta also reflected contests over how government reflected the "community," or if it should continue to do so at all (see, generally, Rose 1996). For instance, the withering away of "community" in public policy rationale led Kennett (1992: 10) to conclude that, in Canada, "conceptions of community appear to have limited relevance to the design of federalism as it relates to water management." Clearly, however, this is incorrect; "community" once played an explicit role in Canadian water policy that directly affected water policy in Alberta and marginalized indigenous peoples deemed outside of that "community." Understanding how notions of community could so easily be jettisoned, then, requires examining how the social construction of "community" was reformulated through policy reforms mobilized alongside concerns over water scarcity.

After decades of federal-provincial tensions—from the PFRA of the 1930s through until Alberta took over infrastructure funding in the 1970s—the Oldman Dam controversy cut to the quick of what interests (if any) the national "community" retained in provincial water decisions. Glenn (1999) provides the authoritative account of how the dam's ecological effects and flooding of indigenous and private lands presented two fronts of opposition. On one front, an ecological coalition, known as Friends of the Oldman River (FOR), launched a legal challenge in 1989 that claimed the environmental assessment for the dam was inadequate. After losing the initial decision, FOR won at Canada's Federal Court of Appeal in the spring of 1990, which effectively meant further work on the dam was illegal. The federal government, however, had no appetite for enforcing the order, especially after other provinces weighed in to support Alberta's position that resource development required

provincial autonomy. Parallel to the legal and political wrangling, a second front of opposition opened when a First Nations group, known as the Lonefighters, took direct action and began using heavy machinery to construct a diversion channel around the dam in early August 1990. By the end of the month, the Lonefighters had trenched a canal that began to divert some water. On August 30, the Royal Canadian Mounted Police (RCMP) enforced a provincial injunction against the Lonefighters without incident.

With the Lonefighters removed, Alberta forged ahead with construction, citing public safety concerns over leaving the dam partially built. In the meantime, Alberta had appealed the Federal Court decision to Canada's Supreme Court, which upheld the lower court's view and ordered a new environmental assessment, which led to the creation of a federal review panel that held public hearings regarding the Oldman Dam in the fall of 1991. The panel ultimately recommended that the dam be decommissioned but, in recognition that this would not likely happen, made a series of recommendations it hoped would arrest Alberta's pathological trend of creating new "needs" for water by approving ever more land for irrigation. Even these moderate recommendations weren't successful; after the Oldman Dam was completed in 1992, Alberta approved an irrigation expansion of 14,000 hectares (34,500 acres), which was more land than could be supported even with the new water supply (Glenn 1999).

While the court-ordered environmental assessment was under way, Alberta initiated a public review of its 1931 Water Resources Act. The timing, as Glenn (1999) notes, may have been designed to split the ability of the public to fully participate in both processes. In any case, provincial reforms targeted problems of tying water to the community. Of principal concern was that, because water licenses were approved for specific uses, and appurtenant to the land identified in the original license, it was difficult to transfer water rights to new demands (Percy 2005). Further, the patchwork of regulations used to solve problems, such as the "Instream Objectives" discussed earlier, provided no tools for a systemic departure from the policy norms Alberta had inherited from the federal government. As legal expert David Percy (1996: 228) remarked, by the time Alberta "euthanized" the Water Resources Act, the province's water policies looked like "an accident victim in a cartoon, entirely swathed in bandages to cover individual problems and its total shape visible only in outline."

On April 30, 1996, the provincial government introduced Bill 41,

the Water Act. The Water Act was pushed quickly into law through a special government session held in the summer of 1996 and divorced water from residual notions of the community. That link had been maintained in Alberta's 1931 Water Resources Act, which held a provision in Section 11(1) that allowed the public to apply for water licenses that would keep water in its natural state. It is somewhat unclear what effects (if any) Section 11(1) had on water allocation but the Water Act nevertheless dropped the clause. Opposition members in Alberta's legislative assembly argued that eliminating this clause curtailed the possibility of the public to secure its own interests. To this, the provincial government responded that a newly created "Director" would hold discretionary powers over the public interest and could grant the government a water license for environmental protection (Alberta Hansard 1996). Two decades later, opposition worries were confirmed when the Alberta court upheld the view that only the government could hold licenses for achieving water conservation objectives (Water Conservation Trust of Canada v. Alberta, 2015).

The Water Act was passed in August 1996 when, citing "pressing needs" for water in southern Alberta, the government used a procedural rule to close legislative debate. Heinmiller (2013) has argued that debates over the Water Act were shaped by coalitions that had emerged during the conflict over the Oldman Dam and which polarized environmental coalitions against the agricultural interests in southern Alberta that aligned with government agendas. Indeed, as one member of the government put it, "This is a popular Bill in southern Alberta, and we need it. Unless you live there, unless you know the water shortages that we experience daily in southern Alberta, you cannot appreciate it" (Taylor 1996: 2155). That member, Lorne Taylor (1996: 2156), went on to argue that water be treated as a commodity like any other: "I think we should be able to investigate selling water and making it a natural resource as are oil, gas, minerals, and promoting them and using them to increase economic development in the province." The Water Act came into force in 1999 and disconnected water from earlier notions of the "community" in three ways (Alberta Environment 2003a): (1) It made it possible to transfer water rights without transferring land, which severed the earlier notion that water in place was a type of wealth; (2) it legalized the creation of a water market to transfer water to new areas and new uses, which redefined what counts as a "beneficial use" into increasingly economic terms; and (3) it allowed for watershed plans that could be developed

by persons other than the government, such as multi-stakeholder groups, which removed the synonymy between the "community" and the "government" that provided rationale for Alberta's initial water law.

Two years later, in 2001, problems of water scarcity became acute when Alberta experienced its most severe drought since western settlement. For the first time, total licensed water withdrawals in southern Alberta exceeded the total water available (Alberta Environment 2005). The drought sparked numerous paleoclimatic studies on water variability in Alberta. Using tree rings and lake sediments, these studies revealed that the 20th century had been atypically wet, that surface water availability was declining, and that warming temperatures would likely reduce water availability while increasing demand through higher rates of evapotranspiration (Laird et al. 2003, Sauchyn et al. 2003, Rood et al. 2005, Schindler and Donahue 2006). Alberta Environment (2004b) published a dissenting study based on the instrumental record alone; it claimed that reduced water availability was not part of broader climatic trends. Then, in the shadow cast by the drought, Alberta adopted key reforms to water policy that took advantage of new forms of economic and cultural capital.

Water: Economic and Cultural Capital

One of the most interesting elements of water politics in Alberta is the role and response of local coalitions to Alberta's policy decisions. For instance, as the coalitions that opposed the Oldman Dam evolved, a number of river-keeping groups formed in southern Alberta on the Oldman and Bow Rivers. These groups expanded their partnerships and networks through the 1990s and, when the 2001 drought set in, became key to the Alberta government's response to water scarcity. As Schmidt (2014) details, between 1999 and 2003 the Alberta government developed its Water for Life strategy for shared water governance and, importantly, took these existing networks as the model for its regional Watershed Planning and Advisory Committees (WPACs) (Alberta Environment 2003b). Deploying the cultural capital they had accrued, several of these coalitions seized the opportunity to become WPACs and began to help Alberta shift water management toward the promise of a more flexible and adaptive strategy. In the heightened stakes created by the drought, however, the government also quickly rolled out its first water market.

Alberta's water market was created in 2002, even though southern irrigators and other license holders had rapidly developed and implemented a water-sharing agreement to deal with the drought, with many irrigators voluntarily limiting water withdrawals—the agreement won the 2003 National Water and Energy Conservation Award from the American Irrigation Association. Alberta's water market had been anticipated by economic arguments supporting the conversion of Alberta's historical water licenses into marketable commodities (see Horbulyk and Lo 1998) and requires the Director to adjudicate license transfers according to numerous criteria, such as ensuring no harmful effects on aquatic environments, adequate water quality for households and traditional water users, no public safety threats, and minimal interference with infrastructure arrangements (Alberta Environment 2002). Whether a permanent sale or temporary lease, the level of historical priority assigned to a license is maintained when it is transferred. Due in part to the transaction costs associated with waiting for decisions by the Director, Alberta's water market was not especially active over its first decade (see Bjornlund et al. 2014). Although several large sales took place, the lack of market activity signaled (to some) that the regulatory framework was too strict.

As the drought subsided, the government of Alberta was keen to promote its Water for Life strategy. In 2006, Alberta convened a meeting of the Rosenberg International Forum on Water Policy. There, Dr. Ingram and numerous other international experts assessed Alberta's provincial strategy and offered recommendations for its implementation (Rosenberg International Forum 2007). It was a heady time in Alberta, with its large energy sector surging amidst high oil prices while its Watershed Planning and Advisory Committees (WPACs) were either in formation or, if already established, undertaking two initial tasks. The first was reporting on the state of their watersheds and the second was the development of an integrated management plan. The most well-established WPACs were in Alberta's southern regions and, when they were adopted as the provincial governance model under Water for Life, Alberta continued its tradition of applying policies and solutions that had evolved in the south to the very different biophysical and social contexts that prevailed in the north. By 2011, eleven WPACs were formed across the province to provide informal advice on water planning and management (see figure 1).

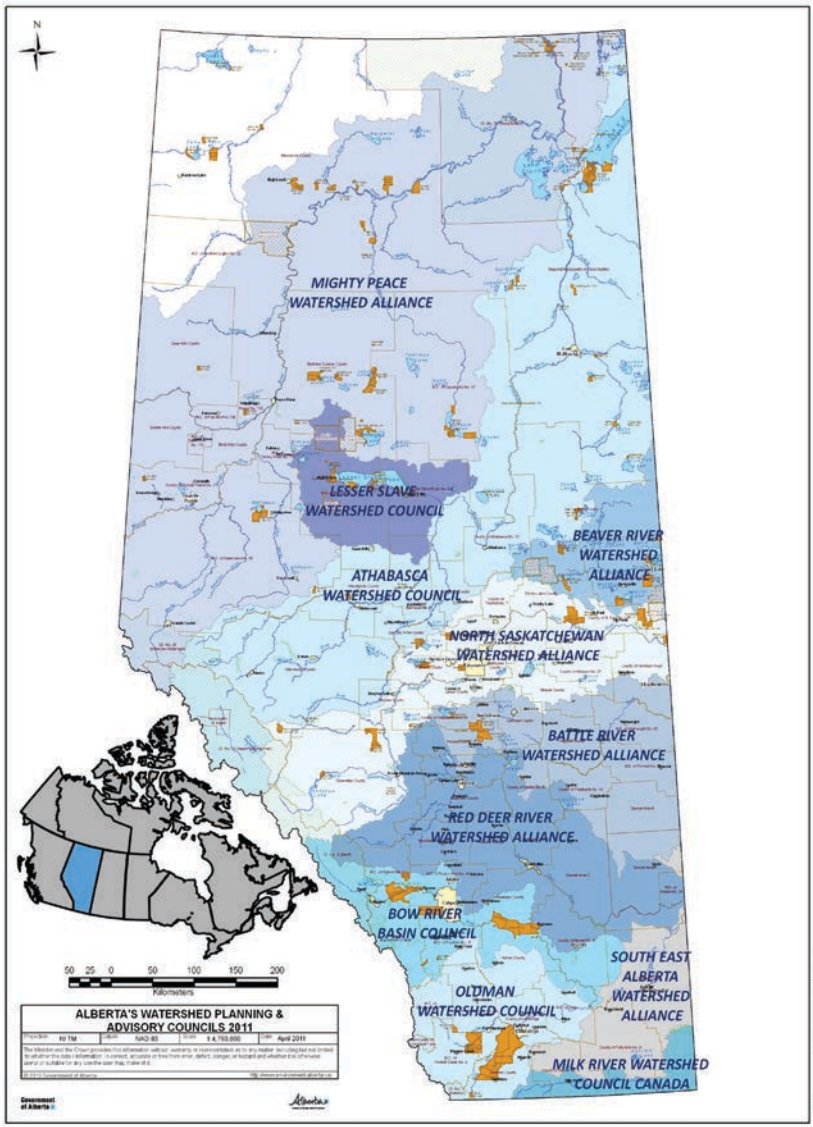

Figure 1. Alberta's watersheds (modified from http://aep.alberta.ca/water/programs-and-services/water-for-life/default.aspx; accessed August 31, 2016).

In 2007, the Alberta Water Council—a provincial stakeholder group that also provides policy advice to provincial government—introduced another element of international discourse by proclaiming that Water for Life formed the basis for a new water ethic in Alberta. Three years

prior, UNESCO had published its "Water and Ethics" series after broaching the topic in the late 1990s (see Priscoli et al. 2004). Alberta's new water ethic sought to connect the original water policy community to its new, shared governance format. As the Alberta Water Council (2007: 27) stated, "From a conservation perspective, promoting the full value of water can encourage a greater conservation ethic if Albertans realize water is not a 'free' and 'unlimited' resource, and that it has value beyond our daily and economic needs." Ultimately, the Alberta Water Council (2007: 29) connected the historical concern with resource conservation with the use of scientific assessments to develop a "productivity ethic" that could support a 30% increase in efficiency and productivity in Alberta's water use.

The incorporation of civil society coalitions into Alberta's new governance ethos was not uniformly positive. First, the independence that coalitions previously enjoyed waned after they became part of formal governance structures. Not only were their recommendations only an informal aspect of procedural decision making, previous funders withdrew support because they did not want to fund government activities. Subsequently, the province changed its funding model from grants that allowed WPACs considerable freedom to contracts that specified deliverables and, consequently, structured governance activities (Schmidt 2014). Second, WPACs frequently lacked participation from First Nations or Metís communities, which was especially notable in the north where resource extraction significantly affects indigenous communities. It was not only histories of injustice that prevented participation but also the terms of the contracts that the Alberta government used to fund WPACs. In some cases, contract clauses declared that the products of governance exercises were the intellectual property of the Alberta government (Matthews and Schmidt 2014). As a result, indigenous participants often did not enter into shared governance arrangements due to the possibility of Traditional Ecological Knowledge becoming the government's intellectual property. This perpetuated the long, structural injustice that arose from the initial dispossession of water for Canadian sovereignty.

By 2009, environmental conflicts in Alberta's energy patch were increasingly difficult to ignore. In addition to oil sands development, mentioned above, the consequences of energy development on water through hydraulic fracturing (aka "fracking") were hotly contested (see Nikiforuk 2015). As part of their response to contests over how best to allocate water across the province, the Alberta government commissioned

reports from three expert groups. The reports—from a special Minister's Advisory Council (2009), the (now defunct) Alberta Water Research Institute (2009), and the Alberta Water Council (2009)—all offered recommendations on how to reduce barriers to water transfers while enhancing ecosystem protection. However, after Alberta's Premier Council on Economic Strategy proposed a provincial Water Authority for overseeing water transfers (Government of Alberta 2011), the government's ostensible goal of improving water allocation was interpreted by environmentalists, unions, and concerned citizens as an attempt to privatize Alberta's water. This led to the creation of another coalition—Our Water Is Not For Sale—that objected to any proposed extension of a re-regulated water market across the province. By 2011, the coalition had produced its own report suggesting alternatives to exclusively market-driven reforms, such as through recovering notions of the public trust and the cultivation of common-pool resource institutions (Schmidt 2011). After the coalition convened a series of public lectures across the province, Alberta suspended its overhaul of water allocation in favor of further public consultations, which were held in 2013.

Water Policy Resignations

In Alberta, international discourse has historically been marshaled to the settler-colonial ends of establishing, preserving, and extending control over land and resources through the dispossession of indigenous peoples. In this context, the reasons for Dr. Ingram's resignation from the province's "world class" environmental monitoring panel highlighted the ongoing, structural exclusion of indigenous peoples. It also highlighted the limitations that institutional design put on forms of scientific knowledge that would enhance understanding of energy development on ecological communities (e.g., Rooney et al. 2012, Kurek et al. 2013). In two senses, then, Alberta's water policies were entangled with the social construction of the "community" that water policies served and which excluded first and foremost indigenous peoples and secondly the ecological systems—what Aldo Leopold (1966) famously called the ecological community—from policy design.

In retrospect, reflecting on Dr. Ingram's resignation also helps to highlight how the social construction of Alberta's "target population" in water policy has been shaped through how the settler community

imagines and legitimates its liberal democracy. Initially, the rejection of private water rights was legitimated by imagining a near synonymy between the settler "community" and the state. The demands of the settler-colonial project for land, and water, continued to structure Alberta's water policy as it shifted from an explicit emphasis on "community" toward governance formats that drafted economic and cultural capital into water policy—namely, through the creation of water markets and the incorporation of civil society coalitions into shared governance programs. However, recent research continues to confirm that the significant and powerful interests of industry are shaping and curtailing the ways in which water governance proceeds, especially in northern Alberta (Brisbois and de Löe 2016). Critically, however, the move from community to capital continues to construct the "target population" of water policy in unjust ways. For instance, a decade after the Oldman Dam was completed the Alberta and Canadian governments finally settled their disputes with the affected First Nations. The agreement included a multi-million-dollar arrangement, but also required that the Piikani First Nations assent to the statement that they had no "prior or superior entitlement to water" (Phare 2009). As Phare (2009) notes, the required relinquishing of indigenous rights is surprising, especially given the lack of historical or legal precedent for recognizing them officially. Speculatively, one wonders whether the out-of-court settlement was designed to prevent such a precedent from potentially being set—and thereby to keep the social construction of the "target population" in Alberta's settler-colonial water policy from reflecting on its trajectory from community to capital. ✣

Note

1. For more information on Canada's Western Land Grants system, see http://www.bac-lac.gc.ca/eng/discover/land/Pages/land-records.aspx.

Acknowledgments

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