



Social license to operate: Not a proxy for accountability in water governance



Natasha Overduin*, Michele-Lee Moore

University of Victoria, Canada

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ABSTRACT

With the emergence of more collaborative, watershed governance arrangements and the engagement of various actors in decision-making processes, new questions emerge about the potential roles for these organizations and agencies in both upholding accountability, and in being held accountable. Therefore, this study explores the intersection between alternative collaborative watershed governance approaches, and the simultaneous emergence of the concept of social license as an accountability instrument in relation to water governance. Based on an empirical analysis of a case study in southeast British Columbia, where water quality contamination is primarily the result of coal mining, this study seeks to: (1) examine how social license is understood by a range of watershed actors; (2) better understand whether social license may be useful as a watershed-based or community accountability instrument as new collaborative modes of watershed governance emerge; and, (3) explore how social license may be enforced or enabled. Findings show how industry efforts to earn social license have created benefits, such as enabling community-based water monitoring, thereby building capacity for deeper community engagement in governance processes and a greater ability for the community to uphold accountability. However, we confirm that social license is not a proxy or silver bullet for enhancing accountability in collaborative watershed governance. Our findings reveal four specific limitations regarding the use of social license as a principle for accountability in collaborative watershed governance.

1. Introduction

“Social license to operate” or “social license” is becoming widely used in resource extraction contexts such as mining, where interests range from empowering communities to ensuring mining remains viable (Michell and McManus, 2013; Owen and Kemp, 2013; Bice, 2014; Bice and Moffat, 2014). Its definition is contested, in part because it remains an informal form of permission about resource extraction, unlike a regulatory license (Bice, 2014). Some scholars indicate that a social license refers to community acceptance or approval of a project and its social, cultural, and ecological impacts (Gunningham et al., 2004; Thomson and Boutilier, 2011). Others assert that social license may just indicate reluctant acceptance (Owen and Kemp, 2013; Owen, 2016). Dare et al. (2014) suggest that a ‘social license continuum,’ which involves multiple and competing social licenses, may better reflect reality given the diverse number of interests bound up within a social license.

Regardless of the definition employed, the concept points industry towards the need to go beyond regulatory compliance, and to behave in a transparent and responsible manner, in order to meet community expectations and earn trust and legitimacy (Gunningham et al., 2004; Thomson and Boutilier, 2011; Harvey and Bice, 2014). It remains in

question whether this “beyond compliance” behavior actually happens, or whether the concept becomes jargon used by powerful self-regulating industry actors to set their own terms of conduct (Newell, 2005; Coumans, 2011; Owen and Kemp, 2013; Brueckner et al., 2014). Social license implies, at least, that an accountability relationship can exist directly between a private actor and a community. For that reason, it is increasingly used by industry, government, and community actors alike (e.g. Mason, 2012; Gerson, 2014; Hussain, 2014; McCarthy, 2015); and particularly, in discussions about the impacts of resource extraction on water (e.g. Shephard and Martin, 2008; Prno and Slocombe, 2012; Bunnell, 2013; Goss et al., 2015).

Discussions about social license and water have emerged in parallel to ongoing efforts within water governance scholarship to explore the role of different actors, including private industry, in collaborative arrangements at the watershed or river basin scale. Strong trends in watershed governance scholarship suggest ‘good governance’ may be achieved through devolved, collaborative arrangements where decision-making authority, responsibility, transparency, and accountability for water is shared (UNESCO, 2003; UNDP, 2004; Lautze et al., 2011; Holley et al., 2012; de Loë, 2015; Renzetti and Dupont, 2017). Typically, this argues in favour of re-scaling governance to watershed scales so that governance aligns with ecological boundaries, as opposed to

* Corresponding author.

E-mail address: natasha.overduin@gmail.com (N. Overduin).

arbitrary political borders (Norman et al., 2012), and where diverse actors can be included. This idea of a single scalar “fix” has been criticized (Cohen and Davidson, 2011; Davidson and de Loë, 2014). Yet, watersheds remain the primary site in which alternative, collaborative approaches to governing are being organized, and these arrangements – at times – include industry actors (e.g. Brandes et al., 2014; Hunter et al., 2014; Rolston, 2015; Renzetti and Dupont, 2017).

With the growing interest in alternative, collaborative watershed governance approaches, and the simultaneous arrival of the concept of social license in relation to water, questions arise about their intersection in theory and in practice. The roles of private industry actors are highlighted by both discussions. Consideration is needed of whether and how elements of good watershed governance – including responsibility, transparency, and accountability – relate to industry involvement, and the possible role for a social license. Despite the two parallel trends, substantive theoretical analyses of the applied logic of social license and the notion of accountability in water governance have not kept pace. Therefore, the goals of this study are to: (1) examine how social license is used by a range of watershed actors, not just industry; (2) better understand whether social license may be useful as a watershed-based or community accountability instrument as new collaborative modes of watershed governance develop; and, (3) explore how it may be enforced or enabled.

To address the research question, this study investigates a case in British Columbia, Canada, where water quality challenges are a direct result of ongoing coal mining activities. A private multinational company is actively engaging with the community to deliberately maintain a social license, and to collaborate on new approaches to water quality management. Based on our findings, we argue that social license is not simply a “buzzword” that is being used by powerful companies to gloss over conflicts, as some scholars have proposed (e.g. Owen and Kemp, 2013). Rather, the private actor’s efforts to secure social license in this case is more complex. Activities associated with building social license have created benefits, such as enabling community-based water monitoring, thereby building capacity for deeper community engagement in governance processes and a greater ability for the community to uphold accountability. However, we confirm that social license is not a proxy or silver bullet for enhancing accountability in collaborative watershed governance. We claim that it does not ultimately satisfy accountability demands of a number of different actors, including the indigenous nation in whose traditional territory the mining activities occur. Specifically, four limitations emerged in this study regarding the use of social license as a principle for accountability in collaborative watershed governance:

- (1) Despite advances within scholarly circles regarding the measurement of social license that help to create a rigorous instrument, in practice, considerable ambiguity remains about what the concept means or how to determine its presence or absence;
- (2) The use of informal accountability approaches introduces a paradox: although viewed in scholarship as a self-regulatory instrument, participants in this study pointed to the need for a much stronger oversight role for governments if social license was to be meaningful;
- (3) Communities are comprised of a heterogeneous set of actors that do not act as a single entity. In the case study watershed, as is likely true for many watersheds, the various actors are not formally organized with a focus on water governance. Consequently, roles and responsibilities for the enforcement of social license are unclear, raising questions about the viability of using social license as a tool for community-led accountability of industry; and,
- (4) Within the Canadian context of this case study, an informal accountability mechanism adds a layer of complexity when it arises in a legal landscape that has clear requirements for consultation, accommodation, and consent of indigenous nations.

In spite of some derived positive outcomes, we conclude that social license provides little assurance for greater accountability in governance, or improved ecological outcomes. Social license also does not translate to a greater likelihood that private industry actors will be accountable collaborators within alternative, watershed-based governance arrangements. Findings highlight the desire by study participants for greater accountability of both the provincial government and private actors in water decision-making. This indicates that the usage of social license may represent the initial stages of a search for new principles or tools to begin to address accountability gaps, rather than the final solution.

2. Social license and watershed governance accountability

Accountability is the cornerstone companion to decision-making authority and power. It intends to ensure that decision-makers pursue public goals equitably and transparently (Bovens, 2007; Mashaw, 2006; Wallington and Lawrence, 2009). Accountability involves a specific social relationship between actors, where an actor has the obligation to explain and to justify conduct to another actor (Bovens, 2007). Robust accountability relationships involve a “process or mechanism through which actors can pose questions, pass judgement, and impose formal or informal sanctions, which in turn have consequences” (Bovens, 2007, p. 450). Strong enforcing actors (including parliaments, ombudsmen, and auditors, in Western vertical governance systems) are thus a necessity in a functioning system. Transparency – the “public disclosure of key decisions and the information needed to assess those decisions” (McAllister, 2012, p. 13) – is also a basic requisite (Bovens, 2007).

Collaborative watershed governance involve various actors in decision-making processes, leading to questions about their potential roles in both upholding accountability, and in being held accountable (Black, 2008; Gunningham, 2009; Holley, 2010; Holley et al., 2012; Brandes et al., 2014; van der Heijden, 2014; Renzetti and Dupont, 2017). Previous water governance scholarship has highlighted the variation in actors’ resources (social capital, time, financial), capacity, and commitment to administer such formal accountability relationships. Scholarship also reveals active resistance from Western governments for enabling new accountability roles. For example, power asymmetries and structural barriers created through ongoing colonization processes in Canada exclude indigenous nations from meaningful roles in governance processes (e.g. Walkem, 2007; Booth and Skelton, 2011; Simms et al., 2016). In another example, community-based water groups face challenges in accessing decision-makers, sharing their information, and influencing water decisions and outcomes (Conrad and Hilchey, 2011). In essence, upholding accountability implies the need for a certain amount of formal organization and authority. In many watersheds, this organization or authority may not be present: or, it may be present but remain unacknowledged by colonial governments.

Existing options in Canada for holding industry actors to account for water quality impacts mainly lie within environmental assessment processes. Evidence indicates that such processes are not meeting community expectations, and are fraught with contestation and conflict (e.g., Young, 2008; Gibson et al., 2010; Haddock, 2010; Booth and Skelton, 2011; Archibald et al., 2012; Auditor General of BC, 2016; Author et al., 2016). Assessment processes are typically concentrated on one-time events of developing new projects, and predicting the environmental impacts. They are typically less concerned with ongoing operations, cumulative effects of multiple projects on a landscape, or historical environmental degradation (Gunn and Noble, 2011). Thus, impact assessment tools are not sufficient long-term accountability instruments.

Scholars have documented a growing sense of public mistrust in government decision-making processes and oversight on resource extraction (Biber, 2011; Olszynski, 2014). Industries have increasing onus to demonstrate that they are acting in good faith and benefiting public interest, or, earning social license (Author et al., 2016). Yet,

historically, private actors' are criticized for creating 'accountability deficits' as a result of their strategic exertion of economic clout with governments, avoidance of personal liability, and ability to move operations across borders to evade responsibility for the detrimental impacts of their operations (Blumberg, 2000; Hall and Lobina, 2007; Benner et al., 2004; Bovaird, 2004; Koenig-Archibugi, 2004; Chan and Pattberg, 2008; Carmin and Agyeman, 2011; Hahn, 2011). There is a clear need to better understand how social license may be an approach or tool to bolster accountability, especially within emerging, collaborative watershed governance arrangements.

2.1. Emerging concerns with the 'social license' concept

Four immediate concerns with the validity of the social license concept are recognized, each of which are discussed in turn below, including: (i) social license's troubling resemblance to flawed corporate social responsibility (CSR) rhetoric; (ii) the challenge of measuring the amount of community support needed to secure a license; (iii) a lack of legal consequences to not obtaining social license, and; (iv) the erroneous tendency to conflate social license with free, prior, and informed consent, a term with its own legal standing in governance. In short, existing literature suggests that skepticism around the value of social license may be warranted – and further empirical research is needed to unpack how the concept is understood and applied at the watershed scale.

First, although social license raises new questions about community accountability mechanisms in watershed governance, the term has a scholarly lineage related to CSR (Hilson and Murck, 2000; Newell, 2005; Hilson, 2012; Morrison, 2014). CSR may range from human resource and labour policies, corporate governance, and overall sustainability strategies. Social license is understood to be the implementation and operationalization of an overarching CSR strategy (Bice, 2014). Some scholars claim that seeking social license is another version of standard risk management because without social support, private actors may face civil lawsuits, or protests. Such social unrest can lead to delays or withdrawals of regulatory approval, with subsequent financial costs (Franks et al., 2014). From this perspective, social license is not about actual sustainability or improving accountability and governance, but about the "bottom line" and reducing overt opposition to industrial activity (Owen and Kemp, 2013).

Research examining corporate sustainability reports indicates that private actors tend to assume that social license is already possessed, and must simply be maintained. For example, industry reports typically did not discuss the consequences of failing to acquire social license, nor provide evidence of how social license was acquired (Parsons and Moffat, 2014). In short, existing research leaves the strong impression that social license is simply an extension of the disingenuous CSR approaches – "a movement firmly controlled by the corporations whose abuses it was meant to restrain" (Coumans, 2011, p. 45).

Second, it remains unclear how to measure community support, or how to determine what level of community support is required to confirm a social license has been issued (Prno and Slocombe, 2012; Rooney et al., 2014; Simpson, 2014). Though some practitioners suggest using stakeholder questionnaires (e.g., Boutilier and Thomson, 2011; Black, 2013), these management tools do not deal with the complexities of community dynamics, and may be prone to bias. For example, if majority support suffices, this raises the challenge of how minority, marginalized, and dissenting views can be protected (Schlosberg, 2007; Prno and Slocombe, 2012). Resolving this challenge is particularly important within a collaborative governance context where watershed actors, along with industry, sit at a shared decision-making table. Parsons and Moffat (2014) illustrate how, in mining, power dynamics tend to favour industries' short-term economic gains over those affected by the long-term environmental, cultural, and spiritual impacts of the activity. Their discourse analysis demonstrated that indigenous peoples were severely overlooked in corporate

sustainability reports, mentioned only once in the 62 reports analyzed – raising questions about social license according to whom.

A third identified concern with the social license concept is its limited scope or attention towards enforcement. According to Bovens' definition of accountability, an effective accountability relationship requires a strong enforcing agent. In the case of social license, communities' sanctioning power lies largely in their ability to 'name and shame,' cause reputational damage, and engage in protests and conflict within existing water governance systems (e.g., Bebbington and Bury, 2009). However, for communities, 'naming and shaming' arguably requires sophistication and capacity to create national or even global reach around their specific local issue (e.g., a water quality problem), which may not always exist, especially in rural watersheds where grassroots initiatives are often main drivers. Owen and Kemp (2013) assert that if companies use social license only to mask an expectations gap with community, then individuals, stewardship groups, or NGOs can only protest or resist this industry approach. Social license then represents a "crude form of 'negative governance'" (p. 31), whereby it is easier to state when the license is *absent* rather than when it is present. Creating circumstances where protest and resistance are the only accountability mechanisms available is unacceptable in both conventional and emerging collaborative governance approaches.

A fourth problematic issue with social license is its tendency to ignore 'free, prior, and informed consent' (FPIC). In short, FPIC embodies the right for a community to be fully informed to make decisions about the acceptability (or not) of resource-related activities – including the ability to withhold consent (i.e., say no) to a proposed development (Slack, 2009; Vanclay and Esteves, 2011; Rodhouse and Vanclay, 2016). Internationally, FPIC has a long legal history and is embedded in the UN Declaration on the Rights of Indigenous Peoples (UNDRIP, 2008; and see Vanclay and Esteves, 2011). The World Bank (2003) definition of social license also involves FPIC. Yet, the notion of consent tends to be absent from industry discourse (Bice, 2014; Moffat and Bice, 2014; Morrison, 2014). Legal connotations of consent are often resisted by companies and governments who fear losing access to areas of operation, or extending a veto power over development to a small group of individuals (Slack, 2009; Vanclay and Esteves, 2011; Haalboom, 2012; Boutilier, 2014). Private actors may also argue that they do not recognize international indigenous rights or title in a domestic context where those rights and title are not confirmed, or go unrecognized by the state (Haalboom, 2012; Hanna and Vanclay, 2013).

The relationship between social license and the legal right to free, prior, and informed consent, along with indigenous rights, particularly in the Canadian context, remains under-examined in the literature and we identify a number of important gaps. First, acquiring FPIC requires that communities are viewed as equal partners, and implies they must have adequate resources, information, and time to assess their interests and make a decision (Vanclay and Esteves, 2011). It remains unclear how social license fulfills these criteria. Second, considerable ambiguity arises around whether social license establishes an accountability relationship that enables community actors to directly influence industry's management decisions. Finally, little analysis is available about how social license and accountability relationships manifest in a context where indigenous rights and title continue to be resisted by the state: does social license present an opportunity or constitute yet another barrier for decolonizing water governance?

In sum, the problems associated with social license are intensified in circumstances where shifts towards more collaborative watershed governance arrangements are emerging, and we suggest there is a need to further explore how social license is understood and applied. It remains unclear whether its inherent tensions may be overcome in order to fulfill its theoretical potential as a community-based accountability instrument that is well-suited to collaborative watershed governance. Although research examines how industry is using the concept of social license, there is no review about how the broader range of watershed actors talks about social license. Moreover, none of the literature

empirically examines whether ecological outcomes are improved as a result of social license activities or accountability relationships. In particular, the scholarship has not yet empirically explored how social license may be enforced or enabled by a range of watershed actors. There has been little exploration of what the relationship between FPIC and social license looks like in the context of watershed degradation and ongoing governance processes (for an exception see [Syn, 2014](#)).

3. Methods for data collection

This case study was part of a broader investigation into the role of private actors in watershed governance in British Columbia, Canada. Data were collected through a case study methodology ([Yin, 2009](#); [Baxter, 2010](#)), and analyzed with qualitative data analysis approaches, including the cycle of coding, comparison, and categorization informed by [Strauss and Corbin \(1990\)](#), [Dey \(1993\)](#), and [Charmaz \(2008\)](#). The social license theme emerged as a key phenomenon through an iterative coding process, and warranted further exploration. The results are based on 23 semi-structured interviews conducted from June–November 2014. Participants included individuals who participate in water management and water decision-making processes in the watershed, such as: small business owners from the fishing and tourism sectors; staff of local community-based environmental and water stewardship groups including a citizen-science, watershed stewardship organization; provincial government regulators, scientists, and researchers from natural resource sector departments; consultants participating in multi-actor processes; staff of the Ktunaxa Nation, including senior scientific and technical advisors who provide advice to the Nation and participate in regulatory initiatives on the Nation's behalf; local government politicians and staff (e.g., planning staff); and the mining Company's staff located both locally and at corporate headquarters. Interview data was supplemented by document analysis of development plans, reports, and scientific research; and attendance at local conferences.

3.1. Case study context

This research examines water governance processes that occur in British Columbia's Elk River watershed, located in southeast B.C. The watershed is an important part of the Ktunaxa Nation's traditional territory (Ktunaxa *?amak?is*). As well, a non-indigenous population of roughly 14,000 lives in the watershed, primarily in three small municipalities. The watershed is the location of five mountaintop coal mines, owned and operated by one multi-national mining company (herein referred to as "the Company"). Historically, smaller, separate private actors operated these mines, but now the Company represents the single largest private actor operating within the watershed, making it a meaningful focal point for exploring the phenomenon of social license in relationship to accountability in water governance regimes.

As a result of decades of mining, concentrations of selenium (Se) and other contaminants in the Elk River watershed have been found to exceed safe levels for aquatic life (e.g., [Lemly, 2014](#)) and the provincial water quality guidelines of 2 µg/L ([Province of British Columbia, 2001](#)). Levels of Se found in tributaries and in one drinking water well have been measured at concentrations ranging from 5 to 113 µg/L ([Hauer and Sexton, 2013](#); [Lemly, 2014](#)). Se is toxic to aquatic life in elevated amounts and has been found to cause reproductive failure and deformities in developing embryos of fish and aquatic birds (e.g. [McDonald, 2009](#)). The Elk River and its tributaries provide important habitat for the culturally valued and at-risk trout species, which heightens water quality concerns (e.g. [Hauer and Sexton, 2013](#); [Lemly, 2014](#)).

At the same time, the mines provide significant regional employment, and municipal tax revenue, directly employing roughly 4000 people ([Laurie, 2013](#)). According to Environmental Impact Assessment documents at the time of research (as well as personal communications), several major applications were under development to expand

the Company's coal extraction activities in the watershed.

Three notable initiatives related to water quality and watershed governance were underway in the Elk Valley at the time of research:

- First, in 2013, the Province of B.C. issued a Ministerial Order requiring the Company to develop an Elk Valley Water Quality Plan (Water Quality Plan) within one year, which was to include short, medium, and long term remediation plans, and a plan to prevent future contamination. The Water Quality Plan was required to include a Technical Advisory Committee (TAC), intended to provide oversight with a multi-sector group of technical experts, including experts from the Ktunaxa Nation.
- Second, a collaborative, multi-stakeholder Cumulative Effects Management Framework was initiated by the Ktunaxa Nation as a condition requirement in an Environmental Assessment Process in 2012, roughly a year before the Ministerial Order required a water quality plan.
- Third, a community-based citizen-science watershed stewardship group leads watershed-scale research and management solutions initiatives, such as community-based water monitoring, a valley-bottom assessment (akin to a watershed report card), and a flood solutions strategy (e.g. [McPherson et al., 2014](#)). This group partners with a range of local actors, including local governments, and the Company. The different water-related activities in the watershed occur at multiple scales and do not necessarily integrate or overlap.

More recently, the B.C. Auditor General (2016) released evidence asserting that insufficient regulatory oversight and ineffective action had been taken regarding mining activities in B.C. in general, and the Elk Valley specifically.

4. Results and discussion

In the following section, we review empirical evidence that establishes how a range of actors engaged in watershed decision-making within the Elk Valley perceived what the process of seeking a social license involves, including how it is operationalized. We then present findings demonstrating the intangible nature of social license and the challenges actors perceived in defining or measuring it. In turn, we provide evidence suggesting that a strong provincial government presence is not only important to collaborative watershed governance, but may be an important enabling condition for industry actors to secure social license. Finally, we note the participants' concerns and ambiguity around who enforces the license. The findings highlight how, despite positive relationships between the Company and community actors that have stemmed from social license-seeking activities, actors across the watershed remain skeptical that social license efforts will equate to improved ecological outcomes, and thus, does not actually lead to "beyond compliance" standards. During the study and at the time of this publication, water quality issues remained unresolved. Moreover, social license does not translate to a willingness to engage meaningfully in collaborative decision-making, nor does social license address the legal requirements regarding consultation and consent with indigenous nations.

4.1. Obtaining social license

As a starting point, findings revealed by community members and local government participants illustrate primarily four mechanisms in which the Company demonstrated "good corporate citizenship" and sought to obtain social license.

- (i) Responsive, honest communication and demonstrated willingness to accommodate local concerns

Since selenium (Se) contamination of water was a known problem

prior to the Ministerial Order to create a water quality management plan, the Company hosted a number of community engagement meetings to provide opportunities for residents to ask questions and voice concerns about mining. In these meetings and through other outreach activities, the Company acknowledged the water quality issues that they inherited from previous mine owners, being frank about the link between mining and water quality contamination, and explaining mitigation efforts. According to one Company interviewee, “We recognized, for our continued operation, that [a lack of engaging] represented a social risk, because if you weren’t being open and transparent – we ran the danger of people thinking we were hiding something, and that’s just not good management.”

Participants who live and work in the watershed reflected on the Company’s approach, describing their appreciation of the Company’s prompt responsiveness to e-mails and phone-calls. Additionally, the Company’s willingness to follow specific community suggestions to make information about water quality management readily available in a variety of formats – such as at information stalls at local events, the shopping mall – was widely recognized.

These steps were very basic in terms of establishing a relationship, but indicate that the Company both took initiative to engage community, and turned community suggestions into a reality. Consequently, community interviewees explained that, at the time of this study, they “felt heard” and “listened to” and like their “input was valued.” This finding illustrates how this particular Company demonstrated that it was seeking social license from the community, and how simple it may be for a private actor to satisfy community concerns and set the foundation for what could be a collaborative engagement in the watershed.

(ii) Demonstrating commitment on finding solutions and upholding corporate environmental sustainability goals

Prior to the Ministerial Order, the Company voluntarily convened an independent advisory research panel to investigate selenium problems in the watershed, which sought to provide “independent expert advice and assistance by producing a strategic plan for the sustainable management of selenium” (*Strategic Advisory Panel, 2010*) at the mine operations. Additionally, the Company purchased conservation lands to help achieve its own CSR biodiversity goals, which, although not directly related to Se remediation, were understood to support overall ecological health in the watershed. Finally, participants noted that the Company provided operational funding for the Elk Valley Cumulative Effects Management Framework initiative. For participants in this study, these actions were not a distraction from the water quality issues; rather, it helped build trust that the Company’s promises, such as achieving “net positive change in biodiversity” constituted more than “just buzzwords” in a strategic plan. In the view of one fisheries biologist, “they’re walking the talk.”

(iii) “Giving back” to the community

Local government and community interviewees also referred to the Company’s financial contributions to community organizations as evidence of their seeking social license. A local mayor stated, “They fund a lot of activities in various communities in the Elk Valley and I think that’s a big part of trying to maintain their social license and being good corporate community citizens and members.”

(iv) Partnership with community-based organizations on stewardship, research, and education programs

The Company developed a strong partnership with the local community-based watershed stewardship group by participating on the group’s Board of Directors, providing funding, sharing watershed LiDAR data and information, and partnering on various projects, including monitoring, research, and education initiatives. The community-based

watershed group leads activities such as: citizen-science community-based water monitoring, community outreach and education, and a number of solutions-oriented watershed management projects including valley-bottom mapping, and a flood solutions strategy for the Elk River. As a result of the partnership, members of the community-based group saw an increase in their overall capacity and scope of work, as explained by one staff member of the organization:

“We’ve been lucky, to have some [Company] investment in what we’ve done and what we’ve been able to achieve, because without it, we would not be where we are right now. They give us money, no strings attached. They just write the cheque, and say: Thank you for your good work. Done.”

As a result of these efforts, local government staff recognized, at the time of research, that the community group had developed useful management tools. For example, a local government planner acknowledged how the group’s state-of-the-watershed report positively influenced the revising of a local Official Community Plan to include development protection areas for riparian areas. Moreover, because of their perceived expertise and connection to the community, the group also actively participates in the collaborative, industry-supported Cumulative Effects Framework Working Group, where they share their knowledge and aim to represent a community ‘water voice.’

As a consequence of these efforts to seek social license, more than 90% of participants described relations between the Company and the community as positive, despite ongoing water quality contamination. Through the mechanisms described above, conflict around ongoing mining was minimal, and had been reduced from when the mine operations were owned by smaller, separate private actors. One ENGO member commented:

“We’re lucky here to have [the Company], I wouldn’t want to be a community group trying to do [environment stewardship and conservation] work with a different kind of company. There’s a lot of less responsible mining companies out there that aren’t necessarily willing to be a good corporate citizen like [they] try to be.”

Existing critical scholarship tends to paint a monochromatic picture of industry efforts to seek social license as a sole means for limiting community resistance to carry out business as usual (e.g. *Haalboom, 2012*). Yet, the activities and relationships described here are indicative of the theoretical promise of social license to form accountability relationships between a private actor and those affected by mining operations. Although one interpretation of the data is that the company has “bought” community support through activities that seek social license, this interpretation would entirely neglect the participants’ perceptions that substantive community capacity and expertise has been developed as a direct result of the activities. The positive impact for the community to engage in watershed stewardship and have a formal voice in key water governance processes (such as the development of the Cumulative Effects Framework) were not to be underestimated, according to participants. The findings also illustrate how the Company was perceived as “more responsible” than others, especially compared to previous mine operators, thereby indicating that social license may be a relative concept. Minimal engagement activities may be sufficient in the short-term, but may not be adequate if other private actors entered the watershed, collaborated, and raised the bar, or if Se contamination still persists.

4.2. Too intangible to measure

Although the data highlighted four key mechanisms by which the Company was *seeking* a social license amongst Elk Valley community members, participants articulated less certainty about whether or not a social license was actually *secured*. This led some participants to question the value of the concept. For instance, three provincial government interviewees acknowledged their uncertainty, with one individual

stating, “How do you know when a mining company achieves social license? You can’t. I can’t see how you would ever know that. What would you even measure it with?” Similarly, another provincial government participant conceded that the Province doesn’t have a “standard definition” of social license. The interviewee suggested, social license might have some “defining principles,” but ultimately “what it might take to have the license of multiple actors in one given area might be different than what it takes in a different area.” Another government interviewee indicated that “seeing discontent from certain groups, whether its ENGOs or NGOs, or just the public, writing letters to the ministers” is a signal that social license is *not* earned. However, this interviewee acknowledged,

When there’s hot spots in the province it (social license) generally corresponds quite well, but I think that in many places, the public and ENGOs can be quite quiet. That doesn’t mean that there aren’t problems to deal with, or that we’re conducting natural resource management in a way that meets the expectations of the people of British Columbia – which we’re supposed to be doing on their behalf.

In other words, participants indicated that conflict can be a signal that a social license has not been achieved, but an *absence* of conflict, or ‘minimal community resistance’ does not equate to a social license. This finding provides empirical support for arguments put forward by Morrison (2014), as well as Owen and Kemp (2013) in their discussions about negative governance instruments. At the same time, participants also suggested that social license can be fragile, impermanent, and rapidly lost. A community member explained how rising Se concentrations in the watershed are “putting the social license to operate, and also putting the provincial government, in a very precarious position.”

This data illustrates how determination of community approval of a social license, or a Company’s operations, remains a considerable challenge. Despite scholarly and industry efforts to create tools for determining community support for a company or operation (e.g. Black 2013; Thomson and Boutilier, 2011), these tools were not well-known amongst practitioners in this study. Moreover, as discussed further below, these tools do not deal with the complex nuances within communities themselves.

4.3. The role of government in legitimizing social license: A formal role for an informal mechanism?

Data revealed suggestions from a number of community and government interviewees that the provincial government – not only private actors – also needs to contribute to the social license. A majority of participants described the provincial government as “unresponsive” in communications, and “invisible” in the watershed, claiming that the provincial staff seemed under-resourced, and generally lacked understanding of the local context. In the words of one participant – expressing a perception shared by five other local watershed actors – “[The Province] has been totally absent from [the water quality contamination] issue.” A senior government interviewee confirmed this trend, explaining how “I hear all the time that ‘government needs to be acting within their social license.’”

Interviewees also questioned the provincial government’s enforcement and oversight capacity of mining operations, and whether this was rigorous enough to protect water in the long-term. For example, a staff person of the community-based water group explained, “I put a lot of responsibility on the legislated authority for the problem we’re in. Because how was it that the government, the ‘monitors’, the people responsible for the permits, didn’t blow the whistle on these guys sooner – like, when water quality went over [the Se guideline]?”

The findings are indicative of a more general absence of trust in the provincial government, and in the formal processes intended to provide oversight. For example, another participant expressed the view that “I have more faith in [the Company] than I do the provincial government:

but it is still that fox in the henhouse scenario.”

A senior provincial government interviewee explained that although it “sounds like a no brainer” for Ministry staff to be more present in the watershed, government departments are highly budget and staff constrained. The interviewee also explained that the Ministry is aware of community desire for greater government presence. When Ministry staff did visit the watershed to participate in a community meeting about water quality contamination, they heard from community members:

“The Ministry isn’t usually at these meetings, it’s usually [the Company], giving us their spiel and we have no choice but to... there’s no other opinion or point of view. Or accountability. We need to see the Ministry at more of these meetings.”

These patterns in the data suggests that the lack of formal enforcement or presence from the Province made it difficult for any of the participants to confirm whether social license was obtained, or even could be obtained. An absence of provincial government may motivate community groups or members to require social license; and to independently develop additional tools to enhance accountability, such as community-based water monitoring. The data also shows how participants desire greater provincial involvement, and that rigorous government oversight and enforcement may be needed to legitimize private actors’ efforts to acquire social license.

Interestingly, community mistrust existed despite the creation of a provincial oversight body. As previously described, the Provincially-ordered Water Quality Plan process included the creation of a multi-agency technical advisory committee (TAC), chaired by the Province. The purpose of TAC was, according to a provincial government interviewee, to take the science “out of [the Company’s] realm” and into a more objective scientific panel. In other words, the Company’s voluntary approaches to managing water quality, such as the Se Panel and community dialogues, were not considered by the Province to be sufficient for addressing water quality concerns. Yet, participants who observed or participated in TAC noted three major problems with the process that weakened its oversight function.

First, TAC was a largely closed, non-public process. Documents were made available online, but were not easily decipherable by the average non-scientific expert. As a result, most of the non-expert participants in this study were either not aware of TAC’s existence, or were only vaguely aware of its purpose: it did not serve to alleviate perceptions of mistrust of the provincial government or the Company, or meet the principles of transparency important to water governance. Second, the TAC process was viewed by a participating senior scientist as being unduly influenced by the Company, who was perceived to be resistant to cooperation with other TAC members:

“[the Company] pushed back hard on many of the details we saw as essential to make, for instance, the Tributary Protection program effective. So, they fought back on the definition of unimpaired versus impaired streams, and geographic scope, and timing of getting this work done.”

Therefore, despite other data indicating a positive relationship with industry, in this forum, the intentions of the Company were perceived more skeptically, at least by some participants. Third, two interviewees participating in the TAC suggested that the provincial government did not include the appropriate technical experts in the process who could provide the adequate knowledge and oversight to the process.

These findings highlight the challenges that can arise if a company demonstrates commitment to community relationships in some activities, but then works to exert power and control in other activities led by regulators. Without consistency, the Company’s social license-seeking activities do little more than boost reputation, without achieving true accountability. Moreover, the findings raise new insights about the nature of potential future collaborative watershed governance arrangements: namely, that an enabling condition for securing

social license involves a strong and trustworthy government enforcement presence, which supports claims by Newell (2005), Morrison (2014), and Brueckner et al. (2014). The notion that government is still the ultimate enforcer of both the formal and informal accountability mechanisms is counterintuitive to the notions of devolution and subsidiarity associated with the watershed governance concept (Renzetti and Dupont, 2017).

4.4. Does not guarantee ecological improvements

Activities associated with seeking social license were not found to extend to providing other actors with real opportunity to influence mine development decision-making, or mine operations management, in ways that improved water quality. The starkest example raised by community participants involves the Company's efforts to expand mining activities into new areas, using some of the same mining practices that caused the original water quality contamination. One ENGO staff member expressed concerns about mine expansions, and referred to the conclusions drawn by the collaborative expert Se Panel in 2010 which critically explored how Se could be managed in the watershed. The interviewee questioned whether the Company's approach to managing water quality had really changed:

... this expert's panel report says mining practices need to change so you don't create the same problem you are trying to deal with from all the historical mining... is that happening? That's the biggest question. Is all the new mining that you're doing now, are you doing it any differently, or is it going to cause the same problems in the future? Can it be done in a way that is going to reduce the Se levels?

One senior scientist claimed that the Company was resistant to making substantial changes needed to protect the watershed and enhance accountability. The individual provided several examples of how the Company resisted changing management practices, particularly when it came to meeting the indigenous nation's expectations. For instance, the Company "pushed back" on a tributary management program the Ktunaxa Nation articulated as necessary to protecting valuable ecosystems. Furthermore, the Nation proposed that an independent monitoring organization was needed to ensure scientific credibility and to provide objective and trustworthy recommendations about mining practices and development decisions. A TAC member explained how there was considerable "resistance" from both government and the Company on this and other proposals, and that the Company was "dragged kicking and screaming" into some of the discussions about water management actions that the Nation deemed necessary and important. This data reveals again, the inconsistency in which the Company engaged in the different water governance processes, and how it sought social license according to community feedback in some processes, and resisted it in others. The findings also reveal that although SLO was being sought through some of the Company's activities, true collaborative watershed governance was not occurring.

Given the provincial order to remediate water quality, ecological improvements could be considered necessary for securing social license. However, our findings suggest that while activities to build social license may lead to reduced conflict and improved relations between some community and private actors, it may be only superficially connected to actual improved water quality or ecological outcomes. Moreover, participants recognized that relationships were more tense between the Company and those actors in the watershed who pushed hard for greater protection of ecosystems – in this case, particularly the Ktunaxa Nation. Findings from Prno's (2013) case study are indicative of a similar phenomenon. In Prno's study, stakeholders and the corporation located nearby the mine operations worked together, and trust and cooperation were established. However, further-downstream water users were continuously affected by water quality contamination, even sparking litigation. Therein lies an ongoing water governance challenge – finding accountability mechanisms that lead to demonstrable

improvements in both the social aspects to governance, and to ecological wellbeing.

4.5. Social license enforcement: A lack of clarity

Robust accountability requires a strong enforcing agent who can apply formal and/or informal sanctions. Social license implies that actors beyond governments should fill this role. Literature on social license is unclear about 'who' enforces the social license. Bice (2014) defines "community" relevant to social license as including individuals affected by an industry's operations, other companies that are either in the same geographic region or in the same industry, local businesses, NGOs and stewardship organizations, regulators, industry associations, and indigenous landholders. But, findings from this case illustrate there is a significant challenge with Bice's (2014) attempt to define community so broadly. The painting of "community" as a homogenous entity ready to jointly act and enforce often neglects the consideration of intra-community accountability, representation, interests, power differentials and institutions (Agrawal and Gibson, 1999). Therefore, knowing who the "community" is, and their preferences regarding water use and resource extraction can be difficult. In this case, the term community appeared to be used in reference to the public at large, comprised of individuals living in the watershed who were not embedded in a formal organization relevant to water and/or mining. Study participants held different ideas about which actor was the primary 'enforcer' of the social license: the community, local ENGOs, and the Ktunaxa Nation, were all suggested. The data illustrates the potential issues related to each of these groups' being the social license enforcer.

4.5.1. Public at large as the enforcer?

The mining industry is vital to the local economy of the Elk Valley. For example, the industry was described by a local government interviewee as being "engrained in the social and economic fabric of the watershed," due to the long history of mining in the region, municipal governments' reliance on tax revenues, the number of jobs the industry as a whole created in the region, and the Company's contributions to various social programs, such as daycare, and housing. Other participants also recognized the economic reliance on mining for many living in the watershed. The challenge is that this may lessen the pressures on the Company to change the way in which it operates, because it is difficult for the same people employed or economically reliant on the Company to enforce social license terms given the power asymmetries. One community member stated: "because of the preponderance of [coal mine] employees and suppliers in the Elk Valley, they have a high degree of social license already." The region's circumstance, and participants' reflections, indicates that the public at large may have limited ability to uphold social license as an accountability mechanism.

Moreover, private actors who exhibit willingness to "go beyond compliance" when their social reputation is threatened may also be skilled in acquiring social acceptance for their high-risk or damaging activities. Positive relationships and a lack of conflict or social pressure – which was the trend in this case study – may actually detract from the social pressure that acts as one important incentive for spurring private actor's 'beyond compliance' behaviour. When people feel heard, respected and perceive that a company is responsive and acts with integrity, they may be willing to accept decisions that are not in their favour (Besley, 2010; Moffat and Zhang, 2014).

4.5.2. ENGOs as the enforcer?

ENGOs were identified by some participants as potential enforcers of social license. Regionally, an environmental non-profit organization operates in the Elk Valley and in the broader Columbia River Basin. The organization's website points to its long history of grassroots actions and campaigns around watershed issues – for example, campaigning against proposed developments in sensitive glacial areas, and advocating for stronger conservation and protective regulations in

wetlands. An ENGO member explained,

I want to see them get this Se problem under control, and I'm watching this problem carefully, and if we don't see reducing levels of Se on a trajectory that shows that they're getting this problem under control... then we'll have to go into response mode.

However, an advisor for the Ktunaxa Nation was skeptical of the ENGOs ability to fulfill this function in the Elk Valley. Rather than acting as a watchdog and enhancing the accountability of the Company, this individual saw social license as previous scholars have criticized: an industry approach for co-opting other watershed actors. This was directly related to the fact that the Company provided funding to community groups, including the local ENGO and the community-based water group; and that, in some situations, the Company had received public support from the organizations:

I have frustration with them *giving* [the Company] a lot of social license, saying, 'Your Plan is good, bravo to [the Company]'... in media relations, sending letters to the editor etc. saying '[the Company] is doing a great job.' Look, this is not helpful, so let's not give them any more social license than they're due. I would have thought that the strongest local ENGO would have been really holding [the Company's] feet to the fire... So that represents some considerable buying of social license.

Therefore, the positive NGO-industry relationship was not viewed as an actual improvement by this participant, but instead, a disempowerment of potential "watchdog" actors. This perception was the view of only one participant in the study, and based on the data, we can only hypothesize that it may have also been a reflection of how the Ktunaxa Nation was pushing for the strongest levels of protection for ecological values and was facing strong resistance in the formal process that had been put into place by the provincial government's Ministerial Order. But the critique also illuminates the contestation that can arise amongst watershed actors about who can truly uphold accountability, and the detrimental impacts that a Company seeking social license may have on the trust between and amongst other actors. In this case, even having one participant (and others may have existed in the watershed that were not participants in this study) who did not accept that the ENGOs could enforce social license and ensure accountability to the satisfaction of the indigenous nation creates a limit its meaning and usefulness.

While independent third-party organizations can play a role in mediating accountability (see Benjamin, 2010; Finger and Princen, 2013; Rolston, 2015), further research is needed to understand the potential for such organizations to shape the accountability environment within a watershed. Practical consideration should also be given to how a new organization integrates with other ongoing governance processes to ensure it does not become duplicative or work at cross-purposes of existing efforts (Ross, 2003).

4.5.3. The Ktunaxa Nation as the enforcer?

The Ktunaxa Nation was repeatedly singled out by participants as a potential social license enforcer. For example, one provincial government interviewee suggested,

"[the Company] realized they would have to be willing to be innovative and work with First Nations... Even though government might be able or willing to provide a [regulatory] license, they weren't going to get social license with First Nations and they needed to do this; if the Ktunaxa didn't support [the Company's water management plan], it wouldn't go anywhere."

Likewise, another provincial government interviewee mentioned the need for the Company to get "cultural license," in reference to having support from the Nation. Again, this data sets the Nation apart as a social licenser – and, suggests that securing social license unequivocally requires First Nations' support. A biologist working in the

watershed suggested,

"from a legal standpoint, First Nations traditionally have a very strong legal backing... [and] the recent decision about the Tšilhqot'in lands – those are constitutional rights. And in some ways, it gives First Nations a bit more leverage to push."

Most participants understood that the Ktunaxa Nation has an important and distinct role in ensuring accountability of mining. But, the majority did not discuss the need for the Company to obtain *consent* from the Nation for their continued activities. The absence of FPIC discussion signals a lack of understanding, respect, and recognition of indigenous rights, title, and sovereignty.

Little evidence was apparent in this case that social license explicitly included criteria for FPIC. Formal benefits agreements do exist between the Company and the Nation, and one participant described that the Company demonstrated some willingness to accommodate the Nation's timelines. Yet, the Nation still experienced explicit resistance from the Company in core areas of decision-making.

This finding reinforces what Slack (2009) and Owen (2016) also highlight – consent would require a truly collaborative or partnership approach, but social license, with its ambiguous definitions and lack of clear measurement, does not imply this same level of engagement. Consultation, accommodation, free, prior, and informed consent, and recognizing the self-determination of indigenous nations is not just about being culturally respectful through informal mechanisms. Another potential problem with calling on indigenous nations to be social license enforcers (on behalf of a broader watershed population) is the additional capacity burden this may create for nations. That is, it obliges nations to participate in decision-making processes or consultation and engagement activities that were shaped and driven by outside interests, and which fail to meet the requirements of FPIC, or recognize the distinct legal and governing status of indigenous nations (see also Simms et al., 2016).

The inconsistency in the Company's approach in this case mirrors an ongoing theoretical debate. Hanna and Vanclay (2013) recommend companies should fully endorse and respect internationally recognized indigenous rights, including self-determination – even where this is not required by national governments. Conversely, Haalboom (2012) questions whether private actors should be expected to recognize indigenous rights – or if this diverts attention away from government culpability for developing meaningful new relationships and co-governance arrangements with indigenous nations. Scholars have argued that for any watershed governance model to be effective in the future, indigenous authority and knowledge must be meaningful and central in the decision-making framework (von der Porten and de Loë, 2013; Author et al., 2016). In this case, it appeared that social license was another tool for perpetuating longstanding practices of industry to discount indigenous nationhood status. Social license may have potential to be meaningful in collaborative watershed governance – but, only if meaningful governance processes are co-created by indigenous and non-indigenous governments in a partnership approach that upholds FPIC principles.

5. Conclusion

Industry efforts to gain social license represents an emerging phenomenon – but there is doubt about whether social license fundamentally changes how mining companies operate within watersheds (Jenkins, 2004; Canel et al., 2010; Owen and Kemp, 2013). Findings from this case study illustrate the contested nature of social license and demonstrate how, in practice, social license is heavily touted as important by a range of watershed actors, while not being clearly understood by those emphasizing its importance. In this way, it elevates and reinforces the concept as a "pseudo-permitting instrument" (see Owen, 2016).

The majority of social license studies have focused primarily on how

industry applies the concept in practice, not how others in a watershed may use the concept. Research has not paid attention to social license activities that emerge simultaneously to a shift towards collaborative watershed-based governance. Study participants characterized the social license-seeking activities as those that improved industry-community communication, as well as those that strengthened the community's own knowledge about the water quality issues. However, the securing of an actual social license was also shaped by the Company's engagement – and resistance – in formal collaborative or consultative watershed governance processes, such as the Technical Advisory Committee.

The data revealed challenges in measuring and enforcing social license due to minimal engagement by the provincial government, and the challenge of understanding who else could successfully play the role of enforcer. This finding highlights a catch 22: social license has emerged as an informal mechanism when community actors seek greater accountability of industry than formal regulators will require. Yet, without the typical central regulator playing a strong role in enforcement and oversight, questions remain about the value of social license for accountability. The findings revealed that a possible enforcer – the community-based watershed group – faced legitimacy challenges, because other individuals in the watershed suspected their positive relationship with the Company and acceptance of industry funds had potentially compromised its independence. Reconciling different needs and expectations around enforcement roles will require ongoing experimentation in practice.

This study also raises important questions and a need for continued research into how social license and accountability relationships manifest in a context where the rights and title of indigenous nations are still being reconciled in relationship with a prevailing colonial government. It remains unclear whether social license will present an opportunity or constitute yet another barrier in decolonizing governance in the future. In this study, social license activities that were positive (but not focused on consent by indigenous nations), appeared to be erroneously conflated with legal requirements for the duty to consult, accommodate, and to seek free, prior, and informed consent.

Altogether, it is clear that considerable improvements are required before social license represents a tangible and meaningful principle for upholding accountability in collaborative watershed governance in resource extraction contexts.

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