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# **Bureaucratic Slippage and Environmental Offset Policies: The Case of Wetland Management in Alberta**

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*Environmental trading programs are seen as promising tools for fostering sustainable development, yet little is known about how decision-making practices in these emerging policy spaces influence program outcomes. This study quantifies wetland compensation outcomes in Alberta, Canada, and compares these outcomes to statements made in government-issued compensation guidelines. Contrary to guideline intent, we found a strong tendency to skip over wetland avoidance in favor of compensatory payments for wetland loss; that compensation sites are frequently located outside the watershed of impact; and that distances between impact and compensation sites often exceed what is considered reasonable under the guidelines, without commensurate increases in compensation ratios. Agency capture was found to drive these implementation failures, and mechanisms producing capture in this case include overhead governance and organizational goal ambiguity. This study suggests that greater attention must be given to agency context if environmental trading programs are to be effective tools for managing environmental resources.*

**Keywords** agency capture, bureaucratic slippage, compensation, street-level bureaucrats, wetlands

Governments worldwide are increasingly being called upon to “green” their economies, while at the same time, maintain or increase economic growth and prosperity. In order to meet these demands, many governments have turned to the use of economic

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instruments, such as environmental trading or offset programs, to help inform trade-off decisions between ecosystem protection and resource development. As a result, environmental trading programs have become popular tools for managing natural resources, from rare species and biodiversity, to carbon dioxide and wetlands (McKenney and Kiesecker 2010; tenKate et al. 2004). The goal of these programs is to achieve a “no net loss” or “net environmental benefit” by reducing or eliminating residual impacts, after first making efforts to avoid or minimize impacts. Mechanisms employed in these programs commonly include compensation, offsetting, banking, in-lieu fee (ILF) payments, or auction/brokering schemes, and well-known examples include U.S. Wetland Mitigation, the Australian BushTender, Bush-Broker, and BioBanking programs, and the European Union’s Natura 2000 network (McKenney and Kiesecker 2010).

These programs are fundamentally premised on the idea that the units being traded are in some way fungible; however, as many have argued, there are serious challenges associated with effective program design and implementation, such as determining the appropriate timing, location, duration, currency, or equivalency of the trade (McKenney and Kiesecker 2010; Walker et al. 2009; Gibbons and Lindenmayer 2007; tenKate et al. 2004). For example, the U.S. Wetland Mitigation program, which is one of the oldest and most well-studied trading programs in existence, has been plagued by failures attributed to inadequate assessment and exchange currencies, exchange rules that are poorly structured, and a lack of enforcement and compliance (Burgin 2010; Walker et al. 2009; Robertson 2000; Salzman and Ruhl 2000). Despite these challenges and failures, trading programs are considered to be promising policy tools that foster “sustainable development” by allowing for decisions that “balance” economic considerations with conservation objectives (tenKate et al. 2004).

To date, much of the scholarship examining the efficacy of trading programs has focused on evaluating the “nuts-and-bolts” of program design, with a focus on currency and exchange adequacy (McKenney and Kiesecker 2010; Gibbons and Lindenmayer 2007). While program design is undoubtedly important, little work has been done to understand how design inadequacies may be manifest in policy implementation or regulatory oversight, and specifically, how decision making in these emerging policy arrangements facilitates or hinders policy performance. Some scholars suggest that design inadequacies, such as overly simplistic currencies and lax exchange restrictions, coupled with unequal power and divergent goals of the regulators and the regulated community, make trading programs difficult to administer and open to perversion of the public interest (Walker et al. 2009; Salzman and Ruhl 2000). Sociologists have also found that as government decision makers are called upon to use “discretion” in the interpretation of environmental policies, regulations, and guidelines, final outcomes are often far afield from stated intentions (McSpirit et al. 2005; Krogman 1999; Freudenburg and Gramling 1994).

The failure of government agencies to fully and effectively implement environmental law and policy is not a new phenomenon, and because of this, there have been calls to more carefully attend to the details of policy implementation (Freudenburg and Gramling 1994). While previous attention has been given to the effectiveness of regulatory enforcement, it has tended to focus on characterizing the specific acts or strategies of enforcement, with less attention being given to how such enforcement is reshaped or influenced by ongoing and negotiated relations between regulators and those they regulate (Coslovsky et al. 2011). It is here, in the

space where agency mandates and goals are interpreted and multiple interests are negotiated and traded, that both regulators and the regulated community significantly shape environmental outcomes. In his work on “street-level bureaucrats”<sup>1</sup> Lipsky (2010, xiii) noted that in contrast to established laws, policies, and guidelines, it is “the decisions of street-level bureaucrats, the routines they establish, and the devices they invent to cope with uncertainties and work pressures (that) effectively *become* the public policies they carry out” (original italics). Thus, the requirement of front-line decision makers to contend with, and interpret, broad and ambiguous regulatory or policy statements over time and across multiple layers of implementation can result in decisions that deviate from, or even contradict, originally stated goals of the agency, often in ways that favor particular interests over others (Coslovsky et al. 2011; McSpirt et al. 2005; Krogman 1999; Freudenburg and Gramling 1994).

This study answers the call to more carefully attend to the details of policy implementation and, in particular, examines how front-line decision makers use their discretion to make wetland compensation decisions in Alberta, Canada. Following Freudenburg and Gramling (1994), the objective of this study is to measure “bureaucratic slippage” in the implementation of wetland compensation guidelines by empirically quantifying outcomes of wetland policy decisions, in order to compare these outcomes to agency guidelines that provide direction for compensation decisions. The relationship between bureaucratic slippage and agency capture is also explored, and the mechanisms that operate to produce agency capture in this case study are described to elucidate how agency design and culture contribute to incremental regulatory decisions that tend to favor regulated parties.

### **Bureaucratic Slippage and Agency Capture: A Closer Look**

Bureaucratic slippage has been described by Freudenburg and Gramling (1994) as being a manifestation of, and a way to directly measure, the phenomenon of agency capture: that is, the ability of the regulated community to generally control regulatory decisions and/or performances that serve the interests of the regulated community over the interests of the public (Bernstein 1955). Traditionally, capture theory has focused on identifying blatant forms of capture, such as political corruption or the replacement of neutral governance with biased role incumbents (the so called “revolving door”), which has typically been explained using the self-interested, rational actor model of public choice theory (Stigler 1971). Increasingly, however, capture theory has expanded to include consideration of situational factors and power relations that influence “how the stage is set, who has the power to set it, and what the purpose of the staging is” (Hanson and Yosifon 2003, 149). Capture is thus not an “all or nothing” phenomenon that is wholly dependent upon the disposition of rational actors; rather, capture can be manifest incrementally through time and across jurisdictional space by decisions that are made by front-line bureaucrats whose choices may be constrained, either knowingly or unconsciously, by a myriad of situational factors (Balla 2011; Mitnick 2011; Hanson and Yosifon 2003).

While agency capture is difficult to empirically measure, bureaucratic slippage has been put forward as one way to reveal outcomes that arise from power relations that are hidden from view and often overlooked in the evaluation of policy outcomes (Freudenburg and Gramling 1994). Central to the concept of bureaucratic slippage is that capture can be identified in the “details” of policy implementation, which can be measured through critical examination of agency performance (Freudenburg and

Gramling 1994). By comparing implied commitments made in environmental law, policy, or guidance documents with the observable and tangible actions of those agencies responsible for administering government commitments, intentional and unintentional as well as subtle and blatant obfuscations of policy commitments can be measured through slippage. By measuring bureaucratic slippage and examining the underlying mechanisms that lead to capture, greater attention can be brought to bear on how agency design and culture, rather than simply regulator preference, contribute to regulatory decisions that favor powerful actors over time.

### **Wetland Management in Alberta: Background and Context**

Approvals for disturbing or destroying a wetland in Alberta are granted under the Water Act on a case-by-case basis. In each instance, government regulators and permittees negotiate the conditions of the permit, and these negotiations are directed by a wetland policy with the goal of sustaining “social, economic and environmental benefits” of functioning wetlands by applying a mitigation hierarchy of avoidance, minimization, and compensation (Alberta Water Resources Commission 1993). At the same time, regulators are bound by statutory requirements of the Water Act, the stated purpose of which is to “support and promote the conservation and management of water,” while also “recognizing the need for Alberta’s economic growth and prosperity.”<sup>2</sup> Thus, in each instance of negotiation, front-line decision makers must contend with ambiguous goals within an agency context where the prevailing discourse emphasizes the need to “balance” wetland conservation with economic development (Clare 2013).

A rise in the incidence of wetland compensation in the early 2000s, coupled with clear differences in how compensation decisions were being made by regional government offices, prompted the Alberta government to issue compensation guidelines in 2005 (which were reissued with minimal changes in 2007) to clarify expectations around acceptable types of compensation, preferred compensation site location, and suitable compensation ratios. While these rules are considered to be “guidelines” and are not legally enforced, they were put in place to create a conformity of standard for wetland compensation decisions, and are the only “formal rules” that guide wetland compensation practices in Alberta (for a more thorough discussion of the wetland permit process, see Clare et al. 2011).

Despite being very clear in the stated expectations around how wetland compensation should be carried out, there has been inconsistency in how these compensation guidelines have been interpreted and applied by regulators over time. It is this discrepancy between what the guidelines say and how those guidelines are applied by regulators over time that this study strives to quantify, thereby providing evidence of bureaucratic slippage and underlying agency capture, in the wetland approval process in Alberta.

### **Methods**

This work was informed by 34 semistructured, key-informant interviews that were conducted with a range of policy actors who regularly interacted with wetland policy, and included regulators and agency decision makers (17 interviews), employees of environmental organizations (5), industry representatives (6), and consultants (6). Key informants were asked a series of questions that probed their experiences

working with wetland policy. Interviews ranged between 1 and 3 hours in duration and were held privately in an office setting. Interviews were transcribed and organized into conceptual themes in NVivo (QSR International Pty Ltd. 2008) using inductive coding (Thomas 2006). The views expressed by regulators and the regulated community regarding their experiences with the wetland approval process and wetland compensation decisions and outcomes were generally very similar, and quotes are representative of the range of responses heard in interviews. This conformity of views suggests that both regulators and the regulated community experienced similar challenges relating specifically to the wetland compensation decision-making process.

Quantitative wetland permit data were gathered from approvals issued in the central and southern regions of the province (i.e., the “White Area”), as well as approvals that were issued specifically for the Beaverhill subwatershed. The data came from three sources:

1. Department of Environment Water Act approval provincial database. A request was made for all Water Act approvals issued in the White Area between 1999 and August 2011. The data returned included approval number, proponent name, date of approval issue and expiry, wetland activity, and location information for the site of impact. No information on wetland compensation was returned, as this information is not tracked in this database.
2. Department of Environment Northern Region Office Water Act approval files. Between June 23 and July 4, 2009, and between July 12 and July 16, 2010, files associated with approvals that were issued in the Beaverhill subwatershed for wetland impacts occurring between 1999 and 2009 were physically examined. The following information was gathered from the files and entered into a relational database: date of authorization and expiry; proponent name; location information for impact and compensation sites; number, class, and size of wetlands impacted; type of compensation required; price paid per hectare (if a compensation payment was made); and number, class, and size of wetlands created as compensation.<sup>3</sup>
3. Ducks Unlimited Canada Wetland Loss Compensation Annual Reports. Ducks Unlimited Canada (DUC) is the only restoration agency authorized by the government of Alberta to receive wetland compensation payments and must submit an annual report detailing how compensation funds have been allocated. DUC annual compensation reports that were issued in 2009 and 2010 (which included a summary of all compensation payments received by DUC since 1999) were requested from the Department of Environment. The reports included approval number; year the approval was issued; name of proponent; compensation payment amount; location, class, and area of wetland impacted; replacement area and ratio; location, class, and area of the compensatory wetland; and the amount (%) of the payment allocated to each Ducks Unlimited compensation project.

All data were combined to create a list of wetland approvals issued between 1999 and 2010 in the White Area that required off-site compensation through an ILF payment. No single data source contained an exhaustive list of approvals, and agreement between the data sources was quite low. For example, instances of missing records and/or incorrect or conflicting information (e.g., dates, approval numbers) between the data sets were common, which suggests inherent problems with

information tracking and sharing by both the government and DUC. Where possible, conflicting information was verified using “official” government documents (i.e., Water Act approvals) that were obtained online (Government of Alberta 2012) or in person.

Wetland impact and compensation site locations for each approval (if available) were spatially referenced in a global information system (GIS; Environmental Systems Resource Institute 2010) using the legal land description (LLD) from approvals data. Using the Alberta Township Survey polygon (Government of Alberta 2005), a centroid coordinate (NAD 1983, 10TM, AEP Resource) for each quarter section with a reported wetland impacted was generated, and the distance between impact and compensation centroids for each wetland impact was calculated using Hawth's Tools (Beyer 2004). Given that a single approval is often issued for multiple wetland impacts, displacement distances were calculated for every quarter section with a reported wetland impact, rather than calculating average displacement distances for each approval. Impact and compensation centroids were spatially joined to the watershed using the Environment Canada 4-character subbasin spatial layer (Prairie Farm Rehabilitation Administration/Agriculture and Agri-Food Canada 2008), and the number of approvals issued and number of quarter sections with a wetland impact were calculated by subwatershed using a frequency statistic in ArcMap. For approvals lacking impact and/or compensation location data, distance values could not be calculated. Summary statistics were preformed using the statistical package R (R Development Core Team 2011).

Bureaucratic slippage was measured by comparing key statements made in the provincial compensation guidelines (Alberta Environment 2007) to empirical data measuring actual outcomes. These outcomes were quantified and compared for each year between 1999 and 2010, and included a period before (1999–2004) and after (2005–2010) the introduction of the compensation guidelines, allowing for comparisons of agency performance before and after guideline introduction.

## Results and Discussion

### *Bureaucratic Slippage in the Implementation of Wetland Compensation Guidelines*

#### *Slippage in the Prioritization of Avoidance over Compensation*

Alberta Environment's priority is to avoid having land development impact wetland area whenever possible. (*Provincial Wetland Restoration/Compensation Guide*: Alberta Environment 2007, ii)

While the language in the compensation guidelines and the interim wetland policy is clear with respect to a preference for avoidance over compensation, approval data show a steady increase in the number of wetland-related approvals issued between 1999 and 2010, with a near doubling in 2007 (Table 1). While these numbers would be more meaningful in the context of understanding wetland impacts as a proportion of the total number of Water Act approvals issued in a given year, or in relation to the number of wetland-related approvals that have been denied, this comparison was not possible because the data required for this analysis were not available.

**Table 1.** The total number of Water Act approvals issued for wetland impacts in the central and southern region of Alberta between 1999 and 2010, including the number and proportion of those approvals that required an in-lieu fee (ILF) payment as compensation

	1999	2000	2001	2002	2003	2004	2005 <sup>a</sup>	2006	2007 <sup>a</sup>	2008	2009	2010
Approvals issued ( $n = 504$ )	38	29	41	35	24	24	29	25	45	66	63	85
Approvals requiring ILF payment ( $n = 217$ )	0	2	0	4	2	4	11	8	29	45	47	65
Proportion (%) of approvals as ILF	0	7	0	11	8	17	38	32	64	68	75	76
ILF approvals with sufficient distance information ( $n = 146$ ) <sup>b</sup>	0	2	0	2	2	2	6	3	22	37	38	32
Quarter sections with wetland impacts ( $n = 188$ ) <sup>c</sup>	0	2	0	2	2	2	6	3	32	49	51	39
Minimum displacement distance (km)	N/A	71	N/A	69	71	73	14	48	4	4	9	22
Maximum displacement distance (km)	N/A	71	N/A	72	71	234	86	123	140	231	176	193
Average displacement distance (km)	N/A	71	N/A	71	71	154	55	91	52	95	92	102
ILF approvals with ratio information ( $n = 140$ )	0	2	0	2	2	2	4	3	22	37	37	29
Minimum compensation ratio	N/A	1:1	N/A	8:1	7.7:1	3:1	3:1	3:1	1:1	1:1	1.1:1	0.5:1
Maximum compensation ratio	N/A	1:1	N/A	8:1	7.7:1	3:1	5:1	4:1	6:1	3:1	4:1	3:1
Average compensation ratio	N/A	1:1	N/A	8:1	7.7:1	3:1	3.1:1	3.3:1	3.1:1	3:1	3:1	2.8:1

*Note.* For ILF approvals with sufficient information, the minimum, maximum, and average distances between impact and compensation sites were calculated, as well as the minimum, maximum, and average compensation ratios required by the government.

<sup>a</sup>The Provincial wetland compensation guidelines were first issued in 2005 and were subsequently revised without substantial changes in 2007.

<sup>b</sup>Sufficient distance information included a location for both impact and compensation sites.

<sup>c</sup>Given that a single approval can include multiple impact locations, displacement distances were calculated for each unique location and averages were calculated by year.



In the absence of data quantifying permit denials, qualitative data from interviews suggest that the government rarely (if ever) denies an approval for a wetland impact, as articulated by one Government employee who said, “You need to have some strength and willingness on the regulator’s side to be able to say ‘no,’ and I’m not sure that saying ‘no’ is in the provincial vocabulary.” Another regulator went so far as to suggest that denying a permit was not a legal option, and that “if [the applicants] meet the requirements of the Water Act and the restoration/compensation guide, there really is no mechanism for the Department to say ‘no.’”

The fact that the government rarely denies a wetland permit has created conditions where proponents skip over any serious consideration of avoidance (Clare et al. 2011), thus triggering a requirement for the compensation of “unavoidable” impacts. This tendency to skip right to compensation was highlighted in an interview with an environmental consultant, who described experience with the wetland approval process:

I skip to [compensation] right away, just because I’ve never encountered somebody saying “no, don’t touch this wetland.” If it changed to where people were like, “no, don’t touch this wetland,” I might have a different mind set—but it just has never come up, so I always skip right to compensation.

In these cases, there appears to be a distinct preference for ILF payments over other forms of compensation, with the proportion of approvals requiring ILF payments as compensation steadily rising between 1999 and 2010 (Table 1).

Interestingly, the use of ILF payments increased substantially in 2005, and again in 2007—years that correspond with the initial release, and subsequent revision, of the provincial compensation guidelines. As with other offset and trading programs, the option to allow for compensation, rather than prioritizing avoidance, provides regulators with an opportunity to say “yes, with conditions,” without any practical option to deny an approval outright (Walker et al., 2009). Such conditions greatly favor industrial proponents who have the financial resources to compensate for wetland loss through an ILF payment and can thus skip over avoidance in favor of compensation.

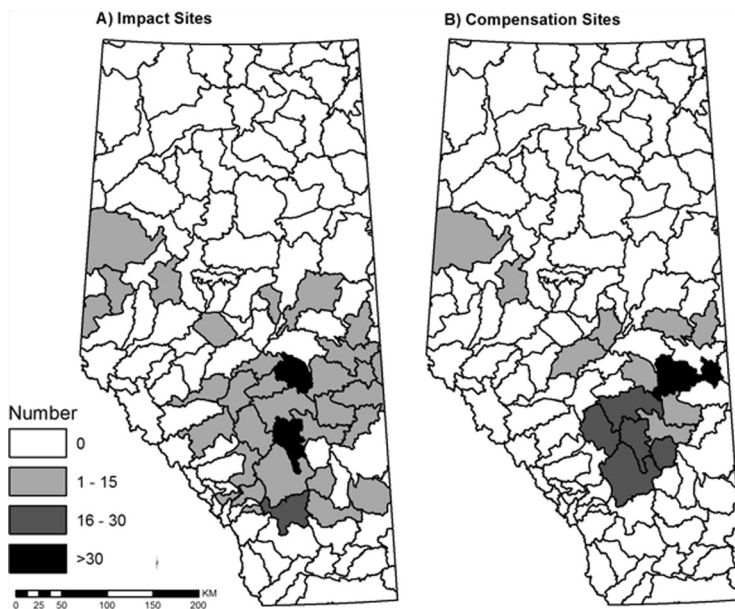
#### *Slippage in the Selection of Compensation Site Locations*

Compensation should take place within the same watershed as the impacted wetland, or in a watershed close by. (*Provincial Wetland Restoration/Compensation Guide*: Alberta Environment 2007, 1)

Most jurisdictions that practice wetland compensation acknowledge that the arrangement of wetlands on the landscape can profoundly influence ecological and hydrological interactions (Gibbs 2000; Hanski 1998), as well as ecological function (Mitsch and Gosselink 2000). Consequently, there is a strong emphasis on locating compensation projects as close to the site of impact as possible, with a preference for impact and compensation sites to be located within the same watershed. While the compensation guidelines in Alberta clearly state such a preference, the practice of relocating wetlands outside the impacted watershed is commonplace.

According to data obtained from DUC annual reports, 80% of ILF payments made between 1999 and 2010 were directed toward restoration projects located outside the watershed of impact. The explanation for why there are such high rates of wetland relocation is quite simple: DUC, the only restoration agency that can accept ILF payments in Alberta, has organizational goals that prioritize wetland restoration in specific regions of the province (Alberta North American Waterfowl Management Plan 2008). The result is an inventory of restored wetlands that is geographically restricted and rarely corresponds with localities where wetland impacts are most concentrated: near the major urban centers of Edmonton and Calgary. In addition, DUC faces an enormous challenge in securing wetlands on private land for restoration, a process that can take several years of negotiation. Thus, the inventory of wetlands that are suitable (by DUC standards) and accessible is limited, which leads to a spatial reorganization of wetlands (Figure 1).

These limitations and lack of concurrence between provincial wetland policy goals and DUC habitat management goals has been acknowledged by both organizations. To resolve this issue, the government and DUC have informally agreed that replacing wetlands within the watershed of impact is an unrealistic goal; instead, several key informants explained in interviews that DUC strives to replace wetlands within the same major river basin. This decision was premised on the idea that the guideline places an *unreasonable* requirement on the proponent given the shortage of suitable restoration sites (personal communication 2009). The lack of compensation sites was identified in interviews as being a major impediment to the ability of applicants to “move on with their development,” and that if the proponent



**Figure 1.** The distribution of wetland impact and compensation sites for impacts in the central and southern region of Alberta between 1999 and 2010, summarized by subwatershed ( $n = 188$ ). The vast majority of compensation occurs outside of the subwatershed of impact (80%), leading to a spatial reorganization of wetlands across the landscape.

“had to wait to get these projects negotiated and built, they could be two or three years down the road” (personal communication, 2009).

The idea that this requirement would somehow restrict or place limits on development is considered to be untenable by both the regulators and the regulated community, and in order to ensure that ILF compensation remains a viable option for applicants who prefer this approach, the government has loosened the requirement for compensation to occur within the same watershed. The leniency of both the government and the restoration agency in the interpretation and application of this guideline favors proponents with tight development timelines, who are not required to wait for compensation sites to become available within the watershed of impact.

### *Slippage in the Calculation of Compensation Ratios*

The maximum rate of compensation is 10:1 considering that most restoration sites should be in the 0 to 80 km range from the impacted site. However, exceptional circumstances would have to be evaluated separately and compensated accordingly. (*Provincial Wetland Restoration/Compensation Guide*: Alberta Environment 2007, 8)

This guideline introduces a minimum compensation ratio of 3:1, which should be applied to any project where the distance between the impact and compensation site ranges from zero (on-site compensation) to within 20 km. In circumstances where the displacement distance is between 20 and 80 km, the compensation ratio should increase linearly with distance, up to a maximum ratio of 10:1. Projects where the displacement distance is in excess of 80 km are considered to be “exceptional circumstances” warranting individual consideration, and presumably, compensation ratio in excess of 10:1. Thus, this sliding scale should provide an incentive to locate compensation sites as close to the site of impact as possible, with the majority of compensation occurring within 20 km at a replacement ratio of 3:1. Compensation located at >80 km should be relatively rare, with corresponding compensation ratios of 10:1 or more.

Between 1999 and 2010, compensation sites were located within 20 km of the impact site in only 12% of cases, with the majority of approvals (49%) being categorized as an “exceptional” circumstance (>80 km). Further, when average compensation ratios are compared against average displacement distances, it is apparent that the government has not been applying the sliding scale to establish compensation ratios. While the average displacement distance generally increased between 2007 and 2010, corresponding compensation ratios decreased, with average compensation ratios in 2010 falling below the “minimum” ratio of 3:1 required under the guidelines (Table 1). While there were instances where regulators did ask for compensation above 3:1, this accounted for only 6% of cases, and the required compensation ratio was never in excess of 8:1. In the vast majority of instances (122 of 140 approvals: 87%), proponents were required to compensate at the minimum ratio of 3:1; however, we did find cases (7 of 140 approvals: 5%) where proponents compensated at less than 3:1. In each case where compensation was less than the required “minimum” ratio, the displacement distance was in excess of 20 km, with two of these cases having displacement distances in excess of 140 km.

The rationale provided for why government regulators are not employing the sliding scale is linked to the same reason why compensation projects are being

relocated outside the watershed of impact: a lack of “suitable” compensation sites, as articulated by one government regulator:

There are issues with the current Guide because there’s that sliding scale with distance, and we haven’t applied that sliding scale at all because Ducks Unlimited doesn’t have enough sites. It doesn’t seem fair to say you have to compensate 200 kilometers away if Ducks Unlimited only has one site—how is that reasonable? So we haven’t been applying that 10:1 scale, we’ve just been applying 3:1.

This sentiment illustrates how many government regulators feel that they are responsible for ensuring reasonableness and fairness for proponents, rather than applying the compensation guidelines as written. By bartering less environmentally demanding wetland compensation requirements, regulators minimize both political costs for government and financial costs for proponents.

### *Mechanisms Driving Agency Capture & Bureaucratic Slippage in Alberta*

While there is strong empirical evidence of bureaucratic slippage in the implementation of wetland compensation in Alberta, one important question remains: What mechanisms are driving the underlying agency capture in wetland policy implementation in Alberta? Drawing from the theoretical frameworks of Mitnick (2011) and Balla (2011), agency capture in this case appears to arise from both relational (i.e., internal and external relationships between regulators and the regulated) and individual (i.e., the interaction of individuals within the regulatory relationship) factors. Specifically, there is evidence to suggest that agency capture is driven by several interrelated mechanisms, including overhead governance and political control of the bureaucracy, and fragmentation of authority that has contributed to organizational goal ambiguity.

#### *Overhead Governance and Political Control*

In parliamentary systems such as Alberta, “the relationship between elected officials and bureaucrats is fundamentally shaped by the absence of a separation between legislative and executive powers” (Balla 2011, 78). As a result, politicians have the capacity to control agency design and oversight in ways that influence decision making and performance at various scales—from the level of the state where rules are made, down to individuals who act in decision-making roles (Balla 2011; Mitnick 2011; Weingast and Moran 1983). Thus, the way in which delegated authority is managed through overhead control must be considered when evaluating agency performance, as this context can significantly shape the understanding of how and why decisions are made (Balla 2011; Christensen 2011; Croley 2011).

Overhead governance is a form of agency capture where industry influence is maintained through stable relationships with government, and this influence consistently shapes agency decision making and/or performance in ways that benefit industry (Mitnick 2011). Since the early 1970s, the political landscape in Alberta has been dominated by a single governing party, and there is compelling evidence to suggest that industry (and in particular, agriculture and oil and gas) has long enjoyed a close relationship with the governing conservative party (Clare 2013; Davidson and Gismondi 2011; Fluett and Krogman 2008; Harrison et al. 2005;

Urquhart 2005; Davidson and Mackendrick 2004). Overhead political control by the executive branch of government (i.e., Premier and Cabinet Ministers) appears to be particularly strong in the development and administration of environmental law and policy, as articulated by one Department of Environment employee who said:

I'm often given the opportunity to preview policy that is being developed, or to comment on policy, or even to be directly involved in writing policy. And that policy, as it's being written and developed, is always being reviewed at a higher level. If our politicians feel that we're getting off track, then we're reined in. So yeah, there's direct political influence on the policy side of things.

The critical role that politicians play in shaping environmental policy in Alberta was further articulated by a bureaucrat working as an advisor in the Executive Branch of government:

In terms of policy...it's kind of a top-down and bottom-up dance. Ultimately the Minister calls the shots, and what gets decided here [in the Minister's office], and by Cabinet, and the broader [Progressive Conservation Party] caucus, gets implemented in the department.

The power of politicians to direct what "gets implemented in the department" includes an ability to influence the day-to-day decisions of front-line bureaucrats, as articulated by one government regulator, who described how they must contend with political influence when making regulatory decisions:

I work within a government that is made up of MLAs [Members of the Legislative Assembly] who represent their constituencies. So, if a land-owner has issues with the regulator, it's not uncommon for them to contact their MLA, and then of course, that kind of pressure comes to bear to influence decisions. So, if you don't have a regulatory scheme that is well laid out, it's really open as to how those decisions get made.

It is well documented that politicians may be motivated to influence department mandates or day-to-day regulatory decisions in order to gain political power, or to improve their chances of reelection (Balla 2011). Such politically motivated involvement in the day-to-day business of government departments was articulated by one government employee who described the impact that Cabinet Ministers can have on government departments:

Everything was political to him—we are still digging ourselves out of holes that that man dug, and he was our Minister for only a year. He didn't respect mandates. He turned everything political and wanted everything that he wanted, and that was at the absolute worst time because he was making a run for the [party] leadership. So, he was looking for every opportunity to endear himself to local politicians who might be in a position to support his leadership run.

Overhead control through agency oversight is also manifest in how the government allocates resources, in terms of both personnel and finances. The chronic underresourcing of agencies responsible for managing wetlands in Alberta was a very common theme in interviews with government employees, who spoke about the difficulties associated with managing workloads under such conditions: “Half of our regulatory process, to be honest, is trying to manage workload, because we simply do not have the kind of resources to bring to bear on this.” When regulators are underresourced and faced with complex and time-sensitive tasks, there is a tendency to simplify those tasks in cooperation with regulated industries, which often results in reduced regulatory stringency (Mitnick 2011). For example, in interviews, regulators described how ILF payments make the approval process less complicated and, as a result, faster and easier to administer. The use of ILF payments thus allows regulators to more effectively manage their workload, and also benefits those in the regulated community who have the financial resources available to quickly resolve wetland issues that may be associated with their development.

#### *Fragmentation of Authority and Organizational Goal Ambiguity*

Fragmentation of government authority, which is the division of power through multiple ministries and departments with complex mandates (Bakker and Cook 2011), was identified in interviews with both regulators and the regulated community as being a major issue in the implementation of wetland policy in Alberta. This failure of agency design, where the roles and mandates of government departments are unclear or ambiguous, contributes to organizational goal ambiguity, making it difficult for regulators to act decisively when implementing law or policy (Balla 2011; Chun and Rainey 2005). Organizational goal ambiguity is defined as being “the extent to which an organizational goal or set of goals allows leeway for interpretation, when the organizational goal represents the desired future state of the organization” (Chun and Rainey 2005, 2).

Given that politicians continuously contend with multiple and conflicting interests, environmental law and policy is often ambiguous, with goals that are frequently oppositional or contradictory (Stazyk and Goerdel 2011; Lee et al. 2010; Chun and Rainey 2005). For example, both the Water Act and the interim wetland policy state environmental conservation and economic growth as priorities, and as one regulator pointed out in an interview, meeting both these goals is difficult because “Typically, if you’re allowing something that will benefit the economy, it’s at a detriment to the environment.” In a province where the government relies heavily on resource royalties for revenue, and the political priority is clearly focused on creating favorable conditions for economic growth over environmental protection (Davidson and Gismondi 2011), contradictory law and policy can be an effective political device for supporting business-as-usual development. By creating priority goal ambiguity, conflicting law and policy creates room for regulators to maneuver, dilute, and systematically interpret regulations in a way that favors the regulated industry.

## **Conclusions**

Trading programs such as the one examined in this study are becoming increasingly popular, given their promise as policy tools that “balance” economic development against the loss of important natural assets. While there are significant challenges and flaws associated with trading programs, many advocates (and critics) contend

that with careful attention to program design and sufficient compliance, these programs can help address conflicts between development and conservation (Gibbons and Lindenmayer 2007; tenKate et al. 2004). This assertion, however, fails to recognize the institutional context within which trading programs are developed, and how politics, power, and history can undermine even the most carefully designed trading program (Walker et al. 2009).

The results of this study illustrate that despite having very clear and explicit guidelines to help direct decision making, outcomes are influenced by a myriad of situational factors that cannot be addressed by simply designing “better” trading programs and rules. Rather, the problems that lead to bureaucratic slippage, and ultimately policy failure, are fundamentally political and administrative in nature, and this agency context is rarely, if ever, considered in the design of trading programs. One step toward addressing the problems laid out in this article is to identify key criteria that can be quantified and used to periodically assess the efficacy of wetland decision making and policy performance. The data should be systematically collected and made available to the public, and a quasi-governmental and independent review board could provide oversight for such a process.

While this study focused on bureaucratic slippage in the case of wetland permitting in Alberta, these findings should give pause to policymakers in other jurisdictions who design environmental trading programs, as there is a very clear need for greater scrutiny of the normative, discursive, and incremental ways in which “formal rules” are interpreted and implemented by front-line decision makers. Although bureaucratic discretion can ostensibly provide decision makers with the license to develop more creative solutions for the management of wetlands, the institutional practices in this case have encouraged bureaucratic slippage. Without acknowledging the institutional context within which decisions are made, and the opportunities for powerful actors to influence those decisions, there is little hope that environmental trading programs will deliver promised environmental outcomes.

## Notes

1. Government agency workers with discretion over the dispensation of benefits or the allocation of public sanctions.
2. Water Act, R.S.A 2000, c. W-3, §2.
3. In many cases, the desired information was not contained within the files. For example, location data for compensatory wetlands were often missing, particularly in instances where compensation took the form of in-lieu fee payments. In addition, data related to the number and class of wetlands impacted, and subsequently created, were often absent from files.

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