

**The Efficacy and Politics of Farmland Preservation through Land Use Regulation:  
Changes in Southwest British Columbia's Agricultural Land Reserve**  
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**Abstract:** British Columbia's (BC) Agricultural Land Reserve (ALR) is one of the earliest international examples of legislated agricultural land preservation through land use regulation. This article reports on an analysis of the efficacy of the reserve in southwestern BC, the most densely populated area in the province, since its inception over forty years ago. The results indicate that the ALR has been relatively successful in protecting farmland, though a concerning five-percent of the original reserve has been lost in the study area. A discussion of existing explanations of ALR loss and an alternative explanation are provided. It is argued that competing perspectives on private and collective interests are central to understanding the successes and failures of the ALR reserve system. Some policy recommendations are provided.

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## 1.0 Introduction

Globally, farmland loss due to urbanization is accelerating, and currently urban expansion removes between 1.6 and 3.3 million hectares of land from production annually. This is approximately 0.1 to 0.2 percent of the Earth's total cultivated land, and is often prime farmland (Lambin & Meyfroidt, 2011). Arguments for the preservation of farmland at the local level include the strengthening of local food security (Bristow, D. & Kennedy, C. 2013; Huish 2008; Windfuhr, M. & Jonsén, J. 2005), the protection of greenspace and its social and ecological functions, and the conservation of rural lifestyles (Feitelson, 1999). In the Metro Vancouver region, food is informally considered (for example by the Vancouver Farmer's Market association) to be local if it is produced within a half-day's drive of the city of Vancouver, and the adjacent Fraser Valley region is particularly important to the local food system due to its robust and diverse farming industry. Loss of farmland in this region is an issue of ongoing concern. This article analyzes the effectiveness of British Columbia's Agricultural Land Reserve (ALR) in this rapidly urbanizing area, and provides an overarching sociopolitical explanation for the patterns of change that challenges more conventional assessments of the strengths and weaknesses of this policy. It also presents concomitant policy suggestions for stabilizing the reserve some of which diverge from extant technocratic recommendations.

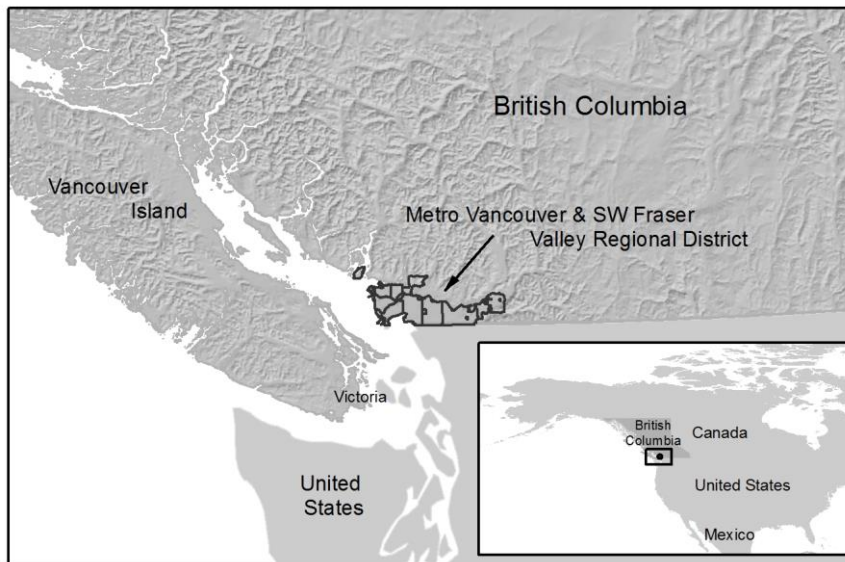
Canadian agricultural production is limited by the availability of suitable soil profiles and climatic conditions. In British Columbia only 2.8% of the province is Class 1-4 farmland (the best soil types) and only 1.1% of that is prime land (Smith 1998). Despite the importance of farmland to local agricultural production and regional food security, Canada's most versatile and productive farmland is at risk of conversion as cities expand into the countryside. Urban land use fosters higher short-term economic returns than does agricultural production; as such, in the absence of specific protections for farmland, urbanization is correlated with a loss of agricultural land (Thompson and Prokopy 2009). Suburban sprawl in particular has been implicated in the transformation of prime soil and of the most fertile growing areas into impervious surfaces (Hasse and Lathrop 2003). Some agricultural economists hold that the loss of farmland is a result of market failure to appreciate largely collective benefits (Johnston and Duke 2009).

A variety of experiments with growth boundaries have been attempted in Copenhagen (Thomas 1990), Japan, and Great Britain (Hall et al. 2003; Relph 1987). Portland emerged as an early example of successful North American use of a growth boundary (Harvey and Works 2002), and British Columbia was one of the first regions to

specifically use land use regulation in an attempt to preserve agricultural production of the land (Tomalty 2002).

This study considers the area shown in Map 1 encompassing most of Metro Vancouver and part of the Lower Fraser Valley. The population of this area in 1976 was 951,618. Thirty-five years later it was 2,055,856.

*Map 1: The Study Area*



The region is bounded by the ocean, mountains, and an international border. The original growth of productive agriculture in British Columbia can be explained as a product of preferable biogeoclimatic conditions, fertile soils, and relatively close proximity to local markets (Dalichow 1972). The proximity of the lower Fraser farmlands to the largest western staples trade conduit in Canada (Hutton 2011) is one of many good reasons to protect the farmland there.

Before 1972, approximately 4000-6000 hectares of agriculturally productive lands in British Columbia were annually converted to non-agricultural purposes (British Columbia, Provincial Agricultural Land Commission 1983), though some have suggested more conservative figures, such as 1000ha per year (Oberlander & Smith 1993). Stobbe et al. (2011) estimate this loss as 0.9% to 1.4% of the land base in the lower mainland area annually, a number in line with similar unprotected regions. Only a few years before the ALR was created the Social Credit provincial government expropriated four thousand acres of high-quality farmland, designated as long-term agricultural land by the Lower Mainland Regional Planning Board, for a superport (Garrish 2002/2003).

In response to this, the governing New Democratic Party (NDP) announced in 1972 that future legislation would prevent the rezoning of land designated as farmland. In 1973 the Land Commission Act was passed. This act included a mandate to zone agriculturally productive lands as protected farmland. Space limitations preclude further provision of the general history of the ALR; for more on this, see Baxter (1974), Petter (1985), Yearwood-Lee (2008), and Androkovich (2013).

Current provincial level data for British Columbia's Agricultural Land Reserve is readily available on the internet, but there are few detailed studies of ALR *changes* in the regions of southwestern BC. One, by Stobbe et al. (2011) that focused only on the City of Abbotsford and the Saanich peninsula on Vancouver Island, noted a loss of roughly ten percent since the ALR's inception, and highlighted the concentration of these losses near major highways.

This article first presents the methods and results of an historical digitization project and analysis, including figures and maps of inclusions and exclusions, for most of the Metro Vancouver region and the Fraser Valley Regional District south of the Fraser River. The discussion that follows draws on these results and the extant literature in an attempt to explain the ALR land losses—which as a whole are neither sizeable nor negligible—both generally, and specifically, with respect to differences between municipalities. A central argument is provided for the ALR land “leak” based upon perceptions of private and collective benefits. Finally, the article concludes with policy recommendations for future land reserve stewardship.

## **2.0 Methods**

Access to original data concerning the ALR is largely confined to original paper maps and documents. The original 1974 ALR paper maps were unavailable from the Agricultural Land Commission. Though in the past some researchers have been granted fairly open access to ALC documents, this is not universally true, owing in part to limited ALC staff time and unforeseen events such as floods in their archival storage rooms. In addition the ALC does not have the archival resources to digitize and preserve all of the original documents. Thus any digitization of original documents that can occur without impinging upon ALC staff time is of benefit to the academic community and the public.

Certified copies of the original ALR maps for the City of Abbotsford, Barnston Island, the Municipality of Bowen Island, the City of Burnaby, the City of Chilliwack, the City of Coquitlam, the District Municipality of Delta, the Township of Langley, the City of

Langley, and the City of Richmond, were borrowed from the libraries at the University of Victoria and the University of British Columbia. These maps were then digitized at a scale of 1:12,000, with registration errors between 0.4-20.0 metres, but usually within 5.0-10.0 metres. This error was likely owed to moderate creases and crinkles in the maps.

The digitized boundaries on the original maps occasionally diverged by tens of metres, with no discernable pattern of divergence, from the current digital cadastral property boundaries, which were attained through the Integrated Cadastral Information Society. This is likely owed to the aforementioned paper distortion, inaccuracies in the original cadastral base layers upon which the ALR boundaries were inked, and the thickness of the original ALR boundary lines. A largely manual process of rectification was performed to align the ALR boundaries with the most sensible Integrated Cadastral Fabric (ICF) fit in a second layer. We present data from both of these sets, and leave it to the reader to choose between the raw lines or those estimated to represent the original intended boundaries.

ArcGIS was used to perform various spatial analytic processes using our maps and the ALC's 2012 ALR maps. The ALC is actively improving their digital records. However, the new July 2015 rectified ALR file possesses some ongoing discrepancies from ours owing to a number of lines that still follow their own digitized hardcopies, as well as those that follow natural features such as rivers, or transportation features such as roads or railways. We chose not to follow natural features as it seemed prudent to focus solely on property lines given that only recognized properties can be excluded and features such as river banks are not geomorphically reliable enough for long-term farming.

### **3.0 Results**

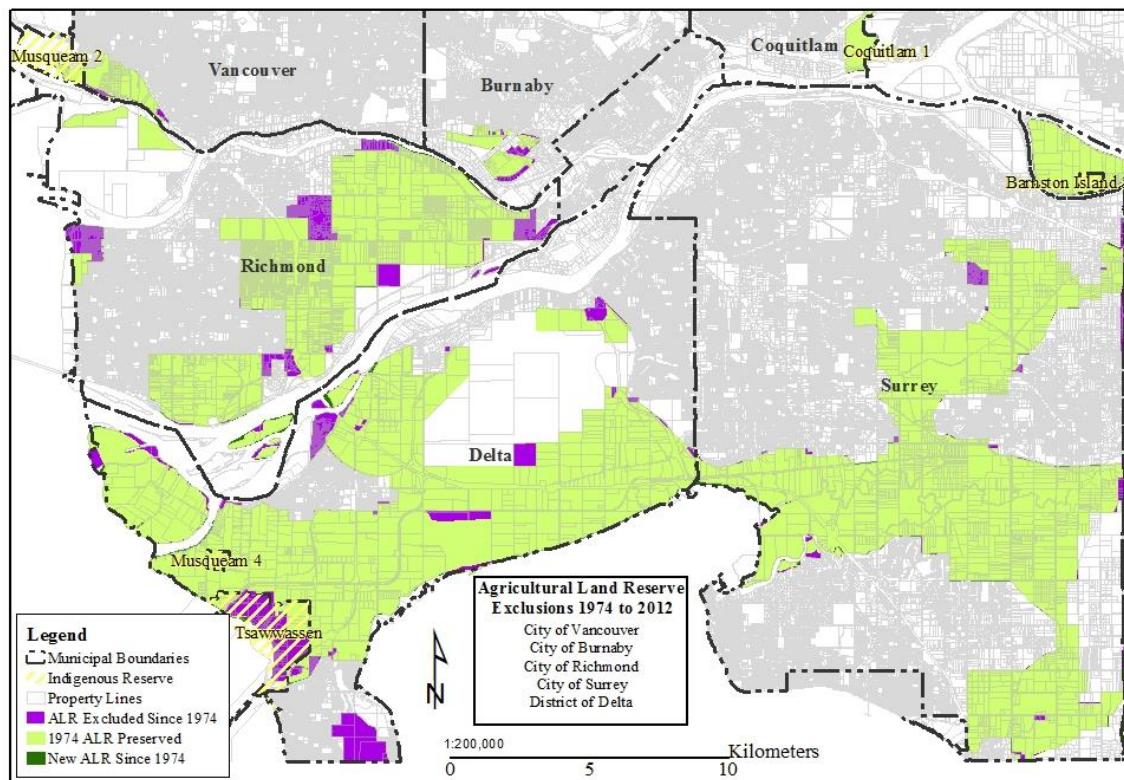
The results of the digitization process are presented in a Table 1 and in visual form in Maps 2 through 5 in the Supplementary Material. Between 1974 until 2012 approximately 5000 ha, or 5%, of the ALR land in Metro Vancouver and the southwest Fraser Valley was lost. A proportionately larger net area, approximately 350ha, or 17%, of ALR land in Aboriginal Reserves were excluded, but this was mostly due to a large exclusion for a new development on the Tsawwassen Reserve. Though we note this loss on First Nations lands, our discussion is only concerned with the area outside of these regions.

Table 1: Comparison of ALR Exclusions by Municipality/District (see notes below)

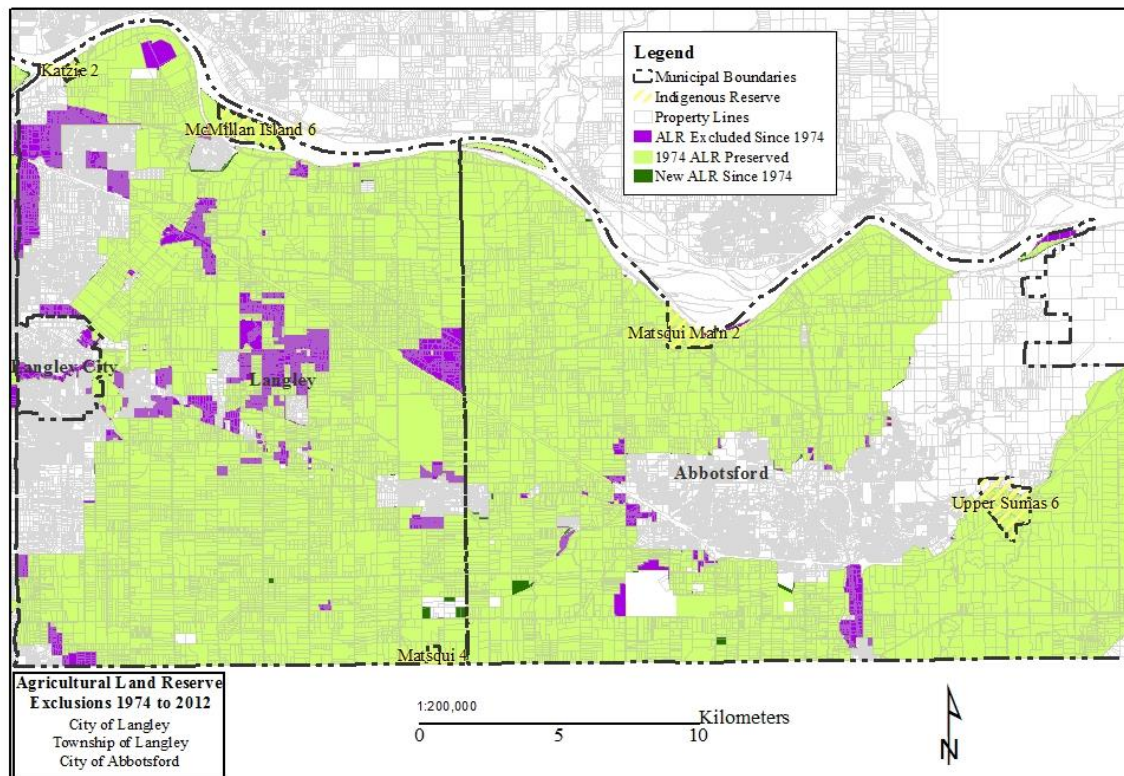
Comparison of ALR Exclusions by Municipality/District (see notes below)													
CSDNAME	CSDT YPE	CDNAME	CCSNAME	Raw 1974 Ha	Raw Ha Excluded	Raw Ha Included	Raw Ha Ex/In	Raw % Ex/In	Rect 1974 Ha	Rect Ha Excluded	Rect Ha Included	Rect Ha Ex/In	Rect % Ex/In
Bowen Island	IM	Greater Vanc	Greater Vanc	376	198	4	-194	-51.6%	376	198	4	-194	-51.60%
Greater Vancouver A	RDA	Greater Vanc	Greater Vanc	541	1	19	18	3.3%	553	4	10	6	1.08%
Surrey (Total)	CY	Greater Vanc	Surrey	9366	201	121	-80	-0.9%	9425	187	49	-138	-1.46%
Surrey (Primary)									7293	90		-90	-1.23%
Surrey (Secondary)									2132	97		-97	-4.55%
Burnaby	CY	Greater Vanc	Burnaby	265	42	12	-30	-11.3%	280	48	2	-46	-16.43%
Abbotsford	CY	Fraser Valley	Abbotsford	27411	621	269	-352	-1.3%	27479	512	92	-420	-1.53%
Delta (Total)	DM	Greater Vanc	Delta	9898	664	119	-545	-5.5%	9990	708	69	-639	-6.40%
Delta (Primary)							0	0	7895	249		-249	-3.15%
Delta (Secondary)							0	0	2095	459		-459	-21.91%
Chilliwack	CY	Fraser Valley	Fraser Valley	16500	1144	514	-630	-3.8%	16361	1083	593	-490	-2.99%
Richmond (Total)	CY	Greater Vanc	Richmond	5800	649	25	-624	-10.8%	5782	640	34	-606	-10.48%
Richmond (Primary)									3114	117		-117	-3.76%
Richmond (Secondary)									2668	523		-523	-19.60%
Coquitlam	CY	Greater Vanc	Greater Vanc	782	18	53	35	4.5%	836	37	18	-19	-2.27%
Langley (City)	CY	Greater Vanc	Langley	149	114	6	-108	-72.5%	149	112	4	-108	-72.48%
Langley (Township)	DM	Greater Vanc	Langley	25751	2769	202	-2,567	-10.0%	25792	2682	74	-2608	-10.11%
Vancouver	CY	Greater Vanc	Vancouver	269	18	3	-15	-5.6%	269	18	3	-15	-5.58%
(Reserves)		Totals (of municipalities wi			97108	6439	1347	-5,092	97292	6229	952	-5277	-5.42%
Skway 5	IRI	Fraser Valley	Fraser Valley	257	4	3	-1	-0.4%	257	4	4	0	0.00%
Skowkale	IRI	Fraser Valley	Fraser Valley	70	0	1	1	1.4%	71	0	0	0	0.00%
Skwahla 2	IRI	Fraser Valley	Fraser Valley	0	0	9	9		0	0	9	9	
Katzie 2	IRI	Greater Vanc	Langley	27	1	3	2	7.4%	30	0	0	0	0.00%
Matsqui Main 2	IRI	Fraser Valley	Abbotsford	124	2	2	0	0.0%	128	4	0	-4	-3.13%
Tzeachten 13	IRI	Fraser Valley	Fraser Valley	184	15	0	-15	-8.2%	184	14	0	-14	-7.61%
Skwah 4	IRI	Fraser Valley	Fraser Valley	130	2	0	-2	-1.5%	130	2	0	-2	-1.54%
Skwali 3	IRI	Fraser Valley	Fraser Valley	136	1	1	0	0.0%	136	1	1	0	0.00%
McMillan Island 6	IRI	Greater Vanc	Langley	146	7	21	14	9.6%	159	1	3	2	1.26%
Tsawwassen	IRI	Greater Vanc	Delta	518	362	8	-354	-68.3%	518	362	8	-354	-68.34%
Musqueam 2	IRI	Greater Vanc	Vancouver	40	1	3	2	5.0%	40	1	3	2	5.00%
Aitchelitch 9	IRI	Fraser Valley	Fraser Valley	18	1	2	1	5.6%	21	2	1	-1	-4.76%
Matsqui 4	IRI	Greater Vanc	Langley	28	0	0	0	0.0%			0	0	
Upper Sumas 6	IRI	Fraser Valley	Abbotsford	194	0	2	2	1.0%	195	0	1	1	0.51%
Kwawkwawapilt 6	IRI	Fraser Valley	Fraser Valley	68	2	1	-1	-1.5%	69	2	1	-1	-1.45%
Squiaala	IRI	Fraser Valley	Fraser Valley	90	2	4	2	2.2%	92	2	2	0	0.00%
Totals (for Reserves)				2030	400	60	-340	-16.7%	2030	395	33	-362	-17.83%



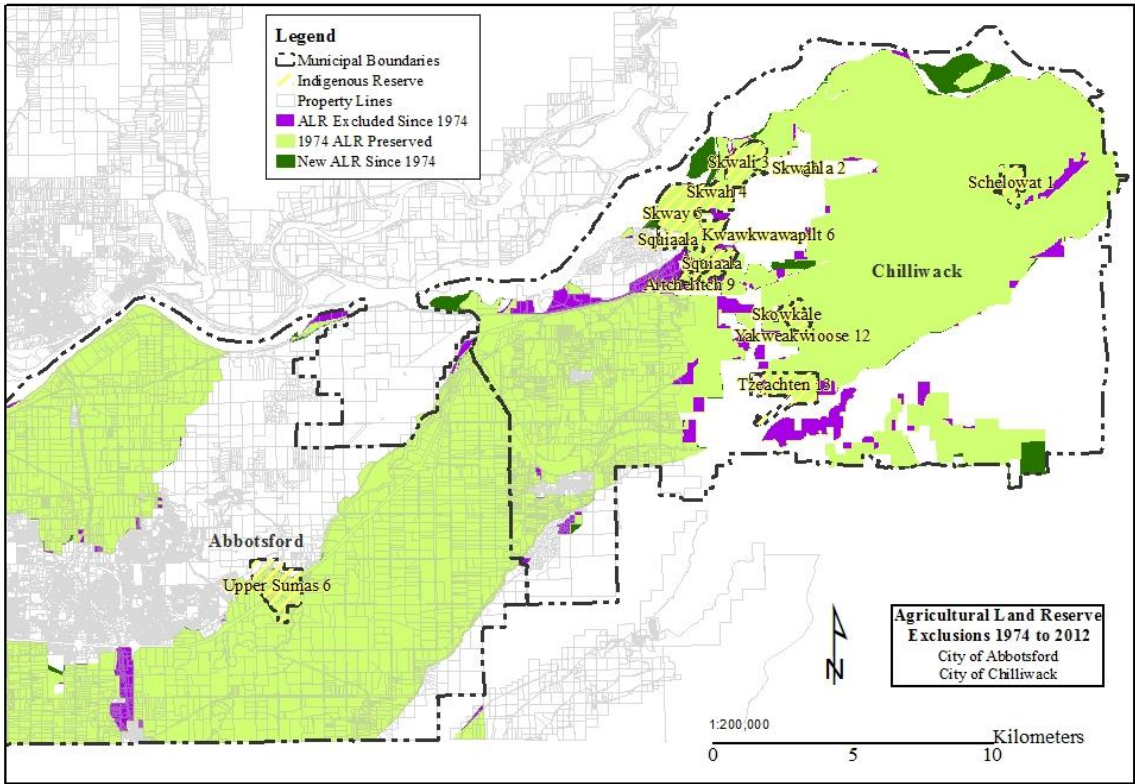
Map 2: ALR changes in Vancouver, Burnaby, Richmond, Surrey, and Delta.



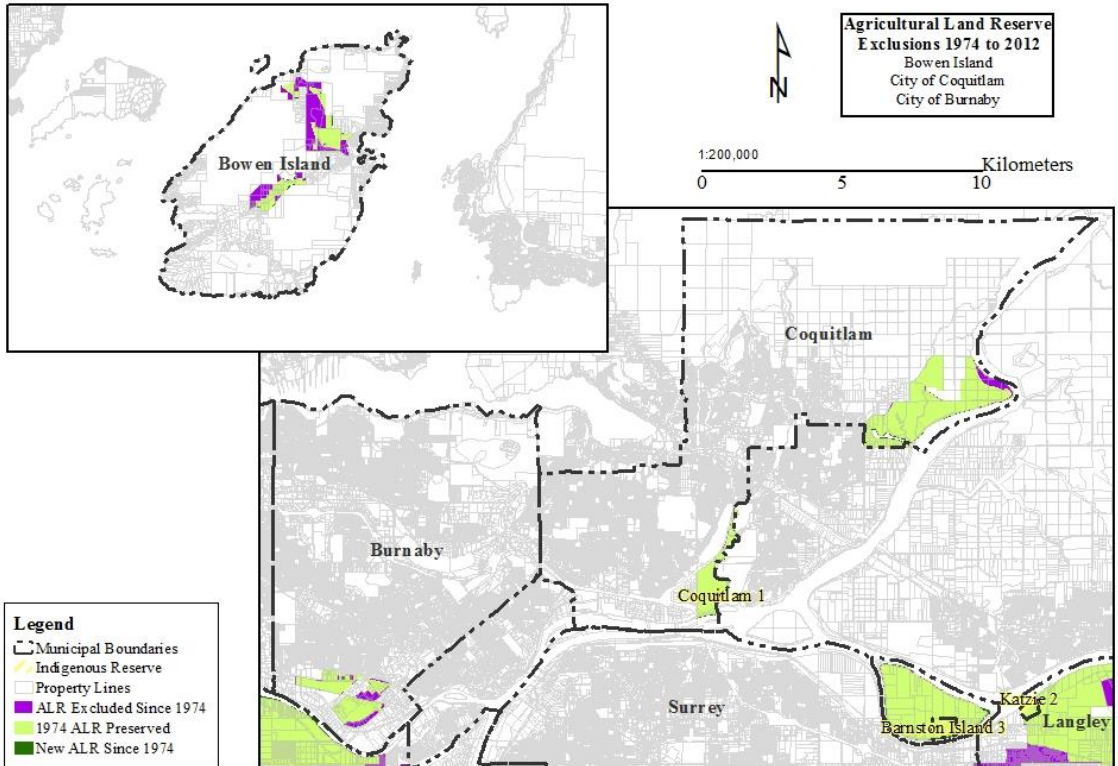
Map 3: ALR Changes in the City of Langley, the Township of Langley and Abbotsford.



Map 4: ALR Changes in Chilliwack.



Map 5: ALR changes in Coquitlam, Burnaby and on Bowen Island.





The maps reveal a varied story of agricultural land loss across the region. There were notable differences in ALR loss when comparing the various municipalities, cities, townships, and districts. Surrey allowed little in the way of ALR exclusions (only approx. 100 ha or 1%), whereas the adjacent Township of Langley and the City of Langley allowed the most change (approx. 2700 ha between them). This is at first glance puzzling, as Surrey is closer to Vancouver proper, and thus, assuming a traditional core/periphery versus polycentric travel model<sup>1</sup>, it should be more susceptible to development pressures. The 100 ha, or 72% of ALR land lost in the City of Langley itself, is understandable as this area is designated by Metro Vancouver as an urban core and the ALR in the municipality was present in a narrow band dividing the city in half. Although the Township of Langley lost much less proportionately – 10% – the absolute loss was a notable 2600 ha. Some of this lost land was also in Metro Vancouver's regional urban containment boundary, particularly Willoughby and Aldergrove, though the majority was not. This introduces another level of jurisdictional intervention and complication, and one might ask why parts of the ALR lands have been included in Metro Vancouver's urban areas, regardless of proximity to small town centres.

The proportions lost in Burnaby and Bowen Island were quite high, but the absolute loss in those municipalities is quite low, owing to the urbane maturity of Burnaby and the steep island forests of Bowen. The southwest corner of the map is of particular interest; around 500ha were lost in each of the municipalities of Delta and Richmond. Like Burnaby, Richmond is contiguous with the City of Vancouver and has a well-established urban core, but maintains a strong farming community both in terms of small farms serving the local food community, and industrial farms, particularly in the case of the cranberry bogs that supply Ocean Spray (see author, in press, for more on Richmond). Richmond's active farming industry is a testament to the strength of the ALR, given its proximity to Vancouver proper. Delta is home to some of the richest and most productive farmland in the region, but port development such as the Deltaport Terminal 2 expansion is increasingly threatening the ALR in this region. The 2012 maps do not yet include the newly opened South Fraser Perimeter Road, which has, following Stobbe et al.'s (2011) argument, increased land losses in the area.

There were several other observations recorded during the digitization and analysis that complicate the overall picture of ALR change. First, some later exclusions circumscribe

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<sup>1</sup> A notably larger proportion of the residents of Surrey commutes to the City of Vancouver than does the proportion of those living in the City of Langley and Langley Township (Translink 2013).

properties that were in fact already gravel pits and golf courses in the original 1972 maps. This was likely an oversight in the drafting of the original ALR boundaries. Second, the road network in the area of interest has expanded enormously since 1974. Neither the 1974 nor the 2012 ALR polygons exclude the area of road network within their boundaries. Thus, area calculations of functional ALR lands – i.e. land that does not include pavement/asphalt – would likely be smaller than the figures provided here, and would likely reveal greater losses of farmland between 1974 and 2012. Third, a notable amount of ALR land in the Metro Vancouver and the Fraser Valley Regional District is in Aboriginal Reserve land (see Table 1). Whether the provincial government’s ALR designation trumps Reserve jurisdictional authority is unknown, but unlikely and ethically questionable.

### *3.1 The District of Langley’s Losses*

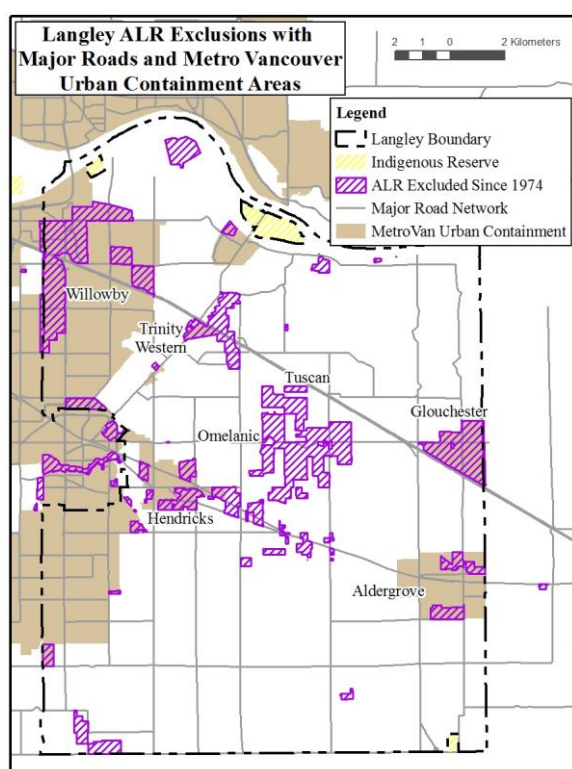
Our work echoes Stobbe et al. (2011) in challenging circulating beliefs about the state of the ALR. For instance, Surrey and Abbotsford do not appear to be out-of-control, sprawling, ALR-excluding frontiers as they are sometimes characterized. Rather, our results find that the District of Langley has a more noticeable ALR “leak” (Campbell 2006:11).

Despite its vast farmlands, Langley Township has a history of suburbanization and regional conflict (Smith 1974). It also has a history of friction with regional and provincial planning bodies. It was the only municipality that had not, by 1973, enacted the zoning regulations in support of the 1966 Official Regional Plan of the LMRPB, despite the plan's weak protection for farmland (Ibid.). When Bill 42, the Land Commission Act, was on the table, fifteen “prominent” Langley area residents, including the Mayor and a former MLA, sent a telegram to the Lieutenant-Governor of British Columbia and the Governor-General of Canada asking them to decline it (Smith 1974:134). The Township of Langley’s Official Community Plan of 1979 marks the beginning of contention between it and the ALC over the expansion of Aldergrove, exemplified by Langley’s 1994 Rural Plan that failed to recognize ALR designations contiguous with Aldergrove’s edges (Garrish 2002/2003). Langley did not become a full member of the GVRD until 1988. The District of Langley required special agreements before they would support the Livable Region Strategy Plan, owing to their concerns regarding the Plan's alleged potential to impinge upon the local municipalities' land use decisions (Patterson 1998; Taylor 2010). In 2012 the mayor proposed abandoning the regional district altogether (Gathercole 2012; Jones 2012).

Metro Vancouver’s urban containment boundaries are another important variable in the assessment of ALR losses. The land within these boundaries has been designated as

areas of, or for, intensive, high-density residential and/or commercial development. The boundaries are determined through negotiations, and sometimes battles, between the regional district and the respective municipality, and addressed in context statements that demonstrate how a municipality will abide by the regional plan. Some former hotspots of contentious intensification and ALR exclusion, such as the Walnut Grove area in the NW corner of the township (Burchfield et al. 2010:43), Aldergrove, or the Gloucester Properties, which were excluded during Social Credit changes to the ALR system (Garrish 2002/2003), are now within the urban containment boundaries (see Map 6 in the Supplementary Material).

*Map 6: Langley hotspots and urban containment boundaries.*



### 3.2 Specific Examples

As mentioned, materials on the background of the ALR exclusions were not available from the ALC. What follows are brief analyses of five exclusions, drawn from academic and mass media sources, so as to exemplify some dimensions of the exclusion process.

#### 3.2.1 Abbotsford Industrial Park

The City of Abbotsford originally applied to have 372 collocated hectares of ALR land excluded for expansion of their industrial sector. One of their arguments was that it was better to exclude a single clump of otherwise highly productive land contiguous with their

urban growth zone than smaller parcels of agriculturally unproductive lands scattered throughout the ALR, a defence that runs contrary to the more usual call for purging the ALR of lower agricultural land classes. In exchange for this they promised to collect a fee which would then, in theory, pay for the agricultural reclamation of gravel pits and other agricultural projects. In 2005 the ALC's South Coast Panel approved the exclusion of 178.5 hectares of the original land requested, citing "community need," even though ALC staff had suggested that the industrial densities used to calculate need were lower than for the City of Vancouver, and Abbotsford was unable to provide evidence of gravel pit owners' interests in reclamation (Green 2006). In response to the ALC's justification that they, "really didn't want to step in the way of [growth]," (Pynn 2005), Green contends: "the Commission was set up to protect farm land – not just to step out of the way for urban growth" (2006:15).

### 3.2.2 Spetifore Farm in Delta

In 1981 the Environment and Land-Use Committee (ELUC) ignored ALC recommendations and removed the 142ha Spetifore Farm from the ALR in Tsawwassen, Delta, concluding that the soil salinity and urban proximity of the land was inappropriate for agricultural use, though some suggested that political affiliations played a role. However, the development plan was shelved when a vast majority of Tsawwassen residents actively opposed it (Garrish 2002/2003).

### 3.2.3 Tuscan Farms

The Tuscan Farm Gardens (approximately 32ha) and Omelaniec exclusions were approved by ALC in 2011, but Township council approval of the developments were not approved until 2013. This was owed in part to concerns around a moratorium on subdivisions built over the aquifer that lies below, and explicit support for farming by three of the nine councillors who voted. The Mayor of the time supported the application (Ferguson 2013a).

### 3.2.4 Hendricks in Murrayville

In 2009, after twenty-one years of application submissions, the ALC again refused a 4.5ha exclusion for development on the Hendricks farm on the south side of Murrayville. In a 2010 letter to the property owner, the ALC expressed that "the land under application has agricultural capability and is appropriately designated as ALR... [however]... the land under application is not very suitable for agricultural use" (Erceg 2013:216). This seeming

contradiction led the ALC to approve “in principle the subdivision of the subject lands on the understanding that the Township of Langley is in favour of the type of edge planning proposed for this application...” (Ibid.). Thus the ALC gave the owner permission to develop the land without removing it from the ALR, clearly a dangerous precedent. The “edge planning” referred to the 15m buffer proposed for placement between the new homes and the ALR farmland to the south. A majority of councillors cited the buffer as necessary, though Councillor Michelle Sparrow said, “this just sets a precedent, and shows that that if you try hard enough and ask enough times and spend enough money, that eventually you will be able to develop your agricultural lands” (Ferguson 2014). The development was approved by council in 2014.

### 3.2.5 The Wall Project

Despite opposition by three out of nine councillors Langley Township rezoned 180 acres, including a significant portion in the ALR and outside of the urban containment boundary, called “The Wall Project”, for a University District housing development (Ferguson 2013b; Jackson & Holden 2013), adjacent to Trinity Western University. This prompted Metro Vancouver to take court action, and irritated other politicians in Metro Vancouver (Nagel 2013a). Langley argued that they were within a two-year transition period from the old 1998 regional plan into a new 2011 version. In response to the court challenge, the mayor of Langley Township claimed: “we feel it should be the municipality that deals with land-use issues,” but the regional district directors feared the precedent would provide a slippery slope to more development. According to Burnaby’s mayor, who is the chair of the regional planning committee, Metro Vancouver had already relented to a development corridor around Trinity Western, but the new plan extended well beyond that (Nagel 2013a). Ultimately the court case, and a following appeal, were lost by Metro Vancouver (Nagel 2014), and so, with the ALC’s conditional approval, the expansion is permitted. These exclusions are not shown on the maps accompanying this article as they occurred after 2012, rather only an 8 hectare expansion across Glover road from Trinity Western that was approved for exclusion by the ALC and Metro Vancouver in 2010 (see Map 6). In response to this the mayor of Langley suggested: “I think this is significant moving forward on how regional districts relate to the member municipalities... The right of locally elected governments to control land use planning is paramount” (Nagel 2014). This is a case whereby the private interests of the municipality (which may or may not be



collective with respect to Langley Township residents) are seen to trump the collective interests of the region, or BC at large.

It seems that Langley's changes are repeatedly supported by two thirds of their councillors, and the mayor. However, review of letters to the editor and web commentary on media reports on Langley development news reveals that many citizens of the district municipality are opposed to what they perceive as their mayor and council's pro-development approach to planning and tendency to discount the rest of the region<sup>2</sup>.

## **4.0 Discussion**

Why has the ALR in the lower mainland suffered losses neither alarming nor inconsequential? Land development proceeds through a series of most often small property decisions by a complex of actors, each of whom holds only a partial snapshot of a larger, moving landscape of contextual influences and impacts (Taylor & Burchfield 2010). When investigating the exclusions it is easy to be drawn into the particulars of each case, and lose sight of the larger organizing influences. As mentioned in the introduction, our primary argument is that different perspectives on private and collective benefits, and their scalar dimension, are central to understanding the successes and failures of the ALR reserve system. The Vancouver region may be one of a number of places where growth management policy is present, but implementation is compromised by a market system that favours developer-driven outcomes and prioritization of private interests over the collective good.

This section is roughly divided into two related sub-sections that focus on politics and conflict, and economics and justice, respectively, and their relationship to the public/private tension. It is followed by analysis of some specific cases.

## **4.1 Politics**

### *4.1.1 Conflict*

There are essentially four levels of government that interact with respect to the ALR: municipalities (or district municipalities), regional districts, the Agricultural Land Commission, and the provincial government. These interactions have often led to multi-jurisdictional conflicts, the outcomes of which are often determined by the powers distributed or revoked by the provincial government. Some suggest that these conflicts and struggles for power are inherent components of urban-rural community politics (Bryant et al.

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<sup>2</sup> For an example, see the exchange between councillors, mayor, and citizens of Langley in response to a news report here: <http://www.langleytimes.com/news/250019151.html>

1982; Halseth 2003). We argue that they are often owed to differences, and sometimes cyclical changes, in the respective governments' adherence to public *versus* private interests<sup>3</sup>.

For instance, originally, an exclusion denied by the ALC could only be appealed through the Environment and Land Use Committee upon the recommendation of two ALC commissioners. Early ALC commissioners were politically appointed, but Hanna (1997) claims there is little evidence to suggest partisan decision making. After the changes implemented by the late-1970s Social Credit government the appeal could be directed to the politically elected and appointed Minister of Environment, who then took the appeal to Cabinet, thus potentially undermining the predetermined public interest mandate of the ALC. This created a rush of applications that undermined the ALC's other roles. When the NDP replaced the Social Credit party this appeal process was abolished, but in its stead cabinet could still consider applications if they were considered of provincial interest, a concept of contested meaning (Quayle 1998). In the early 2000s the Liberal government divided the ALC responsibilities into six regional panels (Garrish 2002/2003), an action that some suggest weakens the ALC's mandate (Bullock 2010; Green 2006) by dividing interests and increasing susceptibility to pressure from developers (Yearwood-Lee 2008).

In his report for the David Suzuki Foundation, Charles Campbell called the new regulatory regime, and the allowance of 0.1%-2.0% of ALR exclusions annually for "community need", a "leaking land reserve" (Campbell 2006, 11). However, it must be recognized that whereas the evidence that follows does suggest a concerning "leak" in the study area, the ALR as a provincial whole has generally maintained its hectares, largely owing to additions in the less productive or accessible far north (Agricultural Land Commission 2012). Regardless, the partisan regulatory shifts may support the evidence, albeit "weak," of higher exclusion approval ratios during Liberal provincial governments (Stobbe et al. 2011:570).

Successive provincial political regimes have also left their mark on regional planning. In 1948 the Town Planning Act was amended to allow the creation of regional planning areas presided over by planning boards (Garrish 2002/2003). The Greater Vancouver Regional District was created in 1967, and bundled with other regional bodies under the rubric of "Metro Vancouver" in 2007<sup>4</sup>. Metro Vancouver Board members are drawn,

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<sup>3</sup> If the provincial cabinet regards an exclusion to be in the provincial interest, they will appoint a board to consider the exclusion from a broader perspective, including environmental, social, heritage, and agricultural issues. The board will submit a recommendation back to cabinet.

<sup>4</sup> Throughout the paper the names are used somewhat interchangeably, though an attempt is made to chronologically align them.

proportionately by population, from the member municipalities, each appointed by their respective councils. Through the Municipal Amendment Act, the Social Credit provincial government voided all regional plans in 1983, arguing that regional districts had overstepped municipal jurisdiction, though some (e.g. Allen & Rosenbluth 1986; Oberlander & Smith 1993) argue that this was put through as a way to undermine the ALR (Hodge & Robinson 2001), and reoriented the GVRD planning functions to encourage, rather than discourage, free development. The shift back to the New Democratic Party in 1991 brought a return to the interest in regional planning, growth management, and sustainable development that culminated in The Livable Region Strategic Plan 1996 (Hutton 2011; Tomalty 2002). This flood and ebb of power mediates the outcomes of Metro Vancouver's conflict with some of its member municipalities. Ultimately, regional governance is weakened by its confederal, advisory nature, sandwiched between provincial and municipal powers (Hutton 2011; Tomalty 2002).

The complex tangle of governance and jurisdictional tensions around agricultural land protection are often blamed for preservation failure. However, Jackson and Holden (2013) argue, in the case of the ALR, that whereas this knot of governance can fall to compromises that undermine the integrity of the policy, the tedious, multi-jurisdictional process, uncertain authority, and struggle over jurisdictional hierarchy, may buy time to build public interest and participation. We would contend that the multi-jurisdictional nature of the ALR exclusion process may create somewhat unpredictable oscillations between private and public interests that precipitate a small but persistent rate of exclusions.

#### *4.1.2 Red Herrings*

Returning to the question of why exclusions occur, for the municipalities studied by Stobbe et al. (2011), proximity to major highways, smaller parcel sizes, and smaller portions of larger land parcels (likely the outcome of concessions and exchanges, or on-farm industrial-use applications), and lower quality soils (see also Drozd & Johnson 2004), were all correlated with a higher likelihood of exclusion upon request. This might seem the place to start, then, with respect to strengthening the ALR. However, these associations do not explain inter-municipal variation in exclusions, such as why the District of Langley suffered more exclusions than adjacent communities over the decades. Rather, these may be intervening variables, the antecedent being the public/private orientation of decision makers. That is, a decision maker may use proximity to highways or the alleged quality of soils to justify an exclusion, or reach some compromise in the portion of land to be excluded, so as

to fulfill a private interest. This is often accompanied by a disregard for staff recommendations (e.g. Green 2006; Jackson & Holden 2013).

For instance, Green outlines a case whereby a consulting company, privately hired by a development proponent, argued that the assessment of agricultural capability—largely a measure of soil qualities—of the land under consideration was, “dated,” despite the fact that this parcel had already been reassessed by the province in the early 1980s and again by a provincial agrologist in 2003 (2006:26-27). The ALC approved the exclusion, citing the developer’s questionable evaluation. In another case developers proposed to swap an exclusion of high-capability land in exchange for inclusion of low-capability land. ALC staff approved the swap and argued, “farm productivity on Vancouver Island can be as much a reflection of hard work and expertise of the farmer as it is a reflection of the original soil conditions” (Agricultural Land Commission 2003a, as quoted in Green 2006:29). This conceals costs with respect to energy, materials, and labour, and is completely antithetical to the purpose of the ALR.

The original ALR boundaries were determined through input from, and multilateral negotiations between various levels and units of government, in addition to extensive public hearings. Canadian Land Inventory Agricultural Capability Classification maps, which focus largely upon soil types and capabilities, were used as base maps to determine line placements. 70-76% of lands classified in the top four classes were included within the original ALR boundaries, whereas only 1-24% of lands in the remaining four categories were included. Omnipresent in the literature is the argument that a notable portion of the parcels excluded from the ALR were removed owing to widespread inaccuracies and imprecision found in the original CLI data used to determine the original boundaries (Garrish 2002/2003; Morfitt 1994). However, the original map scale of the CLI data was 1:125,000, with a resolution of 25m, on a standard map sheet, a level of detail that renders the claims of widespread imprecision suspect.

The 2005 Grizzly Ridge exclusion in the Kootenay region exemplifies not only problematic determinations of agricultural capability, but also claims to relieve development pressure. The ALC Kootenay Panel excluded the land on the grounds that it was not farmed, possessed poor agricultural quality (class 5 and 6), and would relieve future development pressure. However, the Panel was arguably incorrect on all of these justifications: the land was in fact used for grazing by two local cattle companies who were not contacted and later filed a complaint, and the same development pressure argument cited for this exclusion had already been given for an adjacent 800 unit development exclusion (Green 2006). These

types of exclusions may be accompanied by caveats that claim, "...limited regional impact if [the exclusion] is not viewed as a precedent..." (Metro Vancouver 2010:6). Fear of agriculture's "death by a thousand cuts" in the region is in no way alleviated by decisions that frame each case as "limited" and not to be viewed as precedent setting.

"Buffer zones" are another red herring that decision makers use to justify exclusions when under development pressure. In several cases the promise of a buffer zone between new developments and surrounding farmland rationalized exclusions along the urban/rural fringe. However, there is no evidence suggesting that buffer zones actually reduce farmer/suburbanite conflict, or draw a firm boundary on tidelines of exclusion. Also, 91% of 1,142 BC residents polled in 2008 agreed that "as neighbourhoods are built around farmland, farmers have a right to continue using reasonable farm practices, even if the new neighbours oppose the odours or other impacts that sometimes come with farming" (Ipsos Reid Public Affairs 2008:25).

Many of the aforementioned issues are wrapped-up in the creation of golf courses on ALR lands. Using the rationale of thicker urban/rural buffers, the Social Credit government, in 1988, eliminated the ability of the ALC to object to the use of ALR lands for golf courses, which created a rush of speculation purchases that increased land prices until a moratorium was put in place in 1991 by the NDP provincial government (Garrish 2002/2003; Yearwood-Lee 2008). According to Patterson (1998) when the golf courses were permitted they proliferated ALR lands in Langley and Surrey specifically. Whereas early golf courses in Scotland represent use of existing soils and thus retention of agricultural capabilities, most contemporary golf courses, with their complete reshaping of the landscape, and compromised or replaced growing media (Gray 1997; Wheeler & Nauright 2006), may be seen as lost agricultural opportunities, and thus a shift from collective to private benefits.

## **4.2 Economics & Justice**

### ***4.2.1 Land Values and Property Rights***

Farmland values in BC vary by production capacity, soil type, and location, and range from about \$500 to \$5,000 per acre (Farm Assessment Review Panel 2009). Urban proximity tends to form upward pressure on farmland development value and downward pressure on its agricultural value (Nelson 1992).

According to a white paper by The Fraser Institute, the ALR renders farm land values one-fifth to one-tenth that of land outside the ALR (Katz 2009), though the original source (Scott 1995) provides no evidence of how this differential was calculated, and the opposite



may be true with respect to hobby farms (Stobbe et al 2009). The much higher per-hectare land values of small hobby-farm parcels within the ALR—approximately \$90,000 more per hectare—puts a figure on the pressure to subdivide. Regardless, downward pressure of the ALR on commercial farmland is a double-edged effect, as lower land values mean easier entry for those wishing to commence commercial farming operations. This is arguably an agriculturally supportive function of the ALR. A farmer from south of Murrayville who amalgamated his property to increase the agricultural capacity of his land said that:

*All of us in farming depend on the availability of land. I don't mean cheap land, but land that we can (affordably) buy, and grow on. We (farmers) are a dying breed... We are getting squeezed. If it continues like this... my kids won't have a future (Jones 2011b).*

One of the original founders of the ALR concept argued that the Commission should recompense farmers for the development opportunity costs imposed by the reserve, but this idea was rejected by the others involved in the creation of the Act (Petter 1985). Garrish (2002/2003) describes this “abandonment” (28) as detrimental to the goals of supporting active farming and land conservation. Though far from the purchase-of-development-rights approach, the ALR was in fact initially complemented by a set of subsidies such as the Farm Income Assurance Act (FIA), low interest loans, and land improvement grants (Garrish 2002/2003). When the Social Credit party took over provincial leadership in 1975, these programs were eliminated during the free-trade and deficit reduction actions throughout the early 1990s, which led to a call from several farming organizations to eliminate the ALR (Garrish 2002/2003).

Much like Garrish, others, such as Plantinga and Miller (2001) argue that financial compensation for foregone development revenues is the only sure way to reduce subtractions of farmland. However, these discourses advance beyond ALR preservation, and into accusations of unjust relationships, particularly around property rights. Hanna contends that, “the ALR is a land-reserve model that constitutes a significant limitation of property rights where compliance is not encouraged through incentive, but is imposed through strict use regulation... the present land reserve model constitutes a substantial restriction of opportunity without fair compensation...” (Hanna 1997:168). In their position statement, the BC Cattleman’s Association (2010) argue that the support from the government and citizens of the province for their ranching is inadequate, and fails to compensate for the land value depreciation incurred by the ALR. The validity of the contention that the ALR is thus almost universally despised by farmers (e.g. Garrish 2002/2003) has never been directly assessed empirically, though Androkovich et al. (2008) found households that owned land in

the ALR were more willing to pay a premium to preserve the ALR than non-landowners, which calls into question allegations of widespread farmer discontent. Regardless, the core contention—“if society [is] intent upon tying them to their land for the greater good, then society [has] a responsibility to share in that burden” (40)—must be confronted when considering reasons for land loss.

This literature characterizes farmers as unjustly treated by the province, particularly with respect to what is perceived as a right to the capital gains acquired through land value appreciation. There is some truth to this, but it may also mask the respectable profits made by *some* farming operations, especially as commercial farm sizes increase with concentration and automation. Taking the gross farm receipts in British Columbia and dividing them by the number of farms suggests annual gross revenue of close to \$150,000. 89% of this was used for expenses, thus not leaving much, though the expenses include major household purchases including motor vehicles and marked gasoline. 6.4% of the farms in BC in 2011 made more than half a million dollars each in farm receipts, or close to 75% of the province’s total gross farm receipts (Statistics Canada 2011). On the other end of the operational scale, the tax breaks associated with agricultural land may subsidize wealthy landowners seeking rural estates (Cotteleer et al. 2009), particularly given the low threshold of small-farm income required to attain the status (Stobbe et al. 2009). Thus differences in scale complicate a homogenized characterization of the plight of farmers.

Another complication concerns when this land was rendered privately owned by a particular farmer. If the farm was purchased after the ALR was created, then the owner should have known about the land status and what this might mean for land value. If it was purchased sometime before the establishment of the ALR, then, given the sharp rise in land values over the lifespan of the ALR, a sizeable increase in the agricultural land value may still have occurred regardless, particularly near urban markets for food. Is this a step down from bonanza to reasonable gain? Other questions around equity and private property arise, such as why these farmers may stand to gain more than the landless. Finally, if the land was purchased during the colonial appropriation and subdivision of Canada then one might point out the advantages afforded to the farmer at the cost of Canada’s First Peoples. The question of rights and limitless profit is a messy one.

The public may be unsympathetic to Garrish’s (2002/2003) call for compensation. Whereas 16% of BC residents polled in 2014 agreed that, “the ALR unfairly deprives citizens of the freedom to use their land and generate a fair return on investment,” 51%

disagreed, with the remainder neutral or unsure (McAllister Opinion Research 2014:14). This poll result suggests a leaning by the public toward the collective.

In summary, we may ask why compensation is owed; some responses are more convincing than others. On the one hand, if farmers were paid more for their labour perhaps they would be less inclined to seek a large cash-out. Given that farming collects lower profits than other industries, maybe the public owes farmers the difference in exchange for the food security they provide. Ultimately, however, calls for compensation too often fail to acknowledge the funding dilemmas of governments already challenged by decades of cuts.

#### 4.2.2 Neoliberal Contexts

A common neoliberal view on private property is that it should be strictly privately controlled; external control is seen as a move away from free markets towards a command economy, though the need to facilitate markets through regulations renders the perspective somewhat paradoxical at times. Also explicit within this perspective is the idea of an evolution from industrial to post-industrial economies, and concomitantly from production to consumption (Ley 1980). Combined with the associated views on free trade and competitive advantage (e.g. Katz 2009), the comparative value of land as farmland is low, unless it can produce a globally traded product at the cheapest possible price, or can be later developed through free private property decisions. It is assumed—by those such as Robin Silvester, president of Port Metro Vancouver (Wood 2013)—that a transition to a “knowledge economy” will be fueled by food produced in other corners of the world.

This market-based view has entered scholarly discussion of farmland protection. For instance, Stobbe et al. (2009:395) argue that:

*Protection of agricultural land for the purpose of maintaining future agricultural production potential cannot be viewed as a public good, because, if declining global agricultural production or food scarcity is indeed a concern, the value of land in agriculture would rise relative to that in other uses in anticipation of rising future agricultural commodity prices, thereby causing more agricultural land to be protected privately.*

This conventional faith in the self-regulation of markets obscures the prevalence of market failure and the tendency to discount the future (e.g. Clark 2011; Daly & Farley 2004; Endres 2011).

There is a tension between the political desire for food security and the economic squeeze on farmers. It may be very economically “rational” for a farmer to want to “cash out” of farming within a global neoliberal context that directly disadvantages them.

It may be that the global-market-induced transition from a resource-based Vancouver regional economy to one of international investment (Hutton 2011) has put pressure on the ALR. In recent years Vancouver has seen a dramatic influx in international economic elites and an increase in global land speculator activity (Peck et al. 2014). Between 1999 and 2012, the highest quintile of net worth grew most greatly in British Columbia compared to the other Canadian Provinces<sup>5</sup>, much of this growth in wealth arriving through immigration (e.g. Ley 2011). This is one way in which the more open borders (for global capital and the wealthy) associated with neoliberal free-trade and immigration policies may influence the ALR. For instance, the premium that hobby farmers—those who can afford economically unproductive open spaces—are willing to pay for small parcels within ALR lands (Stobbe et al. 2009), exceeds the financial solvency of the agricultural population (Harrison & Cloutier 1995), and contributes to pressure to subdivide larger parcels of ALR lands.

Scholars discussing the ALR seldom acknowledge the neoliberal political context that continually questions regulation, spending on governance, and social compensation. For instance, the change to the Act in the early 2000s led to a 75% reduction in ALC regulations (Agricultural Land Commission 2003b), and a succession of budget cuts between 2002 and 2010 eliminated close to a third of its budget, undermining many of its core functions (Auditor General of British Columbia 2010). Jackson and Holden's (2013) view that multi-jurisdictional governance may be helpful fails to recognize how such a heavy (or arguably productively redundant) system can weather budget-cuts and deregulation. Androkovich's (2013) answer to the ALR's challenges is to augment the current decision processes with expansive quantified physical and cultural criteria, based on the USDA's Land Evaluation and Site Assessment (LESA) framework. This "EIAing" of the ALR is ultimately data hungry and costly, and whereas he recognizes the debilitation of shrinking budgets he does not provide a solution to buoy his resource-intensive recommendations.

If Garrish's contention that, "the absence of a viable farm economy will inevitably preclude the possibility of the commission protecting the agricultural land base over the long-term" (2002/2003:39), is true, then the future of the ALR may be one of perennial erosion, as under a context of free trade regimes and constrained governments, viable farm economies are determined at the global, rather than local, scale. Stobbe et al. (2011) demonstrate that exclusion rates are difficult to correlate with the colour of provincial political power, but Androkovich argues that the incapacitating cuts associated with the

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<sup>5</sup> Authors' calculation using Statistics Canada's Canadian Socioeconomic Information Management Database.

“small c” conservative Liberal party tip the ALC’s general tendencies from preservation to development (2013:371).

According to Stobbe et al. (2013) partial exclusion applications are more often approved, and Green (2006) discusses land-swaps such as the Raven Forest Products decision in Courtenay. Jackson and Holden (2013) discuss the contemporary prevalence of the search for these “win-win” decisions and compromise outcomes in ALR exclusion determinations. This approach is influenced by a fear of threatening economic growth or undermining the perceived sanctity and totality of private property rights, and carries with it the risk of eroding, or outright undermining, collective and consensus-based policy goals (Ibid.), in part by creating an incentive to speculate (Green 2006). This deviation from goal oriented policy to compromise would seem to support Caulfield’s (1993) somewhat cynical argument that developers, rather than plans, drive decision making.

Given the reliance upon petroleum for global trade, impending peak oil (de Almeida and Silva, 2009; Kjärstad and Johnsson, 2009; Kontorovich, 2009; Maggio & Cacciola, 2009; Shafiee & Topal, 2009) may jeopardize the competitive advantage approach to food provision currently in vogue, and demand local food sources (Friedrichs 2010; White 2012; Wright 2009). More importantly, competitive advantage does not seem well-supported by the BC public; recent polling found 91% disagreed that, “protecting farmland in BC makes no sense when we can import food much more cheaply from other countries” (McAllister Opinion Research 2014:14). Androkovich et al. (2008) found equal support for the ALR on the grounds of economic benefit, environmental benefits, and the preservation of local food production.

## **5.0 Conclusion**

Garrish suggests that, “the success of the ALR has always been judged by its effectiveness within the Fraser Valley” (2002/2003:27). Our work agrees with Hutton’s contention that the ALR has succeeded in protecting much of the region’s agricultural lands (2011). Comparatively, development in Greenfield lands in Vancouver has generally been less than in Toronto and Calgary (Burchfield et al. 2010:34), and part of that may be owed to the ALR.

One of the conclusions that can be drawn from our results is that generalizing key explanatory variables for exclusions in one municipality for the region, or beyond, is risky; the history and geography, and particularly the political orientation of decision makers, of each municipality influence its land-use planning outcome.



Given the neoliberal double-blow of free trade, propped up by subsidized petroleum-based transportation networks, and budget cuts, is there really a viable option besides land-use regulation, such as the government spending demanded by Garrish's (2002/2003) compensation-oriented suggestions? We suggest there isn't, but several things need to occur to ensure it works.

First, a firm position must be taken with respect to where private property rights end and collective rights begin, ideally with some public deliberation. Jackson and Holden recommend that the ALC attain, "additional public consent for the need to exercise a food security and sovereignty agenda that sees no exception to preserving arable land that has agricultural merits as part of the regional stock of critical natural capital, even if such merits are not currently being utilized" (2013:4863). Given the public support for the ALR found in the polls, a highly informed public referendum may be one possible approach, though the recent failure of the Vancouver transit plebiscite would suggest some caution.

Second, when the collective good is prioritized over private property rights, it is essential that this balance be communicated to the public. The public impression of private property rights as comprehensive and unchallengeable is deceptive and leads to a fair degree of confusion and suffering, as seen in the struggles of Alberta farmers with the oil and gas industry's subsurface mineral rights (Nikiforuk 2001), or in the case of some retiring farmers within the ALR.

Third, legal reinforcement of the ALR is needed. Compromises ultimately undermine one of the primary purposes of planning and strategic environmental impact assessment, which is to determine comprehensive thresholds and boundaries, in advance, before the complications of specific cases put everything into question and render decisions isolated and piecemeal. Clearly plans and policies, like laws, are meant to be reviewed and changed when proven problematic, but the graveness associated with these changes in criminal law, for instance, does not seem to be present at the provincial, regional, and municipal level with respect to land use planning. The public may support Jackson & Holden's contention that ALR-related law should be strengthened (2013); in a poll of 1,704 BC residents by McAllister Opinion Research, 52% felt that the ALR laws should be, "strengthened to preserve MORE land for growing food," and 19% responded that the law should be maintained—rather than relaxed through Bill 24—so as to protect all lands within the ALR with no major changes (2014:16). Without legal reinforcement of a clearly assessed, informed, public position on private and collective rights, the ALR may continue to slowly bleed land.

Fourth, Androkovich's (2013) call for more specific legislation is wise and would likely reduce compromise outcomes. However, the legislation must be specific not only with respect to technical measurements but also ideological orientation, as this will dictate the thresholds and ranking of the criteria. The scalar terminology used in the Commission's current guiding documents betrays the fundamental paradox—"community need" clearly suggests a collapse of the collective "provincial interest" (Agricultural Land Commission 2005:12; Cabinet Appeals Abolition Act 1993; Quayle 1998). Similarly, "food security" may be seen as a more imperative collective goal than simply preserving land or farming, and so its addition to the act, as suggested by Androkovich (2013), may be prudent.

The absence of a federal level of input to agricultural land use is conspicuous. Canada remains the only G8 nation without a food security plan, though current efforts are underway to strengthen federal action in this area. Correction of the federal vacuum on agricultural land protection could further slow erosion of the land base.

Public support for the ALR in general remains strong. In 2008 and 2014 this support had increased—95% of those polled supported or strongly supported the ALR, compared to 91% in 2004 (Ipsos Reid Public Affairs 2008; McAllister Opinion Research 2014). However, in both cases, fewer than fifty percent felt they understood the relevant issues. Perhaps it is time for an extensive public dialogue on the ALR.

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