

DIKES, DUCKS, AND DAMS:

Environmental Change and the Politics of Reclamation at Creston Flats, 1882–2014

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IN 1947, GUY CONSTABLE, A “charter architect” of the Columbia River Basin development and voluble supporter of Creston farmers and enterprise, made a prescient observation about changing public interests in Creston Flats.¹ Debates around the Lower Kootenay bottomlands, Constable asserted, had moved from “kilowatts vs. cabbages” to “cabbages vs. ducks”; it was possible, he admitted, that “in a little while they would get some fish into the thing as well.”² This article shows how agricultural reclamation schemes (Constable’s cabbages), wildlife conservation, hydroelectric generation, and declining fish stocks took turns shaping discussions about resource distribution and development in the Kootenays between 1882 and 2014. It also argues that agriculture, in the form of a network of dikes along the Creston Flats, remained a central concern as the community grappled with environmental and socio-economic change. In sum, this article maps more than a century of shifting debates tied to agricultural reclamation

* Tammy Hardwick of the Creston Museum proved invaluable over the course of this project, as did Cyril Colonel, Paul Geraghty, and Kevin Monahan. At the University of Victoria, thanks to Rick Rajala and Greg Blue for their patient supervision; the author’s wonderful graduate cohort (especially Amber Ayers, Elizabeth Della Zazzera, Jude Goertzen, Lisa Kuncewicz, Heather Longworth, Lisa Pasolli, and Catherine Ulmer); Dan, Margaret, and Will Vatamaniuck, Joan and Steve Wallace, and Fern Watson for their hospitality; and John Dance, Olga Efimova, Ilana Ludwin, Theresa Wallace, Graeme Wynn, and two anonymous *BC Studies* reviewers for their extremely helpful and thorough comments on earlier drafts. Funding for this research was provided by the Social Sciences and Humanities Research Council and the University of Victoria’s Department of History and Faculty of Graduate Studies.

¹ “Constable Honoured, 60 Years Serving Chamber,” *Cranbrook Daily News*, 13 April 1964, British Columbia Archives (hereafter BCA), Guy Constable Fonds, MS-1462, box 10, file 4, Mfm Aoo666. Articles drawn from archival clippings files frequently lack a recorded page number. To facilitate their access, where possible, I record the title of the article.

² The Application of Creston Reclamation Company Limited for Permission to Construct Certain Permanent Works Adjacent to the Kootenay River and its East Branch, for the Reclamation of Certain Flood Lands Between the International Boundary and Kootenay Lake, near Sirdar (hereafter Duck Lake Hearing at Creston), Creston, British Columbia, 13 and 14 November 1947, 17, British Columbia Ministry of Forestry Library (hereafter BCMFL), 627.1/161.

in Creston, British Columbia. It argues that local notions in Creston about reclamation, wilderness preservation, and the Columbia River Treaty have been continuously shaped by how farmers perceived the landscape and river system. Successive efforts to reclaim Creston Flats fed and sustained ideas about the importance of managing and controlling the environment, even as these efforts led to new vulnerabilities. What was once understood as a local matter is now enmeshed within complex state organizations and institutions, yet the dikes continue to mediate the community's understanding of the Kootenay River, the region, and international politics.

Creston's story is important, in part, because it enriches our understanding of local responses to the Columbia River Treaty. In that small community, situated on rolling benchland above the Kootenay River where it flows between the Selkirk and Purcell mountains en route to Kootenay Lake in southeastern British Columbia (Figure 1), responses to the treaty were shaped by a history of agricultural land reclamation stretching back some six decades. This history also influenced negotiations around environmental conservation and international fish stocks. At the same time, the story of Creston Flats illustrates some of the surprising consequences arising from human manipulations of land and water.

Until now, the Creston Flats have escaped comprehensive analysis. Historian Mabel E. Jordan, Constable's contemporary, wrote two narrative accounts of reclamation attempts around Creston,³ but her work relies almost entirely on her correspondence with Constable.⁴ More recent explorations of the subject are limited in scope or subsumed within broader narratives: Donald Spritzer makes one brief mention of the success of reclamation efforts; Ron J. Welwood challenges some of Jordan's claims about early attempts to dike the flatlands; Paul Koroscil and James Murton discuss one particularly disastrous chapter of Creston's reclamation – the Lister veterans' settlement; Bruce Stadfeld traces how rural electrification and Euro-Canadian settlement in the Kootenays disrupted Aboriginal space; and Michael Kluckner's *Vanishing British Columbia* comments briefly on the success of agricultural reclamation in Creston.⁵ Several other studies deal with the social fallout of the

³ Mabel Jordan, "The Kootenay Reclamation and Colonization Scheme and William Adolph Baillie-Grohman," *British Columbia Historical Quarterly* 20, 3-4 (1956): 187-220; Mabel Jordan, "The Upper Kootenay River Canal," *Canadian West* (Summer 1987): 76-82; and Ron J. Welwood, "Baillie-Grohman's Diversion," *BC Historical News* 36, 4 (2003): 6-12.

⁴ Ron J. Welwood warns that Jordan's acceptance of Baillie-Grohman's accounts can be highly problematic (see Welwood, "Baillie-Grohman's Diversion," 12).

⁵ Donald E. Spritzer, *Waters of Wealth: The Story of the Kootenai River and Libby Dam* (Boulder: Pruett Publishing Company, 1979), 129; Welwood, "Baillie-Grohman's Diversion," 13-14; Paul

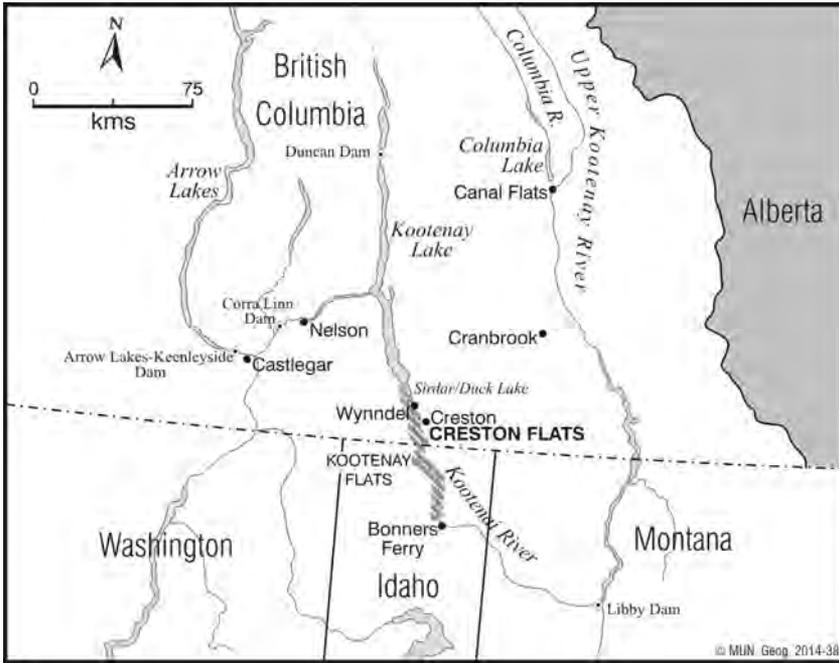


Figure 1. The Creston Flats within the Columbia River Basin. Map by Charles Conway, Memorial University of Newfoundland.

Columbia River Treaty, particularly among communities displaced by the dams it authorized.⁶ Most recently, Philip Van Huizen's work highlights the changing rhetoric of Libby Dam supporters in the United States and Canada, including the Kootenays.⁷ Yet no scholar has comprehensively

M. Koroscil, "British Columbia: Settlement History" (PhD diss., Simon Fraser University, 2000), 89-120; James Murton, *Creating a Modern Countryside: Liberalism and Land Resettlement in British Columbia* (Vancouver: UBC Press, 2007); Bruce Stadfeld, "Electric Space: Social and Natural Transformations in British Columbia's Hydroelectric Industry to World War II" (PhD diss., University of Manitoba, 2002), 110-64; and Michael Kluckner, *Vanishing British Columbia* (Vancouver: UBC Press, 2005), 108-9.

⁶ Tina Loo, "People in the Way: Modernity, Environment, and Society on the Arrow Lakes," *BC Studies* 142/143 (2004): 161-96; Joy Parr, *Sensing Changes: Technologies, Environments, and the Everyday, 1953-2003* (Vancouver: UBC Press, 2010), 102-35; J. Douglas Porteous and Sandra Eileen Smith, *Domicide: The Global Destruction of Home* (Montreal and Kingston: McGill-Queen's University Press, 2001), 151-73; Sandra Smith, "Domicide: Concept, Experience, Planning" (PhD diss., University of Victoria, 1995); Donald Waterfield and Richard Deane, *Continental Waterboy: The Columbia River Controversy* (Toronto: Clarke, Irwin, and Co, 1970); Donald Waterfield, *Land Grab: One Man versus the Authority* (Toronto: Clarke, Irwin and Co, 1973); and James Wood Wilson, *People in the Way: The Human Aspects of the Columbia River Project* (Toronto: University of Toronto Press, 1973).

⁷ Philip Van Huizen, "Building a Green Dam: Environmental Modernism and the Canadian-American Libby Dam Project," *Pacific Historical Review* 79, 3 (2010): 418-53.

explored how the Creston reclamation fits into broader patterns of regional history. Guy Constable's complicated role in BC history remains neglected despite the fact that he attended every meeting related to the development of the Kootenay River from his arrival in 1904 until the late 1960s.⁸ A self-proclaimed "man of many hats," he exercised considerable power in Creston, the Kootenay region, and the province. Besides founding the town's local newspaper, the *Creston Review*, Constable was a school board trustee, an insurance and real estate broker, notary public, local court judge, president of the Kootenay Valley Associated Drainage Districts (KVADD), and a founding member of numerous local business organizations, including the Creston Board of Trade.⁹

Constable engaged in many heated debates that are documented (at least in part) in his extensive personal archive and other sources, such as hearing transcripts, newspaper articles, and the Creston Museum's online history resources.¹⁰ This article focuses on these and explores what T.C. Meredith describes as the "imprint of ... personality" that "is reflected, indelibly, on the cultural landscape of the area."¹¹ For better or for worse, the words and actions of Guy Constable have endured in the cultural landscape of Creston. They are particularly apparent when mapping the longer history of change along the Kootenay River and in Creston. I select three stories that reflect some of the most significant changes in human values, ideas, and debates that were dominant in public discourse in Creston. First, I identify the process and politics of reclamation from the late nineteenth century to the mid-twentieth century. Next, I explore the clash over the future of Duck Lake (a shallow water body located immediately south of Kootenay Lake) that took place between those who supported reclamation, on the one hand, and increasingly influential game interests and governments, on the other. Although Creston farmers initially rejected wildlife conservation policies in the 1940s, government intervention, along with a made-in-Creston compromise, paved the way for the establishment of the Creston

⁸ In the United States "Kootenay River" is spelled "Kootenai River."

⁹ Smith, "Domicide," 265; Letter to the editor from Guy Constable, *Creston Review*, 22 May 1933; *Creston Review*, 25 July 1973, 1, 8. BCA, Guy Constable Fonds, GR-1462, Mfilm A00667, box 10, file 4.

¹⁰ In 2004, the Creston and District Museum and Archives completed a comprehensive online project documenting the community's history, complete with excerpts from oral histories and textual sources relating to the development of the Kootenay River. See Creston and District Historical and Museum Society, *Taming the Kootenay* (Creston, BC: Virtual Museum of Canada, 2004), http://www.museevirtuel-virtualmuseum.ca/sgc-cms/histoires_de_chez_nous-community_memories/pm_v2.php?id=record_detail&fl=0&lg=English&cx=00000322#.

¹¹ T.C. Meredith, "The Upper Columbia Valley, 1900-20: An Assessment of 'Boosterism' and the 'Biography of Landscape,'" *Canadian Geographer* 29, 1 (1985): 52.

Valley Wildlife Management Area (CVWMA) in 1968. In the final section, I explore the legacy of the aggressive campaign for Libby Dam that was waged by Guy Constable and others who saw the project as a means of achieving costless flood control for Creston and its vicinity. By the late twentieth century, Creston farmers struggled to protect their diked lands from an unexpected threat: erosion caused by the dam.

Creston residents interpreted regional, provincial, and international history through the lens of local reclamation initiatives. Nineteenth-century reclamation plans might have failed, but variations of initial diking schemes endured and were repeatedly reinvented over the course of more than a century. As time passed, reclamation became a tangible system tightly interwoven with residents' notions of the region. Seemingly disparate issues, such as wildfowl conservation and flood prevention, were tied, inevitably, to the dikes.

DIKING THE FLATS

Rising in the Canadian Rockies near Banff and Yoho national parks, the Kootenay River flows south through Montana and loops through Idaho and British Columbia before entering Kootenay Lake from the south and draining into the Columbia River at Castlegar. Part of the rich alluvial bottomlands stretching from Bonners Ferry in Idaho to Kootenay Lake, Creston Flats was created by the meandering path of the Kootenay River and the smaller Goat River to the east (Figure 2). Wildlife flourished here, particularly in the wetlands near Duck Lake. Before reclamation the river regularly flouted firm riverbanks as well as international borders. Late nineteenth-century attempts to farm the Flats, including those near Creston, were stymied by spring floods that wrought havoc on crops and settlers alike. Guy Constable's son described the Kootenay's riverbanks near Creston as having been "a tangle of cottonwoods, a jungle, a great cover for pheasants" before major reclamation efforts began in the 1930s. "There were countless sloughs, channels, potholes, lakes, meadowgrass, red topped rushes," he recalled: "You would skate on one slough and go across the ridge and get on another and skate some more."¹²

In 1882, London-born William Adolph Baillie-Grohman (1861-1921), a successful adventure writer who had first journeyed to the Kootenays on a hunting expedition, took note of rich soil deposits south of

¹² Bill Constable, cited in Creston and District Historical and Museum Society, *Taming the Kootenay, 1882: The Creston Valley*, 10.

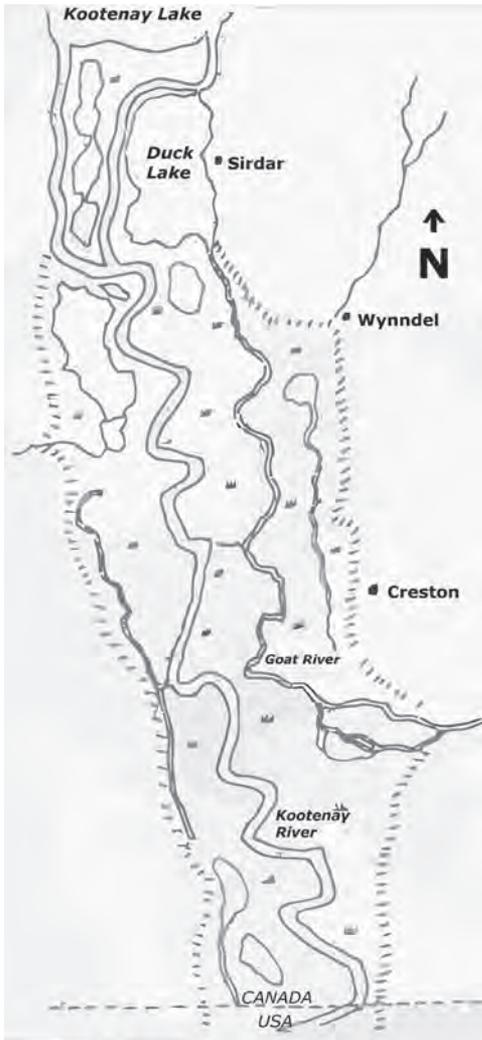


Figure 2. In 1905, the Goat River had not yet been diverted into the Kootenay River. Image courtesy of Creston and District Museum and Archives. Adapted by the author from Jason Smith, Creston Flats ca. 1905. Creston and District Historical and Museum Society, *Taming the Kootenay, 1882: The Creston Valley*, 7.

Kootenay Lake.¹³ Despite the nearby presence of the Yaqan Nu?kiy (the Lower Kootenay Band, one of seven bands that make up the Ktunaxa Nation), whose ancestors had inhabited the region for millennia, Baillie-Grohman conceived of the land as empty space, ripe for farming and European settlement.¹⁴ The Englishman negotiated a

ten-year land concession from the province that began on 10 December 1883 and covered over 19,000 hectares near the river, including Creston Flats.¹⁵ Since floods made agriculture nearly impossible, he decided to construct a channel across McGillivray's Portage (Canal Flats), diverting the Kootenay River into Columbia Lake. In theory, this would reduce the

¹³ Jordan, "Kootenay Reclamation," 187-206.

¹⁴ Baillie-Grohman may have been influenced by American settlers in the region who were familiar with the country and its potential for agricultural reclamation. See Meredith, "Upper Columbia Valley," 47; and Welwood, "Baillie-Grohman's Diversion," 13-14.

¹⁵ Jordan, "Kootenay Reclamation," 189.

Kootenay's levels downstream at Creston and facilitate reclamation and farming at Baillie-Grohman's Kootenay Reclamation Farm (KRF) south of Creston.¹⁶ Baillie-Grohman swiftly created the Kootenay Lake Syndicate with British investors and began the project, which subsequently failed due to planning and technical challenges.¹⁷

Creston's appeal for potential farmers is readily apparent: the Kootenay's mining boom, lumber industry, and growing towns promised ample markets for agricultural products, and the railway promised a rapid avenue to outside markets.¹⁸ However, Baillie-Grohman, and Constable after him, continually wrestled with uncertain jurisdictional issues in the region: the BC government held title to most of the lands, but the federal government was responsible for the Ktunaxa's nearby reserves. Baillie-Grohman was forced to renegotiate the scheme in 1886, after the Canadian Pacific Railway (CPR) made a deal with the BC government and moved into the area. Despite costly concessions to the railway, his ambitious plans for Canal Flats were plagued with transport and supply problems, and he also faced vocal opposition from farmers living in the northern Columbia Valley who feared the project would flood their communities. Even though he was aware that constructing the canal and maintaining the low water levels required for the railway were mutually exclusive, Baillie-Grohman built the connection between the rivers. The results were disastrous.¹⁹ He was forced to abandon the canal – and his investment in the project – to floods.²⁰ Reclamation at first seemed to be a more feasible proposition, but Baillie-Grohman soon became embroiled in property disputes, and power struggles within his company completely derailed the project. Baillie-Grohman ultimately headed back to England to face unhappy investors, and the Alberta and British Columbia Exploration Company (ABCEC) took over the syndicate. Two years later, the extreme floods of 1894 destroyed ABCEC's new dikes along the KRF.²¹

¹⁶ "Come with Me to Yesterday: Baillie-Grohman Canal Again," *Cranbrook Daily Townsman*, 29 January 1976, BCA, William Baillie Grohman Vertical File, box 6, file 0094, no. 0114; Welwood, "Baillie-Grohman's Diversion," 10.

¹⁷ Spritzer, *Waters of Wealth*, 83, 77; Jordan, "Kootenay Reclamation," 193, 198-200; and Kluckner, *Vanishing British Columbia*, 109.

¹⁸ Creston and District Historical and Museum Society, *Taming the Kootenay, 1882-1893: W. A. Baillie-Grohman and the Midge*, 1; Guy Constable, *Reclamation: Creation of an Inland Empire* (Creston: Creston Board of Trade, 1918), 3.

¹⁹ Jordan, "Kootenay Reclamation," 198, 201-2; and Spritzer, *Waters of Wealth*, 74-77.

²⁰ Nearly a century after Baillie-Grohman's efforts, Hydro BC briefly flirted with his idea of diverting Kootenay River water into the Columbia. See Spritzer, *Waters of Wealth*, 78, 86; and "Historians Dedicate Grohman Canal," *Cranbrook Daily Townsman*, 11 September 1975, BCA, William Baillie Grohman Vertical File, box 6, file 0094.

²¹ Jordan, "Kootenay Reclamation," 203-5.

“Baillie-Grohman’s 1885 map of the Kootenays was not a reality, it was a vision,” Stadfeld writes. “It represented capital’s and the state’s ideal conception of the Kootenay valley ... a stratified non-Native space” that erased the Indigenous people in favour of forestry, farming, and mining.²² While early settler society accounts of reclamation schemes rarely acknowledged the presence of Indigenous communities, the lives of Aboriginals had long been intertwined with the Kootenay River and reclamation schemes.²³ Stadfeld points out that the Kootenay’s rhythms were central to the Ktunaxa’s subsistence cycle and how they experienced time and space. For example, the Ktunaxa moved upriver during the winter, travelling across the frozen water on snowshoes, and downriver in the spring, using their distinctive sturgeon-nosed canoes.²⁴ Harvesting plants such as cattails and dogwood berries that flourished on the flooded river’s bottomlands, the Ktunaxa also used their knowledge of the river during hunting expeditions.²⁵ It is no wonder, then, that they resisted efforts to curtail their access to the river. In 1892, members of the Yaqan Nuʔkiy threatened an ABCEC surveyor on the Flats and destroyed his survey stakes. A few months later, the company rejected Ktunaxa demands for compensation after their dredger destroyed Yaqan Nuʔkiy potato crops. The situation escalated, with threats of violence, until the local government agent finally intervened and promised compensation. The local Indian Agent urged the company to make an effort to negotiate with the Yaqan Nuʔkiy, to no avail.²⁶ In 1895, members of the Yaqan Nuʔkiy once again confronted trespassing ABCEC construction crews and forced them to adjust the diking site to accommodate their burial grounds and gardens; some of the sites were spared.²⁷ Lands designated as reserves by the federal government lay close to the river, and Yaqan Nuʔkiy living there had little choice but to remain and deal with continued flooding. Like the Chinese labourers who had helped build the Reclamation Farm, the Ktunaxa and other

²² Stadfeld, “Electric Space,” 134.

²³ For information on the Ktunaxa, see Randy Bouchard and Dorothy Kennedy, *First Nations’ Aboriginal Interests and Traditional Use in the Waneta Hydroelectric Expansion Project Area: A Summary and Analysis of Known and Available Background Information* (Victoria: Waneta Expansion Power Corporation and Bouchard and Kennedy Research Consultants, 2004), C-9; and Randy Bouchard and Dorothy Kennedy, *First Nations Ethnography and Ethnohistory in British Columbia’s Lower Kootenay/Columbia Hydropower Region* (Victoria: British Columbian Indian Language Project, 2000), 9-12, 33-35, 222, 292-305.

²⁴ Stadfeld, “Electric Space,” 118.

²⁵ *Ibid.*, 121-23.

²⁶ *Ibid.*, 142-45.

²⁷ Nicholas Coccola, *They Call Me Father: Memoirs of Father Nicolas Coccola*, ed. Margaret Whitehead (Vancouver: UBC Press, 1988), 130-32.

Aboriginals were excluded from purchasing the best lands in Baillie-Grohman's farming scheme.²⁸

The Yaqan Nu?kiy and other Creston residents harvested hay, wheat, and other grain crops on the partially reclaimed Flats until the arrival of Guy Constable.²⁹ Constable had grown up near dikes in his native Lancashire and remained fascinated by reclamation, hydraulic engineering, and soil preservation; his detailed journals convey his appreciation for agriculture and his belief in its utility for humankind.³⁰ His vision of the manifold virtues of agrarian, rural life was shared by successive BC governments.³¹ For Constable, the environment was fickle, complex, female(!), and something that could and should be controlled. Such sentiments were widely held at the time: reclamation was necessary to achieve a regulated, predictable landscape. Drainage projects like those in Europe, or in southern Manitoba's "wet prairie," likewise embodied the agricultural ideal. "It was the government-assisted improvement that, though satisfactory to nearly no one, was desired by nearly everyone," writes Shannon Stunden Bower.³² Constable tended to essentialize nature and humans, making assumptions about the uniformity of both. He embraced both utopian agrarianism and the faith in twentieth-century scientific developments that were in the process of transforming farming, arguing that diking demands "a definite psychology ... that ... requires two generations to acquire" and that every local farmer "must create for himself a State of Mind in which the first things to register will be dykes, drains and noxious weeds."³³ Constable and many of his contemporaries saw reclamation as a liberating process, one that could restore civic virtues and idyllic rural farm life.³⁴

Although Constable originally immigrated to the Kootenays to work

²⁸ Jordan, "Kootenay Reclamation," 193, 201.

²⁹ Creston and District Historical and Museum Society, *Taming the Kootenay, 1908-1932: Years of Struggles and Setbacks*, 3-5.

³⁰ In addition to archival files at the BCA, Guy Constable's journals are available in Creston. See Guy Constable's journals and ephemera, 1917-1961, vols. 1-7, Creston and District Museum and Archives (hereafter CDMA), Guy Constable Files, MS-86-72-34, box 34. See also Jordan, "Kootenay Reclamation," 193.

³¹ Murton, *Creating a Modern Countryside*, 38-39; Cole Harris and David Demeritt, "Farming and Rural Life," in *The Resettlement of British Columbia: Essays on Colonialism and Geographical Change*, ed. Cole Harris, 218-49 (Vancouver: UBC Press, 1997).

³² Shannon Stunden Bower, *Wet Prairie: People, Land, and Water in Agricultural Manitoba* (Vancouver: UBC Press, 2011), 110.

³³ Letter to the editor from Guy Constable, *Nelson News*, 23 June 1938, 2; Letter to the editor from Guy Constable, *Creston Review*, 19 February 1936. Both letters in CDMA, Guy Constable Files, MS-86-72-12, box 12, file 8.

³⁴ Donald J. Pisani, *Water and the American Government: The Reclamation Bureau, National Water Policy, and the West, 1902-1935* (Berkeley and Los Angeles: University of California Press, 2002), xii.

as an engineer at Alice Mine, he soon abandoned his post to investigate the agricultural potential of the Creston Valley.³⁵ When the Ktunaxa petitioned the Royal Commission on Indian Affairs in 1914, protesting land expropriations and calling for additional reserve lands, Constable made a similar request.³⁶ However, Constable's intervention was informed by very different motivations: he reasoned that the lands should be leased by Creston's settler farmers, who would reclaim and farm them. Despite Constable's efforts, reclamation efforts in Creston lagged behind those along the Kootenai in northern Idaho.³⁷ As Bruce Stadfeld shows, power interests (particularly the West Kootenay Power and Light Company, a CPR subsidiary) aggressively lobbied against reclamation initiatives due to fears that dikes and other drainage systems would limit the river's hydroelectric potential.³⁸ In 1918, Constable recruited the favourably inclined Baillie-Grohman to support a new reclamation scheme; Baillie-Grohman, in turn, enlisted his good friend Theodore Roosevelt. But the incipient effort foundered when Roosevelt died in 1919.³⁹ That same year, Constable helped establish a provincially funded agricultural scheme for returning First World War veterans in Lister, a small community to the southwest of Creston. Work teams cleared the land for orchards, and by 1921 they had built farms and planted trees. However, scarce provincial government funding exacerbated the soldiers' significant debts; few could support their families. The soil proved unsuitable for orchards and drought forced veterans across the border to work in American mines and mills. Only twenty-two veteran farmers remained on the land by 1929, and the promised irrigation projects never materialized.⁴⁰

Despite these setbacks, several new reclamation initiatives began

³⁵ Letter to the editor from Guy Constable, *Nelson News*, 23 June 1938; "Guy Constable: 'Father of Creston,'" *Creston Review*, 25 July 1973. Both of the preceding items found in BCA, Provincial Secretary, Guy Constable Fonds, GR-1462, Mfm A00667, box 12, file 8. Constable ardently defended Baillie-Grohman and referred to himself as the man's "internee," or apprentice. See Guy Constable, "How Baillie-Grohman Saved Lands Here for BC's Own Citizens," *Nelson Daily News*, 15 January 1954, BCA, William Baillie Grohman Vertical File, box 6, file 94, no. 97.

³⁶ Guy Constable to the Minister of Lands, 29 October 1928, 1, CDMA, Guy Constable Files, MS-86-72-21, box 21, file 4. See also Ktunaxa/Kinbasket Independent School System Society (KISS), *Jurisdiction Pilot Final Report* (Cranbrook: KISS, 2003), 37.

³⁷ Creston and District Historical and Museum Society, *Taming the Kootenay, 1908-1932*, 12-13.

³⁸ Stadfeld, "Electric Space," 154.

³⁹ Pisani, *Water and the American Government*, 7, 30. Baillie-Grohman died two years later while overseeing postwar relief efforts for the Austrian Tyrol. See Jordan, "Kootenay Reclamation," 206-9.

⁴⁰ The British Columbia Land Settlement and Development Act, 1917, granted the government the power to designate lands for returning soldiers. Owners of "unimproved" lands were under strict deadlines to improve their lands if they did not want to pay a tax or surrender the land to the board. See Koroscil, "British Columbia," 89, 99, 115-19; and Murton, *Creating a Modern Countryside*, 45.

during the 1930s.⁴¹ James Murton notes that agricultural failures in the 1920s did much to diminish the appeal of life on the farm, but the catastrophic Great Depression pushed many British Columbians to revisit the ideal of life on the land: this may account for the resurgence of reclamation projects in Creston during this decade.⁴² In 1932, Frank and R.B. Staples and Frank Putnam diverted the Goat River and established the Creston Reclamation Farm (CRF) on the east shore of the Kootenay River (Figure 2).⁴³ As well, construction began on P.C. Bruner's 971-hectare Bruner Reclamation Farm (BRF) in 1936.⁴⁴ The KRF, Baillie-Grohman's original scheme, remained the most prominent reclamation project, however. In 1929, Constable and his colleague Howard Amon purchased a vast swath of the ABCEC's 4,046-hectare KRF with their newly formed Kootenay Valley Power and Development Company (KVPDC) and began to build dikes. Starting in 1930, they recruited farming families from the northwestern United States to farm the newly reclaimed area; farmers owned shares in the KVPDC rather than the land. Reclamation attempts took three forms: settlers built dikes; a dredger worked to deepen the river; and drainage ditches across new farmland collected water, which was then funnelled into the Kootenay.⁴⁵ Challenged by repeated floods in the early 1930s, the KVPDC went bankrupt in 1934. Constable "lost his shirt," and KRF farmers, also bankrupt, abandoned the Flats.⁴⁶ The same year, Constable rallied and his Creston Reclamation Company (CRC) took over KVPDC operations. By 1935, through the interventions of Constable and others, the Flats included three diking districts spread over 6,474 hectares of reclaimed land. Three years later, floods washed away hundreds of hectares of crops and necessitated arduous repairs to the new dikes.⁴⁷ By 1949, Creston Flats was heralded as the successful story of "good citizens who worked to build a farming community out of waste land," and there is no question that it provided ample employment for many men and women in the community.⁴⁸

In his study of reclamation, Murton detects an irreconcilable gap

⁴¹ *Creston Review*, 1 September 1933, 1.

⁴² Murton, *Creating a Modern Countryside*, 167-81.

⁴³ Creston and District Historical and Museum Society, *Taming the Kootenay, 1932-1935: A New Effort Begins*, 8-12.

⁴⁴ *Creston Review*, 22 May 1936, 1.

⁴⁵ Creston and District Historical and Museum Society, *Taming the Kootenay, 1908-1932: Years of Struggles and Setbacks*, 15-30.

⁴⁶ *Ibid.*, 36, 40.

⁴⁷ *Ibid.*, 27-28; and Creston and District Historical and Museum Society, *Taming the Kootenay, 1935-1947: Success ... For Now*, 2-15.

⁴⁸ *Creston Review*, 21 July 1949, 4. Women were recruited through newspaper advertisements in the early 1940s to cook for labourers working on the dikes and in the fields. See Creston and

between rhetoric celebrating reclamation and reality.⁴⁹ North American reclamation projects were plagued by numerous difficulties: ineffective technologies, spiralling costs, and incorrect assumptions about soil ecology confounded federal and private planners alike.⁵⁰ According to environmental historian Donald Worster, large-scale irrigation and drainage projects are no more than “temporary achievement[s]” because all such systems begin “to grow increasingly vulnerable, subject to a thousand ills that eventually bring about ... [their] decline.”⁵¹ In British Columbia, few projects realized what Murton calls “the ideal of a modern countryside.”⁵² Scientific know-how and technology were not enough to guarantee success, especially given complex local environments and social contexts.⁵³

The newly reclaimed Creston Flats was not without its own share of such problems. Controversy erupted over Constable’s handling of the project, and in 1916 one local farmer even accused him of unfairly using his influence with the Board of Trade to improve his stake in the reclamation scheme.⁵⁴ In the 1930s, different overlapping reclamation projects came into conflict.⁵⁵ Farmers who worked the reclaimed lands using a “prairie-style” approach (i.e., in large blocks) faltered given the heterogeneous soils of the Flats.⁵⁶ At the same time, continual localized floods brought financial ruin to many new farmers on the Creston Flats, and in 1948 a particularly disastrous flood wrecked crops, homes, roads,

District Historical and Museum Society, *Taming the Kootenay, 1935-1947: Success ... For Now*, 33-34.

⁴⁹ James Murton, “Creating Order: The Liberals, the Landowners, and the Draining of Sumas Lake, British Columbia,” *Environmental History* 13, 1 (2008): 118.

⁵⁰ Mark Fiege, *Irrigated Eden: The Making of An Agricultural Landscape in the American West* (Seattle: University of Washington Press, 1999), 130; and Robert B. Campbell, “Newlands, Old Lands: Native American Labor, Agrarian Ideology, and the Progressive-Era State in the Making of the Newlands Reclamation Project, 1902-1926,” *Pacific Historical Review* 71 (2002): 209-10.

⁵¹ Donald Worster, *Wealth of Nature: Environmental History and the Ecological Imagination* (Oxford: Oxford University Press, 1993), 138. See also Pisani, *Water and the American Government*, 31-32; Marc Reisner, *Cadillac Desert: The American West and its Disappearing Water* (New York: Oxford University Press, 1988), 133.

⁵² Murton, *Creating a Modern Countryside*, 5.

⁵³ *Ibid.*, 69.

⁵⁴ Letter to the editor from Guy Constable, *Creston Review*, 14 September 1916, CDMA, Guy Constable Files, MS-86-72-12, box 12, file 8.

⁵⁵ Staples and Putnam’s diversion of the Goat River led to numerous complaints: BRF and KRF representatives argued that it eroded the west bank and endangered their own schemes. See Creston and District Historical and Museum Society, *Taming the Kootenay, 1932-1935: A New Effort Begins*, 12; Bob Rogers, cited in Creston and District Historical and Museum Society, *Taming the Kootenay, 1948-2003: Perseverance*, 3.

⁵⁶ Creston and District Historical and Museum Society, *Taming the Kootenay, 1935-1947: A New Effort Begins*, 37-38.



Figure 3. Workers attempt to shore up the river's banks and dikes during floods in 1948. Image courtesy of Creston and District Museum and Archives. From "Agriculture" file, photo no. 3.

bridges, the Goat River diversion, and the vast majority of reclaimed lands. Despite the best efforts of emergency work crews, it was "a stinking mess" (Figure 3).⁵⁷ Postwar public hearings also revealed a less than ideal situation, even after the construction of new dikes.⁵⁸ In 1950, Mr. Raymond, a farm owner near Duck Lake (also called Sirdar Lake), complained that the reclamation projects had raised water levels and flooded his lands: "I already have two acres under water, and I have still three-quarters of an acre left to live on," he informed those attending a hearing in Creston that year. "I have paid taxes for the two acres under water for the last ten years, and I want to know what way you are going to protect the property owners."⁵⁹ A half-dozen nearby landowners faced similar problems.

Raymond complained that some farmers had been given few opportunities to voice their opinions, but at least he had the chance to speak before the hearings. Pisani notes that Indigenous peoples were often hardest hit by early twentieth-century water developments.⁶⁰ This

⁵⁷ Creston and District Historical and Museum Society, *Taming the Kootenay, 1948: Disaster*, 1-82; Creston and District Historical and Museum Society, *Taming the Kootenay, 1935-1947: A New Effort Begins*, 43-44.

⁵⁸ Jordan, "Kootenay Reclamation," 187.

⁵⁹ In the Matter of the Creston Reclamation Company Limited (hereafter CRC Hearing), Creston, British Columbia, 25 July 1950, 43-44, BCA, British Columbia, Fish and Wildlife Branch Records, GR-1027, box 123, file 6.

⁶⁰ Pisani, "A Conservation Myth," 157.

is true of the Ktunaxa, whose interests were quickly dismissed when they surfaced in debate; representatives from Indian Affairs and Northern Resources frequently declined to speak at the hearings and never mentioned that the reclamation was problematic for the Ktunaxa.⁶¹ The Department of Indian Affairs and Northern Resources leased Ktunaxa lands to the CRC for diking and agriculture in 1934; the year before, male community members had voted in favour of the plan.⁶² It seems likely that reclamation offered Ktunaxa farmers relief from floods and labourers greater work opportunities. Ktunaxa labour was extremely important to the local economy, but Ktunaxa input into policy-making decisions was non-existent.⁶³ This is in keeping with patterns that historian John Lutz traces in his reassessment of settler-Indigenous relations in British Columbia.⁶⁴ In Creston, the CRC paid for the Ktunaxa to move off a little more than 200 hectares and compensated them for lost property; however, the Ktunaxa went uncompensated for their lands occupied by the dikes.⁶⁵ Indeed, the federal minister of the interior proposed a highly questionable strategy for the lands' development in which the government would either pay pro rata for reclamation or relocate the Ktunaxa so that purportedly "abandoned" lands would revert to the province.⁶⁶ Several years before, a genuine political scandal had erupted when local landowner H.H. Currie accused Constable and the CRC of helping the federal government acquire title to the reserve lands through reclamation.⁶⁷ This contestation continued throughout the twentieth century as the Ktunaxa sought ownership and control over the dikes on reserve lands.⁶⁸ Today, the Yaqan Nu?kiy farm 1,619 hectares of prime farmland beside the Kootenay River and are actively engaged in decisions affecting conservation and development in the region.⁶⁹

⁶¹ Duck Lake Hearing at Creston, 79, 189.

⁶² Ibid., 9; *Creston Review*, 31 March 1933, 1.

⁶³ Welwood, "Baillie-Grohman's Diversion," 15; and Coccola, *They Call Me Father*, 11.

⁶⁴ John Lutz, *Makúk: A New History of Aboriginal-White Relations* (Vancouver: UBC Press, 2008), 31-48, 275-300.

⁶⁵ Duck Lake Hearing at Creston, 80.

⁶⁶ Constable to the Minister of Lands, 29 October 1928, BCA, Guy Constable Fonds, MS-1462, Mfm A00671, box 21, file 4.

⁶⁷ Constable to Currie [draft], *Nelson Daily News*, 2 September 1929, BCA, Guy Constable Fonds, MS-1462, Mfm A-667, box 12, file 9.

⁶⁸ KISS, *Jurisdiction Pilot Final Report*, 27; Kelly Babcock and Jubie Steinhauer, *First Nations Water Rights in British Columbia: A Historical Summary of the Rights of the Lower Kootenay First Nation* (Vancouver: Ministry of Environment, Lands and Parks Water Management Branch, 1999), 11; BC Minister of Recreation and Conservation to Arthur Laing, 30 June 1966, BCA, British Columbia, BC Fish and Wildlife, Creston Valley Wildlife Management Area, GR-1027, box 134, file 1.

⁶⁹ Lower Kootenay Band, "Building an Economy": *Economic Sector Strategy Plan January 2013 to December 2017* (Creston: LKB, 2013), 7.

DEAD DUCKS

During the early twentieth century, reclamation proponents in Creston sought new areas for diking. In 1947, a CRC representative asserted that a proposed reclamation project north of Creston near Duck Lake was inevitable since earlier efforts had been the first step to reclaim “all the available land on this side of the border.”⁷⁰ As ambitious as these plans were, they met with unforeseen resistance: ducks and those dedicated to protecting (and hunting) them. In 1942 and again in 1947, the CRC requested permission to reclaim further lands around Duck Lake. A 1942 map of the proposed extension shows some of the many claims along the Flats (Figure 4). Since diking Duck Lake would affect the Kootenay/Kootenai River’s water levels, proponents were obliged to put their plan before the International Joint Commission (IJC), which reviewed American and Canadian projects affecting waterways in both countries. In 1949, the IJC permitted the diking of 1,295 hectares south of Duck Lake.⁷¹ However, interventions from wildfowl conservancy interests and, later, provincial and federal governments prevented total reclamation of Duck Lake and led to the creation of the Creston Valley Wildlife Management Area in 1968. This occupies the southern quarter of Duck Lake as well as much of the marshland on the western shore of the Kootenay River, including the Six Mile Slough to the west and part of Leach Lake and the Bruner Reclamation Farm (Corn Creek Marsh).

For all the benefits touted by its champions, reclamation brought significant problems to the town and neighbouring communities. By the late 1940s, it was clear to many locals that reclamation had had profound ecological effects on wildlife in the region.⁷² To the great delight of farmers, skunk populations had nearly disappeared; but crow populations exploded during the same period, becoming a “curse” in reclaimed lands.⁷³ At the 1947 Duck Lake Hearing, attendees learned that duck populations on the flyway had been reduced to a quarter of pre-reclamation populations.⁷⁴ Widespread use of DDT on reclaimed lands in the 1950s devastated surviving wildfowl.⁷⁵ Local perturbation aligned with growing international awareness of the human impact on the natural

⁷⁰ Baillie-Grohman’s original concession had included Duck Lake, Leach Lake, and the Six Mile Slough. See Creston and District Historical and Museum Society, *Taming the Kootenay, 1948-2003: Perseverance*, 15; Duck Lake Hearing at Creston, 25.

⁷¹ CRC Hearing, 9-10.

⁷² Duck Lake Hearing at Creston, 189, 197.

⁷³ *Ibid.*, 189.

⁷⁴ *Ibid.*, 192.

⁷⁵ Grant Ellis, “Bear Traps, Baby Skunks, and Diplomacy: Half a Day in the Life of a Conservation Officer,” *Wildlife Review* 9, 2 (1979): 26.



Figure 4. This 1942 map shows existing and planned reclamation schemes along Creston Flats, including those over Duck Lake. Image courtesy of the Creston and District Museum and Archives. Guy Constable, "The Application of Creston Reclamation Company for Permission to Construct Permanent Works Adjacent to Kootenay River," Creston, 1942, 1, CDMA, Guy Constable Files, MS-86-72-30, box 30, file 1.

environment and helped produce the Migratory Bird Act, 1916.⁷⁶ By the 1920s, Canadian and American hunters and other individuals concerned about diminishing wildfowl populations set out to map their flight patterns, study their behaviour, and form conservation organizations.⁷⁷ Such efforts revealed that the reclamation of North American wetlands had disrupted bird habitat along migration routes.⁷⁸ Because Creston is located on the Pacific flyway, bird enthusiasts and sportsmen perceived it to be particularly important and pressured government to address their transnational concerns.

During the IJC's 1947 Duck Lake Hearing at Creston, the debate turned on agriculture versus ducks: game interests were increasingly at odds with further reclamation efforts. Different groups faced off, presenting conflicting interests and contradicting needs.⁷⁹ By the 1950s, "the duck people" were accused of financing the trips of reclamation opponents from Bonners Ferry.⁸⁰ Ironically, the very thing that had drawn Baillie-Grohman to the Kootenays – hunting – was now considered a threat to the heirs of his reclamation vision.⁸¹ Many of the individuals testifying at the hearings clearly embraced a single-use ideal: agriculture and agriculture alone offered wealth for investors and farmers alike. The Creston School District suggested that reclamation would increase the tax base and help the region and the school system; the Co-operative Fruit Growers Association of Wynndel (a small community located at the southern limit of the Duck Lake project) also supported reclamation since it would encourage more fruit and vegetable farming.⁸² Members of the Board of Trade could only conceive of the lands around them in agricultural terms: farming would benefit the region and their livelihood while a wildlife sanctuary would infringe upon and endanger past work. The Creston Valley Co-operative Association's (CVCA) representative,

⁷⁶ As Kurpatrick Dorsey writes, the treaty succeeded largely because North American Progressive-era conservationists persuaded society of the value of bird protection. See Dorsey, *Dawn of Conservation Diplomacy: US-Canadian Wildlife Protection Treaties in the Progressive Era* (Seattle: University of Washington Press, 2008).

⁷⁷ *Ibid.*, 251–52.

⁷⁸ Robert Wilson, "Directing the Flow: Migratory Waterfowl, Scale, and Mobility in Western North America," *Environmental History* 7, 2 (2002): 251; Robert Wilson, *Seeing Refuge: Birds and Landscapes of the Pacific Flyway* (Seattle: University of Washington Press, 2010).

⁷⁹ *Ibid.*, 253.

⁸⁰ Duck Lake Hearing at Creston, 247.

⁸¹ Colpitts observes that Baillie-Grohman, like contemporary hunters, was alarmed at the rapid decline of big game in the province and had harsh words for big game hunters from Europe. See George Colpitts, "Wildlife Promotions, Western Canadian Boosterism, and the Conservation Movement, 1890-1914," *American Review of Canadian Studies* 28, 1–2 (1998): 118–23.

⁸² See Duck Lake Hearing at Creston, 32, 35, 47–50.

speaking on behalf of fourteen hundred members, rhapsodized about the reclamation project. Like other local groups, the cvca framed its support in terms of local and national needs, citing the national importance of food production and local benefits stemming from reclamation that had already “added enormously to the gross wealth” of the community.⁸³

Creston’s dikes, built when ducks were plentiful, had ultimate precedence. According to this narrative, dikes were responsible for the community’s prosperity and any potential limitations on them were a threat to it.⁸⁴ Members of the Board of Trade and the crc even contested the right of game interests and federal departments to speak at the ijc hearings. “The Government has ... in the most solemn way ... said[,] “This is reclaimable land and it is going to be reclaimed,” declared crc lawyer Alfred Bull. “How can any subordinate officer come and protest against it[?] That would be a most absurd situation.”⁸⁵ Reclamation supporters strove to quash any opposition, dismissing it as illegitimate and irrational.

Yet the 1947 hearing at Creston revealed that game conservancy interests had influence and would be heard, if only because of their sheer numbers.⁸⁶ Beginning in the late 1920s, conservation and hunting groups had begun to speak out against potential new dikes, arguing that reclamation had already endangered local wildfowl populations. By 1947, they were vocal in their opposition to the reclamation of Duck Lake. Representing “the majority of sportsmen in the East Kootenay District,” R.K. Garland brought forward telegrams opposing the new project from clubs across the country.⁸⁷ One telegram from the BC Gun Dog Club argued that reclamation “would mean the ruination of our duck resting areas which are far too few in British Columbia.”⁸⁸ B.W. Cartwright of Ducks Unlimited called on the government to fulfill the stipulations of the Migratory Birds Convention Act.⁸⁹ He regretted

⁸³ *Ibid.*, 45-46.

⁸⁴ *Ibid.*, 20-21.

⁸⁵ *Ibid.*, 28-29.

⁸⁶ J.J. McEwen, chairman of the Western Canada-Yukon Fish and Game Council’s Committee of Waterways, took note of the increased furor over reclamation from game interests: “The last time I appeared before you I was a voice crying in the wilderness ... it has only been in very recent years that people have awakened to the fact that this sort of thing, speaking of ducks and speaking of wild life, is also a crop to be harvested.” See Duck Lake Hearing at Creston, 144.

⁸⁷ Specifically, from Nelson, Kaslo, Rossland, Trail, Castlegar, Nakusp, Salmo, Gray Greek, South Slovan, New Denver, and Slovan City.

⁸⁸ Duck Lake Hearing at Creston, 140.

⁸⁹ Cartwright represented the Manitoba branch funded by US sportsmen; the organization attempted to restore marshlands drained for agriculture after the First World War. Signed in 1916 by the United States and Canada, the Migratory Birds Act emphasized cross-border

the rapid and irreplaceable loss of waterfowl habitat and noted that emphasizing conservation rather than reclamation would benefit both hunters and the economy.⁹⁰

CRC representatives and wildlife supporters quarrelled over who had sufficient expertise to back up their claims. D.K. Archibald, a Creston farmer, was incensed after hearing Dominion Wildlife Officer and ornithologist J.A. Munro argue that Creston Valley bird populations were shrinking. Munro, after all, had only lived in the region for one summer, so how could he be as knowledgeable as long-time residents?⁹¹ Reclamation supporters, particularly farmers, resented testimony from outsiders with vastly different priorities.⁹² Archibald was particularly indignant, demanding to know why the “game people” had only now brought up their concerns about wildfowl. The farmer suggested that they should redirect their efforts to “kill off the crows and magpies and these other things that are preying on and destroying the nests of the ducks.” Indeed, Archibald maintained that he had “made a great contribution” to the ducks since he had lost 28 hectares of peas, worth seven thousand dollars, to the birds.⁹³ While Archibald clearly resented the birds’ consumption of his crops, he and other reclamation supporters used it to justify the new project since this proved that ducks could adapt by eating from the reclaimed croplands.⁹⁴

After the hearings at Creston, a frustrated Constable acknowledged the growing power of provincial and federal governments over the fate of Duck Lake.⁹⁵ Before the 1947 hearing, government departments had been slow to contest reclamation based on conservation needs, and even during the hearing, provincial government officials struggled to appeal to both sides of the debate.⁹⁶ G.P. Melrose, deputy minister of lands for British Columbia, portrayed the Duck Lake project as part of a larger

policy and linked various wildlife departments. See Tina Loo, *States of Nature: Conserving Canada's Wildlife in the Twentieth Century* (Vancouver: UBC Press, 2006), 18.

⁹⁰ Duck Lake Hearing at Creston, 154-55.

⁹¹ *Ibid.*, 183.

⁹² *Ibid.*, 190, 192.

⁹³ *Ibid.*, 188. See Stunden Bower's discussion of Manitoba (Stunden Bower, *Wet Prairie*).

⁹⁴ *Ibid.*, 187-88.

⁹⁵ While the provincial government directed much of wildfowl policy, the federal government's jurisdiction over migratory birds brought federal departments, including the Canadian Wildlife Service (cws), into the debate.

⁹⁶ Although government administrations in Canada were aware of the destructive impact its citizens were wreaking on forests and water systems, it was only in the early twentieth century that there was a real effort by institutions (which had emerged in the late nineteenth century) to enforce existing conservation laws, create new ones, and manage human-nature interactions through regulatory bodies. See Graeme Wynn, *Canada and Arctic North America: An Environmental History* (Santa Barbara: ABC-CLIO, 2007), 260.

provincial policy of natural resource development.⁹⁷ In his view it was

difficult to evaluate wild life since its importance is more aesthetic than economic, but when all the arable land is under crop, there will still be available to the sportsmen the ninety-odd percent of British Columbia that cannot be changed greatly from its natural state. Similar conditions hold in Canada and the Western United States.⁹⁸

Melrose's approach clashed with other government testimony at the hearings, particularly that of federal Wildlife Officer Munro, who reasoned:

[Duck Lake] is yours and mine. The idea [of reclamationists] is to take it away from us ... [Its value] as an historical monument, as a wild life monument, is something precious that we must preserve. It really transcends in wild life value or anything else, because we cannot get it back. I can assure you if you visit that area in August and September and went through it by canoe as I did, you will agree there is absolutely nothing that duplicates it.⁹⁹

The 1947 Duck Lake Hearing revealed the surprising (and, to Constable, alarming) influence of government conservation representatives who contested Constable's assurances that ducks would be able to gain access to generous sources of feed from new croplands after reclamation. This line of questioning later led the IJC commissioner to ask a bewildered Creston farmer whether he had ever examined the stomach contents of ducks he had shot on reclaimed farmland.¹⁰⁰ Wildlife Officer Munro pressured one Creston farmer to admit that, given existing data, many of his statements about birds eating local crops were probably inaccurate.¹⁰¹ The wildlife officer took a similar, equally successful tack with BC government land and agriculture representatives, arguing that "ordinary laymen should not question the wisdom of a learned man" and castigating the reclamation supporters' "lack of precise terminology."¹⁰²

Increasingly intense international concern about wildfowl populations spurred on federal and provincial involvement. At the 1947 hearing,

⁹⁷ Duck Lake Hearing at Creston, 61-64. He further argued that land would ensure prosperity for individuals and the province: "The most important resource is land and what it can produce by way of forest or farm; in either case, of good living for people." See Duck Lake Hearing at Creston, 65.

⁹⁸ *Ibid.*, 167.

⁹⁹ *Ibid.*, 153.

¹⁰⁰ *Ibid.*, 23, 68.

¹⁰¹ *Ibid.*, 235, 239.

¹⁰² *Ibid.*, 232.

Marshall Edson of the Idaho Fish and Game Department reasoned that previous investments in restoring wildfowl habitat would be for nothing if Canada destroyed the “natural refuge” of Duck Lake.¹⁰³ A US Fish and Wildlife Service biologist, R.H. Imler, came to the hearing to argue that the loss of wildfowl habitat in Duck Lake was of vital importance for the entire continent: “The birds do not have much knowledge of international boundaries, they move back and forth rather freely and because of that they are not a local problem.”¹⁰⁴ Likewise, Canadian R.K. Garland might have been representing the West Kootenay Rod and Gun Club, but he also brought telegrams and letters of support from American organizations and individuals.¹⁰⁵ Their numbers included hunters who had shot at Duck Lake, including Washington senator Clinton S. Harley. “The game reserves of British Columbia are worth a tremendous amount,” Senator Harley wrote to the BC premier in 1949. “Other farm land can be found and developed, but you cannot artificially build another Duck Lake ... Let’s conserve these natural hunting grounds for the benefit of posterity.”¹⁰⁶ More broadly, the Ducks Unlimited representative expressed considerable irritation at the hearing that Canada lagged behind the United States in game preservation.¹⁰⁷

Creston reclamation supporters were wholly unimpressed by such arguments. George Sinclair, chair of the Board of Commissioners of Creston, predicted any flyway-friendly “alternative” to reclamation would lead to dire consequences:

The other alternative to Reclamation [*sic*] is that the area be used as a resting place for ducks in their mad migratory rush South to certain death ... [I]f this land is condemned to remain a duck pond a few of our local people will enjoy duck dinner possibly one day out of 365 each year. If this land is not reclaimed some of these same duck hunters and a lot of other people are going to be puzzled how to live in Creston and get three square meals per day for the other 364 days ... I do not care if our friends to the South have to shoot flamingos and seagulls. Ours is the greater need.¹⁰⁸

Reclamation proponents were quick to castigate any potential

¹⁰³ Ibid., 137-138.

¹⁰⁴ Ibid., 146.

¹⁰⁵ Ibid., 141.

¹⁰⁶ Senator Clinton S. Harley to Premier Byron Johnson, 16 June 1949, BCA, Premier’s Papers, Lands: Duck Lake Reclamation, GR-1222, box 71, file 3.

¹⁰⁷ Duck Lake Hearing at Creston, 154-55.

¹⁰⁸ Ibid., 59.

government intervention.¹⁰⁹ Again and again during the 1947 hearing, Munro defended himself against accusations of unwelcome intervention in a purely local matter: “We are,” he insisted, “not here to argue against the people of Creston.”¹¹⁰ The local newspaper’s editorials disagreed and consistently ridiculed Munro and other conservationists while characterizing the farmers’ reaction as a heroic stand to fight back against “the boys at the coast” seeking “to handle our local affairs.”¹¹¹ A week before the IJC decision in 1949, the Creston newspaper threw down the gauntlet. “Creston and its citizens must fight for its [*sic*] natural heritage and expansion especially when the latter is the bread and butter of our local people,” an editorial declared. “Vancouver people will not tolerate outside interference ... [and we] in turn should adopt a similar policy, [even] if it means outright war to protect our interests.”¹¹² In arguing for Duck Lake’s reclamation, the CRC and its allies were also seeking to justify the organization’s existence, which was contingent upon expanding the diked area.

Reclamation on Duck Lake eventually did go ahead, but it was an uneven victory for diking interests. Although the CRC applied to dike 3,278 hectares, in 1950 the IJC allowed the reclamation of no more than 1,295 hectares. The northern part of the lake was reserved for wildlife and water releases for the power plant.¹¹³ While the vocal farmers of Creston exercised considerable influence in their region, widely dispersed wildlife interests scored a partial triumph because of their greater numbers. Both sides continued their campaigns. Some Creston residents depicted the IJC-imposed limitation on reclamation as harmful to the region’s workers. “It’s the American sportsman who will benefit,” predicted the *Creston Review* in 1955:

On the American side it’s the wealthy men who own the guns and dogs, the boats and hunting lodges and the hunting equipment ... Scores of Working [*sic*] people are employed by the harvest [and] the health, welfare and pleasure of the sportsman [are] not more important than the livelihood of the farmer and the laborer.¹¹⁴

Over the next fifteen years, the Creston Chamber of Commerce

¹⁰⁹ *Ibid.*, 167.

¹¹⁰ *Ibid.*

¹¹¹ *Creston Review*, 31 March 1949, 4.

¹¹² *Creston Review*, 21 July 1949, 4.

¹¹³ *Creston Review*, 11 August 1949, 1; International Kootenay Lake Board of Control, Public Meeting Minutes from 11 September 2003 (Creston, BC: IJC, 2003). http://www.ijc.org/php/publications/html/kootenay_030911b_e.htm.

¹¹⁴ *Creston Review*, 24 February 1955, 1.

repeatedly petitioned for reclamation and farming in the areas set aside for wildlife.¹¹⁵

TOWARDS RECONCILIATION

In 1947, wildlife interests failed to articulate a conservationist vision that encompassed previous reclamation projects. Nevertheless, as Jeremy Wilson shows, a conciliatory approach between wildlife organizers and landowners slowly supplanted adversarial conservationism during the mid-twentieth century.¹¹⁶ In 1949, Walter Hendricks, Coalition Member of the Legislative Assembly (MLA) for Nelson–Creston, successfully sought a compromise between wildlife and diking interests by proposing the construction of a large dike across Duck Lake, which would serve both farmers and wildlife and reconcile antithetical visions of the landscape.¹¹⁷ A similar compromise occurred nearly two decades later when outspoken farmers, frustrated by what they saw as the CVWMA's occupation of valuable lands during droughts, successfully pressured for grazing rights in the new refuge. The *Creston Review* characterized this multiple-use approach as “The First Sign of Compatibility” between the two groups; “mother nature” had forced cattlemen and CVWMA managers towards a solution that fostered “harmony in the valley.”¹¹⁸

Government intervention and support for wildlife interests also played an important role. In September 1965, the Canadian Wildlife Service and the BC Fish and Game Branch agreed on the need for a wildlife refuge in the area.¹¹⁹ Three years later, the Creston Wildlife Management Act was passed and Ducks Unlimited and other private groups, along with both levels of government, created the 7,000-hectare CVWMA consisting of a floodplain and wildlife habitat. In 1969, the CRC turned over the outer Duck Lake dike – which was in a state of miserable disrepair – to the provincial government.¹²⁰ By 1971, the federal

¹¹⁵ A.R. Speers to W.K. Kiernan, 26 March 1968; B. Neville-Smith to W.K. Kiernan, 11 April 1969. Both letters in BCA, BC Fish and Wildlife Branch File, Creston Valley Wildlife Management Area, 1967–68, GR-1027, box 134, file 1.

¹¹⁶ Jeremy Wilson, “For the Birds? Neoliberalism and the Protection of Biodiversity in British Columbia,” *BC Studies* 142/43 (2004): 258.

¹¹⁷ An upcoming election likely hastened Hendricks's conciliatory appeals. See CRC Hearing, 12, 15.

¹¹⁸ The quotations are from *Creston Review*, 1 August 1973, 4. See also *Creston Review*, 15 March 1967, 1; *Creston Review*, 27 March 1968, 1; *Creston Review*, 1 May 1968, 1.

¹¹⁹ William Kenneth Kiernan to Federal Minister of Northern Affairs and National Resources, 12 November 1965, 1, BCA, BC Fish and Wildlife Branch File, Creston Valley Wildlife Management Area, 1967–68, GR-1027, box 134, file 1.

¹²⁰ D.D. Moore to Dr. J. Hatter, 17 April 1969, BCA, BC Fish and Wildlife Branch File, Creston Valley Wildlife Management Area, 1967–68, GR-1027, box 134, file 1.

and provincial governments had become much more enthusiastic about the idea of a wildlife reserve. A BC Fish and Wildlife Branch report reflected this change: while conceding that further reclamation would produce significant economic benefits, the report noted that it might also be costly because of the inevitable “destruction of game habitat and consequent loss of game species.”¹²¹ Meanwhile, the Yaqan Nu?kiy, who were initially excluded from the cvwma negotiations, soon moved to deal directly with conservation interests.¹²²

Today, the cvwma stretches south from Kootenay Lake to the American border. Extremely popular with tourists, it is considered a successful wildfowl habitat for migratory birds; Duck Lake itself has become a popular site for bass fishing.¹²³ The refuge’s creation fits into a broader pattern of the development of national wildlife refuges around the country.¹²⁴ Attempts to renegotiate the balance between human use and bird habitat sometimes involved another type of reclamation: available natural wildfowl habitat became so scarce that new bird refuges were created through irrigation and diking.¹²⁵ Wildlife had become a more profitable, valuable commodity than agricultural land, at least to governments in distant Ottawa and Victoria. Diking a wildlife refuge into existence would seemingly make up for the loss of wildlife habitat to megaprojects in the province and bolster the productive capacity of valuable wildfowl. Jeremy Wilson suggests that the Columbia River Basin hydroelectric development in particular inspired the establishment of such refuges in British Columbia, and contemporary documents explicitly identify the cvwma as an offset for lands lost to the Duncan Dam reservoir.¹²⁶

Although Michael Kluckner holds that contemporary Creston “is sufficiently in its natural state to attract a notable migratory bird population,” the cvwma’s management regime also prioritized

¹²¹ BC Fish and Wildlife Branch, *The Creston Floodplain: Evaluation of Alternatives for Development* (Victoria: Province of British Columbia, 1971), 5.

¹²² According to Ducks Unlimited, they took part in a “co-operative venture” with the cvwma and local Ktunaxa in 1975 that included several thousand acres set aside for the refuge. See “From Here and There: Ducks Unlimited Activities,” *Wildlife Review* 7, 7 (1975): 26; KISS, *Jurisdiction Pilot Final Report*, 27; and Babcock and Steinhauer, *First Nations Water Rights*, 8.

¹²³ “Wetland Management Infrastructure Upgrades,” *Wetlander* (Fall/Winter 2006), 6.

¹²⁴ James Alexander Burnett, *A Passion for Wildlife: The History of the Canadian Wildlife Service* (Vancouver: UBC Press, 2003), 186.

¹²⁵ *Ibid.*, 254; Colpitts, “Wildlife Promotions,” 103-30; and Loo, *States of Nature*, 190-91.

¹²⁶ Undated memo on Creston for Kenneth Kiernan, Minister of Recreation and Conservation, ca. 1967-68, BC Fish and Wildlife Branch, BCA, GR-1027, box 134, file 1; Wilson, “For the Birds,” 260; Colpitts, “Wildlife Promotions,” 103-30; Columbia Basin Trust and CRT Local Governments’ Committee, *Columbia River Treaty: Summary of Canadian Dam and Reservoir Issues* (Victoria: Columbia Basin Trust, March 2014), 10.

accommodating agriculture and flood-prevention.¹²⁷ While previous marshlands had been unpredictable, managers initially conceived of the new wildlife refuge as a “duck farm.”¹²⁸ This attitude was apparent at the 1950 Nelson hearing on the Libby Dam, where one game commissioner argued that land set aside for wildlife was “not a good waterfowl habitat,” reasoning that it required “improvements” such as the cultivation of aquatic plants – and flood control.¹²⁹ Dikes originally created for reclaimed farmlands affected water levels in the wildlife area and remain visible today (Figure 5). In 2006, the wildlife area’s Management Authority explained that “control[ing] water levels through a system of dikes and culverts is what makes the management area unique [and] allows us to ... enhance and support the rich [biological] diversity found here.”¹³⁰ The wildlife area, a conservancy site that exists only through further human manipulation of the environment, complements and protects existing reclamation: its designers built low dikes so that, when high water threatens the Creston Flats, the cvwma floods, protecting agricultural land.¹³¹ Thus the cvwma’s design echoes the crc’s earlier plans for Duck Lake, which proposed to use the northern section as a water storage reservoir.¹³² Stunden Bower describes a similar case in Manitoba’s Big Grass Marsh, where conservationists “tailored [their] message so that there seemed to be no contradiction between agricultural production and wetland preservation.”¹³³ Agricultural needs were wholly synchronized with conservation hopes.

Art commissioned by the nascent cvwma reflects this complementarity.¹³⁴

¹²⁷ Kluckner, *Vanishing British Columbia*, 108.

¹²⁸ Wilson, “Directing the Flow,” 256.

¹²⁹ In the Matter of the Application of the Government of the United States re. Libby Dam (hereafter Nelson Hearing on Libby), Nelson, British Columbia, 12 January 1951, 89, BCA, British Columbia, Ministry of Environment Water Management Branch, GR-1427, box 1, file 22.

¹³⁰ See “Wetland Management Infrastructure Upgrades,” 6.

¹³¹ Creston and District Historical and Museum Society, *Taming the Kootenay, 1948-2003: Perseverance*, 30-34.

¹³² Application of the Creston Reclamation Company Limited and the Duck Lake Dyking District to the Honourable the International Joint Commission for an order amending the order of the Commission made the 12th day of October, 1950, relating to the reclamation of certain flood lands between the international boundary line and Kootenay Lake, near Sirdar, Vancouver, British Columbia, 23 March 1954. <http://www.ijc.org/files/dockets/Docket%2070/Docket%2070%20Creston%20Reclamation%20Application%201954-03-23.pdf>.

¹³³ Stunden Bower, *Wet Prairie*, 130.

¹³⁴ Although details around the creation of Monahan’s painting remain scarce, cvwma staff confirmed its continued presence in their offices. Monahan was likely hired due to his distinctive style and experience painting BC wilderness. Other examples of his work are available at <http://shipwrite.bc.ca/artgallery.htm>. The Creston Valley painting was reproduced without attribution in Yorke Edwards, *Wildness on Creston Flats* (Creston: Creston Valley Wildlife Management Area, 1974), 15.



Figure 5. Diking is visible in the present-day CVWMA. Photo courtesy of the author.

In a painting by Hugh Monahan, noted Irish-Canadian wildlife painter and conservationist, the illustrated Creston Valley is bordered by densely forested mountains, reclaimed fields are scattered around the river like squares of a patchwork quilt, and even tidier larger diked wildlife acreages lie next to the fields (Figure 6). Above both, geese fly over reclaimed fields before reaching the refuge area. Reproduced in a 1974 CVWMA pamphlet, the illustration was accompanied by a poetic text by Yorke Edwards, who notes that controlling the water prevents any disorderly drought and flooding. Instead, “the marshes fill with life, and they become the richest lands in the mountains.”¹³⁵ The language used to describe the refuge echoes the grandiose descriptions of Guy Constable at his most enthusiastic: even though the land had escaped reclamation for agriculture, it was still embraced in the scheme’s rhetoric. At least in Creston, everything ultimately came back to the dikes.

¹³⁵ Edwards, *Wildness on Creston Flats*, 10.



Figure 6. To commemorate the creation of the cvwma, conservationist artist Hugh Monahan was commissioned to paint this aerial landscape in the 1960s. Image courtesy of the cvwma and Kevin Monahan. Source: Edwards, *Wildness on Creston Flats*, 15.

FISH VERSUS CABBAGES: CHANGING DEBATES AFTER LIBBY

The politics of postwar hydroelectric development were just as polemical and transformative as were the wildlife debates.¹³⁶ The Columbia River

¹³⁶ There is a rich literature dealing with hydroelectric development in British Columbia. See, for example, Matthew D. Evenden, *Fish versus Power: An Environmental History of the Fraser River* (New York: Cambridge University Press, 2004); John V. Krutilla, *The Columbia River Treaty: The Economics of an International River Basin Development* (Baltimore: Johns Hopkins

Treaty and the Libby Dam fit within the context of a global rush of giant dam construction in the mid-twentieth century; the mega-projects were often meant to legitimize governments and individual leaders.¹³⁷ In the early 1960s, Creston-area farmers threw their support behind the Columbia River Treaty. Signed in 1961 and ratified in 1964, the Canada-US agreement cemented plans for cooperative development on the Columbia Basin, including the Kootenay River. The treaty involved three new Canadian storage dams (Arrow Lakes/Keenleyside, Duncan, and Mica) and one American dam, the Libby, which flooded the upper Kootenay River Valley and created the Kooconusa reservoir.¹³⁸ With memories of the 1948 flood, which had inundated the entire Creston Valley, still looming in the community's collective memory, Creston farmers hoped that this fourth dam would finally ensure flood control for reclaimed lands.¹³⁹ As Philip Van Huizen shows, farmers from Creston and Trail stressed the merits of flood protection at every possible opportunity, disparaging lands in the Arrow Lakes region that were to be flooded by the Keenleyside Dam's reservoir for their purported uselessness while emphasizing the substantive benefits flood control would reap in their own communities.¹⁴⁰

The Libby Dam fits into patterns of water manipulation across the continent. Over the course of the twentieth century, technological innovations and faith in engineering and science facilitated unprecedented human manipulations of land and water, including irrigation systems, flood control, and hydroelectric development. While such developments brought significant benefits to some people, they were accompanied by social disruption and ecological damage on a massive scale, creating entirely new patterns of space.¹⁴¹ These changes went beyond the physical: conceptualizations of the environment were equally transformed by powerful ideologies as developers, seeking to overcome nature and to impose a new vision of order, promoted stability

Press, 1967); and Neil A. Swainson, *Conflict over the Columbia: The Canadian Background to an Historic Treaty* (Toronto: Institute of Public Administration of Canada, 1979).

¹³⁷ John R. McNeill, *Something New under the Sun: An Environmental History of the Twentieth Century* (London: W.W. Norton and Company, 2000), 158–59.

¹³⁸ See Loo, "People in the Way," 163; and Smith, "Domicide," 207.

¹³⁹ Department of External Affairs and National Resources, *The Columbia River Treaty Protocol and Related Documents* (Ottawa: Government of Canada, 1964).

¹⁴⁰ Van Huizen, "Building a Green Dam," 432.

¹⁴¹ McNeill, *Something New under the Sun*, 149–91; Patrick McCully, *Silenced Rivers: The Ecology and Politics of Large Dams* (London: Zed Books, 2001), 70; Reisner, *Cadillac Desert*, 131; Donald Worster, *Rivers of Empire: Water, Aridity, and the Growth of the American West* (New York: Oxford University Press, 1985); Wynn, *Canada and Arctic North America*, 260.

through simplification.¹⁴² The policies of W.A.C. Bennett, British Columbia's colourful premier, and other contemporary Canadian leaders reflected this. They viewed landscape and nature through the lens of high modernism, which involved promoting progress wrought through technological and scientific expertise and a faith in capitalism that was wholly divorced from the complexity of local ecology.¹⁴³ Bennett and others interpreted the Columbia River Treaty and large-scale dam building in British Columbia as an opportunity to reorganize people and spaces into more rational and modern systems.¹⁴⁴

Susan Toller and Peter N. Nemetz argue that hydroelectric development has overwhelmed other uses of valley bottoms since the treaty's ratification.¹⁴⁵ However, this is not entirely the case in Creston, where decades-old local reclamation projects shaped responses to the dam. In 1959, Guy Constable declared passionately before a regional business committee that Libby would be "our strength or the rock on which we split."¹⁴⁶ This declaration might seem odd coming from a man who had previously characterized development as a conflict of "kilowatts vs. cabbages," especially since proponents of reclamation had continuously grappled with regional power companies over the Kootenay River's water levels.¹⁴⁷ However, the Libby Dam, built in Montana and operated by the American Army Corps of Engineers, was an exception. Constable had called on Prime Minister Mackenzie King to support the project as early as 1922.¹⁴⁸ For Constable, Creston was the future, and Creston's dikes required the Libby Dam, a project that promised to regulate the volatile Kootenay River and protect the dikes. Constable died in July 1973, the same month the project was completed.¹⁴⁹

In the years leading up to the construction of the Libby, one local farmer observed that Creston farmers like himself felt "like the man who has a very bad tooth . . . He knows that he is going to be much better if he

¹⁴² Murton, *Creating a Modern Countryside*, 15.

¹⁴³ Tina Loo, "Disturbing the Peace: Environmental Change and the Scales of Justice on a Northern River," *Environmental History* 12, 4 (2007): 899-904; Arn Keeling and Robert McDonald, "The Profligate Province: Roderick Haig-Brown and the Modernizing of British Columbia," *Journal of Canadian Studies* 36, 3 (2001): 7-23.

¹⁴⁴ Loo, "People in the Way," 161-96.

¹⁴⁵ Susan Toller and Peter N. Nemetz, "Assessing the Impact of Hydro Development: A Case Study of the Columbia River Basin in British Columbia," *BC Studies* 114 (1997): 8.

¹⁴⁶ Meeting minutes of the Water Resources Committee of the Associated Chambers of Commerce of South Eastern British Columbia, 2 December 1959, 10, CDMA, Guy Constable Files, MS-86-72-II, box II, file 2.

¹⁴⁷ High water levels required for local hydroelectric production endangered the dikes. See Duck Lake Hearing at Creston, 82-84, 174-76.

¹⁴⁸ *Creston Review*, 26 January 1961, 4.

¹⁴⁹ Spritzer, *Waters of Wealth*, 152.

has the tooth removed. He does not know how much it is going to cost him ... [or] ... how bad it is going to hurt."¹⁵⁰ In supporting the dam's construction, the farmers of Creston Flats traded one uncertainty for many new ones. Despite its many benefits, Libby also created numerous ecological disruptions that have diminished fish-spawning grounds.¹⁵¹ Toller and Nemetz note that, in many cases like the Libby Dam, "human activity has disturbed a delicate ecological balance that was once self-regulating, replacing it with a less ecologically robust alternative requiring continual intervention and management."¹⁵²

Erosion, caused by higher water velocities, which IJC engineer V.L. Mosher flagged as a potential problem in 1950, plays merry havoc with Creston's dikes.¹⁵³ This has had an unexpected and unwelcome effect on local farming. Major water releases from the Libby reservoir and the increased velocity of the Kootenay River cause erosion, requiring costly repairs.¹⁵⁴ As early as 1975, the Association of Kootenay Valley Drainage Districts (AKVDD), representing the region's farmers, informed the BC government of the slippage problem. By the late 1990s, the AKVDD took their complaints to local MLAs, MPs, other relevant politicians and government officials both in Canada and the United States. Problems associated with high water became particularly serious in 1997, but farmers were told that Libby was working at full capacity and that nothing more could be done.¹⁵⁵ Finally, after years of petitions, the AKVDD received funding for an erosion study in 1999. The report found that, in the wake of the construction of the Corra Linn Dam (at the west arm of the Kootenay River) and the Libby Dam, the river has experienced massive changes to its flow regime that continue to endanger the Creston Flats reclamation.¹⁵⁶ Cyril Colonel, who had farmed in the Creston area for four decades, expressed his displeasure about this outcome alongside other members of the AKVDD, declaring: "All the talk directed at the Farming communities by various authorities from both sides of the border about 'you have flood control what more do you want' is basically

¹⁵⁰ Nelson Hearing on Libby, 57.

¹⁵¹ Toller and Nemetz, "Assessing the Impact of Hydro Development," 5, 12-13.

¹⁵² *Ibid.*, 14.

¹⁵³ V.L. Mosher, Flood Control Benefits to Kootenay Flats in Canada by Operation of Libby Dam, 15 February 1950, 2-3, CDMA, V.L. Mosher Collection, Water Management/Dams/General/Libby Dam, MS 2002-400-22-3i.

¹⁵⁴ Cyril Colonel to Senator Larry Craig, 12 July 1999, personal collection of Cyril Colonel, Creston, British Columbia, courtesy Cyril Colonel.

¹⁵⁵ Cyril Colonel to Dr. Stephen Martin, 20 February 2002, personal collection of Cyril Colonel, Creston, British Columbia, courtesy Cyril Colonel.

¹⁵⁶ Northwest Hydraulic Consultants, Ltd., *Kootenay River Erosion Study (Draft)* (Creston: Association of Kootenay Valley Drainage Districts, 1999), 1, 28.

a fallacy.”¹⁵⁷ But the dikes, and the floods that threatened them, were no longer solely of local concern: larger state bodies were now involved.

Armed with evidence of erosion, Creston farmers directed their main campaign at the US Army Corps of Engineers (ACE), the body that controlled the Kootenay River’s water levels. In a 2002 letter to the ACE, Colonel noted that farmers had noticed a new kind of erosion since construction of the Libby dam. Rather than the destructive spring floods common prior to Libby, water levels post-dam construction were extremely inconsistent, producing “constant wetting and drying and freezing and thawing of the river banks during the winter months.”¹⁵⁸ “Instead of ... known places of concern, we experienced major erosion to the entire length of our diking system,” wrote Colonel. “Our setback lands began to slip into the river.” Soon the farmers began to lay rocks along the riverbank to shore up soil, including along shorelines that had never previously required such measures.

Much as Guy Constable predicted, fish did indeed take centre stage after Libby’s construction. In the United States, growing concerns about the effects of the dam on fish populations encouraged greater testing and regulation.¹⁵⁹ Canadian environmental law scholar Nigel Bankes observes that the implications of Libby’s operation for sturgeon flows provides “a nice example of the tension between a Treaty negotiated in a particular era and informed by a particular set of values and a newer and emerging set of values.”¹⁶⁰ Bankes argues that these tensions were successfully resolved by multiple entities, including the Bonneville Power Authority, British Columbia Hydro, and private organizations. However, the spirit of compromise described by Bankes did not extend to Creston farmers, who felt that their interests had been sacrificed in favour of fish stocks. In particular, ACE spillway release tests, designed to ascertain Libby’s impact on fish populations, exacerbated existing erosion. Creston farmers were continually frustrated by the ACE’s failure to address their complaints about the spillway tests. When the farmers reasoned that the entire river should be rip-rapped to resolve the erosion crisis, this, too, ran into resistance. In a letter to the ACE in 2002, Colonel explained that Creston farmers felt that “the river was being used as pipe to transport water to other stake holders [*sic*] for power generation, to promote fish habitat and for irrigation.” International fisheries departments had objected to

¹⁵⁷ Cyril Colonel to Dr. Stephen Martin.

¹⁵⁸ Ibid.

¹⁵⁹ Spritzer, *Waters of Wealth*, 152.

¹⁶⁰ Nigel Bankes, “Multiple Actors in Canada-US Relations: Environment: Garrison Dam, Columbia River, the IJC, NGOs,” *Canada-United States Law Journal* 30 (2004): 117-27.

farmers rip-rapping along the shoreline because of the impact of stones falling into the river, Colonel noted, even as they ignored “huge slabs of earth” from eroding dikes entering the flow.¹⁶¹ The farmers argued that they were constantly brushed aside by an opaque web of American institutions. Some of the farmers who had initially welcomed Libby were not even informed of a 2002 hearing in Creston on the dam’s spillway release test.¹⁶²

Today the Kootenay River dikes cover nearly eighty kilometres along the river, and fluctuating lake and river levels still affect them despite persistent arguments that the Libby Dam has resolved all the region’s flood problems.¹⁶³ The spectre of flooding remains, and the region is unprepared for inundations like those in 1974 and 1996.¹⁶⁴ From 2007 to 2012, the BC government spent over \$2.4 million to repair Creston Flats dikes as part of flood mitigation measures, and in 2007 five disparate organizations began a new cross-border initiative for managing floodplain issues in the Kootenay River Valley.¹⁶⁵ As the ecological impacts of the Libby Dam gain increasing public attention, Creston farmers struggle to affirm the importance of their own concerns while their communities cope with flood damage, dike maintenance, drainage costs, and the effects of climate change. As of 2014, residents along the river continue to complain that Libby’s operations have damaged Creston dikes, endangering both agricultural lands and the cvwma wetlands. The area’s vulnerability is exacerbated by limited long-term funding for dike maintenance.¹⁶⁶ Further threats to farming on the Flats come from changes to the province’s Agricultural Land Reserve (ALR) regime, which could potentially open up previously protected farmland to development.¹⁶⁷

¹⁶¹ Cyril Colonel to Dr. Stephen Martin.

¹⁶² Ibid.

¹⁶³ BC Development Services Department, *Lakeshore Development Regulations and Policies in the Regional District of Central Kootenay* (Victoria: Regional District of Central Kootenay, 2007), 6.

¹⁶⁴ Ibid., 10, 29, 33.

¹⁶⁵ This cross-border initiative treats larger floodplain issues in the Kootenay River Valley and includes the cvwma, the Yaqan Nu?kiy, the Creston Diking District, Nick’s Island Diking District, the Reclamation Diking District, Duck Lake Diking District, and the Goat River Residents Association. See BC Development Services Department, *Lakeshore Development Regulations and Policies*, 21; Government of British Columbia, *Flood Mitigation Works on Track for May Completion* (Victoria: Government of British Columbia, 2007), http://www2.news.gov.bc.ca/news_releases_2005-2009/2007OTP0051-000501-Attachment1.htm; and Ministry of Justice, “Minister’s Statement on Current Flooding in BC,” *NationTalk*, 25 June 2012, <http://nationtalk.ca/story/ministers-statement-on-current-flooding-in-b-c>.

¹⁶⁶ Columbia Basin Trust and CRT Local Governments’ Committee, *Columbia River Treaty*, 10.

¹⁶⁷ Bill Metcalfe, “Kootenay Boundary Politicians Protest New Agricultural Land Bill,” *Nelson Daily*, 21 April 2014.



Figure 7. A view of orderly reclaimed fields in Creston. Photo courtesy of the author.

CONCLUSION

T.C. Meredith's observation that we can see the mark of human historical developments on today's landscape is certainly true of Creston, where evidence of human manipulation is everywhere.¹⁶⁸ A poetic description of the northern reaches of the Creston Flats in 1974 emphasizes the wildlife area's utilitarian features:

Each unit may be flooded
or drained at will.
The more the units,
the better the control.¹⁶⁹

It might seem as though human intervention has stamped out every glimmer of wilderness on the Creston Flats: the river's once-wandering path, controlled by dikes, is now subject to a mechanical switch while tangled vines are replaced with orderly units of land (Figure 7). Indeed, it would be very easy to embrace a common historical premise that humans have altered the landscape of the Creston Flats to such a degree that "nature in its most authentic essence has been banished far away."¹⁷⁰ However, environmental historian Mark Fiege warns that such assumptions about conquered, orderly environments are problematic because the implications

¹⁶⁸ Meredith, "Upper Columbia Valley," 54.

¹⁶⁹ Edwards, *Wildness on Creston Flats*, 15.

¹⁷⁰ William Cronon, "Foreword," in Fiege, *Irrigated Eden*, x.

of human manipulations of land and water are often far from predictable.¹⁷¹ Similarly, Richard White argues that, despite human intervention, the Columbia River “maintains its natural, its ‘unmade’ qualities.”¹⁷² Although competing claims on the Kootenay River and its alluvial flatlands led to a diverse range of human interventions, these schemes often had unexpected results that continue to shape Creston today.

Interconnections within river systems are intricate and pervasive. As with the broader ecosystem of the Kootenay River and the Columbia Basin as a whole, human modifications to the Creston Flats, including a massive dam upstream, did not occur in isolation; rather, they were part of a greater web of conflicting motives and manipulations that included the Columbia River Treaty. Likewise, narratives about dam building were alternatively nuanced at the local level in Creston by concerns about the future of farming on the Flats. The schemers and dreamers of the Creston Flats reclamation hoped to ensure a profitable, stable agrarian future by diking bottomlands and containing the Kootenay River. During their attempts to do so, they met with resistance from diverse interest groups and from the river itself. Every attempt to create order only complicated human claims on the area, and the stability sought for the Creston Valley through reclamation did not ensure stability for the broader region, or even for Creston itself. Indeed, the river’s natural processes assert themselves today when, during flood years, the river swells and spills onto the bottomlands. At the same time, the Creston dikes continued to influence how later farmers and politicians have thought about the region, acting as a focal point for new, emerging ideas about land and water during debates over wildlife conservation and hydroelectric development.

Reclamation has remained central to how the farmers have perceived, and modified, the landscape and river system. By building the dikes and farming alongside the once-meandering Kootenay River, Creston farmers inadvertently created and later perpetuated the idea of dangerous flooding and the necessity of constructing a managed environment – one that persists to this day in the varied landscape of the Flats. In ways that echo discussions of sustainable development, altering Creston’s landscapes to foster economic growth led to greater vulnerability. Ultimately, the Creston Flats defy any definitive narrative but, rather, speak to the power of place and the capacity of one grand river to define a community.

¹⁷¹ Fiege, *Irrigated Eden*, 3-8.

¹⁷² Richard White, *The Organic Machine: The Remaking of the Columbia River* (New York: Hill and Wang, 1995), ix.