

**FROM A “WHOPPER” TO A “GREEN AND CLEAN” DEVELOPMENT:
MODERNITY, ENVIRONMENTALISM, AND THE CANADIAN-AMERICAN
LIBBY DAM PROJECT**

by

PHILIP VAN HUIZEN

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ABSTRACT

In the 1940s, planners in both the American West and British Columbia were in the throes of what anthropologist James Scott has termed “high modernism.” Development rhetoric during this period promoted the construction of large dams in ways that stressed the rational “conquest of nature” using tools provided by science and technology. The Libby Project, included as part of the Columbia River Treaty and located along the Kootenay River in northwestern Montana and southeastern British Columbia, was initially promoted in a similar fashion. By the time construction of the Libby Dam began in 1966, though, a growing environmental movement changed how planners, such as the US Army Corps of Engineers in Montana and various scientists, politicians, and bureaucrats in British Columbia, described and designed the Libby Dam and its reservoir, Lake Koocanusa.

This thesis traces how the “environmental turn” affected the Libby Project from 1948 to the late 1970s. I argue that the larger North American environmental movement gave pre-existing conservation groups and government agencies in Montana and British Columbia greater influence over politicians and legislation. In response, Libby Project planners implemented mitigation measures, “blended” the dam and reservoir into the Kootenay landscape, and appropriated First Nation’s symbols and artefacts to make the project seem “native” to the Canadian-American Kootenay Basin. Such efforts also affected how local residents in the area viewed environmentalism and the Libby Dam. In this way, Libby project experts and Kootenay residents were affected by, and a part of, the more general shift from high modernism to environmental modernism that occurred in North America in the mid-to-late twentieth century.

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Introduction

In 1972 the U.S. Army Corps of Engineers (Corps) held an international competition for a 27 by 10 foot sculpture to commemorate the Libby Dam, located just north of Libby, Montana, and its 150-kilometre long reservoir, Lake Koocanusa, which extends into southeastern British Columbia. The winning design, by Albert Wein of Encino, California, was installed in 1975 on the upstream wall of the Libby Dam Treaty Tower, a 57-foot structure constructed halfway along the dam's crest. In the sculpture, a muscular, loincloth-clad "Indian" man, meant to symbolize the dam, blocks the path of two wild horses, meant to represent the raging Kootenay River.¹ Light streams down from a partially cloudy sky, as if from heaven, while Canada geese fly in the air above and two fish swim in calmed waters at the man's feet. The entire scene rests atop a half-eagle, half-maple leaf to acknowledge the two nations involved in the project. The sculpture is striking, not only as a piece of artwork, but also because the dam is not included in the scene, nor is any other image traditionally associated with technology, such as power lines, gears, or levers. Instead, by appropriating an image of a stereotypical, "prehistoric Indian" for the dam and including images of fish and geese, the sculpture naturalized the Libby Dam, which separated it from previous artwork that had depicted dams as machines that conquer nature.² Thus, the sculpture reflects how planners, at the time, wanted the Libby Project to be seen: an example of international cooperation and

¹ Spelled "Kootenai" in the United States. Although rivers often cross international boundaries, their spellings sometimes do not. In the interest of consistency, I use the Canadian spelling in this paper, except when quoting from American sources.

² Sculptor Oscar J.W. Hansen has explained that his Greco-Roman styled artwork for the Hoover Dam was meant to symbolize that "man's control over natural forces has grown in proportion to his increasing knowledge of the true nature of this universe of which we are a part." See, Oscar J.W. Hansen, *With the Look of Eagles: Sculptures at Hoover Dam* (Washington DC: Bureau of Reclamation, Department of the Interior, 1967), 10. For reflections on other Western American dams through artwork, see Newton Harrison et. al., *Arrested Rivers* (Niwot, CO: University Press of Colorado, 1994).

technical achievement that maintained a link with both the natural environment and the history of the Kootenay River Basin.³

The design and promotion of the Libby Project, however, did not always contain this message. The process that led to its completion was long and controversial and covered a period when general perceptions of the environment, land use, and development shifted. When the idea of damming the Kootenay River near the forty-ninth parallel first occurred in the 1940s, planners in both the American West and British Columbia were in the throes of what James Scott has termed “high modernism,” a time that Patrick McCully, perhaps more appropriately for this paper, has labelled “the big dam era.”⁴ Development rhetoric during this period promoted the construction of large dams, such as the Hoover and Grand Coulee in the American West and the Kenney Dam in British Columbia, in ways that stressed the rational “conquest of nature” using tools provided by science and technology.⁵ Inspired by the enormous popularity of such dams, Libby Project supporters initially promoted their dam in a similar fashion.

By the time construction of the Libby Dam began in 1966, though, a growing environmental movement caused many to question the benefits of high-modernist projects and to focus on their adverse environmental impacts. This, in turn, affected how planners described and designed subsequent projects. Libby Project planners changed

³ US Army Corps of Engineers, “Libby Dam Treaty Tower Commemorative Sculpture Competition” (Seattle District, 1972), City of Vancouver Archives (CVA), Ilel Imredy Collection, 620-D-5, file 1.

⁴ James C. Scott, *Seeing Like a State* (New Haven: Yale University Press, 1998); for analysis of high-modernism in BC see Tina Loo, “People in the Way: Modernity, Environment and Society on the Arrow Lakes” *BC Studies* 142-143 (Summer, 2004), 161-196; and Arn Keeling and Robert McDonald, “The Profligate Province: Roderick Haig-Brown and the Modernizing of British Columbia” *Journal of Canadian Studies* 36 (3) (Fall 2001), 7-23. Patrick McCully, *Silenced Rivers: The Ecology and Politics of Large Dams* (London: Zed Books, 1996).

⁵ R.J. Forbes, *The Conquest of Nature: Technology and its Consequences* (New York: Praeger, 1968).

their designs and promotions from ones that stressed the dam's "conquest of nature" to others that focused on their compatibility; technology no longer dominated nature but complemented and intertwined with it. In this way, Libby Planners anticipated the decline of large dam construction that would occur in the United States and Canada due to environmental pressure in the mid-1970s and the 1980s respectively.⁶ The Libby Dam, then, spans more than just the width of the Kootenay River. The process leading up to and including its construction also stretches between the high-modernist, big dam era and the contemporary period of environmental modernism.

A pessimistic argument might posit that planners changed their designs and sought to blend the Libby Dam and reservoir into the Kootenay River Valley only to "sell" the project in the face of increasing environmental criticism. Indeed, this has been the story told by many scholars who have examined development projects in the twentieth century Canadian and American Wests. These works, although they acknowledge that a general political shift towards more "environmentally friendly" policies occurred in the United States and Canada during the 1960s and 1970s, still pit technology, modernity, and development against nature, sustainability, and environmental activism.⁷

Recent scholarship, however, has complicated such dualisms. Inspired by historians William Cronon and Richard White, some American scholars have challenged

⁶ Patrick McCully, *Silenced Rivers*, 23-28.

⁷ Patrick McCully, *Silenced Rivers*; Matthew D. Evenden, *Fish versus Power: An Environmental History of the Fraser River* (Cambridge: Cambridge University Press, 2004); Jean Barman, *The West Beyond the West: A History of British Columbia* (Toronto: University of Toronto Press, 1991), 270-321; Samuel P. Hays, *Beauty, Health and Permanence: Environmental Politics in the United States, 1955-1985* (Cambridge and New York: Cambridge University Press, 1987); Patricia Nelson Limerick, *The Legacy of Conquest: The Unbroken Past of the American West* (New York and London: W.W. Norton and Co., 1987); Donald Worster, *Rivers of Empire: Water, Aridity, and the Growth of the American West* (Oxford: Oxford University Press, 1985).

nature-technology binaries by examining topics as diverse as the creation of “wilderness” to the evolution of organisms used as technology by humans.⁸ Robert Gottlieb has challenged the idea that the environmental movement that emerged after 1970 was entirely new and separate from progressive movements that had existed in the United States since the 1890s. British Columbia historians Tina Loo, Arn Keeling, and Robert McDonald, on the other hand, have challenged the homogeneity of high modernism by showing that alternative views of modernity competed throughout the modernizing of British Columbia.⁹

Although this work has been fruitful and exciting, for the most part scholars still assume that a strict nature-technology binary continued to exist for “experts” involved in large-scale construction projects in the twentieth century.¹⁰ An examination of the design and promotion of the Libby Project, though, reveals that this assumption is too simplistic. Libby Project planners, especially after 1960, were aware of and often exploited apparent contradictions between a desire to develop and modernize the American West and British

⁸ William Cronon, “The Trouble with Wilderness; or, Getting Back to the Wrong Nature” in Cronon, ed., *Uncommon Ground: Rethinking the Human Place in Nature* (New York: W.W. Norton and Co., 1995), 69-90; Richard White, *The Organic Machine* (New York: Hill and Wang, 1995); Robert Gottlieb, *Forcing the Spring: The Transformation of the American Environmental Movement* Revised Edition (Washington: Island Press, 2005, originally published, 1992); Jeffrey K. Stine and Joel A. Tarr, “At the Intersection of Histories: Technology and the Environment,” *Technology and Culture* 39 (October 1998): 601-640; Jennifer Price, *Flight Maps: Adventures With Nature in Modern America* (New York: Basic Books, 1999); Edmund Russel, “Introduction: The Garden in the Machine: Toward an Evolutionary History of Technology,” in Susan R. Schrepfer and Philip Scranton eds., *Industrializing Organisms: Introducing Evolutionary History* (New York and London: Routledge, 2004): 1-16.

⁹ Loo, “People in the Way:”, 161-196; Keeling and McDonald, “The Profligate Province,” 7-23.

¹⁰ By experts, I mean professional planners involved in the design and promotion of large dam projects, such as architects, engineers, and developers. This also includes biologists and sociologists who, in the late 1960s, were used as experts to mitigate the effects of dams on flora, fauna, and humans living nearby. Experts involved in the construction of “natural” tourist destinations, such as National Parks and Niagara Falls, on the other hand, have been depicted as more aware of grey areas between nature and technology. See Alan MacEachern, *Natural Selections: National Parks in Atlantic Canada, 1935-1970* (Montreal & Kingston: McGill-Queen’s University Press, 2001); and William Irwin, *The New Niagara: Tourism, Technology, and the Landscape of Niagara Falls 1776-1917* (University Park: The Pennsylvania State University Press, 1996).

Columbia and a desire to preserve its “frontier-like” qualities.¹¹ Development planners for the Libby Project were part of the environmental shift that occurred after the Second World War, and incorporated environmentally modern ideas into their projects.

This argument is complicated, though, by the fact that the Kootenay River Basin straddles the Canadian-American border. As some scholars have pointed out, the political boundaries of nation-states encapsulate more than just the limits of a nation’s geography. They are also powerful social constructions that often cause academics to define and examine their studies only within the geographical limits of their respective nation-states.¹² Borderlands, or “bioregions,” such as the Kootenay River Basin, however, and the rivers, people, flora, and fauna that inhabit them, do not adhere to the same politically created borders.¹³ Any study of the Kootenay Basin, then, must cross these same boundaries, while also accounting for how they have affected the area.

¹¹ The term “frontier” has a long and contested history. It is used here in the form popularized by Frederick Jackson Turner, who described the American frontier as both a physical, “wild” place and a formative process that “created” Americans as they tried to tame the West. See Frederick Jackson Turner, “The Significance of the Frontier in American History,” (1893) reprinted and abridged in Weber and Rausch, eds, *Where Cultures Meet: Frontiers in Latin American History* (Wilmington: Scholarly Resources Inc., 1994):1-18. For a discussion of how this term has since been contested see Jeremy Adelman and Stephen Aron, “From Borderlands to Borders: Empires, Nation-States, and the Peoples in Between in North American History,” *American Historical Review* 104(3) (June 1999): 815-16.

¹² Benedict Anderson, *Imagined Communities: Reflections on the Origins and Spread of Nationalism* Revised Edition (London: Verso, 1983, 2003); Ian Tyrell, “Making Nations/Making States: American Historians in the Context of Empire,” *The Journal of American History* 86(3) (1999): 1015-44.

¹³ North American borderland studies are extensive. For an overview of Spanish/Mexican-American works, see David J. Weber, “The Spanish Borderlands, Historiography Redux,” *The History Teacher* 39(1) (November 2005), 43-56; For western Canadian-American borderland studies see, Sterling Evans ed., *The Borderlands of the American and Canadian West: Essays on Regional History of the Forty-Ninth Parallel* (Lincoln and London: University of Nebraska Press, 2006); Elizabeth Jameson, “Dancing on the Rim, Tiptoeing through Minefields: Challenges and Promises of Borderlands,” *Pacific Historical Review* 75(1) (2006), 1-25; Paul W. Hirt ed., *Terra Pacifica: People and Place in the Northwest States and Western Canada* (Pullman: Washington State University Press, 1998); John M. Findley and Ken S. Coates, eds., *Parallel Destinies: Canadian-American Relations West of the Rockies* (Seattle: University of Washington Press, 2002). For a discussion of the term “bioregion,” see Dan Flores, “Place: An Argument for Bioregional History,” *Environmental History Review* 18(4) (1994): 1-18. For examples of “bioregion” scholarship, see Katherine Morrissey, *Mental Territories: Mapping the Inland Empire* (Ithaca and London: Cornell University Press, 1997); Theodore Binnema, *Common and Contested Ground: A Human and Environmental History of the Northwestern Plains* (Norman: University of Oklahoma Press, 2001).

The purpose of this thesis is to examine how the environmental movement in the Pacific Northwest and British Columbia affected the promotion and construction of the Libby Dam and the mitigation of its environmental effects, from 1948 until the late 1970s. As such, it is divided into four sections, roughly organized chronologically. The first part, after a brief history and description of the Kootenay River Basin, examines the early years of the Libby Project, from 1948 until the early 1960s. During this period the Libby Project was first promoted as another example of high modern development, but ran into controversy because of competing development schemes in British Columbia. The second part examines how the general shift in public opinion concerning the environment during the 1960s, especially in urban centres like Vancouver, Helena, and Seattle, changed the Libby Project. During this period older conservation and preservation groups and government agencies at federal, provincial, state, and local levels gained greater influence over development projects and were able to force development agencies to adopt environmental mitigation strategies. The third section analyzes how such environmentalist pressure forced those responsible for creating Lake Koocanusa in the British Columbia Social Credit government and the US Army Corps of Engineers to change their development policies. Although still committed to constructing large dams, each developed strategies to ensure that the Libby Project would be seen as environmentally modern. Finally, in the fourth section I conclude by briefly describing the legacy that such a change in "the politics of development" has had for the Kootenay River Basin.¹⁴

¹⁴ H.V. Nelles, *The Politics of Development: Forests, Mines and Hydro-Electric Power in Ontario, 1849-1941* (Toronto: Macmillan Co. of Canada Ltd., 1974).

1. "The Most Useless Land": High Modernity and the Libby Project

The history of the Kootenay Basin, much like the water that defines its limits, has never been static. The people who have inhabited it, as well as their perceptions of the area, have been in constant flux, reacting to both physical changes in the basin's ecology and to changing ideas about how to manipulate its environment. In the early twentieth century, many Canadian and American politicians and planners began to promote the construction of a large-scale dam to control the seasonal flooding of the Kootenay River and to produce electricity. As part of a larger, global ideology of high modernism, its supporters promoted the dam using rhetoric that stressed "man's" ability to dominate and subdue nature. Although a treaty that would allow the dam to be built was unanimously ratified by both countries in 1964, such a massive development was not without controversy. However, those who were not in favour of it still supported the "conquest of nature" but had different ideas about where and how it was should be accomplished.

The Kootenay Basin has long been separated by the river that runs through it. The Kootenay River originates in Kootenay National Park in the Rocky Mountains of eastern British Columbia. From here it flows south through the Rocky Mountain Trench, across the Canadian-American border, and into Montana. After reaching the town of Libby, Montana, it turns northwest to Bonners Ferry, Idaho, curves north, and crosses back into British Columbia, near Creston, after which it eventually empties into the Columbia River. In total, the Kootenay River is approximately 746 kilometers (464 miles) long and drains a basin of nearly 50,000 square kilometers (19,300 square miles).¹⁵

¹⁵ M.R. Whatley, *Effects on Fish in Kootenay River of Construction of Libby Dam* (Victoria, Fish and Wildlife Branch, Department of Recreation and Conservation, April 1972), 2-3. Whatley gives his measurements in miles, the conversions are my own.

Before the mid-eighteenth century, the Kootenay Basin was predominantly inhabited by the Ktunaxa/Kootenai peoples, who loosely separated themselves into two groups according to the upper (eastern) and lower (western) arms of the Kootenay River, divided roughly at Lower Kootenay Falls, near present-day Libby, Montana.¹⁶ Upper Ktunaxa/Kootenai managed large populations of horses and often crossed the mountains onto the prairies to hunt buffalo. Lower Ktunaxa/Kootenai, on the other hand, were more stationary and predominantly hunted and fished within the Kootenay Basin. After the forty-ninth parallel was imposed on the region in 1846, more and more non-Ktunaxa/Kootenai settlers entered the area in search of mineral and forest resources. Ktunaxa/Kootenai populations were decimated by disease and most were eventually forced on to seven different reserves by government officials in the 1870s and 1880s: two in northwestern Montana and northern Idaho respectively and five in southeastern British Columbia. This began a long period of political marginalization of the Ktunaxa/Kootenai, in both Canada and the United States, which continued until well after the Libby Dam was finished.¹⁷

Non-Ktunaxa/Kootenai settlers were first drawn to the floodplain regions of the lower Kootenay River in the western part of the Kootenay Basin, near Bonners Ferry Idaho, and Creston, Nelson, and Trail in British Columbia. Large settler populations were

¹⁶ Also known as the Kootenay First Nation in British Columbia. In 1990, they officially changed their name to the Ktunaxa Nation. In Montana and Idaho they refer to themselves predominantly as the Kootenai, but also as the Ksanka. See, Randy Bouchard and Dorothy Kennedy, *First Nations' Ethnography and Ethnohistory in British Columbia's Lower Kootenay/Columbia Hydropower Region* (Victoria: British Columbia Indian Language Project, Prepared for Columbia Power Cor., 2000), 9-12. Throughout this paper I will refer to them together as the Ktunaxa/Kootenai.

¹⁷ *Not So Long Ago: Recollections of Ktunaxa/Kinbasket Elders* coordinated by Troy Hunter (Cranbrook: Ktunaxa/Kinbasket Tribal Council, 1999); Kootenai Cultural Committee of the Confederated Salish and Kootenai Tribes, *Ktunaxa Legends* (Pablo, MT: Salish Kootenai College Press, 1997); Spritzer, Waters of Wealth, 6-54; Olga Weydemeyer Johnson, *Flathead and Kootenay: The Rivers, the Tribes and the Regions Traders* (Glendale: Arthur H. Clark Co., 1969).

drawn to the area's mineral wealth and productive soil, as one of the most fertile plateaus west of the Rocky Mountains was located here. By the late nineteenth century, steamship operations were set up along the lower Kootenay River. In the eastern part of the Kootenay Basin, logging and mining operations began to flourish in Libby and Eureka in Montana, and in Cranbrook, Kimberley, Fernie, and Fort Steele, British Columbia after the 1890s. Farming was more difficult along the upper Kootenay River, though, and only a scattered number of ranches had been set up outside of mining towns by the end of the Second World War.¹⁸ As such, early views about development and modernization varied in the Kootenay Basin. Extractive resource areas, such as towns that supported mining and logging industries, generally supported major growth and development schemes. Smaller-scale ranchers and farmers, on the other hand, desired growth only in immediate relation to the lands they occupied and generally preferred less "outside" interference.¹⁹ However, such interference increased as high modernist ideas spread in the Kootenay Basin, especially after the Second World War.

High modernism can be loosely defined as a more specific and exaggerated form of modernism. Both denote a belief in scientific rationalism, technology, and standardization, but believers in high modernity apply these ideas on a mass scale. This requires rigid, "top down" control, generally by politicians and bureaucratic "experts," in order to control nature (both human and non-human). According to James Scott,

[high modernism] is best conceived as a strong, one might even say muscle-bound, version of the self-confidence about scientific and technical progress, the expansions of production, the growing satisfaction of human needs, the mastery

¹⁸ Spritzer, *Waters of Wealth*, 32-117.

¹⁹ Hugo Tureck, *Social Impact of the Libby Dam, Lincoln County: The Case of Absentee or Extra-Local Influence* (Bozeman: Montana State University, 1972), 8-47.

of nature (including human nature), and, above all, the rational design of social order commensurate with the scientific understanding of natural laws.²⁰

The emergence of high modernism as a predominant (though, not the sole) ideology amongst planners and government officials in British Columbia and the American Pacific Northwest in the immediate years preceding and those following the Second World War has been well-documented.²¹ In this period, federal, provincial, and state planners and politicians, as well as many private interests, envisioned their areas industrializing in a homogenous fashion that could be rationally planned and controlled.

A major component of such planning involved the construction of “mega-projects,” such as the large-scale manipulation of river systems, especially with enormous multipurpose dams. American government agencies like the Army Corps of Engineers, the Bureau of Reclamation and the Tennessee Valley Authority became famous for the construction of immense dam networks along the Colorado, Columbia, and Tennessee Rivers. These networks were widely credited with modernizing their respective river basins by producing electricity for industry and providing irrigation and flood control for large-scale agriculture.²² Politicians and planners in other areas of North America, and indeed the world, envisioned harnessing river waters and constructing dams in a similar fashion in other river basins. As A.G.L. McNaughton, Canadian Commissioner for the Canadian-American water management institution, the International Joint Commission

²⁰ Scott, 4. For discussions on modernity in general, see Stuart Hall et al., eds., *Modernity: An Introduction to Modern Societies* (Oxford: Blackwell Pub., 1996).

²¹ See, Loo, “People in the Way”; Keeling and McDonald, “The Profligate Province”; Jean Barman, *The West Beyond the West*, 270-96; Robert E. Ficken, *Rufus Woods, The Columbia River, and the Building of Modern Washington* (Pullman: Washington State University Press, 1995); Michael P. Malone et. al. *Montana: A History of Two Centuries* Revised Edition (Seattle: University of Washington Press, 1991), 314-46; Reisner, *Cadillac Desert*, 151-75.

²² Kevin Wehr, *America's Fight Over Water: The Environmental and Political Effects of Large-Scale Water Systems* (New York: Routledge, 2004), 1-58; McCully, *Silenced Rivers*, 1-28; Loo, “People in the Way,” 163-66.

(IJC), explained in 1954: "an expanding industrial economy requires continuous and ever-increasing sources of electrical power. Canadian hydro-electric power potential is large, but to a great extent this power potential has not been assessed and most of our possible developments are still to be planned."²³ Undeveloped rivers were seen as wastes of potential energy sources, while a developed river was seen as the nucleus of a system that would modernize its surrounding region.

The possibility of damming the eastern Kootenay River first arose after major flooding occurred in the West Kootenay flats in 1934, and was investigated by the Corps throughout the 1940s. However, the idea was not seriously considered until 1948, after the worst flooding in decades killed fifty people and caused over a hundred million dollars worth of damage to property and crops along the Kootenay and Columbia rivers in Montana, Idaho, Washington, and British Columbia.²⁴ As a result, in 1950 the 81st Congress passed the Flood Control Act, which authorized the Corps to design and construct a multipurpose dam to control flooding and generate electricity near Libby, Montana, provided an international agreement could be reached.²⁵ In 1951, the Corps submitted an application for this dam to the IJC, which had been established in 1909 by the International Boundary Waters Treaty to negotiate the development of shared water resources between the United States and Canada. However, due to disagreements over the dam's location, compensation for flooded lands, and the possibility of diverting the Kootenay into the Columbia River in British Columbia, the IJC did not successfully

²³ Letter from AGL McNaughton to the Secretary of the IJC Treasury Board, 2 November, 1954, p. 1, Simon Fraser University Archives (SFUA), WAC Bennett Papers, F-55 Container 47 File F-55-29-0-12.

²⁴ Neil A. Swainson, *Conflict over the Columbia* (Montreal: McGill-Queen's University Press, 1979), 41-43; Donald E. Spritzer, *Waters of Wealth* (Boulder: Pruett Publishing Co., 1979), 136-137.

²⁵ "New Dams to Control Floods Asked" *Province* July 27, 1948, p. 1; "Canada, U.S. Plan Curbs for Kootenay" *Vancouver Sun* July 27, 1948, p.9; "Flood Control in Northwest Recognized as International" *Christian Science Monitor* August 5, 1948, p.13. "U.S. to Seek Authorization to Build Big Kootenay Dam" *Victoria Times* Aug. 19, 1950, p.17.

negotiate terms for the Libby Dam until 1961, when it was included as part of the Columbia River Treaty.

The Columbia River Treaty, signed in January 1961 by Canadian Prime Minister John Diefenbaker and American President Dwight Eisenhower and ratified in 1964, provided British Columbia with nearly US\$65 million to construct three storage dams along the Canadian portion of the Columbia River to provide storage for American dams downstream. British Columbia was also entitled to half of the additional power that American dams would produce as a result of the extra storage, which it sold to the United States for a thirty-year lump sum of US \$275 million.²⁶ The treaty also gave the United States permission to construct the Libby Dam, and thus flood part of southeastern British Columbia, but did not compensate British Columbia for flooded lands nor for the cost of developing its side of the reservoir. In addition, no regulations or guidelines were included that addressed the environmental or social impacts of the Libby Dam.²⁷

From the beginning, American planners and politicians, especially those situated downstream, overwhelmingly supported damming the upper Kootenay River. These supporters bragged that the dam would be almost 450 feet high and over 3000 feet wide and proudly described it as a “whopper” after the 1950 Flood Control Act passed easily through Congress.²⁸ Support for the dam ranged from the practical to the symbolic.

²⁶ The four year lapse between signing and ratification was the result of a controversy between WAC Bennett, the Canadian government, and private lobbyists, such as former IJC Chairman A.G.L. McNaughton, over British Columbia's right to sell power to the United States, the possibility of diverting the Kootenay River into the Columbia River, and the autonomous management of Canadian water resources. This was eventually resolved when the Canadian Government granted BC the right to sell its power entitlement to the United States. For a detailed account of this controversy and the Columbia River Treaty see Swainson's *Conflict Over the Columbia*; John V. Krutilla *The Columbia River Treaty* (Baltimore: Johns Hopkins Press, 1967); and Loo, “People in the Way,” 163-64, 181-88.

²⁷ *The Columbia River Treaty, Protocol and Related Documents* (February, 1964), Article 12, sec. 2, 66-67.

²⁸ “New Dam is a Whopper,” *Province*, Nov., 14, 1950, p.11; Spritzer, 137.

Montana Congressman Wesley D'Ewart argued that "all will admit" the land to be flooded had a very low agricultural value, whereas flood control afforded the reclamation of "extremely fertile lands."²⁹ Practical arguments such as this stated that the Libby Dam enabled the Kootenay river system to be reorganized. Flooding that generally occurred in the fertile lower portion of the Basin would be moved to the upper region where agricultural potential was greatly inferior. Ultimately, the argument went, this would mean greater wealth and prosperity for everyone.

Just as important, though, was the dam's symbolic value. Congressman Mike Mansfield suggested that the dam be constructed by both countries on the Canadian-American border, arguing it could be "... a symbol of the friendship and the dependence, one upon the other, of the people of Canada and the United States."³⁰ More than just a symbol of peaceful international relations, though, the dam would also be a testament to male ingenuity and dominance over the natural world. As Idaho Senator Frank Church explained, "... the Libby Dam [will] demonstrate again that man is not powerless to control his environment."³¹

The symbolic value of the Libby Dam was transferred to its initial designs, which were powerfully simple and undecorated. Released in the late 1940s, early drawings depicted the dam as an unadorned mass of concrete that stretched majestically across the

²⁹ "Advantages of Dam Extolled" *Daily Colonist*, April 9, 1953, p.3.

³⁰ "Senator Seeks Friendship Dam" *Daily Colonist*, April 7, 1960, p.1.

³¹ As quoted in Spritzer, 143. It is unclear whether Church's use of the term "man" here refers to humanity in general, or if it is indicative of how technology was often gendered male while nature was gendered female. Evidence for how descriptions of the Libby Dam may or may not have been gendered is limited. Unfortunately it is beyond this paper to expand on this point. For more detailed analyses of gendered descriptions of human-nature and human-technology relationships and power dynamics see Susan R. Schrepfer, *Nature's Altars: Mountains, Gender, and American Environmentalism* (Lawrence: University Press of Kansas, 2005); Virginia Scharff, ed., *Seeing Nature Through Gender* (Lawrence: University Press of Kansas, 2003); Ruth Oldenziel, *Making Technology Masculine: Men, Women and Modern Machines in America, 1870-1945* (Amsterdam: Amsterdam University Press, 1999); Ruth Schwartz Cowan, *More Work For Mother: The Ironies of Household Technology from the Open Hearth to the Microwave* (New York: Basic Books Inc., 1983).

Kootenay River Valley, dwarfing the mountains, trees, and river also included in the drawings.³² These designs and the rhetoric that went with them were a continuation of ideas that had been applied to large development projects throughout the early to mid-twentieth century, beginning with the Hoover Dam in the late 1920s. Hoover's main architect, Gordon B. Kaufmann, rejected designs that included, among other things, two American eagle statues perched on the dam's observation towers. Kaufmann's revised design aimed for simplicity and clean lines; the dam would speak for itself as a symbol of "greatness, power, and domination."³³ Kaufmann's design worked, and the dam attracted millions of tourists in its first decade, many of whom were left speechless with a "world's fair feeling" of awe.³⁴

According to historian David Nye, this "world's fair feeling" was the result of a distinctly American obsession with the "technological sublime." Previously, Americans had reserved the term sublime for natural objects, such as Niagara Falls and the Grand Canyon, which were seen as potent examples of God's creation and caused visitors to feel terrified and entranced simultaneously. With the onset of the Industrial Revolution in the late-nineteenth century, though, nature increasingly lost its sublime status to technological wonders, such as sky scrapers, bridges, and dams. Libby Project designers in the United States, then, designed their dam in such a way that capitalized on and

³² Pictures and discussions of initial designs of the dam can be found in the Guy Constable collection on microfilm at the BC Archives (BCA), A00671, 21-1; also in "New Dam is a Whopper," *Province*, Nov., 14, 1950, p.11.

³³ Theodore Steinberg, "'That World's Fair Feeling': Control of Water in 20th-Century America," *Technology and Culture*, 34, 2 (April, 1993): 402.

³⁴ Wallace Stegner, "Myths of the Western Dam," *Saturday Review* October 23, as quoted in Steinberg, 401.

encouraged these sorts of reactions from visitors, further strengthening their "affection for spectacular technologies."³⁵

Within Canadian and British Columbia government and planning circles, the Libby Dam was much more controversial. However, this was not because of the potential destruction that flooding would cause for British Columbia's population or ecology or because Canadians were less enthralled by the technological sublime than Americans. Instead, controversies involved compensation for power benefits and whether it was more in British Columbia's interest to divert or dam the Kootenay River within British Columbia. No one questioned the fact that the river needed some sort of massive development. In fact, the most viable alternative plan to divert the Kootenay River into the Columbia would have caused far more destruction, since a much greater quantity of the Columbia and Kootenay River Valleys would have been inundated.³⁶

Those in favour of the Columbia River Treaty dams in British Columbia justified their construction using high-modernist arguments similar to ones made in the United States. One of the principal purveyors of such arguments was W.A.C. Bennett. Bennett and his pro-development Social Credit government, which ran the province from 1952 to 1972, engaged in numerous projects to modernize and connect the outlying regions of British Columbia. Bennett's "black top government" in the 1950s, for example, constructed more highways, bridges, and roads than all previous governments combined.³⁷ The Social Credit government approached the construction of multipurpose dams in a similar fashion. In a speech to commemorate the formal ratification of the

³⁵ David E. Nye, *American Technological Sublime* (Cambridge: MIT Press, 1994), xiii; xi-43.

³⁶ David J. Mitchell, *W.A.C. Bennett and the Rise of British Columbia* (Vancouver: Douglas and McIntyre, 1983 second edition, 1995), 298.

³⁷ Loo, "People in the Way," 162-63.

Columbia River Treaty at the Peace Arch Crossing between Washington and British Columbia, Bennett stated: "We have all witnessed the benefits to every sector of a developing economy which follow the development of massive blocks of hydro-electric power. It is infinitely ... rewarding to see them extended to millions of people in both our countries."³⁸

These arguments were also commonly used in the southwestern Kootenay floodplain region near Trail and Creston, where farms were situated on over 15,000 acres of reclaimed land. In the eyes of Libby promoters, the development of these fertile lands justified the sacrifice of less productive areas and people. Dennis Williams, editor of the *Trail Daily Times*, argued that the land to be flooded by the Libby Dam represented "some of the most useless land in the province ... land which consists in the main of rocky, over-grazed range, scrub-cattle owned by sub-marginal farmers (many of whom rely on Christmas tree cutting and social welfare payments for subsistence) and acres of jackpines not worth the cost of harvesting."³⁹ As for the southwestern Kootenay region, on the other hand, expanding industry, such as the Cominco smelter at Trail, desperately needed more power, and the fertile plains could be further expanded to provide food for British Columbia. As MLA Leon J. Ladner put it, "the economic destiny of Western Canada and British Columbia in particular, affecting the welfare and happiness of generations unborn, is at stake."⁴⁰

³⁸ W.A.C Bennett speech at Columbia River Treaty ratification ceremony, Peace Arch, Sept. 16, 1964, SFUA, WAC Bennett papers, F-55 container 62 file F-55-39-0-20.

³⁹ Dennis A. Williams, *Columbia River Treaty Project of Most Value To Us* (Trail: The Trail Daily Times, 1966), 3-4.

⁴⁰ Leon J. Ladner, "The Columbia River and our Destiny" speech delivered at the Banquet of the Associated Boards of Trade and Chambers of Commerce of Southeastern BC, April 5, 1977, VCA, Leon J. Ladner Fonds, Add Mss 641, 570-F-5, file 155.

As these examples show, the rhetoric used to promote the Libby Dam was similar for politicians outside of the Kootenay Basin, and for state and provincial politicians and residents within the downstream regions of the Kootenay River, on both sides of the Canadian-American border. For these people, the Kootenay River was a "menace" that threatened the agricultural use of the floodplain. However, in areas upstream from the potential site for the Libby Dam, in the East Kootenay region of British Columbia and in Lincoln County in Northwest Montana, views about the Libby Dam were much different. Most of the residents that lived in areas of the Kootenay River Valley that would be inundated were against the dam, but resigned themselves to its eventual existence. As Jack Aye, a rancher who lived near Wardner, British Columbia, explained:

At first we [ranchers] had thought about organizing, but on giving it further thought we decided that it would be futile for us to try and stop the building of this dam. I know myself for one, I am certainly not in favour of it, probably for a very selfish reason. We have spent the most productive part of our lives building up a ranch that will be flooded in this area, and the place is just now starting to produce ... it is not a very nice feeling to have something like this come on you. But, I do not feel that there is anything that I can do to stop it⁴¹

Residents in Lincoln County came to similar conclusions and many were apathetic about the dam's potential existence, since they felt its construction was inevitable. An Executive Committee of the Greater Libby Association for the Libby Dam argued, "the dam will come whether or not people here are for or against it and the people of this community should start planning ahead to meet and get the most out of the situations arising from the project."⁴²

⁴¹ International Joint Commission, "Public Hearing at Cranbrook, British Columbia, March 1951: In the matter of the application of the government of United States re. Libby Dam," (January 12, 1951): 42-43, BCA, BC Ministry of Environment Water Management Branch, GR 1427, Box 1, File 22.

⁴² As cited in Hugo Tureck, *Social Impact of the Libby Dam, Lincoln County: The Case of Absentee or Extra-Local Influence* (Bozemen, MT: Montana State University, 1972), 51.

This does not mean that these residents were anti-modern. As Tina Loo has argued for residents flooded out of the Arrow Lakes region along the Columbia River, upstream residents expressed an alternative version of modernity that supported growth and development, but still allowed for their independent, self-sufficient existence free from government interference.⁴³ For the most part, residents supported the modernization of their regions; however, they felt that they were paying a much higher price for it than downstream regions and distant urban centres that reaped all of the rewards. Fernie Board of Trade member, K.N. Stewart stated that “we feel that while the West Kootenay – Creston area is gaining a benefit ... we are the ones that are directly losing. Our economic life is being directly concerned. It is being lowered to a certain extent due to the flooding and cutting off of our potential.”⁴⁴

Residents who were negatively affected by the reservoir's flooding, though, consisted of a much smaller population than those who would potentially benefit from it. As such, project planners and supporters generally ignored or dismissed them due to the relatively unproductive value of their land. Land use, then, was calculated in a typically high-modernist fashion in order to “simplify” the Kootenay River Valley and make it “legible.”⁴⁵ For boosters and planners looking at the Kootenay Basin “from above,” the upper portion consisted of low population densities and unproductive lands, while the lower reaches were productive, yet ravaged by nature. By transferring floods from productive areas to unproductive ones, the Libby Project would transform the Kootenay River Basin into a more productive system, one which inundated useless lands for the improvement of more useful areas.

⁴³ Loo, ““People in the Way,”” 196.

⁴⁴ IJC, “Public Hearing at Cranbrook,” 47.

⁴⁵ For a discussion of this aspect of high modernity, see Scott, 11-52.

These sorts of justifications and rhetoric began to change, though, during the Libby Dam's construction. A growing environmental movement and a greater awareness of some of the adverse effects of large dams altered the social milieu within which the Libby Dam was constructed. As a result, the rhetoric used by government officials, scientists, and the media changed during its construction phase.

2. A Mitigated Development: Environmentalism and the Libby Project

Despite over a decade of controversy and stalled negotiations, the Army Corps of Engineers began construction of the Libby Dam in the summer of 1966.⁴⁶ During this period, however, a general environmental movement gained momentum and concerns about the effects of high modern mega-projects became more common. Focus within Montana, Idaho, and British Columbia began to shift to the Libby Dam's environmental effects as conservation groups and government agencies conducted numerous fish and wildlife impact studies for the Libby Dam during the 1960s and early 1970s. Such studies revealed the harm that the Libby Project posed for the Kootenay Basin's ecology and outlined measures that would mitigate its effects. Combined with increasing media and public attention on the project, this continuous pressure forced the Corps and the British Columbia government to undertake a more "environmentally friendly" approach to dam and reservoir construction.

The specifications for the Libby Dam had changed little since the original plan given to the IJC in 1951. The dam was to be built 27 kilometres (17 miles) upstream from Libby, Montana, would be 135 metres (446 feet) above bedrock, nearly a kilometre (3055 feet) wide, and was estimated to cost over US\$350 million for the United States portion

⁴⁶ "Libby Dam Officially under way" *Province*, Aug. 15, 1966, p.12.

and nearly US\$20 million for British Columbia. The reservoir, named Lake Koocanusa by an area resident in 1970, would have a storage capacity of 4.965 million acre-feet of water, a maximum length of 155 kilometres (90 miles) – 72 kilometres of which would be in Canada – a maximum width of 3 kilometres (2 miles), and a maximum depth of 107 metres (356 feet). The electrical output of the dam, both onsite and downstream, would add a total of 854,000 kilowatts to Pacific Northwest and British Columbia grids. In addition, inundation caused by Lake Koocanusa would require the relocation of hundreds of residents in Montana and British Columbia; the entire town of Rexford, Montana; sections of the Burlington-Northern Railroad in Montana and the Canadian National Railroad in British Columbia; the construction of a 2 mile-long railway tunnel in Montana; the relocation of Montana State Highway 37 and British Columbia Highway 3; and the construction of new access roads and bridges across and around the reservoir and the Kootenay River.⁴⁷ The environmental impact of these changes would be substantial, and a growing sense of environmentalism in both countries led to greater demand for governmental responsibility for these impacts.

Nature preservation and conservation groups, such as the Sierra Club and various wildlife organizations and Rod and Gun Clubs, had existed since the late nineteenth and early twentieth centuries in both the United States and Canada; however, their ability to affect general public opinion was slight until after the Second World War.⁴⁸ According to

⁴⁷ H.R. Hamilton et al., *Koocanusa Reservoir* (Calgary: HydroQual Ltd., 1990), 3; U.S. Army Corps of Engineers, *Environmental Statement Final Draft* (Seattle, 1972), 1-2 and 9.

⁴⁸ There is some debate as to whether the United States has traditionally been more concerned with wilderness preservation and, as a result, environmentalism, since there was no Canadian equivalent to preservation societies like the Sierra Club before the late 1960s. Instead, it is argued, Canada has been more concerned with conservation. See Donald Worster, "Two Faces West: The Development Myth in Canada and the United States," in Paul W. Hirt, ed., *Terra Pacifica: People and Place in the Northwest States and Western Canada* (Pullman: Washington State University Press, 1998), 71-92 and Frank Zelko, "Making Greenpeace: The Development of Direct Action Environmentalism in British Columbia," *BC Studies*

Samuel Hays, the growth of the environmental movement after 1945 was due to a combination of post-war increases in wages, standards of living, leisure time, and university enrolments, especially in urban centres.⁴⁹ In addition, the growing popularity of ecological studies like Rachel Carson's *Silent Spring* (1962) led to a greater general awareness of human-induced changes in the natural world, especially as a result of unchecked population, consumption, and industrial growth. Finally, increased media attention on issues concerning health and quality-of-life and the growth of counterculture movements in large urban centres in the late 1960s resulted in the establishment of various environmental groups in British Columbia and the Pacific Northwest cities, such as the Scientific Pollution and Environmental Control Society (1968), Friends of the Earth (1969), and Greenpeace (1971).⁵⁰ These groups gained prominence in the media and public sympathy in the early 1970s, which, in turn, pressured governments into incorporating more of an environmental agenda into their policies.

142/143 (Summer/Autumn, 2004), 220-222. Unfortunately it is beyond this paper to engage sufficiently in this debate. Suffice it to say that, although there may be some truth to the aforementioned argument, it is complicated by the fact that natural resources are under the direct control of provincial governments in Canada. Thus, although preservation has been a part of the conservation movement in Canada, it has tended to be local in nature. See Tina Loo, *States of Nature: Conserving Canada's Wildlife in the Twentieth Century* (Vancouver: UBC Press, 2006); Arn Keeling, "'A Dynamic, Not a Static Conception': The Conservation Thought of Roderick Haig-Brown," *The Pacific Historical Review* 71 (2) (2002), 239-68.

⁴⁹ Samuel P. Hays, *Beauty, Health and Permanence: Environmental Politics in the United States, 1955-1985* (Cambridge and New York: Cambridge University Press, 1987); *ibid.* *A History of Environmental Politics since 1945* (Pittsburgh: University of Pittsburgh Press, 2000); For a similar argument for environmentalism in Canada, see Jennfier Read, "Addressing 'A Quiet Horror': The Evolution of Ontario Pollution Control Policy in the International Great Lakes, 1909-1972" (PhD Dissertation: Queen's University, 1999), 200-42.

⁵⁰ See Robert Richter, *The Battle Over Hetch Hetchy: America's Most Controversial Dam and the Birth of Modern Environmentalism* (Oxford: University of Oxford Press, 2005); Arn Keeling, "Sink or Swim: Water Pollution and Environmental Politics in Vancouver, 1889-1975," *BC Studies* 142/143 (Summer/Autumn, 2004), 69-101; Frank Zelko, "Making Greenpeace: The Development of Direct Action Environmentalism in British Columbia," *BC Studies* 142/143 (Summer/Autumn, 2004), 197-239; Kevin Wehr, *America's Fight over Water: The Environmental and Political Effects of Large-Scale Systems* (New York and London: Routledge, 2004); Mark T. Harvey, *A Symbol of Wilderness: Echo Park and the American Conservation Movement* (Albuquerque: University of New Mexico Press, 1994); Roderick Nash, *Wilderness and the American Mind* Fourth Edition (New Haven: Yale University Press, 2001, originally published, 1967).

Although such an environmental movement was important in focusing public attention on dams in general, preservation and conservation groups and government agencies were far more important to the Libby Dam and the mitigation of its environmental effects. According to Robert Gottlieb and Arn Keeling, the environmental movement's roots in Canada and the United States extend further back than historians like Samuel Hays have argued. Since the late 1890s, progressive groups, including conservation and preservation societies, laid the groundwork for environmentalism, and eventually became a part of the much larger environmental movement in the 1960s and 1970s.⁵¹ For the Libby Dam, such conservation groups, like the Montana Wildlife Federation and Kootenay Rod and Gun Clubs, capitalized on the growing popularity of general environmental awareness and forced the Corps and the Social Credit government to introduce extensive mitigation measures.

This affected the Libby Project as early as 1961, when the President of the Montana Wildlife Federation, Bob Sykes, began to lobby Montana Senators Mike Mansfield and Lee Metcalf to "protect and maintain the fish recreational value of [the Libby Dam]." According to Sykes, previously constructed dams in Montana, such as the 1953 Hungry Horse Dam on the Flathead River, caused tremendous problems for fish and wildlife in the surrounding river basin. Sykes pointed out that "the State of Montana is now being confronted with the problem of how to rehabilitate and maintain [the Hungry Horse] reservoir There is no provision for the expense." Sykes also reminded the Senators that they had previously shown "interests on conservation" and thus should show "serious consideration for reasonable legislation" that would prevent such problems

⁵¹ Robert Gottlieb, *Forcing the Spring: The Transformation of the American Environmental Movement* Revised Edition (Washington, DC: Island Press, 2005, first published 1993); Arn Keeling, "'A Dynamic, Not a Static Conception,'" 239-68.

from repeating with the Libby Project. Sykes also believed that a coordinated effort was needed that would include federal, state and Canadian organizations in order to properly address any future problems.⁵²

In British Columbia, similar concerns were raised by East and West Kootenay Rod and Gun Clubs. The Kimberley Rod and Gun Club had been actively lobbying to protect the area's fish and wildlife from the effects of the Libby reservoir since at least 1961.⁵³ They were joined in these efforts by the West Kootenay Rod and Gun Club, which was concerned about the downstream effects of the Libby Dam. According to representatives, although the elimination of annual flooding in the Kootenay floodplain would allow for greater agricultural use, it would also dry up wetlands, which would prove disastrous for wildlife and waterfowl and thus for hunters. As such, both groups lobbied the British Columbia Fish and Game Branch to coordinate with American agencies and plan for mitigation.⁵⁴

Such lobbying was successful as, in 1962, representatives from various levels of government in the United States and Canada formed the Libby Project Planning Committee (Committee) to analyze future fish and wildlife issues. Composed of scientists and planners from the Canadian Wildlife Service, the British Columbia Fish and Game Branch, Idaho and Montana Departments of Fish and Game, the US Forest Service, the US Bureau of Sport Fisheries and Wildlife, and the US Army Corps of Engineers, the Committee spent the following year assessing the dam and reservoir's impact on fish and

⁵² Letter to Senators Metcalf and Mansfield from Bob Sykes, President Montana Wildlife Federation, Feb. 21, 1961, MHS, Metcalf Papers, MC 172 125-5.

⁵³ Kimberley Rod and Gun Club "Recreation in the Libby Project Area," Annual Convention of the BC Federation of Fish and Game Clubs in Vernon, BC, 1963, BCA, BC Energy Commission, GR 1390 Box 14.

⁵⁴ I.D. Smith, *Probable Effects of the Libby Dam upon Wildlife Resources of the East and West Kootenay* (Victoria: Wildlife Management Division, Fish and Wildlife Branch, Department of Recreation and Conservation, Feb. 1970), 1.

wildlife resources in the entire Kootenay Basin and released a report in 1963. The Committee concluded that, although the dam's social impact in the region would be relatively small, its effect on wildlife and fish resources in Montana, Idaho, and British Columbia would be substantial.⁵⁵ The artificial lake would destroy over forty-thousand acres of prime winter grazing lands that would result in the permanent loss of thousands of big game ungulates, such as elk, big-horned sheep, and white-tailed deer. The loss of winter range would cause these animals to starve, since the snow on the remaining portions of the valley would be too deep to find food. This was of particular concern for mountain sheep, since they were already an endangered species. Furthermore, the relocation of railways and highways and the creation of other roads would destroy another 2,000 acres of grazing territory, and, like the reservoir, would permanently impede migration patterns. The dam would also destroy wetlands downstream in the floodplains of Montana, Idaho, and British Columbia, which would wipe out waterfowl and water-based wildlife, such as geese and muskrats. It would also alter river conditions, both upstream and down, which would eradicate prized game fish, including dolly varden, whitefish, and, Montana's state fish, cutthroat trout. Instead, non-game fish, such as suckers and chub, would flourish in the reservoir and upstream tributaries and downstream as far as Kootenay Lake.⁵⁶

The Committee was only concerned with fish and wildlife that it deemed important as resources for the Kootenay Basin's fishing and hunting industries. As such, it recommended that the area needed to be carefully managed, on both sides of the border, in order to maintain valuable animal populations. This included constructing barrier dams

⁵⁵ Libby Project Planning Committee on Fish and Wildlife Resources, *Libby Dam and Reservoir Project, Kootenai River, Canada and the United States* (1963), 6.

⁵⁶ Libby Project Planning Committee, 8-54.

on Kootenay's upstream tributaries to separate game from non-game fish so that desired fish could spawn in natal streams; funding projects that would "eliminate" non-game fish from the reservoir altogether; constructing a hatchery to stock the reservoir with cutthroat trout and whitefish; hiring biologists to work with project engineers and architects to ensure that new roads and rail lines were constructed in ways that would not inhibit wildlife; clearing all trees and undergrowth in areas that would be flooded; and purchasing private lands around the reservoir in order to convert them into winter grazing areas for big-game ungulates. By purchasing all remaining private lands, natural resources not affected by the dam were to be preserved from private abuse, such as ranching or logging, by reserving them for wildlife preservation and public recreational use. Finally, the Committee recommended that all measures should be carried out according to national boundaries. Thus, just as responsibility for dam and reservoir construction was separated by the Canadian-American border, the Corps and the British Columbia government should also be separately responsible for environmental mitigation.⁵⁷

Such an acknowledgement of the Libby Project's effects did not automatically translate into funding for mitigation. Initially, in the United States, the Corps was reluctant to set aside funds for any of the mitigation measures recommended by the Committee, except for reservoir clearing which had always been a part of the project. Technically, legislation had been in place since 1946 under the US Fish and Wildlife Coordination Act that required the Corps to consult federal and state fish and wildlife agencies whenever any dam was constructed. However, the law had been loosely enforced throughout the 1950s and few funds were ever allocated for fish and wildlife

⁵⁷ Libby Project Planning Committee, 8-54.

management. This lack of planning for the environmental effects of other Montana dams, especially the Hungry Horse Dam (1953) on the Flathead River and the Clark Canyon Dam (1964) on the Beaverhead River, had wiped out game fish below the dams and in the reservoir and had severely reduced big game populations.⁵⁸ To prevent such results for the Libby Project, and bolstered by a swing in public opinion against such effects, conservation groups began to aggressively push the Corps to set aside funds for the Committee's environmental mitigation recommendations.

In 1964, just after the Columbia River Treaty's ratification, Sykes again lobbied Montana politicians to push the Corps to provide funds for the Committee's mitigation plans.⁵⁹ Sykes was joined in his efforts by Monty Kennedy, president of Flathead Wildlife Incorporated, who angrily argued that "even tho [sic] this is supposed to be a multiple use reservoir, the Corps of Engineers refuses to recognize necessary and proper expenditures pertaining to fish and wildlife damage, replacement and recreation."⁶⁰ In response, Senators Metcalf and Mansfield and Congressman Arnold Olsen lobbied the US Department of the Interior to conduct a further study of the Libby Dam's effects, with the request that they pressure the Corps to adopt any recommendations.

In 1965, the US Bureau of Sports Fisheries and Wildlife, a subsection of the Department of the Interior, released a report that further amplified the need for environmental mitigation measures. Its regional director, Paul Quick, also berated the Corps for not accounting for fish and wildlife. Quick criticized project planners, pointing

⁵⁸ Letter to Senator Lee Metcalf from Frank H. Dunkle, Director, Montana Department of Fish and Game, Dec. 3, 1965, MHS, Metcalf Papers, MC 172 125-6.

⁵⁹ Letter to Senators Mike Mansfield and Lee Metcalf and Representatives James F. Battin and Arnold Olsen from Bob Sykes, Montana Wildlife Federation, Feb. 20, 1964, MHS, Metcalf Papers, MC 125-4.

⁶⁰ Letter to Senator Lee Metcalf from Monty Kennedy, President, Flathead Wildlife Incorporated, March 19, 1964, MHS, Metcalf Papers, MC 172 125-4.

out that, from the beginning, “conservation, development, and improvement of fish and wildlife [was] not an authorized purpose of the project.” He argued that this should change: “capital and operation and maintenance costs of mitigation measures recommended as project costs [should] be treated in the same manner as other project joint costs and allocated among the beneficial purposes of the project.”⁶¹ To further complicate the matter, the Bureau also recommended that a system be installed to regulate river temperature and flow downstream. Most older dams only released water from the bottom of their reservoirs, which was much colder than river temperatures. They also did not maintain consistent flow patterns. According to the Bureau’s report, these two problems explained why downstream fish were negatively affected by large dams.⁶²

When it became clear that the Corps was also ignoring the Bureau’s recommendations, conservation groups and government agencies conducted a media campaign to draw attention to the Corps’ reluctance to fund mitigation efforts. Conducted largely in Montana newspapers, such as the *Missoulian*, *The Tobacco Valley News*, and the *Western News*, Montana’s Fish and Game Department and fish and wildlife groups complained that “it appears that the day is hurriedly coming when wild rivers will be as scarce as Dodo birds.”⁶³ Montana’s media were sympathetic to such claims and began to regularly report that Montana’s fish and wildlife were waging a “losing battle” against the Army Corps of Engineers, most often because of “cost-benefit ratios.”⁶⁴ The media

⁶¹ Paul Quick, “Report of the Regional Director” in US Department of the Interior, “A Detailed Report on Fish and Wildlife resources Affected by Libby Dam and Reservoir Project Kootenai River Montana” (Portland, February, 1965), 2, 10.

⁶² US Department of the Interior, “A Detailed Report . . .,” 35-36.

⁶³ “Libby Dam Will Hurt Area Wildlife Assets,” *Western News* April 11, 1964, MHS, Department of Health and Environmental Sciences – Environmental Sciences Division Records, S 86-6 2-30.

⁶⁴ “Libby Dam Construction to Cause Irritations” *The Missoulian*, Aug. 8, 1965, p.6; “Fish-Game Fights Losing Battle” *The Missoulian*, March 20, 1966, p. 15; “Libby Dam Wildlife Needs Stressed” *The Missoulian*, November 1, 1966, p.4, all articles from MHS, Merriam Papers, MC 58 11-1.

also polled Montana views on the dam's environmental impact, which ranged from "dam good for business," to "mixed," and "disgusted."⁶⁵

In British Columbia, a similar sort of intergovernmental and media pressure occurred, although a little later. As a result of controversial problems with other treaty dams, such as the lack of proper debris-clearing and the mud-flats that occurred with the Arrow Lakes project and the high number of fish deaths that occurred at the Mica Dam, public attention focused on the potential effects of the Libby project.⁶⁶ In the late 1960s the British Columbia Fish and Wildlife Branch commissioned two separate studies to assess the impact of the Libby Dam in British Columbia: I.D. Smith's 1970 study on the effects of the Libby Dam on East Kootenay wildlife and M.R. Whatley's 1972 study of its effects on fish.

Smith's study agreed with the Project Planning Committee's assessment that significant wildlife populations would starve as a result of flooding. Lake Koocanusa would destroy 18,000 acres of winter range in British Columbia, which would result in the loss of habitat for white-tailed and mule deer, elk, beaver populations, endangered big horn sheep, and small numbers of waterfowl, osprey and golden eagles.⁶⁷ Of particular concern for Smith, though, was the threat that the reservoir posed to deer and elk populations, since their decline would most affect the hunting industry. Smith stated that, during the previous few decades, big game populations had already declined within the

⁶⁵ "Effect of Libby Dam on Eureka Discussed" *Kalispell News*, Mar. 12, 1964, p.1; "Dam Good Business for Public" *The Missoulian*, Sept. 24, 1965, both articles from MHS, Merriam Papers, MC 58 11-1; "Libby Area Residents Views on Dam Mixed" *Great Falls Tribune*, Feb. 23, 1964; "Rexford not Bitter, Just Disgusted" *Great Falls Tribune*, Oct. 8, 1965, p.14, both articles from MHS, Metcalf Papers, MC 172 681-11.

⁶⁶ Loo, "People in the Way," 183-196; "Dams Kill, Injure Salmon," *Daily Colonist*, Oct. 23, 1970, p.22; "Fish Deaths Probed," *Victoria Times*, June 14, 1972, p.16.

⁶⁷ I.D. Smith, *Probable Effects of the Libby Dam upon Wildlife Resources of the East and West Kootenay* (Victoria: Wildlife Management Division, Fish and Wildlife Branch, Department of Recreation and Conservation, Feb. 1970), 11-16.

Rocky Mountain Trench due to competition for winter grazing lands with ever-increasing cattle populations. These ranchlands were all within the area that would be flooded by Lake Koocanusa. Smith's recommendation, then, was to buy out grazing lands from ranchers who would be flooded and to thereafter disallow cattle farming in areas surrounding Lake Koocanusa.⁶⁸

Whatley's study of the Libby Dam's effect on British Columbia fisheries also stressed that mitigation measures were needed. According to Whatley, the nature of fishing in the area would change upstream, from a winter industry that favoured whitefish, to a summer lake fishery that favoured trout. However, a hatchery would be needed in order to keep the reservoir stocked with valuable fish. In addition, pollution from the Sullivan Mine in Kimberley and a pulp and paper mill in Skookumchuck upstream, would have a serious impact on reservoir fish populations and, if not curtailed, would create water discoloration and algae blooms in the reservoir.⁶⁹ As for downstream fish, Whatley concurred with the US Bureau of Sport Fisheries report that a temperature regulation system was needed, since "effects of reduced water temperatures and flows will prove deleterious to feeding, mitigation, and spawning of fish ... originating from Kootenay Lake."⁷⁰

Thus, in both British Columbia and Montana, conservation groups, government agencies, and media pressured the Corps and the Social Credit government to account for the environmental impact of the Libby Dam. In the United States, similar pressure on other American development projects, in coordination with growing public sentiment

⁶⁸ Smith, *Probable Effects* ..., 24.

⁶⁹ M.R. Whatley, *Effects on Fish in Kootenay River of Construction of Libby Dam* (Victoria: Fish and Habitat Protection Section, Fish and Wildlife Branch, 1972), 27, 44-46.

⁷⁰ Whatley, *Effects of Fish*, 46.

towards the environment in general, culminated in the Nixon administrations' 1969 National Environmental Policy Act (NEPA). NEPA authorized the creation of an Environmental Quality Council and, for the first time, required national agencies to publish environmental impact statements and mitigation plans for all ongoing and future projects.⁷¹ Although the Libby Dam was well under construction at this time, it was still a number of years from completion, and, since the Corps was a government agency, an environmental impact statement was required – one of the first that would be conducted for a dam in the United States.⁷² However, NEPA did not require the assessment to be conducted by an independent agency and did not outline regulations for international developments. As a result, the Corps conducted its own assessment of the effects of the Libby Dam and reservoir in the early 1970s, but only assessed its impacts up to the Canadian-American border.

The Corps' environmental statement addressed many of the concerns previously raised by the Libby Project Planning Committee and the U.S. Bureau of Sport Fisheries and Wildlife. It acknowledged that, without proper precautions, the dam would have a significant detrimental effect on fish and wildlife, potentially eliminating valuable game fish and big game ungulate populations.⁷³ To compensate for fish losses, the Corps stated that it would build a hatchery to periodically stock the reservoir with 25,000 pounds of cutthroat trout; install a selective withdrawal system that would draw water from different

⁷¹ "Nixon Confirms Intention to Create US Panel on Environment Policy" *The Washington Post*, Mar. 25, 1969, p. A5; "Protecting the Environment" *New York Times*, Dec. 5, 1969, p.44; "Environment Package" *Christian Science Monitor*, Dec. 16, 1969, p.3. For a general history surrounding the act, see Hays, *Environmental Politics*, 61-62 and 126-27.

⁷² For a history of the construction of the Libby Dam, see Rich Aarstad, "The Libby Dam" written for the US Army Corps of Engineers Libby Dam Project (unpublished, 2001); and Spritzer, *Waters of Wealth*, 136-54.

⁷³ Corps, *Environmental Statement: Libby Dam and Lake Koocanusa, Kootenai River, Montana* Final Draft (Seattle District: 1972), 14.

levels of the reservoir to control downstream river temperatures; and construct barrier dams in Kootenay tributaries to impede the migration of non-game fish into the reservoir.⁷⁴ To mitigate the effects that the loss of grazing land would have on wildlife, the Corps would provide funds for the Forest Service to implement a "timber and wildlife habitat management program on about 7,000 acres of National Forest Lands." Furthermore, the Corps promised to purchase an additional 12,000 acres of privately owned land to recreate winter grazing lands and provide recreational access around the American portion of the reservoir.⁷⁵

In British Columbia, or Canada for that matter, no law similar to NEPA existed. However, the Social Credit government, in response to Smith's wildlife conservation report, organized an Environment and Land-Use Subcommittee composed of representatives from the British Columbia Land Service, Forest Service, Water Resources Service, Department of Agriculture, Department of Mines, Department of Municipal Affairs, and Department of Recreation and Conservation. In 1971, the Subcommittee released a report that agreed with Smith's recommendations and advised that the government not use crown land as compensation for ranchers whose lands would be inundated by Lake Koocanusa. Instead, it recommended that the government change land use within the East Kootenays from ranching to "preserving wilderness" for wildlife conservation.⁷⁶ However, the Social Credit government lost the next election at the end of 1972, and Dave Barrett's subsequent NDP government did not adopt the Subcommittee's recommendations. This is most likely because the NDP had been critical of the Columbia

⁷⁴ Corps, *Environmental Statement*, 13.

⁷⁵ Corps, *Environmental Statement*, 14-15.

⁷⁶ "Dam May Mark End of Ranching" *Province*, Jan. 14, 1970, p.22; "Bar to Crown Land Advised for those Ousted by Flooding" *Vancouver Sun*, June 3, 1971, p.17.

River Treaty dams since the mid-1960s, especially concerning the amount of money involved. With the NDP government unwilling to shell out more, the Subcommittee's recommendations went ignored.⁷⁷

Despite this, the Libby Project had changed significantly. Beginning with the Libby Project Planning Committee in the early 1960s, the increasing power of environmental criticism throughout the decade forced both the Corps and the Social Credit government to plan ways to mitigate the Libby Dam's environmental effects. This symbolized a dramatic shift in the rhetoric behind the construction of the Libby Project. No longer were planners on either side of the border referring to the Libby Project using high-modernist language that promoted the conquest of nature. Instead, they emphasized mitigation efforts, such as a fish hatchery, a selective withdrawal system, and habitat management. Increased mitigation plans, though, were not the only way that pressure from the environmental movement affected the Libby Project.

3. A "Native" Development: Deflecting Criticism and Shaping Public Perception

Increasing environmental awareness affected more than just a practical concern for nature. It also influenced public perceptions of development and forced development planners to change how they wanted their projects to be seen. In the 1960s, especially in the United States, protest against dams had challenged previous depictions of them as symbols of domination. In response, both the Corps and Bennett's Social Credit government developed new design plans for the Libby Project that naturalized the dam and reservoir so that they would be seen as "native" to the Kootenay Basin.

⁷⁷ See, Swainson, *Conflict Over the Columbia*, 283; Spritzer, *Waters of Wealth*, 152-53.

In Montana, Corps planners had always been optimistic about the Libby Project's potential as a tourist destination and aggressively worked to develop it. However, from the late-1950s, as a result of protests over dams in Echo Park and Glenn Canyon in the Colorado River Basin, Corps planners realized that the previous popularity of dams as symbols of the "technological sublime" was complicated by increasing concern over their environmental effects.⁷⁸ As a result, the Corps changed how they designed their projects so that they would be seen as existing in harmony with nature. As one plan for the Libby Project put it, "aesthetics, architectural treatment and landscape preservation and restoration are emphasized to illustrate that man can develop and utilize water resources without obliterating natural scenic value."⁷⁹

To further this goal, the Corps hired prominent Seattle architect Paul Thiry in 1962 as the supervising designer for the Libby Project. In his previous work, including as the principal architect for Seattle's World Fair from 1957 to 1962, Thiry had combined modern technology with an area's surrounding, natural beauty, thereby tempering high modernist architecture, made famous by the French architect Le Corbusier, with a sense of regionalism.⁸⁰ For the Libby Dam, Thiry recommended that "the overall project be designed to create a feeling of belonging – that the structures grew there ... the dam and all elements of the project [should be] designed as an architectural extension of the surrounding terrain."⁸¹ The best way to accomplish this was through a particular type of landscape design. According to Thiry, landscape was a medium that would "provide a

⁷⁸ Wenr, *America's Fight over Water*, 187-224; Harvey, *A Symbol of Wilderness*, 287-301.

⁷⁹ Corps, "Section 3 – Visitors' Accommodations Concept" (date unknown): 1, Montana Historical Society (MHS), Libby Dam, Libby MT – Recreation File.

⁸⁰ Meredith L. Clausen, "Paul Thiry" in Jeffrey Karl Ochsner, ed., *Shaping Seattle Architecture: A Historical Guide to the Architects* (Seattle: University of Washington Press, 1994), 246-51. For an analysis of Le Corbusier's high modernist designs, see Scott, *Seeing Like a State*, 103-46.

⁸¹ Corps, "Section 3," 1-2.

transition between the manmade features of the project and the natural surroundings.”⁸²

Anything that blocked views of the dam and reservoir, such as large rocks, shrubs, or trees with low leaf bases was removed. Instead, viewpoints were constructed that “framed” built structures with flora, either with breaks in vegetation or by planting trees with high foliage that would not obstruct views. The use of “intrinsic elements,” such as vegetation, rocks, and fallen trees, would form a “landscape identity” that would fulfill what visitors expected to see. As another planner plainly put it, “these intrinsic elements are the basis of subliminal advertising to which we are all exposed every day.” Thus, only “native plant material ... [that would] enhance, suggest, or maintain the character of the natural landscape” was used, rather than “sheared shrubs and manicured lawns,” in order to convince visitors that not much had changed in the area surrounding the dam.⁸³

In the Libby Dam’s environmental statement, the Corps used Thiry’s designs to downplay the dam’s adverse environmental effects. The Corps stressed that the “near wilderness setting” of the dam’s location would be preserved by combining the dam, powerhouse, and visitors’ facilities into one structure and that the area would be managed in order to maintain a sense of “nature.” In addition, “the aesthetic qualities of the shoreline [would] be maintained in a near-natural state by proper planning and the prevention of unplanned, unsightly development.” Finally, roadways would be designed to “generally [follow] natural contours to reduce ... environmental impact.”⁸⁴

⁸² Corps, “Section 3,” 1-2.

⁸³ Corps, *Design Memorandum 44: Libby Dam – Lake Koocanusa Project Master Plan* (Seattle District, 1983): section 9, p. 1 and 6. For other discussions of the use of landscape to subliminally advertise the “natural development,” see MacEachern, *Natural Selections*; John M. Findlay, *Magic Lands: Western Cityscapes and American Culture After 1940* (Berkeley: University of California Press, 1992), especially 70-72.

⁸⁴ Corps, *Environmental Statement*, “near wilderness setting” from p. 9, second quote, 15-16.

The Corps also used tours of the Libby Dam to translate its message of environmentally responsible development. Tourists were led by guides through a series of rooms inside the dam – one of which was fashioned into a grotto – that were decorated with artwork and exhibits that displayed the “native” flora and fauna and the “prehistory” of the region.⁸⁵ Even in places where it was supposedly clear that nature did not exist, such as the turbine room and powerhouse, guides continued to emphasize Corps efforts to mitigate the dam’s environmental impacts. This included a tour of the dam’s selective withdrawal system, which helped regulate water temperatures released downstream. Visitors were constantly reminded of Corps efforts to plan the dam with the surrounding Kootenay River Basin in mind. Corps planners believed that, once this information was provided, visitors would be more likely to not only accept the dam and reservoir’s place in the region, but would see them as “natural” choices for development.⁸⁶

The Corps also encouraged visitors to see the “cultural resources” and “prehistory” that were incorporated into the project. A large part of this involved displaying artifacts and sites formerly used and inhabited by the Ktunaxa/Kootenai. Before the Kootenay Valley was flooded, anthropologists from the University of Montana excavated numerous artefacts, such as pottery, arrowheads, and pipes, much of which was then displayed in the Visitor Center Museum.⁸⁷ Planners understood that by providing a museum that chronicled the history of the Kootenay River Valley and its people they would be able to guide how visitors saw the Libby Project in relation to this

⁸⁵ Corps, “Libby Dam and Lake Koocanusa, Kootenai River, Montana: Dedication Issue” (Seattle District: August 24, 1975), MHS, Libby Dam, Libby MT File; Corps, *Interpretive Plan*, 2.

⁸⁶ Corps, *Environmental Statement*, 1-2.

⁸⁷ “UM Anthropologists, Sociologists to Comb Site of Libby Reservoir,” *Great Falls Tribune*, May 12, 1966, p.8, MHS, Department of Health and Environmental Sciences – Environmental Science Division Records, S 86-6 Box 2 Folder 30.

history. Exhibits were designed to illustrate “the geological development of the area, Indians and their ethnological and ethnographic development, the period of early fur traders in the area” and, finally, “the era of transportation and industry.”⁸⁸ Each chronologically followed the next, so that a tour of the displays ended, teleologically, with the Libby Dam and thus presented a history that was seamless and appeared to progress peacefully.

Such a history was also conveyed outside of the Visitor Center. The Corps constructed trails that led to “historic Indian pictographs” and other “cultural sites” not inundated by the reservoir, which were maintained by the Corps, the U.S. Forest Service, archaeologists, and anthropologists.⁸⁹ To aid visitors, the Corps placed interpretive signs in these sites to inform tourists about an item’s “function or historical significance and how it [fit] into the total project and environment.”⁹⁰ These sites were regarded as part of the “prehistory” of the area, and thus as part of its natural landscape. In this way, Ktunaxa/Kootenai “cultural resources” were used to naturalize Lake Koocanusa and its surrounding area.

Left out of the Visitor Center’s displays and Lake Koocanusa’s “cultural sites,” though, was any trace of friction or animosity that may have existed during or between the Kootenay Basin’s various “stages” of history. That Ktunaxa/Kootenai bands did not simply disappear but had been forced onto reserves outside of the Libby Project area by various government agencies, settlers, and diseases nearly a century before and still lived

⁸⁸ “Task Force Adopts Theme for Museum” *Western News* July 10, 1969, MHS, Libby Dam – Visitor’s Center File.

⁸⁹ Corps, “A Proposed Public Use Plan for Libby Dam and Lake Koocanusa, Montana,” (Seattle District, date unknown), 5, MHS, Libby Dam, Libby MT – Recreation File; Corps, “A Preliminary Investigation of Recreation, Fisheries and Cultural Resources and Impacts on These Resources if the Reservoir is Drafted Deeper: Final Report Libby Dam-Lake Koocanusa Project, Kootenai River, Montana” (Seattle District, 1985), 21.

⁹⁰ Corps, “Section 3,” sec. 3, p. 5.

relatively nearby – mostly on numerous reservations in Montana and British Columbia – was not mentioned.⁹¹ Nor were tensions acknowledged that existed between the Ktunaxa/Kootenai and the Corps and the Montana and British Columbia governments over rights to such artefacts and “cultural sites.”⁹² The Corps wanted visitors to experience first-hand only a pleasant version of the history of the area, which would, planners hoped, harmonize it with the present reality of the dam, either through the timeline-oriented “Indian” exhibits in the Visitor Center Museum, or by “walking into the past” along nature trails that led to “prehistoric” sites.⁹³

Since the Libby Dam was not located in British Columbia and Lake Koocanusa water levels would drop significantly in the province every year, tourism plans were not as extensive for the Libby Project in British Columbia. However, as previously mentioned, other Columbia River Treaty Dams had been criticized concerning their

⁹¹ *Not So Long Ago: Recollections of Ktunaxa/Kinbasket Elders* coordinated by Troy Hunter (Cranbrook: Ktunaxa/Kinbasket Tribal Council, 1999); Kootenai Cultural Committee of the Confederated Salish and Kootenai Tribes, *Ktunaxa Legends* (Pablo, MT: Salish Kootenai College Press, 1997); Spritzer, Waters of Wealth, 6-54; Olga Weydemeyer Johnson, *Flathead and Kootenay: The Rivers, the Tribes and the Regions Traders* (Glendale: Arthur H. Clark Co., 1969).

⁹² Evidence for this point is scarce, presumably since the Ktunaxa/Kootenai were not consulted about the Libby Project by government agencies nor by the media on either side of the border. Tensions are mentioned in a letter to Corps engineer Colonel Roger Yankoupe from Tribal Council Chairman Joseph J. Felsman of the Confederated Salish and Kootenai Tribes of the Flathead Reservation, April 23, 1985, appended to the end of Corps, “A Preliminary Investigation,” exhibit 5. Similar archaeological digs occurred in British Columbia, but, so far, I have been unable to locate evidence of tensions over artefacts and sites between the Ktunaxa Nation and the British Columbia government and/or archaeologists. That some Ktunaxa were involved in digs that did not go well is mentioned by British Columbia Ktunaxa Elder Theresa Pierre, who said in an interview “I worked in archaeology before. That was out by Fort Steele and at the Reservoir. I got mad and walked out.” See *Not So Long Ago: Recollections of Ktunaxa/Kinbasket Elders*, 103. Such digs were not referred to at all, though, in BC’s main newspapers, nor in Provincial records. I also looked at every issue of *Indian Voice* and *Native Voice* from 1955-1975 but did not find any mention of the Libby Project. Presumably such a lack of evidence would be solved, at least partially, through the use of oral history - which would have enriched other areas of this essay as well. Unfortunately, due to time and monetary constraints, I was unable to conduct any interviews for this paper, and I recognize that my thesis does suffer somewhat as a result.

⁹³ For a larger discussion of appropriating and imagining First Nations groups and resources as a way to naturalize tourist destinations see Karen Dubinsky, *The Second Greatest Disappointment: Honeymooning and Tourism at Niagara Falls* (Toronto: Between the Lines Press, 1999); Philip J. Deloria, *Playing Indian* (New Haven and London: Yale University Press, 1998); Jasen, *Wild Things*; Daniel Francis, *The Imaginary Indian: The Image of the Indian in Canadian Culture* (Vancouver: Arsenal Pulp Press, 1992).

environmental effects, and the Bennett government was anxious to deflect negative attention. In 1967 E.M. Gunderson, executive director of B.C. Hydro – a publicly owned corporation responsible for, among other things, constructing dams on the British Columbia portions of the Columbia and Peace Rivers – wrote to Bennett that “the setting up of another park would do much to offset the criticism being given the government by the public.”⁹⁴ Such advice translated into promises to create numerous parks in British Columbia as the Social Credit government began to profess a concern for the environmental effects of development. In a 1972 radio broadcast, just before the Social Credit Party lost the next election, Minister of Highways Wesley D. Black stated that “B.C will be kept green and clean Concern for the environment has become a watchword ... in British Columbia, the preservation of a quality environment must become everyone’s business.”⁹⁵ Although much of this talk was simply a change in rhetoric that did not result in substantial policy changes, it did lead to the creation of a new park and wildlife preserve on the British Columbia shore of Lake Koocanusa.

In 1972, the Social Credit government set aside 1,400 acres of newly purchased land for the creation of Kikomun Creek Provincial Park to preserve wildlife and provide a space for recreational activities on Lake Koocanusa. Don Burke, project supervisor for the provincial parks branch, described the new park as “different from other provincial facilities,” since construction was meant to be as “unobtrusive as possible.” Swimming areas were designed to be “lagoon-type,” and parking areas and other constructed facilities were separated with “grassed banks and trees” to ensure that, as Burke

⁹⁴ Letter from E.M. Gunderson, Executive Director of BC Hydro, to WAC Bennett, June 16, 1967, SFUA, WAC Bennett Papers, Container 55-65, F-55-42-0-1

⁹⁵ Wesley D. Black CKKC radio broadcast, March 30, 1972, pp. 1, 4, 9, BCA, Wesley D. Black Files, MS 449 box 7 file 46.

explained, "people won't see just one great sea of metal." In addition, "trees will be made to keep the park area as natural as possible and swimmers will be protected from boating areas by banks around the lagoon." The park also contained a large camping area and numerous nature trails to allow visitors to explore its preserved wilderness. Planners hoped that the proper development and subsequent management of the park would attract visitors for both its constructed and natural beauty and that it would remain a "bright spot" along the Koocanusa shoreline.⁹⁶

In reality, though, the Canadian side of the Libby reservoir did not afford as many recreational opportunities as Kikomun planners had hoped. In its first couple of years, the reservoir was constantly threatened by landslides as water levels fluctuated to produce power downstream. As one sign in the park warned: "DANGER: Sudden landslides and resulting high waves will occur in the shoreline and reservoir. The public is warned to keep away from banks and shores except at established boat launching ramps."⁹⁷ In addition, upstream pollution from Crestwood pulp and paper mills in Skookumchuck, coal operations in Sparwood, and Cominco mines near Kimberley also threatened to destroy any recreational value that Kikomun park possessed. As a result of such threats, and the reservoir's constant problem with mudflats, Kikomun was the only provincial park created for Lake Koocanusa on the British Columbia side of the border. Instead, the remainder of the area around the reservoir not occupied by towns like Wardner or Newgate, or by small ranches and farms, was left unmanaged.⁹⁸

⁹⁶ "Libby Dam provides new BC park," *Vancouver Sun*, June 28, 1972, p.10.

⁹⁷ "Libby Dam provides new BC park," p. 10.

⁹⁸ "Kootenay Preserve Planned," *Victoria Daily Times*, March 31, 1971, p. 20; "Regional Planner Fears 'Cesspool of the Kootenays,'" *Province*, April 7, 1971, p.14. See also, Constance and Christopher Graf, *Reflections on the Kootenay: Wardner, BC 1897-1997* (Altona: Friensens Cor., 1997), 557-59.

By the mid-1970s, then, a growing environmental movement, combined with pressure from conservation groups and government fish and game departments, drastically changed designs and plans in order to control how visitors saw the Libby Project. In the United States, planners attempted to blend the dam and reservoir into the surrounding area through landscaping, historical exhibits, and “cultural sites” so that the project would “fit” into Kootenay’s natural history. In British Columbia, a similar sort of logic went into the development of a provincial park on Koocanusa’s shores, but mudflats, potential landslides, and pollution halted further attempts to make Lake Koocanusa seem “green and clean.” In both Montana and British Columbia, planners implied that the dam and reservoir, although human-made, created an area that intertwined technological and natural elements, thereby creating a “new” Kootenay region – a “second nature” – centred on a lake system instead of a river.⁹⁹

Conclusion: Environmental Modernism and the Legacy of the Libby Dam

The completion of the Libby Dam in 1975 marked the end of a controversial process that took almost three decades to complete. As was common during the “big dam era,” initial controversies did not concern the possible adverse environmental or social impacts of the dam. Instead, arguments over the dam involved compensation for lost land and power benefits, and where the dam should be built. The issue of whether the Kootenay River should be dammed in the first place never arose; those involved assumed that if the dam was not built at Libby it would be built somewhere else. In typical high

⁹⁹ Corps, *Environmental Statement*, 21. For further discussions of “second nature,” see Cronon’s *Changes in the Land: Indians, Colonists, and the Ecology of New England* (New York: Hill and Wang, 1983) and *ibid.*, *Nature’s Metropolis: Chicago and the Great West* (New York and London: WW Norton & Co., 1991). For water resource development and “second nature,” see White, *Organic Machine* and Irvin, *The New Niagara*.

modernist fashion, when the environment was mentioned it was to warn of the potential destructive power of nature, to celebrate “man’s” progress through the domination of nature, or to point out the “uselessness” of the area that the Libby reservoir would inundate.

As the dam neared the construction stage, though, attitudes concerning large dam development began to shift. A growing sense of environmentalism focused public attention on the adverse effects of dam projects, which gave environmental groups and pro-conservation politicians and government agencies a greater amount of power to push for environmental mitigation. As a result, planning and the language of development changed. Government agencies on both sides of the border conducted studies that assessed the potential effects of the dam on the Kootenay environment and advocated for a shift in land use policies in the area that was to be inundated by the reservoir, from privately-owned farms to publicly-owned wildlife and recreation areas. In response, both the Corps and the BC Social Credit government adopted “green and clean” development policies. The Libby Project was no longer celebrated as a “whopper,” or as a majestic symbol of “man’s” dominance over nature. Instead, planners, especially in the United States, emphasized the project’s “wild” setting and attempted to blend the two together. In this way, the rhetoric, plans, and eventually the impact of the Libby Dam changed, from “taming” and “conquering” nature to “mitigating” and “managing” it. Although the promotion of the dam was no longer *high* modernist in tone, the overall emphasis was still on the rational management of nature by trained experts, which can instead be described as a form of *environmental* modernism. In this way, Libby Project planners anticipated the decline of the “big dam era” in North America, as concern for the

environment slowed dam construction immensely in the United States beginning in the mid-1970s and about a decade later in Canada.

The legacy of such a change in “the politics of development” is complex, and affects people as well as the environment. Many of the measures adopted to mitigate the dam’s environmental effects worked fairly well, and its environmental impact – though not insignificant – was relatively controlled, especially compared to dams of similar size that did not plan for environmental mitigation.¹⁰⁰ The dam’s selective withdrawal system successfully regulated the temperature of water released from the reservoir, which minimized the decline of trout, whitefish, and dolly varden downstream. A hatchery was constructed at Murray Springs in 1974 to stock the reservoir with cutthroat trout, which, in combination with upstream barriers, prevented the reservoir from being taken over by non-game fish.¹⁰¹ Wildlife mitigation measures were also relatively successful. Changes to land use allowed most wildlife to continue to graze in the area within stable population levels.¹⁰² Finally, the Libby Project also managed to lower pollution levels in the Kootenay River. In the late 1960s and early 1970s, pressure from pollution control groups, such as the Vancouver-based Society for Pollution and Environmental Control and the BC Environmental Council, as well as from the Army Corps of Engineers, forced industrial complexes upstream to reduce effluents released into the Kootenay River and its tributaries. Although phosphorus levels remained fourteen times higher than

¹⁰⁰ For a comprehensive listing of the environmental effects of dams all over the world, see McCully, *Silenced Rivers*.

¹⁰¹ Vito A. Ciliberti, Jr., *The Libby Dam Project: An Ex-Post Facto Analysis of Selected Environmental Impacts, Mitigation Commitments, Recreation Usage and Hydroelectric Power Production* (Missoula: University of Montana, April 1980), 122-127; Montana Department of Fish, Wildlife and Parks, *Kootenai River Investigations Final Report, 1972-1982* (March, 1983).

¹⁰² Chris Yde and Arnold Olsen, *Wildlife Impact Assessment and Summary of Previous Mitigation Related to Hydroelectric Projects in Montana: Volume One – Libby Dam Project* (Montana Department of Fish, Wildlife and Parks, Funded by Bonneville Power Administration, 1984).

recommended levels, it still prevented Lake Koocanusa from becoming the “cesspool” that some had feared.¹⁰³

Even with these mitigation efforts, the Libby Dam still had unanticipated environmental effects. Barrier dams and the Murray Springs hatchery keep the reservoir well-stocked with game fish, but an over-dependence on these hatchery-raised fish has threatened species composition and diversity. Downstream, rare giant white sturgeon, which can grow up to nine feet in length, are now nearly extinct, since the Libby Dam cut them off from spawning territories upstream.¹⁰⁴ Black bear and Ural-Tweed bighorn sheep populations were also almost decimated, as not nearly as much land as promised was set aside, and much of it that had been was not suitable for them. Furthermore, upstream bird populations, including grouse, geese, ducks, and eagles, dropped significantly, as fluctuating reservoir levels destroyed most nesting areas.¹⁰⁵

Mitigation efforts for the Libby Project also affected more than just the environment. Decisions for environmental management were left in the hands of a small group of experts, and local communities were not consulted. For Ktunaxa/Kootenai groups who had inhabited the area inundated by Lake Koocanusa, this meant that their history, cultural artefacts, and even their identities were appropriated without consultation in order to help sell the Libby Project as “native.” Guides for the Libby Dam and Lake

¹⁰³ “Firm Cuts Pollution in Two Rivers,” *Vancouver Sun*, Nov. 20, 1969, p. 40; “Regional Planner Fears ‘Cesspool of the Kootenays,’” *Province*, April 7, 1971, p.14; “Lake Scum Threatens to Spread,” *Province*, Aug. 9, 1973, p.9; “Kootenay’s Colour Regrettable Says Company,” *Vancouver Sun*, Dec. 16, 1974, p.17.

¹⁰⁴ Vaughn L. Paragamian “Changes in the Species Composition of the Fish Community in a Reach of the Kootenai River, Idaho, after Construction of the Libby Dam” *Journal of Freshwater Ecology* 17(3) (September 2002), 375-83; *ibid.* et al., “Spawning Habitat of Kootenai River White Sturgeon, Post-Libby Dam” *North American Journal of Fisheries Management* 21 (2001), 22-33; E.M. Rubridge and E.B. Taylor, “An Analysis of Spatial and Environmental Factors Influencing Hybridization between Native Westslope Cutthroat Trout and Introduced Rainbow Trout in the Upper Kootenay River Drainage, British Columbia” *Conservation Genetics* 6(3) (May 2005), 369-84.

¹⁰⁵ Yde and Olsen, *Wildlife Impact Assessment*, 12-69.

Koocanusa are pleased to inform visitors that “surprisingly, Koocanusa is not an Indian name.” Rather, it was created in 1970 by Alice Beers of Rexford, Montana – and chosen for the reservoir by the Corps and the British Columbia Department of Recreation and Conservation – by combining the first three letters of the words Kootenay and Canada with USA.¹⁰⁶ However, just as the “Indian” man in the Treaty Tower sculpture was invented to make the Libby Dam seem more “native” – and thus more natural – so was the “Indian”-sounding name of its reservoir an invention meant to accomplish the same goal. These inventions, though, do not acknowledge that Ktunaxa/Kootenai groups did not simply disappear from the area, but had been pushed out nearly a century before and still lived in the Kootenay Basin. Nor do they acknowledge tensions between them and government agencies over such cultural appropriations.

For local residents forced to move because of the reservoir, the environmental mitigation policies incorporated into the Libby Project meant something different. Such residents, especially ranchers and farmers, resented the fact that “outsiders” would construct a dam and reservoir that would flood their homes to benefit those living downstream and in faraway urban centres.¹⁰⁷ The fact that, in addition to being relocated, they would be unable to continue ranching in the area due to the “unprecedented procedure” of environmental mitigation was particularly grating.¹⁰⁸ Such plans involved changing traditional land use in the area from small, independent ranches and farms to

¹⁰⁶ Corps, “Libby Dam and Lake Koocanusa, Montana/British Columbia” (Seattle District, 1999); “Dam Reservoir to get a Two Nation Name” *Vancouver Sun*, Dec. 15, 1970, p.3.

¹⁰⁷ 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 (Summer 1997), 5-13.

¹⁰⁸ “Libby Dam Area Landowners” *Great Falls Tribune*, July 17, 1966, MHS, Merriam Papers, MC 58 11-1; “Rexford Not Bitter, Just Disgusted” *Great Falls Tribune*, Oct 8, 1965, p. 1, MHS, Metcalf Papers, Mc 172 681-11; “Kootenay Ranchers Protest Dam Land Grab” *Vancouver Sun*, Jan. 13, 1970, p.26; See also, Constance and Christopher Graf, *Reflections on the Kootenay: Wardner B.C. 1897-1997* (Altona: Friesens Co., 1997), 551-59.

wildlife preserves that were “environmentally friendly” and good for tourists, but bad for those who called the area home.

In British Columbia, the buy-out process was particularly controversial. Although the BC Ministry of Highways was responsible for clearing the land for the reservoir, BC Hydro was brought in to negotiate and buy property because of its experience with the Columbia River dams. However, since BC Hydro was not responsible for any development in the area, it did not use much tact in the buy-out process. Thus, residents felt as though no discernable policy existed, and the purchases seemed clumsy and ad hoc. Some ranchers in British Columbia set up roadblocks, while others refused to sell.¹⁰⁹ In 1973, such controversy, along with criticisms of ballooning Columbia River Treaty Dam costs, dissuaded Dave Barrett’s new NDP government from purchasing additional properties for winter grazing lands, and such environmental mitigation plans were scrapped.¹¹⁰

In Montana, the Corps was clearly responsible for the Libby Project, which made it easier for conservation groups to push for wildlife habitat preservation. Initially the Corps was reluctant to purchase additional lands for the same reason the NDP government did not do so in British Columbia. As one Corps engineer explained, “many Montana residents, particularly those in Lincoln County, are opposed to any further Federal land acquisition in the project vicinity.”¹¹¹ However, political and media pressure was on the side of conservationists. Lobbyists managed to convince the governor, Forrest Anderson, to threaten legal action against the Corps if they did not honour their

¹⁰⁹; “Kootenay Ranchers Block Highway Crews” *Province*, Feb., 13, 1970, p. 31; “Hurting Too Many Little People” *Province*, April 8, 1971, p.4

¹¹⁰ “Libby Dam land battle drawing slowly to a close,” *Vancouver Sun*, March 19, 1973.

¹¹¹ Letter to Senator Lee Metcalf from Thomas Nelson, LTC Corps of Engineers, Feb., 8, 1972, MHS, Metcalf Papers, MC 172 99-4.

commitment to create winter grazing lands. Anderson angrily wrote: "I will not stand idly by and permit the flooding of the Libby Dam reservoir without firm assurance that sufficient compensation will be provided for big game habitat."¹¹² With political pressure such as this, as well as further lobbying by Senator Metcalf, Congress eventually passed the Water Resources Development Act in 1974, which provided the Corps with US\$2 million to purchase land for habitat mitigation. However, by the late 1970s funds ran out after only 2,400 acres had been purchased, far short of the 12,000 that had been previously proposed.¹¹³

Since this period, environmentalism within the Kootenay region, especially in Montana, has increased substantially, halting numerous subsequent development proposals for the Kootenay River. The first of these was BC Hydro's resurrection of a previous plan to divert part of the Kootenay River into the Columbia to produce more power at the Revelstoke and Mica Dams. Such a development would have created a reservoir nearly twice the size of Lake Koocanusa in British Columbia, and would have rendered the Libby Dam nearly useless. Thus, a combination of pressure from environmental groups protesting the project's "total irresponsibility" and the American government protesting its affect on the Libby Dam halted discussion of the project in B.C. nearly as quickly as it had begun.¹¹⁴

A second, more realistic possibility was the Corps' late 1970s proposal to build a re-regulation dam to generate more power downstream from the Libby Dam. Although

¹¹² Letter to Sydney Steinborn, District Engineer, Corps, from Forrest Anderson, Montana Governor, February 7, 1972, MHS, Metcalf Papers, MC 172 99-4.

¹¹³ John Munding and Chris Yde, *Final Report: Wildlife and Wildlife Habitat Mitigation Plan for Libby Hydroelectric Project* (Montana Department of Fish, Wildlife and Parks, January 1985), 1-3.

¹¹⁴ "Cut in Libby Dam Water a Disaster: Mansfield," *Victoria Times*, Aug. 4, 1975, p.2; "A Mightier Mica," *Vancouver Sun*, August 8, 1975, p.4; "River Diversion Irresponsible," *Victoria Colonist*, July 27, 1977, p.2.

the dam would not have inundated more than 2,000 acres and had always been considered a future part of the Libby Project, environmental groups used the 1973 Endangered Species Act to stop the development in 1977 because of the risk it posed to grizzly bear populations. Not everyone wanted the development halted, however. As one Libby resident, Bob Wilkins, put it, "it was a big controversy about that Re-Reg Dam. It was a hell of a fight ... [that] didn't do this community any good at all, and it was handled poorly."¹¹⁵ This split was exacerbated when additional proposals for Kootenay River dams at Lower Falls, Montana and just outside of Bonners Ferry, Idaho were also shelved as a result of pressure from environmental groups in Montana, Idaho, and British Columbia.¹¹⁶

Thus, although follow-through was often less than promised, a significant change occurred during the Libby Project, from 1948 until the late 1970s, as a growing environmental movement affected not only public perceptions of development projects but also how planners designed and planned for their environmental effects. Environmentalism, then, did more than just alter public perceptions of ecology, land use, and development. It also changed how projects were designed and how they functioned, or, determined whether they would be built at all. These changes, in turn, had significant effects, both positive and negative, on the flora, fauna, and people of the Canadian-American Kootenay Basin. The repercussions of this continue to be felt, as ideas concerning development and the environment continue to shift according to different times, places, and people.

¹¹⁵ Bob Wilkins Interview, May 13, 2002, p. 21, MHS, OH 2004.

¹¹⁶ "U.S. Dam Building Proposals 'threaten fish in the Kootenay,'" *Vancouver Sun*, July 21, 1977, p.18.

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