

Institutional Adaptation to Drought and the Special Areas of Alberta, 1909-1939

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Abstract for “Institutional Adaptation to Drought and the Special Areas of Alberta, 1909-1939.”

The Special Areas Board is responsible for administering approximately 2.1 million hectares (5.2 million acres) of sparsely populated and arid land in southeast Alberta known as the Special Areas. This article traces the history of the Special Areas from the influx of farmers through the incremental establishment of the Special Areas Board. Beginning in 1917, the Special Areas suffered from prolonged droughts. As a result, farmers and municipalities were bankrupted and schools and businesses were closed. The Special Areas Board was eventually established in order to purchase and sell farm land as well as relocate settlers in order to facilitate a transition from small grain farms to large ranches. The Board also administered schools and roads to meet the needs of a shrinking and more dispersed population and was responsible for the conservation of soil and water resources within its boundaries.

Institutional Adaptation to Drought and the Special Areas of Alberta, 1909-1939

Introduction

Geographically, the Special Areas refers to a large (currently 2.1 million hectares or 5.2 million acres), sparsely populated region of southeast Alberta. Bordered by the Red Deer River in the north, the Oldman and Saskatchewan rivers in the south, the town of Drumheller in the west and the province of Saskatchewan in the east, the Special Areas has been governed and managed by a provincially-appointed Board since the 1930s in response to the exigencies of prolonged drought. Replacing municipal local government, the Special Areas Board not only manages land and water resources throughout the region but also roads, schools and other physical and social infrastructure. Although the Alberta government has periodically investigated the unique status of the Special Areas with a view to re-instituting local democratic control through municipal government, the Special Areas Board continues to administer the region on behalf of the provincial government.

[Insert Figure 1: Special Areas of Alberta, 2006]

The Special Areas constitute the majority of the region known by both historians and climatologists as the Alberta portion of the Dry Belt.¹ The Dry Belt is the most arid

¹ D.C. Jones and R.C. MacLeod, *We'll All Be Buried Down Here: The Prairie Dryland Disaster, 1917-1926* (Calgary: Alberta Records Publication Board, 1986). J.R. Villmow, "The Nature and Origin of the Canadian Dry Belt," in J.G. Nelson, M.J. Chambers and R.E. Chambers, eds., *Weather and Climate* (Toronto: Methuen, 1970), pp. 51-74. According to Villmow (p. 52), the phrase "Dry Belt" can be traced

portion of the semi-arid Palliser Triangle, itself long known to be highly susceptible to “cyclical prolonged droughts, lasting many years.”² As can be seen in Figure 2, the boundaries of the Palliser Triangle as drawn by Captain John Palliser do not correspond precisely to more contemporary conceptions of the Triangle. The area of the Palliser Triangle has been re-interpreted over time based on different variables including: the low amount of moisture gain through precipitation (rain and snowfall); the high amount of moisture loss through evapotranspiration; and a thin topsoil that is prone to drifting after extensive cultivation.³ Lying in the rain shadow of the Rocky Mountains in the West and the Cypress Hills and the Sweet Grass Hills in the south, the Dry Belt receives less than 325 mm of annual precipitation, considerably lower than the Palliser average. The Belt also suffers higher moisture losses because of summer heat waves and winter Chinooks.⁴ Approximately 80 per cent of the Alberta Dry Belt has a thin, light brown soil cover. Because the organic content and the nitrogen content of the soil is low, it is highly susceptible to erosion in conditions of low moisture and high winds after the natural grass cover is broken.⁵

to a 1938 article written by climatologist A.J. Connor who identified the boundaries of the Dry Belt and pointed out the reasons for its increased exposure to drought relative to the rest of the Palliser Triangle: see A.J. Connor, “The Climates of North America: Canada,” in W. Köppen and R. Geiger, eds., *Handbuch der Klimatologie*, Bd. II (Berlin, 1938), pp. 359-64.

² G.T. Davidson, “An Interdisciplinary Approach to the Role of Climate in the History of the Prairies,” in R. Wardaugh, ed., *Toward Defining the Prairies: Region, Culture, and History* (Winnipeg: University of Manitoba Press, 2001), p. 102. For Captain John Palliser’s own observations, see I.M. Spry, *The Papers of the Palliser Expedition, 1857-1860* (Toronto: Champlain Society, 1968). As Davidson (p. 109) points out, Palliser traveled through the region during a drought that lasted from 1840 until 1865, a more severe drought than any experienced in the 20th century, including the droughts of the 1920s and 1930s.

³ On the shifting boundaries of the Palliser Triangle, see L. Dale-Burnett, “Agricultural Change and Farmer Adaptation in the Palliser Triangle, Saskatchewan, 1900-1960,” unpublished Ph.D. thesis, University of Regina, 2002.

⁴ Prairie Farm Rehabilitation Administration, *Drought in the Palliser Triangle: A Provisional Primer* (Ottawa: Agriculture and Agri-Food Canada, 1998), p. 2.

⁵ L.S. Martin, “The Special Areas of Alberta: Origin and Development,” report prepared for G.E. Taylor, Member of the Legislative Assembly of Alberta, 1977, pp. 2-3.

[Insert Figure 2: The varying definitions of the Canadian portion of the Palliser Triangle.

Note: insert the boundaries of the Dry Belt as defined by Villimow, p. 53]

Despite the aridity and unsuitable nature of the soil of the Dry Belt in Alberta, it was nonetheless settled by grain farmers just before the First World War. After enjoying bumper crop years, these same settlers faced a series successive droughts commencing in 1917. Over time, most left, eventually with the encouragement of the government of Alberta which concluded that settlement of the Dry Belt had been an enormous mistake. By the late 1920s, the Alberta government had begun experimenting with direct administration of the region through administrative boards in order to encourage further depopulation and to transform the abandoned farms into productive farming or livestock grazing adjuncts to surviving farms or ranches. These properties were either leased to ranchers or rancher-farmers at a low price or turned into community pastures that were available to all on the same terms and conditions. In this manner, farmers or ranchers could increase the size of their spread without taking on the risk of ownership.

This article begins with the agricultural settlement of the Dry Belt of southeast Alberta, and the impact of successive droughts on the region. This is followed by an examination of the government of Alberta's establishment of the administrative boards – eventually consolidated as a single Special Areas Board in the late 1930s – that would manage all the land, water and infrastructure resources in the region. The article concludes with the impact of this institutional legacy on how the provincial governments of Alberta and Saskatchewan currently address the threat of drought and how they might

address the threat of future prolonged droughts in the Dry Belt as a result of climate change.

Climate Change and a Conceptual Model of Vulnerability to Drought

There are not yet sufficient data to determine whether the droughts that plagued the Dry Belt for most of the years between the two World Wars are in fact part of a larger trend of global warming. Nonetheless, the majority of current climate change scenarios, as applied to agriculture in general, and to the Palliser Triangle in particular, do predict extended periods of higher temperature, lower precipitation and an increase in the frequency of droughts relative to the 20th century.⁶ This means that the Palliser Triangle faces greater drought risk from climate change in the future, and since the Dry Belt has been the most high-risk part of the Palliser Triangle, the extent to which this sub-region is capable of adapting to future drought based upon its history and unique institutions is a significant policy issue for all governments in the region.

Figure 3 is a conceptual model of vulnerability to climate change as applied to drought that draws upon previous work on human adaptation to climate change.⁷ It elucidates two basic facts. The first is that human vulnerability is positively correlated with the extent of drought exposure and negatively correlated with the ability of people to

⁶ E. Wall, B. Smith and J. Wandel, *Canadian Agri-food Sector Adaptation to Risks and Opportunities from Climate Change* (Guelph: Canadian Climate Impact and Adaptation Research Network, C-CIARN Agriculture Position Paper, 2004), pp. 3-4. G.D.V. Williams and E.E. Wheaton, "Estimating Biomass and Wind Erosion Impacts for Several Climatic Scenarios: A Saskatchewan Case Study," *Prairie Forum* 23, no. 1 (1998): 49-66. G.D.V. Williams, R.A. Fautley, K.H. Jones, R.B. Stewart and E.E. Wheaton, "Estimating Effects of Climatic Change on Agriculture in Saskatchewan," in M.L. Parry, T.R. Carter and N.T. Konjin, eds., *The Impact of Climatic Variations on Agriculture: Volume I: Assessments in Cool Temperate and Cold Regions* (Dordrecht: Kluwer Academic, 1988), pp. 219-379.

⁷ B. Smith, J. Wandel and G. Young, "Vulnerability of Communities to Environmental Change," Institutional Adaptation to Climate Change (hereafter IACC) Project Working Paper No. 21, 2005. H. Diaz, A. Rojas, L. Richer and S. Jeannes, "Institutions and Adaptive Capacity to Climate Change," IACC Project Working Paper No. 9, 2005. A. Rojas and L. Richer, "Successful Institutional Adaptation to Climate Change Impacts Posed on Water Resources," IACC Project Working Paper No. 18, 2005.

adapt successfully to drought. The second fact is that past responses to drought, particularly those which shaped our institutions at an earlier time, continue to have a political, administrative, organizational or intellectual influence on how we shape our present and future adaptive strategies to drought.

[Insert Figure 3: Conceptual model of drought vulnerability]

The degree of drought exposure is, in turn, a function of physical stimulus in terms of moisture at the root level of agricultural crops and grasses as well as physical sensitivity in terms of land use and occupancy. The amount of moisture in the soil is determined by moisture gain (precipitation) and moisture loss (evapotranspiration), with air temperature, wind and soil-type all having an impact. The way in which the soil is being cultivated and the type of crops or grass being grown – the occupancy characteristics of the land – will determine the sensitivity of the type of agriculture or ranching to prolonged droughts.⁸

Even if two areas – the Alberta-side of the Dry Belt and the Saskatchewan-side of the Dry Belt, for example – face similar exposure to drought, they will not necessarily have the same vulnerability to drought. Indeed, it does appear that farmers on the Saskatchewan side of the Dry Belt were more vulnerable to drought than their counterparts in the Alberta Dry Belt in the 1930s. This was in part a consequence of earlier institutional adaptation to drought on the Alberta side of the border which was

⁸ On exposure, see B. Smit and O. Pilifosova, “From Adaptation to Adaptive Capacity and Vulnerability Reduction,” and T.E. Downing, “Lessons from Famine Early Warning and Food Security for Understanding Adaptation to Climate Change: Toward a Vulnerability/Adaptation Science?”, in J.B. Smith, R.J.T. Klein and S. Huq, eds., *Climate Change, Adaptive Capacity and Development* (London: Imperial College Press, 2003).

triggered by more extreme exposure to drought in the Alberta Dry Belt in the late teens and early 1920s. The most obvious historical legacy of this institutional adaptation is the sparse population of southeast Alberta relative to southwest Saskatchewan and the different use of land resources that continues to be managed by a single Special Areas Board in Alberta rather than by multitude of small rural and urban municipalities in Saskatchewan.

Agricultural Settlement and Droughts in the Special Areas

By the 1880s and 1890s, the large herds of buffalo that had once roamed southern Alberta and Saskatchewan had been killed off and the Aboriginal groups that had once lived on the buffalo faced starvation and marginalization as they were moved on to reserves.⁹ By the early 1900s, ranchers had moved into the Dry Belt and were using much of the region for grazing. As a consequence of the bitterly cold and treacherous winter of 1906-07, however, these same ranchers saw at least half of their herds starve to death, and most were forced by bankruptcy to abandon their ranches in the area.¹⁰

With the Dry Belt largely swept clean of ranchers and cattle, the federal government in conjunction with the Canadian Pacific Railway and local real estate boosters unleashed an intensive publicity campaign to attract settlers into the region

⁹ D. O'wram, *Promise of Eden: The Canadian Expansionist Movement and the Idea of the West, 1856-1900* (Toronto: University of Toronto Press, 1980). S. Carter, *Aboriginal People and the Colonizers of Western Canada to 1900* (Toronto: University of Toronto Press, 1999). J.R. Miller, *Skyscrapers Hide the Heavens: A History of Indian-White Relations in Canada* (Toronto: University of Toronto Press, 3rd ed., 2000). O.P. Dickason, *Canada's First Nations: A History of Founding Peoples from Earliest Times* (Toronto: Oxford University Press, 3rd ed., 2001).

¹⁰ D.C. Jones, *Empire of Dust: Settling and Abandoning the Prairie Dry Belt* (Calgary: University of Calgary Press, 2002), 9, 46-7. Glenbow Alberta Archives (hereafter GAA), M4454, a Glenbow Foundation Project, an historical survey of the Special Areas of Alberta by U.D. MacLean, Dec. 4, 1959 (hereafter referred to as Glenbow History of Special Areas), pp. 4-19. On the shifting ranching frontier, see D.H. Breen, *The Canadian Prairie West and the Ranching Frontier, 1874-1924* (Toronto: University of Toronto Press, 1983). S.M. Evans, "American Cattlemen on the Canadian Range, 1874-1914," *Prairie Forum* 4, no. 1 (1979): 121-35

despite the fact that the region received less rainfall than other areas within the Palliser Triangle. In 1909, the Alberta Dry Belt was officially opened to homesteading. By 1910, farmers and their families were streaming into the region; by 1911, school districts had begun to be formed; by 1914, the municipalities and local improvement districts were established. From a population of less than 800 people in 1906, the Alberta Dry Belt was supporting 24,000 inhabitants just ten years later. Almost all lived on newly-established farms on which wheat was the principal crop.¹¹

This new grain economy was propped up by high prices for wheat induced by the First World War. Higher than average precipitation helped produce bumper crops in 1915 and 1916. However, this prosperity was brought to a sudden halt by successive droughts beginning in 1917 and continuing through to the abnormally wet year of 1927. After that short reprieve, the droughts came back with a vengeance during the 1930s.¹²

The Alberta Dry Belt would decline in population and its land tenure converted from pure wheat farming to larger livestock-grain operations, with far more emphasis on the livestock portion of the enterprise. As can be seen in Table 1, the Special Areas reached a peak of population in the 1921 census year from which it declined consistently. By 1976, the rural population of the region was less than one-quarter of what it had been in 1921. This depopulation was not simply the product of families abandoning their farms and moving to greener pastures on their own resources. It was also the product of a major institutional effort, spearheaded by the provincial government of Alberta, to depopulate its portion of the Dry Belt.

¹¹ Jones, *Empire of Dust*, 21-4.

¹² G.P. Marchildon, S. Kulshreshtha, E.E. Wheaton and D. Sauchyn, "Drought, Demographic Migration and Institutional Adaptation in Alberta and Saskatchewan, 1914-1939," IACC Project Draft Working Paper, 2006.

[Insert Table 1: Rural and Urban Population of the Special Areas, 1916-76]

By the early 1920s, the new government formed by the United Farmers of Alberta (UFA) had concluded that the settlement of the Dry Belt had been an enormous mistake. Simply put, grain crops required more moisture than the natural grasses of the area, and this meant that ranching was naturally more suited to the region than farming.¹³ The preamble of the 1938 legislation establishing the Special Areas commission and administration stated that the Dry Belt was simply incapable of supporting a viable crop economy.¹⁴ At around the same time, a report to the provincial government on the Special Areas Act stated that the legislation was “designed” to “mend... the mistakes of a land settlement policy which had placed thousands of settlers upon lands which were capable of sustaining only a small fraction of their number – the tragedy of Western Canada.”¹⁵ More than two decades later, in a 1961 review of the administration of the Special Areas, the view still held that the wheat economy of the region had been doomed from the beginning, and with it, a social and political infrastructure administered by local governments.¹⁶ David C. Jones, the principle historian of the period, wholeheartedly

¹³ On July 18, 1921, the UFA government was elected with 38 members compared to 15 Liberals and 8 independent and Labour Party members. On the rise of the UFA and their agricultural platform in the 1921 election, see B.J. Rennie, *The Rise of Agrarian Democracy: The United Farmers and Farm Women of Alberta, 1909-1921* (Toronto: University of Toronto Press, 1977).

¹⁴ “Whereas certain areas of the Province include a considerable amount of land which by reason of insufficient rainfall, inferior quality of soil and other causes, cannot by the use of ordinary methods of agriculture be made to yield over a period of years produce in sufficient amount to provide the persons farming such land with the means of livelihood...” Preamble quoted in R.S. Rust, “An Analysis and Evaluation of Land Use in the Special Areas of Alberta,” unpublished M.A. thesis, University of Alberta, 1956, p. 26.

¹⁵ PAA, Department of Public Welfare fonds, 73.307, Box 7, Appendix on the History of the Special Areas (hereafter referred to as Appendix), p. 23.

¹⁶ PAA, 711456, Government of Alberta, Report of the Special Areas Investigation Committee [Chair, Wallace R. Hanson], Jan. 1961, p. 4.

agrees with this view, arguing that recurring droughts from 1917 until the 1930s exposed the Dry Belt settlement as a “monumental blunder of western colonization.”¹⁷

In 1921, the UFA government had been elected on the promise that it would address the drought catastrophe in southeast Alberta. In Jones’ opinion, what to do with the Dry Belt “was perhaps the great single problem facing the United Farmer government in the twenties” and the problem “was constantly before the government until its defeat” by William Aberhart and the Social Credit Party in 1935.¹⁸ Premier-elect Herbert W. Greenfield promised that his government would do everything possible to solve the problem, going so far to say that should the southeast “fall” even after this, then his government was “prepared to fall with it.”¹⁹ In November 1921, the UFA government asked Charles Magrath, an entrepreneur and former mayor of Lethbridge, to do a study of the Alberta Dry Belt.²⁰

To address the impact of successive droughts, the Magrath Commission recommended that the region be closed for further settlement and that Crown lands be expanded by taking over abandoned farms.²¹ Since the Magrath report preceded the 1930 transfer of natural resources and Crown lands to the three prairie provinces, it called upon the federal government to conduct extensive soil and water surveys of the Dry Belt that would include recommendations on new weather recording stations as well as possible

¹⁷ D.C. Jones in Jones and MacLeod, *We'll all be Buried Down Here*, p. xxix.

¹⁸ D.C. Jones, “A Strange Heartland: The Alberta Dry Belt and the Schools in the Depression,” in D. Francis and H. Ganzevoort, eds., *The Dirty Thirties in Prairie Canada* (Vancouver: Tantalus, 1980), p. 102.

¹⁹ D.C. Jones, “Herbert W. Greenfield,” in B.J. Rennie, ed., *Alberta Premiers of the Twentieth Century* (Regina: Canadian Plains Research Center, 2004), 61-2.

²⁰ Jones, *Empire of Dust*, p. 120.

²¹ Given the dispossession of reserve lands throughout the prairie provinces in the decade following the First World War, it is interest to note recommendation number 7 of the Magrath Commission: “That the Dominion Government should be requested by the Alberta Government to arrange through it that such grazing as is available on Indian Reserves should be made available for ‘community pastures’ by farmers in adjacent areas.” PAA, 73.307, Box 7, Appendix, p. 15

sites for irrigation projects and the “impoundment of water.”²² The Commission also urged the provincial government to provide loans to farmers with larger and more viable spreads so that they could purchase seed grain and horse-feed in order to keep their farms going.

In response, the provincial government took two major steps. After brokering a deal with the federal government and the railways to each share one-third of the cost with the province, the UFA government offered free transportation to destitute farmers to leave the drought-stricken region. Administered by the provincial government, the program paid for up to two railway cars per farm family to transport machinery, furniture and livestock. By 1926, 1851 farm families had taken advantage of the offer of free transportation.²³ Most moved north of Calgary or to the irrigated districts near Lethbridge.²⁴

The second step was the Alberta government’s introduction of the Drought Relief Act of 1922 (succeeded by the Debt Adjustment Act in 1923), which empowered a government commissioner to negotiate the settlement of debts, particularly land mortgages. After suffering five years of successive droughts, most farmers, school districts and municipalities in the region were unable to pay their respective debts. E.J. (Ted) Fream, the first secretary of the UFA, described by Jones as the “workhorse of the UFA government,” was made Commissioner.²⁵ Fream’s job was to travel throughout the Alberta Dry Belt negotiating settlements between debtors and creditors with a view to

²² PAA, Department of Public Welfare fonds, 73.307, Box 7, Appendix, p. 16.

²³ Government of Alberta, *Department of Agriculture Annual Report, 1926* (Edmonton: Department of Agriculture, 1927), p. 14.

²⁴ Government of Alberta, *Department of Agriculture Annual Reports, 1922-26* (Edmonton: Department of Agriculture, 1923-27).

²⁵ Jones, *Empire of Dust*, p. 167

prolonging the life of at least some farms, schools and local governments. In the process, Fream came to know almost every aspect of the Dry Belt from the ranchers and farmers to the school teachers and local reeves.

The Evolution of the Special Areas Solution

Having Ted Fream working year after year to clear away a few bad debts only partially addressed the problems that were accumulating in the Alberta Dry Belt. By the mid-1920s, many were becoming impatient with what they viewed as a weak provincial response to the crisis, and the UFA government decided to try a new approach. In 1926, Fream was asked to head up a joint federal-provincial commission. The mandate of the Tilley East Commission was to study one of the hardest hit portions of the Dry Districts – the parched land between the Red Deer and Saskatchewan rivers, from the town of Tilley to the Saskatchewan border – and make recommendations on its future administration. Both governments were involved because the federal government, rather than the province, owned all Crown land within the province.²⁶

The Tilley East Area may have been the hardest hit portion of what would eventually become known as the Special Areas but it also exemplified the problems affecting the entire Dry Belt. Settlers in the region had been encouraged by high wheat prices and bumper crops in the First World War to buy more land and equipment on borrowed money. When the droughts came, farmers became increasingly insolvent but stubbornly continued to farm hoping that each new season would bring rain and a bumper crop even as the mortgage companies and debt collectors closed in. By the early 1920s,

²⁶ E.W. Stapleford, *Report on Rural Relief due to Drought Conditions and Crop Failures in Western Canada, 1930-1937* (Ottawa: Minister of Agriculture, 1939), p. 77.

however, it was too late for many farmers. No longer able to purchase seed grain or, in many cases, able to feed their families without relief, they began to abandon their farms and move away.

Covering 1.5 million acres, the Tilley East Area had lost approximately 80 per cent of its inhabitants by 1926.²⁷ Average wheat yields had fallen like a stone after 1916, and some crop districts suffered complete crop failures year and after.²⁸ Farms were being abandoned at a rate that threatened the viability of the remaining farms which were increasingly stranded and threatened by blowing topsoil from adjoining, untended fields.²⁹

Although droughts were a recurring phenomenon directly east on the Saskatchewan side of the border, the droughts were far less severe than those on the Alberta side between 1917 and 1926. As a consequence, as can be seen in Table 2, vacant or abandoned farms in the Dry Belt region on the Saskatchewan side of the border covered only one-sixth the area of vacant or abandoned farms on the Alberta side of the border by 1926. The few farmers left in the Alberta Dry Belt were surrounded by almost 1.3 million acres of untended and drifting land. The extreme situation in Alberta goes far to explain the numerous provincial studies, commissions, laws and policies – all designed to address the drought catastrophe – compared to the relative lack of similar activity in Saskatchewan during the 1920s.

²⁷ Estimate provided in Jones, *Empire of Dust*, p. 212

²⁸ On Alberta Dry Belt wheat yields from 1912 until 1921, see Table 11 in Jones, *Empire of Dust*, p. 265.

²⁹ GAA, Glenbow History of Special Areas. According to this manuscript history, the Tilley East Area was the first of the Special Areas to suffer severely from drought (p. 47).

[Insert Table 2: Vacant or Abandoned Farms in the Alberta and Saskatchewan Dry Belt by census division, 1926]

Going further than the Magrath Commission five years earlier, the Fream Commission recommended that a single board manage all land and water resources throughout the Tilley East Area. Since the federal government still owned Crown land in the province, Fream envisaged a board established jointly by Ottawa and Edmonton. The whole idea was to encourage the continuing exodus of farmers while allowing the Crown to repossess vacant and abandoned land (through non-payment of back taxes) and then lease back some of this land to the few viable rancher-farmers left in Tilley East and create community pastures out of the rest.

In 1927, the provincial government passed a law putting the area under the stewardship of the Tilley East Board but without dissolving the existing municipalities, local improvement districts and school boards.³⁰ The new law was based upon three assumptions: 1) the “soil and climate” of the Tilley East Area was incapable of providing “human subsistence and economic security from ordinary farming based upon cereal production”; 2) further depopulation was required to ensure the “productivity” of those remaining; 3) the necessity of taking “lands out of private control” and publicly managing access to both land and water in a way to allow existing ranches and ranch-farms to expand and thereby become more economically sustainable.³¹

It took until July 1929 for the UFA government to actually establish the board. The delay appears to have been caused by the negotiations between the province and the

³⁰ An Act respecting the Tilley East Area, S.A., c. 45, 1927.

³¹ PAA, Department of Public Welfare fonds, 73.307, box 5, Appendix, p. 23.

federal government over the transfer of natural resources (including land) from the federal government to the province. Ultimately, the federal government decided that a federal-provincial board was unworkable and that it would be best for the province to operate on its own after it was clear that all Crown lands were about to be transferred to the province.³² The UFA government appointed Ted Fream as Chair of the new three-member board.³³ Five months later, the UFA government signed the Natural Resource Transfer Agreement with the federal government, finally giving the government of Alberta, and by delegation Fream's new board, full jurisdiction over land and water resources in Tilley East. This power was delegated, in full, to Fream's new board by virtue of the legislation establishing the Tilley East Area.³⁴

Fream used the board's powers to bring vacant and abandoned lands under the control of the board. Since the property taxes on these lands were generally in arrears for years, the board initiated tax recovery proceedings in order to obtain default judgments through the courts and, ultimately, Crown ownership of the lands. Once under board control, these lands could then be used by the board in a way to shore up nearby ranches and farms through sale or, more commonly, lease, at very low prices. Some of the larger parcels of marginal land were transformed into community pastures so that a large number of ranchers or rancher-farmers in a given district would have access to additional grazing land for their livestock. The whole purpose was to encourage "the extension of

³² Stapleford, *Report on Rural Relief*, p. 77.

³³ The other two members were A. Buckham of the Department of Municipal Affairs, and John Barnes, a farmer from Bindloss. The work of the board was so extensive that the part-time members, including Fream, were replaced by full time members-employees in April 1931. PAA, Department of Public Welfare fonds, 73.307, box 5, Appendix, pp. 25-6.

³⁴ On the signing and implementation of the Natural Resources Transfer Agreement and what it meant to the UFA government, see Franklin L. Foster, "John E. Brownlee," in B.J. Rennie, ed., *Alberta Premiers of the Twentieth Century* (Regina: Canadian Plains Research Center, 2004), pp. 89-92.

ranching operations” or a “combination of ranching and farming rather than straight grain growing.”³⁵

With the Tilley East experiment proving successful, the UFA government asked O.S. Longman to investigate the exodus of farmers from the Berry Creek Area northwest of the Tilley East Area. Longman recommended that Tilley East Area Board extend its control to the Berry Creek Area. “[I]t would appear desirable, if not essential, that all possible land within the area be brought under single control,” Longman concluded, “to facilitate the organization and establishment of the farm-ranch unit.”³⁶ In response to Longman’s recommendations, the provincial government passed a law that put the Berry Creek Area under the administrative control of a single board composed of the same members as the Tilley East Board supplemented by an individual from the Berry Creek Area.³⁷

The Berry Creek Area administrative consolidation, however, went one major step further than Tilley East Area. Before consolidation, there were 67 school districts in the Berry Creek Area south and east of Hanna.³⁸ Because of their destitution, municipalities voluntarily gave up their individual school boards in favour of a single large experimental school district under an official trustee. One municipal secretary summarized the dismal arithmetic: “No rain: No crop: No taxes: No school.”³⁹ Initially, the provincial government had passed the Tax Recovery Act (1932) in an effort to

³⁵ Stapleford, *Report on Rural Relief*, p. 77.

³⁶ O.S. Longman quoted in GAA, *Glenbow History of Special Areas*, M4454, p. 54.

³⁷ An Act respecting the Berry Creek Area, S.A. c. 55, 1932. PAA, Department of Public Welfare fonds, 73.307, box 5, Appendix, p. 27. In 1934, the two Areas were consolidated into a single Area: An Act to amend and consolidate an Act respecting The Tilley East Area and The Berry Creek Area Act, S.A. c. 61, 1934.

³⁸ Jones and MacLeod, *We’ll all be Buried Down Here*, p. xlv.

³⁹ D.C. Jones, “A Strange Heartland,” in Francis and Ganzevoort, eds., *The Dirty Thirties in Prairie Canada*, p. 93.

facilitate recovery of unpaid taxes in part to allow municipalities to keep their schools open. Unfortunately, this also had the undesirable impact of bankrupting even more farmers and forcing them to abandon their lands, ultimately leaving municipalities in a worse position.⁴⁰ Something more radical was required if schools were to be kept open and teachers were to be paid.

The individual most responsible for the Berry Creek school consolidation – school inspector Lindsay Thurbus – would go on to manage similar school consolidations in the Acadia and Sullivan Lake school divisions that would become part of the Sounding Creek and Sullivan Lake Special Areas established in 1935. In effect, the large school districts – a response to the exigencies of drought in the Dry Belt – became the blueprint for education in postwar Alberta as fewer and larger farms as well as highly dispersed population became the norm for the rural regions outside the Dry Belt.⁴¹

Unfortunately for the UFA government, the droughts of the 1930s were not limited to the Tilley East and Berry Creek areas. With the entire Dry Belt suffering the impact of severe drought, the government was again pushed into a policy of encouraging the depopulation of the region and the province resurrected its program of free transportation for farm families and their machinery, livestock and personal effects. Between 1931 and 1935, almost 2,000 families moved out of the Alberta Dry Belt, the majority settling around Edmonton or in the Peace River country. In 1934, for example, 1,102 rail cars were paid for by government and the railway companies to relocate 601

⁴⁰ Jones and MacLeod, *We'll all be Buried Down Here*, pp. xlvi-xlvii.

⁴¹ D.C. Jones, "Schools and Social Disintegration in the Alberta Dry Belt of the Twenties," *Prairie Forum* 3 (1978): 1-9.

farm families.⁴² Ultimately, however, more than a program of organized depopulation was required to deal with the crisis.

In 1934, the provincial Minister of Agriculture appointed a committee of agricultural experts and farmers, again under the leadership of O.S. Longman, to recommend a policy solution for the entire drought area. The committee decided that the Tille East and Berry Creek Area Act be amended to include other areas similarly deemed “unfit for agricultural purposes.”⁴³ In 1935, the provincial government replaced the Tilley East and Berry Creek Area Act with the Special Municipal Areas Act, and brought in extensive new areas – Sounding Creek, Neutral Hills and Sullivan Lake – under the administration of the Special Municipal Areas Board as well as consolidated municipalities.⁴⁴ Two years later, the Bow West Special Area was added. This consolidation in effect created the boundaries of the original Special Areas.

[Insert Figure 4: Special Areas, circa 1942]

In 1938, the provincial government took a further important step by eliminating all of the municipalities and improvement districts with the Special Areas. Before consolidation, there had been 34 separate governmental and administrative units managing some 7 million acres.⁴⁵ The provincial government also established a new three-person Special Areas Board headquartered in Hanna to manage all land and water

⁴² Government of Alberta, *Department of Agriculture Annual Reports, 1931-36* (Edmonton: Department of Agriculture, 1932-37).

⁴³ Stapleford, *Report on Rural Relief*, p. 79.

⁴⁴ An Act respecting the Special Municipal Areas, c. 69, 1935. PAA, Department of Public Welfare fonds, 73.307, box 5, p. 29.

⁴⁵ PAA, Department of Public Welfare fonds, 73.307, 67, brief report on work in Special Areas, date unknown.

resources as well as roads, schools and other physical and social infrastructure throughout the Special Areas.⁴⁶ This Board, appointed by the provincial cabinet in Edmonton, was conferred all the legal and administrative tools required to manage the Special Areas in the manner it deemed most efficient for the remaining residents.

Assessing Institutional Adaptation: the Impact and Success of the Special Areas

One of the main objectives of the Alberta government through its free transportation programs and the Special Areas form of administration was to reduce the population of the region while transforming land tenure – from small wheat farms to larger ranches and ranch-farms. In order to do this, private ownership was increasingly supplanted by Crown ownership under the control of the Special Areas Board. In effect, the Board offered an alternative to the risk of private ownership – and the debt that accompanied it. Access to land was increased through inexpensive Crown leases and community pastures. In 1938, for example, grazing lands were leased for 2.5 cents per acre while crop lands could be rented for a one-sixth share of the annual crop.⁴⁷

As shown in Table 3, the rural population of the Special Areas, which reached a peak in the early 1920s, has been on a downward trajectory ever since. At the same time, the urban population has grown gradually since the late 1930s, indicating a small but viable service economy in the region. This decline in population is also reflected in the decline in the number of farms in the Special Areas (Table 4). However, there is a legitimate question of whether both of these declines are simply part of a larger North

⁴⁶ An Act to Amend and Consolidate the Special Areas Act, S.A. c. 92, 1938.

⁴⁷ Stapleford, *Report on Rural Relief*, p. 81.

American trend of depopulation and growing farm size throughout the Great Plains of North America.⁴⁸

[Insert Table 3: Population of the Special Areas, census years, 1916-76]

By 1936, farms in the Special Areas were already 1.7 times the size of the average Alberta farm, perhaps in part the product of the provincial government's active interventions beginning in 1921. The relative trend line is even more significant: Table 4 illustrates the fact that farm size in the Special Areas grew to 3.6 times the size of the average Alberta farm by 1956, a ratio that would remain stable for at least the next two decades. This means that, at least for the early history of the Special Areas, provincial policies seem to have had a substantial impact on increasing the size of farms in the region *relative* to the rest of Alberta even in an environment where rural population was decreasing and farm size was increasing as a general rule throughout the Great Plains of North America.

[Insert Table 4: Farm Size in Special Areas compared to the Provincial Average, 1936-76]

The fact that a Special Areas Board, rather than individual municipalities, continues to manage a huge expanse of southeast Alberta also speaks to the political success of the Special Areas. Despite the fact that there is, in effect, no democratic

⁴⁸ M. Fulton, R. Olfert and M. Partridge, *Population Growth – Double or Nothing? Preparing for Saskatchewan's Next 100 Years* (Saskatoon: Canada Rural Economy Research Lab, Policy Brief, Sept. 2005).

representation at the local level – an anomaly in terms of all other provinces in Canada – there has been limited political opposition to the continuation of the Special Areas administration. This is no small feat given the fact that this provincially-appointed Board has had, and continues to have, more decision-making authority than any elected municipal government and elected school board combined.

This anomaly continues even though the unique governance model of the Special Areas has been examined periodically by the provincial government. These re-examinations were triggered, in large part, because the interwar crisis caused by successive, severe droughts did not repeat itself in the postwar era. While droughts have occurred in the Alberta Dry Belt since the 1930s, the region has not experienced the magnitude of almost continuous drought exposure suffered between 1917 and 1939. As a consequence, it is less than surprising that the idea of disbanding the Special Area Board and reintroducing local government was raised on occasion. The first reappraisal occurred in 1953. Appointed by the Minister of Municipal Affairs, the three-person committee chaired by O.S. Longman, now the provincial deputy minister of agriculture, concluded that while the Special Areas had made a dramatic recovery in economic terms, “the hazardous nature of the region and the possible recurrence of prolonged drought” required the extraordinary administration of the Special Area Board.⁴⁹

In 1960, Ernest Manning’s government appointed a three-person Commission, chaired by W.R. Hanson, to determine whether: 1) the climatic and soil conditions that had led to the establishment of the Special Areas were “still sufficient to warrant the continuance” of the administration; 2) “the agricultural conditions in the Special Areas

⁴⁹ Government of Alberta, “A Preliminary Report on the Special Areas of Alberta,” report submitted to C.E. Gerhart, Minister of Municipal Affairs, Government of Alberta, Nov. 4, 1953.

are of a sufficiently difference character in comparison to other areas of the Province to warrant the special type of administration now in force in this area;” and 3) the unique conditions continue to warrant comparatively low rental rates and tax rates (subsidized by all Alberta taxpayers) for grazing leases and community pastures in the Special Areas.⁵⁰

After numerous field trips as well as public hearings at the towns of Consort, Hanna, Oyen and Buffalo, the Hanson Commission came to the conclusion that, irrespective of improved change in circumstances, all of the verbal and written briefs and submissions “supported the continuation of the government by the Board as set up under the Special Areas Act.” As the committee report noted: “[n]ever have members of the Committee found a people so unanimous in their approval of a form of local government, especially one in which all power is centralized in a Minister of the Crown with local self-government lacking.” This view supported the Committee in its recommendation that, as an instrument, the Special Areas Act and Board were “well conceived to accomplish the job at hand” and the “administration has generally been well carried out.”⁵¹

Despite this, the Hanson Committee still found it difficult to justify the lack of local self-government and the permanent continuation of the Special Areas Board. Concluding that the rehabilitation of the Dry Districts had been largely completed, the Committee argued for the restoration of local self-government and the disbanding of the Special Areas Board over a transition period of 10 years.⁵² The recommendation was not implemented by the Manning government nor accepted by succeeding Alberta

⁵⁰ Excerpt from order-in-council 1376/60, Government of Alberta, Sept. 13, 1960, in PAA, Government of Alberta, Report of the Special Areas Investigation Commission, Jan. 1961.

⁵¹ PAA, Government of Alberta, Report of the Special Areas Investigation Committee, Jan. 1961, p. 21.

⁵² PAA, Government of Alberta, Report of the Special Areas Investigation Committee, Jan. 1961, p. 24.

governments, perhaps because of the popularity of the Board among the remaining farmers and ranchers in the Special Areas.

The Policy Legacy of the Special Areas and Future Adaptation to Climate Change

What is the policy legacy of the Special Areas in the context of climate change as currently understood by a majority of scientists? There are a number of lessons that can be drawn from the historical experience of the Alberta Dry Belt. In terms of institutional adaptation, the creation of the Special Areas Board (and its predecessors) was a direct response to the inadequacy of local government. The municipalities and local improvement districts were simply too small and too bereft of social and physical capital to cope with the crushing impact of prolonged drought. Originally designed to serve a settlement pattern of $\frac{1}{4}$ to $\frac{1}{2}$ section (160-320 acre) grain farms, these local governments simply could not adjust to wholesale farm abandonment and the inability of most remaining farmers to pay property and education taxes because of successive crop failures. Little wonder that relief for the worst-off farm families and town residents, originally a municipal responsibility, had to be administered by the province and the federal government from the beginning of the crisis in the Alberta Dry Belt and in both Alberta and Saskatchewan during the drought and depression of the 1930s.

In contrast, the Special Areas Board had the size and the expertise to facilitate adaptation to drought. The Board (and its predecessors) rehabilitated abandoned land by planting crested wheat grass to stop soil drifting. It built and maintained the main roads while abandoning roads in the most sparsely populated parts of the Special Areas. It managed an enormous school district in which it could build a critical mass in terms of

teachers and students to continue educating the children of dispersed farm-ranch families. It managed land resources in the most economic manner possible, ensuring that farmer-ranchers could obtain access to additional grazing land inexpensively and in as risk-free a manner as possible through the renting out of Crown land at low rates and through extensive community pastures. Indeed, the Special Areas Board and its predecessors in Tilley East and Berry Creek built up enough expertise that the provincial government felt free enough to reject the federal government offer to set up community pastures in Alberta through the Prairie Farm Rehabilitation Administration (PFRA) during the late 1930s.⁵³ The Board could also manage, even redirect, scarce water resources to best serve the farmer-ranchers in the region. This is a job it continues to do: in 2005, for example, the Special Areas Board launched a major study of a water diversion project on the Red Deer River which it sees as a “long-term solution to recurring droughts in the Special Areas.”⁵⁴

Beyond adaptation, the Special Areas Board also reduced physical exposure to drought by converting land tenure from small wheat farms to large ranch-farm operations in which livestock – cattle and sheep – were central to the livelihood of those who remained. This required an active policy of encouraging depopulation, a policy initiated by the provincial government but eventually turned over to administrative boards in the Special Areas.

Historically, the Alberta Dry Belt experience contrasts sharply with that in the Saskatchewan Dry Belt. Because early exposure to drought was not nearly as severe in

⁵³ G.P. Marchildon, “The Origins of the Prairie Farm Rehabilitation Administration,” IACC Project Discussion Paper, draft, 2006.

⁵⁴ Special Areas Board, *Special Areas Water Supply Project: Public Consultation Results – Summary, May to July 2005*. Hanna: Equus Consulting Group on behalf of the Special Areas Board, 2005.

southwest Saskatchewan relative to southeast Alberta, the Saskatchewan government did not dismantle its local governments in favour of a centrally-controlled administration. Nor did it actively encourage depopulation and a radical change in land use. As a consequence, when the more extensive droughts of the 1930s struck, no longer limited to a part of the Dry Belt and instead covering most of the Palliser Triangle, Saskatchewan wheat farmers in the Dry Belt were hardest hit. As a consequence, the Saskatchewan government – assisted substantially by the federal government – spent much more on relief than the Alberta government in a desperate effort to prevent starvation in the drought-stricken rural areas during the 1930s. The more senior governments were forced to act because of the inability of municipal governments to provide relief much less initiate any proactive efforts at rehabilitation.⁵⁵

While land rehabilitation and water conservation eventually became the purview of the federal government, through the PFRA, in Saskatchewan, the provincial government did facilitate the northward exodus of those farmers completely broken by drought in the south. Unlike Alberta, however, there was no similar effort to convert small grain farms into large ranch-farm operations through the direct control and management of land resources. The municipalities continued to regulate (to a very limited extent) land resources, the majority of land remained in private ownership and grain farming continued in the Dry Belt of southwest Saskatchewan during and after the continuous droughts of the 1930s.

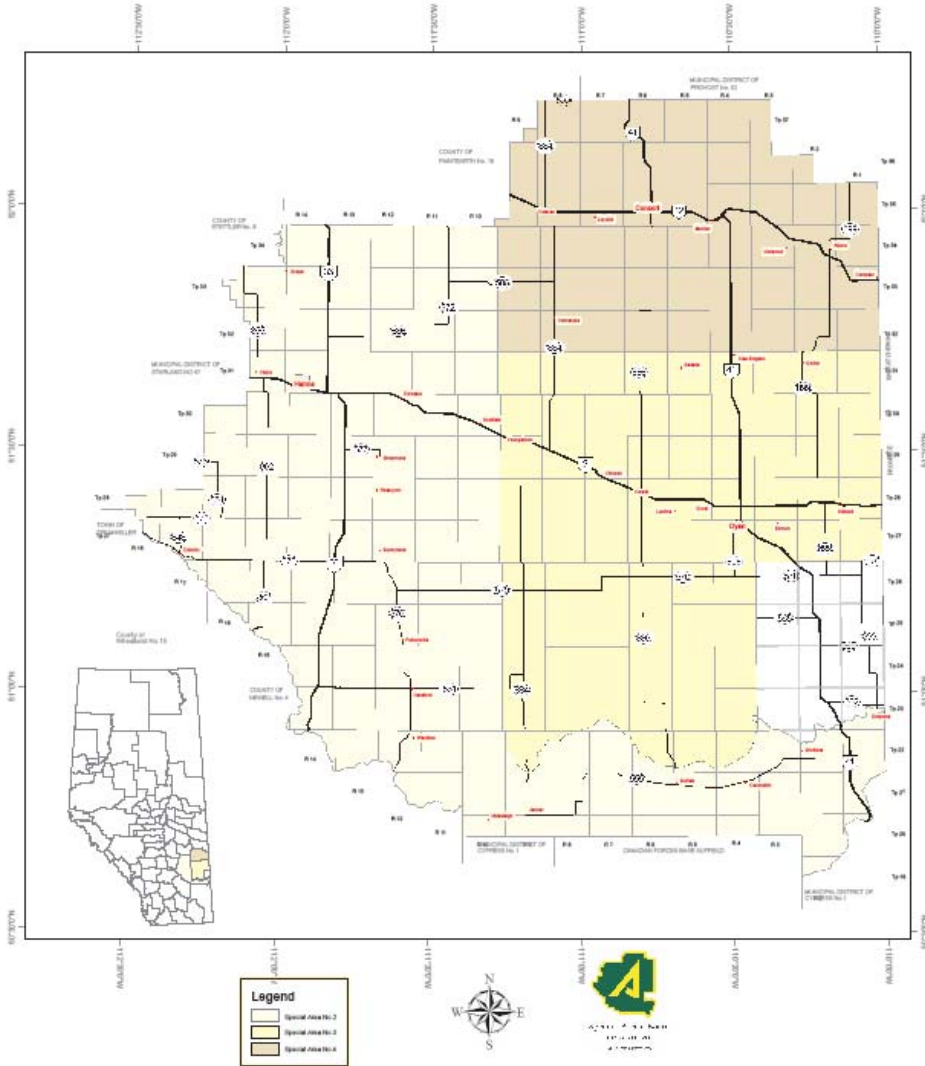
If climate change produces more severe and more prolonged droughts in the future than those suffered in the 1920s and 1930s, Alberta is currently more prepared

⁵⁵ B. Neatby, “The Saskatchewan Relief Commission, 1931-1934,” *Saskatchewan History* 3, no. 2 (1950): 41-56. G.P. Marchildon and D. Black, “Henry Black, the Conservative Party and the Politics of Relief,” *Saskatchewan History* 58, no. 1 (2006): 4-17.

than Saskatchewan to adapt. The historic experience of the Alberta Dry Belt has prepared the provincial residents for a more interventionist approach by the Alberta government to deal with the crisis. Although the PFRA helped immensely in the rehabilitation of the Saskatchewan Dry Belt by the late 1930s (and continues to provide expertise and maintain infrastructure which ensures that farmers in southwest Saskatchewan are not as vulnerable as they would be in its absence), the fact remains that the rural municipalities are too small and too poorly resourced to deal with prolonged drought crises. In contrast, coping with and adapting to drought is the primary responsibility of the Special Areas Board in Alberta. As a special-built institution, it is in a much better position to help the communities and rancher-farmers of the Albert Dry Belt to deal with an extended drought than the many rural and urban municipalities in the Saskatchewan Dry Belt.

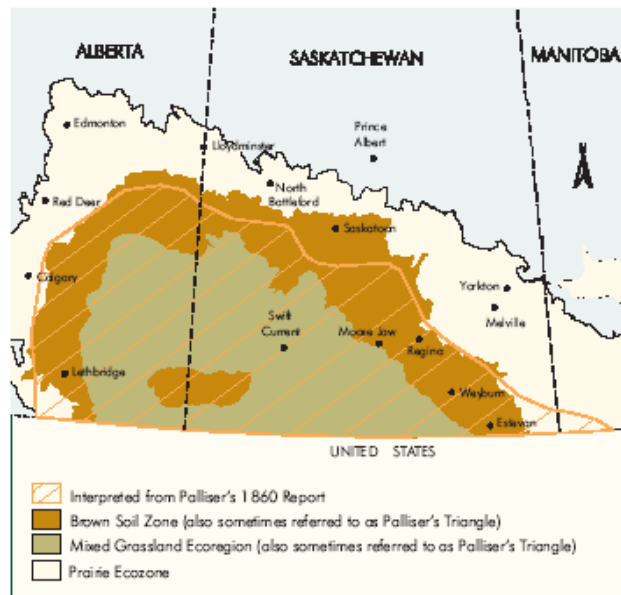
Figure 1: Special Areas of Alberta, 2006

Special Areas 2,3,4



Source: Special Areas Board, Hanna, Alberta, at:
www.specialareas.ab.ca/SA.23and4Map.pdf

Figure 2: The Varying Definitions of the Canadian portion of the Palliser Triangle and the Dry Belt



Source: Canadian Plains Research Center, University of Regina

Figure 3: Conceptual Model of Drought Vulnerability

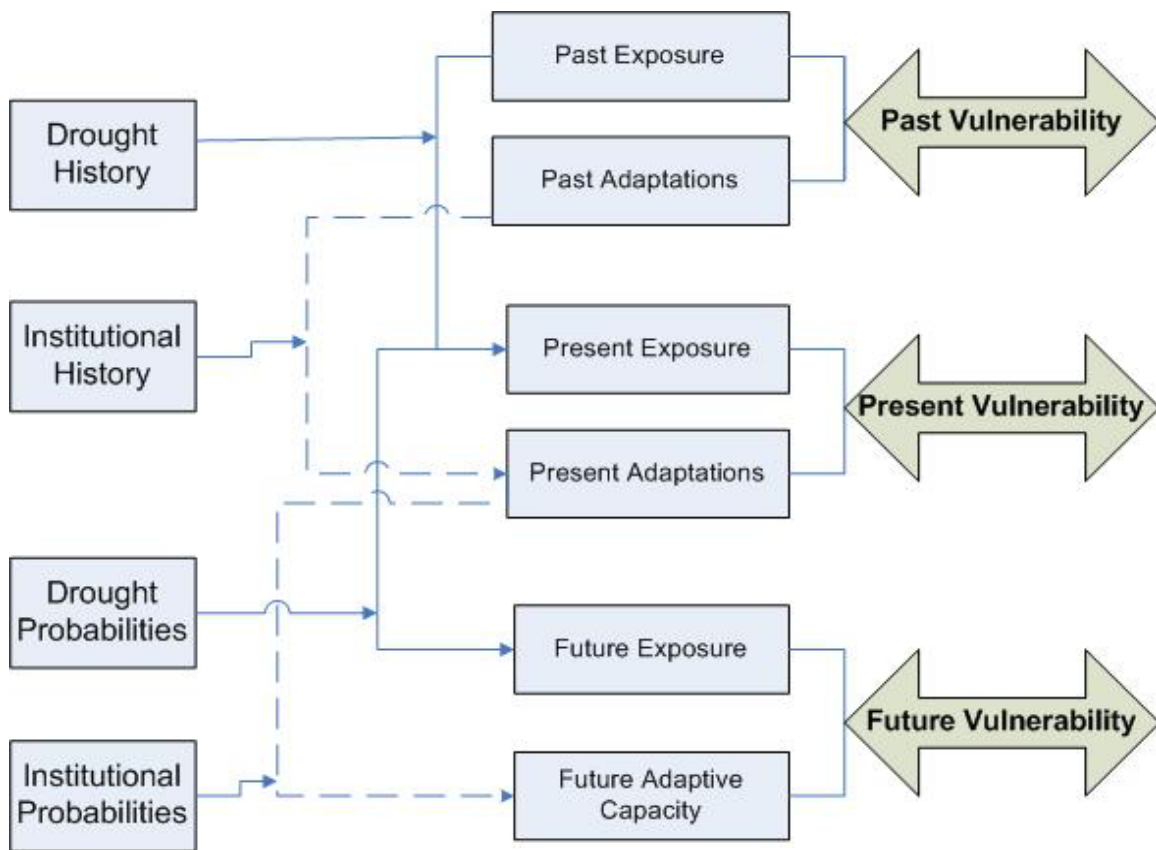


Table 1: Rural and Urban Population of the Special Areas, 1916-76

Census Year	Rural	Urban	Total
1916	21,715	2,449	24,164
1921	26,031	3,658	29,689
1926	19,344	3,529	22,873
1931	20,320	3,754	24,074
1936	14,967	3,038	18,005
1941	11,794	3,325	15,119
1946	9,542	3,504	13,046
1951	8,430	4,076	12,506
1956	8,723	4,657	13,380
1961	8,799	5,256	14,055
1966	7,974	5,354	13,328
1971	7,050	5,250	12,300
1976	5,854	5,182	11,036

Source: L.S. Martin, “The Special Areas of Alberta: Origin and Development,” report prepared for G.E. Taylor, Member of the Legislative Assembly of Alberta, July 1977, p. 49.

Table 2: Vacant or Abandoned Farms in the Alberta and Saskatchewan Dry Belt by census division, 1926

	Population	Vacant or abandoned farms (number)	Vacant or abandoned farms (acres)
Alberta Census Divisions 3 and 5	39,365	5,124	1,287,594
Saskatchewan Census Division 8	44,667	916	212,091

Source: Derived from Tables 1, 3, 4 and 6 in David C. Jones, *Empire of Dust: Settling and Abandoning the Prairie Dry Belt* (Calgary: University of Calgary Press, 2002), pp. 254-7.

Figure 4: Special Areas, circa 1942



Source: A. Stewart and W.D. Porter, *Land Use Classification in the Special Areas of Alberta* (Ottawa: Department of Agriculture, 1942), p. 26.

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1966	7,974	5,354	13,328
1971	7,050	5,250	12,300
1976	5,824	5,182	11,036

Source: L.S. Martin, “The Special Areas of Alberta: Origin and Development,” report prepared for G.E. Taylor, Member of the Legislative Assembly of Alberta, 1977.

Table 4: Farm Size in Special Areas compared to the Provincial Average, 1936-76

Census Year	Number of Farms	Special Areas Average Size (in acres)	Provincial Average Size (in acres)	Farm Size Ratio of Special Areas relative to Provincial Average
1936	4,319	697	404	1.7
1941	3,847	908	434	2.1
1946	3,449	1,188	464	2.6
1951	2,895	1,459	527	2.8
1956	2,384	2,074	579	3.6
1961	2,126	2,322	645	3.6
1966	1,927	2,631	706	3.7
1971	1,675	2,862	790	3.6
1976	1,556	3,085	864	3.6

Source: Derived from L.S. Martin, “The Special Areas of Alberta: Origin and Development,” report prepared for G.E. Taylor, Member of the Legislative Assembly of Alberta, p. 59.