

2007

Fever, firepower, and flood: the transformation of the Missouri River bottomlands in the Dakotas 1804-2005

Robert A. Dunn

Louisiana State University and Agricultural and Mechanical College

Follow this and additional works at: https://digitalcommons.lsu.edu/gradschool_dissertations



Part of the [Social and Behavioral Sciences Commons](#)

Recommended Citation

Dunn, Robert A., "Fever, firepower, and flood: the transformation of the Missouri River bottomlands in the Dakotas 1804-2005" (2007). *LSU Doctoral Dissertations*. 413.

https://digitalcommons.lsu.edu/gradschool_dissertations/413

This Dissertation is brought to you for free and open access by the Graduate School at LSU Digital Commons. It has been accepted for inclusion in LSU Doctoral Dissertations by an authorized graduate school editor of LSU Digital Commons. For more information, please contact gradetd@lsu.edu.

FEVER, FIREPOWER, AND FLOOD: THE TRANSFORMATION OF THE
MISSOURI RIVER BOTTOMLANDS IN THE DAKOTAS
1804-2005

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The Department of Geography and Anthropology

by

Robert A. Dunn
B.A. University of Pennsylvania, 1973
M.A. Temple University, 1980
May 2007

ACKNOWLEDGMENTS

First and foremost, I wish to express my deep gratitude to my major professor, Dr. Kent Mathewson of the Department of Geography and Anthropology, for his extraordinary patience and forbearance in helping me to develop this research project and see it through to completion. I also wish to thank my committee members Drs. Craig Colten, Miles Richardson, and Rebecca Saunders for their inspirational teaching during my graduate studies at LSU, and for their expert guidance during my preparations for the General Exam. I also wish to acknowledge the tremendous debt I owe to my former colleagues at the U.S Army Engineer Waterways Experiment Station, particularly Drs. Lawson Smith, Roger Saucier, Paul Nickens, and Roger Hamilton. I also want to thank my colleagues in the Corps of Engineers at the Omaha District and Northwestern Division, particularly Mr. David Vader, former tribal coordinator for the Omaha District. I especially want to thank Drs. Timothy Feather and Dale Brown of Planning and Management Consultants, Ltd. for their tremendous help in facilitating and recording the three 1997 Sioux focus groups discussed in this dissertation. I want to thank the archivists at the National Archives Plains Regional Office in Kansas City, Missouri, the Bureau of Indian Affairs Regional Office in Aberdeen, South Dakota, and the research librarians at the Waterways Experiment Station in Vicksburg, Mississippi. Their diligence in finding the research materials I needed was invaluable. I also wish to thank my supervisors at the U.S. Army Engineer District, Philadelphia: Mr. Jerry Pasquale, Mr. Stanley Lulewicz, and Mr. Minas Arabatzis. Their corporate support and personal encouragement were critical to the successful completion of this research effort. Finally, I want to thank my

wife Carolyn for her love and support during the project, and most especially for her great help in the typing and proofreading of the manuscript.

TABLE OF CONTENTS

ACKNOWLEDGMENTS	ii
LIST OF TABLES	vi
ABSTRACT	vii
CHAPTER 1. INTRODUCTION	1
CHAPTER 2. CONTACT AND CONTAGION	14
The Upper Missouri Cultural Landscape-Pre-1800	14
The Earthlodge Dwellers	18
The Sioux Migration and the Equestrian Revolution	25
White Contacts and First Conflicts (1804-1850)	30
American Contacts with the Arikara, Mandan, and Hidatsa	38
Traders, Artists, and Epidemics (1806-1849)	48
Wagon Trails and Army Forts in Sioux Country	56
CHAPTER 3. CONFLICT WITH WHITE AMERICA	62
The Sioux and the U.S. Army	62
The 1868 Fort Laramie Treaty	72
The Rise of Sitting Bull and War with the U.S.	81
The Taking of the Black Hills	87
CHAPTER 4. CONTAINMENT: THE EARLY RESERVATION PERIOD	92
The Break-Up of the Great Sioux Reservation	92
Allotment and Assimilation in the Early Reservation Period	94
Sioux Ecology in the Early Reservation Era	102
The Fort Berthold Indians in the Early Reservation Period	112
CHAPTER 5. FLOODING: THE MIDDLE RESERVATION PERIOD	123
The Reservoir Landscape	123
The Corps and the Missouri River	124
Fort Randall and the First Taking of Sioux Land	135
Garrison Dam, Lake Sakakawea, and the Fort Berthold Indians	145
Oahe Dam and the Upriver Sioux	154
Gavins Point Dam, Big Bend Dam, and the Downriver Sioux	161
A Landscape Transformed by Water and Tears	165
The Legacy of General Lewis Pick	170
CHAPTER 6. STAND-OFF: THE LATER RESERVATION PERIOD	177
Coyote Warriors and Sovereign Nations	177
The Erosion of Heritage	189

Indian Use of Corps Reservoirs in the Dakotas: The Sioux Focus Groups.....	202
Indian Water Rights and the Corps’ Current Operation of the Missouri River Reservoirs	213
CHAPTER 7. FUTURE LANDSCAPES	222
The “New” Frontier Landscape: Buffalo Commons, White Depopulation, and Indian Resurgence	222
CHAPTER 8. CONCLUSIONS	237
REFERENCES	244
APPENDIX	
A. MAPS.....	253
B. ARCHIVAL DOCUMENTS	272
C. SUMMARY NOTES- SOUTH DAKOTA FOCUS GROUPS	280
D. NOTES ON ARCHIVAL RESEARCH	297
E. LTG LEWIS A. PICK ARCHIVE	307
VITA.....	329

LIST OF TABLES

Table 1.1	The Upper Missouri Reservoirs and Affected Reservations And Tribes	3
Table 5.1	Projects Proposed by Pick.....	129
Table 5.2	Projects Proposed by Sloan.....	131
Table 6.1	Shoreline Erosion Rates, Missouri River Main Stem Lakes.....	193
Table 6.2	Shoreline Erosion Characteristics, Missouri River Main Stem Lakes.....	194
Table 7.1	American Indian and Alaska Native Population for the United States, Regions, and States, and for Puerto Rico, 1990 and 2000.....	236

ABSTRACT

This dissertation focuses on the indigenous geography of the Missouri River Valley of the Dakotas. Since Lewis and Clark's expedition in 1804, this landscape has been transformed by two externally introduced components, reservations and reservoirs. To move the native tribes out of the way of an expanding American empire in the mid-19th century, the U.S. government confined the tribes to territories, then to reservations, which grew smaller as each new wave of Euro-American immigration launched more land-taking by the federal government. To ensure military and political control over the tribes, the U.S. government supported the efforts of hide hunters to annihilate the immense bison herds and implemented a policy of forced assimilation. The 1887 General Allotment Act directly attacked Indian tribalism and freed up thousands of acres on the remaining reservations for white ownership. The most severe physical impact to the bottomlands came in the mid-twentieth century with the construction of the Pick-Sloan reservoirs which inundated the fertile river bottomlands and destroyed what had been an "oasis" on the Plains for thousands of years. Human impacts to the Three Affiliated Tribes and to the Sioux have been severe and long-lasting; resulting in "trans-generational trauma." Erosion created by the reservoirs has destroyed numerous archaeological sites and comprises a costly management problem for the Corps of Engineers. Indian cultural resurgence began with the Indian Reorganization Act of 1934 which finally put an end to the hated policies of allotment and assimilation and recognized native tribes as internal sovereign nations. With a renewed spirit of tribalism the Sioux and the Three Affiliated Tribes have won important legal victories in federal

courts to gain just compensation for the loss of the bottomlands. Prolonged drought and economic recession have caused a major demographic shift on the Plains (white depopulation) which has created many new "frontier counties" with fewer than six people per square mile. Native Americans have embraced a scaled-down version of the "buffalo commons," which appears better suited to the semi-arid grassland ecosystem. A post-modern frontier landscape is emerging on the Northern Plains with many biogeographic features of the aboriginal landscape.

CHAPTER 1

INTRODUCTION

The landscape of the Dakotas today is very different than the one encountered by Captain Meriwether Lewis and Lieutenant William Clark in the fall of 1804. The physical landscape of the Missouri River valley in North and South Dakota has been transformed by a series of massive dams and reservoirs, which have inundated the highly productive river bottomlands and created a shoreline erosion zone of epic proportions. The cultural landscape created by the indigenous tribes over the past two centuries is very different also. The descendents of the Sioux, Mandan, Hidatsa, and Arikara now live on reservations too often characterized by poverty, alcoholism, and teen-age suicides. The indigenous geography of this transformed landscape will be the focus of this dissertation.

The geographic paradigm that will guide this research is the reinterpretation of Friedrich Ratzel's *Anthropogeography* first set forth by Carl Sauer (1925) in his seminal work *The Morphology of Landscape*. Beginning in the late 1920s and continuing throughout his career into the 1970's Sauer transformed the meaning of "anthropogeography" from Ratzel's positivist study of the effects of nature on man to the historical study of man's cultural impact on the landscape (Speth 1999, 175-195). By the mid-1940s Sauer had reduced the field of anthropogeography in scope and given it academic status as the branch of human geography that is concerned with "primitive and primordial peoples." Sauer shaped anthropogeography to the task of the historical understanding of the biophysical earth under the influence of culture (Speth 1999, 192). He sought to understand the cultural transformation of nature as expressed in the growing

artificiality of the human world and, most especially, to depict native (First Nations) cultures living in close contact with nature with no restriction in time.

Sauer emphasized the dynamic basis of geographic studies focusing on the component parts, or “morphology” of landscape, involving strong elements of personal judgment and historical sensitivity in the selection of particular landscape components for study (Butlin 1993, 131). The goal of Sauer’s anthropogeography was not a positivist search for spatial geographic laws, but rather a humanistic *Verstehen*, or understanding, resulting from careful field observation and the incorporation of historical and archaeological research.

The primary landscape components to be studied in this dissertation are the Native American reservations adjacent to the Missouri River in North and South Dakota and the U.S. Army Corps of Engineers reservoirs that have impacted them for almost half a century. The first two sections will present an historical geographic perspective on the clash of two disparate cultures. This collision of cultures began with the Lewis and Clark expedition up the Missouri in the fall of 1804. Landscape changes in the 19th century precipitated by this conflict include: 1) the creation and subsequent collapse of a permanent Indian frontier (1817-1848); 2) the effects of the Fort Laramie Treaty of 1851; 3) the formation of the Great Sioux Reservation in 1868; 4) the confiscation of the Sioux’s sacred Black Hills following the discovery of gold in 1874; 5) the impact of U.S. military action against the Sioux in the 1870s, 6) the effect of the Dawes General Allotment Act in 1887, and 7) the break-up of the Great Sioux reservation into smaller reservations in 1889. I will then examine the human geography of the reservation system

prior to the Indian Reorganization Act of 1934 with particular attention to the effects of the U.S. policy of forced assimilation.

The second part of this study will examine the impacts of the Corps of Engineers reservoirs on the Missouri River valley cultural landscape beginning in the late 1930s, specifically focusing on impacts to the adjacent Native American reservations (Map 1 Appendix A). Table 1.1 below shows these reservations and the tribes that have been impacted by the Corps reservoir construction program in the Upper Missouri River valley.

Table 1.1: The Upper Missouri Reservoirs and Affected Reservations and Tribes

Ft. Peck Dam, Montana	1940	Ft. Peck Lake	Ft. Peck Reservation	Assiniboin and Yanktonai Sioux
Ft. Randall Dam, South Dakota	1953	Lake Francis Case	Yankton Reservation	Yankton Sioux
Garrison Dam North Dakota	1954	Lake Sakakawea	Ft. Berthold Reservation	Mandan, Arikara, and Hidatsa
Gavin's Point Dam, South Dakota	1955	Lewis and Clark Lake	Santee Reservation; Yankton Reservation	Santee and Yankton Sioux
Oahe Dam, South Dakota	1962	Lake Oahe	Cheyenne River Reservation; Standing Rock Reservation	Upper Yanktonai; Lakota Hunkpapa, Miniconjou, Sans Arc, Two Kettle, Sikasapa)
Big Bend Dam, South Dakota	1964	Lake Sharpe	Crow Creek Reservation; Lower Brule Reservation	Brule; Lower Yanktonai

In his comprehensive study *Indian Reservations in America* Frantz (1993) notes that the study of American Indians and their reservations opens up to the geographer a wide spectrum of possibilities for research that encompasses many disciplines in the field. That is the reason he found it rather surprising that geographers, whether German or English speaking, have generally paid little attention to this subject. Prior to 1960 the majority of geographic research on the American Indian was generally limited to Carl Sauer and the Berkeley School. The geographers from Berkeley, working in cooperation with Berkeley anthropologists, tended to concentrate exclusively on historical and cultural questions that tended to pre-date the reservation era of the American Indian. Only Hoover's work in the 1920's and '30s at the Arizona State Teachers College was concerned with the structure of specific reservation and their residents (Frantz 1993,1). But Hoover's (1931) work is very largely descriptive and does not give detailed information of prevailing socioeconomic conditions.

Beginning in the mid-1960s more geographers began to specialize in the study of American Indians. This trend was largely responsible for the founding of the Native American Specialty group within the Association of American Geographers. However, few geographers have concentrated on the present day situation of the American Indians. Frantz (1993, 2) notes that geographers have done research on American Indians living in large cities and Indian migration to urban areas. Relatively few studies have focused on the present day structure of the Indian reservation.

In general, geographers who seek detailed information about American Indians must seek out the relevant specialist literature of historians, anthropologists, sociologists and economists. This is precisely what Frantz (1993) had to do in conducting his

research. He discovered that there is a sharp division of labor in studies regarding racial and ethnic minorities in the United States, primarily between sociology and anthropology. Remarkably few sociologists, economists, and regional scientists concern themselves with American Indians. In contrast there are many anthropologists who are Indian specialists but they are mainly concerned with the cultural history traditions of American Indians rather than modern life on the reservations. Likewise there are many historians interested in the history of Indian-white relations but very few with an interest in reservations who are trained in geography. As Frantz notes (1993, 4), “this comprehensive literature cannot, however, obscure the fact that research on the demographic and socioeconomic situation of present-day Indians is only beginning. Geographers can also make their contribution by filling these gaps in research.”

The geography of culturally distinct reservation “islands” on the American landscape is unique to American geography. Reservations are discontinuous areas encompassing diverse cultures with diverse histories, yet the sum of all these disparate places comprises one Indian Nation, which still has an overriding sense of communality. Only where red and white cultures interface, Frantz (1993, 293) argues, can “Indian Country” be defined:

The intersection of those two cultures, one indigenous, one exotic, has been a severe test of the most basic values of each. Indian country has American commitment to the most fundamental democratic principle, equal rights under the law. For the same reasons the commitment of American Indians to preserve the integrity of community and homeland has been tested again and again. Indian country is as much a process of cultural definition as it is a place.

Geographer David Wishart (1996) has written an exceptionally fine historical geography of Nebraska’s Indian Country in his award winning book *An Unspeakable Sadness: The Dispossession of the Nebraska Indians*. *An Unspeakable Sadness* is a

straightforward historical treatment in the tradition of Meinig's *The Shaping of America* series, where great emphasis is placed on the impacts of American frontier imperialism. Wishart documents the protracted effort of white America to suppress and transform Nebraska's indigenous peoples in the 19th century. He records how the Native American traditional cycle of hunting and farming was broken by white military and political interference and how the Indians' lands were taken away from them bit by bit. But he also recounts the long and painful process of cultural and political Indian resurgence. Today for example, Nebraska's Native American population has risen from a low point in the late 19th century until now, when there are approximately 1,400 Missouri, 1,500 Omaha, 2,300 Pawnee, 2,200 Southern Ponca, and more than 400 Northern Ponca.

In his relatively brief treatment of the 20th century, Wishart focuses primarily on the tortuous land claims process, whereby Nebraska's indigenous people sought a more just compensation for lands that had been taken from them without consent, or at an unfair price, in the 19th century. In examining the land claims process Wishart makes an explicit reevaluation of the government's past dealings with the Indians. He seeks to provide an official conclusion as to whether the United States has given the Indians a genuine opportunity "to live as Americans." Despite formidable legal obstacles all four of the Nebraska Indian Nations met the five year land claims deadline set by the Indian Claims Commission (ICC) and embarked on the lengthy, frustrating process that would, in the end, result in additional payments to them for their forced 19th century land cessions. Before the creation of the ICC in 1946, tribes were barred from pursuing claims against the United States. Tribes were given five years to file their cases and the commission had ten years to settle. Between its creation and its expiration in 1978 the

ICC awarded more than \$500 million to tribal members whose land had been taken by the United States government (Hightower-Langston 2003, 374).

An Unspeakable Sadness is very much a case study in land held, land lost, and finally, land partially regained through financial compensation. Nevertheless, as Wishart (1996, 244) concedes, even if the Indians had been adequately compensated for their land originally, it is doubtful that a place would have been found for them in the social fabric of 19th century United States:

Frontier expansion was so rapid, and frontier attitudes were so hostile, that it is unlikely that the Indians would ever have been allowed to retain more than a fraction of their lands. Even the fragments of land that they kept as reservations after the 1850s were regarded by Americans as unnecessarily large for their needs....Finally, additional payments would not have solved the Indian's main dilemma: they wanted to keep their lands, their lifestyles, their cultures- to turn back the clock to a time when the land was filled with game, not Americans. When time ran out in the 1870s, with the bison gone and the Indians still resisting change, then change was simply imposed in the form of removal and allotments.

The last decade of the twentieth century saw a major shift in the ideological boundary between the two cultures that define Indian Country. Under the Clinton Administration the U.S. government finally abandoned its attempts at forced assimilation. Federal Indian policy is now framed to seek a "government to government" relationship between each of the tribes and the United State of America (Public Law 103-413, 1994) which reaffirms American commitment to coexistence with sovereign Native people. In the future the U.S. Army Corps of Engineers will be a major player in forging new relationships with the Indian tribes of the Missouri River Valley in the Dakotas. Understanding the past mistakes made by the Army Corps in the creation of the Pick-Sloan reservoirs is critical towards improving these future relationships. Furthering that understanding is my objective here.

This dissertation will focus on the Sauerian anthropogeography of the indigenous tribes of the Upper Missouri Valley since 1804, when Lewis and Clark traveled up the Missouri in America's first organized attempt to explore the newly acquired Louisiana Territory. I will then examine the human geographic impacts of the Army Corps of Engineers reservoir construction program on the indigenous peoples and their subsequent efforts to protect their lives and their patrimony. The Corps' Missouri River reservoirs have caused massive physical and cultural landscape changes and devastating impacts to Native American culture and heritage, such as the loss of the in-situ archeological record, which has in some cases been totally destroyed by reservoir construction and operation (Ruple 1991).

The transformation of the Missouri River Valley in the Dakotas will be examined from an explicitly geographic perspective. Meinig (1986, xvi) created six operational principles to better explain how a *geographic* interpretation of history, as expressed in his masterpiece *The Shaping of America*, differs from standard historical treatments. Presented below is the present research problem organized by these principles. Meinig's original text and phrasing appears in quotes:

1. **Geographic Context:** "Every area is part of a larger mosaic, and its own character cannot be adequately assessed without reference to some encompassing system." In this dissertation the encompassing system is U.S. Indian Policy nationwide as well as U.S. national programs for flood control, navigation, and hydropower.
2. **Geographic Coverage:** "Although areas will vary greatly in their significance for particular topics, the geographer works with the full map at hand and must

not completely ignore some areas and give attention only to part of a whole. One simple but important corollary is that all resident populations are thereby encompassed and recognized.” To date, the Upper Missouri Valley’s indigenous Indian populations, which have been severely impacted by the Corps’ reservoirs, have not received an adequate historical treatment. The historical perspective in official government documents and even in academic studies has been Eurocentric in nature. In this discussion every effort will be made to let the Native American resident population share their history from their unique perspective.

3. **Geographic Scale:** “Even after the nation becomes a powerful force people continue to live in a locality, a state, and a region, and it is important not to impose a dominating national perspective on all topics. Indeed, patterns and problems arising from the coexistence of these several scales of group life are topics of continual significance in this complicated nation.” This dissertation studies the patterns and problems arising from the complex and evolving relationship the indigenous tribes have had with the U.S. Government and one Federal agency in particular, the U.S. Army Corps of Engineers.
4. **Geographic Structure:** “One of the elementary ways to make sense out of a complex whole is to study it as a set of and a system of parts. Although routine in the consideration of the geopolitical structure of a federation, such an approach is not so obvious with respect to less formal areas. Most geographic regions are abstractions and approximations rather than discrete parts, yet it is necessary to give attention to the diverse character and

relationships of regions and to the interests and networks that bind them into larger associations.” Here I will focus on both the unique character of the Dakotas as a region as well as the relationship of the reservations to the surrounding white culture, to other Indian groups, and to the United States Federal government, particularly the Bureau of Indian Affairs and the U.S. Army Corps of Engineers.

5. **Geographic Tensions:** “Large territorial structures are necessarily internally diverse and uneven in the patterns of power and influence. Center-periphery relationships are inherent in many modes of administration and service, several centers may compete in any particular activity, and regions may develop very divergent interests. Such conditions tend to generate pressures and resistances among various points and areas, which if not ameliorated may create stress and even threaten the integrity of the whole.” The social and political tension between the resident tribes, the Bureau of Indian Affairs, the Corps of Engineers Omaha District and Corps of Engineers Headquarters in Washington, D.C. will constitute a major part of this study.
6. **Geographic Change:** “All human geography is subject to change, and the emergence of the United States and its ongoing development constitute one of the greatest exhibits of the continuous reshaping of the geographic character of areas. Such alteration is the generalized result of changes in the many elements of an area; it is always uneven in incidence, may be gradual and unappreciated at the time, and can never be fully controlled or predicted. Continual assessment of such internal geographic dynamics is an essential

dimension of historical analysis.” The historical relationship between the Upper Missouri tribes, the Bureau of Indian Affairs, and the Army Corps of Engineers has changed through time and continues to change. Here I will focus on those massive and tragic changes that these federal agencies have brought to reservation populations in the Upper Missouri region.

The data collected to complete this research has come from a variety of sources. One major source of information has been archival and library research; particularly important here were the U.S. National Archives Regional Office (Plains Region) in Kansas City, Missouri, the Bureau of Indian Affairs Office in Aberdeen, South Dakota, the Research Library of the U.S. Army Engineer Research and Development Center in Vicksburg, Mississippi, and the District Library of the U.S. Army Engineer District, Philadelphia. The second greatest source of information has come from personal interviews and discussions from 1991 to the present with employees of the Omaha District, and Northwestern Division Offices, U.S. Army Corps of Engineers. In 1991 I participated in the U.S. Army Corps of Engineers Waterways Experiment Station (WES) workshop in Pierre, South Dakota, on the stabilization of archaeological sites impacted by the Pick-Sloan reservoirs. From 1994 to 1997 I also served as a principal investigator for the Corps’ Environmental Impact Research Program work unit on the mitigation of impacts to archaeological sites impacted by reservoir “draw-downs.” During this time I interacted intensively with the archaeologists and project managers of Omaha District. Another important source of information came from my participation in the Department of Defense’s Northern Plains American Indian Cultural Communications Course held in Cheyenne, Wyoming, in the summer of 2002. The last, and perhaps most important,

source of information has come from the native peoples themselves. While serving as a principal investigator for the Corps of Engineers Headquarters-sponsored Recreation Management Support Program in 1997, I conducted a total of six focus groups dealing with Native American recreational use of Corps projects in Oklahoma and South Dakota (Dunn and Feather 1998). The unpublished data from the three South Dakota focus groups used for this dissertation were collected in 1997 at a statewide pan-tribal meeting held at the South Dakota state capital in Pierre, at the Big Bend Dam Resident Office on Crow Creek reservation, and at the Swift Bird Community on the Cheyenne River Reservation (Dunn and Feather 1997 a-c and summarized in Appendix C). On a personal note, my decision to pursue this dissertation research topic came directly from this first-hand experience with the native people and my intense desire to understand for myself their two hundred year-long relationship with the U.S. Army and the U.S. Army Corps of Engineers.

In summary, this dissertation will focus on the cultural landscape of the Dakotas and the impacts on indigenous Native Americans in the Missouri River Valley from two introduced landscape components, reservations and reservoirs. Following a discussion of the pre-reservation landscape as it existed at the start of the 19th century I will focus on the creation of the reservation cultural landscape and the human geography of the Missouri River reservations in the Dakotas. I will then investigate the impact of the Corps of Engineers reservoirs on these reservations and on the Native Americans who live on them. I will conclude with a discussion of the 21st century Dakota landscape where drought and regional economic recession have caused major demographic changes (white

depopulation and Indian repopulation) and the emergence of a post-modern frontier landscape.

CHAPTER 2

CONTACT AND CONTAGION

The Upper Missouri Cultural Landscape - Pre-1800

A visitor to the Fort Berthold Reservation today will see a vast expanse of water where once there existed a deep, heavily timbered valley with a highly fertile floodplain. Members of the Three Affiliated Tribes (Mandan, Hidatsa, and Arikara) on the Fort Berthold Reservation justifiably refer to the creation of the huge reservoirs on the Missouri River by the Army Corps of Engineers as “The Flood” (Van DeVelder 2004). For the indigenous people of the Upper Missouri, impoundment of the Missouri River has been a catastrophe of epic proportions. The Missouri River Valley was once a complex ecosystem that supported varied plant communities and provided habitat for many animal species. On the dry windswept grasslands of the Dakotas, the river valley was once “an elongated oasis” (Meyer 1977, 1). With its rich alluvial soils and timber resources, the Missouri River Valley acted as a 2,000 mile extension of the central-lowland riparian habitat found on the Mississippi River. The extension of this narrow ecological niche allowed prehistoric Mississippian-style horticulture to penetrate far into the arid plains grasslands (Van DeVelder 2004, 22). Outside of the river valley, maximum economic exploitation of the bison-rich grasslands landscape could only be achieved when the “equestrian revolution” reached the Northern Plains in the eighteenth century (DeMallie 2001a; Holder 1993; Flores 1991; Roe 1955).

Conceptually, we can readily accept Meyer’s metaphor that the Missouri River Valley was an “elongated oasis.” We might also think of it as an elongated “island” on the Great Plains grasslands. Biogeographers have described one Plains river, the Western

Niobrara River in Nebraska, as a “linear resource island” (MacDonell and Wandsnider 2003). To understand this somewhat strange use of the term “island” will require some background on the recent integration of biogeographical theory into Plains archaeology.

Kornfeld and Osborn’s (2003) important volume *Islands on the Plains: Ecological, Social, and Ritual Use of Landscapes* brings together many interesting papers on the wider applicability of biogeographical theory to the study of Plains prehistoric settlement. For these researchers, an “island” on the Plains is “a variation in the landscape that provides a combination of resource productivity and/or predictability that positively differentiates that location from the rest of the region” (MacDonnell 1996).

On the vast grasslands of the Plains, there are many such “islands,” consisting of isolated, bounded habitats that appear quite distinctive from the surrounding grasslands. These habitat islands or patches are attractive to game animals and to human predators as well. They vary in size and can include uplands, sand hills, stream valleys, canyons and other landscape features (Osborn and Kornfeld, 2003, 1). Human populations on the Plains have always exploited these islands/patches. They comprise an essential part of the Plains’ physical and cultural landscape.

The theoretical foundations for conceptualizing islands in this way can be traced back to the early development of island biogeography theory (MacArthur and Wilson, 1967). Even in their early work, MacArthur and Wilson (1967, 3) proposed that the principles of island biogeography “apply in lesser or greater degree to all natural habitats. Consider, for example, the insular nature of streams, caves, galley forests and tide pools.” They argued that many landscape features, such as lakes, mountain ridges, and river valleys were appropriate features to study with the concepts of island biogeography they

were developing. Indeed Osborn and Kornfeld (2003) make a strong case that this biogeographical island approach better explains prehistoric human cultural ecology and settlement on the Plains than any other theoretical framework.

The Dakotas contain a range of distinct habitat islands in what 19th century American immigrants perceived only as a flat sea of grass. These distinctive landscape features were an important part of everyday life for the aboriginal Plains peoples. Their geographic knowledge of where these islands were located, and what resources they could provide, were essential to their very survival. It seems self-evident that the most important habitat “islands” would be the major river valleys that dissect the Plains. They contain riparian and associated vegetation communities in broad valleys that may be many miles across. In some cases, the importance of these habitat islands/patches went far beyond the realm of subsistence and entered the realm of the sacred. As we shall see, the spiritual value of the Missouri River Valley as “Grandmother River” for the Mandan-Hidatsa-Arikara, and for the Sioux, exemplifies this conversion of the profane into the sacred.

The distinction between habitat islands and patches is largely scale-dependent, in that a patch for one organism may be an island for another. Osborn and Kornfeld (2003, 6) note that “isolation, low species turnover, and distinct abrupt boundaries may distinguish islands from patches.” These theorists propose that many landscape “islands” are just isolated enough that “many species forming biotic communities cannot travel from one to another.” The grasslands surrounding these islands form “filter-bridges” impeding the physical transfer of organisms. These islands also tend to be stable for long periods of time, last longer than patches, and have more marked and abrupt boundaries.

This boundary effect of a habitat island is particularly striking from the air. On the first trip I made to Rapid City, South Dakota, in the mid-1980s I was struck by the distinct island appearance of the Black Hills in the sea of grass.

Traditional use of habitat islands and the amount of time it took to travel between them were both transformed by the equestrian revolution on the Plains. Many tribes that were formerly geographically limited gained much greater access to important resources. One proto-historic example of this is the sixteenth century Cheyenne. During their long odyssey from the Eastern Woodlands of Minnesota to the Northern Plains of South Dakota, several bands of the Cheyenne lived for a time as earthlodge dwellers on the Missouri River (NPS 2005; Wood 1971). At that time Cheyenne village farmers were constrained by fuel-wood availability. Their home ranges were small and their subsistence was heavily dependent on riverine floodplain horticulture. Moore (1987, 145) has proposed that Cheyenne villages were limited in size to under a thousand people. With the coming of the horse culture from the Southwest they were able to move out of the Middle Missouri region onto the High Plains to hunt bison. Their home range increased dramatically, as did their access to many habitat islands. To accommodate a highly mobile lifestyle, residential group size decreased along with the length of their residence at their campsites. Their new ecological constraints became the availability of pasture and water for their horse herds (Osborn and Kornfeld 2003, 10). The Lakota (Teton Sioux) went through a similar transformation when they left the woodlands of Minnesota and moved onto the Plains in the mid-18th century (Map 2 Appendix A).

The Earthlodge Dwellers

The Mandan, Hidatsa, and Arikara, the so-called “Village Indians” of the Upper Missouri region, have their origins in the cultural florescence archaeologists have designated as the Plains Village Phase (circa 900 CE to 1850 CE) (Meyer 1977; Wedel 1978). While the Omaha and Ponca were also earthlodge dwellers on the Missouri in the eighteenth century, their settlements fall outside the central area affected by the Corps of Engineers in the twentieth century and so will not be considered here. The Dakota or Sioux, the other major tribe in the Dakota portion of the Missouri River valley area, are relative newcomers who moved from the Great Lakes into the Middle and Upper Missouri region in the late 18th and early 19th centuries but never adopted the village farmer lifestyle (DeMallie 2001a and 2001b; Bonvillain 1994, 17-19).

Wedel (1978, 206) has proposed that from the 10th century CE and possibly as early as the 8th or 9th century, the Woodland complexes of the eastern Plains began developing a more sedentary way of life which included constructing villages with very substantial earthlodge structures. These new settlements were scattered along the permanent streams throughout much of the tall-grass and mid-grass prairies. The people developed a dual subsistence strategy which included maize horticulture along the river flood plain and the hunting and gathering of game and wild plants in the wooded bottomlands and the nearby grassy uplands. The Plains Village lifestyle dominated the eastern Plains for nearly a millennium. The Plains Village complexes shared a number of distinctive cultural traits: construction of multi-family earthlodges more substantially built than the habitations of Woodland peoples; permanent settlements sometimes fortified with dry moats and stockades; pottery; artifacts constructed from stone, horn,

shell and other materials; and the bison scapula hoe which was a signature tool that lingered well into the historic period (Wedel 1978, 207-208).

Archaeologists now infer that drought conditions may have caused people to abandon the central Plains in the 15th century and move into the Middle Missouri region (Wedel 1978, 209). The newcomers introduced the four-post earthlodge and many other distinctive cultural traits. This merging of new ideas and people with indigenous river valley cultures has been termed the “Coalescent Tradition.” These new traditions gradually moved northward up the Missouri River Valley, developing through a series of cultural stages between 1450 and 1680 CE. The later stages—the so-called “Post-Contact Coalescent,” which may have involved the historic Arikara, represents the climax of Village Indian culture on the Middle Missouri. Further upstream, the historic Mandan and Hidatsa may have emerged from a distinct cultural formation called the “Terminal Middle Missouri” that co-existed with the later stages of the Coalescent Tradition (Wedel 1978, 210; Wood 2001, 194).

When Meriwether Lewis and William Clark led the Corps of Discovery up the Missouri River in the fall of 1804, the “Village Indians of the Upper Missouri” had already been decimated by a major smallpox pandemic in 1781 as well as by intermittent but fierce warfare with the Sioux who had come to the Missouri River region in the mid-eighteenth century. Due to severe depopulation, the numerous Mandan and Hidatsa villages on the Knife and Heart Rivers had been greatly reduced in number. Lewis and Clark saw many abandoned villages before they reached the main Mandan village (Ronda 1984, 70).

In the mid-sixteenth century the protohistoric Mandan and Hidatsa were already living in the Missouri River Valley, having emerged from the fusion of the Terminal Middle Missouri Variant peoples with the Post-Contact Coalescent peoples (Wood 2001 194; Krause 2001, 206). The Siouan-speaking Mandan are believed to have moved from the area of southern Minnesota and northern Iowa to the plains river valleys in South Dakota about 1,000 BP; they then moved slowly north along the Missouri River until they reached North Dakota (National Park Service 2006). They gradually moved upriver until they reached the mouth of the Heart River in present day North Dakota where French explorer LaVerendrye visited them in 1738 (Meyer 1977).

The Hidatsa appear to have moved from central Minnesota to the area of Devils Lake in northeastern North Dakota. About 400 BP they started moving to the Missouri River valley and eventually settled near the Mandan. The Hidatsa are another Siouan speaking people, known to the Mandan as the Minitaree, meaning “they crossed the water” (Leitch 1979, 176). The Hidatsa are very close linguistically to the Crow, and according to their own tradition, the two tribes separated in the late seventeenth century, with the Crow moving further on to the west. The Hidatsa took up the Plains Village life, building earthlodge villages near the junction of the Knife and Missouri Rivers also in present day North Dakota. The Hidatsa, like the Mandan, relied on both hunting and agriculture with corn and buffalo their preferred foods. Like the nomadic Plains tribes, the Hidatsa and Mandan used the buffalo hides for blankets but they also used them to build distinctive circular “bull-boats” on a globular framework of branches. Neither the Hidatsa nor Mandan fully participated in the nomadic existence of the bison-hunting tribes who moved onto the Plains during the equestrian revolution. In the late eighteenth

century, the Hidatsa, like the Mandan, were severely impacted by smallpox epidemics, the most destructive occurring in 1781. They also took many casualties from ongoing intermittent warfare with the invading Teton Sioux (Lakota), who sought to control all movement and trade on the Missouri River. When Lewis and Clark visited the Hidatsa villages in the fall of 1804, they were reduced to just three villages on the Knife River near the Mandan villages (Ronda 1984, 68).

The Arikara were a Caddoan speaking agricultural tribe, who came upriver from the Southern Plains in Kansas. The Arikara lived for a time along the Loup River in Nebraska. In the seventeenth century, they separated from the Skidi Pawnee and either migrated or were driven northward, following the Missouri River through what is now South Dakota (Parks 2001; Leitch 1979, 49). In 1804, they were located along the Missouri, between the Grand and Cannonball Rivers, in three large villages. From there, they gradually moved north eventually joining the Mandan and Hidatsa. They are regarded as the northernmost extension of the Caddoan linguistic family. Their tribal name means “horn” and refers to their distinctive hairstyle where pieces of bone were used to create horn-like protuberances. Like the Mandan and Hidatsa, the Arikara followed a Plains Village lifestyle. They built their earthlodge villages on high bluffs overlooking the Missouri River. In historic times, they fortified these villages with timber stockades reinforced with earth and surrounded by ditches (Parks 2001; Leitch 1979, 50). Their semi-subterranean lodges were large enough to house two or three families. They also used buffalo-skin teepees for overland travel and summer buffalo hunts. The Arikara were expert farmers and traded their surplus corn to the Sioux and other Plains buffalo-hunting tribes for buffalo robes, skins and meat. In 1770 French fur traders found the

Arikara living south of the mouth of the Cheyenne River in present day South Dakota (Map 4 Appendix A). Like the Mandan and Hidatsa, they were constantly fighting with the invading Teton Sioux (Lakota). They also suffered massive population loss in the 1780s from smallpox epidemics. By 1803, just prior to the Lewis and Clark expedition, the Arikara occupied only three villages between the Cannonball and Grand Rivers in what is now South Dakota (Schneider 2001; Ronda 1984, 53).

One characteristic the Arikara shared with the Mandan and Hidatsa, was that these village farmers built their settlements near the mouths of major western tributaries of the Missouri River. There were several reasons for this. Unlike the sediment-choked Missouri, the tributary rivers provided higher quality drinking water. The river valleys, filled with cottonwood and other tree species, provided a plentiful source of firewood and winter fodder for horses. Perhaps most important of all, “the east-west position of the valleys acted as natural highways guiding western tribes such as the Sioux, Cheyenne, and Kiowas, to the agricultural towns” (Ronda 1984, 44).

The Village Indians of the Upper Missouri were located “at the nexus of three converging trade routes” (Meyer 1977, 16). In the pre-horse era of the early eighteenth century, and even after the horse culture had spread northward from the Southwest, the Mandan acted as middlemen between tribes with different products to exchange (Meyer 1977, 85). From Proto-historic times, they had traded their horticultural products for bison and antelope hides, dried meat and pemmican and prairie turnip flour. They also traded in exotic goods such as obsidian (Yellowstone region), native copper (Great Lakes) and conch shells (Gulf Coast). With the coming of the Spanish horse to the Southern Plains tribes closest to Mexico, and the coming of firearms to the Northern

Woodland tribes closest to Canada, the village Indians of the Upper Missouri, especially the Mandan, became the conduit for the continental diffusion of these important trade items. From the west, the Hidatsa's kinsmen, the Crow, brought trade goods they obtained at the Shoshone rendezvous from southwestern Wyoming. The Shoshone themselves had earlier traded with western tribes like the Nez Perce, Flatheads, and Utes. From the Southwest, the Mandan received goods of Pueblo and Spanish origin from Southern Plains tribes such as Kiowa, Commanche, the Southern Cheyenne, and Arapaho. From the Northeast, the Mandan received firearms from the Cree and Assiniboine who had traded with English and French settlers along the Atlantic Coast and the St. Lawrence River.

The early eighteenth century eyewitness accounts by LaVerendrye (1738) and other traders confirm that trading was a major part of village Indian economic life on the Upper Missouri. Meyer (1977, 16) proposes that "such an exchange between semi-sedentary horticultural peoples and nomadic hunters had the effect of stimulating each group in its specialty." The downside of this extensive trade network was that the Indian competition to control the flow of European-made goods rapidly intensified. This led to increased warfare, which threatened and finally shattered the prosperity and security of the Mandan, Hidatsa, and Arikara.

The importance of trade can also be seen in their settlement pattern. According to Meyer, the Mandan located their villages in the Heart River valley because it served as the natural route of travel for the bison hunting Plains tribes to the West. The Mandan deliberately located there in order to intercept that important trade source. They relocated closer to the Hidatsa only after the devastating smallpox pandemic of 1781 when their

numbers were reduced from 12,000 to about 1,500 (National Park Service 2005). The post- pandemic spatial distribution of the earthlodge villages in the late eighteenth and early nineteenth centuries shows the Hidatsa and Mandan living in close proximity to each other near the mouths of the Knife and Heart Rivers (Map 5 Appendix A).

Meyer (1977, 16) dismisses the idea that the earlier arrival of the Hidatsa coming down the Missouri River from the north caused the withdrawal of the Mandans from their northernmost villages. Traditional oral sources from both tribes corroborate the friendly relations between the Mandan and Hidatsa peoples. However, there is a clear gap between the northernmost concentration of Arikara villages near the Cannonball and Grand Rivers and the southernmost Mandan villages on the Heart River.

Meyer (1997, 16) proposes that as the Mandan increased in prosperity and decreased in population size and territory, they developed a more elaborate religious ceremonial life. While this hypothesis may be hard to prove, it is clear that Mandan cultural and religious beliefs did influence the nomadic bison hunters who came to trade with them. The elaborate *Okipa* ceremony vividly described by Lewis and Clark, and painted by Karl Bodmer and George Catlin in the 1830s, exemplifies this elaborate religious ceremonial life and probably influenced the final form of the Sun Dance among the nomadic Northern Plains Tribes. The *Okipa* ceremony among the Mandan was held inside a special large earthlodge to ensure the prosperity of the people and the success of the buffalo hunt. The four-day ceremony included fasting, dancing, recounting tribal history, prayers, and self torture (e.g. hanging from skewers), all elements of the Sun Dance as it has survived to this day (Erdoes 2001).

The Sioux Migration and the Equestrian Revolution

In the late seventeenth century, the Sioux or Dakota were the largest tribe of the Siouan linguistic family. In their historic homeland of Minnesota and Wisconsin, their numbers have been estimated at 25,000 (Leitch 1979, 164). In the mid-eighteenth century, as Euro-American populations grew, they moved westward onto the Plains. The Lakota or Teton Sioux spread the fastest and the furthest, quickly reaching as far west as eastern Wyoming and Montana. They transformed their Woodlands-adapted lifestyle into the lifestyle of mounted nomadic buffalo hunters with no intermediate village farmer phase. The Dakota were known to their adversaries as the *Sioux*. “*Sioux*” is a pejorative French term derived from the Ojibwe *Nadouessioux* implying snake or enemy (DeMallie 2001a, 749). For discussion purposes here I will use the term Sioux more often since it is so well entrenched in the historical record. The Sioux called themselves *Oceti Sakowin*, meaning Seven Council Fires. This term refers to their seven political divisions (tribes): Mdewakanton, Sisseton, Wahpeton, Wahpekute, Yankton, Yanktonai, and Teton. The Sioux can also be divided into three different dialect groups. The names of these three dialect groups, Dakota, Nakota, and Lakota are all cognates meaning “allies.” The Dakota dialect speakers are the Santee or Eastern group and are composed of the first four political divisions (Mdewakanton, Sisseton, Wahpeton, and Wahpekute). The Nakota dialect speakers are the Yankton and Yanktonai. The Lakota speakers are the Teton or Western group. Numerically, the Lakota or Teton Sioux comprised more than half of the entire Sioux nation, and had seven subdivisions (bands): Oglala, Brule, Hunkpapa, Miniconjou, Sans Arc, Sihasapa (or Blackfoot) and Two Kettle (or Oohenonpa) (Bonvillain 1994).

The Sioux people probably migrated from the Ohio valley to the western Great Lakes region in the seventeenth century, where they encountered an aggressive response from the native Ojibwe (Leitch 1979, 146). Pressure from the Ojibwe, early recipients of French firearms, plus the lure of the great buffalo herds on the plains, were instrumental in the Sioux's westward migration. The Lakota were the first to leave the Minnesota region about 1700 and they also spread the furthest west. The Yankton and Yanktonai, who occupied a middle position between the western Lakota and the eastern Santee groups, soon followed them. The Santee largely remained in the Minnesota, Wisconsin, and eastern South Dakota region. By the mid-nineteenth century, the Sioux nation, relative newcomers to the region, dominated western Dakota, northwestern Nebraska, northeastern Wyoming, and southeastern Montana (DeMallie 2001a).

In Minnesota, the Sioux lived in pole-frame lodges covered with bark or woven mats. When they moved onto the Plains, they did not build permanent earthlodges but adopted the easily transported buffalo skin tipi for both summer and winter use. In the woodlands of the Great Lakes their subsistence depended on gathering rice and maple sugar, fishing, and hunting woodland game. After they migrated onto the arid grasslands of the Plains, the Sioux's material culture centered on the buffalo, which provided food, shelter, clothing, tools, containers and almost all the essentials of life. The acquisition of horses in the early eighteenth century made the Lakota and other Sioux bands true equestrian nomads, ranging far and wide following the migrating bison herds. They depended entirely on hunting and gathering for their food supply (DeMallie 2001a; Holder 1993).

The Sioux's westward movement onto the Plains was a gradual process. Even when they still resided in Minnesota, bison hunting on the prairie was pursued during the summer by the Lakota, Yanktons and Yanktonais (Calloway 2003, 308). When the weather turned cold, they returned to the thick forest to hunt woodland game and trap fur-bearing animals in anticipation of trading pelts to the French. At the turn of the eighteenth century, the Sioux did not yet have horses. When horses reached the Sioux is uncertain, but there are indications that they began stealing them from other tribes during the first decade of the eighteenth century. In *One Vast Winter Count*, Calloway (2003, 309) reports that Lakota "winter counts" (yearly pictorial records on deerskin) refer to horses stolen from other tribes during this period. There is an old Cheyenne oral tradition that the Cheyenne took pity on the Sioux, who followed them onto the Plains, when they saw that they had no horses and depended on dog travois to carry their possessions. We do know that the Sioux traded with the Arikara for horses who got them from a number of sources, including the Cheyenne in the mid- to late eighteenth century. During the time they were acquiring horses, the Teton Sioux or Lakota were also acquiring guns. Their sources were the eastern Dakota who traded with the British factors on the St. Peter's River.

As the first wave of Lakota migration moved across eastern South Dakota, they fought with and displaced native people such as the Sows, Otos, and Omahas. By the mid-eighteenth century, they encountered the fortified earthlodge villages of the Mandans, Hidatsas, and Arikaras. The Lakota continued to move westward, moving around the Missouri River earthlodge dwellers. The Lakota hunted bison, acquired more horses by trade and theft, and grew in population and power. According to the winter

count of one Oglala Lakota family (American Horse), Standing Bear led the first party of Oglalas to the Black Hills in 1775-1776. However, most of the Lakota bands were still east of the Missouri River in the 1770s. They were thriving in the tall grass buffalo country of the eastern Dakotas and beginning to demonstrate their distinctive proud warrior ethos. They began to attack the Village Indians on a regular basis, subjecting the Arikara in particular to numerous violent raids.

Archeological investigations at the Arikara Larson site have revealed scalped and mutilated bodies ranging from children to the elderly, along with evidence of fire that destroyed the village's wooden palisade. The Arikara's own oral tradition indicates that by the mid-eighteenth century they had a thousand earthlodges, each able to house around twenty people. By the mid 1770s, diseases such as smallpox and continued raids by the Sioux had reduced them to about 300 lodges and greatly diminished the number of warriors. By the turn of the nineteenth century, the Arikara were reduced to just 150 lodges distributed in three villages and "were practically at the mercy of the Sioux" (Calloway 2003, 310). The Mandan and Hidatsa further upstream were experiencing similar desperate conditions. If their population numbers had not declined so quickly they would have had a fighting chance against the invading Sioux, but the devastating smallpox pandemic of 1779-1783 removed their last hope.

This particular pandemic began in Mexico City in 1779 and killed an estimated 18,000 people in two months. While it spread in all directions at once, it spread fastest along well-traveled trade routes. Calloway (2003, 419) notes "it raced across the plains along roughly the same lines by which horses spread across the west." When smallpox reached the more sedentary village farmers on the Missouri River, they died by the

thousands. The Arikara, estimated at 24,000 before 1780, lost nearly 80% of their population. The loss of life and the abandonment of entire villages is well-documented. Lewis and Clark found only 2,000 Arikara left when they arrived in the fall of 1804 (Calloway 2003, 419). The Mandan and Hidatsa suffered similar losses. The Mandan population has been estimated to have been about 9,000 people by the mid-eighteenth century. When Lewis and Clark visited them in 1804 they had been reduced to just 1,200. The Hidatsa were reduced to about 2,700 after the pandemic. Due to their severe losses, the Mandan and Hidatsa combined their villages in order to better defend themselves against the Sioux.

Tribal “winter counts” collected from the northern Plains indicate that “epidemics were raging in the northern plains even before significant or sustained contact with non-natives took place” (Sundstrom 1997, 324). Based on early winter counts as many as five epidemics may have occurred before white traders established permanent trading posts in the Missouri River Valley. This agrees with the depopulated “ghost villages” observed by Lewis and Clark and the oral reports of epidemics made to them by the Mandan and Arikara (Lehmer 1977). The winter counts examined by Sundstrom (1997) provide an almost complete record of epidemic disease on the northern Plains from 1682 to 1920. In addition to numbers killed, the winter counts also record the varied reactions of the tribes to disease outbreaks. These included population dispersals, attempts to use native medicines, avoidance of Euro-Americans and other outsiders, and changes in religious practice. Using the winter counts from all available northern Plains tribes Sundstrom (1997, 308) identified about thirty-six major epidemics between 1714 and 1919.

From the Sioux' winter counts, we know that they were impacted by the major pandemic of 1781 but they appear to have lost a smaller percentage of their total population (Calloway 2003, 421). However, there is little hard information on the actual numbers killed. One estimate of 10,000 casualties appears in 1778 (DeMallie 2001a, 748). In 1804-1805, Lewis and Clark estimated a total of 8,410 Sioux living in the vicinity of the Missouri River. One estimate made by Pike in 1805 estimated the total Sioux population at 21,675, of which 11,600 were Lakota. Perhaps their more mobile lifestyle spared them the worst effects of the pandemic (Trimble 1989). Perhaps some genetic immunity, gained from smaller epidemics in the east, spared the Sioux from total annihilation. Whatever the reason, the depopulation and displacement of the Missouri River's Village Indians opened a path for the Sioux to freely move across the Missouri River. With the combination of horses, guns, and a fierce warrior ethos, the Sioux became the dominant tribe of the Northern and Central Plains in the early 19th century. A collision with the U.S. Army in the mid-nineteenth century, when the Sioux had reached the zenith of their political and military power, was inevitable. But first they had to contend with the first American expeditionary force, under the joint command of Meriwether Lewis and William Clark.

White Contacts and First Conflicts (1804-1850)

Lewis and Clark and the small expeditionary force called "the Corps of Discovery" came into the region now called South Dakota in September of 1804. In his journal entry for September 17, 1804, Lewis described a rich and wonderful landscape teeming with game (note his original spelling): "This senery already rich pleasing and beatiful was still further hightened by immense herds of Buffaloe, deer Elk and

Antelopes which we saw in every direction feeding on the hills and plains” (DeVoto 1981, 28). To the young Americans raised in thick forests, here was an open grassland landscape filled with wonders, truly a new world of opportunity for future generations. The reality was that this bountiful land was an ancient one that had been fought over by Native Americans for centuries. The current residents, the Teton Sioux and the Village Farmers further upriver, would have very different experiences with the young American explorers.

The initial contact with the Sioux came on September 23, 1804, when three Teton Sioux (Lakota) teenagers swam across the Missouri River to reach the American campsite (Ambrose 1996, 168). Using sign language with the Americans’ French interpreter Drouillard, the boys communicated that there was a band of Sioux camped in about eighty buffalo hide lodges at the mouth of the next river and another band of sixty lodges a short distance further upstream (Maps 3 & 4 Appendix A). Lewis and Clark gave the boys some tobacco and asked for a meeting with their chiefs the next day. Things began badly the next morning when hunter John Colter’s horse was stolen by some Sioux warriors. As we have seen, the acquisition of horses had been a priority among the Sioux for over fifty years. The taking of an unattended horse was as natural to them as picking up a lost coin from the pavement is for us today. However, Lewis and Clark reacted sternly to this “outrage.” Through Drouillard, they told the five young Sioux warriors on the riverbank that while they came as friends, they were not afraid of Indians and that they would not speak to any Tetons until the horse was returned (Ambrose 1996, 169). The following day at the mouth of Bad River, near present-day Pierre, South Dakota, a confrontation occurred that foreshadowed two centuries of bad

blood between the Sioux and white Americans. After a tense night on their keelboat, the Americans met a contingent of Sioux who had brought a large amount of buffalo meat as a gift. Communication proved very difficult because Drouillard spoke no Lakota and could not effectively communicate through sign language the complex political message Lewis wished to convey. Lewis then tried to impress the Sioux with a demonstration of marching and American technology. He then handed out medals and presents to the three chiefs. The Sioux were not at all impressed and wanted more gifts. After partaking of the expedition's whiskey, trouble started. The Americans had to force the chiefs off the keelboat and back into their canoe. Three Sioux warriors seized the bowline of the keelboat. According to Clark, one of the Sioux chiefs proclaimed that he had not received "presents sufficient (sic) from us." He demanded a canoe-load of presents before he would allow the expedition to go on. William Clark reacted aggressively, drawing his sword and ordering the American men to take up their weapons. They loaded the keelboat's swivel gun, took defensive positions and prepared to fight (Ambrose 1996, 170). Hothead William Clark threatened the Sioux that "he had more medicine on board his boat than would kill twenty such nations in one day" (Ambrose 1996, 171). Clark ranted on that the expedition "must and would go on" and that his men were warriors not squaws.

Putting Clark's action in historic context, President Thomas Jefferson had given Lewis and Clark explicit instructions to pay "close attention to the Sioux" (Ronda 1984, 30). Jefferson had written that "on that nation we wish more particularly to make a friendly impression, because of their immense power, and because we learn they are very desirous of being on the most friendly terms with us" (Ronda 1984, 30). Now, at the first meeting with the dominant tribe on the Missouri, relations had already turned ugly.

Several historians have speculated about what might have happened if Clark had fired that swivel gun and killed dozens of Sioux warriors while hundreds more lined the riverbank. Perhaps Ambrose (1996, 170) sums up the consequences best:

In short, had that cannon fired, there might have been no Lewis and Clark Expedition. The exploration of the Missouri River country and Oregon would have had to be done by others at a later time. Meanwhile, the Sioux would have been implacable enemies of the Americans, and in possession of the biggest arsenal on the Great Plains. For some time to come they would have had the numbers and the weapons to turn back any expedition the United States could send up the Missouri.

Fortunately for all that day, the Sioux Chief Black Buffalo defused the situation by taking the towline away from the three young warriors and motioning for the warrior hugging the keelboat's mast to let go. I personally find it most interesting that the Sioux exercised so much restraint during this first encounter. The Sioux chiefs decided not to push the situation into a violent confrontation even though they far outnumbered the Americans and could have easily destroyed the small American force after the first firing of the swivel gun. Clark eventually calmed down sufficiently to walk over to the chiefs and offer his hand in friendship. The chiefs, still smarting from Clark's tough talk and body language, refused to shake his hand. Still, Black Buffalo and two of his warriors asked for and were given permission to sleep aboard the keelboat (Ambrose 1996, 171). A disaster had been averted but no lasting friendship had been established, despite the exhortations of President Jefferson in the expedition's official orders.

In all of the accounts of this incident, both in the official journals of Lewis and Clark and in later retellings of it such as Ambrose (1996), there is no real attempt to convey the Sioux's own perspective of the encounter. As the dominant tribe of the region,

they had every right to expect, if not demand, tribute from these invaders of their territory.

On September 26, 1804, the keelboat now carrying Black Buffalo and his warriors sailed upriver to the Brule village estimated to contain eight or nine hundred people. The Brule Sioux prepared a feast and dance to honor the Americans. They were feasted with great slabs of roasted buffalo meat amid American and Spanish flags displayed in a circle. However, there is no evidence in any of the expedition members' accounts to indicate that the Brule recognized the sovereignty of either Spain or America. At first contact, and well into the reservation period, the Sioux recognized no "Great White Father." They were a sovereign nation unto themselves and preferred to stay that way. What the Sioux wanted from the Americans at this time was not political and military domination but the opportunity for trade. The Sioux wanted to control all the trade on the Missouri River and they resented American attempts to reach and to trade with their rivals, the upriver village farmers, the Arikara, Mandan, and Hidatsa (Ronda 1984, 36).

The most meaningful gesture of tolerance made by the Brule Sioux came at the end of the evening of September 24, 1804. While returning to the keelboat with Lewis and Clark, the Brule chiefs offered them two young women as bed partners. From the Indians' perspective, this gesture served two purposes. First, it was a sincerely hospitable gesture and, secondly, it was good diplomacy (Ronda 1984, 36). There is evidence from Clark's own journal that he also understood the meaning of the offer just this way. Nevertheless, the two officers refused the offer that night and again on their second night spent with the Brule. The second rejection "must have bewildered the Brules and surely did not foster the friendship and trust Jefferson was seeking" (Ronda 1984, 37). Clearly,

the Sioux tried to reach out in friendship to the Americans, as equals. They could not and would not accept a subservient role. Subsequent events during the expedition's three-day encounter with the Sioux bear this out. Lewis and Clark continued to insist that the Sioux were now part of the Louisiana Territory acquired by the Americans and that President Jefferson was their "Great White Father." As part of this new deal, the officers argued that the Sioux should give safe passage up the Missouri for the later fur traders and merchants that would come upriver from St. Louis. The Sioux rejected these demands because they were determined to preserve their political sovereignty and to look out for their own economic self-interest. Ronda (1984, 38) notes that in the eyes of the Brule chiefs, the presence of the American expedition "posed something of a dilemma and an embarrassment." The Americans were stingy with their gifts which negatively impacted the chiefs' prestige. And the determination of the Americans to proceed upriver to trade with their enemies was frustrating and potentially dangerous to the Sioux. The Sioux were used to getting their way with poorly armed traders who came upriver, usually winning through intimidation. This favored tactic did not work with the Americans. If the Sioux attacked the Americans head-on, they would lose warriors and, even more importantly, lose face.

On the last morning of their stay with the Sioux, the Brule warriors pressed for more gifts and tried to prevent the keelboat from departing. This time Lewis reacted with anger, ordering all Indians off the boat, while Clark tried negotiating with Black Buffalo, even as he prepared to fire the port swivel gun. Just as in the first encounter, violence seemed imminent. Finally, Black Buffalo found a way to avoid a battle while still saving face. He demanded tobacco for the warriors holding fast to the boat's cable. After

hesitating, the two American captains controlled their anger and tossed some tobacco to the Indians. At that moment, Black Buffalo pulled the cable out of their hands. With the boat free, the Americans sailed away to visit the upstream Arikara. Clark later put his thoughts at the time on paper during the winter spent with the Mandan. He described the Brule Sioux as “the vilest miscreants of the savage race and must ever remain the pirates of the Missouri” (Ronda 1984, 40). This characterization is both ethnocentric and unfair. It epitomizes nineteenth century American frustration in the face of strong Indian opposition to American imperialist ambitions. The relations between the Sioux and the Americans were now set on a collision course in which ultimately there could only be a military confrontation. Rejecting DeVoto’s ethnocentric interpretation of the Brule incident, Ronda (1984, 4) correctly argues that it was not the Sioux who were “defeated” (humiliated) by Lewis and Clark’s firmness, “rather it was American diplomacy that had been handed a stinging rebuff.”

From a geographic perspective, the Sioux at this time already controlled a huge territory in which the Missouri River served as the main source of trade goods and seasonal natural resources. At the time of their famous confrontation with Lewis and Clark, the Brule’s territory was roughly bounded by the North Platte River on the south and just east of the Missouri River (Map 4 Appendix A). The northern boundary was between the Bad and Cheyenne Rivers in northern South Dakota (Ronda 1984, 264). The plant and animal resources available in the Missouri river valley were also important to them. But unlike the upstream village farmers, the Lakota bands of the Dakotas were not sedentary farmers. Their mental geography conceptualized vast areas of the Plains’ grassland landscape where immense herds of bison moved freely along ancient trails. The

mobility provided by the horse made this highly mobile lifestyle possible. What is often overlooked, however, is that there were clear seasonal rounds even for these nomadic bison hunters.

During the spring and summer (April to August), Lakota bands hunted for bison on the grasslands west of the Missouri River. Their strong presence on the plains intimidated the Arikara and the other village farmers and kept them from hunting buffalo. This gave the Lakota the opportunity to bring in their buffalo meat and hides to the Arikara villages on the Missouri River to trade for their agricultural goods, tobacco, and horses (DeMallie 2001a, 731). At harvest time in the fall, the Lakota made temporary truces with the Arikara for the purpose of allowing this trade to happen. During the winter months, the Lakota returned to the wooded Missouri River Valley where there was plentiful fuel for fires and small bison herds seeking protection from winter storms. When the spring thaw came and the snow melted, scattered bison herds left the shelter of the river valley. As the smaller herds began to merge into larger and larger herds, the Lakota followed them out onto the plains and another seasonal round began. After several generations, the Missouri River valley came to represent to the Lakota people security and an abundance of wild food and trade goods. While used differently than the Mandan, Hidatsa, and Arikara, the river and its fertile valley became an important, indeed, critical part of their social and economic life.

Even after the famous confrontation with Lewis and Clark, the Lakota continued to move westward in the early part of the nineteenth century and eventually succeeded in pushing out the Kiowa and Crow from the Black Hills area. The Yankton and Yanktonai took the place of the Lakota in utilizing the Missouri River Valley's resources, though

they mostly continued to live east of the river during the spring and summer bison hunts (DeMallie 2001a, 731). By the mid-nineteenth century, when the equestrian revolution peaked, the Sioux controlled both the resources of the Missouri River bottomlands and the high plains. They gained an unprecedented military superiority over other Plains tribes, and reached their own cultural florescence, just before America's westward expansion forced them into a final confrontation with the U.S. Army.

American Contacts with the Arikara, Mandan, and Hidatsa

Lewis and Clark encountered the Arikara in early October 1804, just days after their tense encounter with the Brule Lakota. The Arikara, like all the Missouri River tribes, had been devastated by the smallpox pandemic of 1781. One French trader, Jean-Baptiste Trudeau, who visited the Arikara in 1794-95, reported that "in ancient times the Ricara nation was very large; it counted thirty-two populous villages, now depopulated and almost entirely destroyed by the smallpox which broke out among them at three different times" (Calloway 2003, 421). When Lewis and Clark found the Arikara in 1804, they estimated their numbers at around 2,000, concentrated near the mouth of the Grand River in present day North Dakota (Map 5 Appendix A).

Before they met the Arikara people, the American expedition saw their abandoned villages. They saw the abandoned island village of Lahoocatt, several more abandoned villages around the mouth of the Moreau River, and another vacant Arikara village about a mile upstream with crops still growing in the fields and domestic items like baskets and bullboats scattered around the village site. The Americans saw for the first time the earthlodges, village fortifications and agricultural fields that characterize the Plains Village lifestyle. The Arikara villages Lewis and Clark saw were concentrated near the

Cheyenne, Moreau, and Grand Rivers. They were larger than normal size because they were filled with smallpox refugees. A pre-pandemic Arikara village held upwards of thirty-five lodges. The ones encountered by Lewis and Clark contained over sixty closely-spaced lodges with no clear arrangement that made sense to the Americans. The lack of a central plaza or clear walking lanes may reflect the stress-response quality of these post-pandemic villages (Ronda 1984, 45).

Ronda (1984, 48) describes the relationship between the Arikara and the Lakota as an “uneasy symbiosis.” The complex inter-tribal political situation Lewis and Clark encountered in October 1804 illustrates this very well. The year before the Corps of Discovery came upriver to their territory, the Arikara’s corn crop was destroyed by flooding from the unpredictable Missouri River. Many Arikara left their Moreau and Grand River villages for an unusual summer bison hunt on the high plains (Ronda 1984, 47). It was unusual because the Arikara usually hunted in October or November to lay up a meat supply for the winter. In October 1803, however, the Lakota had blocked the Arikara’s access to the bison herds on the western plains. They did so in a deliberate effort to control the flow of hides and meat to the Arikara. This made the Arikara dependent on the Lakota for meat and hides just as the Lakota depended on them for plant foods and more exotic trade goods. . The Lakota could not simply massacre the Arikara and carry off their corn and other food items. They needed a long-term symbiotic relationship with the village farmers for their own survival. The Arikara by this time needed the meat and hides provided by the Lakota just as much. What is more, the growing Lakota population, and their prowess as warriors, made all the village farmers unwilling to break out of their somewhat confining role as provisioners for the Lakota.

. Based on their journal entries, Lewis and Clark appear to have misunderstood the symbiotic relationship between the Arikara and Lakota (Ronda 1984, 49). To the American officers, the Arikara seemed like hapless “victims of Sioux aggression.” The captains argued in their report to Jefferson that in the future, American traders could only succeed if the Arikara-Sioux “alliance” was broken. But the Arikara did not want to be freed of their Sioux “yoke.” What the American officers did not understand was that both in war and in peace, there was a great deal of cooperation and friendship between the Arikara and the Lakota. For their part, the Arikara wanted the Lakota to bring them manufactured European trade goods, especially guns. They also needed the Sioux to buy their surplus corn and the horses which the village farmers constantly received in trade from a number of other western tribes (e.g., the Cheyenne).

Ronda (1984, 49) points out that the tension Lewis and Clark saw between the Arikara and the Mandan during the winter encampment at Fort Mandan came because joint Arikara-Lakota war parties carried out raids against the Mandan and Hidatsa villages. When Lewis and Clark attempted to break the symbiotic alliance between the Lakota and the Arikara on their return trip down the Missouri, they met with little success. The Arikara told them that they must trade with the Sioux to get guns and powder and that they had to get rid of their surplus horses (Ronda 1984, 50).

The American officers had been instructed by President Jefferson “to assert United States sovereignty over Louisiana Purchase Lands” (Ronda 1984, 55). They had to convince the Arikara that the United States of America was a great nation and that they were now under the “protection” of the Great White Father, President Thomas Jefferson. In short, they were to spread the mantle of American imperialism over another Indian

nation. Lewis and Clark believed that the Sioux were the greatest regional threat to the future American occupation of Louisiana Territory. They proposed in their official report that an alliance, inspired and fostered by America, of the Upper Missouri's village farmers could weaken the Sioux and allow Americans to gain an economic foothold on the trade network that heretofore had been turned inward amongst the tribes. What Lewis and Clark failed to grasp was that for the Arikara, the Mandan and Hidatsa were more their enemies than the Lakota, their symbiotic partners. While the Americans did not receive from the Arikara the aggressive response they got from the Brule Lakota, they were completely unable to sever the economic and social bonds between the Arikara and the Lakota. Ronda (1984, 55) argues that in their attempt to create an alliance among the village farmers, Lewis and Clark acted with a "naive optimism typical of so much Euro-American frontier diplomacy."

In their final meeting on October 12, 1804, the Arikara chief Pocasse made three main points. First, the Arikara would not attack the American expedition. Second, Pocasse expressed his interest in making a lasting peace with the Mandan and his desire to visit with President Jefferson. Third, the chief expressed doubt that the Arikara would ever completely cut their strong ties to the Lakota. The essence of the Arikara chief's message to the Americans was that, if the Arikara pursued an exclusive friendship with the Mandan and exclusive future trade with the Americans, they feared retaliation from the Lakota. The Americans' presence seemed very temporary to the Arikara. The Lakota, however, were there to stay. Regarding future trade, the Lakota needed the Arikara's agricultural surplus; the Americans did not. The second chief Piahita also frankly questioned the wisdom of pursuing peace with the Mandan if it would anger the Lakota

(Ronda 1984, 62). With talks completed, the captains invited one of the Arikara chiefs (Waho-erha) to accompany them further upriver to the Mandan villages to facilitate peace talks.

The Mandan and Hidatsa villages on the Upper Missouri were rightly viewed by Jefferson and the American expeditionary force as “the keystone of the Upper Missouri region” (Ronda 1984, 67). Information about these villages had been trickling down the Missouri River for decades, prior to the Corps of Discovery’s 1804-05 expedition. Lewis and Clark knew that the Mandan and Hidatsa towns were the center of a vast trade network. Tribes throughout the northern Plains as well as French merchants were drawn to their trading festivals, especially during the late summer and early fall. Reaching these villages and establishing good relations with the Mandan and Hidatsa was extremely important to the success of the entire expedition.

In the late fall of 1804, there were two Mandan and three Hidatsa villages on the Missouri River south of the Knife River in what is now central North Dakota. The close proximity of the two tribes had come as a result of the devastating smallpox pandemic of the 1780s. The southernmost Mandan village Mitutanka was north of the Heart River on the west bank of the Missouri River and “situated on an eminence of about 50 feet above the water in a handsome plain” (Ronda 1984, 67). This was the village closest to Lewis and Clark’s winter quarters at Fort Mandan and the one they became most familiar with. It was consistently referred to by the American officers as the lower or first Mandan village. Directly north of Mitutanka was a larger town of about 50 earthlodges called by the Americans Rooptahee. This was the upper or second Mandan village referenced in the journals of Lewis and Clark. Ronda (1984, 69) notes that the name Rooptahee was

actually a mispronunciation of Nuptadi, one of the Mandan sub-tribes which existed before the 1781 smallpox pandemic. Directly across the Missouri River from Roptahee was the Hidatsa village called Mahawa. This town was distinct from the two larger Hidatsa towns because the separate band, the Awaxawii Hidatsa, who lived there, were linguistically distinct from the main body of Hidatsa on the Knife River. The Mandan called them Wattasoon (Ronda 1984, 70). To the American explorers, their language appeared so different from the Hidatsa they thought they might even be a separate tribe.

On the high banks of the Knife River were located the two major Hidatsa villages, only one of which was built after the 1781 smallpox pandemic. The “First Minnetaree Village” was located on the right bank of the Knife River above the confluence with the Missouri. Called Metaharta, this village was the home of the young Shoshone woman Sacajawea, who along with her French husband would accompany Lewis and Clark to the Pacific and back. Metaharta was a large village for the time with about forty earthlodges. It was ultimately destroyed by the Lakota in 1834 (Ronda 1984, 70). The “Second Minnetaree Village” named Meneterra, was the largest of the Hidatsa towns with 130 earthlodges at the time Lewis and Clark visited. Meneterra was unusual because it was established prior to the 1781 smallpox pandemic and probably was the best representation of what all the Mandan and Hidatsa villages may have looked like prior to depopulation through epidemic diseases.

In the center of each village was an open plaza, several acres in size. Built around the plaza were earthlodges which were regularly spaced to form the plaza’s perimeter. Beyond these earthlodges, the spacing of lodges was not consistent, with some very close together and others widely spaced. To the eyes of the American explorers, it all seemed

rather haphazard. In fact, it probably reflected kinship ties and social position. In the center of the plaza in a typical Mandan village was a sacred cedar post. This post represented the Mandan's "culture hero" *Lone Man*. Further down the Missouri River valley the Omaha people had a similar culture hero represented as a sacred pole, this tradition among the Omaha has continued to modern times (Ridington and Hastings 1997). On the north edge of the plaza was a large "medicine lodge" where the *okipa* (Sun Dance) rituals were conducted. Outside the *okipa* lodge, effigies representing spirit beings were hung on poles. Ronda (1984, 71) points out that for both the Mandan and Hidatsa peoples, the village plaza was the "focus of important political economic and ceremonial activities." Their eventual assimilation into one village called "Like-a-Fishhook" is not surprising. After the 1837 smallpox epidemic, all the village farmers, including the Arikara, were at the brink of total destruction.

The winter of 1804-05 that Lewis and Clark spent with the Mandan and Hidatsa is one of the best documented phases of the entire expedition and one of the best loved by American historians. The spirit of cooperation and mutual trust achieved by both Americans and Indians during that intensely cold winter is surely a "point of light" in the dark and troubled history of American and Indian relations. Lewis and Clark made first contact with a Mandan hunting party on October 24, 1804. With the help of the French trader Gravelines and the Arikara chief who came upriver with them, good relations were soon established with the Mandan chief named Big White. By October 20, the American expedition had set up camp just south of the first Mandan village. Perhaps because of long experience with white traders, the 4,000 Mandan-Hidatsa in their five villages were less afraid and more curious about the first American military expedition to come this far

upriver. Clark's journal entry records that: "Many men, women and children flocked down to see us" (Ambrose 1996, 184). The Americans built Fort Mandan during the month of November and settled in for a long, intensely cold winter. They would not leave until April 7, 1805. Historians like Ronda (1984), Ambrose (1996), DeVoto (1953) and others have provided us with detailed accounts of these busy months that need not be repeated here.

The Mandan chief and his people cultivated a friendship with the Americans and generally sought to keep the Hidatsa away from the Americans as much as possible. Ambrose (1996, 188) notes that the Mandan lied to the Hidatsa, telling them that "the Americans had joined with the Sioux and intended to make war on the Hidatsa." The reason for the lie was the Mandan's intense desire to monopolize trading with these Americans and others who might follow them upriver. This alarmed Captain Lewis to such an extent that he set out on horseback to visit the Hidatsa chiefs and assure them of the peaceful nature of the American expedition (Ambrose 1996, 188). While he was not well received by the chiefs, he was able to return to Fort Mandan with two lesser Hidatsa chiefs. Lewis was able to get them to promise not to wage war on the Shoshone and Blackfeet to the west where the Americans would be headed in the spring. Neither Lewis nor Clark really understood the ephemeral nature of intra-Indian warfare. They also did not realize warfare (raiding) was an integral part of Indian culture and an essential way to develop leadership qualities among their young men (Ambrose 1996, 189).

On November 30, 1804, the captains were informed by the Mandan that a raiding party of Sioux and Arikara had attacked five Mandan hunters, killing one and stealing nine horses. The captains' response reflects their Jeffersonian diplomatic agenda. The

Americans would support their new allies, the Mandan, against a common foe, the Sioux. It would also give them an opportunity to impress the Mandan with their firepower. Ironically, the Mandan rejected the offer of support when Clark arrived at the Mandan village with twenty-one armed soldiers. They rebuked the American officer for meddling in their affairs. Because Lewis and Clark had assured them that the Arikara would break off with the Sioux and seek peace with the Mandan, the Mandan had sent out much smaller hunting parties. The November 30 attack by the Arikara and the Sioux war parties confirmed to the Mandan that the Arikara were liars and the Americans were dupes. The new American peace policy linking the three village tribes against a common foe (the Sioux) was a pipe-dream—nothing more.

From an historical geographic perspective, it is important to understand that the hunting territory controlled by the Mandan at this time was still quite large. Before the 1781 smallpox pandemic, the Mandan lived in eight large villages clustered in the river valley north and south of the mouth of the Heart River. The Mandan-controlled hunting territory, however, covered all of southwestern North Dakota and even extended into what is now eastern Montana (Wood and Irwin 2001, 351). With depopulation from smallpox and the subsequent need to join with the Hidatsa for protection from the Sioux, that hunting territory grew much smaller. With fewer numbers, they could no longer keep the marauding Sioux out of the larger area they had previously controlled.

Because of the close trading relationship between the Arikara and the Sioux in the south, the Mandan-Hidatsa had to look for another source of European trade goods. They found it to the north in the many bands of Cree and Assinboine. These woodland hunters had been trading with the Mandan-Hidatsa for a very long time. From the notes of French

trader La Verendrye, we know that the Mandan had been trading with the Assinboine since 1738 and probably well before then. LaVerendrye recorded that the Mandan “knew well how to profit by it in selling their grains, tobacco, skins and colored plumes which they knew the Assinboine prize highly (Ronda 1984, 76). The Assinboine merchandise sought often by the Mandan included “guns, axes, kettles, powder, bullets, knives and awls” (Ronda 1984, 75).

Foremost in the minds of Lewis and Clark when dealing with the Mandan-Hidatsa that winter was the distribution of political power on the Upper Missouri and possible future competition with American merchants in St. Louis. The main trade competition that had to be eliminated was the Sioux. The captains’ journal entries portray the Teton Sioux as “colonial masters exercising political and economic dominance over the innocent and vulnerable Arikaras” (Ronda 1984, 76). In order for the Upper Missouri’s village farmers to participate in the new order of American trade, the economic and military stranglehold of the Sioux had to be broken. One possible way to accomplish this was to draw the Sioux away from their own major source of European trade-goods, the British North West Company, and force them to enter the American trade network that was just beginning to develop. But in the winter of 1804-05, that was also just a pipe-dream.

Lewis and Clark also tried to break up the Mandan-Hidatsa trade with the Crees and Assinboines. As instruments of a nascent but growing American imperialism, the Army officers sought to block any external trade sources that could be supplied by American merchants. The captains explicitly instructed the Mandan-Hidatsa chiefs that they should no longer seek trade with the Crees and Assinboines but rather look to

American merchants. Clark portrayed the Crees and Assinboines as oppressors of the Mandan-Hidatsa. As the Sioux “oppressed” the Arikara, in the Americans’ eyes, so did the Cree and Assinboine oppress the Mandan-Hidatsa. The Americans completely misunderstood this northern trade network just as they had misunderstood the southern trade network between the Arikara and the Lakota. Ronda (1984, 77) points out that the trade items exchanged between the Mandan-Hidatsa and the Cree-Assinboine, primarily food products and horses, would not be of interest to American merchants who were becoming increasingly obsessed with beaver pelts. Clearly, the diplomatic efforts of Lewis and Clark to disrupt long-standing trade networks in the Upper Missouri region were politically motivated and only served the interests of a young American nation seeking to expand both in territory and power. They were not motivated by any real concern for the native people, as their self-serving rhetoric seeks to imply.

Traders, Artists and Epidemics (1806-1849)

In the post- Lewis-and-Clark era on the Upper Missouri, there was intense European and American competition with the Missouri’s indigenous village farmers for the fur and beaver pelt trade with the nomadic Plains tribes. Both the British North West Company and the later American Fur Company sought to control the fur trade with the nomadic bison hunters. It was also a time when the Western scientists and artists discovered the Northern Plains, and through riveting descriptions and images, told America and the world about the unique culture of the native peoples of the Upper Missouri. Tragically, it was also a time of great Indian sickness and continuing depopulation. Beginning in 1806 with a whooping cough outbreak that killed 130 Mandan and culminating with a smallpox epidemic in 1837 that nearly wiped out all of

the Missouri's village farmers, the very contact with white society the Village Indians sought, very nearly destroyed them. It was also a time when the Sioux were able to capitalize on their enemies' misfortunes to gain complete political and military supremacy of the region, just in time for a showdown with the growing American nation.

After Lewis and Clark's final departure from the Upper Missouri region in 1806, on their return trip from the Pacific coast, two representatives of the British North West Company, Charles McKenzie and Alexander Henry, visited the Mandan-Hidatsa. Their vivid descriptions of Mandan life complement the accounts of the American explorers and comprise a major source of Mandan-Hidatsa ethnographic information (Wood and Irwin 2001, 350). They were followed by many others. In 1811 John Bradbury and Henry Brackenridge of the Missouri Fur Company visited the Upper Missouri tribes and left us detailed accounts of their visit (Meyer 1977, 50-52). They were followed by the notorious General William Ashley in 1822-25.

Ashley was an American civilian and represented the Missouri Fur Company. His battle with the Arikara in June 1823 is historically significant because it is the only recorded instance where one of the Three Affiliated Tribes "fought in open warfare with the United States" (Meyer 1977, 54). In 1822 Ashley had stopped at the Arikara villages, held a council and did some minor horse trading. His decision, not to leave a stock of goods and a clerk to collect furs, apparently angered the Arikara who were used to better treatment by white fur traders. Meyer (1977, 53) notes that Ashley was then working to establish a new trend where white men by-passed the Indians altogether and did their own trapping, the mountain man trapper that is such a large part of American western folklore. When Ashley came upriver in early June 1823, the Arikara killed one of his men during

the night of June 2 and then opened fire on the party at daybreak. Fifteen white men were killed and Ashley had to abandon his plans. He promptly contacted the U. S. Army at Fort Atkinson and asked for military assistance. Under the command of Colonel Henry Leavenworth, 275 soldiers set out on a punitive expedition. They were joined along the way by a party of 750 Sioux warriors, who by this time were depending more on the white traders than their old Arikara allies. The Sioux arrived first and started the fight. When the Americans reached the strongly fortified Arikara village on August 9, 1823, they began an artillery bombardment. Despite the fact there was minimal damage to their earthlodge village, the Arikara asked for a peace conference, which lasted for two days. When negotiations broke down, the American commander decided to attack the village the next day. During the night, the Indians evacuated the village, leaving Leavenworth to fight only one old woman, the chief's mother, who had been left behind. The Arikara, unlike the much more powerful Sioux, recognized that further resistance would be fruitless. They never again attempted to stop the increasing traffic on the Missouri River (Meyer 1977, 54).

During the post-Lewis and Clark era, the balance of economic power in the Upper Missouri shifted from the British operating out of Canada to the Americans operating out of St. Louis. As a consequence, the Missouri River became more important as the principal corridor of commerce. As the fur trade grew in size and importance, the American trading posts that sprang up were located to make transportation easier for the trading companies not the Indians. The American fur traders also wanted more direct access to the nomadic Plains tribes who were trapping the beaver and the fur bearers. One consequence of this economic shift was the declining role of the Mandan, Hidatsa and

Arikara as traders and middlemen during the decades after the Lewis and Clark expedition (Meyer 1977, 47). It was during this time of transition that American artist George Catlin visited the village tribes in 1832. The following year, Prince Maximilian and his expedition's artist, Karl Bodmer, came up the Missouri. Their combined efforts made the village tribes famous throughout the world, just before they were almost annihilated by smallpox in 1837-38.

The ethnographic descriptions of Prince Maximilian of Wied and the artwork of Karl Bodmer, the official artist for the Prince's expedition, constitute one of the most important sources of information on the Upper Missouri Village Indians during this period. (see Thomas and Ronneveldt 1982). Like Catlin, the men traveled up the Missouri River on the *Yellowstone* as far as Fort Pierre but then they transferred to another steamboat, the *Assiniboine*, to reach the American Fur Company's trading post, Fort Union, at the mouth of the Yellowstone River. Maximilian spent the summer and fall of 1833 at Fort Union and at the new trading post in Montana called Fort McKenzie. He returned down the Missouri to spend the winter at Fort Clark near the Mandan villages. His ethnographic observations are very detailed, reflecting both his scientific interests and his Germanic love of precision. Unlike Catlin, however, he had no desire to romanticize the Indian. Inspired by his mentor Alexander von Humboldt, Maximilian was able to describe the Mandan and other Plains tribes as fully developed human beings who were not inferior by nature to Europeans (Meyer 1977, 58). He was not uncritical of certain Indian characteristics which frustrated him but he was able to put aside his ethnocentrism to give "a holistic picture of the culture, just before the shattering blow of the 1837 smallpox epidemic struck it" (Meyer 1977, 58).

Without question, the most devastating event to the Upper Missouri's village Indians during this period was the smallpox epidemic of 1837-38. Mortality rates ranging from 50% to 90% brought the Missouri's indigenous peoples to the brink of extinction. In recent years considerable controversy has arisen over whether this was a deliberate act of genocide against the Plains tribes by the U. S. Government (Churchill 1997, 155). The epidemic also severely impacted the Hunkpapa Lakota and other Sioux tribes living near the Missouri River but their larger and more mobile populations enabled them to recover much faster.

Regular steamboat traffic bringing large amounts of trade goods to the Upper Missouri trading-posts began in 1830. Both Catlin in 1832 and Prince Maximilian in 1833 were able to go all the way to Fort Union at the mouth of the Yellowstone River. By 1837, steamboat traffic was a normal occurrence on the Upper Missouri, but very dependent on varying water levels and the treacherous snags and shoals that had to be negotiated. In the spring of 1837, the entire Arikara tribe had just joined the Mandan and Hidatsa after a series of moves to avoid harassment by the Sioux and by the American army after the Leavenworth campaign (Parks 2001, 367). They were settled around Fort Clark, the large trading post of the American Fur Company, located near present day Bismarck, North Dakota. When the steamboat *St. Peters* arrived at Fort Clark on the afternoon of June 19, 1837, it brought more than trade-goods; it brought smallpox in the form of infected blankets. According to Churchill (1997, 155), these "trade blankets" for the Mandan and Hidatsa had been taken from a military infirmary in St. Louis that had been quarantined for smallpox. Churchill argues that these blankets were not regular trade-goods but a deliberate transmission of smallpox for American political and military

advantage. This extreme view is not shared by most historians. Meyer (1977, 91) reports that the presence of smallpox on board the *St. Peters* was suspected by agents of the American Fur Company during the trip upriver from St. Louis. Before the boat had passed Fort Leavenworth, a black passenger became sick but was not diagnosed with smallpox. When the boat took on three Arikara women who had been living with the Pawnee, they quickly became sick and had not recovered by the time the *St. Peters* reached Fort Clark. By the time the boat reached Council Bluffs, Iowa, more people were sick and the agents realized they were indeed carrying smallpox on board (Meyer 1977, 91). One of the passengers on board was Joshua Pilcher who had just been appointed Upper Missouri Indian agent under William Clark, then Superintendent of Indian Affairs. Pilcher began to take steps to limit Indian exposure to the infected passengers on board. There is no indication that he knew that blankets may have been the vector for transmission of the disease. Pilcher also began sending letters to the Sioux bands along the river “warning them to stay out on the Plains and avoid coming to the trading posts for the rest of the summer” (Meyer 1977, 91).

Why didn't the *St. Peters* simply turn around and go back when the agents on board realized they were carrying smallpox? The simplest answer is greed. They could not afford to scrap the entire trading season. Meyer (1977, 91) sums it up quite diplomatically, “commercial considerations dictated that the boat make its round of visits to the forts, whatever the consequences to the Indians along its route.” We do not know if the American Fur Company realized it was carrying infected blankets. Furthermore, the allegations that infected blankets were the actual vector of transmission is not universally accepted (Meyer 1977, 92; Brown 2005).

At the time the *St. Peters* reached Fort Clark, many Mandan and Arikara men were hunting bison on the plains. The American Fur Company agent Chardon sent messages by mounted men to stay away from the village. The hunters returned anyway believing that this warning was a fabrication to exclude from trading. The Mandan began dying by mid-July 1837. Every day brought the news of more people dying. By September 19, just three months after the *St. Peters* arrived at Fort Clark, more than eight hundred Mandan had died. The reaction of the Mandan and Hidatsa was quite strange to the white agents at Fort Clark. The Indians began to hold a series of large dances. Chardon and others thought they were all just resigned to die and simply wanted to enjoy life while they could. It is much more likely that the dancing was a means of petitioning for supernatural intervention (Meyer 1977, 93). Many Indian men and women simply committed suicide when they could not cope with the deaths of loved ones or their own disfigurement from the lesions created by the smallpox. Some Mandan wanted to kill the white men who had brought this terrible plague on them. Chardon recorded in his journal that “We are beset by enemies on all sides—expecting to be shot every minute.” The great Mandan chief, Four Bears, who was the subject of one of Catlin’s greatest portraits, “renounced his friendship for the whites and urged his tribesmen to kill them all” (Meyer 1977, 94). Four Bears died from smallpox on July 30, 1837.

Among the Mandan and Arikara, the epidemic continued unabated through the summer and on into the fall. The Hidatsa, who suffered less in the early and middle summer, also began to succumb in large numbers in the winter. Smallpox raged among the Hidatsa throughout the winter months. Chardon records that Hidatsa were still dying in large numbers late in January 1838 (Meyer 1977, 95). According to Chardon and other

eyewitnesses at Fort Clark, the Mandan suffered the worst losses and came closest to total annihilation. Only 23 men, 40 women, and about 60 to 70 Mandan children survived. The Hidatsa were hit just a little less hard. They lost about two-thirds of their total population of 2,100 (Stewart 2001, 331). The Arikara lost about half of their total population (Parks 2001, 367). Other northern Plains tribes were also hit hard by the epidemic, including the Assinboine and Blackfeet. As a total nation, the Sioux suffered relatively fewer losses although some individual bands did suffer heavy losses.

It is ironic that the U. S. government's agent, Joshua Pilcher, was instrumental in saving many Lakota by getting a supply of vaccine to them in the spring of 1838. Meyer (1977, 96) contends that Pilcher acted out of self-interest more than humanitarianism. Pilcher feared that the Sioux would blame the whites for their casualties from smallpox and take out their anger and frustration on him and the white traders on the Missouri. Because of problems getting the vaccine up river, he was only able to vaccinate about three thousand Lakota. Fortunately, traders at Fort Clark and Fort Union also received a supply of the vaccine during the winter of 1838 and had also used it among the Lakota. It is ironic that white Americans almost destroyed their greatest friends in the Upper Missouri, the Mandan, Hidatsa and Arikara, and saved almost all of their greatest enemies, the Sioux.

From a geographic perspective, the smallpox epidemic produced several spatial effects on the cultural landscape. First, the Mandan at their Fort Clark village moved up the Missouri and joined the Hidatsa villages on the Knife River. The remaining Arikara took over the Mandan village at Fort Clark and stayed there for over two decades until they finally moved to join up with the Mandan-Hidatsa in 1861. Wood and Irwin (2001,

381) report that the Ruptaree Mandan chose to remain in their village below the Knife River, some distance up river from the remaining Arikara. These Mandan repopulated their village through intermarriage with the Yanktonai Sioux who had not been as warlike as the Teton Sioux. In 1845, the Mandan living on the Knife River and the more numerous Hidatsa founded a consolidated village called “Like a Fishhook” after the river’s curving configuration. Through relocation and consolidation they were seeking a more easily defended position in this oxbow bend in the Missouri River. In 1860 the Ruptare Mandan moved up to Like-a-Fishhook and reunited the Mandan people. In 1862 the Arikara finally abandoned their village that replaced the original Mandan village when Fort Clark itself was abandoned and destroyed in 1861. The consolidation of all the Upper Missouri village farmers at Like-a-Fishhook village in 1862 begins their new shared history as the “Three Affiliated Tribes” (Schneider 2001, 391).

Wagon Trails and Army Forts in Sioux Country

While the Sioux were impacted by the 1780s smallpox pandemic, as well as the 1837 epidemic that began at Fort Clark, their relative population losses were far less than those sustained by the Village Indians of the Upper Missouri. As we have seen, the distribution of smallpox vaccine by U. S. government agents and commercial traders may have saved the lives of thousands of Lakota and Nakota speaking people living near the Missouri River. With their larger pre-epidemic population and greater mobility, they were able to withstand their population losses with far less impact to their culture. But it was not just numbers that enabled the Sioux to gain political and military supremacy in the Upper Missouri region. I believe their warrior ethos played a great part as well. Historians have noted several characteristics of the Sioux that put them on a collision

course with an expanding nineteenth century America. The Sioux were proud, aggressive, highly mobile, and very reluctant to part with land they had conquered through the force of arms. These characteristics could just as well be used to describe the white Americans the Sioux encountered in the first half of the nineteenth century. Perhaps the very similarities of the American and the Sioux put them on a course where only one society could emerge victorious. It is a mistake, in my opinion, to vilify the Sioux when in many cases the Americans acted just as aggressively, if not more so.

The beginning of U.S. federal jurisdiction over the Sioux began shortly after the War of 1812. The Santee Sioux, or eastern Dakota, were allies of the British and fought with the British Army against the Americans (DeMallie 2001a, 733). The western Teton Sioux, then living near the Missouri River, were influenced by American traders on the river trading posts to side with the Americans, even though they did not fight side by side with American forces back east. When the war ended in 1815, Indian representatives were invited to Portage des Sioux by the U.S. government to sign a treaty of peace and friendship. The Santee, the Yankton, and the Teton Sioux all signed the treaty, which specified “that the Indian signers acknowledged themselves and their tribes to be under the sole protection of the United States.” This was the “first extension of federal jurisdiction over the Sioux” (Ibid.). Whether or not the Sioux signers actually understood they were compromising their sovereignty is an open question.

In 1825, the Yankton, Yanktonai and Teton Sioux signed more treaties with the U.S. when a military expedition came up the Missouri River under the military command of General Henry Atkinson and the civilian Indian agent Benjamin O’Fallon. The greater significance of these treaties over the 1815 treaty was that in them the Sioux explicitly

acknowledged that they were living within the boundaries of the United States, that they recognized the political supremacy of the U.S. over them, and that they claimed the protection of the U.S. if they were attacked by other nations. Whether they truly understood what this meant in political terms is also questionable. The 1825 treaties gave to the U.S. “the right to regulate all trade and intercourse with the Indians” (Ibid.) The 1825 treaties with the Sioux established the foundation for the U.S. government’s future dealings with them. From the U.S. perspective, the Sioux were now a subject people and, quite simply, they should do what they were told. From the Sioux perspective, however, the American immigrants that began crossing their lands uninvited were unwelcome invaders into their hard-won territory.

The fact that more and more Americans were moving across Sioux country after 1840 reflects the breakdown of the American “Permanent Indian Frontier.” This so-called Permanent Indian Frontier was a by-product of an American Indian Removal policy that began with Thomas Jefferson and culminated in the harsh removal tactics of President Andrew Jackson (Utley 1984, 37). The frontier was created by the building of American military posts running north and south from Fort Snelling, Minnesota, to Fort Jesup, Louisiana. Between them were Fort Atkinson, Nebraska; Forts Leavenworth and Scott, Kansas; Fort Gibson, Oklahoma; Fort Smith, Arkansas; and Forts Towson and Washita, Oklahoma. This frontier separated the “wild” Plains Indians (together with the five “civilized tribes” relocated by the Trail of Tears) west of the 95th meridian, from the United States as it was then configured. The Frontier Army soldiers’ mission was to protect all Indians (wild and civilized) from encroaching white settlers and to stop the flow of alcohol coming into the Indian villages. The Army was also tasked with the

difficult mission of reducing inter-tribal conflicts and to regulating legitimate trade.

Mounted troops from the frontier forts ranged far onto the plains on both peacekeeping and exploratory missions (Fort Leavenworth 2005, 1).

The size and spacing of the frontier forts reflected a compromise between Army General Winfield Scott who favored a few widely-spaced large forts and Secretary of War John Bell who wanted a larger number of smaller posts that were more closely-spaced (National Park Service 2005, 2). What was finally built satisfied neither man but did function fairly well until westward expansion after the Mexican War finally turned the “permanent frontier” into an anachronism (National Park Service 2006, 2). During the Mexican War of the 1840s, Fort Leavenworth, one of the larger frontier forts, served as a base of operations for the “Army of the West,” which was given the difficult mission of securing New Mexico, California, and adjoining territories (Fort Leavenworth 2005, 1). Ironically, American soldiers made possible the flood of American immigrants to California and the Oregon territory after the Mexican War ended with the treaty of Guadalupe Hidalgo in 1848. Immediately after the Mexican War, traffic increased dramatically on the Santa Fe Trail. Next to come were the greatly increased numbers of settlers traveling along the Oregon Trail. Finally, when gold was discovered in California, the flood of white settlers crossing the frontier onto the Plains became unstoppable. Mounted troops from Fort Leavenworth and other frontier forts were called on to protect the wagon trains from attack from the Plains tribes. The frontier forts were modified to serve as supply depots and arsenals for newer forts built further west to better serve the needs of the American settlers crossing the Plains on their way to California and Oregon.

The major wagon trails (Oregon, Overland, etc.) crossing the Plains soon became a major source of concern for the native tribes, especially the Sioux. The white settlers came in prairie schooners, stagecoaches, freight wagons and on foot. The animals that pulled these wagons ate the grass that formerly fed herds of bison. The thousands of white settlers burning wood in the evening campfires destroyed valuable bottomland hardwood forests in the river valleys. White hunters killed buffalo, deer, and antelope by the thousands. These animals provided the subsistence base for the Sioux and the other nomadic hunting tribes of the Plains. The wagon trains, which initially were viewed with curiosity by the Sioux, soon came to be viewed as a direct threat to their way of life. Earlier treaties signed twenty years earlier by their fathers meant little to Sioux warriors who were determined to protect their families and their way of life. One modern Lakota author has tapped into Lakota oral tradition and eloquently expressed the reaction of their culture hero Crazy Horse (Light Hair) and his people to the flood of white settlers and their wagons into their homeland as preserved in their own oral tradition (Marshall 2004, 112-113):

...The passage of so many white emigrants along the Oregon Trail was such a spectacle that young Lakota men and boys would sit atop the ridges and watch the frenzy of activity that was usual for a wagon train. Part of the trail cut through the southern part of Lakota territory in what is now northwest Nebraska and southeastern Wyoming. In a relatively short span of time, the flow of whites into the northern Plains had grown from a trickle to a flood, and the impact went far beyond the narrow corridor of the Oregon Trail itself, which followed the North Platte River. Carcasses of dead livestock were left to rot, household goods were discarded, rivers and streams were polluted, migration patterns of bison herds were disrupted, and human graves dotted the landscape along the trail. Initial curiosity gave way to suspicion on both sides. Near confrontations terrified white immigrants primed with horror stories of Indian depredations, prompting them to call for help from the army and the United States government. The first treaty council in 1851 was convened as a result of such fears. The primary objective of the government's

“treaty men” or “peace talkers,” as the peace commissioners were labeled by the Lakota, was to secure assurances that white emigrants could pass unmolested, so long as they stayed on the Oregon Trail. ‘We need land only as wide as our wagon tracks,’ was the assurance given by the peace commissioners, ‘because we are only passing through.’ To win the promise of safe passage from the Lakota and other tribes, the commissioners promised payment in the form of annuities. Like it or not, the future had arrived for the Lakota and for Light Hair. The whites and their promises were part of Lakota life forever. Even if the Lakota could have guarded their borders and prevented intrusion, and even if they had said no to the conditions of the 1851 Fort Laramie Treaty, the whites still would have flowed around them like water around an island in a river. By the power of numbers alone, the whites were, and would always be, a force for the Lakota to contend with.

CHAPTER 3

CONFLICT WITH WHITE AMERICA

The Sioux and the U. S. Army

America's westward expansion to the California and Oregon Territories in the 1840s caused the break-up of the so-called "Permanent Indian Frontier" and gave the western U. S. Army a new mission. The Frontier Army's original mission was to man a series of forts whose primary purpose was to separate white Americans from Indians along a line of demarcation. Its new mission was much more comprehensive and dangerous. The soldiers were to protect U. S. citizens "everywhere in the West" (Utley 2001, 163). Settlers moving along the great overland trails crossing formerly protected Indian Territory now became the Army's chief concern. The Sioux, and other Plains tribes, bitterly resented white encroachment into their territory. Thousands of white settlers in their wagon trains were destroying or displacing the plants and animals the native peoples of the plains depended on for survival. Confrontations between the Army and the Sioux would lead to a U. S. policy of tribal concentration that was formalized and codified in the first Fort Laramie Treaty of 1851 (Treaty of Fort Laramie With Sioux, Etc., Sept. 17, 1851). This concentration policy called for the defining of tribal territories and hunting grounds and the separation of whites from Indians by allowing corridors of safe passage across Indian territories. Both of these actions, concentration and separation, were important steps to the formation of the reservation landscape.

Contacts between the Sioux and white settlers moving across their lands in the 1840s were initially limited to more or less peaceful encounters where the Sioux would demand a payment or toll, much as they had done with Lewis and Clark on the Missouri

River some forty years earlier. As the number of wagon trains increased, Indian demands increased and aggressive encounters became the norm rather than the exception. Sioux warriors began raiding wagon trains as a way to compensate their people for the loss of game and to gain honor for themselves (Utley 1993, 143). The U. S. Army responded by sending out more patrols and establishing small forts close to the major wagon trails. The presence of soldiers acted as an effective deterrent to raiding but due to their low numbers, raiding continued. Army leadership back East disagreed on how to effectively protect the white settlers from Indian attacks. Utley (1988, 164) reports that some generals wanted "an extensive network of forts that would permit continuous military occupation of the Indian country." More realistic opponents of this expensive approach argued that the small size of the U. S. Army (in 1850 about 14,000) required the placement of a small number of forts at strategic locations. From these forts, strong, highly mobile columns could move out, and by "showing the flag," intimidate the tribes into behaving themselves. What finally developed on the Northern Plains was a combination of both strategies which proved largely ineffective. There were not enough small forts to really protect white settlers in Indian country. There were too many small forts to supply and maintain for the Army to build stronger permanent garrisons that could have enough cavalry to effectively enforce the peace.

Recognizing the need for a diplomatic solution, the U. S. government acted through its agent, Thomas (Broken Hand) Fitzpatrick. Fitzpatrick had been appointed U.S. Indian agent for the Upper Platte and Arkansas agency in 1846. By 1850, he became convinced that the Army would never be strong enough to really punish the tribes and enforce the peace through military intimidation. Because of his legendary status as a

mountain man, he was held in high regard by the Plains tribes. Fitzpatrick thought diplomacy might be the most effective way to restore peace (Utley 1984, 60). His diplomacy took the form of "big talks" with the tribes. One of these big talks was held in a grassy valley near Fort Laramie in September 1851. The fort had been purchased by the Army in 1849 from the American Fur Company.

Through his personal initiative and word-of-mouth inter-tribal communication, Fitzpatrick managed to assemble the largest group of Indians that had probably ever met in one place on the Great Plains (Adams 1977, 281). Ten thousand Sioux, Cheyenne, Arapahos, Crows, Gros Ventres (Hidatsa), Assiniboines, Arikaras, and Shoshones gathered on the North Platte River for their leaders to meet with Fitzpatrick and other U.S. government officials. Many of these tribes were traditional enemies, and Fort Laramie, with about 270 soldiers, was totally unprepared to take military action if fighting broke out. Before wagonloads of presents for the Indians arrived, the grass around Fort Laramie had been completely eaten away by thousands of Indian horses. To occupy their time, the tribal chiefs held a series of feasts where dog, an Indian delicacy, was the main course. Before the wagons carrying the promised presents arrived, the chief U. S. official, Col. David Mitchell, Superintendent of Indian Affairs for the entire Central Division, moved the council thirty-five miles down the North Platte for the horses to get adequate fodder. Treaty negotiations began *sans* presents on September 8 and continued for nine straight days. Mitchell first read the prepared treaty to the tribal leaders line by line as interpreters tried to convey the meaning of his words. Following the reading, the tribes debated internally for almost a week. Among the Sioux, the greatest debate was not on the treaty terms so much as who would sign for them. Finally, Colonel Mitchell asked

a Brule Lakota leader named Brave Bear to serve as "the white man's chief" (Adams 1977, 282). Mitchell also persuaded the other Sioux leaders to accept Brave Bear as "paramount chief of the Sioux." This difficulty in determining "responsible leadership" in the white man's way would continue to plague the Sioux but it also allowed them to challenge treaties that supposedly bound them to a course of action they really did not support *en masse*.

Coming into the great council at Fort Laramie, Indian agent Fitzpatrick was looking to purchase not land *per se*, but a safe right-of-way through the Indians' territory. Adams (1977, 279) points out that this whole effort was really the imposition of an alien concept on the tribes, since they had no real understanding of what a "right-of-way" meant. What Fitzpatrick hoped would happen was that the distribution of presents that would accompany the signing of the treaty would create enough goodwill towards the whites that attacks on settlers in the wagon trains would be less likely. Neither a truly safe right-of-way nor long-lasting goodwill followed the signing of the 1851 treaty.

Behind the formal language, the treaty asked for four major concessions. In return, the tribes were to receive \$50,000 worth of gifts and more gifts every year for the next fifty years. Adams (1977, 281) reviews these concessions in some detail and points out that all of them were essentially impossible for the Indians to make. First, the treaty asked the assembled tribes to stop fighting each other. This was culturally implausible because Indian raiding, not "war" in the white man's sense, was essential to the acquisition of horses and to the development of leadership through acts of bravery. Second, the 1851 treaty required the tribes to create boundary lines for each tribe and remain within them except for hunting forays. This was culturally and logistically

implausible for bison-hunting nomads. Their tribal territories were, and had always been, flexible and dynamic. The only practical impediment to movement was a tribe's military strength. Stronger tribes, like the Sioux had become since coming onto the High Plains, pushed aside weaker tribes. Adams (1977, 281) wisely concludes that asking dominant tribes "to freeze their geographical relationships was asking them to abandon a part of their heritage." Third, the 1851 treaty permitted the Americans to build roads and forts on the Indians' territory. The full implications of this provision were not understood by the tribes because they could not comprehend the enormous number of white people that would be coming and the true significance of armed garrisons. The Indians who traveled to the "big talk" at Fort Laramie confided to Jesuit missionary Father DeSmet that they thought the great migration of whites from the East was already over (Ibid.). They could not believe that more white people would be coming. Finally, the treaty required each tribe to assume responsibility for the behavior of its people. This was also impossible because they had "no machinery for forcing the will of the majority on the whole membership of the tribe" (Adams 1977, 282). For example, if a Sioux warrior and some friends wanted to attack a wagon train of white settlers, there was no effective means to prevent them. Normal mechanisms employed to shape social behavior, such as ridicule and ostracism, were not up to the challenge.

The lasting impact of the 1851 Fort Laramie Treaty to the cultural landscape of the Upper Missouri region was the legacy it created of fixed tribal boundaries (Map 6 Appendix A). At the time these tribal "territories" were not fully realized "reservations," not yet. The tribal territories were not yet "instruments for the control and civilization of the Indians" (Utley 1984, 61). The territories defined at the first Fort Laramie Treaty did

lay the foundations for the creation of true reservations in the second Fort Laramie Treaty in 1868. The Sioux may also have sensed this. During the protracted negotiations in September, 1851, one Sioux chief rose and declared:

You have split my land and I don't like it. These lands once belonged to the Kiowas and the Crows, but we whipped these nations out of them, and in this we did what the white men do when they want the lands of the Indians" (Utley 1984, 61).

Not all of the Sioux leaders signed the 1851 Treaty at Fort Laramie. Those that did not, such as the Miniconjou Lakota, did not feel bound by it. Even those that did sign found it impossible to keep, in the face of what they saw as white (*wasichu*) provocation. One incident that occurred in 1854 is quite famous for the ferocity of the Sioux's response to what they saw as clear provocation. The story of the "Grattan Massacre" or the "1854 Mormon Cow War" has been told countless times by historians like Utley (1993, 45), Adams (1977, 286-287) and many others. It has been preserved in Lakota oral tradition and set down in detail by Marshall (2004, 40). Comparison of the white and Lakota versions reveals a great deal of the Sioux's mind-set during this critical time period preceding the reservation era which really began with the second Fort Laramie Treaty in 1868. This incident marks the beginning of armed conflict between the Sioux and the U. S. Army that would last for the next thirty-six years, ending only with the Wounded Knee Massacre of 1890

Here is a straightforward account of this tragic event from a white perspective. In August 19, 1854, Second Lieutenant John L. Grattan, a young, inexperienced officer, marched into the Brule Lakota village located near Fort Laramie and demanded the surrender of a Miniconjou visitor to the camp who was accused of slaughtering a cow

that had wandered away from a passing wagon train of Mormon immigrants. When the Brule chief hesitated and asked for more time to settle the matter peacefully, Grattan ordered the thirty soldiers under his command to open fire with rifles and cannon. The Brule chief, Conquering Bear, was killed. In retaliation, the Brule warriors attacked in force and killed the entire U. S. troop. In the spring of 1855, the U. S. Army dispatched infantry troops on a punitive mission against the Brule (Utley 1993, 43). After disembarking from steamboats at Fort Pierce, the infantry troops, led by General William Harney, marched up the valley of the North Platte to Fort Laramie. Upon arrival, they destroyed the Brule village on Blue Water Creek, now led by Little Thunder. Utley (1993, 45) notes that this retaliatory attack was "the first time Sioux saw women and children cut down by American soldiers and many others taken captive."

According to Lakota oral tradition, as recorded by Marshall (2004, 40-45), here is a shortened version what actually happened. An "old, footsore cow" wandered into a Sicangu Lakota camp on its own. Chased by the camp's barking dogs, the cow began running between the buffalo skin lodges and knocking over racks of buffalo meat drying in the sun. A young Miniconjou man visiting his relatives killed the old cow and divided the meat among the elders of the camp, earning praise for this generous deed. When Conquering Bear, an old man designated as a Lakota spokesman by the white commander at Fort Laramie, heard that soldiers might be on their way to the camp, he rode to the fort with the intention of paying for the cow. He apologized to the fort's young commander whose name was Fleming, explaining that the cow had been butchered because it appeared to belong to no one. The old Indian offered to pay for the old cow with a good horse. Fleming rejected the offer outright and demanded that the killer of the cow be

turned over to him. The old chief returned to the Sicangu camp to think it over. The next afternoon, the white soldiers (Long Knives) came in two wagons, with two "wagon guns." The man in charge of the soldiers, Grattan, would not listen to the old man and shouted for the soldiers to fire the wagon guns at his lodge. After breaking off the lodge poles, the soldiers fired their rifles and Conquering Bear fell, struck in the chest and stomach. When the second wagon gun fired, a hundred or more Lakota men swarmed the soldiers and cut them down and began stripping away their guns and powder cases. While the Lakota women wept, angry warriors rode to the trading post near the Army fort and threatened to attack the fort and shut down the "Holy Road" (Oregon Trail) once and for all. A warrior of high repute named Swift Bear spoke words of wisdom and advised against killing the whites at the Fort. The whites, said Swift Bear, would only send more Long Knives and more wagons and more Lakota would be killed. Swift Bear said that killing the soldiers who attacked the camp was right because men are bound to defend the helpless ones. The Lakota hoped that thinking men among the whites, who also have good hearts, will understand why this happened and influence others (Marshall 2004, 43).

I find the Lakota's oral tradition of the Grattan Massacre compelling and extremely helpful in understanding the Sioux's strong resistance to the ever-growing white presence in their territory. These Lakota were smart, strong people who cared about each other and their collective future in the face of an enemy whose numbers and technology seemed insurmountable.

During the twenty-seven year period between the two Fort Laramie treaties, no other historical event is as important to the Lakota-American relations as the war led by Red Cloud and the Oglala Lakota over the Army forts protecting the Bozeman Trail. This

confrontation led directly to the 1868 Fort Laramie Treaty and the creation of the Great Sioux Reservation that would forever change the regional cultural landscape.

As proposed in 1866, the Bozeman Trail would connect the Platte Road portion of the Oregon Trail with the Montana gold fields of Virginia City, Montana (Axelrod 2002, 304). It would cut directly across the Lakota's buffalo hunting grounds in the Powder River country of what is now northeastern Wyoming. In June 1866, Red Cloud and other Lakota chiefs traveled to Fort Laramie to discuss the Americans' proposed new treaty for this trail. The Indian commissioners proposed that if the Lakota allowed the road to be built and to allow safe passage for travelers, they would be given presents and allowed to hunt in peace. In the eyes of the white commander, this was simply a refinement of the 1851 Fort Laramie Treaty. During the course of the talks, a battalion of U. S. infantry under the command of Colonel Henry Carrington arrived at Fort Laramie. Carrington carried Army orders to protect whites on the trail by building Army posts at strategic points along the proposed trail (Faragher 1996, 230).

Red Cloud's reaction surprised the white officers with its intensity and decisiveness. He denounced the commissioners for "treating the assembled chiefs as children" according to one eyewitness. Red Cloud spoke eloquently to the effect that his people were being crowded back by the whites every year and now their last hunting ground was to be taken from them. If the buffalo were driven off, his people would starve. Red Cloud ended with a threat that if the combined tribes of his people would only defend their homes, they would be able to drive the soldiers out of their country.

His eloquence did not move the Lakota and Cheyenne leaders, whose people lived south of the Platte and did not hunt in the Powder River country. But Red Cloud and his

sub-chiefs refused to sign the treaty and returned home to the Powder country determined to stop the forced occupation of their country by the U. S. Army. Red Cloud has been quoted to say:

The white's presence is an insult and a threat. It is an insult to the spirits of our ancestors. Are we to give up their sacred grounds to be plowed for corn? Lakotas, I am for war (Faragher 1996, 230).

Carrington completed three forts along the Bozeman Trail before winter set in: Fort C. F. Smith on the Bighorn River in southern Montana; and two forts in Wyoming, Forts Reno and Phil Kearney (Utley 1996, 61). Both Lakota and Cheyenne mounted a formidable insurgency. The Lakota threatened the soldiers constantly, seizing their supply wagons, stealing horses and cattle, and killing soldiers foolish enough to be outside the fort without an armed escort. One of the Lakota war leaders who participated in these raids was Crazy Horse. The most celebrated of these raids is the Fetterman massacre in which Crazy Horse led Lt. Col. William Fetterman and his eighty troops to their death at the hands of 2,000 Lakota, Cheyenne, and Santee Sioux warriors (Ward 1996, 232). Fetterman was assigned to protect wagons carrying firewood back to Fort Phil Kearney and not to be drawn out of sight of the fort. When taunted by Crazy Horse and a few decoys, the overconfident Fetterman felt compelled to follow. He led his men over Lodge Trail Ridge and into the hands of a large Lakota-Cheyenne fighting force that killed them all (Marshall 2004, 149-151). Truly, this was a victory for the Lakota but subsequent developments proved it to be a hollow victory for it led to an American policy of reservation confinement and the ultimate loss of freedom for the Sioux.

The 1868 Fort Laramie Treaty

Understanding the second Fort Laramie Treaty of 1868 is critical to understanding how the current reservation system came to be created. The six Sioux reservations which exist today on the Upper Missouri River are the scattered remnants of the Great Sioux Reservation created in 1868 by this treaty. It is also necessary to understand the historical events that led up to the second Treaty. The Fetterman Massacre of 1866 shocked and angered the American military leadership. It also shocked the American political leadership in Washington. The quite different responses of these two groups created a dialectic that ultimately resulted in the compromise we call the "reservation."

The American military commander of all troops on the Great Plains, General William Tecumseh Sherman, advocated aggressive military action to crush all Indian resistance "even to their extermination, men, women, and children" (Utley 1984, 105). While Sherman's subordinates began planning for an all out war against the Sioux in the summer of 1867, politicians in Washington began a campaign of their own for peace. The leader of this peace offensive was Senator James Doolittle, Chairman of the Senate Committee on Indian Affairs. Doolittle had led a fact-finding group that had just authorized a report on "the condition of the Indian tribes." The Doolittle report came out in January, 1867, and reported that the Plains were already in a bad way. Their population was declining due to the growing scarcity of game, especially buffalo, and the ravages of disease and alcoholism. Their general view was that Indians were being severely impacted by contacts with whites. The authors of the report argued that most Indian hostilities were retaliatory in nature and the result of white encroachment into their territory or outright provocation by whites (Utley 1984, 106). Doolittle and his co-authors

recommended the separation of Indians from the vice-ridden white men living on the frontier. They argued that if the Indians could be given land "reserved" exclusively for them and taught how to support themselves by farming, hostilities would surely cease. However, Doolittle and his colleagues did not believe that the Army officers and enlisted men now assigned to the Army forts were up to the job. They didn't have the requisite skills, the temperament, or the inclination to civilize the Sioux and the less dominant indigenous tribes.

The Doolittle report recommended that the Indian Bureau be kept in the Interior Department and that five "boards of inspection" be created to oversee the process of Indian civilization. These boards would be composed of high-ranking civilians and Army officers. Doolittle drafted a bill to authorize these recommendations and it passed the Senate without delay. When it reached the House, however, it bogged down. Part of the reason for the delay was an ideological split in the cabinet of President Andrew Johnson. Secretary of War Edwin Stanton, following the recommendations of the Army's leadership, urged "vigorous military retaliation" (Utley 1984, 106). Interior Secretary Orville Browning, following the Doolittle report's recommendations, argued for the creation of "reservations" and the "peaceful handling of Indian difficulties." The current Commissioner of Indian Affairs Lewis Bogy, a subordinate of Browning, proposed that peace councils be held with the tribes to show them "the wisdom of settling on reservations." While the cabinet members debated, the House finally acted on the Doolittle bill, negatively. They struck out the creation of boards of inspection endorsed by the Senate and substituted a measure to transfer the entire Indian Bureau to the War

Department. When the new bill came back to the Senate, it was promptly rejected and Congress adjourned (Ibid.).

While the politicians argued, the military acted. In April 1867, Sherman ordered General Winfield Scott Hancock to undertake a campaign against the Southern Plains tribes. The campaign purpose was to “shock and awe” the Cheyenne and other tribes in Kansas, into submission. To Sherman’s disgust, Hancock, and his soon to be famous subordinate George Armstrong Custer, bungled the campaign. The Indians eluded the U. S. forces and made retaliatory raids on to their way to the high plains of Kansas. In frustration, Hancock burned the Cheyenne village. Back in Washington, Interior Secretary Browning complained after a cabinet meeting on May 28, 1867, "The War Department seems bent on a general war and will probably force all the Indians into it" (Utley 1984, 108).

Ironically, the political versus military impasse was finally broken by the military when an Army investigative commission on the Fetterman Massacre submitted its report early in the summer of 1867. The commission chairman, General Alfred Sully, reported that the Northern Plains tribes wanted peace and freedom from white encroachment. The report recommended that the Bozeman Trail be abandoned as unnecessary and that military operations be focused on the defense of the Platte route. Most importantly, the Sully commission recommended that a “reservation” be created for the exclusive occupancy of the Sioux in the Missouri and Yellowstone River basins (Utley 1984, 108). They also recommended separate cabinet status for the Indian Bureau.

These recommendations found favor in the Indian Bureau now headed by Nathaniel G. Taylor. Taylor quickly drafted a proposal for the creation of two large

reservations for all the Plains Indians. One of these reservations should be located north of Nebraska, while the other should be located south of Kansas. The beauty of this proposal, in his mind, was that it accomplished several political aims simultaneously. First, it opened a clear corridor for American emigration to the West. Second, it opened up a way to complete the Union Pacific and Kansas Pacific railroads without constant Indian harassment. Third, the plan pleased General Sherman because it reinforced the recommendations of his own annual report of 1866. Sherman had recommended that the crucial belt of western territory between the Platte River and the Arkansas River be cleared of Indians. While Sherman would have used military force to clear this belt of territory, the Taylor reservations proposal accomplished the same end, in a much more peaceful fashion.

Taylor's recommendation won support in Congress as well. The new chairman of the Committee on Indian Affairs, Senator John Henderson, introduced legislation to authorize implementation of the Taylor program on July 16, 1867. After just four days of debate and amendment, the bill flew through both houses of Congress and was sent to President Johnson. The law also required that a peace commission composed of four civilians and three Army generals be given the assignment "to identify and remove the causes of hostility and attempt to consolidate all the Plains Indians on reservations" (Utley 1984, 109). When Johnson signed the bill, he assigned General Sherman as the ranking military member of the Taylor Peace Commission, along with Generals William Harney and Alfred Terry. The mixed political and military composition of the commission reflected the intent of Congress as well. As implied in the new law itself, "if the commission could not negotiate a peace, the Army would be turned loose to conquer

a peace." From the white perspective, the idea of confining "wild Indians" on reservations seemed to be the way out of a genocidal war. To the Sioux and other Plains tribes, it meant the loss of their freedom, their nomadic way of life, and almost the end of their tribal culture.

The Taylor Peace Commission negotiated with the Southern Plains tribes at Medicine Lodge Creek, Kansas, in October 1867. Joining Taylor as chairman, were Senator John Henderson, John Sanborn, a former member of the Army's Sully commission, and Samuel F. Tappan, an Indian supporter and humanitarian (Utley 1984, 109). After the signing ceremony with the Southern Plains chiefs, the commission members went north to Fort Laramie. Their purpose was to complete "the grand design of consolidating all the Plains Indians on two huge reservations out of the way" (Utley 1984, 118).

The original draft of the Fort Laramie Treaty primarily focused on the creation of a massive reservation, out of the way of white emigration to the west, and out of the way of what was soon to become in 1869, a transcontinental railroad. The reservation would be located north of Nebraska and west of the Missouri River, comprising what today is the western half of South Dakota. To bring in the Sioux, the Taylor Peace Commission had to add important concessions. It designated the Powder River country (Northeastern Wyoming) as "Unceded Indian Territory" and stipulated that the Bozeman Trail Army forts would be forever abandoned (Map 8 Appendix A). This looked like another win-win situation to the commissioners because the Union Pacific railroad was growing so fast that it had opened better routes to the Montana mines in the west. From the Army perspective, the abandonment of the forts made sense because it freed up the limited

number of troops to put down hostilities on the Southern Plains. It also became clear to the American military leaders that the benefits did not justify the cost, both in dollars and men lost, of keeping the forts open (Adams 1977, 352).

After a tough, cold winter on the Northern Plains, the Army sent couriers to the Sioux bands in the Powder River basin in the spring of 1868 with an invitation to come to Fort Laramie and meet with the Peace Commission. Only the Brule Lakota led by Spotted Trail and a few others responded favorably. Red Cloud sent a message that left little room for negotiation. He wrote, "We are on the mountains looking down on the soldiers and the forts. When we see the soldiers moving away and the forts abandoned, then I will come down and talk" (Utley 1984, 119).

The first Army post abandoned was Fort F. C. Smith on the Bighorn River in southern Montana. The day after the soldiers left, the Lakota burned it to the ground. Still, the Lakota ignored the entreaties of the Peace Commission at Fort Laramie. Two more Army posts were abandoned and burned by the Lakota and still Red Cloud and his people ignored the Commission's invitation and set about "making meat" for the winter (Utley 1984, 120).

While Red Cloud and the Lakota hunted buffalo, the Taylor Peace Commission began to unravel in the face of a new Indian war on the Southern Plains. The Southern Cheyenne attacked white settlements on the Saline and Solomon Rivers in Kansas when they were denied promised arms and ammunition under the Medicine Lodge Treaty. General Sherman retaliated in force. Under the command of another Civil War veteran, General Philip Sheridan, the Army prepared to mount a major offensive against the rebellious Cheyenne. While the Army prepared for "total war" against any tribe breaking

the Medicine Lodge Treaty, the Peace Commission members met in Chicago on October 7 and 8, 1868 (Utley 1984, 124). This last meeting of the Peace Commission proved disastrous for those politicians seeking a peaceful resolution to the Plains Indian problem. The three military members of the Commission, Generals Sherman, Harney, Terry and a new civilian observer, Republican presidential nominee Ulysses S. Grant, now believed that only a military solution could ever solve the growing problem of an expanding white America and a recalcitrant Indian population on the Plains.

The commission, carried by the military vote, concluded that the U. S. should stop recognizing Indian tribes as "domestic dependent nations," except as necessitated by existing treaties. From now on, Indians should be individually subject to American laws (Utley 1984, 125). Because some Sioux chiefs had signed the Fort Laramie Treaty on April 9, 1868, there was still a window of opportunity for Red Cloud and the Oglala Lakota. However, the Taylor Peace Commission also resolved that there should be an end to the negotiation of treaties and that the Indian Bureau should be transferred to the War Department.

The following month, November 1868, Red Cloud and Man-Afraid-of-His-Horses finally signed the Fort Laramie Treaty for the Oglala Lakota. But it was almost too late for peace. The Peace Commission itself was dissolved after their October 1868, meeting in Chicago and the military commanders took charge of the volatile situation on the Southern Plains. As for General Sherman, the overall commander, the peace policy was no longer tenable. He candidly admitted to the press in October, 1868, "Too many scalps have disappeared from the heads of their legitimate owners to make it safe to prolong this policy (of peace)" (Utley 1984, 125). With the election of Ulysses S. Grant as President

in November 1868, Sherman felt confident that his no-nonsense approach to Indian misbehavior would prevail. Utley (1984, 125) has also noted that the political climate at that time supported a strong military response to Indian attacks on U.S. citizens. President Grant was perceived to be the leader "who would obliterate every tribe if necessary to protect U. S. citizens."

From an historical geographic perspective, the 1868 Fort Laramie Treaty is the start of a long, sad process of Indian confinement and white agency control backed up by the threat of U. S. military force. Map 8 in Appendix A shows the boundaries of the Great Sioux Reservation in 1868, and the adjoining areas of the Sioux Unceded Territory which were to be used as their exclusive bison hunting territory. By the time the treaty was signed by Red Cloud, many of the provisions contained in the treaty's sixteen articles were largely obsolete. For example, Article I speaks of the U. S. desire for peace when, in fact, the U. S. government's principal desire in the fall of 1868 was to punish Indians who resisted the ongoing American invasion of the Plains, to move them out of the way, and to transform them into peaceful farmers (Treaty with the Sioux, Etc., April 29, 1868:3). Article II, which describes the reservation boundaries in detail, also made statements such as "no (white) person shall ever be permitted to pass over, settle upon, or reside in the territory" (Ibid.: 4). Yet, within nine years, following the discovery of gold in the Black Hills, the U. S. government passed the 1877 law which removed the Black Hills from the Great Sioux Reservation. The break-up of the Great Sioux Reservation continued in 1889 with the passage of the Sioux Act of March 2, 1889 which created the modern configuration of Sioux reservations in South Dakota. Maps 10-12 in Appendix A show the *wasichus'* "Dakota Territory" in the period prior to its splitting into North and

South Dakota in 1889. We shall see that the process of pushing Indians out of the way of white Americans onto smaller and smaller pieces of land did not stop in 1889.

The Treaty of 1868 split the Lakota people into two factions, agency and non-treaty (Utley 1993, 85). Among the Lakota, two figures arose in the non-treaty faction who would become the most notorious of all Plains Indians to the nineteenth century American public, Sitting Bull, the Hunkpapa Chief and spiritual leader, and Crazy Horse, the Oglala war leader who continues to inspire Indian resistance to white aggression. As with the first Fort Laramie Treaty of 1851, the Indian "signers" in 1868 probably had no idea what they were being asked to do on behalf of their people (Utley 1993, 84). For example, the treaty not only ended the war over the Bozeman Trail forts, it committed the signers to settle on and remain within the confines of a reservation, to obey the order of a white Indian agent, and to mimic the dress and the behavior of white people. Knowing that the numbers of buffalo were rapidly declining even by 1868, the Peace Commission members also set the Sioux-signers onto the bleak path of subsistence dry-farming on the arid grasslands of the Northern Plains. Utley points out those Indian leaders like Gall, Sitting Bull, and even Red Cloud had little, if any, understanding of these broader implications. Yet from a legalistic white perspective, the fact that Sitting Bull and other Lakota leaders refused to abide by the terms of the treaty provided sufficient cause for U.S. military action "with extreme prejudice." From the perspective of Sitting Bull and Crazy Horse, the fact that the whites did not completely withdraw from their homeland justified any effort on their part to remove or eradicate them. Just two months after Gall, "touched the pen" at Fort Laramie, Sitting Bull led a raid against the northernmost U. S.

Army's outpost (Fort Buford) in which three soldiers were killed and three wounded while 250 head of cattle were captured.

Sitting Bull's total rejection of white encroachment can be conceptualized as one end of a spectrum of Indian-white relations. The "agency Indians" that chose to settle on the Great Sioux Reservation after the Treaty of 1868 could represent the other end of that spectrum. They became more and more dependent on white subsistence rations as they gave up their independence. In the middle were those Indian bands who tried "to keep a foot in each world" (Utley 1993, 85). These groups tried to lead a nomadic existence following the bison herds in the Unceded Territory, while at the same time using the agency system set in place by the treaty to the greatest extent possible. As the bison in the Unceded Territory were hunted to near extinction by Indians and whites in the 1870s, this middle position became impossible to maintain. About 2.5 million buffalo were killed annually between 1870 and 1875, and by 1883 the last large herd on the Northern Plains containing about 10,000 buffalo had been slaughtered (Bryant 2006; Isenberg 2000). As their major food source was exterminated, the Sioux were gradually split into two camps, the agency Indians now under the leadership of Red Cloud and the "wild" Indians under the leadership of Sitting Bull. Each tribe of the Sioux nation was split in this way. One third of the total Lakota population chose the "red path" of Sitting Bull. Among his own people, the Hunkpapa, more than one half chose to resist the abhorrent life being forced upon them by white America (Utley 1993, 85).

The Rise of Sitting Bull and War with the U.S.

After the signing of the second Fort Laramie Treaty, Red Cloud turned away from unnecessary conflict with the U. S. Army and became increasingly concerned with

securing the best deal for his people with the U. S. government and the reservation agents created by Articles IV and V of the 1868 Fort Laramie Treaty. This left a leadership vacuum among the non-Treaty Lakota. It also gave the Lakota the opportunity to cut across traditional band loyalties and select a paramount chief to direct their resistance to white American control. Among the Oglala, Crazy Horse was the greatest warrior of all the Lakota but his introverted personality and mystical disposition made him unsuitable as the overall leader of his people (Utley 1993, 86; Marshall 2004). Other leaders were possible candidates, including Lone Horn (Miniconjou), Spotted Tail (Brule), and Young-Man-Afraid-of-His-Horses (Oglala). But the man who combined both the personality traits and the strong desire to lead his people was Sitting Bull of the Hunkpapa Lakota. In 1869, his supporters organized a pan-Lakota gathering for the purpose of appointing Sitting Bull "supreme chief of the Sioux confederation" (Utley 1993, 87). The position of supreme chief of the Sioux was totally new. The various tribes of Lakota, Nakota and Dakota speakers had never before had the need or the desire to create such a high position. Only the imminent threat of total war with white America could have moved them to do so. It is ironic that, for the Sioux to fight the *wasichus*, they were forced to adapt the whites' political leadership strategy. Sitting Bull seized the reins of power firmly and began what had never before been attempted, building a Sioux coalition in the early 1870's to resist placement on any reservation, however "Great" it might appear.

During this same time, the symbiotic relationship between the Sioux agency Indians and white agents began to evolve (Utley 1993, 88). Due to the tremendous size of the Great Sioux Reservation in the early 1870's, there was a need for numerous agencies that were spatially distributed to meet the treaty requirements of the numerous tribes

comprising the Sioux nation. The Oglala and the Brule were serviced by agencies in northwestern Nebraska, located close to the reservation. Red Cloud and Spotted Tail were the respective chiefs of these two tribes with the direct roles of advocate and diplomat. They looked out for the interests of their people and negotiated with the white agents to ensure they lived up to their treaty responsibilities. On the upper Missouri, there were two agencies, the Grand River Agency that serviced the Hunkpapa, the Blackfeet Lakota and the Yanktonais, and the Cheyenne River Agency that serviced the Miniconjou and San Arc Lakota (Utley 1993, 88). Each group had chiefs who functioned in similar ways to the more famous Red Cloud. They were all caught in the political web created by the Treaty of 1868. The job of each chief was to use the system created by white America to keep their people alive while playing along with the civilization game of the "*wasichu*" (whites). Because of the growing dependence on white annuities, the population of agency Indians tended to cluster near the agency distribution centers. As we shall see, these population clusters became the nuclei of the smaller, more spatially dispersed reservations after the final break-up of the Great Sioux Reservation in 1889. From the agency Sioux perspective in the early 1870s, the goal was to take from the *wasichus* what they needed to survive while still remaining Sioux. Red Cloud, the tribes' cultural broker with the white world, became Sitting Bull's chief rival for the job of overall leader of the Sioux nation.

In the spring of 1871, two more Sioux tribes poured into the roiling mix of agency Sioux on the Great Sioux Reservation and hostile non-treaty Sioux hunting in the Unceded Territory. The tribes were the eastern Dakota and the Yanktonais who were refugees from the Minnesota uprising of 1862 (Utley 1993, 43). Their homeland east of

the Missouri was hunted out and they were on the move following the bison herds into the Mill River country in eastern Montana. Six thousand strong, they were able to negotiate with the local U. S. government agent from a position of power to receive rations. Indian agent Andrew Simmons persuaded the Durfee and Peck Trading Company to build a trading post on the Mill River that could also house a sub-agency to service these tribes. In essence, a satellite agency for the Great Sioux Reservation was created on Mill River to keep the peace with the eastern Sioux, who were clearly not afraid to fight if they were pushed. As the shrinking bison herds moved north at this time, the non-treaty Lakota loyal to Sitting Bull also came up the Mill River. Once there, Sitting Bull began negotiating for better trade relations. To remain politically independent of the restrictive agency situation in South Dakota, he needed arms, ammunition, and other white goods. By using the commercial Fort Peck Trading Company on the Missouri River at the mouth of the Mill River, Sitting Bull was able to equip the Lakota well enough to stay independent and survive the harsh winter of 1871-72. The growing influence Sitting Bull exerted over the newly resident eastern Dakota and Yanktonais at this time is apparent in their shared determination to take the white man's rations but not his civilization (Utley 1993, 95). Clearly, Sitting Bull laid the groundwork at this time for pan-Indian resistance to increasing American efforts to corral the Sioux onto reservations.

The nucleus of the Fort Peck reservation was created in December 1872, when the Interior Department authorized the consolidation of all Sioux agency needs (Yanktonai, Dakota, and Lakota) at Fort Peck. The Mill River Agency at Fort Peck distributed rations and clothing as specified in the 1868 Fort Laramie Treaty to "friendly" Sioux. For their part, the Sioux used the agency hand-outs to sustain themselves through the winter but

kept their independent lifestyle and their culture mostly intact. Their opposition to white encroachment, particularly the building of the Northern Pacific Railroad through their hunting territory was firm as iron. Utley (1993, 97) notes that when buffalo were abundant and stomachs were full, the flame of Sioux independence and hatred of government officials burned brightest. But when hunger overwhelmed them, their dependence on *wasichu* rations and clothing brought them back to the agency time and again. The decline of the Northern Plains bison population was soon to make the nomadic free life of the non-treaty Sioux an anachronism.

The first major break in the Great Sioux Reservation was the forced cession of the Black Hills. This event, which has never been forgotten or forgiven by the Sioux precipitated the famous Sioux War of 1876. In 1873, surveyors laid out a route for the Northern Pacific Railroad along the northern margins of the Sioux's Unceded Territory. This infuriated Sitting Bull, Crazy Horse, and the non-treaty Lakota now living and hunting there. In July 1874, Lt. Col. George Armstrong Custer ("Long-Hair") led a major expedition with one hundred- plus wagons into the Black Hills. The official purpose was to locate the best site for a new Army fort to protect the Red Cloud (Oglala) and Spotted Tail agencies. But Custer took along a large number of reporters who were to confirm the reports of gold in the Black Hills. The Custer expedition stayed in the sacred Black Hills for two months before returning to Fort Abraham Lincoln on the Missouri River. Before they returned, newspaper accounts began appearing in Chicago and other mid-western cities that gold had been discovered in the Black Hills (Utley 1993, 116).

The sudden influx of miners into the Black Hills was startling in its rapidity and infuriating to both agency and non-treaty Sioux. One party of miners reached the Black

Hills, deep in the protected Great Sioux Reservation, just weeks after the Custer expedition pulled out. The miners built a strong stockade for protection against the Sioux and prepared to sit out the long winter, just to be first to find gold in the spring (Utley 1993, 116). Other miners followed when the Army showed little or no interest in enforcing the 1868 Treaty. These miners even began to make official inquiries about how they could buy land in an area that was supposed to be set aside forever.

The next stage of provocation for the non-treaty Sioux came late in the winter of 1875 when the bands loyal to Sitting Bull received word from the Indian agents to "come to the agencies at once or be considered hostiles against whom the army would make war" (Utley 1984, 180). The non-treaty Lakota bands refused to come to the agencies and the stage was set for armed conflict with the United States Army. Utley reports that deteriorating conditions at the agencies, the *wasichus'* Black Hills invasion, and agents' efforts to restrict their traditional hunting trips in the Unceded Territory precipitated a large migration of agency Sioux into the Unceded Territory. Once there, they were welcomed into the camps of Sitting Bull's loyalists. By June 1876, the Lakota had created a mobile tipi village that grew in size as it moved westward with the bison herds. They were soon joined by large bands of Cheyenne. The Cheyenne came at the direct invitation of Sitting Bull. The previous summer of 1875, the Cheyenne had participated in a Great Sun Dance with Sitting Bull and his followers (Utley 1993, 122). During elaborate ceremonies, Sitting Bull was able to make a political and religious alliance with the Cheyenne to fight against a common foe, the "blue coats" of the Americans.

By mid-June 1876, an Indian force of truly massive size was camped on a creek running into the Little Big-Horn River which the Lakota called the Greasy Grass. Sitting

Bull, the political and religious leader of this unprecedented coalition, experienced a vision during the Sun Dance that was held. This prophetic vision, widely reported by historians, had many dead blue coats "falling right into our camp" (Utley 1984, 181). Just before Custer's battle at the Little Bighorn, a large number of agency Sioux joined the alliance. The resulting village extended for three miles along the "Greasy Grass" or Little Bighorn River. That village has been estimated by oral informants to have contained twelve hundred lodges with two thousand warriors from the Hunkpapa, Oglala, Miniconjou, Sans Arc, Blackfoot Lakota, and Northern Cheyenne. It is beyond the scope of this work to analyze the defeat of Custer at the Little Bighorn. However, that defeat and the uproar it created in the United States changed a lethargic U. S. Army into a deadly and implacable foe of the Sioux. It also gave American politicians the justification to seize the Black Hills in 1877.

The Taking of the Black Hills

When Custer attacked the Sioux and Northern Cheyenne alliance on the Little Big Horn in June 1876, he set in motion a series of events that would sour white Americans' relationship with the Sioux for the next one hundred years. The first effect of the Custer disaster was that it "shook the Peace Policy to the verge of collapse" (Utley 1984, 184). Second, it galvanized the U. S. Army into unprecedented action in rounding up the non-treaty Sioux and their Cheyenne allies. By the fall of 1876, the Army had begun a campaign of retribution that would last throughout the winter of 1876-1877. In not allowing the non-treaty Indians time to hunt buffalo and establish winter camps in more sheltered areas, Army Commander Colonel Nelson Miles broke down the Sioux and Cheyenne resistance, forcing their final surrender in the spring of 1877. Rather than

become an agency Indian, Sitting Bull led his Lakota followers northward into Canada, out of the reach of the relentless "Bear Coat" Miles. Because Sitting Bull and his people could not follow the shrinking buffalo herds back into Montana, they were eventually starved out and forced to surrender to Miles at Fort Buford, Montana, in July 1881. Most tragically for the Lakota, Crazy Horse was bayoneted while surrendering at Fort Robinson, Nebraska, on September 5, 1877 (Hardorff 2001). During his final hours after being stabbed by a Sioux guard when he tried to resist imprisonment, he made a statement to Indian agent Jesse M. Lee. I include it here because it conveys the very essence of Sioux resistance to reservation life at this time:

My friend, I do not blame you for this. Had I listened to you this trouble would not have happened to me. I was not hostile to the white man. Sometimes my young men would attack the Indians who were their enemies and took their ponies. They did it in return.

We had buffalo for food, and their hides for clothing and our tipis. We preferred hunting to a life of idleness on the reservations, where we were driven against our will. At times we did not get enough to eat and we were not allowed to leave the reservation to hunt.

We preferred our own way of living. We were no expense to the government then. All we wanted was peace and to be left alone. Soldiers were sent out in the winter, who destroyed our villages. Then "Long Hair" [Custer] came in the same way. They say we massacred him, but he would have done the same to us had we not defended ourselves and fought to the last. Our first impulse was to escape with our squaws and papooses, but we were so hemmed in that we had to fight.

After that I went up on Tongue River with a few of my people and lived in peace. But the government would not let me alone. Finally, I came back to the Red Cloud Agency . . . I came here with the agent [Lee] to talk with Big White Chief, but was not given a chance. They tried to confine me, I tried to escape, and a soldier ran his bayonet into me. I have spoken (Nabokov 1991, 178-179).

The third effect of the Little Big Horn disaster was that it precipitated what many Lakota still regard as the illegal "taking" of the Black Hills by the U. S. and the initial

break-up of the Great Sioux Reservation. Just three months after Custer's last stand in 1876, a U. S. government commission headed by George Manypenny came to the Great Sioux Reservation for meetings with agency Sioux chiefs. They brought with them an agreement that required the Sioux to give up all rights to the Black Hills and other lands west of the one hundred and third meridian. It also required them to give up their rights to hunt in the Unceded Territories to the north. In exchange, the Sioux were promised in Article 5 subsistence rations "until the Indians are able to support themselves" (Act of February 28, 1877: 5). The agreement also required that wagon roads could be constructed and maintained "from convenient and accessible points on the Missouri River, through said reservation to the country lying immediately west thereof" (Article 5). In other words, the U. S. government could build roads across the reservation into the Black Hills. Article 3 also required the Sioux to "consent and agree to the free navigation of the Missouri River." Throughout the agreement are explicit exhortations for the Sioux to become self-supporting and "acquire the arts of civilized life."

Not often discussed in the secondary literature is that the Black Hills agreement appears to lay the groundwork for the eventual removal of the Sioux to Indian Territory in present-day Oklahoma.

Article 4. The government of the United States and the said Indians, being mutually desirous that the latter shall be located in a country where they may eventually become self-supporting and acquire the arts of civilized life, it is therefore agreed that the said Indians shall select a delegation of five or more chiefs and principal men from each band, who shall, without delay, visit the Indian Territory under the guidance and protection of suitable persons, to be appointed for that purpose by the Department of the Interior, with a view to selecting therein a permanent home for the said Indians. If such delegation shall make a selection which shall be satisfactory to themselves, the people whom they represent, and to the United States, then the said Indians agree that they will remove to the country so selected within one year from this date. And the said Indians do further agree in all things to submit themselves to such beneficent

plans as the Government may provide for them in the selection of a country suitable for a permanent home, where they may live like white men (Act of February 28, 1877: 4-5).

No such selection of land in Indian Territory was ever made by the Sioux. However, other portions of the 1877 agreement reflect the U. S. government's desire to remove the Sioux problem by whatever means necessary. The implications of the agreement are clear: either become like white American farmers as specified in Articles 5, 6, and 7 or get out of the way.

In contemporary legal analyses of the Black Hills Agreement of 1876, which became law through an Act of Congress on February 28, 1877, attorneys representing the Lakota have noted that the Manypenny Commission ignored the 1868 Treaty's requirement that any cession of land would require the signatures of three-fourths of the adult males. The 1877 treaty was signed allegedly by coercion, by only ten percent of the adult male Sioux population (Getches, Wilkinson and Williams 2004, 359-360). When the U. S. Congress enacted the 1876 Manypenny Agreement into law, it had the legal effect of abrogating the 1868 Fort Laramie Treaty and the practical effect of legitimizing the invasion of the Black Hills by miners and settlers. On several occasions the Lakota have sued the U. S. government alleging that the Black Hills were taken without just compensation. The Lakota Confederacy in 1991 charged the U. S. with treaty fraud. They argued that ". . . any attempt to supplant the legitimate sovereignty of the Lakota by the absorption of territory without the course of negotiations must be considered as an unlawful premature annexation" (Getches, Wilkinson and Williams 2004, 359-360).

It is interesting to consider that in 1946, the Indian Claims Commission found that the 1877 Act constituted a "taking" under the Fifth Amendment of the U. S. Constitution

and that "the Black Hills had been acquired through unfair and dishonorable dealings." They further determined that the Sioux were entitled to \$17.55 million for the gold and the land taken. This topic was discussed in the Department of Defense training course on *American Indian Culture and Communication* which the author took in Cheyenne, Wyoming, in July 2002. The Native American course instructors noted with pride that the Sioux have never accepted this payment and that it remains in the bank accruing interest. The reason that the Sioux have never accepted a monetary settlement is that it would forever sever them from their legal title to the Black Hills. The U. S. courts have rejected all Lakota suits, stating that "Congress had provided an exclusive remedy for wrongful taking of Indian lands in passing the Indian Claims Commission Act" (Ibid.).

After the death of Crazy Horse in 1877, and the surrender of Sitting Bull in 1881, Sioux resistance to internment on the reservation ceased. From an ecological perspective, the U. S. government's (Army and BIA) encouragement to white hunters to slaughter as many bison as possible made the lifestyle of nomadic bison hunting no longer possible for the Sioux. We will discuss the human ecology of reservation life in more detail in conjunction with the Dawes Allotment Act of 1887.

CHAPTER 4

CONTAINMENT: THE EARLY RESERVATION PERIOD

The Break-Up of the Great Sioux Reservation

From the mid-1880s on, the smaller Sioux Reservation (*sans* Black Hills) was seen by the U. S. government and by American commercial interests as a great barrier to American progress. The rich bottomland along the Missouri River was highly coveted by white homesteaders (DeMallie 2001b, 805). The Northern Pacific Railroad was blocked because it could not cut across reservation land. In 1888, the U. S. government sent a team of commissioners to negotiate for the surrender of 9,000,000 acres from the existing reservation. They proposed the creation of smaller reservations around the existing agencies at Standing Rock, Cheyenne River, Pine Ridge, Rosebud and Lower Brule (Maps 8 & 9 Appendix A). Bound by the 1868 Fort Laramie Treaty, they tried in vain to get the signatures of three-quarters of the adult male population.

In 1889, the Commission returned, led by the respected General George Crook, known to the Sioux as "Three Stars." This time, Crook and the other commissioners used a greater variety of coercion tactics; they "feasted the Indians, cajoled them, and even threatened them." The result was that they obtained many more signatures, but whether they satisfied the requirements of the law is controversial. The documents reviewed by DeMallie (2001b, 815) and other historians clearly show instances of misrepresentation and outright fraud. For example, the commissioners called Indian men to the agencies and would not allow them to return home until they signed. The commissioners also allowed underage Sioux boys to sign as well as non-Indian males married to Indian women (Shovel 2006, 2). With Congress passing the Sioux Act of March 2, 1889, the U.

S. acquired nine million acres and created a passage for the railroad and the deluge of homesteaders that would follow (Act of March 2, 1889).

To add insult to injury, the Crook Commission had provided that the U. S. would agree not to cut the subsistence rations, previously obligated under Article 5 of the 1877 Black Hills Act, if the Indians signed. The U. S. government promptly cut the rations by fifty percent as soon as the 1889 Act became law. This resulted in a real famine on the six reservation remnants during a time when drought and grasshoppers had killed most of the home-grown food sources (Shovel 2006, 4).

The U. S. finally achieved its goal of confinement and displacement of the Sioux in 1889, the same year Dakota Territory was split in two and North Dakota and South Dakota achieved statehood (DeMallie 2001b, 815). The Sioux Act of 1889 created six smaller reservations from the Great Sioux Reservation (Map 9 Appendix A). All lands falling outside of these separate reservations were "restored to the public domain" and according to Article 21, could be disposed of by the U. S. under the provisions of the 1862 Homestead Act (Act of March 2, 1889: 13-15).

From a geographic perspective, the Sioux Act created a cultural landscape of "reservation islands" in a sea of white settlers. The five Sioux "islands" adjoining the Missouri River in South Dakota will constitute our primary focus in upcoming discussions. We will also consider in detail the Fort Berthold Reservation of the Three Affiliated Tribes (Mandan, Hidatsa, and Arikara).

The northernmost Sioux Reservation on the Missouri River was created around the Standing Rock Agency. Section 3 of the 1889 Sioux Act describes the new reservation's geographic boundaries. Just south of Standing Rock Reservation is the

reservation created around the Cheyenne River agency. Section 4 of the Sioux Act provides the legal description of its boundaries. Below the Cheyenne River Reservation and still west of the Missouri River is the smaller reservation created around the Lower Brule Agency. Section 5 of the Sioux Act provides the legal description of its boundaries. Across from the Lower Brule Reservation, on the east side of the Missouri River, Section 6 of the Act created an even smaller reservation around the Crow Creek Agency. As noted above, the Santee Sioux tribe's northern Nebraska reservation was recognized but not created by the 1889 Act. (Act of March 2, 1889: 4-7). The Santee reservation will not be included in our upcoming discussion of the impact of the Pick-Sloan reservoir building program.

Allotment and Assimilation in the Early Reservation Period

The Sioux Act of 1889, sponsored by Senator Henry Dawes, applied the same principles of "allotment in severalty" set forth earlier by the 1887 Dawes General Allotment Act. With this particular application to the Sioux, the government first negotiated, actually forced, the cession of nine million acres of "surplus" land and then allotted the remaining reservation lands to the Indians in return for "joint undivided occupancy" (Utley 1984, 247).

The infamous Dawes Allotment Act itself has been the subject of historians' interest for over a century and a great body of historical analyses has been directed toward its profound and terrible results (e.g., Otis 1973; Washburn 1975; Prucha 1985; Carlson 1981). Named for its sponsor, Senator Henry Dawes of Massachusetts, the 1887 act was intended by white reformers to foster the full assimilation of Indians into American society and to protect Indians from white land thieves. What it actually

accomplished was nothing less than the loss of two-thirds of all Indian reservation land in less than half a century.

Dawes and his idealistic supporters reasoned that as long as tribes held land collectively, whites would commit acts of violence against Indians to obtain their land. White "prairie logic" held that if no individual owned the land, then no one really owned it and it was up for grabs. By allotting land to individual Indians, tribal lands could be broken into individual small farm allotments. Indians would be protected and civilized and eventually transformed into and assimilated as productive farmers and ranchers (Hightower-Langston 2003, 352). What the Dawes Act actually did was to give land-hungry white settlers a legal way to get title to Indian reservation land.

The idealistic goal behind the Dawes Act was to eliminate tribal government and tribal culture and to push full assimilation onto Indian communities and individuals. "Kill the Indian but save the man" became the reformers' adage and the best way to "kill" the Indian was to remove him from the shackles of collective "savage tribalism." The most influential humanitarian movement advocating Indian allotment in severalty came out of the annual Lake Mohonk Conference held in Ulster County, New York (Washburn 1975, 12). This conference brought together intellectuals, scholars, humanitarians, and government reformers who were sincerely concerned about "the vanishing Indian race." In a socially relaxed camp environment, they debated and planned strategies to keep American Indians from joining the buffalo on the downward spiral to extinction.

In 1884, Plains anthropologist Alice C. Fletcher, the famous ethnographer of the Omaha, made a very influential presentation at Lake Mohonk. She argued that tribalism was the Indians' greatest threat to survival and Indians were "capable of becoming

citizens with individual allotments of land which they could farm capably" (Washburn 1975, 12). Her eloquence persuaded the conference organizers to prepare a resolution that "the organization of the Indians in tribes is, and has been, one of the most serious hindrances to the advancement of the Indian toward civilization and that every effort should be made to secure the disintegration of all tribal organizations." They further resolved that "to all Indians who desire to hold their land in severalty, allotments should be made without delay; and that to all other Indians like allotments should be made as soon as practicable."

The Lake Mohonk Conference was instrumental in the preparation of a proposed Congressional bill, the 1884 Coke bill (48th Congress, First Session, S. 48). The unsuccessful bill specified an individual allotment of 160 acres. This small allotment might work in the richer Missouri River bottomlands but it was totally inadequate for the more arid grasslands of the high plains. Despite misgivings about the size of the allotment and her feeling that greater flexibility in size was essential, Alice Fletcher joined her fellow conference delegates in approving the draft Coke bill "as the best practical measure yet brought before Congress for the preservation of the Indian from aggression, for the disintegration of the tribal organizations and for the ultimate breaking up of the injurious reservation system."

With the hindsight of a century of Indian struggle to keep their reservations intact, it is hard to know whether to laugh or cry at this bold expression of white American ethnocentrism. What Alice Fletcher and the Indian supporters did not realize was that their well-intentioned assault on Indian tribal culture was an insidious form of genocide. Destroy a people's culture and you may very well destroy their will to survive. The Ghost

Dance revitalization movement created by the Paiute visionary Wevoka gained popularity with the Sioux only after the 1887 Dawes Act and 1889 Sioux Act almost broke their will to survive.

Washburn (1975, 15) notes that the 1884 Coke bill and other severalty bills were introduced, discussed in committees, and favorably reported in successive Congresses but without any final disposition. The political problem with all these bills was that they authorized the President to issue patents for Indian reservations in favor of the several tribes holding them. Under such patents the U.S. was to hold the patented land in trust for the tribes for twenty-five years, and then convey it by patent to the respective tribes, free and clear of all legal encumbrances. The purpose of this provision was explicitly stated in the discussion of the 1884 Coke bill, "It places the strong restraint of the law upon the unjust occupation of Indian lands in the incessant push of Western settlement." In order to get a severalty bill passed this provision benefiting the Indians had to be removed. Washburn (1975, 21) notes that "white farmers, speculators, railroad men, and frontiersmen generally resented the Coke bill's guarantee of tribal land as inalienable for twenty-five years, and Congress had, as noted earlier, held back from passage of such a bill."

In February of 1886, Senator Henry Dawes introduced a new allotment bill in the Senate which differed from the Coke bill only in its provision to allow the Secretary of the Interior to purchase any portion of an Indian reservation not needed for allotment. This critical change, which allowed for white acquisition of reservation land, was the conceptual breakthrough needed to pass the legislation. The U.S. Senate passed the Dawes bill which became the General Allotment Act of 1887 on February 25, 1886. The

final plan (signed February 8, 1887) authorized the President to have Indian reservations surveyed and to allot the lands as follows (note acreage figures inserted by author):

To each head of a family, one-quarter of a section (160 acres); to each single person over eighteen years of age, one-eighth of a section (80 acres); to each orphan child under eighteen years of age, one-eighth of a section (80 acres). To each other single person under eighteen now living, or who may be born prior to the date of the order of the President directing an allotment of the lands embraced in any reservation, one-sixteenth of a section (40 acres) (Act of February 8, 1887:3).

Washburn (1975, 24) notes in his critical overview that the Dawes Act "authorized the President to break up Indian reservations, allot to the Indians 40 to 160 acres of their own lands, and open the remainder to white settlement without consultation with the affected Indians."

Under the allotment system, children and grandchildren inherited smaller and smaller parcels until they reached a point where selling or leasing was the only economically rational course of action. On a national basis, two thirds of all reservation Indians ended up selling their lands to white farmers and ranchers at the end of the twenty-five year trustee period (Hightower-Langston 2003, 352). In 1891, Congress amended the Dawes Allotment Act to 80 acres for each adult Indian and authorized the Commissioner of Indian Affairs to lease Indian allotments to non-Indians. As a result, Indians lost even more control of their land. Later amendments to the Dawes Act expedited the process by allowing tribal members to directly lease their 80 acres to white farmers, ranchers, mining and timber companies, etc. In many cases, leases were well below fair market values (Hightower-Langston 2003, 353). Prior to the 1934 Indian Reorganization Act, several tribes had sued the government in an effort to keep ownership of reservation lands determined surplus after initial allotment. But U.S.

Federal Courts consistently ruled that the federal government did not need tribal consent to sell surplus lands on the reservation, notwithstanding what previous treaties may have said.

The consensus of most historians is that the Dawes Act was disastrous for American Indians (NADP 2006, 1-6). It did not promote or benefit Indian agriculture. It did not allow Indians to become self-supporting yeoman farmers in the Jeffersonian mold. On the majority of reservations in the west there was just not enough fertile, tillable land for allotment to work. Carlson (1981) developed a model of economic activity on Indian reservations that showed that the problem was not the Indian's inability to farm but that they made "rational decisions not to farm unprofitable land." Where Indians were allowed to raise cattle on arid western grazing lands, they equaled or surpassed their white neighbors. In subsequent sections, we will see a real life example of this success on the pre-reservoir Fort Berthold Reservation (McLaughlin, 1993). With regard to the stated goals of the Dawes Act supporters, i.e., the assimilation of Indians into American society and the concomitant reduction of Federal support, the results of allotment are neutral. Other socio-cultural factors appear to be much more important toward promoting assimilation, such as Indian participation in the armed forces during World War I. The one thing that all historians accept is that the Dawes Act facilitated the continuing loss of Indian land.

The Dawes Act called for 160 acres to be allotted to heads of families and 80 acres to be allotted to single adults, ostensibly this was to protect Indians from land swindlers. The creators of the legislation placed restrictions on the use and disposal of the lands. One important restriction in Section 5 of the Act was that the allotted land was to

be held in trust by the U.S. government for twenty-five years. During that time, allottees could not lease, sell or will their lands to their descendants. The unforeseen result was that Indian allottees could not get bank loans and had no way to buy farm equipment or make necessary improvements to their land. In order to survive, two-thirds of Indian allottees were forced to sell their lands to whites at the end of twenty-five years (Hightower-Langston 2003, 352).

Prior to the 1934 Indian Reorganization Act, which effectively reversed the disastrous course set by the Dawes Act, a number of amendments were made to the 1887 General Allotment Act. None of them were beneficial to the Indian. For example, an 1891 amendment reduced allotments to 80 acres for each adult and allowed the Indian commissioner to lease allotments to non-Indians. Subsequent amendments allowed tribal members to lease their 80 acre allotments to non-Indian individuals or companies which took ever more reservation acreage out of Indian control. Some Indian tribes filed lawsuits in an effort to retain the "surplus land" after allotments were made. In the 1903 precedent setting case of *Lone Wolf vs. the U.S.*, the Kiowa filed a lawsuit to block the sale of "surplus lands" on the reservation without tribal consent. The U.S. courts ruled that tribal consent was not required and that previous treaties such as the 1868 Fort Laramie Treaty that created the Great Sioux Reservation were effectively abrogated (Ibid.).

With the Dawes Act of 1887, the amount of surplus land on Indian reservations was determined only after allotments to Indian individuals were completed. With the Sioux Act of 1889, the procedure was reversed. The U.S. government "negotiated" the cession of the surplus lands first, and then allotted the remaining portions of the Great

Sioux Reservation to the Sioux in return for "joint undivided occupancy" (Utley 1984, 247). Together these two critical pieces of legislation radically changed the life of the Sioux and the cultural landscape of the Northern Plains. They also left the Sioux "a badly divided and thoroughly demoralized people" (Utley 1984, 249).

During the Crook Commission's coercive negotiations leading to the passage of the 1889 Sioux Act, Sioux tribal spokesmen voiced their fears that, having given up their land for the assurance of rations, what would prevent the Federal government from cutting these rations? The commissioners had always responded that the treaties fixed the amount of rations and that the land agreement had nothing to do with the treaties. However, once the commissioners obtained the needed signatures, Congress cut the Sioux appropriation, thus confirming the Sioux's worst fears. The annual beef issue at Rosebud, Pine Ridge, and the Upper Missouri reservations was cut in half.

On February 10, 1890, President Harrison, without waiting for Congress' formal approval of the Crook Commissioner's promises to the Sioux, threw open the ceded territory to white settlement. In addition to losing their land and having their rations reduced to starvation levels, the winter of 1889-90 brought an epidemic of measles, influenza, and whooping cough. The summer of 1890 brought a drought that destroyed what few crops had been planted. With the buffalo herds destroyed, confined to reservations without adequate food, and their land stolen through legal machinations, the Sioux sought relief through the spiritual realm which had always nourished them. They ardently embraced the Ghost Dance religion of the Paiute prophet Wevoka. The apocalyptic vision set forth by Wevoka appealed so strongly to the Sioux because it was the very antithesis of *wasichu* assimilation. The Ghost Dance religion promised an Indian

paradise in which the earth was renewed, white society was buried, and the buffalo returned. Tragically, what this messianic movement delivered was the horror of the Wounded Knee Massacre in 1890 (Brown 1970, 439-445; Utley 2004, 1-5).

Sioux Ecology in the Early Reservation Era

With the creation of even smaller reservations in 1889, and the effective extinction of bison on the Northern Plains by the mid-1880s, the relationship of the Sioux to their environment was forever changed. The General Allotment Act of 1887 emphasized land ownership above all and the Sioux struggled to make sense of the American farming lifestyle that bound them so firmly to one piece of land. Since the Fort Laramie Treaty of 1868 the agency Sioux had received a significant portion of their material needs from the U.S. government. For example, the U.S. government was supposed to provide clothing annually for thirty years. The U.S. government was also bound by the Treaty to provide the other necessities of life such as agricultural tools, housing supplies, wagons, and stock cattle in an effort to "civilize the Sioux." Problems came when Congress would arbitrarily cut the budget and these necessities were not provided in time or in sufficient quantities or were just cut off entirely. As the years passed the once self-sufficient Sioux became increasingly dependent on government hand-outs from agency officials that did not really care whether they lived or died. Those few officials sincerely interested in the Indians' welfare were in the minority.

The 1868 Fort Laramie Treaty stipulated that issues of clothing were to be made by the first of August. This deadline was rarely met. Ostler (2004, 130) provides this excerpt from the Cheyenne River Sioux on the hardships caused by missing such a deadline:

Last winter our people all left their camps and came to the agency expecting every day to get our goods but we did not get them for several weeks The weather was very cold and many of our people almost perished because they had no clothing and many of them that had poultry and small stock at home found much of it frozen when they got back.

The food rations provided by the U.S. government were usually late in coming and never comparable to the protein-rich diet enjoyed by the Sioux before their forced confinement on reservations. A diet rich in meat was essential to survival during the extremely cold winters on the Plains. When the beef rations to the Sioux were curtailed by Indian agents, many Sioux died. One historically documented example of this was the government's effort to curtail issuing beef rations "on the hoof" and change over to issuing beef "on the block" or frozen for later issue (Ostler 2004, 131). During the early reservation period, the U.S. Indian agents released live cattle at the agency or at selected locations on the reservation to Sioux band leaders. The Sioux called the day "*wanasapi*," the word for a communal buffalo hunt. It provided the Sioux a sense of continuity with their past and a small amount of control over what they actually could eat (e.g., bone marrow and vitamin rich internal organs). Men shot the cattle and women joined in the butchering and skinning. While not the same as a communal bison hunt, the opportunity to kill and eat their own food was important to the Sioux physical and mental well-being. After a time, however, BIA officials began to object to this "hunting" of U.S. beef on the hoof. They argued that it reinforced barbaric behavior (e.g., eating raw liver) and gave Indians the unwelcome opportunity to own weapons and acquire ammunition (Ostler 2004, 131). As a result, the Indian Bureau began to require that cattle should be killed and butchered by agency employees and issued "on the block." Because Indians could not select their own cuts of beef and could not utilize the marrow and the vitamin rich internal organs,

essential in such a challenging environment, their health suffered. But, in addition, their self-esteem also suffered. Ostler (2004, 132) puts it this way:

It was one thing to have government officials release cattle and have Indians take over from there. It was quite another for Indians to contemplate the prospect of government officials throwing them pieces of beef.

Sioux women already resented that they were forced to wait in line for hours to obtain rations of flour, coffee and sugar and that the clerks often threw the rations at them "as if they were dogs."

Issuing beef "on the block" not only deprived the Sioux of dietary nutrients and offended their innate sense of self-respect, it deprived them of the hides they needed to make traditional leather goods such as moccasins. Furthermore, the loss of the cattle hides deprived them of the opportunity to trade leather goods for additional food. One cattle hide was worth a hundred pounds of flour and a small amount of clothing. In the marginalized economy of the early reservation period, people were literally living on the edge of life and death so these hides could make all difference. To make matters worse, U.S. agents on the reservations were instructed to use food rations as a tool to force compliance with rules designed for rapid cultural assimilation. Agents on reservations threatened Sioux parents with the withholding of food rations if they refused to send their children to off-reservation boarding schools or if they hosted or attended traditional dances or religious ceremonies (Ostler 2004, 133).

From an historical geographic perspective, one noticeable change on the reservation landscape was the increased use of American-style houses by the Sioux. With the disappearance of the bison herds, they lost the hides needed for tipis. Cattle were insufficient in number to make up the loss and eventually even their hides were withheld

by agents who could sell them more profitably off-reservation. During the early transition period in the 1880s, the Sioux made tipis from government-issued canvas but these proved cold and drafty in winter conditions. Eventually, the U.S. government honored their treaty obligations to the extent that building materials for log houses were issued and stoves were provided to heat them. As the nineteenth century drew to a close, the Lakota lived in cabins during the winter but continued to live in canvas tipis during the warmer summer months. However, to force cultural assimilation, agency officials often cut back on the issuing of canvas to recalcitrant Indians who did not build log cabins (Ostler 2004, 134).

BIA officials, intent on implementing an official government policy of cultural assimilation, had to contend with Sioux resistance that could be subtle yet very effective. Sioux “passive resistance” to white demands has endured from the early reservation period up to the present. An example of Sioux resistance to American assimilation efforts is their early refusal to spatially separate their houses onto their individual allotments. To spatially separate like most American farm families would have accelerated the break-up of their community and severed tribal relationships. On the Pine Ridge reservation, they built their log cabins along streams in relatively close proximity to each other. This configuration created elongated villages that functioned in the same manner as a band or “*tiyospaye*.” They modified their cabins’ interiors to resemble the walls of a tipi by using muslin wall coverings. These they painted with the kinds of designs that traditionally covered the exterior walls of a tipi. Through the constant visiting of each other’s cabins, they reinforced their own cultural values in pictographs and drawings of Lakota history and the traditional roles of Sioux men and women (Ostler 2004, 134).

In ecological terms, the Sioux's hunting of small game on the reservation, and off the reservation when they could do so, kept their hunting skills intact. It also gave them some sense of cultural continuity. With the enormous herds of bison now gone, the Sioux of the early reservation period hunted deer, pronghorn antelope, jackrabbits and other small game with bows and arrows they had to keep hidden from white Indian agents. Since they were denied access to guns and ammunition, Sioux men hunted to put meat on the table while white agents played games with beef rations. They also used elk, deer and pronghorn antelope hides for leather goods and traded hides for cash (Ostler 2004, 136). First-hand accounts from whites who were befriended by agency Sioux also report that their diet included a variety of wild plant foods. One young white woman in 1889 observed women and children gathering wild cherries, wild turnips, rose-hips, mint and balm. Lakota women also gathered service berries, choke cherries and plums during the summer months as these came into season. All this took place within an oppressive colonial system designed to gain control over their food, their way of life, even their most personal beliefs. It is a remarkable story of endurance in the face of extreme adversity.

The repressive reservation system and the 1887 Dawes Allotment Act were tools of the U.S. government's policy of assimilation. That policy was guided by the 18th century Jeffersonian vision of America in which Indians could be civilized to become self-sufficient farmers and cattlemen. The success of the five "civilized tribes" of the Southeast certainly gave credence to the farming ideal, but to make Jefferson's vision a reality in the West, would take more than just providing the Sioux with seed and tools.

It has become an historical cliché to characterize the bison hunting Sioux of the 1880s as having a natural antipathy to farming. But historically, the Sioux were

horticulturists before they moved out onto the high plains in the late eighteenth century. The Lakota name "minneconjous" meaning "planters beside the stream" is indicative of their horticultural heritage (Ostler 2004, 137). So what made the government's dream of Sioux yeoman farmers on the South Dakota landscape so impossible? The Northern High Plains landscape has three characteristics that doomed the "dry-farming" government experiment: 1) the growing season is short; 2) the soil on the high plains is poor; and 3) the rainfall is unpredictable, cyclic, and tends to be scarce. Where farming could succeed in the region it had already flourished for centuries, in the Missouri River floodplain, which even in prehistoric times had been fertile and well watered enough to support Mississippian-style horticulture.

Over the course of a century, the Sioux had adapted superbly to the semi-arid High Plains ecosystem which supported immense herds of bison. This "bison ecosystem" was destroyed by white America out of greed along with a deliberate strategy to displace the Plains tribes that stood in the way of America's westward expansion. Now that the bison were effectively gone and the Indians confined to smaller reservations, American attempts to transpose an Eastern subsistence strategy onto the Plains began to bump into harsh reality. Only where the Sioux had access to the Missouri River floodplain, or the floodplains of smaller tributaries, did they again become successful farmers.

During the 1880s, much of the farm work on the Missouri River reservations was done by women. Ostler (2004, 137) notes that this was partially due to men working for wages away from the home. But there may be another explanation that would become more important with time. The arid plains environment supported a vast grassland ecosystem ideally suited to grazing herbivores. With the bison almost extinct, many

Indians recognized that cattle grazing could be their best chance for long-term survival in a confined reservation situation.

During the early reservation period, many U.S. Indian agents tried to block Indian effort to raise cattle because "it would retard their progress toward civilization" (Ostler 2004, 138). Gradually, the more intelligent agents recognized that cattle grazing made sense for the Indians on the high plains just as it made sense to the white cattle barons. Iverson (1994, 53) reports that for many Plains tribes, including the Sioux, their horsemanship and knowledge of the landscape made them ideally suited to the cowboy way of life.

On the Standing Rock and Cheyenne River reservations, cattle-raising became important early on the grassland areas of both reservations. By 1890, the Cheyenne River Sioux were providing one fourth of the beef required for their agency's rations (Ostler 2004, 138). This remarkable increase in their stock came from the Sioux's extraordinary care of their herds. The Sioux cut hay for their animals using mowing machines and built shelters to keep them from freezing to death during the intensely cold Dakota winters. These were measures that very few white ranchers were taking at the time. In one annual report to the BIA (1887), the Indian agent at Standing Rock reservation noted that Indian winter cattle losses during that incredibly harsh winter were lower than those of non-Indian ranchers. When the snow was so deep the cattle could not reach the grass below, the Indians "fed their cattle with the bark of cottonwood trees, just as they had fed their horses in seasons past" (Ostler 2004, 139). It is worth mentioning here that the western Sioux (Lakota) were also able to increase their horse herds even during those times when white ranchers could not. One example of this comes from the Cheyenne River

reservation. In 1876, following Custer's massacre at Little Big Horn, the U.S. Army took away the "war-horses" of the agency Indians. However, they did not take the horses of mixed-bloods (*metis*), and white men with Indian wives, so-called "squaw men." Through trade with these people and with other tribes on reservations, the Lakota gradually built up their herd. In 1878, there were just 606 horses reported in the U.S. agents' annual report. By 1887, the herd size had increased to 2,789 (Ostler 2004).

Despite their success in raising cattle and horses, the Sioux of the early reservation period were forced to confront a colonial-style administration that did not embrace their traditional tribal values (Ostler 204, 139). Sioux bison hunters were traditionally regulated by tribal values that required reciprocal obligations among kin within the residential band or "*tiyospaye*." Hunters distributed meat from a kill to needy relatives, or they might provide all the meat for a special feast or dance. This traditional reciprocity carried over to the cattle era on the reservation. The slaughter of dozens of cattle for a larger social occasion on the reservation was proper etiquette within the Sioux cultural system. But Indian agents intent on propagating American capitalism were angered by displays of tribal collective economic behavior. Agents actually punished Indians who managed their stock cattle in Indian fashion and not "in the spirit of capitalism." Ostler (2004, 139) reports one incident where three Lakota men at Pine Ridge Reservation were fined and sentenced to fifty days of hard labor for killing cattle for a kinship-related social event.

In his unique study of the Plains Sioux from the perspective of American colonialism, Ostler (2004) provides many examples of Sioux pragmatic economic behavior in the face of an oppressive colonial government. Most of these examples have

been gleaned from the Annual Report of the Commissioner of Indian Affairs (ARCIA). This annual report summarized the yearly reports of all the Indian agents under his supervisory control. One of the most successful economic endeavors by the Sioux was hauling freight. They took up this activity not because they were becoming culturally assimilated but because it offered the freedom of movement they longed for and provided an income to supplement the rations issued by the agents. Other related activities were the chopping of wood in the Missouri River bottomlands for steamboats. Sioux laborers hauled water from the Missouri River in barrels for use at the agency at Standing Rock before a new water system was constructed in 1889. They even sought out work off the reservation when it was permitted by the agents. One of the most compelling and symbolic activities the Brule Sioux engaged in during the 1880s was searching for and collecting the bones of buffalo killed during the final slaughter of the early 1880's. These bones were ground up for fertilizer and sold nationwide. The 330 tons of bison bone the Brules collected and hauled did provide them with income but surely "each bone gathered was a bitter reminder of all that had been lost" (Ostler 2004, 148).

During this early reservation period, the devastating effects of the 1887 Dawes Allotment Act also began to be clearly seen. Geographically, the allotment process caused a "checkerboard effect" on reservation land ownership. Government surveyors blanketed the Sioux reservations as they computed the total acreage and began dividing the land into 160 acre parcels for each of the adult males who were heads of families. At the same time, census takers counted the members of the heads of households. After the reservation lands had been assigned to all the allottees, there was always land left over, in fact the majority, to be auctioned off to the highest bidder (Thomas, et al, 2001, 368).

This process not only resulted in the loss of Indian land, it worked against the best use of the arid grasslands. Cattle grazing in numbers sufficient to feed the Sioux, and perhaps make a reasonable profit, required thousands of acres. One cow alone could need 40 acres if the grass was sparse or poor quality. Tribal cooperation would be needed to provide the vast acreage needed. Allotment worked against tribalism at all levels because it stressed individual land ownership. Theodore Roosevelt, a young Dakota rancher at this time, called the entire Indian land allotment process "a mighty pulverizing engine to break up the tribal mass" (Thomas, et al 2001, 369).

Not only did non-Indian land ownership "checkerboard" the reservation as the unallotted land was sold off, the 160 acre Indian parcels were subdivided into smaller and less useful parcels after just a few generations of inheritance. Many of these small parcels were leased to white ranchers in an effort to raise desperately needed income. This micro-checker-boarding effectively destroyed the vision of Dawes and other reformers of "a new generation of happy Indian farm families" (Thomas, et al. 2001, 368).

Several historians have noted that the long-term survival of the Sioux and other Plains tribes was actually unexpected. The whole allotment system was built on the premise of continuing Indian depopulation. Reformers had seen the steep population decrease among the Plains tribes caused by smallpox, warfare, and resistance to white encroachment and expected the downward trend to continue. The whole reservation system was created to provide a safe but temporary haven for what they believed was a "vanishing race." Fortunately, the downward population spiral gradually stopped and Indian populations began to grow very slowly in the late 19th century.

The Fort Berthold Indians in the Early Reservation Period

After the devastating smallpox epidemic of 1837-38, the Mandan, Hidatsa, and Arikara began a long process of cultural and social fusion. Living together in a single village after 1845, they created for themselves a new collective tribal identity. Despite their relatively few numbers, the so-called "Fort Berthold Indians" controlled a vast "common homeland" of over twelve million acres (Van Develder 2004, 72). The 1851 Fort Laramie Treaty had given formal recognition to this common homeland that covered large parts of western North Dakota, northeastern Wyoming, and eastern Montana (Map 7 Appendix A). During the 1851 treaty negotiations, the boundaries of this homeland were described as follows:

. . . commencing at the mouth of the Heart River, thence up the Missouri River to the mouth of the Yellowstone, thence up the Yellowstone to the mouth of the Powder River, thence from the Powder River to the headwaters of the Little Missouri, and along the range of the Black Hills to the headwaters of the Heart River, then following the watercourse back to the place of the beginning" (Van DeVelder 2004, 72).

This vast area comprised the buffalo hunting grounds controlled by the Mandan, Hidatsa, and Arikara peoples since the fifteenth century C.E. The Upper Missouri's Village Farmers had always been seasonal bison hunters and they depended on the summer bison hunts to supplement their bottomland horticulture. They also had traded extensively with the nomadic Plains tribes who became full-time bison hunting specialists during the equestrian revolution. During the early reservation period, however, the near extinction of the bison herds by white hunters made the control of millions of acres unnecessary. Their own reduced numbers and the constant influx of white settlers simply made it

impossible. The entire period after the Fort Laramie Treaty of 1851 could be characterized as the doomed attempt of the Fort Berthold Indians to hold onto their land.

During the U.S. government's efforts to seize Indian land while European settlers poured into the Dakotas, white perceptions grew that the Fort Berthold Reservation was just too large for the small numbers of Indians living there. The government's own language in the later 1886 land cession by the Fort Berthold Indians made this explicit:

. . . it is the policy of the Government to reduce to proper size existing reservations when entirely out of proportion to the number of Indians existing thereon, with the consent of the Indians, and upon just and fair terms. And that 'the Indians of the several tribes, parties hereto, have vastly more land than they need or will ever make use of, and are desirous of disposing of a portion thereof in order to obtain the means necessary to enable them to become wholly self-supporting by the cultivation of the soil and other pursuits of husbandry . . .'

(McLaughlin 1993, 129).

The U.S. government's land taking began soon after the Arikara joined the Mandan and Hidatsa at Like-A-Fishhook village. In the first treaty at Fort Berthold in 1866, the U.S. commissioners sought permission for the construction of roads and telegraph lines through the territory of the Three Affiliated Tribes. An addendum to the treaty required the Mandan and Hidatsa to cede lands south of the reservation for use in constructing a stage line. While this agreement was signed by all three tribes, it was never ratified by the U.S. Congress. The second Fort Laramie Treaty of 1868 dealt exclusively with the Great Sioux Nation. It did not apply to the Fort Berthold Indians in North Dakota. It was not until 1870 that President Ulysses. S. Grant signed an executive order setting aside 7.8 million acres to create "The Fort Berthold Reservation" (Schneider 2001, 391). With the stroke of a pen, the Fort Berthold Indians lost five million acres of their ancestral homeland. When the reservation was given legal status by executive order on

April 12, 1870, a small strip of land east of the Missouri River was included at the urging of a concerned Army officer, Capt. S. A. Wainwright. This was to guarantee the three tribes possession of the land their village actually occupied.

Unlike the treaty of 1868 that created the Great Sioux Reservation, the 1870 executive order made no provisions for rations and annuities. The village farmers were forced to be self-reliant during the time when bison hunting became less and less dependable. By the early 1880's, the immense bison herds had been so decimated by white hunters that they were on a downward spiral to extinction. The last recorded bison hunt on the Northern Plains took place in the fall of 1883 (Isenberg 2000, 159; Shovel 2006, 1). From the early 1880's on, the majority of Plains Indians became completely dependent on U. S. government beef herds for the greatest part of their sustenance. Only their skillful exploitation of the plant and animal resources of the Missouri River floodplain allowed the Village Farmers to survive. The leaders of the Three Affiliated Tribes complained to the government agents that "the government treated the tribes who fought against it better than those that did not take up arms" (Schneider 2001, 391).

Further land cessions by the Three Tribes came as a result of the U. S. government's concessions to the Northern Pacific Railroad. The original 1864 railroad line was to have cut through the heart of the three tribes' territory. Following a long work stoppage and reorganization, the Northern Pacific's board of directors began in 1879 to put pressure on the U.S. government to show good cause why they could not put their railroad line through, what looked to them, like unoccupied and unused territory. Despite the efforts of the BIA agents who tried to keep the reservation, the U.S. government favored the Army position of further reduction. By Presidential Executive Order of July

13, 1880, the Three Affiliated Tribes were deprived of the greater part of their ancestral lands. Historian Meyer (1977, 113) reports "there was not the slightest consultation with the Indians prior to the issuance of this executive order." The justification by the Army officers who influenced the issuance of this order was that the Indians no longer used the land for bison hunting. By 1880, the 7.8 million acres comprising the Fort Berthold Reservation had been reduced to just 2.9 million acres (Meyer 1977, 137).

With the passage of the Dawes Act in 1887, the government's land-grabbing process seemed to have reached its ultimate sad conclusion in the pre-reservoir North Dakota landscape. Land not allotted to individual tribal members was opened for sale to land-hungry Euro-Americans and Scandinavian immigrants. But in 1891, the Three Affiliated Tribes were forced to make still another land cession. This last cession had actually begun in May 1886, when three commissioners, John Wright, Jared Daniels, and C. F. Larrabee visited Fort Berthold during an extended trip. Their purpose was to negotiate more land cessions from numerous tribes in Minnesota and the Dakotas. They negotiated the sale of two-thirds of the Fort Berthold Reservation. The 1886 agreement "left only the area south of the 48th parallel and east of a north-south line drawn six miles west of the westernmost point on the big bend of the Missouri" (Meyer 1977, 137). In return for this major land cession, the three tribes were to receive \$80,000 annually for ten years. It also provided for the allotment of reservation lands. It was only this allotment provision that caused any objections to be raised by the Mandan and Hidatsa. The loss of their trading role with nomadic Plains tribes (now confined to reservations), and the near extinction of bison by 1883, made the cession of their unused lands for a regular annuity seem reasonable. It is important to note here that, unlike the Sioux, the

Fort Berthold Indians were not recovering from a protracted and bitter war with the United States. They had not participated in the Great Sioux War except to serve as scouts for the U.S. Army.

The 1886 agreement was not ratified until 1891. The reason for the long delay centered on the original provisions in the agreement that all lands remaining after allotment had been carried out were to be held intact for twenty-five years and then conveyed "by patent to said tribes in common in fee" (Meyer 1977, 137). The Indian Commissioner in Washington, John D. C. Atkins, objected strongly to this because he believed it would create "a kind of landed aristocracy" and perpetuate tribalism. Atkins, like so many other bureaucrats dealing with Indians at this time, was an advocate of forced assimilation. So even though the agreement was submitted to Congress in January 1887, it languished there until the offending article had been replaced. The replacement provision specified that surplus land would be held in trust by the U.S. government as part of the reservation. These lands would not be patented "in common in fee" to the tribes. This change required the approval of a majority of Fort Berthold's adult males. Only after this was accomplished did the President sign the act on May 20, 1891, and the Fort Berthold Indians became recipients of the benefits promised. By the time the 1891 Act was signed by President Grover Cleveland, the Fort Berthold Indians were being acculturated so rapidly that the thousand- year-old Plains Village lifestyle had really ceased to exist.

Meyer (1977, 134) has characterized the abandonment of Like-A-Fishhook village in the mid-1880s and the dispersal of Indian families across the landscape onto allotted tracts of land as one of the most important events in the history of the Three

Affiliated Tribes. The Indians' decision to abandon the traditional village lifestyle was aided and abetted by Indian agents who were tasked with implementing the U.S. policy of forced acculturation. In their reports to their superiors, these agents complained of the unsanitary conditions in the old village and how the problem of waste disposal created conditions conducive to the spread of disease (Meyer 1977, 134). The agents forgot to mention that the source of the epidemics that nearly annihilated the three tribes came from whites. The problem of village middens was not new. Plains' archaeologists have recorded refuse middens around Upper Missouri earthlodges that were so thick that the village's open plaza area appeared "to be sunken in comparison" (Ibid.) Nevertheless, conditions in Like-A-Fishhook reached a state that required relatively little persuasion by Indian agent Gifford to convince the three tribes that it was time to leave their beloved village behind. Traditionally, this was the time when a new village site would be chosen and the cycle of midden formation would start over. What changed in the mid 1880s was that an agent of American colonialism facilitated the end of village life, because it was perceived as uncivilized.

As Arikara families started the exodus from Like-A-Fishhook to new farms about twenty miles from the agency, Agent Gifford had the lodges and log cabins in the village destroyed immediately after their departure. There would be no turning back from the white road to acculturation. By 1886, the Arikara section of Like-A-Fishhook had been abandoned. The Hidatsa and Mandan soon followed them. By the winter of 1888, only a handful of Mandan elders, too infirm to move, lingered in the few earthlodges remaining. As McLaughlin (1993, 110) has noted in her doctoral dissertation on the Fort Berthold Indians, "this ended the final phase of the Plains village tradition."

The Dawes Act of 1887 gave Indian “male heads of households” 160 acres and 320 acres when grazing was the primary means of economic production. Women and orphan children were given smaller lots. As they moved onto their allotments, the Fort Berthold Indians began transforming their material culture through a gradual process of acculturation, much as the five "civilized tribes" had done in the Southeastern U.S. a century before. This should not be regarded as selling out or caving in to American colonial power. The decision to change their material culture was a rational, largely economically-driven, decision that was necessary given their socio-economic and ecological imperatives.

One example of their selective acculturation is the abandonment of the earthlodge for the log cabin. Having left their village home of fifty years, and dispersing across the Missouri River Valley, they adapted the house style of the white settlers who surrounded them. But unlike those white settlers who built sod houses on the more open high plains, the Fort Berthold Indians made use of the timber resources of the Missouri River bottomlands. The log cabins used by the Indians preserved some of the features of the traditional earthlodge. One Congregational minister in the new agency town of Elbowoods, a certain Reverend Hall, left this description of the typical log house in 1890, the time when allotment really began to take effect at Fort Berthold.

Chinked with mud, it consisted of two rooms, one about twenty feet square, the other perhaps half that size. In the larger room, which was the men’s sitting and sleeping quarters, one found a rusty heating stove on the dirt floor. Along the walls were two low benches made of rough boards and wooden blocks; one or two bedsteads of the same materials occupied the rest of the space. Light was provided by one or two panes of glass plastered around with clay. The other room, which served as kitchen, pantry, storeroom, women’s quarters, and nursery, was lighted by an open door or by a pane of glass stuck under the eaves. Visitors to such a dwelling might be offered coffee, unleavened biscuit, potatoes, and sometimes venison (Meyer 1977, 155).

While the Fort Berthold people lived in log cabins at the end of the nineteenth century, their core cultural values remained with the earthlodge. They were still building large ceremonial earthlodges in 1888 when Hall visited an Arikara settlement to conduct a Christian service (Meyer 1977, 155). By 1900, however, the Fort Berthold Indians were clearly in a state of transition. The problems of their old life marked by interminable warfare with the Sioux and the worry of ever-shrinking bison herds had given way to a whole new set of problems. While they no longer depended on the white fur traders and the Indian bison hunters for the necessities of life, they were under the thumb of an alien government with the clear goal of transforming them into good Americans. Their children were forced to go to schools, both on and off the reservation, where their own culture and languages were ridiculed. At Fort Berthold, there were two mission schools, a government boarding school at the agency in Elbowoods, and three day schools whose sole purpose was to "kill the Indian but save the man or woman" (Meyer 1977, 156).

The autobiography of Louis Two Ravens Irwin, a Mandan-Hidatsa, gives us some insight into the soul of these people (Irwin and Liebert 1996). In describing his people's special attachment to the Missouri River bottomlands, Two Ravens wrote:

In those days my people's communities and farms were all up and down the bottoms of the river and a beautiful road with big trees all along it connected the communities. Today, places that were just down the river might be a two-hour drive around the lake . . . My people had always been farmers, and I remember the big community gardens where we grew corn, squash, beans, potatoes, turnips, melons, and just about anything else you can think of . . . My people were self-sufficient, all we had to trade for was some salt and coffee and flour. North Dakota is a cold place, but the people had lots of timber and firewood that grew along the river bottoms . . . We hunted deer, rabbits, and prairie chickens and ate fish from the river. Along the Missouri we gathered bushels of plums and chokeberries and bullberries. My people were also successful ranchers and had

big herds of horses and cattle, our new buffalo. We called the Missouri the "Grandmother River" (Irwin and Liebert 1996, 9-10 passim).

The life and the struggle of Two Ravens will become even more pertinent as this discussion moves on to consider the modern reservoir landscape. For now, it is important to consider his comment that his people were successful ranchers. One cannot really understand the Three Affiliated Tribes unless you know them as cattlemen.

Allotment did not produce the big increase in agricultural production that the government Indian agents anticipated (McLaughlin 1993, 143). Still, the Mandan, Hidatsa, and especially the Arikara, made concerted efforts at grain farming. During the 1890s, the Arikara produced two thirds of the harvested wheat crop. But cultivated acreage at Fort Berthold declined by half during the first years of the new century. By 1904, the breaking of prairie grassland for new crops had just about stopped. The three tribes ran up against the harsh reality of the Plains climate just as the Euro-Americans had done. The semi-arid and unpredictable climate of western North Dakota simply could not support the dry land farming of grain crops like wheat and flax. As McLaughlin (1993, 143) notes, "the highly variable annual and seasonable precipitation, which averaged less than sixteen inches, short and hot growing seasons, and long winters made for erratic and unpredictable crop production that was discouraging for both the Indian and for their tutors."

The Three Affiliated Tribes were being asked by U.S. Indian agents to dry-farm grasslands that had evolved as one of the greatest habitats for grazing herbivores in the world. It just didn't make sense to the Fort Berthold Indians and gradually the U.S. agents themselves came around. By 1911, only one hundred Indians on the reservation, less than

one third of the entire adult male population, were farming on the high plains. Only 1,000 out of 151,882 allotted agricultural acres were actually under cultivation. The reservation agent, a man named Hoffman, wrote a forceful letter to the U.S. Indian commissioner advocating that Indians should concentrate their efforts on stock raising and "confine their farming to growing corn and vegetables rather than cash grains" (McLaughlin 1993, 146). As noted earlier by Two Ravens, all of the successful vegetable and corn farming took place in the Missouri River bottomlands. In his letter to Washington, agent Hoffman also noted that the Arikara's strong commitment to farming had made them "the poorest Indians on the reservation." Hoffman also wrote this prescient statement: "They failed for the same reasons that almost ever white farmer in western North Dakota failed. This is not farming country" (McLaughlin 1993, 147).

McLaughlin's dissertation is a detailed study of how the Fort Berthold Indians turned this dismal situation around and developed a very successful ranching operation which combined leasing to non-Indians as well as the grazing and selling of their own cattle herds on the arid grasslands. Despite this success, few Indian allottees moved onto their grazing lands, preferring to remain near their Missouri River communities, where family members could cultivate the marvelous gardens described in Two Ravens' autobiography. Despite their pragmatic economic commitment to grazing cattle on the dry grasslands of the reservation, the Mandan, Hidatsa, and Arikara kept their spiritual and familial commitment to the Missouri River Valley which had shaped and sustained them for centuries. In the next section, our attention will focus on the Indians' economic and ideological conflict with white America over the use and abuse of "Grandmother River."

It is the ultimate irony of history that Fort Berthold was "both the first reservation to be flooded and the most severely impacted of all the Indian reservations on the Upper Missouri" (McLaughlin 1993, 358). Garrison Dam, constructed by the Army Corps of Engineers, flooded 155,000 acres of the Fort Berthold Reservation and forced the relocation of 85% of its people. The tribes' removal from their ancestral Missouri River bottomland homes totally disrupted their economic and social organization. McLaughlin rightly describes "the Great Flood" created by the Army Corps as "the most important event in the contemporary history of the Three Affiliated Tribes and one that clearly revealed and imposed the political hegemony and power of the federal government over the Fort Berthold people" (McLaughlin 1993, 358). Vine Deloria, the great Sioux writer and political advocate, once opined that the Pick-Sloan Plan constructed by the U.S. Army Corps of Engineers was "without doubt the single most destructive act ever perpetuated on any tribe by the United States" (Deloria in Lawson 1982: xiv).

CHAPTER 5

FLOODING: THE MIDDLE RESERVATION PERIOD

The Reservoir Landscape

In the construction and early operation of the Pick-Sloan reservoirs the Army Corps of Engineers was used by the U.S. Government like a sword to cut and fit recalcitrant Native American tribes and their reservations into the complex puzzle that is the modern reservoir landscape in the Dakotas. Since the 1930s, an important mission of the Corps' Omaha District has been to bring the indigenous peoples of the Upper Missouri into conformity with expansionist pro-development U. S. policies (Lawson 1982 and 1994; Reisner 1993). Historians and historical geographers have rightly characterized these American policies as imperialist or colonialist (e.g., Lawson 1982 and 1994, Ostler 2004, and Meinig 1986). If we define "imperialism" as geographer Donald Meinig does, as "a type of geopolitical relationship; the aggressive encroachment of one people upon the territory of another, resulting in the subjugation of the latter people to 'alien rule,'" then the construction and operation of the Corps' Upper Missouri reservoirs in the 20th century clearly represents the regional expression of American "internal imperialism." From the historical perspective of the geographer the construction of the Pick-Sloan Plan represents the growth of the same American imperialism that in the nineteenth century forced free people onto reservations and implemented a policy of forced assimilation. As a long-time employee of the Army Corps of Engineers myself, the full understanding of the Corps' role in the destruction of Indian life, property, and heritage has been deeply troubling.

To the law-abiding middle-class Americans who comprise the majority of the Corps' workforce, the benefits of the Pick-Sloan reservoirs, namely flood control, downstream navigation, water supply for irrigation, recreational opportunities, etc., all seem very real and important, so much so that they appear to outweigh any adverse impacts to "a bunch of reservation Indians." Yet, from the perspective of this researcher, there is so much more to this story. The anthropogeography of the reservoir landscape in the Dakotas is truly the struggle for Native Americans' physical and cultural survival. It is the convergence of two different cultures, two different world-views, and two very different mental geographies. For the Corps of Engineers the Missouri River represented a threatening natural resource and a technical challenge to be overcome. For the indigenous people of the Missouri River valley the bottomlands personified home, sustenance, and security, affectionately expressed in the phrase "Grandmother River" (Irwin and Liebert 1996, 2).

The Corps and the Missouri River

The Corps of Engineers began work on the Upper Missouri shortly after the end of the Civil War, when it began to improve steamboat navigation on the treacherous and unpredictable river white settlers called "Big Muddy." In 1867, U. S. Army Captain Charles W. Howell boarded the steamboat "Miner" at Sioux City, Iowa, bound for Fort Benton, Montana. He was tasked with preparing a detailed survey of the Upper Missouri to determine what could be done to improve river navigation. Howell's mission came during a time when the amount of steamboat navigation on the Upper Missouri was increasing dramatically. Gold had been discovered in Montana during the Civil War and gold fever was causing a massive rush of men and supplies upriver. The Missouri, once

the main route to the lucrative fur trade had become "a bonanza trail" to the gold mines of the West (Omaha District 1985, 4). Fort Benton changed almost overnight from a sleepy outpost at the head of river navigation to the commercial hub of the new El Dorado. While only six steamboats made it all the way to Fort Benton in 1864, seventy boats made the trip just three years later. Steamboating on the Upper Missouri quickly became a million dollar business. But it was a very dangerous business because the steeply sloping Missouri had a rapid current and its unstable banks made it unusually turbid.

The river's heavy silt load caused great difficulties for navigators. The sediment that collected on sandbars forced the main channel to change its location or diverted the current through many small channels. Vessels passing over these bars between deepwater pools frequently ran aground. The channel changes caused by the bars increased erosion, added more silt to the river, and caused a silt accretion on the downstream bars. These changes occurred in continuous cycles. Such changes in the river became most pronounced during high water stages and endangered both vessels and adjacent bottomland farms.

The Corps' early work on the Missouri focused on snag removal and labor intensive dredging of the shoals caused by massive flooding that generally came twice a year. The Omaha District Engineer in the 1870s, Major Charles Sutter, concluded in a report to Corps Headquarters that the difficulties of river navigation largely resulted from the lack of sufficient scouring power by the river at specific locations. He proposed a system of channel improvements to concentrate the flow of water at these places. Using wing dams and other stone and wooden structures, he successfully used the river's own flows to deepen and maintain its own channel while cleaning itself of snags.

The history of the Corps' improvement efforts on the Missouri at the end of the nineteenth century is filled with difficulties, both engineering and financial. Despite the Corps' strenuous efforts to increase the reliability of commercial navigation and the commercial pressure caused by the gold rush, steamboat navigation gradually declined on the western rivers after the Civil War. Shallow-draft barges that carried their cargoes above the waterline began to be used instead of large steamboats. These barges allowed a strong towboat to do more work than a conventional steamer and did not require a deepwater channel. The expanding network of trans-Mississippi railroads was also beginning to negatively impact the need for steamboat travel. Nevertheless, commercial river interest did not give up easily (Omaha District 1985, 4-12).

Yielding to persistent lobbying efforts, the U. S. Congress appropriated \$850,000 in 1882 for the Corps to begin the systematic improvement of the river for navigation and flood control. Congress also created the Missouri River Commission during that same year. The Commission began an extensive series of improvements on the river from its mouth near St. Louis all the way upriver to Fort Benton in Montana. Congress consistently directed the Missouri River Commission to build engineering works that responded to both local interests such as bank protection and flood control, as well as national interests in a water transportation route that would yield greatly increased revenues to the U.S. Treasury. Ironically, the U.S. Congress never actually appropriated enough money for the Corps to satisfy either of these interests.

By 1902, the Missouri River Commission's best efforts had yielded only a six-foot channel for forty-five miles of the river and added just 5,500 acres of reclaimed bottomland, worth \$915,000, to the tax rolls. The Commission could do no better because

much of the money had been diverted to local flood control projects, even though the Corps had no legislative mandate at the time to engage in such work. In the Commission's 1902 report to Congress, it recommended its own termination. Essentially, there was no need for a navigation agency without a viable navigation program. The Corps' perspective on all this was very interesting. The District Engineer, Captain Hiram Chittenden, thought the Missouri River Commission represented "a stupid attempt to reverse the decrees of destiny and accomplish the impossible" (Omaha District 1985, 15). The millions spent by the Commission had no impact on regional commerce. Chittenden sarcastically claimed that the funds could have been as well spent on "a railroad through Greenland." On the plus side, the Corps' laborious efforts on the river had brought some benefits in the form of protected riverfront property and reclaimed farmland. Chittenden predicted that all future public expenditures would concentrate on downstream protection against floods and upstream irrigation. He wondered how downstream flood protection like this could be done most effectively, perhaps through upstream reservoirs to hold back that massive wall of water (Ibid.).

The official history of the Omaha District is replete with accounts of the tremendous flood events on the Missouri in the first half of the twentieth century. In the spring of 1943, however, the Missouri River produced the flood of record. Following heavy spring rains and snowmelt caused by unusually warm temperatures, the Missouri went out of its banks and flooded 540,000 acres. After another nine days of rain, the river rose again and inundated 1,240,000 acres, many of which had been underwater only days before. The estimated damages amounted to over \$32 million dollars. This massive flood became a catalyst in markedly changing the mission and program of the Omaha District,

and ultimately resulted in the formation and construction of the infamous (to Native Americans) Pick-Sloan Plan.

Following the catastrophic flood event in 1943, the Corps' Missouri River Division Commander, Colonel Lewis A. Pick, was assigned the comprehensive review of all previous efforts at flood control in the river basin. Rather than limiting his review to river flood control, however, Pick greatly exceeded his assignment and considered many external factors related to the entire Missouri River Valley. Previous river development in the valley had always been oriented toward specific projects rather than the creation of a comprehensive and unified program. Pick recognized that this band-aid approach would never work with the mighty Missouri River. His dramatic proposal shifted the Corps' emphasis from single-purpose to multiple-purpose concepts and called for a vastly expanded Federal water policy in the basin.

Pick recommended that the Corps of Engineers construct multiple-purpose dams in the Dakotas. These dams would store flood-producing water and use that water to provide hydroelectric power, wildlife habitat, recreation facilities, reliable downstream navigation, irrigation, as well as water for domestic and sanitary needs. Pick also expected other benefits from the control of floods, including the protection of lives and property and the stabilization and encouragement of economic development. The heart of his proposal was the simple control of *surplus* water, by "diverting it from the wrong to the right place, at the right time, in the required volume" (Omaha District 1985, 76).

Table 5.1 Projects Proposed by Pick (Source: Omaha District 1985, 76)

<u>Area</u>	<u>Project</u>	<u>Gross Storage</u>	<u>Construction Cost</u>
Missouri River	Garrison, ND	17,000,000 acre feet	\$130 million (M) *
Main Stem: Fort	Oak Creek, SD	6,000,000	60M
Peck to Sioux City	Oahe, SD	6,000,000	50M
	Fort Randall, SD	6,000,000	75M
	Gavins Point, SD	200,000	15M
Yellowstone Watershed			
	Lower Canyon, MT	2,250,000	35M
	Boysen, WY	3,500,000	20M
Republican Watershed			
	Medicine Creek	(not given)	2.4M
	Hale	(not given)	7.2M
	Red Willow	(not given)	2.1M
	Enders	(not given)	6.7M
	Beecher Island	(not given)	6.6M
Levee System			80M

*Includes diversion into the Dakotas

Colonel Pick proposed a comprehensive program of progressive development in the Missouri basin (Table 5.1). He argued that it would not be economically feasible to construct all the multiple-purpose projects simultaneously. He recommended instead an orderly four-phase approach as circumstances and funds permitted. The Missouri main stem projects were to be built, operated, and maintained by the Corps of Engineers. The

Corps would arrange with other agencies for use of the water stored in the reservoirs after provision of sufficient storage for flood protection. Similarly, other details of the plan would be formulated in cooperation with other Federal agencies and local interests. Two of the Federal agencies affected by Pick's proposals supported the Pick plan. The Department of Agriculture and the Federal Power Commission both saw the plan as the way to resolve conflicts of interest through the creation of these additional storage reservoirs.

The Bureau of Reclamation was less enthusiastic. The Bureau argued that the waters of the Missouri River and its tributaries west of or entering above Sioux City would be more useful to more people if they were utilized for domestic, agricultural, and industrial purposes rather than primarily for navigation improvement. Since the passage of the 1939 Reclamation Act, the Bureau of Reclamation had been working on its own comprehensive water resources plan. William G. Sloan, Assistant Director of the Bureau's Region 6 Office in Billings, Montana, was given the assignment to prepare a basin-wide water resources development plan. All beneficial uses of water were to be taken into account in the formulation of a plan most likely to yield "the greatest good for the greatest number of people." Sloan's plan had been in preparation about five years when the appearance of the Pick plan accelerated its completion (Omaha District 1985, 79; Table 5.2). Sloan's 1944 report assumed that farming would remain the primary basis of the basin's economy. At the time, the area under study contained over four million irrigated acres, about 12.5% of those acres in Federal projects. Most of the acreage was in the upper basin, west of the 100th meridian. There was practically no irrigated land in the eastern half of the basin, except along the Platte River in Nebraska. The Sloan plan

recommended doubling the amount of irrigated land and constructing seventeen hydroelectric power plants to generate four billion kilowatt-hours annually. Sloan argued that the decline of population would stop, the tax base would expand, and prosperity and stability would prevail (Ibid.).

Table 5.2 Projects Proposed by Sloan (Source: Omaha District 1985, 19)

<u>Area and Project</u>	<u>Gross Storage Capacity (acre feet)</u>	<u>Construction Cost (millions)</u>
Missouri River Main Stem:		
Fort Peck to Sioux City		
Oahe	19,600,000	\$72.8
Fort Randall	5,100,000	55.7
Big Bend	250,000	26.0
Smaller projects	---	239.1
Yellowstone River Watershed		
27 reservoirs and irrigation		
distribution	4,285,200	177.6
Niobrara, Platte, and Kansas Rivers		
22 reservoirs and irrigation		
distribution	5,650,400	273.0
Upper Missouri Basin		
19 reservoirs and irrigation		
distribution	3,359,950	103.6
Minor Western Tributaries		
15 reservoirs and irrigation		

distribution	1,237,000	35.0
Lower Missouri Basin		
Pick plan approved	---	195.8
Fort Peck		
Power system	---	11.0
Transmission grid	---	68.0
Total		\$1,257.6

The Pick plan emphasized down-valley flood control and downstream navigation while the Sloan plan emphasized up-valley drought relief through irrigation and economic development linked to hydropower. The fate of the two plans rested with the U.S. Congressional committees that weighed the alternatives and essentially decided on the course of future development. The details of the Congressional debate on these plans is fascinating to read but beyond the scope of this discussion. What finally brought the two groups together was their consensus that a Missouri Valley Authority (MVA) along the lines of the Tennessee Valley Authority was not a good idea. The vehicle for the ultimate fusion of the two plans was the Missouri River States Committee (MSRC), a conference of governors established in 1942 that advocated, "headwaters-to-mouth planning." The governors argued that water development in any part of a basin would unavoidably affect water use and water quality in other parts of the same basin and that the same water often has value for several purposes. The MSRC sponsored several meetings in the summer of 1943, which Pick and Sloan both attended and where both presented their respective plans (Omaha District 1985, 83).

In August 1944, the MSRC petitioned the President, Congress, and the two respective agencies to conclude their protracted discussions and adopt a coordinated plan. Seven of the eight states' representatives voted for a proviso in the resolution that "nothing done in the interests of flood control or navigation affect the use of water for irrigation west of the 97th meridian." While the two plans differed in purpose and details, they agreed on the basic concept of storage and control of river flow for multiple uses. The agencies finally came to an agreement based on allocations of jurisdiction for the proposed development. The Corps of Engineers would be responsible for determining main stem and tributary reservoir capacities for flood control and navigation. The Bureau of Reclamation would determine reservoir capacities on the main stem and tributaries for irrigation purposes. The two agencies made major compromises on proposed main stem dams between Fort Peck and Sioux City (Map 13 Appendix A). They agreed on five in the Dakotas. The reservoirs created would impound 72% of the new water storage in the entire basin (Ibid.).

The reservoir created by Gavin's Point Dam (Pick Plan) would extend from Yankton to Running Water, South Dakota. Garrison Dam's reservoir (Pick Plan) would extend 100 miles westward from just above Stanton, North Dakota, toward the Montana state line. Fort Randall Dam (Compromise), beginning at the border between Nebraska and South Dakota, would back up water to above Chamberlain, South Dakota. The reservoir, created by the Big Bend Dam (Sloan Plan) would contain a 250,000 acre-foot pool below Pierre, South Dakota. Oahe, the fifth project, had been recommended by both agencies. The compromise resulted in the adoption of the Sloan version, which was far

larger than Pick's. Oahe would be built just above Pierre and would store 19.6 million acre-feet of water.

Unlike the Bureau of Reclamation, the Corps had no plans for the Missouri and its tributaries above Fort Peck and made no recommendation for projects on the small streams flowing eastward through the western Dakotas. The final joint report appeared to be a reasonable solution to what had seemed to be an intractable problem. On 22 December, 1944, President Roosevelt signed the Flood Control Act that set the Pick-Sloan Plan into action. That plan would provide the framework for the development of water resources in the Missouri Valley and the basis for Omaha District's civil works construction program for the next twenty-five years.

Not all of the Missouri River basin's inhabitants were in favor of the Pick-Sloan plan, and certainly not the basin's indigenous peoples. As we have seen, the Northern Plains tribes had been confined to reservations since 1880 after a quarter century of bitter, armed conflict with the U. S. Army. The proposed construction of the Pick-Sloan reservoirs would transform the landscape of the Missouri River valley. While it would benefit many Euro-Americans, this landscape transformation would produce severe environmental and cultural impacts on the Northern Plains tribes. The eight Indian reservations adjacent to the Missouri main stem reservoirs fought the creation of the Pick-Sloan reservoirs during their planning stages in the 1940s and during their construction in the 1950s and 1960s. Today, Indian opposition to the reservoirs and attempts to gain compensation for their impacts is still a major rallying point for all the tribes, especially the Sioux (Dunn and Feather 1998).

Fort Randall Dam and the First Taking of Sioux Land

The Depression-era construction of Fort Peck Dam in northeastern Montana by the Corps' Omaha District laid the groundwork for the Pick-Sloan reservoirs on the Missouri twenty years later. Fort Peck showed the Corps' planners and engineers that large upstream reservoirs could effectively control downstream flooding and improve navigation on the lower Missouri. The Corps' movement toward reservoirs as "an orthodox method of flood control" had begun in the early 1930s (Lawson 1982, 11). Following the "flood of record" in 1927 in the Mississippi River Valley, which also produced major floods along the Missouri, Congress directed the Corps to conduct the most intensive hydrologic study ever made of the Mississippi and its major tributaries. As part of this effort, the Corps established a research hydraulics laboratory in Vicksburg, Mississippi, the Waterways Experiment Station (WES). After four years of intense research at WES using enormous physical models of the Mississippi and its tributaries, the Corps published in 1933 the massive "308 Report." This influential technical source book questioned the Corps' seventy-five year reliance on levees for flood control and argued that upstream reservoir storage was critical to downstream flood control and essential to provide the depth of water needed for downstream navigation projects.

The "308 Report" identified Fort Peck, Montana, as the most suitable location for an upstream reservoir on the Missouri River. After minimal political wrangling for the New Deal era, President Franklin D. Roosevelt authorized construction of Fort Peck Dam as a National Industrial Recovery Act project in 1933, just months after the Corps of Engineers' 308 Report was published (Ibid.). To increase navigation depths on the lower Missouri from six to nine feet, the Corps needed a reliable release of upstream river

water. To ensure this navigational water supply, Omaha District built at Fort Peck the largest earth dam in the world and the biggest reservoir since Hoover Dam (Omaha District 1985, 23-40). In the course of this arduous construction project built under the most severe weather conditions, the Corps of Engineers team members became experts in constructing multiple-purpose dams on the mighty Missouri River. In *Dammed Indians* Lawson (1982, 11) notes, "the powers and techniques established at Fort Peck determined to a great extent the dominant role the Corps of Engineers would have in the future development of the entire Missouri Basin." The last load of sandy soil was rolled into Montana's Fort Peck Dam on October 11, 1940.

One critical difference from the later Pick-Sloan reservoirs is that the new reservoir created by Fort Peck Dam did not inundate the nearby Fort Peck Indian Reservation. That reservation, home to the Yanktonai Sioux (Nakota) and the Siouan-speaking Lower Assiniboine, lay to the east (downstream) of the massive earth-dam and was not directly affected by the rising waters. So, while Fort Peck Dam is a key element of the westernmost Upper Missouri reservoir landscape, it did not directly impact Fort Peck Reservation or any of the downstream Indian reservations in North and South Dakota.

Fort Randall Dam was the first Pick-Sloan dam completed by Omaha District (Omaha District 1985, 107). The dam is located in southern South Dakota, just north of the Nebraska state line. It is named for a 19th century Army fort which once housed the 25th Infantry Regiment of black "buffalo soldiers" during the Great Sioux War. Work started on Fort Randall Dam in southern South Dakota in May 1946. With the

construction of Fort Randall dam, the true metamorphosis of the Missouri River Valley began, along with the start of a new war with the Sioux nation.

Fort Randall Dam was designed as a 160 foot high, 28 million cubic yard, rolled-fill earthen dam similar to the Fort Peck Dam built six years earlier. To construct this massive new dam and 150-mile-long reservoir (Lake Francis Case) the Corps first had to build a rail line to the dam site and an entire town to house the workers. From 1946 to 1950, Omaha District's army of contractors built 18 workers' dormitories, 312 single family dwellings, 25 utility buildings for 625 trailer spaces, 3 cafeterias, a school, a movie theater, a hospital, and a hotel and called it all "Picktown" (Omaha District 1985, 107). Reading through the official District history of the construction of Fort Randall Dam, I was struck by the innovative engineering solutions and the logistical ingenuity that, at the height of construction, kept 5,000 people working two 10-hour shifts, six days a week:

Heavy equipment accomplished the earthwork. Great draglines scooped out eight cubic yards a bite from the borrow areas. The shovel filled each of the eleven 18-ton capacity Mack trucks used on the job with just two such bites. The trucks dumped the earth on the embankment, and other equipment graded it down and sprinkled it with water. The sprinkling permitted the soil to be compacted to the desired density. Great sheepsfoot rollers ran back and forth over the fill, compressing it. A lighting system allowed the work to proceed at night through two 10-hour shifts, 6 days a week (Omaha District 1985, 108).

In addition to the work on land, the portable dredge ship, *Western Chief*, dredged to depths of 48 feet through the mud and softer rock in the river that was soon to become a lake. The dredge *Western Chief* had been designed and built for the project by Erickson Engineering of Tampa, Florida, under the Corps' close supervision. It came to the construction site by rail in twenty-one separate sections that were assembled on-site.

Carrying 1,500 tons on a shallow 36-inch draft, it was an engineering marvel. With an estimated 11,000 horsepower, it was the most powerful suction dredge of its time (Omaha District 1985, 109).

From 1946 to 1954, the Omaha District engineers and their army of contractors and laborers worked diligently to produce a series of engineering wonders at the Fort Randall construction site. With Herculean effort, they cut twelve power-generating tunnels through limestone and chalk hillsides. They built a huge intake structure that was comprised of twelve concrete towers that measured 65 by 110 by 185 feet that stood like a column of soldiers at attention. By July 1952, the intake structure stood ready to receive the entire flow of the Missouri River. Using the *Western Chief*, they then pumped a 200,000 cubic yard stockpile of chalk into a temporary dam to close the river's natural channel and divert the flow through the new intake structure and tunnels. They went on to build a spillway for the dam along with moveable tainter gates and a stilling basin. This proved to be a massive undertaking since the 1,000-foot-wide spillway required 500,000 cubic yards of concrete. The flow of water over the huge spillway, should it occur during flood events, would be controlled by twenty-one moveable tainter gates, each 40 by 29 feet in size.

Aside from the very difficult engineering solutions above ground, the District's engineers and geologists struggled to solve the problem of underlying aquifers. The Cordell aquifer lies well below the Niobrara chalk through which they had tunneled to create hydroelectric power tunnels. Across the Missouri basin, hydrostatic pressure on the chalk formation, which is split in places by fracture joints and seams of coal-like bentonite, posed major problems for the Corps. To counteract the uplift capability of the

Cordell aquifer on the Niobrara chalk, the Corps ordered its contractors to drill 35 "relief wells." In accomplishing this difficult construction mission, the District proved itself to be superbly capable at Fort Randall and gave needed confidence to the Corps' planners and policy makers back in Washington that the Pick-Sloan Plan was achievable. The Corps' engineers themselves, like all good soldiers, did not question the underlying policy that directed their efforts.

When the opening day ceremonies took place on March 15, 1954, President Eisenhower spoke over the radio to 600 state and federal officials gathered at the new Fort Randall powerhouse. Two former governors of South Dakota then spoke and reminded everyone present that South Dakota was sacrificing 500,000 acres of land for the construction of the Pick-Sloan reservoir on the Missouri River main-stem and that "South Dakotans expected great benefits from Fort Randall Dam and the others as they were completed" (Omaha District 1985, 115). Conspicuously absent was any mention of the reservoirs' impact on the valley's indigenous people.

In order to create the reservoir formed by Fort Randall Dam, the Corps of Engineers had to take 3,350 acres of the Yanktonai Sioux Reservation at the lower (southern) end of the pool. At the upper end of the reservoir eventually named Lake Francis Case, the Corps took about 9,500 acres of the Crow Creek Sioux Reservation on the Missouri's east bank and about 8,000 acres of the Lower Brule Sioux Reservation on the western shore. From the Corps' perspective, this taking of land, and whatever compensation the Congress later authorized, was simply part of the cost of doing business. The paramount concern was completing the new mission as quickly and efficiently as possible. For the Yanktonai, Crow Creek and Lower Brule Sioux, however,

this land taking was a catastrophic loss. The Sioux had not even been consulted during the plan formulation phase of Pick-Sloan (Lawson 1982, 45). The Bureau of Indian Affairs (BIA) was kept informed during the Congressional debates on Pick-Sloan in 1944. Yet, the BIA raised no objection on behalf of the people who would be most affected. The Corps of Engineers believed so strongly in the Federal government's powers of eminent domain, that they began the surveying and the initial stages of dam construction before they began any formal negotiations with the tribes.

The Corps of Engineers' agenda for reservoir construction on the Missouri was presented to the Sioux as a done deal that required no more input than their signature. In the 1940s, the tribes lacked the political clout to stop the national momentum building towards the construction of the Missouri dams. Even after the passage of the Indian Reorganization Act of 1934, there was very little inter-tribal coordination or cooperation within the overall Sioux nation at that time. This disorganization came as a direct result of the tribes' half-century of confinement to geographically scattered reservations and a Federal policy of anti-tribalism. Furthermore, the old U.S. policy of forced assimilation lingered on in the Dakotas even after the Indian Reorganization Act legislated against such a policy.

Within the individual Sioux tribes, there was too much fragmentation for an effective and sustained opposition to the Pick-Sloan Plan (Lawson 1982, 46). In today's climate of growing Indian political power, the Pick-Sloan reservoirs could never be built. In the 1940s and 1950s, however, there was little the tribes could do to stop it. The Sioux tribes affected "were angry and bitter that the United States again would break the faith of its treaty obligations and sacrifice their interests to satisfy white demands for progress"

(Lawson 1982, 46). That bitterness lingers on as we shall see in a later discussion of the Corps-sponsored focus groups on Indians' use of the Pick-Sloan reservoirs (Dunn and Feather 1998).

What were the real losses for the Sioux tribes from the construction of Fort Randall Dam and the creation of Lake Francis Case? The Crow Creek Sioux lost 9,514 acres of Missouri River bottomlands, over one-third of which was forested. Eighty-four families (34% of the tribe) were forced out of their homes in the sheltered bottomlands and relocated on arid uplands suited only for grazing cattle. Their largest community, Fort Thompson, where the old BIA agency office had been located, went under the rising waters of the lake. The BIA agency office was relocated thirty miles away in the state capital at Pierre, and the Indian Health Service was moved twenty miles south to Chamberlain. For the poorest tribal members, many without cars, access to these critical facilities became very difficult (Lawson 1982, 48).

On the Lower Brule reservation, the flooding of 7,997 acres also caused the forced relocation of thirty-five Indian families from the sheltered bottomlands along the river to the arid grasslands on top where sub-zero Dakota winter winds could freeze exposed skin in seconds. The greatest economic loss was that one-half of their sheltered pastureland was inundated. The Lower Brule Reservation's primary industry "Tribal Livestock Enterprise" was almost wiped out. Fortunately, the reservation's largest town, Lower Brule, was not inundated (Lawson 1982, 50).

At the downstream end of the new Lake Francis Case, the Yanktonai reservation lost 3,349 acres of Missouri River bottomlands. This time only nineteen families had to be relocated because the majority of the Yanktonai reservation was located downstream

of Fort Randall Dam. Only twenty percent of the reservation's river bottomlands were inundated by the rising waters. No major Yanktonai communities were directly affected. The new lake created by Fort Randall Dam also affected the eastern edge of the Rosebud Sioux Reservation. A little more than 1,200 acres were inundated but no tribally-owned land was affected. The Corps of Engineers only condemned land owned by six individual Sioux property owners.

To deal with the numerous relocations caused by the Pick-Sloan plan, Omaha District staffed up to create one of the largest real estate offices in the Army Corps of Engineers. Their real estate office employed as many as 350 individuals by 1965. Before the Corps could build the dam or operate the reservoir, it had to purchase or obtain by condemnation the needed land. It also had to relocate highways, railroads, bridges, sewage plants, and public buildings. In such a massive relocation effort, the relocation of Indian families out of the Missouri bottomlands seemed to the Corps' supervisors like a minor inconvenience, another example of disparate mental geographies.

The creation of Fort Randall Dam and Lake Francis Case required transformations in the entire region's infrastructure. Omaha District had to relocate the sewage treatment and electrical generating facilities at Chamberlain, South Dakota. The District built a new railroad bridge at Chamberlain to carry the *Chicago, Milwaukee, St. Paul, and Pacific Railroad* across the new lake. It also relocated federal, state, and county roads along with telephone and power lines (Omaha District 1985, 182). The forced relocation of Indians impacted by Fort Randall Dam and its reservoir is, strangely enough, a source of pride for the District. The District's official history points with pride to the fact that the Corps built a new elementary school for the Crow Creek

schoolchildren and gave both Crow Creek and Lower Brule tribes "generous relocation assistance" (Omaha District 1985, 163). While this official history gives a straightforward accounting of the amounts paid to the tribes as compensation for their land loss, it does not accurately portray these sums as totally inadequate.

The Omaha District obtained the Yanktonai Sioux Reservation land (3,350 acres) by condemnation in 1948 for just \$121,000. This was supplemented with \$106,500 more by Congress in 1954 and 1955 to cover relocation costs and to purchase additional replacement lands. Both amounts were inadequate from an economic standpoint and no amount of money could adequately compensate the tribe for loss of their reservation bottomlands. But the Yanktonai Sioux were still better off than either the Lower Brule or the Crow Creek Sioux.

During the time Lake Francis Case was gradually filling in the early 1950s, Omaha District officials, without prior consultation, began condemnation proceedings against the Crow Creek and Lower Brule tribes. Neither tribe would voluntarily sell their beloved bottomlands. The Corps' condemnation efforts were suspended in July 1954, after Congress directed the Chief of Engineers and the Secretary of the Interior to negotiate with both tribes (Omaha District 1985, 102). Department of Interior real estate appraisers evaluated the needed Crow Creek land (9,500 acres) at \$400,000, considerably higher than the Corps' appraisers had done. The Interior Department officials appraised the needed Lower Brule land (8,000 acres) at \$270,000, also higher than the Corps' appraisal. Still, the Sioux tribes refused to sell their land. Finally, in January 1955, with the waters rising onto the Sioux land, the United States filed declarations of taking in Federal Court and deposited with the Court the land values appraised by the Department

of the Interior. As the lake waters rose and threatened to swallow up the historic Crow Creek agency at Fort Thompson, the people at Crow Creek continued to fight for better terms (Lawson 1982, 105). The spring run-off of 1955 would certainly flood the Sioux homes in the bottomlands. In January and February, Crow Creek people still had no money with which to move. Earlier condemnation funds provided by the Corps could not be distributed because the Justice Department had not yet filed an official "declaration of taking." Finally, on March 22, 1955, Indian landowners on Crow Creek Reservation received just under \$400,000 from the Court, and those on Lower Brule received just over \$270,000 as partial payment for their property.

Throughout the Indian relocation process, the Corps of Engineers officials acted like penny-pinching misers. The Corps was compelled by the Court to pay the relocated Indians a certain amount for relocation expenses but they refused to release the funds until actual costs of moving had been incurred. Both tribes had to create hardship funds to assist poor tribal members. With limited funds and lake waters rising, the hasty relocation and salvage operations created many bitter memories among the Sioux. Both tribes fought for years for a fairer settlement from Congress. In September 1958, Congress finally approved payment of a \$1.4 million overall settlement for the Crow Creek Sioux and a \$980,000 settlement for the Lower Brule Sioux (Omaha District 1985, 163). Both tribes eventually received a more generous relocation assistance allocation but they did so only after the Corps of Engineers seized even more land from their respective reservations for the Big Bend Dam/Lake Sharpe project in 1962. The landscape transformation created by Fort Randall Dam/Lake Francis Case earned kudos for the Corps' engineers but brought only heartbreak to the Sioux (Lawson 1982, 107).

Garrison Dam, Lake Sakakawea, and the Fort Berthold Indians

There is a classic photograph that gives credence to the old adage that one picture is worth a thousand words. It is the 1949 Associated Press photograph of the Fort Berthold Tribal Chairman weeping inconsolably as the U. S. Secretary of the Interior signs the bill that would flood the ancestral home of the Mandan, Hidatsa, and Arikara people. I have seen the original photograph in the Plains Region National Archives in Kansas City, Missouri. It has been reproduced in many books, one of these being VanDevelder's (2004) study of a Mandan/Hidatsa attorney named Raymond Cross and his father, Martin Cross, the Tribal Chairman at the end of World War II. The father attempted to block the building of Garrison Dam and the son struggled to later gain adequate financial compensation for his people. Their story will be discussed in detail below.

While the creation of the gigantic Lake Oahe may have had a greater effect to the physical landscape of the valley, the construction of Garrison Dam and Lake Sakakawea by the Corps of Engineers is the greater human tragedy. In an interview given in the early 1980s, tribal chairwoman Alyce Spotted Bear described that human impact in this way:

Besides flooding their bottomland farms and unalterably ending the tribes' self-sufficient existence, the Garrison Dam and Lake Sakakawea dispersed the tribal members onto upland sections of the reservation separated from each other by drives of two to four hours, she says. In her view, the sociological havoc wreaked on their communal spirit by the dam since the 1950s has been as devastating as the smallpox epidemic of 1837 (Duncan 1987, 189).

Prior to "The Flood," the Three Affiliated Tribes had come closest to the Jeffersonian ideal of Indian yeoman farmers. By the close of the nineteenth century, the Mandan, Hidatsa, and Arikara had formed viable, self-sufficient communities that combined

farming in the rich Missouri bottomlands and cattle grazing on the arid upland grasslands Map 14 in Appendix A). Prior to Pick-Sloan, they had actually begun to prosper and grow in population. The bottomlands their ancestors had farmed were still highly productive and they were able to create a largely self-sufficient community not tied in to the American cash economy (Duncan 1987, 180). Consequently, the Great Depression had relatively little economic impact on them. Throughout the 1940s and early 1950s, before they were impacted by Pick-Sloan, only six percent of the tribes' members were on public welfare. All that changed with the creation of Garrison Dam. The most productive bottomland farms, the majority of homes, town, Indian schools, churches and cemeteries went underwater. Duncan (1987, 180) notes that "the social and economic base for 85 percent of the people of the Fort Berthold Reservation gradually disappeared under the new Lake Sakakawea."

The change in human geography was drastic and devastating. The Three Affiliated Tribes, which had for centuries been concentrated in or adjacent to the Missouri River bottomlands, became widely dispersed on the much less productive high plains in five distinct segments of the reservation. Garrison Dam destroyed their tribe's economic infrastructure and reduced their opportunities for the communal interaction needed to fight against the Corps in one devastating blow. The stress and demoralization that followed "The Flood" produced severe sociological effects: "unemployment and alcoholism, the twin scourges of modern reservations, rose with each foot of lake water" (Ibid.). Just as their old enemy the Sioux had become dependent on white man's rations just to survive in confinement on a reservation, so now too did the Fort Berthold Indians.

Their long legal and political struggle back to self-sufficiency and self-respect will be discussed in detail later.

The Omaha District engineers who worked for General Lewis Pick, the creator of the overall plan, focused solely on the geotechnical and engineering challenges of the physical landscape and selected potential dam locations that were technically feasible, both in engineering and economic terms. Impacts to resident tribes appear to have been ignored. Early in 1945 Corps engineers made their decision and began to prepare detailed plans for a rolled-fill earthen dam across the Missouri River seventy-five miles north of Bismarck, North Dakota. The massive dam, 12,000 feet long and 210 feet high, would impound a 200- mile-long lake with twenty percent more volume than the lake created by Fort Peck Dam (Omaha District 1985, 121).

Could the Corps have built Garrison Dam at an alternative location that would not have caused such a massive impact to the Fort Berthold Reservation? I believe they could have done so only with major modifications to the entire Pick-Sloan plan. From the Corps of Engineers perspective, the placement and construction of Garrison Dam was a technical challenge they felt confident they could overcome. The forced relocation of the Fort Berthold Indians, however, would prove to be a far more troublesome problem.

The potential human impacts on the Fort Berthold Indians were given little consideration in this pre-National Environmental Policy Act (NEPA) era. The whole idea of "environmental justice" and trying to avoid impacts to less privileged ethnic minorities was still far into the future. Another factor in the Corps' planning process during the late 1940s, is that the "termination movement" of the Truman Administration, which called for the break-up of all Indian reservations, was just gathering momentum. The

"termination policy" reached its full development under the Eisenhower Administration of the 1950s when sixty separate termination bills were pursued in Congress.

In 1946, when the real estate acquisition was underway for Garrison Dam, the Bureau of Indian Affairs (BIA) was already developing a comprehensive plan to "terminate" all Indian reservations over a period of fifty years (Hightower- Langston 2003, 419). This Federal termination policy, originally termed "liquidation", called for the disposal of all tribal land and the end of Federal responsibilities toward Indian nations. It was the logical extension of the assault on tribalism begun by the 1887 Dawes Allotment Act. Under the termination policy, Indian ethnicity would have as much significance as being Irish or Italian or Polish. In 1947, the acting Commissioner of Indian Affairs was directed to identify and list all Indian tribes and clarify which were ready for termination. In 1949, the Congressional Hoover Commission recommended ending all Federal Indian programs. The new head of the BIA, Dillon Meyer, a Truman political appointee, began to aggressively seek the termination of all tribal status. Only the growth of the civil rights movement in the 1960s led to an official reversal of the twenty-year-old termination policy by the Nixon Administration in 1970 (Ibid.).

. In this context, the Corps' treatment of the Fort Berthold Indians during the land acquisition process for the Garrison Dam project is much more understandable. To Corps officials at the time, it seemed inevitable that the Fort Berthold Indians, and the down-river Sioux tribes, would eventually lose their tribal reservation lands. While the real estate specialists with Omaha District sympathized with the plight of the Fort Berthold Indians, they emotionally detached themselves in order to accomplish the District's Pick-Sloan mission.

The key political issue for the Corps in securing the land needed to create Lake Sakakawea was the elevation of the permanent pool. The Missouri-Basin Inter-Agency Committee had approved an operating pool level of 1,850 feet above near sea-level. This was also the elevation General Pick had set forth in his plan and the one approved by Congress in December 1944 (Omaha District 1985, 159). This elevation had the potential to flood Williston, North Dakota, along with portions of two adjacent irrigation projects. North Dakota Congressman William Lemke succeeding in attaching a rider to the Corps' annual appropriation bills during the 1946-48 session that stopped the Corps from operating the pool above 1,830 foot contour or from constructing dikes or levees to support a higher pool level. Despite Lemke's efforts and those of other congressmen, the Corps commanders eventually won their fight to operate the Garrison Dam reservoir, now called Lake Sakakawea, at the 1,850 foot elevation after it agreed to purchase the lands in the two irrigation districts and to protect the town of Williston with levees and pumps. The Three Affiliated Tribes did not have any Congressional advocates in their struggle to keep their land out of the rising waters.

The Omaha District planners calculated that Lake Sakakawea would inundate 155,000 of 585,000 total acres on the Fort Berthold Reservation. They also determined that the new lake would force 289 of the reservation's 357 households to relocate and completely inundate the Fort Berthold Agency at Elbowoods. Furthermore, it would destroy the Indian's strong cattle grazing business centered in the Missouri River bottomlands. For the Corps engineers and real estate specialists who participated in the assessment of the Indian lands that would have to be taken, it was difficult to deal with this human tragedy. But it was part of the Corps' mission and an integral part of

American national policy. The whole unpleasant business went forward as if it had assumed a life of its own. After protracted discussions, the U. S. Congress, in July 1947, appropriated \$5.1 million to compensate the Fort Berthold Indians for the appraised value of their lands. Representatives of the Three Affiliated Tribes signed the required land acquisition contract in May 1948, not because they thought it to be a fair deal but "because they felt they were helpless to do otherwise" (Omaha District 1985, 181). The Fort Berthold Indians petitioned the U. S. Congress for financial compensation for their intangible losses related to the taking of their timbered and sheltered winter grazing land, and also for freedom from paying taxes on their taken lands. After intense negotiations, Congress finally approved in October 1949, the payment of an additional \$7.5 million as compensation for their intangible losses. Congress also authorized the Fort Berthold Indians "to remove, over a 3-year period, any improvements, timber, and minerals contained on their lost lands, despite receiving compensation for them" (Omaha District 1985, 181).

The facts just outlined are the skeleton of the Fort Berthold Indians' story. To put flesh on these "bones" requires a more sensitive examination of the human story behind the facts. One author who has pursued such an investigation and published his research on the Mandan-Hidatsa is Paul Van DeVelder (2004). Perhaps a good place to start this re-fleshing process is to look at the way in which the people at Fort Berthold thought of the bottomlands that would soon be flooded. Here is a portion of Van DeVelder's (2004, 20) interview with Phyllis Old Dog Cross about Elbowoods, the old agency town in the bottomlands that would be flooded by Garrison Dam:

"Our life in Elbowoods was very much like it was for our ancestors at the Knife River," says Phyllis. Life's necessities were readily available out the back door, in

the woods along the river, or just down the road, in town. They farmed the rich bottomlands, hunted game, and gathered food that grew wild in the hills and along the river. And just as it had been for their ancestors on the Knife and Heart Rivers, the village was still the social hub for the people of the three tribes. Forty generations of their ancestors had lived in villages in this valley. They still owned half a million acres of land straddling the river -- land they possessed in perpetuity by virtue of aboriginal title that was formally recognized by the federal government at the Treaty of Horse Creek in 1851. When the Cross children were growing up, tribal members lived in nine villages that were strung out along sixty miles of river bottom like widely spaced emeralds on a silver thread . . . "Our views of how the world worked were pretty much shaped by the complexities, the nuances, the social pathologies, good and bad, of small-town relationships," says Phyllis. "Like any close family, my friends in Parshall today are as familiar to me as they are mysterious. The world beyond the horizon can go to hell in a hand basket overnight. When the sun comes up in the morning, the roosters will crow, and those people will still be here."

The nearby town of Parshall referred to above was, and still is, a predominantly white farm town, comprised of "the descendants of blond, blue-eyed stoics who immigrated to America from Scandinavia" (Van DeVelder 2004, 13). Parshall, located just east of the Van Hook Arm of Lake Sakakawea, was not flooded by the Corps' construction of Garrison Dam. However, after surveyors reestablished the legal boundary lines of the Fort Berthold Reservation after the lake had finally filled, they determined that "the tidy homes, schools, and churches of Parshall had been in Indian Country all along" (Van DeVelder 2004, 29).

Van DeVelder conducted interviews with all the members of the Cross family, including the four daughters and four sons, of tribal leader Martin Cross and his second-generation Scandinavian wife from Parshall. One of the most useful interviews for our purposes here occurred after the family visited the Sacred Heart Cemetery, where deceased Cross family members were re-interred during the construction of Garrison Dam. Thousands of Indian graves had to be moved by the Corps of Engineers from

cemeteries in the Missouri bottomlands. VanDevelder (2004, 31) notes that "as a result of that chaos, the remains of tribal ancestors now lie scattered in cemeteries across 400,000 acres of prairie." After leaving the cemetery, the Cross family drove together toward the hated Lake Sakakawea. VanDevelder (2004, 31) recorded their reactions as follows:

The familiar pathology gets complicated the closer the Cross kids get to the lake. Bucky, for example, has returned to Fort Berthold on numerous occasions, but he has no use for the dam on the lake. Like the experience of many of the people who lived through The Flood, his memories of that era are still raw. "A lot of our tribal people have never seen Garrison Dam," says Marilyn. "One day soon there won't be anyone left who remembers Elbowoods, or Nishu, Lucky Mound, or Beaver Creek. That day will mark the end of something for our people. It's best not to think about it."

VanDevelder believes that the experience of the Mandan, Hidatsa, and Arikara over the past fifty years, since the creation of Garrison Dam and Lake Sakakawea, is best described as "transgenerational trauma." This is a term used by psychologists studying the long-term effects of extreme hardship on small groups and communities. This type of trauma can cause long-term psychological damage. If left untreated, the effects of the original trauma, such as "The Flood" at Fort Berthold, can span several generations. Unless treated, the social pathology of trauma spreads through a small community like smallpox did among the three tribes in the nineteenth century. Psychologists studying the phenomenon report that the symptoms of trauma-induced pathology include a sudden increase in alcoholism and drug addiction, joblessness, child abuse, domestic violence, clinical depression, and suicides. In addition, trauma-induced stress contributes to widespread diabetes and heart disease, and overall life expectancy can decrease significantly. This is precisely what occurred in the years after "The Flood" at Fort Berthold (Van DeVelder 2004, 32).

One Cross sister, Phyllis, interviewed by Van DeVelder, is a registered nurse and a mental health specialist. Here is her assessment of what happened to members of the three tribes post-Garrison Dam:

I've come to the conclusion that our thinking failed us. Our thinking failed us because suddenly our landmarks, our social and physical landmarks, the framework for everything we were was gone. Our identity derived from our villages. Those were destroyed. We were born into very dynamic and complex social networks that connected those identities across forty generations. Those went when the villages went. When everything was gone, there was no one waiting to help us put the world back in order. No jobs, no communities, no gardens, no homes. Gone (Van DeVelder 2004, 32).

Based on my review of Record Group 77, the official Corps documents archived in the Plains Regional Office of the National Archives (see Appendix D), and my review at Waterways Experiment Station of the Annual Reports to the Chief of Engineers submitted by the Omaha District Commander, no one in the Corps really anticipated the psychological trauma and resulting social pathologies among the Sioux and the Three Affiliated Tribes as a result of the Pick-Sloan reservoir construction program. The severe trauma of "The Flood" at Fort Berthold also affected in varying degrees the Sioux tribes downriver. The flooding of the Sioux reservations by the Pick-Sloan reservoirs exacerbated the multiple traumas they had already experienced including: military conquest, the loss of their freedom, the loss of the buffalo food source, involuntary confinement on reservations, and most of all the hated official policy of forced assimilation.

From a geographic perspective, there is still another aspect of social pathology to consider, racism. When the Fort Berthold Indians lost their bottomland homes and communities to the rising lake, they were forced to move "on top," to local small towns

like Parshall. When the traumatized Cross children were moved to Parshall, their mother's home, they encountered racial bigotry and hatred that they never anticipated. The youngest Cross children, Carol and Raymond, "were thrown headlong into the darkest and meanest days of the storm that descended on Parshall. Their new small-town home on the High Plains suddenly transformed itself from an idyllic farming village into a racial war zone" (Van DeVelder 2004, 32). Phyllis Cross, the mental health specialist, gave her analysis of her siblings' situation to Van DeVelder (2004, 32-33) as follows:

"Craziness, dis-integration, and racial hatred were completely normal to Raymond and Carol," says Phyllis. "Little children, elders, were dying all around us. Meals were breaks between funerals. Raymond and Carol grew up thinking it was normal to see the mothers and fathers of their friends passed out drunk in the streets at twenty below. In that world, either you learn to step over the bodies and keep going, or you lie down beside them. Raymond will never talk about those years. He could walk through a burning house today and not know it was on fire. He has that ability to detach, to focus on a distant point that came from walling himself off from the world in order to survive. The more we studied trauma, the more clearly we saw how it was being passed on to the next generation. How do you bury the past when your identity is trapped in its lasting effects? What do you call your life as a community, as a people, when despair is the only emotion you can trust?"

Oahe Dam and the Upriver Sioux

In his Foreword to Michael Lawson's (1982) great book *Dammed Indians*, Vine Deloria opined that the three reservations that suffered the most from the construction of the Pick-Sloan reservoirs were Crow Creek, Lower Brule, and Fort Berthold. Here is his succinct assessment:

. . . Fort Berthold was virtually destroyed, and the dam waters separated the reservation completely. The tracts that remained were left farther apart by road than the people had originally been from the nearest white settlements when the reservation was intact. The Crow Creek and Lower Brule tribes had almost all of their usable lands taken, and their reservations were so drastically impacted that they have never been able to establish viable communities since their lands were lost (Lawson 1982, xiv).

The larger upriver Sioux reservations, Cheyenne River and Standing Rock, also lost most of their bottomlands as a result of the Pick-Sloan Plan but "they had a sufficient number of communities on the high plains west of the river so that the disruption of some communities did not totally disorient the tribe." While it is true that the construction of Lake Oahe impacted a smaller percentage of upriver reservation land, the construction of this gigantic reservoir transformed the physical landscape of the Upper Missouri like no other Corps reservoir. The loss of their river bottomlands has never been forgotten or forgiven by the Lakota. One reason for this may be, as Deloria believes, because the bottomlands provided during the early reservation period "a measure of isolation and security to peoples who badly needed to be left alone to reflect on the radical changes they had experienced" (Lawson 1982, xi). For this reason, the Missouri River bottomlands also represented something very special (sacred) to the Lakota newcomers, just as they did to the indigenous Three Affiliated Tribes.

Oahe Dam is the crown jewel of the Pick-Sloan dams, and Lake Oahe is by far the largest reservoir on the Missouri. For most Corps of Engineers' employees the engineering achievement at Oahe Dam is a source of great corporate pride. The Omaha District engineers originally planned to locate the third Pick-Sloan dam twenty miles upstream of Pierre, South Dakota, the capital city. They changed their plans after geological tests revealed foundation problems. They moved fourteen miles downriver to an area where high bluffs came relatively close to the river. By building into the high bluffs, they could build a much higher (242 feet) dam that was considerably shorter than Fort Randall, Garrison, or Fort Peck Dams. Because of its extreme height and the topography at this location, the reservoir created by this high dam can hold a greater

volume of water than any of the other Pick-Sloan projects (Omaha District 1985, 135). For the first time, the District would not have to build a worker's town because Pierre, being just six miles away, could provide plenty of housing.

Early work had just begun in 1952 when political opposition to the project almost shut it down. The problem was the dam's extreme height. Residents of the upstream areas, Indians on the west and white farmers on the east, were angry that so much valuable farmland would be flooded. They argued that the height of the dam should be lowered from an enormous 242 feet to a more reasonable 60 feet. This decrease in dam height would produce a smaller reservoir that was much closer in volume to General Pick's original plan. At the same time, an engineering study paid for by a rival consortium of fourteen private power companies concluded that Oahe Dam was not even necessary. The firm of Mead and Hunt of Madison, Wisconsin, found that the combined storage of Fort Peck, Garrison, and Fort Randall Dams were more than adequate to control flooding on the Missouri River (Omaha District 1985, 135).

The Corps engineers responded to these attacks by pointing out that if Fort Randall and Garrison Dams were to be used entirely for flood control, they would not be able to release enough water to generate much hydroelectric power, one of the main purposes of the entire Pick plan. This argument worked on the governors of the ten Missouri Valley states. They protested the proposed cancellation of the Oahe Dam project by the first Eisenhower administration. After some political fireworks, President Eisenhower restored \$8.2 million of funding for the Oahe project for Fiscal Year 1954. Construction begun two years earlier picked up again and Omaha District engineers and workers started to build the largest rolled earthfill dam in the world (Ibid.).

My review of the Oahe Dam construction records in the Omaha District's annual reports to the Chief of Engineers revealed that the Omaha District and its main construction contractors, James Construction Company (Phase 1 excavation) and Western Contracting (Phase 2 closure operations) overcame many engineering challenges. One of these was the imminent threat of landslides from the adjoining bluffs. To reduce this threat, District engineers drilled horizontal wells 600 feet into the shale from the stilling basin. These wells were designed to reduce horizontal water pressure on the shale. Nevertheless, during excavations at the base of the eastern bluff, a massive landslide moved a 2,000-foot-long tongue of earth toward the Missouri River. The slide filled a newly excavated area with an estimated 7,000,000 cubic yards of earth which had to be removed (Omaha District 1985, 136).

By late 1957 the District engineers were planning the best technique for dam closure. With the help of mainframe computer specialists from the Missouri River Division, they calculated the best method using thirty-five variables. First, they used the Garrison Dam, 250 miles upstream, to restrict the river's flow. Then they began dumping fill at an accelerated rate so that the restricted channel was filled more quickly than the reduced flow could erode it away. Western Contracting completed the closure operation in just under twenty-two hours, dumping an amazing 3,200 cubic feet of fill per hour (Omaha District 1985, 137).

Breaking away from earlier dam designs, Omaha District engineers located the hydroelectric powerhouse on the left bank of the Missouri River. The massive outlet works consisting of six flood control tunnels, were located on the right bank, and the spillway was located one mile downstream of the outlet works. Each of the huge tunnels

measured 18.5 feet in diameter and 3,450 feet long. Each tunnel had its own intake structure while sharing a common stilling basin. The story of how the tunnels were excavated is a key part to the engineering legend of Oahe Dam. District engineers were afraid that dynamite explosions would completely disintegrate the already fractured shale bedrock. The Corps' contractor, Mittry Constructors of Los Angeles, developed a cutterhead excavating machine, the "*Mittry Mole*" that used two sets of rotating cutters to cut and break loose the shale. The mole was attached to a conveyor which carried the excavated material out of the tunnel. This eliminated the need for railcars or trucks in the tunnel. The "*Mittry Mole*" could excavate at twice the rate of traditional methods, slightly more than two feet per hour over extended periods (Omaha District 1985, 138).

It is clearly beyond the scope and the overall purpose of this paper to describe all the innovative engineering features of Oahe Dam. America's best engineering talent and the best construction methods available were used to construct this awesome project whose primary role has always been to provide a huge volume of storage space for floodwaters. The gigantic reservoir created behind Oahe Dam stretches 200 miles north from Pierre, South Dakota, past the Cheyenne River reservation, past the Standing Rock reservation straddling the state line of North and South Dakota, even further northward past Bismarck, North Dakota, where the Missouri finally returns to its original channel before being impounded again by Garrison Dam.

By the time the Omaha District real estate specialists began the land acquisition process in 1950 for Lake Oahe, they had become somewhat hardened to the plight of the Missouri River Sioux tribes. After all, Oahe was the third of the Pick-Sloan dam projects. What the Corps did not expect was just how hard the Sioux would fight for their river

bottomland. At Cheyenne River Reservation, the Corps initially assessed the 104,420 acres needed for Lake Oahe at \$1.6 million, including improvements such as farms and the standing timber. The Sioux rejected this assessment as totally inadequate and even refused to negotiate. The Department of Interior stepped in and made a new appraisal, raising the estimate to \$2.05 million. The Cheyenne River Sioux appealed to the U. S. Congress "seeking \$2.6 million for the land, \$8.3 million for future damages, including the loss of grazing permit revenue, the timber supply, wildlife, wild fruit, and \$12.3 million for the rehabilitation of the tribe" (Omaha District 1985, 163).

Protracted and contentious committee hearings in the House of Representatives finally produced a compromise in 1954. Congress approved \$5.4 million as payment for the land taking needed for Lake Oahe and another \$5.16 million for relocation costs and to restore "the economic, social, religious, and community life of the whole tribe" (Ibid.). Omaha District spent an additional \$5.5 million to build a new agency headquarters at Cheyenne River, along with schools, a hospital, new housing, and new utilities. From the Corps of Engineers' perspective, reflected in the official history of Omaha District, this was more than adequate compensation for the Sioux's loss of their land. From the Sioux perspective, the loss of their bottomlands and all its resources was irreplaceable. The two respective positions have never changed.

President John F. Kennedy officially dedicated Oahe Dam on August 17, 1962, but construction actually went on for two more years. Omaha District continued the relocation of highways and public facilities around the lake for another decade. When maintenance and repair costs were added to the estimated \$345 million dollars it cost to

construct Oahe Dam, an estimated \$400 million of taxpayer dollars had been spent on this one project.

Oahe Dam and the lake it created is the largest, brashest, most "in-your-face" component of the Pick- Sloan Plan. It is also the greatest source of friction between white America and the Sioux on the Upper Missouri. The Standing Rock and Cheyenne River Sioux together lost more than 160,000 acres of their prime river bottomlands to the Oahe Project. Ninety percent of the timbered areas on these two reservations were submerged. With the inundation of the bottomlands, the Sioux also lost their cherished farms and gardens, wild fruit and vegetable resources, and most of their riparian wildlife resources (Lawson 1982, 50). Cheyenne River Reservation lost over 104,000 acres and the largest town on the reservation, Cheyenne Agency. Two other smaller communities were inundated. Thirty percent of the Cheyenne River tribe's population was forced out of their homes by the rising waters of Lake Oahe. Just to the north, Standing Rock Reservation fared a little better, losing about 56,000 acres of river bottomland which forced the relocation of twenty-five percent of the tribal members. As Lake Oahe rose, it flooded the town below the Standing Rock agency headquarters at Fort Yates, North Dakota. One hundred and seventy families had to be relocated by the Corps to the mainland. It was a truly heartbreaking time for the Sioux.

At Standing Rock Reservation, the impact to the land was less and so was the final compensation. The Corps' initial low appraisal of their land was again rejected by the Sioux and negotiations in Congress again produced a compromise. In 1958, Congress settled on a total of \$5.25 million for the 56,000 acres of land needed for Lake Oahe. This figure included about \$2 million for the land and \$3.3 million for "intangible losses."

Congress also appropriated another \$6.96 million to relocate 190 families out of the bottomlands and to improve "the overall economic and social conditions of the Standing Rock Sioux tribe" (Omaha District 1985, 164). Both the Standing Rock and Cheyenne River Reservations retained their mineral rights and obtained hunting, fishing and exclusive grazing rights on Lake Oahe lands in the congressionally approved settlements. What the U. S. government lawyers and the Army engineers could not or would not grasp was the long-term effect on the upriver Sioux. Because they fought so long and so hard for just compensation, they fared much better than the Three Affiliated Tribes, but they would not escape the social pathologies that plagued all the Missouri River reservations impacted by the Pick-Sloan Reservoirs.

In the late 1990s, award-winning writer, William Least Heat Moon, traveled up the Missouri River by boat and described the modern Lake Oahe landscape this way in his book *Riverhorse*:

I'd traveled every county in the Great Plains but I'd never seen them look as they did there. It wasn't the treeless roll of the hills - that was familiar enough - rather it must have been the littoral aspect that the grand spread of water gave under a big sky. Like the ocean Oahe can be a new vacancy of everything except water and air . . . Capable of carrying clipper ships and men-of-war, Oahe could be a portion of the Northwest Passage that Europeans long dreamed of and Lewis and Clark went looking for (Least Heat Moon 1999, 278 passim).

Gavins Point Dam, Big Bend Dam, and the Downriver Sioux

Gavins Point Dam is the penultimate Pick-Sloan project built and the southernmost. It is the Missouri River dam closest to the river's mouth. Located on the South Dakota-Nebraska state line, the dam is about four miles west of Yankton, South Dakota. Gavins Point is a small dam whose primary purpose is to provide a steady outflow of water for downstream navigation. Omaha District engineers selected the odd

location of the dam after eliminating three other alternatives. They faced several logistical constraints. First, they wanted a location that could provide a slackwater pool for possible navigation facilities above Yankton, South Dakota. They also had to keep the reservoir's headwaters below Fort Randall Dam's tailrace, the area below the dam where rapidly moving water exited the turbines used to generate electricity. This reservoir would later be called Lewis and Clark Lake. The Corps met the challenge of keeping the dam out of the white Mid-western town of Yankton and still keeping the spillway in the more stable Niobrara chalk formation. White constituents in Yankton successfully persuaded their congressmen to exert pressure on the Corps to avoid all adverse impacts to their city from the dam's construction (Omaha District 1985, 147). As we have seen, Indian tribes did not have such effective Congressional advocacy.

Initially, the Corps' planners designed a small dam fifty-five feet in height with just one hydropower generator. Due to congressional pressure to increase the amount of hydropower, the design changed to seventy-two feet with three generators in 1950. The seventy-two foot high dam impounds a lake with a total capacity less than one-fortieth of Lake Sakakawea on the Fort Berthold Reservation. Groundbreaking on the dam site began with a ceremony on May 18, 1952, over which the new Chief of Engineers, Major General Lewis Pick, the Corps' mastermind behind the Pick-Sloan Plan, presided along with the governors of South Dakota and Nebraska. Construction on the project lasted five years. The final dimensions of the dam were 8,700 feet long and 72 feet high. Like most of the Pick-Sloan dams, the story of Gavins Point is one of engineering challenges met and overcome. Unlike most of the dams, it required no forced relocations of Native American people (Ibid.).

Lewis and Clark Lake, which was impounded by the Gavin's Point Dam, did not initially flood any substantial population centers. However, the most significant relocation to result from the dam was that of Niobrara, Nebraska, which occurred more than a decade after Gavin's Point Dam was closed. The relocation came as a result of the aggradation of silt in the upper reaches of Lewis and Clark Lake. As Lewis and Clark Lake rose it slowed the Missouri's flow and retarded its scouring action. Without that scouring, silt soon accumulated in a delta at the mouth of the Niobrara River. The delta diverted the Niobrara's waters into the previously dry lowland areas and caused the ground water level around its mouth to rise. This produced seepage and drainage problems in the town. Total relocation of the town proved to be the only economically feasible course of action. No relocations relating to Indian reservation are recorded in the Omaha District's official history of the construction of this project (Omaha District 1985, 168).

The last Pick-Sloan Reservoir to be constructed by the Corps' Omaha District was Big Bend Dam. It is located about halfway between Fort Randall Dam and Oahe Dam. The dam gets its name from the historic 21-mile meander loop in the Missouri River where Lewis and Clark and thousands of adventurous steamboat passengers walked across the 1.5 mile wide neck of the loop to stretch their legs. During the height of steamboat traffic in the 1830s and 1840s, passengers often "picnicked while they waited for the riverboats to make the long trip around the bend" (Omaha District 1985, 153). Big Bend Dam is located about 50 miles southeast of Pierre, South Dakota, and abuts the Crow Creek Reservation on the east, and the Lower Brule Reservation on the west. Unlike Gavin's Point, Big Bend Dam severely impacted both reservations.

Omaha District engineers received initial funding for design studies at Big Bend in 1956. After considering a number of alternative designs, they ultimately decided to build in the firm Niobrara chalk at the old Fort Thompson agency. The engineers designed a unique S-shaped earthen embankment that avoided several problems. The S-shape required less land than on the traditional linear axial embankment and put the dam north of a flood-prone creek. It also eliminated the need to relocate an old Indian tribal cemetery adjacent to the historic Fort Thompson agency. Learning from the experiences with Fort Randall Dam, they also tried to minimize the number of Indian family relocations. The first dam design was high at 102 feet, but still less than half the height of the enormous Oahe Dam.

Real estate officials with the District began negotiations for 21,026 acres of Sioux land in December, 1960. Lower Brule suffered most, losing 14,609 acres, almost fifteen percent of the reservation's land base, including the largest town of Lower Brule. That entire community would eventually be moved by the Corps to a new town site one mile west of its former location. Sixty-two families were displaced. This land taking destroyed the bottomland timber and pastureland remaining after the Fort Randall project. Lawson (1982, 54) notes that one-half of the farms and ranches remaining after Fort Randall were inundated to create Lake Sharpe, the reservoir behind Big Bend Dam.

On the Crow Creek Reservation, the Corps wanted just under 6,500 acres of the remaining river bottomland. Twenty-seven Sioux families would have to be relocated. One-fourth of the tribe's remaining farms and ranches were given up to the new reservoir. Lawson (1982, 54) notes ironically that:

The government's handling of the Fort Randall relocations had been so slipshod that families on both the Crow Creek and the Lower Brule reservations were

relocated on lands within the projected area of the Big Bend Dam. These unfortunate Indians were then required to undergo the trauma of yet another move.

By May 1961, the Corps had agreed to purchase 14,300 acres of Lower Brule lands for \$825,000 and 6,300 acres of Crow Creek lands for \$355,000. Congress accepted these low payments, but it also chose to provide further substantial funds to the tribes to cover their intangible losses and to assist their economic and social rehabilitation (\$3.2 million for Lower Brule and \$4.4 million for Crow Creek). Congress acted in this manner after learning that the annual per capita income on the Lower Brule and Crow Creek reservations was only \$319 and \$269 respectively. During 1962-1966, the Omaha District relocated the village of Lower Brule, built a new town site for the Crow Creek Indians, relocated tracks of the Chicago and North Western railroad along Lake Sharpe, and completed other work required by the creation of the lake (Omaha District 1985, 167).

A Landscape Transformed by Water and Tears

The transformation of the Upper Missouri landscape by the Army Corps of Engineers brought fame and advancement to General Lewis Pick. Following his service as Commander of the Missouri River Division, he went on to become a Lieutenant General and Chief of Engineers (see Appendix E). Omaha District went from relative obscurity within the Corps to become what many Army officials regarded as the premier engineering organization in the Army, all because of the construction of the Pick-Sloan reservoirs. As a result of this supreme engineering achievement and the high quality engineers recruited, Omaha District was later given a huge military construction mission that included construction of the Strategic Air Command (SAC) headquarters, Warner

Air Force Base, hundreds of Minuteman missile silos, and numerous other military construction assignments for the Air Force (Omaha District 1985, 181-194).

For white Americans, the giant Missouri River reservoirs brought a variety of benefits, including hydroelectric power, downstream flood control, improved navigation on the Lower Missouri River, and recreational opportunities for a growing white middle class. That last benefit should not be discounted. Section 4 of the Flood Control Act of 1944 had authorized the Corps of Engineers "to construct, maintain, and operate public park and recreational facilities in reservoir areas" under its jurisdiction. The law required that the water of Corps reservoirs should be "open to public use generally, without charge, for boating, swimming, bathing, fishing, and other recreational purposes" (Omaha District 1985, 267). For this reason, Omaha District planners gave much attention to recreation on "the greatest chain of manmade lakes in the world." They built 144 recreation areas on the main stem Missouri reservoirs so that "the dams and reservoirs evolved into a huge recreational complex based on the Pick-Sloan plan." The upshot of all this was that boating, fishing, and water skiing became big business on the Big Muddy, but for white America only.

There is a photograph in the Omaha District's official history of a young white girl water-skiing on Lake Oahe in the 1970s that I find very troubling. Holding onto a taut tow rope, she is laughing and smiling in obvious delight. Behind her are a vast expanse of open water and a section of the treeless, arid high plains surrounding Lake Oahe in the background. While the children of white Americans in the late 1960s played in the waters of the new "Missouri Great Lakes," the children of the indigenous peoples

relocated "on-top" became victims of social pathologies that caused many to commit suicide. There will be more on this tragic human disparity in the next section.

Turning to the physical landscape, when Omaha District built Fort Peck Dam in the 1930s, they routinely left the trees that grew within conservation pools standing and simply drowned them when the reservoirs filled. With the Pick-Sloan Reservoirs, however, the Corps planners abandoned this hazardous practice because they anticipated heavy recreational use. But even they did not anticipate just how big recreational boating would become on the Missouri reservoirs after Pick-Sloan. To create safe boating areas, many of the timbered areas of the Missouri bottomland were clear-cut prior to inundation. This was also needed for the safe operation of power plants. The "oasis" of the Missouri floodplain was destroyed by chainsaws and rising water. The District was persuaded by the U. S. Fish and Wildlife Service to leave a few uncut areas for fish habitat. However, the Corps still cleared tens of thousands of acres of bottomland timber at all of these main stem Missouri reservoirs "to create safe boating areas, eradicate mosquito breeding grounds, remove dead trees, and provide access for depth soundings" (Omaha District 1985, 271). For the Corps' employees and contractors performing this work, timber cutting was not only necessary but beneficial, and clearly it was necessary for white Americans with big boats and big bucks to spend on recreation. But for the Three Affiliated Tribes at Lake Sakakawea and the Sioux tribes on reservations along the Upper Missouri, the screaming sound of those chainsaws and the sight of the rising water brought only tears for what was being lost.

To begin this discussion of the Native American reaction to the landscape transformation created by the Pick-Sloan Plan, let us consider the Sioux's traditional

conception of landscape. Here is a "geography of the mind" quite different from the white engineers who designed and built the Pick-Sloan reservoirs.

We're setting on our blessed Mother Earth from whom we get our strength and determination, love and humility -- all the beautiful attributes that we've been given. So turn to one another; love one another; respect one another; respect Mother Earth; respect the waters -- because that's life itself! -- Phil Lane, Sr., Yankton Sioux 1992 (Hill 1994, 22).

Once we were happy in our own country and we were seldom hungry, for then the two-leggeds and the four-leggeds lived together like relatives, and there was plenty for them and for us. But the *Wasichu* came, and they have made little islands for us and other little islands for the four-leggeds, and always these islands are becoming smaller, for around them surges the growing flood of the *Wasichu*; and it is dirty with lies and greed --Black Elk, Oglala Sioux (Neihardt 2000, 7).

During my review of Record Groups 75 (BIA) and 77 (COE) pertaining to the Pick-Sloan land taking in the National Archives at Kansas City, I observed two major trends. The first was the strong sense of urgency on the part of white Army Corps and BIA officials tasked with getting a "big job" done in a hurry. The second was the preponderance of government documents written with the attitude that "you Indians have to make up your mind." (see Appendix B #1). Underlying the numerous council meeting minutes and official letters (see Appendix D) is the constant theme that affected Indians could not make decisions fast enough to get out of the way of dam and reservoir construction. We now know that this initial mental paralysis on the part of many Indian families was clearly the result of psychological trauma. Indian people could not believe it was happening, could not understand why it was happening, and could not find a way out of the unreal situation. One BIA news bulletin (Appendix B #1) illustrates both of these themes. The excerpts taken from the Fort Berthold Agency News Bulletin of November 8, 1950, published at Elbowoods, North Dakota, were written by BIA Agency

Superintendent R. J. Quinn (Record Group 75, National Archives Plains Regional Office.). The sense of urgency and the feeling of white frustration at Indian inaction are palpable.

Phyllis Cross, the daughter of Tribal Council Chairman Martin Cross, described this period of land taking and reservoir construction as a time when their community "went into social free fall for the next fifty years . . . this happened to thousands of people simultaneously" (VanDevelder 2004, 32). Her brother, Martin Cross, Jr., known by his nickname "Crusoe," compared it to the post-Flood break-up of ice on the Missouri River:

"When it's fifty below in February, the sheet of ice on the river can get to be a couple of feet thick," says Crusoe. "People think it fractures and breaks apart in the spring, piece by piece, but that's not what happens. As snow starts melting upstream, the flow of water beneath the ice builds up pressure. In a sudden thaw, that pressure builds so quickly that the entire ice sheet explodes. You can hear it miles away, like a sonic boom, disintegrating into ten zillion pieces. That's exactly what happened to us when The Flood came to Elbowoods" (VanDevelder 2004, 160).

We will see how both the Fort Berthold Indians and the Sioux picked up the pieces of their individual lives and the life of their communities in upcoming sections. I believe it is fitting to close this discussion of the reservoir landscape with the thoughts of one white civil engineer who worked on the construction of Garrison Dam. Byron Sneva was a Corps contractor and a Norwegian American from Minnesota who saw his participation in the massive construction job as a great experience for him professionally. However, he also remembers how the Missouri bottomlands once looked during those times when he and other young Corps engineers took a rare day off to go hunting in the bottoms. His recorded memory provides the reason for the Native Americans' tears as the lake waters rose:

Those river bottomlands were a different world. There was so much game in the fields and woodlands of the bottom that we never bought meat at the grocery store . . . You didn't have to spend more than one winter there to know that nobody could survive that country on top. When I saw the lake for the first time, I was stunned. We destroyed hundreds of square miles of beautiful river bottomland. What a terrible thing. We gave them no choice (VanDevelder 2004, 144).

The Legacy of General Lewis Pick

In 1970, Martin Cruz Smith published his first novel entitled *The Indians Won*. In it he conducts a “contra-factual” thought experiment by exploring what would have happened if, after the Battle of Little Big Horn, the Plains tribes had not disbanded, but led by the Sioux, continued to grow in strength. What if by consolidating all Indian nations and securing alliances with friendly European nations, they had been able to establish an independent sovereign Indian Nation in the midst of the United States, effectively dividing America in two? What if a fiercely determined and resolute, pan-Indian alliance had turned the tidal wave of "Manifest Destiny" into a ripple that eventually just died away? What if the United States had lost the inner continent to this "Indian Nation," what would the effect have been on American history?

In the course of my research, I have conducted a similar thought experiment for myself on the post-reservoir landscape of the Upper Missouri Region. What if Lewis Pick had not been selected as the Corps' Missouri River Division Commander? There would have been no Pick-Sloan Plan. Would the Upper Missouri tribes have fared better? Based on my research to date, I am convinced that, even if some small upriver reservoirs would have been constructed eventually, the Indian tribes of the Upper Missouri would have fared far better. Under the leadership of a different commanding officer, far greater efforts would have been made to avoid the physical destruction of Indian reservation

land. And if that destructive flooding and population relocation had been avoided, the Missouri River Valley might still be an oasis on the Plains for Native Americans.

Lewis A. Pick was a tough officer who did not tolerate insubordination or contradiction from subordinates (see Corps' biography in Appendix E). Before coming to the Missouri River Division, he had twenty-six years of experience as an Army Corps of Engineers' officer. He was the District Engineer in New Orleans just after the record-breaking 1927 flood in the Mississippi River Valley. He had also served as engineer assistant to future President Herbert Hoover in the Department of Commerce (Appendix E; Omaha District 1985, 75). As an Army engineer officer, he was very well qualified to guide the work of subordinate engineers. As a human being, he was the worst possible choice to negotiate with the Indian tribes of the Upper Missouri. His legacy has now negatively impacted several generations of Native Americans.

Colonel Lewis Pick was cut from the same cloth as General George S. Patton. They were both blunt, gruff, take-charge Army commanders. One anecdote from Pick's first days as MRD commander lives on in the Corps' corporate memory. Upon taking command in Omaha during World War II he ordered all of his staff, Army officers and civilians, to work a series of continuous seven-day weeks. Pick was determined to impress upon his subordinates that with the nation at war, their role at home was just as urgent. On the first Sunday after he gave the order, he went to the Division office fully expecting to see every man at his desk. Every man who was not, regardless of rank or seniority, was fired. Another incident reported by Reisner (1993, 187) comes from Pick's later service in Burma during World War II. A team of surveyors had designed a technically perfect but rather long road which successfully avoided all topographically

difficult areas. Upon reviewing the plans for the road, Pick exploded. He fired the entire team and personally designed a much more difficult, downright treacherous road that could be finished slightly sooner. By ruthlessly accomplishing his mission and showing extraordinary self-initiative, Pick was rewarded by his Army superiors. His personal characteristics made him extremely hostile to Indian attempts to save their reservation land or to gain adequate financial compensation.

During the planning stages of the Pick-Sloan reservoir construction, the Corps, under Col. Pick's take-charge leadership, clearly took extraordinary pains not to inundate any of the white towns along the Missouri River. Lake Oahe stopped just short of inundating Bismarck, North Dakota. Pierre, the capital of South Dakota, was protected by its location just below Oahe Dam and just above the tail end of Lake Francis Case. Chamberlain, South Dakota, was spared by a similar placement between Big Bend Dam (below) and Fort Randall Dam (high above). Furthermore, the height of Garrison Dam on the Fort Berthold Reservation was reduced twenty feet from 1,850 feet to 1,830 feet for the express purpose of avoiding inundation impacts to the small but growing white town of Williston, North Dakota. One troubling question remains: why couldn't the Corps have avoided catastrophic inundation impacts to Indian reservation lands? Dam placement, dam height, and the number of dams alone could have made this possible. The ultimate answer, I believe, is that Colonel Lewis Pick made a series of highly ethnocentric judgment calls based on the erroneous assumption that all Indian tribes on the Missouri River would eventually be terminated, and that these reservations would cease to exist in a few decades. The "Termination Program" of the 1950s Eisenhower Administration was active during the time Pick-Sloan Reservoirs were being designed and built. Termination

was designed to revoke the limited sovereignty guaranteed to tribes by the Indian Reorganization Act of 1934. Termination meant the end of all treaty obligations and the end of reservations. Tribal lands would simply become publicly owned land subject to state taxes. "Termination struck at the three most important things to reservation people -- sovereignty, land, and culture" (Hine and Faragher 2000, 538).

In *Cadillac Desert* Reisner (1993, 188) describes the impact of the Pick-Sloan reservoirs on the indigenous Indian tribes as "the most calamitous thing that had happened to them in their history." Reisner wonders why, if that were true, Pick didn't have "the good grace to leave the proceedings through which the tribe would be compensated to someone else" (Ibid.) The answer is that Pick, the Patton of the Army Corps of Engineers, simply couldn't. His take-charge personality required him not just to participate in tribal meetings, he had to run them. One such meeting at Fort Berthold reservation is particularly important.

After Indian attempts to stop the building of Garrison Dam had broken down, a public meeting with BIA and Corps officials was planned at Fort Berthold reservation. The main points for discussion were: compensatory land to offset the loss of the bottomlands; electricity for pumps to bring water up "on-top;" grazing rights around the new lake; first rights to bottomland timber resources; and a bridge across a narrow reach of the new lake so that their people could maintain contact with one another. In his typical take-charge fashion, Colonel Pick began with a statement recorded by an eyewitness as "I want to show you where we are going to place you people" (Reisner 1993, 189). Shortly after this condescending comment by Pick, the meeting was disrupted by a "dissident tribal faction" in Indian ceremonial attire led by a man named Crow Flies

High. The leader of the group went up to Colonel Pick and made an obscene gesture in his face. Pick turned beet red and is recorded as saying he would never forget this insult. Pick stormed out of the negotiation and never returned. Based on his later anti-Indian behavior, Pick never did forget and never forgave, to the great detriment of all the Missouri River tribes. Whether we should characterize Pick as a racist is problematic. Based on the circumstantial evidence just discussed it might appear so. Until a definitive study of his papers, now archived in the Corps of Engineers Office of History (Appendix E), can be performed I would prefer to withhold final judgment.

What is clear is that Lewis Pick treated the Missouri River tribes harshly. A clear example of this is the way he handled their requests for compensatory land to mitigate the loss of their beloved bottomlands. The issue of compensatory lands was critical to the Fort Berthold Indians. Under the law, all compensatory lands were to be "comparable in quality and sufficient in area to compensate the said tribes for the land on the Fort Berthold Reservation." The problem was that there was no land in North Dakota that could really match the sheltered bottomlands as prime winter cattle range. Secretary of Interior Julian "Cap" Krug recognized this problem and decided to accede to their demands for water, at cost hydroelectric power, and first timber and mineral rights. Krug also agreed to pay the Three Affiliated Tribes \$5,105,625 in additional compensation.

This Interior Department's effort to reestablish a modicum of goodwill with the tribes was totally sabotaged by Col. Lewis Pick. Pick's supporters in Congress rejected Krug's plan and drafted a new tribal settlement package along grim lines suggested by the Corps' angry MRD commander. The new terms were far harsher than the Department of Interior's terms. They were, in fact, downright punitive. For example, the Fort

Berthold tribes would not be permitted to fish in the reservoir. Their cattle could not drink from, or graze near it. They were denied the right to purchase hydroelectricity at cost. They could not use government compensatory funds to hire attorneys to fight for their rights. They were not allowed to cut down trees that would be inundated. These were the very harsh terms that caused George Gillette, the Mandan tribal leader, to break into tears at the ceremonial signing of the bill.

To ensure that Garrison Dam would be built as planned and, presumably, the Indians who had insulted Col. Pick would lose their beloved bottomland, the Omaha District began construction well before the final agreement was signed with the Fort Berthold Indians. Over \$60 million was spent on engineering and preliminary construction at Garrison Dam between 1945 and 1948. Every Congressman protested this illegal action by the Corps. In the ultimate irony, the Fort Berthold tribes were prevented by law to spend any of their Federal financial compensation to pay for legal representation to fight against the decisions made by the angry old man at the top of the Corps' power structure. Reisner (1993, 191) argues with conviction that it never had to be this way:

Had the Missouri been left to the Bureau of Reclamation exclusively, things wouldn't necessarily have turned out much better. However, because the projects would, for the most part, have been well upriver, the Fort Berthold Reservation wouldn't have been drowned, a lot of riparian waterfowl habitat in the heart of the Central Flyway wouldn't have been inundated, and the dams, being high rather than wide, would likely have produced a lot more hydroelectricity for their size. The irrigation projects the Bureau planned might have been losers in an economic sense, but the Missouri, if it had to be intensively developed, might have been more useful irrigating crops than providing free transit -- at enormous public expense -- for a handful of barges.

Since the construction of the Pick-Sloan reservoirs, the Corps of Engineers has also had to live with the legacy of Lewis Pick. The management challenge created by Pick's transformation of the Dakota landscape will be explored in detail in the next section.

CHAPTER 6

STAND-OFF: THE LATER RESERVATION PERIOD

Coyote Warriors and Sovereign Nations

The image of the coyote as a wily, supernatural trickster in Plains Indian folklore and oral tradition has been well documented by anthropologists. "Coyote" is admired for his ability to outsmart his opponents and to trick them into giving him what he wants. During the Pick-Sloan reservoir construction period, the Missouri River tribes fought a losing battle against the Army Corps of Engineers, the Bureau of Indian Affairs, and the entire U.S. Federal Bureaucracy. In this last section, we will see how a new generation of Indian leaders, "coyote warriors," has used the tricks and tools forced on them by "*wasichu*" to hold on to their reservation lands and improve them for the next generation. In playing this high stakes game with white society these coyote warriors have earnestly sought to reconnect with the values and traditions of their arrested (*pre-wasichu*) culture. One of these shared values is that the land and its resources must be held in sacred trust for all the people, what the Sioux call "*wouncage*." This *wouncage* is the "guiding ethic of conducting the life of the individual and the tribe in a state of reverence and balance with the natural world" (VanDevelder 2004, 4). For many Native Americans, it is "the enlightened state of living in harmony and balance with the 'Great Mystery'" (Ibid.). This reverential approach to nature can be characterized as ecological and ecosystemic and is, therefore, very appealing to many Americans today. But in the period during reservoir construction on the Upper Missouri (1950-1970), Indian *wouncage* was the very antithesis of American society's attempts to control the mighty Missouri river.

Ironically, the start of the Upper Missouri tribes' long road back to physical and

psychological health can be traced to the time when the first dam on the Missouri, Fort Peck, was being constructed in the 1930s. The Indian Reorganization Act of 1934, also known as the Wheeler-Howard Act, stopped the downward cultural death spiral caused by the Dawes General Allotment Act of 1887, and gave Indian people a real "New Deal." I believe the Indian "New Deal" created by BIA Chief John Collier enabled the tribes to survive the trauma of the Pick-Sloan period and gave them a foundation to build on, one which recognized their simple desire to live as tribal peoples.

The Indian Reorganization Act reversed the Dawes Act's misguided attempt to privatize all reservation land holdings. It also gave official government endorsement to local self-government on a *tribal* basis. In essence, the Act restored to Indian people the tribal management of their collective assets, including land holdings, and gave them the economic foundation to live on the reservations as *tribal* people, not as white Americans with red skins. Practically, the Wheeler-Howard Act slowed down the extremely damaging practice of assigning tribal lands to individuals. When individual Indian landowners sold land to non-tribal whites, it produced the checkerboard pattern so distinctive of late nineteenth and early twentieth century reservations, e.g., see Fort Berthold (Map 14 Appendix A). The Indian Reorganization Act allowed Indian lands to be kept in collective Indian hands. Because of the 1934 Act and the efforts of Federal courts, over 2,000,000 acres of land were returned to various tribes around the U. S. within twenty years after passage of the Act (Hine and Faragher 2000, 465-467).

The Indian Reorganization Act is a clear rejection of the concepts behind the 1887 Dawes Allotment Act. The Dawes Act's philosophical underpinnings were based on the ethnocentric concepts of the rightness of assimilation and the superiority of Anglo-

American culture. In contrast, the Indian Reorganization Act holds forth the ideal that it is all right for American Indians to be "Indians", i.e., for tribal people to be tribally organized and governed. This philosophical or conceptual position of "cultural pluralism" owes much to the anthropological research of Columbia University's Franz Boas and his many famous graduate students. Many of Boas' students (e.g., Robert Lowie) did ethnographic research among Plains tribes and were impressed by the enormous diversity of cultures. As anthropological pluralists, Boas' intellectual children argued that each Indian culture should be non-judgmentally considered within the "framework of its own values and assumptions." In their superb revisionist history of the American West, Hine and Faragher (2000, 465) make the important point that the Boasian tradition influenced the formation of a new American socio-political "cultural pluralism," as expressed in the writings of Harvard philosopher Horace Kallen (1924):

"America", Kallen argued, "was best understood as a 'federation or commonwealth of national cultures", a 'democracy of nationalities, cooperating voluntarily and autonomously through common institutions in the enterprise of self-realization through the perfection of men *according to their kind*'" (Hines and Faragher 2000, 465).

That phrase "according to their kind" captures the essence of 1930s American socio-political "cultural" pluralism. In the context of Indian tribes, it meant it was good, natural and right for Indians to live as they wanted to, and not to be assimilated. This position took root in the heart and mind of anthropologist John Collier, the architect of the Indian New Deal and the first *wasichu* coyote warrior.

Collier came to New York City from Georgia during the first decade of the twentieth century and as part of his social work studies, took classes in sociology and anthropology at Columbia University. He absorbed there the Boasian- inspired pluralist

perspective. By 1920 he was working as a social worker in Taos, New Mexico. He soon became aware of the intellectual and political war going on at that time between the Pueblos and the BIA officials. The Pueblo people and their leaders were determined to preserve their ancient customs and unique communal culture against the assimilationist attempts of BIA official. Eventually, Collier abandoned his neutral position as a bystander and became personally involved in the Pueblos political struggle to defend their land and water rights. He helped to organize a nationwide support group of reformers sympathetic to the plight of Native Americans threatened by government assimilationist efforts. Collier's efforts to develop a network of pro-Indian reformers led to the formation of the American Indian Defense Association. He became a nationally recognized leader and critic of assimilationist government policy. Among Collier's associates in the American Indian Defense Association was a rising politician named Harold Ickes. When Ickes joined the first FDR administration in 1933 as Secretary of the Interior, he tapped John Collier to be the new Commissioner of Indian Affairs.

In the staid BIA bureaucratic world, when assimilationism had been the paradigm since the Indian wars, it was like the *coyote* had broken into the hen house. At his swearing in, Collier set forth his pluralist agenda for "Indians, whose culture, civic tradition, and inherited traditions are still strong and virile, should be encouraged and helped to develop their life in their own patterns" (Hines and Faragher 2000, 466). That pluralist agenda was codified in the landmark 1934 Indian Reorganization Act. This legislation "represented the most radical shift in Indian policy in American history, one that fundamentally affected the lives of tens of thousands of Indians."

There are many examples of how Collier's empathy for Native Americans changed individual lives. Under Collier's leadership, the hated Indian boarding schools that sought to "kill the Indian" in students were phased out. In their place were built many more reservation day schools. These day schools were the seed for the high schools and tribal colleges that thrive today on so many reservations. These schools teach Indians about their own history, language, and culture, as well as the practical skills needed for economic survival in the multi-ethnic society American has become. This would not have been possible without the courage and humanity of John Collier.

From a geographic perspective, the Indian New Deal did two major things for the Northern Plains tribes. First, it ended the misbegotten policy of allotment which had robbed American Indians of so much reservation land. Reservation lands that had never been allotted were soon reconsolidated with tribal holdings and managed by tribal councils or corporations. Small land tracts allotted to individual Indians were often recovered by tribes when these individuals exchanged their small tracts (fragmented through inheritance) for shares of common stock in Indian corporations. Under Collier's leadership, the BIA established a monetary fund from which tribes could borrow to purchase reservation lands from non-Indian landowners. In so doing, Indians could remove the *wasichu* created checkerboarding from their reservations and pursue economic choices that required large amounts of open rangeland. This ties directly into the second major benefit of the Indian New Deal, the abandonment of attempts to dry farm the arid high plains and the serious effort to take up the stock raising that seemed best suited to the environment and to the Indians. The famous 1928 Merian report on the

effects of allotment that was carefully reviewed by Collier and his new BIA team had concluded that:

Not only does the average Indian show considerable aptitude for this work, but enormous areas of Indian Land, tribal and individual, are of little value except for grazing (Hine and Faragher 2000, 467).

Under the Collier administration of the BIA, the number of Indian cattle ranchers doubled. Cattle ranchers brought more than economic benefits, too. Young Indian men liked the outdoor lifestyle of the cowboy and took to dressing in boots, spurs, and cowboy hats. More importantly, they began to respect themselves as economic providers, not beggars on the government dole. An anthropologist working on the San Carlos Apache reservation in the late 1930s made an observation that could apply to the Upper Missouri Indians in the 1970s:

The cattle industry is undoubtedly a fortunate choice for the reservation. Indians I have known like the idea of cattle work, for they feel it is something worth a man's effort. They like an occupation which supplies action and at present when the cowboy is so idolized in the West, the idea of being one is attractive to young men (Hine and Faragher 2000, 468).

Forced from their bottomlands, the Sioux and the Fort Berthold Indians had to begin a new life "on top."

The Indian Reorganization Act of 1934 not only let Indians be Indians; it gave the tribes legal status as sovereign nations (Act of June 18, 1934: 8). Collier's New Deal gave tribal governments "the right to exercise what the chief legal advisor to the Interior Department called 'internal sovereignty'" (Hine and Faragher 2000, 468). This internal sovereignty gave Indian tribes the right to set and run their own tribal governments. If the

tribe chose to adopt a constitution, the Act did require the following as set forth in

Section 16:

Any Indian tribe, or tribes, residing on the same reservation, shall have the right to organize for its common welfare, and may adopt an appropriate constitution and bylaws, which shall become effective when ratified by a majority vote of the adult members of the tribe, or of the adult Indians residing on such reservation, as the case may be, at a special election authorized by the Secretary of the Interior under such rules and regulations as he may prescribe. Such constitution and bylaws when ratified as aforesaid and approved by the Secretary of the Interior shall be revocable by an election open to the same voters and conducted in the same manner as hereinabove provided. Amendments to the constitution and bylaws may be ratified and approved by the Secretary in the same manner as the original constitution and bylaws.

In addition to all powers vested in any Indian tribe or tribal council by existing law, the constitution adopted by said tribe shall also vest in such tribe or its tribal council the following rights and powers: To employ legal counsel, the choice of counsel and fixing of fees to be subject to the approval of the Secretary of the Interior; to prevent the sale, disposition, lease, or encumbrance of tribal lands, interests in lands, or other tribal assets without the consent of the tribe; and to negotiate with the Federal, State, and local Governments. The Secretary of the Interior shall advise such tribe or its tribal council of all appropriation estimates or Federal projects for the benefit of the tribe prior to the submission of such estimates to the Bureau of the Budget and the Congress (Act of June 18, 1934:8).

As we shall see, this notion of internal sovereignty would be critical for the Upper Missouri tribes in their long legal fights with the U. S. for a more just financial compensation for the adverse effects of the Pick-Sloan reservoirs. Both the upriver and downriver Sioux and the Fort Berthold Indians accepted Collier's New Deal and chose to reorganize along an elected democratic form of government. Most Indian tribes and communities accepted the Indian New Deal but seventy-seven tribes did not (Hine and Faragher 2000, 469). Those that did not, such as the Iroquois and Navajo, already had strong traditional council governments. They also had strong feelings that the U. S. government did not have the right to make them sovereign nations, they already were.

The Iroquois especially feared that "acceptance would compromise the hard-line position they had taken on the question of sovereignty for over a century" (Ibid.). Indeed, when offered American citizenship in 1924, through the Indian Citizenship Act, the Iroquois council rejected the offer. They believed they already were citizens, of the Iroquois Nation. While not as "hard-line" as the Iroquois, many traditionalists among the Sioux feared that the newly elected tribal councils and chairmen would be comprised of pro-white "assimilated" Indians who had been educated at white boarding schools. Because many Sioux traditionalists refused to participate in elections for representative councils, their voices were stilled. The passionate dialectic between progressives and traditionalists would come to the forefront of American consciousness in the 1970s with the rise of the American Indian Movement (AIM) under the leadership of Russell Means and Dennis Banks (Means and Wolfe, 1995).

In *Dammed Indians* Lawson (1982) gives a detailed account of the Upper Missouri's Sioux tribes' negotiations and settlements with the Corps of Engineers and the Bureau of Indian Affairs during and after the construction of the Pick-Sloan reservoirs. One of the "coyote warriors" who emerges from this detailed history is Frank Ducheneaux, Tribal-Chairman of the Cheyenne River Sioux. Their reservation land was heavily impacted by the massive Lake Oahe constructed by the Army Corps. In 1954, the eighty-third U. S. Congress requested members of the Cheyenne River Sioux Tribal Negotiating Committee to appear at hearings conducted by the House and Senate subcommittees on Indian Affairs. It offered Ducheneaux, the coyote warrior, an opportunity to get more for his people by playing a little game. He knew members of Congress would be more impressed by real Indians in full traditional garb. He also knew

that they would not be as sympathetic to half-blood acculturated Indians like himself, who "wore business suits, smoked cigars, and clearly articulated their demands" (Lawson 1982, 94). Ducheneaux and his fellow tribal committee negotiators decided to have the two darker-skinned full bloods on the committee; John Little Cloud and Alex Chasing Hawk do most of the talking. As part of their ploy, Ducheneaux instructed Little Cloud to speak only in Lakota while Chasing Hawk would translate his testimony into broken English. Of course, both men spoke English as well as their wily Tribal Chairman, Frank Ducheneaux. While their tactics worked in gaining the sympathy of the Congressmen, they worked not at all with the Corps' lead man, the ultra-hard-line Army Secretary Robert T. Stevens (Lawson 1982, 96).

After reviewing the Army Secretary's recommendations, the House Interior committee drastically cut the additional cash requests made by Tribal Chairman Ducheneaux. The compensation for additional severance damages was cut almost \$3 million; the funds for tribal rehabilitation were slashed \$6 million. To add further insult to injury, the interest rate on the tribal settlement was reduced from five percent (5%) to four percent (4%) as the BIA had recommended. Bottom line for the Cheyenne River Sioux was a loss of \$9 million from their original request. Still, despite strong objections from the Army Corps of Engineers, Ducheneaux's efforts to win over the Congressmen paid off. The Cheyenne River Sioux were permitted to retain all the salvage, mineral and shoreline rights they had asked for without payment of fees. This was a far better deal than had been given to the Fort Berthold Indians at Garrison Dam. Interior Committee members kept the provisions that protected the Cheyenne River Sioux's settlement funds from prior claims and held the Federal government, not the Sioux, responsible for all

hazards to cattle created by Oahe Dam. The sympathetic Congressmen also directed the BIA to give full assistance to the tribal members in finding suitable new land.

While many whites at the time regarded Tribal Chairman Ducheneaux's tactics as tricky or devious, in the context of Indian culture they were viewed by the tribe as both necessary and praiseworthy. The coyote warrior fights not for the purpose of deception but to help his people in their struggle with an immensely more powerful adversary. Perhaps the best examples of coyote warriors fighting against the physical, economic, and psychological damage caused by Pick-Sloan comes from the Fort Berthold Reservation.

Coyote Warrior by Paul Van DeVelder (2004) is an in-depth examination of one Mandan-Hidatsa family. It is primarily the story of Martin Cross, Tribal Chairman during the Pick-Sloan era, and his brilliant attorney-son, Raymond Cross, and their attempts to win a just financial compensation after the devastating loss of the river bottomlands that had sustained his people for over a millennium. Martin Cross destroyed his marriage, burned himself out, and alienated his eight surviving children in his heroic attempts to stop the building of Garrison Dam. When that effort failed he continued to seek just compensation for his people's irreplaceable loss.

In the late 1950s, the struggle between the Fort Berthold Indians and the U. S. government transformed the father from "a small-time Indian rancher into a national leader for Indian people" (Van DeVelder 2004, 145). The full details of his extraordinary life are beyond the scope of this discussion. His son, Raymond Cross, became the ultimate coyote warrior by using his legal training at Stanford and Yale Universities, to win a decision for a final just compensation before the U. S. Supreme Court in 1992. With the passage of the Three Affiliated Tribes Just Compensation Act, the Fort Berthold

Indians would receive a total compensation package of \$149.2 million. How Raymond Cross achieved this feat epitomizes the coyote warrior ethic.

After years of litigation and a favorable decision by the U. S. Supreme Court for tribal attorney, Raymond Cross, it was late in 1992 that a joint committee of the House of Representatives and the U. S. Senate finally agreed to award the Mandan, Hidatsa and Arikara tribes on Fort Berthold Reservation the sum of \$149.2 million for the unjust taking of their reservation by an illegal act of Congress in 1949. One problem remained: where would the money come from? Raymond Cross, Senator Kent Conrad of North Dakota, and Lee Foley, a public interest lobbyist in Washington, D.C., devised an ingenious scheme to fund the huge compensation package approved by Congress. Congress could "grow the funds by siphoning off surplus funds that were generated each year by power receipts from Garrison Dam" (VanDevelder 2004, 238). The resulting trust fund for the Three Affiliated Tribes would generate annual interest in perpetuity and would not require removing funds from the U. S. Treasury. By stretching the plan out over six years, they reasoned that the total deposits would reach the target amount of \$149.2 million. In essence, it was a very wily double accounting scheme. Revenues from the dam would simply be counted twice by the U. S. Treasury, once as receipts for hydroelectric power generated by Garrison Dam, and then a second time when those profits were deposited into the account of the Three Affiliated Tribes. In a very real sense, Raymond Cross won just compensation for his people by using the dam that had almost destroyed them.

The Three Affiliated Tribes Just Compensation Act won passage in Congress and ultimate approval by the first President Bush as an attachment to the large Bureau of

Reclamation Reform bill prepared by California Congressman George Miller. Bush wanted to sign the Miller bill because he needed the western states favoring the bill to win a tight election against Democratic Presidential candidate Bill Clinton. By choosing Miller's Reform bill, that so many western states wanted passed, Raymond Cross made a very wise decision, worthy of the wiliest coyote. When the Mandan-Hidatsa attorney met with Congressman Miller to try and persuade him to attach the Three Affiliated Tribes Just Compensation Act to his long-awaited and high stakes Reform bill, Cross brought a copy of the speech Senator Daniel Inouye of Hawaii had made in support of the Three Affiliated Tribes. Senator Inouye's empathetic remarks encapsulate the long struggle of the village farmers for just compensation from Pick-Sloan (Van DeVelder 2004, 257-258)

'During the 1940s and the 1950s, the U. S. Army Corps of Engineers flooded more than two hundred thousand acres of prime land on these reservations when it constructed a series of flood control dams on the Missouri River,' began the senator, struggling to control his emotions. 'The tribes were forced to sign away those lands with literally a gun to their heads, and in absolute violation of their rights as treaty signatories with the United States government. At that time, the tribes were provided with a small measure of compensation which came nowhere near the level of adequately compensating the tribes for the losses they sustained, and was even less responsive to the devastation caused to their lives by this brutal act. Senate Bill 168 is the first legislative measure to be introduced in an effort to bring this deplorable chapter in the United States' history to a close. Today, this committee calls on the rest of the United States government to live up to its trust responsibility to these tribes and join in our efforts to provide equitable and just compensation that will in some small measure help make amends for the wrongs that were done to the people of the Fort Berthold and Standing Rock Reservations.'

'What you have done is to share with us part of the sad and tragic chapter of the relationship between the United States and Indian nations,' continued the senator. 'It is not a happy chapter. It is a chapter of deceit and deception, it is a chapter of promises and broken promises. The committee is well aware of that, and we are going to do our best to undo the damage that was wrought in those years past. It might be well that we remind ourselves at this juncture that this proud nation who maintains publicly that we keep our promises and our commitments, as President

Bush so eloquently stated at the joint session of Congress, has not been honest in its dealings with the Indian nations. Throughout the years, we have had eight hundred treaties with Indian nations, treaties entered into between sovereign nations, the United States and Indian nations. They are sovereign. As such, the U. S. Senate, our predecessors, had the responsibility of studying these treaties and acting upon them to either accept or reject. Of the eight hundred treaties, the record will show that the U. S. Senate just ignored four hundred thirty of them However, we called upon the Indian nations to live up to their promises in the treaties. The U. S. Senate did ratify three hundred seventy of them, and of the three hundred seventy treaties that this Senate, our predecessors, ratified, the United States government violated provisions in every one of them. It is a very sad chapter, and as one senator, as chairman of this committee, I can assure you that we will do our best to see that no further violations are carried out in this country.'

Today, the perpetual trust fund is working precisely as designed and the hydroelectric power revenues from Garrison Dam are helping to compensate the people who helped Lewis and Clark so long ago.

The Erosion of Heritage

Turning now from social impacts to native tribes to the physical morphology of the Dakota landscape, the Pick-Sloan reservoirs have created a shoreline disaster on the Missouri River of epic proportions. Crashing waves, winter ice, and the pounding of fallen timbers into vertical eroding banks have destroyed thousands of acres of the terraces and bluffs that once held the remains of earthlodge villages and prehistoric Indian encampments. I saw this erosion catastrophe firsthand in 1991 when I attended the *Archaeological Site Protection and Preservation Workshop* in Pierre, South Dakota, sponsored by the Corps of Engineers Environmental Impact Research Program (EIRP).

This important workshop was conducted by three outstanding Corps' scientists who have influenced my life greatly, both personally and professionally. Dr. Roger Saucier, Program Manager of the EIRP, was a physical geographer and a Ph.D. graduate

of Louisiana State University. Dr. Lawson Smith was a geomorphologist at Waterways Experiment Station (WES), and a national expert for the Corps in erosion processes. Dr. Paul Nickens was a former University of Colorado archaeologist, then serving as principal investigator for the archaeological site protection research being conducted by the Environmental Laboratory at WES. These three men came to South Dakota in 1990 at the request of the Corps' Omaha District, which in the late 1980s had come under severe criticism for its perceived "neglect" of the erosion problem that was literally destroying the archaeological and cultural heritage of the indigenous people.

Since the passage of the National Historic Preservation Act (NHPA) in 1966, the District had spent considerable time and money excavating a few sites impacted by Corps recreational facilities and surface collecting artifacts from many sites threatened by bank erosion. But this band-aid approach to the problem was not working. After twenty years of ever-increasing bank erosion and the political firestorm of the 1980s created by irate Indians and State Historic Preservation officers, the District needed outside help in dealing with this particular legacy of General Lewis Pick. To understand the unique historical significance of the WES workshop in proper context, some additional background on the Missouri River's shoreline erosion problem is necessary.

Reservoir bank and shoreline erosion is different from the shoreline erosion found on ocean beaches and the shores of natural lakes. Reservoir impoundments "create erosional shores or slopes previously unaffected by lacustrine processes, causing immediate and accelerated erosion and sedimentation" (Ebert, et al. 1989, 53). Reservoir filling kills off natural protective vegetation. Fluctuating water levels in a reservoir's drawdown zone rapidly erode the exposed soil. The release of sediment into the near

shore waters creates unique offshore depositional features and jump-starts a different unnatural erosional regime (Ebert et al. 1989, 54). In general, hydrologic conditions in new reservoirs are not only altered, they remain unstable as fluctuating water levels are manipulated for human purposes (e.g. water releases for hydropower) or from natural processes (e.g. drought). In simple terms, water level fluctuations determine the type and extent of shoreline erosion because they determine where the water impacts the sediment.

Another way reservoirs differ from natural lakes is that they are deepest near dams, while lakes are deepest in the center. Because of this difference, there is greater spatial variability of erosional features along the reservoir's shores. Along the length of a river reservoir's elongated and irregular shoreline, the geotechnical properties of sediments will vary considerably. There may be areas or pockets that will erode rapidly and drastically while other areas may be much less affected.

From a geomorphic perspective, newly created reservoir shorelines, such as those created on the Missouri River, were immediately in "dis-equilibrium" with the new lacustrine environment. Ebert, et al. (1989) showed that the large Pick-Sloan reservoirs were still not in equilibrium thirty years after their construction. The reservoir waters were eating away at the banks in an effort to reach a stage of hydrologic equilibrium. Part of the instability problem was due to the reservoir shoreline's morphology:

Specifically, profiles of eroding reservoir margins often differ from typical natural coastal profiles in having prominent, abrupt bluffs adjacent to a foreshortened beach profile. In many cases, a backshore zone is entirely absent, with the waterline lying at or above the bluff toe. Natural lakeshore processes and predictions may not, therefore, be completely appropriate analogs for characterizing reservoir shores, and since large reservoirs are relatively recent phenomena, the behavior of their shores is poorly understood (Ebert et al. 1989, 55).

What was understandable and disturbing to the Missouri River Sioux tribes, and the Three Affiliated Tribes, is that with each passing year the reservoir's banks were being eaten away and the earthlodges and bones of their ancestors were being exposed and lost to the water.

After a rigorous analysis of historic aerial photographs combined with numerous field visits to known sites, and a multiple regression analysis of pertinent variables, Ebert and his colleagues concluded that the differential rates of bank erosion along the archaeologically defined "Middle Missouri" was not only serious but potentially catastrophic to the entire physical landscape of the Valley. Here are their four main conclusions:

(1) In a specific sense, the results of this study illustrate conclusively that bank erosion is taking place at the 12 sites studied. This erosion falls within the range of general reservoir bank erosion measured by physical scientists in a number of similar studies. The amount of erosion also agrees with estimates given by archaeologists for sites along Middle Missouri and other reservoirs.

(2) Although bank erosion is demonstrably taking place at all of the study sites, its rates are variable from site to site. Determining the amount of management concern that should result from different rates of bank erosion at each site will undoubtedly involve a complex equation in which many variables, including archaeological significance and tradeoffs between economic and other resource values, must figure. Exploration of such decision making is beyond the scope of this study.

(3) Nonetheless, the results of this study emphasize that there is a pressing need to make such decisions. Some of the archaeological sites studied will be gone within a few decades, as will probably hundreds more not studied. It should also be borne in mind that while archaeological sites occupy only a small portion of the shores of Corps of Engineers reservoirs, bank erosion is taking place along entire shorelines where it threatens other resources such as vegetation, habitat, and the boundaries between public versus private property. Bank erosion is far more than simply an archaeological problem.

(4) Data such as those collected here, from historical and sequential aerial photographs, can serve as one of the major bases for locating areas with differential rates of bank erosion and for planning and prioritizing to meet the problems posed by bank recession. (Ebert et al. 1989, 114).

The 1989 Ebert study of Missouri River shoreline erosion was primarily focused on demonstrating how aerial photographs could be used to measure and predict the rates of erosion of archaeological sediments in reservoirs with sequential historical aerial photographs. Contracted by WES for the EIRP as a future management tool, Ebert's (1989) study was heavily focused on methodology rather than substance. Omaha District was also working the problem and the substantial conclusions of their best hydraulic engineers were equally alarming (Knofczynski and Dorough 1989). Table 6.1 and 6.2 shown below are taken from an unpublished manuscript in the files of Omaha District. They were prepared by W. G. Dorough, Chief of the River and Reservoir Engineering Section, and M. R. Knofczynski, an hydraulic engineer in that section.

Table 6.1 - Shoreline Erosion Rates, Missouri River Main Stem Lakes (Source Knofczynski and Dorough 1989, 4)

PROJECT	RECORD (YRS)	BANK	RECESSION RATES (FT/YR)	
			HISTORICAL	RECENT SURVEY
FORT PECK	49	L	1.6	2.5
		R	2.4	2.5
GARRISON	38	L	4.3	3.9
		R	3.2	4.4
OAHE	31	L	6.5	6.1
		R	5.7	4.5
BIG BEND	20	L	7.2	7.6

		R	8.9	8.5
RANDALL	33	L	3.8	3.0
		R	7.2	6.0
GAVINS	36	L	3.3	3.1
		R	2.8	8.1

Table 6.2 - Shoreline Erosion Characteristics, Missouri River Main Stem Lakes
(Source Knofczynski and Dorough 1989, 4)

PROJECT	NORMAL POOL VARIATION	BANK	BREAK POINT ELEV	AVER. BEACH WIDTH	AVER. BANK HGHT	AVER. BEACH SLOPE	PLUNGE POINT ELEV
BIG BEND	1420 - 1420	L	1420	274	13	77	1415
		R	1420	243	21	110	1416
FT PECK	2245 - 2230	L	2241	136	10	19	2231
		R	2232	144	19	27	2224
GARRISON	1850 - 1835	L	1843	346	14	24	1825
		R	1844	198	12	19	1833
OAHE	1615 - 1600	L	1610	311	16	36	1596
		R	1610	291	25	19	1592
FT RANDALL	1360 - 1340	L	1357	305	33	24	1336
		R	1355	493	17	57	1339
GAVINS PT	1208 - 1206	L	1207	118	10	17	1201
		R	1210	92	8	11	1202

**i.e., 77:1 Slope

Lake Sharpe (Big Bend Dam), Lake Oahe (Oahe Dam), and Lake Francis Case (Ft. Randall Dam) had the top three annual historical bank recession rates. All three lakes are located in the bentonite geological region where the valley bluffs erode readily. Data from Corps monitoring stations at all six lakes showed there were many sites eroding in the ten to fifteen feet per year range. Two stations at Lake Sharpe showed incredible erosion rates of fifty-two feet per year and sixty-three feet per year, respectively. The Corps engineers reported that:

. . . the normal erosion cycle begins in the late winter as thaw from the winter frost causes mass failure of the upper bank. Colluvium from this source then builds up at the toe of the banks, which in turn is eroded by storm-wave action during higher pool levels. If the colluvium is eroded away or overtopped by wave wash or high lake levels, the waves come in contact with the primary sediment or bedrock, thus causing the banks to be undercut and a new process of erosion to begin. For many of the high bank locations, the effect of the undercutting is to set into motion the development of extensional cracks at the tops of the bank. These, in turn, expand in width until bank failure releases the stress and another process of erosion begins (Knofczynski and Dorough 1989, 5).

The engineers reported that where the bank sediments were of small grain size, the eroded material was transported away by wave action and redeposited deeper in the reservoir. This prevented the development of a stable beach. In the absence of beach developing materials (coarser sand and gravel), the shoreline at the base of an eroding vertical bluff became flatter or more concave with each succeeding survey they conducted. In layman's terms, the Pick-Sloan reservoirs had created an erosion monster on the Missouri with no apparent way to stop it.

The District undertook a series of multiple regression analyses to determine the ultimate limits of shoreline erosion. Building on previous work by the University of North Dakota at Lake Sakakawea (Garrison Dam) and Oahe Lake, which relied on field

observation data, the District tried to develop a comprehensive predictive model based solely on historic range cross-section data and information gathered from maps, aerial photos, and published soils information. Several factors were included in the model: 1) bank orientation to prevailing wind direction; 2) effective fetch length; 3) longest fetch length; 4) bank slope; 5) bank height; 6) soil type; 7) the relative protection of the shoreline from potential erosion; and 8) whether the erosion occurred on a bend or along a straight. They were used as independent variables to formulate a relationship with the dependent variables -- bank erosion rates measured from the range cross section data. The factors determined by the District to be statistically most significant were wind direction, type of soil, bank slope, and relative protection of the shoreline from potential erosion (Knofczynski and Dorough 1989, 13).

In addition to the statistical analyses, the District began to use remote sensing images and GIS databases in the late 1980s in an effort to understand and, hopefully, counteract the runaway bank erosion problem created by the Missouri reservoirs. In the end, they were unable to determine "the ultimate limits of erosion" quantitatively. Qualitatively, they measured significant erosion at every monitoring station. Predicted rates of erosion differed significantly depending on location and the significant factors just mentioned. The total impact of erosion on the nearly 5,400 miles of shoreline along the Missouri main stem system was staggering.

While the Corps engineers developed complex equations and ran computer programs to determine rates of shoreline erosion, archaeologists in the 1970s and 1980s working on the Missouri main stem went from concern, to worry, to downright anger as more and more of the archaeological record was being destroyed. One famous case where

destruction was prevented is the Crow Creek Missouri Site on Lake Francis Case. I saw this site in 1991 during the WES site protection workshop. It was presented to us as a case study where the Corps took decisive action to prevent the loss of a unique archaeological resource. The facts of the case are as follows.

On Memorial Day weekend of 1978, archaeologists visiting the Crow Creek Sioux reservation discovered a new feature eroding out of the caving bluffs above Crow Creek. It was a mass grave of ancient human skeletal remains. Looters who routinely patrolled the eroding shorelines looking for artifacts to sell had begun to dig holes into the site. Corps archaeologists from the Omaha District, in conjunction with tribal representatives from the Crow Creek and Lower Brule reservations, and the state archaeologist's office, took action to protect the site from looters, and began a data recovery effort. By July 1978, the Corps-led team had uncovered a mass grave more than twenty feet long, twelve feet wide, and four feet deep. It is the largest known Pre-Columbian massacre site in North America. The skeletal remains of nearly 500 men, women and children were excavated. Remains of fifty more individuals were left sealed in place. Many of the victims showed evidence of wounds and scalping. Because there were few young women represented in the skeletal assemblage, researchers surmised they were taken captive. It appears that survivors of the attack returned to bury the dead in a mass grave after animals had gnawed on the remains. Archaeologists initially dated the massacre to 1325 C.E. and believe the victims were Caddoan speaking ancestors of the modern Arikara tribe. They were part of the "Coalescent" culture developed after the Caddoan group moved upriver to merge with the native Middle Missouri Indians (ancestors of the Mandan). The reason why these people were massacred is uncertain.

Krause (2001, 196) notes that in the fourteenth century CE immigration from the Central Plains into the Missouri River valley apparently diminished in response to drier climatic conditions. The river bottoms and terraces of the Dakotas south of the Big Bend region were only sparsely settled by indigenous “long rectangular house peoples” of the Extended variant of the Middle Missouri tradition. During the 1400s, the climate seems to have improved and stimulated more immigration from the Central Plains. The new movement of people into the region produced military conflict between ethnic groups, perhaps over riverine resources. Krause postulates that “the Crow Creek massacre site, where at least 500 Initial Coalescent villagers were killed bears stark testimony to the seriousness of the military threat (Ibid)

In any case, the archaeological record supports the theory that the defenders of this large village were overwhelmed in a short time, the villagers were massacred, with the exception of young women, and their earthlodge village was burned (Omaha District 1981, 5). The human remains from Crow Creek were studied and photographed at the University of South Dakota. In cooperation with the Arikara tribe, the resident Crow Creek tribe, and the University of South Dakota, the Corps’ Omaha District temporarily stored the remains in the Big Bend Powerhouse before they were finally re-interred on site at Crow Creek. How many more sites like this were not discovered in time haunts archaeologists to this day. What about the hundreds, perhaps thousands, of other sites threatened by the erosion monster unleashed by the Pick-Sloan reservoirs?

By the late 1980s, the Omaha District was overwhelmed with potentially significant archaeological sites eroding out of the caving banks of the Missouri. The District Engineer, Col. Donald Hazen, made a command decision that with limited

funding available, two full-time Corps archaeologist positions on the Upper Missouri would have to be cut. In addition, the lack of funding for traditional site protection efforts (e.g., extensive armoring of shoreline with stone rip-rap) forced Col. Hazen to cancel needed site protection efforts. His actions set off a political firestorm. In the District's files, I found a letter to Colonel Hazen dated August 24, 1989, from Senator Tom Daschle (D-SD) that reflects the urgency felt by the Senator and his constituents and his accurate perception of the Corps' mismanagement of cultural resources at that time (Appendix B #2).

Daschle's letter was not the only one written on this matter. His colleague, Senator Quentin Burdick, Chairman of the Senate Committee on Environment and Public Works, had written in July to Chief of Engineers Lt. General Henry J. Hatch, complaining about the "lack of Corps protection of archaeological sites in the Missouri River Trench" (letter dated July 19, 1989). Burdick's short letter enclosed a July 7, 1989 diatribe from South Dakota governor George A. Sinner that went right to the heart of the problem, the Corps' low prioritization of archaeology in the annual budget (Appendix B #3).

Around this time the South Dakota State Historic Preservation Officer contracted with an outside firm for an independent and objective assessment of the condition of selected known archaeological sites along the Missouri River in South Dakota. The resulting report by Ruple (1991) was a strong indictment of the Corps' neglect of cultural resources impacted by shoreline erosion. Ruple (1991, 90) succinctly summarized the erosion problem as follows:

The reason these forms of erosion are in the process of site destruction is that the Corps of Engineers has built dams which created reservoirs. This raised the

surface of the relatively narrow and shallow Missouri from a meandering river deep in a sheltering valley, to the high and wide lakes which, in wet years, fill the valleys almost completely. The destruction of sites by wave action of a man-made lake, artificially high and wide, is not an 'act of God'. It is a foreseeable, indirect effect of the operation and maintenance of the dams and reservoirs. It fits well within the definition of a federal undertaking as spelled out in 36CFR800.2(c).

Ruple also noted that when left alone, archaeological sites on the stable terraces of the Missouri River had lasted hundreds of years and could have lasted hundreds more. However, the Corps' construction of the Pick-Sloan reservoirs inundated the bottomlands and brought destructive wave action into direct contact with these geologically fragile terraces. As a result, "most of the remaining sites are completely disappearing in the brief span of two decades *due to inaction*" (Ruple 1991, 91) (emphasis added). By law, Ruple argued, the Corps should mitigate adverse effect by data recovery (excavation) or by site protection. In 1990, the Corps was doing nothing for the sites being impacted by the normal operation of these reservoirs. Ruple noted sardonically, "The Omaha District is getting the reputation of mitigating lithic scatters for projects to install picnic tables while letting some of the most important sites in the nation wash into the river."

The problem then, and now, is that within the Corps' bureaucracy, critical decisions concerning archaeological sites are too often made by supervisory planners or engineers at a higher level. Getting their attention is analogous to the old story of getting an obstinate mule's attention; you simply have to hit them in the head with a two by four. That is just what happened to the Omaha District in the early 1990s.

The Ruple report, and the South Dakota SHPO's endorsement of its recommendations, resulted in critical decisions by the Corps' top management that led directly to the WES Workshop on Site Protection I attended in 1991. That workshop led

in turn to the dawning of a new era of more effective cultural resource management for the Omaha District. Perusing my five-inch- thick notebook from the 1991 Workshop, I am still amazed at the diversity of topics and the depth of knowledge of the erosion problems on the Missouri River. By the time the workshop was held in August, 1991, top WES scientists like Roger Saucier, Lawson Smith and Paul Nickens had been working for well over a year on the archaeological erosion problems on Lakes Sharpe and Francis Case, south of Pierre. Consequently, workshop participants, like me, were able to visit actual sites to see a wide variety of site protection and preservation techniques, the details of which go beyond this present discussion. Their leadership and forethought inspired me to come to WES and continue for several more years Nickens' work on the mitigation of reservoir draw-down impacts to archaeological sites.

Corporately, the WES Workshop gave new life to the Omaha District's efforts to protect the Native American heritage, as preserved in the archaeological record, entrusted to its care. The hard proof of this was the 1993 Programmatic Agreement for Section 106 compliance between the Omaha District, the Advisory Council on Historic Preservation, the State Historic Preservation Officer's (SHPO's) of Montana, North Dakota, South Dakota, and Nebraska "*Regarding the Effects of Operation and Management of the Six Missouri River Mainstem Reservoirs As Integrated Components of the Basin-Wide Comprehensive Missouri Basin Plan.*" This breakthrough document acknowledged, finally, that the operation and integrated management of water levels in the Fort Pick and Pick-Sloan reservoirs constituted a Federal Undertaking for purposes of Section 106 of the National Historic Preservation Act. Continuing the analogy, this simple act slammed the two by four of Federal law against the heads of the Corps decision makers.

For each Pick-Sloan reservoir, the Omaha District committed to prepare and regularly update individual Historic Properties Management Plans, submit Remedial Action Plans for sites affected by shoreline erosion, and consult with the respective SHPO's and Advisory Council (ACHP) to mitigate adverse effect to significant cultural resources through the best combination of site protection and archaeological data recovery. The Corps archaeologists in Omaha District that I know and respect are committed to the preservation of Indian heritage in the Upper Missouri as never before.

Indian Use of Corps Reservoirs in the Dakotas: The Sioux Focus Groups

In 1995, the U. S. Army Engineer Waterways Experiment Station (WES) in Vicksburg, Mississippi, began a new research work unit entitled "Ethnic Cultures and Corps Recreation Participation." The overall objective of the new research was to develop baseline information on ethnic minorities' recreational use of Corps of Engineers operating projects, including the 460 Corps reservoirs and navigation pools distributed across the American landscape. The work unit was designed to give Corps executives in Washington, D.C. (Headquarters, USACE) and at regional Division offices (Major Subordinate Commands) hard information on how ethnic minority groups were actually using Corps projects and what the Corps needed to provide in both services and facilities to achieve greater customer satisfaction. The creation of the WES work unit was a reactive response by the Corps leaders to two Executive Orders of the new Clinton Administration.

Executive Order 12862 "Setting Customer Service Standards" issued September 11, 1993, requires Federal agencies to identify the customers who are, or should be, served by the agency and to survey these customers to determine the kind and quality of

services they want and their level of satisfaction with existing services. The purpose of securing information on customers was to set standards that will allow the Federal agencies to "provide service to the public that matches or exceeds the best service available in the private sector." It should be noted that this executive order does not distinguish between white majority and ethnic minority customer groups.

The second Executive Order #12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," however, did focus on ethnic minorities in a way that made many high level white bureaucrats in the Corps very uncomfortable. Issued on February 11, 1994, the order directed Federal agencies to "identify differential patterns of consumption of natural resources among minority populations and low income populations" and ensure that programs, policies, or activities that substantially affect human health (including outdoor recreation) do not exclude persons from "receiving the benefits of such programs as a result of race, color, or national origin." The order also directed each Federal Agency (including the Corps of Engineers) to "collect, maintain, and analyze information on the race and national origin of residents surrounding Federal facilities or sites that have substantial environmental, human health, or economic effects on nearby populations."

The two executive orders combined would force the entire Corps of Engineers to seek out ethnic minority groups, ask them what improvements in facilities and services they desired, establish new customer service standards, and plan how to meet those standards. For an organization directed by white engineers, introverted detail-oriented middle-class men for the most part, meeting these customer service requirements seemed very formidable.

The WES supervisors delegated by HQ, USACE to create the new work unit, got off to a rocky start by assigning an economist to be principal investigator who had no anthropological or sociological training. In addition, the new principal investigator had little practical life experience with minority groups and no real desire to acquire any. The work unit floundered and produced in the course of two years only a minimalist Plan of Study and a literature review that was produced by a contract with Texas A&M University (Gramann 1996). The work unit went unfunded by Headquarters in 1996 and seemed directionless. In 1997 the original principal investigator was reassigned to another project in Oregon he was much more enthusiastic about.

At that time I was one of two research archaeologists working in the Environmental Laboratory (EL) at WES in Vicksburg, Mississippi. With undergraduate and graduate degrees in Anthropology and a strong interest in ethnology, I became the logical candidate in EL to serve as the new principal investigator. When I accepted the opportunity to take over the work unit, I took on a project that would occupy my professional life for the next six years. My resident academic year at LSU in 1999-2000, which was entirely funded by HQ, USACE, was justified by the WES leadership as the requisite training needed for me to serve as a credible principal investigator in ethnic geography.

In the spring of 1997 I began planning for a series of focus groups with Native Americans, the first of four ethnic groups to be studied. Little research had been done on the recreation preferences of contemporary Native Americans (McDonald and McAvoy 1997). Given the large number of Indian reservations near Corps reservoirs in the West, there was a clear need for primary source data on Native American recreational habits

and preferences at Corps operating projects. The work unit's excellent literature review (Gramann1996) had recommended that in lieu of administering a traditional survey instrument a series of focus groups would be more effective in obtaining sample data on Native American recreational habits and preferences. The focus group interview is a qualitative, rather than quantitative, research tool. Focus groups evolved from non-directive individual interviewing in the 1930's when social scientists began to question the accuracy of traditional information acquisition methods. They were concerned about the excessive influence of the interviewer and the limitations of predetermined closed-ended questions. Nondirective interviews used open-ended questions and allowed individuals to respond without setting boundaries or providing clues to potential response categories. They allowed the subjects more opportunity to explain their responses and to share experiences and attitudes (Dunn and Feather 1998, 3)

Focus groups are widely used by marketing firms and political strategists. In the world of marketing research, focus group interviews are widely accepted because they produce believable results at a reasonable cost. In the larger sphere of social scientists, planners, and educators, focus group interviewing is most appropriate when the objective is to explain how people regard an experience, idea, or event (Ibid.). They seemed to me very appropriate for Native Americans:

Given (Native Americans) preference for the spoken word, the spiritual nature of interaction with people and the land, the sense of inter-relationships, and the meaning given to sense of place, it appears that qualitative methods will be more successful at answering the (research) questions (McDonald and McAvoy 1997).

In 1997 I conducted six focus groups with Native American tribes in the Corps' Tulsa and Omaha Districts. Only the three Sioux focus groups conducted in South Dakota will

be discussed here. In organizing them, I was ably assisted by WES' contractor *Planning and Management Consultants, Ltd.* (PMCL) of Carbondale, Illinois, and by the Omaha District Tribal Coordinator, geographer David Vader. All three South Dakota focus groups were held during the period July 21-23, 1997.

The first focus group was held off-reservation on neutral ground at a major hotel (Governor's Inn) in Pierre, South Dakota. Arrangements for conducting the meeting and identifying the attendees were made by Omaha District's Tribal Coordinator and Ms. Diane Big Eagle, wife of Tribal Council Chairman Duane Big Eagle, of the Crow Creek Sioux Tribe. Ten Indian people participated, representing the Crow Creek, Rosebud and Yankton Sioux. The discussions were facilitated by Dr. Dale Brown (PMCL), and recorded by Dr. Timothy Feather (PMCL) and myself. An official synopsis of the meeting and a summary of our recommendations pertaining to recreation appear in Dunn and Feather's (1998) report published by WES as Natural Resources Technical Note REC-09. Selected excerpts from our unpublished meeting notes appear in Appendix C.

The meeting was structured around two basic questions:

- (1) What outdoor recreation/leisure activities do you like to pursue and;
- (2) What are some of your recreation/leisure experiences at Corps project and what improvements or management activities could be taken by the Corps to enhance those activities?

The participants were asked to create a picture or list a series of words that represented important aspects for Native American recreation at Corps projects, either existing or desired. The group then entered into a free-flowing discussion of issues surrounding the two questions. The overall tone of this first meeting was very

constructive and enthusiastic. However, the memory of the land taking by the Corps during the construction of the Pick-Sloan reservoirs was still very painful to the older participants.

Looking back on these meeting notes (Appendix C) after the space of nine years, I am struck by the participants' patience with the WES research team. Given the brutal treatment the Sioux received from the U. S. Army in the nineteenth century, and the harsh treatment given them by the Army Corps of Engineers in the twentieth century, it is amazing to me now that we were allowed to pry into their lives to the extent that we did. The tone of the pan-tribal focus group in Pierre was businesslike but very suspicious of the Army's real motive for the research. What I most remember is the impassioned speech of the tribal elder who recounted the land taking by the Corps for the Fort Randall Dam and the construction of Lake Francis Case. That "baptism by immersion" into the Sioux vs. Corps of Engineers fight contributed greatly to my decision to pursue this dissertation topic. Four of our numerous findings/recommendations to the Corps from the first focus group are very relevant to this discussion of the contemporary reservation cultural landscape.

First, the Sioux believe passionately that wildlife and fish habitat should be protected and enhanced. There is a general consensus that the Corps' lake projects have spoiled the land and the water. Reservoir construction took away a significant amount of timber which was a critical source of shade, fuel, and habitat central to the Native American livelihood in the region. Programs to reintroduce wildlife are important because of the spiritual connotations to some Native Americans. Protection and restoration projects should continue to be part of the Corps' offering.

Second, there is still a fair amount of resentment and distrust of *wasichus* (whites) and the U.S. Government in particular. The water and electrical power supplies are substandard on many of the Sioux reservations. The participants argued that a portion of the money generated by hydroelectric power stations could be set aside to improve reservation infrastructure. The Sioux are very interested in having a participatory role in future land and water management decisions. They believe that it is important that the perspectives from the "grass roots" Native Americans are clearly taken into account by Corps and other government agencies.

Third, economic development and better health facilities are a high priority for Native Americans in the region. Corps initiatives that could bring jobs should also be a priority. Present ranger positions at Corps lakes should be filled by Native Americans, especially those where interpretation of cultural resources is addressed. The participants explained that many European tourists come to South Dakota to see Native Americans, so why not hire native people as rangers? The focus group participants argued that future economic developments, like a planned golf course at Fort Thompson, should be operated by Native Americans.

Fourth, Native Americans enjoy many of the same recreational activities common to the American population in general. Such activities include fishing, swimming, boating, camping, hunting, gardening, and more seasonal activities such as cross-country skiing, skating, and hockey. However, due to the relatively high cost, Native Americans rarely recreate in boats, jet skis, or use other expensive accessories as do the majority of whites. The participants were generally comfortable with this, stating that Native Americans "make do with what they have" (Dunn and Feather 1998, 10).

The second focus group was held on July 22, 1997, in a pavilion at the Corps' Big Bend Dam resident office on the Crow Creek Sioux reservation. Because the outdoor setting for the meeting was located close to the site of the old Fort Thompson agency, the meeting is described as the Fort Thompson focus group in Dunn and Feather (1998). The outdoor meeting was organized by Mr. David Vader, the Omaha District's Tribal Coordinator and facilitated by Dr. Dale Brown (PMCL). The summary notes of the meeting were made by Dr. Timothy Feather (PMCL) and the author. Five Native Americans participated, all of whom were members of the Crow Creek Sioux tribe. Pertinent excerpts from the unpublished Fort Thompson meeting notes made on July 22, 1997 appear in Appendix C.

The meeting was again structured around the same two basic questions. The tone of the Fort Thompson outdoor focus group was far more upbeat and very constructive in its criticism of the Corps, mostly focusing on issues of economic development. The fact that two male members of the tribe were employed as Corps summer rangers was a source of great pride for the tribal leaders. One young Indian man who participated in the focus group came dressed in his Corps of Engineers ranger uniform. His clean-cut appearance and his enthusiasm were especially striking to the WES team. The following findings from our 1998 report are pertinent to this discussion of the contemporary cultural landscape.

First, the focus group participants perceived a critical need for linking economic opportunities for Native Americans to recreational development. Second, they argued that Corps facilities should be expanded to accommodate larger groups of Native Americans (for example, larger pavilions and more showers). The existing facilities at

Lake Sharpe are well maintained, but they are small for holding powwows. Third, the participants felt that there were some safety issues related to water-based outdoor recreation (by Native American youth) that cause great concern to the reservation members. The Native American lifeguards at the Big Bend Dam swimming area are paid by the Crow Creek Sioux, not the Corps. Fourth, specific facility enhancements that were recommended by the Native American participants included nature trails, an outdoor theater, cultural museums, development for water sports, and development and maintenance of campsites. Our overall impression was that the Crow Creek Sioux were eager to share in the prosperity enjoyed by white Americans but they did not want to sacrifice their cultural heritage to do so (Dunn and Feather 1998, 11).

The third and final Sioux focus group was held at the Youth Center for the Swift Bird Community on the Cheyenne River Reservation. The meeting, held on July 23, 1997, was again organized by Mr. David Vader, Omaha District's Tribal Coordinator, in coordination with Karen Nitzchke of the Cheyenne River Tribal Council. The seven Native American participants were residents of the Cheyenne River Reservation. Selected excerpts from the summary notes of this important meeting facilitated by Dr. Dale Brown (PMCL) appear in Appendix C.

The tone of the last focus group on the Cheyenne River Reservation was very reserved and suspicious. The extreme poverty of the community of Swift Bird was shocking to all the WES team members. This experience made real to me for the first time how Indian reservations in America can be accurately described as "Third World" countries. The Swift Bird focus group participants displayed in their comments and body language what my colleague Tim Feather described as a "defeated posture." My lasting

memory from this meeting was the incredible love and patience displayed by Indian mothers and fathers toward their unruly children who, at one point, almost disrupted the meeting with their boisterous playing. The following findings from Dunn and Feather (1998, 12) are relevant to this discussion.

First, the Sioux participants felt strongly that they should have greater accessibility to recreational areas with proper facilities. These were defined as facilities that include a sufficient number of clean restrooms, enough tables in picnicking areas, proper trash management, safe areas for swimming that are separate from boating areas and roped off to prevent swimming in deep water, and areas fenced off to livestock. Corps facilities on the reservation (west of the Missouri River) were not well maintained and there was a feeling that the Corps did not cater to Indians the way they did for whites using Corps facilities east of the Missouri River.

Second, the participants proposed that new and better recreational facilities should be built on the reservation side of Lake Oahe. It was clear to the WES team that most Native Americans in this area do not have convenient access to Corps facilities. A favorite and potentially deadly recreational activity for teenagers is jumping off the Highway 212 Bridge into the waters of Lake Oahe. The participants felt that the Corps should hire mainly Native Americans to run the new developments. A facility that offers fuel, bait, and boat rentals would be welcomed. More Native Americans should be hired at existing Corps sites, which would increase enthusiasm for Native Americans to use the sites.

Third, the Sioux on the Cheyenne River Reservation generally do not feel comfortable around whites; they tend to believe they are discriminated against and that

they are still viewed as "savages." They also feel that whites only want to profit from them and assume full control of any development that is profitable. The heart of the Corps' Indian visitation "problem" at its Missouri River projects is not just economic under-development on the Indian reservations. I believe the low Indian visitation is exacerbated by racial prejudice. White racial prejudice against Indians in the region prevents Indians from fully utilizing Corps built recreational facilities that do not require expensive boats and jet-skis. Furthermore, based on my personal observations, the sickness of racial prejudice appears to have affected some white Corps employees as well as the white visiting public.

The Native Americans who participated in the South Dakota focus groups clearly felt uncomfortable and, in some cases, discriminated against, at Corps recreational facilities that were visited primarily by whites. Perceived discrimination has mostly been viewed in recreation research as an independent variable that affects recreation participation. Simply put, people who feel unwelcome will usually not come back; discrimination reduces visitation by minority groups. Gramann (1996) argues that the perception of discrimination can also be treated as a dependent variable that is influenced by a variety of socioeconomic factors. One such factor is the level of cultural acculturation. One question of interest to researchers is whether minority group members with differing levels of acculturation also differ in their perception of discrimination at recreation areas. Gordon's (1964) theory of ethnic assimilation predicts that greater cultural assimilation will lead to reduced levels of perceived discrimination by minority group members. A contrasting perspective on the issue is known as the ethnic competition hypothesis. Glazer and Moynihan (1963) argued that increased knowledge of

the dominant culture and its higher socioeconomic standing will lead to greater perceptions of discrimination.

Among the Sioux tribes we met with in South Dakota, the ethnic competition hypothesis seems to be a more plausible explanation for their responses. Due to the pervasive influence of television, even Native Americans on the most remote reservation have a window into the material affluence of the dominant culture. Their heightened awareness of racial and cultural differences may be causing an increased perception of discrimination. They are reluctant to cross the Missouri River and use recreational facilities enjoyed by the dominant white culture because it exposes them to the possibility of discrimination. Their shared perception of discrimination causes feelings of ethnic group solidarity and results in a form of boundary maintenance, expressed as "Let the whites stay on their side of the river; just improve the facilities on our side" (Dunn and Feather 1998, 16-17).

Indian Water Rights and the Corps' Current Operation of the Missouri River Reservoirs

The Corps of Engineers Missouri River Mainstem Reservoir System ("the System") became fully operational in 1967. For over twenty years the six dams and reservoirs comprising that system (Fort Peck, Garrison, Oahe, Big Bend, Fort Berthold, and Gavins Point) were operated by a "Master Manual" that became increasingly more sophisticated over the years (Map 1 Appendix A). When a major drought hit the northern Plains region from 1987 to 1993, reservoir water levels dropped and discharge flows from the upstream reservoirs needed for downstream navigation on the Missouri River could not be maintained. Furthermore, as lake levels continued to drop, dozens of marina operators were left high and dry and boat ramps built during higher lake levels became

unusable. The affluent white boating public contacted their Congressmen who in turn put pressure on the Corps commanders to do something. Finally, the dropping lake levels seriously affected three threatened and endangered species: the interior least tern, the piping plover, and the pallid sturgeon.

In response to pressure from conservation agencies like the U.S. Fish and Wildlife Service and from irate Congressmen, the Corps' Northwestern Division and Omaha District engineers began planning a major overhaul of the Master Manual for the Missouri River System. As required by the National Environmental Act (NEPA) of 1969 they also began preparing a massive multi-volume Environmental Impact Statement. During the fourteen year preparation of the Draft (DEIS) and Final Environmental Impact Statements (FEIS), Omaha District and Northwestern Division (2004, 1) were acutely aware of their responsibilities to the indigenous tribes and their unique status as dependent sovereign nations as indicated below in the Corps' official summary of the FEIS:

Thirty American Indian Tribes are located within the Missouri River basin. Thirteen Tribal Reservations or Tribal Lands are located directly on the System, the river reaches between the dams, and downstream of the System along the Lower River. The Tribes are dependent sovereign Nations, and the Corps is currently in Government-to-Government consultation with basin Tribes. Because of this Government-to-Government relationship with the Corps and because the Corps has a Trust responsibility to the Tribes, they are given special consideration in the FEIS. For the Tribal Reservations located on the Missouri River, the FEIS identifies impacts to Tribal resources resulting from the PA. The FEIS also includes a Tribal Appendix that addresses Master Manual issues important to the Tribes, presents the consultation history and process to date, and contains all written comments the Corps has received from the Tribes to date. Following publication of the RDEIS, the Corps held several workshops and hearings in partnership with the Tribes. Following the RDEIS comment period, a Tribal Summit was held on April 16, 2002 in Rapid City, South Dakota. Eighteen basin Tribes were represented at the Summit. *The Tribes expressed concerns about many Missouri River issues, including water rights and impacts to cultural*

resources resulting from the operation of the System, which continue to be major Tribal issues (emphasis added). On October 31, 2003, a Tribal Summit was also held in Rapid City, South Dakota. Representatives of eight Tribes were present at the meeting, with the issues being similar to those expressed at previous summits. Consultation with basin Tribes on the Study will continue throughout the National Environmental Policy Act (NEPA) process. In addition, the Corps recognizes that consultation with the Tribes on many significant issues relating to management of the Missouri River will continue well into the future and that the Tribes will have an important role in MRRIP (Northwestern Division 2004, 1).

The two part Tribal Coordination Appendix referenced above contains over 1,600 pages of articulate, scathing criticism of a “System” that in the collective opinion of the affected tribes should never have been built (available at http://www.nwd-mr.usace.army.mil/mmanual/Volume%20III/Final_Appendix_A_Part_1.pdf and at http://www.nwd-mr.usace.army.mil/mmanual/Volume%20IV/Final_Appendix_A_Part_2.pdf).

To fully understand the tribes’ criticism some additional background on the proposed change in reservoir management is needed. The original Master Manual set forth a “current water control plan” (CWCP) which assumed that “when System inflows are above or below normal, the amount of water in the upper three reservoirs is balanced so that the effects are shared equally among these reservoirs.” With the new preferred alternative (PA) for water control presented in the draft (DEIS) and final Environmental Impact Statements (FEIS) this balancing act was scrapped, primarily to protect endangered species and to “preclude jeopardy to the listed species.”

The new preferred alternative (PA) provides for three main water control features, including drought conservation measures, summer non-navigation service levels, and “unbalancing” the upper three reservoirs of the System. First, during extended droughts downstream navigation service would be curtailed to a greater extent under the PA than

with any previous plan. This would allow more water to be stored in the upper three reservoirs (Fort Peck Lake, Lake Sakakawea, and Lake Oahe). During severe droughts releases for navigation would be suspended at a higher total System storage level than under the old CWCP. Second, the summer non-navigation service level for the lower Missouri River under the old CWCP was 9 kcfs (thousand cubic feet per second). The PA would raise this to 18 kcfs (thousand cubic feet per second). This change and the more stringent drought conservation measures combine to increase the number of non-navigation years from 1 (under the old CWCP) to 4 for the PA should a severe drought occur such as actually did occur during the pre-reservoir 1930 to 1941 drought.

The PA also includes a method of “unbalancing” the amount of water in these upper three reservoirs (Fort Peck Lake, Lake Sakakawea, and Lake Oahe) as long as an extended drought (more than one year) or an extremely high runoff into the System is not occurring. The objective of unbalancing is to benefit young fish in these three reservoirs (Northwestern Division 2004, 9). Unbalancing consists of lowering one of the upper three reservoirs approximately three feet to allow vegetation to grow around the lake shore and then refilling the reservoir to inundate the vegetation. The unbalancing would rotate among the three reservoirs on a three-year cycle. Higher releases during the spring would fill the downstream reservoir and provide a rising reservoir level for game and forage fish spawning. The next two years of lower flows would expose bare sandbar habitat in the river reach between the two lakes for use by birds protected by the Endangered Species Act. Unbalancing also provides more sandbar habitat around the perimeter of the reservoirs for the listed birds in the drawdown year. In subsequent years,

the inundated vegetation around the perimeter would be used by adult fish for spawning and by young reservoir fish to hide from perimeter.

The FEIS describes in detail the impacts of this PA on all key resource areas of the Missouri River Valley. Positive effects are shown for navigation, recreation, fish production, fish habitat, bird habitat, and riparian habitat. Only two areas show severe negative impacts: warm water fish habitat in the river and historic properties (cultural resources eligible for, or listed on, the National Register of Historic Places). Regarding the latter, the FEIS acknowledges that the drought conservation measures in the PA increases the adverse impact to historic properties, because reservoirs are periodically retained at a higher level. Higher pool levels increase the potential for erosion of archaeological sites. Under the traditional way of controlling reservoir level (CWCP), the reservoirs are drawn down more significantly during droughts, and as a result there is less impact to sites from erosion. Under the new PA, higher pool levels would produce more erosion and expose more sites to erosion, looting, and eventual loss.

For the Corps decision-makers at Headquarters and at Northwestern Division, the loss of archaeological sites, representing the cultural patrimony of the indigenous tribes, was an acceptable trade-off for compliance with the Endangered Species Act. In fairness to the Omaha District, however, I must note that their staff archaeologists are working hard to mitigate adverse effects to archaeological resources through data recovery, site protection and stabilization, and better tribal coordination, all under the umbrella of a new Programmatic Agreement for Section 106 (National Historic Preservation Act) compliance. From the Corps commanders' perspective this enormous archaeological

headache on the Missouri is just part of the cost of doing business under the legacy of Lewis Pick.

As previously noted, the Corps fully complied with NEPA in soliciting comments from affected Indian tribes up and down the Missouri River. As expected, the tribes were united in their opposition to further impacts to their archaeological heritage but the criticism didn't end there. The key issue for most of the tribes was, and still is, water rights. Perhaps the most forceful and comprehensive set of review comments came from the Standing Rock Reservation on Lake Oahe. In their July 7, 1993 review comments of the DEIS they noted that:

Our entitlements to water are presently perfected, full vested water rights which are so senior as to bear an immemorial priority. Their enforceability and related attributes proceed, in part, from trust obligations imposed upon the United States arising out of the Fort Laramie treaties and related documentation. Enforcement and protection of these rights often entail exercise of jurisdiction over off-reservation activities. The sources of water available to these rights include surface supplies such as streams, lakes, and springs as well as subsurface supplies of every description, whether regarded as tributary or not. (Standing Rock Sioux 1993, 1-2)

The Standing Rock Sioux tribe, along with other Indian nations in the upper Missouri, claims substantial water rights to the Missouri River which the Corps of Engineers has never recognized. As the Sioux noted in their 1993 letter, "the COE operates the System without regard to the Tribe's reserved water rights, although those rights amount to a substantial portion of the storage water in the Oahe Reservoir." The water the Sioux rightfully regard as their own is "utilized for navigation, hydropower generation, irrigation, and recreation ...without benefit to the Tribe and Tribal members, who remain among the poorest people in the United States" (Standing Rock Sioux 1993,

65). Here are the main points of their lengthy argument which, I believe, reflect the general feeling of all the Upper Missouri tribes concerning Indian water rights:

1. The history of Federal Policy toward Indian water rights in the Missouri River basin must be reversed for the preservation and survival of the Indian people.
2. The United States Army Corps of Engineers Master Manual Review and preliminary draft EIS do not consider Indian water rights. This institutional policy of studied ignorance will bring about difficulty or impossibility of Indian water use and benefits, will place at risk substantial economies based upon an artificially secure management scheme, and will necessitate revisitation of the Master Manual.
3. The hydropower benefits of the Missouri River Basin have substantially repaid the Federal Treasury, and the Missouri and Mississippi navigation industry prospers along with other downstream users, while the upstream tribes remain among the poorest people in the nation and still have to haul their own water. Indian and rural people pay the highest electrical rates in the country.
4. The Standing Rock Sioux Tribe on Oahe Lake is subject to drastic water level fluctuation affecting access, municipal and irrigation water intakes, livestock, and shoreline development without compensation for hydropower, navigation, and endangered species protection usage of Indian water. Standing Rock Sioux Tribe estimates its water rights necessary just to irrigate 303,000 acres on the reservation are 1.2 million acre feet annually.
5. The Master Manual review must be broadened to account for Indian interests.
6. The simulation model which forms the basis of the Master Manual Review and Update is incapable of incorporating Indian water rights, does not allow for consumptive use depletions or agricultural purposes, and does not provide for future depletions. The model is biased against the Tribes and upper basin states in favor of downstream states.
7. The model is insensitive to the 307 alternatives and results in minimal variation for hydropower, water supply, recreation, and flood control and is only sensitive to navigation.
8. The Master Manual Review has omitted a basin wide coordinated perspective and is therefore ineffective as a tool for management for the Missouri River System.
9. The McCarran amendment, state court jurisdiction over Indian water rights, erosion of the Winter's Doctrine, and forced state settlement by threat of litigation, present a harsh climate for the protection of Indian water rights and thus the survival of the Indian people.
10. The COE perpetuates the dilemma by refusing to acknowledge water rights, and non-Indians continue to develop unused Indian water. Therefore, congressional oversight of the Master Manual Review is

necessary. New Indian water policy and institutional management structures are necessary to protect Indian water rights and keep the Indian people from being planned out of existence. (Standing Rock Sioux 1993, iv-v)

In another letter dated February 17, 1999, to the Corps' Division Engineer BG Robert E. Griffin, the Tribal Chairman of the Crow Creek Sioux Reservation wrote this:

We are very concerned with the conduct of the Corps of Engineers in the Master Manual Review process. The water rights and cultural resources issues getting raised by the Tribes continue to be subordinated to the concerns of the navigation industry and to wildlife. The drafters of the NEPA documents continue to ignore the suffering of our Tribal membership at Crow Creek, so the Fort Randall and Big Bend dams could be built. These are the issues which I shall instruct my delegates to raise with you during the upcoming consultation meeting. I sincerely hope that the Corps of Engineers changes its way of doing business, and seriously listens and responds to the concerns of the Tribal leadership (Crow Creek Sioux Tribe 1999).

Despite these tribal protests and the many others included in Appendix A of the FEIS the preferred alternative (PA) for the Master Manual was selected and implemented by the Corps' Northwestern Division in March of 2004. In the official record of decision (ROD) for the FEIS, (available at <http://www.nwd-mr.usace.army.mil/rcc/reports/pdfs/recordofdecision.pdf>), the Northwestern Division Commander noted that "careful consideration was given to the overall public interest and the economic, social, cultural and environmental effect throughout the development of the Selected Plan, which is the environmentally preferred plan." Over 500 alternatives were addressed in four draft EISs and the FEIS and "all practicable means were adopted to avoid or minimize adverse impacts ...and existing actions and programs are in place to minimize adverse impacts to Tribal cultural resources and historical sites." The Corps' Division Commander committed to conducting appropriate surveys, providing required

documentation, and entering into Memoranda of Agreement or Programmatic Agreements to mitigate any adverse effects to cultural resources that may result from implementation of the Selected Plan. No mention was made of tribal water rights in the Corps' official record of decision. The affected tribal members on the Missouri could only grind their teeth in frustration. On the critical issue concerning who has the legal right to control the turbid waters of the Missouri River, the stand-off between the Indians and the Corps continues.

CHAPTER 7

FUTURE LANDSCAPES

The "New" Frontier Landscape: Buffalo Commons, White Depopulation and Indian Resurgence

On July 23, 1997, the same day the WES team conducted the very emotional evening focus group on the Cheyenne River Reservation, we spent the afternoon visiting with our tribal liaison, Karen Nitzschke, and her family. Karen, a full-blood Lakota, is the sister-in-law of the legendary Green Bay Packer, Ray Nitzschke. She took us to see one of the many bison herds on the reservation; this one located just a mile or so from her home. As the WES team members looked at the shaggy herd of about one hundred animals on a cloudless afternoon, I remember thinking, why can't the Sioux bring back the buffalo? Bison have evolved in and adapted to this arid grassland environment over millennia and they do not require the expensive feed and intensive veterinary care needed by American cattle (Map 15 Appendix A). So why couldn't tribes like those on the Cheyenne River Reservation use bison to revitalize their economy and their culture? What I did not realize that day was that the Sioux and many other Northern Plains tribes were just beginning to do precisely that. Over the last decade, a scaled down version of the "buffalo commons" concept has come to almost all of the Dakota reservations, contributing to a healthier reservation economy, the resurgence of tribal culture, and increased individual self-respect. The recent phenomena of white flight from the Northern Plains and the migration of urban Indians back to the reservation, have transformed the cultural landscape of the Dakotas in the early twenty-first century.

The "buffalo commons" concept is essentially a proposal to restore the most arid portions of the high plains ecosystem back to bison grazing lands. This proposal is most often attributed to a seminal 1987 article by Rutgers University urban planner, Frank Popper, and his wife, geographer Deborah Popper. In their article "The Great Plains: From Dust to Dust" the Poppers (1987) argued that the privatized agricultural use of the arid plains was simply not "sustainable." For proof of the Plains' nonsustainability, they pointed to two main facts, periodic ecological disasters brought on by sustained droughts, and continuing population losses (out-migration) resulting from these ecological disasters. They noted that the High Plains has lost a third of its population since 1920, when drought and locusts brought on the infamous Dust Bowl:

The short-grass Plains soil in places was destroyed by an excess of cattle and sheep grazing and of cultivation of corn, wheat, and cotton. When drought hit with merciless cyclicity, the land had no defenses. By the late 1930s, the Dust Bowl covered nearly a third of the Plains. It kicked up dirt clouds five miles high and tore the paint off houses and cars. It sent the Okies west to California, inspiring both John Steinbeck's famous novel, *The Grapes of Wrath*, and Dorothea Lange's stark photographs (Popper and Popper 1987, 2).

Responding to this ecological catastrophe, the U. S. government under President Franklin D. Roosevelt took numerous conservation measures. One of these was the outright purchase of 7.3 million acres of abandoned farm holdings on the High Plains. The U. S. government created there "national grasslands" by reseeding abandoned farms with native prairie grasses and leasing them out for cattle grazing. I worked in one of these areas in northeastern Wyoming in the early 1980s, the so-called Thunder Basin National Grasslands. Just as the Poppers noted in 1987, these national grasslands are among the most successful types of federal landholdings. The reason for this is that this

kind of land use makes great ecological sense. For the Poppers, it was a small conceptual leap from re-establishing grasslands for the grazing of domestic cattle to returning native grasslands to the grazing of native bison.

The Poppers borrowed the term “commons” from two sources. The term derives originally from a parable published by mathematician William Forester Lloyd in his 1833 book on population (Hardin 1968, 1244). Lloyd’s parable demonstrates how free access and unrestricted demand for a finite resource, such as grazing land, ultimately dooms the resource through over-exploitation prompted by human greed. The tragedy of freedom of the commons, or simply the “tragedy of the commons,” is that “each man is locked into a system that compels him to increase his herd without limit – in a world that is limited.” As Hardin (1968) notes in his famous essay *The Tragedy of the Commons*, “ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. Freedom in a commons brings ruin to all.” Hardin (1968, 1248) argued that only a “fundamental extension in morality” (self imposed moral constraints) could prevent greedy over-exploitation and the concomitant tragedy of the commons.

The Poppers argued persuasively that the American experience on the Plains was just "a spectacular variant on the tragedy of the commons" (Popper and Popper 1987, 4):

To the Indians and the early cattlemen, all of the Plains was a commons. The Homestead Act and the succeeding federal land subsidies for settlers amounted to attempts to privatize the Plains, to take them out of the federal domain and put them permanently in individual or corporate hands. Today’s subsidies for crops, water, and grazing land amount to attempts to buttress the privatizations. But private interests have proved unable to last for long on the Plains. Responding to nationally based market imperatives, they have overgrazed and overplowed the land and overdrawn the water. Responding to the usually increasing federal subsidies, they have overused the natural resources the subsidies provided. They never created a truly stable agriculture or found reliable conservation devices. In

some places, private owners supplemented agriculture with inherently unstable energy and mineral development.

As an alternative to what they saw as a bleak future for the Plains, the Poppers argued that America's best course of action would be "to restore large parts of the Plains to their pre-white condition, to make them again the commons the settlers found in the nineteenth century" (Popper and Popper 1987, 5). They argued for the re-creation of the native Plains ecosystem in which large herds of bison were the dominant species. To re-establish the Plains buffalo commons, the Poppers proposed, the federal government should begin a process analogous to the creation of the "national grasslands." The U. S. government should acquire land as it gradually becomes more depopulated, tear down fences marking private property, and restock the native fauna, most notably with bison. The Poppers conceded that it would be at least twenty to thirty years before the native vegetation and wildlife could re-establish themselves on the semi-arid Plains. Regarding the indigenous Plains tribes, the Poppers noted:

There may also be competing uses for the land. In South Dakota, several Sioux tribes are now bringing suit for 11,000 square miles, including much of the Black Hills. The federal government might settle these and other long-standing Plains Indian land claims by giving or selling the tribes chunks of the new commons . . . More and more previously private land will be acquired to form the commons. In many areas, the distinction between the present national parks, grasslands, grazing lands, wildlife refuges, Indian lands, and their state counterparts will largely dissolve. The small cities of the Plains will amount to urban islands in a short-grass sea (Popper and Popper 1987, 6).

To call the Poppers' buffalo commons proposal controversial would be an understatement. The controversy has created its own growing body of literature, both pro and con. Matthews' (1992) book *Where the Buffalo Roam* is a detailed and sympathetic

examination of the political firestorm created by the Poppers. Callenbach's (1996) book *Bring Back the Buffalo* is an ecologically oriented analysis of the buffalo commons proposal in conjunction with the use of wind power. Why is the buffalo commons proposal so very controversial to most white Americans who grew up on the Plains? For many white Americans, it implies that the settlement of the Plains by their grandparents and great-grandparents was "a terrible mistake" (Matthews 1992, 8). It creates in many white Americans the very same feeling of dread that Native American people felt during the invasion of their Plains homeland. Most importantly, it makes whites wonder, "This is our home; where are we to go?" For all these reasons, the buffalo commons proposal has met with intense criticism by white residents and attracted the ire of the politicians who represented them in Washington. Proponents of the buffalo commons plan are quick to point out that much of this criticism is unwarranted and based on the misunderstanding that implementation of the buffalo commons plan would be forced on white Americans rather than be voluntary. The Poppers' proposal that one way to achieve this would be through voluntary contracts between the BLM or Forest Service and Plains farmers and ranchers. The Federal agencies would pay ranchers the value of what they would have cultivated over the next fifteen years but require them to plant and re-establish native short-grasses according to an approved restoration plan. Supporters point out that the white depopulation of the Plains, the re-establishment of large areas of native grassland, and the privately funded restoration of bison herds are all likely to happen without the federal government's direct involvement (Williams 2001, 4).

Not all Plains residents have reacted negatively to the buffalo commons idea. Native American people on the reservation of the Dakotas have embraced it. Here is one Sioux reaction:

“In the 1980s, the Poppers basically hit all these white people on the head with a two-by-four with this idea,” says geographer and Rosebud Sioux member Edward Valandra. “Way back when, they were onto something really powerful that resonated really well with us. When I first heard them, I thought maybe the ghost dancers’ prophecy of the returning buffalo might be coming true” (Williams 2001, 7).

Bringing bison back to the large Sioux reservations in the Dakotas works on so many levels, economically, ecologically, and spiritually. On the economic level, the “tragedy of the commons” caused by individualistic self-interest could be overcome by collective tribal ownership of the herds and the facilities needed to care for the bison and to process their meat and hides. On an ecological level, reintroducing a species superbly adapted by evolution for the semi-arid plains environment makes much more sense than raising domestic cattle that have great difficulty living off the land and require intensive veterinary care. On the spiritual level, Lakota traditionalists believe that bison and people were created together and that in times past they could turn into each other; they could even interbreed and produce offspring. In those former times, the decision whether to take a bison form or a human form was a matter of individual self-determination (Callenbach 1996, 65).

The Lakota and other Plains tribes still refer to bison as “our four-legged relatives” or “our people” and most often refer to them as “the buffalo people.” In Richard Erdoes (1972) insightful book *Lame Deer, Seeker of Visions*, the Lakota

medicine man makes this profound observation on the spiritual connection between the Sioux and the bison:

“There is power in a buffalo-spiritual, magic power -- but there is no power in an Angus, a Hereford When we killed a buffalo, we knew what we were doing. We apologized to his spirit, tried to make him understand why we did it, honoring with a prayer the bones of those who gave their flesh to keep us alive, praying for their return, praying for the life of our brothers, the buffalo nation, as well as for our own people To us all life is sacred.” And he went on: “You can’t understand about nature, about the feeling (Sioux) have toward it, unless you understand how close we were to the buffalo. That animal was almost like a part of ourselves, part of our souls” (Callenbach 1996, 67; Lame Deer and Erdoes 1972, 120).

The Indians’ desire to “bring back the buffalo” is not just about economics. It is a deeply spiritual and highly emotional impulse. On a very deep level they need to see, interact, and communicate with the “buffalo people” to revitalize their culture and to create a link with their past.

Efforts to bring the buffalo back to Indian reservations are now taking place on both national and regional levels. The Inter-Tribal Bison Cooperative (ITBC), founded in 1990, has the goal of restoring bison herds to thirty-one participating tribes in thirteen states. This national organization is active in consulting with tribes on their bison-restoration efforts and training young people to work with bison “in the framework of tribal culture and tribal needs” (Callenbach 1996, 70). The ITBC has helped Indian tribes secure federal funds for tribal bison restoration and management efforts. The U. S. Congress has been persuaded to provide these funds because many congressmen now believe that restoring bison to the reservations is the best way to improve the diet and the health of low income Native Americans living on reservations. Genetically and

physiologically, a diet high in bison protein and low in fat is much better suited to Indian people than the typical white American diet so high in carbohydrates and fat.

In the Dakotas, tribal bison restoration efforts are moving forward rapidly. In 1997, the Cheyenne River Sioux Reservation that I visited had over 750 animals scattered over 50,000 acres. The director of their bison restoration effort, Mr. Fred DuBray, who was also serving as the ITBC president in 1996, predicted that the 2.5 million acre reservation would have over 5,000 animals by 2006. The great success of bison restoration efforts at Cheyenne River Reservation was even featured in a nationally televised PBS documentary in 2005. The leading regional buffalo organization in the Dakotas is the "Dakota Territory Buffalo Association." This organization was formed in 1996 by a group of buffalo producers from a twelve state area and two Canadian provinces. The organization works with Indian reservations and white ranchers on the marketing of bison meat and by-products and holds its annual Winter Conference every January in Rapid City, South Dakota. Held in conjunction with the conference is the Black Hills Buffalo Classic Show and Sale (DTBA website 2006).

Two other related components of the new Dakota frontier landscape have been previously mentioned, white flight from the Northern Plains and Indian population re-growth. These two inter-related demographic trends are transforming the Northern Plains into a post-modern cultural landscape. Both scholars and journalists have discovered in the last decade that this major demographic shift is transforming America's "heartland." A frontier, larger than the one that exited a century ago, is reappearing on the Great Plains (see Maps 16, 17, & 18 in Appendix A). The Plains region is losing so many rural white Americans that 261 Plains counties now hold fewer than six residents per square

mile (Belsie 2003, 2). That population density statistic denotes the U. S. Census Bureau's traditional definition of a "frontier" (Matthews 1992, 180). U. S. Census Bureau statistics clearly show a declining white share of the total state populations of North and South Dakota (Russell 1998, 480-481)

Looking at the Northern Plains region as a whole, journalist Laurent Belsie (2003, 2) has noted:

And the nation's frontier midsection is expanding. While frontier counties west of the Rocky Mountains are generally filling up, the rural Plains continue to empty out. Already the frontier has pushed beyond the traditional eastern boundary of the Plains into eastern Kansas, the eastern edge of the Dakotas, and even into northwest Minnesota.

Even the *New York Times* noted in 2001 that, according to 2000 U.S. Census figures, in North Dakota, 47 of the state's 53 counties lost population during the decade from 1990 - 2000 . The few counties gaining population were populated primarily by Indians. In South Dakota, half of the state's counties also lost population. In contrast, the second-fastest-growing county in the state, Shannon, which is 94 percent Indian (Pine Ridge Reservation), grew by 26 percent according to the 2000 census (Egan 2001, 2).

The problem of white depopulation on the Northern Plains has become so serious that in October 2001 Senator Bryon Dorgan of North Dakota used federal funds to organize the first *Great Plains Population Symposium* in Bismarck, North Dakota. The primary objective of the Symposium, organized by Dickinson State University, was to develop national policy recommendations to facilitate rural development and stem regional depopulation (Dickinson State University 2006, 1). During three days of presentations by university scholars from the Plains states, discussions centered on "Quality of Place," "Rural Policy Development Not Synonymous with Agriculture

Policy,” “Rural Health Care,” and Rural Economy.” Some of their conclusions are most enlightening. For example, while the academic presenters endorsed cultural diversity as an essential ingredient of “quality of place” they also noted that attracting and keeping a culturally diverse citizenry on the Northern Plains “may be problematic given the current lack of diversity and related narrowness of attitudes and experience with diversity of many who now live in the isolated rural communities of the Great Plains” (Ibid.).

Another presentation by the University of Montana Business Research Center identified the following reasons cited for “white flight” away from the Great Plains: 1) a lack of infrastructure and services; 2) a lack of things to do; and 3) adverse social conditions rather than just employment based reasons. The majority of those people interviewed said it was very unlikely that they would ever return to their home town. Interviewees who had recently returned to the rural Great Plains were primarily motivated by family issues, not employment or cultural opportunities (Dickinson State University 2006, 2).

Ultimately, the driving force behind this white depopulation phenomenon is the Plains’ semi-arid climate. Sporadic years of drought have caused many white farmers and ranchers to lose everything they own, forcing their relocation, even though their families may have lived on the land for decades. Left behind is a cultural landscape where hundreds of small rural towns have been abandoned. In the small cities the largely white population is dominated by aging baby-boomers "and businesses coping with the paradox of a dwindling customer base and a shortage of workers" (Egan 2001, 2.).

Some academicians, like Frank and Deborah Popper, argue that the white depopulation of the Plains is really not "America’s forgotten crisis." They argue that the semi-arid Plains were never meant to have large human populations dependent on a form

of agriculture better suited to the humid east. Even with increasingly more sophisticated technology, many scientists doubt that the center can hold. As Belsie (2003, 3) sarcastically notes:

Perhaps it (The Plains) should let its people go, they say, and cradle instead ribbons of interstate highways, big windmills, and even fewer mega-farms. Or maybe it will revert to a kind of huge outdoor zoo of the early 1800s, when settlers were few and buffalo roamed freely.

While *wasichus* depart the Great Plains in increasing numbers, Native American reservation populations have been growing nationwide but most especially in the Plains states (see Table 7.1). These population increases certainly reflect natural biological increases and may well be related to better diet and better health conditions. I also believe that a significant part of the Native American resurgence on the Plains is due to the in-migration of Indian people back to the Plains reservations. The U. S. Census of 2000 showed a disproportional gain in populations in counties containing the region's Indian reservations. This growth could not be accounted for solely by higher birthrates, better health care, and the availability of federally-subsidized housing (Mitchell 2004, 1). Thousands of Native Americans who grew up in American cities are returning to Indian reservations on the Plains. Many of the elderly Indian retirees coming home to the reservation may have been relocated during the Eisenhower administration's termination efforts. The children and grandchildren of Indians relocated forty or fifty years ago are also coming back to the new frontier created by white emigration.

While Plains counties lost twenty percent or more of their total population in the last decade, overall Indian populations grew by twenty percent in North Dakota, twenty-three percent in South Dakota, eighteen percent in Montana, twenty percent in Nebraska,

and twelve percent in Kansas. Tribal officials on the reservations report that a major reason for these increases has been the steady in-migration of Indian people since the mid-1980s (Egan 2001, 1). Their reasons for coming back are varied but two major reasons have emerged from the numerous interviews. First, Indians coming back to the Plains reservations say that they are seeking to be restored to their ancestral culture and to their own ethnic identity. Second, they are coming back for jobs, many working in casinos (“the new buffalo”) and tourism, particularly with European tourists (Egan 2001, 3; CNN 2001, 1-3.). And as the bison restoration programs have grown on many Plains reservations, there will be more new job opportunities in Indian heritage tourism for these new reservation members.

While white Americans leave the Plains in increasing numbers, European tourism on American Indian reservations has been growing in recent decades, particularly among Germans. This was noted by the Indian participants of the Fort Thompson focus group the ERDC team conducted at the Crow Creek Sioux Reservation in 1997 (Appendix C) and has been reported by several American journalists as well. For example, *New York Times* journalist Timothy Egan (1998, 1) reported that:

Visitors, especially a growing number of Europeans, are traveling to some of the country’s most remote places, like this Indian reservation in central Oregon, in search of life many Americans overlook on their vacations. No theme parks built around fantasies for these travelers. In fact, some of the biggest new attractions are rooted in today’s world and in authenticity- even if it leaves visitors feeling more guilt than vacation relief. Tourists in Indian country spend their holidays hearing tales of heart-numbing atrocities or listening to songs in languages that never show up in Frommer’s guides. They come away thrilled.

One Denver tourism marketer interviewed by Egan had just produced a catalogue of Indian travel packages that was going out to 5,000 travel agents in Italy. But Germany continues to be the focus of the most intense marketing for reservation tourism in Europe.

There are more than 300 “Indian Clubs” in Germany where members adopt a tribe or a chief and study their history. Millions of Germans, including the wife of Dr. Frederick Briuer, my former colleague at ERDC, grew up reading the popular books of Karl May, a German author who wrote a series of stories about an Apache brave and his white sidekick (Egan 1998:2). Tribes with stronger economic bases than those in the Dakotas, such as those in the Northwest, have responded to the influx of European tourists by building interpretive centers on their reservations that cater to the Europeans’ love of heritage tourism told from an Indian perspective. Many of these centers are part of resorts that include casinos, golf courses, and recreational vehicle parks (Ibid.). The Umatilla and the two other tribes on their reservation, the Cayuse and the Walla Walla, even sent their own tribal delegation to Berlin, Germany in 1998, to the world’s biggest tourism trade show in an effort to market directly to the German public. While the full blossoming of European tourism on the Indian reservations in the Dakotas is still to come, the reintroduction of bison herds onto these reservations, the ultimate in perceived authenticity, will undoubtedly draw ever-increasing number of European tourists.

The need for a post-modern “frontier” landscape, dominated by bison and Indians, was the central thesis of the buffalo commons proposal made by the Poppers. They also predicted, accurately it now seems, that as white populations on the Plains continued to spiral downward, many white Americans would come to realize that farming and building towns on the Plains may just be "the largest, longest-running agricultural and environmental miscalculation in American history" (Popper and Popper 1987, 1). But the Poppers were not completely prescient. They thought that the American federal government would be the driving force in the creation of a buffalo commons landscape.

Their plan saw the government buying land, restoring the bison on native grasslands, and eventually turning some of the land over to Indians to manage. Instead, what has happened is that "Indians and bison have returned by self-initiative and free enterprise, helped by the success of casinos" (Egan 2001, 3). The role of the federal government has become one of subsidizing dwindling white farming and ranching communities on the High Plains, to the tune of more than \$20 billion per year. I can only wonder, along with University of Texas professor, Myron Gutmann, whether "the experiment on much of the northern Plains with European agricultural settlement may soon be ending" (Egan 2001, 2; Map 18 Appendix A).

Table 7.1 American Indian and Alaska Native Population for the United States, Regions, States and for Puerto Rico, 1990 and 2000 (Source: U.S. Census Bureau, Census 2000 summary file available at <http://www.census.gov/population/www/cen2000/phc-t18.html>)

Table 2. American Indian and Alaska Native Population for the United States, Regions, and States, and for Puerto Rico: 1990 and 2000

(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf1.pdf)

Area	1990			2000						
	Total population	American Indian and Alaska Native population		Total population	American Indian and Alaska Native alone population		American Indian and Alaska Native alone or in combination population		American Indian and Alaska Native in combination population	
		Number	Percent of total population		Number	Percent of total population	Number	Percent of total population	Number	Percent of American Indian and Alaska Native alone or in combination population
United States	248,709,873	1,959,234	0.8	281,421,906	2,475,956	0.9	4,119,301	1.5	1,643,345	39.9
Region										
Northeast	50,809,229	125,148	0.2	53,594,378	162,558	0.3	374,035	0.7	211,477	56.5
Midwest	59,668,632	337,899	0.6	64,382,776	399,490	0.6	714,782	1.1	315,302	44.1
South	85,445,990	562,731	0.7	100,236,820	725,919	0.7	1,259,230	1.3	533,311	42.4
West	52,786,082	933,456	1.8	63,197,932	1,187,989	1.9	1,771,244	2.8	583,255	32.9
State										
Alabama	4,040,587	16,506	0.4	4,447,100	22,430	0.5	44,449	1.0	22,019	49.5
Alaska	550,043	85,698	15.6	626,932	99,043	15.6	119,241	19.0	21,198	17.8
Arizona	3,665,228	203,527	5.6	5,130,632	255,979	5.0	292,552	5.7	36,873	12.5
Arkansas	2,350,725	12,773	0.5	2,673,400	17,908	0.7	37,002	1.4	19,194	51.9
California	29,760,021	242,164	0.8	33,871,648	333,346	1.0	627,562	1.9	294,216	46.9
Colorado	3,394,394	27,776	0.8	4,301,261	44,241	1.0	79,889	1.9	35,448	44.5
Connecticut	3,287,116	6,654	0.2	3,405,565	9,639	0.3	24,488	0.7	14,849	60.6
Delaware	666,168	2,019	0.3	783,600	2,731	0.3	6,069	0.8	3,338	55.0
District of Columbia	606,900	1,466	0.2	572,059	1,713	0.3	4,775	0.8	3,062	64.1
Florida	12,937,926	36,335	0.3	15,982,378	53,541	0.3	117,880	0.7	64,339	54.6
Georgia	6,478,216	13,348	0.2	8,186,453	21,737	0.3	53,197	0.6	31,460	59.1
Hawaii	1,108,229	5,099	0.5	1,211,537	3,535	0.3	24,882	2.1	21,247	85.8
Idaho	1,006,749	13,780	1.4	1,293,853	17,645	1.4	27,237	2.1	9,592	35.2
Illinois	11,430,602	21,896	0.2	12,419,293	31,006	0.2	73,161	0.6	42,155	57.6
Indiana	5,544,159	12,720	0.2	6,090,485	15,815	0.3	39,263	0.6	23,448	59.7
Iowa	2,776,755	7,349	0.3	2,926,324	8,989	0.3	18,248	0.6	9,257	50.7
Kansas	2,477,574	21,965	0.9	2,688,418	24,936	0.9	47,263	1.8	22,427	47.4
Kentucky	3,685,296	5,769	0.2	4,041,789	8,616	0.2	24,552	0.6	15,936	64.9
Louisiana	4,219,973	18,541	0.4	4,468,976	25,477	0.6	42,879	1.0	17,401	40.6
Maine	1,227,928	5,998	0.5	1,274,923	7,098	0.6	13,156	1.0	6,058	46.0
Maryland	4,781,468	12,972	0.3	5,296,486	15,423	0.3	39,437	0.7	24,014	60.9
Massachusetts	6,016,425	12,241	0.2	6,349,097	15,015	0.2	38,050	0.6	23,035	60.5
Michigan	9,295,297	55,638	0.6	9,938,444	58,479	0.6	124,412	1.3	65,933	53.0
Minnesota	4,375,099	49,909	1.1	4,919,479	54,967	1.1	81,074	1.6	26,107	32.2
Mississippi	2,573,216	8,525	0.3	2,844,658	11,652	0.4	19,555	0.7	7,903	40.4
Missouri	5,117,073	18,895	0.4	5,595,211	25,076	0.4	60,099	1.1	35,023	58.3
Montana	789,065	47,679	6.0	902,195	56,068	6.2	66,320	7.4	10,252	15.5
Nebraska	1,578,385	12,410	0.8	1,711,283	14,896	0.9	22,204	1.3	7,908	32.9
Nevada	1,201,833	19,637	1.6	1,998,257	26,420	1.3	42,222	2.1	15,802	37.4
New Hampshire	1,109,252	2,134	0.2	1,235,786	2,964	0.2	7,885	0.6	4,921	62.4
New Jersey	7,730,189	14,970	0.2	8,414,350	19,492	0.2	49,104	0.6	29,812	60.3
New Mexico	1,515,069	134,355	8.9	1,819,046	173,493	9.5	191,475	10.5	17,992	9.4
New York	17,990,455	82,651	0.3	18,976,457	82,461	0.4	171,581	0.9	89,120	51.9
North Carolina	6,628,637	80,155	1.2	8,049,313	99,551	1.2	131,736	1.6	32,185	24.4
North Dakota	638,800	25,917	4.1	642,200	31,329	4.9	35,228	5.5	3,899	11.1
Ohio	10,847,115	20,358	0.2	11,353,140	24,496	0.2	76,075	0.7	51,589	67.8
Oklahoma	3,145,585	252,420	8.0	3,450,654	273,230	7.9	391,949	11.4	118,719	30.3
Oregon	2,842,321	38,496	1.4	3,421,399	45,211	1.3	85,867	2.5	40,456	47.2
Pennsylvania	11,881,643	14,733	0.1	12,281,054	18,248	0.1	52,650	0.4	34,302	65.2
Rhode Island	1,003,464	4,071	0.4	1,048,319	5,121	0.5	10,725	1.0	5,604	52.0
South Carolina	3,488,703	8,246	0.2	4,012,012	13,718	0.3	27,456	0.7	13,739	50.3
South Dakota	696,004	50,575	7.3	754,844	62,293	8.3	68,281	9.0	5,999	8.8
Tennessee	4,877,185	10,099	0.2	5,689,283	15,152	0.3	39,189	0.7	24,036	61.3
Texas	16,986,510	65,877	0.4	20,851,820	118,382	0.6	215,599	1.0	97,237	45.1
Utah	1,722,850	24,283	1.4	2,233,169	29,684	1.3	40,445	1.8	10,761	26.6
Vermont	562,758	1,696	0.3	608,827	2,420	0.4	6,396	1.1	3,976	62.2
Virginia	6,187,358	15,282	0.2	7,078,515	21,172	0.3	52,864	0.7	31,892	60.0
Washington	4,866,692	81,483	1.7	5,894,121	93,301	1.6	158,949	2.7	65,839	41.3
West Virginia	1,793,477	2,458	0.1	1,808,344	3,606	0.2	10,644	0.6	7,038	66.1
Wisconsin	4,881,789	39,387	0.8	5,263,675	47,228	0.9	69,386	1.3	22,158	31.9
Wyoming	453,588	9,479	2.1	493,782	11,133	2.3	15,012	3.0	3,879	25.8
Puerto Rico	3,522,037	(X)	(X)	3,808,610	13,336	0.4	26,871	0.7	13,535	50.4

X Not applicable.

Source: U.S. Census Bureau, Census 2000 Summary File 1; 1990 Census of Population, *General Population Characteristics (1990 CP-1)*.

CHAPTER 8

CONCLUSIONS

In searching for *Verstehen* (understanding) of the transformation of the Dakotas' cultural landscape since Lewis and Clark, this dissertation has focused on the impacts to indigenous Native Americans from two externally introduced landscape components, reservations and reservoirs. In this search I have tried to let the indigenous tribes share their own perspectives on the transformation of their homeland over the past two hundred years. Giving voice to the indigenous people of the region over the course of two centuries has been challenging. Where first-hand Native American histories were missing, the records of Indian winter counts, the accounts of explorers, and the observations and inferences of archaeologists have been utilized.

Following Meinig's six underlying principles of historical geography (context, coverage, scale, structure, tensions, and change), the context or encompassing system here has been the historical development of U.S. Indian Policy as it has interfaced with other national programs, particularly the U.S. Water Resources Policy administered by the U.S. Army Corps of Engineers. The geographic coverage has focused on the Upper Missouri's indigenous peoples in an effort to correct the highly Eurocentric perspective found in government documents and many historical and economic studies. Following Meinig's admonition, the geographic scale has varied from a national perspective to a regional or local one as the analytical need has arisen. The geographic structure has encompassed both the unique character of the Missouri River region in the Dakotas as well as the relationship of the indigenous tribes to white America and the government bureaucracies they must contend with. The tensions which have been examined here

have been the long-lasting social and political tensions between the resident tribes, the Bureau of Indian Affairs, the Army Corps of Engineers, and the surrounding white population in the Dakotas. Finally, regarding Meinig's cautionary note that "all human geography is subject to change," I have primarily focused on those massive and tragic changes that the U.S. government has forced on the indigenous people of the Dakotas, specifically on the creation of the reservation system, its policies of forced assimilation, land allotment, land seizure, the creation of the most massive reservoir complex ever built in the United States, and the human impacts of that complex on the native people.

The cultural landscape as it existed at the end of the eighteenth century, just prior to Lewis and Clark, was both complex and dynamic as many tribes were pushed westward onto the Plains by eastern Euro-American settlement. With the expansion onto the Plains of a growing American empire in the early nineteenth century, the stage was set for the inevitable conflict between white America and a Native American order dominated by the recently arrived Sioux Nation. To move these Indian nations out of the way of American expansion, they were confined to territories, then to reservations, which in turn grew smaller and smaller as each new wave of Euro-American immigration onto the Plains precipitated another illegal land-taking by the federal government. To ensure the military and political control of Native Americans, the Army supported the efforts of hide hunters to annihilate the immense bison herds, and a federal policy of forced assimilation to the farming lifestyle of white Americans was implemented by agents of the Bureau of Indian Affairs. Misguided legislation by the U. S. Congress, such as the 1887 General Allotment Act, directly attacked Indian tribalism and freed up thousands of acres of the remaining reservation lands for private white ownership.

The most severe physical impacts to the Dakota reservation landscape came in the mid-twentieth century with the construction of a series of Missouri River dams and reservoirs by the U. S. Army Corps of Engineers. The Pick-Sloan reservoirs inundated the fertile river bottomlands and destroyed what had been an "oasis" on the semi-arid Plains for thousands of years. Impacts to the village farmers (Three Affiliated Tribes) and to the Sioux nation have been severe and long-lasting. The start of an Indian cultural resurgence began with the Indian Reorganization Act of 1934 which finally put an end to the hated policies of allotment and assimilation and recognized native tribes as internal sovereign nations. With a renewed spirit of tribalism and better political organization, the Dakota tribes were able to win important legal victories in the federal courts, and in Congress, to gain just compensation for the loss of their beloved river bottomlands.

In the last quarter century, prolonged drought and economic recession have caused a major demographic shift on the Plains (white depopulation) which has created many new "frontier counties" with fewer than six people per square mile. Geographers and ecologists are seriously proposing the abandonment of European-style agricultural settlement on the high plains in favor of a "buffalo commons" better suited to the semi-arid Plains ecosystem. Native Americans of the Dakotas have already embraced a scaled-down version of the buffalo commons concept. On many Plains reservations today Indians have not only improved their health from low-fat protein-rich bison meat but renewed their spiritual connection to their own cultural heritage. Many urban Indians and their descendants, displaced by government relocation efforts in the mid-twentieth century, are migrating back to the Plains reservations. As more whites continue to leave the rural frontier counties, Indian populations on the reservations continue to grow, along

with the number of bison. A post-modern frontier landscape is emerging on the Northern Plains with many biogeographic features of the original pre-reservation, pre-reservoir landscape. While temporal and financial constraints have prevented the full exploration of the national economic and social effects of this regional landscape transformation in this dissertation, it is clearly a topic deserving future research.

The transformation of the Northern Plains landscape is happening in spite of enormous government subsidies to maintain a diminishing Euro-American agricultural settlement there. Many Dakota Indian reservations now have far more people than they had when they were originally created. If global warming produces even more arid conditions on the high Plains, many Euro-American farmers and ranchers will simply be unable to sustain themselves, regardless of government subsidies. Enormous areas of open grasslands will become available for native wildlife, such as bison. One conceivable fate for the northern Plains, one hated by many long-time resident Euro-Americans, is the restoration of a native bison ecosystem, largely managed by Native Americans.

There are three interesting conclusions to be drawn from this protracted exercise in Sauerian anthropogeography. First, tribalism among the native peoples of the Dakotas has endured despite all U. S. attempts in the nineteenth and twentieth centuries to destroy it. The native peoples of the Upper Missouri region today still strive to preserve their tribal and cultural integrity, including the preservation and recovery of their archeological heritage. Despite the very damaging efforts of the Bureau of Indian Affairs and the Army Corps of Engineers, the tribes have also succeeded in preserving their cultural core values (Champagne 1994, 181). Looking to the future, the fate of the Dakota landscape now appears to be inextricably bound to the indigenous Native Americans' strong self-identity

as *tribal* people, so well-expressed in the Lakota phrase, *mitakuye-oyasin* -- (all my relations).

Second, the unpredictable semi-arid climate of the High Plains predestined for failure all American attempts to make Plains Indians into the yeoman farmers envisioned by Thomas Jefferson. Only when tribes had access to the Missouri River bottomlands did Indian agriculture flourish. Outside the Missouri bottomlands "oasis," only cattle grazing has provided the tribes with a stable subsistence base, but even then, only when it could be done by the tribes collectively. Land allotment laws of the nineteenth century sought to destroy this tribal collective and force an individualistic process of cultural assimilation. Ironically, what allotment actually did was to drastically curtail the ability of Indian reservations to participate in American agricultural markets and make any national economic recession particularly hurtful to reservation communities (Champagne 1994, 170). If bison restoration efforts on Indian reservations in the Dakotas succeed in the long term, they will do so as collective tribal efforts. Two centuries of white settlement on the arid northern plains has shown that privatization of the commons in this unforgiving environment too often leads to the tragedy of economic failure and depopulation (Popper and Popper 1987, 4).

Third, the Corps of Engineers' 20th century reservoir construction program completely disrupted the living and subsistence patterns of the Missouri River reservations. The Indian reservations adjoining the river were adversely affected both economically and ecologically. Unlike most of 1950s America, these reservations did not participate in the general post-World War II prosperity. Many slid into a Third World-style poverty that is shocking to most white Americans when viewed first hand. After

decades of federal economic development efforts, many Plains reservations are still some of the most impoverished places in America (Champagne 1994, 179).

On the reservations most impacted by the Pick-Sloan reservoirs, hard-fought legal victories and favorable Congressional actions have partially mitigated the enormous adverse impacts of this ill-conceived plan. But the struggle is far from over. For the heirs of Lewis Pick, the U.S. Army Corps of Engineers' employees, the main stem Missouri reservoirs have become a formidable management challenge in this post- NEPA (National Environmental Policy Act), post-NHPA (National Historic Preservation Act) era. With the benefit of hindsight, smaller Bureau of Reclamation dams, located further upriver and away from the reservations, could have alleviated downstream flooding on the Missouri and avoided the adverse impacts to the Missouri River Indian reservations we have documented in this paper.

Billington et al. (2005: 292) have argued that it would be a most useful exercise to explore in detail just what the advantages would be of removing all the Pick-Sloan dams. Despite escalating conflicts between environmentalists, Indian tribes, white farmers, bison ranchers, and barge interests their removal by the Corps of Engineers does not appear likely in the near future. Schneiders (1999, 258) observed that even at the height of the severe drought that began in the late 1980's "few individuals entertained any thought of simply letting the river go, of taking down the dams and training structures and abandoning the traditional paradigm, even though that seemingly radical alternative possessed many obvious, tangible advantages." From the long-term perspective of historical geography, however, the transformation of the Missouri River bottomlands in the Dakotas may only be half-way through a full circle.

REFERENCES

- Act of February 8, 1887/24 Stat., 388. An Act to Provide for the Allotment of Lands in Severalty to Indians on the Various Reservations. (General Allotment Act or Dawes Act). Statutes at Large 24, 388-91, NADP Document A1887 (<http://www.ourdocuments.gov/doc.php?flash=true&doc=50>)
- Act of February 28, 1877/19 Stat. 254. An Act to Ratify an Agreement with Certain Bands of the Sioux Nation of Indians. 44th Congress-Second Session, 1877. In *Indian Affairs: Laws & Treaties*, Vol. 1, Compiled and edited by Charles J. Kappler. Washington, D.C.:Government Printing Office, 1904. (http://digital.library.okstate.edu/kappler/Vol1/HTML_files/SES0168.html)
- Act of June 18, 1934. (S. 3645.) 48 Stat. 984. (Indian Reorganization Act). An Act To conserve and develop Indian lands and resources; to extend to Indians the right to form business and other organizations; to establish a credit system for Indians; to grant certain rights of home rule to Indians; to provide for vocational education for Indians; and for other purposes. In *Indian Affairs: Laws and Treaties*, Vol. V Laws, compiled and edited by Charles J. Kappler. Washington, D.C.:Government Printing Office, 1941). (http://digital.library.okstate.edu/kappler/Vol5/html_files/v5p0378.html)
- Act of March 2, 1889 (25 Stat. 888). An act to divide a portion of the reservation of the Sioux Nation of Indians in Dakota into separate reservations and to secure the relinquishment of the Indian title to the remainder, and for other purposes. 50th Congress-Second Session, 1889. In *Indian Affairs: Laws and Treaties*, Vol. 1 Laws, compiled and edited by Charles J. Kappler. Washington, D.C.:Government Printing Office, 1904. (http://digital.library.okstate.edu/kappler/Vol1/HTML_files/SES0328.html)
- Act of May 20, 1862 (Homestead Act). Public Law 37-64, 05/20/1862; Record Group 11; General Records of the United States Government; National Archives. (<http://www.ourdocuments.gov/doc.php?doc=31>)
- Adams, Alexander B. 1977. *Sunlight and Storm: The Great American Plains*. New York: G.P. Putnam's Sons,
- Ambrose, Stephen. 1996. *Undaunted Courage: Meriwether Lewis, Thomas Jefferson, and the Opening of the American West*. New York: Touchstone Books.
- Axelrod, Alan, 2003. *America's Wars*. New York: John Wiley and Sons.
- Belsie, Laurent. 2003. The Dwindling Heartland: America's New Frontier. *Christian Science Monitor*, February 11, 2001 (<http://www.csmonitor.com/2003/0211/pols03-usgn.html>).

- Billington, David P., Donald C. Jackson, and Martin V. Melosi. 2005. *The History of Large Federal Dams: Planning, Design, and Construction in the Era of Big Dams*. Denver: U.S. Department of the Interior, Bureau of Reclamation.
- Bonvillain, Nancy. 1994. *The Teton Sioux*. New York: Chelsea House Publishers.
- Bowers, Alfred W. 1950. *Mandan Social and Ceremonial Organization*. Chicago: University of Chicago Press.
- Brown, Dee, 1970. *Bury My Heart at Wounded Knee: An Indian History of the American West*. New York: Holt, Rinehart, and Winston.
- Brown, Thomas. 2005. *Assessing Ward Churchill's Version of the 1837 Smallpox Epidemic*. Beaumont, Texas: Lamar University website at <http://hal.lamar.edu/~browntf/Churchill1.htm>.
- Bryant, Peter J. 2006. Extinction and Depletion from Over-Exploitation. In *Biodiversity and Conservation: A Hypertext Book*. Internet website <http://www.dbc.uci.edu/~sustain/bio65/lec05/b651ec05.htm>
- Butlin, Robin. 1993. *Historical Geography: Through the Gates of Space and Time*. New York: John Wiley and Sons.
- Callenbach, Ernest. 1996. *Bring Back the Buffalo: A Sustainable Future for America's Great Plains*. Berkeley: University of California Press.
- Calloway, Colin G. 2003. *One Vast Winter Count: The Native American West Before Lewis and Clark*. Lincoln: University of Nebraska Press.
- Carlson, Leonard A. 1981. *Indians, Bureaucrats and Land: The Dawes Act and the Decline of Indian Farming*. Westport, Connecticut: Greenwood Press.
- Champagne, Duane. 1994. *Native America: Portrait of the Peoples*. Canton, Michigan: Visible Ink Press.
- Churchill, Ward. 1997. *A Little Matter of Genocide*. San Francisco: City Lights Books.
- CNN (Cable News Network). 2001. Culture, New Wealth Luring Indians to Reservations. News Report archived on CNN internet website <http://archives.cnn.com/2001/US/04/10/census.indians/index.html>
- Crow Creek Sioux. 1999. Letter dated February 17, 1999 from Harold Miller, Sr. Tribal Chairman to BG Robert B. Griffin, Division Engineer. Internet website http://www.nwd-mr.usace.army.mil/mmanual/Volume%20III/Final_Appendix_A_Part_1.pdf

- Daschle, Senator Thomas. 1989. Letter to Colonel Donald E. Hazen, Omaha District Engineer, dated August 24, 1989. Correspondence Files of U.S. Army Engineer Division, Northwestern, Omaha, Nebraska.
- DeMallie, Raymond J. 2001a. Sioux Until 1850. In *Handbook of North American Indians, volume 13 part 2*. Washington, D.C.: Smithsonian Institution Press.
- . 2001b. Teton. In *Handbook of North American Indians, volume 13 part 2*. Washington, D.C.: Smithsonian Institution Press
- DeVoto, Bernard (ed.). 1981. *The Journals of Lewis and Clark*. Boston: Houghton Mifflin.
- Dickinson State University. 2006. Executive Summary. *Great Plains Population Symposium, October 15-17, 2001, Bismarck, North Dakota*. Dickson State Universty website at http://gppop.dsu.nodak.edu/i_exec_summary.htm
- DTBA (Dakota Territory Buffalo Association). 2006. Internet website <http://dakotabuffalo.com>.
- Duncan, Dayton. 1987. *Out West: An American Journey*. New York: Viking Penguin
- Dunn, Robert A. and Timothy D. Feather. 1997a. *After-Action Report, 21 July 1997, Native American Focus Group, Governor's Inn, Pierre, South Dakota*. Manuscript on file with Planning and Management Consultants, Ltd, Carbondale, Illinois.
- . 1997b. *After-Action Report, 22 July 1997, Native American Focus Group, Fort Thompson (Crow Creek), South Dakota*. Manuscript on file with Planning and Management Consultants, Ltd, Carbondale, Illinois.
- . 1997c. *After-Action Report, 23 July 1997, Swift Bird Community, Cheyenne River Reservation, South Dakota*. Manuscript on file with Planning and Management Consultants, Ltd, Carbondale, Illinois.
- Dunn, Robert A. and Timothy D. Feather. 1998. *Native American Recreation at Corps Projects: Results of Six Focus Groups*. Natural Resources Technical Note REC-09, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.
- Ebert, James I., Eileen L. Camilli, and LuAnn Wandsnider. 1989. *Reservoir Bank Erosion and Cultural Resources: Experiments in Mapping and Predicting the Erosion of Archaeological Sediments at Reservoirs Along the Middle Missouri River with Sequential Historical Aerial Photographs*. Contract Report EL-89-3, EIRP Work Unit 32357, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.

- Egan, Timothy. 1998. Indian Reservations Bank on Authenticity to Draw Tourists. In *New York Times*, 21 September 1998. (<http://query.nytimes.com/gst/fullpage.html?res+950CE5DA1330F032A1575AC096E95...11/20/2006>)
- . 2001. As Others Abandon Plains, Indians and Bison Come Back. In *New York Times*, 27 May 2001. (<http://nytimes.com/2001/05/27national/27FRON.html>).
- Erdoes, Richard, 2001. *Crying for a Dream: The World Through Native American Eyes*. Rochester, Vermont: Bear and Company.
- Faragher, John Mark. 1996. The Grandest Enterprise under God 1865-1874. In *The West: An Illustrated History*, ed. Geoffrey C. Ward, 214-289. New York: Little, Brown and Company.
- Flores, Dan, 1991. Bison Ecology and Bison Diplomacy: The Southern Plains from 1800 To 1850. In *The Journal of American History*, Volume 78 No.2 (Sept. 1991), pp. 465-485.
- Fort Leavenworth. 2005. *History*. Fort Leavenworth website at http://garrison.leavenworth.army.mil/sites/services/museum_History.asp
- Frantz, Klaus. 1993. *Indian Reservation in the United States*. The University of Chicago Press, Chicago.
- Getches, David H., Charles F. Wilkinson, and Robert A. Williams. 2004. *Cases and Materials on Federal Indian Law (American Casebook Series)*. New York: West Publishing.
- Gramann, James H. 1996. *Ethnicity, Race, and Outdoor Recreation: A Review of Trends, Policy, and Research*. Miscellaneous Paper R-96-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.
- Hardin, Garrett. 1968. The Tragedy of the Commons. *Science* volume 162, pp. 1243-1248.
- Hardorff, Richard G. 2001. *The Death of Crazy Horse*. Lincoln: University of Nebraska Press.
- Hill, Norbert S, (ed.). 1994. *Words of Power: Voices from Indian America*. Golden, Colorado: Fulcrum Publishing Co.
- Hine, Robert V. and John Mark Faragher. 2000. *The American West: A New Interpretive History*. New Haven: Yale University Press.

- Hightower-Langston, Donna. 2003. *The Native American World*. Hoboken, New Jersey: John Wiley and Sons.
- Holder, Preston. 1993. *The Hoe and the Horse on the Plains: A Study of Cultural Development Among North American Indians* (Landmark Edition). Lincoln: University of Nebraska Press.
- Hoover, J. 1931. Geographic and Ethnic Grouping of Arizona Indians. *Journal of Geography* 30, pp.235-246.
- Irwin, Louis Two Ravens, and Robert Liebert. 1996. *Two Ravens: The Life and Teachings of a Spiritual Warrior*. Rochester, Vermont: Destiny Books.
- Iverson, Peter. 1994. *When Indians Became Cowboys: Native Peoples and Cattle Ranching in the American West*. Norman: University of Oklahoma Press.
- Isenberg, Andrew C. 2000. *The Destruction of the Bison: An Environmental History 1750- 1920*. New York: Cambridge University Press.
- Knofczynski, M.R. and W.G. Dorough. 1989. *Shoreline Erosion Process, Missouri River Mainstem Lakes*. Manuscript on file with the U.S. Army Engineer Division, Northwestern. Omaha, Nebraska.
- Kornfeld, Marcel and Alan J. Osborne (eds.) 2003. *Islands on the Plains: Ecological, Social, and Ritual Use of Landscapes*. Salt Lake City: University of Utah Press.
- Krause, Richard A. 2001. Plains Village Tradition: Coalescent. In *Handbook of North American Indians, volume 13, part 1*. Washington, DC: Smithsonian Institution Press.
- Lame Deer, John (Fire) and Richard Erdoes. 1973. *Lame Deer Seeker of Visions: The Life of a Sioux Medicine Man*. New York: Touchstone.
- Lawson, Michael. 1982. *Dammed Indians: The Pick-Sloan Plan and the Missouri River Sioux 1944-1980*. Norman: University of Oklahoma Press.
- . 1994. *Dammed Indians: The Pick-Sloan Plan and the Missouri River Sioux 1944-1980 (paperback edition with new preface)*. Norman: University of Oklahoma Press
- Least Heat Moon, William. 1989. *River-Horse: The Logbook of a Boat Across America*. New York: Penguin Books.
- Lehmer, Donald. 1977. Epidemics Among the Indians of Upper Missouri. In *Selected Writings of Donald J. Lehmer*. W. Raymond Wood, ed., pp. 105-111. Reprints in Anthropology Number 8

- Leitch, Barbara. 1979. *A Concise Dictionary of Indian Tribes of North America*. Reference Publications, Inc. Algonac, Michigan.
- MacArthur, R.H. and E.O Wilson. 1967. *The Theory of Island Biogeography*. Princeton: Princeton University Press.
- MacDonnell, George H. 1996. *The Western Niobrara River: An Inter-Island Passage on The Plains*. Program and Abstracts of the 5th Annual Plains Anthropological Conference, October 30 – November 2, p.94. Iowa City, Iowa.
- MacDonell, George H. and LuAnn Wandsnider. 2003. The Western Niobrara River: An Inter-Island Passage on the Plains. In *Islands on the Plains: Ecological, Social, and Ritual Use of Landscapes*, eds. Marcel Kornfeld and Alan J. Osborne. Salt Lake City: University of Utah Press.
- Marshall (III), Joseph W. 2004. *The Journey of Crazy Horse: A Lakota History*. New York: Viking Penguin
- Mathews, Anne. 1992. *Where the Buffalo Roam*. New York: Grove Press.
- McDonald, D. and L. McAvoy. 1997. Native Americans and Leisure: State of the Research and Future Directions. *Journal of Leisure Research*. 29(2), pp. 145-166.
- McLaughlin, Irene C. 1993. *Colonialism, Cattle, and Class: A Century of Ranching on the Fort Berthold Indian Reservation*. PhD. Dissertation in Anthropology, Columbia University, New York.
- Means, Russell and Marvin J. Wolf. 1995. *Where White Men Fear to Tread: The Autobiography of Russell Means*. New York: St. Martin's Griffin.
- Meinig, D.W. 1986. *The Shaping of America: A Geographical Perspective On 500 Years of History, Volume 1 Atlantic America, 1492-1800*. Yale University Press, New Haven, Connecticut.
- Meyer, Roy W. 1977. *The Village Indians of the Upper Missouri*. Lincoln: University of Nebraska Press.
- Mitchell, John G. 2004. Change of Heartland: America's Rural Interior Searches for New Horizons. *National Geographic*, May 2004, pp.2-29.
- Moore, J.H. 1987. *The Cheyenne Nation: A Social and Demographic History*. Lincoln: University of Nebraska Press.
- Moore, Robert J. 2002. *Native Americans: The Art and Travels of Charles Bird King, George Catlin, and Karl Bodmer*. Edison, New Jersey: Chartwell Books.

- Nabokov, Peter, 2001. *Native American Testimony; A Chronicle of Indian-White Relations from Prophecy to the Present, 1492-2000*. New York: Penguin Group.
- NADP (Native American Documents Project). 2006. Internet website at http://www.csusm.edu/nadp/a_1887.htm
- National Park Service. 2005 Archaeological Overview of the People of the Upper Missouri by W. Raymond Wood. NPS website at http://www.nps.gov/jeff/LewisClark2/theBicentennial/Symposium2001/Papers/Wood_R
- _____. 2006. <http://www.nps.gov/knri/teach/history.htm>
- Neihardt, John G. 2000. *Black Elk Speaks (21st century edition)*. Lincoln: University of Nebraska Press.
- Omaha District, U.S. Army Corps of Engineers. 1981. *The Crow Creek Massacre Site*. Pamphlet published by the U.S. Army Corps of Engineers, Omaha, Nebraska.
- . 1985. *The Federal Engineer Damsites to Missile Sites: A History of the Omaha District*. U.S. Army Corps of Engineers, Omaha, Nebraska.
- Ostler, Jeffrey, 2004. *The Plains Sioux and U.S. Colonialism from Lewis and Clark to Wounded Knee*. Cambridge, U.K.: Cambridge University Press.
- Otis, Delos. S. 1973. *The Dawes Act and the Allotment of Indian Lands*. Norman: University of Oklahoma Press.
- Parks, Douglas. 2001. Arikara. *Handbook of North American Indians, volume 13, part 1*. Washington D.C.: Smithsonian Institution.
- Popper, Deborah E. and Frank J. Popper. 1987. The Great Plains: From Dust to Dust. *Planning*, December 1987 (available on Internet at <http://www.planning.org/25anniversary/planning/1987dec.htm?project.Print>)
- Prucha, Francis Paul. 1985. *The Indians in American Society*. Berkeley: University of California Press.
- Reisner, Marc. 1993. *Cadillac Desert: The American West and its Disappearing Waters*. New York: Penguin Books.
- Ridington, Robin and Dennis Hastings. 1997. *Blessing for a Long Time: The Sacred Pole of the Omaha Tribe*. Omaha: University of Nebraska Press.
- Roe, Frank.G. 1955. *The Indian and the Horse*. Norman: University of Oklahoma Press.

- Ronda, James P. 1984. *Lewis and Clark Among the Indians*. Lincoln: University of Nebraska Press.
- Ruple, Steven D. 1991. *An Assessment of the Condition of Selected Archaeological Sites Along the Missouri River in South Dakota*. Report Submitted to the Historical Preservation Center, Vermillion, South Dakota in Fulfillment of Contract No. 1250-413-009 (91),
- Russell, Cheryl. 1998. *Racial and Ethnic Diversity, 2nd edition*. Ithaca, New York: new Strategist Publications.
- Sauer, Carl O. 1925. *The Morphology of Landscape*. Berkeley: University of California Publications in Geography 2.
- Schneider, Mary Jane. 2001. Three Affiliated Tribes. In *Handbook of North American Indians, Plains, Volume 13 part 1*. Washington, D.C.: Smithsonian Institution.
- Schneiders, Robert K. 1999. *Unruly River: Two Centuries of Change Along the Missouri*. Lawrence: University Press of Kansas.
- Shovel website. 2006. *Fort Laramie Treaty Lands Map*. Website maintained by Jordan S. Dill at <http://www.dickshovel.com/1868.html>.
- Smith, Martin Cruz. 1970. *The Indians Won*. New York. Nordon Publications.
- Speth, William W. 1999. *How It Came To Be: Carl O. Sauer, Franz Boas and the Meanings of Anthropogeography*. Ephemera Press, Ellensburg, Washington.
- Standing Rock Sioux. 1993. Standing Rock Sioux Tribe Master Manual and Environmental Impact Statement Review and Comments dated July 7, 1993. (http://www.nwd-mr.usace.army.mil/mmanual/Volume%20III/Final_Appendix_A_Part_1.pdf)
- Stewart, Frank H. 2001. Hidatsa. In *Handbook of North American Indians, Plains, Volume 13 part 1*. Washington, D.C.: Smithsonian Institution.
- Sundstrom, Linea. 1997. Smallpox Used Them Up: References to Epidemic Disease in Northern Plains Winter Counts 1774-1920. *Ethnohistory* Volume 44, number 2 (spring 1997), pp. 305-343.
- Thomas, Davis, and Karin Ronneveldt (eds). 1982. *People of the First Man: Life Among the Plains Indians in their Final Days of Glory (Text by Prince Maximillian zu Wied)*. New York: Promontory Press
- Thomas, David Hurst, J. Miller, R. White, and P. Nabokov. 2001. *The Native*

Americans: An Illustrated History. New York: World Publications Group.

Treaty of Fort Laramie With Sioux, Etc., 1851. Sept. 17, 1851. (11 Stats., p. 749),
Articles of a treaty made and concluded at Fort Laramie, in the Indian Territory,
between D. D. Mitchell, superintendent of Indian affairs, and Thomas Fitzpatrick,
Indian agent, commissioners specially appointed and authorized by the President
of the United States, of the first part, and the chiefs, headmen, and braves of the
following Indian nations, residing south of the Missouri River, east of the Rocky
Mountains, and north of the lines of Texas and New Mexico, viz, the Sioux or
Dahcotahs, Cheyennes, Arrapahoes, Crows. In *Indian Affairs: Laws and Treaties*,
Vol. 1, Treaties, compiled and edited by Charles J. Kappler. Washington,
D.C.:Government Printing Office, 1904.
(<http://digital.library.okstate.edu/kappler/Vol2/treaties/sio0594.htm>)

Treaty with the Sioux-Brule, Oglala, Miniconjou, Yanktonai, Hunkpapa, Blackfeet,
Cuthead, Two Kettle, Sans Arcs, and Santee-and Arapaho, April 29, 1868;
General Records of the United States Government; Record Group 11; National
Archives. (<http://www.ourdocuments.gov/doc.php?doc=42>).

Trimble, Michael K. 1989. Infectious Disease and the Northern Plains Horticulturists: A
Human Behavior Model, pp. 41-59. In *Plains Indian Historical Demography and
Health: Perspectives, Interpretation, and Critiques*, Gregory R. Campbell, ed. *Plains
Anthropologist* 34/124, pt.2 , Memoir 23. Lincoln. .

Utley, Robert M. 1984. *The Indian Frontier of the American West 1846-1890*.
Albuquerque University of New Mexico Press.

----- . 1988. Indian-United States Military Situation. In *Handbook of North American
Indians, History of Indian-White Relations, Volume 4*. Washington D.C.:
Smithsonian Institution Press.

----- . 1993. *The Lance and the Shield: The Life and Times of Sitting Bull*. New York:
Ballantine Books.

----- . 2004. *The Last Days of the Sioux Nation (2nd edition)*. New Haven: Yale
University Press.

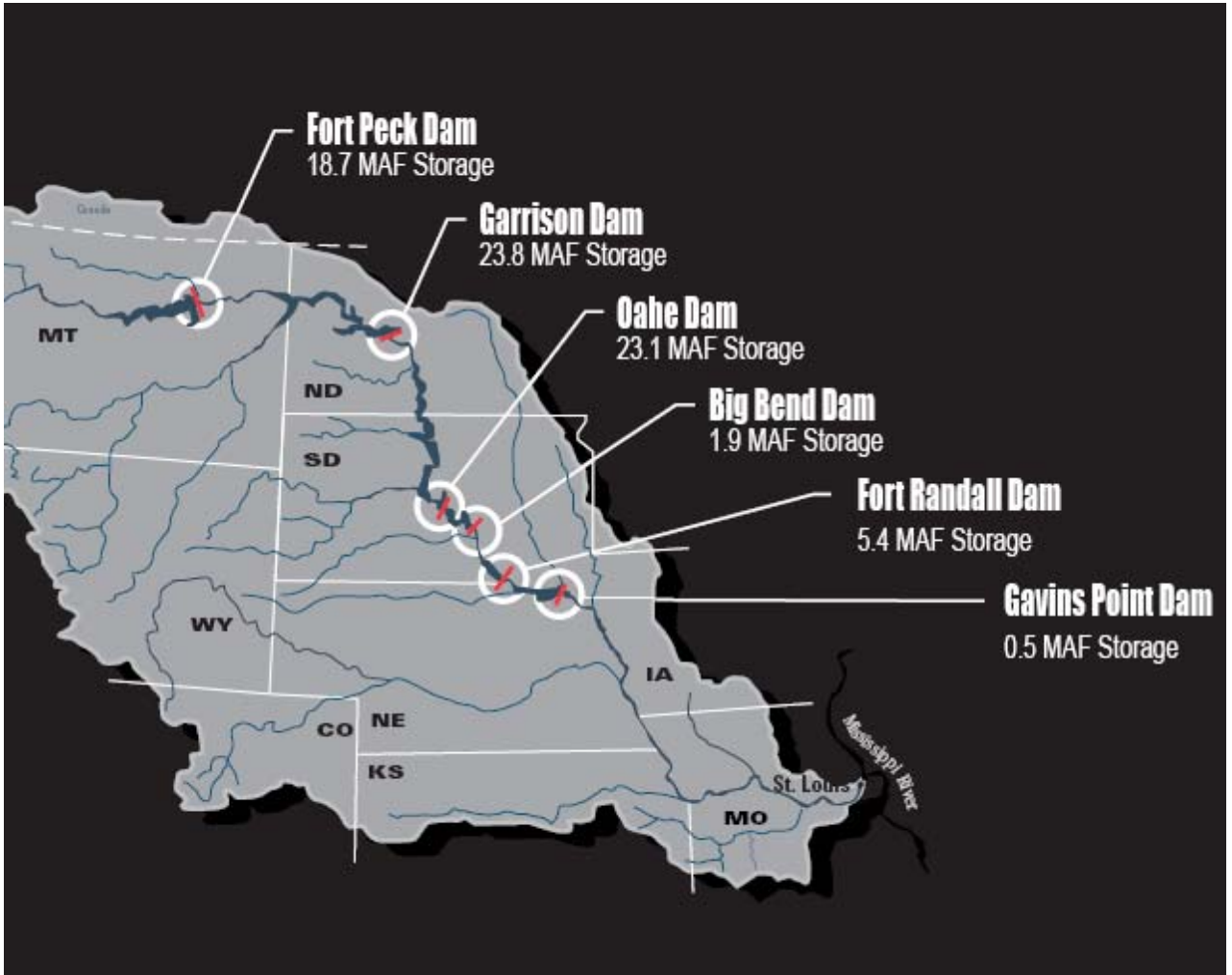
Van DeVelder, Paul. 2004. *Coyote Warriors: One Man, Three Tribes, and the Trial that
Forged a Nation*. New York: Little, Brown and Company.

Washburn, Wilcomb E. 1975. *The Assault on Tribalism: The General Allotment Law
(Dawes Act) of 1887*. Philadelphia: J.B. Lippincott Company.

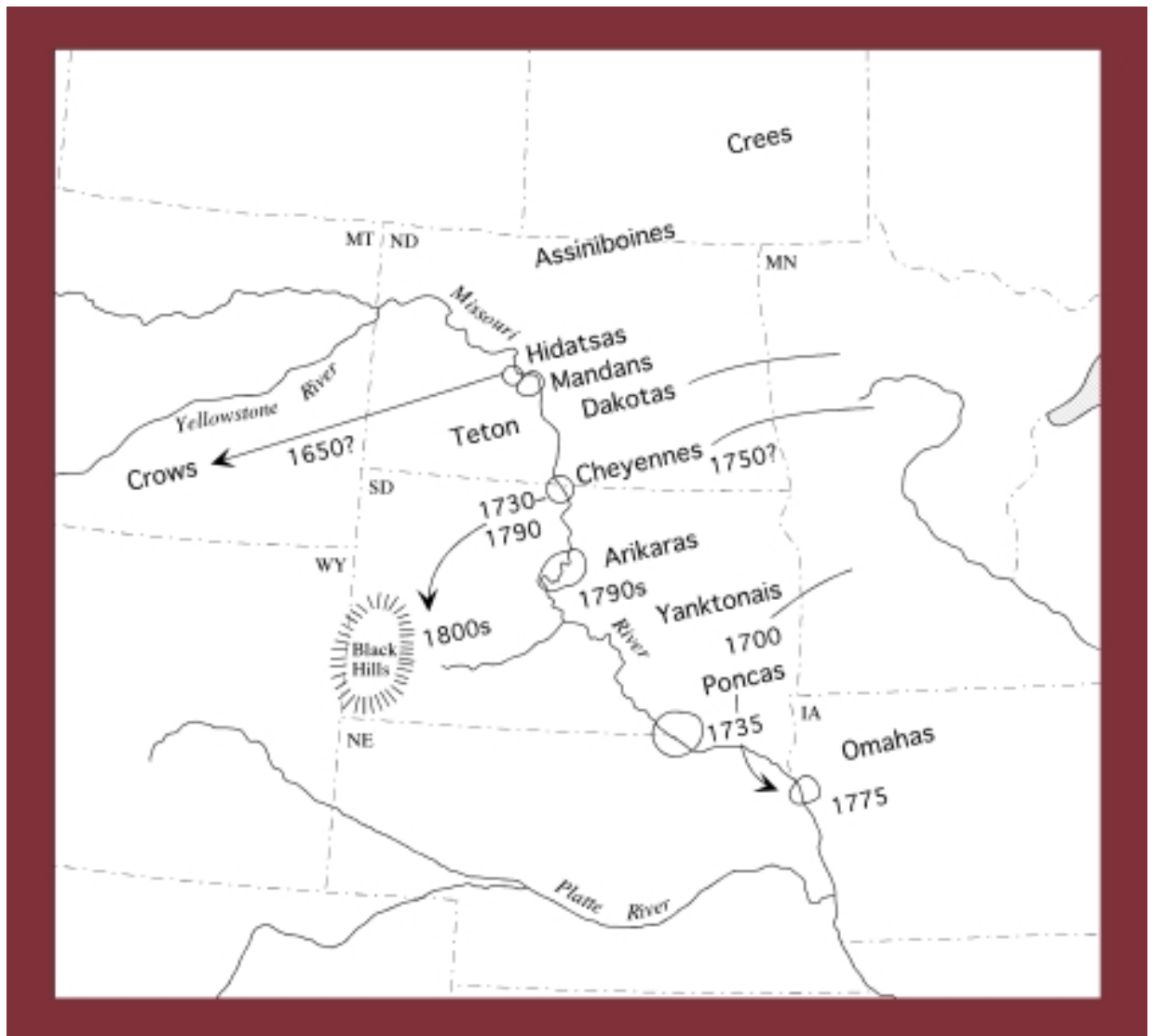
Wedel, Waldo R. 1978. The Prehistoric Plains. In *Ancient Native Americans*, edited by
Jesse D. Jennings, W.H. Freeman and Company, San Francisco Wikipedia. 2006.
Map of Dakota Territory.

- Wikipedia On-Line Encyclopedia. 2006. Dakota Territory. Internet website at http://en.wikipedia.org/wiki/Dakota_Territory.
- Williams, Florence. 2001. Plains Sense: Frank and Deborah Popper's "Buffalo Commons" is Creeping Toward Reality. *High Country News*, Volume 33, Number 1, January 15, 2001 (online at http://www.hcn.org/servlets/hcn.PrintableArticle?article_id=10194).
- Wishart, David J. 1996. *An Unspeakable Sadness: The Dispossession of the Nebraska Indians*. University of Nebraska Press, Lincoln
- Wood, W. Raymond. 1971. *Biesterfeldt: A Post-Contact Coalescent Site on the Northwestern Plains*. Smithsonian Contributions to Anthropology, Number 15. Washington D.C.: Smithsonian Institution Press.
- , 2001. Plains Village Tradition. In *Handbook of North American Indians, volume 13, part 1*. Washington DC: Smithsonian Institution Press.
- Wood, W. Raymond and Lee Irwin. 2001. Mandan. In *Handbook of North American Indians, volume 13, part 1*. Washington D.C.: Smithsonian Institution Press.

APPENDIX A: MAPS



Map 1: The Missouri River Dams Constructed by the U.S. Army Corps of Engineers
 (Source: Missouri River Final Environmental Impact Statement (Omaha District 2004:
 Master Water Control Manual River and Update)



Map 2: Tribal Distributions on the Missouri River Pre-1800
 (Source: "An Archaeological Overview of the People of the Upper Missouri by
 W. Raymond Wood" on
[http://www.nps.gov/jeff/LewisClark2/TheBicentennial/Symposium2001/Papers/wood_R
 a...](http://www.nps.gov/jeff/LewisClark2/TheBicentennial/Symposium2001/Papers/wood_R_a...))



Map 3: Lewis and Clark Map of the Big Bend Area in Lakota (Teton Sioux) Territory
 (Source: 1814 Map by Samuel Lewis Based on an Original Map drawn by William Clark
 at http://lcweb2.loc.gov/cgi-bin/map_item.pl)



Map 4: Lewis and Clark Map Showing Teton Sioux and Arikara Territories' Near Present-Day North Dakota-South Dakota boundary.
 (Source: 1814 Map by Samuel Lewis Based on an Original Map drawn by William Clark at http://lweb2.loc.gov/cgi-bin/map_item.pl)

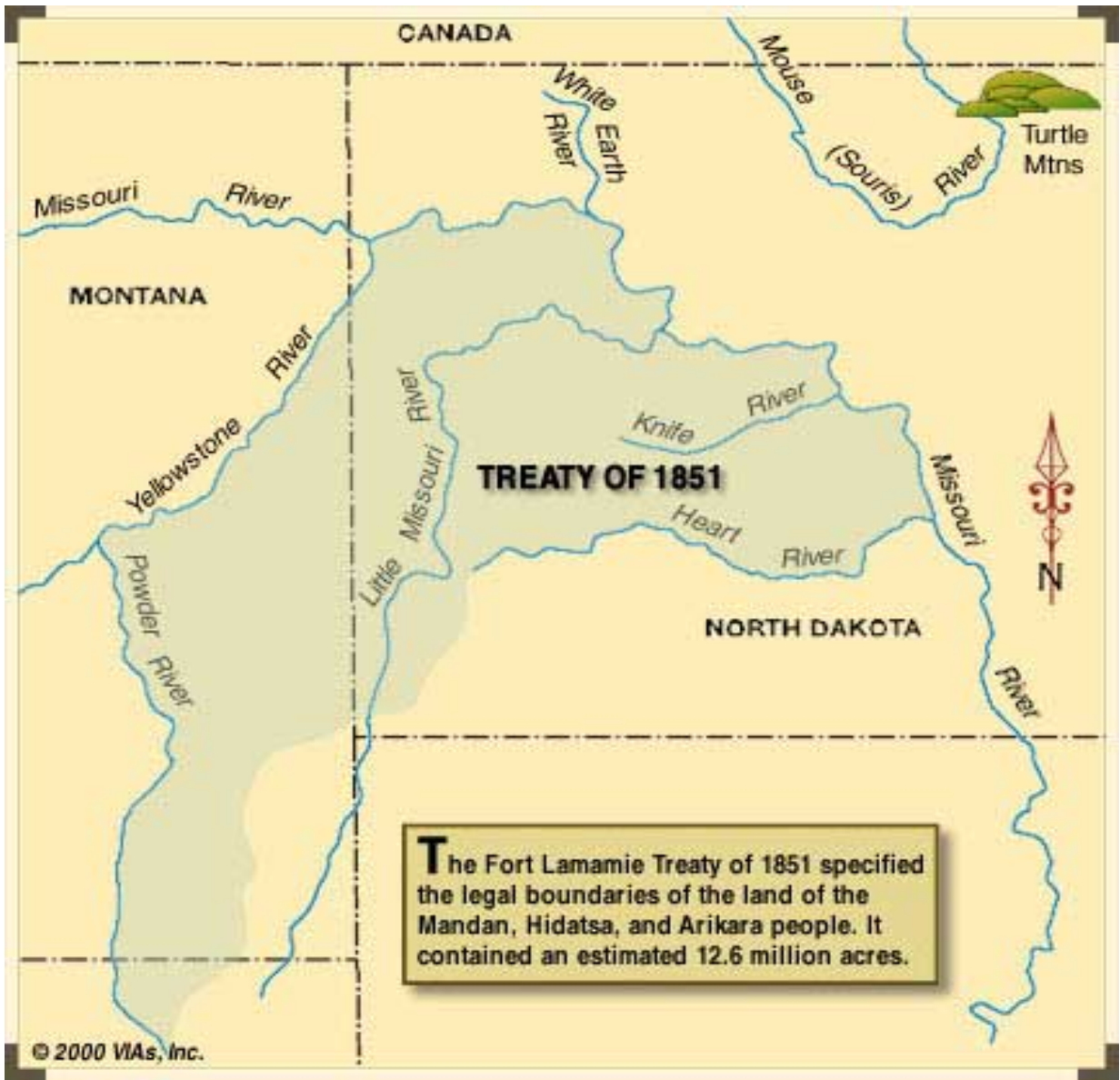


Map 5: Lewis and Clark Map Showing Mandan, Hidatsa, and Arikara Territories and the site of Fort Mandan.

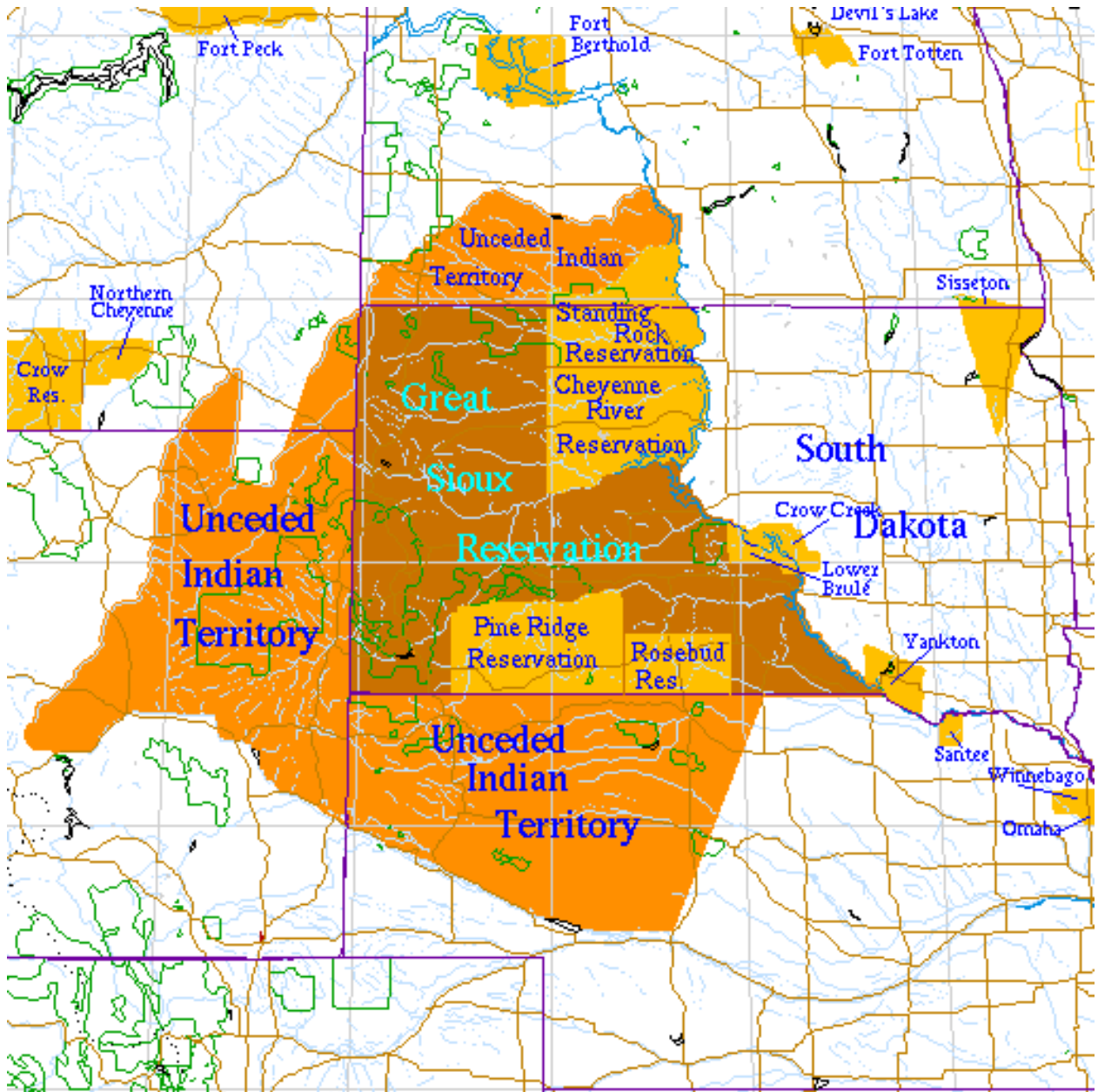
(Source: 1814 Map by Samuel Lewis Based on an Original Map drawn by William Clark at http://lcweb2.loc.gov/cgi-bin/map_item.pl)



Map 6: Map Drawn by Jesuit Father DeSmet for the 1851 Fort Laramie Treaty.
(Source: Public Broadcasting Service website at http://www.pbs.org/weta/thewest/resources/archives/three/63_09.htm)



Map 7: Territory of the Three Affiliated Tribes after the Fort Laramie Treaty of 1851
(Source: <http://www.trailtribes.org/kniferiver/content/KRMusselman-map1851.jpg>)



Map 8: Fort Laramie Sioux Treaty Land of 1868 with Modern Reservations Superimposed.
 (Source: www.dickshovel.com/1868.html)

Map Legend:



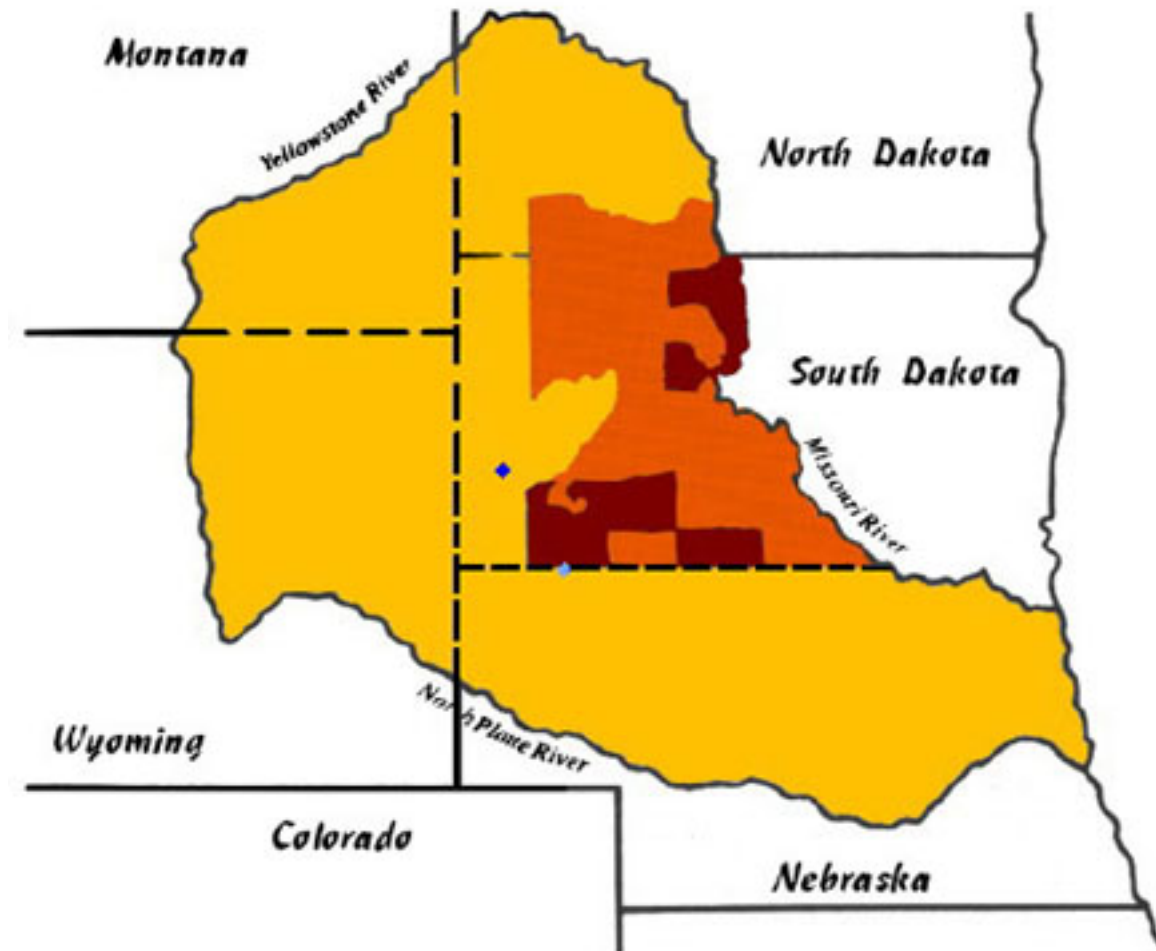
Lakota Nation: Reserved by the 1868 Treaty for the unreserved use of the Lakota people



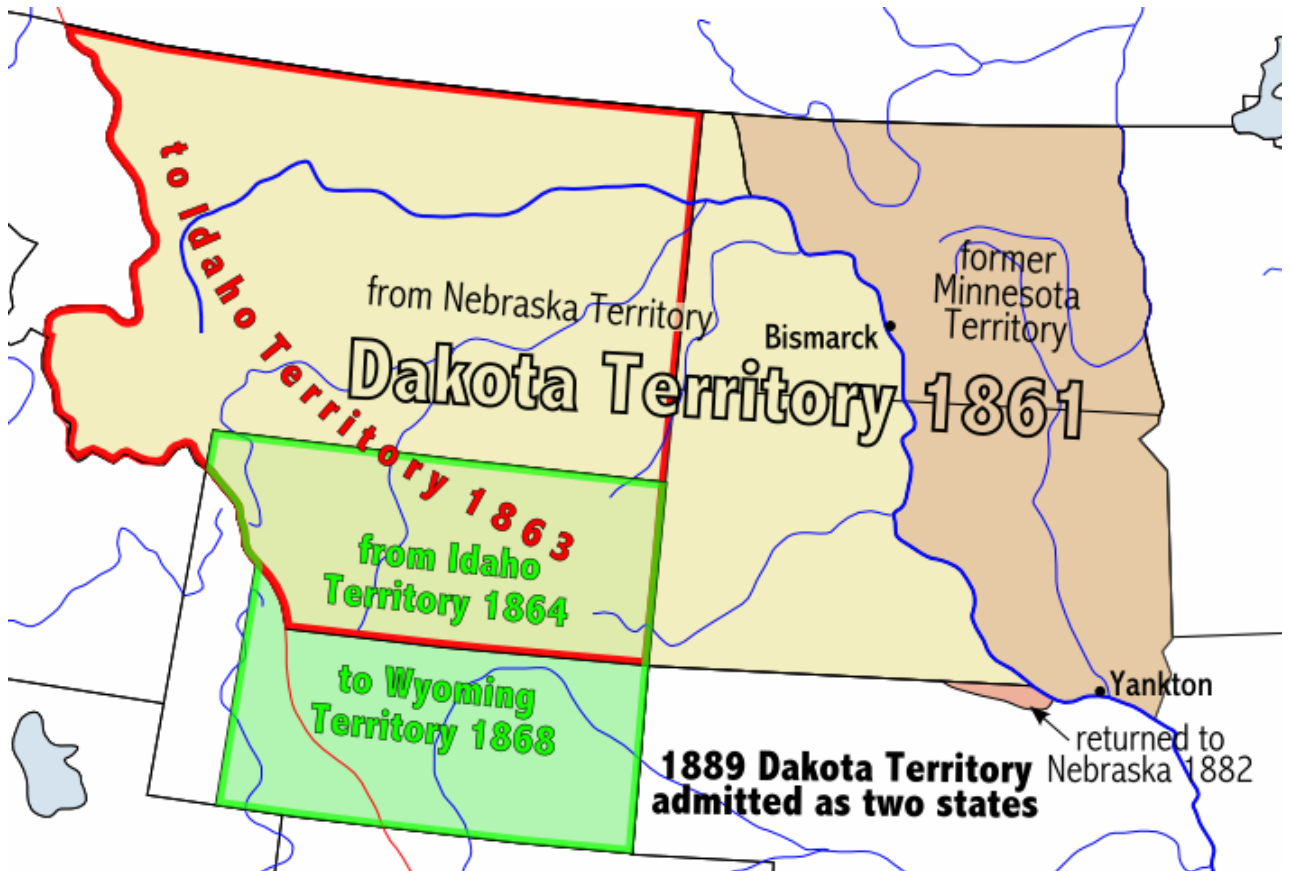
1876: Lakota reservation after the US stole the Black Hills



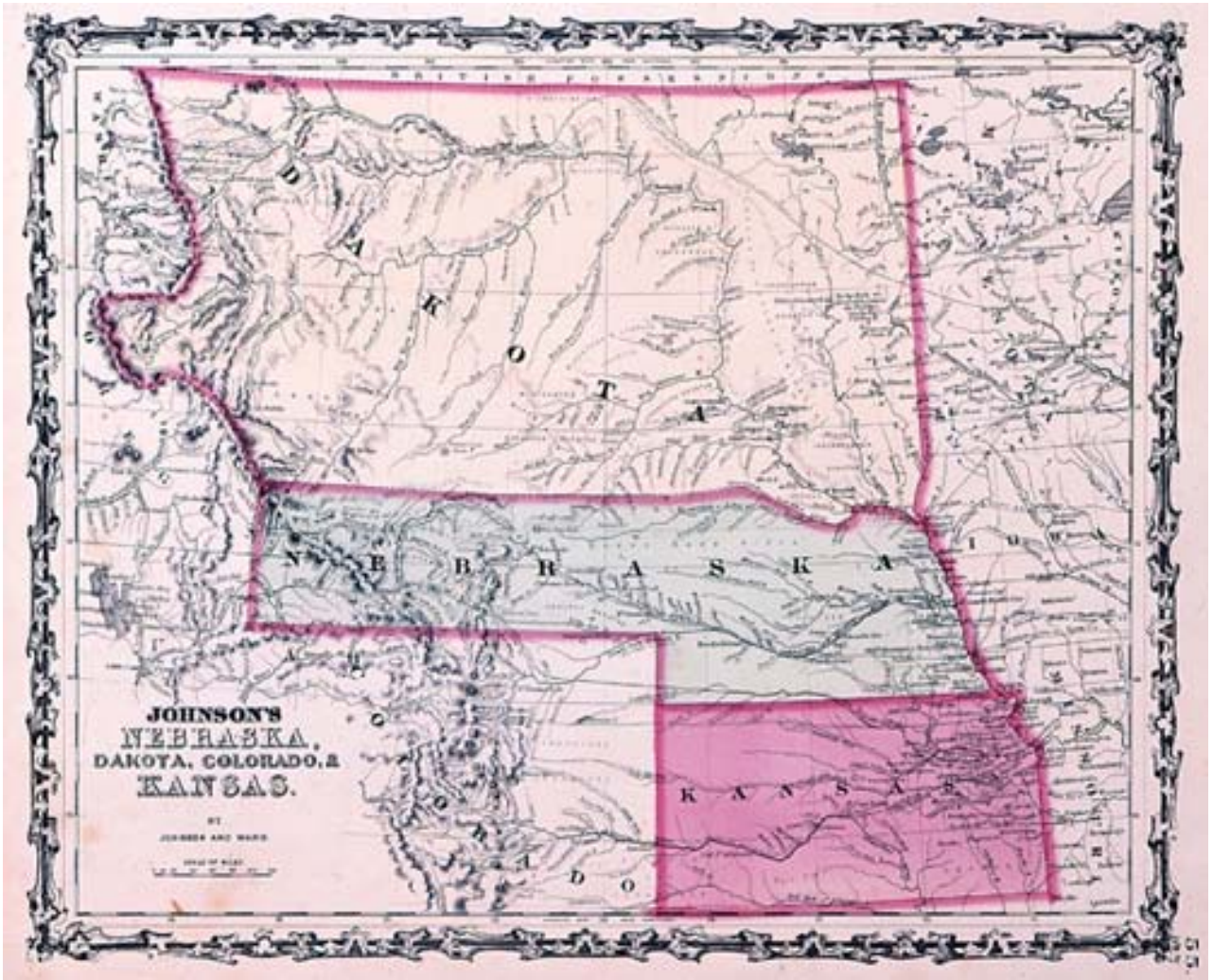
Lakota reservations after 100 years of court actions



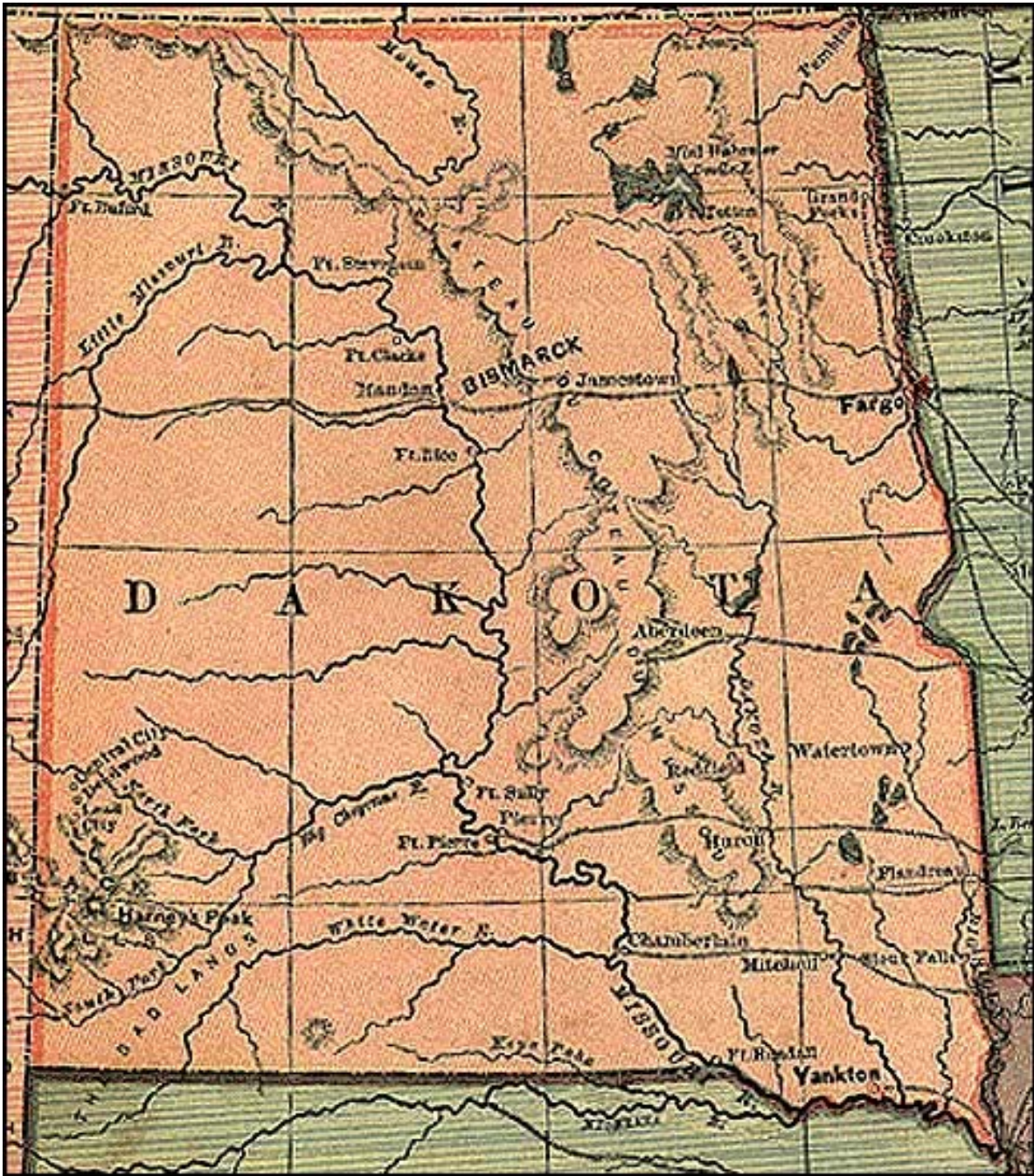
Map 9: The Shrinking Sioux Reservations 1862 to Present
(Source: http://www.canku-luta.org/PineRidge/laramie_treaty.html)



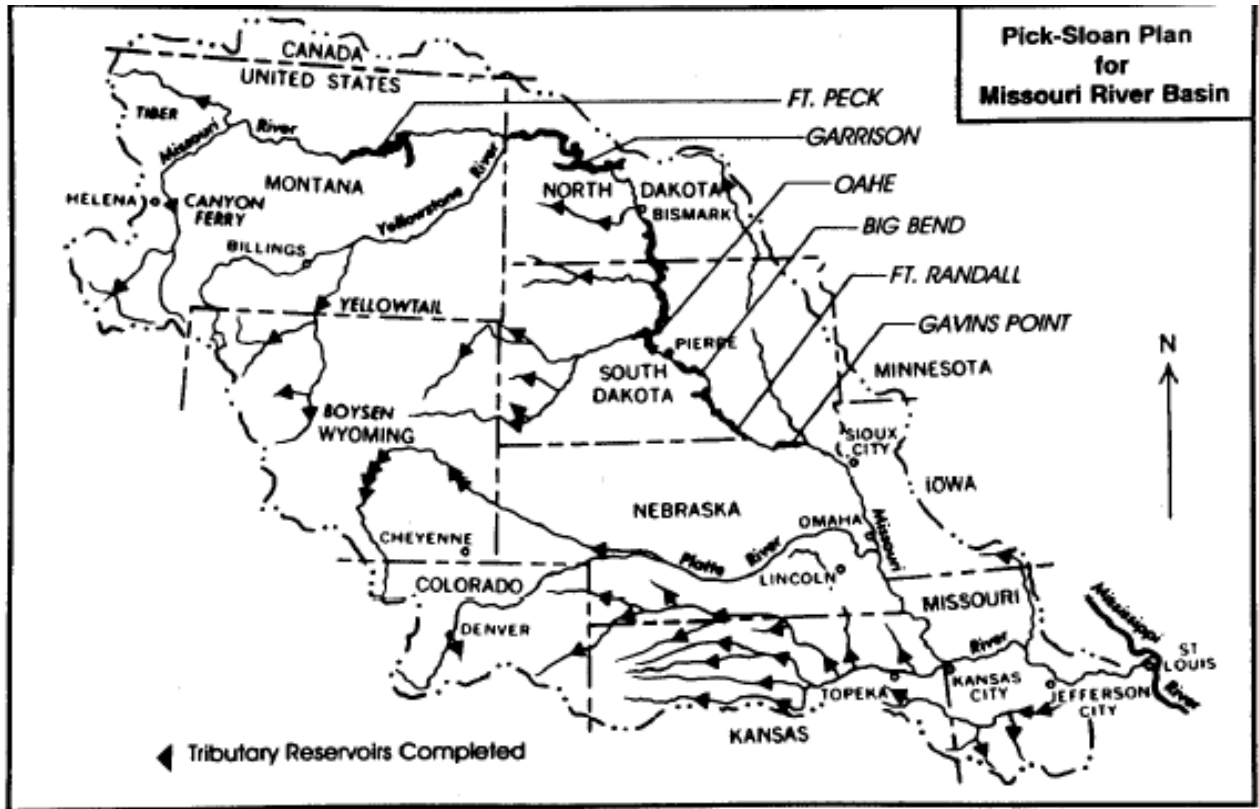
Map 10: Dakota Territory 1861
(Source: http://en.wikipedia.org/wiki/Dakota_Territory)



Map 11: Dakota Territory 1861 – 1863
(Source: South Dakota State Historical Society at
<http://www.sd4history.com/Unit4/dakotaterritorymap.htm>)

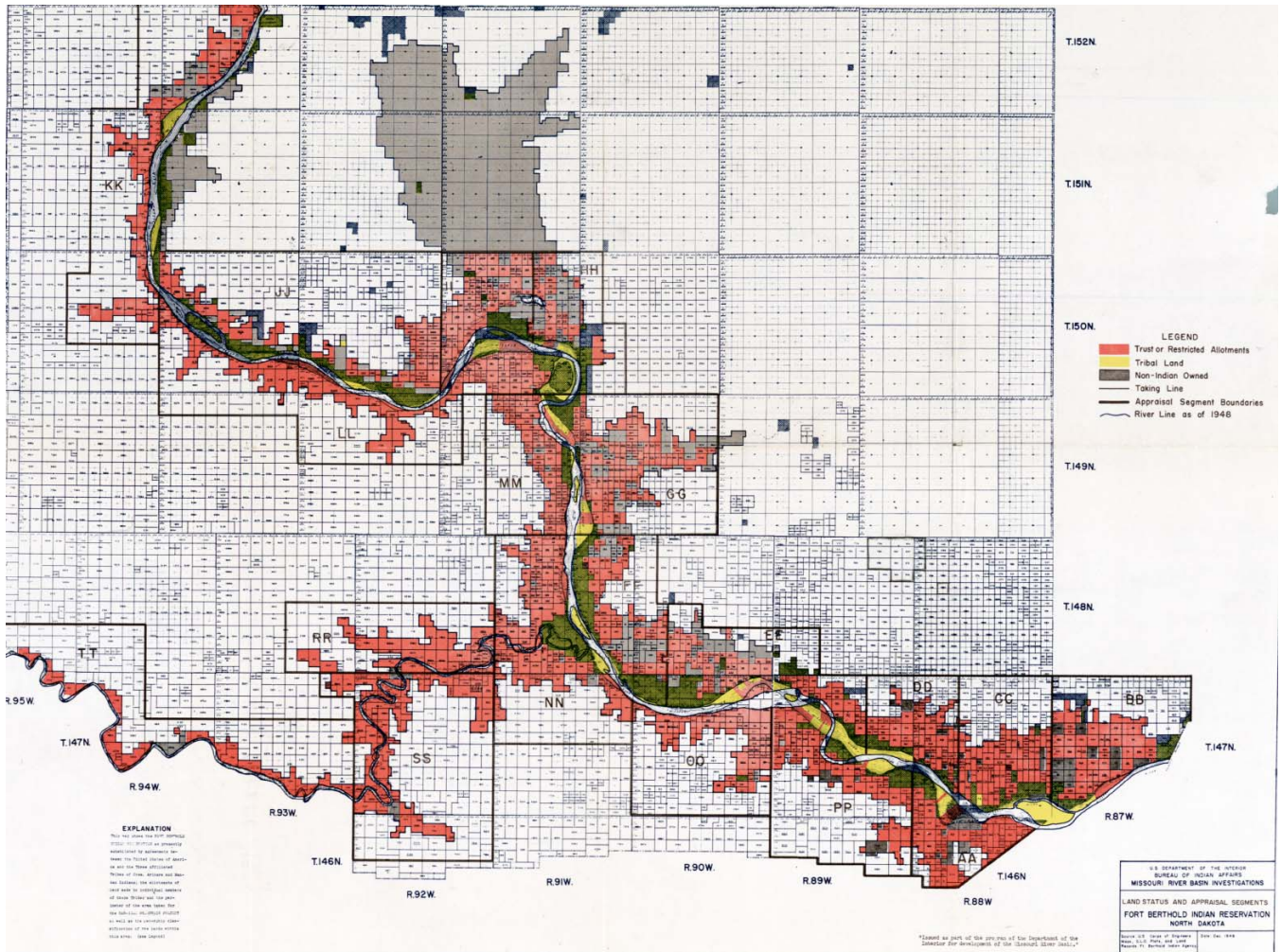


Map 12: Map of Dakota Territory 1863-1889
(Source: <http://pbs.org/weta/thewest/places/states/dakotas/>)

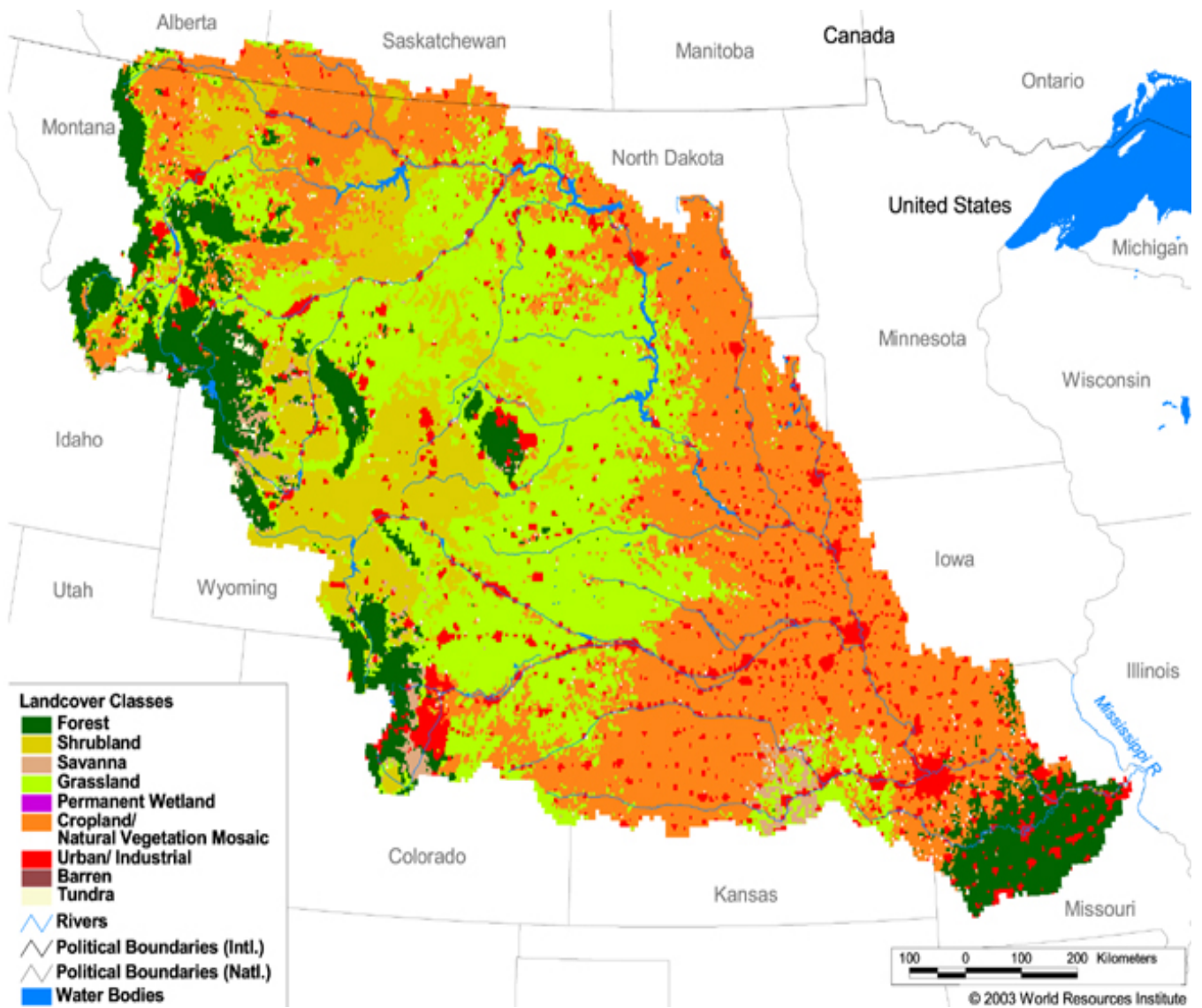


Pick-Sloan Plan for Missouri River Basin

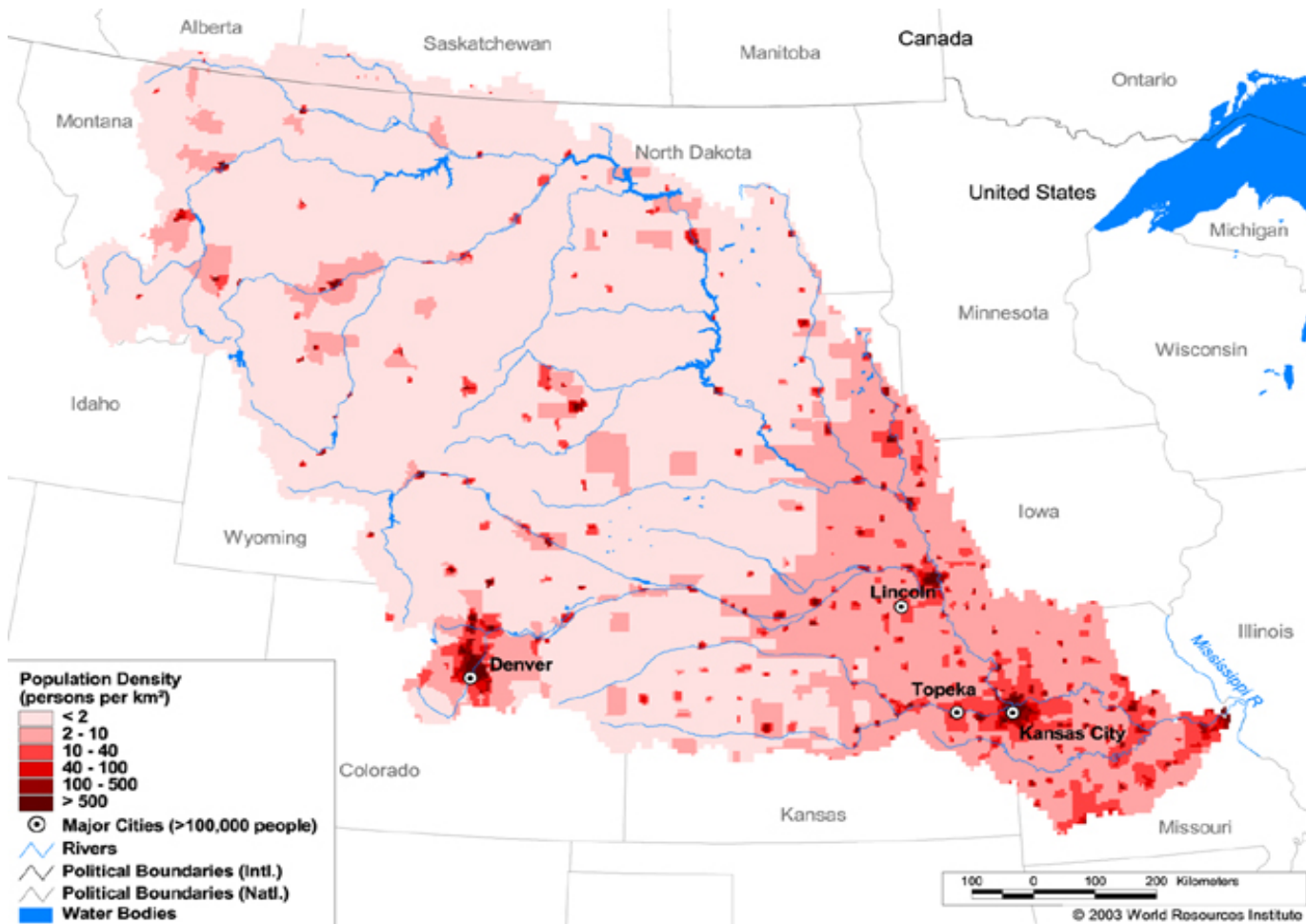
Map 13: The Pick-Sloan Plan for the Missouri River Basin
 (Source: U.S. Army Corps of Engineers Pamphlet at
<http://www.usace.army.mil/publications.eng-pamphlets/ep870-1-42/c-4-2.pdf>)



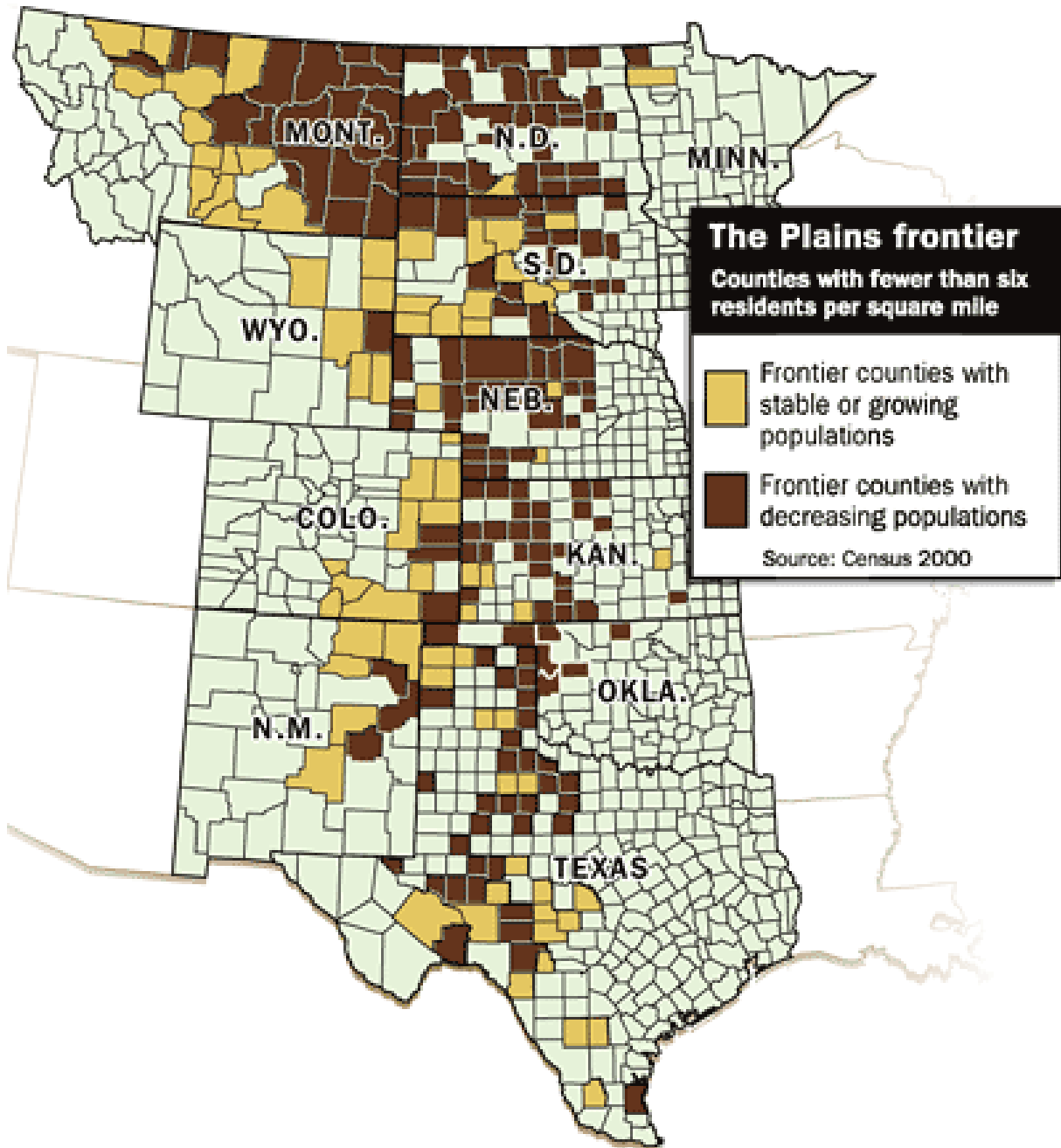
Map 14: The Fort Berthold Indian Reservation in 1948 as mapped by Omaha District, U.S. Army Corps of Engineers for the Bureau of Indian Affairs (Source: National Archives Plains Regional Office, Kansas City, Missouri)



Map 15: Missouri River Basin Landcover Classes
 (Source: Water Resources Atlas – Watersheds of the World at <http://www.waterandnature.org/eatlas/html/na14.html>)

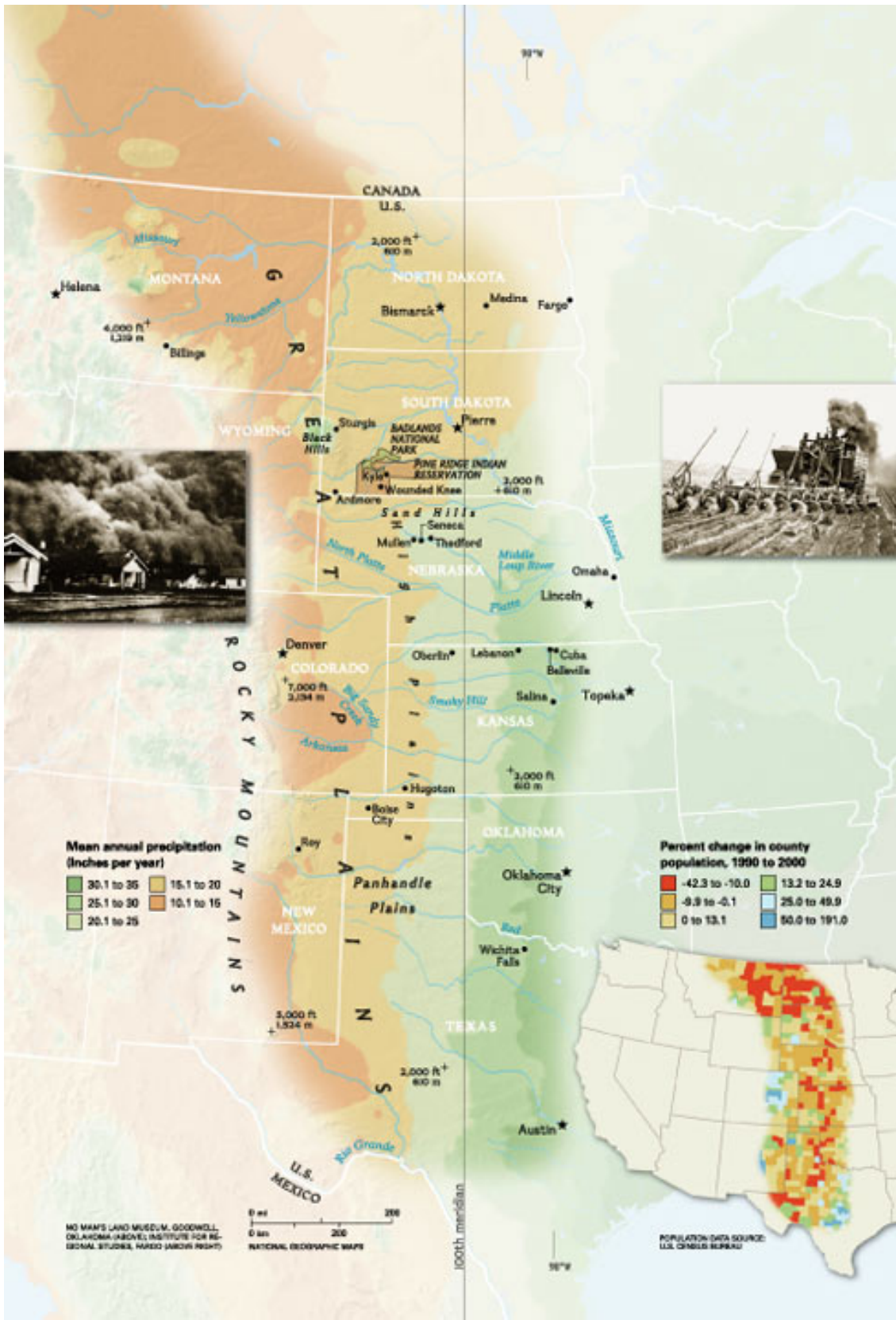


Map 16: Missouri River Basin Population Density
 (Source: Water Resources Atlas – Watersheds of the World at
<http://www.waterandnature.org/eatlas/html/na14.html>)



Map 17: Plains Frontier Counties

Source: Belsie 2003 at <http://www.csmonitor.com/2003/0211/p01s03-usgn.html>



Map 18: The Great Plains Depopulation Phenomenon (Source Mitchell 2004:16)

APPENDIX B: ARCHIVAL DOCUMENTS

APPENDIX B: ARCHIVAL DOCUMENTS

FORT BERTHOLD AGENCY

NEWSBULLETIN

Elbowoods November 8, 1950

Volume 1 ***** No. 8

LAND APPRAISALS ARE HERE AT THE FORT BERTHOLD AGENCY

THE NEWS YOU HAVE LONG AND PATIENTLY WAITED FOR CAN NOW BE GIVEN TO YOU. YOUR APPRAISALS FOR THE LANDS THAT YOU HAVE LOST UNDER PUBLIC LAW 437 IN THE TAKING AREA ARE NOW AT THE AGENCY AND BEGINNING MONDAY, NOVEMBER 13, WE WILL TAKE EITHER YOUR ACCEPTANCE OR REJECTION ACCORDING TO YOUR DESIRE AFTER YOU HAVE LOOKED AT THE PRICES PLACED ON YOUR LANDS.

This is going to be a big job for us. We want to give each of you all the information you want so that you can decide what to do. Just remember that we will have over 1,000 interviews on some 4,000 to 5,000 undivided interests in land and improvements. We must check and recheck your ownership rights. We must explain the values placed on each tract of land, the values placed on all improvements and natural resources such as timber, water or minerals. We can't do this in one day. We figure it will take us at least six weeks to explain the appraised values, take your acceptance or rejection, and to be sure that you are paid for what you own. Remember if we make a mistake it will affect two people, the one who gets the money and the one who loses it.

In discussing this matter with your Tribal Council Chairman, Martin Cross, we agreed that if we would give each district special days to come to the Office we would avoid the rush and confusion that would happen if you all tried to come at one time. So we listed the communities on a sheet of paper and threw eight numbers in a hat and Martin drew to see who would be first. This is the way that it turned out.

INDEPENDENCE No. 1 November 13 and 14

CHARGING EAGLE No. 2 November 15 and 16

LUCKY MOUND No. 3 November 17 and 20

ELBOWOODS No. 4 November 21 and 22

NISHU No. 5 November 24 and 27

BEAVER CREEK No. 6 November 28 and 29

SHELL CREEK No. 7 November 30 and Dec. 1

RED BUTTE No. 8 December 4 and 5

The people in the districts listed will come on the days set for their districts only. If for any reason you cannot come on the days set for you, you will have to wait until the schedule is done. Those who happen to miss will come on December 6 and after that until we get the job done. We can only go so fast and be right and so we can handle only so many people in a day. Some of you may have to come twice, but we can't help that.

OUR OFFICE WILL BE OPEN MONDAY TO FRIDAY EVERY DAY FROM 1:00 P.M. TO 5:00 P.M. UNTIL ALL OF THE ACCEPTANCES OR REJECTIONS ARE COMPLETED. WE NEED FROM 8:00 A.M. TO 12:00 NOON EVERY DAY TO CHECK OUR RECORDS ON THE ACCEPTANCES AND REJECTS TAKEN SO WE CAN BE SURE WE ARE PAYING YOU FOR WHAT YOU ACTUALLY OWN AND ARE ENTITLED TO. WE HOPE EVERYONE WILL REALIZE THAT THIS IS THE MOST IMPORTANT JOB WE HAVE RIGHT NOW AND WE WILL DO EVERYTHING WE CAN TO HURRY THE MATTER ALONG BUT WE MUST HAVE YOUR COOPERATION. ROUTINE BUSINESS WILL SUFFER AS A RESULT OF THIS JOB BUT THAT IS BETTER THAN DRAGGING THIS IMPORTANT WORK OUT ALL WINTER.

Mr. Britton Clair, Chief of Missouri River Basin Land Division and his two assistants, Mr. Jack Lewis and Mr. Walter Wood, and their clerk, Miss Dora Miller, are here from Billings Area Office to explain the appraisals to you. They will work in the Land Division of this Office. Our own land staff under Mr. McSpadden will devote all their time to checking the heirship and land records and to correct any mistakes that may be made. REMEMBER THAT THE FOLKS FROM BILLINGS ARE ONLY EXPLAINING THE APPRAISALS AS THEY WERE APPROVED BY THE BOARD OF APPRAISERS APPOINTED BY

THE SECRETARY OF THE INTERIOR, SECRETARY OF AGRICULTURE AND THE DEPARTMENT OF THE ARMY. THEY DO NOT HAVE AUTHORITY TO CHANGE ANY OF THE APPRAISALS OR TO RAISE THEM. . . .

WHAT TO DO IF YOU REJECT THE APPRAISAL

If after you have looked over your appraisal remember that Public Law No. 437 gives you the right to ACCEPT or REJECT the appraisals. If you decide to reject the appraisals, the Department of the Army will institute proceedings in the United States District Court for North Dakota for the purpose of having that court decide what will be the just amount of money you will receive for your holdings. That decision will be made by the U. S. Court and not by the Indian Service or the Army Engineers. Under Section 6 of Public Law No. 437, you are entitled, as a member of the tribes, to ask the Commissioner of Indian Affairs and have him designate attorneys of the Bureau of Indian Affairs to represent you in court. Section 13 of Public Law No. 437 provides: "No part of such funds shall be used for payment of the fees or expenses of any agent, attorney or other representatives of any individual Indian or Tribe." This means that no part of the "taking area" money can be used to pay for legal service.

If you decide to reject the offer, you need not give any reason unless you want to, but you can ask for any explanation of the appraisal you need information upon. In all cases of rejection, I will simply advise the Indian Office that your desire is to reject the appraisal because it does not meet with your approval and if you desire legal services from the Indian Office, I will also make that request. (Records Group 77, Box 4, National Archives Plains Region, Kansas City, MO).

#2

August 24, 1989

Dear Colonel Hazen:

I am writing to you again on the subject of cultural resources on the Missouri River, and specifically, the Corp's responsibility regarding these resources.

As you will recall, I originally wrote you a letter, also signed by Senators Kent Conrad and Larry Pressler, on December 5, 1988 protesting the elimination of the two archaeological positions for North and South Dakota. It was our assertion that cultural resources along the Missouri are threatened by looting, vandalism and erosion due to low water conditions, and that elimination of the two positions threatened the integrity of these important resources. We stated that it was unrealistic to expect that other, non-qualified, personnel situated in Omaha could adequately protect and identify the threatened resources. In your response dated December 20, 1989 justifying the terminations, you stated that "I am . . . confident that we will be able to successfully protect these valuable cultural resources with the actions I have taken."

When you visited my office in March, I raised the issue again. I was not only concerned about the two positions in question, but also about the appearance that the Corps was trying to get away from its statutory and historical obligations to protect the cultural resources of the Missouri River. At this meeting and in pursuant correspondence, you assured me that the commitment of the Corps to cultural resources was in no way shrinking, and that you fully expected to be able to perform satisfactorily your obligations.

On May 17, 1989, I wrote to General Ryan regarding two issues. First was the Corps' intention to terminate the third and final year of a contract with Augustana College in Sioux Falls, South Dakota, investigating cultural resources at Lake Sakakawea in North Dakota. To the Corps credit, General Ryan stated unequivocally in his letter dated June 9 that the contract would be honored. The second issue I raised again concerned the overall role of the Corps in protecting cultural resources along the Missouri River. While acknowledging manpower and funding problems, General Ryan stated that the district " . . . has taken steps to meet their commitments commensurate with the availability of resources."

While General Ryan's statement appeared to have been something of a retreat from your earlier strong statements assuring protection of the resources, I was willing to give the Corps a chance to do what is required by law -- namely protect

cultural resources along the Missouri River. However, it appears that this objective is in jeopardy.

I have attached a letter to you from Dr. J.R. Fishburne, State Historic Preservation Officer in South Dakota. I believe that Dr. Fishburne's letter clearly explains the situation, and the importance of the Arikara village/burial site. I would echo Dr. Fishburne's recommendations. The Corps should protect the resources and bring its programs into compliance under the law.

Protecting cultural resources is not an optional matter for the Corps of Engineers. It is a basic obligation under the Historic Preservation Act of 1966. Lack of funding, while a legitimate concern, is not reason to let endangered cultural resources be threatened. I believed that eliminating the two archaeology positions for the upper Missouri River fit the saying of "penny wise, pound foolish." Now the Corps must accept its responsibility and protect the resources. As you stated in your letter of December 20, 1988, "The use of contractors or temporary hires will also be considered if conditions warrant." Whatever the method chosen by the agency, the cultural resources must be protected.

I look forward to your reply on this matter.

With best wishes, I am

Sincerely,

/s/ Tom

Tom Daschle

United States Senate

#3

July 7, 1989

The Honorable Quentin Burdick

United States Senator

511 Hart Senate Office Building

Washington, D. C. 20510

Dear Quentin,

Among our nation's most significant cultural resources are those archaeological sites in the Missouri River Trench. Many of these sites, which number in the hundreds and represent upwards of 14,000 years of human habitation in the Dakotas, are the management responsibility of the Corps of Engineers.

In 1985, the Omaha District Corps of Engineers classified 127 archaeological sites on Corps managed property in North Dakota along the Oahe and Garrison reservoirs as being endangered by bank erosion or looting. Today, five years later, 125 of these sites still await attention from the Corps.

The sad but obvious fact is that, at their present levels of effort and commitment, these sites, or major portions thereof, will have disappeared long before the Corps begins to adequately and conscientiously address its congressionally mandated responsibility to protect these properties. With their loss, we lose the ability to explore and understand the prehistory and history of our state and nation.

This issue, and other cultural resource management issues, were the topic of a recent meeting in Mobridge, South Dakota, attended by representatives from the Omaha District Corps of Engineers staff, and State Historic Preservation Offices of both Dakotas. All in attendance agreed the problem related to budget and that budgetary decisions affecting Corps management of cultural resources in the Missouri Trench are made in the Washington, D. C., offices of the Corps, not at the district level.

Considering the years of neglect to which the Corps has subjected these resources, it seems an appropriate time for the Corps to seriously consider reordering its management priorities to include protection of our heritage as represented by these sites.

Much of our ability to understand the prehistory of our region was lost, through inundation of hundreds, if not thousands, of archaeological sites, when the Garrison and Oahe reservoirs were constructed less than half a century ago. Unless the Corps takes immediate action to protect the few remaining archaeological sites under their management in the Dakotas, our states will be much poorer culturally in our second century of existence than in our first.

I urge you to share these concerns with your colleagues in the South Dakota congressional delegation and I appreciate your assistance in resolving this problem. Please contact James Sperry and his staff at the State Historical Society of North Dakota for any documentation you might need in supporting our case. Thanks.

Sincerely,

/s/ Bud

George A. Sinner

Governor

APPENDIX C: SUMMARY NOTES--SOUTH DAKOTA FOCUS GROUPS

APPENDIX C: SUMMARY NOTES--SOUTH DAKOTA FOCUS GROUPS

By Robert A. Dunn and Timothy D. Feather, Ph.D.

Pierre Focus Group (21 July 1997)

Welcome

Dave Vader opened up the session, thanking everyone for their participation and introducing the research team. Bob Dunn also welcomed the group and described the research program and the work unit. He referenced the two Executive Orders that resulted in this program. Mr. Dunn emphasized that we were looking forward to their input and then turned the session over to facilitator, Dr. Dale Brown.

Introductions/Visioning/Thematic Discussions

Dr. Brown introduced the facilitation team and stressed that we were there to listen and to record and lead this group in an unbiased and neutral way. He described the process starting with visioning and introductions, and followed by a discussion surrounding two basic questions:

- (1) What outdoor recreation/leisure activities do Native Americans like to pursue?
- (2) What are some of your recreation/leisure experiences at Corps projects and what improvements or management actions could be taken to enhance those activities?

Dr. Brown noted that the Corps personnel in attendance were there to listen, not participate in the discussions. The goal was to gather information regarding Native American recreation experiences.

Dr. Brown asked the participants to take the cards in front of them to prepare for the visioning exercise. He asked them to create drawings of what type of leisure and recreation-type activities that Native Americans like to pursue. Participants were allowed to make a list of words instead of a drawing if they chose to do so.

Following the creation of the drawings and lists for the visioning exercise, Dr. Brown asked the participants to introduce themselves and present what they created. This exercise went straight into an expanded discussion of the two primary questions. The contents/messages from drawings and lists regarding Native American recreation needs and continuing discussion were as follows:

- As an entree into the visioning exercise, one of the participants made comments as the Grandfather of most of those in the room. He was the Tribal Chairman during the Fort Randall takings and was the official representative of the Crow Creek Tribe in the 1940s and 50s. There was a highly scientific study where empirical information on the basin was developed and studied. This was called the Missouri River Basin Investigation (MRBI). Timber counts, mapping of takings, habitat inventory were all part of the MRBI. There were some high profile studies through the Governors office that overflowed the flooded areas where trees used to exist. Habitat was lost and major sources of fire wood were gone. Much of this was chronicled in a 1953 film on CBS featuring Eric Sevareid in "The American Week". This went beyond displacement of homes, but a loss of important forest lands that were central to the hunting and fuel sources for these people. He suggested that a forest station be a high priority to replace what was lost. This would create jobs and recreation centers as well as provide benefits to the natural environment.
- One participant grew up off the shores of the Missouri River and swam in mud holes. When he visits Fort Thompson, he can envision the beautiful valley the communities formed. He now enjoys the river but does not swim himself. He mainly goes to the river to picnic and watch his children and grand children swim and boat. This usually consists of 15 or so people. It was noted that many are still wondering how good the word of the U. S. government is and if it can be trusted.
- Another participant noted that fishing and horseback riding along the Crow Creek was important before it was dammed up. The fishing used to be good; the water used to be clean. He recalled times where he could drink out of the stream along with his horse. Now the water is too polluted. He used simple means of fishing with a stick, hook, and a grasshopper, using the stick as a bobber. Sometimes they would catch fish with their hands. In modern times they use modern fishing tackle and recreate like most Americans. However, many Native Americans do not have enough money to afford a boat, so they fish offshore. Restoration of fishing habitat should be a priority. This would lead to more recreation and needs for improvements, including planting trees and building benches, which would in turn create jobs for Indians.
- This participant grew up in Pierre with his family and worked with them hunting and gathering wood. Ninety-nine percent of their living came from the timber. They hunted deer and rabbits. Before the islands were taken away when the river was dammed, black-tailed deer were seen. These should be reintroduced because they have spiritual connotations for some Native Americans. He remembers the flooding that reached the Federal Building. Then the dam was built which he helped work on. They have had a good working relationship with the Corps for the last 20 years by cooperating on restoration and mitigation projects, tree plantings, and wildlife restoration. Recreation and mitigation should continue to be the focus. Fishing from the shore at Fort Thompson is very good. There are opportunities for cookouts (centered around birthdays, holidays, and special events, etc.) and swimming. Tourism is very big where land has been redeveloped for camping, although right now there are problems with flooding. Native Americans don't really camp that much, except at powwows.

- This participant works with the Crow Creek and moved from Fort Gates. Native Americans like to do what other Americans do for recreation. There is hardly any difference. The focus of any enhancements should be on employment, e.g. research centers, fish hatcheries, where Native Americans could get jobs and economic development would ensue. Ice fishing is a big winter activity.
- Native Americans like to fish, swim, boat, camp, golf, powwow, hunt, and garden. This participant was not raised on a reservation, but was taught by her grandmother. Native Americans are very naturalistic and creative people, and they make do with what they have. Some don't have a lot of money to go on vacation, so they do with what they have access to. They don't always grow their own berries and corn, but they buy ingredients from the store and make traditional meals. They have powwows, with up to 1,000 people in attendance. This is small compared to some other tribes.
- This participant works as a mental health counselor and a social worker as an urban Indian. He does not fish very much but camps, hikes and goes to powwows. They think about the kids who need a place to go, especially youth at risk. A summer camp with hiking, horseback riding, volleyball, and crafts while teaching values is important. The Corps could set aside a place to camp. Bathrooms, showers, and swimming activities are important. They have an outdoor health center that has Native American training activities to deal with common ailments such as diabetes.
- They like to camp with tents and family.
- This participant works in an Indian education program. Her grandfather moved south to work on the railroad. They like to go to softball games such as the recent memorial tournament. They go to powwows, dancing, drumming and singing. They like campfires and story telling, especially for the kids. They have activities like blindfold walks and listen to the outdoors and animals. They are taught that they are related to everything around them and to give back to Mother Earth. It is important to care for the environment. Walking and looking at herbs, roots, and studying about their medicinal value are common. They eat mushrooms and wild turnips.
- This participant plays softball in several leagues. He is also a drum keeper for powwows. Typically there is a powwow almost every weekend, except he has lost a brother and is now in a period of mourning. They live on the river and the kids like to fish and tell stories.
- This participant lives in Pierre and works with children. She goes to powwows quite often. It is important to have hiking trails where children can go for Native American interpretation and culture. They do not want to lose their identity. Kids drive the activities. They hold youth groups on Friday nights and they always pray before they play.

Before the group took a break it was noted that the relocation due to building the Corps lakes was an important influence moving many off the reservations to the towns. The group then took a ten minute break.

Dr. Brown began with a series of questions based upon points made earlier in the session, as well as additional information that was needed for the primary questions.

Are there some activities that are seasonal in nature or take place in certain seasons of the year?

- The group quickly converged on winter sports activities (cross-country skiing, ice skating, and hockey), which are very popular in that region of the country.

What are some experiences at Corps recreation areas?

- Most Native Americans don't use Corps areas, partially because there are very few Native Americans that work at them. It is in many respects an issue of feeling comfortable and welcome. Some would like the Corps sites better and would attend more often if they were staffed by Native Americans. For example, if a site has a tour guide, the tour might be enhanced by employing the skills and knowledge of Native Americans. It would probably be more interesting to non-Native Americans.
- A survey conducted by a retired legislator asked people at a truck stop why they like to come to South Dakota. The results indicated three major attractions: Mt. Rushmore, Black Hills, and Indians. The survey went on to ask them what they had seen, and it indicated two of the three: Mt. Rushmore and Black Hills. More exposure to Native Americans within the economic fabric will benefit all.
- Much of the recreation management along the shoreline is done by the state of South Dakota, not the Corps. As you get further from the dam, there are more non-Corps recreation sites.
- Some Native Americans would certainly be interested in leases from the Corps to have ready access to Corps lands. As it stands now, cost is a big issue with Native Americans when it costs \$15 to bring a family swimming and \$13 for a night of camping.
- Some suggested that Native Americans should be allowed to go to local Corps recreation facilities without having to pay.

What could the Corps do to attract more Native Americans?

- It should be understood that there are two classes of Native Americans. Those at Pierre are part of a developed economy. Those residing at Fort Thompson, on the reservation, are poverty stricken and unemployment is very high. Recreation that costs money is not a popular activity because it is beyond most people's means at the reservations.
- Develop a program that allows Native Americans free access to the Corps sites. An important suggestion is to employ Native Americans at the Corps site. This familiarity would make it more attractive to Native Americans.

- Fort Thompson is very interested in pulling economic resources out of the river. That is all they have -- the only hope is in the lake. They can do this with local entrepreneurship. If a golf course is built, it should be run by locals. It is definitely a reality that good economic development can arrive in the next few years. There are opportunities now. There are 20 jobs not far away that could be filled.

What are special requirements or needs for powwows?

- Holding a powwow at a Corps facility would almost certainly require a permit. Needed at the site are water, trees, arbor, arena, and camping pads for tents.
- Powwows are very important sources of tourism and enthusiastically followed by the tribes, especially with the prize money. Powwows lead to tourism, which leads to jobs, which leads to money. However, some are traveling to the less commercial, more traditional powwows.

Several points were made during the discussions, some directly related to recreation and others providing some background perspective on the evolving relationship between the Corps and the tribes in the region. These points follow:

- The Corps is often affiliated with displacement and uncertainty because of the history of water resource developments in the region. There are direct reasons for displacement and associated indirect economic reasons. Some ask why you would want to live in poverty when you can get a job elsewhere. This creates conflict and other dimensions of uncertainty and uneasiness.
- Communication in the decision-making process is important; everyone should be included. The Corps has improved tremendously in communications since the 1970s.
- Government-to-government communication appears adequate; there is a trust. But at the grass-roots level there are problems. It is important to get Native Americans on the decision-making boards that strategize on water resources. This representation should not be just legislators, but the grass-roots people.
- The concerns vary geographically. Those at Pierre are less concerned with Lake Oahe, but at Fort Thompson the lake covers their land. At Standing Rock, the dammed river covers their land, and there continues to be some resentment toward the Corps. Some have the attitude that the land is still owned by the tribe and that it is not something for sale. Some of the poverty on the reservations is tremendous and the economic situations are very harsh.
- Someone is getting rich off all of the electrical power being generated. Within the Native American community, the white man is referred to as "spider people" that could bring power and electricity to us that would be of great benefit. There will be money generated from the water systems.

Some of the reservations do not have good water supply (some have "poison" water). Many have very expensive power.

- Compensation for land from the Standing Rock Tribe was supposed to be issued, and only partial payment has been received. This tribe expects some of the land to be returned. This is a type of ongoing conflict that exists between some of the Native Americans and the Corps.
- Sovereignty is an important issue and an important dimension of identity to the Native Americans. They are the indigenous people. When agencies are formulating plans about changes to the land it is very important to get the input from the people who live there.

Dr. Brown asked the group for any concluding messages that they would like to make:

- When making important decisions, please go to the grass-roots people. It is important to come to them.
- Hire Native Americans whenever possible for advertising, design, and maintenance. People want to see Native Americans. The resources generated should be spent on the people of the region. Advertise the tribes widely with signs and brochures saying "This is the Land of". It will attract more people if Native Americans are visible and an integral part of the operation.
- Thanks was offered to participants in this effort, especially to Mr. Vader for his continual support. There is a great concern for the people of impoverished reservations, especially Fort Thompson. It is very difficult for them to focus on recreation when the social undertow is poverty and its associated social problems. There is great uncertainty and concern about activities on Capitol Hill where Native Americans have few friends. Economic development and education are the biggest issues.
- Over the years, good and bad things have happened in tribal politics. Important things are happening through a bill called the Wildlife Mitigation Act. Who are the friends of the Corps? Their biggest nightmare is that the personal relationships developed will fall apart and be used against them. The Missouri River is very important to the tribes in South Dakota. Of the nine tribes, five are on the river. Things are going fairly well at present because the Corps and the Tribes seem to be in control.
- A great deal of literature has been written on the topic of Lake Oahe and the impacts on the Native Americans. Examine other literature and references on Oahe and others in the region.

Summary/Closure/Evaluation

Dr. Brown thanked the participants for their attendance and participation. He handed out evaluation forms. While the participants completed the evaluation forms, Mr. Vader and Mr. Dunn thanked the participants and made comments regarding the efforts of the focus group. Besides benefiting the multiyear research effort, there are some immediate things

that can come from these activities. It can certainly help adjust the priorities at the District. If a line item in the annual O&M budget for dealing with the tribes is created, this would require input from the tribes. The relationships that have been formed are important to maintain and enhance. In one year's time, something could come out of this that would benefit the tribes. They were encouraged to hold the Omaha District accountable.

Fort Thompson Focus Group (22 July 1997)

Welcome

Mr. Vader opened the session by stating that the research was looking at recreation needs. He thanked everyone for participating and introduced the research team. Mr. Bob Dunn elaborated on the purpose of the research, indicating that we are interested in getting data describing the recreation patterns and preferences of Native Americans. The short term impacts could be improvements through the District; the long term impact is that all Corps lake managers will have guidance in support of the special needs of ethnic groups.

Introductory Statements and Discussion

Dr. Brown introduced the facilitation process and pointed out that essentially the same process has been carried out with other Native American groups. Dr. Brown stressed that the research team was there to listen, record, and lead this group in an unbiased and neutral way. He described the process starting with visioning and introductions, then a discussion surrounding two basic questions. The goal of this effort is to gather information regarding Native American recreation experiences.

Dr. Brown asked the participants to introduce themselves and to give the group some ideas as to the types of recreational and leisure activities that they pursue. The responses were as follows:

- One participant spends recreation and leisure time with grandchildren at cookouts and picnics.
- Another participant was employed by the state Department of Natural Resources at Fort Thompson. Mitigation activities are important for the Corps to be involved with, as they are important for recreation. Softball tournaments, powwows, and the rodeo are also important leisure and recreation activities.
- Fishing, boating and picnics are main activities that Native Americans like to pursue in this area. This person felt a fish-cleaning facility with a grinder would be well used and appreciated. This participant works for the Department of Natural Resources as a wildlife biologist.
- Softball tournaments are important recreational activities according to this participant, who also was a Corps employee.

- Another participant spends quite a bit of time with tribal activities. When recreating, fishing and powwows are important.

Dr. Brown then prompted the group to discuss the details of powwows.

- There is an excellent powwow this weekend (Friday-Sunday) at Big Bend, which is a 40-minute drive. It is gaining in popularity, since it has been held for 12 years and is attended by hundreds of people. There are not many facilities there, but people still go, partly because there is prize money for dancers. There is an arbor, they have softball games, and they hold horseshoe tournaments.
- Most people camp out at a powwow. Cooking is typically done at a community building. Cooking used to be done outside, but there were some problems with the health departments. There are regulated vendors come in with food, arts, and crafts.
- The tribal powwows are organized by a committee. It is advertised through posters and the local calendar of events, but not at the Corps project office -- but it should be. It is typically held every third weekend in August. One year there were 1,000 dancers in attendance. The powwow is in the Calendar of Events for the Sioux Nation and brings in many tourists. In all, communication is fairly weak about schedule, advertising, etc. The Corps is not centrally involved, but it has provided maintenance support in the past (e.g. trash bags).

Dr. Brown asked the group what other outdoor activities that Native Americans like to pursue.

- Health consciousness and diets have made hiking very important. There are quite a few diabetics.
- Bicycling, hiking, nature trails, and horseback riding are all common activities. A stable would be very useful where people could rent horses and go for trail rides.
- Many local people don't have boats but they could organize a commercial tour of the North Shore for economic development. There could be a stop at the casino, and during the tour the important sites could be described. This could be organized and managed by Native Americans. Other types of economic development are also possible, including hotels, landing strip, and golf courses.
- Sports such as baseball, football, and golf are all very important. Everyone in the tribe shows up for sporting events such as baseball, boxing, and foot races. The kids are really very good at sports.
- There are not that many traditional elderly, but the "younger" elderly like to do many of the same things as the kids. Children do drive the decisions about recreation.
- Most of the students in Fort Thompson go to a tour of the dam. Some other school groups come in and take tours. For example, there is a school

in Iowa that did fund-raising to support victims of the severe winter, and they are taking a field trip to the reservation that will include the dam. About 40 kids are coming.

- It should be noted that many Native Americans are traditionalists when it comes to spending time with tribal events where privacy is important and appropriate. Sweats, praying, burial grounds, and bones are not really open to the public.

Dr. Brown asked the group what needs to be added or improved for recreation.

- It should be recognized that many recreation needs hinge upon age. For example, there are differences in the needs of children and the young adults. The young adults need a recreation center complex that is alcohol and drug free. It would contain an Olympic size swimming pool, basketball court, etc. It would be similar to a YMCA and open 24 hours per day. This is very important to provide them something else to do. It has to be cared for by them; ownership is important.
- They have two softball fields already, so many more are not needed. Lights for softball would be well-utilized.
- An outdoor amphitheater would be helpful and used frequently. The amphitheater could host plays, music, puppet shows, and story telling. Crowds of around 200 people would be expected. Something like this would help pull tourists off the popular Native American "loop". This is a needed opportunity for tapping into the tourism revenues. Many, many people that vacation at the Black Hills could stop in this part of the state.
- A water theme part would be nice.

What improvements could be made at Corps facilities?

- Crow Creek and the Corps have a very good relationship. The Park ranger is a lifelong resident. They have tribal members on the Corps staff. This is a significant source of pride. They understand the maintenance needs of the Corps projects.
- More information on the significant cultural and historical features of Corps sites is needed and on the wildlife also. A visitation center could be a central feature of the Corps site at the tribe.
- Shower facilities for powwows are needed. The Corps is recognized for taking good care of their facilities. However, fees are charged, (e.g. Big Bend) which is problematic for some Native Americans.
- North Shore doesn't have any smaller areas along the lake. Facilities with water and bathrooms should be there.
- The Iron Nation site (public use area) is very primitive and has a small boat ramp. People do not swim there.
- Soldier Park has very good water quality. There is pure spring water that is very clear. This is an attractive recreation feature.

What could be done to attract people from the surrounding areas and further away?

- Well-advertised fishing tournaments.
- Prairie dog hunting is popular. Tourists will pay \$200 for a good prairie dog hunt. They are quite a nuisance and are not good eating. Some people have mapped the prairie dog towns, which identifies key areas to hunt.
- Taxidermy is a sought-after service.
- Another idea is to have a museum that shows Native American culture and history, and have an adjacent cafe that serves regional food and snacks.
- Tourists will come to Native American powwows. Regional food could be served at these events. This could be tied to the amphitheater at the Corps site. This type of activity, if done right, would also draw more Native American people to the sites. Again, the Corps is recognized for taking good care of its facilities.
- There could be an active Native American village where people could visit (e.g. old Fort Thompson). Some locals have already indicated that they would live there and would provide interpretive services and tours and explain the culture, history, and activities.

Dr. Brown continued by asking, what kind of recreation occurs in the cold weather?

- When it is cold, people play basketball indoors. Outdoor recreation during the cold weather includes hunting, tobogganing, and snowmobiling. They hunt for whitetail deer.

Dr. Brown looked down at the beach area (this focus group was held outside at a pavilion) and asked, what should we see down there that we don't?

- The beach is very crowded on hot days. The beach at this site is very large, about 1.5 miles long. People pull into the parking lot to swim and socialize.
- The kids only have a small floating ramp. They need a bigger one with other features like a water wheel. They need something where they can dive, instead of the bridge.
- The beach could be managed to accommodate the different age groups of children. It could be designed to have some things for bigger children and some for the younger ones. Sometimes the smaller children get picked on.
- Generally, it is critical that the shore be developed more. This means jobs. But the development should be done in a naturalistic way. It shouldn't be a lot of factory-looking pieces.

Does the Corps need to accommodate larger groups?

- Yes, larger shower facilities are needed. A pavilion to fit 50 to 100 people is needed. With the amount of traffic that comes through, it appears the larger facilities would be justified.

- Camping is done at Old Fort Thompson where larger groups may gather.

Is there anything else that would bring other Native American groups to this area?

- Communication is very important. The Corps could help by including calendars and site information in Corps brochures and packets. The Native Americans would certainly reciprocate.
- There should be effective advertising of archeological findings and good interpretation should be provided.
- Communicate with the world wide web. Advertise events that are on the Crow Creek homepage. Create a link to the District homepage which could feature the Sioux Indians highlighting what they have at Corps sites. Presently, the South Dakota School of Mines is helping the tribe with their website. Omaha District has something on-line about the Corps projects; it would be an ideal linkage opportunity.
- This community has an accomplished storyteller who is an important asset to the community. Her story-telling could be advertised, which would certainly draw tourists.

What can be done by the Corps as it considers enhancement of recreation areas? What should they think about to make it Indian-friendly?

- Nature trails and observation points.
- An outdoor theater.
- Historical and cultural buildings and museums.
- Development for water sports.
- Development and maintenance of camp sites with bigger shower facilities.

Dr. Brown concluded the focus group discussion asking if there were any final thoughts or ideas.

- They have been advertising a tour of homes. People, mainly tourists, can arrange to stay in these homes, whether a modern-day facility or a tepee. It gives them a sense of Indian life. The group organizing this is trying to raise funds for the purchase of several tepees.
- Communicate more with the tribes including them in brochures -- information and points of interest. For example, there is an old church that is still standing that would be an interesting site for tourists. There are relatives of Lewis and Clark at Fort Thompson. There is a paleontology site from the Ice Age. The tribe is putting together this type of information and would be very willing to advertise in cooperation with the Corps.
- They have tours of the powerhouses daily.
- The Corps should include Native Americans in its brochures. Not just in the cultural resources sections, but also in the other photographs -- this will appeal to Native Americans.

Summary/Closure/Evaluation

Dr. Brown thanked the participants for their attendance and participation. He handed out evaluation forms. While the participants completed the evaluation forms, Mr. Vader and Mr. Dunn thanked the participants and made comments regarding the efforts of the focus group. Discussions continued afterward during a tour of the area and lunch.

Swift Bird Focus Group (23 July 1997)

Welcome

Mr. Vader opened the session by describing the research at WES as a means of better understanding the recreation and leisure time spent by the Native Americans. This information will be used by the Corps and others on the development and enhancements of recreation sites. Currently, the Corps is involved in making improvements at the Rousseau Creek recreation area. The type of information received at these focus groups would be used to address those types of improvements. Mr. Vader then went on to introduce the rest of the research team.

Bob Dunn elaborated on the WES recreation research effort. He cited Executive Orders from the Clinton Administration concerning the creation of a better government that focuses on customers and environmental justice. This research, which is a multiyear effort, will help the Corps better understand the recreation needs of ethnic groups.

Introductory Statements and Discussion

Dr. Brown introduced the facilitation team. He indicated that this meeting process had been carried out at two other sessions in South Dakota. Dr. Brown stressed that the research team was there to listen, record, and lead the group in an unbiased and neutral way, and that the information being collected was important to the Corps for managing recreation sites.

Dr. Brown asked the participants to take the cards in front of them to prepare for the visioning exercise. He asked them to create drawings of what type of leisure and recreation-type activities that Native Americans like to pursue. Participants were allowed to make a list of words instead of a drawing if they chose to do so. Following the creation of the drawings and lists for the visioning exercise, Dr. Brown asked the participants to introduce themselves and present what they created. The participant responses were as follows:

- Swimming, fishing, and camping are important recreation activities. This participant takes 12 children to the lake everyday to swim and fish. They really like swimming in an area that has a hard bottom.

- Picnicking, hiking, and campfires at clean and well-maintained facilities are important. They have had some problems with the performance of some maintenance contractors at local recreation areas.
- This participant likes to participate in archeological digs. Fishing and boating are also very popular recreation activities. They also like to take their children swimming. Children like to jump off the boat ramps and swim around them, which presents a dangerous situation when boats are pulling in.
- Fishing and spending time looking at nature are important leisure and recreation activities.
- This participant echoed similar general recreation activities as the others, but indicated that he visits recreation sites in surrounding areas. It was suggested that it would be nice if more sites were developed on the reservation side of the lake, with shaded areas, picnic tables -- more like those at the Old Agency site run by the State. There appears to be quite a bit of red tape involved with the development of areas along the lake, which inhibits development of new sites. It was also noted that hunting (ducks, geese, coyotes, deer) is an important recreation activity.
- Cultural activities are important for some Native Americans, including those where wood is needed for fires. Some participate in sweats (sweat lodges) and like to jump in the water/lake immediately afterward.
- Swimming, camping, and volleyball are common recreation activities. They also like badminton. The Whitlocks area is nice because it has volleyball, swimming, and bathrooms.

Dr. Brown then moved the group into a series of topics related to the two primary questions, as well as the topics raised in the visioning exercise.

What are issues concerning swimming areas?

- Safety is very, very important. There need to be designated swimming areas that do not conflict with the other recreation activities in the immediate area. The swimmers need to know how far out they can go in the water before it gets deep.
- Children love to swim. They swim, get muddy, then jump in the water. Some people come by on jet skis and give kids rides; they love it. The kids also like boat rides.
- General maintenance of the areas is important. Many of the areas have smelly dumpsters and bathrooms that are not well maintained. The bathrooms are typically full. In some areas, the mowing is taken care of the State.

What is needed at lakeside picnic areas?

- Many picnic tables are needed on the holidays. Weekends are fairly busy also. Some people travel fairly significant distances to the local recreation areas on the lake (e.g. Eagle Butte).

What do Native Americans like to do for outdoor recreation?

- Powwows are very important and popular, although their hallowed grounds are in very poor condition.
- Powwows were held regularly for a few years, but enthusiasm and organization has diminished. It takes money to run a good powwow. Developing an area for powwows down by the river would be beautiful. They would need to have an arbor for dancing, and a 5-foot pit to cook meals. One hundred people would go to the powwow, but this is a very low number compared to surrounding powwows which are steadily growing in attendance. These usually last 3 days. Some people camp at the powwow; some drive back and forth. Non-Native Americans also attend. In general, most people camp with tents and pop-up campers. At these times, better access to water and shower facilities is needed. In the past, rented portable toilets have been used.
- In the winter Native Americans fish, hunt, ice skate and sled. They also like to go to the salmon runs.
- Softball, basketball, volleyball are all very important and common recreation activities. Children should spend time playing basketball and other activities instead of jumping off the bridge into the lake. People come from all around to jump off the bridge.

What would distract the kids from jumping off the bridge?

- Provide them with quality alternatives. Whitlock campgrounds are of excellent quality. Mobridge and Red Pine have places to swing, climb, including an obstacle course. Softball games also give the kids something else to do.

Does the Corps know when the powwow is held?

- Some of the bigger powwows are advertised widely. However, they simply don't see the Corps because they are not held on or near any Corps facilities. The facility (e.g. camping, bathrooms) needs are driven by the location of the powwow.

The discussion was laced with several comments related to the participants' perspectives on racial differences and stress.

- There is a Corps facility at Mobridge but Native Americans don't feel comfortable there because it is mainly run and attended by white people. There is no eye contact made; Native Americans feel "bucky". Also, kids

have not been exposed to many black people. So there is not really much of a problem, except with whites.

- Native Americans essentially do not cross the river; they don't really associate with the Corps and other white people. There is a general discomfort. Most think that the State does everything that is good and the Native Americans do all that is bad. (for example, Those fishermen who make a mess are the Native Americans, not the whites.)
- Some of the whites are nice to the kids, but others present problems.
- If something were developed, the participants would want it primarily for Native Americans. Their experience has been that when some type of development happens, white people come in and take over. They want to make sure the tribe benefits, even if it means keeping whites away. Whites could spend money at these areas, but not take over.
- Some people do not understand Native Americans. They can't seem to shake the image of "savages."
- There was a person interviewing for a teaching position at a school on the reservation, who was planning to live in Gettysburg. When the intended landlord heard that this person was going to work at the reservation, the landlord doubled his rent. This caused the person to turn down the job. The city people are simply interested in making money off the Native Americans, who are seen as a potential source of revenue.

The facilitator asked several more questions.

What can the Corps do to help?

- Build a facility on the reservation side of the lake. Allow for a gas and bait shop on this side where boats could be rented and boats could be docked. The development really has to be on this side of the river. Most people just drive through, look, and take pictures because they are touring. They like to look at Native American people and the buffalo.
- There is a concern for passing on the culture, but they would be reluctant to open some of their cultural activities for public viewing.
- There could be buffalo-related programs that would include tours.

Who would take care of these sites?

- They could hire Native American people. There are programs and partnerships where wages could be shared. There is a lot of talent in this community (e.g. fishermen, hunting guides).
- They would prefer the Corps manage their sites instead of the State. If Native Americans worked at the sites, there would be more tribal enthusiasm for those areas. More Native Americans would come and feel more comfortable. When Native Americans drive by, they would call out to the workers.

- Church groups come through every year, but they tend to spend most of time and effort in town.

What improvements should be made?

- Make some facilities on the Cheyenne River where they can have convenient access. They would like to take the kids camping at good facilities, like those at Whitlocks.
- It would be nice if there was a fence to keep livestock from going into recreation areas.
- The water level of the reservoir is a problem for some.

Summary/Closure/Evaluation

The representatives from the Corps made closing comments. The information from this focus group will be made part of the current Master Planning efforts by the District. For example, they want to lay some things out for Rousseau Creek that will provide access to the lake. They will use the information from this focus group right away. While some of this may appear trivial, the Corps is moving in a direction to support the needs of Native Americans. The Corps representatives encouraged the Native Americans to move forward on Rousseau Creek and Old Agency planning and development. The land may be returned someday, but something has to be done to it first. Even if the State maintains the land, there is a role for Native American input on the planning side. Stay in close touch with the Omaha District.

The participants were thanked for their time and input and asked to fill out evaluation forms as they left the meeting.

APPENDIX D: NOTES ON ARCHIVAL RESEARCH

APPENDIX D: NOTES ON ARCHIVAL RESEARCH

U.S. National Archives –Plains Region (Kansas City, Missouri)

Archival research at the National Archives Plains Regional Office in Kansas City, Missouri primarily focused on Record Group 75 (Bureau of Indian Affairs) and Record Group 77 (U.S. Army Corps of Engineers). The following list provides the provenience of the examined documents contained in these record groups. Following this listing is a short discussion of the most useful archival documents organized by topic.

Record Group 75 (Bureau of Indian Affairs)

According to archivist, Tim Rives, Record Group 75 contains records of the Bureau of Indian Affairs, Aberdeen Area Office, Aberdeen, South Dakota, including transaction case files and land lease case files. Dates vary but include 1929-1961 (box numbers on the boxes on 39/3/9-13 are different from the handwritten list since they were reboxed May 2002).

The following boxes were personally examined by the author.

Series 517042 Box 17 – This box contained the Standing Rock reservation censuses from 1884-1939. It also contained a series of Plat maps and a book of plat maps dated March 13, 1913.

Series 518723 Box 61 – BIA file on the Fort Berthold Indian Reservation containing copies of legislation, original maps, progress reports and Indian claims against the U.S. government during the period 1946-1952

Box 81 – BIA file containing the Minutes from Cheyenne River Sioux meetings during the period October 30 through November 1, 1952

Box 103 – BIA correspondence with the Cheyenne River Sioux 1951-1952 and with the Crow Creek Sioux 1943-1950 and 1951-52

Box 104 – BIA Minutes of Meetings held in 1946 pertaining to the Garrison Dam Project

Box 106 – BIA Correspondence with Standing Rock Sioux 1943-1049

Box 174- General Correspondence of the Bureau of Indian Affairs 1944-1946

Box 195 - BIA files on the Crow Creek Reservation containing copies of state and federal legislation during the period 1934-1956.

Audiovisual Records Reference Copies Box 2– Aerial photo negative of the 1930’s Missouri River prior to impoundments constructed by the U.S. Arm Corps of Engineers.

Record Group 77 (U.S. Army Corps of Engineers, Omaha District Historical Files)

Box 3 – Miscellaneous documents prepared by Omaha District during the period 1944-1969.

Box 4 – District history files during the period 1948-1961. Also contains documents collected by Omaha District e.g. newspaper articles, pertaining to General Lewis A. Pick during the period 1946-1953)

Box 5 – Documents pertaining to General Lewis A. Pick collected by Omaha District during the period 1952-1956.

Box 13-3 and Box 14-1– Folder labeled the “Pick-Sloan Plan” Also contains article entitled “The Missouri River Basin and the Pick-Sloan Plan” by Charles D. Turner, prepared for Professor Henry P. Caulfield at the Water Resources Policy Institute dated May 1978.

Box 14 - Folder #5 contains Comprehensive Missouri Basin Development Plan

Box 16 – Folder #1 contains miscellaneous correspondence and internal reports pertaining to the Pick-Sloan Plan

Box 20 – Folder #1 contains copy of First Missouri River Inspection by the Omaha District.

Box 22 – Folders 1-11 contain general correspondence between Omaha District and other state and federal agencies on the Pick-Sloan reservoirs.

Box 32 – Folders 1-11 contain Omaha District General Correspondence

Box 48 – File marked “Interesting Items” contains 1952 Omaha District report entitled “Lewis and Clark’s Expedition 1804-1806: A Brief Synopsis taken from the Original Diaries of Members of the Lewis and Clark Expedition.” Also contains a 1948 National Park Service/Department of Interior Report on Historic Sites in the Fort Randall Reservoir Area prepared for the Omaha District. This report appears to be part of the Missouri River Basin Survey. The final item is an 1867 Missouri River Survey by C.W. Howell.

Useful National Archives Documents Organized by Topic

Fort Berthold Indian Reservation (Record Group 75)

Fort Berthold Agency News Bulletin (Elbowoods, SD), Vol. 1, No. 8, November 8, 1950

United States Department of the Interior, Office of Indian Affairs, Field Service, Billings Area Office, Letter to Mr. G. Warren Spaulding, dated August 9, 1950

BIA Special Report to the Area Director, Concerning the General Relocation Problems of the Fort Berthold Agency and Current Status of the Work, August 9, 1950

Minutes of Tribal Business Council, Fort Berthold Indian Reservation, Special Meeting, July 19, 1950

BIA Aberdeen Area Office, Letter dated February 20, 1950, to Commissioner of Indian Affairs, Washington, D.C., Pertaining to Construction of Roads to Serve the Indian Families Who Must Relocate Due to the Construction of Garrison Dam

Bureau of Indian Affairs, Washington, D.C., Letter dated April 18, 1950, to Major Gen. Lewis A. Pick, Chief of Engineers, U.S. Army Corps of Engineers, Washington, D.C., Regarding Project No. 341-B-3 (Reconstruction Facilities, Fort Berthold Agency)

Fort Berthold Tribal Business Council's Report to the Members of the Three Affiliated Tribes on the Business of our Trip to Washington, D.C. on March 6, 1950 (Author, Carl Whitman, Jr., Chairman, Tribal Business Council)

The Congressional Record of the Hearing before the Committee on Indian Affairs, United States Senate, Seventy-Ninth Congress, on S. J. Res. 79, A Bill Establishing a Joint Congressional Committee to Make a Study of Claims of Indian Tribes Against the United States, and to Investigate the Administration of Indian Affairs, (Protesting the Construction of Garrison Dam, North Dakota, by the Fort Berthold Indians), dated October 9, 1945

(Draft) Contract By and Between the United States and the Indians of the Fort Berthold Reservation as Provided for by Public Law 296 – 80th Congress First Session, 1948

Fort Berthold Tribal Council Meeting at Shell Creek, January 17, 1951, on Shell Creek Relocation Meeting

Fort Berthold Tribal Council Relocation Meeting for Independence District, December 20, 1950

Fort Berthold Tribal Council Relocation Meeting, Beaver Creek District, December 13, 1950 (Meeting Called to Order by George Gillette, Tribal Council Chairman)

The Congressional Record of the Hearings before the Committee on Indian Affairs, House of Representatives, Seventy-Seventh Congress, First Session on H. R. 46, A Bill for the Relief of the Indians of the Fort Berthold Reservation in North Dakota, dated April 23, 1941 (Fort Berthold Indians)

Fort Berthold Tribal Council Relocation Meeting on Nishu District, December 11, 1950 (Meeting Called to Order by William Deane, Jr., Chairman, Nishu District Tribal Council)

Bureau of Indian Affairs, Department of the Interior, News Release dated May 20, 1948, on Contract with Fort Berthold Indians (Official Announcement of Signing of Contract Between General R. A. Wheeler, Chief, Corps of Engineers, and the Tribal Business Council of the Fort Berthold North Dakota Indian Reservation)

BIA Letter, (no date), Received June 2, 1952, Aberdeen Area Office, to Commissioner, Bureau of Indian Affairs, Washington, D.C., written in connection with the action of the Fort Berthold people in calling for a referendum vote to determine whether or not the Tribal Council Resolution of April 13, 1951, providing for a Tribal Program, would be retained or rescinded.

BIA Letter, (no date), Received November 7, 1952, Aberdeen Area Office, to Mrs. Stella Maetgold, describing Fort Berthold Indians' attitude toward removal

Report of Wilkinson, Boyden & Cragun on the Claims of the Three Affiliated Tribes of Fort Berthold Reservation, as Discussed with Messrs. Martin Cross, Carl Whitman, and B. J. Youngbird, Tribal Delegates, Upon the Occasion of Their Trip to Washington, March, 1952

Cover Letter from Secretary of Interior, J. A. Krug, to Hon. Robert F. Patterson, Secretary of War, dated December 27, 1946, regarding Fort Berthold Indian Reservation selection and offer of Lieu Lands (Krug's opinion is that the War Department's offer did not provide lands "comparable in quality and sufficient in area to compensate" the Indians for the lands to be inundated in the reservoir area, and withholding his approval at this time.)

Accompanying Memorandum from Acting Commissioner of Indian Affairs to Secretary of Interior, dated December 27, 1946, setting forth his reasons for withholding approval of the offer of Lieu Lands to the Indians of the Fort Berthold Reservation

Minutes of Meeting in Assistant Secretary Davidson's Office, December 23, 1946, for the Purpose of Obtaining the Views of the Three Affiliated Tribes of the Fort Berthold Reservation on the Lieu Lands Offered by the Secretary of War (Second Meeting: first meeting held December 16, 1946)

Sioux Land Loss From the Pick-Sloan Reservoirs (Record Group 75)

Minutes of the Cheyenne River Sioux Tribal Council held at Cheyenne Agency, South Dakota, October 30, 31, 1952, November 1, 1952, Frank Ducheneaux, Chairman, Alice Bowker, Secretary, Percy E. Philips, Treasurer (Includes all correspondence from Corps of Engineers and Bureau of Indian Affairs pertaining to the construction of the Lake Oahe Project)

Letter from Congressman E. Y. Berry to Richard LaRoche, Lower Brule, South Dakota, Alice Jandreau, Lower Brule, South Dakota, Supt. R. B. McKee, Ft. Thompson, South Dakota, Herbert Wounded Knee, Harrold, South Dakota, and Vernon Ashley, Ft. Thompson, South Dakota, dated May 8, 1952, progress report on bill providing for negotiations between the army, the Indian Department, and the tribes for settlement of lands to be taken and the rehabilitation of the two reservations following such settlement.

Record of telephone conversation with the Washington Office and J. M. Cooper, Area Director, Bureau of Indian Affairs, relative to the Advisability of Having Crow Creek and Lower Brule Tribal Delegations Testify in Behalf of H.R. 7592

Congressional Bill H. R. 8293, 82nd Congress, 2nd Session, dated June 19, 1952, to authorize the negotiation and ratification of separate settlement contracts with the Sioux Indians of the Lower Brule and the Crow Creek Reservations in South Dakota for Indian lands and rights acquired by the United States for the Fort Randall Dam and Reservoir, Missouri River Development; and to authorize an appropriation for the removal from the taking area of the Fort Randall Dam and Reservoir, Missouri River Development, and the reestablishment of the Indians of the Yankton Indian Reservation, South Dakota.

Congressional Bill H. R. 5097, 81st Congress, 1st Session, dated June 9, 1949, introduced by Mr. Morris, for the administration of Indian livestock loans, and for other purposes.

Congressional Bill H. R. 5098, 81st Congress, 1st Session, dated June 9, 1949, introduced by Mr. Morris, to authorize the leasing of restricted Indian lands for public, religious, educational, recreational, business, and other purposes requiring the grant of long-term leases.

Congressional Bill H. R. 5099, 81st Congress, 1st Session, dated June 9, 1949, introduced by Mr. Morris, to authorize the United States to purchase restricted lands of individual Indians, and for other purposes.

Congressional Bill H. R. 8293, 82nd Congress, 2nd Session, dated June 19, 1952, introduced by Mr. Berry, which was referred to the Committee on Interior and Insular Affairs, to authorize the negotiation and ratification of separate settlement contracts with the Sioux Indians of the Lower Brule and the Crow Creek Reservations in South Dakota for Indian lands and rights acquired by the United States for the Fort Randall Dam and Reservoir, Missouri River Development; and to authorize an appropriation for the removal from the taking area of the Fort Randall Dam and Reservoir, Missouri River Development, and the reestablishment of the Indians of the Yankton Indian Reservation, South Dakota.

Letter from Frel W. Owl, Superintendent, Crow Creek Agency, Fort Thompson, South Dakota, to Mr. Vernon Ashley, Secretary, Crow Creek Tribal Council, dated May 25, 1949, regarding construction of dam at Fort Randall and a proposal for the construction of an additional dam in the Big Bend area.

Letter from Frell W. Owl, Superintendent of Crow Creek Agency, Fort Thompson, South Dakota, to Mr. Vernon Ashley, Secretary, Crow Creek Tribal Council, dated June 17, 1949, regarding reversion of American Island to the United States.

Letter from Allan G. Harper, Assistant Regional Director, United States Department of the Interior, Office of Indian Affairs, Region No. 2, dated May 17, 1949, to Frell M. Owl, Superintendent, Crow Creek Agency, Fort Thompson, South Dakota, regarding delay in coming to an agreement on legislation on Oahe Dam in relation to the Cheyenne River and Standing Rock Reservations.

Letter Report from National Congress of American Indians, dated August 13, 1946, to all Indian tribes regarding the signing of the Indian Claims Commissions Bill, written by N. B. Johnson, Claremore, Oklahoma, exhorting tribes to present their land claims before the Land Claims Commission created by this law.

Corps of Engineers, Omaha District, and Pick-Sloan Reservoirs (Record Group 77)

Address of Maj. Gen. Lewis A. Pick to Nebraska Bankers' Association, November 10, 1948, Fontenelle Hotel, Omaha, entitled "Missouri River Development, A Sound Investment" (Pick lays out economic justification for construction of the Pick-Sloan Plan).

Report entitled "The Missouri River Basin and The Pick-Sloan Plan" by Charles D. Turner, prepared for Professor Henry P. Caulfield, PO792 – Water Resources Policy, May, 1978. (Report effectively compares and contrasts the original Pick versus Sloan plans).

Omaha District Construction Division Memorandum dated March 20, 1963 on Basic Topographic Data Files (Aerial Photos resulting from Aerial Surveys from 1930, 1936, 1937, 1938, 1939, 1941)

Records of the Office of the Chief of Engineers, Missouri River Division, Civil Work Projects Photographs, Photo Unit [PU], Subject Heading List (Only Pick-Sloan Reservoirs shown here), Box No. 1-11, Big Bend; Box 12, Fort Peck; Box 13-29, Fort Randall; Box 30-38, Garrison Dam; Box 39-51, Gavins Point; Box 52-79, Oahe; Memorandum includes Administrative History of the Fort Berthold Agency from 1851 to 1991, prepared by K. Miller, 6/24/91.

Original Missouri River -Pre-Reservoirs (Record Group 77)

Map of Missouri River and accompanying Report, prepared 1868, by Br. Maj. C. W. Howell, Captain of Engineers, submitted to Gen. A. A. Humphrey, Comm. Corps

Engineers, with letter of Colonel Macomb, Corps of Engineers, dated January 7, 1868, Cincinnati, Ohio.

Letter to Br. Maj. Gen. A. A. Humphrey, dated January 14, 1868, from J. N. Macomb, Brvt. Colonel of Engineers, enclosing the report of his assistant, Brvt. Major C. W. Howell, Capt. of Engineers.

Bureau of Indian Affairs Regional Office, 115 4th Avenue, S.E, Aberdeen , South Dakota

Initial coordination with archivists at the Bureau of Indian Affairs was performed by the author in June 2003. The BIA staffers indicated that all historic documents relevant to the author's research were currently archived at the U.S. National Archives Plains Regional Office in Kansas City, Missouri. They did indicate, however, that a series of new GIS overlays were available to researchers interested in the historical geography and the shifting boundaries of the Sioux and Fort Berthold Indian reservations in the Dakotas during the late 19th and early 20th centuries. At the author's request these large GIS maps were sent to him in Vicksburg, Mississippi as reference materials. The descriptions of these BIA GIS maps provided below should assist future researches interested in the historical indigenous geography of the tribes affected by America's westward expansion and the later construction of the Pick-Sloan reservoirs.

Map 1 (36 inches x 50½ inches)

Title: 1851 Sioux Nation Current Reservation Lands

Prepared by: U. S. Department of the Interior-Bureau of Indian Affairs Great Plains Regional GIS 10/01/99

Legend color-coded

- Treaty of Fort Laramie with Sioux, September 17, 1851 (11 Stat. 749)
- Treaty Reservation Boundary, April 29, 1868 (15 Stat. 635)
- Amend Reservation Boundary, Act of February 28, 1877 (19 Stat. 254)
- Sioux Nation Split, Act of March 2, 1889 (25 Stat. 888)
- Current Reservations, Rosebud Reservation diminished by the Acts of April 23, 1905, March 2, 1907, May 30, 1910. Pine Ridge Reservation diminished by the Act of May 27, 1910. Lower Brule Reservation diminished by the Act of April 26, 1906.
- Federal Lands

Map 2 (36 inches x 50½ inches)

Title: 1889 Reservation Establishment, 1851 Fort Laramie Treaty

Prepared by U. S. Department of the Interior-Bureau of Indian Affairs Great Plains Regional GIS 10/01/99

Legend color-coded

- 1851 Original Fort Laramie Treaty Area
- 1868 Great Sioux Nation
- Amended Reservation Boundary 1877

- Sioux Nation Split, March 2, 1889 (25 Stat. 888) 11,883,325 Acres
- Black Hills National Forest Streams and Rivers
- Black Hills National Forest Boundary

Map 3 (36 inches x 50½ inches)

Title: 1877 Black Hills Taking, 1851 Fort Laramie Treaty

Prepared by: U. S. Department of the Interior-Bureau of Indian Affairs, Aberdeen Area
GIS 05/06/99

Legend color-coded

- 1851 Original Fort Laramie Treaty Area
- 1868 Great Sioux Nation
- Amended Reservation Boundary, February 28, 1877 (19 Stat. 254) 20,330,122 Acres
- Black Hills National Forest Streams and Rivers
- Black Hills National Forest Boundary

Map 4 (36 inches x 50½ inches)

Title: 1851 Sioux Nation Fort Laramie Treaty

Prepared by: U. S. Department of the Interior-Bureau of Indian Affairs, Aberdeen Area
GIS 09/06/96

Legend color-coded

- Treaty of Fort Laramie with Sioux, September 17, 1851 (11 Stat. 749)
- Treaty Reservation Boundary, April 29, 1868 (15 Stat. 635)
- Amend Reservation Boundary, Act of February 28, 1877 (19 Stat. 254)
- Sioux Nation Split, Act of March 2, 1889 (25 Stat. 888)
- Federal Lands

Map 5 (36 inches x 50½ inches)

Title: Great Sioux Nation 1868 Fort Laramie Treaty

Prepared by: U. S. Department of the Interior-Bureau of Indian Affairs, Aberdeen Area
GIS 02/24/97

Legend color-coded

- 1851 Original Fort Laramie Treaty Area
- Treaty Reservation Boundary, April 29, 1868 (15 Stat. 635) 27,240,179 Acres
- Black Hills National Forest Streams and Rivers
- Black Hills National Forest Boundary

U.S Army Engineer Research and Development Center (ERDC), Research Library, Waterways Experiment Station, Vicksburg, Mississippi

A complete set of the Annual Reports of the Chief of Engineers, U.S. Army Corps of Engineers is archived at the Research Library at the Waterways Experiment Station in Vicksburg, MS. These reports contain detailed information on the construction of the Pick-Sloan Reservoirs on the main-stem Missouri River. They also include synopses of the major obstacles encountered during the construction of these dams, including the

problems of relocating Indian people from their homeland. The author reviewed all annual reports of the Chief of Engineers for the thirty-year period from 1940 to 1970. In addition, many of the journals and books shown in the References Cited section of this dissertation were obtained through inter-library loans with the ERDC research library. The author wishes to acknowledge the great efforts of senior librarian Mr. Don Kirby in obtaining these reference materials.

APPENDIX E: LTG LEWIS A. PICK ARCHIVE

APPENDIX E: LTG LEWIS A. PICK ARCHIVE

**Office of History
U.S. Army Corps of Engineers
7701 Telegraph Road
Alexandria, VA 22315**

The archival holdings of the U.S. National Archives Office in Kansas City relating to the construction of the Pick-Sloan reservoirs are extensive but shed relatively little light on the mind and character of Lewis A. Pick, the most important figure in the history of the Corps' turbulent interaction with the tribes of the Missouri River Valley in the Dakotas. During discussions with members of my dissertation committee in the fall of 2006 the question arose if there was a separate archive of Lewis Pick documents located somewhere else. Subsequently, I began coordination with the Corps of Engineers' Office of History at Fort Belvoir, Virginia to answer this question. I discovered that the Corps maintained a large archive on Lewis Pick which included 15 archival boxes of General Pick's papers, plus three oversize boxes and one box of photos. With the assistance of Drs. Paul Walker and Michael Brodhead in the Office of History I was able to obtain a copy of the Corps official biography of General Pick and the Office of History's "finding aid" to the papers of LTG Lewis A. Pick. Due to severe time constraints I was not able to travel to Virginia to examine these papers first hand. However, the information they contain may help some future researcher answer the key question as to why Lewis Pick made the decisions on reservoir construction and placement that have so altered the physical and cultural landscape of the Missouri River Valley.

Official Biography of LTG Lewis A. Pick, Chief of Engineers

For thirty-five years, Lieutenant General Lewis A Pick, thirty-fifth Chief of Engineers, built things for the United States Army. When he retired on 9 February 1953, after a multi-billion dollar building career, he had not only come up with the answer to flood control, but had also supervised the building of 56 air fields and hundreds of camps, the famous Ledo Road in Burma, popularly known as "Pick's Pike," a dozen-odd dams and scores of other projects.

Lewis Andrew Pick was born on 18 November 1890 at Brookneal in southern Virginia, and spent his childhood in the nearby town of Rustburg, where he received his early schooling. As a boy he traveled throughout the southern Virginia area, visiting relatives and working wherever work was to be found. In 1910, Lewis Pick entered Virginia Polytechnic Institution Blacksburg, Virginia, where he received his first exposure to military life. He excelled both as a cadet and as an athlete earning letters in three major sports, setting school record in the discus event, and serving as captain of the football team. In his senior year, he was selected as an all-conference tackle. He graduated in June 1914 with a Bachelor of Science degree in Civil Engineering.

Following his graduation from VPI Pick took employment with the Southern Railroad as a civil engineer. By the spring of 1917 he had worked his way up to the position of Supervisor of the 131-mile distance between Greensboro and Goldsboro, North Carolina. Then, when the United States entered World War I, he joined the Army.

After attending Officer's Training Camp at Fort Oglethorpe, Georgia, and Fort Belvoir, Virginia, he was appointed a First Lieutenant in the Corps of Engineers Reserve on 15 August 1917. He served his first duty with the Office of the Chief of Engineers, but that tour soon ended with his assignment to the 23d Engineer Regiment. He sailed for France in March 1918 where he participated in the Meuse-Argonne campaign and was promoted to Captain in September 1918. After the Armistice he served in England for a short time, returning home for discharge on 4 September 1919.

Life on the railroad provided very little of the excitement and travel to which he had become accustomed during the war, so he soon applied for a commission in the Regular Army. This application was approved and on 1 July 1920 Pick was appointed a Second Lieutenant in the Corps of Engineers and was promoted that same day to the rank of Captain.

His first assignment in the Regular Army was at the Presidio of San Francisco in the Office of the Ninth Corps Area Engineer. Late in 1920 he was ordered to the Philippine Islands where he served first with the 3d Engineers and later with the 14th Engineers of the Philippine Scouts, which he helped organize. Before returning to the United States in 1923, he made an extensive trip through China, Manchuria, Siberia, and Japan, developing a knowledge of Oriental peoples which would stand him in good stead in later years.

Following a brief administrative assignment at Fort Humphreys, Virginia, Pick was detailed to the Engineer School at that post as a student officer. Graduated in Jun 1924, he served at Summer Camp at the ROTC at Camp Meade, Maryland. Then in September, 1924, he became Professor of Military Science and Tactics at Alabama Polytechnic Institute in Auburn, Alabama.

While at Auburn he married Miss Alice Cary, daughter of Dean Charles Allen Cary of Auburn. Their son, born in 1927, followed in his father's path. Lewis A. Pick, Jr., graduated from West Point in 1950 and accepted a commission in the Corps of Engineers, retired in 1973 with the rank of Colonel. Leaving Auburn in 1925, Captain Pick was assigned to the Corps of Engineers' New Orleans District, becoming District Engineer in 1927. During the great Mississippi River flood in 1927, he served as Herbert Hoover's engineer assistant on the Relief Commission to the stricken area.

In 1928, he was assigned to Texas Agricultural and Mechanical College in College Station, Texas. There he organized the Engineer ROTC unit which has since produced so many outstanding engineering officers. After four years of this duty, he was transferred to the Command and General Staff School at Fort Leavenworth, Kansas, where he served two years as a student officer and four more as an instructor. During this time, on 1 August 1935, he was promoted to the rank of Major. Pick finally completed his formal education with a course at the Army War College. This was followed in 1919 by an assignment as Executive Assistant to the Division Engineer of the Ohio River Division in Cincinnati. He remained at this post until April of 1942, and was promoted first to the rank of Lieutenant Colonel (18 August 1940) and later Colonel (24 December 1941.)

Colonel Pick's next assignment was to serve as Division Engineer of the challenging Missouri River Division. The region of the Middle West was the site of a 1.5 billion dollar military construction program as part of the nation's mobilization efforts for the Second World War. The Division Engineer's responsibilities extended beyond this, however; during his tour of duty Pick evolved the so-called "Pick Plan," subsequently modified and now known as the "Pick-Sloan Plan," for controlling and utilizing the waters of the Missouri River system.

In October of 1943, Pick was assigned to the China-Burma- India Theater of Operations where he was made responsible for supplying American and Chinese troops operating in Burma. To accomplish this, he undertook the construction, operation, and maintenance of the Ledo Road. This road, popularly known as "Pick's Pike," was one of the greatest achievements in the history of military engineering. In recognition of his accomplishments in Burma, Pick was promoted to Brigadier General in February of 1944 and to Major General in March of 1945.

General Pick returned to the United States in September of 1945. After a short tour in the Office of the Chief of Engineers, he returned to Omaha to serve once again as Chief of the Missouri River Division. There he made great strides toward the realization of the Pick-Sloan Plan. He also directed the successful "Operation Snowbound" in the winter of 1948-49, bringing relief to the frozen disaster areas of Wyoming, Nebraska, and the Dakotas. His assignment as Division Engineer ended when, on 1 March 1949, he was appointed Chief of Engineers and ordered to Washington.

The start of General Pick's tour of duty as Chief of Engineers found the Corps civil functions under heavy attack. The Corps of Engineers stood upon its achievement, and his record was enhanced by many splendid accomplishments during Pick's term of office. However, the problem was not resolved until after his successful flood fight of 1952 in the Missouri Basin, when the President expressed the conviction that retention of civil works functions by the Corps was in the best interest of the United States.

Then, for the third time in recent years, the outbreak of hostilities in Korea causes a transition of Corps of Engineers' activities from civil to military. The state of semi-war which began in 1950 resulted in partial mobilization, with its attendant accelerated military construction program. Under General Pick's leadership, the Corps of Engineers again was called upon to help strengthen the national defense. Old camps were rehabilitated; new ones were built; industrial plants were designed and constructed; and airfields were laid out all over the free world. Some idea of the magnitude of this undertaking can be had when it is considered that the Corps of Engineers under General Pick placed nearly six and a half billion dollars worth of military construction in the first two years of the Korean emergency, as compared with a total of eleven billion placed by the Corps during World War II.

Pick was promoted to the rank of Lieutenant General on 31 July 1951. He retired from his post on 30 November 1952, but remained in active service until 26 January 1953 in order to provide leadership for the Corps until such time as his successor, Lieutenant General Samuel G. Sturgis, Jr., could relieve him. He then retired permanently from the Army.

After his retirement, Pick came to devote increasing amounts of time to state and national politics and toward lobbying for Congressional approval of certain engineering projects which had long interested him, such as the Panama Canal Board (on which he served from August 1952 to November 1953) and the completion of the dams and reservoirs of the Pick-Sloan Plan. During 1956, he served on the Alabama State Planning Board at the state capital in Mobile.

In May of 1953, General Pick accepted in position of Vice-Chairman of Georgia-Pacific Plywood Company, a firm based in Olympia, Washington. He relocated to the Northwest for a year, but returned to his "home state" of Alabama with his wife when his mother-in-law became ill the following summer. He then continued to represent Georgia-Pacific from his home in Auburn, Alabama, but in a much more limited way. Among the projects which he pursued with Georgia-Pacific was the development of the harbor of Yaquina Bay in Oregon, the opening of pulp mill in Alaska, and the exploitation of the potential lumber riches of the Belgian Congo of Africa.

In 1954 Pick began to serve as a consultant to the John J.Harte Company of Atlanta, Georgia, an engineering and architectural firm, on the construction of a power plant in the City of Quito, Ecuador. His association with this company was successful, and in October of 1955 he accepted the position of Chairman of the Board.

Lewis A. Pick died on 2 December 1956 in Washington, DC, at the age of sixty-six.

Office of History's Finding Aid to the Papers of Lewis A. Pick

Box 1

Folder (Fd) 1 Biographical Information

Fd 2 Pay Voucher - Feb. 1949

Fd 3 Correspondence - British Decoration - Honorary C.B.- 21 Nov. 1949

Fd 4 Correspondence - Mistake in Press Clipping (Clipping Needs to be Copied) –Feb 1952

Fd 5 Correspondence - Various Topics Pertaining to Last Days in Corps - Jan 1953

Fd 6 Medical File - Picks Retirement - 1953

Fd 7 Correspondence - Adjutant General Bergen – Retirement-1953

Fd 8 Correspondence/File - Attempting to Prove Pick's Physical Disability 1955, 1953

Fd 9 Correspondence - Dr. Raudin - Retirement - 1953

Fd 10 Correspondence - Albert Reeves - Medical Retirement -1953

Fd 11 Retirement Papers - 1953

Fd 12 Congratulation Letters Upon Retirement - Jan 1953

Fd 13 Post-Retirement Army Correspondence - 1953

Fd 14 BG Frank Bowman CE Far East Command - Correspondence - Sep-Nov 1953

Fd 15 Col H.V. Canan CE - Correspondence - Mar/Apr 1954

Fd 16 MG Henry Collins, Camp Atterbury - Correspondence - Oct 1953

Fd 17 Col Harry L. Fox District Engineer, Mobile – Correspondence Apr-May 1954

Fd 18 Col Delbert B. Freeman - Division Engineer - Upper Mississippi Valley – Correspondence - Aug-Sep 1953

Fd 19 Col Jackson Graham CE Personnel & Administration -Correspondence - Jun. 1953-Apr 1954

Fd 20 LTG Leslie Groves (Ret'd) - Correspondence - Apr 1953- May 1954

- Fd 21 Capt. Richard Groves CE - Correspondence - Feb-Nov 1953
- Fd 22 Col H.R. Hallock District Engineer Ft Worth -Correspondence - Feb 1954
- Fd 23 Col Wright Hiatt, CE - Correspondence - Mar 1953
- Fd 24 Col N.A. Matthias, CE - District Engineer Seattle -Correspondence - Jun. 1953-May 1954
- Fd 25 Kenneth P. Middleton, Technical Liaison, Missouri River Division – Correspondence - Nov 1953
- Fd 26 MG G.J. Nold - Joint Construction Agency, US European Command – Correspondence - May 1953-Sep 1954
- Fd 27 BG Louis Prentiss - Engineer Commission of DC - Correspondence - 1953-1954
- Fd 28 MG B.L. Robinson, CE - Correspondence - May 1953-May 1954
- Fd 29 MG Edward Rose, NJ Department of Defense - Correspondence Sep 1953
- Fd 30 Gen S.L. Scott Commanding General, Ft Belvoir - Correspondence - May 1953
- Fd 31 E. Manning Seltzer - Assistant Chief, Legal Division, CE Correspondence – Sept-Oct 1953
- Fd 32 BG Don Shingler - Division Engineer, North Pacific -Correspondence - Feb-Apr 1954
- Fd 33 Col C. Smith, CE - Allied HQ Paris - Jan 1953
- Fd 34 Col Craig Smyser, Panama Canal Zone – Correspondence Jun. 1953-Sep 1954
- Fd 35 Col Morton Solomon, CE - Mar-Nov 1954
- Fd 36 MG S.D. Sturgis - Correspondence - Apr 1953-Mar 1954
- Fd 37 Col BB Talley, Division Engineer, North Atlantic Division Correspondence - Feb 1953-Aug 1954
- Fd 38 Maxwell D. Taylor - Chief of Staff - Correspondence - Nov-Dec 1955
- Fd 39 Col C.T. Tench, District Engineer, New Orleans District -Correspondence - May 1953-Mar 1955

Fd 40 Col Henry Walsh, District Engineer, San Francisco -Correspondence - Jun-Jul 1953

Fd 41 Col Ellis Wilhoyt, Jr. - District Engineer, Savannah, Georgia - Nov 1953

Fd 42 BG W.K. Wilson - Med Division Engineer - Correspondence - May-Jul 1953

Fd 43 Col J.J. Zimmerman, CE - Technical Liaison Division - Correspondence - Oct 1953

Box 2

Fd 1 Photographic Division, Signal Corps - Correspondence -May-Jun 1954

Fd 2 Air Force Academy - Correspondence - Apr 1954

Fd 3 Missouri River Division - Correspondence - Nov 1953

Fd 4 Governor Siguard Anderson, South Dakota – Correspondence Feb 1954

Fd 5 Congressman Frank Boykin - Correspondence - Jul 1953-Sep 1954

Fd 6 MG J.S. Bragdon (Ret'd) - Executive Branch Economic Advisor - Correspondence - Apr/Jul 1954

Fd 7 Congressman Charles Buckley, Bronx, NY - Correspondence Aug-Sep 1953

Fd 8 Senator Hugh Butler, Nebraska - Correspondence - Oct 1953

Fd 9 Senator Francis Case, South Dakota - Correspondence Apr-Aug 1954

Fd 10 Senator Homer Capehart - Correspondence - May-Jun 1954

Fd 11 Senator Frank Carlson - Correspondence - Sep 1953

Fd 12 Congressman Carl Elliot - Correspondence - Jun 1954

Fd 13 Congressman Harris Ellsworth - Correspondence - Mar 1954

Fd 14 Congressman George Dondero - Correspondence - Nov 1953 -Jun 1954

Fd 15 Governor Phil Donnelly, Missouri - Correspondence - Feb 1954

Fd 16 Congressman Ben Jensen, Iowa - Correspondence - Mar 1954

Fd 17 Congressman Bob Jones - Correspondence - may 1954

- Fd 18 Congressman Russell Mack - Washington - Correspondence Sept 1953-may 1954
- Fd 19 Mr. Tom Paine, Attorney - Correspondence - May 1954
- Fd 20 Edward McKim - Panama Canal Board - Correspondence May 1954
- Fd 21 Senator Sam Reynolds, Nebraska - Correspondence - Jul 1954
- Fd 22 Val Peterson - Director of Civil Defense Administration Correspondence –
Oct-Dec 1953
- Fd 23 Congressman Albert Rains, Alabama - Correspondence - Sep-Oct 1953
- Fd 24 Congressman Olin Teague - Correspondence - 1954
- Fd 25 Harry & Bess Truman - Correspondence - Sep 1951-Jul 1954
- Fd 26 Tracy Voorhees, Defense Advisor to NATO – Correspondence Aug-Sep 1953
- Fd 27 Governor Candidate James Allen, Alabama - Correspondence Apr 1954
- Fd 28 Governor Candidate James Faulkner, Alabama - Correspondence - Apr 1954
- Fd 29 Governor Candidate James Folsom, Alabama - Correspondence Jun 1954
- Fd 30 LTG Pick - Encomium - Jan 1953
- Fd 31 Letter to President Eisenhower - Reference - Pick Art Theft - Apr 1953
- Fd 32 Hoover Commission on Organization of the Executive Branch Description of
Personnel - 1953
- Fd 32 HR 8300 - Correspondence - Proposed Changes in Capital Gains Tax on Timber –
Apr 1954
- Fd 33 Statement of Policy & Objectives - Citizens for Eisenhower Congressional
Campaign Committee - 1954
- Fd 34 Taft-Hartley Labor Law - Correspondence - Sep 1953
- Fd 35 Building A Bigger America - LTG Pick - 9 Jan 1953
- Fd 36-37 Official Correspondence - Engineer Divisions - 1952-1953

Box 3

- Fd 1 Report of Semiannual Inspection of the Engineer Replacement Training Center, Ft Belvoir - 1951
- Fd 2 Review of Draft History of the Ledo Road Project -Jun 1953
- Fd 3 Port Potential Survey of the Yaquina Bay Region, Newport, Oregon - Thomas Murray - No Date
- Fd 4 Water Conservation - The Nations Most Critical Future Problem - LTG Sturgis – Oct 1955
- Fd 5 Retired Army Officers Residing Within 3rd Army Area -Mar 1953

Box 4

- Fd 1 Project Documents - Apr 1955
- Fd 2 Corps of Engineers Installations & Activities
- Fd 3 Mississippi River Commission Correspondence - May 1952- May 1954
- Fd 4 Panama Canal Board - Feb 1953 - Sep 1954
- Fd 5 Alaska Pulp Mill Project - Georgia-Pacific Correspondence Jul 1953-Mar 1954
- Fd 6 Photos - Alaska Pulp Mill Project
- Fd 7 Great lakes-St. Lawrence Association Correspondence - Jun 1953 - Oct 1954
- Fd 8 St. Lawrence Waterway Congressional Lobbying - Feb-Jul1954
- Fd 9 St. Lawrence Project - Feb 1951, Jun 1951 (News)
- Fd 10 Hydro-Electric Power Commission of Ontario - Pictorial Souvenir Visit of US Public Works Committee to Niagara Falls, Ontario - Jun 1951
- Fd 11 Map & Cost Figures - St. Lawrence Seaway - 1951
- Fd 12 Sandy Point Weather Project - Correspondence - Aug 1953- Jun 1954 (News)
- Fd 13 Missouri Basin Dams - Correspondence/Newsarticles - 1953-1954
- Fd 14 Georgia Turnpike Project - Jun 1952

Box 5

- Fd 1 Pick Correspondence With W.E. Potter - 1953-1955
- Fd 2 Garrison Dam - Correspondence, News articles - 1953-1955
- Fd 3 Garrison Dam - Photos - Closure Celebration - Jun 1953
- Fd 4 Fort Randall - Correspondence, News articles - 1954
- Fd 5 Correspondence - Requests for Photos - 1953
- Fd 6 News article - We're Taming the Tempestuous Missouri - Bruce Campbell & Correspondence - 1954
- Fd 7 Pick Correspondence With Kenneth P. Middleton - 1954-1955 (News)
- Fd 8 Flood Protection in the Kansas River Basin - N.T. Veatch - 13 Mar 1953
- Fd 9 Missouri Basin Plan in Operation - BG W.E. Potter - 25 Aug 1954
- Fd 10 Yaquina Bay Public Hearing - Newport, Oregon - Jan 1953
- Fd 11 Georgia-Pacific Management Correspondence - Yaquina Bay -Jan 1954-Oct 1955 (News)
- Fd 12 C.D. Johnson Lumber Co. Correspondence - Yaquina Bay -Mar 1954 - May 1955
- Fd 13 Industrial Correspondence - Yaquina Bay Project - Mar-Apr 1954
- Fd 14 Yaquina Bay - Correspondence (Political) - Mar 1954-Sep 1955
- Fd 15 Newport Port Commission, Newport, Oregon – Correspondence - Aug 1954-Jan 1955
- Fd 16 Modification of Yaquina Bay Project - Correspondence - Jan 1953-Oct 1955
- Fd 17 Col Louis Foote, North Pacific Division Engineer - Correspondence - Aug 1954-Aug 1955
- Fd 18 BG E.C. Itschner, C.E. - Correspondence - Yaquina Bay - Mar 1954-Aug 1955

Box 6

- Fd 1 Col J.V. Moorhead - Portland District - Correspondence -Sep 1954-Apr 1955

- Fd 2 MG B. Robinson, OCE - Correspondence - Aug 1954-May 1955
- Fd 3 Yaquina Bay - Maps & Press
- Fd 4-5 King, Miller, Anderson, Nash & York - Attorneys - Correspondence (Yaquina Bay) - Sep 1954-Apr 1955 & May-Dec 1955
- Fd 6 Corporate Statements Supporting Yaquina Bay Project - Sep-Nov 1954
- Fd 7 C.D. Johnson Lumber Company - Yaquina Bay & Harbor, Oregon – Supplementary Statement - Jan 1955
- Fd 8 Report on an Engineering Study of Possible Industrial Water Supplies Near Toledo, Oregon - Jan, Mar 1955
- Fd 9 Corps of Engineers - Review Report on Yaquina Bay & Harbor, Oregon - Apr 1955
- Fd 10 C.D. Johnson Lumber Company - Statement in Support of Yaquina Bay - Oct 1955
- Fd 11 Report on Improvement of Yaquina Bay & Harbor, Oregon Oct 1955

Box 7

- Fd 1 Cheatham Dam (Tennessee) Dedication - Correspondence -Nov 1953-Sep 1954
- Fd 2 Mexican Canal Project - Correspondence - Apr-Sep 1954
- Fd 3 Olympia National Park - Correspondence, Pamphlets, Maps - Aug-Oct 1954
- Fd 4 Thailand Roads Project - John J Harte Co. - Nov 1954-Feb 1955
- Fd 5 Belgian Congo Lumber Project - Georgia-Pacific -Correspondence - Mar-Oct 1955
- Fd 6 Trip to Belgian Congo & Brussels - Correspondence - Jun/Aug 1955
- Fd 7 Quito, Ecuador Power Project - John J Harte Co., - Mar-Oct 1955 (Press)
- Fd 8 Work Conference on Nuclear Energy - Proceedings - Correspondence - Aug 1956
- Fd 9 Operation Snowplow - Lines of Communication - No Date

Fd 10 Water Resources Development by the Corps of Engineers in Alabama - Jan 1953-Jan 1955

Fd 11 Map- Kansas City's Flood Control Projects - No Date

Box 8

Fd 1 Statement on LTG Lewis A. Pick (New Vice Chairman of Georgia-Pacific) - 1953

Fd 2 Hardwood Plywood Institute - Correspondence - Apr 1954- Mar 1955 (News)

Fd 3 Georgia-Pacific - Correspondence (Imports) - Feb-Dec 1954

Fd 4 Statements Made at Luber, Plywood & Wood Products Industry Conference - Feb 1954

Fd 5 Study of Savannah Operation for Georgia-Pacific - Michael Pasquier - Oct 1953

Fd 6 First Meeting - Committee for American Labor & Industry for Foreign Aid Through Higher Living Standards - Oct 1954

Fd 7 Robert N. Hawes - Attorney/Hardwood Plywood Institute -Correspondence – Feb-Dec 1954

Fd 8 Congressman Russell V. Mack (Washington) - Correspondence- Jan-May 1954 (News)

Fd 9 Congressman Paul Brown (Georgia) - Correspondence -May-Jan 1955

Fd 10 Operating Statements - Georgia-Pacific- Sep 1953-Jun 1954

Fd 11 Owen R. Cheatham - Chairman Georgia-Pacific - Correspondence - May 1953-Jul 1954

Box 9

Fd 1 Department 21 - Georgia-Pacific, Olympia Office - Jun-Nov 1953

Fd 2 Pick's Transfer to Southeast & Letter of Resignation -Georgia-Pacific - Jul 1954

Fd 3 Georgia-Pacific Publications, Directives, Reports - 1950-Jun 1954

Fd 4 Extraordinary Maintenance & Capital Expenditures - Georgia-Pacific - Feb 1954

Fd 5 Distribution - Georgia-Pacific - No Date

- Fd 6 C.F. Hood (US Steel Corp) - Correspondence - Apr-Jul 1953
- Fd 7 Ed Maxwell, Blyth & Co., Seattle, Washington - Correspondence - May 1953
- Fd 8 John W. Overton, Turner Insurance & Bonding Co. - Correspondence - Jan-May 1954
- Fd 9 W.A. Patterson - President of United Airlines - Correspondence - Apr 1955
- Fd 10 W.R. Pfizer (Panama Canal Co.) - Correspondence - Dec 1953
- Fd 11 John P. Sout, VP of Fruin Colnon Contracting Co., St. Louis - Correspondence – Dec 1953-Jan 1954
- Fd 12 Elmer B. Staats, Research Director, Marshall Field & Co. - Correspondence – May 1953
- Fd 13 Top Plywood Salesman - Georgia-Pacific - Dec 1953
- Fd 14 Management Advisory Committee Meetings - Georgia-Pacific 1954
- Fd 15 Classification of Salesmen - Georgia-Pacific - Jul 1954
- Fd 16 Plant-City Advertising Recommendation - Georgia-Pacific Jul 1952
- Fd 17 Waste Effluent Handling Program - Georgia-Pacific - Jun 1956
- Fd 18 Georgia-Pacific Press Clippings - Jan 1953
- Fd 19 Georgia-Pacific Annual Reports - 1951-1953
- Fd 20 Southern Operations - Georgia-Pacific - Sep, Nov 1953
- Fd 21 Report on Progress at Toledo - Georgia-Pacific - 1953-54
- Fd 22 Reading File - Georgia-Pacific - 1953
- Fd 23 Sea-Going Lumber Carrier Barge Proposed by Johnson-Crooks Corp - Oct 1953
- Fd 24 Hardwoods Exports - Correspondence - 1953-1954 (Press)

Box 10

- Fd 1 Georgia-Pacific Plywood Co. - Plan of Organization -Mar 1952

- Fd 2 Georgia-Pacific Correspondence - 1953-1954 (Press)
- Fd 3 Price Lists - Georgia-Pacific - 1954
- Fd 4 Olympia Plant - Production Reports - No Date
- Fd 5 Warehouses Survey - Georgia-Pacific - 1953
- Fd 6 Plywood Sheathing - Georgia-Pacific - 1954
- Fd 7 Correspondence - Georgia-Pacific - (Barges) - 1954
- Fd 8 Barbara Crandall - Correspondence - 1954
- Fd 9 Federal Power Commission - Idaho Power Co. - Hearing on Oxbow, Brownlee & Hells Canyon Projects - No Date
- Fd 10 Bozell & Jacobs, Inc. - Correspondence - 1953 (Press)
- Fd 11 Georgia-Pacific - Apr 1953 & Housing Trends Jun 1953, Jan 1954

Box 11

- Fd 1 Leo V. Bodine - Correspondence - 1954
- Fd 2 Col Schenk H. Griffin - Correspondence - 1953-1954
- Fd 3 R.B. Keller - Correspondence - 1953 (Georgia-Pacific)
- Fd 4 S.W. White - Correspondence - 1953 (Georgia-Pacific)
- Fd 5 C.D. Johnson Lumber Corp. - Correspondence - 1954
- Fd 6-7 Correspondence to Georgia-Pacific From Other Firms -1953-1955 (Press)

Box 12

- Fd 1 American Legion - Correspondence/Membership Cards -Nov 1953-Oct 1954
- Fd 2 ASCE - Correspondence - Sep 1952-Sep 1954
- Fd 3 Chi Epsilon Fraternity, NY City Alumni Chapter - Correspondence - Oct 1953-Feb 1955
- Fd 4 Newcomer Society of North America - Correspondence & Bulletins - Sep 1953

- Fd 5 PIANC - Correspondence - Mar-Oct 1954
- Fd 6 SAME - Seattle Post Correspondence - Sep-Oct 1953
- Fd 7 SAME - Tacoma, Olympia Post - Correspondence - Jun-Jul 1954
- Fd 8 Sgt. Ambrosio P. Birco - Correspondence - Jun 1953-Jan 1954
- Fd 9 Lt. Johnny Escamos - Correspondence - Jul-Nov 1953
- Fd 10 Clinton F. Crosbie - Correspondence/Photos - Aug 1953
- Fd 11 Capt. Charles E.K. Fraserm Ret'd - Correspondence -Aug-Dec 1953
- Fd 12 E. A. Hasty - Correspondence - Aug-Sep 1953
- Fd 13 Afiti Temple Ceremonial Invitation - Dec 1953
- Fd 14 China-Burma-India Veterans Association – Correspondence Oct 1953-Jul 1954
- Fd 15 Robert E. Lee - Correspondence - No Date
- Fd 16 Wisconsin China-Burma-India Club Reunion – Correspondence 1953
- Fd 17 William R. Ziegler, National Commander of China-Burma-India Veterans Association – Correspondence - Sep 1953-Aug 1954
- Fd 18 Frank D. Merrill - Correspondence - Jun 1953-Apr 1954
- Fd 19 Merrill's Marauders Association - Correspondence - 1953-1955
- Fd 20 Rustburg High School - Correspondence/Reunion - Apr 1954
- Fd 21 Association of Non-Tax Supported Colleges of Washington - Correspondence – Aug 1953
- Fd 22 Olympic National Park Executive Committee - Correspondence- Jul 1954
- Fd 23 The Rainier Club - Seattle, Washington - Correspondence - Mar-Jul 1954
- Fd 24 Tacoma Golf & Country Club - Correspondence - Aug 1953
- Fd 25 Bremerton, W.Va. - Public Schools Speech Request - Correspondence - Dec 1953
- Fd 26 China-Burma-India Chapter, Chillicothe, Ohio - Speech Request Correspondence –

Oct-Nov 1955

- Fd 27 Kiwanis Club, Tacoma, Washington - Speech Request - Jun-Jul 1954
- Fd 28 National Security Industrial Association – Correspondence - Sep 1953
- Fd 29 Puget Sound Post - Industry-Ordnance Day - Invitation -Apr 1954
- Fd 30 LTC Charles W. Stewart - Correspondence - Speech Request - 1954
- Fd 31 23rd Engineers Association - Correspondence – Speech Request - Apr-May 1954
- Fd 32 Georgia-Chapter - VPI Alumni Association - Correspondence- Speech Request – Mar 1955
- Fd 33 West Point Manufacturing Co. - Correspondence - Speech Request - Dec 1954
- Fd 34 Dr. Francis C. Wood - Correspondence - Nov 1955
- Fd 35 Correspondence Requesting Speeches - 1953
- Fd 36 Correspondence Requesting Photos - 1953
- Fd 37 Correspondence Requesting References - 1954
- Fd 38 Correspondence Requesting/Receipt of Publications - 1954
- Fd 39 Correspondence - Periodical Subscriptions - 1953
- Fd 40 Pick - The Story of Blue Jay - Article - Military Engineer - Jul-Aug 1953
- Fd 41 1st Presbyterian Church, Auburn - Correspondence - Sep 1953-Dec 1954
- Fd 42 Mr. Philip Shvey - VPI Alumnus - Correspondence - May-Jun 1953
- Fd 43 Morris Frank, The Houston Chronicle - Correspondence - Mar 1954
- Fd 44 Col Conn Anderson - Correspondence - Jun 1954
- Fd 45 Joshua Green - People's National Bank of Washington - Correspondence - Mar 1954
- Fd 46 Travis Bryan - Correspondence, News Articles - 1953-54
- Fd 47 Pick - Personal Financial Correspondence - Jul 1953-Nov 1954
- Fd 48 Dun & Bradstreet Report on John J. Harte Co. - Atlanta May 1953

Fd 49 Bekins Moving & Storage Co. - Correspondence - 1953

Fd 50 Lewis A. Pick, Jr. (son) Correspondence - Dec 1945 - May 1947

Box 13

Fd 1 Correspondence - Written in a Foreign Language

Fd 2-3 Correspondence - Personnel - 1951-1953 (News)

Fd 4 Memorabilia - Church, Cherry Blossom Festival, Alumni Directory - 1953 & 1955

Fd 5 Permanent International Association of Navigation Congresses - Report & Correspondence - 1952-1954

Fd 6 List of American Legion Members - No Date

Fd 7 Unidentified List of Conclusions - No Date

Fd 8 News-Photo - Pick With Eric Brown at a Georgia-Pacific Plant - No Newspaper Name or Date

Fd 9 News-Article - US Held Eyeing Nippon Plywood - No Paper Name - 1953

Fd 10 News-Article - 4 Day Week Slated for Plywood Mills -Variety of Papers - Jun 1953

Fd 11 News-Article - Gen Pick to Join Georgia-Pacific Staff in Olympia - May 1953

Fd 12 News-Article - Gen Pick Elected Officer of Georgia-Pacific No Name or Date

Fd 13 News-Article - Personalities - LTG Pick - The Timberman Jun 1953

Fd 14 News-Articles - On the House (Georgia-Pacific) - The Olympian - Jul 1953

Fd 15 News-Article - Stronger, Cheaper Pulps Made From Hardwoods - NY Times - Jun 1953

Fd 16 News-Articles - Panel Maker to Cut Week (Georgia-Pacific) The Oregonian - Jun 1953

Fd 17 Ironworks Summer Shop-Talk (Newsletter) - Jul 1953

Fd 18 News-Article - Plywood Hike Ignored Here - Portland Oregon Morning Paper –

Nook 1953

- Fd 19 News-Article - CIO Woodworkers Contracts - No Name or Date
- Fd 20 News-Article - Plywood Mill Prices Down - No Name or Date
- Fd 21 News-Article - Tokyo Pulp Group Leaving For Alaska - No Name or Date
- Fd 22 News-Photo - Pick at Alabama-Georgia Tech Game - Birmingham News - Nov 1951
- Fd 23 News-Article - Pick Backs Waterway Course From City to Gulf - The Birmingham News - Nov 1951
- Fd 24 News-Article - Army Engineer Chief Tours Flood Area on Way to Amarillo - The Amarillo Daily News - No Date
- Fd 25 News-Article - For Coosa River Valley Alabama Power Plans- Little TVA - The Birmingham News - Nov 1953
- Fd 26 News-Article - Garrison Dam - Minot (ND) Daily News - Jun 1953
- Fd 27 News-Article - The Panama Canal - Sunday News - Jun 1953
- Fd 28 News-Article - Big Missouri Dam Put in Operation - NY Times - Mar 1953
- Fd 29 Military Engineering Aspects - Statement by Pick - No Date
- Fd 30 News-Article - Defiant Rhee Raises Korean Truce Price Daily Olympian - Jun 1953
- Fd 31 News-Article - Large Barges Said Answer - The Oregonian - Jul 1953
- Fd 32 Congressional Record - 83rd Congress, 2nd Session; President Eisenhower & A Geologist - Museum Official Urge Approval of the Upper Colorado River Storage Project, Including Echo Part & Glen Canyon Dams - 1954
- Fd 33 News-Article - Hoover Names 24 For Power Survey - NY Times - Nov 1953
- Fd 34 News-Article - The Bryan Daily Eagle - Mar 1954
- Fd 35 News-Article - Kiewit Buys Construction Firm Interest - No Name or Date
- Fd 36 News-Article - Gen Rose is Names as Jersey Member of Pier Commission - NY Times - Aug 1953

- Fd 37 News-Article - New Town Rising Near Arizona Mine - NY Times - No Date
- Fd 38 News-Article - 'Gas' Price Raised by Socony-Vacuum - NY Times - Jun 1953
- Fd 39 Our Great West Boom or Bust - Bernard DeVoto - No Name or Title to Magazine
- Fd 40 Guest Card - Athletic Club, Atlanta - Nov 1954
- Fd 41 News-Article - Pick Heads Atlanta Engineer Firm - Atlanta Journal - Oct 1955
- Fd 42 Material for Contest to Name Lakes Formed by Dams -1953
- Fd 43 News-Article - Pick Cracks Whip on Missouri – NY Times - Jan 1946
- Fd 44 News-Articles From Numerous Papers & Dates

Box 14

- Bks 1-8 PIANC - XVIIIth International Navigation Congress Rome 1953 Section 1
Communication 1, 2,3 & Section 2 Communication 1,2,3,4,5
- Fd 1 The Intracoastal Waterway - Corps of Engineers - Part I Atlantic Section - 1951
- Fd 2 Work Conference on Nuclear Energy - St. Petersburg, Florida - Aug 1956

Box 15

- Bk 1 Directory of Membership The Associated General Contractors of America, Inc –
Jul 1953
- Bk 2 The Houston Port Book - Official Publication of the Harris County - Houston Ship
Channel Navigation District - Spring 1954
- Bk 3 Tools of the Earthmover Yesterday & Today Preserved in Pictures - J.L. Allhands
- Sam Houston College Press - Huntsville, Texas - 1951

Box 16 Photos

- Fd 1 General Pick
- Fd 2 Transportation Centre Royal Engineers Longmoor
- Fd 3 Visit to Marathon - Apr 1956
- Fd 4 Visits Travis Bryan at Bryan Texas - Mar 1952

Fd 5 Written Material to Accompany Fd 4

Fd 6 Possible Family Photos - May 1942

Fd 7 Burma

Fd 8 Pick and Macan (Photo Autographed)

Fd 9 Visit to the School of Military Engineering - Chatham - Jul 1950

Fd 10 Great Lakes - St. Lawrence Project - Tour of Inspection of Project Area, Duluth to Montreal by Committee on Public Works House - May 31 - Jun 5 1951

Fd 11 Photo to Pick From Mr. Dale Miller, Mayflower Hotel 372 Washington DC

Fd 12 Photo Plate Used by the National Cyclopedia of American Biography - 1957

Fd 13 Documents to Accompany Fd 12

Fd 14 LTG Lewis A. Pick, USA (Ret)

Fd 15 Toledo

Fd 16 BG Haydon L. Boatner - Travis Bryan - Jul 1951

Fd 17 Documents to Accompany Fd 16

Fd 18 Photo Addressed to Lewis & Alice From Travis - Apr 1954

Fd 19 Pick - Young Man

Fd 20 Visit to Memphis - Dec 1950

Fd 21 Documents to Accompany Fd 20

Fd 22 North Jetty

Fd 23 Documents to Accompany Fd 22

Fd 24 Group Photo - Members Listed on Back

Fd 25 Visit to Turkey

Fd 26 General Pick - 1944

Fd 27 Unidentified - Photos

Fd 28 Unidentified - Negatives

Fd 29 Unidentified - Group Photos

Oversize Box 1

Fds 1-3 The Virginia Tech - Virginia Polytechnic Institute (Newspaper - Bound - Vol. 8
No 1 - Vol. 8 No 31 & Vol. 9 No 1 - Vol. 9 No 31 & Vol. 10 No 1 - Vol. 10 No 31

Fd 4 Blueprints - 300 Ft Sea Going LBR Carrier Barge (3 copies)

a. Strength of Ship & Stability

b. Out BO Profile

c. Midship Section

d. Parth Long Section

Fd 5 Washington Veneer Co. Plants #1 & 2 - Olympia, Washington Sep 1949

Fd 6 Republican River, Nebraska - Harland County Reservoir Interior Access Roads –
Jul 1953 (13 Sheets)

Fd 7 Interior of Blue Mosque in Istanbul, Turkey

Fd 8 Unidentified Photo of Lady

Oversize Box 2

Fd 1 Unidentified Photo

Fd 2 Photo Taken Before Blue/Gray Game - Feb 1956

Fd 3 Numerous Copies - LTG Pick U.S.A. (Photos) - Sep 1951

Fd 4 Appointment As Captain in Corps of Engineers - 1 Jul 1920

Fd 5 Cartoon - General Pick We Miss You...Hurry Back - No Date

Fd 6 Album of Panama Canal Zone

VITA

Robert A. Dunn currently serves as Tribal Liaison and staff archaeologist for the U.S. Army Engineer District, Memphis, Tennessee. He has been a Corps of Engineers archaeologist for twenty-three years. Prior to coming to Memphis District in the fall of 2006 he served for three years as District Archaeologist for the U.S. Army Engineer District, Philadelphia, Pennsylvania. Before that assignment he worked for nine years as a research archaeologist and geographer in the Environmental Laboratory at the U.S. Army Engineer Research and Development Center in Vicksburg, Mississippi. Prior to that, he served for ten years (1984-94) as District Archaeologist and project manager in Little Rock (Arkansas) District's Planning Division. Mr. Dunn first joined the Corps in Rock Island (Illinois) District's Planning Division as an archaeologist in 1983. Before joining the Corps he worked in Wyoming for two years (1981-83) as a contract archaeologist for two firms based in Laramie, Wyoming. He was an archaeological intern at the Illinois State Museum during the 1981-82 academic year. He received a Bachelor of Arts in anthropology from the University of Pennsylvania (1973) and a Master of Arts in anthropology from Temple University (1980). His doctoral graduate work at Louisiana State University came as a result of his selection for Headquarters' (U.S. Army Corps of Engineers) sponsored long-term training during the 1999-2000 academic year.