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# Environmental history of Montana's Smith River

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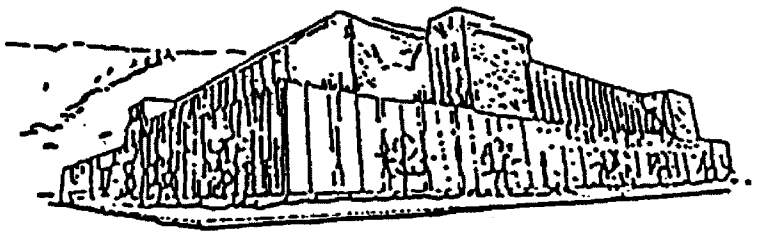

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# An Environmental History of Montana's Smith River

by

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The Smith River winds through a remote, semi-wilderness area straddling portions of both the Northern Rocky Mountains and the Great Plains in west-central Montana. Boasting outstanding scenery, sport fishing, and wildlife, the Smith today is one of the most popular recreational floating rivers in Montana.

But despite its seemingly pristine setting, humans have long manipulated the environment of the Smith River. This thesis describes how various cultures living along the river's banks defined and utilized the resources of the river, and whether the cultural ecological relationships they developed provided for long term inhabitation. Tracing both human and natural changes in the river's environment is a necessary part of such an evaluation.

In Part 1, I first examine the physical environment of the river itself and the natural processes of change along it. Following the climatic and culturally induced cataclysms of the late Pleistocene Era, prehistoric peoples developed a long cultural ecological relationship with the river that changed relatively little in over 11,000 years. Disrupted by Euro-American expansion into the hemisphere, the historical Native American period was a time of conflict and dramatic cultural and ecological change along the Smith, one that was prematurely terminated with Blackfoot removal from the valley. The next chapter examines the role of the U.S. military in removing the native populations and briefly traces the histories of the secondary land-use practices of Americans in the valley: trapping, mining, and logging. In the last chapter of Part 1, I examine the evolution of ranching along the Smith.

In Part 2, I detail the most recent use of the river for outdoor recreation, and how this new use conflicted with older land use practices. In the 1960s, when recreationists began floating the river, the State Department of Fish and Game assumed the leadership in the management of the river, championing recreational use over rancher opposition. However, recreation has not displaced ranching in the valley but rather joined it, with compounded impacts on the river's environment. Ironically, outdoor recreation and its management have contributed to changes in the river's environment, endangering the resources upon which both the ranchers and recreationists depend.

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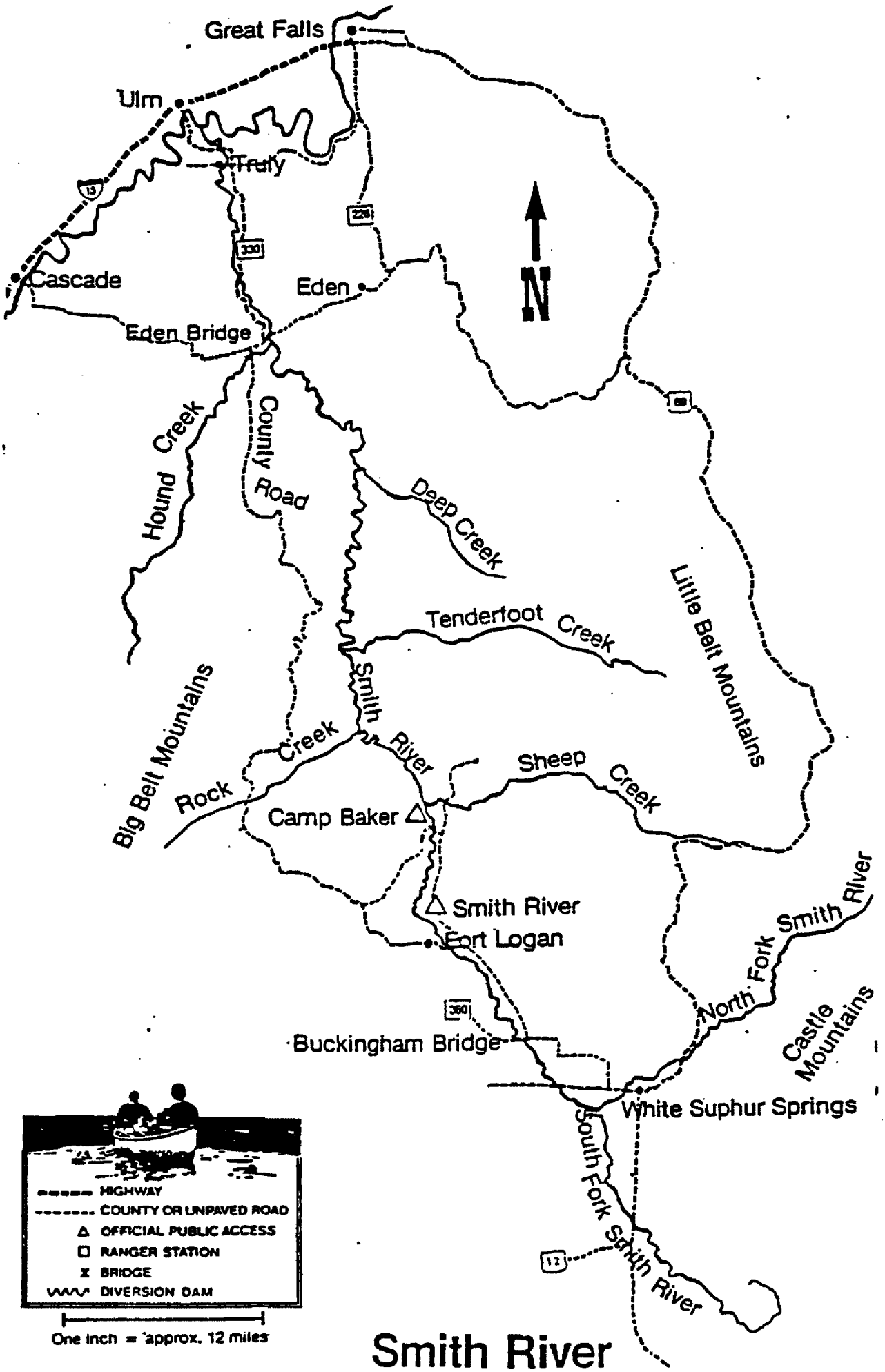
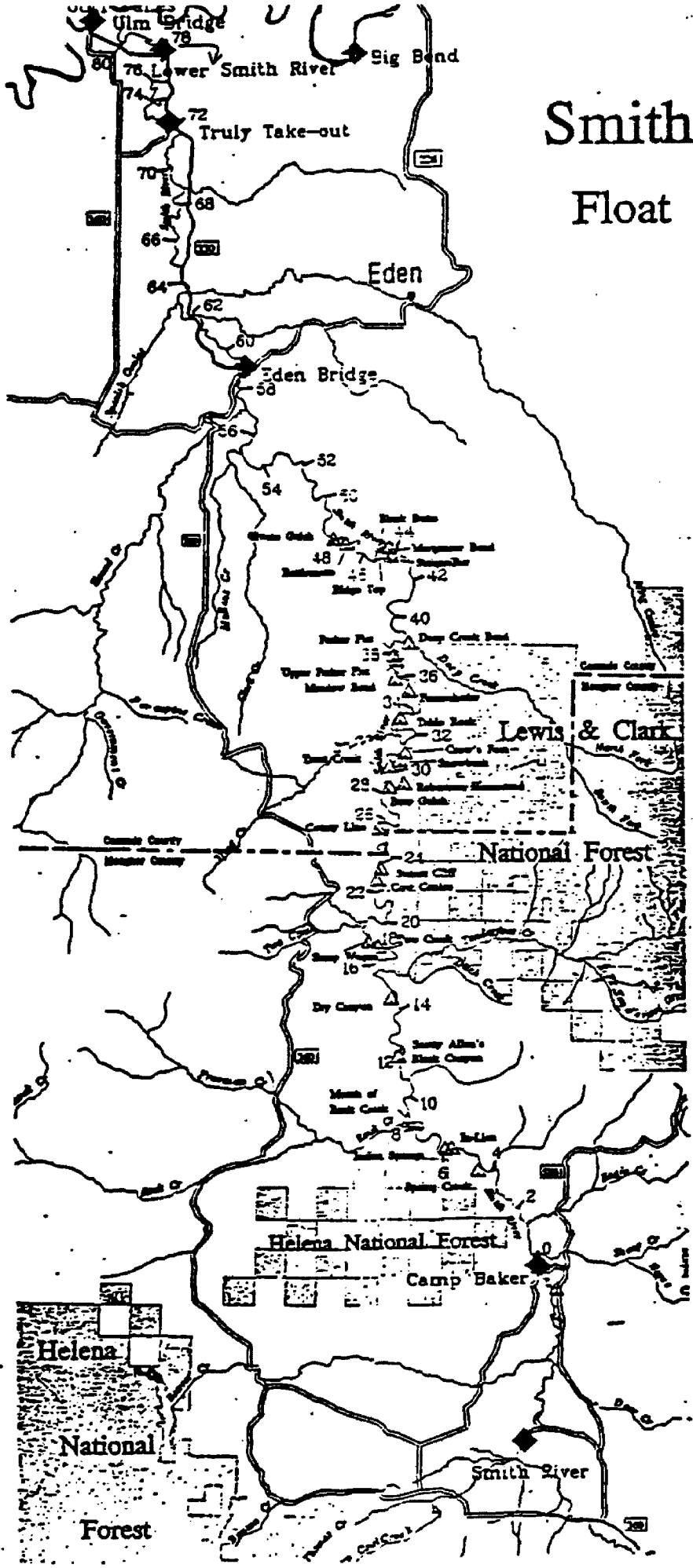


# Smith River

## Float Section



# PART 1

# Environment and Culture

# CHAPTER 1

## Introduction: Putting In at the River Wild

In the Montana summer of 1994 river ranger Chris Lorentz and I eased our canoe into the clear, rippling water of the Smith River at Camp Baker where it is joined by a muddy tributary, Sheep Creek, near the towering gates of the Smith River Canyon. The day was bright, the breeze blew coolly, and the world here was blue, and green, and brown. It was the first time I had ever floated the Smith River, the most popular floating and fly-fishing river in the State of Montana, despite the fact that I was raised in the town of Great Falls, just a couple dozen miles east of where the Smith flows into the Missouri. If it hadn't been for Russia, I might never have floated the Smith. As it was, I anticipated my two and a half day journey down the river with contented excitement. I longed to enter the wilderness of that dark canyon.

And, as far as I knew, it was supposed to be a wilderness, or at least what the professionals with Fish, Wildlife, and Parks liked to call a "semi-wilderness." That's what I had been told. That's what I had read.[1] Anyway, it was not by accident that I was the river ranger's

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[1] For a small sample of articles extolling the Smith's wilderness attributes, see Ed Wolff, "Float Fisherman's Eden," Outdoor Life, July 1989, 96-97; and Steve Moore, "Pristine Montana River Moving into the Big Leagues," Great Falls Tribune, 20 Jan. 1991, C1.

sidekick on this float. I, too, was a temporary employee for the Montana State Department of Fish, Wildlife, and Parks (FWP), a summer intern hired to "develop an interpretive history of the Smith River." What the bearded duo, my bosses Dave Todd and Doug Haberman from the Parks division at FWP's headquarters in Great Falls, meant by "interpretive" differed some from what my professors had taught me about history at the University of Montana. Apparently, according to them, many years ago, Indians and cowboys had entered the wilderness of the Smith River Valley where they had struggled gloriously against a harsh world to eke out a small living along the river's banks. FWP wanted me to try to tell the bold story of their noble lives in a way that the hordes of floaters now visiting the river could understand and sympathize with. In short, they wanted to increase the value of their recreational resource by adding a little bit of culture to the Smith's widely acknowledged natural attributes, like scenery, wildlife, and fishing. That was O.K. with me. In return for the dribble that I would write, Montana FWP was going to send me to Russia for a month as a part of a unique exchange program they had developed. And I really wanted to go to Russia.

By the time my two months internship was completed, I had produced a hefty load of dribble. In the fall, after I had returned from Russia, I heaved this dribble to my graduate advisor, Dr. Dan Flores, in the hopes that it might

pass as a thesis. No such luck. Since then, I have worked on developing a different sort of "interpretive" history of the Smith River, one that is guided primarily, but not exclusively, by the field of environmental history. In this history, rather than glorifying or romanticizing the river's past, I attempt to describe and understand how different cultures living within the Smith River watershed have valued and utilized its natural resources; how different cultural or sub-cultural groups have conflicted over the interpretation and use of the river's environment; and how the environment itself has changed as a result of human and non-human factors.

My environmental history of the Smith River has been profoundly influenced by the works of other environmental historians, from George Perkins Marsh to Richard White. One of the defining tasks of environmental history is to examine the degree to which nature has been altered by culture, and culture altered by nature. In the mid-19th century, George Perkins Marsh wrote Man and Nature in which he warned of the power humanity has to shape, and in the shaping possibly destroy, the natural environment. His work challenged the myth of superabundance that had long held that nature and its resources were limitless and unchanging.[2] Writing, "On the Significance of the Frontier in American History", just

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[2] George Perkins Marsh, Man and Nature: Or the Earth as Modified by Human Action (New York: Charles Scribner's Sons, 1864), 199-227.

a few decades later, Frederick Jackson Turner proposed a deterministic model for how the frontier, that interactive zone between raw nature and initial Anglo-American occupation, had fostered democracy, individualism, freedom, and a strong work ethic, the foundations of a uniquely American society.[3] Walter Prescott Webb further developed this deterministic model in his own work on the Great Plains of the American West.[4] Marsh was preoccupied primarily with how human society impacted nature, Turner and Webb were concerned more with how nature shaped human society. Their writings were seminal contributions to the understanding of culture and environment in the American West.

As environmental history emerged in the last couple of decades as a distinct discipline, responding in part to a growing slate of environmental problems, a new group of historians began to examine the complexities of human-nature interactions. Some found these interactions so complex that they chose to focus their studies of history and ecology on contained regions, much smaller in scale than earlier historians had been comfortable with. Richard White's Land Use, Environment, and Social Change: the Shaping of Island

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[3] Frederick Jackson Turner, "On the Significance of the Frontier in American History," from American Historical Association, Annual Report for the Year 1893 (Washington, D.C.: 1894), 199-227.

[4] Walter Prescott Webb, The Great Plains: A Study of Institutions and Environment (New York: Ginn and Company New York, 1931), 85-139.

County, Washington is amongst the best of these new regional ecological histories. In his widely influential book, White concentrated on the environmental and human microcosm rather than the macrocosm. He intimately described the natural and human histories of one place, a small group of islands in the Pacific Northwest of the United States. His detailed observations of Island County revealed the complexities of human-nature interactions, and only by subtle extension painted the big picture, informing on societies and regions well beyond Island County's boundaries. Rather than making broad generalizations, White's focus was on the richly informative intricacies of the specific. Most importantly, the focus of his historical inquiry prompted historians to return to the basics of people living in a place, with less of an emphasis on process.[5]

Since White published his history of Island County, many other regional ecological histories have been written: including William Cronon's history of colonial New England, Changes in the Land; Timothy Silver's work on the south, A New Face on the Countryside; Dan Flores's more literary treatment of a portion of the Southwest, Caprock Canyonlands; and others.[6] Following White's model, graduate

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[5] Richard White, Land Use, Environment, and Social Change: the Shaping of Island County, Washington (Seattle: University of Washington Press, 1980), 3-13.

[6] William Cronon, Changes in the Land: Indians, Colonists, and the Ecology of New England (New York: Hill and Wang, 1983); Timothy Silver, A New Face on the Countryside: Indians,

students as well as eminent environmental historians have turned with a new appreciation toward the writing of local histories, both their natural and human components, what environmental historians prefer to call regional ecological histories. Employing the methodology of environmental history, they have redefined local history. Their goal has been to examine how regional ecological conditions have impacted the adaptations and adjustments of human societies, and how those societies, in turn, have impacted the ecology, in a sort of dialectical, but stubbornly non-deterministic, fashion.

Most of these histories follow White's model by defining a particular place, and then examining the succession of human habitations in that place. In American environmental history, with varying degrees of treatment, this model has traced prehistoric Native American cultures, to historic Native Americans, to specific European cultural or sub-cultural groups like French fur-traders, Hispanics, Mormons, etc., to early American incursions and eventual settlement and dominance. My environmental history of the Smith River follows this pattern. I begin with a description of the Smith River's physical setting and the natural, non-human, forces of change within that

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Colonists, and Slaves in South Atlantic Forests, 1500-1800 (Cambridge: University of Cambridge Press, 1990); Dan Flores, Caprock Canyonlands: Journeys into the Heart of the Southern Plains (Austin: University of Texas Press, 1990).

environment. I then survey prehistoric populations that inhabited the valley, followed by a succession of Native American cultures. The next chapter details the first American industries in the valley; trapping, mining, and logging, and the role of the U.S. military in removing Native Americans. Then, I examine the hundred and twenty year history of ranching along the Smith. Finally, in the seven chapters that comprise Part 2, I analyze the rise of outdoor recreation on the Smith River and its management.

Environmental historians, particularly Donald Worster and Carolyn Merchant, have developed theoretical frameworks for distinguishing and evaluating successive cultural ecological relationships in a place. Worster has based much of his work on the environmental history of the American West upon Marxist materialism. He is particularly fond of describing human habitation in the American West based in terms of economic "modes of production," a Marxist phrase.[7] While his description of a "pastoral mode of production" in the American West (more commonly known as ranching) draws largely from the work of anthropologists and their own angle on Marx, Worster's particular innovation has been what he has termed a "hydraulic mode of production."[8]

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[7] For a description of how Karl Marx applied the term, see G.A. Cohen's Karl Marx's Theory of History: A Defense (Princeton: Princeton University Press, 1978), 79-84.

[8] See Donald Worster's "New West, True West," in Under Western Skies: Nature and History in the American West (New York: Oxford University Press, 1992), 29-33. Worster further develops

Anthropologists have used this materialist approach to distinguish amongst societies worldwide: hunter/gatherer, pastoral, subsistence agricultural, market agricultural, and market capitalist, seem to be the broadest, most widely accepted divisions. In describing the relationship between these cultural groups and their natural environments, anthropologists eventually developed an approach known as "cultural ecology."[9] Environmental historians like Worster, in building upon the work of anthropologists, have applied cultural ecology to historic as well as prehistoric societies, and evaluated cultural ecological relationships in terms of ecological change and even ecological sustainability. The relatively recent idea that modern human societies might be undermining the natural environment to the point of ecological and cultural destruction underlies the whole reason for the rise of the field of environmental history since the 1970s.

In Carolyn Merchant's book, Ecological Revolutions, she described a process of cultural ecological transformation, both cultural changes in worldview and changes in economic modes of production, as well as their resulting impacts on

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his notion of the hydraulic mode of production in, Rivers of Empire: Water, Aridity, and the American West (New York: Oxford University Press, 1986), 48-60.

[9] For an anthropological description of cultural ecology, see Julian Steward, Theory of Culture Change: The Methodology of Multilinear Evolution (Urbana: University of Illinois Press, 1963), 31.

the environment. She outlined three cultural ecologies, or societies, in New England from roughly 1600 to the present; a Native American society, a preindustrial society, and an industrial society. Her work was primarily concerned with analyzing how complex cultural and ecological forces interacted to create new cultural ecological relationships. She calls this process of transformation a cultural ecological revolution. She also suggests that New England is on the verge of creating a post-industrial society.[10]

In my environmental history of the Smith River I borrow freely, but certainly incompletely, from the frameworks outlined by Worster and Merchant. The four primary cultural ecological relationships that I describe in the history of the Smith River Valley are: a prehistoric society, a historic era Native American society, a capitalistic American pastoral society, and the contemporary society that combines pastoralism with outdoor recreation. But these are only rough divisions. Each society interacted with the Smith River Valley differently, manipulating its resources and changing its environment. And, of course, there was certainly diversity within each society.

As another historian of the American West, James Malin, argued, any given society is faced with a certain number of possibilities for cultural development given broad

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[10] See Carolyn Merchant's Ecological Revolutions: Nature, Gender, and Science in New England (Chapel Hill: University of North Carolina Press, 1989), 1-26.

limitations.[11] Malin's neo-deterministic model held that history is shaped by human choices made in the limiting context of the physical environment. Environment does not dictate the choices, but it does establish certain parameters. This has been the case for cultures that have interacted within the Smith River Valley. The primary cultural adaptation has been to aridity. It was largely because of lack of water that prehistoric cultures in the valley were hunter/gatherers, that the Native American cultures in the valley were hunter/gatherers possibly in transformation to a form of mounted pastoralism, and that American settlers developed livestock agriculture rather than mixed agriculture. But, again, water does not define all historical cultural development in the valley. It has simply always been important. As there has been diversity of culture and within culture, there has been diversity within environment, which has meant many possibilities for cultural ecological relationships existed for the Smith River Valley. This thesis attempts to better understand the cultures and the environments that emerged in the river's long history of human inhabitation.

The present situation of management choices on the Smith River is illustrative of the variety of cultural and

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[11] James Malin, History and Ecology: Studies of Grassland, ed. Robert P. Swierenga (Lincoln: University of Nebraska Press, 1984), 132-135. Also, James Malin, On Nature and History: Essays about History and Dissidence (Lincoln: University of Nebraska Press, 1954).

environmental possibilities that exist on the river today. In recent American history, environmental conditions, while not ideal for economic development, supported solvent ranching operations along the river. In addition, limited timber and mining resources bolstered the river's development potential. Environmental factors have also created a river and a river canyon that is aesthetically pleasing, at least according to our present cultural definitions. These factors have populated the shores with wildlife and filled the waters with fish, making the river a popular and highly valued recreation site in the last few decades. Recreational demands have recently become so important that they have begun to conflict with the extractive uses of the river's resources. Choices must be made. Will the river be preserved as a recreational resource, or will the river's economic resources be maintained or perhaps even expanded? Will the competing interests continue to be roughly balanced as they are now, with all demands attempting to be met, or will some innovative proposal chart a new course for management in the future? And how will the choices made effect the environment? These questions are shaped, but not predetermined by environmental conditions, conditions that quickly change as a result of human manipulation. Humans will ultimately make the choices based upon their values, values that have arisen, in part, from interactions with the

landscape.

The basic assumption of regional environmental histories is the belief that different regions will reveal different relationships between human and natural communities, and that both culture and environment are dynamic and shifting. This is true because the physical setting always differs from place to place, as does the history of human occupation. The Smith River, located in a transitional zone between the northern Rockies and the Great Plains, exhibits an ecology dramatically different from that found, for example, along the lower Mississippi. The Flathead and the Blackfeet inhabited the Smith in a fashion far dissimilar to the Natchez and the Choctaw along the lower Mississippi, and while the French, Spanish, English, and African-American slaves all interacted in the one, none were very familiar to the history of the other. American incursion into both differed markedly, as did American adaptations to each region.

Even in the relative uniformity of modern life, the lower Mississippi River and the Smith River exhibit two distinctly different environmental adaptations, each with distinctly different environmental problems. In the former, local people and government institutions grapple with the threats to human health and to the ecology of the river posed by industrial and commercial development. In the later, local people and government institutions are

preoccupied with managing the relatively pristine resources of the Smith amongst the competing interests of recreational floaters and fishermen, ranchers, loggers, environmentalists, and others. No one theory can describe both the Smith and the Mississippi accurately. They are two different places.

Therefore, this history is rooted to a landscape, not to a group of people, or an abstract idea. Principally, that landscape is defined by a river and the land within the river's drainage. This combination of earth, water, and sun have sustained life for the three million years since the river formed. Of that vast stretch of time, humans have inhabited this particular drainage for less than 20,000 years. The river is located near the backbone of an immense continent where high northern plains meet a mountain chain stretching north and south nearly half way around our planet. It flows through the mountains and out onto the plains for only a short length before joining the upper reaches of a much greater river, the Missouri. For less than two hundred years, Americans have called the river the Smith, inappropriately named after a long dead Secretary of the Navy, who never stood on its shaded banks. Within that time, the river has been politically assigned to both Meagher and Cascade Counties in the west-central region of the state of Montana of the United States of America. This history is primarily about how humans have interpreted and

manipulated the natural resources of the Smith River differently.

In an attempt to study the relationship between culture and environment in any given region, the first task of environmental historians has been to establish and justify the boundaries of that region. Regional ecological histories are based on the assumption that the region itself has some cultural and ecological distinctness, a certain wholeness that makes sense when studied by itself. The first task is to define those distinctions. This does not mean that any region can be adequately understood without a broader ecological and cultural context. However, eventually all regions have a global, if not cosmic context, and historians, like ecologists, are forced out of practical necessity to limit the boundaries of their studies.[12]

I have limited my study more than the environmental historians to whom I am indebted have limited theirs. While their environmental histories have focused on much larger regions like New England, the South Atlantic, the Southern High Plains, I have attempted to contain my history within a relatively small watershed.[13] The only environmental history whose scale approaches my own is Richard White's

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[12] For a more thorough discussion of establishing boundaries for environmental histories see Cronon, Changes in the Land, 14-15; and Silver, 1-6.

[13] See Cronon, Changes in the Land; Silver; and Flores, Caprock Canyonlands.

environmental history of Island County, Washington.[14] Often, particularly when describing the prehistoric and Native American cultural ecological relationships with the river, I am forced out of my watershed into the broader milieu of Montana or Western American history, in order to find material and make connections as to how cultures have used the resources of the Smith's watershed. However, I try, as best as I am able, to anchor myself to the river.

Few regional ecological histories have been defined by a river, but despite the deficiency of precedent, there seems to be both ecological and cultural justification for a history of a watershed, even a watershed as small as the Smith River.[15] Scientists like Robert Curry have argued that the watershed is the most appropriate ecological unit, a contained, yet interdependent cycle of water and land, which in combination with sunlight, forms the fundamental habitat for all living things.[16] Aldo Leopold, ecologist, philosopher, and father of modern conservation, also observed how the water cycle of a river most clearly illustrates the principles of ecology, and provides a

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[14] See White, Land Use, Environment, and Social Change.

[15] There is only one environmental history that I know of, and it follows a very different model than my own. See Philip Scarpino, The Great River: An Environmental History of the Upper Mississippi River, 1890-1950 (Columbia: University of Missouri Press, 1985).

[16] Robert Curry, "Watershed Form and Process: The Elegant Balance," Co-Evolution Quarterly (Winter 1976-77): 14-21.

metaphor for an appropriate way of living.[17] In addition, as policy makers and historians of the American West from John Wesley Powell to Donald Worster have argued, water in the semi-arid lands west of the hundredth meridian has been of seminal importance to the region's history and development. As boundaries, watersheds make ecological and cultural sense.[18]

But this watershed has never been completely isolated from the ecologies and cultures around it. The river's history, like the history of all regions, has been influenced profoundly by forces originating outside of the watershed. A survey of the region's immediate physical neighbors is therefore helpful. With the exception of its northernmost end, where it rolls out onto the Great Plains, the Smith River Valley is contained loosely within the Northern Rocky Mountains. These are modest, isolated, and rounded ranges, like the Belts, which differ markedly from the towering, jagged, monumental ranges found in western and southwestern Montana. East, just beyond the Little Belt Mountains, lies the expanse of the Northern Great Plains, and from the Smith River Valley, the peace of those gentle,

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[17] Aldo Leopold, Round River (New York: Oxford University Press, 1953).

[18] See John Wesley Powell, Report on the Lands of the Arid Region of the United States, With a More Detailed Account of the Lands of Utah, U.S. Geographical and Geological Survey of the Rocky Mountain Region (Washington: GPO, 1879); and Worster, Rivers of Empire, 36-47; and Worster's "New West, True West," in Under Western Skies, 19-33.

undulating plains is palpable, as is the din of far off markets, from Great Falls to Chicago. The most important ecological and cultural feature of the Smith River has been that, despite its small size, it is of both the mountains and the plains. This has made it ecologically diverse, providing a broad range of habitat types despite its size. This ecologic diversity has increased the river's cultural value.[19]

The region surrounding the Smith River reflects this diversity. The parallel drainage immediately to the west of the Smith contains the Upper Missouri river from the Three Forks of the Missouri north to the Gates of the Mountains. In many ways it is very similar to the Smith River Valley, except that it is a larger river and supports a much larger human population, including Montana's capital. To the south of the Smith's headwaters, the valley broadens between a series of ranges, including the Bridger Range and Big Belts on the west and the Castle and Crazy Mountains on the east, before being cut off by the Absaroka Range on its southern border. Sixteen Mile creek, south of the Smith, flows west into the Rockies to just north of the Three Forks of the Missouri. The Musselshell and Shields rivers, also south of

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[19] See George Frison, "The Western Plains and Mountain Region," in Early Man and the New World, Richard Shutler, Jr., ed. (Beverly Hills: Sage Publications, 1983), 109-124; and, George Frison, "The Foothills-Mountain Dichotomy in Paleoindian Subsistence Strategies Between Two Ecosystems," in Ice Age Hunters of the Rockies, Dennis Stanford and Jane S. Day, eds. (Denver: University of Colorado Press, 1992), 323-342.

the Smith, flow east and emerge from the mountains and pour out almost immediately onto the Great Plains.[20]

The environmental history of the Smith River is also, in part, an environmental history of the American West. And as an ecological and cultural place, the Smith River is typically western. As has been mentioned, the Smith River courses through two of the West's most distinctive geographic regions, the Rocky Mountains and the Great Plains. As commentators on the American West from Long to Worster like to point out, the West, including the Smith River Valley, enjoys less rainfall than the eastern states, making it a semi-arid environment.[21] The Smith River Valley supported vibrant prehistoric and Native American cultures, and was a scene to the common western tragedy of American expansion and conquest. Its economic development was also typically western, based initially on the boom bust pattern of mining operations, and eventually on large scale

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[20] See Montana Promotion Division, "Montana Official Highway Map 1994-95," (Helena, Montana: Simon and Schuster, Inc., 1994). For more detailed maps of portions of the Smith River Drainage from White Sulphur Springs to Ulm, consult the following U.S. Geological Survey quadrangles. For Meagher County, Montana; Fort Logan, Devils Footstool, Ellis Canyon, and Lingshire NE. For Cascade County, Montana; Millegan, Boston Coulee School, and Spanish Coulee School.

[21] See Webb, The Great Plains; and Donald Worster, Under Western Skies, 19-28.

ranching.[22] Finally, the Smith River, in recent decades, has become the most popular float river in Montana, mirroring the particular patterns and problems associated with such recreation and its management nationwide, but particularly in the West. In all this, the Smith River has been both a unique environmental and cultural place, as well as being part of a larger place and larger processes.[23]

In sum, this is a history of a small place. Yet, within this area is a surprising amount of cultural and ecological diversity, and a surprising amount of history. Regardless, the best justification I have for writing a history of the Smith River, that which truly makes this history unique, is the present level of recreational use on the river, and the history of the management of that use. If nothing else, the attempt I make to describe the sequence of past cultural ecological relationships on the river serves as an introduction to the river's more recent use. This environmental history begins with the water, the land, and the living things found within its watershed, but not the primordial wild I had expected to see when I first

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[22] For a good overview of this process in the American West, see Patricia Limerick, Legacy of Conquest: The Unbroken Past of the American West (New York: W.W. Norton, 1987), 97-133.

[23] For a discussion of place and bioregional history, see Dan Flores, "Place: An Argument for Bioregional History," Environmental History Review, 18 (Winter 1994): 1-18; and, Dan Flores, "The Rocky Mountain West; Fragile Space, Diverse Place," Montana: The Magazine of Western History, 45 (Winter 1995): 46-56.

floated the river. Before I had even settled into my canoe, I realized that there was a humane presence in this wilderness, and that, in one occupation or another, people had been there for a long time.

## CHAPTER 2

### Crick, Land, and Critters

The Smith River, or crick, as Montanans are fond of saying, is a modest but beautiful river that flows a short distance from the Northern Rocky Mountains to the Great Plains, where it joins the mightier Missouri. At its headwaters in the south, it forms from two small streams, the North Fork and the South Fork, that flow together in a broad intermountain valley just west of the ranching community of White Sulphur Springs. Of these streams, the North Fork drops from the gentle slopes of the Little Belt Mountains to the east, tumbles past White Sulphur Springs, and a dozen miles later splashes into the South Fork. The South Fork makes an equally short and languid trip from the granite walls of the Castle Mountains in the southeast before it joins with the North Fork. From there, the Smith River runs nearly due north through a remote section of west-central Montana for a total of 110 river miles. Only a few ranches visible from the river, and two subdivided sections of summer homes, remind the casual observer, these days usually a recreational floater intent on fishing, that humans live near the river's banks. By national standards, the Smith River is a pristine wilderness, or, as the Nature Conservancy claimed, "the Smith River offers the finest combination of wilderness, scenery, trout fishing, and

wildlife in the state." For the state of Montana, that's a pretty big claim.[1]

From the confluence of the North and South Forks, the main stem of the Smith River continues north through the rounded and relatively wide valley floor separating the Big Belt Mountains on the west from the Little Belt Mountains on the east. Near Camp Baker, the popular Montana State Department of Fish, Wildlife and Park's (FWP) floating access site at the mouth of Sheep Creek, the Smith River enters a narrow limestone canyon. The river courses through this canyon for nearly half of its entire length, just over fifty miles, before it gushes out onto the heaving grasslands of the Great Plains, where it meanders sluggishly toward the Missouri River, which it meets near Ulm, Montana.

The short, rich life of the Smith River is contained within three distinct geographic zones: first, a wide Northern Rocky intermountain valley approximately twenty-five river miles long; second, a narrow, spectacular, canyon about fifty-five miles long, separating two small Northern Rocky Mountain ranges; and, finally, a transitional zone of the Northern Great Plains, at the foot of the Rocky Mountain Front, through which the river slowly flows for a final

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[1] "Float Fishing in Montana," Nature Conservancy Magazine, Jan./Feb. 1988, 31.

thirty miles before joining the Missouri.[2]

This is the geography revealed to the floater, sitting in his raft, moving slowly, pleasantly, downriver. Neither the river's ecological or cultural history can be understood out of context with a more complex, physical landscape, a landscape that is often hidden just beyond the sight of a floater, or simply ignored. "Wilderness" is a word that is too misleading and simplistic to describe this land through which the Smith River flows.

First, while this thesis is primarily concerned with the river itself, and the human and non-human communities living closest to its banks, it also encompasses the broader reaches of the Smith River Valley, beyond the "river corridor," as FWP labels the land that can immediately be seen from a floater's perspective moving down the river. After all, unless this history were to be completely aquatic, it requires some land to work with. Therefore, throughout this thesis, I refer to both the Smith River and the Smith River Valley, which is itself defined by the river's drainage, or watershed.

The Smith River watershed, like most watersheds, looks something like an narrow, oblong bowl, with the lips of the bowl formed by the surrounding mountains. Around the Smith,

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[2] U.S. Department of the Interior, Bureau of Land Management, Preliminary River Access Study of Five Major Rivers in Montana, by Sharon K. Vaissiere (Billings: BLM, 1981), 1-8.

these mountains are small. The highest peaks to the east and west range from 8,500 to 9,500 feet above sea level. The elevation of the floor of the watershed varies from 5,400 feet above sea level in the valley of its headwaters, to 3,350 feet above sea level where it pours into the Missouri. This drainage is approximately 75 miles in length, 110 river miles, and the valley width varies from 3 to 45 miles. The total area of the drainage is slightly over 2,000 square miles.[3]

To understand how human communities have used and manipulated the resources of the Smith River, and how both environment and culture have changed as a result of this manipulation, it is necessary to reconstruct the evolution of the environment of the river before the arrival of humans. To paint a complete picture is impossible, as it involves thorough treatment by specialists of a variety of earth science disciplines. For the environmental historian (or at least for this environmental historian) only the dimmest outlines can be drawn. My description of the physical environment of the Smith River before the coming of humans begins with geology, and moves on to a survey of climate, hydrology, and soil. These are the building blocks upon which the human story along the river has been based.

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[3] Montana Department of Fish, Wildlife, and Parks, Environment and Information Division, Smith River Drainage Inventory and Planning Investigation: Federal Aid to Fish and Wildlife Project - FW-1-R-3 (Great Falls, Montana: Department, 1973), 1-2.

Less so than the flora and fauna of the region, these environmental factors have been more resistant to human manipulation, and represent a sort of baseline from which to begin. (Of course, more recently, the river's hydrology has been affected by human water diversion, and the soil by human caused erosion). Finally, I will conclude the chapter with a look at the shape and composition of the watershed's natural vegetation under the recent climatic, geologic, and hydrologic regime, and the fauna that vegetation has recently supported.

The renowned nineteenth century scientist, Dr. Ferdinand V. Hayden, was the first to write on the geology of the Smith River, which he observed in July of 1860 while returning from an exploratory expedition of the Yellowstone and Upper Missouri Rivers under the command of Captain William F. Raynolds. He and his companions were also the first documented party of Americans to have entered the Smith River Valley. In his journal of July 6, Hayden noted: "Passing along the Smith's river I saw this series of curious sombre, apparently basaltic rocks, which, except for their structure and color, I would regard as cretaceous or tertiary."[4] The following day he wrote: "Descending the Smith's river we find that it cuts its way through immense canons of carboniferous limestones, with numerous ejections,

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[4] Ferdinand V. Hayden, Geologic Report of the Exploration of the Yellowstone and Missouri Rivers (Washington: Government's Printing Office, 1869), 91.

however, of eruptive rocks."[5] Hayden, unlike most of his contemporaries, recognized the immense time that was necessary to create such a diversity of geologic formations as those he found along the Smith River. His theories of geology and paleontology, based upon the direct observations taken on expeditions like the one through the Smith River Valley, challenged long held beliefs about the nature of creation, specifically, about the age of the Earth.[6]

This question of time adds an important perspective to the environmental history of the Smith River. As modern geologists now know, the physical environment of the region has been a product of several billions of years of geologic change, and humans in Montana have only been a part of that change for the last 12,000 years, 20,000 at the most, in either case, a geologic nanosecond of time. In addition, geologic processes continue to re-shape the face of the region, generally at a rate unnoticed during the short span of human life, human civilization, and human evolution. These processes, however, can be observed in the records left in the rock and sediment of the Smith River Valley. They form a colorful picture of the region's geologic

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[5] Ibid, 92.

[6] For additional information on Dr. Ferdinand Hayden and on the role of scientists in the exploration of the American West, see William H. Goetzmann, Exploration and Empire: The Explorer and the Scientist in the Winning of the American West (New York: Alfred A. Knopf, 1966); and Richard A. Bartlett, Great Surveys of the American West (Norman: University of Oklahoma Press, 1962).

history that is considered remarkably scenic by visitors to the river today.[7] If the geology of the watershed has one theme throughout its vast history, it is a theme of environmental change.

Nearly five billion years ago the Earth's molten mass cooled to form a thick outer crust of igneous rock. Worn down to sand and mud by rain and the vast seas that covered most of the surface, including the northern reaches of the present continent of North America, some of this sediment was forced back below the Earth's crust by tectonic subduction zones where it was solidified and re-crystallized under immense pressures and temperatures to form the basement rocks, which, as elsewhere in the Rockies, underlie the Smith River Valley. These are the oldest rocks in the region and are only exposed in some remote areas of the Little Belt Mountains just to the east of the Smith River. Dating from the Archaen Era (2.6 billion years ago and older) of the Precambrian Eon (570 million years ago and older), the oldest of these basement rocks found in Montana are 3.2 billion years old.[8]

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[7] According to a survey taken in 1988 by the Montana State Department of Fish, Wildlife, and Parks (FWP), 82% of floaters surveyed floated the Smith River for its scenic beauty. See FWP, "Draft of the 1994 Smith River Management Plan," by Doug Haberman (Great Falls: FWP, 1994), appendix three.

[8] James L. Rearden, "The Land," in The Smith River Journal: A History from Lewis and Clark to 1979, Cascade and Meagher Counties, Montana (Great Falls: Smith River Historical Society, Tribune Printing, 1979), 7-12.

The layer blanketing the basement rocks is a sedimentary deposit of multicolored sandstones and mudstones from the Proterozoic Era (570 million years ago - 2.6 billion years ago) of the Precambrian Eon. These Precambrian sedimentary rocks, also known as "Belt" sedimentary rocks because their distinctive stratification resembles the broad band of a belt, are well displayed in the Little Belt Mountains. They are deposits of sediments formed from the erosion of the first chain of mountains in the region known as the "Ancient Rockies". This layer is exposed along the Smith River Valley as the Smith River leaves the canyon region and enters onto the plains, just southeast of the township of Lingshire, extending easterly away from the valley toward the town of Neihart in the Little Belts.[9]

Most of the exposed geologic formations found in the Smith River Valley date to the eon following the end of the Precambrian Eon, the Phanerozoic (present- 570 million years ago). The Paleozoic Era (230 million years ago - 570 million years ago) is the first era of the Phanerozoic Eon. During long periods of time in the Paleozoic Era most of central Montana lay below sea level and layers of sediment accumulated on the floor of a vast inland sea. Rocks in the Smith River area dating from the Paleozoic Era also contain

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[9] Ibid, 8.

the first animal fossils.[10] Of the many formations laid down during the Paleozoic Era, the Madison limestone is the most conspicuous in the region of the Smith River, and where it is revealed by erosion, throughout central Montana. The high limestone cliffs of the Smith River Canyon, admired by floaters between Camp Baker and Eden Bridge, are mostly made up of the distinctly pale gray, almost white, Madison limestone of the Paleozoic Era.[11]

Shallow sea waters again covered central Montana during long intervals of the Mesozoic Era (65 million years ago - 230 million years ago) until about 140 million years ago, at the start of the Cretaceous period, when the "New Rockies" began to rise and drain the land eastward. As the sea retreated, deposits of sand, mud, and peat were laid down. It was also during the Mesozoic Era that dinosaurs roamed the Earth, including large numbers in the lands now known as Montana. Sometime near the end of the Mesozoic Era and the beginning of the Tertiary Era (2.5 million years ago to 65 million year ago), dinosaurs became extinct, possibly because of some catastrophic environmental event, like a meteor impact a thousand times greater than the explosion of a nuclear warhead.[12]

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[10] Ibid, 7-12.

[11] David Alt and Donald W. Hyndman, Roadside Geology of Montana (Missoula: Mountain Press Publishing Co., 1990), 252-253.

[12] Rearden, 7-12.

Several formations from the Mesozoic Era are visible along the Smith River, particularly in the northern and southern ends of the valley. The oldest is the dark Morrison formation containing shales and coal seams. Located in the northern reaches of the valley before Eden, particularly near the junctions of Hound Creek and Ming Coulee with the Smith River, the Morrison Formation contains bituminous coal of moderate quality. Coal is the only geologic natural resource known to exist in extractable quantities in the Smith River Valley, and it is only marginally marketable.[13] Geology has left the Smith River Valley beautiful, but, in terms of our modern demand for minerals, oil, and gas, it is poor in natural resources.

The layer overlying the Morrison Formation is the Kootenai Formation. This layer includes red and green siltstones with gray sandstones on top. The full depth of this layer is exposed from the Hound Creek Bridge south a short distance. The Flood Member of the Blackleaf Formation is the most recent layer of the Mesozoic Era found on the Smith River. This layer contains light gray sandstones at the bottom changing to darker shales and siltsones at the top. It is found along the final miles of the Smith before it pours into the Missouri.[14]

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[13] John Goer, "Geology and Groundwater Resources of the Stockett-Smith River Area, Montana" (Master's thesis, University of Montana, Missoula, 1964), 96-102.

[14] Rearden, 9.

As the Rocky Mountains rose through the crust of the Earth beginning approximately a 140 million years ago, the sedimentary and basement rocks that had been formed over the last two billion years were violently ripped, tilted, and exposed. The Big Belt and Little Belt Mountains, like many ranges in the Northern Rockies, arose from relatively localized pressures beneath the Earth's surface resulting in arches in the crust. As the basement rocks and the Precambrian sedimentary rocks began to rise, the overlaying younger rocks were fractured, exposing the older rocks at the center of the arch. The combination of forces created by the rising arch of the Little Belts to the east and the uplifting of the Big Belts to the west caused tremendous compressional forces along the central region of the present-day Smith River. The result is that the Smith River today is bordered to the south by a broad open valley and to north by the Great Plains, while its central portion is wedged tightly between the surrounding steep slopes and cliffs of the Big Belt and Little Belt Mountain ranges.[15]

The Rocky Mountains continued their slow, monstrous rise during the Cenozoic Era (65 million years ago - present) following the Mesozoic Era. During much of the Tertiary Period (65 million years ago - 2.5 million years

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[15] U.S. Department of Agriculture, Soil Conservation Service, Geologic Parent Materials of Montana Soils, by Roger Veseth and Clifford Montagne (Bozeman: Montana Agricultural Experiment Station, 1980), 1-7.

ago) the Northern Rockies were extremely arid. There was not enough rainfall or runoff to develop streams or major river systems. Sediment loads were carried only short distances from the mountains, and erosion contributed little to the re-shaping of the landscape. Limited fossil evidence from the period reveals the remains of primitive horses, camels, and other larger animals.[16]

As the climate became wetter near the beginning of the Quaternary Period (3 million years ago - present), the Smith River began to chart its present course. For the last three million years the Smith River cut through the layers of the sedimentary rocks of the valley and gouged its way through the compressed folds between the Big Belt and Little Belt Mountains before pouring out onto the Great Plains and joining up with the Missouri River. As the Smith River cut deeper into the valley floor its drainage area grew, its tributaries developed, and its spectacular, but resource poor, geologic formations were revealed.[17]

The geologic legacy of the Smith River for the modern era has meant, so far, that there has been little mineral and natural resource development in the valley itself, and that the region's geologic beauty has provided an optimal environment for scenic floats. At least in this limited regard, the area's geology has determined that the

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[16] Rearden, 7-12.

[17] Ibid.

environment of the river would be preserved rather than developed. But the geologic history of the region has also been a history of change, change so complete and on such a massive timescale as to almost make human environmental manipulation seem utterly insignificant. This is an argument that many opponents have made to the radical cultural changes proposed by environmentalists since the 1960s and 1970s.[18]

Climatic forces began to directly shape the present environment of the Smith River Valley beginning in the Quaternary Era. This era witnessed four known ice ages, periods of slightly decreased global temperatures and increased precipitation that allowed Arctic glaciers to extend south and cover much of the northern part of this continent, a process that had dramatic consequences for the Smith River. The latest ice ages, the local Pinedale ice age that ended approximately 10,000 years ago and the Bull Lake ice age from 70,000 to 130,000 years ago, extended as far south as the Missouri River.[19] When this happened the Missouri and the Smith Rivers were dammed up by a wall of

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[18] For a moral and philosophical refutation of this line of thinking, see Aldo Leopold, "The Land Ethic," in Sand County Almanac, and Sketches Here and There (New York: Oxford University Press, 1987; orig. pub. 1947), 224. Also see Donald Worster's discussion of "permissive ecology" in, "The Shaky Ground of Sustainable Development," The Wealth of Nature: Environmental History and the Ecological Imagination (New York: Oxford University Press, 1993), 152-153.

[19] Alt and Hyndman, 266-270.

ice several hundred feet thick to the north and extending south as far east as the Highwood Mountains. The result of this was the formation of Glacial Lake Great Falls. Its farthest reaches extended to nearly Augusta, Montana on the west, Craig, Montana to the southwest, and as far south as the Dry Fork on the Smith River, or about the point where the northern end of the Smith River opens onto the plains. Bench areas on both sides of the Smith River were inundated by this glacial lake, which deposited nearly 300 feet of sediment at Ulm. As the glaciers retreated, the lake was drained.[20]

Climate continues to shape and re-shape the environment of the Smith River, with seasonal and generational cycles perceptible to human cultures, as well as more profound and subtle changes over a longer timespan.[21] Cycles of drought have been particularly important to the cultural ecological history of the Smith River, and of the American West.[22]

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[20] Rearden, 9.

[21] On the importance of climate to history, see Reid Bryson and Thomas J. Murray, Climates of Hunger: Mankind and the World's Changing Weather (Madison: University of Wisconsin Press, 1977); and, Robert I. Rotberg and Theodore K. Rabb, eds., Climate and History: Studies in Interdisciplinary History (Princeton: Princeton University Press, 1981).

[22] On drought cycles and the devastation of inappropriate cultural ecological relationships in the West, see Donald Worster, Dust Bowl: The Southern Plains in the 1930s (New York: Univ. of Oxford Press, 1979). Also see Dan Flores's discussion of the ecological changes caused by climate fluctuations in Caprock Canyonlands: Journeys into the Heart of the Southern Plains (Austin: Univ. of Texas Press, 1990), 145-46.

Today, precipitation and temperature vary slightly within the Smith River Valley. The southern end of the valley, south of Camp Baker, under the present climate regime receives approximately 14 inches of rain annually, as does the northernmost section of the valley as it angles down to the plains. The middle canyon section of the river is the highest and most mountainous section of the valley and receives anywhere from 16 to 18 inches of precipitation annually.[23] The mean annual temperature of the Smith River Valley is between 38 and 42 degrees fahrenheit, with the middle mountainous canyon section being generally colder. The northern and southern ends of the valley also receive less snowfall, from 51 to 60 inches annually, compared to the canyon's 81-90 inches. Like much of the American West, the Smith River Valley is a semi-arid environment, and water has been one of the most important ecologically and culturally limiting factors in the region's history. With the cycles of drought presently typical to the region, and the possibilities of increased aridity due to larger climatic changes, the environment of the Smith River Valley will continue to change, and water will be one of the most important factors in that change.[24]

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[23] USDA, Soil Conservation Service, Climax Vegetation of Montana; Based on Soils and Climate, by Robert L. Ross and Harold E. Hunter (Bozeman, Montana: SCS, 1976), 53-56.

[24] Joseph M. Caprio and Gerald A. Nielsen, Climate Atlas of Montana (Bozeman, Montana: Plant and Soil Science Department, Montana State University, 1992), 8-10.

In the five billion year old history of the river's geologic gestation, and the three million years since its birth, the common theme of the Smith River's history has been change. The Old Rockies have risen and eroded away, life has evolved on the Earth, species, like the dinosaurs have become extinct, Pangea has broken apart, a new chain of Rocky Mountains has risen, and glaciers have expanded and receded, to name just a few of these changes. Since the retreat of the Pinedale glaciers over 10,000 years ago, about the time humans arrived in the valley, the slow process of geologic activity affecting the Smith has been almost imperceptible to humans. Other natural, seasonal changes are more readily apparent, such as fluctuations in valley's temperature, precipitation, streamflow, and the periodic shifting of the river's channel, while the geologic forces pushing up the Rocky Mountains, sunspot storms, oscillations in the earth's orbit, and other unknown conditions which cause an ice age, continue apace, so far still beyond the reach of human manipulation. Since the last ice age, changes in the hydrology of the Smith River and in the river valley's plant and animal communities have been more dramatic as a result of human occupation than geologic activity.

Ultimately, water is what defines the Smith River. And, particularly in the semi-arid landscape of valley, the river's hydrology has been of pressing importance to its

ecologic and cultural history. The Smith River is born of two mountain streams and advances downriver being joined by over a dozen mountain tributaries before it passes its essence on to the Missouri River. The Missouri River continues to the Mississippi, and the Mississippi flows into the Gulf of Mexico, where it mingles with the world's oceans. The tributaries of the Smith rush cold from the tree-clad slopes of the surrounding mountains. Tributaries listed in the order that they join the Smith River from the east include the North Fork, Newlan Creek, Whitetail Deer Creek, Sheep Creek, Eagle Creek and Tenderfoot Creek, which all drain the Castle Mountain and Little Belt Mountain areas. Flowing from the west are Birch Creek, Camas Creek, Elk Creek, Thomas Creek, Benton Creek, Beaver Creek, Rock Creek, and Freeman Creek, which all drain the southwest flank of the Big Belt Mountains. One of the largest tributaries, Hound Creek, drains out of the northern reaches of the Big Belts and winds through the plains before dumping muddy into the Smith just a few miles before it pours into the Missouri.[25]

The amount of water carried by the Smith River, its "streamflow", is measured by hydrologists as cubic feet per second (c.f.s.). The river's streamflow varies dramatically

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[25] Montana, The Governor's Council on Natural Resources and Development, The Smith River An Opportunity for Quality: Report to Governor Forrest H. Anderson and the 42nd Montana Legislative Assembly (Helena, Montana: Council, 1970), 1-2.

between the months of spring runoff, anywhere between mid-April and mid-June, and the rest of the year. It is also significantly different from year to year depending on precipitation and evaporation rates. Finally, streamflow progressively increases the further downriver it is measured, as successive tributaries flow into the Smith adding to its volume.

A ten year average of streamflow during the 1950s was taken near Eden, Montana not far from where the Smith flows into the Missouri and just past where it is joined by its last major tributary, Hound Creek. Such a sample measures the maximum potential flow of the Smith River over a ten year period, but includes human caused decreases in streamflow, primarily from irrigation, since 1870. However, these figures give a good estimate of the river's natural streamflow during a ten year period when not in a drought cycle, as most water diversion for irrigation prior to the 1950s was minimal. Even today, compared to many rivers in the West, the streamflow on the Smith River has only been moderately affected by human irrigation efforts. However, as further chapters will show, this is not to say that the environmental impacts of irrigation have been moderate.

The maximum runoff during the ten year period reached a peak of 3,119 c.f.s.. The minimum peak runoff was 600 c.f.s. and the minimum runoff approached 50 c.f.s. These numbers reflect dramatic seasonal and conditional

| | |
|---|---|
| January | 90 c.f.s. |
| February | 100 c.f.s. |
| March | 150 c.f.s. |
| April | 310 c.f.s. |
| May | 780 c.f.s. |
| June | 790 c.f.s. |
| July | 300 c.f.s. |
| August | 150 c.f.s. |
| September | 110 c.f.s. |
| October | 120 c.f.s. |
| November | 110 c.f.s. |
| December | 100 c.f.s. |

Table 1. Average Streamflow on the Smith near Eden, 1950-1959.

differences in streamflow to be found on the Smith River. These differences have posed serious environmental limitations on human activities in the region, including the water needs of hunter/gatherer societies during the dry summer months, the needs of farmers and ranchers for irrigation, and, most recently, the needs of outdoor recreationists for sufficient streamflow to float the river and to maintain sport fish populations.[26]

Measurements taken at Camp Baker, the launching site for most all recreational floaters on the Smith, indicate substantially less annual streamflow than that recorded at Eden nearly seventy river miles downstream. The year of 1971 provides an example. The average maximum streamflow between mid-May and mid-June of this year was 400 c.f.s.. The average runoff in other months was below 100 c.f.s.. Streamflow at Camp Baker is on the average approximately half that at Eden. Because Camp Baker is far above the Eden Bridge take-out site, this is only natural. It is mentioned only to demonstrate the abrupt difference in streamflows found on different lengths of the river. [27]

The discharge of a few of the Smith's tributaries, also taken during 1971, gives a perspective of the relative contributions made to the overall streamflow of the Smith.

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[26] The Governor's Council, Smith River An Opportunity for Quality, 20.

[27] FWP, Smith River Drainage Inventory and Planning Investigation, 63.

Working downriver, the maximum discharge of the selected tributaries during the spring runoff of 1971 were as follows:[28]

| | |
|---|---|
| North Fork | 125 c.f.s. |
| South Fork | 50 c.f.s. |
| Camas Creek | 125 c.f.s. |
| Beaver Creek | 100 c.f.s. |
| Eagle Creek | 150 c.f.s. |
| Sheep Creek | 400 c.f.s. |
| Rock Creek | 70 c.f.s. |
| Hound Creek | 250 c.f.s. |

Table 2. Maximum Streamflows of Smith's Major Tributaries, 1971

The hydrology of the river, specifically, the volume of its streamflow, has meant different things to different people. In general terms, the volume of the Smith River is insufficient to boost it to the ranks of a mighty river. Certainly smaller than the Missouri, the Smith River is also more modest than the Yellowstone, the Musselshell, or the Clark Fork, for example. Little more than a large stream until joined by Sheep Creek near Camp Baker, the river was declared commercially navigable by the state of Montana from

[28] Ibid, 60-67.

the mouth of Sheep Creek to its confluence at the Missouri in the 1980s. This designation provided the state a legal basis for the ownership and regulation of the Smith's waters.[29] "Cubic feet per second" and other scientific vocabulary aside, the description that communicates the most to recreational floaters is that during a year of average precipitation, from mid-April to mid-July, you can generally float a loaded canoe down the Smith from Camp Baker without scraping the bottom up too badly. For agriculturalists, the Smith contains insufficient water for massive irrigation projects, and so far reclamationists have not been attracted to the Smith, although present irrigation levels significantly impact the river's hydrology. In the past, loggers have found the water of the Smith sufficient for massive log runs, beginning as far upstream as where Sheep Creek enters the Smith at Camp Baker.

The hydrology of the river is equally important to the non-human inhabitants of the valley. The water shapes the landscape, and for living things, the riparian ecosystem of the Smith rests upon the foundation of its hydrology. In this semi-arid landscape, the river's waters are as vital for wildlife as they are for humans. An understanding of the river's hydrology aids in the understanding of the relationships between the river and the land, the flora, the

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[29] Montana Department of State Lands, Navigable Water Ways Owned by the State of Montana and Administered by the Department of State Lands (Helena, Montana: Department, 1987), 1-6.

wildlife, and the people who inhabit or visit the region.

Changes in the river's hydrology, human caused or otherwise, have profound impacts on the river's ecology. The cubic feet per second measured only since recent decades calculates a streamflow that has been dramatically reduced since the irrigation of the Smith River Valley by ranchers and farmers. Less water for the river means not only less water for the fish, the fauna, and the wildlife, but also less for the recreational floater. More subtle changes in the river's hydrology, such as temperature increases in the water caused by irrigation, for example, has in recent decades made the Smith River almost uninhabitable for its native species of trout.[30] Disruptions in the rivers p.h., sedimentation, and chemical pollution caused by human activity in the valley also have consequences generally disruptive to native plant and animal species. Human caused disruptions in the natural hydrology of the river will be more closely examined in the following chapters.

Geologic activity has shaped not only the hydrology of the region, but the composition of the land. Like climate and streamflow, the chemical make-up of the soil of the land has been fundamental in determining what kinds of human economic activities have been possible in the valley. Several broad classifications distinguish the soil types

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[30] FWP, Smith River Drainage Inventory and Planning Investigation, 12-24.

found along the banks of the Smith River. These soil classifications conform roughly to the three geographically distinct regions through which the Smith flows: first, the broad intermountain valley region from White Sulphur Springs to Camp Baker; second, the mountain slopes and plateaus extending above the Smith River Canyon from Camp Baker to roughly Eden bridge; and last, the foothill region of the Northern Great Plains from Eden Bridge to the Smith's confluence with the Missouri River.[31]

The soil found in the first region is an association of Chestnut (50-65%), Lithosol (20-30%), and Alluvial (5-15%) soils. It is an association typical of the broad intermountain valleys of the Northern Rockies of Montana with elevations between 3000 and 6400 feet and precipitation between 10 and 17 inches a year. It was formed from loess and alluvium from acid igneous, and metamorphic and sedimentary rock sources. In terms of human use, Chestnut soils, usually considered well suited for production of small grains, particularly wheat, when mixed with stony lithosols as it is along this portion of the Smith, is better used for grazing.[32]

The second region exhibits a combination of two different soil types. The first is an association of

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[31] USDA, Soil Conservation Service, Soils of the Western United States (Bozeman, Montana: Agricultural Experiment Station, 1964), 20-29, 33-38.

[32] Ibid, 25.

Chernozem (50-70%) and Regosol (20-35%) soils, found on the high, treeless benchlands and terraces above the Smith River Canyon. This association was formed from glacial till, outwash and alluvium from shale, sandstone, limestone and acid igneous rock sources. Typical of certain high plains and benchlands found in Montana, this soil association is found at an elevation of between 4000 and 5000 feet and receives 16-20 inches of rain each year. This soil, too, poorly supports intensive agricultural farming, and is more suitable for grazing.[33]

An additional soil type found in this region is an association of Gray Wooded (50%), Chernozem (20%), and Lithosol (15%) soils typical of wooded mountain slopes and valleys in Montana and Wyoming. This soil association was formed from residuum and colluvium from sandstone, shale, granite, gneiss, schist, and limestone rock sources. It is generally found between the 4500 and 9000 feet above sea level and receives generally anywhere between 16 and 40 inches of rain a year. This soil supports forests, limited grazing, and is generally unsuitable for agriculture.[34]

The final soil type found along the Smith River occurs from approximately Eden bridge to the confluence of the Missouri, as the Smith empties onto the Northern Great Plains. It is an association of Chestnut (60-70%) and

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[33] Ibid, 27-29.

[34] Ibid, 33-37.

Regosol (20-30%) soils. This soil association has its source in loess and aeolian sands, calcareous glacial drift, and residuum from shale and siltstone rock sources. It is found in the plateaus, foothills, glacial drift plains, and benches of Idaho, Colorado, and Montana, at elevations between 2300 and 6500 feet. This soil is suitable for limited grain production and moderate grazing.[35]

The soil composition of the Smith River Valley has been the basis for the region's vegetative mosaic, which, in the most general terms, has produced grasslands in the upper and lower sections of the valley, with forests in the central canyon region of the river. The soil, particularly in combination with low precipitation, has, in the last one hundred and thirty years of American settlement, made large-scale farming of grain crops ecologically and economically impractical. Human communities in the region have primarily subsisted from grazing animals: first, the Native Americans with the buffalo and other browsing animals like deer and elk; and then Euro-Americans with their sheep and cattle. Human manipulation of the environment of the Smith River Valley in order to maximize the grazing and farming potential of the valley will be addressed in the proceeding chapters.

The most obvious changes in the river's environment since the arrival of humans have been changes in the river

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[35] Ibid, 20-23.

valley's vegetation, and fish and wildlife populations. That the flora and fauna of the region have changed is clear, but the scientific and popular belief that they ever existed in a static, stable state before the arrival of humans is misleading. This idea of "climax communities" and "stable ecosystems," formerly used without question by ecologists, environmentalists, and environmental historians in order to determine the "natural," and therefore morally right, ecology of a given region has recently come under attack by many scientists influenced by chaos theory.[36] As well it should, because the climax and stable ecosystem models have several flaws. They suggest progression, order, and permanence, when the ecology of the Northern Rockies, as elsewhere, is frequently disrupted by climatic change, fires, storms, floods, earthquakes, and other natural phenomena. As the disciples of chaos preach, unpredictable change, rather than permanence and order, is the nature of the universe. Ultimately, our sun will run out of fuel, collapse, and the Earth will die. According to these

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[36] The concept of succession, progression, and climax communities originated with the earliest ecologists, like Frederick Clements, Plant Succession: An Analysis of the Development of Vegetation (Washington: Carnegie Institute, 1916), and were largely unchallenged as recently as the late 1960s. Eugene P. Odum elaborated on Clements's idea of climax communities, and introduced the concept of stable ecosystems. See Eugene Odum, Fundamentals of Ecology (Philadelphia: W.B. Saunders, 1971); and, "The Strategy of Ecosystem Development," Science 164 (1969): 262-270. Perhaps the most articulate critique of these ideas of "climax communities" and "stable ecosystems" has come from Daniel B. Botkin, Discordant Harmonies: A New Ecology for the Twenty-first Century (New York: Oxford University Press, 1990).

criticisms, there is no such thing as a stable or permanent ecosystem.[37]

The notion of stable, natural ecosystems also seldom take into full account the subtle but profound changes in the landscape brought about by cultural interactions long a part of an apparently "natural" ecology, a fact that anthropologists and Native American historians have become increasingly aware of. American environmental history can no longer begin with Europeans stumbling onto stable, unmolested ecosystems, a fact that has made the writing of environmental history more difficult. What emerges from this debate is an increasingly complex ecological picture which stubbornly defies explanation by any one theory. The attacks by chaos theorists are also eviscerating the moral foundation of modern environmentalism, and substituting it with a cheap relativism that suspiciously affirms our present economic paradigm of industrial capitalism.[38]

These weaknesses in the new ecology of chaos have led some environmental historians, particularly Donald Worster, to advocate a return to an order based ecology, one upon which a clear environmental ethic, like Leopold's "Land Ethic," can be based. However, until ecologists can come to

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[37] Botkin; Paul R. Ehrlich and Jonathan Roughgarden, The Science of Ecology (New York: University of Oxford Press, 1987), 541-552; Robert May, Stability and Complexity in Model Ecosystems (Princeton: University of Princeton Press, 1973).

[38] Worster, "The Ecology of Order and Chaos," in The Wealth of Nature, 165-167.

a new consensus, environmental historians looking for such a foundation must rely upon older models of climax and stable ecosystem. Although simplistic and generalized, these models still provide a convenient picture of what the Smith River Valley might have looked like, for at least a short time period, in the absence of human caused changes, or at least in the absence of Euro-American caused changes. In an attempt at least to estimate the composition of the various vegetative communities found along the Smith River before the arrival of Europeans to the hemisphere, this thesis suffers some from the use of climax models.[39]

Ultimately, Worster observes, environmentalists, perhaps even environmental historians, may have to rely upon intuition as much as science to determine appropriate environmental change. For academics who still believe in an objective truth, this is a large pill to swallow. However, it may be the only pill we have. In the case of the Smith River Valley, perhaps we don't really need science to tell us that there is something ecologically and morally wrong with buffalo being replaced by cattle, and pronghorns being

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[39] For other discussions on the use of climax vegetation models and the writing of environmental history see, Richard White, Land Use, Environment, and Social Change: the Shaping of Island COunty, Washington 2nd ed. (Seattle: Univ. of Washington Press, 1992), xvii-xix; Also see, Geoffrey Cunfer, "An Environmental History of the Canadian River Gorge" (M.A. thesis, Texas Tech University, 1993), 21-23.

replaced by sheep.[40]

A variety of vegetation communities can be found along the Smith River dependent upon local interrelationships of soil, climate, physiography, hydrology, and chaos. Human and non-human changes to the region, particularly in the last two hundred years, make projections of native climax vegetation patterns problematic, if not impossible. However, such an attempt assists in establishing a comparative framework in which present vegetation communities and land use practices can be compared to the ecological standards of naturally existing climax plant communities, under contemporary climatic and geologic regimes.

At least five separate climax vegetation communities have been identified adjacent to the Smith River. From the beginning of the Smith at the juncture of the North Fork and the South Fork near White Sulphur Springs to just south of Camp Baker is a Limy-Shallow-Very Shallow Range Site Complex. In Limy soil, soils that are more than 20 inches deep that are nearly white, with more than 15 percent or more calcium carbonate within four inches of the surface, are found the following dominants. Amongst the grasses can be found bluebunch wheat grass, prairie junegrass, needleandthread, threadleaf sedge, western and thickspike

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[40] Worster, "Restoring a Natural Order," in The Wealth of Nature, 171-183; and Worster, "The Ecology of Order and Chaos," in The Wealth of Nature, 170.

wheatgrass, and sandberg bluegrass. The single dominant shrub is winterfat.[41]

In the shallow soil of this complex, soils 10 to 20 inches deep to hard rock or soft beds of decomposed granite, siltstone, or sandstone, are found the following dominants. The dominant grasses include bluebunch wheatgrass, rough fescue, needle and thread, prairie junegrass, western wheatgrass, and sandberg bluegrass. The dominant forb is phlox, and the dominant shrubs are big sagebrush and gray horsebrush.[42]

In the very shallow soil of this complex, areas where few roots can penetrate deeper than 10 inches, can be found the following dominants. The dominant grasses include bluebunch wheatgrass, prairie junegrass, western wheatgrass, threadleaf sedge, needle and thread, and sandberg bluegrass. The dominant forb is phlox, and the dominant shrubs and scrub trees are mountainmahogany, antelope bitterbrush, big sagebrush, limber pine, and rocky mountain juniper.[43]

The next climax vegetation community encountered along the Smith River is found in the area surrounding the confluence of the Sheep Creek and the Smith at the present site of Camp Baker. Labeled a Silty Range Site, it is characterized by the following climax vegetation. The

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[41] USDA, SCS, Climax Vegetation of Montana, 27-28.

[42] Ibid.

[43] Ibid.

dominant grasses include rough fescue, Idaho fescue, bluebunch wheatgrass, columbia needlegrass, basin wildrye, spike fescue, parry danthonia, slender wheatgrass, big bluegrass, prairie junegrass, and timber danthonia. The dominant forbs include lupine, sticky geranium, arrowleaf balsamroot, and prairiesmoke, while big sagebrush and tall larkspur are the two dominant species of shrubs. This climax vegetation complex is again encountered from approximately the mouth of Deepcreek to the mouth of Hound Creek.[44]

The most common vegetation complex found along the river, in the area just north of Sheep Creek to Deepcreek, is characterized by subalpine fir, Douglas-fir, and ponderosa pine complex forests. Ponderosa pine climax forests occur on moderately steep to very steep south and west facing slopes at elevations below about 5,000 feet. Douglas-fir climax forests occur on strongly sloping to very steep south and west facing mountain slopes at elevations of 5,000 - 7,000 feet and the forested foot slopes to the valleys north and east aspects below 5,000-5,500 feet in elevation. The subalpine fir climax forest occurs above the upper limits of the Douglas-fir climax forest zone. Engelmann spruce occasionally is the climax forest overstory component along the lower portion of the subalpine fir zone on soils with favorable moisture-holding capacity or where

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[44] Ibid, 24.

extra moisture is available from run-in or water table. Typical overstory composition today is subalpine fir 50%, Douglas-fir 35 %, ponderosa pine 10%, Engelmann spruce 5%. The dominant trees in this area include, of course, subalpine fir, Douglas-fir, ponderosa pine, Engelmann spruce, and elk sedge. The dominant grasses include pinegrass, blue wildrye, richardson needlegrass, bearded wheatgrass, Idaho fescue, beargrass, bluebunch wheatgrass, columbia needlegrass, and mountain brome. The dominant forb is heartleaf arnica, and the dominant shrubs are snow berry, mallow ninebark, orangegrape, grouse whortleberry, dwarf huckleberry, and twinflower.[45]

As the Smith drifts out of its mountain canyon onto the rolling swells of the Great Plains, specifically, from Hound Creek to a couple of miles north of Ming Coulee, the vegetation is classified as a Silty Range Site, characterized by the following dominant grasses; needle and thread, western and thickspike wheatgrass, green needlegrass, bluebunch wheatgrass, basin wildrye, prairie junegrass, and blue grama. Silver sagebrush is the dominant shrub.[46]

In the last segment of the river, from just north of Ming Coulee to the Smith's confluence with the Missouri River, the vegetation adjusts to sandier soils. Classified

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[45] Ibid, 33-34.

[46] Ibid, 7-8.

as Sands and Sandy Range Site Association, the following dominants can be found amongst the grasses; prairie sandreed, needle and thread, Indian ricegrass, threadleaf sedge, and in the sandier soils, bluebunch wheatgrass, western and thickspike wheatgrass, and blue grama. Yucca and skunkbush sumac are the dominant shrubs.[47]

But of course this discussion of dominants is only accurate in describing the vegetative composition of the valley when the biological surveys were taken a couple of decades ago. In reality the valley's vegetation has changed from year to year in response to seasonal environmental factors like precipitation. More fundamental changes have occured over larger periods of time. However, a general picture of vegetative communities in the Smith River watershed can be determined for the past few hundred years at least. It consisted primarily of grasslands in the broad northern and southern valleys of the Smith River, and fir forests in the central portion of the river's canyon. This vegetative pattern closely reflected the three major geographic zones found along the Smith River.

This variety of grassland and forest vegetation supported a diversity of animals in the Smith River Valley. Attempts to describe the frequency and distribution of animals of a region prior to American settlement generally rely heavily on the accounts of early explorers and

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[47] Ibid, 10.

naturalists. Unfortunately, the first documented trip down the Smith River Valley didn't occur until 1860, when Dr. F.V. Hayden recorded the his impression of the region while returning from the exploration of the Missouri and Yellowstone Rivers with the Raynold's Expedition.[48] Hayden was more interested in rocks than he was in wildlife, and soon after he passed through the valley, Americans began settling in the region, quickly disrupting the native flora and fauna. No known early naturalist or explorer observed the wildlife of the Smith River Valley in detail prior to American habitation. In order partially to reconstruct an image of the valley's non-human inhabitants prior to American settlement, secondary references and primary references for nearby areas must be consulted.

The Lewis and Clark Expedition, over half a century earlier than Hayden, viewed the Smith River from its mouth at the Missouri, but they did not explore its length. They give us our first image of the river, its environment, and, most importantly, its fauna. On July 15th, 1805, Meriwhether Lewis made the following observation:

> we passed the river near where we dined and just above the entrance of a beautifull river 80 yards wide which falls in on the Lard. side which in honour of Mr. Robert Smith the Secretary of the Navy we called Smith's River. this stream meanders through a most lovely valley to the S.E. for about 25 miles when it enters the Rocky mountains and is concealed form our view. many herds of buffaloe were feeding in this

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[48] Hayden, 90-91.

valley.[49]

The buffalo, like those that Lewis observed, were one of the most important species found in the valley prior to American settlement in the late 1860s. It is probable that they migrated through the more accessible grasslands at the northern and southern ends of the valley in great numbers, while the high, narrow canyon walls of the central portion of the river would have limited their presence, and the forests found in this region would have provided less desirable forage.

Lewis and Clark, and other early explorers, while they did not visit the Smith River itself, made observations about the wildlife found in similar locales throughout western Montana. From their records, it is easy to imagine the abundance and diversity of wildlife to be found in the Smith River Valley prior to American settlement. Wildlife, still relatively abundant in the Smith River Valley, was probably more abundant before the 1860s.[50]

Fish and wildlife, like vegetation, have been particularly susceptible to human manipulation over the years. Many species of fish and wildlife have been displaced by foreign species or disrupted by human activities, especially in the last century. Some of these

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[49] Gary Moulton, ed., The Journals of the Lewis and Clark Expedition, vol. 4 (Lincoln: Univ. of Nebraska Press, 1987), 382.

[50] Elers Koch, "Early History of Big Game in Montana," The Journal of Wildlife Management 5, no. 4, (Oct. 1941): 357-370.

changes have been actively sought by the human communities in the valley, and some have been merely consequential. To understand the degree to which humans have altered the native fauna of a the Smith River Valley, it is helpful to survey the fauna presently found in the valley, and to attempt to understand what species are no longer found in the valley, and what species presently found in the valley are not native to the area.

Neglected in many environmental histories, but extremely important to the environmental history of the Smith River, have been the region's fish populations. The following fish were native to the Smith River and many of its tributaries prior to this century; cutthroat trout, Yellowstone trout, Arctic grayling, mountain whitefish, mottled sculpin, longnose sucker, white sucker, mountain sucker, longnose dace, stonecat, burbot, and carp. Today, the Yellowstone trout and Arctic grayling are extinct throughout the river's drainage, and the cutthroat trout is threatened with extinction. The most popular sport fish in the river today, the brook trout, brown trout, and especially the rainbow trout, have all been introduced to the Smith in recent decades. The kokanee is another introduced fish found today in the Smith.[51] Because of the nature of their habitat, fish and their aquatic ecosystems

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[51] Robert J. Behnke, Native Trout of Western North America (Fort Collins: American Fisheries Society, 1992), 73-98.

throughout the Smith River drainage have been less vulnerable to human caused disruptions, until the present century, when large scale irrigation, and even more recently, recreational fishing, have dramatically altered the species composition to be found in the river and its tributaries.[52]

Some of the more prominent wildlife species native to the Smith River watershed prior to contact included: buffalo, gray wolves, grizzly bears, coyotes, mountain lions, wolverines, martins, bobcats, foxes, raccoons, elk, mule deer, white-tail deer, pronghorn antelope, moose, black bears, mountain goats, mountain sheep, mink, muskrat, and beaver. Today, the grizzly bear, gray wolf, wolverine, and mountain goat, can no longer be found in the watershed. Mountains lions, martins, moose, mountain goats, and mountain sheep are either threatened or can no longer be found in the area.[53]

Over seventy species of birds have been observed on the river.[54] Of those, the bald eagle is presently endangered. It is likely that the Smith River Valley was part of the natural range of the whooping crane and the peregrine falcon. Endangered in Montana, these species are presently

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[52] FWP, Smith River Drainage Inventory and Planning Investigation, 12-24.

[53] Ibid, 75-108.

[54] FWP, "A Checklist of the Birds Found on the Smith River, Montana," (Great Falls: FWP, 1993).

not known to be found on the Smith River today.[55]

Within the last few centuries, disruptions in the native environment of the Smith River Valley have been precipitated by European expansion into the western hemisphere. According to environmental historian, Alfred Crosby, colonizing Europeans brought with them a "portmanteau" of accompanying biota, plants and animals that, in many cases, displaced the native flora and fauna as effectively as Europeans displaced Native Americans. Crosby describes this as a process of "ecological imperialism." These sorts of disruptions have been the primary cause of changes in the watershed's flora and fauna since Europeans entered the western hemisphere.[56]

Environmental historians, Richard White and Bill Cronon, have contributed additional perspectives by detailing how successive cultural communities have interacted with the landscape differently. Each of these communities, from Native American to modern industrial, has actively altered the land to conform to certain economic modes of production and to values, beliefs, and assumptions

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[55] USDA, Forest Service, Species List: Birds, Mammals, Fish, Reptile, and Amphibians for the Forest Service (Missoula: USFS, Northern Region, 1978), 77-78.

[56] Alfred Crosby, "Ecological Imperialism," The Texas Quarterly 21 (Spring 1978): 10-22.

shared by each culture.[57]

The remainder of this thesis will attempt to apply the work of these and other environmental historians to a relatively small river drainage located in west-central Montana. It will begin with early, prehistorical populations, continue with historic Native American and Euro-American cultural ecological relationships with the river, and end somewhere close to the present, when the river is still used by ranchers, and, in recent decades, a new breed of land-users, outdoor recreationists.

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[57] See William Cronon's Changes in the Land: Indians, Colonists, and the Ecology of New England (New York: Hill and Wang, 1983), and White's Land Use, Environment, and Social Change.

## CHAPTER 3

### Paintings on the Walls

When humans first migrated into the region through which the Smith River flows, at least 12,000 years ago, they encountered an environment very different from that which is found there today. A continental wall of glaciers towering just to the north of the Smith River Valley fed great glacial lakes like glacial Lake Great Falls, which inundated the lower end of the Smith River Valley. The climate was cooler and wetter, and the vegetation was primarily that of the steppe-tundra, not that of the 20th century's plains and coniferous forests. Giant mammals of the Pleistocene roamed through the valleys, the foothills, and the high plains. But dramatic changes quickly began to alter this environment, as humans migrated into the region for the first time, and the climate became warmer and drier, forcing the glaciers of the last Ice Age to retreat.

Soon, the glacial lakes receded, the vegetation changed, the first human culture in North America, the Clovis culture, spread throughout the continent, and many of the larger mammals became extinct. Filling the ecological void of their extinctions came many different animals, including a smaller form of bison. By approximately 11,000 B.P., the environment of the Smith River Valley more closely resembled today's environment than the environment that had

existed just 1,000 years previously.[1]

The story of human prehistory in the Smith River Valley is first, one of a radical but relatively short period of change and adaptation, followed by a much longer period of cultural and ecological stability. This process can best be understood as a cultural ecological dialectic. When humans first moved into the region they encountered a Pleistocene environment. Both climatic and human factors worked to alter this environment dramatically within the short span of a couple thousand years. This was the period of the massive Pleistocene extinctions. Following the climatic transformation of this period, humans adjusted to a new environment, that they, in part, had helped shape.[2] For approximately the next 11,000 years, human culture and the physical environment, while both continued slowly to evolve and change, exhibited characteristics of stability, consistency, and order that are surprising when contrasted to the rapidity of cultural and environmental change in

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[1] On history and climatic change, see Reid Bryson and Thomas Murray, Climates of Hunger: Mankind and the World's Changing Weather (Madison: University of Wisconsin Press, 1977); and, Robert Rotberg and Theodore Rabb, eds., Climate and History: Studies in Interdisciplinary History (Princeton: Princeton University Press, 1981). For an excellent reference on the Pleistocene Era, climate, ecology, and culture, see Paul Martin and H.E. Wright, eds., Pleistocene Extinctions: The Search for a Cause (New Haven: Yale University Press, 1967).

[2] On how prehistorical Native Americans shaped the environment of North America before the arrival of Europeans, see William Denevan, "The Pristine Myth: The Landscapes of the Americas in 1492," Annals of the Association of American Geographers 82 (Sep. 1992): 369-85.

modern times. Certainly, fluctuations in climate and other environmental factors caused modifications in human culture during this period, but these adjustments were neither as dramatic nor as permanent as the preceding period of the Pleistocene extinctions, or the succeeding period that began with European entry into the western hemisphere 11,000 years later. If the Pleistocene extinctions represented the first cultural ecological revolution affecting the region of the Smith River Valley, then Euro-American technological and biological incursions into the region beginning in the 18th century, precipitated a second period of dramatic cultural ecological change. This chapter is concerned with the first of those cultural ecological revolutions that occurred during the Pleistocene extinctions, and the long period of cultural and ecological stability that followed it for 11,000 years before the arrival of Europeans.[3]

Human migration into North America, as well as the warming climate, precipitated dramatic ecological change for the Smith River Valley, and for the whole continent. After two centuries of debate, scholars now agree that humans migrated to North America from Asia via the Bering Strait land bridge known as Berengia. These migrations, or more likely, series of migrations, occurred during the

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[3] Carolyn Merchant first introduced the term "ecological revolution" to environmental historians in, Ecological Revolutions: Nature, Gender, and Science in New England (Chapel Hill: University of Norht Carolina Press, 1989), 1-25.

Wisconsinan glaciation of the Pleistocene age, sometime between 75,000 B.P. - 10,000 B.P.[4] According to climatological and geological evidence, Berengia was exposed during at least three different periods of the Wisconsinan glaciation; 75,000 B.P. - 62,000 B.P., 55,000 B.P. - 48,000 B.P., and 44,000 B.P. - 10,000 B.P.[5] Clear archeological evidence indicates that humans inhabited North America by 12,000 B.P. More speculative evidence suggests that they may have been here as early as 50,000 B.P.[6]. It is extremely unlikely then, that early Asian hunters migrated into North America at their first opportunity during the Wisconsinan glaciation between 75,000 B.P. - 62,000 B.P. Sometime after 55,000 B.P., but because of the lack of archeological evidence, most likely between 13,000 B.P. - 14,000 B.P. these hunters arrived in Alaska[7].

Ironically, the same process of glaciation that exposed Berengia and allowed for humans to move into Alaska also prevented them from easily migrating south. During the Late

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[4] Paul S. Martin and Richard Klein, eds., Quaternary Extinctions: A Prehistoric Revolution (New Haven: Yale University Press, 1984).

[5] J.A.J. Gowlett, Ascent to Civilization: the Archaeology of Early Man (New York: Knopf, 1984), 1-25.

[6] Stuart J. Fidel, Prehistory of the Americas (New York: Cambridge University Press, 1992), 46-48.

[7] Knut R. Fladmark, "Times and Places: Environmental Correlates of Mid-to-Late Wisconsonian Human Population Expansion in North America," in Early Man in the New World, ed. Richard Sutler, Jr. (Beverly Hills: Sage Publications, 1983), 13-41.

Wisconsinan, 25,000 - 10,000 B.P., the most probable time period for human migration south, glaciation reached its furthest extent. Two great glacial sheets, the western Cordilleran and the eastern Laurentide, met at the juncture of the Rocky Mountains and the Great Plains, and almost completely blocked off migration routes from Alaska to the south. A narrow corridor separating these two sheets provided an inhospitable, but perhaps the only, avenue for southern migration during this time period. At the southernmost extent of Wisconsinan glaciation, this ice free corridor, also known as the Great North Trail, extended along the Rocky Mountain front to present day Montana, and opened up onto the Great Plains just north of the Smith River Valley.[8]

Evidence of Montana's earliest known inhabitants comes from several archeological sites not far from the Smith River Valley, which have been dated to 12,000 B.P. It is probable, based upon the location of the Great North Trail and the existence of several known ancient archeological sites in the Upper Missouri and Upper Yellowstone Rivers adjacent to the Smith, that the earliest humans to enter what is presently the United States inhabited or passed

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[8] William L. Bryan, Jr., Montana's Indians: Yesterday and Today, Montana Geographic Series (Helena: Montana Magazine Inc., 1985), 7-8.

through the Smith River Valley.[9] Beginning by about 12,000 B.P., conclusive evidence exists of human inhabitation of North America. From this evidence archaeologists can begin to describe who these people were and how they lived off the land.

For the purposes of describing its prehistory, the Smith River lies within the boundary of a broad cultural region referred to by anthropologists as the Northwestern Plains. This region includes most of Montana east of the Rocky Mountains, as well as Wyoming, western South Dakota, western Nebraska, northern Colorado, northeastern Utah, eastern Idaho, and southwestern North Dakota.[10] Although much of the Smith River is actually within the mountains, bordered on the west by the Big Belts and on the east by the Little Belts, neither anthropologists nor historians have established a unique designation for the cultural groups occupying the Rocky Mountains. The closest designations are those of the Northern Plains, the Columbia Plateau, and the Great Basin, and these are mostly historic designations. While the Smith River lies near the border of all three of these regions, it is closest, culturally, to the plains region. The Northwestern Plains environment, however, cannot be considered without recognizing the mountain

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[9] George Frison, Prehistoric Hunters of the High Plains (New York: Academic Press, 1978), 22-72.

[10] Ibid, 1-13.

ranges, minor uplifts, intermontane basins, major rivers, high-altitude plateaus, and other landforms that were a part of the region. All form a part of a diverse landscape that was utilized by the prehistoric inhabitants. The Smith River Valley was such a landscape.[11]

Located as it is, in a transitional zone, an ecotone, between the Rocky Mountains and the Northern Great Plains, the Smith River Valley has supported human populations that have utilized the resources of both of these regions. While the nearby plains supported the large populations of megafauna, such as the bison upon which prehistoric Indians depended most, the montane valley of the Smith River offered additional resource alternatives that complemented the communal bison hunts conducted primarily on the plains.[12] The valley supported a wide array of faunal and floral resources that supplemented the bison economy. Bison could also be found in the valley, especially during the winter,

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[11] George Frison, "The Foothills-Mountain Dichotomy in Paleoindian Subsistence Strategies Between Two Ecosystems," in Ice Age Hunters of the Rockies, eds. Dennis Stanford and Jane Day (Denver: University of Colorado Press, 1992), 323-342.

[12] See Montana Environmental Quality Council, Fourth Annual Report (Helena: State of Montana, 1975). Here, state ecologists have defined the larger ecological region of the Smith River Valley as a part as Montana's Rocky Mountain Foreland. As an ecotone habitat exhibiting characteristics of both the Great Plains and Rocky Mountain Front, the region offered a variety of resources for prehistoric Native American cultures. On how cultural regions overlapped with ecological regions, see Alfred Kroeber, Cultural and Natural Areas of Native North America (Berkeley: Univ. of California Publications in American Archeology and Ethnology, 1939); Raymond Gastil, Culture Regions of the United States (Seattle: Univ. of Washington Press, 1975).

although they were not as numerous there as they were on the plains. Prehistoric hunters also preyed upon other large mammals found in the Smith River Valley, including pronghorn antelope, mule deer, elk, and mountain sheep. Various plants found in the valley, but less common on the plains, provided edible seeds, berries, roots, leaves, and bulbs.[13] Exposed Morisson Formations along the Smith River provided a source of lithic tool making materials in the form of chert and quartzite. A large quarry site can be found a half a mile up from the Smith River near present day Camp Baker.[14] Such sites were much less common on the plains. While the communal bison hunts were primarily conducted during the late summer and early fall, valleys like the Smith River Valley provided shelter and additional resources in the winter.[15]

Several systems for describing the chronology of early Indians in North America from 12,000 B.P. to the historic period have been developed by archaeologists. These systems separate prehistoric Indian experiences into cultural

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[13] For an example of historical Native American use of flora in the region, see Alex Johnston, "Blackfoot Indian Utilization of Flora of the Northwestern Great Plains," Economic Botany 1, (Jan. 1970): 301-323.

[14] USDA, Forest Service, "Cultural Resource Testing at Camp Baker on the Smith River," by Richard Newton (Great Falls: Lewis and Clark National Forest, 1994), 2.

[15] George Frison, "The Western Plains and Mountain Region," in Early Man and the New World, ed. Richard Shutler, Jr. (Beverly Hills: Sage Publications, 1983), 109-124.

periods, further subdivided into complexes. Although many different systems exist, Dr. George Frison's chronology, developed specifically for the Northwestern Plains, is the most appropriate for understanding the prehistoric occupation of the Smith River Valley. Frison's chronology is divided as follows:

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| Paleoindian Period | ca. 12,000 B.P. - 8000 B.P. |
| Plains Indian Archaic Period<br>Early Plains Archaic<br>Middle Plains Archaic<br>Late Plains Archaic | ca. 8000 B.P. - 700 A.D.<br>ca. 8000 B.P. - 4500 B.P.<br>ca. 5000 B.P. - 2500 B.P.<br>ca. 3600 B.P. - 700 A.D. |
| Late Prehistoric | ca. 500 A.D. - 1750 A.D. |
| Protohistoric | ca. 1750 A.D. - Historic |

Table 3. Chronological Division of North America Prehistory[16]

However, even with such chronological guidelines, organizing and understanding twelve thousand years of prehistoric human occupation in or near the Smith River Valley is a complex task. In the most thoroughly examined archeological areas of the Northwestern Plains, distinct delineations in place, cultural group, and time, are rarely found. Over sixteen different cultural complexes, distinguished primarily by projectile points, have been

[16] Frison, Prehistoric Hunters of the High Plains, 15-75.

identified in the Northwestern Plains.[17] The Smith River Valley, although possessing considerable evidence of prehistoric occupation, has yet to be closely researched by archaeologists.[18] None of these complexes has yet been directly tied to the Smith River Valley, although it is highly probable that several of them will be. An understanding of the prehistory of the Smith River Valley relies heavily upon work done by archaeologists in nearby areas, just beyond the Smith's watershed.

For a period of approximately 11,000 years, prehistoric cultures in the Northwestern Plains shared many common cultural traits, differing only in particular, limited aspects. First, prehistoric Indians in the region were hunter-gatherers, relying for their subsistence on the hunting of game, of which the bison was the most important, and the gathering of wild plants. Economically, socially, and politically, they were organized at the band level; even in historic times tribal affiliations meant relatively little to these Indians. They moved constantly in response to available food supply, perhaps fifty to one hundred times during the year, and never permanently settled. They did not practice agriculture, nor did they develop village life,

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[17] Ibid, 1-15.

[18] Archaeologists John and Mavis Greer from the University of Missouri are presently cataloguing archeological sites along the Smith River. Some samples taken in the summer of 1994 will soon be dated. Further archaeological work in the area is planned.

ceramics (until very late), or craft specializations. The preeminent Northwestern Plains archeologist, George Frison, complained: "about the only things that changed through time were projectile point types and styles, and to a lesser extent certain items in the tool assemblages... In short, the Paleoindian hunting group was about the same size and the same complexity as the terminal Late Prehistoric period hunting group and was doing about the same thing."[19] For nearly 11,000 years humans maintained a cultural and environmental equilibrium on the Northwestern Plains, a cultural ecological accomplishment in stability that has not been equalled since.

Prehistoric Indians did not "develop" in the region in the way our own culture developed economically and industrially, because the Northwestern Great Plains could not ecologically support more intensive economic systems.[20] The Smith River Valley, unlike the nearby Middle Missouri, did not foster a neolithic revolution. These prehistoric cultures recognized an environmental reality along the Smith River that our present technology has, so far, allowed us to partially ignore. In this significant aspect, the environment of the Northern Great Plains was limiting and deterministic, yet within the context of their ecological mode, prehistoric inhabitants were able to make a wide range

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[19] Frison, Prehistoric Hunters of the High Plains, 19.

[20] Ibid.

of cultural choices in order to adapt to less dramatic environmental changes. The importation of technology originating from more hospitable areas outside of the Northwestern Plains was eventually required to change the cultural ecology of the region dramatically.

Despite the cultural similarity of prehistoric Indians living in the Northwestern Plains for a period of over 11,000 years, archaeologists have identified numerous cultural groups, or complexes, distinguished by minor technological or adaptive differences. Some of these groups almost certainly lived in and utilized the resources of the Smith River Valley.

The Paleoindian Period (ca.12,000 B.P. - 8000 B.P.) witnessed the earliest known cultural group found in North America, the Clovis complex. These early big game hunters used spears tipped with large lanceolate, often fluted stone projectile points to hunt giant mammals like the woolly mammoth and Bison antiquus, an early, large species of buffalo, that are both now extinct. The Clovis complex appeared rapidly throughout much of North and Central America, including Montana, and endured for approximately 700 years.[21] The closest known Clovis site to the Smith River is known as the Anzick site, a Clovis burial site, located on a drainage of the Yellowstone River tributary near Wilsall, Montana, just twenty miles south of the

[21] Fidel, 56-63.

headwaters of the Smith River. Its proximity suggests that the Smith River Valley was utilized and impacted by the startling efficiency of the Clovis hunters.[22]

Archaeologists are still uncertain as to the origin of the Clovis complex. One theory is that they evolved from earlier, unsuccessful cultural groups in North America. In this case, the development of the fluted stone projectile point by the Clovis people was a technological leap of relatively immense proportions, ensuring the widespread adoption of the Clovis tool complex throughout the Americas. Another theory is that the Clovis people were amongst the first human migrants to move into North America south of the ice sheets.[23] In either case, the advent of the Clovis complex coincided with a phenomena that radically altered the biological landscape and tested the culturally adaptive skills of paleoindians living in the Northwestern Plains.

The phenomena was known as the Pleistocene extinctions. From about 12,000 B.P. to its climax in North America in about 11,000 B.P., a wave of extinctions resulted in the eradication of 32 genera of American mammals, from 35 to 50 species. In a cataclysm of extinctions, faintly reminiscent of the process of species annihilation that ended the age of dinosaurs millions of years earlier, the great woolly mammoth, the burly mastodon, the gentle giant sloth, the

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[22] Frison, Prehistoric Hunters of the High Plains, 29.

[23] Fidel, 56-62.

armadillolike glyptodon, the camel, the horse, the saber-toothed tiger, the dire wolf, the shasta ground sloth, and the giant short faced bear, disappeared from North America and the Smith River Valley. Paul Martin has developed a theory that explains both the rapid appearance and spread of the Clovis complex, and the Pleistocene extinctions.

Martin's theory, if accepted, represents the dire cultural consequences of human insensitivity to ecological limits. In his theory Martin asserts that the Clovis hunters were the first wave of humans to pass through the ice-free corridor into North America, and that when they arrived they encountered large mammals that had developed neither defensive nor reproductive strategies to deal with the threat of human predation. The essence of his "Prehistoric Overkill" theory argues that human predation was primarily responsible for the Pleistocene extinctions. Taking advantage of a seemingly limitless supply of game, and unwisely abusing their technological advantage, the Clovis hunters multiplied rapidly and spread throughout much of the Americas before the extinctions halted their development and destroyed their culture.[24]

While most scholars recognize that human predation played a role in the Pleistocene extinctions, some point to global climactic changes as the primary source of those

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[24] Paul Martin, "Prehistoric Overkill," in Pleistocene Extinctions, 75-121.

extinctions. The gradual warming at the end of the last ice age, from 15,000 B.P. to 10,000 B.P., led to a drier, hotter climate for much of North America, a climate similar to our own, and many species were forced to make challenging adjustments. The argument made by critics of Martin's overkill theory is that the mammals that became extinct during the Pleistocene were unable to adapt to environmental changes, and that this resulted in their extinction more than human predation.[25]

The causes of the Pleistocene extinctions may never be precisely known, but I tend to favor Martin's theory. Likely, both Clovis overhunting and climatic changes contributed to the Pleistocene extinctions, but the crucial question is whether either one of those factors alone would have been sufficient to do so. Assuming that both factors were the immediate causes of the extinctions, humans, not changing environmental conditions, were "responsible" for them. Responsibility suggests the ability to make choices about actions, and to be held accountable for the choices made. While a changing climate might have been part of the cause for the Pleistocene extinctions, it was not responsible for those extinctions, because the climate does not make choices. Humans do. The Clovis culture chose to use its evolutionary and technological advantages to over

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[25] John Guilday, "Differential Extinction During Late-Pleistocene and Recent Times," in Pleistocene Extinctions, 121-141.

hunt, so that it could grow, and spread, and enjoy the luxury of excess. Ultimately, their technology failed them when the large mammal populations collapsed, and the Clovis culture was held ecologically accountable, and it too disappeared.[26]

A new environment and new human cultures emerged from the cataclysm of the Pleistocene era. Prehistoric humans on the Northwestern Plains were forced to adapt to different environmental conditions, including climate and the absence of most large, easily hunted mammals. Most importantly, paleoindians learned to rely more on the gathering of wild plants and the hunting of a smaller species of bison and other game. This species of bison, the species with which we are still familiar, avoided extinction, thrived on the emerging grasslands encouraged by the climatic changes, and expanded to fill vacant ecological niches.[27] Prior to the climatic changes of the late Pleistocene, the Northwestern Plains, including the Smith River Valley, were part of a vegetative zone known to Clovis hunters as the tundra steppe. The emerging interglacial vegetative zone that replaced this environment, and typifies the present environment of the region, was characterized by grassy

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[26] For an excellent account of what happens when a culture operating at the fringe of its environmental limits encounters a changing climate, see Donald Worster, Dust Bowl: the Southern Plains in the 1930s (New York: Oxford Univ. Press, 1979).

[27] Francis Haines, The Buffalo (New York: Thomas Y. Cromwell Co., 1970), 1-28.

plains east of the Rocky Mountains and in the intermountain valleys, and coniferous forests along the slopes of those mountains. The Smith River Valley is a combination of both vegetative types.[28]

The Folsom complex appeared approximately five hundred years after the Clovis, following the climax of the Pleistocene extinctions in 11,000 B.P., and represented a cultural ecological adjustment to the Pleistocene extinctions and to the changing environment. While the Clovis people primarily hunted the large and now extinct Pleistocene mammals like the mammoth, the Folsom people concentrated their hunting upon the bison, both the large and now extinct Bison antiquus as well as the smaller species of bison that survived the Pleistocene extinctions. For the hunting of the bison and other species, the Folsom people developed a slightly different style of fluted point, called the Folsom point, that distinguishes them from the Clovis people.[29]

Folsom sites nearest to the Smith River include the Indian Creek and MacHaffie sites, both located on the southeastern flank of the Elkhorn Mountains in the Upper Missouri River drainage west of the town of Townsend, Montana, approximately forty miles to the west of the Smith River. These sites are dated to approximately 11,000 B.P.

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[28] Fidel, 85-86.

[29] Ibid, 75-83.

Like the nearby Clovis sites, the proximity of Folsom sites to the Smith River Valley suggests that these people also lived in and utilized the resources of that watershed.[30]

The Agate Basin and Hell Gap complexes followed the Folsom complex on the Northwestern Plains beginning over 10,000 years B.P. Their complexes represented a refinement of cultural adaptation to bison hunting on the Northwestern plains that completed the environmental adjustments first began by the Folsom people. They established a pattern of cultural ecological habitation in the area that endured with remarkably little change for the next 10,000 years.[31] Agate Basin and Hell Gap projectile points have been collected at Canyon Ferry, Montana on the Upper Missouri River drainage and in the Big Belt Mountains to the west of the Smith River. Again, like the cultures preceding them, it is likely that the peoples of these complexes frequented the Smith River Valley.[32]

The Plains Archaic Period (ca.8000 B.P. - A.D. 700) was a continued period of stable cultural activity on the Northwestern Plains centered on the hunting of the bison.

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[30] Leslie B. Davis and Sally T. Greiser, "Indian Creek Paleoindians: Early Occupation of the Elkhorn Mountains' Southeast Flank," in Ice Age Hunters of the Rockies, 225-284.

[31] Frison, Prehistoric Hunters of the High Plains, 147-191.

[32] Department of Interior, Bureau of Reclamation, Class III Cultural and Paleontological Resource Inventory at Canyon Ferry near Helena, Montana, by Sally Greiser, Heidi Plochman, Weber Greiser, Daniel Gallacher, Robert Ottersberg, and Donald Smith (Billings, Montana: Bureau of Rec., 1983), 1-35.

The Northwestern Plains cultures achieved a level of cultural ecological stability that successfully weathered pronounced fluctuations in the climate. There was a slight increase in population during the period, as hunter-gatherer groups occupied the available ecological niches in North America. There was also a shift away from complete dependency on larger mammals like the bison, to a reliance on a somewhat broader range of environmental resources. There was an important technological jump with the development of the atlatl, a wooden shaft with a leather thong at the end on which a spear was placed. By technologically extending the length of the arm, the atlatl significantly increased the force and the range of the throwing spear. Projectile points were subsequently modified from the long, lancelote spear points to a wide range of shorter, stemmed, side-notched, and corner-notched dart points. The Plains Archaic period is further divided into the Early Plains Archaic Period, the Middle Plains Archaic Period, and the Late Plains Archaic Period.[33]

The Early Plains Archaic Period (ca.8000 B.P. - 4500 B.P.) coincided with a warming, drying trend, known as the Altithermal climatic episode. Harsher, more arid environmental conditions on the plains led to a decrease in prehistoric Indian habitation in that area, and an increase

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[33] USDA, Forest Service, Deep Creek Park Archaeological Research Design, by Sandi Morris (Great Falls: Lewis and Clark National Forest, 1994), 12-18.

in population densities along plain river basins, foothills, and nearby mountain valleys. These conditions also meant that populations on the Southern Plains found more hospitable conditions to the north, leading to a migration into that area. Both of these migrations, to the west toward the mountains, and to the north toward cooler, slightly wetter climates, probably meant an increase in human habitation and activity in the Smith River Valley.[34] These migrations suggest that the Indians of the Early Plains Archaic made necessary cultural ecological adaptations to increasing aridity and a warming climate that demonstrated their cultural flexibility toward change, rather than their resiliency to that change. Their culture was closely attuned to their environment, and they responded to its subtle, and not so subtle, changes.

The Oxbow Complex in the latter part of the Early Plains Archaic Period, extending into the beginning of the Middle Plains Archaic Period, provides one example of how a cultural complex adapted to changing ecological conditions. An Oxbow Complex site has been recently uncovered on the Sun River near its juncture with the Missouri River, only a few miles from where the Smith River itself flows into the Missouri. The resources of the Smith River Valley would almost certainly have been utilized by the inhabitants of this complex site. The chronology of occupation unearthed

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[34] Frison, Prehistoric Hunters of the High Plains, 191-201.

at this site reveals a cycle of habitation extending over 2,200 years, from approximately 5700 B.P. to 3500 B.P. Again, while revealing of on-going dialogue between culture and environment, changes and adaptations, the primary theme of the two thousand year old habitation at the Oxbow site was of cultural ecological continuity and stability.[35]

Because of its close proximity to the Smith River, the Sun River Oxbow site provides a good model for how Archaic Indians adjusting to climatic changes may have used the lower portion of the Smith River Valley. The Oxbow site was used primarily as a processing station for large ungulates. It was occupied in the fall by its earliest inhabitants, and in the winter and spring by its later inhabitants. The Altithermal warming and drying process of the Archaic Period reached its peak near the beginning of the earliest cultural level observed at the Oxbow site. Bison compromised only 3% of the faunal remains from this level, while pronghorn antelope represented 78% of the remains found. As the climate improved and bison populations again increased on the plains, subsequent cultural levels at the Oxbow site reveal increasing bison remains. In the cultural level dating to 3500 B.P., 95% of the faunal remains were from bison. These differences in subsistence patterns through

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[35] Sally Greiser, T. Weber Greiser, and Susan M. Vetter, "Middle Prehistoric Adaptations and Paleoenvironment in the Northwestern Plains: the Sun River Site," American Antiquity 50, no. 4 (Oct. 1985): 849-877.

time reflect environmental changes and human adaptation to those changes. As the environment changed, the Oxbow cultures shifted traditional hunting patterns and preferences, again demonstrating prehistoric cultural flexibility to, and perhaps understanding of, environmental changes.[36]

As observed in the example of the Oxbow site, the Middle Plains Archaic Period (ca.5000 B.P. - 2500 B.P.) witnessed another shift in the climate of the Northwestern Plains beginning in about 4500 B.P., one that was more congenial to human habitation in the region. As wetter weather fostered larger bison herds on the plains, the Archaic Indians repopulated the region and developed improved techniques for hunting them. Evidence of arroyo traps, corrals, drive lines, and the use of bison jumps date to this period. Beside moving back onto the open plains, the Middle Plains Archaic inhabitants also increased their emphasis on plant foods. Grinding stones, stone circles, and cairns proliferated. The McKean Complex is the hallmark of the Middle Plains Archaic Period.[37].

The Pelican Lake Complex replaced the McKean Complex in the region of the Northwestern Plains closest to the Smith River Valley at the beginning of the Late Plains Archaic Period (ca. 2600 B.P. - A.D. 700). The Pelican Lake Complex

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[36] Ibid, 849-877.

[37] Frison, Prehistoric Hunters of the High Plains, 201-212.

is identified by changes in projectile point types from the preceding period. Pelican Lake points are the oldest of several styles characterized by wide, open corner notches that form sharper points or barbs as they intersect blade edges and bases. However, in terms of bison procurement and general cultural ecological characteristics, there is little distinction between the McKean Complex of the Middle Plains Archaic and the Pelican Lake Complex of the Late Plains Archaic.[38] Numerous Pelican Lake or related Late Plains Archaic sites are recorded near the Smith River Valley including a bison kill and campsite in Sun River Canyon, a lower Sun River site, and the Antonson site unearthed in a nearby drainage.[39]

The Late Prehistoric Period (ca.A.D. 500 - A.D. 1750) saw additional technological advances and a continuance of the bison- hunting cultural complex, with no known culturally caused ecological crises. While bison procurement methods remained mostly the same as in earlier periods, greater numbers of bison began to be harvested. This indicates an increase in Indian populations and possibly an increasing reliance upon the bison. The most important technological advance that contributed to both of these came with the development of the bow and arrow. The

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[38] Ibid, 213-243.

[39] USDA, Forest Service, "Deep Creek Park Archaeological Research Design," 15-17.

bow and arrow greatly increased the effectiveness of the prehistoric inhabitants in hunting and warfare, and quickly replaced the atlatl and the dart. Because of this new technology, projectile points became smaller and manifested in a variety of types which included side-basal, and corner notching. The earliest of the late side-notched projectile points appeared in the Northern Plains and gave their name to the Avonlea Complex. Pottery also appeared in this period. Abundant archeological evidence from the Late Prehistoric Period exists in and around the Smith River Valley.[40]

The preceding cultural complexes have been identified with specific sites and regions through thorough archeological investigation. Because of their proximity to the Smith River Valley, it is likely that all the cultures I have previously mentioned inhabited and utilized the resources of that watershed. In preparation for more extensive archaeological investigations, for the last several years archaeologists Mavis and John Greer from the University of Missouri have been cataloging the prehistoric pictograph and occupation sites found along the Smith River. Archaeologists hired by the Montana State Department of Fish, Wildlife, and Parks, have also done some surveying in the area. It is hoped that from their combined efforts some

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[40] Frison, Prehistoric Hunters of the High Plains, 62-69, 213-237.

or all of these complexes will eventually be tied directly to the Smith River Valley, and more will be learned of who the Smith's prehistoric inhabitants were and how they utilized the resources of the region.[41]

The Greer survey revealed an abundance of pictographs, tepee rings, and lithic debris found along the length of the Smith River Valley that conclusively demonstrate that at least some, if not all, of these cultures once frequented the river. These prehistoric remains are generally found along the broad grassy banks or benches just up off the river. Sheltered by cottonwoods and bordered by the dramatic cliffs of the Smith canyon between Camp Baker and Eden Bridge (the perimeters of the Greer survey), these sites are amongst the most beautiful in the valley. Rocks brought up from the river bed to hold down the buckskin canvas of tepees today lie half buried in the ground and are often blanketed by concealing grass. The circles formed by these rocks vary in diameter, with most being between 12 and 15 feet across. In many cases, modern boat camps provided by Fish, Wildlife, and Parks for contemporary floaters are located along or adjacent to these more ancient campsites.[42]

Other evidence of Indian habitation may be found near

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[41] Mavis and John Greer, "Rock Art Along the Smith River in Central Montana: Report on the 1993 Field Season," (Helena: State Historic Preservation Office, 1993).

[42] Ibid.

these sites, primarily lithic debris and stones worn from the grinding of pemmican. Lithic debris can be found throughout the valley; near tepee rings, in caves at the foot of ancient pictographs, or as solitary scatterings located at the edges of the rocky canyon wall.[43] The debris is evidence of prehistoric tool and weapon making. From chert and other sedimentary rocks, prehistoric craftsmen constructed spearheads, arrowheads, knives, scrappers and other tools by patiently striking at the rocks and working upon the most eligible flakes until the sharpest edges and points were formed. The rocks from which these tools were made were mined at quarry sites and moved to a nearby water source to be worked. Finished lithic products were then either utilized by the band or traded to other bands for goods. An extensive chert quarry site is located a half mile to the west of Camp Baker.[44]

This lithic procurement site, or what we would call a mining site, covers two acres of disturbed land; subsurface depressions, or pits, and dense mounds of lithic debris. The site is about a half a kilometer long and 250 meters wide. There are about seventy-five quarry pits total, and many of them are large, from three to seven meters in depth

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[43] Ibid.

[44] On prehistoric lithic procurement see, Robson Bonnichsen, Marvin Beaty, Mort D. Turner, Joanne C. Turner, and Diane Douglas, "Paleoindian Lithic Procurement at the South Fork of Everson Creek, Southwestern Montana: A Preliminary Statement," in Ice Age Hunters and the Rockies.

and five to ten meters wide. Chert, in a surprising variety of yellowish browns, browns, reds, whites, greens, and blacks, was extracted from the Cambrian Meagher Limestone formation found here, and after being quarried was then worked into various tools and weapons.[45] The prehistoric cultures in the Smith River Valley mined, but apparently without undermining their ecology or their way of living.

Pictographs etched into the high limestone cliffs, at the base of smooth terraces just off the river, and hidden in the gaping crevasses and caves throughout the canyon, are the most dramatic remains of the river's prehistoric inhabitants. There are twenty-one pictograph or rock art sites presently documented along the Smith River, and forty-four in the Smith River drainage. Although the pictographs have yet to be dated, from stylistic evidence it is estimated that most of the pictographs found along the river are prehistoric in origin, dating back as far as two to three thousand years ago. Much beyond that and this prehistoric artwork fails to resist the eroding affects of time.[46] It is believed that at least some of the pictographs may have been associated with shamanistic activities that were often an emotional and religious expression of the

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[45] FWP, "Camp Baker Fishing Access Archaeological Investigations: 1983," by Steve Aagberg (Great Falls: FWP, 1983), 1-3; and FWP, "Archaeological Monitoring Report: Camp Baker Access Road Improvements," by Aagberg (Helena: FWP, 1991), 1-2.

[46] Archaeologists Dr. John and Mavis Greer, interview with author, 12 July 1994.

respect in which prehistoric cultures held nature.[47]

Most the rock art found along the Smith River is of the "Central Montana Abstract Style." There are five major categories of Central Montana motifs; anthropomorphic figures, human handprints, zoomorphs, tally marks, and geometric designs. Varying shades of red, purple, and dark orange are the most common colors employed in these motifs. Central Montana Abstract style is distinct from both the Western Montana style (also known as the Columbia Plateau style) and the Northwestern Plains style.[48] Although the broader cultural association of the prehistoric inhabitants of the Smith River Valley is most closely associated with the Northwestern Plains, rock art is further subdivided, and the art of the Smith River Valley, Central Montana Abstract, was created by an artistic sub-group of the broader Northwestern Plains culture.[49]

Human handprints are the Central Montana style's most common motif. Along the Smith, as elsewhere, handprints outnumber other designs and are easily the most recognizable paintings. The best example of the popular hand print motif

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[47] Mavis Greer, "Shaman Activity Portrayed in the Pictographs of Central Montana," (Helena: SHPO, 1994), 4-8.

[48] USDA, Forest Service, Overview: Ecological and Cultural Prehistory of the Helena and Deerlodge National Forests, Montana, by George C. Knight (Helena: Helena and Deerlodge National Forests, 1989), 138-139.

[49] On the rock art of the region see, James D. Keyser, "Rock Art of North American Northwestern Plains: An Overview," Bollettino del Centro Camuno di Studi Preistorici 25-26 (1990): 100-21.

along the Smith can be found at Handprint Bluff, clearly visible from the river approximately 16 miles downriver from Camp Baker. It is not at all clear whether these handprints served any function other than an aesthetic one. It is possible that they were identifying marks associated with hunting grounds, territorial claims, or religious activities. Human handprints do not occur in Western Montana.[50]

Amongst the Central Montana anthropomorphic motifs, stick figure humans predominate. Indeed, the style's most distinguishing characteristic resides in its abstract humanoid figures, which are characterized by their maze-like outlines and exaggerated anatomical features. These bizarre figures are unlike anything found in Western Montana or on the Northwestern plains. Shamanistic figures can be found in several caves along the Smith, and in Twin Caves and Crystal Cave humans with a bison headdress can be found portrayed.[51]

Zoomorphic figures are relatively uncommon in central Montana. Where they are found they are primarily mountain sheep, fancy outlined lizards, or bear tracks. Notably infrequent are horses, antlered species, pictures of herds, and bison. In the Western Montana style, zoomorphic and

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[50] USDA, Forest Service, Overview: Ecological and Cultural Prehistory of the Helena and Deerlodge National Forests, Montana, 139-140.

[51] Ibid, 139-40.

anthropomorphic figures often accompany one another. In the Central Montana style they do not. Zoomorphs along the Smith include a grizzly bear head, bear paws, lizards, rabbit heads, turkey tracks, a turtle, a rattlesnake, and two orange elk.[52]

Tally marks, too, are found along the Smith River. Perhaps they recorded important events, tracked the days, or recorded the number of kills.

Geometric figures and designs in Central Montana rock art are complex. There are polygons and closed curvilinear shapes; there are concentric circles and circles inscribing polygons; there are dots within polygons and polygons within polygons. Zig-zag lines tail away from geometric figures, or connect separate figures. The effect is "abstract" and is a noted contrast to the relatively simple intersecting lines of Western Montana rock art. Finger dots, spatter marks, sun symbols and other geometric designs can be found along the Smith.[53]

Again, although most all of the sites along the river are from the prehistoric Central Montana Abstract tradition, some are notably not. In Thistle Cave, some fifty miles downriver from Camp Baker, superimposed over a red smear of the Central Montana Abstract style is a small human in black charcoal crayon in a style commonly found in petroglyphs

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[52] Ibid, 140.

[53] Ibid.

and some pictographs of the Northwestern Plains rock art tradition. In at least this one case, the Central Montana Abstract example along the Smith preceded the later Northwestern Plains tradition.[54]

The pictograph sites, especially, provide stylistic evidence of prehistoric habitation. Combined with the tepee ring sites and the lithic debris found throughout the valley, the pictographs make the Smith River Valley an attractive region for further archeological investigation. Detailed excavation at these sites may reveal a wealth of information on the various prehistoric cultures that inhabited the Smith River Valley. Taken together, the existence of detailed archeological sites from the Paleoindian Period to the Late Prehistoric, and the variety of pictographs, tepee rings, lithic debris sites, testify to the prehistoric activity in and occupation of the Smith River Valley.

By the end of the Late Prehistoric Period, Indians on the Northwestern Plains can be identified by their historical tribal designations, although, for several more decades at least, their way of life differed little from what it had been 11,000 years earlier. After the initial shock of human introduction into North America that contributed to the Pleistocene extinctions, paleoindians

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[54] Mavis and John Greer, "Rock Art Along the Smith River in Central Montana," 10-11.

ecologically adjusted to changing environmental and biological factors and established cultures that worked within the perameters of their environments. In eleven thousand years of history, limited technological advances from the spear to the atlatl and finally to the bow and arrow, changes in projectile points, the use of bison traps and jumps, and mining, contributed to slightly higher human populations on the plains and a more secure means of subsistence, without eliminating the bison populations or destroying the ecological base. After the cultural and ecological adjustments made following the Pleistocene extinctions, prehistoric peoples interacted with and shaped their environment without severe ecological disruptions.

The most obvious explanation for this environmental and cultural success is due to what John Bennet has called "low energy adaptations." As Bennet explains, "low energy societies use human and animal muscle power, and with this limited technology they can extract just enough energy from the habitat to provide sustenance and shelter for the resident population, with little left over for luxuries." Such cultures were "in balance" with their environment because they were never, or very seldom (as in the case of the Pleistocene extinctions), able to extract more energy from the environment than the environment was able to

regenerate.[55] The prehistoric hunter/gatherer societies of the Smith River Valley were all low energy societies; they hunted with stone tools of their own fashion, traveled on foot, produced little in excess and therefore traded little, and were vulnerable, and therefore responsive, to subtle changes in their environments. Low energy societies, as opposed to high energy societies like our own, do not produce enough to support large markets or large populations, the two primary reasons for our present environmental crises.[56]

By the end of the prehistoric period, dire rumblings far to the east of the Northwestern Plains foreshadowed the close of an era of sustainable living, the longest that the Smith River Valley has ever enjoyed.[57] Introduced European

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[55] John Bennet, "Human Adaptation to the Great Plains," in The Struggle for Land and Empire: Indigenous Insight and Industrial Empire in the Semiarid World, ed. Paul A. Olson (Lincoln: Univ. of Nebraska Press, 1990), 47-49.

[56] Donald Worster, "Transformations of the Earth," in The Wealth of Nature: Environmental History and the Ecological Imagination (New York: Univ. of Oxford Press, 1993), 45-63.

[57] In arguing that prehistoric cultures in the Smith River Valley attained a remarkably long-term, sustainable, cultural-ecological equilibrium, I am not "searching for Golden Age utopias," as Dan Flores puts it in, "Place : An Argument for Bioregional History," Environmental History Review 18 (Winter 1994): 17. These prehistoric cultures manipulated their environments, and if their technological advancement had continued uninterrupted they may eventually again have reached environmental crises. The key to their long cultural ecological stasis was that they were "low energy" societies. Rejection of everything that makes us a "high energy" society, and a return to the "Golden Age" of the stone age is not a practical solution for our modern environmental problems.

biota, technology, and economic systems soon radically altered the prehistoric cultural ecological stability that for 11,000 thousand years had existed there. From then on, environmental and cultural change has been measured in years, not millennia.[58]

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[58] For a more thorough and evocative portrayal of prehistoric Native Americans in the American West, and the way that environmental historians interpret their cultural ecological relationships, see Dan Flores, Caprock Canyonlands: Journeys into the Heart of the Southern Plains (Austin: Univ. of Texas Press, 1990), 13-21.

## CHAPTER 4

### The Valley of Horses

Along seemingly every other shady bend of the Smith River past Camp Baker, high canyon walls enfold short stretches of bright green meadows lined by aspen and cottonwoods, and just beyond those walls, darker forests of evergreen. Often, trout, preferring these bends in the river, break the surface of the rushing water, reflecting the brilliance of their lithe, colorful bodies, and sometimes, along the edges of these meadows, deer can be seen grazing cautiously as birds whirl in the sky. Today, twenty-seven such meadows have been developed as floater campsites by the Montana State Department of Fish, Wildlife, and Parks (FWP). Not surprisingly, many of these campsites contain evidence of earlier human visitors. In some cases, just a few yards from where the latest in Northface@ tents are assembled today, traces of rock rings forming circles of about fifteen feet in diameter can be found hidden in the grass. These are tepee rings, indicating that historic Native American peoples frequented the Smith River Valley, and that an appreciation for the area's beauty and utility is shared across the centuries.[1]

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[1] USDA, Forest Service, Overview: Ecological and Cultural Prehistory of the Helena and Deerlodge National Forest, Montana by George C. Knight (Helena: Helena and Deerlodge National Forests 1989), 1-15; John and Mavis Greer, "Rock Art Along the Smith River in Central Montana: Report on the 1993 Field Season" (Helena:

Historic Native Americans in this northern region between the Rocky Mountains and the Great Plains migrated seasonally, following the movements of the buffalo during the summer months. During the harsh Montana winters, Indian bands of maybe 30 or 40 men, women, and children, occasionally camped along the sheltered banks of the Smith River's central canyon section. Ewers stated that the Blackfeet bands preferred the valleys of the larger tributaries for their winter campsites.[2] Yearlong, the Smith River Valley provided water, a critical resource in an otherwise arid landscape, small populations of bison, rich habitat for fish and other game, and wood for fuel, shelter, and tools. During the summer months these bands of Indians traveled out of the canyon to the north and onto the Great Plains, perhaps camping at the broad open valley of the lower Smith where it flows into the Missouri, and from there, hunters ranged onto the plains to hunt the swelling herds of mighty buffalo.[3]

However, despite its initial resemblance to the earlier

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State Historic Preservation Office, 1993). Both site rock art, tepee rings, and lithic debris as evidence of significant historic and prehistoric Native American habitation along the Smith River.

[2] John C. Ewers, The Blackfeet: Raiders on the Northwestern Plains (Norman: Univ. of Oklahoma Press, 1958), 54.

[3] Ibid, 53-55; On the lifeways of Northern Plains Indians during the historic period, see Angie Debo, A History of the Indians of the United States (Norman: Univ. of Oklahoma Press, 1970); for the ecology of the buffalo see Frank G. Roe, The North American Buffalo: A Study of the Species in Its Wild State (Toronto: University of Toronto Press, 1951).

prehistorical period, historical Native American occupation of the Smith River Valley and west-central Montana, from roughly 1700 to 1870, was a period of conflict and change, as it was in much of the American West. This is particularly apparent when the historic period is compared to the prehistoric period. During the prehistoric period, which extended into the dim past some 12,000 years before approximately 1700 A.D., climatic fluctuations and new ways of chipping stone were considered dramatic catalysts to cultural and ecological change. In contrast, change during the historic period of Native American habitation in the Smith River Valley, from roughly 1700 to 1870, seems more dramatic. Cultural and ecological changes following the introduction of horses, guns, disease, and the market economy, led to increased conflict and cultural ecological crises, which nearly resulted in the extinction of the bison and in cultural genocide for the Native Americans who inhabited the region. Invariably, Euro-American "discovery" and expansion into the western hemisphere was at the root of the cultural and ecological change in the Smith River Valley from 1700 to 1870.[4]

It is misleading then, that popular perceptions of the

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[4] For differences in prehistoric versus historic Native Americans, see Robert F. Spencer and Jesse D. Jennings, The Native Americans: Ethnology and Backgrounds of North American Indians (New York: Harper and Row, 1977), 6-24. For the general effects of introduced biota on native species, see Alfred Crosby, Ecological Imperialism: the Biological Expansion of Europe, 900-1900 (Cambridge: Cambridge Univ. Press, 1986), 145-216, 269-294.

way that Native Americans lived come almost exclusively from this period. These images of Native Americans have been fed to us for a long time by Hollywood, which has always dealt in stereotypes, from Tonto to Lieutenant John Dunbar. More recently, a sincere but simplistic environmentalism has appropriated a romantic image of Native Americans that glorifies the "harmonious," "natural" lifestyles of Native Americans in what amounts more to an implicit criticism of the environmental abuses of our modern society than an accurate understanding of Native American culture.

For most Americans today, the dominant popular image of Indians, whether noble or savage, is still that of the mounted plains warrior galloping after a herd of fleeing buffalo. However, it was only in the last two hundred years of at least a 12,000 year history, that Native Americans rode upon horses. Reintroduced to the American West by the Spanish (an indigenous species of horse died out during the Pleistocene extinctions 11,000 years ago), the horse didn't appear in Northern Plains area of the Smith River until after the turn of the 18th century.[5] The noble, or ferocious, or savage "plains warrior" was unknown to the region before 1700, when prehistoric peoples were living ambulatory lives within long recognized territorial boundaries similar to the lives led by their ancestors for

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[5] Frank Roe, The Indian and the Horse (Norman: Univ. of Oklahoma Press, 1955).

thousands of years. With the horse, the Native Americans of the Northern Great Plains became not only more mobile, but more aggressive, and, following a pattern set by nomadic horsemen worldwide, more warlike.[6] The mounted warriors in the Great Plains of the American West, the Sioux of the Dakotas, the Comanche of the Southern High Plains, and the Blackfeet along the Northwestern Great Plains and in the Smith River area, were products of Euro-American expansion.

In a contemporary society faced with serious environmental problems, one of our most prevailing cultural beliefs about Native Americans is that they lived in "harmony" with the land, that their way of living off the land did not undermine their culture by destroying their ecology. It is thought that Native Americans, by living simply, were able to maintain cultural and ecological stability. Generally, this belief reflects a romantic image of both nature and lost Native American cultures. It embodies a nostalgic longing for a more wholesome, simpler, and environmentally sustainable way of life.

However, this belief that Native Americans lived in "harmony" with their environment is misleading for several reasons. First, it suggests that Native Americans, both historic and prehistoric, did not actively manipulate or

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[6] John Bennett, "Human Adaptations to the North American Great Plains and Similar Environments," in Struggles for the Land: Indigenous Insight and Industrial Empire in the Semiarid World, ed. Paul A. Olson (Lincoln: Univ. of Nebraska Press, 1990), 51.

change their environments. Second, it ignores the dramatic changes that Euro-American expansion had on Native American life, and it seldom distinguishes the prehistoric Native American, who hunted on foot with a spear or bow, from the historic Native American, who hunted on horseback with a gun. Recent scholarship has called into question whether the historical Plains Indian of the 19th century, mounted, well-armed, beginning to participate in a European market economy, and heavily dependent upon the hunting of buffalo, like the Blackfeet, were practicing a sustainable way of life.[7]

An examination of Native American habitation of the Smith River Valley and the surrounding regions from 1700 to 1870 reveals significant insights into some of the major themes of Native American and environmental history. For at least two hundred years before American settlers arrived in the Smith River Valley, before most Native Americans had even seen a white man or woman, the indirect impacts of European expansion were revolutionizing Native American way of life. First, European expansion into the western hemisphere created pressures that influenced migrations of Native American peoples, generally westward, which led to increased conflict and warfare. The Smith River provides a

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[7] Dan Flores, "Bison Ecology and Bison Diplomacy: The Southern Plains from 1800 to 1850," Journal of American History 78 (September 1991): 465-85. Although Dr. Flores' work is specifically on the Comanche of the Southern Plains, its arguments may be applicable to the tribes of the Northern Plains.

particularly good example of the effect this had on increasing conflict amongst various cultural groups. In less than two hundred years, the Flathead were forced from the Smith River by the Shoshone, the Shoshone by the Blackfeet, and the Blackfeet by the Americans, to name only the most important tribes that competed for the Smith River region.[8]

Second, for two centuries preceding the arrival of American settlers, Native Americans in the Smith River Valley were profoundly affected by the introduction of what Alfred Crosby calls the European "portmanteau biota," which included the various plants, animals, and pathogens that Europeans brought with them from Europe.[9] In some cases, most notably with the horse, these were much sought after cultural acquisitions, which, as is the case of the horse, revolutionized the Native American way of life on the Great Plains.[10] In other cases, the European portmanteau biota was unwelcome, as with the introduction of smallpox and other introduced European diseases, which devastated Native

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[8] William Bryan, Montana's Indians: Yesterday and Today, Montana Geographic Series (Helena: Montana Magazine Inc., 1985), 118-119; Carling Malouf, A Brief History of the Indians of Montana (Missoula: The Univ. of Montana Foundation, 1969), 12-15.

[9] Crosby, Ecological Imperialism, 89-90.

[10] See Preston Holder, The Hoe and the Horse on the Plains (Lincoln: Univ. of Nebraska Press, 1970); and Roe, The Indian and the Horse.

American populations.[11]

A third result of European expansion was the eventual incorporation of Native Americans into the global market economy, a good example of which was the fur trade. In the Smith River Valley, as elsewhere, for a generation, the Blackfeet effectively resisted the pressures to trap beaver, and by doing so, made choices about how they managed their ecology. This leads to the final point, contrary to some persistent belief, that all Native American groups actively manipulated their environments, making conscious, cultural ecological choices. These choices profoundly affected the environment of the Smith River. Again, later in this chapter, the Blackfeet will provide the primary example of this, but first, a brief look at the successive historical Native American cultures of the Smith River Valley lends an appreciation for the dramatic changes that disrupted the prehistoric cultural ecological equilibrium of the region. Whether historic Native Americans in the Smith River Valley were practicing a sustainable way of life is less clear.

The Flatheads were both the last prehistorical, and the first historical group of Native Americans to frequent the Smith River Valley. They were originally the eastern most of the Columbia Plateau tribes of the linguistic group known

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[11] Henry Dobyns, Their Numbers Become Thinned: Native American Population Dynamics in Eastern North America (Knoxville: Univ. of Tennessee Press, 1983); Dobyns, Native American Historical Demography (Bloomington: Univ. of Indiana Press, 1976).

as Salish, which encompassed the areas of southern British Columbia, eastern Washington, northern Idaho, and western Montana. The Salish speaking tribes included the Pend d'Oreille, Kalispell, Coeur d'Alene, Spokane and others. The progenitors of the Flathead began migrating slowly into the mountain valleys of western Montana several thousand years ago. As they moved away from the rich fishing grounds of the Columbia Plateau and the Pacific Northwest, they were drawn to the valleys and the plains of south central Montana where they hunted the buffalo. Sometime during this migration, the Flathead completed a slow transformation from a Pacific Northwest people primarily dependent upon fish, to a Northern Great Plains people primarily dependent upon bison.[12]

By about 1600 A.D., the Flathead inhabited the Three Forks region of the Upper Missouri and Gallatin river valleys, just to the southwest of the Smith River Valley. Hemmed by the mountain ranges to the south and the west, the Flathead seasonally ventured north and east to the Great Plains to hunt the vast herds of buffalo. They established a seasonal bison range that extended from the Three Forks region to the Sweetgrass Hills and the Bighorn Mountains. The Smith River Valley occupied the heart of this range, and provided one of only three convenient avenues for the

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[12] See John Fahey, The Flathead Indians (Norman: Univ. of Oklahoma Press, 1974), 1-26; Fahey, The Kalispel Indians (Norman: Univ. of Oklahoma Press, 1986), 1-37.

Flatheads to move from the mountain valleys of the Upper Missouri and the Gallatin rivers to the Great Plains. One route lay to the immediate north along the Upper Missouri itself; the other two led to the east into the Upper Smith River Valley, then continued east along the Musselshell River, or turned north, following the entire length of the Smith River Valley to where it opened onto the plains not far from the Great Falls of the Missouri.[13]

During the 17th century, the Flathead, the only Salish speaking people living east of the Continental Divide, ranged seasonally from their mountain valleys, like the Smith, onto the Great Plains. For most of the year, the Flathead moved in small bands of less than a hundred people throughout the mountain valleys of south-central Montana. Such bands made more sustainable and efficient use of the region's resources. During the buffalo hunting season in the summer, when the Flathead flowed out onto the Plains to bunt buffalo, they came together to form larger summer encampments. A typical encampment included about three hundred lodges, or 2,000 to 3,000 people. The camp was generally located at the base of a chain of hills whose gentle slopes presented a narrow valley and a prairie, onto which the hunters ranged. The northern end of the Smith River Valley fit this description perfectly. During the winter, the Flathead once again broke up into smaller bands

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[13] Fahey, The Flathead Indians, 1-26.

and retreated into the shelter of the mountain valleys and canyons of central and southwestern Montana where they lived off the preserved bison meat of the summer, hunted smaller fish and game, and gathered a variety of plants.[14]

For at least a century, but probably much longer, the Flathead held this range without contest and with little change in the way they used its resources. During the harsh Montana winters, they huddled in the protective mountain valleys just to the east of the continental divide, gathering plants for food and medicine, and hunting game and small herds of bison.[15] Seasonally, the ventured out to hunt the seemingly endless herds of buffalo on the plains from the sheltering mouths of the Upper Missouri, Smith, and Musselshell Valleys, accompanied only by their dogs and the stone weapons and tools that they could make, in a cultural ecological relationship, which more closely resembled the prehistoric patterns of the last 11,000 years than the more recent historic stereotype of the Plains Indian.[16]

However, by 1700 A.D. this ancient way of life in the Smith River Valley was radically disrupted. From the south, mounted on horses, came the Shoshone. The range of the

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[14] Peter Ronan, History of the Flathead Indians, 1813-1890 (Helena: Journal Publishing Company, 1900), 48-53.

[15] R.D. Stubbs, "An Investigation of the Edible and Medicinal Plants used by the Flathead Indians," (M.A. thesis, Univ. of Montana, Missoula, 1966).

[16] Bryan, 118-119.

Flathead was quickly overrun by these mobile warriors, the first great horsemen of the Northern Plains, and the Flathead were pushed to the west out the Three Forks area of the Upper Missouri and established a new cultural center in the Bitteroot Valley by the early 18th century. Although for over the next one hundred and fifty years the Flathead occasionally slipped out of the mountain valleys of western Montana to hunt buffalo on the plains, it was always at the risk of provoking attack from the mightier tribes of that region.[17]

In 1730, the Flathead obtained the horse from the Shoshone, but by then it was too late to reacquire territories they had lost.[18] Flathead frequency in the Smith River Valley consequently decreased, although they continued to pass stealthily through the region seasonally to hunt buffalo in the valleys and plains of west-central Montana. The importance of these seasonal hunts increased for the Flathead when bison in the Bitteroot Valley and throughout the valleys of western Montana nearly disappeared by the early 19th century. This contraction of the buffalo range was perhaps an early indicator of the increased hunting pressures that resulted from the introduction of the

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[17] Ibid.

[18] Carl Waldman, Atlas of the North American Indian (New York: Facts on File Publications, 1985), 56-57.

horse.[19] However, continued harassment by the now dominant Blackfeet, combined with the smallpox epidemics beginning in the 1760s, further reduced Flathead population and power, confining them more and more to the Bitteroot Valley.[20]

As late as 1870, a census taken at the U.S. military fort at Camp Baker on the Smith River recorded that small numbers of Flathead trickled persistently through the Smith River Valley during the buffalo season.[21] Throughout the 17th century, the Flathead were the dominant Native American group found in the Smith River Valley. Although their visits to, or through, the valley never entirely stopped until after the 1870s, shortly after 1700 A.D. the control of the region had shifted to others, and the Flathead never again permanently occupied the resource- rich valleys east of the continental divide where the Northern Rockies meet the Great Plains.[22]

The Shoshones replaced the Flathead as the dominant Native American tribe found in the region encompassing the Smith River Valley during the 18th century. The Shoshone were a part of the Uto-Aztecan language stock centered in

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[19] Fahey, The Flathead Indians, 8-10.

[20] Ibid, 25.

[21] Department of Dakota, "Camp Baker, Montana Territory, Est.1 November, 1869" (Washington: National Archives Microfilm Publication No. 617, Jun 1870 - Oct 1880), copy on file with the Montana State Historical Society, Helena.

[22] Ibid.

the Great Basin region, including portions of eastern Nevada, northern Utah, Northwestern Colorado, the Snake river country of southern Idaho, and western Wyoming.[23] In the 17th century the northern and western Shoshone began expanding onto the Northern Great Plains of central Montana, and eventually reached as far north as Saskatchewan and Alberta where their presence was noticed in the Eagle Hills by Jesuits in the 1600s. During this period the widely dispersed Shoshone ranging north and south on the Northern Great Plains seldom came into direct conflict with the Flathead, who were entrenched in the western river valleys and the nearby plains onto which they immediately opened.[24]

This situation changed by 1700 when the Shoshone acquired the horse from the Comanche who lived to the south. The Shoshone were the earliest Northern Plains tribe to obtain the horse. The horse, as it did with other tribes, had a major impact on the Shoshone way of life. It made them more mobile, increased the efficiency with which they hunted the buffalo, fostered an increase in population growth, and led to increased inter-tribal warfare, as the equestrian transportation revolution wreaked a mockery of traditional territorial ranges. Also, amongst the plains

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[23] Robert A. Manners, "Introduction to the Ethno-historical Reports on the Land Claims Cases," in Shoshone Indians, eds. Carling Malouf and Ake Hultkrantz (New York: Garland Publishing Company, 1974), 17-24.

[24] Carling Malouf, A Brief History of the Indians of Montana (Missoula: Univ. of Montana Foundation, 1969), 12-20.

tribes, horses quickly became a symbol of status and wealth, and horse raiding became a common source of aggression and conflict.[25]

Although most of the tribes of the Northern Plains and Columbia Plateau had acquired the horse by the middle of the 18th century, the Shoshone obtained a strategic advantage by being the first. For many decades, the Shoshone were the richest horsemen on the Northern Plains. They controlled direct trade links to the even richer horse tribes of the south, who had first obtained their horses from the Spanish. Already a major presence and a strong threat to the Flatheads in the area of the Smith River in the 17th century, the Shoshone, once equipped with the horse, drove the Flatheads back across the continental divide within a few decades of the turn of the 18th century[26].

The Shoshone dominated an immense range encompassing portions of the Northern Rockies and Northern Great Plains, including the Smith River Valley, for a century, until approximately 1800 when they were driven south out of Montana by the Blackfeet and smallpox. Clear indications of the Shoshone's decreasing dominance on the Northern Great Plains by the turn of the 19th century can be found in the records of Lewis and Clark. In 1800, Sacajawea, the

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[25] Roe, The Horse and the Indian.

[26] Virginia Trenholm and Maurine Carley, The Shoshonis: Sentinels of the Rockies (Norman: The Univ. of Oklahoma Press, 1964), 17-40.

Shoshone interpreter and guide with the Lewis and Clark expedition, was captured by Crow-Hidatsa Indians during a battle in a Shoshonean camp at Three Forks, fifty miles southwest of Camp Baker on the Smith River. Five years later Lewis and Clark found Shoshone neither at Three Forks nor for a considerable distance south. When Lewis and Clark finally did encounter the Shoshone, that group of Native Americans desperately begged for trade in guns, which the Americans had little intention of supplying.[27]

During the 18th century, while the Shoshone gradually lost their monopoly of the horse on the Northern Great Plains, the Blackfeet were building a monopoly of their own. Through their Cree and Assiniboine allies to the east who obtained them from the French, the Blackfeet acquired guns. In 1730, in the Bow River area of Alberta, the Blackfeet, on foot and armed with muskets, fought their first major battle with the Shoshone, who were mounted but lacked guns. Toward the end of the 18th century, the Blackfeet had acquired horses and better guns, and had, furthermore, prevented the Shoshone from obtaining guns. Armed, mounted, and with considerable allies, the Blackfeet began to sweep the Shoshone from the plains, much with the same disdain that

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[27] Gary Moulton, ed. The Journals of the Lewis and Clark Expedition, vol. 4 (Lincoln: Univ. of Nebraska Press, 1987), 400.

the Shoshone had treated the Flathead.[28]

Then disaster hit both the Shoshone and the Blackfeet. In 1781, the first known smallpox epidemic ravaged the tribes of the Northern Plains, killing off from one-third to one-half of their total populations. The Shoshone and the Blackfeet were affected equally, and for a period of time both peoples retreated into their smaller, traditional ranges, the Shoshone to the south of the Smith River, the Blackfeet to the north, and the Flathead, who were also affected, to the west. However, the Blackfeet were the first to recover from the smallpox devastation, and now armed and mounted they quickly spread south along the Rocky Mountain front across the nearly vacant plains of central Montana, pushing remnant populations of Shoshone south, and further confining the Flathead to their remote mountain valleys in the west far from the bison of the plains.[29]

At about this same time, another group of peoples were pushing the Shoshone from the Big Horn and Upper Yellowstone country and converging on the Smith River from the east. These were the Crow, who by the time of the arrival of white settlers in the Smith River Valley had settled as close to

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[28] Colin C. Calloway, "Snake Frontiers: the Eastern Shoshones in the Eighteenth Century," Annals of Wyoming 63, no. 3 (Summer 1991): 82-92.

[29] Ibid, 88-92; George E. Hyde, Indians of the High Plains: From the Prehistoric Period to the Coming of the Europeans (Norman: Univ. of Oklahoma Press, 1959), 105-213.

the Smith as the Musselshell and Judith Rivers.[30] Although the 1870 Camp Baker census of Native American populations in the region of the Smith River mentioned small populations of Crow within their district, and it is probable that some Crow occasionally frequented the Smith River area, they did not seriously challenge the Blackfeet dominance of the drainage.[31] In fact, it was the Crow who mostly sought protection from the Blackfeet, as indicated by a series of treaties they signed with the U.S. government beginning in 1825, wherein the Americans promised to protect the Crow from their powerful enemy to the north and west. These treaties inevitably led to additional land cessions, and in 1868 a treaty was signed giving the United States Crow lands from the western boundary between the headwaters of the Smith River Valley down to the Shields River Valley and including the lands between the Musselshell and Yellowstone Rivers.[32] However, despite the continued sporadic presence of small groups of Crow and Flathead in the Smith River Valley, it was the Blackfeet who dominated the region during most of the 19th century, until they were eventually pushed

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[30] See Robert H. Lowie, The Crow Indians (New York: Farar and Rinehart Inc., 1935) 1-57; Dale K. McGinnis and Floyd W. Sharrock, The Crow People (Billings: Indian Tribal Series, 1972), 1-4; Joseph Medicine Crow From the Heart of the Crow Country: The Crow Indians' Own Stories (New York: Orion Books, 1992).

[31] Department of Dakota, "Camp Baker."

[32] Burton M. Smith, "Politics and Crow Indian Land Cessions," Montana: The Magazine of Western History 36, no.4 (Autumn 1986): 25-51.

north of the Missouri by American settlers and troops in the 1860s.

The Blackfeet were an Algonquian speaking people who originated from the woodlands between the Great Lakes and Hudson's Bay far to the east. Like many other native peoples, the Blackfeet were forced from this homeland by the pressures of European expansion into the western hemisphere. The Blackfeet eventually arrived at the foot of the Canadian Rocky Mountains in present day Alberta, where they adapted to the drier plains ecology, which, as it had for 11,000 years, supported cultures that centered around the hunting of bison. By the end of the 18th century, the southern most branch of the Blackfeet people, the Piegan, advanced south along the Rocky Mountain front into present-day Montana. By the time Lewis and Clark had pushed, pulled, and rowed their way to the Upper Missouri, the Blackfeet were the undisputed military power of a vast tract that stretched from the North Saskatchewan River to the Three Forks. Their territory comfortably embraced the Smith River Valley.[33]

The Lewis and Clark expedition nearly coincided with the Blackfeet movement into the Smith River Valley. Although earlier French fur trappers, like the Verendrye brothers, may have been the first Europeans to move up the

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[33] Ibid, 152-153; Also see Ewers, The Blackfeet; George B. Grinnell, Pawnee, Blackfoot and Cheyenne: History and Folklore of the Plains (New York: Charles Scribner's and Sons, 1964); W. McClintock, The Old North Trail or Life, Legends, and Religions of the Blackfeet Indians (London: MacMillan and Co., 1910).

Smith from the Missouri, it was Lewis and Clark who, in passing, gave the river its current name.[34] Most certainly, the Flathead, the Shoshone, and the Blackfeet had their own names for the Smith River, but these have been lost to history. After a strenuous portage around the Great Falls of the Missouri at the present day location of Great Falls, Montana, the explorers continued their ascent of the Upper Missouri River. July 15th, 1805, the day after the portage around the falls, Lewis, in an effort to lighten the load in the canoes, proceeded overland along the shores of the Missouri. As evening approached, he neared the mouth of the Smith River. His journal notes:

> We came to an island opposite a bend toward the north and it reached 7 1/2 miles to the lower point of woodland at the entrance of a beautiful River, which in honor to the Secretary of the Navy, we called Smith's River. The stream falls into a bend on the south side of the Missouri and is eighty yards wide. As far as we could discern its course, it wound through a charming valley toward the Southeast, in which many herds of buffalo were feeding; till at a distance of 25 miles it entered the Rocky Mountains and was lost to our view.[35]

Lewis and Clark camped that night at the mouth of the Smith River opposite or near the present town of Ulm, nearly 20 river miles southwest of the Great Falls. Properly recorded, the beautiful Smith was not further explored at

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[34] Orin G. Libby, "Some Verendrye Enigmas," Mississippi Valley Historical Review, 3 (Sep. 1916): 300-319.

[35] Moulton, 382.

the time, and Lewis and Clark continued on their historic journey westward.

When, precisely, the Blackfeet moved south into "that charming valley," is uncertain, but they most certainly would have been attracted to river by its, "many herds of buffalo."

As it had done for many millennia, the Smith River provided an ideal habitat for bands of the semi-nomadic Blackfeet, who ventured forth from its lower valley to hunt the buffalo on the plains during the summer, and then at the arrival of the cold Montana winter, retreated into the shelter of its beautiful canyon where they hunted smaller game, fished, and collected plants. When Camp Baker was established on the Smith River near the head of the canyon by the U.S. Army in 1869, the total number of Blackfeet estimated in the Smith River area was 4,000, or over double the present population of the region. This same census reported 200 Crow in the valley, and mentioned small bands of Flathead who still moved through the valley seasonally to reach the plains to hunt buffalo.[36]

Blackfeet life centered upon the buffalo. It was not only their most important food source, upon which their movements were based, but it also supplied many of the raw materials necessary for the Blackfeet material culture, including many of their tools, much of their clothing, and

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[36] Department of Dakota, "Camp Baker."

some of the materials needed for the construction of shelter. For the Blackfeet, the buffalo took on a spiritual significance as important to the Blackfeet culture as it was to their physical existence. For the Blackfeet, as for the earlier, prehistoric cultures on the Northern Great Plains since the Pleistocene extinctions, the importance of the buffalo can hardly be overestimated.[37]

In addition to buffalo, the Blackfeet supplemented their diet with other meat, including elk, deer, and pronghorn antelope, which were all plentiful in the Smith River Valley. This cultural preference for meat is revealed concisely in the Blackfeet language. In Blackfeet, meat was called, "natpi waksin," or "real food," while all other foods were called "kistapi waksin," or "nothing food."[38]

Nevertheless, the Blackfeet diet consisted of a considerable amount of gathered plants. Plants, along with animal skins, bones, and stones, also formed a considerable part of the Blackfeet material culture.[39] Because the Blackfeet inhabited an area of diverse climate and topography bordering both the plains and the Rocky

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[37] Ewers, The Blackfeet; J.W. Schultz, Blackfeet and Buffalo: Memories of Life Among the Indians (Norman: Univ. of Oklahoma Press, 1962). For an evocative literary interpretation of the importance of the buffalo to Blackfeet culture, see James Welch, Fools Crow (New York: Viking Press, 1986).

[38] Melvin R. Gilmore, Uses of Plants by the Indians of the Missouri River Region (Lincoln: The Univ. of Nebraska Press, 1977), 1-2.

[39] Ibid, 1-35.

Mountains, they exploited a diverse range of plant and animal resources. The Blackfeet possessed a broad knowledge of plant pharmacopeia. In their use of plants as medicines, they treated horses as well as humans, and there was even a Blackfoot cult of specialists in the treatment of horses with plant remedies. Plants were also used for other purposes including the production of dyes and perfumes, the manufacture of weapons, and as construction materials. Plants also served as seasonal indicators of the best times to hunt buffalo.[40] In all, the Blackfeet utilized 185 species belonging to 140 genera of plants distributed among 57 families.[41]

Blackfeet consciously managed their environment and made clear environmental and cultural choices to aid them in the hunting of the buffalo, smaller game, and the gathering of various plants. The clearest manner in which Blackfeet manipulated their environment to provide better habitat, not only for buffalo but for a wide variety of plants and animals, was through the deliberate use of fire. The use of fire by Native American groups throughout North America and long before the arrival of Europeans has been well described

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[40] Alex Johnston, "Blackfoot Indian Utilization of the Flora of the Northwestern Great Plains," Economic Botany 24 (Dec. 1969): 301-304.

[41] Ibid, 301-232.

by environmental historians and others.[42] The Blackfeet, like many other Native Americans, recognized that fire, by clearing forest undergrowth and stimulating seed germination, increased bison and big game habitat. Fire was also sometimes used as a part of war strategies, or to herd bison into waiting horsemen or over buffalo jumps.[43] For the Blackfeet, fire was a powerful tool that allowed them a measure of control over their environment.[44]

Native American caused fires on the Great Plains, while serving the specific needs of humans, also profoundly altered the environment itself, extending the grasslands of

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[42] For a look at how other environmental historians have treated Native Americans and their use of fire to manipulate the landscape, see Richard White, The Roots of Dependency: Subsistence, Environment, and Social Change Among the Choctaws, Pawnees, and Navajos (Lincoln: Univ. of Nebraska Press, 1983), 10-11; Richard White, Land Use, Environment, and Social Change: the Shaping of Island County, Washington, 2nd ed. (Seattle: Univ. of Washington Press, 1992), 20-23; William Cronon, Changes in the Land: Indians, Colonists, and the Ecology of New England (New York: Hill and Wang, 1983), 49-51; Timothy Silver, A New Face on the Countryside: Indians, Colonists, and Slaves in South Atlantic Forests, 1500-1800 (Cambridge: Cambridge Univ. Press, 1990), 57-66; Dan Flores, Caprock Canyonlands: Journeys into the Heart of the Southern Plains (Austin: Univ. of Texas Press, 1990), 60-61; and, Emily W.B. Russell, "Indian Set Fires in the Forests of the Northeastern United States," Ecology, 64 (Feb. 1983): 78-88.

[43] Stephen J. Pyne Fire in America: A Cultural History of Wildland and Rural Fire (Princeton Univ. Press, 1982); Omer C. Stewart, "Fire as the First Great Force Employed by Man," in Man's Role in Changing the Face of the Earth, ed. William L. Thomas, Jr., vol.1 (Chicago: University of Chicago Press, 1956), 115-33.

[44] USDA, Forest Service, "Why Indians Burned: Specific Versus General Reasons," by Henry Lewis, in Proceedings of a Symposium and Workshop on Wilderness Fire, 75-80 (Ogden: U.S. Forest Service General Technical Report INT-182, 1985).

the Great Plains environment, and perhaps even maintaining the Great Plains as a grassland, rather than low scrub or brushland, which would have supported fewer numbers of bison and other large ungulates.[45] Native Americans also used fire extensively in the mountain valleys and forests for similar purposes. The Smith River Valley itself, prior to the arrival of American settlers and fire suppression, was significantly shaped by Native American fire ecology. Its three distinct vegetative zones, the grass covered bottomlands in the northern and southern broad intermountain valleys, and the forested central canyon region, were products of this manipulation.[46]

The acquisition of the horse, reintroduced to the western hemisphere by the Spanish, was another cultural choice that assisted the Blackfeet in the hunting of the buffalo. This choice also had other, unanticipated, effects on Blackfeet culture and Blackfeet ecology. As has been mentioned, the acquisition of horses often led to increased tribal conflict. Horses, a new element in the region's ecology, also competed with both buffalo and other

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[45] On the Great Plains environment and fire ecology see, J.E. Weaver and E.W. Albertson, Grasslands of the Great Plains (Lincoln: Johnson Publishing Co., 1956); and, Henry Wright and Arthur Bailey, Fire Ecology (New York: John Wiley & Sons, 1982).

[46] S.W. Barrett and S.F. Arno, "Indian Fires As an Ecological Influence in the Northern Rockies," Journal of Forestry 80 (1982), 641-653.

ungulates, like elk, for the region's grasses.[47] But for the Blackfeet, what was most important, was that domestication of the horse gave them crucial advantages of speed and mobility in the hunting of buffalo, which allowed the Blackfeet greater choice in which and how many buffalo they killed.[48]

While the Blackfeet actively manipulated their environment through the use of fire, and eagerly incorporated the horse and the gun in the hunting of buffalo, they made other ecological choices, which were more passive, but at least as revealing of their depth of understanding local ecological relationships and their commitment to managing for them. For nearly fifty years after the Lewis and Clark expedition, before the arrival of missionaries, prospectors, and settlers in the Montana territory, fur trappers working for the American Fur Company and the Rocky Mountain Fur Company attempted, unsuccessfully, to trap and trade in Blackfeet territory. These fur trappers and traders operated only at great risk along the Upper Missouri, and presumably within the Smith River Valley, in the 1820s and 30s, because of the hostility

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[47] Alan Osburn, "Ecological Aspects of Equestrian Adaptations in Aboriginal North America," American Anthropologist, 85 (Sept. 1983): 563-91.

[48] John C. Ewers, The Horse in Blackfeet Indian Culture (Washington, D.C.: Bull. 159, Bureau of American Ethnology, Smithsonian Institute, 1955).

of the Blackfeet toward their economic operations.[49]

These trappers especially desired to trade in beaver pelts, and those innocuous animals were sought out and methodically eradicated in most of North America outside of the Rocky Mountains by the early 1800s. In other areas along the rivers of the Midwest and in the eastern hardwood forests, traders had been successful not only in being permitted to trap and trade in Indian territories, but in recruiting Indians as trappers themselves. Eventually, this had devastating effects on beaver populations, and fur traders had to move west continually to seek out fresh supplies. However, for decades their progress was halted along the Upper Missouri because of Blackfeet resistance to the fur trade in beaver. Although the Blackfeet were just as eager to acquire American trade goods as other tribes, particularly guns, ammunition, iron tools and weapons, blankets, tobacco, and alcohol, for several decades they traded only buffalo, wolf, and smaller game pelts for these goods, and generally refused to trade in beaver. Trappers like John Colter who were caught looking for beaver on their land, were dealt with summarily.[50]

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[49] Paul C. Phillips, The Fur Trade, vol. 2 (Norman: The Univ. of Oklahoma Press, 1961), 389-429.

[50] On the fur trade in the area, see David J. Wishart, The Fur Trade of the American West, 1807-1840: A Geographical Synthesis (Lincoln: Univ. of Nebraska Press, 1992); John Sunder, The Fur Trade on the Upper Missouri 1840-1865, (Norman: The Univ. of

Several explanations have been offered for Blackfeet hostility and aversion to hunting beavers in the first half of the 19th century. The first observers, the traders and trappers themselves, blamed it on Blackfeet savagery, laziness, and poor hunting skills. Early ethnographers, like John Ewers, pointed to Blackfeet superstitions and phobias. More recent historians and anthropologists have emphasized the importance of the beaver in Blackfeet rituals and culture.[51] However, the beaver was at least equally important in the mythologies of Indians to the east, and none of these provides a clear convincing explanation for Blackfeet hostility toward traders, and their reluctance to trap beaver.[52]

Scholars have adequately explained part of the problem in identifying one source of Blackfeet hostility toward traders seeking access to the west along the Upper Missouri into and past Blackfeet territory. Throughout the 19th century continued Blackfeet military success depended upon

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Oklahoma Press, 1965); Charles Larpenteur, Forty Years a Fur Trader, ed. Elliot Coues (Minneapolis: Univ. of Minnesota Press, 1962).

[51] Mark A. Judy, "Powder Keg on the Upper Missouri: Sources of Blackfeet Hostility, 1730-1810," American Indian Quarterly 11, no. 2 (Spring, 1987): 127-144.

[52] For details on the relationship between Native Americans and beavers in the East, and explanations for and the impacts of over-hunting, see Calvin Martin's Keeper's of the Game: Indian-Animal Relationships and the Fur Trade (Berkeley: Univ. of California Press, 1978), and Shephard Kretch, III, ed., Indians, Animals, and the Fur Trade: A Critique of "Keepers of the Game" (Athens: Univ. of Georgia Press, 1981).

their use of the horse, and more significantly, their limited monopoly on guns. By straddling the Upper Missouri and halting traders from moving west, the Blackfeet prevented their traditional enemies, the Shoshone and the Flathead, from having a secure supply of guns. Indeed, during the 19th century, it was the armed and mounted Crow warriors living to the east, not the Flathead and Shoshone, who became the greatest threat to Blackfeet dominance along the region. However, although this helps to explain Blackfeet hostility, it does not explain Blackfeet aversion to hunting beaver, or why they opposed Euro-American trapping of beaver on their lands.[53]

Anthropologist Grace Morgan offers a compelling explanation for both. In her Ph.D. dissertation, "Beaver Ecology/Beaver Mythology," she explains the ecological basis for Blackfeet cultural taboos discouraging the hunting of beaver. Her main hypothesis is that the aversion to hunting beaver by Plains Indians like the Blackfeet was a response to the limited availability of surface water, and a recognition of the beaver's role in maintaining these resources in "Valley Complex (river/stream) systems."[54] She explains that in the arid landscape of the West beaver populations conserve and stabilize surface water in select

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[53] Judy, "Powder Keg on the Upper Missouri: Sources of Blackfeet Hostility, 1730-1810," 127-144.

[54] R. Grace Morgan, "Beaver Ecology/Beaver Mythology" (Ph.D. Diss., Univ. of Alberta, 1991), 1-18.

habitats, which were most frequently found on large tributaries like the Smith River. These areas were also preferred for seasonal wintering grounds by Native Americans, and were where these groups retreated during the summer in times of drought. In these areas, beavers maintained surface water by constructing dams, which during drought often provided a crucial source of water in river valleys like the Smith, where beavers were plentiful. Morgan notes that the stabilization of surface water through the non-hunting of beaver was a crucial survival strategy on the plains, particularly for a pedestrian people with limited mobility, and particularly considering beaver susceptibility to human over-hunting.[55]

The Blackfeet effectively prevented the large scale trapping and trading of beaver along the Upper Missouri, including the Smith River drainage, until the 1840s. By doing so they made a logical, but not an easy, ecological choice. By resisting the fur trade, they conserved the water resources of riparian ecosystems like the Smith River, which were so valuable in the arid and drought prone West, but they were also limiting their ability to trade for increasingly valued goods, like guns and iron tools. Eventually, the change from trade in beaver pelts to buffalo hides, in combination with other changes like the introduction of the horse, which provided the Blackfeet with

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[55] Ibid, 1-18.

a mobility that lessened the limitations of water resources, resulted in an erosion of traditional cultural ecological relationships like that between the Blackfeet and the beaver. Beginning noticeably in the early 1840s, trading and trapping on the Upper Missouri River and tributaries like the Smith, became more common. However, by then, as European fashions changed, the demand for beaver furs decreased. It is likely that the Blackfeet conservation of the beaver in the drainages in the region of the Upper Missouri until the 1840s, partially shielded that animal from the over-hunting and local extirpation it suffered from almost universally elsewhere.[56]

However, the profound changes indicated by the decreasing importance of the beaver in Blackfeet culture and ecology by the 1840s hinted at even more dramatic cultural ecological disruptions within the next few decades. As has been mentioned, the first great change came with the introduction of the horse. By the early 19th century, the Blackfeet had so thoroughly adapted to the horse culture, that some ethnologists suggest that they could more appropriately be considered pastoralists than hunter/gatherers.[57] For thousands of years prior to the

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[56] Judy, "Powder Keg on the Upper Missouri: Sources of Blackfeet Hostility, 1730-1810," 127-144.

[57] John Bennet, "Human Adaptations to the North American Great Plains and Similar Environments," in The Struggles for the Land: Indigenous Insight and Industrial Empire in the Semiarid World, ed. Paul A. Olson (Lincoln: Univ. of Nebraska Press, 1990), 57-60.

arrival of the horse, small hunter/gather bands had followed the great migrating herds of bison, occasionally moving in to kill off a lone straggler, or sometimes even stampeding herds along cleverly constructed buffalo runs that ended in precipitous cliffs, killing scores of bison at once. One such buffalo run is located at Ulm Pushkin, a few miles north across the Missouri from the mouth of the Smith River. Despite their use of fire, or perhaps because of it, these prehistoric Native Americans maintained a long term cultural ecological equilibrium from the Pleistocene extinctions to the introduction of the horse. They were a sustainable hunter/gatherer society practicing what John Bennet calls, "low energy" adaptations to the semi-arid plains.[58]

Beginning with the introduction of the horse, Native American cultural exposure to Europeans created changes and tensions within the ecological relationship of the bison complex. First, the horse, and eventually the gun, allowed the Blackfeet an unprecedented ability to select which buffalo were to be killed, and, almost, to kill as many buffalo as they desired. They were moving from being hunters to harvester. Even more characteristic of pastoral people, the horse allowed the Blackfeet a limited ability to guide the direction of herds, almost as a cowboy guides a herd of cattle. Such power demanded proper management. The

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[58] Ibid, 48.

crucial difference between the Blackfeet and "true pastoralists", of course, was that the Blackfeet did not breed buffalo, but with the introduction of the horse, the Blackfeet may have been on their way to doing so.[59]

However, by the 1870s buffalo populations were collapsing and the species was rapidly approaching extinction. Scholars have proposed several reasons for this precipitous decline of the buffalo on the Great Plains in the later half of the 19th century. Prior to the last decade, it was assumed that 1870s-1880s hide hunting and pot shots by American train passengers were primarily to blame.[60] This theory was reinforced by popular culture throughout the 20th century, which in portraying the Indian as a savage living in harmony with the land, seldom ever depicted Native Americans as active manipulators of their environments who were in the process of dramatic cultural ecological change from the very start of European contact. This message of Native American innocence has also been reinforced by late 20th century criticisms of Euro-American expansion and 19th century ideas of progress and manifest destiny. The wasteful, murderous image of the eastern gentlemen shooting at grazing buffalo from moving trains, and leaving their massive carcasses to rot, is a powerful

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[59] Ibid, 57-60.

[60] James B. Trefethen, An American Crusade for Wildlife (Alexandria, Virginia: Boone and Crockett Club, 1975), 3-19.

one.[61]

More recently, scholars have looked at other contributing factors to the near extinction of the buffalo, including the role possibly played by Native Americans. Dan Flores, presently at the University of Montana, suggests that the precipitous decline of the buffalo in the 1870s and 80s resulted from a combination of factors including environmental conditions, habitat competition from introduced cattle and horses, non-human predation, market hunting, and most controversial of all, possible over-hunting for the market by mounted Native Americans armed with the gun. Flores calls into question the assumption that historical Plains Indians were acting in balance with their environment. He concludes that because of the near destruction of the Native American cultures by disease and removal it will never be known whether the horse cultures of the Great Plains were practicing a ecologically sustainable economy. He suspects that they were not.[62] Bennett's broader perspective suggests that, if left alone, the Plains Indian would have completed the transition to a pastoral culture, eventually managing buffalo in much the same way that early European pastoralists managed cattle.[63]

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[61] See Roe's The North American Buffalo, and The Indian and the Horse. Roe argues that Native American hunting did not contribute to the near extinction of the buffalo.

[62] Flores, "Bison Ecology, Bison Diplomacy," 465-484.

[63] Bennet, 57-60.

Whatever their direct impact on bison populations actually was, the Blackfeet, beginning noticeably in about the middle of the 19th century, were increasingly becoming dependent on American goods. This led to increased Blackfeet cooperation in the fur trade, first, briefly, in beaver pelts and then in buffalo hides. In seeking guns, liquor, iron tools, and other trade goods, the Blackfeet were no longer relying exclusively upon their own ability to acquire and process the limited resources of their immediate environment. As this dependency grew, the Blackfeet economy began to shift from diversified subsistence to a trade-based market where pelts and skins were currency, the demand for which began to exceed the supply, undermining the basic ecology. Following Bennet's model, they were moving from a "low energy society" to a "high energy society." When settlers arrived in the Smith River Valley, the Blackfeet were already on the verge of a cultural ecological crises. We may never know how their culture might have weathered these changes.[64]

The historical inhabitation of the Smith River Valley by Native Americans cannot be understood without an appreciation for the repercussions of European expansion into the western hemisphere beginning in 1492. The

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[64] White's, The Roots of Dependency, explains the process by which three Native American cultural ecological adaptations were disrupted by Native American incorporation into the global market economy.

indirect, and later the direct, effects of this expansion set into motion events that eventually created cultural and ecological crises amongst Native Americans in the Smith River Valley resulting ultimately in their removal from the region. Amongst the most important of these events were: first, the forced migration and subsequent increase in inter-tribal conflict resulting from earlier tribal dislocation; second, the introduction of European biota including diseases and the horse; third, the incorporation of Native Americans into the global market economy; and, finally, the displacement caused by Americans who settled along the river beginning in the latter half of the 19th century. The crucial question of how these Native Americans might have adapted a new cultural ecological relationship with the Smith River Valley remains unanswered. They were robbed of the land before they had time to make those adaptations. The next chapter will reveal how Americans displaced the Blackfeet in the Smith River Valley and established their own cultural ecological relationship with the land and the river.

## CHAPTER 5

### Making the Smith Safe for Extraction

In 1805, the day after a difficult portage around the Great Falls of the Missouri, the Lewis and Clark expedition camped near present day Ulm on the Missouri, across from the mouth of the Smith River. In their journals they admired what they could see of the lower Smith River Valley, particularly the large herds of buffalo grazing along its gentle banks. Lewis and Clark were the first known Euro-Americans to visit the river, and their stay was short. Having named it, and in a sense claimed it, they moved on. For the next sixty years, American presence in the Smith River Valley was nearly as transitory, if indirectly profound. When American settlers arrived in the Smith River Valley in the late 1860s, they came with the quickness of a Mongol horde, and they came to stay. The clamor of their industry soon resounded from the gentle banks of the Smith River.[1]

Fur trappers were the first group of Euro-Americans to move through the area following the exploration of Lewis and Clark. While these agents of Manuel Lisa, and later the American Fur Company, attempted to trap beaver along the tributaries of the Upper Missouri, including the Smith

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[1] Gary Moulton, ed., The Journals of the Lewis and Clark Expedition, vol. 4 (Lincoln: Univ. of Nebraska Press, 1987), 382.

River, during the first half of the 19th century, they were largely unsuccessful because of the hostility of the Blackfeet who controlled the area. However, it is likely that an occasional fur trapper wandered stealthily through the canyon and lower and upper valleys of the Smith River during these first decades of the century, and by the 1840s certain bands of Blackfeet were beginning to participate in the trade for beaver and allowed Euro-American trappers access to the region. It is even possible that some of these trappers, probably French, may have preceded Lewis and Clark to the Smith River during the 18th century. However, by the mid-19th century, by the time that the Blackfeet were beginning to allow trappers and traders into their territories in greater numbers (the American Fur Company established Fort Benton as a trading post in 1847), the great trade in beaver pelts began to diminish as these animals approached local extirpation and European hat fashions changed.[2]

It is difficult to estimate the impact that the fur trade had on the ecology of the Smith River Valley, but it is likely that because of the initial hostility of the Blackfeet and the subsequent decline of the market for

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[2] See John Sunder, The Fur Trade on the Upper Missouri, 1840-1865 (Norman: Univ. of Oklahoma Press, 1965); Paul C. Philips, The Fur Trade (Norman: Univ. of Oklahoma Press, 1961); Charles Larpenteur, Forty Years a Fur Trader, ed. Elliot Coues (Minneapolis: Univ. of Minnesota Press, 1961); David J. Wishart, The Fur Trade of the American West, 1807-1840: A Geopgraphical Synthesis (Lincoln: Univ. of Nebraska Press, 1992).

beaver, that beaver populations, and therefore the river/stream environment complex created by beaver dams, were less affected in the Smith River Valley than elsewhere.[3] However, the fur trade in buffalo skins during the later half of the century, this time with the Blackfeet as active participants, probably had a significant impact on bison populations in the valley, and with the near extinction of the bison, large scale fur trapping in the valley, and throughout the West, came to a close.

Fur trapping was never a widespread or enduring way of life in the Smith River Valley, although it had significant effects on both culture and environment, and continued sporadically for over a century. When disease and the U.S. Army finally cleared Native Americans from the Smith River Valley in the late 1860s, Americans moved in attracted mostly by other opportunities at exploiting the natural resources of the region. Trapping, mining and logging were introduced to the Smith River Valley, but they were only secondary economic activities, not worthy of what Donald Worster has termed a "mode of production." Trapping, mining, and logging continued in the valley throughout the history of its American habitation, but the dominant economic activity, or mode of production, has been a pastoral one, based upon the large scale grazing of cows and

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[3] Grace R. Morgan, "Beaver Ecology/Beaver Mythology," (Ph.D. diss., Univ. of Alberta, 1991), 1-17.

sheep to supply a market economy.[4]

This chapter will briefly trace the history of trapping and mining, which first attracted Americans to the region. Then it will describe the process by which the Blackfeet were removed from the area and sketch the history of the early logging of the drainage, which occurred simultaneously with ranching. The next chapter will deal specifically with American pastoralism in the Smith River Valley. In both of these chapters, I will attempt to gauge the affect of cultural and ecological interactions upon one another, and determine whether the pastoral model that emerged was a sustainable one.

After the market for beaver pelts and buffalo hides collapsed, limited fur trapping continued in the Smith River Valley from the 19th century to the mid-20th century, with a new emphasis on predators or "pests" like bears, wolves, and coyotes, which were deemed as threats to ranching operations. Of course the hunting of ungulates for meat and pelts also continued. One long term 20th century resident of the Smith River Valley, Old Scotty Allen, trapped most of his life along the Smith River, when he wasn't being gassed

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[4] For a description of "modes of production," a term which Donald Worster has borrowed from Karl Marx, and for an excellent discussion of environmental history and the American West, see Donald Worster, "New West, True West," in Under Western Skies: Nature and History in the American West (New York: Oxford Univ. Press, 1992); Also, see Worster, "Transformations of the Earth," in The Wealth of Nature: Environmental History and the Ecological Imagination (New York: Univ. of Oxford Press, 1993), 52-63.

in the Ardennes forest during World War One, or fighting the Japanese on Okinawa during World War Two. Between wars and after, Scotty Allen wandered along the tributaries of the Smith, trapping for bears and wolves mostly, and often put in forty miles a day on foot. But he generally seldom left the Smith River Valley. Scotty Allen continued trapping and camping along the Smith (he never owned a permanent home or property in the valley) until he died at an old age in 1970s.[5]

Often, Smith River ranchers, or their sons, would supplement the family ranch income by hunting and trapping. John Staigmiller, a successful rancher and former state representative to the Montana Legislature, recalls that hunting and trapping brought the family sorely needed extra money, particularly during the "difficult times" of the 1920s and 30s.[6] But by then, most of the wolves, at least, had been trapped out of the Smith. In 1914, Staigmiller remembers seeing fourteen wolves in one pack milling about on a high cliff above the Smith River. He also recalls that in 1916, state bounties were paid on nearly 100,000 coyotes, over 14,000 wolves, and 155 mountain lions. By the 1920s and 30s, wolves, coyotes, bears, and mountain lions were

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[5] Vernie Kitson, "Scott Allen," in The Smith River Journal: A History from Lewis and Clark to 1979 (Great Falls: Tribune Printing, 1979), 21.

[6] John B. Staigmiller, "John B. Staigmiller," in The Smith River Journal, 303-306.

difficult to find near the Smith, or anywhere in Montana for that matter.[7]

Two remarkably different but powerful forces motivated trapping in the Smith River Valley from the 1820s to the 1940s. The fur trade of the 19th century was based on a market demand for beaver pelts, and later buffalo hides, while in the late 19th century and throughout the first half of the 20th century, fur trapping was primarily an attempt to exterminate predator or pest species like bears, wolves, coyotes, and mountain lions, which threatened ranching operations. The trapping of predators and pests was further stimulated by government subsides. As hunters eradicated the buffalo in the Smith River Valley by the late 19th century, trappers and hunters met similar success in eradicating, or nearly eradicating predators in the valley. As a result of these efforts by ranchers and the government, by the mid-20th century wolves and grizzly bears were no longer found in the Smith River Valley, and coyotes, mountain lions, and black bears were very rare.

While the 19th century fur trade had broad implications for the Native American cultures and ecologies of the Smith River Valley and Montana, it was a short-lived extractive industry involving isolated posts and small numbers of Euro-American trappers and traders. Government sponsored trapping of predators in the valley during the 20th century

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[7] Ibid, 303-306.

was equally short-lived and, at the most, employed only small numbers of professional trappers in the valley, or supplemented rancher incomes. Large-scale mining operations near the Smith River, while also short-lived, attracted much larger numbers of Americans to the area, some of whom stayed on as settlers in the upper Smith. The discovery of precious metals in the mountains of western and central Montana during the 1860s marked the beginning of the end of Blackfeet habitation of the Smith River Valley, and the dawning of a new cultural ecological relationship with the land and the river.[8]

In the winter of 1864, while the country reeled from the devastation of the Civil War, four industrious ex-Confederate soldiers discovered gold on the Upper Missouri River, just north of present day Townsend and directly west of the Smith River Valley over the Big Belt Mountains. Soon known as Confederate Gulch, the strike attracted the first permanent white settlements to the Smith River Valley. Mining camps spread east across the Big Belts and centered around the boom town of Diamond City, which grew from a few

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[8] Common themes in the history of the American West, including the disruption of native cultures, the fur trade, mining, expansion, and settlement, are detailed by Patricia Limerick, The Legacy of Conquest: The Unbroken Past of the American West (New York: W.W. Norton, 1987). Also see, Richard White, "It's Your Misfortune and None of My Own": A History of the American West (Norman: Univ. of Oklahoma Press, 1991). On the history of Montana, see K. Ross Toole, Montana: An Uncommon Land (Norman: Univ. of Oklahoma Press, 1959); Michael P. Malone and Richard B. Roeder, Montana: A History of Two Centuries (Seattle: Univ. of Washington Press, 1976).

cabin shacks in 1865 to a town of approximately 2,000 grubby souls by 1867. Diamond City, despite the glamour of its name, was a dirty, sprawling mining camp, splattered like a giant bird dropping in the midst of the green forests of the Big Belt Mountains nearly equidistant between the Smith and the Missouri Rivers, where the effluent from its tailings eventually dribbled down into both drainages.[9]

While, as of the late 20th century, there have never been significant mining operations directly on or near the Smith River, some mining has occurred near its tributaries, and the river has intermittently been affected by them. Particularly in the late 19th century, mining operations for precious metals in the Big Belts and Little Belts impacted the water quality of the Smith. A visiting surgeon to the army post at Camp Baker in 1869 described the river as, "warm and muddy, some of its tributaries being used for mining purposes."[10] Most of this early mining affected the upper drainages and impacted the entire river. Later, during the 20th century, limited coal mining operations

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[9] K. Ross Toole and Merril G. Burlingame, A History of Montana, vol. 2 (New York: Lewis Publishing Company, 1957), 206-207.

[10] U.S. Department of War, "Report of the Assistant Surgeon on Camp Baker, Montana Territory, July, 1870," circular no. 4, by Clarence Ewen, Surgeon General's Office (Washington: Government Pringing Office, 1870), 409.

occurred near the lower reaches of the river.[11] Intensive mining has always been a possibility in the valley, and as recently as in 1983, Cominico American Inc. explored the potential for a massive lead and zinc mining operation at the Camp Baker launch site, near the head of the Smith River Canyon.[12] Since mining first attracted settlers to the Smith River Valley in the late 1860s, the industry has affected the water quality of the drainage, with a direct impact on the riparian ecosystem, but it has not been the most important economic activity in the region.[13]

Settlers soon followed miners into the mountain valleys of west-central Montana, looking for more permanent and stable occupations. James Scott Brewer, born in Virginia in 1830 of German and English origin, built the first cabin in the upper Smith River Valley in 1866 at a spot later called Trinity Springs. At the time it was the only settlement on the Smith River drainage side, the east side, of the Belt Range. Most settlers to the region concentrated in the upper Missouri River Valley to the west of Confederate Gulch and Diamond City, where Helena was soon founded. If geology

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[11] Ken Staigmiller, "Early Day Mining," in A History of the Eden Area: Cascade County, Montana (Great Falls: Eden Area Historical Committee, 1976), 43-45; Irene Bradock, "Emil and Hilma Carlson," in The Smith River Journal, 77.

[12] John Kuglin, "Mineral Exploration Near Smith River Considered," Great Falls Tribune, 25 Jan. 1983, B1.

[13] For an example of mining and its environmental impacts, see Randall Rohe, "Man and the Land: Mining's Impact in the Far West," Arizona and the West 28 (1986): 299-338.

had placed the gold and silver on the east slopes of the Big Belts, rather than on the west slopes, then the Smith River Valley might have become the center of Montana's early settlement and development, not the Upper Missouri. However, by the late 1860s a handful settlers, disgruntled miners and hopeful homesteaders followed Brewer into the upper Smith River Valley. Although their numbers were small, they established the first permanent American community in the valley.[14]

It wasn't long before these settlers joined the nearby miners in complaining about the Indians, primarily the Piegan Blackfeet still moving through and seasonally camping in the area. These settlers and miners, who were unwelcome trespassers, if not invaders, felt threatened by the Blackfeet bands, or at least those bands that still remained after the most recent smallpox epidemic of 1857. The Blackfeet claimed the Smith River as a part of their traditional hunting grounds and winter camps, and resented American incursion. During the 1860s, occasional Blackfeet raids on whites in central Montana, usually to acquire horses, were not uncommon. Although Blackfeet raids were grossly exaggerated by local white accounts, white hatred for the original inhabitants was not an exaggeration. Indians of all tribes were generally characterized as

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[14] The Meagher County News, Meagher County: An Early-Day Pictorial History, 1867-1967 (White Sulphur Springs: The Meagher County News, 1968), 11-12.

murderous, treacherous, thieving, and savage by these earlier settlers. Military occupation in the Smith River Valley was viewed as a vital necessity for the successful settlement and development of the valley and surrounding territories.[15]

The U.S. Army post of Camp Baker on the Smith River at the head of the river canyon and the juncture of Sheep Creek was established in November of 1869 explicitly for that purpose. Major General Winfield Scott Hancock of the U.S. Army founded this one company military post and named it Camp Baker after his commanding officer, Colonel E.M. Baker of Fort Ellis. Built on land purchased from the Moore Ranch, Camp Baker was intended as a temporary adjunct of the larger Fort Ellis, which was located just outside of present day Bozeman.[16] Specifically, the camp was to provide protection from Indian raids for the mining towns that had recently sprung up following the discovery of gold, silver, lead, and copper in the Confederate Gulch and Copperopolis regions. The largest of these mining towns was Diamond City located twenty miles to the southwest of Camp Baker. Camp Baker was also intended to provide protection for the ranchers of the Smith River Valley who continued to complain

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[15] John Coleman, "Camp Baker," (Helena: Camp Baker Collection, Montana State Historical Society), 10-11.

[16] Raymond Metzner, Jr. and Lawrence S. Heberie, "Camp Baker and Fort Logan," in Military Posts of Montana (Missoula: Pictorial Histories Publishing Co., 1978), 8-10, 51-52.

of Indian raids on their livestock and horses. From its location on the Smith River, Camp Baker was near to both the mining camps of the Big Belts and the settlements in the upper Smith River Valley. It was also located on the migratory route the Blackfeet and other Native American groups followed when traveling from the upper Smith River Valley north to the shelter of the Smith River canyon, and eventually out onto the Great Plains.[17]

In 1869, the year it was established, Camp Baker conducted a survey of the Native American populations within its jurisdiction. The "friendly" Indians, those considered generally pacified, of the Smith River Valley, according to the survey, included a scattering of about two hundred Crow, and occasional bands of Flathead who passed through the valley seasonally on their way to hunt buffalo on the plains. The tribes of the Blackfeet people, the Piegans, Bloods, and Blackfeet proper, numbered approximately four thousand according to this survey, and were considered hostile.[18]

Camp Baker was described by visiting Surgeon Clarence Ewen in July of 1870:

> The post is on the west side of Smith's River, about 150 yards from and 80 feet

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[17] Coleman, 10.

[18] U.S. Department of Dakota, "Camp Baker, Montana Territory, Est. November, 1869," Montana State Historical Society (Washington: National Archives Microfilm Publication No. 617, June 1970 - Oct 1880).

> above it. The buildings are of pine logs, and consist of seven small huts, each 16 by 25 feet, roofed with pine slabs covered with earth, lighted by a small window in the door, and warmed by open fireplaces; three are used for officers' quarters, and have board floors; the one used for headquarter's offices, and the three remaining, occupied by the enlisted men, have dirt floors; the other buildings are stables, 116 by 26 feet, the post bakery, 16 by 15 feet, and the commissary store-house and company cook-house in the same building, 42 by 15 feet. The hospital and guard house are in tents.

While at its original location from November 1869 to August 1870, the camp supported up to fifty soldiers. Ewen also described the game of the region as abundant, with deer, elk, antelope, mountain sheep, and black and "cinnamon" bears being the principal wild animals. The streams, he noted, contained trout and grayling, although the water of the Smith River was described as "warm and muddy" because of mining.[19] Grizzly bears are no longer found anywhere in the Smith River Valley, nor are grayling found in the river, and the trout that Ewen observed were mostly cutthroat trout, now endangered.

The official duties of the men at Camp Baker included scouting the general area for hostile Indians and for Indian

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[19] U.S. War Department, "Report of the Assistant Surgeon on Camp Baker, Montana Territory, July, 1870," 409.

bands accused of stealing stock.[20] The soldiers also escorted government supply wagons and captured Indians accused of crimes. The reality of these duties was much less glamorous than the myths associated with them. For most, the daily routine was a drudgery. Harsh discipline, severe winter weather, and the loneliness of the still mostly uninhabited valley contributed to high rates of desertion and alcoholism amongst the soldiers at Camp Baker.[21] However, during the short time that troops were attached to the original Camp Baker site, they participated in a gruesome adventure, the likes of which pepper the history of the conquest of the American West. It was a brutish military campaign that symbolically marked the end of the Blackfeet cultural ecological adaptation to the Smith River Valley, and the beginning of the new American adaptation.[22]

The establishment of Camp Baker encouraged more settlers into the upper Smith River Valley, and the Blackfeet, already devastated by smallpox, beginning to suffer from the dwindling herds of buffalo, and threatened

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[20] At Camp Baker, the Blackfeet weren't the only enemies. During the summer grasshoppers descended on the camp as if sent by Moses himself. As one smug journalist wrote in 1960, "Climate wasn't the only natural problem. Grasshoppers did their share in the pre-DDT days". See, the Montana State Historical Society, "Camp Baker" (Helena: Camp Baker/Fort Logan Collection), 136-137.

[21] The Montana State Historical Society, "Camp Baker," (Helena: Camp Baker/Fort Logan Collection), 136-137.

[22] Metzner and Heberie, 8-10, 51-52.

continuously by American expansion, were quickly pushed north out the Smith River Valley. Their efforts to resist these pressures included raids and isolated attacks on white settlers, which eventually precipitated a final clash, exaggerated by some as war: the Piegan War of 1870.[23]

The event, a massacre more than a war, occurred in the harsh winter month of January, 1870. It was precipitated by the 1869 killing of Malcolm Clarke, a prominent Helena rancher. Although Clarke was killed by relatives of his Blackfeet wife in what may have been a domestic dispute, the incident was seen differently by the local white ranchers and miners, who, conveniently, interpreted it as a murder instigated by a Piegan tribal band leader named Mountain Chief. In response to local outrage, Colonel Baker of Fort Ellis, after whom Camp Baker was named, was ordered by General Sheridan to bring all offenders to justice. At a minimum, this included all of Mountain Chief's band and not just those few members actually responsible for the killing. General Sheridan commanded, "If the lives and property of citizens of Montana can best be protected by striking Mountain Chief's band, I want them struck. Tell Baker to strike them hard."[24]

An expedition was led against the Piegan Blackfeet by

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[23] Toole, An Uncommon Land, 125-126.

[24] James Willard Schultz, The Blackfeet and the Buffalo: Memoirs of Life among the Indians (Norman: The Univ. of Oklahoma Press, 1962), 302-303.

Colonel Baker that included Company G of the Second Cavalry under Captain Norton of Camp Baker.[25] Along with three other companies of the 2nd Cavalry, and 55 mounted men of the 13th infantry, Colonel Baker's forces came upon Piegan encampments along the Marias River to the northwest of the Smith on the morning of January 23rd, 1870. That morning, before the attack, scout Joe Kipp reported to Colonel Baker that the encampments below belonged to Black Eagle and Heavy Runner's people and that Mountain Chief's band was not in the area.

The morning was bitterly cold. The camp below was still asleep. Many of the Indians lay dying of smallpox.

Colonel Baker responded; "That makes no difference, one band or another of them; they are all Piegans and we will attack them." And then to one of his men: "Sergeant, stand behind this scout, and if he yells or makes one move, shoot him." And finally: "All ready men. Fire!" [26]

The official Army report of Indians killed included 120 men and 53 women and children, 44 lodges destroyed and 300 horses captured. This army report conflicted with other reports. The report from Vincent Collyer of the Board of Indian Commissioners listed 173 killed; 15 fighting men (between 12 and 37 years of age) 90 women, and 50 children under 12 years of age. These last figures conformed more

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[25] Metzner and Heberie, 37.

[26] Schultz, 304.

closely to Blackfeet accounts. In both accounts, only one U.S. cavalry man was killed.[27]

Many more Blackfeet died of starvation, deprivation, and disease following Baker's massacre, and the Blackfeet were soon forced onto the reservation and ceased to pose a significant threat to white settlement in the Smith River Valley, or anywhere else in Montana.[28] Baker himself, while criticized by a few, was considered a hero by most settlers in the valley. Camp Baker, the U.S. Army post, was later moved and renamed Fort Logan after an officer killed during the Battle of the Big Hole against the Nez Perce.[29] The present day Camp Baker, located on the original Camp Baker site, is the Montana Department of Fish, Wildlife, and Park's floater access site to the Smith River, and cabin site for the Smith River rangers. Today, Camp Baker, Montana's most popular float launch site, hosting thousands of river recreationists each season, continues to honor the name of Colonel Baker, whose bloody massacre destroyed the Blackfeet.

"Baker's Massacre" was the only engagement in which soldiers from Camp Baker at its original site participated.

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[27] Ibid, 305.

[28] For the impact of reservation life on Blackfeet culture, see William E. Farr, The Reservation Blackfeet, 1882-1945: A Photographic History of Cultural Survival (Seattle: Univ. of Washington Press, 1984).

[29] Metzner and Heberie, 36-37.

Later, at the end of 1870, Camp Baker, the army post, was moved to a new site on the Smith River at Camas Creek, some ten miles upriver from the original location at the conflux of Sheep Creek and the Smith River. There the soldiers continued to serve a military mission that had become practically obsolete, and seven years passed before the soldiers participated in another military engagement, which was nearly as tragic as the "Piegan War."[30]

In 1877 soldiers from Camp Baker on the Smith River at Camas Creek joined soldiers from Fort Ellis, Fort Shaw, and Fort Missoula under the leadership of General Gibbon to halt the Nez Perce retreat under Chief Joseph. The Nez Perce, men, women, and children, fleeing from soldiers attempting to force them onto reservations in eastern Washington, hoped to eventually reach the perceived safety of Canada. The soldiers caught up with and attacked the fleeing Nez Perce in the Big Hole Valley. After many of their men were killed at the Battle of the Big Hole, the Nez Perce barely managed to escape. In the battle Captain William Logan of Camp Baker was also killed, and the post took his name in his honor in 1878. The Nez Perce never made it to Canada.[31]

Camp Baker/Fort Logan was finally abandoned in 1880. Militarily, its ten year existence had never been necessary.

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[30] Metzner and Heberie, 37-38.

[31] Montana Historical Society, "Fort Logan," (Helena: Camp Baker/Fort Logan Collection), 136-137.

Neither the Blackfeet, the Nez Perce, or any other Native American group ever posed a significant threat to the settlement of the Smith River Valley. The campaigns against those people were simply final, unnecessary tragic events in the greater tragedy of American expansion into the West. As early as April of 1870, following Baker's Massacre, Major E. M. Baker himself, wrote from Fort Ellis to Department Headquarters:

> I earnestly request that the authority be granted me to remove Company G, 13th Infantry from Camp Baker, as, in my opinion, there is no more necessity for a company at Camp Baker, than there is in front of the Headquarters of the Commanding General of the Department.[32]

But despite the fact that it no longer had a significant military purpose, Camp Baker/Fort Logan was maintained as a U.S. Army post for nearly ten years following Baker's Massacre of 1869. There are primarily two explanations for this. First, Camp Baker/Fort Logan continued to be manned because of the exaggerated concerns and imaginations of the settlers in the upper Smith River Valley, and second, because the fort provided a substantial federally subsidized market for the local ranchers. Then, as now, military decisions were influenced as much by special interest politics and economics, as by military

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[32] Merril G. Burlingame, The Montana Frontier (Helena: State Publishing Co., 1942), 212-213.

necessity.

The eleven year history of the army in the Smith River Valley, from 1869 to 1880, was significant to the cultural ecological history of the valley and the river for several reasons. First, the military presence of Camp Baker/Fort Logan completed the removal of Native Americans, mostly Blackfeet, from the Smith River Valley by 1870, and for the remaining ten years, somewhat unnecessarily assured that Native Americans would not re-inhabit the region. The removal of Indians from the valley had an indirect impact on the environment itself, as their particular environmental manipulations, so long a part of the region's ecology, ceased. The most significant example of this was seen in differing cultural interpretations of fire. American land use practices stressing fire suppression replaced Native American use of fire to shape the land.[33]

The Army's presence on the Smith River was also important to the cultural ecology of the valley because it encouraged the settlement of the region by greater numbers than might otherwise have been the case. Settlers were reassured by the presence of the military. In addition, as mentioned, the fort provided a ready market for local goods, which represented both a direct and an indirect federal subsidy to the settlement of the region. Finally, and least

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[33] S.W. Barrett and S.F. Arno, "Indian Fires as an Ecological Influence in the Northern Rockies," Journal of Forestry 80 (1982): 647-653.

significantly, the presence of the fort itself had limited environmental impact on the region, as soldiers hunted throughout the valley and fished the river for food, and logged the forest for its cabins and blockhouse.[34]

Following the army occupation, and after ranching had been well established, large scale logging in the early 1890s joined trapping and mining as an important secondary land-use practice in the Smith River Valley. Large scale commercial logging operations in the forests rising up from the banks of the Smith were short-lived, but like trapping and mining, logging continued to play a secondary role in the cultural ecology of the river into the late 20th century.[35]

Of course, logging for local use accompanied the first settlers into the Smith River Valley as early as the 1860s. In the late 1860s and throughout the 1870s a sawmill located on the Moore ranch adjacent to the Smith River, near the original Camp Baker, provided the lumber needed for the building of Camp Baker and other ranches in the area. Small scale logging continued to supply the direct needs of the local settlers and nearby mining operations until the late

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[34] Burlingame, The Montana Frontier, 212-213.

[35] George Engler, Lewis and Clark National Forest supervisor, defended several decades of the USFS policy in the mid-20th century of encouraging the cutting of forests in the Smith River Valley by claiming, "it is necessary to clearcut to have regrowth of timber stands." See, John Kuglin, "Smith River Area Residents Express Fears for Canyon's Future," Great Falls Tribune, 8 March 1970, A5.

1880s, with some impact on the local environment. Large scale lumbering operations on the Smith began in the late 1880s and continued into the next decade, and the Smith River, as well as some of its larger tributaries, became an avenue for massive log runs.[36]

The forests cut in the Smith River Valley beginning in the late 1880s didn't supply the relatively limited needs of the local ranchers, but supported much larger communities and markets, far away from the Smith's forested slopes.[37] Lumber was a scarce resource for towns and cities developing along the rivers of the Northern Great Plains in central Montana during the late 1880s. Great Falls, with a burgeoning population of 4,000 in 1890 was in particular need of wood. Working their way up the Missouri to the west of Great Falls, lumber companies soon exhausted the resources found along the banks of that river and turned instead to nearby tributaries such as the Smith.[38]

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[36] U.S. Army Corps of Engineers, Smith River Navigation Study, by Alan Newell and Gary William (Omaha: U.S. Army Corps of Engineers, 1974), 5-6.

[37] For an excellent study of commodity relationships between urban and rural areas, including lumber, livestock, and grains, see William Cronon's Nature's Metropolis: Chicago and the Great West (Oxford: Cambridge Univ. Press, 1991. Although Great Falls was not Chicago, and the Smith River Valley was just a small portion of the "Great West," Cronon's models are extremely helpful in understanding how the cultural ecological activities of the Smith River Valley were influenced by the market economy and urban centers.

[38] USDA, Forest Service, Testing Archeological Inference at an Historical Logging Site in Montana by George C. Knight (Missoula: USFS Northern Region, 1981), 71-76.

Large scale logging in the early 1890s occurred primarily on the east side of the Smith River in the Little Belt Mountains, particularly in the areas adjacent to the Smith near Deep Creek and in upper Sheep Creek, where splash dams were necessary to carry the logs to the Smith. Great Falls was the destination of the great log drives down the Smith which took place in the late 1880s and early 1890s. Not only did these logs help to build up the city of Great Falls, but they were also used in the construction of some of that city's famous hydro-electric dams, which harnessed the mighty Missouri River.[39]

The most extensive logging took place on Sheep Creek, which splashes into the Smith River from the Little Belt Mountains to the east, just opposite of the present day Camp Baker site at the approach to the river canyon. This tributary begins as a trickle thirty-six miles up in the Little Belts and drops 2,800 feet as it courses through the shallow trenches past a forested and rugged landscape. In the springs of 1890, 1891, and 1892, over ten million board feet were harvested in the Little Belts and successfully forced down Sheep Creek to the Smith River and from there to Great Falls.[40]

Because of unsuitably low streamflows, log drives down Sheep Creek required innovative engineering. These drives

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[39] Ibid, 71-76.

[40] Ibid, 7, 57, and 70-71.

were accomplished by the construction of a series of three splash dams along Sheep Creek, which were used to create a flood that enabled logs to be driven. Sometimes the flood was released by the dynamiting of the splash dam; in other cases, the dam was equipped with a sluice through which water and logs were allowed to pass.[41]

Timber was harvested in the Sheep Creek drainage year round, but primarily in the summer and fall when the loggers weren't occupied with other activities. Log chuting, the process by which logs were conveyed along tracks, troughs, or ditches by sliding them with the help either of gravity or draft animals, and log hauling were accomplished in the winter. Chuting and hauling were facilitated by the heavy snows in the area. The log drives then coincided with the spring runoff, and most likely occurred during the 8-week period between April 29 and June 26.[42]

On May 11 and 12, 1891, the reporter of the Meagher County News viewed the dams and the drive, which by that time had already passed Moose Dam, and provided an eyewitness account of the operation:

> On the morning of the 12th, we visited the jam in the canyon and witnessed a sight which we shall long remember. The logs were piled fifteen to thirty-five feet high upon one another, and we waited expectantly for the flood from the two dams above to come and move the

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[41] Ibid, 86-87.

[42] Ibid, 60, 86.

> immense mass. When the water arrived the men commenced to pick out the logs which formed the key and with about fifteen minutes work the vast mass gave way, fell seething into the water and went curling down the stream like a mammoth sea serpent wriggling on the water.[43]

By the mid-1890s most of the easily accessible timber along Sheep Creek had been harvested. The timbered slopes further north of Sheep Creek were more difficult to reach, and by the mid-1890s logging operations shifted to the Deep Creek drainage of the Smith further downriver. Eventually, this resource was exhausted as well, and with no other easily accessible timber stands in the Smith River Valley, the timber companies turned their attentions elsewhere, at least for a few decades.[44]

The environmental impacts of the logging operations of this size, which took place over a century ago, are difficult to assess. What is remarkably clear is that the logging itself was far from sustainable. The economic mentality was to move in, cut the forests down, manipulate the river to wash away the logs and the soil, and move on to untouched stands. The immediate result of large scale logging, all of it clearcutting in the 19th century, was the destruction of habitat for large numbers of plants and

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[43] "Meagher's Wealth," Meagher County News, 19 June 1891, 1.

[44] USDA, Forest Service, Testing Archeological Inference at an Historical Logging Site in Montana.

animals. A secondary effect was increased soil erosion, which among other things choked the Smith River with sedimentation and endangered the fisheries, to say nothing of what turning the river into a log highway did for the river's ecology. In some cases, the effects of erosion, particularly on the steeper slopes, meant that the trees would never grow back. Irreparable environmental change was the result of short-sighted logging.[45]

The extraction of resources to supply distant markets motivated the first Europeans and Americans who came to the Smith River Valley. Trappers ripped pelts and hides from the steaming bodies of beaver and buffalo; miners stripped silver, gold, and copper from the mountains; and loggers chopped lumber from the forests. They trapped, mined, and cut as if there were no end to nature's bounty, no end to their industry, and no impact on the environment. When the end came, they moved on, leaving the land deserted, if not poisoned. Historians of the American West have described these activities as "boom and bust" economies. Historian K. Ross Toole has argued that Montana was unusually victimized by this extractive pattern of exploitation by eastern industries to supply a world market, although he stresses the victimization of the early settlers and not of the

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[45] On logging in the West and its environmental impacts, see Michael Williams, Americans and Their Forests: A Historical Geography (Cambridge: Cambridge Univ. Press, 1989).

landscape.[46] Environmental historians, sensitive to the degradation of natural ecologies as well as cultures, are more critical of the capitalistic system of world markets, and what has been described as the "commodification" of nature.[47]

American incursion into the Smith River Valley near the end of the 19th century was a cultural and ecological invasion that closely paralleled European imperialism in Africa and around the world.[48] The Europeans went overseas, the Americans moved West. The U.S. cavalry was the agent of conquest that cleared the way for American colonists of the West. The trappers, miners, and loggers who operated in the Smith River Valley were not settlers as much as they were itinerant laborers extracting resources for distant markets. They weren't settling down to inhabit a place and establish a sustainable, or even a temporarily sustainable, way of living. When they did settle down and become ranchers or farmers, it was mostly by accident. When the

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[46] Toole, An Uncommon Land, 3-10.

[47] See Worster, Wealth of Nature, 58. Carolyn Merchant has given a good description of the source and character of our present capitalist worldview in Ecological Revolutions: Nature, Gender, and Science in New England (Chapel Hill: Univ. of North Carolina Press, 1989), 199-231; Also see, William Cronon, "That Wilderness Should Turn a Mart," in Changes in the Land: Indians, Colonists, and the Ecology of New England (New York: Hill and Wang, 1983), 159-170.

[48] See Daniel R. Headrick, The Tools of Empire: Technology and European Imperialism in the Nineteenth Century (New York: Univ. of Oxford Press, 1981), 3-16; and, Basil Davidson, Africa in History (New York: Macmillan Publishing Co., 1974), 240-275.

beaver, the gold, and trees were gone, they had the choice of either moving back East, as many of them did, or sticking around and trying to find a more permanent, stable way of living.

# CHAPTER 6

## The Cows of Conquest

Ranching was the first attempt by Americans to inhabit the Smith River Valley permanently. Although it too was tied to the market economy and went through a series of evolutions and adjustments before reaching its present form, ranching was the primary mode of production found in the valley from 1870 to 1990, and will continue to be so for the near future. Ranching resulted in environmental degradation, but unlike trapping, mining, and logging, which are more extractive industries, ranching, so far, has supported a relatively long term American habitation of the region without completely undermining the local ecology. However, a final analysis is premature. Not much more than one hundred years old, a long time by American standards, ranching in the Smith River Valley is still in its infancy. This chapter will trace the rise of ranching as a way of living with the environment of the Smith River Valley, and will attempt to analyze whether it has been a successful cultural ecological adaption, whether it has been culturally and ecologically sustainable.

After the fur market collapsed, the accessible minerals in the nearby mountains were extracted, and the Indian threat was removed, settlers followed James Brewer, the valley's first American inhabitant, into the upper Smith

River Valley in greater numbers. Some of these settlers were formerly employed as trappers and miners, and some of them moved directly to the valley from the East with the intention of making a home and finding a secure living in agriculture.[1] Brewer himself, however, after only a couple of years at Trinity Springs, heard of the "hot white sulphur springs" close by, promptly moved there, and founded the town of White Sulphur Springs, at the juncture of the North Fork and South Fork of the Smith River. For the next hundred and thirty years, White Sulphur Springs served the larger ranching community as the only town of any appreciable size in the upper Smith River Valley.[2]

These early settlers had high hopes of building a thriving rural community in the valley centered around a

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[1] The story of the Watson family provides a good example of circumstances that drew early settlers to the upper Smith River Valley. Alexander Watson homesteaded in the valley in the 1870s. Watson was born in Scotland in 1840 and his family migrated to Pennsylvania in 1849. He enlisted in the Union Army during the Civil War. He decided to go West in the early spring of 1864 in quest for gold and to trade with the Indians. Eventually, he was attracted to the mining town of Diamond City and from there began a sheep and cattle operation in the Smith River Valley which endured for forty years, until his land was gobbled up by aggressive, consolidating agribusinesses at the turn of the century. Today, the original homestead is a part of the much larger ranching operation of the Lazy 10 Incorporated.

See Art Watson, son of Alexander Watson, who is the author of Devil Man With a Gun (White Sulphur Springs: Meagher County News, 1967) and Montana Trails and Tribulations (Billings: Western Printing and Lithography, 1975), two compilations of stories, adventures, and anecdotes celebrating life along the Smith River in the late 19th and early 20th centuries.

[2] The Meagher County News, Meagher County: An Early-Day Pictorial History, 1867-1967 (White Sulphur Springs: Meagher County News, 1968), 11-12.

respectably large urban center. They had grand expectations of White Sulphur Springs. Attempting to fulfill those expectations, promoters of the region engaged in a frenzy of boosterism. In a typically western attempt to develop the valley, during the late 19th century the springs were promoted as the medicinal equivalent of the famous European hot springs of Baden, Germany. It was reputed by local residents that the Flathead and other Indians of the area revered the hot springs as a place of peace and healing. However, no archeological or ethnographic evidence exists for this. It was simply an advertising tool of Smith River boosters.

The most romantic of these early promoters of the Smith River Valley was Robert Sutherlin, who along with his brother founded the Smith River Valley's first newspaper, The Rocky Mountain Husbandman. However, Sutherlin did not limit his enthusiasm for the Smith to the bland print of the newspaper, but praised its virtues in rhapsodic poetry as well. His epic poem, The Smith River in Verse, tells of how prior to the coming of the white man, the great North American Indian civilizations of the Mayans and the Mound Builders met in the idyllic valley of the Smith River to soak together in the warm waters of the sulphur hot springs. While bloody war raged elsewhere between these two mighty contestants, here, along the Smith, they met in peace, prosperity, and harmony. His revelation to America was of a

new found Eden.[3]

America, however, didn't listen, perhaps because it was already overwhelmed by such revelations emanating from the American West like so many cheap sermons. By 1870, White Sulphur Springs became the largest town in the Smith River Valley, but the foundation of its support was the small, local ranching community, not wealthy easterners seeking health, peace, or more wealth. White Sulphur Springs was considered a poor investment. "In town" the local ranchers purchased various goods that they couldn't make themselves, received news, organized their business, and met for dances and drinks, much like small towns throughout the West.[4] Ivan Doig, Montana writer and native of the Smith River Valley, described ranching in the region and life in town during the mid-20th century in This House of Sky.[5] White Sulphur Springs remained the largest urban center in the Smith River Valley for over a century. In 1990, White Sulphur Springs boasted a population of less than one thousand, supporting the ranching community of the upper

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[3] Robert Sutherlin, Smith River in Verse (White Sulphur Springs: Rocky Mountain Husbandman, 1902), 1-46.

[4] For an interesting discussion of social adaptations to arid environments, see John Bennet, "Human Adaptations to the North American Great Plains and Similar Envorinments," in The Struggle for the Land: Indigenous Insight and Industrial Empire in the Semiarid World, ed. Paul A. Olson (Lincoln: Univ. of Nebraska Press, 1990), 63-69.

[5] Ivan Doig, This House of Sky: Landscapes of a Western Mind (New York: Harcourt Brace Jovanovich, 1978), 13-176.

Smith River Valley of about the same size. To the disappointment of most of the locals, the town and the region remained off the beaten track (usually a railroad track) of development in the West.[6]

Although the Smith River Valley supported trapping, mining, logging, and was even promoted as a health spa, from 1866 to the late 20th century its primary business was ranching. The cultural ecological relationship that emerged during this period, replacing the Native American and prehistoric cultural ecologies, has been characterized by this particularly American form of pastoralism. The evolution of ranching operations in the valley can tentatively be divided into three phases, each representing degrees of resiliency or adaptation to the environment of the Smith River Valley. Generally, each new phase was precipitated by environmental crises, suggesting that adaptation to the environment of the Smith River Valley only comes when forced. All stages were saturated with the cultural ecological baggage that the settlers brought with them, primarily from the East. Roughly, the first ranching phase was from 1866 to 1887, the second from 1888-1934, and the third from 1934-1994. Certainly, such division risks a simplification and generalization of the complex dialogue between the ranchers of the Smith River Valley and the

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[6] Meagher County, Economic Growth Council, "In Montana, Here's White Sulphur Springs," (White Sulphur Springs: Meagher County, 1992).

environment itself, but it also assists in understanding and evaluating these processes.[7]

Geographer William Riebsame has distinguished between a culture's adaptation to the limits of an environment as opposed to its resiliency. Adaptation refers to the culture's ability and willingness to change, so as to conform to those limits. Resiliency represents a culture's resistance to change, its ability to spring back from disruption to a status quo, but its failure, in the long term, to establish a sustainable cultural ecological relationship. In this chapter I argue that the most recent

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[7] See William Wyckoff and Katherine Hansen, "Settlement, Livestock Grazing and Environmental Change in Southwest Montana, 1860-1990," Environmental History Review (Winter 1991), 46-68. I have used their example of the Madison Valley as a model for the Smith River Valley. The Madison and Smith River Valleys are geographic neighbors, as well as being ecologically and historically similar. However, I differ with Wycoff and Hansen on several points. For example, while they stress the drought of 1934 as instrumental in ending a ranching phase, they did not mention the devastating winter of 1886-87 that effectively put a halt to the "open range," the first stage of ranching in both the Smith and the Madison.

An even more important difference is that after 1960, Wyckoff and Hansen recognize a new phase of outdoor recreation in the Madison Valley that they suggest significantly displaced ranching. In the Smith River Valley, however, recreation did not displace ranching, but rather occurred simultaneously with, and without restricting, ranching operations. Again, for example, on the Madison after 1960, much of the National Forest land in the valley, once extensively used for grazing, was protected as Wilderness under the Wilderness Preservation Act of 1964. As of 1995, no such protection has limited ranching operations in the Smith River Valley. The essential difference is that most of the land in the Smith River Valley remains private property, while a much larger portion of the Madison River Valley is public land. On the Smith, ranching and recreation go hand in hand, with compounded impacts on the river and the valley ecology.

phase of ranching in the Smith River Valley, beginning in the 1930s, represents a cultural ecological adaptation that is sustainable, in its present response to the demands of the market, despite the fact that it has resulted in a transformed, and less diverse, environment.[8]

However, that does not mean that I am not critical of the most recent ranching adaptation. Its greatest weakness is that at any time market demands may create, virtually overnight, a cultural ecological relationship in the Smith River Valley that is far from sustainable. Private landowners still have the right to overgraze and poorly manage their lands in response to swings in the market. Also in response to the market, extractive industries may replace ranching at any time. Large ore deposits, or oil, may be discovered and mined in a manner that is destructive to the natural ecology. The price of lumber may rise and the remaining forests harvested. The land along the river may continue to be subdivided and developed in response to the desire of urban dwellers to move into nature. And, as will be detailed in Part Two, outdoor recreation on the Smith River may continue to rise and be poorly managed, combining with the environmentally deleterious effects of ranching to create a cultural ecological relationship based both on ranching and recreation, with no preservation, that

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[8] See William Riebsame, "Sustainability of the Great Plains in an Uncertain Climate," Great Plains Research 1 (1991): 133-51.

is not sustainable. The challenges to maintaining a sustainable ecological relationship with the Smith River are particularly acute because nearly 80% of the land along the river is in private ownership.[9]

The very first attempts by Americans to inhabit the Smith River Valley ended in failure, and only the future will show if the present adaptation will be more successful. The reasons for those failures, and the source of present criticisms to the ranching system is that, so far, Americans in the region have not developed a uniquely local way of living in that place. American settlers who followed the miners into the upper Smith River Valley brought with them animals, tools, and ideas about how the valley should be settled and about how it should be made productive, which had nothing to do with the nature of the river's environment. These cultural preferences encountered environmental limitations in the Smith River Valley, the most important of which was aridity. Whether northern Yankees, southern rebels, or Europeans, these settlers came from the East, which was much wetter than the West, and the first adjustment they were forced to make, and so far have only partially made, was to the aridity of the what the western explorer Stephen Long once called "The Great

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[9] Meagher and Cascade County records of original patents and land ownership.

American Desert."[10] Generations of Western commentators, from Powell to Webb to Worster, have described the West in terms of aridity, as if the history of the West can be summed up as the human cultural and ecological adaptation to lack of water.[11] Of course, this synthesis works much better when applied to the American Great Plains, or to the Southwest, than it does to a mountain valley in the Northern Rockies of Montana.[12]

The first settlers would have preferred to practice the sort of mixed farming that they had been used to back East. However, ranching rather than mixed farming quickly established itself as the most important economic activity of the region. The first settlers were perceptive enough to realize that even the relatively well-watered Smith River Valley was unable to support small farms of mixed agriculture (or large cotton plantations for that matter), but they were optimistic about eventually raising grains like wheat. In the meantime, they settled for an economy

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[10] Edwin James, From Pittsburgh to the Rocky Mountains: Major Stephen Long's Expedition, 1819-1820, Maxine Bensen, ed. (Golden, Colorado: Fulcrum Inc., 1988).

[11] See John Wesley Powell, Report on the Arid Lands of the United States, Wallace Stegner, ed. (Cambridge, Mass.: Harvard Univ. Press, 1962 [1878], 15-34; Walter Prescott Webb, The Great Plains: A Study of Institutions and Environment (Boston: Dodd and Mead, 1931), 1-45; Donald Worster, "New West, True West," in Under Western Skies: Nature and History in the American West (New York: Oxford Univ. Press, 1992).

[12] See Dan Flores, "The Rocky Mountain West; Fragile Space, Diverse Place," Montana: the Magazine of Western History 45 (Winter 1995), 46-56.

typical of arid adaptations worldwide, one based upon pastoralism, the raising and grazing of large mammals like sheep and cattle.[13]

The first settlers became ranchers rather than farmers, and this form of pastoralism remained the predominant human economy in the Smith River Valley for well over a century. At its most fundamental level, the first American ranching along the Smith River wasn't much different from what Native Americans had been doing for millennia; living off large, grazing animals. It was particularly similar to the recent historic period of the plains Indian. The mounted Blackfeet buffalo hunters, whom Bennett claims were nearly pastoralists themselves, bore remarkable similarities to Smith River cowboys.[14] The former preferred buffalo, while the latter preferred cattle. But, of course, there were vast differences between the two; one hunted and one sold to the market. Particularly in terms of cultural ecological sustainability, the differences between the Blackfeet hunting of the buffalo and American ranching on the open range, were more important than the similarities.

Grazing animal preference was the most obvious difference between the two systems. American preference for cattle and sheep over buffalo or big game like elk and deer led to dramatic changes in the river valley's ecology as

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[13] Bennett, 57-61.

[14] Ibid, 58.

these and other introduced species displaced indigenous species. Most dramatically of all, by 1870, cattle and sheep, introduced and encouraged by American settlers, entirely displaced the buffalo, which had formed the mainstay of the cultural ecology of the region since the Pleistocene extinctions over eleven thousand years earlier. In addition, Americans introduced many other species of plants and animals, which a hundred years later were still in the process of transforming the original landscape.[15]

For American settlers along the Smith, ranching represented not an innovation to the arid grasslands of the Great Plains and mountain valleys, but a return to a much more ancient land use practice that originated with the domestication of sheep, goats, and cattle in the Middle East thousands of years earlier. Except, of course, that ranching in the American West responded to the demands of a global market, and not to the much more limited demands of subsistence. A more recent European example of large scale mounted pastoralism could be found in the Spanish high plains in the late medieval European period, a form of pastoralism that was transplanted to the Spanish colonies of the American southwest in the 17th and 18th centuries, long before Anglo-American cowboys came into the scene in the late 19th century. However, when the American cowboy did

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[15] Alfred Crosby, Ecological Imperialism: The Biological Expansion of Europe, 900-1900 (Cambridge: Cambridge Univ. Press, 1986), 145-194.

arrive, his innovation was pastoralism on a massive scale, driven by seemingly insatiable market demands in the East, and made possible by the expanding system of railroads.[16]

And ranching in the remote Smith River Valley in west-central Montana responded to pressures that originated far from the borders of its watershed. In the first couple of years settlers in the upper Smith River Valley directly supplied the nearby mining towns of Diamond City, Copperopolis, and other areas. But as the ore from these mines diminished, and the communities they supported were abandoned, the settlers in the valley turned to large scale ranching operations supported by distant market centers from Great Falls, to Minneapolis, to Chicago and points east.[17]

John Staigmiller of the lower Smith River Valley (where settlement followed a pattern similar to that of the upper Smith River Valley, only a decade or two later) remembers driving cattle to Great Falls where most of the cattle was then sent on rail to Chicago. For every car of cattle, one man got a free ride on the train to and from Chicago. These

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[16] On the cattle industry in the American West see, Ernest Osgood, The Day of the Cattleman (Minneapolis: Univ. of Minnesota Press, 1929); Edward E. Dale, The Range Cattle Industry (Norman: Univ. of Oklahoma Press, 1930); Lewis E. Atherton, The Cattle Kings (Bloomington: Indiana Univ. Press, 1961). For the role of the railroads and eastern urban centers in the Western cattle industry see William Cronon, Nature's Metropolis: Chicago and the Great West (New York: Norton & Co., 1991).

[17] John Staigmiller, "Roundups" in A Century in the Foothills: A History of the Eden Area, 1876-1976 (Great Falls: Eden Area Historical Committee, 1976), 9-10; Ernest Pribyl, "Cattle Marketing," in A Century in the Foothills, 17-20.

men were known as cowpokes or cowpunchers. Their responsibility was to watch the cattle and poke or punch them to their feet just before the train started. The ranchers of the lower valley, like Staigmiller, depended more upon Great Falls than upon White Sulphur Springs as an urban center for obtaining goods and bringing livestock to market. Staigmiller recalls the biannual trips to Great Falls for getting household supplies, clothing, and winter groceries traded for with butchered beef.[18]

In order to incorporate the Smith River Valley into the market economy, early settlers were guided by a complex system of public land laws and traditions that encouraged quick settlement and quick profit for eastern industry while attempting to perpetuate Anglo-American culture as it had been known in the East. Once disease and the army removed the remaining Blackfeet from the Smith River Valley, the American government finally took possession of the region, over sixty-five years after the Louisiana purchase had declared possession based upon the principles of the European legal tradition.[19] The Homestead Act of 1862 was

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[18] Staigmiller, "John B. Staigmiller," in The Smith River Journal: A History from Lewis and Clark to 1976 (Great Falls: Tribune Printing, 1979), 303-306.

[19] American claims to the Smith River Valley began with the Louisiana Purchase, which was symbolic of how far removed, outside forces eventually affected that river's cultural ecology. The Louisiana Territory, including the Smith River Valley, was sold to the United States because of Napoleon's vision of world geo-politics, as well as Jefferson's initiative. Had Napoleon thought differently, or Jefferson been reluctant to assert

designed to transfer land from the public domain into the capable hands of American settlers efficiently. These settlers were considered capable in the sense of prospering, and thereby contributing to the nation's wealth and power.[20] In this regard, the greatest flaw of the Homestead Act was that it granted only 160 acres of land in return for five years of "improvement."[21] The language of the Homestead Act itself suggests American attitudes with regards to the ecology of the Smith River Valley. To "improve" the land meant to alter the valley to conform to Eastern (whether American or European) ideas of a proper bucolic landscape occupied by farmers practicing mixed farming, with sheep, cows, pigs, and perhaps a few chickens. In other words, an Old MacDonald's farm of the Far West. Land that remained "unimproved" was land left with its indigenous flora and fauna intact and undisturbed. The Homestead Act set out not only to distribute the land from the public domain to the

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uncertain Presidential power, the history of the Smith River might have been very different. See K. Ross Toole, Montana: An Uncommon Land (Norman: Univ. of Oklahoma Press, 1959), 25.

[20] See Donald Worster's critique of this capitalistic idea, the brainchild of Adam Smith, "The Nature We Have Lost," and "Wealth of Nature," in The Wealth of Nature: Environmental History and the Ecological Imagination (New York: Univ. of Oxford Press, 1993), 3-15, 203-219.

[21] George P. Sanger, ed., The Statutes at Large, Treaties, and Proclamations of the United States of America From December 5, 1895 to March 3, 1863 (Boston: Little Brown & Co., 1865, vol. 12), 392-393. For general references, also see Paul W. Gates, History of Public Land Law Development (Washington: GPO, 1968); and Roy M. Robbins, Our Landed Heritage: The Public Domain, 1776-1936 (Princeton: Princeton Univ. Press, 1942).

private farmer in the orderly Jeffersonian grid pattern of 160 acres, but to transform the landscape.[22]

In the East, 160 acres was sufficient for small farmers who hoped to support themselves and make extra money on an economy of mixed agriculture. But in the arid West, including the Smith River Valley and even the well irrigated land bordering the river, mixed agriculture was improbable, and 160 acres simply wasn't enough for economically solvent cattle or sheep ranches.[23] However, during the first phase of ranching along the Smith River Valley from 1866-1887, the 160 acre homestead wasn't restricting, because it was ignored. The public domain was exploited as open range where cattle and sheep grazed freely, and where grazing permits or any sort of regulation or conservation was unheard of. In a recent article in the Environmental History Review, Montana State University scholars Wyckoff and Hansen traced the seasonal herding patterns of livestock in the Madison Valley from 1870-1960, and illustrated the early ranchers' dependence upon free access to the public

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[22] For a more thorough discussion of language and landscape transformation see Richard White, Land Use, Environment, and Social Change: The Shaping of Island County, Washington 2nd ed. (Seattle: Univ. of Washington Press, 1992), 41.

[23] Patricia Limerick, The Legacy of Conquest: The Unbroken Past of the American West (New York: W.W. Norton, 1987), 55-77; Donald Worster, "Cowboy Ecology," in Under Western Skies: Nature and History in the American West (New York: Oxford Univ. Press, 1992), 34-52.

domain.[24] This was equally true of ranchers in the Smith River Valley, who followed similar herding patterns including a method of transhumance where the cattle and sheep were herded onto the cooler, forested public lands or upper foothills during the summer months, and then driven back onto the valley floor near the original ranch homesteads during the winter.[25]

The open range and the great cattle drives were the hallmarks of the first phase of ranching in the Smith River Valley from 1866-1887. Railroads were crucial to the establishment of the cattle industry in the West, and as the open range on the public domain provided grazing for large herds of sheep and cattle, the drives were necessary to move the livestock to the railways. By 1883 the Northern Pacific Railroad extending east to Minneapolis and Chicago, and the Utah Northern extending south to Utah, met at Garrison, Montana, just west of Butte.[26] For ranchers on the Smith River Valley, it was the Northern Pacific, and a few years later the Great Northern, that provided the transportation arteries to the lucrative cattle markets of the East, and Great Falls was the gateway.[27]

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[24] Wyckoff and Hansen, 53-57.

[25] Ernest Pribyl, "Cattle Marketing," in A Century in the Foothills, 17-20.

[26] Toole, An Uncommon Land, 91-93.

[27] See William Cronon, Nature's Metropolis: Chicago and the Great West (New York: W.W. Norton & Company, 1991), 55-96.

The 1880s saw the climax of the open range West of cattle drives and lone cowboys, which left such an indelible impression upon the popular culture of America. Throughout the 1870s and early 1880s, the majority of cattle found in the state of Montana were contained in Meagher (the upper Smith River Valley) and Choteau Counties. The U.S. Department of Agriculture estimated that by 1883 some 600,000 cattle and 500,000 sheep could be found in the Montana territory.[28] Of this, there were at least some 30,000 cattle in the Smith River Valley in 1880.[29] In 1875, White Sulphur Springs's Rocky Mountain Husbandmen noted that there were some 20,000 sheep in Meagher County, and that soon revenue from sheep in the county would exceed revenue from mining. In the Smith River Valley and across the state during the 1880s, the livestock industry expanded like a rapidly filling balloon, and a few ambitious ranchers, through the exploitation of the open range and aided by the railroads, built 160 acre homesteads into ranching empires.[30]

Then in the harsh winter of 1886-1887, the balloon popped. By the mid-1880s the ranges of western and eastern Montana, including the Smith River Valley, were overcrowded

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[28] Toole, An Uncommon Land, 142.

[29] John Staigmiller, "Roundups," in A Century in the Foothills, 10.

[30] Toole, An Uncommon Land, 148.

due to the particularly clement winters and the generous precipitation over the last years, and the incautious, short-sighted efforts of ranchers to respond to the demands of the market. One extended cold Montana winter wreaked catastrophe for open range ranching. Mostly, cattle starved to death because of insufficient forage, because the range was over-grazed and because they could not paw through the ice and snow to get at the grass below. They also died of exposure to temperatures that unlike the buffalo, they had not evolved with. The plight of the cattle on the open range during the winter of 1886-1887 was immortalized in Charles M. Russell's painting, Waiting for a Chinook.[31] At the onset of winter in 1886, there were perhaps 600,000 head of cattle on the Montana range. When the chinook finally came in March of 1887, only about 82,000 survived.[32]

The low mountains surrounding the Smith River Valley provided some protection from the ice and the snow that led to the starvation of so many cattle in eastern Montana, but nonetheless, losses in the valley were a blow to the

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[31] See Charles M. Russell, Waiting for a Chinook, Charles Russell Museum, Great Falls, Montana. While the painting appropriately depicts a branded longhorn, the last of a starving herd, in a wintery Montana plains landscape, the villains of the painting appear to be the wolves skulking in the background, and not the ranchers who unwisely over-stocked the plains with mal-adapted and non-native cattle. The painting is typical of the many artists and writers who have glorified the American West and invented "bad guys" to explain the failures of American settlers.

[32] Toole, An Uncommon Land, 147.

industry. It was a mortal wound to open range pastoralism.[33] Throughout the state, however, sheep suffered much less than cattle, mostly because the sheep, which were assumed to be more vulnerable to the winter weather, were better provided for than the cattle, which were thought able to survive on the open range in large numbers on their own. It turned out they couldn't, and by 1888, responding to an environmental slap in the face (perhaps more a kick to the groin) Smith River ranchers began to alter their ranching operations.[34]

In the years immediately following the winter of 1886-87, cattle operations were drastically curtailed and redefined as open range pastoralism was transformed into livestock agriculture. The days of the open range were over.[35] Of course, ranchers still depended heavily upon the public domain for grazing land, but they also recognized the need to provide shelter and supplemental feed for cattle if

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[33] For an example of how ranchers in the Smith River Valley were affected by the winter 1886-1887, see Edith M. McKamey, "Colby Sheep Company," in The Smith River Journal: A History from Lewis and Clark to 1979 (Great Falls: Tribune Printing, 1979), 89-90. McKamey began with 160 acre homestead. Prior to the winter of 1886-87, McKamey stocked some 12,000 sheep in the valley. As a result of his losses he sunk deeply into debt and nearly lost everything. He recovered, however, and through an aggressive attempt to acquire more land eventually became the largest single landholder in the valley. McKamey epitomized the successful transformation of pastoral ranching to livestock agriculture.

[34] Toole, An Uncommon Land, 149-151; John Staigmiller, "Roundups," in A Century in the Foothills, 9-10.

[35] Toole, An Uncommon Land, 146.

they expected them to survive the winter. The ranchers learned that they needed to treat their cattle as they had treated their sheep, like frail, domesticated, and introduced species, transplanted from more clement environments. Fenced ranching began to replace the open range, and ranchers began to manage for water and forage. Ranchers raised hay to provide winter feed, and began irrigating sections of their land. Ranching became fixed in a place and the 160 acre homestead that had formerly operated as little more than a ranching headquarters, now became central to ranching operations, drawing livestock into a tighter and tighter orbit as the number of homesteads increased and the grazing commons of the public domain decreased. Ranching became less extensive, and while increased management gradually led to more intensive ranching, ranchers had learned the lessons of environmental limits during the 1886-87 winter. By the early 1890s continued market pressures, tempered by environmental limits, and influenced by cultural perceptions of a proper, or "improved" landscape, had transformed the cultural mode of production from a mobile pastoralism to livestock agriculture.[36]

The next phase in ranching along the Smith River endured from approximately 1888-1934, and was typified by an

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[36] Bennett, 58-59.

adjustment from pastoralism to livestock agriculture.[37] During this period the common grazing land available on the public domain decreased as the majority of the land in the valley transferred to private owners via the Homestead Act and unsubsidized purchases near the turn of the century. During this period the Timber Culture Act of 1873 and particularly the Desert Lands Act of 1877 provided additional means of obtaining land from the public domain, which granted greater acreage in partial recognition of the environmental realities of ranching in the West. These acts also marked the first efforts by the federal government toward forest conservation and water reclamation.[38]

Most of the available land in the Smith River Valley was settled during this time. The first phase of ranching along the Smith was confined largely to the upper Smith River Valley near White Sulphur Springs. Beginning in the late 1880s settlers moved into the lower Smith River Valley near Ulm and Great Falls, and then settlement expanded along the river north from White Sulphur Springs and south from Ulm into the more remote mountain canyon region along the central area of the river, portions of which were preserved from settlement with the establishment of the forest

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[37] For an example of the more intensive nature of livestock agriculture including haying and irrigation, see Irene Ellis, "Harvey and Henrietta Ellis," in The Smith River Journal, 118-122.

[38] See Gates and Robbins.

reserves in the 1890s.[39] Today part of the Lewis and Clark National Forest, this central canyon region comprises the largest chunk of public land remaining in the valley. As a result of early and rapid settlement along the Smith River Valley, today over 80% of the land in the Smith River drainage is private property.[40]

The second ranching phase from 1888-1934 saw first, a fragmentation of the land in the Smith River Valley as large numbers of homesteads were filed, followed by a consolidation of these original homesteads by the more aggressive, capable, or fortunate ranchers. Generally, as the number of individual homesteads increased, ranching became less profitable and management more intensive as larger numbers of ranchers competed for shrinking forage and water resources throughout the Smith River Valley during the first couple of decades of this period. Scores of homesteads were taken out and the valley was quickly carved up into small sections, most of which simply couldn't support profitable ranching operations, even if the homesteaders happened to be fortunate enough to own river

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[39] Michael Williams, Americans and Their Forests: A Historical Geography (Cambridge: Cambridge Univ. Press, 1989), 395-424.

[40] Meagher and Cascade County records of original patents and land ownership.

front land. Most of these homesteads ended in failure.[41]

Those homesteads that did survive managed to do so only because they acquired more land, often through opportunism and fraud. The best example of aggressive ranching consolidation along the Smith River during this period is provided by George C. Colby, a thirty-one year old school teacher from Connecticut who homesteaded on the Smith in the 1880s. He was eventually able to acquire over thirty-two homesteads and ranches. Colby employed techniques common to the history of the fraudulent abuse of the Homestead Act in the American West to obtain his large holdings. Colby's preferred method was to have his numerous employees file on homesteads, which he then bought from his employees at a ridiculously low prices.[42] Although this kind of collusion subverted the intent of the Homestead Act, it was often necessary to maintain high profits if not economic solvency. Increasingly, this sort of greed and fraud came to be seen as a virtue of capitalism.[43] The Colby property eventually transferred to the McKamey Cattle and Sheep Company in the lower Smith River valley that today comprises the largest

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[41] Janet Zieg, interview with author on the Zieg ranch north of Camp Baker, 6 June 1994. Also, for one of many common examples see Ruth Boomer, "George Mongar and John Jenkins" in The Smith River Journal, 245-246.

[42] Donald McKamey, "Colby Sheep Company," in The Smith River Journal, 89-90.

[43] See Worster's, "The Nature We Have Lost," in Wealth of Nature, 14.

single private landholding on the river. Colby was just one of several examples of this process of consolidation.[44]

During this phase of ranching the transformation of the landscape of the Smith River Valley accelerated, but not according to the expectations of the settlers and the politicians in Washington D.C. who had authored the Homestead Act. Mixed farming by small yeoman farmers was an Eastern dream that might have worked in Jefferson's Virginia, but not in the Smith River Valley of Montana. Ranching continued as the primary economic activity, and the few successful ranchers quickly acquired the failed homesteads of the vast majority of settlers who gave up in disillusionment, disgust, and often economic devastation.[45] By the early 1930s, ranches in the valley were large and their were fewer of them, management was intensive, as was the use of what was left of the public domain. Haying and irrigation had steadily increased, as had the numbers of stock, so that once again, as in the mid-1880s, the range was overgrazed.[46]

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[44] For another example, see Marguerite Cope, "Theodore Reuben Cope," in The Smith River Journal, 92-93. The Cope holdings grew from a modest 160 acre homestead to eventually over six thousand acres.

[45] For an example of the social as well as the environmental adaptations that ranchers in the Smith River Valley made, see Bert Ducolon, "Albert and Catherine Ducolon," in The Smith River Journal, 106-108.

[46] For examples, see George Kneeland and Elsie Gruel, "Charles and Hannah Kneeland," in The Smith River Journal, 180-181.

The drought of 1934 wasn't nearly the catastrophe that the winter of 1886-1887 was, but it was significant enough to mark a new phase in ranching in the Smith River Valley. However, the date is somewhat arbitrary. The year, 1934, was particularly dry, but the range and the business of livestock agriculture began suffering from drought, abuse, and market depressions as early as the 1920s. The situation became worse with the Depression of the 1930s, and was finally compounded by a series of drought years, the worst of which was in 1934. Montana ranges, particularly in eastern Montana, experienced soil erosion from over-grazing and plowing nearly on par with the Dust Bowl of the American Southwest.[47] Although Smith River Valley ranchers were less affected, these conditions precipitated changes in the way that ranchers in the valley did business.[48]

This new phase of ranching in the Smith was a response not only to environmental conditions like drought, but to new, increasingly restrictive federal regulation of the public domain. With New Deal conservation legislation and the extension of the early 20th progressive conservation agenda, including the increase in the management of the forests by the Forest Service, ranchers in the Smith River Valley were increasingly restricted in their access to

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[47] See Donald Worster, Dust Bowl: The Southern Plains in the 1930s (New York: Oxford Univ. Press, 1979), 13-14.

[48] Wyckoff and Hansen, 55-62.

public land for grazing.[49] The passage of the Taylor Grazing Act of 1934 represented the federal government's commitment to manage grazing on the public domain. Other New Deal efforts were aimed at conservation programs and emergency relief for ranchers caught in the double vice of crashing markets and ecological mismanagement.[50] But Progressive and New Deal efforts at conservation of the public domain were much less significant to ranching in the Smith River Valley than elsewhere in the state, because so little land in the Smith River Valley remained in the public domain by the 1930s, less than 20%, and most of that was in the difficult to access and undesirable grazing lands of the Lewis and Clark National Forest in the central portion of the river canyon.

Most of the changes in ranching practices following the 1930s were initiated by the ranchers themselves who, acting out of self-preservation, were becoming increasingly savvy to the management practices necessary to maintain profitable grazing in the valley. Not that this necessarily resulted in decreased environmental degradation. For the most part,

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[49] Samuel P. Hays, Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890-1920 (Cambridge: Harvard Univ. Press, 1959).

[50] For a detailed study of New Deal relief in the West, see Richard Lowitt, The New Deal and the West (Bloomington: Indiana Univ. Press, 1984). For a look at how drought and declining markets devastated other regions of the West in the 1930s, and for an excellent critique of the New Deal's efforts to react to those problems see Donald Worster, Dust Bowl, 181-230.

ranchers merely increased management activities for optimal livestock production while identifying and attempting to overcome the environmental limitations of the Smith River Valley. After the minimal management adjustments precipitated by drought and market decline, relative prosperity returned to the ranching community of the Smith River when environmental conditions temporarily improved and world markets expanded in the 1940s.[51]

From the 1940s to the mid-1990s, ranching operations in the Smith River have not fundamentally changed. Access to public land has become increasingly regulated, and ranch management on the private property has become more intensive as technology has improved, irrigation of the Smith River has increased, and livestock ranching has become increasingly a business, an agri-business.[52] Large ranches are typical, and since the beginning of the century, cattle have slowly, but not entirely, displaced sheep in the valley, partially because wool has been replaced by synthetic materials, and partially because of the high market demand for cattle.[53]

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[51] See, for example, Vonley Cox, "The Dorothy and Vonley Cox Ranch," in The Smith River Journal, 93-95.

[52] For a detailed look at the evolution and importance of irrigation in the Smith River Valley and FWP difficulties in preserving adequate streamflow levels for floating and the fisheries, see, FWP, "Evaluation of Newland Creek Reservoir Water Purchase to Augment Stream Flows in the Smith River, Montana," by Fred Nelson and Frank Culver (Helena: FWP, 1992), 1-12.

[53] Wyckoff and Hansen, 60.

The over hundred year history of ranching in the Smith River Valley has certainly resulted in environmental change. The greatest change has been in the displacement of native plant and animal species by introduced, non-native species. This has generally resulted in an environment that is not only more artificial, but less diverse. The most obvious changes have been the replacement of buffalo and antelope with cattle and sheep, and the eradication of predator species like the gray wolf, mountain lions, and grizzly bears. But most all native species have suffered from the affects of habitat destruction and introduced competition. One example of this environmental change has been the near destruction of the native sagebrush habitat. In order to create range for cattle and sheep, sagebrush in the valley was plowed, burned, mowed and chemically treated into near oblivion. In a 1970 survey, a historical review of sagebrush eradication was taken in two township areas west of White Sulphur Springs. The study showed that nearly 50% (12,000 acres) of the original sagebrush stand in the area had been eradicated since 1915, and replaced by introduced grasses. The destruction of sagebrush habitat has been devastating for animal species that have depended on that habitat, like the sagebrush grouse.[54]

While pressures on native plants and animals are still

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[54] Montana Department of Fish and Game, Environmental Division, Smith River Drainage Inventory and Planning Investigation, (Great Falls: FWP, 1973), 1-2.

great, there is some evidence that the environmental condition of the valley has improved since the 1930s and 1940s. Since that time, the number of ranchers and stock in the valley have slowly decreased, and ranching has become less intensive.[55] The campaign against predators has ended, and while the gray wolf and grizzly bear have not yet moved back into the valley, mountain lion and coyote populations may have stabilized. Conservation efforts, including game management and the regulation of the public domain, initiated in the 1930s and 1940s, have improved the situation somewhat, at least on the public lands.[56] But, increased irrigation and the use of chemical pesticides and herbicides have posed new problems to river quality and quantity in particular, and intentionally and unintentionally introduced species, from lamas to leafy spurge, have continued to threaten indigenous populations of flora and fauna.[57]

In the 1960s, outdoor recreation on the Smith River began to increase significantly, adding its own particular

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[55] Montana, Governor's Council on Natural Resources and Development, The Smith River An Opportunity for Quality: Report to Governor Forrest H. Anderson and the 42nd Montana Legislative Assembly (Helena: FWP, 1970).

[56] Long time Smith River resident, Robert Tynes, commented, "Hunting in the 1930s and 40s was not nearly as good as it is now." See, Robert C. Tynes, "Walter E. Sr. and Elizabeth Tynes," in The Smith River Journal, 313.

[57] "Leafy Spurge Program Planned on Smith River," Great Falls Tribune, 29 Jan. 1978, D2.

impacts on the river's environment. Unlike some other areas in the West, the increase in outdoor recreation did not lead to legislative preservation of the river, or the curtailing of ranching operations. Ironically, it has led to even greater degradation of the river's environment. Only in a few areas along the Smith River has ranching given way to the American desire to experience or live in the outdoors. Two subdivision sections have been carved out of ranch lands along the river, and two ranches have been partially converted to dude ranches.[58] But ranching is still by far the most important economic activity in the Smith River Valley, and 93% of the total value of the farm products from this area is derived from livestock.[59]

Significantly, none of the public land along the river has been protected by legislation as a result of the

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[58] Meagher County Records of original patents and land ownership, Meagher County Courthouse, White Sulphur Springs, Montana.

For a good example of the pattern of land ownership in the Smith River Valley, from a long history of ranchers to the recent economic response to outdoor recreationists, see, "The Zieg Family," in A Smith River Journal, 143-45. The Zieg property was originally homesteaded by Ed Sayre around 1873, who purchased water rights and briefly operated a small sawmill. The Berkins owned the property beginning in the 1880s, followed by the Songster Family in 1913. The Songsters operated a successful ranch until they sold it to the Zieg family in 1960. The Ziegs sold the property in the 1980s and for a brief period of time it was even owned by H. Ross Perot. The ranch was finally sold to its present owner and is now the "Elk Canyon Ranch," a dude ranch for outdoor recreationists and vacationers.

[59] Montana, the Governor's Council, The Smith River An Opportunity for Quality.

increase in outdoor recreation, and the few acres that the State Department of Fish, Wildlife, and Parks have either purchased or leased from ranchers, have been developed as boat camp areas to accommodate the increasingly large number of floaters on the river, and not to preserve the environmental integrity of the river itself. Since the 1960s, outdoor recreation and livestock agriculture have co-existed in the Smith River Valley, compounding the impacts on the river's environment.

A barely visible drawing can be detected on the wall of a rock shelter hidden in a high limestone outcropping that backs an rocky terrace just south of where Tenderfoot Creek flows into the Smith River. But it is not an ancient pictograph created by a long lost prehistoric culture. Rather, it is a black charcoal sketch depicting two cowboys, probably drawn in the late 19th or early twentieth century. One cowboy has a fancy dangling belt and prominent bowed legs and cowboy hat. The other is a small cowboy holding a fishing pole with a fish dangling from the line, probably a cutthroat trout, but that's stretching the imagination some. This bit of art (or is it graffiti?) eerily foreshadows the curious juxtaposition of ranching and recreational fishing on the Smith River.[60] Will future generations of Smith River inhabitants be able to identify with this drawing in

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[60] John and Mavis Greer, "Rock Art Along the Smith River in Central Montana: Report on the 1993 Field Season" (Helena: State Historic Preservation Office, 1993), 7.

any way, or will it merely be a quaint reminder of a culture and an ecology long since past? Will the cowboy and the fish be able to co-exist in perpetuity?

Although ranching has evolved over the last century, and led to dramatic environmental changes, ranchers along the Smith River remain proud and committed to their culture and their way of living, in part because life in the Smith River Valley has more often been difficult than easy. These hardy ranchers believe sincerely that the ecology that they have created represents progress. They are, for the most part, resistant to the recent environmental movement to restore native species to the valley. And they regard the environmental notion of returning to a "simpler," perhaps even pre-industrial, way of living with disdain. They are far from accepting the gray wolf or rejecting capitalism. Long time Smith River rancher Elsie Gruel romanticizes, "Hard times, no money, poor crops, but we have stuck with the land and it has been most rewarding."[61] Another Smith River rancher, George Marko, echoes her sentiments: "In spite of hard work, drought, grasshoppers, floods, illness and disappointment of all sorts, we still treasure the many priceless memories of these years, nor would we choose to exchange the early years of doing without for all the

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[61] Elsie Gruel, "The Robert Gruel Story," in The Smith River Journal, 137-139.

conveniences we list as necessities today."[62] As a group, ranchers in the Smith River Valley are committed to maintaining the particular cultural ecology that they have created. Although that ecology is poorer, and especially in its ties to the market, is fraught with many weaknesses, the ranchers of the Smith River Valley may be successful for a long time to come. Their cultural and ecological success will depend upon how much they limit themselves, how well they resist the pressures of the market, and the sort of relationship that they are able to forge with outdoor recreationists and the Montana State Department of Fish, Wildlife, and Parks.

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[62] George Marko, "George E. and Ellen Marko," in The Smith River Journal, 199-200.

## PART 2

### Recreation Management, 1960-1994

There was a change in the way that certain people valued the Smith River that manifested itself in the 1960s. Some Americans, mostly urban dwellers from places like Great Falls and Helena, began to frequent the river in increasing numbers. They did not come to hunt bison, to extract furs, minerals, or timber, or to raise cattle. They came to recreate in the outdoors, to float and fish the river, which was both ecologically and aesthetically desirable for these activities. They were visitors to the valley who did not seek to define a new mode of production but rather a new mode of use. As their numbers grew they came into increasing conflict with the ranchers of the region. A state agency, first called the Montana State Department of Fish and Game, and eventually renamed Fish, Wildlife, and Parks (FWP) emerged to define and regulate this new recreational use of the Smith River, and to mediate the conflict that arose, particularly between ranchers and

floaters.

Part 2 of this environmental history of the Smith River attempts to examine a different set of questions relating to environmental history than those questions pursued in the preceding chapters. Part 1 was primarily concerned with tracing successive cultural ecological relationships in the valley over the longue duree, the modes of production that those cultures employed, and whether those modes were ultimately sustainable.[1] Part Two diverges some from this pattern by focusing more intensively, and less holistically, on the complexities of the river's most recent environmental history. It explores how and why the way people valued the Smith River changed, and how conflict arose within a culture over the use of the river. It attempts to understand some of the social divisions lying behind these changes, and the motivations of the various interest groups on the river, including the pursuit of power to reproduce economically and culturally. At the same time, it continues to trace and evaluate, in terms of sustainability, the course of environmental change on the river. Part 2 demonstrates that the environmental history of the Smith River has been more

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[1] Worster proposed and defended this method of inquiry in, "Transformations of the Earth: Toward an Agroecological Perspective in History," A Roundtable: Environmental History, Journal of American History, 76, no.4, (Mar. 1990): 1087-1106.

complex and less deterministic than Part 1 seems to imply.[2]

In Part 2, the sub-cultures interacting in the Smith River Valley, and the ecological visions that they proposed, were not uniform (suggesting perhaps that they never were). Ranchers, floaters, miners, sport fishermen, loggers, conservationists, outfitters, environmentalists, and various state and federal agencies, especially FWP, the U.S. Forest Service (USFS), and the Bureau of Land Management (BLM), all interacted in varying degrees of conflict and cooperation over the use and management of the Smith River Valley. Each group was motivated by values, biases, and ambitions uniquely their own. Continued environmental change, along with cultural difference over how to use and control the use of the Smith River were the predominant themes of the river's environmental history from 1960 to 1994, and will probably continue to be so for the near future.

In the analysis of this complex interaction between various cultural sub-groups and the environment of the Smith River Valley during this time period, I make several arguments. First, unlike some other areas as beautiful and undeveloped as the Smith River Valley, outdoor recreation did not replace the dominant economic activity in the Smith River Valley. As of 1994, no part of the Smith River Valley

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[2] In Part Two I am attempting to address some of the criticisms that William Cronon raised against Worster's model for environmental historians in, "Modes of Prophecy and Production: Placing Nature in History," A Roundtable: Environmental History, Journal of American History 76, no.4 (Mar. 1990): 1122-31.

had been legislatively protected for either recreational use or ecological preservation.[3] This has resulted in a compounded impact on the river's ecology. The reason why the Smith has not been protected is because, in part, of the resistance by FWP to relinquish its management of the river to one of the federal agencies (likely the USFS), as well as FWP's attempt to appease the interests of both ranchers and recreationists. I also argue that the agency biases that FWP has brought to the ecological management of the river have resulted in environmental transformations that are nearly as significant as the ecological changes initiated by ranchers in the 19th century.

The Smith River is Montana's most managed river, and because it was the first to be managed intensively, it provides a model that other rivers throughout Montana may soon follow. Management of the Smith River for recreation has also resulted in some of the ironies and paradoxes that have become common to such recreation management throughout America, a theme I will explore in more detail later. The Smith River is one of the few popular recreational rivers

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[3] This contrasts, for example, with Wyckoff and Hansen's interpretation of the Madison River Valley, where the implication is that the rise in outdoor recreation led to land use allocation, particularly preservation, which has replaced ranching as the defining characteristic of the period. See William Wyckoff and Katherine Hansen, "Settlement, Livestock Grazing and Environmental Change in Southwest Montana, 1860-1990," Environmental History Review (Winter 1991): 63-66. The same implication is made in other regional environmental histories.

nationwide that is managed by a state agency. The study of the Smith River's recent environmental history suggests a comparison of river management between state and federal agencies that has national application. Finally, the history of the river during the last few decades is essentially a history of management. Throughout the chapters that comprise the last half of this thesis, I am concerned with what has motivated the agency of that management, how that management has represented conflicting cultural values about the river, how that management has affected environmental change, and whether or not the management of the Smith River has been appropriate to both the valley's human and non-human inhabitants.

# CHAPTER 7

## Rise in Recreation, 1960-1969

Sometime in the 1960s people regularly began to float down the Smith River purely for the recreational enjoyment it offered. Most of these floaters also fished for the river's trout, both native and introduced species, for sport. Within a couple of decades, outdoor recreationists, eager to float and fish, were flocking to the river in large numbers. These numbers continued to grow annually.[1]

In the past, the river provided many resources that humans living within its drainage needed to survive. But the recreational resource valued beginning in the 1960s introduced a new kind of appreciation for the river and its environment. Outdoor recreational use on the river represents the most recent cultural ecological evolution in an on-going cultural relationship with the river, one that is based not on subsistence or market capitalism, but on less easily defined notions of aesthetics and quality of

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[1] FWP, "Draft of the 1994 Smith River Management Plan," by Doug Haberman (Great Falls: FWP, 1994), 4.

life.[2] It marks not only a new shift in the way that the river is valued, but it has meant changing impacts on the way that the river is used, and therefore, changes in the river's environment.

For at least twelve thousand years, the river supported the hunting and gathering societies of successive groups of Native Americans by sustaining plant and animal populations upon which these people depended. Beginning in the early 19th century, the river contributed to the Euro-American world market economy by surrendering the fur of its beavers and buffalo to trappers and traders. Eventually, American settlers relied upon the river to maintain their cattle and their sheep, and to irrigate their fields of hay. Although, at least to some, the river has always been beautiful, not until the 1960s did recreation begin to be considered as one of the river's primary resources.[3]

The rise in outdoor recreation on the Smith River resulted from larger developments in American cultural and economic history. Two circumstances allowed for large scale outdoor recreation to occur on the Smith. First, it was necessary for Americans to value outdoor river recreational activities, such as floating, sport fishing, hunting, camping, hiking, and the viewing of wildlife and scenery,

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[2] See Samuel P. Hays, "From Conservation to Environment: Environmental Politics in the United States Since World War II," Environmental Review 6, no.2 (Fall 1982): 14-29.

[3] FWP, "Draft of the 1994 Smith River Management Plan," 4-8.

amongst others. Second, Americans had to be able to pursue these activities. This meant that they had to have leisure time off from work, that the market produced sufficient material goods for these activities, such as canoes, fly rods and wooly buggers, coolers, tents, cases of Bud Light, etc., and that potential recreationists could afford these goods. The river also had to be accessible for urban populations like Great Falls and Helena, which meant roads and cars. For most average middle class Americans, the desire to float down the Smith River didn't combine with the ability to do it until the post-World War Two prosperity of the 1950s.[4]

It is more difficult to trace the evolution of the desire to recreate in the outdoors than it is to identify the period during which prosperity allowed for such recreation. The American Romantic movement of the early 19th century, led by Ralph Waldo Emerson and Henry David Thoreau, marked the first clear change in the way that Americans viewed nature, the emergence of non-utilitarian values of wild places. For the Romantics, nature had spiritual value, even intrinsic value, beyond its economic one; therefore, some of the wild places had to be visited

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[4] Paul Pacini, "Recreational River Management on the Blackfoot and Smith Rivers," paper delivered to the Montana Academy of Sciences, Butte, Montana, 20 Apr. 1985, 6.

and protected.[5] This appreciation of nature spread during the late 19th century as the industrial revolution transformed America into an modern urban society and many Americans began to long nostalgically for the supposedly simpler, better, and morally superior times of their rural ancestors. It was also in the 19th century that Americans began to realize the impact that progress was beginning to have on the natural environment, that nature itself was endangered.[6]

By the end of the century neo-Darwinian thought was being applied to the relationship between American society and nature. Recreation in wild nature came to be seen as valuable for a number of reasons having little to do with spiritual rejuvenation. Intellectuals like Frederick Jackson Turner concluded that nature, or in Turner's case the frontier, was primarily responsible for shaping the

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[5] See Henry David Thoreau, especially "Sounds" and "The Beanfield" from Walden: or Life in the Woods (Boston: Ticknor and Fields, 1854), 124-126, 168-171; Ralph Waldo Emerson from Brooks Atkinson, ed., The Complete Essays and Other Writings of Ralph Waldo Emerson (1844; reprint, New York: Modern Library, 1940), 277-278, 693-697, 715-716. See also Catherine L. Albanese, Nature Religion in America from the Algonkian Indians to the New Age (Chicago: Univ. of Chicago Press, 1990), chap. 3.

[6] George Perkins Marsh, Man and Nature: Or the Earth as Modified by Human Action (New York: Charles Scribner's Sons, 1864), 35-37. Not only did this new way of thinking about nature lead to the growth in outdoor recreation, but it also went hand in hand with the emerging spirit of conservation and environmentalism. See Donald Worster ed., American Environmentalism: The Formative Period, 1860-1915 (New York: Oxford University Press, 1973).

American character of individualism, democracy, and freedom.[7] These were themes that were also increasingly common in popular portrayals of the American West. Partially in response to these ideas, America's, indeed the world's, first national parks were created. It was believed that the creation of parks for outdoor recreation would supply a sort of perpetual frontier where Americans continually could revisit to cultivate the characteristics of individualism, self-reliance, know-how, freedom, and democracy.[8] The cult of masculinity that emerged around the turn of the century centering upon the dynamic character of Theodore Roosevelt, viewed wild nature as a testing ground for self-reliance and vigorous living, a place of challenge and risk in a modern life that was becoming increasingly effete and riskless.[9] Others, like Frederick Law Olmstead, argued for the benefits of outdoor recreation in parks, both urban and rural, claiming that they led to a healthier,

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[7] Frederick Jackson Turner, "On the Significance of the Frontier in American History, 1893," American Historical Association, Annual Report for the Year 1893 (Washington, D.C.: Am. Historical Association, 1894), 199-227.

[8] See Roderick Nash, "The Value of Wilderness," Environmental Review, 3 (1977): 14-25. See particularly, "Argument 3: Wilderness as Formative Influence on American National Character." Although Nash is referring specifically to the Wilderness Preservation System his arguments also apply to the National Park System and to the whole movement toward outdoor recreation in general.

[9] Theodore Roosevelt, "Opening Address by the President," Proceedings of a Conference of Governors in the White House, ed. Newton C. Blanchard (Washington, D.C.: Government Printing Office, 1909), 3-12.

happier life, and provided for the "relief of ordinary cares."[10]

It was this new appreciation for nature and the benefits of outdoor recreation that spurred the conservation and preservation movements. Progressive Conservationists, best represented by Gifford Pinchot, head of the newly created Forest Service and friend to Theodore Roosevelt, were concerned primarily with the efficient management of the nation's resources. Outdoor recreation was increasingly considered one of the many resources nature provided, and there was growing recognition that it would eventually have to be managed for as well.[11] It was the preservationists, led by John Muir, who first began to argue for the preservation of natural areas irrespective of economic consideration. Muir spoke of a spiritual, non-utilitarian appreciation for nature that harkened back to the earlier transcendentalists. Defending the Hetch Hetchy Valley of of Northern California from being dammed, Muir writes:

> Hetch Hetchy Valley far from being a plain, common, rock-bound meadow, as many who have not seen it seem to suppose, is a grand landscape garden, one of Nature's rarest and most precious mountain temples... the sublime rocks of its walls seem to glow with life, whether leaning back in repose or standing erect in thoughtful attitudes, giving welcome to

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[10] Frederick Law Olmstead, "The Yosemite Valley and the Mariposa Big Trees," Landscape Architecture, 43 (1952): 17-21.

[11] Samuel Hays, Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890-1920 (Cambridge: Harvard Univ. Press, 1959), 1-45, 270-273.

> storms and calms alike, their brows in the sky, their feet set in the groves and gay flowery meadows, while birds, bees, and butterflies help the river and waterfalls to stir all the air into music... Dam Hetch Hetchy! As well dam for water-tanks the people's cathedrals and churches, for no holier temple has ever been consecrated by the heart of man.[12]

It was in the spirit of both Progressive Conservationists like Pinchot and preservationists like Muir that the National Parks Act was passed in 1916, to "conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."[13] The creation of the National Park System epitomized the nation's recognition of the importance of outdoor recreation. Vigorously promoted by its first director, Steven Mather, the National Park System quickly became an icon of the American Way of Life.[14]

With the park system expanding, and the creation of primitive areas for recreation within the Forest Service, the first half of the 20th century saw a steady increase in the numbers of Americans taking to the outdoors. The automobile greatly increased America's ability to access

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[12] John Muir, The Yosemite (New York: Century, 1912), 249-262.

[13] U.S. Congress, The National Parks Act, 1916 (Washington: GPO, 1916).

[14] Alfred Runte, National Parks: The American Experience (Lincoln: Univ. of Nebraska Press, 1979).

distant primitive areas. The Boy Scouts and Girl Scouts of America began to inculcate the country's youth in the benefits of outdoor recreation. Although the Depression left Americans with less time and money to vacation, the Civilian Conservation Corps under Franklin Roosevelt's New Deal built new roads and paths into America's primitive areas, which a more prosperous America, returning home from the Second World War, would enjoy.[15]

The fifties brought economic prosperity, but it was a prosperity founded in an increasingly modern, bureaucratic, and businesslike nation. Business in corporate America was becoming increasingly dull, impersonal, and less satisfying. Experience outdoors gave Americans a feeling of self-reliance, control, independence, and had a recuperative effect on the psyche.[16] The 1950s also saw the increased efforts of wilderness advocates, particularly Howard Zahniser and the Wilderness Society, for the creation of the Wilderness Act. The creation of Wilderness Areas, it was argued, offered opportunities in outdoor recreation that the National Parks were unable to offer. An increasing segment of outdoor recreationists wanted wilderness, not parks;

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[15] For an explanation of the rise in outdoor recreation in America, and a excellent treatment of America's changing attitudes regarding wilderness, see Roderick Nash's Wilderness and the American Mind (New Haven: Yale University Press, 1976), 228-262.

[16] Hays, "From Conservation to Environment: Environmental Politics in the United States Since World War II," 14-29.

large tracts of nature void of roads, hotels, and gift shops, where a man or woman could look the wild in the face and grapple with survival.[17]

Montanans have been used to living near a wilder nature than most of the nation. For most Montanans, especially prior to the 1960s, living in the outdoors was a way of life, and most recreation was outdoor recreation. There was also the fact that in Montana there was an abundance of wild nature and a paucity of people, at least compared to the rest of the nation.[18] These factors delayed the rush to recreate on the Smith River, which didn't begin noticeably until the late 1950s, and didn't become intensive until 1980.

Although not an outdoor recreator, perhaps one of the first victims of modern America who found a deliberate refuge in the wildness of the Smith River Valley was a character by the name of Old Scotty Allen. For some, the Smith provided therapy for the tribulations of the earlier half of the 20th century, the Depression and two world wars, and the monotony of business as usual in the second half of the century. Particularly, this may have been the case for Allen, who was gassed during World War One, suffered through

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[17] Roderick Nash, "The Value of Wilderness," Environmental Review, 3 (1977): 14-25.

[18] For a somewhat romantic and glorified treatment of Montanans and their land, see Norma Tirrell's We Montanans (Helena: American Geographic Publishing, 1988), 32-39.

the Depression trapping throughout the Smith's drainage, returned to fight in the South Pacific during World War Two, and then fled to the Smith River again where he spent the last three decades of his life in solitary wanderings throughout the drainage, camping, hunting, trapping, and working the occasional odd job until his death in the early 1980s.[19]

By the 1960s America's appreciation for outdoor recreation began to grow appreciably along Montana's Smith River, which mostly attracted urban dwellers from Helena and Great Falls. The first known recreational float trips down the river occurred in the early 1950s, and the number of float trips a year quickly grew. By 1953 the distinct recreational opportunities of the area were recognized and a proposal was made in the state legislature to set aside a state owned school section in the Smith Canyon as a public recreational area. A year later the State Fish and Game Commission recommended the action.[20]

Unlike many other areas in Montana and throughout the West, the management of natural and recreational resources along the Smith River was assumed by the state and not the federal government, despite the fact that the vast majority of public land along the river was federal land, not state

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[19] Vernie Kitson, "Scott Allen," in The Smith River Journal: A History from Lewis and Clark to 1979 (Great Falls: Tribune Printing, 1979), 21-22.

[20] FWP, "Draft of the 1994 Smith River Management Plan," 4-8.

land. Most of the land along the Smith River in the 1950s, as today, was under private ownership, about 80%. The U.S. Forest Service (USFS) owned a section of land along the east bank in the central portion of the river canyon as part of the Lewis and Clark National Forest. The Bureau of Land Management (BLM) owned a few parcels up off the river. The state of Montana in the 1950s owned far less land along the river than either the USFS, or even the BLM. Not far outside of the Smith River Valley, the National Park Service was busy developing its monumental park system, amongst the best examples of which were Glacier National Park to the north of the Smith River and Yellowstone National Park to the south, but the natural beauty of Smith River Valley was more modest as well as economically more profitable for traditional land use practices.[21] At the time, the Forest Service was still primarily in the business of logging and the BLM in the business of grazing, and the days when they would begin actively pushing for recreation were a decade or two off. The state then, perhaps in an effort to imitate the National Park Service, and in order to mediate the growing conflict between sportsmen/recreationists and farmers in the area, assumed the early leadership in the management of the Smith River.[22]

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[21] Runte, National Parks and Yosemite: The Embattled Wilderness.

[22] FWP, "Draft of the 1994 Smith River Management Plan," 4-8.

Throughout the late 1950s, as recreation on the river steadily increased, the state continued to flirt with the idea of creating a state park on the Smith River. In these early years, the Fish and Game Department formed a natural alliance with the Montana Wildlife Federation (MWF), a state branch of the National Wildlife Federation founded in 1936 as a sportsman's organization dedicated primarily to the conservation of fish and game. Fish and Game and the MWF supported state park bills for the Smith, which were introduced in 1957 and 1959, but failed to pass due to opposition by traditional agricultural interests hostile to both increased recreation and sporting activities on the Smith, and to increased state management of lands along the Smith.[23]

As the nation showed its commitment to wilderness and wild rivers in the 1960s with the passage of the Wilderness Act of 1964 and the Passage of the Wild and Scenic Rivers Act of 1968, the state of Montana began to assert its prerogative in the management of the Smith River and began to respond to the increasing challenges of that management.[24] In 1960, the Smith River Fishing Access site located near Fort Logan was purchased from private landownership by the department of Fish and Game. By the

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[23] Ibid.

[24] U.S. Congress, The Wilderness Act of 1964 (Washington: GPO, 1964); U.S. Congress, Wild and Scenic Rivers Act of 1968 (Washington: GPO, 1968).

late 1960's, floaters' vehicles parked along the Smith River crossing on County Road 360 were becoming a nuisance to landowners and a hazard to driving safety, so in 1969 the Camp Baker Site was purchased by the department of Fish and Game to serve as a boat put-in site and parking area.[25] Additional attempts to acquire or purchase lands for recreational purposes along the Smith River were initiated throughout the 1960s by the Region Four Headquarters of the Montana Department of Fish and Game in Great Falls, under which the management of the Smith River fell.[26]

As the semi-wilderness qualities of the Smith River canyon attracted more sportsmen and recreationists to the river in the 1950s and 1960s, it also attracted people interested in more permanent or long-term associations with the river. It was during the early 1960s that two cabin site developments were subdivided and platted out of the large agricultural holdings on the Smith at Castle Bar and Two Creeks. Continued subdivision of the Smith River Canyon soon became one of the primary concerns of the state, recreationists, and farmers, and one of the greatest threats to wildlife habitat near the river.[27]

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[25] Pacini, "Recreational River Management on the Blackfoot and Smith Rivers," 6.

[26] FWP, "Draft of the 1994 Smith River Management Plan," 4-8.

[27] "Stream Access; Smith River Landowners Discuss Their Concerns with Recreationists," Great Falls Tribune, 30 May 1985, B1.

To recreationists, subdivisions were an intrusion on the wilderness experience, and a disruption of privacy and scenery. In addition, sportsmen disliked the disturbance of wildlife habitat and the added pressure placed on the fisheries by summer cabin residents. The Department of Fish and Game, as a recreation and natural resource management agency, also opposed subdivisions because of the threats they posed to fish, game, recreationists, and orderly management.[28]

As a group, ranchers opposed the subdivision of rangeland along the river for cabin site development as well. Subdivision was a fracturing and a surrendering of their property, which represented an erosion of their way of life. It also introduced city-folk as neighbors. On the other hand, ranchers wanted to be able to dispose of their private property as they saw fit, and they were increasing tempted to sell off portions of their property for considerable sums of money. When it came to a question of cash or culture, cash often won out. One enterprising landowner, Everett "Junior" Carlson, to the disgust of some of his neighbors, and later to the frustration of the Fish and Game, ran a quasi-commercial campground on his homesteaded property along the river in the 1960s, allowing camping trailers and the construction of cabins in exchange

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[28] FWP, "Draft of the 1994 Smith River Management Plan," 20.

for supplies and cash.[29]

This initial period also witnessed the emergence of the various interest groups that conflicted, and sometimes cooperated, over how the resources of the river would be used. At its most basic level, interests on the river were divided into two camps. In the one camp were the agricultural, primarily ranching, interests that had operated in the Smith River Valley since the late 19th century. For nearly a hundred years this group had been used to exclusive rights over the resources of the river. Indeed, they considered the river their private property, and continued to do so even after the state assumed its legal rights to the management of the Smith. The private landowners wanted to protect their property rights, which included maintaining their access to water for irrigation, stretching fences across the river to prevent cattle from wandering, and preventing trespassing and vandalism, which were becoming increasingly common occurrences. They were largely opposed to increased recreation along the river, and to the increasingly regulatory hand of government management.[30]

The new players on the river were the recreationists, whose interests were mostly straightforward and undivided

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[29] Ibid.

[30] John Kuglin, "Smith River Area Residents Express Fears for Canyon's Future," Great Falls Tribune, 8 March 1970, A5.

throughout the 1950s and 1960s. Recreationists, during this initial phase, wanted to access the river for floating and fishing, and, at first, the vast majority of recreationists were more interested in fishing than in floating. Specifically, they were mostly sport fishermen, as distinguished from the more general pool of outdoor recreationists. The Department of Fish and Game represented their interests during the initial phase of management. They defended the sportsmen's right to use the river against the landowners who attempted to deny them that right, and they obtained fishing and floating access sites along the river. As the history of the management of the river unfolded, conflict increased over the use of the river, and the positions of various interest groups on the river became more complex.[31]

## CHAPTER 8

## Fish and Game Assumes the Mantle, 1970-1972

In 1969, one year after the U.S. Congress passed the

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[31] John Kuglin, "Outdoor Scene," Great Falls Tribune, 22 June 1969, C1.

Wild and Scenic Rivers Act, the Montana State Legislative Assembly passed House Joint Resolution #12 (HJR 12) calling for a study proposal of Montana's Smith River. The purpose of the proposal was to asses the recreational resources of the river and to determine how the Smith River would be managed for those resources. The report was to be submitted to Governor Anderson by the Governor's Council on Natural Resources and Development, a forum of coordinating state agencies, with the Department of Fish and Game having the primary responsibility for the writing and supervising of the report. The report was scheduled for completion by the 1st of December, 1970. It marked the beginning of the second stage of management on the Smith River.[1]

HJR 12 was significant for two reasons. First, it demonstrated the legislative intent of the state to manage the Smith River for recreational purposes, and by doing so it gave tacit support of the rights of recreationists to use the river, despite the complaints of private landowners. Second, HJR 12 affirmed the State Department of Fish and Game's prerogative as the pre-eminent management agency for the Smith River.

Fish and Game realized that before it could manage the river for recreation it had to justify its right to do so

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[1] Montana, the Governor's Council on Natural Resources and Development, The Smith River An Opportunity for Quality: Report to Governor Forrest H. Anderson and the 42nd Montana Legislative Assembly (Helena: FWP, 1970), 1-3.

legally. This was particularly difficult because the state owned so little land along the river, and because the ownership status of the river itself remained in question. Was the river public or private property? The resolution of this question was the most important result of the Study Proposal of 1970. In championing the interests of recreationists and in attempting to assert its right to manage the Smith, the State Fish and Game was opposed by the traditional agricultural interests along the river.

Despite the fishing access and Camp Baker put-in site purchases made by the Fish and Game in the 1960s, the majority of the land along the Smith River remained private property by 1970. Over 55% of the land bordering the river in the crucial central canyon portion of the river, from Camp Baker to Eden Bridge, the sixty-one mile stretch in which most floating occurred, was in the private ownership of some fifty-seven individuals, mostly ranchers with large landholdings and a number of cabin-site owners in the two subdivided sections. Another 15% of the land bordering the river was part of the corporate holdings of Burlington-Northern Railroad and the Anaconda Company. Public lands held by the USFS, the BLM, and the State accounted for approximately 30% of the total land along this river segment. For the entire 110 mile length of the river from its headwaters to the confluence with the Smith River, less

than 20% of the land was public property.[2]

Almost all of the land along the river, both private and public was being used for agricultural purposes. Land in private ownership along the Smith River was used almost exclusively for ranching. Sheep and cattle grazed the bottoms and adjacent slopes, while limited farming for hay was restricted to areas outside the steep canyon except for a few benchlands adjacent to the river. At the time, lands held by the Burlington-Northern Railroad were being leased to private individuals for grazing or farming operations. In the public sector, the USFS, the BLM, and the State all leased their land along the river canyon for grazing. Aside from ranching, the Anaconda Company land was being held in reserve for possible mineral development, and the USFS was harvesting timber on some of the headwaters of the major tributaries to the Smith, well off of the canyon, although in areas still visible from the river.[3]

By 1970, the only exception to the traditional extractive land use practices of agriculture, mining, and logging, found along the Smith were the recent land purchases made by the cabin-site developers and the Department of Fish and Game for the purpose of recreation.

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[2] See Meagher and Cascade County land ownership records. See also the Council on Natural Resources and Development, 5-6; and, Al Kingston, Head of Forest Management Section of the Fish and Game, letter to Gary Brown, Area Forester, 10 March 1970, on file at the Great Falls Headquarters of FWP.

[3] Montana, Governor's Council, 5-6.

By 1970, the Fish and Game had acquired some land adjacent to the river and access to it in two locations. One area, between Camp Baker and Fort Logan, had been developed as a fishing access site and supported access roads, garbage facilities, latrines and picnic ares. The second site at Camp Baker had only recently been acquired and had not yet been developed.[4]

The interests of the State Fish and Game were apparent from the outset of the study proposal. As the name of the agency suggested, Fish and Game was a regulatory state body representing, first and foremost, sportsmen, then other recreationists, and to a lesser degree, conservationists and the traditional economic interests of ranchers and farmers. Later in the next decade, when Fish and Game changed its name to Fish, Wildlife, and Parks, it was indicative of the increasingly important role of the agency in managing for recreationists other than just sportsmen, and the recognition that wildlife other than game animals needed management consideration. Fish and Game, like any arm of government bureaucracy, also had a direct interest in surviving and thriving as a state agency, which meant, if possible, increasing their mission, their management responsibilities, and their budget.[5] Fish and Game

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[4] Ibid, 10-11.

[5] As Donald Worster writes, "the first law of bureaucracy is to survive," The Wealth of Nature: Environmental History and the Ecological Imagination (New York: Univ. of Oxford Press, 1993),

immediately saw a significant future in the management of the Smith River.

As mentioned, in the study proposal the Department of Fish and Game was supposed to assess the recreational resources of the Smith River and to recommend specific management alternatives to the Governor and the State Legislature. Fish and Game had several management choices available to it. Amongst the alternatives it dismissed outright were not to manage at all, or to champion the interests of ranchers in opposition to increased recreation on the Smith. Either of these alternatives, had they been followed, would have ended Fish and Game's involvement on the river. The more likely management alternatives the Department entertained included the designation of a state park, the designation of the Smith as a Wild or Scenic river, or no formal designation at all, but simply increased efforts to obtain land on the river for access sites, fishing sites, and boat camps, and increasing appropriate management in response to rising recreation. In its recommendations, the Department of Fish and Game settled on a variant of the final option, thereby establishing the management direction it would take for at least the next 35 years.[6]

Fish and Game decided against a formal designation, and

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[6] Montana, Governor's Council, 19-20.

therefore a degree of legislative preservation of the Smith River, for several reasons. For one, in making its final recommendation Fish and Game was required to consider the opinions and suggestions of the public, in particular, those of landowners along the Smith and of representatives of sportsmen's organizations. To ascertain those opinions, two public meeting were held to discuss the future of the Smith River. Written public comments were also solicited. Surprisingly, both of those groups opposed formal designation of the river as a state park.[7]

In the winter of 1970, the first meeting between landowners and the Department of Fish and Game was held at Ulm, where the Smith River flows into the Missouri, just west of Great Falls. The landowners were unanimous. They wanted absolutely no increased use of the Smith River by recreationists, and they opposed development of additional access sites to the river. In general, they did not want Fish and Game telling them what to do or how to manage their lands along the river. They resented the legislative study proposal and the obvious direction in which it was headed, and viewed all efforts to manage for recreation on the river as an infringement on their private property rights. In short, they reacted in a manner similar to that exhibited by many western agricultural, mining, or logging interests when

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[7] FWP, "Draft of the 1994 Smith River Management Plan," by Doug Haberman (Great Falls: FWP, 1994), 4-8.

first confronted by the resource management plans of government agencies.[8]

Specifically, ranchers were concerned about increased garbage along the river and at the river campsites, trespassing and damage to their properties, the destruction of their fences, which they sometimes strung across the river to prevent cattle from wandering when the river was low, and about the adverse impact that increased fishing would have on the fish population. They disliked the press coverage that the river was getting as a result of the promotional efforts of the Fish and Game. John Kuglin, outdoor reporter for the Great Falls Tribune, was castigated for what they termed his "city people" oriented articles about the Smith River. What they meant was that they didn't like Kuglin blabbering about how great a place the Smith River was for a family from Great Falls to float down.[9]

At this point in the public meeting, Dick Barnes of the Montana Wildlife Federation, representing the interests of certain sportsmen, nearly incited his own lynching when he told the landowners point blank that no matter what they thought, the public was going to use the Smith River more and more, and no one was going to stop them. This first meeting was a classic example of the conflicting interests

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[8] Al Kingston, Head of the Forest Management Section, letter to Gary G. Brown, Area Forester, 10 Mar 1970, on file at the Great Falls Headquarters of FWP.

[9] Ibid.

of the landowners and the sportsmen over the future of the river.[10]

The second meeting was held in White Sulphur Springs, near the headwaters of the Smith River, and was attended by over 125 people, mostly landowners, with the Montana Wildlife Federation and Trout Unlimited also represented. As in the first meeting, the landowners were clear in their opposition to recreation on the Smith, however, it soon became apparent that landowners and the established sports interests shared some common ground.[11]

The sportsmen's organizations again voiced their support of the efforts of the Fish and Game to acquire land on the river, and they suggested that Fish and Game consider restricting methods of fishing on the river by allowing fly fishing only, and by establishing catch limits and size restriction. Responding to similar claims by the landowners, some sportsmen claimed that they too had been victims of vandalism, that their vehicles had had their tires slashed, headlights smashed, and gasoline siphoned out at access sites on the river.[12]

At the second meeting there was evidence of some agreement between landowners and the established sportsmen on the river. In principal, both groups opposed the

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[10] Ibid.

[11] Ibid.

[12] Ibid.

increase in subdivisions along the river, what they viewed as, "the purchase of summer homes along the river by wealthy easterners." However, Jeff Dogget summed up the more ambivalent position of the landowners on this issue when he said that most ranchers don't want to sell out to real estate developers, but "if someone talks about $2,000 to $10,000 an acre the money will eventually get to you."[13]

Both groups criticized the USFS for permitting clearcutting on forest lands along the slopes above the river canyon. It was not only a detriment to the scenic beauty of the valley, they complained, but it was increasing spring runoff and sediment pollution in the river, which affected the fisheries. George Engler, Great Falls Lewis and Clark National Forest supervisor, gave the dubious response that clearcutting was necessary in the forest because lodgepole pine, the dominant species in the Little Belt Range, required clearcutting in order to have regrowth of its timber stands.[14]

Most importantly for the future of river management, the established sportsmen joined the landowners in expressing concern about the increase in the number of floaters on the river. Representatives from Trout Unlimited actually agreed with ranchers that roads should not be constructed into the isolated canyon, and that access to the

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[13] Ibid.

[14] Ibid.

river should be limited.[15]

The sportsmen also agreed with the landowners in condemning the state for excessively promoting recreation on the Smith, something they felt was beginning to threaten their own first stake claims to fish the limited trout resources of the river without excess competition from other fishermen, and without being continually interrupted by raft after raft full of recreational floaters who happened to drift by. They were particularly worried that due to a float trip last spring promoted by the Montana Chamber of Commerce, publicity on the Smith would soon appear in national outdoor magazines.[16]

The primary concern expressed by both groups was that the "unique quality of the Smith River and its canyon be preserved." For both ranchers and sportsmen, the "unique quality" of the Smith River was that, at least for the present, they had the river to themselves. Both groups were concerned about how the recommendations of Fish and Game's study proposal would affect that "unique quality." Landowners wanted to preserve their property rights, their way of life, and the non-recreational uses of the river, and only grudgingly conceded to keeping the recreational use of the river at present levels. The established sportsmen

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[15] Ibid.

[16] John Kuglin, "Smith River Area Residents Express Fear for Canyon's Future," Great Falls Tribune 8 March 1970, A5.

interests on the river wanted to preserve their exclusive recreational right to the river, limiting increasing use by the general public as much as possible.

Most remarkable of all, both sportsmen and landowners agreed, during these two meeting in 1970, that a designation of the Smith River as either Wild or Scenic under the Wild and Scenic Rivers Act of 1968, might be the most effective way to stop the further development of the river for recreation, to halt the cancerous growth of subdivisions, to provide ranchers with federally subsidized recompense, and to persuade the USFS to halt clearcutting along the Smith River. At the second meeting a resolution was even passed, ninety to two, in favor of a Wild or Scenic designation. It was the only resolution considered at either meeting. Neither the sportsmen or the landowners supported the development of a state park, which they thought would lead to increased recreation on the river, clearly undesirable from the point of view of ranchers, but also opposed by the vested sports interests. Both groups felt that designating the river "wild" would restrict recreational development on the river.[17]

However, there was a considerable amount of ignorance amongst the landowners as to how a Wild or Scenic designation might affect their economic activities. They asked such questions of the Wild and Scenic designation as,

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[17] Montana, Governor's Council, 12-18.

"How would it affect ranch operations such as weed control and irrigation?" "How much control would government have over what is done on private lands adjacent to the Smith River?" "What would be the role of the landowners under such classification?" And, "Could private lands be condemned under such classification?"[18]

The Department of Fish and Game was a little surprised by the results of the public meetings and comments. They had expected the opposition of the landowners to the state park proposal, but they were taken aback by its vehemence. However, they had not anticipated that their own constituency, the sports recreationists and their representative organizations such as the Montana Wildlife Federation and Trout Unlimited, would oppose their intention to increase recreation along the Smith River through the development of a state park. Furthermore, Fish and Game was startled by the apparent support amongst sportsmen and landowners (albeit naive support on the part of the latter) for the designation of the Smith as a Wild or Scenic River. Inherently, Fish and Game opposed such a designation, and not so much because it limited recreational development, an eventuality they could live with, but because it would possibly remove the responsibility of the management of the river from their hands and place it into the hands of a federal agency, probably the USFS. At least in the late

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[18] Kingston, letter to Brown.

1960s and early 1970s, the early leadership that the Montana State Department of Fish and Game took in the management of the Smith River posed the greatest barrier to the designation of the Smith as a Wild or Scenic River, despite the river's outstanding qualifications for such a designation.[19]

After the public meetings, James Posewitz, head of the Fish and Game's Division of Environmental Resources, summed up the present direction of the study, saying it was doubtful that the legislature would receive a recommendation to undertake full scale recreational development along the Smith. "We're almost down to one alternative - preservation. We will go along with what people tell us."[20] In this case, "the people" were the landowners and the vested sports interests. No extra effort had been made to solicit the opinions of the general public, which might have resented the Fish and Game conspiring with landowners and the vested sports interests to limit the public's recreational use of the Smith. As for "preservation," Posewitz meant neither the designation of a state park, which would have further publicized the Smith River, or a Wild and Scenic designation, which would have both

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[19] USDA, Forest Service, Decision Notice and Finding of No Significant Impact: Wild and Scenic Rivers Study (Great Falls: Lewis and Clark National Forest, 1988), 4-5.

[20] Kuglin, "Smith River Area Residents Express Fear for Canyon's Future," A5.

publicized the river and taken the management of the river away from the Fish and Game.

The Report to Governor Forrest H. Anderson and the 42nd Montana Legislative Assembly by the Governor's Council on Natural Resources and Development was submitted on November 20th, 1970, in accordance with HJR 12. It claimed that on the basis of the unique scenic beauty of the area, the present semi-wilderness aspect of the river, the ecology of the river, and the opinions of the landowners and recreationists, the Council could not recommend the development of a state park on the Smith River. Any mention of a possible Wild or Scenic designation, despite the views expressed and the resolution passed by the landowners and sportsmen, was patently ignored in the report.[21]

In the report the Council further claimed that it was apparent that to do nothing to preserve the Smith would result in a continued deterioration of the values the landowners, sportsmen, and the Department of Fish and Game were seeking to maintain. "To strike a delicate balance between the extremes of extensive development and no management or development at all," the Council recommended the passage of the following legislation:

1. An act designating the Smith River a State Recreational Waterway: providing that fish, wildlife, and recreation are legal beneficial users of water; and

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[21] Montana, Governor's Council, 19-20.

declaring it a navigable stream for the purpose of recreation.

2. An act recommending to the Constitutional Convention, revision of Montana's Constitution to permit the exchange of State lands with private individuals when such an exchange is in the public interest.

3. An act appropriating funds for acquiring scenic easements and obtaining land use options.[22]

Of these recommendations, the first was by far the most significant as it addressed the crucial issue of who owned the river and whether or not the state had a legal right to manage it at all. In spite of the initiatives of the Department of Fish and Game in acquiring land for the recreational purposes of floating and fishing during the 1960s, and despite the presumption of the study itself, the question of whether or not the river was public or private property had never been resolved. The assumption by the state and the public that the river was public property, and that therefore non-landowners had the legal right to float the river and Fish and Game had the legal right to manage that floating, provoked bitter protest by the landowners along the river. The most important result of the study proposal of 1970 was that it allowed the State Department of Fish and Game to move quickly to assume public ownership of the river as well as the authority to manage it, in fact as

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[22] Ibid.

well as law. The legislative declaration of the river as "navigable" was the vehicle for this claim.

The question of private vs. public ownership of the river was legally based upon whether or not the river was navigable. By law, historically commercially navigable rivers are the property of the state. However, by 1970 the Smith, like almost every river in the state, had not been officially declared navigable. Once designated by legislation as navigable, only then did the state have ownership of, and therefore the right to manage, the river.[23]

As a result of the recommendation of Governor's Council on Natural Resources and Development, the state legislature eventually, if belatedly, declared the Smith River commercially navigable from the mouth of Sheep Creek, conveniently adjacent to the Camp Baker put-in site, to its confluence with the Missouri River.[24] Massive log runs down Sheep Creek and the Smith River in the late 19th century to mills in Great Falls provided the historical justification for the declaration of the river as navigable. It is ironic that the use of the river by private logging interests in the late 19th century eventually provided the state with the legal right to appropriate the river from private

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[23] Montana, Department of State Lands, Navigable Water Ways Owned by the State of Montana and Administered by the Department of State Lands (Helena: Dept. of State Lands, 1987), 5-6.

[24] Ibid, 5-6.

agricultural interests in the late 20th century.

The declaration of the river as navigable by the state legislature, one abrupt legal maneuver, reserved for the state both the ownership and the right to manage the Smith River, and eviscerated the landowners' nearly century old assumption that they were the owners. It was an adroit tactic on the part of the state government borrowed from decades of similar actions taken by the federal government against both the states and private landholdings. It was not an action which created much good will between the state government and the private landowners along the Smith River, but the landowners were beginning to reconcile themselves to some recreation on the river, and were establishing a hesitant truce with the Department.[25] However, landowners have never forgotten how, in their minds, the river was taken from them. The action also established a precedent for government appropriation of waterways throughout the state. But even before official designation of the river as navigable, throughout the 1970s, Fish and Game behaved as if they had every right to manage the river, and recreationists had every right to float it.

The recreational designation of the river as a State Recreational Waterway was a concession on the part of the

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[25] One landowner along the Smith River, Bud Johnston, who operated a ranch on the Smith next to Camp Baker, even opened a grocery story to service floaters during the early 1970s, the "Camp Baker Canteen." See, Bert Lindler, "Business Caters to Smith Floaters," Great Falls Tribune, 10 July 1986, B1.

landowners and sportsmen to the Department of Fish and Game, which wanted to see some sort of designation that would legitimize its management efforts. However, it was a shallow designation that did not carry the force of a state park designation. It did little more than ban motorized boating on the river, which for almost the entire length of the river was impossible anyway. The successful passage of the other two recommendations permitted Fish and Game to continue its policy of acquiring private land for the state along the river by authorizing the exchange of state lands for private lands, and by providing funding for the state to acquire scenic easements and other land use options that allowed the state to further develop the recreational resources of the river.[26]

Furthermore, the Council's report itself was significant not only because of the impacts the passage of its recommendations had on the river, but also because it more clearly revealed the management bias of the agency now unquestionably responsible for the future of management on the river, the Montana State Department of Fish and Game. Not surprisingly, evidence of the agency's bias toward sports fishing, sports hunting, and recreation, are found

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[26] Douglas G. Smith, Chairman of the Council on Natural Resources and Development, letter to the Governor of Montana, Forrest H. Anderson, 20 Nov 1970, on file at the Great Falls Headquarters of FWP.

throughout the report.[27] By fundamentally affecting the management of the river, this bias eventually resulted in changes in the river's ecology, particularly in its fisheries.

Most of all, despite the concerns of the landowners and the sportsmen, the report promoted the outstanding recreational resources of the Smith River. In the report, the Fish and Game called the Smith River canyon a "geologists paradise," whose impressive limestone canyon, "rivals America's most scenic attractions." The float experience is described as an "adventure" in a semi-wilderness setting. The report also boasted of the big game hunting potential in the river's drainage, and of the river's excellent sport fishing. Most significantly for the future of the native fish in the Smith River, including the native and now threatened cutthroat trout, the report claimed that rainbow trout, an introduced and artificially stocked species, formed the "backbone of the sport fishery in the Smith River," and concluded that, "fishery management should be based on this species." [28]

The Smith River Study of 1970 was most significant because it legitimized, encouraged, and set the tone for Fish and Game's management of the Smith River, and because it revealed the complex interactions between the Fish and

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[27] Montana, Governor's Council, 10-12.

[28] Ibid, 1-45.

Game, private landowners, and various recreational interests that would characterize management issues on the Smith River for the next few decades.

However, it was also significant because it involved a successfully orchestrated cooperative effort amongst state natural resource agencies unprecedented in the state's history. Although the Department of Fish and Game had the primary responsibility for compiling and drafting the report, and for evaluating the river's fish and wildlife habitat, they relied heavily upon the assistance of several other state agencies, including: the State Board of Lands and Investments and the Office of the State Forester for a report on the use of state lands bordering the Smith river, the Bureau of Mines and Geology for an investigation of the drainage's groundwater and mineral resources, the State Water Resource Board for hydrographs and water rights, the Board of Health and Water Pollution Council for a report on water pollution problems, the Montana Highway Department for maps and an estimation of the feasibility of road access into areas of the Smith River canyon, the Department of Planning and Economic Development for a report on the economic status of the area and the probable impact of recreation development, and the Soil Conservation Committee for an assessment of sediment pollution, soil erosion, and

noxious weeds.[29] The report demonstrated the ability of the various agencies in the state government to cooperate constructively within the Governor's Council on Natural Resources.[30]

The Smith River Study Proposal of 1970 also had significant implications for fish, game, and recreational resources managed by the Department of Fish and Game throughout the state. The Department itself recognized the Smith River Study as its first attempt to develop a comprehensive long-range resource management plan based upon an extensive drainage inventory. In this context, the management strategy for the Smith River to be developed according to the recommendations of the Governor's Council, was envisioned as an experimental pilot planning project consisting of two stages, a planning inventory and a plan development. It was believed that the methodology used to inventory and plan the resources of the Smith River would be eventually applied to all areas managed by the Department of Fish and Game. The study, it was anticipated, would be, "a total ecological approach that has not yet been accomplished previously in Montana," which would, "unify the department's effort to solve resource management problems." From its

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[29] James A. Posewitz, Chief, Environmental Resources Division for the State of Montana, letter to Douglas Smith, Chairman of the Governor's Council on Natural Resources and Development, 4 Nov 1969, on file at the Great Falls Headquarters of FWP.

[30] Smith, letter Governor Anderson.

model, the Fish and Game hoped eventually to develop a complete State Fish and Game Plan.[31]

[31] Ibid.

# CHAPTER 9

## Myopic Ecology, 1973-1979

Irrespective of the objections of private landowners and the sportsmen who had first laid claim to the river in the 1950s and 1960s, recreational use of the Smith River continued to rise throughout the 1970s. As the landowners and sportsmen had feared, the recommendations of the Governor's Council's study of the Smith River, including the designation of the river as a state waterway, contributed to the increase of recreation on the river, although perhaps not as much as the designation of a state park might have. One outdoor reporter for the Great Falls Tribune commented that the soaring limestone cliffs of the Smith River Canyon had once "protected the lucky fish from the pickup camper legions," but that the results of the Council's study and the increasing management activities by the Department of Fish and Game, would inevitably attract increasing numbers of floaters to the river.[1]

Meanwhile, the Department of Fish and Game began happily managing the river according to the recommendations of the Council's report, which they had conveniently authored. They also began to prepare what they had called a "total ecological inventory" of the river so as to define

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[1] John Kuglin, "Outdoor Scene," Great Falls Tribune, 22 June 1969, C1.

appropriate management issues for the future.[2]

According to the Fish and Game, the most important management issues facing the Department throughout the 1970s included resolving conflicts between floaters and ranchers over a slate of problems: wayward trespassing, vandalism, littering, human waste disposal, defining and limiting access to the river, and cross-stream fencing. The Department also pursued a policy of land acquisition along the river for possible access sites and campsites, to create a more convenient floating experience and attract more recreationists. These acquisitions were not intended to preserve land along the river from ranching, logging, or other extractive industries.[3]

These management challenges were relatively uncomplicated, although as recreation continued to increase, Fish and Game was constantly pressed to stay ahead of the tasks. Littering was controlled by increasing disposal sites, educating the public about carry-in, carry-out, and enforcing the laws. Education and law enforcement also worked to curb vandalism and trespassing, as did efforts to improve relations between the floaters and the landowners.

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[2] Douglas G. Smith, Chairman of the Council on Natural Resources and Development, letter to the Governor of Montana, Forrest H. Anderson, 20 Nov 1970, on file at the Great Falls Headquarters of FWP.

[3] Montana, Governor's Council on Natural Resources and Development, The Smith River An Opportunity for Quality: Report to Governor Forrest H. Anderson and the 42nd Montana Legislative Assembly (Helena: FWP, 1970), 12-18.

Basic sanitation was taken care of by increasing latrine facilities. For the time being, only one additional public access sight to the river was sought for purchase or lease, a floater take-out site at Eden Bridge, sixty-one miles downriver from the most popular put-in site at Camp Baker, and the Department continued its policy of trying to acquire land along the river for boat camp sites through purchase, leases, land exchanges, and conservation easements. Floaters were warned of cross-stream fences, and the department went to work on trying to develop "float-fences" which would contain cattle, but allow floaters to pass down the river. When finally developed, these fences were the first of their kind in the state.[4]

Other management problems were more complicated and difficult to deal with, and either took longer time to define and resolve, or required a basic change in the way that the Department of Fish and Game approached its management of the river, something Fish and Game was reluctant to do. These issues were more environmental in nature, and didn't have to do with resolving conflicts between the ranchers and the floaters or developing recreational facilities to accommodate more users, as much as in defining how Fish and Game would manage the ecology of the river for recreation. Both defining that relationship and attempting to manage for it was one of the first and

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[4] Ibid.

most challenging tasks that Fish and Game set for itself.

Beginning with water quality, Fish and Game recognized the importance of maintaining adequate streamflow and water quality as essential to recreation. Nearly every summer streamflows in the Smith dropped below their natural level as a result, primarily, of irrigation in the upper Smith River Valley. Low streamflow on the Smith River usually limited the float season from mid-April to mid-July, and water diversion for irrigation sometimes contributed to an early end to the float season.[5] Low streamflows and water diversion also affected water quality and, most importantly from Fish and Game's perspective, the health of the fisheries. The general water quality of the river, although considered good, was impacted by sedimentation as a result of irrigation and clearcutting on Forest Service lands, pesticides, herbicides, and insecticide runoff, and human and animal effluent. Another threat to the water quality on the Smith River was increased recreational cabin-site development along its banks.[6]

Noxious weeds, particularly leafy spurge, were also considered to pose a serious problem to the management of the river's recreation and ecology. Fish and Game considered these weeds threats to recreation because of

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[5] FWP, "The Smith River News: What's Going Down Up On the River," no. 7, 5 Mar. 1993, 7.

[6] Montana, Governor's Council, 12-18.

their persistent incursions into cleared campsite areas. Fish and Game was also required to assist agricultural interests in the eradication of noxious weeds by managing against such weeds in the lands that they controlled. Ironically, attempts to control the noxious weed problem, like the intensive spraying undertaken later in the decade, adversely impacted the water quality by polluting the river with chemical herbicides.[7] Often, by naively dealing with one problem, Fish and Game created another.

Fish and Game also committed itself to managing for fire suppression in the Smith River Valley. Fish and Game claimed that lightning caused fires occurring every year in the drainage increased runoff and siltation in the river. They also recognized that, historically, recreation results in increased human-caused fires. Fish and Game attempted to prevent human caused fires by educating the recreating public ("Only You Can Prevent Forest Fires!"). Taking their cue from the USFS, they campaigned vigorously against all fires in the valley, both human caused and natural.[8]

Subdivisions were considered by the Fish and Game as a general menace to both the recreation and ecology of the

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[7] "Leafy Spurge Program Planned on the Smith River," The Great Falls Tribune, 29 Jan 1978, D2.

[8] Montana, Governor's Council, 12-18. On USFS fire suppression policies, which were adopted by the Montana State Department of Fish and Game, see Stephen J. Pyne, Fire in America: A Cultural History of Wildland and Rural Fire (Princeton Univ. Press, 1982).

river. Not only did a proliferation of cabins along the river impact water quality, but they threatened game habitat, and decreased the value of the river as a recreational resource by disturbing the solitude, scenery, and wilderness aspects of the recreational experience. In order to halt the spread of subdivisions, Fish and Game advocated restrictive rural land zoning laws. They also hoped that a combination of conservation easements and land purchases by the state would serve the dual Department goals of preventing further subdivisions and obtaining more state land (which, ironically, the state hoped to develop into campsites to attract more recreationists). However, Fish and Game rarely had the financial resources to purchase subdivided land.[9]

Maintaining and developing the recreational and sport resources of the river, not the preservation of the natural ecology, was the goal underlying all of these management issues. The health of the fishery habitat, and to a lesser degree the game habitat, were integral to recreation on the river. The preservation of the river's aesthetics and "semi-primitive" characteristics such as solitude, were equally important. The crucial management question was to determine exactly how much recreational use the river could sustain without adversely impacting the recreational experience, the most important elements of which were the fish population

[9] Montana, Governor's Council, 12-18.

and solitude. However, this question was not fully addressed until the early 1980s.[10]

In an attempt to define and eventually resolve the ecological problems of the river more carefully, particularly those pertaining directly to the health and development of sport fish and game resources, in the early 1970s the Department began what it called a comprehensive natural resource inventory of the Smith River drainage. It eventually resulted in the first river drainage inventory ever completed by the Department of Fish and Game, and was considered a crucial first step in developing in a management plan for the river drainage. It was anticipated that the Smith River drainage inventory, followed eventually by the Smith River management plan, would provide the Montana State Department of Fish and Game with a model it would eventually apply to all the state lands it managed.[11]

Fish and Game's natural resource inventory of the Smith River was far from the "total ecological approach" the agency had bragged about. Completed in 1973, the inventory was comprised of three sections. The first section was devoted entirely to sport fisheries, the second to big game, and the third to upland game birds. The inventory was starkly revealing of the Department's fundamental management

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[10] Ibid.

[11] Montana Department of Fish and Game, Environmental and Information Division, Smith River Drainage Inventory and Planning Investigation (Great Falls: Fish and Game,1973), 4.

biases. Fish and animals not considered valuable for sports fishing or hunting were essentially ignored in the inventory, unless it was determined that they competed for habitat with the recreationally "valuable" species. No attempt was made to define the broader ecology of the river, except where ecological relationships specifically and clearly impacted the river's sport fish and game. This bias shaped the manner in which the river was managed and resulted in significant changes in the river's environment.[12]

Even putting the question of ecological management aside for a moment, by the 1970s game management agencies nationwide, including both state and federal agencies, were beginning to recognize the importance of non-game species in attracting outdoor recreationists who were interested in observing wild nature, not just hunting or fishing it. Environmental historian Samuel Hays argued that beginning in the 1970s, "on lands acquired exclusively for game management the great majority of users were non-game observers."[13] However, as the resource inventory revealed, on the Smith River the Montana Department of Fish and Game was prepared only to manage exclusively for sport fish and game. This reflects Fish and Game's persistent commitment

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[12] Ibid, 1-2.

[13] Samuel Hays, "From Conservation to Environment: Environmental Politics in the United States Since World War II," Environmental Review 6, no. 2 (Fall 1982): 19-20.

to sports interests on the river, despite the changing demography of outdoor recreationists. Demonstrating that the Montana Department of Fish and Game was behind the times, in 1973, the same year Fish and Game completed its resource inventory of sport fish and game on the Smith River, the federal "American Game Policy, 1930," became the "North American Wildlife Policy, 1973," and game management agencies across the nation became "wildlife" management agencies.[14]

Montana was slow to make this change in both name and policy, and when, after several years, Montana Fish and Game changed its name to Montana Fish, Wildlife, and Parks, the change was mostly for semantics. The agency still remained committed primarily to its sportsmen constituency. Since the resource inventory of 1973, which focused almost entirely on sport fisheries, big game, and upland game birds, Fish, Wildlife, and Parks has not attempted another, more comprehensive resource inventory. By 1994 it had not yet taken a resource inventory that reflected the "total ecological approach" envisioned over twenty years earlier.

According to the resource inventory of 1973, the stated objective in the management of the Smith River's fisheries was to preserve and develop sport fish species and habitat. The report of the Governor's Council three years earlier had concluded that the primary sport fish in the drainage was

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[14] Ibid, 20.

the introduced rainbow trout, and that the river should be managed primarily for that species.[15] The inventory found that the waters in the Smith River drainage offered sport fishing for rainbow, brown, brook, cutthroat trout and the much less desirable mountain whitefish. In the drainage, these fish were found in 73 streams that totaled over 643 miles, and in 21 lakes and reservoirs totaling about 511 surface acres. While the inventory confirmed that rainbow trout were the most abundant sport fish in the drainage, it noted the increasing importance of brook trout, also an introduced sport fish species.[16]

Of these fish, only cutthroat trout and mountain whitefish were native to the Smith River. Rainbow, brown, and brook trout had all been introduced in recent decades. By the time the Department of Fish and Game began to manage for these fish, the once abundant native Yellowstone trout and Arctic grayling had already become extinct in the drainage, and the cutthroat trout was increasing threatened. The native fish of the drainage were unable to compete well against the introduced species, especially when those species were artificially supported. It is also possible that the native species were unable to adapt as well to lower streamflows in the summer resulting from the

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[15] Montana, Governor's Council.

[16] Fish and Game, Smith River Drainage Inventory and Planning Investigation, 7-8.

irrigation of agricultural fields in the Smith River Valley.[17]

To meet its objectives of preserving and developing the sport fisheries of the Smith River drainage, the planning inventory proposed a number of recommendations. These included legislation to protect stream channels under the Stream Preservation Act, a state water quality and monitoring plan, legislation for proper planning and zoning to restrict development on streambanks or floodplains, and continued efforts by the Department of Fish and Game to acquire land along the river. It was also determined that further consideration of fishing seasons and creel limits was needed. Another recommendation was to encourage commercial fishing operations for mountain whitefish, so as to create additional habitat for trout, the more desirable sport fish. Finally, it was recommended to augment the sport fishery populations in the drainage artificially, with non-native species.[18]

During the fisheries inventory, natural fish production in the Smith River drainage was augmented by planting about 10,000 catchable sized rainbow trout in a few accessible areas. What impact this had on the already decreasing

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[17] Rober J. Behnke, Native Trout of Western North America (Fort Collins: American Fisheries Society, 1992), 73-98.

[18] Fish and Game, Smith River Drainage Inventory and Planning Investigation, 39-41.

numbers of native cutthroat trout can only be guessed. Today, the native cutthroat trout is nearly extinct in the Smith River drainage, and in drainages throughout Montana. Montana Fish and Game shares some, if not much, of the responsibility.[19]

The resource inventory also found that anglers spent an estimated 32,000 days in the Smith River drainage during the license year 1968-69, and it was predicted that based on fishing pressure and populations of game fish, waters in the drainage could probably support three time the present use without impairing the quality of fishing then enjoyed. Although these were optimistic estimates, this addressed an essential management concern, the carrying capacity of the drainage for sports fishing. The conclusion indicated that the Fish and Game could continue to recruit anglers to the river, up to three times its present use, without adversely impacting the sports fishery. Angler success in all waters was estimated to be about three fish per angler day.[20]

One of the major concerns expressed in the inventory was the affect that streamflow had on fish populations. In the early 1970s, about 33,000 acres of land were irrigated in the Smith River drainage. Nearly 30,000 of these acres were in Meagher County, which includes all the upper drainages of the Smith. The remaining irrigated acres were

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[19] Ibid, 7-8.

[20] Ibid, 7-8.

in Cascade County. It was recognized that all waters in the Smith River had been appropriated for irrigation and domestic use, and that, as in other areas of the state, water appropriations were several times the amount of water actually present.[21] Theoretically, based upon the appropriations, this meant that domestic and agricultural use could legally drain the river dry. Fish and Game realized that this might adversely affect their sport fisheries. As it was, river appropriation, every year, resulted in lower streamflows than natural, supposedly impacting those fisheries by destroying habitat and raising the temperature of the streams beyond the optimal level preferred by the trout.

The inventory, by realizing the importance of the relationship between streamflow and the health of the fisheries, assured that one of the greatest management priorities of the Department of Fish and Game would be legally to acquire enough water appropriation rights to maintain the fisheries. Later, it was recognized that such appropriations could also lengthen the floating season, presently being cut short by mid-July by appropriations for irrigation. However, securing rights to the water and stabilizing streamflow proved difficult.[22]

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[21] Ibid, 7.

[22] FWP, "Evaluation of Newlan Creek Reservoir Water Purchase to Augment Stream Flows in the Smith River, Montana," by Fred Nelson and Frank Culver (Helena: FWP, 1988), 5.

Fish and Game recognized that the North Fork Smith River Reservoir, the only state controlled irrigation project in the drainage, might be one source of supplemental water. However, at the time, all of the water stored at the reservoir was contracted out for the irrigation of about 11,000 acres. For the time being, supplementing the streamflow of the Smith River was impossible.[23] For the next twenty years of its management of the Smith River, FWP was unable to secure access to water rights that would guarantee minimum levels of streamflows to protect the fisheries and extend the float season.[24]

The Smith River fishery, while the single most important sport resource managed by Fish and Game, was only one of three such resources detailed in the comprehensive natural resource inventory of the Smith River drainage. The drainage, it was found, also supported an excellent big game population, providing habitat for large numbers of elk, mule deer, white-tailed deer, and antelope, and maintained, as of the early 1970s, remnant populations of moose, black bear, mountain goats, and mountain sheep. Every year during the appropriate season, large numbers of hunters visited the drainage, and contributed substantially to the economy of

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[23] Fish and Game, Smith River Drainage Inventory and Planning Investigation, 24-28.

[24] FWP, "Evaluation of Newlan Creek Reservoir Water Purchase to Augment Stream Flows in the Smith River, Montana", 5.

the region.[25]

As with most of the important management challenges faced by the Department of Fish and Game, big game habitat was threatened by the fact that most of the Smith River drainage continued to be owned by ranchers and farmers, who managed their land for cattle, sheep, and hay, and not for sport fish, big game, and upland birds. Land ownership in the 1970s had not changed much since the 1950s and 1960s. Approximately 70% of the land along the river was in private ownership, 23% was managed by the Forest Service, 6% by the state, and 1% by the BLM. With so much big game habitat on private land, particularly the critical winter range, the Department concluded that the big game outlook was bleak.[26]

The most important difficulty big game encountered in the Smith River drainage was grazing competition from cattle, sheep, and even herds of semi-wild horses, which were particularly efficient competitors with elk. In some big game wintering areas, the protective forests were being logged, and throughout the drainage, the native brush and grassland was being destroyed. All that the Fish and Game could recommend was to prevent overgrazing on public lands, remove trespassing horses, decrease or halt logging on

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[25] Fish and Game, Smith River Drainage Inventory and Planning Investigation, 75-76.

[26] Ibid, 4.

public lands, and purchase crucial ranges.[27] Fish and Games recommendations went largely unheeded. Ranchers continued to manage their lands for the market, not for big game, and Fish and Game was unable to obtain the money to purchase from private landowners areas it considered to be crucial ranges for big game.

The situation for upland game birds was similar to that of big game. The Smith River drainage supported six species of upland game bird in the early 1970s, including blue grouse, ruffed grouse, sharp-tailed grouse, gray partridge, pheasant, and sage grouse. While all species were seen as threatened, the inventory noted that pheasant and sage grouse populations were noticeably decreasing as a result of habitat destruction and changing land use patterns. However, the inventory also concluded that upland bird hunting along the Smith was minimal, and contributed very little to the local economy compared to other regions in the state. The lack of hunter access because of the large amount of private land in the drainage was listed as one of the reasons for this. Increasing access to public and private lands was recommended. Recommendations designed to increase upland game bird populations included the discontinuation of the spraying of sagebrush on public land, so crucial to sage grouse populations, the discontinuation of aerial applications of insecticides, and an improvement

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[27] Ibid, 104-107.

of grazing and timber management on public lands.[28] As with the recommendations for big game management, these recommendations were also mostly ignored. Despite the hopes of the authors of the resource inventory, Fish and Game never played an active role in the management of big game or upland game birds in the Smith River Valley. Nor, as has been mentioned, did they directly manage for any other wildlife species in the watershed. Between 1973 and 1994, because of the constraints of land ownership and funds, Fish and Game directly managed only the sport fish populations of the river.

Land ownership lay at the heart of all major management problems faced by the Department of Fish and Game: the challenges of conflict resolution between landowners and recreationists, the attempts to accommodate and encourage increased recreation on the river through campsite and access site acquisitions, and the management of the river's fish and wildlife resources. As long as the majority of land remained in the hands of private individuals committed to farming and ranching, Fish and Game could not effectively protect the sport and recreational resources. Purchasing land and water rights for the state in the interest of these resources was always the most desirable solution to this problem. However, it was both prohibitively expensive and

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[28] Ibid, 110.

actively opposed by the private landowners.[29]

[29] Steve Moore, "Montana's Beloved Rivers Have Jealous Suitors," Great Falls Tribune, 30 March 1980, C6.

# CHAPTER 10

## Intensive Management, 1980-1985

Management of the Smith River in the first half of the 1980s attempted to accommodate the increasing numbers of recreational floaters on the river, and to reduce conflicts between these floaters and private landowners. By the late 1970s balancing these interests had already become such a challenging task that it became apparent, at least to the state management agency, that the Smith River required intensive management, more management than was then given to any river in Montana. Intensive management of the Smith River by the Department of Fish, Wildlife, and Parks (FWP) began in 1980. In the 1970s the Department of Fish and Game had changed its name to Fish, Wildlife, and Parks in recognition of the increasing importance of non-game wildlife, and because of the increasingly important role of outdoor recreation in Montana.[1] Largely in response to the overwhelming popularity of the Smith, at the turn of the decade FWP launched a vigorous campaign to manage the river.[2]

The most important element of this new level of

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[1] The recognition of the importance of non-game wildlife to outdoor recreationists was part of a national movement from conservationism to environmentalism. See Samuel Hays, "From Conservation to Environment: Environmental Politics in the United States since World War II," Environmental Review 6, no. 2 (Fall 1982): 14-29.

[2] FWP, "Draft of the 1994 Smith River Management Plan," by Doug Haberman (Great Falls: FWP, 1994), 4-8.

intensive management began in 1980, when both FWP and the BLM each hired a river ranger to patrol the river during the floating season from mid-April to mid-July. While the BLM discontinued this practice the following year, FWP continued to employ a single river ranger on the Smith annually. A second ranger was added in 1991. The Smith River was the first in Montana to support its own seasonal river rangers.[3]

The general responsibility of the river rangers was to oversee public use of the river. Throughout the early 1980s their duties included establishing and maintaining campsites, placing signs to mark hazards and to designate public or private property, maintaining the floater gates, educating the public about trespassing and littering, administering landowner and floater surveys, resolving conflicts, and recommending management improvements.[4]

In 1980, FWP also published the first Smith River map and floater's guide, and within the next several years took additional measures to achieve its management goals of encouraging and accommodating increasing recreation on the river. In 1981, a one-acre plot of ground was leased adjacent to the Eden Bridge as a boat take-out area. It was large enough to provide parking space for vehicles that

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[3] Paul Pacini, "Recreational River Management on the Blackfoot and Smith Rivers," Paper deliverd to the Montana Academy of Sciences, Butte, 20 April 1985, 6.

[4] U.S. Department of Interior, Bureau of Land Management, Preliminary River Access Study of Five Major Rivers in Montana by Sharon K. Vaissiere (Billings: BLM, 1981), 9.

floaters would leave there before shuttling south to Camp Baker along scenic highway 89 through Great Falls and White Sulphur Springs, or along rural road 560 through the grazing lands west of the river, which was shorter, bumpier, and impasible when wet. In 1983, FWP was authorized to find a concessionaire to provide a shuttle service for Smith River floaters traveling the 170 miles (via Great Falls) back to Camp Baker to pick up their vehicles. After the lease of the Eden Bridge site, nearly all floaters began to use it as the only regular take-out site. The standard float down the Smith became a three-and-a-half-day float, sixty-one river miles downriver from Camp Baker to Eden Bridge, although the float could be made in two days if necessary.[5]

The Smith River Floater Log was also developed in 1981. It established a method of voluntary registration and comment, so that FWP could better track river use and develop more informed management policies. In 1983, construction began on a cabin at Camp Baker to accommodate the seasonal river ranger, latrines were placed at high use campsites, and FWP continued its policy of seeking land acquisitions along the river.[6] By 1985, FWP had arranged

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[5] Wayne Arnst, "Smith River Shuttle Approved," Great Falls Tribune, 6 May 1983, B3.

[6] Moore, "Montana's Beloved Rivers Have Jealous Suitors," Great Falls Tribune, 30 March 1980, C6.

| YEAR | # OF FLOATERS | AVG. CFS |
|---|---|---|
| 1980 | 1400 | 145 |
| 1981 | 1600 | 220 |
| 1982 | 1700 | 250 |
| 1983 | 1800 | 160 |
| 1984 | 1971 | 145 |
| 1985 | 854 | 100 |
| 1986 | 1962 | 180 |
| 1987 | 1242 | 90 |
| 1988 | 1462 | 60 |
| 1989 | 2395 | 95 |
| 1990 | 2654 | 110 |
| 1991 | 2758 | 150 |
| 1992 | 754 | 70 |
| 1993 | 3400 | 180 |

Table 4. Numbers of Floaters on the Smith River and Average c.f.s., 1980-1993

the voluntary participation of the Ramblin' Sams RV Club of Great Falls in providing host services for floaters at Camp Baker and Eden Bridge. Throughout the 1980s FWP's management budget for the Smith River was approximately $10,000 per year.[7]

By 1980, as a result of the floater log, FWP was able to estimate accurately the number of floaters on the river each year. For the 1980 season the number of floaters was estimated at 1,400, which by 1984 had risen to a record number of 1,971. The following year, 1985, the river suffered from extremely low streamflow due to drought and irrigation demands, which limited the float season and reduced the total number of floaters to 854. Recreation on the river quickly recovered the next year though, and continued to rise each year until mandatory limits were placed on the number of floaters each season beginning in the early 1990s. For the 1993 season, the number of floaters on the Smith had risen to 3,400.[8]

The voluntary floater's log and the floater surveys first administered in the early 1980s also revealed information about how floaters used the river, and gauged the opinions of both floaters and private landowners regarding how the river should be managed. For most, the float season began with spring runoff, which provided the

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[7] FWP, "Draft of the 1994 Smith River Management Plan," 4-8.

[8] Ibid.

river with enough water to float down in about mid-April. Depending on the amount of precipitation for the year, and the demands of thirsty irrigators, the float season usually ended by the middle of July. In 1980, 87% of the float parties began at the put-in site at Camp Baker and floated an average of 3.5 days to the next convenient access site at Eden Bridge. The average party size was six, 41% of floaters were from Lewis and Clark County (Helena) and Cascade County (Great Falls), and most floaters floated during the month of June, with Memorial Day being the peak weekend. The most valued activities were: floating (95%), camping (95%), fishing (85%), sightseeing (82%), rest and relaxation (82%), photography (72%), bird and animal watching (67%). Significantly, 84% of the floaters surveyed said that they did not feel crowded on the river.[9]

During the summer of 1980, personal interviews were conducted with 17 of 18 major private landowners along the Smith to better understand the nature of conflicts between the landowners and the floaters. Approximately thirty other landowners controlling smaller, isolated sites, were not interviewed. Results showed that landowner complaints varied little from those voiced at the public meetings held during the 1970s. Significant percentages of those surveyed felt littering (66%), trespassing (66%), too many people (72%), length of season (50%), and lack of enforcement (61%)

[9] USDI, BLM, Preliminary River Access Study, 11.

were problems. Other problems cited were dogs, human waste, parties, vegetative damage, livestock harassment, camping in hay meadows, lack of signs and vandalism.[10]

Of those surveyed, 55% wanted more enforcement of laws and regulations by the river rangers, reflecting the ambivalence of the landowners, who on the one hand opposed FWP presence on the river, and on the other hand, desired increased regulation of the floaters.[11] A majority of landowners viewed any government activity along the Smith as a threat to their private property rights, which was clear in the land acquisition policy of FWP, but was also sensed in the innocuous presence of the river rangers. Yet, landowners also placed responsibility for control of floaters upon the managing agencies.[12]

Solutions to these problems suggested by most of these landowners were also indicative of their continued opposition to outdoor recreational use on the Smith River; 66% recommended limiting the season and the number of floaters. Solutions designed to accommodate or encourage additional floating on the Smith found little support amongst these landowners, including: better signing (22% approved), providing more and better facilities (11%), continuing FWP's policy of land acquisition (11%), and

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[10] Ibid, 10.

[11] Ibid.

[12] Ibid.

attempting innovative land use agreements like conservation easements and leasing (22%).[13]

Despite its victory over private landowners in the 1970s, when FWP successfully asserted its authority to manage the Smith River for outdoor recreation, throughout the 1980s the department could not afford to ignore the opinions and concerns of private landowners along the river. Most of their management goals depended upon a good relationship with these landowners. The perpetual dilemma FWP confronted was the relative scarcity of public land to be found along the Smith. While in the 1980s, FWP was successful in obtaining more land along the river, they obtained it primarily from other land management agencies, and not private owners. The relative distribution of land between public and private ownership, despite all efforts by FWP, had changed little from the 1970s. In 1981, for the total length of land along the river from its headwaters to its mouth, 76% was private property, 11% was owned by the USFS, 8% was state land administered by FWP, and 5% was BLM land. Along the crucial recreational segment of the river from Camp Baker to Eden Bridge, 65% was private, 20% USFS, 5% FWP land, and 10% BLM land. However, in 1983, in a three way land swap between the USFS, the BLM, and FWP, the BLM surrendered most of its properties along the river to FWP, and FWP obtained some small sections of land from the USFS.

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[13] Ibid.

The Montana Department of State Lands obtained a total of 13 parcels of land along the river from this swap. The land was to be administered by FWP, which hoped to develop these parcels as individual boat camps in which a cluster of campsites would be developed.[14]

In the early 1980s, FWP came under increasing criticism, from both private landowners and invested sports interests, for supposedly promoting increased recreation on the Smith. An editorial in the Great Falls Tribune by a Smith River landowner called FWP a tourist agency rather than a management agency, claiming that it engaged in "provocative programs of promoting river floating." The editorial also revealed a contrasting vision of the appropriate use of the river: ranching on the one hand, defended by the river's inhabitants, and outdoor recreation on the other, which relied upon importing river users, particularly from urban areas outside of the valley. The writer lamented that all that was required to improve relations between floaters and ranchers was a, "sensible policy; one which permits a reasonable number of people to float our river, and one which ensures that, long after we are all gone, the river will be sustaining agriculture and giving pleasure to many people."[15] This rancher clearly

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[14] Ibid, 9.

[15] "What is Best for River?," letter, Great Falls Tribune, 8 May 1980, B3.

differed with FWP on what a "reasonable" number of floaters might be. Herein lay the heart of river management issues during the 1980s: what would be the limit to the number of floaters on the river, and how would that limit be determined?

FWP's response to accusations that department policies were promoting use was predictably defensive. "We're not trying to promote the use of the river," Nels Thoreson, regional supervisor of FWP claimed, "we're just trying to live with it."[16]

However, by increasing management activities, hiring river rangers, and especially by acquiring land and developing campsites and access sites to the river, FWP couldn't help but encourage, if not promote, the increasing use of the river by recreational floaters.[17]

In the past, FWP had heeded the concerns of the landowners and vested sports interests and made efforts to limit the use of the Smith River, most notably in the Governor's Council's Report on Natural Resources and Development when it recommended not to develop a state park along the river. It continued to limit use in the early 1980s by limiting access to the river. The fact that there

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[16] Bert Lindler, "Smith River's New Popularity Creating Problems," 23 Aug. 1981, F1.

[17] Paul R. Pacini, letter to Dan Vincent, FWP Supervisor of Region Four, 28 July 1980, on file at Region Four Headquarters of FWP, Great Falls.

were sixty-one river miles between the floater put-in site at Camp Baker and the take-out site at Eden Bridge, and that the average float took 3.5 days, limited the use of the river to those floaters both able and prepared to spend that much time on the river. Throughout the 1980s, FWP committed itself to limiting access in an effort to curb the numbers of floaters and "preserve" the river, yet it promoted increased use by developing camping facilities, the put-in site at Camp Baker, and the take-out site at Eden Bridge.[18] In following such a strategy, FWP attempted to keep recreational use within the bounds of its budget and management capabilities, thereby improving the quality of the float experience for most people, and placating the worst fears of private landowners. At the same time, FWP allowed for steady increase in the use of the river, which eventually justified a greater budget and greater management responsibilities for FWP, desirable goals for any bureaucracy.

The Smith River in the 1980s was a frothy arena of both cooperation and conflict. Since 1970, when FWP took the management initiative on the Smith River, it had received the tacit approval of, and subsequent support from, the USFS and the BLM, the only other public land management agencies with interests on the river. FWP effectively guaranteed its predominant role in the management of the river when it

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[18] USDI, BLM, Preliminary River Access Study, 15.

acquired land from the USFS, and particularly the BLM, in 1983. The discontinuance, in 1981, of the BLM's river ranger program after only one year, combined with their land concessions to FWP in 1983, for all practical purposes removed the BLM from any significant management role on the river. The relationship between the USFS and FWP was cooperative throughout the 1980s and early 1990s. The USFS White Sulphur Springs Ranger District assisted in the dissemination of floater information collected by the river rangers in the 1980s, and under direction from the Lewis and Clark National Forest Office in Great Falls, continued to follow FWP's lead and support its management efforts.[19]

The best example of this interagency cooperation on the Smith can be found in the "Preliminary Access Study" proposed by the BLM in 1981. The stated goal of the study was to facilitate cooperation amongst public agencies concerned with river recreation management in providing public access and campsites on the Smith River. The immediate results of this study were the resolution of the one year cooperative 1980 river ranger program inefficiently duplicated by both the BLM and FWP, and the agency land swap of 1983. The study also recommended an annual Smith River management meeting of the BLM, the USFS, and FWP, to allow for interagency communication. However, the cooperative, jointly administered management role envisioned in the study

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[19] Pacini, letter to Vincent, 6-7.

for all agencies, never materialized. FWP never shared management responsibilities with the BLM and the USFS, so much as it assumed them for itself. The BLM initiated gesture of cooperation embodied in the "Preliminary Access Study" resulted in that agency's ousting as a management player on the Smith River, and a weakening of the USFS's position.[20]

By the early 1980s, FWP had conclusively attained its position as the primary management agency on the Smith River, and won the alliance of two powerful federal land management agencies. FWP then turned its efforts toward establishing a cooperative forum that would alleviate opposition to its management policies amongst private landowners and recreationists. In the spring of 1984, the "Concerned Citizens of the Smith River Canyon" was formed by FWP as a management advisory group. Core members of the committee represented recreational users, outfitters, landowners, the USFS's Lewis and Clark National Forest, along with the Regional Supervisor, Park Manager, and the Assistant Parks Manger from Region 4 of the FWP headquarted in Great Falls. The group was scheduled to meet once a month with the nominal objective of increasing contact and cooperation amongst the various interests along the river, and to identify and resolve conflicts. This group was later

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[20] USDI, BLM, Preliminary River Access Study, 1-4.

referred to simply as the "Ad Hoc Committee," and it played an important role in the management of the Smith River throughout the 1980s and early 1990s.[21] The Ad Hoc Committee was, on the one hand, a sincere effort by FWP to involve the user interests along the Smith in the management of the river and to resolve conflict, but it was also a tool used by FWP to overcome opposition to its policies, and to provide a showpiece to counter criticisms that the agency represented its own interests rather than the interests of the public. Nevertheless, the Ad Hoc Committee did serve to increase cooperation amongst the department and the various user interests of the river.

The river rangers were also viewed as a congenial, positive force for cooperation by both recreationists as well as landowners. Their frequent, ambassadorial visits to ranchers along the river served to mitigate conflict and improve relations between the landowners and FWP, although, undoubtedly, many landowners still resented their presence.[22] River rangers also visited with floaters at Camp Baker, while patrolling the river, and at late night campfires, sharing friendly conversation, planning serious fishing strategies, and partaking in an occasional beer.

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[21] Pacini, "Recreational River Management on the Blackfoot and Smith Rivers," 9.

[22] "Stream Access: Smith River Landowners Discuss Their Concerns With Recreationists," Great Falls Tribune, 30 May 1985, B2.

Very rarely did a river ranger have to remind floaters that he was also a warden. In a 1980 floater survey, recreationists overwhelmingly approved of the helpful presence of the river ranger.[23]

However, despite the limited successes of the Ad Hoc Committee and the river ranger program, conflict, more than cooperation was the dominant theme on the Smith River in the 1980s. The root of the problem lay in the increasing number of floaters to be found on the river each year. Landowner Walter Tynes summed up the increasing use of the river best when he wryly observed in 1985; "The dogs used to bark every time a floater went by. There's so many going by anymore, they don't even lift their heads."[24]

Not only did landowners have to endure recreational floaters from the "big cities" like Great Falls and Helena, but as a result of national publicity, the river was attracting more and more people from out of state, generally from even bigger cities. In 1983 an article praising the recreational qualities of the Smith River appeared in The New Yorker magazine, and in the early 1980s a national advertising campaign by Coleman Canoe Company featured the Smith River in the promotion of its new product, the "scanoe." The well-known spokesman for the Coleman Company

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[23] USDI, BLM, Preliminary River Access Study, 9.

[24] "Stream Access: Smith River Landowners Discuss Their Concerns With Recreationists," B2.

beamed on televisions across America that; "The scanoe, a plastic square-sterned canoe, is a true breakthrough in water-craft design. I know. I tested it on Montana's rugged Smith River." Montanans, landowners and recreationist alike cringed at the unwanted attention. FWP's attitude was more ambivalent.[25]

With increasing use came the litany of standard landowner complaints of trespassing, vandalism, and litter. Floaters continued to whine about the fences across the rivers (even the innovative float gates), about being kicked off banks where they put in to fish, and about the unsightly cattle or subdivisions marring their otherwise scenic semi-wilderness float. One article in the Great Falls Tribune claimed that while conflicts between recreationists and landowners had been reported on the Dearborn, Stillwater, Big Horn, Madison, West Gallatin, Beaverhead, and other streams, the Smith River was, "in a class by itself."[26]

Most of all, landowners were flabbergasted that recreationists on the Smith seemed to have no respect for private property. Part of the problem was that recreationists could not readily distinguish between public and private land.[27] FWP attempted to address this problem

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[25] Bert Lindler, "Smith River's New Popularity Creating Problems," F1.

[26] Moore, "Montana's Beloved Rivers Have Jealous Suitors," C6.

[27] USDI, BLM, Preliminary River Access Study, 10.

by posting signs. However, this did not entirely address the fundamental issue, and it created a new source of floater resentment. Recreationists were on the river to enjoy themselves, to fish, to drink, and for some, to appreciate the freedom and challenge of a semi-wilderness adventure. "To hell with private property, to hell with the signs, and damn the fences" was the attitude of some floaters. If they had wanted someone to tell them what to do, where to go, and how to do it they would have stayed home. One of the central attractions to outdoor recreation was the freedom it offered from the regulations and restrictions of modern society, and for someone from the city, even a small city, when you are out in the country and there is no house or road in sight, it is difficult to think of the inviting campsite, or the tempting fishing bank as private property. And, of course, some floaters simply didn't give a damn. One floater, commenting on a survey, suggested that the FWP pass out courtesy pliers to cut down obtrusive fences.[28]

Landowners saw themselves as justly defending a way of life they had enjoyed for generations. They also felt that they were the only force protecting the beauty of the Smith

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[28] Lindler, "Smith River's New Popularity Creating Problems," F1.

River from swarms of pestilent recreationists.[29] George Zieg, before he sold his property to the Elk Canyon Dude Ranch, used to allow floaters to camp at a specifically designated campsite on his ranch at the head of the Smith River canyon. Floaters tore down the sign and began camping wherever they wanted. "People don't feel they're trespassing for some reason," he lamented. In the early 1980s at the beginning of his ranch Zieg placed a sign: "No Trespassing for next 4 miles." Every mile he placed another sign. "They think they're out in the country. It's wide open. It's free," said Vonley Cox who leased the Eden Bridge take-out site to the FWP in the 1980s. As a result of trespassing and vandalism, in the 1980s FWP began occassionaly to send real wardens down the river to fine violators. Some of these wardens even disguised themselves.[30]

What was beginning to happen to recreationists on the Smith River was an ironic process quickly becoming a familiar theme in the short, meteoric history of outdoor recreation in America. The need for recreation management to protect the resources of the river and the right of private property owners through rules and regulations

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[29] "Stream Access: Smith River Landowners Discuss Their Concerns With Recreationists," Great Falls Tribune, 30 May 1985, B2.

[30] Lindler, "Smith River's New Popularity Creating Problems," F1.

limiting behavior adversely impacted the very quality of freedom and adventure that attracted recreationists to the outdoors.[31]

The predicament of signs provided a good example of a seemingly necessary management strategy conflicting with the values of recreationists and creating resentment. FWP posted many signs along the banks of the Smith River in the early 1980s in an attempt to deal with its management problems, most especially the problem of trespassing. However, most floaters regarded the signs as a blemish to the scenery, and an imposition on the freedom they hoped to enjoy during their float. Another editorial in the Great Falls Tribune declared, "Don't do this and don't do that signs," on the Smith are unnecessary and unwanted, and the editorial even went so far to propose a solution to the sign problem on the Smith by following the example of the infamous Dr. A.K. Sarvis and his pretty pyromaniac cohort in Edward Abbey's The Monkey Wrench Gang (This was an editorial from a resident of Great Falls, Montana!).[32] In a poll of floaters administered by FWP, 90% of the recreationists on the river informed the department that they did not want

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[31] The paradox of outdoor recreation management was hardly unique to the Smith River. See, Joseph L. Sax, Mountains Without Handrails: Reflections on the National Parks (Ann Arbor: Univ. of Michigan Press, 1980), 105-109.

[32] Wayne Arnst, "Signs Along Our Waterways Just Aren't Necessary," editorial, Great Falls Tribune, 10 Jan. 1983, C1.

signs to indicate private land from public land.[33]

The second malady of modern outdoor recreation evident on the Smith River as early as the 1980s has been referred to as "loving the river (or the wilderness, or park) to death."[34] Here again, the river was beginning to attract so many recreationists that qualities like wildlife, fisheries, solitude, freedom, and adventure were beginning to erode under the increased pressures.[35]

An article on the Smith in 1984 likened Camp Baker in the morning to a zoo, where "party animals from Butte load their three rafts with 18 cases of beer next to an outfitted group of fishermen flown in from New York City."[36] Another article warned that more fish were being caught in the river than the fishery could sustain, pushing the state's most pristine spot to the "verge of becoming a no man's land." It went on to comment that, "As a wilderness experience, some feel the Smith River is to Montana what the L.A. freeway is to California." Even allowing for the gross journalistic exaggeration of these articles, it was becoming clear to many floaters that the Smith River was beginning to

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[33] Arnst, "River Ranger Program in Progress," Great Falls Tribune, 31 Jan. 1983, C2.

[34] Sax, Mountains Without Handrail, 93.

[35] "Heavy Use May Lead to More Limit on Smith," Great Falls Tribune, 2 Nov. 1989, B1.

[36] Eric Wiltse, "A River That Deserves a More Unusual Name Than Smith," Bozeman Daily Chronicle, 12 July 1984, B13.

reach its recreational limits. This issue became even more pressing in the latter half of the 1980s and the early 1990s.[37]

Recreationists weren't the only ones having problems with FWP regulations and the ironies of increasing recreational activity on the river. Landowners fought with the state as much as they fought with recreationists in the 1980s, although, ironically, they depended on the former to protect them from the latter. In 1985, landowners, including Smith River residents, filed suit to declare sections of House Bill 265, the Stream Access Law, unconstitutional. The law, under certain conditions, allowed public use of private property without compensation or consent of landowners, by holding that the public had a right to recreational use of all waters in the state between the high water marks. It essentially allowed recreationists to float and fish without landowner permission between the high-water marks of larger streams and to camp overnight in the same area, if they were 500 yards from or out of sight of homes. [38]

Again, landowners protested ineffectually as the state appropriated what landowners had long held as inviolate private property rights. Not only did most landowners on

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[37] Tom Palmer, "A River These Fishermen Love Is Disappearing," The Independent Record [Helena], 11 May 1984, B1.

[38] Sue O'Connell, "Suit Challenges Stream Access," Great Falls Tribune, 16 June 1985, A2.

the Smith believe that the river, and certainly the banks of the river, were private property, but some even claimed ownership of the wildlife which grazed on their fields. One Smith River resident claimed, "I paid nearly $1,000 an acre for the privilege of saying the water is mine."[39]

The stream access law led to increased resentment on the part of the landowners toward the state and the land management agencies like FWP. In supporting the bill, FWP represented the interests of outdoor recreation and bureaucracy against the interests of agriculture and private property. One immediate reaction to the law was that a popular Smith River campsite, "Indian Springs," located on Louise Rankin Galt's property, was closed for public use. Galt had allowed the campsite on her property for several years, but withdrew it in resentment over the bill and over concerns that people might start to think of it as public property.[40]

While FWP, recreationists, and private landowners fought with each other over the use and management of the river, an ominous event in 1983 reminded them that they weren't the only groups with an interest in the resources of the Smith River. In that year, Cominco American Incorporated asked for exclusive prospecting right on

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[39] Shirley E. Hicks, letter, Great Falls Tribune, 28 March 1983, B2.

[40] "Popular Camp Closed," Great Falls Tribune, 24 June 1985, A7.

hundreds of acres of state land along the Smith River at the Camp Baker access site, at the very mouth of the beautiful Smith River canyon. Cominco was a Spokane based corporation engaged in mining and metal sales, mineral exploration, oil and gas, and chemical fertilizers with sales of about $250 million a year from its various operations. Needless to say, Cominco was attracted to the Smith neither for agricultural nor for recreational reasons, but because the river possessed geologic formations similar to its rich lead and zinc ore deposits in British Columbia. If it was determined there might be an ore deposit of high-enough grade in reserve, the initial prospecting would be followed by exploratory drilling, bulk ore sampling and other studies. If such an ore deposit was found, admittedly a remote possibility, Cominco wanted to negotiate an exclusive lease with the state. Cominco claimed that a major mine could employ as many as 500 local workers, with a direct input of many millions of dollars per year into the local area. Fortunately, for ranchers and recreationists, if not for the local economy, Cominco failed to find what it was looking for, although nothing prevents them, or anyone else, from looking again.[41]

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[41] John Kuglin, "Mineral Exploration Near Smith River Considered," Great Falls Tribune, 25 Jan. 1983, B1.

## CHAPTER 11

## Carrying Capacity Confused, 1986-1988

Recreational use of the Smith River continued to increase throughout the 1980s, due to the accommodating management activities of FWP, the ever rising interest in outdoor recreation nationwide, and the continued promotion of the river in magazines and newspapers. In the mid-1980s, an article appeared in Esquire boasting of the rugged qualities of the Smith River to fashionable men nationwide[1], and another piece in The Nature Conservancy Magazine claimed that the Smith was "Montana's best kept secret, offering the best combination of wilderness, scenery, trout fishing, and wildlife in the state." What's more, if you spent the $3,000 it would cost you to participate in a Nature Conservancy Trip on the Smith River, half of your expenses would be tax deductible.[2] By 1985, the Smith River was no longer a secret, if it ever had been at all. Responding to increased use, FWP prepared for the next phase of management: determining the carrying capacity of the river and establishing management guidelines for limiting the river's use. The Management Plan of 1988 addressed both of these issues and set the course of management for the next

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[1] Verlyn Klinkenborg, "Casting About in Montana," Esquire, May 1987, 33-34.

[2] "Float Fishing in Montana," The Nature Conservancy Magazine, Jan./Feb. 1988, 31.

seven years.

From 1980, when FWP began actively managing the Smith River, to the implementation of the Management Plan of 1988, the general management activities of the Department included the consolidation of its authority as the preeminent management agency on the river, the acquisition of property along the river, the resolution of conflicts amongst various user groups, and the employment of a full time seasonal river ranger. Specifically, during this time, FWP administered floater and landowner surveys, placed signs, acquired and developed facilities at access sites and campsites, administered a privately operated shuttle service, established a voluntary reservation system whereby floaters were encouraged to call the Regional Headquarters in Great Falls to inform the Parks Manager of their intended launch dates and receive pertinent float information, and designed a voluntary boat campsite declaration board at Camp Baker to prevent overcrowding. FWP also conducted creel surveys of the fish population throughout the 1980s. Additionally, the Ad Hoc Committee was formed in 1984 as a cooperative effort to assist FWP in the management of the river.[3]

By 1986 facilities on the river included two access sites, now owned by FWP, at Camp Baker at the head of the

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[3] Joel A. Shouse, The Smith River Study, report prepared for FWP (Bozeman: Consulting Services, 1986), 1-5.

river canyon (floater put-in site) and at Eden Bridge (take-out site), sixty-one miles downriver. In between were sixteen boat camps, five on land owned by FWP, eight on the Lewis and Clark National Forest, and three on private land (two leased annually and one leased permanently). No public water sources were available at any of these locations, and floaters either treated the water from the river, brought water with them, or obtained water at one of a few springs found on or near the river. Primitive toilet facilities were available at ten of the boat camps and both access sites, and the access sites contained areas for camping and parking.[4]

By 1984 public use of the Smith River had increased to the point where it exceeded FWP's efforts to accommodate it. The boat camps began to overflow, people complained of the deterioration of the recreational experience, and conflict between floaters and landowners mounted. FWP, supported by the Ad Hoc Committee, came to the conclusion in 1985 that a comprehensive analysis of the Smith River was needed and that a planning consultant should be retained to perform this work. FWP contracted with Joel Shouse of Consulting Services in Bozeman.[5]

There were three major objectives of Shouse's study. The first objective was to evaluate public use and recommend

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[4] Ibid, 40.

[5] Ibid, 1-5.

ways of managing that use, and the second and third objectives had to do with the preservation of water quality and quantity and the protection of the river corridor. Of these, the first was the most important objective because it established a basis for determining carrying capacity and a specific management strategy for limiting use, which defined future management for the next decade. It was also more important because both Shouse and FWP claimed that there were no pressing environmental threats to the river itself, either to its water or to the land along its banks, and the management strategies they proposed to preserve these resources were largely ineffectual.[6]

Nearly all of Joel Shouse's recommendations were accepted by FWP, and that agency's Management Plan of 1988 was little more than a copy of the study he had completed in 1986. Joel Shouse had more to do with the way that the Smith River has been managed from 1988-1994 than any other single person.[7]

In his analysis of public use, Shouse examined survey information for 1985 in order to determine the recreational carrying capacity of the river. Shouse, in his study, and later FWP in the 1988 Management Plan, determined the carrying capacity of the river based almost entirely upon

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[6] Ibid, 1-5.

[7] FWP, Smith River Management Plan, 1988: Camp Baker Access Site to Eden Bridge (Great Falls: FWP, 1988), 1-60.

floater opinions in 1985 as to whether or not floaters felt "crowded" on any given day. On the peak launch day for 1985, 158 people put-in on the Smith River. On this day 40-45% of the floaters complained they felt overcrowded. Shouse arbitrarily determined that 40-45% represented too many people complaining, and that therefore the carrying capacity was exceeded on those days. Shouse noted that on the weekend of June 14-16, 1985, with approximately 100 people putting in, 14-19% of the floaters complained of overcrowding. Shouse again arbitrarily determined that this was an acceptable level of floater complaint, indicating a number which did not exceed the carrying capacity of the river. FWP agreed completely, and from 1986, the date of the completion of Shouse's report, to 1994, the carrying capacity of the river was established at 100 people putting in on any given day.[8]

It was a magical number in more ways than one. It is not much of an exaggeration to say that one survey and one man's opinion of acceptable limits determined the carrying capacity of Montana's most important recreational river from 1986-1994. In the years to come, other surveys were conducted which did not seem to contradict the results of the original survey, and agency employees later agreed with Shouse's number setting 100 floaters a day as the carrying capacity of the river. These surveys and professional

[8] Shouse, 11.

opinions were all fundamentally influenced by the precedent of that first survey and Shouse's first opinion. The number itself, the whole concept of carrying capacity based on floater opinion regarding minimum acceptable levels of solitude, was so subjective that no reasonably concrete means of quantifying the river's carrying capacity could ever be obtained. "One hundred" was accepted mostly because it was convenient.[9]

Of course, the most important criticism is that the Smith River's recreational carrying capacity was viewed as a function of floater opinion regarding solitude and not as a function of other factors, such as ecological limits for example. Other references were made in both Shouse's report and the Management Plan of 1988 regarding various limits to the river's use, including the number of boat camps available, the fact that there was no intermediate access points between Camp Baker and Eden Bridge, the complaints of the landowners, and vague references to the environmental limits of the river itself, but, ultimately, for FWP, none of these determined the recreational carrying capacity of the river. To the degree that these factors were even figured into the equation, Shouse and FWP concluded, without any evidence, that they "seemed to agree that 100 people launching a day is a practical capacity." The implication

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[9] FWP, "Response to Public Comments," responses to comments made at the Smith River Management Plan Public Meeting, Helena, Montana, 10 May, 1988.

was that it was a practical capacity in all respects, including ecological ones.[10]

Ironically, carrying capacity is an environmental term, but significantly for the future and health of the river, FWP based its management of the Smith upon a cultural carrying capacity determined by opinions of solitude, which had nothing at all to do with the physical limits of the environment. While FWP continued to monitor the health of the sports fishery, despite the heavy pressure, recreational fishing on the Smith River was not determined to be a limiting factor in establishing carrying capacity. No studies were even undertaken to determine how wildlife was affected by recreation. Unlike what is required of management plans for the federal lands, no environmental impact statement was made for FWP's 1988 Management Plan of the Smith River. For the Smith, carrying capacity was a function of cultural perception, not environmental limitations.[11]

Furthermore, both Shouse and FWP claimed that because floater opinion determined carrying capacity, and opinions vary considerably based upon time, circumstance, and changes in cultural perception, that in effect, "there is no finite carrying capacity for the river." The Management Plan therefore recommended that the capacity of the river, as

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[10] Shouse, 21-22.

[11] FWP, Smith River Management Plan of 1988, 1-66.

based upon floater opinion, should be periodically re-evaluated and changed as necessary. Theoretically, this meant that if floaters eventually decided that if a thousand people putting in a day, or 10,000, was acceptable to their notions of solitude, then that would be an appropriate new carrying capacity. "There is no finite carrying capacity for the river."[12]

The development of the Management Plan of 1988 included the involvement of FWP, the USFS staff of the Lewis and Clark National Forest, and the Ad-Hoc Committee, but it was primarily a product of Joel Shouse's Smith River Study of 1986. The 1988 Management Plan approved of every major management recommendation of Shouse's study.[13] The final draft of the plan was offered for public review through written comments accepted at the Great Falls FWP office, and public meetings held in Great Falls and Helena, although most of those who participated were landowners and outfitters who had vested interests in the river. The general public had little influence at all in the way that the river was to be managed.[14]

Echoing the three objectives of Shouse's Smith River study, the stated goal of the Smith River Management Plan of

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[12] Ibid, 5.

[13] "Smith River Landowners To Meet," Great Falls Tribune, 6 Feb. 1986, B2.

[14] Bert Lindler, "Comment Sought On Smith Plan," Great Falls Tribune, 8 May 1988, A2.

1988 was to "identify ways of providing continued public recreational use and enjoyment of the Smith River waterway, consistent with the river's capacity to maintain this use; to seek ways to minimize conflicts between river users and private landowners; and to protect the integrity of the river's water and canyon resources for future generations to enjoy." Again, by "capacity," FWP meant floater opinions regarding solitude. Although conflict resolution was a stated goal of the plan, no specific management plans were proposed to address conflicts aside from continuing to support the cooperative forum of the Ad Hoc Committee. Finally, as in Shouse's report, protecting the river itself, specifically the water quality and the scenic integrity of the river corridor, was largely dismissed as unimportant because no major threats to the river were perceived. Furthermore, the recommendations which were made to preserve the corridor proved to be ineffective.[15]

As it had been in the early 1970s, one of the first concerns voiced by FWP in its Management Plan was the question of the agency's authority to manage the river. Earlier legislative action resulting from the Governor's Council's Report gave FWP the general authority to manage the river for the public welfare, but it was determined that this authority did not extend to the charging of fees and the limiting of use on the river, two essential management

[15] FWP, Smith River Management Plan of 1988, 1-3.

stages outlined in the Management Plan. Therefore, FWP began an effort to obtain such authority through the state legislature, which was granted the next session with the passage of the Smith River Management Act of 1989. One of the most important themes in the history of the management of the river has been the steady acquisition of power by the Montana State Department of FWP to control the use of the Smith River.[16]

Shouse's report identified five progressive stages of management on the Smith River to be implemented as river use increased. These five stages recommended by Shouse where categorically adopted by FWP's Management Plan for 1988 and formed the essential management program on the Smith from 1988-1994. It was determined that floating use for each previous season would be evaluated each year, and based upon the level of that use, by March 1 it would be determined if management would advance to the next stage or not.

The management stages for the Smith River outlined by Shouse and adopted by FWP were as follows:

Stage 1 was the present stage of management in 1988, which had been in effect throughout most of the 1980s. It included voluntary registration, the seasonal river ranger, floater surveys and information, voluntary boat camp declaration at Camp Baker, the sign program, the printed

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[16] FWP, "Draft of the 1994 Smith River Management Plan," by Doug Haberman (Great Falls: FWP, 1994), 4-14.

river guide, the low water advisory, the creel survey, and the Ad Hoc Committee.[17]

Stage 2 was to be implemented when full-time interviewers were not available at Eden Bridge and to ease floaters into a registration/permit system. It continued the voluntary reservation system but added at Camp Baker a mandatory registration by means of a self-issued float permit which incorporated a floater's log that was to be left at Eden Bridge.[18]

Stage 3 required mandatory reservations for a set number of permits for the peak float period from approximately Memorial Day to the 4th of July.

Stage 4 broadened the mandatory reservation system to the entire floating season.

Stage 5 would be initiated when the total user demand exceeded the total annual user permits. It would involve a competitive system for the allocation of a limited number of floater permits per season.

By these means, FWP established a progressive system whereby it could eventually limit the number of floaters on the river and manage those floaters to conform to the capacities of the boat camps.[19]

The basis of this management system was the concept of

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[17] FWP, Smith River Management Plan of 1988, 10-14.

[18] Ibid, 10-14.

[19] Ibid.

carrying capacity developed by Shouse and approved by FWP. About the only original addition FWP added to Shouse's analysis of carrying capacity was to declare that it would be based on the number of float parties per day, rather than the number of floaters per day. Still using 100 floaters per day as the guideline for the carrying capacity of the river, FWP simply divided that number by 6.5, the average size of a float party, to set the carrying capacity of the river to 15 float parties per day. Based on the size of the present campsites on the river, float party size was then limited to fifteen floaters. On the surface this makes sense, but a closer look reveals just how imprecise FWP's system for managing carrying capacity actually was. The system kept within the limits of the carrying capacity, 100 floaters putting in per day, only if the average number of floaters found in all fifteen float parties was less than seven people per party. However, because up to fifteen people could be allowed in each party, theoretically, anywhere up to 225 people could actually put-in on the Smith River per day, thereby exceeding FWP's own standard of carrying capacity by over 100%. Assuming that they understood the math, this potential loophole in their system of carrying capacity did not seem to disturb FWP too much, perhaps because they realized just how subjective their whole system for determining carrying capacity actually

was.[20]

Predictably, public reaction to the Management Plan of 1988 was mixed. Some observers, including Bert Lindler, a journalist for the Great Falls Tribune, who had been writing articles about the Smith River for over ten years, welcomed the Plan, and pointed to the benefits of good management practices in the past. He claimed that since FWP began actively managing the Smith River, recreational conditions had improved; good campsites had been developed, trespassing and vandalism had been reduced, and tensions between landowners and floaters had eased.[21] Gene Fopp, a landowner along the Smith, conceded that the problems of trespassing and vandalism had improved in recent years, although he felt that many problems remained.[22] Others agreed, including Montana Outdoors, which called management on the Smith a successful model of cooperative effort to protect the recreational resources of the river.[23] The voluntary reservation system endorsed as an immediate management tool in the Plan, met the approval of some thirty floaters, outfitters and landowners attending a public meeting in

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[20] Ibid, 5.

[21] Bert Lindler, "Smith River Floating Has Improved a Lot in the Past 10 Years," Great Falls Tribune, 10 July 1986, B2.

[22] Bert Lindler, "Voluntary Reservations Endorsed," Great Falls Tribune, 17 April 1986, C3.

[23] Dave Brooks, "The Smith River," Montana Outdoors, February 1988, 3-12.

Great Falls. Prophetically, one Great Falls resident who first floated the river forty-two years before said that FWP should be ready to impose mandatory limits in the near future.[24]

However, many of the user interests on the river were skeptical about the new Management Plan and its ability to resolve the long-standing problems associated with Smith River management. Landowners continued to resent what they felt were infringements on their private property rights by a conspiracy of big government and urban recreationists. They also continued to worry about the growing number of floaters and the need to identify them by issuing boat tags, so as to track and punish trespassers and vandals. Floaters didn't like the idea of being tagged, and continued to complain about cabins popping up along the Smith as a result of subdivisions.[25]

As the number of floaters increased, tensions between floaters and landowners mounted, as did landowner resentment toward FWP. "Our right to the river is bought and paid for, yours is through confiscation," one landowner yelled at both floaters and FWP representatives at a public meeting.[26] In the struggle for power on the Smith River, traditional land

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[24] Lindler, "Voluntary Reservations Endorsed," C3.

[25] Bert Lindler, "Landowners, Floaters Debate River Plan," Great Falls Tribune, 10 May 1988, 5A.

[26] Ibid.

use practitioners were being outflanked by the teeming hordes of floaters and the slick legal manipulations of government bureaucracy. As Camp Baker had once served as a military base for the removal of the Blackfeet from the valley to make way for the ranchers, it now seemed to be playing an ironically similar role. Only, if FWP was the cavalry and recreationists were the new breed of American settlers, it was the ranchers who were now the unfortunate Indians.

Public reaction to FWP's guidelines for establishing carrying capacity made it clear just how subjective that process actually was. Neale Streeks, a prominent outfitter, said he felt 100 people putting in per day were too many for a quality trip, and that 50 would be better.[27] Landowners pointed out the fallacies of establishing a carrying capacity based exclusively upon floater opinion. They made it clear that in their opinion, 100 floaters putting in per day was too many.[28] Other landowners raised the sensitive question of whether or not they or their guests would be regulated or even limited in their use of the river. The Management Plan of 1988 had not addressed this controversial issue.[29]

The late 1980s also saw the development of a number of

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[27] Ibid.

[28] Lindler, "Voluntary Reservations Endorsed," C3.

[29] FWP, "Response to Public Comments."

additional issues in the management of the Smith River, some of which were addressed by the Management Plan of 1988. Perhaps foremost amongst these was this: if limitations were to be placed on the use of the Smith River, how would FWP manage outfitter use differently from other recreational use? This too was a question of power. Outfitters generally provided recreational services for wealthy out-of-staters. Non-outfitter recreational use of the river drew generally from a local, middle-class population from places like Great Falls and Helena. FWP had to decide how it would appropriate the recreational resources of the river between these two groups.

First, the Management Plan of 1988 determined that it was desirable to have some commercial outfitting on the Smith River. Their justification was that not all people had the specialized equipment necessary to make this type of float and that not all people had the skills and experience to make a float of this duration, and that therefore outfitters were necessary to service those people.[30] How and whether the allocation of such outfitter use would differ from other recreational use was the subject of Shouse's report, which also recognized that this issue had generated tremendous controversy on other rivers, creating conflict between competing outfitters and between outfitters and the general floating public. For the time being, FWP,

[30] FWP, Smith River Management Plan of 1988, 7-8.

in the Management Plan of 1988, simply decided that commercial outfitting was desirable, but temporarily put off the sticky question of how to manage for that type of recreation until they had better analyzed public opinion on the subject.[31]

And the recreating public had strong opinions. At one public meeting, floaters raised concerns over whether or not outfitters would receive "special privileges" as they put it.[32] The generally accurate perception amongst most recreational floaters on the river was that outfitters catered to wealthy, out-of-state clients, and that if they were granted special floating allocations within a system of floating limits, that it would be at the expense of the general floating public.[33]

At least one Montana floater took this line of thinking one step further and suggested that if in the future some sort of permit system was instituted as a result of the recommendations of the Management Plan of 1988 that, "Montana natives be given preference over non-native visitors."[34] "Native" being an imprecise term, apparently, this floater meant that present Montana residents receive

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[31] Shouse, 25.

[32] FWP, "Response to Public Comments."

[33] Bert Lindler, "Floater Flap: Smith River Outfitters Want State to Keep Deal," Great Falls Tribune, 26 Oct. 1991, B1.

[34] FWP, "Response to Public Comments."

special privileges. It is unlikely that he was referring exclusively to the ranchers who had lived in the valley for the last hundred years, or to the Native American populations that had inhabited the valley before that.

By the late 1980s many Montana outdoor recreationists on the Smith wanted to reserve that river's use for themselves, restricting its use by the outfitter clientele comprised only of recreationists who could afford their expensive services. In this way, they were similar to the ranchers on the river who wanted to reserve the river's resources for themselves and their way of life, restricting use by all recreationists. Or like the Blackfeet who wanted to preserve their use of the river from the ranchers and other American settlers. Or the Shoshone who wanted to restrict the Blackfeet. Or the Flathead who wanted to restrict the Shoshone. And on and on. Much of the environmental history of the Smith River revolves around not only how the resources of the river were defined, but what cultural group controlled those resources. By 1994 the question of outfitted use vs. non-outfitted use had not yet been entirely resolved. Nor, for that matter, had the issue of recreational use vs. agricultural use. FWP continued its delicate juggling routine in an attempt to satisfy all users.

The Management Plan of 1988 was significant for a number of reasons. First, it led to increased management of

the Smith River by FWP and established a concept of carrying capacity based upon floater opinions regarding solitude. The Plan also proposed greater management for the Smith River than existed for any river in the state, and although a system for limiting use had been created, the immediate result of the Management Plan was to dramatically increase the recreational use of the river. From 1988 to 1993 recreational use of the river nearly tripled, but not only were recreationists increasingly crowded on the Smith, they were also having to adjust to increasingly restrictive management practices.[35]

The Montana State Department of Fish, Wildlife, and Parks was the clearest beneficiary of the Smith River Management Plan of 1988. Within the department the plan created additional staff positions, including a full time parks manager whose sole primary responsibility was the management of the Smith River. The Smith would continue to be managed through Region Four of FWP in Great Falls, and aside from the Parks Manager, an additional seasonal river ranger was added to the Smith River in 1991 to assist with the new management stages called for by the Plan. The Department's land personnel, located at the state headquarters in Helena, provided additional management support. The management of the Smith River became one of

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[35] FWP, Smith River Management Plan of 1988, 23-24.

the greatest responsibilities of the entire state agency.[36] Finally, in order to provide for the management policies required by the Management Plan of 1988, FWP sought additional funding from the state legislature, and, as will be seen, from other sources. Eventually, its budget increased dramatically as a result of its management efforts on the Smith.[37]

[36] Ibid, 20-22.

[37] Ibid, 23-24.

# CHAPTER 12

## The Management Plan of Realized, 1989-1994

In 1989 the Montana State Legislature passed the Smith River Management Act of 1989 that gave FWP the authority it needed to begin implementing the management stages of the Management Plan of 1988. The act also, somewhat belatedly, designated FWP as the primary management authority for the Smith River. Exercising this authority with alacrity, FWP placed unprecedented restrictions on the use of the Smith River, while at the same time continuing to accommodate that use. By 1994, FWP had advanced rapidly through all five stages of management, although it did not follow the progression exactly as it had outlined in the Management Plan. FWP even went beyond the guidelines of the Plan by introducing a fee system for use of the Smith. It was the first of its kind in the state.[1]

The 1988 Management Plan discussed the need to limit the use of the Smith River, but it didn't actually do it. In that same year 1,462 floaters rode the river from Camp Baker to Eden Bridge. By 1993, that number had risen to 3,400. However, the Plan did increase FWP's responsibilities and its budget for the Smith River. FWP's

[1] FWP, "Draft of the 1994 Smith River Management Plan," by Doug Haberman (Great Falls: FWP, 1994), 4-14.

budget for the Smith River rose from approximately ten thousand dollars annually from 1980 to 1988, to over seventy thousand dollars annually beginning with the 1993 float season.[2]

In 1988, while FWP drafted its first management plan and contemplated visions of future management on the Smith, the river itself, for one last season, was managed much as it had been since 1980. Listed in the Management Plan as "Stage 1," the management of the Smith River for 1988 included a voluntary registration system, the seasonal river ranger, floater surveys and information, voluntary boat camp declaration at Camp Baker, the sign program, the printed river guide, the low water advisory, the creel survey, and the Ad Hoc Committee.[3]

However, river management was riding to the brink of unprecedented levels of intensity and innovation. Although not specifically mentioned in the Management Plan, as early as 1988 FWP entertained the idea of charging user fees for the river. During one of the public meetings, FWP casually suggested that a "voluntary" floater fee might be requested at Camp Baker, which would be earmarked to acquire private land and conservation easements along the river. It is likely that as early as 1988, planners within the Department

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[2] Ibid.

[3] FWP, Smith River Management Plan of 1988: Camp Baker Access Site to Eden Bridge (Great Falls: FWP, 1988), 10-14.

considered eventually charging mandatory fees for the use of the river. If they did consider user fees that early, they determined that it would be prudent not to introduce the idea in the Management Plan of 1988, but to spring it upon the public later, with more subtlety.[4]

In 1989, management on the Smith River continued at Stage 1, but FWP began preparing for increased management for the following year. In preparation for increased management and the addition of one more river ranger to the river, who arrived in 1992, a basement was added to the river ranger cabin at Camp Baker, and the facilities were significantly improved.[5]

Predictably, because FWP continued to accommodate new users without implementing restrictions to limit their numbers, the 1989 season hosted a record number of floaters on the Smith River, 2,395. This prompted FWP to send out surveys to floaters and outfitters to determine how receptive they would be to additional restrictions. Public meetings were scheduled for January of 1990 for the same reason. By the end of that month it was clear that the 1990 season would herald even newer regulations and restrictions for the Smith.[6]

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[4] FWP, "Response to Public Comments," Smith River Management Plan Public Meeting (Helena: FWP, 1988).

[5] FWP, Smith River Management Plan of 1988, 10-14.

[6] Bert Lindler, "Heavy Use May Lead To More Limits On Smith," Great Falls Tribune, 2 Nov. 1989, B1.

The total number of surveys mailed out was 560. Floaters were asked what they thought of mandatory registration, identification tags for their float craft, the possibility of paying fees, and the possibility of additional access to the river to allow for shorter trips.[7] With over half of the surveys returned, respondents were surprisingly in favor of fees (76%), and mandatory reservations (77%), but only 40% favored limiting use by placing a cap on the number of floaters putting-in on the river each day. An overwhelming 89% opposed an additional access site to the river, while 59% felt that there were too many people on the river now. 65% of those surveyed said that an additional river ranger was required on the Smith.[8]

The survey was clear in indicating that floaters would accept more regulations and restrictions in order to indirectly limit use of the river and increase management, but that most were not yet ready to set direct limits on the number of floaters putting in per day. The dilemma that the floaters faced was that they didn't want to feel crowded on the river, but neither did they want to face the possibility that they might be denied the use of the river altogether. It was becoming increasingly clear that they couldn't have

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[7] Lindler, "Smith River Topic of Survey," Great Falls Tribune, 16 Jan. 1990, B1.

[8] Bert Lindler, "Survey: Smith River Floaters Willing to Pay," Great Falls Tribune, 13 March 1990, A3.

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The results of the survey also revealed the continuing differences in perception in river use and management between the landowners and the recreational floaters. Not surprisingly, 80% of landowners felt that float craft should have identification tags, while less than half of the floaters agreed. Just over half of the landowners said littering and trespassing were frequent problems, while only 16% of floaters agreed.[9]

For the 1990 season, FWP jumped to Stage 2 as outlined in the Management Plan of the Smith River, which required mandatory registration.[10] From 1990 on, every float group had to sign in with the river ranger at Camp Baker before being allowed to float. It was a measured step toward greater control. This necessarily funneled floaters through the registration system at Camp Baker, forbidding them to put in at any other access area, which indirectly limited use because only those parties prepared to float the full sixty-one miles between Camp Baker and Eden Bridge could use the river. The only individuals excluded from this rule were private landowners along the river and their immediate families, who could put in at their properties. Forcing floaters to register at Camp Baker also provided FWP, through the river ranger, the opportunity to inform each

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[9] Ibid.

[10] FWP, Smith River Management Plan of 1988, 10-14.

float group of the rules and regulations of the river, like reminding them not to trespass, and that aluminum beer cans thrown into the fire do not burn up.[11]

Along with the mandatory registration at Camp Baker, floaters were encouraged to continue to make voluntary reservations through the Great Falls office. Through an informal system of voluntary reservations, FWP informed floaters of heavy use days and campsite availability, allowing the more flexible floaters the opportunity to choose less crowded launch dates.[12] A fee system was further considered, although not instituted, in 1990. The Ad Hoc Committee debated several possible alternatives, including a $15 fee for each private floater and $30 fee for each client led by an outfitter, with fees being waived for children and educational groups. Several inherent difficulties were identified in establishing a fee system, including whether or not to charge private landowners who wanted to float the river, and determining a fair system of charging fees for outfitters and their clients versus private floaters. Apparently for FWP, not all recreational user groups were created equal.[13]

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[11] Bert Lindler, "Smith River Floaters Will Have to Sign in this Summer," Great Falls Tribune, 6 April 1990, B1.

[12] Bert Lindler, "Smith River Floaters, Sign In Please," Great Falls Tribune, 16 May 1990, C1.

[13] Bert Lindler, "Smith River Floaters may Face New Fees Next Summer," Great Falls Tribune, 27 Dec. 1990, D1.

Finally, beginning in 1990 the registration cards filled out at Camp Baker doubled as boat identification cards to be affixed to floater craft. They were accompanied by voluntary float logs.[14] These float logs replaced the floater questionnaires, and were supposed to be turned in to the Ramblin Sams volunteers who camped for the entire season at the Eden Bridge take-out site, assisting FWP with that end of the river's management.[15]

In 1991, mandatory registration continued at Camp Baker, but mandatory reservations or direct use limits were not initiated. However, FWP did begin to collect mandatory float fees in 1991, a significant management innovation that had not been mentioned in the Management Plan of 1988. In addition, while the number of float groups was not yet limited, the size of each float group was limited to fifteen individuals, which according to FWP was the maximum capacity of the individual campsites along the river. Of course, this was not an effective limit because groups larger than fifteen could simply break up into smaller groups and camp at separate, but probably adjacent, campsites, assuming that they had enough rafts or canoes for such a division. The voluntary campsite declaration board at Camp Baker was also extended to include all campsites along the river, so that

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[14] "The Magnificent Smith River," Fish Line: Reading the Waters, July 1990, 1-2.

[15] "Rambling Sams RV Club Sets Campout," Great Falls Tribune, 10 April 1986, B2.

now, floaters could better plan on which campsites they would stay at. FWP also began sending copies of the seasonal newsletter, "The Smith River News" to floaters, outfitters, and landowners in 1991.[16]

The most important management element introduced in 1991, was, of course, the mandatory fees, the first of their kind in the state. For the time being, fees in 1991 were based upon the recommendations of the Ad Hoc Committee in 1990, $15 per private floater, and $30 for each outfitted client.[17] Fees were waived for educational groups and for children under the age of 12.[18] According to previous surveys and editorials in the Great Falls Tribune, floaters generally accepted fees on the Smith River. This was due in part to the manner in which FWP approached the controversial question of fees. By administering surveys, speaking with the media, and holding public meetings, FWP successfully sold the idea that fees were necessary for quality management of the Smith. Most floaters agreed with the fee program, assuming they would be "getting their money's worth;" the river rangers and the developed campsites were

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[16] FWP, "Draft of the 1994 Smith River Management Plan," 4-8.

[17] "Smith Floaters Face Possible Fee," Great Falls Tribune, 31 Jan. 1991, B1.

[18] Mark Downey, "New User Fee Not Watering Down Use of Smith River," Great Falls Tribune, 2 June 1991, A1.

especially valued.[19] However, the charging of fees may have put the Smith River experience beyond the means of certain recreationists. A working man from Butte with a family of five now had to pay 75$ in fees, plus all the other contingent expenses of a three or four day float trip, a hefty expense not easily afforded by all.[20]

This year also saw the addition of another full-time seasonal river ranger on the river and the beginning of an effective and efficient system of river ranger patrol. While one river ranger remained at Camp Baker to collect fees, register floaters, and deliver a standard spiel about the rules and regulation of the river, the other ranger spent two nights and three days floating the river itself, visiting with floaters and landowners, maintaining the boat camps and the signs, and occasionally checking fishing licenses and enforcing fishing regulations. When the float patrol ended on the third day, the ranger picked up the float logs from the Ramblin Sams at Eden Bridge, checked in at the Great Falls office of FWP, and then drove back to Camp Baker. Every eight days, a ranger had four days off. Not a bad job.[21]

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[19] "Smith Floaters Should Pay to Travel Down Scenic River," editorial, Great Falls Tribune, 6 Feb. 1991, 4A.

[20] Scott McMillion, "A Bargain at Half the Price," Bozeman Daily Chronicle, 10 June 1993, 17.

[21] Downey, "New User Fee Not Watering Down Use of Smith River," A1.

Following the identical and successful strategy that had preceded floater fees, in 1991 FWP sent out surveys questioning floaters as to how use could be best limited on the Smith. Tough questions were asked, like how many floaters should be allowed to put in on the river daily, and what percentage should be outfitted clients as opposed to private floaters.[22]

In 1992, FWP did not advance to a new stage in river management by setting limits to river use, but the collection of fees, mandatory registration, and the voluntary registration system was continued. FWP did move closer to general user limits by setting limits for outfitter use on the Smith. The total number of individual outfitters allowed to operate commercially on the river was set at twenty, with a limit of two outfitter launches per day. By limiting outfitter use, FWP made the judgement that non-outfitted recreationists had a higher claim to the use of the river than outfitted recreationists. This decision reflected the interests of the Department's constituency, the middle-class Montana residents who paid the taxes that supported the State Department of FWP.[23]

In 1992 the environment reminded recreationists and FWP recreation managers just how dependent their activities were

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[22] Bert Lindler, "Number of Smith River Floaters Questioned," Great Falls Tribune, 15 Aug. 1991, B1.

[23] FWP, "Draft of the 1994 Smith River Management Plan," 4-8.

on environmental cooperation. The year brought drought, and the lack of water resulted in the lowest recorded streamflows on the Smith River in over a decade. For much of the normal float season the streamflow was well below 100 cfa, the minimum recommended level for recreational floating on the river. Subsequently, only 754 floaters went down the Smith in 1992, the lowest number since the 1970s. If river management failed to restrict floating on the Smith so far, the environment suffered from no such impotency. In order to better measure streamflow in the future, a gauge was installed below Sheep Creek across from Camp Baker. Now FWP could track streamflow at both Eden Bridge and Camp Baker. In 1992, FWP added new utilities to the Camp Baker ranger cabin and the Eden Bridge Ramblin Sams host site, then hunkered down and waited for abundant snowpack to bring greater number of floaters in 1993, which it did in record numbers.[24]

In 1993, FWP moved to Stage 5, the final stage outlined in the Management Plan of 1988, which required mandatory reservations be made through the Great Falls office and set floater limits at 9 float group launches per day, with a maximum of 15 people per float group, or a maximum of 135 floaters putting in on the river each day. Rather than developing a competitive permit system, or an elaborate allocation system for the limited number of daily launches,

[24] Ibid.

FWP simply started taking phone reservations through the Great Falls office beginning in February of 1993, on a first come first serve basis. The job of the parks manager whose responsibility was the Smith River came to resemble that of a hotel reservation operator. From February to July, he spent a good part of each day on the phone with floaters inquiring about what days were still available. Although most all launch days for 1993 were reserved well before the start of the season, last minute cancellations were common. If these people were courteous enough to inform the Great Falls office of their cancellation, then their launch date could be allocated to someone else. Floaters always had the option of appearing at Camp Baker in hopes that someone with a reservation didn't show up. In short, the Smith River came to resemble something like the Motel 6, and the Smith River ranger up at cabin could have adopted the motto, "We'll keep the light on for you."[25]

Furthermore, the number of outfitters allowed to operate on the Smith was decreased form twenty to sixteen, and the amount in fees outfitters were charged rose to $65 per client, 10% of which went directly into a new Corridor Enhancement Account, a fund reserved for obtaining additional public land along the river.[26] Floaters registering at Camp Baker also had to declare their

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[25] McMillion, "A Bargain at Half the Price," 17.

[26] FWP, "Draft of the 1994 Smith River Management Plan," 4-8.

campsites from those still available on the campsite declaration board before launching. Campsite reservation also worked upon a first come first serve basis. By 1993 there were 16 separate boat camps along the river and each boat camp had up to four separate campsites. The total number of campsites by 1993 was fifty-seven. In 1993 land exchanges between the Helena National Forest and the Galt Ranch resulted in an additional small section of public land along the river, on which additional boat camps were to be developed.[27]

For the 1994 season, the management policies initiated in 1993 were continued, with some additional expansions and clarifications. Landowners along the river and their immediate family were required to register with Camp Baker, but they were exempted from the use limits. In part due to funds generated by the user fees, FWP was able to purchase the Eden Bridge take-out site which had previously been leased.[28] These funds also allowed FWP to hire an intern from the University of Montana for the summer of 1994 to research the river's history. FWP's intention was to increase the cultural appreciation of the Smith River, thereby improving the overall recreational experience for floaters. It is also possible that they anticipated an interpretive history that would glorify the river's ranching

[27] Ibid.

[28] Ibid.

past, thereby appeasing ranchers along the river who, as a group, were still opposed to recreation on the river. They did not anticipate a critical review of their management policies.

Feedback from floaters seemed to confirm their acceptance of the fee system, and their recognition and appreciation of the services to which it was contributing.[29] In 1994, with most all of the management recommendations in the Management Plan of 1988 met, FWP began work on a new management plan that would guide the department into the future.[30]

FWP's management of the Smith River from 1988 to 1994 set an example of recreation management for the state and for the nation. The recreational management of public use of whitewater rivers in the Western U.S. has primarily been the job of federal agencies like the National Park Service, the U.S. Forest Service, and the Bureau of Land Management. States have seldom had the resources or the desire to assume the role of recreation managers for rivers, and, as of 1988, there were very few instances of state management of public use on rivers: a portion of the Deschute River in Oregon, several streams in California, and, of course, since 1980,

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[29] Gary Woodard, "Float Down the Smith Offers Beautiful Views," Billings Gazette, 5 June, 1994, C1.

[30] FWP, "Draft of the 1994 Smith River Management Plan," 15-26.

the Smith River of Montana.[31]

In Montana, few rivers were being managed at all by 1988, and amongst those, the Smith River was the most intensely managed, and the only state-managed river in the state. The USFS managed for public use on two segments of the North Fork of the Flathead River, two segments of the South Fork of the Flathead, and two segments of the Middle Fork of the Flathead. The only other federally managed stream in Montana was the Upper Missouri Wild and Scenic River from Ft. Benton to U.S. Highway 191 at the head of Ft. Peck Reservoir, managed by the BLM. In neither of the two federally-managed rivers did management approach the intensity of management realized on the Smith between 1988 and 1994.[32]

Nationwide, all but a few of the federally managed rivers were adjoined by lands that were 100% under the control of the agency that was managing the floating. This contrasted with the less than 20% of the Smith River frontage which was public land, and the majority of that was owned by the USFS, not by the state of Montana. When, in 1993, FWP placed limits on the number of floaters it allowed to launch on the Smith on any given day, it became the first river in the state to do so, and joined the less than forty rivers nationwide with similar restrictions. The Smith was

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[31] Shouse, 25.

[32] Ibid.

now included amongst the ranks of the most heavily managed recreational rivers in the nation, like the Selway and the Colorado, and it was arguably the most managed state-controlled recreational river in the nation.[33]

The Smith River was the testing ground for most river recreational firsts in Montana, and as such sets a precedent for the future of river management in the state, as well as providing an example of state recreational river management for the nation.[34] In 1980, the Smith River had become the only river in Montana to be patrolled regularly by a river ranger, and by 1994, not only was the Smith still the only river in the state with a full-time seasonal river ranger, but as of 1991, it employed two full-time seasonal river rangers. The 1991 float season for the Smith River was also the first time floaters had ever been charged a fee to float a river in the state of Montana.[35] Finally, in 1993, the Smith River became the first in the state to restrict the daily number of both private and outfitted floaters.[36]

By 1994, the Smith River was by far the most managed river in the state, if not the region. The year before,

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[33] Steve Moore, "Pristine Montana River Moving Into Big Leagues," Great Falls Tribune, 20 Jan. 1991, C1.

[34] Downey, "New User Fee Not Watering Down Use of Smith River," A1.

[35] "Smith Floaters Face Possible Fee," Great Falls Tribune, 31 Jan. 1991, B.

[36] "Fish, Wildlife, and Parks, May Limit Floating on Smith River," Great Falls Tribune, 13 Sep. 1991.

recreational use on the river had risen to a record high of 3,400 floaters on what is generally considered a river with a short float season, from mid-April to mid-July. Throughout the 1990s the river continued to attract national attention in a number of magazines, including Outdoor Life[37] and Montana Magazine.[38] Herein lies the paradox of management and recreation on the Smith River: the increase in the river's popularity and the increase in the river's management were leading to a decrease in the qualitative float experience for the individual floater.

By 1994 there were two river rangers, mandatory reservations, mandatory registration, a mandatory boat camp declaration board for 57 campsites, signs, special fishing regulations, people everywhere, campsites without firewood, and rules from "don't throw your cans into the fire," to "defecate at least 150 feet away from the river." FWP was in the midst of considering even more regulations, like assigning campsites rather than allowing floaters to choose their own.[39] Outfitters, particularly, faced a barrage of red tape, because they were required to have permits from both the USFS and FWP, and FWP kept changing its mind about how much outfitters should be charged and how many launch

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[37] Ed Wolf, "Float Fisherman's Eden," Outdoor Life, July 1989, 96-97.

[38] Lisa Bay, "Of Brie, and the River," Montana Magazine, April 1993, 24-27.

[39] FWP, "Response to Public Comments."

days they should be guaranteed.[40] One editorial of a local newspaper complained, in a rhyming patriotic reference, "No more regulation without justification!"[41] Other articles groaned about the number of regulations and the intensity of management, but admitted that they were necessary to preserving the river from hordes of floaters.[42]

By the end of 1993, many floaters were complaining of the crowded, hectic conditions on the river, what one journalist called, "the riotous mélange of canoes, rafts, drift boats, bikinis, halter tops, and tipsy aggregations of beer-sodden yahoos."[43] It was more than a little ironic that for some, the float experience was becoming more aggravating than relaxing. Another journalist referred to his float with references to "those vulgar fisherman with more beer than sense, that miserable golf course, that god-awful subdivision," where, "commercial outfitters and recreational boaters turn the floats into bitter races for the best campsites," and "landowners squeal over trespassing rights." In addition, heavy use was resulting in campsites beaten bare to the ground and scant firewood,

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[40] "Smith River Float Trips Topic For Three Meetings," Great Falls Tribune, 10 April 198, C1.

[41] "No More Regulation Without Justification," editorial, Great Falls Tribune, 28 Oct. 1991, 4A.

[42] William E. Brock, "Smith Sojourn Smoothes Edges of Hectic Lives," Great Falls Tribune, 27 May 1993, D1.

[43] John Holt, "Montana's Smith River," Fly Fisherman, Oct. 1993, 30-33.

with litter, fire scars, and maimed trees common. The improved outdoor recreation ethic was being offset by sheer numbers. At the end of 1994, the Smith River was suffering from that increasingly common outdoor recreational malady of "being loved to death."[44] For many recreationists, the river no longer provided the quality outdoor recreational experience that it once had.[45]

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[44] "The Little River With a Big Reputation," The Daily Inter Lake, 16 June 1994, C1.

[45] Eric Wilste, "Keeping the Smith Special, Bozeman Daily Chronicle, 24 April 1986, B13.

# CHAPTER 13

## Control and Environmental Deterioration

When the Montana Department of Fish and Game submitted its Smith River Study Proposal of 1970 to the state legislature it established management objectives that formed the foundation of its policies for the Smith River until at least 1994. The first of those objectives was for Fish and Game to assert its authority to manage for recreation on the Smith. Most importantly, this meant overcoming claims by private landowners that the river was private property, a point that was all the more crucial considering that private landowners have, since the late 19th century, controlled over 80% of the land bordering the river. Fish and Game overcame these claims by having the river declared navigable by the state legislature, which gave the state the legal right to manage and use the river for commerce and, apparently, recreation.[1]

In addition to the declaration of the river as navigable, and the passage of the Stream Access Law in the 1980s that further accelerated the erosion of the rights of private landowners, FWP initiated an aggressive policy of

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[1] Montana, Governor's Council on Natural Resources and Development, The Smith River An Opportunity for Quality: Report to Governor Forrest H. Anderson and the 42nd Montana Legislative Assembly (Helena: FWP, 1970), 14.

attempting to purchase or otherwise obtain rights to development along the Smith River corridor through land exchanges, conservation easements, leases, and other options.[2] It was through this policy, as well as the agency's initiative, that FWP achieved a corollary goal by asserting its position as the preeminent land management agency on the Smith over the potentially competitive claims of the USFS and the BLM. By the early 1980s it was clear that FWP had overcome private landowner opposition to recreation on the Smith, and had preempted the USFS and the BLM.[3]

Despite continuing conflicts between user and management interests, particularly between private landowners and recreationists, FWP sincerely pursued cooperative management on the Smith that at least had the appearance of being considerate of the various interests. The Ad Hoc Committee, established in 1984, was an management advisory group comprised of landowners, outfitters, recreationists, and representatives from various land management agencies, and it was the primary agent of cooperative management.[4] However, FWP set the management

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[2] Sue O'Connell, "Suit Challenges Stream Access," Great Falls Tribune, 16 June 1985, A2.

[3] Joel Shouse, The Smith River Study, report prepared for FWP (Bozeman: Consulting Services, 1986), 4.

[4] "Stream Access: Smith River Landowners Discuss Their Concerns with Recreationists," Great Falls Tribune, 20 May 1985, B2.

agenda and, ultimately, retained control of all important management decisions involving the Smith.[5]

As FWP maneuvered to attain authority on the Smith River it pursued its primary management objective, which was to increase outdoor recreation on the river, and thereby increase its own authority, budget, and responsibilities as a land management agency.[6] In this capacity, FWP was not unlike a private industry seeking more customers for its product. However, if the Smith River was a service that FWP was trying to sell to recreationists, there were limits it had to observe other than just market demand. First, FWP could not afford to antagonize the private landowners too much. Ranchers formed a powerful political lobby in Montana, and FWP recognized that they required the tacit cooperation of these landowners, at least until they could obtain greater property rights along the river. Second, the recreational service FWP was selling deteriorated with use, the more users the more regulations, and the less solitude, fish, game, adventure, and scenic beauty. This meant that FWP eventually had to limit the recreational use of the river.

In an attempt to asses the limits of the sport fish and

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[5] FWP, Smith River Management Plan of 1988: Camp Baker Access Site to Eden Bridge (Great Falls: FWP, 1988), 13.

[6] As Donald Worster writes, "The first law of bureaucracy is to survive," Wealth of Nature: Environmental History and the Ecological Imagination (New York: Univ. of Oxford Press, 1993), 76.

game of the river, considered crucial to recreational interests, Fish and Game completed a resource inventory in 1973. The results of this inventory made it clear that in the years to come FWP would manage for the purely recreational natural resources of the river, primarily the sport fisheries, and what the department would later call, "the scenic integrity of the viewshed." In managing for the sport fisheries, FWP stocked non-native trout, established special fishing regulations for the Smith River corridor in 1985, and acknowledged the need to protect the water quality (although they didn't actually do so).[7] At no time between 1970 and 1994, did FWP manage the Smith River in a manner that was specifically designed to preserve, restore, or maintain its natural ecology. Its management policies have always been to manage for the recreational resources of the river, and any ecological management that has occurred has only been incidental to the recreational management. Here, the Management Plan of 1988 is particularly illustrative.[8]

The Management Plan of 1988 was most significant because it established a progressive strategy for managing the Smith River, which would eventually limit its recreational use. It defined the river's carrying capacity in terms of solitude, based upon floater opinions and not

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[7] Fish and Game, Environmental and Information Division, Smith River Drainage Inventory and Planning Investigation, (Great Falls: Fish and Game, 1973), 2-8, 39-41, 75-76, 105-107.

[8] FWP, The Smith River Management Plan of 1988, 3-23.

upon the physical carrying capacity of the river's ecology to resist change or deterioration, a recent recreational concept amongst more progressive land management agencies like the USFS known as the "Limits of Acceptable Change (LAC)."[9]

Managing the natural resources of the Smith River was, at best, a secondary goal of the Management Plan of 1988. The Plan defined this goal as follows, "to protect and preserve water quality and quantity, and the scenic integrity of the river canyon for the enjoyment of future recreationists."[10] Here, again, FWP made its management bias clear. Its interest in maintaining water quality was to preserve a healthy sports fishery comprised mostly of introduced brown and rainbow trout. Water quantity was important for both the health of the fishery and the extension of the float season.[11] Whereas, protecting the scenic integrity of the canyon had everything to do with the aesthetic pleasure floaters obtained in looking at trees and rocks, and nothing at all to do with preserving the river's native ecology.

The Management Plan of 1988 failed to assure the protection of even these narrow goals. As always, the major

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[9] Ibid, 4.

[10] Shouse, 19.

[11] "Smith River Too Low to Float," Billings Gazette, 17 May 1987, C2.

difficulty FWP faced in preserving the river was that so much property along the river remained in private ownership. Efforts made by FWP to obtain more property, or preserve private property along the river were mostly ineffective, because the policies themselves were not aggressive enough, because FWP lacked the financial resources, and because FWP refused to consider alternatives like a Wild and Scenic River designation that might have required FWP to surrender some of its responsibility for managing the Smith River to the USFS. Ironically, if not hypocritically, the property along the river that FWP did obtain from private owners or from other land management agencies was not preserved, but was rather developed for boat camp sites to accommodate more recreationists, which further impacted the river's environment. Ultimately, the agency refused to alter the fundamental nature of its management policies, which was to encourage the maximum manageable amount of recreation, allow for continued agricultural use along the river, and maintain its own leadership as the preeminent management agency. The Management Plan mostly excused FWP from developing tough management strategies to preserve the river by claiming that the threats to the river's quality, quantity, and scenic integrity were minimal.[12] FWP failed to protect even the sport fishery populations it managed so heavily for, and by the early 1990s sport fish populations began to fall under

[12] Shouse, 60-61.

the heavy impacts of recreational fishing.[13]

Management efforts to protect the river were therefore equally minimal, as the Management Plan of 1988 revealed. First, the plan defined different preservation objectives for different stretches of the river. In terms of these objectives, the river outside of the sixty-one mile stretch between Camp Baker and Eden Bridge was completely disregarded, which itself ignored the impacts that agricultural activities upriver from Camp Baker had on river quality and quantity. The first seven miles after Camp Baker and the last nine miles before Eden Bridge were given less priority than the central forty-six miles of the river canyon. In the former stretches, it was determined that logging within 500 feet of the river should be discouraged, but that haying and grazing were not objectionable. In the central portion of the canyon (river mile 7-52), FWP was more ambitious. Here, the goal was for FWP to secure the control of development rights within 500 feet of the river to prevent developments that would diminish the scenic integrity of the river. The Plan also expressed its desire to protect the viewshed to within one mile of the river on both sides.[14]

As modest as these objectives were, FWP could

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[13] Mark Downey, "New User Fee Not Watering Down Use of Smith River," Great Falls Tribune, 2 June 1991, A1.

[14] FWP, The Smith River Management Plan of 1988, 14-17.

accomplish little toward achieving them. Because neither the land around the river or the river itself were protected by federal designation through the Wilderness Act or the Wild and Scenic Rivers Act, the Forest Service could log, or allow the logging of any of its lands, or mining or grazing for that matter. As far as private property was concerned, landowners could log, graze, farm, subdivide, build cabins, or even golf courses right up to the edge of the river. It's no joke that one landowner actually did construct a private golf course on his property along the river in the shadow of some of the canyon's most spectacular geology.[15] FWP could only recommend that development be limited along the Smith River, it could not actually enforce those recommendations. Landowners could even justifiably claim that FWP was being hypocritical. Every parcel of land that FWP owned along the river was developed as a campsite for floaters. Not one was preserved simply to protect the river. How could FWP tell other landowners along the river not to develop when they themselves did?

The Management Plan identified a number of possible ways to secure development rights along the river. None of them were very effective. The most direct method was to purchase the necessary land outright, but the state had very limited funds to do this, and landowners, for the most part,

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[15] John Holt, "Montana's Smith River," Fly Fisherman, Oct. 1993, 30-33.

didn't want to sell their land along the river, particularly not to the state. What money the department had available to it, it attempted to purchase boat camps to accommodate recreationists, not land to preserve the environment of the river. Land exchanges were the next best option. This technique had been employed successfully by FWP to obtain land from the BLM and the USFS earlier in the decade, but again, landowners were unenthusiastic about land exchanges. Not only was land along the river the best in the valley, but landowners were bluntly opposed to increased public ownership of land along the river, because they felt it would lead to increased recreation on the river and to the further erosion of their property rights and way of life. They were opposed to land exchanges even more than land purchases.[16]

Conservation easements, donations, leases, and zoning were other possibilities proposed by FWP, and mostly opposed by private landowners. Conservation easements ran into the same problems as land purchases. As far as donations were concerned, FWP was simply being naive. Amongst these, leasing was the most palatable option for landowners, but because of the impermanent nature of a lease, it was the least desirable for FWP.[17] Strict zoning laws limiting development and subdivision along the river would have been

[16] Shouse, 50.

[17] Ibid, 48-51.

an excellent alternative had not the Cascade and Meagher County Commissioners represented landowners interests so loyally, and had not it been necessary for at least 60% of the landowners in a zoning district to sign a petition in order to change the zoning laws. As one landowner pointed out, "in light of financial problems in the agricultural community, I wouldn't want to say someone couldn't subdivide their land to make ends meet."[18] From 1988 to 1994, FWP did not acquire the control of development rights necessary to maintain the scenic integrity of the river, not to mention the river's ecological integrity.

Regarding the preservation of water quality and quantity in the Smith River, the Management Plan simply maintained that neither were seriously threatened. The Plan suggested that monitoring continue with the management objective being to maintain the water quality standards and water quantity averages observed from 1977-1986.[19] During the drought of 1992, FWP attempted to purchase water from the Newlan Creek Reservoir in the upper Smith River Valley in order to augment streamflows. However, lack of water right decree hampered these efforts. Once the purchased water passed the mouth of Newlan Creek, it was subject to diversion and disappeared. As with land along the river,

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[18] Lindler, "Smith River Development Eyed," Great Falls Tribune, 22 Feb. 1987, C1.

[19] FWP, Smith River Management Plan of 1988, 20-22.

FWP did not have rights to the water either, and as of 1994, nothing had been done to acquire them.[20]

So, despite the stated objective of preserving the Smith River for recreation, limited as it might have been, the Management Plan of 1988 included very little that helped achieve this objective during the next six years of management. Indeed, the objective was not be achieved at all, and as of 1994, the great majority of the river was still not protected.[21]

Furthermore, the environment of the river, which had deteriorated since the rise of recreation in the 1950s, actually continued to deteriorate following the Management Plan of 1988. Traditional land use practices in the area were to blame for some of this, especially agriculture. Irrigation for grazing and farming directly affected the level of streamflow, particularly during drought years, such as 1985 and 1992, when water was in greater demand than supply. In the arid West, and the Smith River Valley was no exception, cattle and crops had priority over fish and wildlife in the distribution of water resources. At the least, unnaturally low streamflows affected the fisheries of

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[20] FWP, "Evaluation of Newlan Creek Reservoir Water Purchase to Augment Stream Flows in the Smith River, Montana," by Fred Nelson and Frank Culver (Helena: FWP, 1992), 1-12.

[21] FWP, "Draft of the 1994 Smith River Management Plan," by Doug Haberman (Great Falls: FWP, 1994), 15-26.

the river.[22] The spraying of crops with pesticides and especially the spraying of weeds like leafy spurge added deadly chemicals to the river. Agriculture and logging also led to increased runoff and sedimentation.[23]

On the Smith River, however, it was the rise of outdoor recreation, combined with the manner in which that recreation was managed by FWP, that contributed the greatest additional pressure on the environment of the river from 1950 to 1994. As a pattern of land use, outdoor recreation is generally considered environmentally friendly compared to extractive uses like agriculture, logging, and mining. Conservation and preservation generally accompany an increase in recreation, as people begin to value fish, wildlife, and scenic resources. However, this has not been the case in the Smith River. Recreation did not displace grazing as the dominant human activity along the Smith River, but combined with it.[24] Recreation management hardly

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[22] "State Discourages Floating On Low-Running Smith River," Great Falls Tribune, 18 June 1985, A6.

[23] Mike Bay, letter to Dan Vincent, FWP Region Four Supervisor, 21 July 1985, on file at Region Four Headquarters of FWP, Great Falls.

[24] See, William Wyckoff and Katherine Hansen, "Settlement, Livestock Grazing and Environmental Change in Southwest Montana, 1860-1990," Environmental History Review (Winter 1991): 1991. Their study of the Madison River Valley implies a shift in land use from ranching to recreation beginning in the 1960s. For the Madison, the rise in outdoor recreation led to the creation of the Lee Metcalf Wilderness Area in the 1980s, and the state established a State Game Refuge, both of which preserved the resources of the region. No such efforts have been accomplished in the Smith River Valley as of 1994.

affected the upper and lower reaches of the river valley at all, and has been limited almost entirely to a sixty-one mile stretch from Camp Baker to Eden Bridge. In this canyon region, recreation overlapped with grazing and other uses, actually increasing the overall human impact on the environment.[25]

From 1970 to 1994 FWP pursued management policies which increased recreational activities on the river without significantly decreasing grazing, farming, and logging activities, or safeguarding against potential threats to the river's environment like mining.[26] As of 1994, no federal or state designations have been created along the Smith which might protect the environment of the river from the abuses of outdoor recreation and extractive industries. Although recreational use of the river rose from less than a few hundred floaters annually in the early 1970s to 3,400 floaters in 1993, no state parks, national parks, Wilderness Areas or Wild or Scenic River segments were created along the Smith River. Agriculture and logging, on both public and private land continued to threaten the environment of the river.[27]

Ironically, recreation management of the Smith River by

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[25] Shouse, 44-46.

[26] FWP, "Draft of the 1994 Smith River Management Plan," 15-26.

[27] Shouse, 34-38.

FWP from 1970 to 1994 resulted in greater environmental damage than would have been the case if no management of recreation were to have occurred at all. First, FWP management contributed significantly to the rise in outdoor recreation on the river. As landowners were particularly fond of pointing out, FWP encouraged recreationists to the river by developing two access sites to the river and acquiring land along the river for developed boat camps, from zero in 1970 to twenty-seven separate boat camps, each containing up to four campsites for a total of fifty-four individually designated campsites on the river in 1993.[28] There was some truth in the accusations made by the private landowners that FWP advertised and promoted outdoor recreation on the Smith.[29]

The Management Plan of 1988 finally recognized the necessity of limiting the number of floaters on the river, although this was based on floater complaints of overcrowding, not on the recognition of environmental limits. However, it wasn't until the 1993 season that limits on the number of floaters were

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[28] FWP, "Draft of the 1994 Smith River Management Plan," 15-26.

[29] "What is Best for River?" Great Falls Tribune, 8 May 1980, 33. Ironically, in this editorial, Alston Chase, a rancher on the Smith, asks: "Do we want the Department of Fish, Wildlife, and Parks, to play the role of protecting our precious natural heritage, or do we want it to be a Department of Tourism, exploiting nature for the sake of short-term economic gain [from recreation]?"

actually set at nine launches per day with a maximum of fifteen floaters in a float group, and that year witnessed the highest number of floaters in the history of the river, 3,400 in all. So, although FWP talked about limiting use as early as 1988, as of 1993 there were no effective limits on that use. The new use limits initiated that year resulted in only four float groups being denied the launch dates they requested.[30]

What's more, under these "limits," there was still room for tremendous growth. Assuming a hypothetical float season of one hundred days between mid-April and mid-July, during a year of average streamflow, if the maximum number of nine float groups put in each day, and if each float group had the maximum number of floaters in it, fifteen, then 13,500 recreationists could float the river in one season and still be within the limits set by FWP. Considering that this was over four times the record number of floaters set in 1993, FWP was hardly limiting use.[31]

No study has yet been done on the impact that such heavy recreation has had on the environment of the Smith River. Certainly the fishery is under tremendous pressure, limited only by the FWP's fishing regulations and the growing "catch and release" consciousness of sports

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[30] FWP, "Smith River News: What's Going Up Down the River," ıo.8, 14 Sept. 1993, 1-2

[31] "The Little River With a Big Reputation," The Daily Inter ⱡake, 16 June 1994, C1.

fishermen. The immediate environments around the fifty-seven campsites along the Smith show signs of heavy wear, with considerable damage to the vegetation. By as early as 1987, recreational pressures were so heavily concentrated at these campsites that wood for fires was becoming extremely scarce, and some campers were resorting to cutting live trees for firewood. There have also been the typical encounters between the wildlife and recreationists, including the general disturbance of habitat, which has resulted in increased stress on these animals.[32]

One major source of habitat destruction along the river has been the increase in subdivision developments. The appreciation of the outdoors, which led to the increase in outdoor recreation on the Smith, also spurred the building of cabins along the river beginning in the late 1960s. By 1986, two subdivision sections had been developed, one at Two Creeks with a total of twenty-six, half acre lots, and one at Castle Bar with a total of fifty, one- third acre lots.[33] FWP opposed these subdivisions, but did nothing to prevent them.

In recent years, two resort ranches have appeared on the Smith River. The Elk Canyon Ranch near Camp Baker has a lodge and cabins for forty guests who ride around the ranch

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[32] "Public Cooperates on Smith River Floating," Cascade County Conservation District, Sep./Oct. 1986, 4.

[33] Shouse, 34-38.

on golf carts. Tennis courts, an artificial fishing pond, and horse back riding are other activities offered at the resort.[34] A big game hunting outfitter/guest ranch operated in the middle canyon section of the river beginning in the mid-1980s. At that time, the total number of structures found along the river was approximately seventy-five, mostly designed to accommodate outdoor recreationists with summer cabins and resorts.[35] Only half-a-dozen year round residences existed on the river itself between Camp Baker and Eden Bridge in the mid-1980s.[36]

From 1970 to 1994, FWP not only contributed to the environmental deterioration of the river by encouraging recreation use without protecting the environment of the river from extractive uses, but it also directly altered the environment of the river by managing for particular species of fish and wildlife. As directed by the Resource Inventory of the Smith River in 1973, the Smith River drainage was managed specifically for big game, sport fisheries, and upland birds, not for the natural ecology. Needless to say, FWP did not attempt to restore the 19th century environment of the river by reintroducing native grasses or extinct species like the buffalo, the grizzly bear, and the gray

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[34] Lindler, "Dude Ranching in Montana Suits John, Kay Eckhardt Just Fine," Great Falls Tribune, 24 July 1986, C1.

[35] Shouse, 34-38.

[36] Ibid, 3-4.

wolf. By stocking the Smith with non-native rainbow and brown trout, FWP even contributed to the near extinction of the native cutthroat trout by 1994.[37]

In its function as a land management agency bound by the Noxious Weed Control Act, FWP also participated in the spraying of leafy spurge with herbicides along the riverbanks of the Smith, which introduced unnatural chemicals into the water.[38] In 1991, FWP participated in the release of flea beetle in an attempt at finding biological alternatives to the control of Leafy Spurge.[39]

In November of 1994, the draft of a new Management Plan was completed. The final copy, probably to be approved sometime in 1995, will guide management of the Smith River into the 21st century. In both its goals and its management recommendations, the Management Plan of 1994 does not differ appreciably from the Management Plan of 1988. Those goals nearly mirror the goals of the 1988 Plan: to provide for continued recreational and commercial use and enjoyment of the Smith River consistent with its capacity (its capacity as defined in the 1988 Plan in terms of solitude), to seek ways to minimize conflicts between river users and private landowners, and to protect the integrity of the water and

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[37] Ibid, 19.

[38] Bay, letter to Vincent.

[39] FWP, "Draft of the 1994 Smith River Management Plan," 4-8.

canyon resources for future generation.[40]

It is certain that FWP will continue to manage primarily for outdoor recreation on the Smith while allowing present levels of commercial use. There are also indications that future recreational use of the Smith River will actually be affected by the limitations set by FWP in the early 1990s. While recreation continued to increase throughout this period and only four float groups were denied their first choice in launch dates in 1993, during the 1994 season, 160 float groups were denied their first choice in launch dates, although nothing prevented those groups from simply switching launch dates.[41] However, if one hundred floaters launching per day is an accurate estimation of the carrying capacity of the river based on floater opinions of solitude as described in the 1988 Plan, then present management limits at nine launches per day of groups of not more than fifteen floaters, exceed that capacity. The draft of the 1994 Plan neither changed the basis upon which river carrying capacity is determined, re-evaluated the river's carrying capacity according to changing floater opinion, or recommended different use limits for the Smith.[42]

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[40] Ibid, 6-14.

[41] "The Little River With a Big Reputation," The Daily Interlake, 16 June 1994, C1.

[42] FWP, "Draft of the 1994 Smith River Management Plan," 4-4.

The 1994 Plan recommends to continue the same sort of conflict resolution tactics and cooperative efforts between landowners, floaters, and the agency, which were initiated in the 1988 Plan. These efforts have, and may continue to be, relatively successful. FWP as of 1994, was even in more control of the river than it had been in 1988. Ranchers, though still resentful, had resolved themselves to the reality of recreation on the river, and floaters to the realities of regulation. Although potential for conflict still exists, particularly if FWP becomes more aggressive in its attempts to obtain land along the river, if recreationists or some other group decides to push for preservation legislation, or if other user interests, like mining interests, join the fray over resource use along the Smith. The struggle for power and control in the Smith River Valley continues.[43]

Finally, the 1994 Plan offers no new strategies to preserve or protect the natural resources of the Smith River. Unless FWP obtains the financial resources to purchase or otherwise obtain development rights to lands along the river corridor for the purpose of environmental preservation and not simply further recreational development, and unless landowners become willing to sell or relinquish those rights, then it is unlikely that the environmental resources of the river will be preserved or

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[43] "The Little River With a Big Reputation," C1.

protected. Even if FWP were to acquire private land as state property, as with the USFS lands along the river, without legislative designation, there will be no guarantees that the resources of the river will be preserved in their present state for the future. As the 1994 Plan makes clear by omission, FWP still refuses seriously to consider the designation of the Smith River as a Wild or Scenic River, despite its outstanding qualifications.[44]

Perhaps because the Smith River is in Montana and surrounded by so much private land, no group or agency, aside from the private landowners themselves, has seriously challenged the way that FWP has chosen to manage the river from 1970 to 1994.

In the late 1980s, American Rivers, an environmental organization, appealed the Lewis and Clark National Forest management plan because rivers in the forest had not been adequately reviewed for Wild or Scenic designation. The USFS reluctantly responded with an extensive review of the rivers within that forest. Of all the rivers reviewed, the Smith River was the most highly qualified. The USFS found that the Smith river was considered highly qualified for Wild or Scenic designation because it possessed nearly all

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[44] See FWP, "Draft of the 1994 Smith River Management Plan," -48. Nowhere in the 1994 Draft Management Plan is there mention f the possibility of Wild or Scenic River designation. Nor is here mention of Wilderness designation, or even the stablishment a State Wildlife Refuge. Without some such esignation, it is unlikely that FWP will be able to meet even ts modest preservation goals.

of the "outstandingly remarkable" values listed in the Wild and Scenic Rivers Act, any one of which can qualify a river for designation. The USFS itself determined that the Smith River had outstanding scenic, recreational, geologic, fishery, and wildlife resources. Based on recent archeological and historical surveys in the 1990s, the river might also qualify today as having outstanding historical value as well. However, after the review was completed, and the USFS took no other action with regards to the Smith, and American Rivers turned its attention elsewhere.[45]

Although most of the land along its banks is under private ownership, the Smith River is still eligible for Wild or Scenic designation because a portion of the river is bordered by the Lewis and Clark National Forest. Although a Wild, or more probable, a Scenic designation on the Smith would not guarantee the river's protection from all commercial or recreational abuses, it would provide federal legislative standards that would preserve the river more adequately than it is preserved under the present state management. Perhaps more importantly, such a federal designation would provide the managing agency with supplementary federal funds with which to acquire property and water rights along the river.[46]

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[45] Bert Lindler, "Rivers Reviewed in Forest Appeal," Great alls Tribune, 4 Apr. 1988, A1.

[46] Ibid.

Of course, unlike in 1970, landowners no longer support Wild and Scenic Rivers designation.[47] They recognize such designation now as being hostile to their perception of private property rights, and to their commitment to continue ranching along the river. They would prefer to continue grazing, logging, subdividing, or engaging in any other land use practice they see fit, rather than "locking the resources up."[48]

Support for Wild or Scenic designation will probably not come from the USFS, an organization which has only grudgingly complied with the legal guidelines requiring them to review the river for such eligibility. Nor, it seems, does the Montana State Department of Fish, Wildlife, and Parks support such designation. At least, none of their management plans have seriously considered such an option. FWP's primary commitment has been to maintain and, if possible, increase its authority and responsibility for managing the Smith River. In this it has been remarkably successful. Since intensive management began in 1980, recreational use has risen from a few hundred floaters annually in the 1970s to over 3,400 floaters by 1993, and FWP's budget for the Smith River has increased from a few thousand dollars annually, to over $72,000 in the early 1990s. From 1970 to 1994, FWP has been the primary, almost

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[47] Lindler, "Smith River Development Eyed," C1.

[48] Ibid.

the exclusive, land management agency for the Smith River. Today, its closest rival, the USFS, continues to take its direction in managing the Smith River from Montana's FWP, but a Wild or Scenic River designation for the Smith might change that. Despite the fact that a Wild or Scenic designation might better protect the natural environment of the Smith, FWP remains committed to the status quo.[49]

In the on-going campaign for a Montana Wilderness Act, in 1992 the Montana Wilderness Association sent out a letter regarding the Smith River. In it, it listed the serious threats to the river still posed by logging and overgrazing. It also mentioned a proposed plan by off-road vehicle interests to create a 30,000 acre motorized recreation area along the Tenderfooot and Deep Creek tributaries to the Smith in the Lewis and Clark National Forests. It should have mentioned that nothing prevents mining claims from being filed along the Smith River drainage, and that the high level of recreation management allowed by FWP also threatens the river. It suggested that the best way to preserve the Smith River was to protect the adjacent 100,000 acres Tenderfoot-Deep Creek roadless area within the Lewis and Clark National Forest through Wilderness designation.[50]

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[49] Fryar Calhoun, Western White Water: From the Rockies to he Pacific (Berkeley: River Publications, 1993), 109-111.

[50] Emily Sieger, President of the Montana Wilderness ssociation, letter to Smith River Enthusiast, 26 March 1992, on ile at Region Four Headquarters of the FWP, Great Falls.

However, as of 1994, Montana has yet to resolve its long standing Wilderness debate.

Unless support for a Wild or Scenic River's designation, or some other appropriate designation, comes from the recreationists themselves, it is highly unlikely that it will come from anywhere else. The State Department of Fish, Wildlife, and Parks remains both in control and committed to the status quo, while the U.S. Forest Service, for at least the time being, follows its lead. But FWP, as a state agency, must respond to the interests of recreationists and ranchers alike if it is to continue to survive. Both ranchers and recreationists must decide how much access to the resources of the river they desire, and whether or not that access will ultimately destroy those resources. FWP needs to help them determine the answers to those questions. It can best begin by developing another resource inventory, one that really does attempt a "total ecological approach," and then by setting a recreational carrying capacity for the river based on biology, not just on floater opinions of solitude. In the meantime, the environment of the Smith River continues to bear the heavy burden of both agricultural and recreational use. In the struggle for power over the Smith River, it's the river itself that seems to be losing.

## CHAPTER 14

## Conclusion: Approaching Eden

As we glided toward the take-out site at Eden Bridge, slipping silently from the dark recesses of the Smith River canyon and into the bright, dry prairie on which Vonley Cox's bloated cattle munched contentedly, I regretted the end of my float. I had been two and a half days on the Smith with river ranger Chris Lorentz, who was a much friendlier guy than his former wife knew. She and I had participated in the University of Montana's Wilderness and Civilization Program together. Chris and I discovered our common acquaintance that last day, when we stopped for a late lunch of cold steak next to one of Vonley's cows, at the last bend just before Eden Bridge. I think we both wanted to prolong our stay on the river just that little bit more.

The two and a half days we had spent on the river were more like play than work. I couldn't believe Chris actually got paid for this. We stopped at the campsites to patrol for trash, and we visited with the floaters and a few landowners, often as not over shared drinks. At one point we surprised a couple of fishermen when in a light drizzle we paddled our canoe to the bank, eased ourselves out and onto the wet grass, and strolled over to admire the bright rainbow trout they had caught. Their gloating voices

changed to guarded apprehension when Chris casually stripped off his rain jacket to reveal his uniform and shiny ranger badge underneath. When asked for their fishing licenses, they stammered out the excuse that they had left them back in the pickup truck. But Chris let them off the hook, so to say, when I recognized one of the fishermen as a high school buddy from Great Falls.

When not preoccupied with such labors, we busied ourselves by admiring the view from the canoe, hiking up to pictographs hidden in caves far above the river, and generally relaxing. We even did a little fishing of our own. Chris had brought along his fly rod, and under the shadows of the canyon walls I had, for the first time in my life, made a few clumsy attempts to flick the bugger about, making it clear to Chris and the fish that I had no idea what I was doing. I soon gave up. Chris, however, fished some as I paddled, but he caught nothing, and that evening for supper we had to be content with the steaks that FWP had provided us. As we washed our steaks down with beer under a crescent moon at twilight Chris complained that the fishing just didn't seem to be as good as it once had been on the old Smith. As I reached for another beer, I thought that sounded like an excuse.

But something <u>was</u> happening to the fish, or at least the important fish like the rainbow trout. In the winter of 1995 FWP informed Smith River recreationists that rainbow

trout populations in the river had decreased 75% since 1987. They suspected that the cause of the rapid decline was "whirling disease," or the trout plague as it is commonly called, a European disease which has decimated "wild" trout populations throughout the West, particularly in Colorado. "Spread of the disease into central Montana could threaten several high-quality rainbow trout fisheries and the contributions they make to regional tourism," FWP officials said.[1]

FWP offered no other explanation as to why the rainbow trout populations had dropped. Nor did they remind recreationists that rainbow trout had been introduced to the Smith River in recent decades and did not evolve naturally in that watershed. Incredibly, FWP ignored as a possible explanation that between 1987 and 1994 recreational use of the river had increased about 300%, that about 85% of recreators were sports fishermen, and that fishing regulations had not changed in that time period. This factor alone could explain the 75% decrease in rainbow trout during the same period.

FWP proposed tests to search for evidence of the whirling disease, the plague. And, it could be that the disease has affected the river's fisheries. However, even if the disease is detected in the Smith, FWP still remains

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[1] Mark Downey, "Missouri, Smith to be Tested for Trout lague," Great Falls Tribune, 8 Feb. 1994, A1.

culpable of ignoring the river's history, even its most recent history, in which FWP has played such an important role. FWP is a confused agency. Most of its employees care about and are committed to protecting the natural resources the agency manages, like the Smith River, but at the same time, FWP feels it must promote "regional tourism." As the history of the river's management by FWP reveals, if FWP manages for recreation without consideration of the river's ecology, it is in danger of destroying that ecology, which will then lead to a decline in recreation on the Smith anyway.[2]

FWP will then resemble the agent of an extractive industry, like logging and mining, that responds more to market demands than to ecological realities, and only remains for the short term. If this happens, if FWP doesn't commit itself to the preservation of the Smith River's environment, then recreation on the river will decline or degrade into a cheap thrill similar to water log rides found at amusement parks nationwide. Eventually, only ranching could remain on the Smith, unless of course it continues to blindly follow the pied piper of market capitalism into the morass of ecological impudence. So far, it is the ranchers who remain most committed to the Smith River as a home, while FWP and most recreationists treat it more like an outdoor hotel.

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[2] Ibid.

My first trip down the river didn't reveal any of these issues, problems, or conflicts that I have since learned so much about. Or, if it did, I was too enamored with the joys of the outdoor experience to notice. It was a needed respite from all those long days buried in the library doing historical research. Ranger Chris seemed to care about the river, as did the career employees with FWP back in the Great Falls office, as did the floaters we met and the landowners we visited with. Everything looked beautiful and nearly natural to me, even if there were cows and subdivisions along the river. The Smith River was still a wonderful place of high canyon walls, green trees, meadows awash with sunlight, and clear water murmuring down from the mountains. This was the memory that I had in my mind when Chris and I rounded the last bend in the river and glided up to the take-out site at Eden Bridge, into the smiling welcome of a long retired Ramlin' Sams volunteer. And, like everyone else, I can't wait to get back on the river.

## Appendix 1:

### Summary of the Greer Survey on Pictographs, Tepee Rings, and Lithic Debris found along the Smith River from Camp Baker to Eden Bridge

-Pictographs: Spring Creek Pictographs 24ME45

In the vicinity of where Spring Creek flows into the Smith, on the east side of the river, the first known Indian pictographs between Camp Baker and Eden Bridge can be found tucked into a concealing crevasse and a rock shelter in a high limestone outcropping. The pictographs are a popular afternoon horse ride destination for the clients of the Elk Canyon guest ranch.

Like many of the other higher pictograph sites along the Smith, the site includes two adjacent caves. However, unlike other sites, this is in the middle bluff in a series of three limestone tiers located on the top third of the mountain side. The pictographs can be found in a crevasse opening and above the crevasse in a small horizontal shelter. The figures, one of which is an arrow-like design, are very large and are composed of very broad lines in an orange paint. These figures are a different style from others along the Smith, and they do not appear to be related to other sites in the area. Their style and appearance suggest they may be later than most of the Central Montana Abstract Tradition. It is even possible that these

pictographs were painted by early sheep herders.[1]

-Prehistoric habitation site 24ME99/24ME104

This open campsite is on an upper flat bench, about 50 feet above a lower gravel terrace of the Smith River not far from the mouth of Rock Creek. The site lies on a flat, grassy area bordered on the north, south, and west by fairly steep earthen bluffs that drop sharply down to the lower terrace adjacent to the river. On the east a cliff and steep hillside rise sharply and are covered with pines. The site is vegetated with dense short grasses and flowers.

The site was originally recorded as containing several tepee rings; chert, obsidian, and agate flakes; and a quartzite chopper. Today, the rings are mostly buried, with only the tops of the rocks exposed.[2]

On the opposite side of the river indications of another habitation site can be found on a large fairly flat upper terrace or piedmont area above the steep embankment overlooking the Smith. Chert flakes were observed in two slightly eroded areas about 1000 feet apart. Primary and secondary flakes, some of which are edge-retouched, seemed to indicate habitation use of the flat. The flakes were observed to be eroding from buried cultural deposits.[3]

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[1] Mavis and John Greer, "A Preliminary Assessment of Selected ites along the Smith River and Belt Creek in Central Montana," Helena: State Historic Preservation Office), 7.

[2] Ibid, 7.

[3] Ibid.

-Prehistoric habitation site: Left Hand Cave 24ME325

This cave lies high off the Smith River, 400 vertical feet above the west bank. It is in a low bare hillside with major animal trails in the area. There are two parts to this east-facing cave. Shelter A is the large room and is a large semi-circular chamber 81 feet wide, 30 feet deep, and 8-13 feet high. The rocky floor slopes down gently to the mouth. At the overhang the terrain drops steeply into the head of a gully or draw. The cave appears to have formed along an eroded layer of conglomerate or limonite below a fairly massive bed of high-grade limestone. The floor is pocked with a considerable amount of cow dung. There is an excellent view of the Smith River and the open hillside across the river from the cave.

The main evidence of occupation includes ashy deposits in the front half of the cave. Light gray ashy deposits occur around roof fall blocks, chunks, and coarse gravel pieces and contain charcoal, burned (oxidized) orange-to-reddish pebbles and small cobbles, and dark gray (reduced) very fine burned gravel. The occupational deposits are estimated to be about 12 cm thick.

Cave B is a small room just on the north side of the main rockshelter. It measures 22 feet wide x 25 feet deep x 2.5-3 feet high. The floor is flat with dirt and gravel deposits.[4]

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[4] Ibid, 8.

-Pictographs: Canyon Mouth Site 24ME341

Pictographs are on two areas of the exposed limestone bluff that backs a terrace. Panel 1 is painted in dark red and light orange. The light orange appears to represent the remains of older figures that are unidentifiable. Dark red smears, finger lines or retouched handprints, and a distinctive hand impression are visible. Panel 2 has only red paint, and a stylized bear head is the dominant figure. The face is in dual perspective, with the head and open jaw in profile, pointing right, but with the face, eyes, and ears in frontal view facing the viewer. The head is covered with red finger dots. Panel 2 also has a possible shaman figure to the left of the bear head.[5]

-Pictographs: Marmot Shelter 24ME343

This red-painted bluff on the west bank is separated from the river by a narrow strip of land. Visible from the river, the rock art is on a high, relatively flat vertical face, about 100 feet long, of fine-grained fairly smooth limestone. Paintings cover an area about four meters high on the overhanging face. The panel cannot be reached by an individual standing on the ground, which suggests changes in the depth of the river bed, climbing abilities, or perhaps the use of a horse as a stepping stool, although the site probably pre-dates the introduction of the horse to North

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[5] Greers, "Rock Art Along the Smith River in Central Montana: eport on the 1993 Field Season," (Helena: State Historic reservation Office, 1993), 7.

America. All paint is dark orangish red. Observed were two sets of finger lines and a smear. These are similar to other figures on the Smith River.[6]

-Pictographs: Handprint Bluff 24ME133

The panel is on an exposed bluff that extends down to the river. The hand prints can only be viewed from the water. Five rows of handprints are distinguishable. The top row has two prints, the second row has two prints, the third row has four prints, and the fourth row has three prints. The fifth (bottom row) has at least seven prints. A single print is isolated about three feet diagonally down from the main cluster. All hand impressions are high on the bluff and can not be reached today by a person standing in the water at the bluff edge. Presumably they were made by people standing on each other's shoulders or on horse back if the drawings post-dated the introduction of the horse, which is unlikely. It is also possible that the river has cut away at the bank to the point where the handprints can no longer be reached by someone standing in the water at the bluff edge.[7]

-Prehistoric occupation and tepee ring site 24ME135

This site lies on an intermediate bench situated on top of a rock platform near the junction of Tenderfoot Creek and the Smith River. Four tepee rings lay along the north side

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[6] Ibid.

[7] Ibid.

of the river; however, evidence of historic farming together with the numerous rockpiles along the cliff's edge suggests many more tepee rings existed on the terrace prior to the area being cleared for fields.

Lithic debris is sporadically distributed throughout the site area, consisting of yellow, white, and red chert, quartzite, and black metamorphosed siltite. Primarily flakes, both worked and unworked, are evidenced, but choppers and scrapers can also be found. This appears to have been an extensive aboriginal campsite both spatially and temporally, perhaps representing hundreds or even thousands of years of intermittent seasonal habitation.[8]

-Pictographs: Lizard Site 24ME344

This site is located near the bottom of a rough, blocky limestone wall that borders a small flowing creek. Pictographs are in three areas along a 50-foot portion of the wall. A small lizard, from which the site gets its name, is the western most figure. The lizard is red, and the pigment is a coarse clay-like mixture, which appears to be made from locally available substances in this and nearby bluffs. East of the lizard are the remains of what may be an attempt to write a name on the bluff face as evidenced by lines and loops. However, the figure cannot be definitely interpreted, and it may be the remains of a geometric design. Several finger lines in orangish pink paint are

[8] Ibid, 8.

immediately around the corner of the bluff from the lizard and name panels.[9]

-Prehistoric habitation and tepee ring site 24ME87

This site is located on a large open grassy terrace rising gently up from the east bank of the Smith. Evidence of one complete tepee ring and several partial rings lie on an intermediate bench situated above the Smith river on a rock platform. The complete tepee ring contains 50 rocks and is 15 feet in diameter. One yellow-brown, worked chert flake was found at the base of the terrace ledge which is possibly associated with the rings. A good view of the river is provided from the rings.[10]

-Prehistoric occupation site 24ME88

An intermediate bench situated above a rocky ledge on the west side of the river is the location of this occupation site, where aboriginal visitors or inhabitants constructed tools and weapons. A scattering of chert chipping debris and a basalt scraper were found near the cliff edge. A good view of the Smith is to be had from the site.

Across the river, on a small intermediate bench lying above the east bank of the Smith is the location of a complete tepee ring and two partial rings. The complete ring is approximately 12 feet in diameter and contains 12

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[9] Ibid, 7.

[10] Ibid, 9.

rocks which are all partially buried.[11]

-Prehistoric occupation site 24ME89

This site is on a high terrace approximately forty feet up from the east bank of the Smith River. A small amount of lithic material is found concentrated near the edge of the terrace.[12]

-Prehistoric tepee ring site 24ME90

This site is located on an intermediate terrace supporting a rough, rock ledge dropping off to the west bank of the Smith. One complete tepee ring, with a 12 foot diameter and formed by 15 almost entirely buried rocks, can be found in the area. Partial rock circles with rocks which were almost entirely buried lie along the terrace edge suggesting that other rings also once occupied the area. One metamorphosed siltite flake was all that was recovered in the way of lithic debris.[13]

-Prehistoric occupation site 24ME91

The southern end of an intermediate terrace rising 40 feet above the Smith River not far from the Sunset Cliff Boat Camp is the location of this occupation site. The site is marked by a heavy concentration of lithic debris which is found near the edge of the terrace extending back

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[11] Ibid, 9.

[12] Ibid, 10.

[13] Ibid, 10.

approximately 50 feet.[14]

-Prehistoric occupation/chipping station site 24CA69

The center edge of an intermediate terrace rising above the Smith River on a rough rocky base is the location of this site. The site is marked by a high concentration in a small area (5 ft. by 5 ft.), of black metamorphosed siltite chipping debris. A great view of the Smith River is afforded from this chipping debris site.[15]

-Pictographs: Double Cross Cave 24CA353

The cave is visible high on the north side of a bend in the river. The cave consists of a series of long, moderately deep interconnected passageways, tunnels, and fairly small tabular-like rooms. Paintings are located only in the main entrance room. On either side of the main room are double crosses in dark red finger paint. A fifth figure is a series of finger lines that appears to be an incomplete, indistinguishable figure. The crosses are sloppily drawn, unlike the careful painting at most of the prehistoric pictograph sites in the Smith River area. Intuitively the crosses appear to be historic, possibly dating from the late 1800s.[16]

-Prehistoric occupation site 24CA70

Scattered chipping debris was located on an

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[14] Ibid, 11.

[15] Ibid, 12.

[16] Ibid, 10.

intermediate bench rising above the west bank of the Smith River. Red and yellow chert flakes and a local, presently unidentified, hard yellow material were found.[17]

-Pictographs: Big Bluff Pictographs 24CA71

The site lies along the exposed rocky face at the base of a high overhanging limestone cliff. The undercutting of the base of the bluff has created a small protected rock shelter in the area of the paintings, which extend 270 feet along the base of the cliff. Most of the figures are painted on gray surfaces, especially on the central panel, but some are on exposed yellowish limestone. Pictographs are dark red and orangish-red. A few anthropomorphs (including a possible shaman figure and dancing figures) and fewer zoomorphs (but including figures that resemble rabbit heads) were observed. Other figures include hand smears, finger dots, spatter marks, geometric designs, and several actual hand impressions.[18]

-Pictographs: Twin Caves 24CA101

These adjacent caves lie near the crest of the rim bordering the Smith. The southern cave is painted in a dark red and has circles, finger lines, one animal, and a human with a bison headdress. The northern cave is painted mainly in light orange and has mostly different kinds of figures from those in the southern cave, with only a few dark red

[17] Ibid, 11.

[18] Ibid, 8.

finger lines and smears common to both caves. Other figures in the northern cave include a skeleton figure, a turtle, and a rattlesnake.[19]

-Pictographs: Fraunhoffer Cave 24CA354

The cave is a prominent opening on the west side of the river. It measures 36 feet deep x 30 feet wide x 30 feet high. The front portion of the cave floor is flat and contains the remains of dry laid jumbled wall and recent ash. The wall is possibly early historic or prehistoric; it is not recent. The wall borders and forms a flattened floor covered with gravel, rock, and pack rat debris. The rock wall measures 1-2 feet high x 12 feet long x 2 feet thick. No artifacts or rock art have been found in the cave.[20]

-Pictographs: Indian Cave 24CA347

This high prominent opening dominates the limestone mountain side when viewed from below. The main panel runs along the north wall and begins about 6.5 feet above the cave floor. Pictographs are also on the ceiling and walls in the back of the cave. Present are geometric figures, rattles, a prayer stick, and several shaman figures of both red and yellow, some with horned headdresses. Dots (many in patterns), a few animals (including two orange elk), turkey tracks, finger lines, a swastika, a sun symbol, a cross,

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[19] Ibid, 9.

[20] Ibid, 9.

hand prints, smears, and bison heads also are present.[21]

-Pictographs: Deep Creek Cave 24CA404

The site is located in a small limestone cave 8 feet wide, 11-15 feet high, and 32 feet deep. The walls are painted, and some paintings are on the ceiling. Figures include circles, dots, finger lines, smears, bear paws, a large painted handprint, a bison head, and an anthropomorph that appears to be a shaman. Colors include purplish-red, dark red, and orange. Most of the upper paintings along the left wall are orange with only a few in red. Both the red and orange on the left side are placed intentionally over the smoke blackened limestone and thus post-date the blackening of the rocks. The paintings on the right wall are red.[22]

-Pictographs: BLM Double Cave 24CA405

Two cave entrances are in limestone outcroppings at the crest of a long grass and tree-covered slope that rises gently from the river terrace. No rock art was observed in the southern shelter, the larger of the two caves. Thirty feet to the north is a small shelter, and paintings are on the wall toward the back of the cave on the right side (as one looks into the cave) and on the ceiling. Nine small red smears with no form were noted on the wall. A red ceiling smear two feet from the back wall in the center of the cave

[21] Ibid, 9.

[22] Ibid, 10.

probably was originally an identifiable figure, but the form is no longer discernable. In the center of the figure, transverse to the long axis of the figure, are at least three finger lines.[23]

-Pictographs: Rapids Cave 24CA99

The cave is in a prominent limestone outcropping above a wide grassy terrace. The cave mouth is about 15 feet high, but the pictographs occur on the ceiling of an upper level that is only about four feet high. Figures include vertical finger lines that resemble symbols, a small trapezoid, an upside down U, and a small circle. The figures are all red, small, and form a cohesive panel that measures 115 cm by 33 cm.[24]

-Pictographs: Upper Cave Pictographs 24CA406

The cave is located near the crest of a steep hillside with several exposed levels of limestone bluffs. Paintings are on the northeast wall of the cave (right side when facing in the entrance) in an area about seven feet across. Sixteen smears of dark red paint occur on an overhanging wall to ceiling protrusion. One group forms a somewhat circular pattern, but this may be fortuitous. No definite figures were observed.[25]

-Pictographs: Lower Bluff Pictographs 24CA407

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[23] Ibid, 11.

[24] Ibid, 8.

[25] Ibid, 11.

The pictographs are on a bluff face protected by a slight overhang. It is estimated that only a small portion of the paintings still remain, but the deterioration is natural and not caused by human vandalism even though the shelter is near the river. The remaining paintings are clustered in three areas. Panel one is mainly painted in a purplish-red and consists of finger lines, two possible hand prints, and smears. Panel two has finger lines only. Panel three appears to have been prepared for painting by smoothing the rough limestone. Four figures that resemble dancing capital I's are arranged in a pattern on Panel three. The I's are all of red paint and are partially covered with calcium carbonate. Between Panel one and Panel two is a small smear that suggest that much more of the wall was painted in the past.[26]

-Pictographs: Texas Shaman Cave 24CA408

The site includes a bluff and a small cave just above the river level. The bluff is at the northern end of the site, and the Panel one red paintings extend along the exposed face for 14 feet. Panel one has two possible anthropomorphs and a heart line that extends the length of the bluff. Red paintings occur in the northern end of the cave on blocks hanging from the ceiling. Panel two, in the cave, has four distinguishable red anthropomorphs that may

[26] Ibid, 11.

represent shamans.[27]

-Pictographs: Crystal Cave 24CA102

The site is a small, inverted-V-shaped crack in the limestone cliff. The opening is about 10 feet wide at the bottom, and angled walls form a pointed ceiling 15 feet high. Red and black figures include hand prints, finger lines, turkey tracks, and a human with a buffalo headdress. A dark red sun symbol is in an area of black linear figures. A vertical black arrow about five feet long with a simple tip is prominent on the main panel. Superpositioning of figures and layers of calcium carbonate is present on the main panel.[28]

-Pictographs: Thistle Cave 24CA409

This is a small cave with paintings on the vertical faces of hanging ceiling blocks mainly facing the Smith River. Red pictographs include twelve finger smears; no red figures are distinguishable. Superimposed over one of the red smears is a small human in black charcoal crayon. The figure has a rectangular body with a V-neck, stick legs, feet, arms, and three distinctive fingers. This figure is of a style commonly found in petroglyphs and some pictographs of the Northwestern Plains Rock Art Tradition; it is not common to the pictographs of the Central Montana Abstract Tradition. This is the only site in the Smith

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[27] Ibid, 11.

[28] Ibid, 9.

River area visited to date in which the Northwestern Plains tradition is clearly on top of the red paint smears generally associated with the Central Montana Abstract Tradition. In addition, there are also some charcoal lines on the ledge below the human figure.[29]

-Pictographs: Claw Cave 24CA100

This is a low cave at the back of an upper terrace. The ceiling at the mouth of the cave is about 5.5 feet high, but it drops to three-five feet high in most of the interior. Animals have rubbed many of the paintings off, and it is estimated that at least 20 other figures were present that are now indecipherable. The remaining pictographs are mainly on the north side of the shelter. The most prominent are two distinctive dark red claws, and dark red smear remains in the shelter. Most of the ceiling is heavily fire-blackened.[30]

-Pictographs: Cavern Cave 24CA348

This cave consists of two rooms, a lower larger room with a wide opening overlooking the Smith River to the north and an upper room accessed by a small opening in the ceiling at the back of the larger room. All pictographs are in the lower room on two faces of a high slab in the upper right of the room. Several sets of red three finger lines and an

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[29] Ibid, 11.

[30] Ibid, 8.

animal figure can be observed.[31]

-Prehistoric tepee ring site 24CA355

The tepee ring site lies on a lower terrace along the east side of the river. Several (more than 10) tepee rigs can be observed. The rings were constructed of local river rocks, and those easily visible are complete circles of contiguous rock. There is good potential for artifacts and associated buried deposits.[32]

[31] Ibid, 10.

[32] Ibid, 10.

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