

University of Montana

## ScholarWorks at University of Montana

---

Graduate Student Theses, Dissertations, &  
Professional Papers

Graduate School

---

2009

### On This Piece of Ground: Landowner Perceptions of Restoration in the Deer Lodge Valley

Sarah Carvill

*The University of Montana*

Follow this and additional works at: <https://scholarworks.umt.edu/etd>

**Let us know how access to this document benefits you.**

---

#### Recommended Citation

Carvill, Sarah, "On This Piece of Ground: Landowner Perceptions of Restoration in the Deer Lodge Valley" (2009). *Graduate Student Theses, Dissertations, & Professional Papers*. 716.  
<https://scholarworks.umt.edu/etd/716>

This Thesis is brought to you for free and open access by the Graduate School at ScholarWorks at University of Montana. It has been accepted for inclusion in Graduate Student Theses, Dissertations, & Professional Papers by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact [scholarworks@mso.umt.edu](mailto:scholarworks@mso.umt.edu).

ON THIS PIECE OF GROUND  
LANDOWNER PERCEPTIONS OF RESTORATION IN THE DEER LODGE VALLEY

by

SARAH GARDNER CARVILL

Bachelor of Arts, the University of California, Santa Cruz, California, 2007

Thesis

presented in partial fulfillment of the requirements  
for the degree of

Master of Science  
in Environmental Studies

The University of Montana  
Missoula, MT

May 2009

Approved by:

Perry Brown, Associate Provost for Graduate Education  
Graduate School

Dan Spencer, Chair  
Department of Environmental Studies  
College of Arts and Sciences

Phil Condon  
Department of Environmental Studies  
College of Arts and Sciences

Laurie Yung  
Department of Society and Conservation  
College of Forestry and Conservation

On this Piece of Ground: Landowner Perceptions of Restoration in the Deer Lodge Valley

Chairperson: Dan Spencer

Committee members: Phil Condon, Laurie Yung

As politicians tout a new “restoration economy” and environmentalists seek more innovative ways to conserve open space and rehabilitate degraded ecosystems, ecological restoration holds increasing cachet in many western states. To what extent do restorationists’ visions align with the experiences of the rural agricultural communities where restoration is taking place? How might restoration initiatives driven by state and federal policy and by environmental interests meaningfully involve and include the people who live alongside proposed projects?

I attempted to answer these questions by examining local involvement in restoration in one Montana watershed. Facing a major Superfund cleanup with a high-profile restoration component, some ranchers in the Deer Lodge Valley have organized to represent landowners in the decision-making process and to implement best management practices on private lands. The majority of landowners in the valley remain outside this effort, however. Using data from 27 original in-depth interviews, I have tried to make sense of landowners’ choices about whether and how to be involved with restoration, and to better understand the possibilities for restoration on private and working lands. I also make use of literature in environmental ethics geared toward defining “good restoration,” as well as my own experience as California-born writer and veteran weekend weed-puller, stranded for a lonely summer in the shadow of the Anaconda smelter stack.

My findings are presented as a narrative of the emergence of a local, grassroots restoration organization (Chapter 3); a discussion of the major themes of my interviews with agricultural landowners (Chapter 4); and an expansion of existing theory on countervailing trends in ecological restoration that accounts for some particular challenges of restoring ecosystems on working landscapes in the rural West (Chapter 5).

## ACKNOWLEDGMENTS

First and foremost, I am deeply grateful for the extensive and enthusiastic support of my advisors, Phil Condon, Laurie Yung, and Dan Spencer. Phil provided incisive commentary even on very late, very long submissions, and he is as good-natured as he is good with words— a distinction I suspect few writers of his caliber can claim. Laurie has taught me more about qualitative research than anyone I know; our long conversations in her gable office have been invaluable to my professional development, but I also think they were the primary reason I did not have to buy one of those special lamps for people who get depressed in winter. Dan Spencer cleared the way for this project with his tireless work in support of the Clark Fork restoration and the people of the Deer Lodge Valley, and as chair of my committee, he pushed me— with infinite patience and almost imperceptible subtlety— to dig more deeply into an unfamiliar literature and continuously reevaluate empirical data from an unfamiliar place. He is mind-bogglingly good at advising graduate students, and also just mind-bogglingly *good*. I feel privileged to have worked with him, and the time I spent with each of my advisors has truly been a gift.

Additionally, the members of Dan's Fall 2007 graduate seminar on ethical issues in restoration were a tremendous source of intellectual stimulation (and, in some cases, entirely unintellectual entertainment) at the outset of my adventures in Deer Lodge, and they supported my continued work there in a variety of critical ways. Ana Pederson inspired this project on our first class field trip when she declared, as we pulled out of John Hollenback's driveway, "Someone needs to write about that man!" Cassie Hemphill happily shared her vast knowledge of Superfund litigation in the West; Bryce Andrews provided interview contacts through his work on the Dry Cottonwood Ranch (and procured for me a deer); and Kassi Miller provided a house. I am, of course, forever indebted the owner of that house, Jake Benes, who was satisfied with my desultory attention to the front lawn where anyone else would probably have asked for rent. When Anaconda got too scary— Read: about every three days— Erika Edgley let me sleep on her couch in Missoula. And even with free housing, my fieldwork would not have been possible without the financial assistance the Environmental Studies Department provided to me through the Bryon D. and Bernice Dawson Memorial Fund and a scholarship generously endowed by Ron and Nancy Erickson.

On a more personal note, I owe many thanks to the friends and colleagues who hauled me through the trials of research. In particular, I would like to acknowledge Dan Zizzamia, Rachel O'Brian, and Lauren Butz, all of whom I had the good fortune to meet during my first weeks in Missoula. Since then, they have become my dearest friends, and each of them has demonstrated epic patience with my admittedly rather dull and vexing alterego, the Neurotic Researcher. Kate Ryan, who supervised my TAs in the English Department, has been an invaluable mentor, and I started referring to her as my "unofficial fourth committee member" when she started reading my memos. My undergraduate advisor at U.C. Santa Cruz, Daniel Press, convinced me to go back to Montana after the dog chased me back to California in August 2008 (see Ch. 5). In the Spring of 2009, for the second time in two years, he cajoled me to quit hating myself, forget theory, and "just tell the story."

Finally, I would like to acknowledge all the people connected to the cleanup who gave me their time and their perspectives. I am especially grateful to Bruce and Tammy Thomas, John Hollenback, Dan McQueary, and Renée Myers of the WRC; Chris Brick, Heidi DeArment, Karen Knudsen, and Tracy Stone-Manning of the Clark Fork Coalition; Powell County Planner Ron Hanson; Sherm Anderson, who gave me a tour of his mill; Carol Fox of the Natural Resource Damage Program; Lars and Mary Ann Olsen, who taught me more about the history of Deer Lodge and Western Montana than I ever expected to learn in two afternoon; and the friendly folks at Yak Yaks coffee shop— the social hub of my Deer Lodge life.

## TABLE OF CONTENTS

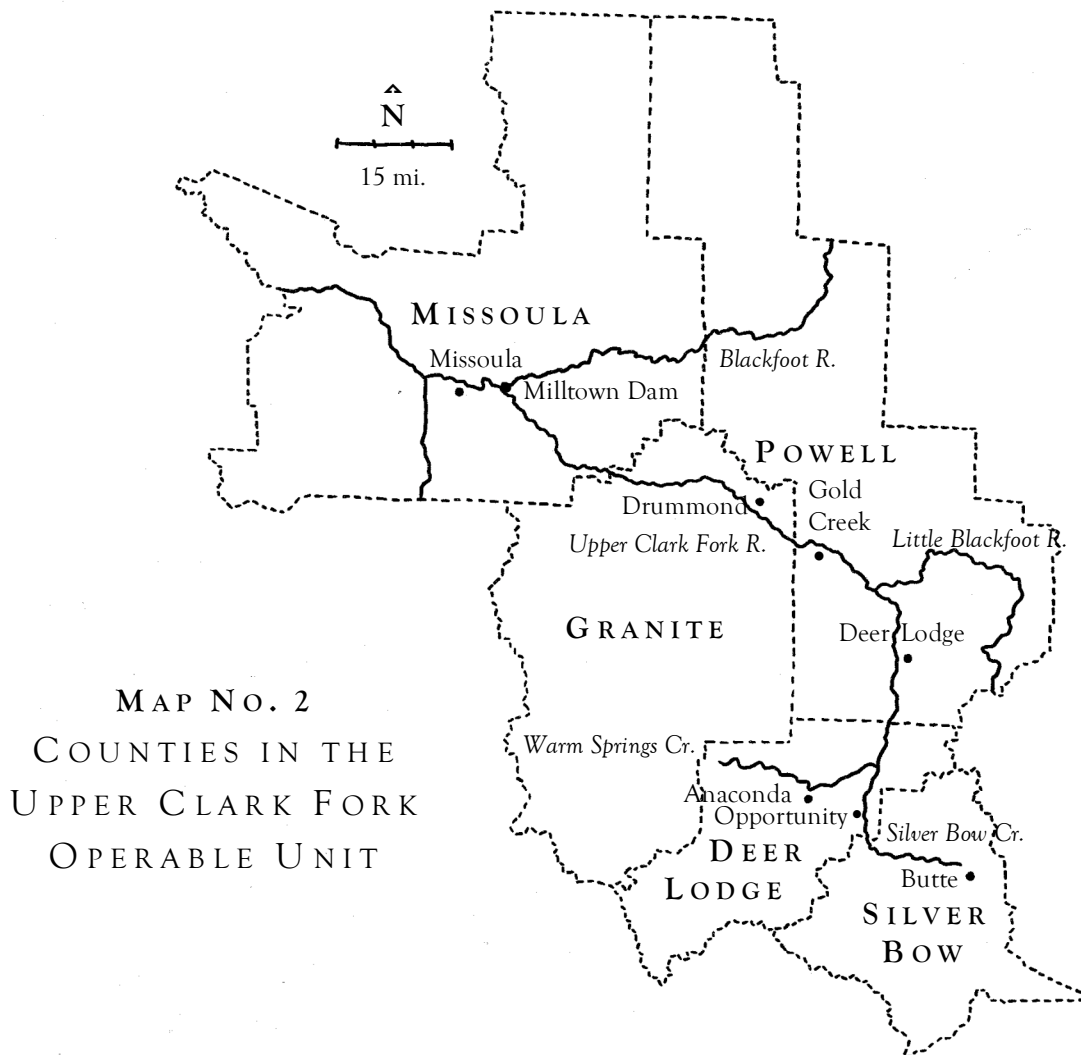
ABBREVIATIONS	v
MAPS	vi
CHAPTER 1: From Golden Gate to Gold Creek	1
<i>Between Butte and the Bitterroot: Cleaning Up and Hanging On</i>	3
<i>California Weeding: A Restoration Idyll</i>	5
<i>The Grassroots, the Rangelands, and Me</i>	7
CHAPTER 2: Ethical Conversations and Practical Applications	11
<i>Origins: Science Shrouded in Ethic</i>	11
<i>Adolescence: Definition Woes and Philosophers' Blows</i>	13
<i>Ethical Defenses: Jordan's Paradigm to Light's Pragmatism</i>	16
<i>Focal Restoration: Naming the Garden</i>	20
<i>A Shifting Balance; An Open Question</i>	22
CHAPTER 3: The Focal Politics of the WRC	28
<i>From Omission to Mission</i>	30
<i>The East Valley Project: Pipeline, Public Access, and the Partnering Voice</i>	34
<i>The Coming of the Coalition</i>	37
<i>Building Capacity, Building Trust</i>	44
<i>On the Ground with the WRC</i>	49
<i>More Projects and New Roles</i>	52
<i>Growing the Group</i>	57
<i>Focal Practices for a Technological Restoration</i>	59
CHAPTER 4: The View from the Ranch	63
<i>Here for Our Use</i>	64
<i>Taking Care of Land; Taking Care of Business</i>	66
<i>"It's Not as Easy as They Think."</i>	67
<i>Rule #1: Ranching Does Not Pay</i>	70
<i>Mother Nature and the River</i>	73
<i>Enter the Government</i>	79
CHAPTER 5: Achieving Balanced Restoration in Working Landscapes	85
<i>Shutting the Gates: The Promise of Private Property Rights</i>	88
<i>Back to Higgs: A Four Domino Problem</i>	90
EPILOGUE: The Case for Ranching	95
NOTES	100
BIBLIOGRAPHY	107
APPENDIX A: Research Methods	112
APPENDIX B: Interview Guide	126
APPENDIX C: Consent Guide	127
APPENDIX D: Information Sheet for Participants	129
BOXES	
<i>Superfund and the Upper Clark Fork: A Primer</i>	38
<i>The Access Issue: Ranch Management as Recreation Management</i>	68
PHOTOGRAPHS follow pages 23 and 79.	

## ABBREVIATIONS

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (“Superfund”)
CFC	The Clark Fork Coalition (“The Coalition”)
CFRTAC	Clark Fork River Technical Assistance Committee
DEQ	Department of Environmental Quality, State of Montana
EPA	U.S. Environmental Protection Agency
FSA	Farm Service Agency, U.S. Department of Agriculture
FWP	Montana Fish, Wildlife, and Parks, State of Montana
NEPA	National Environmental Policy Act of 1969
NRCS	Natural Resource Conservation Service, U.S. Department of Agriculture
NRDP	Natural Resource Damage Program, State of Montana
SER	Society for Ecological Restoration International
SERNW	Society for Ecological Restoration Northwest
WRC	Watershed Restoration Coalition
UCFR	Upper Clark Fork River
UCFRB	Upper Clark Fork River Basin
WGA	Western Governors’ Association

MAP NO. 1  
THE CLARK FORK AND  
THE NORTHWEST





NOTES: The town of Deer Lodge is the county seat of Powell County; Anaconda is the county seat of Deer Lodge County. The Deer Lodge Valley follows the Clark Fork from Drummond to just south of the confluence of Warm Springs and Silver Bow Creeks.



MAP NO. 3  
TERRAIN MAP OF THE  
DEER LODGE VALLEY



(Google/Tele Atlas 2009)

## CHAPTER 1

### *From Golden Gate to Gold Creek*

The Thomas Ranch is tucked into a ring of hillock facing northeast. To picture it, make a “C” with your left hand, and imagine Gold Creek incising the soft back-arc of the letter— the webbing of the thumb— and oxbowing through the openness. A long, unpaved driveway labeled “Hereford Lane” provides vehicle access from Gold Creek Road, traveling down-contour at the seam of pasture and bluff. After passing two houses, the lane meets the stream in a muddy constellation of barn, feedlot, and shed— the hub of the ranch.<sup>1</sup> The creek gathers itself on the far side of the operation, curls its farewell around a cottonwood grove, and slips out into the triumvirate of Upper Clark Fork transportation just beyond the property line: River, railroad, interstate.

On my second visit, I left Missoula at dawn and arrived at the ranch as the sun was coming up over the Flint Creek Range. Hung a left, hit the washboard, slowed down— that last one for the sake of the shocks, but also for the sake of the view. It was November; the peaks reared whitely over the hay fields and the uplands. The leaves were gone from the cottonwoods along the creek, and the evergreens on the ridges had that darkness about them that feels specific to winter-on-the-way. Everything else had been cured to dull-gold months ago, in an August so hot and dry that riders feared sparks struck from horseshoes on gravel.

The Thomases have lived and ranched in this mountainous wrinkle of Western Montana for four generations. They raise Herefords for “seed stock,” and on the day of my visit they were “working cattle.” I had lived in Montana for about four months, and I did not know what any of that meant, except that I should probably dress warmly, and figure out a place to hose down my boots at the end of the day.

Bruce, of course, was already at the barn when I arrived, but Tammy was in the kitchen of their house, a cheerful little blue stucco about hundred yards from the old homestead where Bruce’s parents still live. Tammy greeted me with a hug, a pair of insulated coveralls,

and a mug of black coffee, and then sent me down the road, my every joint now encased in about two inches of insulation and canvas. I moved over the clods of dirt like a Michelin woman, swinging my legs sideways to take a step forward. This all seemed a little unnecessary, but by the time we broke for lunch, I had been standing more or less in one place for five hours, and it was snowing.

It may not have felt much like it, but I understood that the standing was a luxury— a luxury afforded to no one other than me. Bruce and Tammy’s older daughter, Amber, and her husband Travis spent the morning on horseback, herding cattle into a cow-wide, plywood-paneled alley with clucking and repetition— “Hey, hey, hey! Hey girls! Hey!” Two small dogs punctuated this human encouragement with heel-nips and a superfluity of sprinted circles. The mass of the herd pushed year-old Herefords one by one to the front of the alley, from where they stumbled into the chute, a “V” of welded metal tubing painted red and capped with what looked like a vise for cow-necks.

That is, in fact, exactly what it was. Bruce, impervious to cold as to the protests of thousands of pounds of confused cow, shouted jokes as he hauled down on a lever controlling the headgate, trapping the beasts momentarily at their throats so that the Thomases’ other guest— the local veterinarian— could administer shots to haunch after orange-brown haunch. Puncture accomplished, Bruce allowed the contraption to fall open, and the released cow tumbled forward, recovering a semblance of balance just in time to kick hind her legs over the “V.” In this I saw something that surprised me: an improbable bovine beauty, or something close to grace.

That evening at the kitchen table, over the remnants of mashed potatoes, beans from the garden, and a profoundly local chunk of roast beef, I asked the Thomases about their lives and their land. Bruce explained how working for the lumber mill had acquainted him with the ins and outs of Clean Water Act permit requirements, and how that had given him some insights into the connections between agriculture and environmental policy more generally. When his neighbor on Gold Creek, John Hollenback, started a group aimed at involving landowners in resource issues in the Upper Clark Fork Basin, Bruce

immediately recognized the need for such an organization, and his boss at the mill encouraged him to get involved.

Since then that group, the Watershed Restoration Coalition (WRC), has helped Bruce and Tammy plan and pay for upgrades to their ranch— upgrades targeted at improving water quality and water availability in Gold Creek. The Thomases have been able to switch from flood irrigation to more-efficient pivots, and they are transitioning to wildlife-friendly fencing. They have taken their mild-mannered white-faced cows off several acres of riparian pasture and installed a pipeline to move water from the creek into the uplands. The feedlot still straddles the creek, but there's a plan in the works to move it.

The WRC isn't paying for these improvements itself; rather, the group assists landowners like the Thomases in coordinating watershed-level projects with their neighbors and locating government grant and cost-share programs that match their needs. Agencies like the federal Natural Resource Conservation Service (NRCS) and local weed control and conservation districts maintain a presence in the Deer Lodge Valley— just upriver from Gold Creek— and can support landowners' resource management initiatives with funding, specific services, and educational information. However, WRC members are in a position to take advantage of another source of support— one unique to the Deer Lodge area and its river.

#### **BETWEEN BUTTE AND THE BITTERROOT: CLEANING UP AND HANGING ON**

The Clark Fork has its headwaters in Butte, Montana— one of the historic centers of hard-rock mining in the West— and from the opening of Butte's first copper, silver, and gold mines in the 19<sup>th</sup> century, the river has been the city's industrial drainpipe. In 1983 several sites along the Clark Fork were designated as contaminated and slated for cleanup under the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).<sup>2</sup> Taken together, these sites constitute one of the largest "Superfund" complexes in the country.<sup>3</sup> The responsible party, Atlantic Richfield Company (ARCO), has since signed a series of settlements with the Environmental Protection Agency (EPA) and the state of Montana. The agreements set aside funds for CERCLA-mandated

remediation, but they also dedicate millions of dollars to restoration— a step above the cleanup required by Superfund legislation.<sup>4</sup>

What this means is that landowners with contamination in their backyards and hay meadows have some choice in the matter of how, and to what degree, the sites are treated. There is also a grants program intended to fund environmental improvements in the watershed more broadly— including, but certainly not limited to, water-saving ranch upgrades of the sort that the Thomases have been implementing on their property.

In Western Montana, there are those who regard the cleanup and restoration of the Clark Fork as nothing less than transformative. It is hard not to see it that way if you're looking upriver from Missoula, toward the site of a dam that once stopped the flow of mine wastes from following the Clark Fork out of Montana and into Idaho's Lake Pend Oreille. Because of the Superfund designation and the settlements with ARCO, the Milltown Dam has been removed; the reservoir behind it has been drained, and heavy machinery is now peeling back layers of contaminated sediment from the old floodplain.<sup>5</sup> The Deer Lodge Valley offers no such concentration of spectacle, but the cleanup there will treat hundreds of bald patches along the river— places where, in some cases, the ground is so steeped in heavy metals that nothing will grow.<sup>6</sup> Many people anticipate increased tourism and a healthier, more dependable fishery will follow remediation; others believe that the Superfund designation has depressed land values in the area, and fear that if the Clark Fork's toxic stigma is lifted, the Deer Lodge Valley will become the next Bitterroot, Flathead, or Gallatin— a playground for the wealthy from which long-time locals will be priced out.

Having been exposed to countless such predictions in Missoula, I expected that the Thomases would be at least equally eager to speculate on the ways Superfund remediation and ecological restoration might affect their community. But when I asked them how they see the Deer Lodge Valley changing in the future, they didn't even mention the cleanup. Instead, they talked about the way rising land values, high fuel prices, and low cow prices were already making it harder and harder to get a ranch to pay for itself.

These subjects would become familiar to me as I got to know more landowners in the area. Most of the ranch families in Deer Lodge are supported by earnings from at least one full-time, off-ranch job. Bruce and Tammy have never drawn a wage from their operation. Instead, they both work 40 hours a week at the mill. There are days when Bruce, who is in the procurement department, closes deals via Blackberry while moving cattle. But the timber industry is struggling; it is unclear how much longer Sun Mountain Lumber will be able to fill the economic gaps in Powell County.<sup>7</sup>

My last question: “What are your goals for the ranch?”

Neither Bruce nor Tammy hesitated. The synchrony was automatic, or accidental—achieved without so much as a shared glance.

“To keep it.”

#### **CALIFORNIA WEEDING: A RESTORATION IDYLL**

I came to Montana from the west and so, paradoxically, as a stranger to the West, but I was no stranger to the promises and practice of ecological restoration. I did my undergraduate thesis on a contentious proposal to re-water a stream on California’s rural eastern flank. The surrounding community had been stripped of its land-based industries decades before I was born— an early victim of the economic transformations now underway, but as-yet unconsummated, in much of the intermountain region. I first got involved with restoration much earlier than that, however, in an entirely different cultural context: Beginning when I was twelve, I spent my Saturday mornings ripping various invasive plant species from patches of public land in and around San Francisco— my hometown. I did not do this because I believed particularly in restoration. Actually, I wanted to chain myself to a bulldozer; I wanted to be a treesitter like Julia Butterfly Hill. It just happened that EarthFirst! wasn’t recruiting middle schoolers at that particular time. The Golden Gate National Recreation Area (GGNRA) was.

It was 1996, Bill Clinton was in office, and the Berlin Wall was a memory. It had been years since anyone looked westward from the salt-corroded battlements of the Pacific fearing the Soviets or Japan, but the California coast still bristled with essentially obsolete

military installations. As base after base was decommissioned, prime ocean-view real estate became vulnerable to development. With Congressional Republicans controlling the national purse strings, the transfer of this land to public agencies with more ecologically-sensitive mandates was about as much as environmentalists could expect. If Californians wanted the gun emplacements replanted with coyote brush and the dunes released from ice plant once imported from South Africa to stabilize them, they would have to do it themselves— or find a bunch of really energetic pre-teens whose schools required “community service.”<sup>8</sup>

So in sixth grade, I learned to identify and uproot French broom on Wolfback Ridge in Sausalito. Later I went to work on the ice plant of Fort Funston, and painstakingly tucked species of lupine and silver beachweeds into the dunes at Crissy Field. The work tended to be difficult, dirty, and cold, but it affirmed my identity as an environmentalist and a Californian. This provided an important antidote to middle and high school, where I was simply a nerd.

I took pride in my ability to identify the native flora of California’s coastal ecosystems; this knowledge— and the way I had attained it— seemed pretty unique to my adolescent self. But my accidental milieu was not as particular to me, or even to the GGNRA, as I had first imagined. Later, as an Environmental Studies major down the peninsula in Santa Cruz, I was introduced to the story of Midwesterners who in the 1980s and 1990s began using their weekends to restore oak woodland in a network of suburban parklands dubbed “the Chicago Wilderness.” They traced the spirit of the efforts to even-earlier chapters in the history of restoration ecology.<sup>9</sup> Now this decentralized, inchoate tradition was thriving on the Central Coast, as well: It seemed like some classmate always had an announcement about an upcoming restoration workday. When I moved to Missoula for graduate school, I found more of the same: regular people making Saturday morning pilgrimages to pull weeds and plant seedlings in local parks, open spaces, and preserves.

It’s a great image— less polarizing than the escapades of an EarthFirst!er, for starters— but “community-based restoration,” as it is often called, is also characterized by a number of attributes that Americans generally seem to find worthy of admiration. Thrift, optimism,

and civic-mindedness; self-starters solving their own local problems with hands-on work—this is what restoration invites us to see in photos of mud-streaked, happy people wielding tools in the sun-dappled commons.

Of course, it is unlikely that the work now underway in Deer Lodge will yield these kinds of snapshots. On my most recent visit to the Thomas Ranch, as my slush-greyed Volkswagen thunked wearily over the cattle guard at the head of Hereford Lane, what I saw were the foreboding, wintry Flints presiding over a quiet valley. The cold creek was shrouded with bare cottonwoods. In the foreground, iced in snow, stood the elegant threaded wheels of two new pivots. *This* may be what restoration looks like in the Deer Lodge Valley.

#### **THE GRASSROOTS, THE RANGELANDS, AND ME**

Clearly, the projects underway in the Clark Fork watershed do not resemble the idylls of community-based restoration in Chicago and San Francisco, and there are those who would argue, for other reasons, that this work should not be called restoration at all. But our brief tour of the Deer Lodge Valley has already revealed this much: A group which chose to call itself the Watershed Restoration Coalition, and environmentally salutary projects getting paid for, at least in part, by funds intended to support restoration. The state of Montana sees this money as one component of a broader push to encourage economic development through restoration.<sup>10</sup> It is as if the place cannot relinquish the word. And what that means to me is that those of us who care about the meaning of the word must not ignore the place.

So in early June of 2008, I did something that most of my fellow Environmental Studies majors at UC Santa Cruz would have regarded as mildly insane: I moved into a tiny and aggressively-tiled split-level located in the long shadow of the Anaconda smelter, at the head of the Deer Lodge Valley. The house was a friend's boyfriend's investment property, and he needed someone to water the lawn while he finished up a mostly-correspondence master's degree in South Dakota; I needed a cheap and relatively short-term living situation near the people who lived near the Clark Fork. My goal for the summer was to interview as many of them as possible. I told my quarries there and my



advising committee back in Missoula that I was interested in “landowner perceptions of restoration in the Deer Lodge Valley” because that seemed unthreatening, academic, and unspecific— something for the ranchers, something for the professors, and a lot of leeway for me.

What I actually wanted to figure out was less conducive to sound bites. I believe that resource conservation, economic development, and— especially— ecological restoration initiatives are more likely to be successful, sustainable, and equitable when they are driven, or at the very least endorsed, by the human communities they are intended to enhance. The cleanup and restoration projects underway in the Deer Lodge Valley are, in a sense, anything but “bottom-up,” but I accept the premises that led to their proposition by outsiders. Toxic waste that poses a human health risk should be cleaned up, and it makes good sense for the state to find ways to piggyback its restoration dreams on a Superfund remediation effort that will happen whether affected landowners want a part in it or not. Moreover, the presence of the WRC suggests to me that the Superfund- and state-driven transformation of the Deer Lodge Valley might yet have meaningful participatory elements. My interviews were intended to assess the extent of and potential for such local engagement. Fundamentally, I wanted to know if and how locals might involve themselves *meaningfully* in the cleanup and restoration of the Clark Fork.

There was one thing more. I came to Montana in part on the strength of my conviction that what was happening in this particular part of this particular state could speak back to restoration somehow. Restoration as I had known it in California was something that happened on public lands, and the diverse ways that people value such spaces almost guaranteed that most restoration projects would be controversial. In San Francisco, there have been alarmingly vitriolic debates between birdwatchers and dog walkers;<sup>11</sup> in the community I studied in the Eastern Sierra, a group that wanted to restore ecosystem structure ended up in “screaming matches” with residents who saw the proposed restoration site as a valuable historical landscape.<sup>12</sup> In Chicago, people who loved trees clashed with those who loved *native* trees.<sup>13</sup> It seemed to me that in these cases, restoration advocates never had to work very hard to empathize with their detractors. With ecology on

their side, they could write off their opponents as mere recreationists, as insensible nostalgics, or as aesthetes who evaluate environmental health on the basis of how things look.

I am not trying to belittle historical preservationists and people who want to let their dogs run off leash, nor is it my goal to put down weekend weed pullers. My point is that restoration is full of unanswered questions— questions having to do with boundaries, compromise, and the pragmatics of implementation. Brushing aside restoration's detractors means dodging an opportunity to engage these questions more rigorously and more fully.

My California intuition told me that Deer Lodge and the Clark Fork hold special instructive potential for the restoration community because, in this case, local people who are not restorationists simply cannot be dismissed.<sup>14</sup> Restoration is not happening in the Deer Lodge town park; it is happening on private property, in a part of the country where government incursion onto private property is not generally well-tolerated. If landowners are not consulted, respected, and engaged in this process, they will not maintain the work that is done in their yards. The ecological benefits of restoration will not be realized, and even if human health hazards associated with contamination are successfully mitigated, the millions of dollars in settlement funds dedicated specifically to restoration will have been wasted. Agencies and environmental groups advocating for cleanup and restoration on the Clark Fork recognize this, and they are trying to work with landowners. And since many of those landowners are ranchers, working with them doesn't just mean honoring different value systems; it means thinking about what restoration can and should mean in a working landscape.

My investigation, then, has been twofold: I wanted to see whether and how community-based restoration might thrive within the context of a massive, top-down initiative, but I also wanted to learn something about the potential for restoration on private and especially working lands. These issues are knit together; to understand how closely, it is necessary to dig more deeply into the evolution of ecological restoration— and, more specifically, into the ethical debates that have paralleled the development of

restoration science and practice. This is the subject of Chapter 2. In Chapter 3, I return to Deer Lodge to describe in detail the realized opportunity for local involvement in restoration that the WRC represents. I then step back from the WRC and turn to the puzzle of non-participation. In Chapter 4, I discuss the major themes of my interviews with agricultural landowners in the Deer Lodge Valley, connecting these emphases to subtler dynamics that may dispose landowners to keep a wary distance from cleanup and restoration. Chapter 5 brings the place-specific insights of Chapters 3 and 4 into conversation with the contributions of the literature distilled in Chapter 2, offering an account of the barriers to implementing community-based restoration in the working landscapes of the rural West.

As I see it, these barriers have a lot to do with the culture and the economics of ranching, and there are those who would characterize them as so many good reasons that the industry's time has come and gone. It is not my goal to provide ammunition to adherents of this perspective. Accordingly, I conclude by situating my findings within a broader discussion about the fate and future of places like Deer Lodge, explaining why "keeping the ranch" may be as vital a goal for all westerners, new and old, as it is for people like Bruce and Tammy Thomas.

## CHAPTER 2

### *Ethical Conversations and Practical Applications*

The notion that local residents in a place like the Deer Lodge Valley should be involved in the restoration of their river has roots that go deeper than pragmatism. If it is to some degree an artifact of a model developed on urban and suburban public lands, it is not necessarily defunct or merely decorative in other contexts. This idea can be traced to a proposition that has been hanging around the restoration community for some time: Put simply, many people feel that restoration has as much potential to transform social relations as it does to transform ecosystems.

This idea is not unproblematic, and countervailing perspectives seem relevant to the Upper Clark Fork projects, as well. For example, there is a fear among some restoration advocates that attempting to do restoration in working agroecosystems or on active rangelands might lead to practices that buy broad support by scrimping on science— and that this will degrade restoration or erode the meaning of the word over time. In order to understand what is at stake on the Clark Fork, it is necessary to dig more deeply into the conversation about the respective roles of ecology and society in restoration. In particular, it is helpful to look at the way people with an interest in restoration have characterized the normative role of humans in its practice: Why is local involvement important to restoration? How might ecological restoration benefit human communities?

First, however, it is important to understand where and how restoration began, and how these circumstances foreshadowed a sense of possibility and promise that inspires restoration advocates— and dogs its detractors— to this day.

#### **ORIGINS: SCIENCE SHROUDED IN ETHIC**

Though attempts to heal land degraded by human activities are at least as old as farming, most accounts of the emergence of ecological restoration begin in the 1930s, in the mingling of Depression-era interest in agricultural soil rehabilitation with the new science of ecology. Around this time, Aldo Leopold's famous work on a derelict farm in

Wisconsin tested the notion that ecological principles might be used to facilitate something more radical than the simple recovery of utilitarian value in land— something like the reestablishment of a pre-agricultural ecosystem, either in place of or alongside agricultural land use.<sup>15</sup>

Next came formal experiments in restoring Midwestern prairie at the storied University of Wisconsin Arboretum in Madison. These were carried out under the guidance of Leopold and other pioneers of ecology.<sup>16</sup> Evocations of this work bring the hush of sacrament to the narrative of the development of restoration; perhaps part of the appeal of the Arboretum's prairie as a creation story is the marriage of science and spirituality it implies: Here is hypothesis-testing by the author of the land ethic; here is ecology, the science most closely associated with wild nature, applied in a setting whose formal name suggests a garden— that word of course bringing its own prodigious load of Biblical connotations. The problems and promises of restoration are foreshadowed by the early years at Madison; so too is the close relationship of its science and practice to ethical inquiry. Can restored ecosystems be considered “natural”? Is restoration just another tool in the conservationist's box, or does it offer something beyond whatever recovery of ecological processes it facilitates?

In the decades following the Depression, these philosophical questions gestated as ecological restoration branched and eddied— “flowing along multiple channels,” in the words of philosopher and restoration advocate Eric Higgs.<sup>17</sup> The Arboretum would continue to function as a hub for the development of the field into the 1980s, when the science of restoration made its academic debut. It was the Arboretum's publications manager, William R. Jordan III, who launched the first restoration journal in 1983; it was Jordan who coined the phrase “restoration ecology” in order to designate experimentally driven restoration science from the already-more-inchoate sweep of restoration practice.<sup>18</sup> In 1985, Jordan and UW Forestry professor John Aber heralded restoration ecology in the pages of *BioScience* as the “real science of land health... envisioned by Aldo Leopold.” Their brief opinion paper makes reference to a contemporary symposium of natural scientists from diverse subfields endeavoring to “place their disciplines in perspective against the

needs of a holistic approach to restoration.” According to Aber and Jordan, participants felt their collective, scholarly engagement with restoration had the potential to transform ecological theory.<sup>19</sup>

Statements such as these and the disciplinary affiliations of the symposium’s attendees evince a strong scientific impulse in the restoration community, but Aber and Jordan did not restrict their speculation on the potential of restoration to the realm of ecology. In addition, they suggested, restoration might “help alter the prevailing view of human activity as necessarily having a negative impact on the landscape.”<sup>20</sup> Even in the beginning, and even in the pages of *BioScience*, restoration was recognized as a means for re-imagining—and perhaps reconfiguring—human relationships to the non-human world.

The next twenty-five years would see tremendous growth in restoration science, practice, and even business.<sup>21</sup> By the turn of the century, the idea of repairing ecosystems had acquired a sort of star quality in some political and economic circles.<sup>22</sup> And as restoration was defined, redefined, and professionalized, the philosophical questions seeded with the prairie grasses at Madison became difficult to ignore. The time had arrived to grapple with the social and ethical implications of “nature by design.”<sup>23</sup>

#### **ADOLESCENCE: DEFINITION WOES AND PHILOSOPHERS’ BLOWS**

In 1988, the Society for Ecological Restoration (SER) was established “to promote ecological restoration as a means of sustaining the diversity of life on Earth and reestablishing an ecologically healthy relationship between nature and culture.”<sup>24</sup> Before it could hope to do that, however, the SER had to distill an agreeable definition of ecological restoration. If frequency of repetition can be regarded as a rough proxy for the difficulty of a task, defining restoration has been a doozy: The last twenty years have delivered at least four iterations from SER— an average of one definition every five years— and dozens more from other groups and scholars.<sup>25</sup> This parade of presumably unsatisfactory attempts is one source of insight into the ontological challenges presented by restoration. Higgs— who served as a member of the SER’s Board of Directors from 1995 to 2003 and chaired it from 2001-2003— attributes the difficulty of the definition work to the tension between “ecological realities and an awareness of culturally contingent meanings.”<sup>26</sup> Restoration, it

was felt, had to have some ecological basis and be accountable to some ecological standard; a good definition would police the boundary between projects undertaken to actually improve the health of an ecosystem and those merely intended to improve the look of a site or bandaid over flagrant, careless exploitation of natural resources. But ecology does not resolve all the questions posed by restoration. How does one approximate ideal ecological conditions for any one site? At what point does human influence on ecosystems— now increasingly recognized as omnipresent, and dismissed less often as undesirable— become synonymous with degradation? And what about this notion that restoration can have social or cultural benefits in addition to ecological ones?

Adopted in 2002, the SER's current definition describes restoration simply as "the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed."<sup>27</sup> These few words do not set any standards by which the success of restoration projects might be judged; the question of what one is restoring *to* in any particular case and the role of cultural context in making that determination remain open and unspecified. The definition does, however, explicitly characterize restoration as a *process*. It does not make any claims about the form of "assistance" restoration might or should embody, but it does imply that *how* an ecosystem is restored— and who restores it— might be as important as what we end up with, on the ground, when the process is complete.

While the SER wrote and rewrote its definitions, scholars in the humanities were also plying the ambiguities of restoration. At first, this group seemed rather less inclined to look charitably on the new field, as a handful of outspoken philosophers quickly put restoration on the defensive. Robert Elliot got the ball rolling in 1982 with the provocatively titled article "Faking Nature."<sup>28</sup> Though Elliot acknowledges that restoration is a productive approach for some cases and beneficial on some sites, he emphasizes that a restored ecosystem will inevitably lack the full value of a "natural" one, and should not be presented as natural— either directly or by implication.<sup>29</sup> This is an ontological argument about restoration; it can be understood as response to the question, "What is a restored ecosystem?"— or, perhaps more appropriately in this case, "What can't a restored ecosystem be?" Elliot replies that restored ecosystems can never be natural. Other answers would

follow, and philosophers would not soon abandon the debate about the relative merits of these responses.

At the end of the day, though, does it matter what society decides restored ecosystems *are*? Does it matter what words we are and are not allowed to use to describe them? There is no shortage of voices in the academy that would rush to respond in the affirmative, and the point has been made with respect to restoration particularly. Higgs, for example, gets to the heart of the terminology issue by way of restoration specifically: “Dismissing the conceptual debate ignores the power of language in shaping belief and practice,” he notes.<sup>30</sup> He may be right, but few outside the humanist and social sciences are inclined to follow the several and often intricate steps from discourse to its concrete implications for restoration practice— or for environmental and conservation movements generally. For those who are more interested in whether to support restoration and how to make it work than in persistent problems in environmental philosophy— the nature of nature or the attributes of artifice, say— Elliot opens another conversation, the practical implications of which are more readily detectable.

For Elliot, the central contention of ecological restoration is no less audacious than this: “The destruction of what has value [the original ecosystem] is compensated for by the later creation... of something of equal value [the restored ecosystem].”<sup>31</sup> Take this “restoration thesis” (as he calls it) at face value, divorce it from any of your associations with restoration— from who you think does it, and why— and it is not difficult to see where Elliot is going: The problem with restoration is that it makes the “destruction” of ecosystems seem totally fixable. Consequently, it might actually be used to *justify* environmental degradation. But the restoration thesis doesn’t just anticipate this possibility; it assumes it. It incorporates the destruction of natural systems into the meaning of restoration itself. Abuse of natural systems is not a distinct phenomenon for which the new phenomenon— restoration— might be used as an antidote; as Elliot has written it, abuse is *part* of the restoration process. If you promote one, you get the other. Here we have the grounds for an argument against restoration that stands apart from the question of whether or not restored ecosystems are “fake”: Restoration *harms* nature,



therefore, restoration is bad.

This relationship is the starting point for subsequent ethical critiques of restoration, most notably those of Eric Katz. Katz would write prolifically on the dangers and contradictions of restoration throughout the 1990s, usually with a focus on the ontological side of the debate.<sup>32</sup> However, he also probes various and insidious implications of Elliot's restoration thesis. In addition to the scenario Elliot explicitly proposes— in which the promise of restoration is used to assuage environmentalists' concerns about resource exploitation— Katz takes issue with an idea that is only latent in the restoration thesis: Human beings have a moral responsibility to “compensate” for the damage we inflict upon nature. For starters, Katz doesn't believe such compensation is possible,<sup>33</sup> but he also worries that if people believe we can and should make restitution to nature for our disruptions to and extractions from it, we will be vulnerable to the “technological fix” mentality that has, in his view, “engendered the environmental crisis” in the first place.<sup>34</sup> Not only will we believe that environmental degradation is repairable and, by extension, no big deal; we will focus on improving our tools and methods for repairing ecosystems as a way to avoid admitting that some things— some ecosystems, say— are fundamentally unknowable, and maybe even unfixable.

#### **ETHICAL DEFENSES: JORDAN'S PARADIGM TO LIGHT'S PRAGMATISM**

One approach to defending restoration would be to argue that its potential benefits outweigh risks of the sort Elliot and Katz describe. William R. Jordan III makes this case in a 1994 book chapter by arguing that “ecological restoration provides a basis— actually a paradigm— for a healthy, mutually beneficial relationship between ourselves and the natural landscape.”<sup>35</sup> Though Jordan does not refer to Elliot and Katz or answer their specific concerns, his ambitious proposition stands as an early testimony to the deeper possibilities of restoration— the same possibilities to which other restoration advocates would appeal in their answers to the critics. The image of a new, more functional “paradigm” around which to structure relationships between humans and the natural world— one which permits human use of nature's resources without relinquishing the idea that nature has value beyond the countable sort implied in that terminology— operates at a

grander scale than Elliot's restoration thesis. Recall the specter of a society leveraging promises of future restoration for the right to pollute and destroy today; the soaring idealism of Jordan's vision hobbles that creaky, cynical mechanism.

Of course, soaring visions often come up short on specifics, and an argument like Jordan's would not likely have much effect on someone who shares Katz's bedrock beliefs on the ontological side of the restoration debate. What about people who think that "reengagement" of humans with nature will dilute the essence of the latter? Another way to defend restoration is to begin by accepting this much as a premise— or, at least, by letting it stand. Andrew Light agrees to do this, for the sake of argument, and starts instead from Elliot's one concession to restoration advocates: "Fake" or not, natural or not, restoration is the best available option for some sites, in some circumstances, like those in which the essential qualities of "nature" have already been diluted by human contact.<sup>36</sup> If one grants that restoration can also be used in a deceptive, arrogant, or dominating way, a pragmatic question follows: If there are "good" restorations and "bad" restorations, how do we tell the difference?<sup>37</sup>

Light confronts this challenge as a response to Katz, parsing the latter's arguments against restoration into five separate categories and then trying to define "benevolent" restoration in terms of the "bad" things it must not do. Though his effort yields no simple definition nor even a complete framework, the fact that Light is attempting the fight reflects a shift in the larger academic conversation. Where the SER, Elliot, Katz, Jordan, and others were chipping away at the problem of *what* restoration is and *whether* or not it is good, Light is trying to characterize good restoration.<sup>38</sup>

This distinction is not merely academic: By the eve of the Millennium, when Light was writing, restoration practice had expanded and become almost commonplace. Good or bad, restoration was reality. The original philosophical debate might have been intellectually interesting, but practically it was almost insignificant. The same was true with respect to the struggle to define restoration: The ivory tower tug-of-war over terminology had not yet exhausted the writers and thinkers at each end of the rope, and an attendant

crop of “re-” words had yet to be played out for their ontological implications and possibilities,<sup>39</sup> but the rest of the world seemed to have moved on.

With a multifaceted “restoration” cemented in the lay lexicon, it was no longer very productive to talk about what practices the word itself should be used to describe, but the normative questions surrounding restoration were anything but obsolete. Even as writers like Light advanced their ethical defenses, the proliferation and popularization of restoration practice was changing the field in ways that seemed to bear out Katz’s prophecies. Contracting firms and mitigation bankers were emerging to respond to growing interest in restoration— interest that was increasingly being described in market terms.<sup>40</sup> With the transformation of restoration into an industry came increased professionalization of restoration practice. Whether or not individuals and corporations engaged in this work had collectively succumbed to the “technofix” mentality Katz described is an open question, but what they were doing was certainly different from what restoration was when it started, with the Leopold family on their Sand County farm and the botanists painstakingly trying to recreate native Midwestern prairie at the Madison Arboretum. Nor was it similar to the high-profile, community-based restoration efforts that had followed in the 1990s— those weekend weed-pulling teams in the parklands of the “Chicago Wilderness” and the GGNRA.

Different, certainly. But was it bad? Was the diversity of forms of restoration healthy, or was it the beginning of the slippery slope Katz described? If philosophers were going to play a role in answering these questions— and in determining the shape and boundaries of restoration as a whole— a conversation about the difference between “good” and “bad” restoration might be the most logical venue for doing so. A useable framework for distinguishing between the two might replace an agreed-upon *definition* of restoration as restoration’s non-ecological holy grail.

This possibility was not lost on Light. Indeed, he begins his response to Katz with a call to arms for environmental philosophers at large. “So far, most work in environmental ethics has been concerned with describing the nonanthropocentric value of nature,” he notes, evoking Elliot and Katz’s ontological interrogation of restoration implicitly if not

directly, “but one can easily wonder whether such work is directed only toward other environmental philosophers as a contribution to the literature on value theory or whether it has a broader aim.”<sup>41</sup> Light is adamant about the necessity of extending environmental ethics beyond such “intramural discussions” and making it useful to policy-makers, natural resource professionals, and popular audiences. He sees the restoration debate as an opportunity to model what a broader engagement by environmental ethicists might look like. Among other things, he suggests that they develop an “applied ethic for resource managers”— a framework that can be used to identify and support good restoration and stop malevolent restoration.<sup>42</sup>

Throughout this conversation, those who endeavored to defend restoration on philosophical grounds— that is, those who were not primarily interested in demonstrating the potential of restoration *science* to actually improve the ecological health of degraded ecosystems— tended to converge on one particular dimension of its social potential. This is perhaps best summarized by Light: “The relationship between humans and nature imbues restoration with a positive value even if it cannot replicate natural value in its products.”<sup>43</sup> The idea here is that the process of attempting to restore a given site provides a opportunity to build and strengthen that relationship— and maybe even to transform it; to “regenerate old ways or create new ones that bring us closer to natural processes and to one another,” as one of Light’s contemporaries would put it.<sup>44</sup> Of course, these claims circle back to Jordan’s vision, in which restoration is embraced for its potential to cultivate and model a “healthy, mutually beneficial relationship” between humans and nature.<sup>45</sup> And this particular benefit of restoration can be appreciated even if you believe, as Robert Elliot does, that a restored ecosystem is inescapably, essentially different from the original. Even those who insist that restoration does not give us “nature” might find value in the opportunity it provides for building community among humans and between humans and non-humans. This is where community-based efforts to repair degraded ecosystems got their academic due: Projects like the Chicago Wilderness could facilitate the preservation of endangered plant communities (for example), but they could *also* give hundreds of ordinary people the opportunity to get to know their neighbors and the local flora through hard, shared, work— to reap the benefits Light, Jordan, and others theorized.

If Light was correct— if restoration really did have the potential to reengage humans with nature and with one another— there was still the possibility that restoration would fail to achieve this potential. What if restoration attained all the popularity of a “new paradigm,” but did *not* transform much of anything? In order to understand how this could be— and how to prevent it— restorationists needed to describe and define the crossroads at which they seemed to be standing.

#### FOCAL RESTORATION: NAMING THE GARDEN

It is Eric Higgs who takes on the project Light calls for. In his 2003 book, *Nature By Design*, the former SER Chair proposes an ethical framework that can be used to evaluate individual restoration projects. Restoration in general, he argues, is defined by the value it places in “ecological integrity” and “historical fidelity.” The former encompasses “concern for the quality of ecosystems resulting from restoration”; the latter represents the necessity that a restored system reflect prior ecological conditions at the site to some degree.<sup>46</sup>

Both these requirements hold restoration accountable to ecology, but historical fidelity does something else in addition: It is the characteristic of restoration that links ecological considerations and cultural values. According to Higgs, restoration that is informed by history requires learning the stories of a place and then actively participating in the extension of those stories into the future. This is one way the work ties human communities more closely to the ecosystems in which they are grounded— one reason it can be said that restoration does more than simply recover the value lost when an ecosystem is damaged, but also *creates* new value by enhancing human relationships to place and the natural world.<sup>47</sup> What Higgs calls historical fidelity is thus the nucleus of the special potential of restoration noted by Jordan and Light.

The third component of Higgs’ framework differentiates restoration generally from *good* restoration. One way of conceptualizing this difference can be drawn easily from the foregoing references to “potential”: Restoration *has* potential; good restoration achieves it. For Higgs, restoration achieves its potential and becomes good when it engages human communities with stories specific to their ecological place. Good restoration is participatory— at least in some sense.

Before Higgs can take this idea further, however, he has to delineate the distinction between good restoration and the more institutionalized practice he views as a primary threat to it. He does this by positing a new, bicameral typology of restoration— one that separates the “technological” from the “focal.”<sup>48</sup> This division is an application of Albert Borgmann’s 1984 device paradigm, which casts new technologies as the physical evidence of a social system that tends to transform practices of work, play, and ritual into commodities that can be bought and sold.<sup>49</sup> Put another way, items like microwaveable dinners and instant messaging software are not innocuous things that help us perform tasks; they are representations of society’s substitution of marketable goods for the more complicated and interdependent work of engaging directly with the soil in the garden or the person on the other end of the Ethernet cable. This “pattern,” as Borgmann calls it, is not wholly “bad” or without benefits, but it tends to focus our attention on what we gain from “devices” (i.e. the quick dinner and the IM program) and distract us (often with more consumption) from what we give up by using them; by packaging the process into a sellable good, it also distances device users from knowledge about the ways in which devices are produced.<sup>50</sup> The trouble with the technological pattern is not the gadgets it yields; it is the costs and consequences of those gadgets that it obscures.<sup>51</sup>

In restoration, this pattern manifests itself in the very trends Katz condemned: in the move toward professionalization of practice, in increased emphasis on refining technique and scientific approaches, and in the growth of markets for ecosystems, as in mitigation banking. Notably, Higgs also classifies the embrace of ambitious “megaprojects” as a part of the technological pattern, implying that such endeavors tend to buy their scope and grandeur at the expense of engagement with and extension of local connections to the land.<sup>52</sup> What gets lost in all cases where technological restoration dominates is a sense of attachment to and responsibility for place,<sup>53</sup> “the knowledge that lies outside of science,”<sup>54</sup> the democratic aspects of community-based restoration,<sup>55</sup> and the awareness that “nature” itself is a malleable and socially contingent idea.<sup>56</sup> What these threatened elements of restoration have in common is their potential to reconnect people with the land in which they live, and the other people with whom they share it— that value-added component Light describes.

The third component of Higgs' model for good restoration responds to the threat of technological restoration: "Focal restoration" is adapted from Borgmann's concept of "focal practices," which Higgs describes as "the challenging, skillful, and sometime tedious activities required to keep something of value alive."<sup>57</sup> Local volunteers ripping invasive non-native species out of sand dunes and replanting them with carefully-tended indigenous plants grown from locally-collected seeds is an example of focal practice translated through the filter of restoration. This is this kind of inclusive, organic, community-based restoration that Higgs wants to protect by separating it out as a crucial aspect of good restoration.

#### A SHIFTING BALANCE; AN OPEN QUESTION

Higgs argues that for any given restoration project, the insights and advantages of a technological approach must be balanced by focal elements. His goal is not to wipe out the former; in fact, he concedes that the "technological" impulse within the restoration community has provided good things to the practice, such as increased scientific knowledge of ecosystems. It is when technological elements of restoration swamp the focal that the potential of restoration is jeopardized. Good restoration, according to Higgs, requires focal elements vigorous enough to guard against the hazards of a purely technological approach.<sup>58</sup>

Higgs also suggests that the character of this balance, and of the restoration as a whole, must be shaped by the social and cultural context in which it is carried out. He explicitly refers to "the importance of particularity"— cultural as well as ecological— "and the risk of imperialism in restoration."<sup>59</sup> Though he makes this comment in response to the open question of how to promote restoration outside of North America and especially in the Global South, he implies that these points are also relevant to atypical restoration projects in parts of the world where restoration is common. Restoration on working landscapes in the United States is an example of such a situation— and Higgs hints at this connection in his discussion. "What an American restorationist perceives as restoration, of for that matter as nature or wilderness," he notes, "is typically different from the perceptions of...

any practitioner in agroecosystems, where cultural practices are as blatantly important as ecological processes.”<sup>60</sup>

When I first read *Nature by Design*, the disconnect between the diversity of “good restorations” Higgs anticipates and the relatively narrow range of examples of “focal” restoration provided by his— and my— experience dogged me. Imagining what a “good” or “balanced” restoration would look like on working ranchlands seemed to be as difficult for him as it was for me. So I began to see the cleanup and restoration of the Upper Clark Fork, and particularly the efforts in Deer Lodge, as an opportunity to probe that disconnect.

The technological elements of the Upper Clark Fork cleanup and restoration are powerful. The geographic area of the project and the enormity of the remediation component almost require that it be managed at a larger-than-local scale. Superfund law is shaping the goals and outcomes. To top it all off, Montana Governor Brian Schweitzer has joined the ranks of politicians who are embracing the concept of a “restoration economy” as a way to patch the gaping holes in local economies of the post-industrial West.<sup>61</sup> Establishing restoration as the region’s next “boom” may have real social and ecological benefits, but that does not mean it will encourage focal restoration.

And true to Higgs’ model, none of this is *necessarily* a bad thing: Rural communities in the West desperately need jobs, and if they can generate them in ways that are environmentally salutary, everybody wins. Where hazardous waste contamination is an issue, it is patently unrealistic to expect that remediation will be carried out by volunteers and planned solely through discussion groups and community meetings; this work requires technical expertise— not to mention the millions of dollars only government is likely to wrest from a responsible party with ARCO’s clout and coffers.

Higgs also suggests that if there is no focal element to this work, its benefits will fall short of what is possible— perhaps in ways that undermine the long-term success of the effort. How can restoration of this scope and technical complexity be anything other than technological? In the Deer Lodge Valley, this is exactly where the WRC comes in.



PLATE 1. The Clark Fork and the Deer Lodge Valley



*The Clark Fork in the Deer Lodge Valley, photographed by the author in July of 2008.*



*Looking west, across the width of the Deer Lodge Valley, from the eastern uplands. Photo by Dan Spencer.*

PLATE 2. The Thomas Ranch



*The Thomas Ranch. The feedlot is visible in the foreground; Hereford Lane passes the outbuildings at right. Photo by Dan Spencer.*



*Changes on the Thomas Ranch: Pivots and wildlife-friendly fencing (visible against stump in foreground). Photo by Dan Spencer.*

PLATE 3. The Milltown Dam and Reservoir, Before and After



*The subtlety of restoration on the Thomas Ranch contrasts sharply with the transformation of the Milltown area. This May 2006 view looks southeast up the Clark Fork. The Blackfoot passes under I-90 (left) to join the Clark Fork in the reservoir. Courtesy of CFRAC.*



*The same view in June 2009, after the removal of the dam and contaminated sediments behind it. Courtesy of CFRAC.*

PLATE 4. Public Lands Restoration in the Golden Gate National Recreation Area (GGNRA)



*Traditional restoration: Flags mark new native plantings at a project site in Presidio of San Francisco, part of the GGNRA.*



*A sign at San Francisco's Fort Miley, photographed in 2009, attests to the ongoing efforts of volunteer restorationists in the GGNRA.*

### CHAPTER 3

#### *The Focal Politics of the WRC*

During the first week I lived in Anaconda, three significant things happened: I became afraid of Anaconda, it snowed, and I attended a WRC meeting. They happened in that order. I became afraid of Anaconda when I picked up my first copy of the *Anaconda Leader* and discovered that a local woman had recently gone missing. She was last seen at a bar; her car was discovered a few days later, just a few blocks from my white split level. The article mentioned that her groceries, which had been left in the back seat of the car along with a recently-filled prescription, had begun to rot.

I read the coverage while perched on a high stool at my adoptive kitchen table. The table was situated in front of a picture window that faced the front lawn and the Pintlers. When I read about the missing woman and her rotting groceries, I drew the vertical plastic blinds and twisted the rod that made them slap flat against each other. They remained closed for the duration of the summer, along with most of the rest of the window coverings in my borrowed house.

I also became jumpy. Edgy. Easily startled. This transformation was decisive; sleep, when it finally came that night, did little to dampen my paranoia. In the morning, as I blearily steered my bowl of oatmeal toward the table, I saw a sliver of the world through the imperfectly protective blinds. I yelped out loud, nearly dropping my breakfast. The sliver was white. The lawn, the street, my poor black Volkswagen, and the secret crags of the Pintlers— everything in my inch-wide vertical cross-section of Anaconda was covered in fresh June snow.

It also hailed, rained, and thundered that day— that hour, actually. I drove to Deer Lodge watching lightening stab the hayfields on either side of the interstate, and when I pulled into the parking lot of the USDA building and got out of the car, falling ice bit at my face.

If conditions outside worsened over the next several hours, I had no way of knowing about it: The conference room where the WRC meets is a windowless enclave of perfect officeness within what is already an overwhelmingly beige and fluorescent place. It is decorated with a projector screen and the standard coffee obelisk, the latter of which is crowded by its customary hangers-on: Squeaky white styrofoam cups, red plastic straws, the varying pastels of competing artificial sweeteners. Usually, the big table supports a big box of donuts and jelly rolls; occasionally, someone brings cookies.

By the time the meeting begins, the room is full, and it is mostly full of white men in their 40s, 50s, and 60s. Those who fit that description in only two of the three ways tend to be employees of state and federal resource management agencies. Those who fit the description in just one way are the WRC's Executive Director, Renée Myers, employees of the Clark Fork Coalition— a Missoula-based environmental advocacy group whose Executive Director, Karen Knudsen, sits on the WRC's Board— and, of late, me. The rest of the attendees— the folks who are three for three— are mostly Deer Lodge-area ranchers.

Typically, after everybody gets his or her coffee, Myers presents the agenda. A native of upstate New York, she is trim and sensible, with straight blond hair and an understated affection for Patagonia fleece. She kicked off the June meeting with a miniature film screening— probably a first for the WRC. The twenty-minute movie she showed told the story of landowner/agency collaboration to restore habitat for the endangered Arctic grayling in the Big Hole Valley, thereby justifying its endearingly straightforward title, "Fish and Cow."<sup>62</sup> In keeping with this, Myers didn't take her screening too seriously— in fact, there was an uncharacteristic bashfulness about her announcement of the first agenda item— but when she began explaining why she had wanted to start the meeting this way, any hint of hesitancy vanished. "I see little movies like this as a way of opening a conversation," she said pointedly.

Knudsen agreed, noting that the film— or others like it— could be good outreach tool for the WRC's work in the Deer Lodge Valley. From there the conversation drifted and eddied: Would the film's emphasis on conservation easements send the wrong message?

One member stressed that even if the landowner doesn't want an easement, there's plenty of conservation work he can do. The real message of the movie, someone else said, was about the conservation value of large ecosystem ranches. Myers pointed out that the film also showed the potential of conservation groups like the WRC— the type of organization committed to serving as an “intermediary” between landowners and agencies. The talk jumped from place to place, but the common thread of the discussion was its attention to what the WRC might do in the future, and how it might do it.

“What about a WRC movie?” someone said.

“Sure,” Myers replied, almost instantaneously. “When we get on-the-ground success.”

WRC founder John Hollenback remained quiet for much of the conversation, deferring to the Executive Director of the group he started. But before Myers advanced the meeting to the next agenda item— updates from “partner” agencies and organizations— Hollenback weighed in.

Carefully, he noted that ranchers could be considered “the original conservationists.” They “have a lot in common” with the newer type, and he thought the film was a good reminder of this. When the two groups cooperate, he pointed out, “what benefits is the resource.”

#### **FROM OMISSION TO MISSION**

The idea of starting a landowner group came to Hollenback in 1999, while he was sitting in a meeting with representatives of ARCO, EPA, and “several other agencies.”

When he relayed the story to me in an interview last April, Hollenback paused here. Trying to remember, he focused on the polished top of his dining room table and the old brick of a tape recorder I had borrowed from the University. Finally, he laughed a little and said, “You know, I'm really not sure who was there.”

That he cannot recall such details is unsurprising. In the years since the state sued ARCO, “meetings” have become a regular feature of life in the Deer Lodge area. First there were those held by the company, which convened local residents in order to pitch them its

own vision of remediation. For a time, it was assumed that ARCO would implement cleanup under the supervision of the EPA, but after the state settled, the Montana Department of Environmental Quality (DEQ) partnered with the federal government to execute the actual earth-moving. That meant more meetings; different pitches. A Technical Assistance Committee was formed to help “make the Superfund process and cleanup options understandable for all”<sup>63</sup>; the Natural Resource Damage Program (NRDP) established the Upper Clark Fork River Basin (UCFRB) Restoration and Remediation Education Advisory Council to weigh in on grant proposals on behalf of the public.<sup>64</sup> These committees held open meetings, too.

Thus even before the formation of the WRC, the area had become a sort of ground zero for acronyms undertaking outreach. Most of the landowners I interviewed for this project could not remember the particular purpose nor the sponsors of *any* meetings they had chosen to attend. They couldn’t remember which meetings they had chosen *not* to attend, nor why, nor when they had given up on attending meetings, period. And the number of people who have given up is substantial. When I asked one old rancher if there was any particular reason he had not gotten involved in the WRC, he gruffed, “I don’t like to be involved in anything.”

And then there are people like John Hollenback.

Hollenback has been a member of the board of his local conservation district for forty years; he was chairman of the board for ten of those years. He helped establish the Powell County Planning Board and served on it for more than thirty-five years, and he has been the chair and vice-chair of the Montana Grazing Lands Conservation Initiative. He was nominated to the Governor’s Rangeland Resources Executive Committee in 1977, and he remains a member today. He is the director of the South Garnet Weed Management Area, and he has twenty years of experience on the board of the People’s Bank of Deer Lodge. He has been director, chair, and vice chair of the Montana Youth Range Camp, and he and his wife Carole host an Agricultural Lenders’ School on their ranch. Remember that Advisory Council? He was a member for six years. He has been a brand inspector for the state of Montana since 1956. He joined the Gold Creek Knights of Columbus in 1961,



and he remains affiliated with Deer Lodge branch. Add up the years Hollenback has served in a leadership position with each of these groups, and the total is over twelve decades. That's a lot of meetings.

And it doesn't count the town hall affairs associated with cleanup— the meetings he attended simply as an interested resident of the Upper Clark Fork Basin.

“Anyhow, we had a meeting in Deer Lodge and they were going over the lawsuit and what the lawsuit consisted of,” Hollenback explains. “I read that all over.” The literature and the agencies' presentations were “very in depth,” he recalls. There did seem to be one omission, though: “The landowner was never mentioned.”

This made no sense to Hollenback. True the cleanup of the upper river was still in the planning stages, but it had been clear from the start that most of the contaminated sites were on private lands. Therefore, the success of the effort seemed to depend upon landowner involvement. “Especially on a long-term basis,” Hollenback stresses, “it's going to be the private landowners that understand and maintain what was done.” Given that, he felt, someone needed to make sure that landowners' concerns were accounted for in the decision-making process.

“After that meeting, I kept sitting around,” he remembers. “There was a couple of people there from the state, so I called a few people aside [and] said, ‘Any of this strike you funny?’ And they said, ‘Well... yeah.’”

According to Scott Payne, a consulting hydrogeologist who would serve as the WRC's first watershed coordinator, Hollenback had identified a real gap in the process. What was missing in the Deer Lodge Valley was “a grassroots organization to represent, specifically, rural agricultural interests.”

So Hollenback decided to start that group. He began by calling friends and neighbors, inviting them to yet another meeting related to the cleanup. But this one would be different: Hollenback's primary objective was to make sure landowners would have a voice—“Not necessarily [to] fight anybody,” he modifies, “But [to] help with the process and make sure that the landowners were part of the process.”

His rewording points to a slight ambivalence in the WRC's early history: "Fighting" wasn't the goal, but it wasn't exactly off the table, either. The landowners Hollenback convened were underwhelmed, even frustrated, by the failure of the state, ARCO, and the EPA to include them in the planning stages, and they wanted to stick up for themselves. At the same time, there were clear signs that the group hoped to play a constructive role in the cleanup. For example, Hollenback didn't restrict his initial solicitation to landowners; he also invited representatives from the DEQ, the state's Department of Natural Resources and Conservation (DNRC), the four conservation districts along the Upper Clark Fork, and the weed control districts in the cleanup area. Many of them showed up at the first WRC meeting; some became members of the group's original, seven-person board. Hollenback arranged meetings with commissioners from the affected counties, as well. He says he did all this because he thought that representatives of local government and resource institutions might take on an "advisory" role in the group, helping landowners figure out ways to work within a process dominated by more powerful actors from different organizational cultures.

At first, though, locals showed up at meetings because they saw the WRC as a way to keep apprised of what was going on in the Valley. Dan McQueary raises angus cattle east of Deer Lodge town, on a piece of ground that once belonged to his great-grandfather. He was recently elected to a term on the WRC's Board of Directors, and he has clear plans in mind for restoring habitat along his stretch of Cottonwood Creek. McQueary maintained an understated presence at early meetings, however. Initially, he says, "You were just there to hear what was going on— to put your ten cents'-worth in, as a landowner, if something came up and you wanted to say something."

As the group continued to meet, it became clear that the WRC could do more in the Valley than listen and talk: They could try to get funding for conservation projects that landowners actually wanted to implement on their individual properties. To do that, though, it was clear that the WRC needed an employee. More specifically, they needed a watershed coordinator— someone who understood what they were trying to do, and who could write grants to help them get money to do it. "We ended up getting some funds

through the state [for the position],” Hollenback explained. Since the WRC was not incorporated, it was the conservation district that hired Payne, whose consulting business had grown to include a lot of coordination work.

It was 2000 when Payne came on board, and his “marching orders” seemed clear: “It was like, ‘By golly, we’re gonna show the world that these things are important,’” he says.

The most effective way to do that was, however, something the WRC would have to figure out as it went along.

#### **THE EAST VALLEY PROJECT: PIPELINE, PUBLIC ACCESS, AND THE PARTNERING VOICE**

Payne’s first task was to write a proposal to the NRDP— the office of the Montana Justice Department established to prosecute the case against ARCO and to oversee the distribution of whatever compensation the government might wrest from the company. In 1999, a partial settlement secured \$230 million for the state, and though the language of that agreement committed much of this money to specific major projects, a substantial portion of the claim— \$129 million— was dedicated to restoration in the Clark Fork Basin.<sup>65</sup> A wedge of that monetary pie was set to be distributed as grants to government agencies, individuals, and other private entities. Any proposal that aims to “restore or replace” natural resources in the upper river basin is considered for funding; applications are reviewed by the Advisory Council and studied extensively by NRDP staff. Their recommendations are forwarded to the Governor for approval or denial on an annual cycle.<sup>66</sup>

The WRC’s first proposal was for the East Valley Project— a comprehensive effort to develop offstream watering sites for multiple landowners running cattle in a large area south of Deer Lodge town and east of the Clark Fork. The core of the project would be pipeline installation, for which the NRCS provides cost-sharing with landowners through its Environmental Quality Incentives Program (EQUIP). The WRC’s idea was to procure NRDP funding for the difference between EQUIP’s contribution and the full project cost, essentially transferring the landowner’s “share” to the state.

So along with NRCS employee Nancy Sweeney, Payne visited the targeted properties and sat down with East Valley residents. The goal was to gauge interest in the project, but they didn't just talk with landowners about pipeline; they also solicited suggestions for other improvements that could piggyback on more core components of the proposal. "We would look at other whistles and bells that could go on the projects," Payne explained. "[The ones] that NRCS couldn't do very easily or justify, we would then put that in the NRDP grant." This gave ranchers an opportunity to articulate the kind of assistance they would need to run their operation in more environmentally-friendly ways.

Essentially, the WRC was attempting to leverage NRDP funds to enhance the conservation benefits of existing programs. For example, in Montana, EQUIP will pay a fixed percentage of the statewide *average* cost of pipeline installation, but if implementing a standard pipeline project on a particular piece of land is inordinately expensive, the landowner might find him or herself saddled with a much higher share of the cost. That's pretty much out of the question for the average Deer Lodge Valley agriculturalist; most ranchers would be hard pressed to pay even 25% of the cost of new pipeline. If the WRC could guarantee 100% cost-share, landowners who saw offstream water development as financially out of reach would be able to move their cattle off fragile tributaries of the Clark Fork. Says Payne, "We felt that the benefits to wildlife, and to the range, and the birds, for example, and the riparian areas, were well worth it."

The proposal was, however, "quite controversial." The project's ecological value wasn't in question— not exactly, anyway. The issue was whether the benefit to the public was substantial enough to warrant the expenditure of NRDP money. "It definitely wasn't the majority," according to Payne, but a number of Advisory Council members did feel that if landowners wanted 100% cost-share, they needed to give something more in return.

"What they wanted those landowners to provide," Payne explains, "was free access for recreation." And several of them already were. Montana Fish Wildlife and Parks (FWP) will administer hunting access for private landowners through its Block Management program, and many eligible Deer Lodge Valley residents have chosen to participate. However, others prefer to handle recreationists themselves, on a case-by-case basis, and

some properties are closed to the entire sweep of potential public uses, including hunting, fishing, camping, cycling, bird-watching, snowmobiling, and the use of all-terrain vehicles.<sup>67</sup> Council members wanted more consistency— a clear commitment to public use.

“And we argued that, you know, this isn’t a conservation easement,” Payne says. “If you want that, then you’re gonna have to pay a lot more.”

“Argued” indeed: The landowners of the WRC were acting based on the feeling that they had been left out of the process, and their posture toward the NRDP reflected that. “The Board and [Hollenback] had a very acute feeling that something had to be done and a voice had to be heard,” Payne recalls. They wanted it to be a “strong voice,” so that’s exactly what he was.

“And that really wasn’t a good strategy,” he concedes. “It wasn’t the partnering voice that usually comes in watershed processes.” Typically, he says, parties to such processes “try to find compromise and consensus, and you move forward with conservation projects that make— hopefully— everybody a winner.”

The WRC’s failure to toe that line with the East Valley Project backfired: The NRDP decided not to fund their proposal, and the group got the message. “Everyone kind of said, ‘Well, maybe we need to do this differently,’” Payne concludes. “And that’s when a more partnering approach was taken.” Ultimately, the WRC secured a Clean Water Act Section 319 grant to compile baseline data on the target sites.<sup>68</sup> This did not address the access issues that Payne identified as the seed of the NRDP controversy, but it did help establish that the proposed project would restore ecological integrity to East Valley streams. It was also a showing of good faith: The WRC wasn’t trying to bilk the NRDP for ranch upgrades; they were looking for ways to make conservation tenable on private lands. The distinction is unprovable to some and irrelevant to others, but the WRC believes in it wholeheartedly, and the NRDP must have believed in it, too: The Advisory Council ended up accepting a second application for East Valley Project funds, this one augmented with findings from the Section 319 study. They also approved additional support for the project as work on the affected tributaries advanced. When I talked to Payne in June of 2008, the East Valley Project was “just wrapping up.”

Some things have not changed since the project's inception. "There's still those people that believe anytime you give people NRDP money, recreation access to private property should come hand-in-hand," Payne reflects. "To this day, I think, you put in an application and those same questions will come up."

The WRC's approach, however, was beginning a permanent shift. They had taken a first step toward becoming the group they are today— one firmly committed to building coalitions in order to achieve on-the-ground results. Now, Hollenback says, "We're not there to butt heads with people who might have stronger opinions on one thing or another," he pauses here, and smiles, "Although we do develop some opinions, too... which is okay." Sobering again, he adds, "What's happened is that we've been able to sit down and talk with people that we haven't sat down and talked with before."

One of those people showed up right around the time the East Valley Project was getting underway. Her name was Heidi DeArment, and she had just been hired by the Clark Fork Coalition. Go to a WRC meeting today, and the Coalition's presence seems perfectly natural— it isn't just Knudsen there, comfortably chatting with the local members; other staff come up to Deer Lodge with her, just to hear about what's going on in the Valley. But this would have been almost unimaginable when the WRC was forming. In 2002, when DeArment introduced herself to the group, it became pretty clear that the "talking" Hollenback is now so enthusiastic about was still a long way off. At least in the beginning, "sitting down" with the WRC was all that DeArment could hope to do.

#### THE COMING OF THE COALITION

The WRC's meetings are open. "If you want to go, go," Payne says. This was true from the outset, and no matter what— even if you happened to work for a Missoula-based environmental group widely loathed in the Deer Lodge Valley.

These were DeArment’s credentials, and though her presence at the WRC meetings didn’t seem very subtle to anyone at the time, the approach she was taking in Deer Lodge was the product of years of Coalition learning. Founded in 1985, the group was one of the earliest and strongest advocates of remediation and restoration in the Clark Fork basin. Though the Coalition was not a party to any of the litigation against ARCO, it was present at every decision point associated with the CERCLA process, lobbying for the most ambitious and thorough options on the table. By the time the EPA began evaluating the situation in the Deer Lodge Valley, the Coalition had already attempted to build support for its positions in Butte, Anaconda, and Milltown. The successes and failures of these efforts provided several distinct lessons— lessons which, taken together, accounted for

#### **SUPERFUND AND THE UPPER CLARK FORK: A PRIMER**

The federal Comprehensive Environmental Response, Compensation, and Liability Act (also known as “Superfund” or by its acronym, CERCLA) specifies a four-step process for evaluating and remediating abandoned hazardous waste sites. First, data gathered in preliminary assessments are compiled to produce a numeric “score” for the site. The score is a representation of the site’s toxicity and the likelihood that it will contaminate the surrounding environment and/or endanger human health. The second step adds high-scoring sites, or sites that have been targeted for other reasons, to a National Priorities List (NPL). The third phase is, in essence, a modified NEPA process: It involves in-depth study of the site geared toward developing a suite of specific remediation options which are then made available for public review and comment. The EPA selects a remediation action, which is publicized in a “Record of Decision” (ROD). The fourth phase involves the development of a technically detailed remediation plan and the actual execution of cleanup.

It is important to note that selection among alternatives is based in part on the EPA’s assessment of what kind of cleanup the public would like to see, as indicated by comments the agency receives. In the case of the Clark Fork Superfund complex, this meant that each time the EPA went through the process of writing a cleanup plan for a particular site, ARCO attempted to convince local residents that the least expensive remedies were also the most effective remedies, while groups like the Clark Fork Coalition tried to influence public opinion in the direction of the most aggressive treatments.

It is also helpful to emphasize that the order in which these battles were fought had little to do with the physical geography of the watershed; it had a lot to do with settlement negotiations. Because mining-related contamination in the Upper Clark Fork Basin takes several forms and covers an unusually large area, the EPA divided all the individual hazards among four NPL sites: Silver Bow Creek/Butte, Anaconda, the Clark Fork River, and the Milltown Reservoir Sediments. Some of these sites have been further divided into what the EPA calls “operable units.” Settlements between the state, the federal government, and ARCO addressed individual NPL sites, individual operable units, specific special projects, or combinations thereof— not the Superfund complex as a whole.

Without settlements, there is no money for cleanup. Consequently, the CERCLA process for each site advanced when the parties to the lawsuit seemed to be making significant progress toward relevant settlements. The result was that the CERCLA decision processes— and the Clark Fork Coalition’s attendant community interventions— moved from the top of the watershed (Butte and Anaconda) to the bottom of the affected area (Milltown), and then back upstream to the middle stretch (Deer Lodge). The final consent decree for the Clark Fork Operable Unit, which encompasses the Deer Lodge Valley, was signed in February 2008.

DeArment's appearance at and persistence with the WRC.

The first lesson came when the Coalition hired a Butte native to rally local support for aggressive cleanup of the Berkeley Pit, a former copper mine that, in its glory days, seemed well on its way to consuming uptown Butte. Now the pit is a gaping hole slowly filling with groundwater. The water is so acidic that in 1995, a flock of snow geese died shortly after landing in it. The *High Country News* reported that the number of birds killed was initially underestimated by about half; “[It] rose when officials realized the pit's contaminated water hindered the count by turning the snow-white geese brownish-orange.”<sup>69</sup> The rest of Butte is in pretty rough shape, too. The summer I lived in Anaconda, I attended a hearing at which the Butte-Silver Bow County reclamation manager, Tom Malloy, took the floor and declared, “When it rains, the streets still run green to this day!” For emphasis, he brandished a chicken-sized chunk of green rock. Even in the low fluorescent light of the Butte War Bonnet Hotel conference room, I could tell that this rock was a serious problem. Having at least frightened me, Malloy concluded, “We are not past dead fish yet.”

But none of this— not the goose-killing pit; not the green rocks and stormwater; not the arsenic dust in the corners of this historic boomtown's every nook and cranny— made the Coalition's job there any easier. According to Executive Director Karen Knudsen, mobilizing locals to support cleanup was “a huge struggle.”

“Mining built Butte,” she points out. Though outsiders may find it easy to separate condemning contamination from condemning the past, Knudsen perceives that this can be much more challenging for locals. At the time that the Coalition was pushing for intensive remediation in Butte, many of the town's residents felt that acknowledging the public health threats they faced was tantamount to “turning their backs” on their history. “I think [it] was really difficult for the community to get past that,” Knudsen says. What that meant, ultimately, was minimal local interest in the level of cleanup the Coalition was hoping to see. And in the end, Knudsen says, “We didn't get the kind of EPA decision that we wanted.”<sup>70</sup>

That story repeated itself in Anaconda, where ARCO remediated its slag heaps only to “recreational standards.” That's how the sleepy little company town ended up with a



sparkling green, perpetually underutilized Jack Nicklaus “signature” golf course— perhaps the only place in the world where you can play nine holes on top of (mildly) toxic waste.

The lesson for the Coalition? “Community support is absolutely crucial,” Knudsen says. “You can have the best science in the world pointing to the most logical, sensible cleanup, but if you don’t have community support, it’s dead in the water.” The group was also becoming aware of another potential problem: It’s own reputation. Says Knudsen, “We’ve definitely got trust and credibility issues with rural folks.”

Fortunately, however, the next cleanup decision was much closer to the Coalition’s home turf: The Milltown Dam, just upstream from Missoula, had been the end of the line for mining wastes that slipped into the river from Silver Bow Creek, or as runoff from contaminated sites in the floodplain of the Deer Lodge Valley. In 1982, after a Missoula County health worker collected some alarming tap water samples in the vicinity of the dam, a team of University of Montana scientists linked toxic sediments lining the reservoir to the arsenic in Milltown’s groundwater.<sup>71</sup> And there’s nothing like arsenic in drinking water to launch a Superfund listing process.

In February 2000, the Coalition began pushing for removal of the dam.<sup>72</sup> This time, they got what they wanted— in part, says then-Executive Director Tracy Stone-Manning, because they had succeeded in “making an environmental issue into a community issue.”

The next challenge for the group would be to do the same thing in a rural area— specifically, the Deer Lodge Valley. For the upper river, what was up for debate was the method that would be used to treat contaminated soils— especially the crusty hot spots where nothing could grow. Known locally as “slickens,” many of these patches are so steeped in heavy metals that when it rains, they turn blue. When it rains hard, the blue water dribbles into the Clark Fork and kills fish. In the late ‘80s, ARCO succumbed to agency pressure and constructed earthen berms around some of the worst and largest of these sites, but these were never intended to be a permanent solution to the runoff problem.<sup>73</sup> I got a chance to inspect one of the berms recently, when a landowner took me down to the river to showed me some slickens up close. The low mounds did not pass

themselves off convincingly as mechanisms for water quality control. They did, however, look very much like an Arboretum exhibit of Montana's invasive plant species.

When it was clear that some degree of cleanup would be mandated for the upper river, ARCO began campaigning to convince the people of the Deer Lodge Valley that the cheapest remediation option— deep-tilling contaminated soils with a lime mixture specially formulated to neutralize acid from the metals— also happened to be the most effective option. The company convinced County Planner Ron Hanson that this “*in situ*” approach was in everybody's best interest, and backed its claims with “before” and “after” photos of a slickens-patch-turned-hayfield. Hanson and the Powell County Commissioners used those pictures on full-color posters which declared, in fat blue letters, “It's hard to argue with success. IN-PLACE TREATMENT WORKS!” They also circulated a petition to Deer Lodge Valley landowners, and according to Hanson, “the bulk of them” signed their support for the *in situ* option. Hanson freely admits that ARCO was helping to fund his position at the time, but I got the sense that he genuinely believed in in-place treatment. He felt— and feels— that whatever allowed the company to “get in, get done, get out” was the best thing for the landowners; *in situ* treatment provided that expediency.

The alternative was full-scale removal of contaminated soils, both in the floodplain and in the river's banks and bed. This approach was far from perfect: People worried about what seeds might come into the riparian areas with replacement soil, for example; others couldn't get past the apparent contradiction of essentially taking apart the river in order to dig out the contaminants— Wouldn't that just re-pollute the water? If the sediments were so well-buried, why were they a problem? Everybody in the Deer Lodge Valley knows that in the long run, the river will cut new oxbows, and swell and writhe with the periodic infusions major floods. Re-entrainment of buried metals is to some degree inevitable. Given the twin impossibilities of removing *all* the contaminants and ensuring that those left behind will never end up in the water, it is unsurprising that locals greeted the idea of something as apparently drastic— and patently costly— as soil removal with varying degrees of fatalism.

Still, soil removal has considerable advantages. It obviates some of the uncertainties about appropriate lime concentrations for particular sites, for starters. The contamination won't "come back" after a few seasons, either— a potential flaw of *in situ* treatment the Commissioners' poster did not acknowledge, and about which the company's photos could say nothing of use.<sup>74</sup>

And in this struggle over competing treatment options, the Coalition had some powerful interests on its side. Hanson explains that the state "clashed" with the county over soil removal, noting with what appeared to be particular disappointment that the divergence in opinion precluded the production of a second poster. But the Coalition realized that it could still fail in Deer Lodge just as it had failed in Butte and Anaconda—even if the EPA's decision favored soil removal.<sup>75</sup> As long as most of the contaminated sites were on private land, locals would be the ones who would maintain the replaced or limed soils in the long run— or choose not to maintain them. So far, they weren't turning out to be the biggest supporters of the plan.

This was, in one sense, incredible: As Stone-Manning put it, ARCO had "made the cleanup [seem] bad" to the very people whose lives remediation was supposed to improve. But it was also in keeping with the Coalition's previous experiences in the watershed: ARCO had local support. They got it, Stone-Manning says, because "they engaged in the community." It was clear that if the Coalition wanted the cleanup to succeed, they needed to earn locals' trust. Knudsen says, "We recognized that we really needed to sit down and have a lot of coffees over kitchen counters with people and develop relationships."

That would be DeArment's job. She had grown up in Iowa— perhaps the heart of America's farm country— and before coming to the Coalition she had held executive-level positions with two beef companies, so she could speak the industry language. Ultimately, DeArment "spent about a year" meeting with area landowners, asking them about their concerns about cleanup, assessing their views on things like riparian fencing and conservation easements, and, in each case, "trying figure out what the huge hurdles were to convert[ing] a cattle operation into a place that could be restored."

DeArment sat in on the WRC meetings in part as a way to figure out where to start—to develop a sense of who might be willing to talk with her one-on-one. But DeArment, Stone-Manning, and Knudsen all stress that the WRC was not merely as a means to an end for Coalition. Though they genuinely hoped to influence the choices local residents would make about remediation and restoration, they emphasize that what they *really* wanted was for community members to start talking about their goals for the Deer Lodge Valley— not just for the cleanup, but in terms of the broader changes that would likely follow.

Stone-Manning felt that ARCO’s imminent departure was going to create a “power vacuum” in the area; it was unclear who or what might come to fill it. That was all the more reason for the Coalition to take an active role not by dictating next steps, but by nudging the community to set its own course— by convincing the Valley that “it could figure out what it’s future could be,” she explained. “It could drive the bus.”

To do that, Knudsen says, “We realized that identifying local leadership is essential.” Of course, the WRC was emerging as exactly that. Though the Coalition and Powell County seemed to agree on nearly nothing— “Their values were completely different from our interests,” recalls Hanson— the county planner and Stone-Manning slowly came to an understanding: The Deer Lodge Valley needed to start talking about its future, and it was the WRC— not the county or the Coalition— that needed to facilitate the conversation.

The potential was there: Stone-Manning’s interest in having the community articulate its own vision for the cleanup paralleled the WRC’s emphasis on giving the landowners a voice in the process. The Coalition shared Hollenback’s firm belief that community buy-in was essential to the long-term health of the Clark Fork, since “the people who live there [are the ones who will] protect the investment in the cleanup.” The things that the Coalition and the WRC could agree on were not peripheral; they were central.

The trick would be proving that to the WRC.

## BUILDING CAPACITY, BUILDING TRUST

The WRC could help the Coalition by leading and legitimizing the process of envisioning an economically and ecologically sustainable future for the Deer Lodge Valley. DeArment was pretty sure that the Coalition could help the WRC, as well. After enduring an initiation of sorts— “I basically was not allowed to talk during the first couple of meetings,” she summarizes— the opportunity she needed presented itself. Payne said he thought the WRC should have a website, but the group had neither the funds to pay a developer nor the expertise to make something themselves. DeArment said, “We’ll do it for you.”

“And there was this huge long debate about whether or not they could actually accept anything from us, because we were accepting money from some foundation that they didn’t like, and we were too green,” DeArment rolls her eyes. “In the end, Scott was like, You know, we don’t have to tell anybody they did it, let’s just let them do it.”

So began a pattern of “little offerings,” as DeArment calls them. The Coalition’s attorney could draft the WRC’s 501(c)(3) entrance documents; the Coalition could help the group find speakers to bring to its community events— small favors, all, but WRC members were uncomfortable accepting even this much. Trust remained an issue— “They were very, very wary of us,” DeArment says— but there was another tension, too: The WRC was determined to maintain its independence. The group did not want to put itself in a situation in which it could not stand up for, or be responsive to, the people it was established to serve.

The debate over whether or not to incorporate as a non-profit amplified these concerns. The WRC’s Board knew they needed direct access to funding: They could not continue using the conservation districts to administer the group’s finances indefinitely— not if they hoped to grow. But applying for 501(c)(3) status was a hotly contested proposition. According to Stone-Manning, it was the “same conversation month after month” in WRC meetings. “Should we become a 501(c)(3)?” “I don’t know... those enviros are a 501(c)(3),” she says, mimicking the back-and-forth. She situates WRC’s reluctance to incorporate as a product of bad associations with non-profit environmental organizations.

WRC Board member Don Ueland provides an insider interpretation of what was at stake. He knew the group needed the funding— and the increased ease of administering that funding— that would come with incorporation, but the solution was also the problem. “I was kinda leery of becoming a 501(c)(3), ’cause what happens then is you start chasing the dollar,” he says. “Say a big, rich, environmentalist group starts throwin’ money at you, you start takin’ it, and you start doin’ some of their projects? Pretty soon, you’re slanted all one way... I’m kinda afraid of 501(c)(3) because of that.”

Ueland is a perpetually jovial fellow whose grandparents started piecing a ranch together in the late 1800s— “mining claim by mining claim,” as he puts it. He emphasizes that he has got nothing against environmentalists; he just doesn’t want to feel beholden to them. It’s a matter of “keep[ing] your goals directed— straight, you know?” he says. And the goal of the WRC is to be “a landowner group,” he emphasizes. “*That’s* what we’re tryin’ to do, is these projects.”

Once the WRC had convinced itself that it could incorporate and seek funding without drifting from its original purpose, the Board agreed to let the Coalition draft its 501(c)(3) paperwork. They were making strides— building relationships. “I think Heidi was a big part of that,” Payne says.

DeArment agrees, in a general sense. “It was just literally getting to know [the Coalition],” she reflects. “Once they get to know us as people, and they can ask us questions, we seem less like a big organization and more just like people that they know.”

Stone-Manning remembers telling Hollenback, “Your mission is our mission,” and feeling that it made an impression. “John Hollenback made the leap” and started trusting the Missoulians, she said— and the Coalition learned to give seemingly small steps their due.

The next step was bigger. Stone-Manning wanted to fund a full-time watershed coordinator for the WRC, but getting grants for the work the Coalition had been doing in the Valley was turning out to be a bit of a challenge. “[The foundations] think they drive what’s happening on the ground; they react to it,” she says. When the Coalition was trying to build bridges in Deer Lodge, “They [were] so freaked out about the 2000 election, they

want[ed] to see a victory.” In other words, progressive grant-making organizations were interested in funding the sure thing, and unfortunately for the WRC and the Coalition, “community building” didn’t really fall under the rubric of tried-and-true methods for achieving conservation goals.

Stone-Manning recalls observing to one foundation staff member, “I’m gonna have a hard time here, aren’t I?” Her contact was a middle-aged man who, like many of his peers in the field, had cut his political teeth in an era when nonprofit groups scored major environmental victories primarily by suing big polluters. He replied, “With the old guys like me? Yeah.”

“They’re used to fighting the 1980s battles,” Stone-Manning theorizes. “They *came* from them. That’s what they know.” By contrast, “trust-building is not a very sexy thing to fund. But,” she says, all confidence, “it wins in the end.”

Sure enough, the Coalition did get money for a full-time watershed coordinator. Payne left the WRC a few years ago to focus on other projects. Around the same time, Renée Myers was working as a consultant for a firm the Coalition had hired to put together a redevelopment plan for the Upper Clark Fork. The Missoula group recruited Myers to take Payne’s place, and when the WRC incorporated, Myers became its first Executive Director.

Though the Clark Fork Coalition and the Watershed Restoration Coalition seemed, at best, like the quintessential odd couple, the groups had a lot more in common than the shared word in their names. The former came to the Deer Lodge Valley looking to bolster local leadership for cleanup and restoration; the latter was in the Deer Lodge Valley, trying to figure out how to make sure local views on related issues would be heard. Both coalitions had learned the hard way that they couldn’t accomplish their goals without help.

These commonalities have to do with process, but there turned out to be a fair amount of overlap in the groups’ desired outcomes, as well. “I think [landowners] realize ‘Hey you know what, [the Coalition] wants the same things that we want,’” Myers says, citing “wide open landscapes” and working ranches as specific examples of those shared objectives.

As they worked together and grew to trust one another, they also came up with ways of thinking and talking about what they were doing that would not alienate or threaten either party. For example, the WRC and the Clark Fork Coalition's mutual emphasis on "landowner involvement" is key for giving individuals from different social and political cultures a way to describe cleanup and restoration of the Upper Clark Fork that is not threatening— either to their interests and values or to the interests and values of other parties. McQueary, for example, says that five years ago, he would not have wanted the WRC to work with the Coalition, but he has changed his views. "I think it's a very good organization," he tells me now. What changed? "I think they are striving to work with landowners. They are striving to understand landowners. My impression five years ago was that they didn't understand the landowner."

My sense is that the Coalition also understands something else about the WRC and its members: Many ranchers possess decades-deep, if not generations-deep knowledge of their land and of their communities. Such knowledge is often very hard for urban and suburban Westerners to cultivate— no matter how much we might want the sense of connection and practical advantages it affords. Part of what makes community-based restoration on public lands so challenging is the necessity of developing a working familiarity with the ecology of a place more or less on the fly. Even agency employees tend to be transient inhabitants: if they are not Americorps volunteers, en route to an advanced degree or more permanent employment elsewhere, they tend not to have grown up on the public lands they manage. Restoration on private ranches in Deer Lodge, by contrast, is advanced and enabled by the fact that many landowners already have a sort of embodied, longitudinal understanding of what the issues on their land are, and of how that land is changing. The WRC can help Deer Lodge locals bring such understandings to bear on cleanup— and perhaps on other looming ecological challenges like climate change.

The Coalition, in turn, brings more to the table than specific expertise in non-profit management and fundraising, a staff lawyer, and a staff scientist; they also represent a whole-watershed perspective that can productively inform the WRC's sub-basin efforts.



Myers is mindful of all these reciprocities. “I think the Clark Fork and the Coalition and the WRC complement each other. I think we each have qualities that each other needs,” she summarizes. “From here on out, I think the Clark Fork Coalition is just basically a partner.”

And perhaps most importantly, working with the Coalition has cemented the WRC’s commitment to collaborating with diverse interest and stakeholder groups. Member landowners tend to view discussion and cooperative efforts as viable methods for preventing and managing potential sources of environmental conflict in the watershed. Hollenback in particular has become a strong proponent of inclusive, non-litigious approaches to resource management, and he sees the groups the WRC talks with regularly getting good at it, too. “Now,” he says, “When several of us are sitting down around the table there’s no discomfort or anything. Everyone’s entitled to say what they want to say, nobody’s judging one another. I think that’s tremendous progress.”

One current project produced a Memorandum of Understanding signed by “fourteen or so” agency and interest groups. “Some of them are pretty strong— pretty, what I would call far out, from my perspective,” Hollenback chuckles. “They’d probably call me far out. We [were] doggone surprised that we were signing an MoU with these people, but what they were doing, it was hard for them, too. They were signing on with us that, yeah, something needed to be done, let’s try to do it together.” He indulges a pause, then adds, “And that’s pretty neat.”

Myers agrees that learning to work cooperatively with other organizations has been one of the WRC’s key and distinguishing accomplishments— and a necessary one. To carry out the kinds of projects the WRC has gravitated toward, she says, “You have to kind of open up and put a hand out and say, ‘Hey, let’s work on this, let’s try to come to some compromise,’ or you know, ‘What can we do together?’ Because if you don’t have that collaboration,” she adds, “You’re really missing the boat.”

And nobody wants to see that happen— not on the Clark Fork, not now. With Superfund remediation and its retinue of restoration projects, Payne observes, it is “the relationships” between stakeholders that will determine success. “From a technical

standpoint, [the cleanup] is doable,” he says. The Deer Lodge Valley, with its open spaces and agricultural base, is an “ideal” place for this kind of plan to succeed. But the only way that is going to happen is if people try to get along, and make plans with others’ needs in mind.

#### **ON THE GROUND WITH THE WRC**

“When people ask me what I do, I tell them that I work for a landowner-based conservation group that implements conservation and restoration projects and strategies on the ground.”

This is what Myers told me when I asked her how she explains her job to people who don’t know the WRC. And the key components of the group’s work, as reflected by its members’ assessments, are all right there.

First, the WRC is determined to maintain its identity as a landowner-based group that is responsive to landowners’ needs. What it does is dictated by what landowners want—period. In most cases, that means helping ranchers who are interested in making changes to their operations, but can’t afford to do so on their own. Sometimes those changes are primarily about enhancing fish and wildlife habitat or water quality. McQueary, for example, wants to reestablish riparian vegetation along his stretch of Cottonwood Creek. “The cattle have destroyed the brush,” he gruffs. “I would like to see brush back.” Unlike offstream water development or increasing irrigation efficiency, which yield at least marginal economic benefits for the landowner, planting willows along the creek probably won’t do a thing to decrease McQueary’s operating costs. He just wants to make things better on his place— more like he thinks they once were.

Other Deer Lodge Valley residents aren’t there yet, and the WRC thinks that’s just fine. Myers is happy to spend time talking with landowners about conservation projects in terms of the bottom line. “In a lot of these cases [you need] to help them to understand what those [economic] benefits are,” she explains.

Either way, Ueland says, “[Individual] farmers and ranchers don’t have the money to go out and do those kind of things themselves,” so one particularly important function of the

WRC is to secure that extra support. McQueary says, “The WRC can help them find financial help.” Myers agrees: “The big thing is being able to find the money and cost-share.”

But part of being a landowner group is being flexible, and recognizing that members’ needs vary. While WRC leaders tend to regard coming up with funding for restoration and ranch efficiency improvements as the group’s typical role, they are also aware that responding to landowner needs might mean a number of other things. It might mean helping the new owner of a five-acre parcel figure out which resource agency to contact about identifying and controlling invasive weeds, for example. It might also mean trying to find a buyer for a conservation easement. The WRC is “not really big on” conservation easements, according to Payne, but when Jim and Charla Berg wanted to put one on a scenic, cross-contour chunk of their family’s expansive east side cattle ranch, the WRC wrote an NRDP grant proposal to fund the appraisal. “We recommended that project for a conservation easement— not because the WRC wants to promote conservation easements,” Payne explains. “That’s not what they’re about. The landowner wanted it.”

But that proposal “got scrutinized to no end,” he said. FWP took over the project, submitting an application for \$5 million dollars in purchase funds during the 2008 NRDP grant cycle. The WRC would likely have asked FWP to assume legal responsibility for the easement in any case, but the group passed the project along because it had a higher chance of success with a resource agency as its sponsor. “The FWP is in a better position to promote conservation easements [than the WRC],” Payne says. Rolling his eyes, he adds, “They’re not the local landowner trying to get rich; they’re the agency trying to protect fisheries.”

This episode illuminates another part of what it means to be a landowner group: It’s not about getting credit for the project; it’s about doing whatever it takes to make sure the project actually gets done.

And *that*— the “carrying out” part— underscores the second major keyword in Myers’ plain-speak description of the WRC: Implementation. Start hanging around the WRC, and it will soon become apparent that this noun— and especially its associated verb— is

fundamental to the way the group sees itself and its role in the Deer Lodge Valley. The emphasis shows up in subtle ways— Hollenback’s proclivity for beginning sentences with the phrase, “We’re working some projects...” is my own favorite example— but one can always leave it Scott Payne to put it directly. “The WRC is a implementation watershed group,” he tells me. “And [it’s] really important that you distinguish this.” Ask him “From what?” and his answer is equally clear:

The WRC is not a policy watershed group. They don’t stand up and dictate policy across the basin. They have opinions about it, but they don’t write white papers... What they do is they write grants to do things on the ground. They implement things. Which is really hard to do. Lot of watershed groups talk, and talk, and talk, and that’s great if they want to talk and they enjoy it and they get things done— they get a rule change here or laws changed or something like that. But these guys really aren’t interested in changing laws and rules. They’re interested in having their projects go forward, and sometimes they have to challenge how things are looked at, but they don’t... you know, go on public radio and do discussion topics and stuff like that... They’d rather just sit back, let everybody else argue about it, [and] figure out what the rules are.

— the goal there being to work effectively within those rules to implement projects. As Payne represents it, the group’s aversion to taking formal positions dovetails with its emphasis on supporting landowners: If the rules obstruct landowner involvement, then the WRC “has to challenge how things are looked at”; at the same time, they don’t want to “dictate policy across the basin” because they appreciate that each property or operation has different constraints, and because they accept that individual landowners are varyingly open to particular conservation tools and practices.

I once asked Myers about the WRC’s views on *in situ* treatment and soil removal, and her response is instructive in illustrating Payne’s point.

“I think we’ll leave that to... the experts,” she said carefully. “I think part of what we do [is]— whatever the decision comes out to be— help work with the landowner to implement whatever practices they need to implement, instead of kind of putting ourselves in that argument.”

I played back what I had understood. “So you let EPA make the decision and say to the landowner, ‘Okay, how do we make this work with your operation?’”

Myers nodded her approval. “Exactly.”

The emphasis on sticking to implementation— and eschewing policy as much as possible— also relates to the WRC’s self-conception as a “landowner group” in a more direct way: The WRC feels that landowners, and ranchers in particular, tend to measure the value of their efforts in terms of the tangible or “on the ground” results of those efforts. “That’s what landowning’s all about,” Myers asserts, “is getting on-the-ground stuff done.”

Another person who stresses this connection is Rick Cline. Cline is not involved in the WRC— primarily, it seems, because his responsibilities as president of his ditch company keep his free time occupied with similar work. As such, he has experience with grant-seeking and the vicissitudes of Superfund remediation. He told me he understands why these processes are so exhaustive and rule-bound: “They can’t just spend that kind of money on whim. They gotta know what’s going on.” Still, he can’t shake his visceral aversion to the way government agencies apportion funds and assess potential projects. Progress is much too slow. “But that’s just a rancher’s perspective,” he tells me. On your own place, he says, “You want something done, you get it done. You don’t wait a year to do it, you go ahead and do it.”

The WRC can’t do much to change agency processes, but it can honor the culture of “go ahead and do it”— the culture of the population it hopes to serve— by focusing on projects that result in tangible, visible change. It is in these outcomes that both the WRC landowners and the group’s director find satisfaction. As Myers says, “The most rewarding part, I think, is just seeing landowners get projects on their ground and seeing them happy with them.”

#### **MORE PROJECTS AND NEW ROLES**

The June WRC meeting presented me with an opportunity to do some heavy lifting for one of the group’s projects-in-progress. The work currently underway in Brown’s Gulch is a sort of quintessential example of the private land restoration initiatives the WRC has become adept at planning and executing. The group has been able to fund an assessment of baseline conditions in this Clark Fork tributary, which joins Silver Bow Creek upstream from the Deer Lodge Valley, near Ramsey— one of those interstate-side settlements more frequently characterized as an “exit” than as a town. The data from the study will inform

future project choices, helping landowners in the area figure out how to get the most bang for each restoration buck. But in keeping with the value WRC members place in the kind of results that are visible “on the ground,” they did not wait for the study to take advantage of a few clearly appealing opportunities. Myers had found some funding to purchase native willow starts, for example. She had intended to install them on a stretch of streambank in Brown’s Gulch at the end of May, but a rather listless and dallying spring had delivered unusually voluminous and late runoff. High water canceled the original planting date. Now, in anticipation of quickly tapering flows at the end of the week, Myers was scrambling to replace her original team of volunteers.

I was the only person at that meeting who happened to be totally free every single day for the rest of the week, so on Friday I met Myers in a gas station parking lot, and then bumped up the Gulch in the muddy wake of her big red truck. We spent the better part of the day on opposite sides of the creek, driving heavy iron spud bars into the matted grass and silty shallows and prying open space for root wads. Our progress was marked by burgundy spears of willow— one to each hole. For most of the day, we were close enough to safely toss a tube of sunscreen or a water bottle across the cold creek, but I felt I was alone: The water was making that clean rushing noise that doesn’t seem significant until you try to shout over it; we couldn’t make ourselves understood through the ruckus, and when we stopped trying, the Gulch seemed silent.

At the end of the day, I took pictures of the stretch we had planted from the most obvious landmarks I could think of— a low wooden bridge; a big tree stump in a flat open spot beside the creek. Myers wants to be able to photograph the same scene year after year, as the several projects on Brown’s Gulch advance.

Many of these will likely be WRC endeavors; others may be carried out by government agencies. Now that all settlement agreements have been finalized and restoration and remediation activity in the watershed is due to increase, the WRC is working with other stakeholders in the Deer Lodge area to establish priorities for tributaries like Brown’s Gulch. The point is not to determine which streams deserve the most attention; rather, the goal is to rank potential projects within sub-basins based on the types of problems that are

most significant for each tributary. Some streams have their own metals contamination problems; in others, sedimentation, nutrition runoff, or low flows might be of much greater concern. Once studies are undertaken to establish the key issues in each sub-basin, the various groups and agencies at work in that area can collectively determine which types of projects will deliver the most benefit— and which institution will be the most appropriate sponsor for each project. And, of course, “everyone’s going to have an idea of what each other’s doing,” Myers adds. “[This way] everybody’s communicating.”

Myers sees an important role for the WRC in this process: Sitting down with landowners to determine *their* priorities— and ways in which individuals might be willing and able to contribute.

Overall, the prioritized project list should enhance the cumulative ecological benefits of conservation work in the basin, but Myers also thinks this approach can further relationship- and trust-building among local agencies and interest groups.

“There’s going to be a lot of competition for the [settlement] money, and I think that could be a bad thing,” she says. If, however, stakeholders can put their proposals forward in conversation with one another, and delegate projects to particular groups according to their differing strengths and capacities, they have a chance to change the tone. Instead of jealously guarding and fighting for their “own” projects, grant applicants will be more likely to feel invested in a suite of proposals put forward by trusted colleagues with varying institutional affiliations; if one of these proposals is funded, everyone wins.

Thinking about the Clark Fork cleanup this way is especially constructive in the absence of a comprehensive, NRDP-endorsed plan outlining goals and priorities for the basin as a whole. DeArment says the Coalition “tried and tried and tried and tried” to get something like that adopted, but the data they would have needed to write it was “locked up” in the legal wrangling between ARCO and the state and the EPA— much of which happened behind closed doors.

Contrast willow-planting in Brown’s Gulch or pipeline cost-share in the East Valley with the prioritized projects list or the Bergs’ proposed easement, and one begins to get a sense of the diverse types of initiatives with which the WRC has become involved by

following landowners' suggestions and stated concerns. The group is also beginning work on a Forest Stewardship Plan to address beetle kill in the eastern uplands— that's the project with the fourteen-signatory MoU.

Talking with Payne, Myers and member landowners suggests at least two more general needs in the Deer Lodge Valley that might give rise to WRC programs in the near future.

First, both Payne and Myers note a gap between government approaches to soliciting public involvement and the opportunities for involvement that local residents ultimately perceive. The WRC, Myers says, "can be an intermediary between the state or federal agency" and the landowner. The most obvious example is the remediation dimension of the cleanup— the removal and in-place treatment of individual slickens patches slated to begin in 2009. Of course, the WRC was formed to represent landowners in the cleanup process as a whole, and through the grants program in particular they have succeeded in entering a public dialog about what kinds of restoration and conservation projects might be carried out in the basin. However, many landowners— especially those who have not gotten involved with the group—are likely to experience frustration and confusion as the DEQ moves forward with site-specific remediation work on private lands.<sup>76</sup>

As Payne observes, "I think there's a bit of a gap between the remediation side and landowners. EPA and DEQ tend to want to remain in control, so there's kind of a gap between communicating with landowners and gaining their trust to do the work. The WRC's in a position to help out with that, in my opinion, and they're not generally asked to do that."

Not generally, perhaps, but Hollenback was recently approached by DEQ Project Manager Joel Chavez to discuss this possibility. "I was very excited that he would come and talk to me about that," Hollenback says, and he hopes the WRC will be able to work with the agency "to help the landowners— you know, the inner workings between the two."

This potential extends beyond the realm of cleanup, however. The WRC can also make NEPA-style "scoping" processes more navigable for landowners and other private citizens— people who are not necessarily familiar with the goals, mechanisms, and



rationales governing comment periods and protocols for agency response. When I raised this possibility with Myers, she said, “That’s kind of where we are in the Forest Stewardship Plan. We hope to be able to answer those questions, or if we can’t answer them, help direct them to the right person.”

The second need is education, especially in areas like weed control, where one landowner’s indifference clearly amplifies the problem for everyone else in the proverbial neighborhood. Ueland notes that increases in the number of “weekend farmers and ranchers” in the Deer Lodge Valley means more landowners who are less plugged into agricultural issues. “A lotta those people don’t know all the concerns,” he explains. In some cases, that is because the individuals do not have ranching backgrounds, nor any interest in maintaining their agricultural properties for agricultural use. Those who have the history in and commitment to agriculture might nonetheless find that earning a living in town and ranching on the side eats up time they might once have used for the informal continuing education that happens among friends at the local coffee shop— something I frequently witnessed when I hung out at YakYaks in Deer Lodge town between interviews.

Another consequence of this is that landowners are less familiar with the resources available to them through agencies like the NRCS. Ueland offers a relatively humorous example from an early-stage planning meeting for the Brown’s Gulch Assessment. “We had a meeting in this very room... and we had almost every landowner here,” he says. Those landowners started brainstorming potential projects— planting willows, replacing headgates, improving rotational grazing, experimenting with new types of fencing. In short, Ueland says, everybody was getting “all excited.”

The WRC leadership had news for them. “We said, ‘All that stuff’s available to you right now,’” Ueland recalls. Then he asked how many of the assembled landowners had heard of EQUIP. Not a hand went up— “Not one!” he exclaims, still incredulous.

And then he smiles. In Brown’s Gulch, at least, “everybody knows *now*.”

## GROWING THE GROUP

Given the WRC's emphasis on landowner involvement and project implementation, it is unsurprising that these are the metrics Myers jumps to when evaluating the group's progress. "I think the greatest success for the WRC has been being able to grow in a direction that they're reaching more landowners and increasing the amount of sample projects on the ground," she says. And the group's primary goal is to continue doing both of these things.

The fact that the WRC has already established a reputation as a landowner group will likely increase its appeal among potential participants. This is what piqued Ueland's interest. He and his twin brother own a huge amount of ground in the hills at the head of the Valley, much of it directly in the airshed of the Anaconda smelter. The family used to own land along Silver Bow Creek, but they sold it to ARCO when the EPA issued its Record of Decision for the area. "They were heavy on— they call 'em institutional controls," Ueland explained to me. "You can't graze the stream bottoms, you can't let your cows knock down the reconstructed banks, and degrade the streambanks and things like that, and we're like, 'Well, we're never gonna get to use it anyway, then, basically, right?'" The brothers ended up selling the stream frontage to the company because it was easier to do that than it was to work around the cleanup.

"And, other ranchers took the other approach. They hung onto theirs, and they'll have a nice piece of ground when it's done. They really will. But I'm sure they'll have some institutional controls that will limit 'em," he shrugged, then smiled. "You know, to each their own."

When Ueland heard about the WRC, he immediately took an interest: "It kinda provides its own function, it's away from the government and a group of landowners, and I thought, Well this is the perfect group!"

However, the fact that the WRC's ranks are so dominated by *ranchers* also presents an outreach challenge. The group recruits new participants primarily through the social networks of its active members. These individuals— the board members especially— serve as informal "liaisons," Myers says, "getting out there, kicking it over the fence, and talking

with other landowners.” Of course, the fence reference is figurative, but there is a kernel of literal truth in it: The WRC’s membership seems to concentrate along particular tributaries. Hollenback and Thomas, of course, are neighbors on Gold Creek; Ueland and Cam Balentine live up Brown’s Gulch; McQueary and Sun Mountain Lumber Company owner Sherm Anderson both live on Cottonwood Creek, and at the last meeting I attended, I heard the name Applegate thrown out in the introductions— a name I recognize from the mailbox just down the road from McQueary’s driveway.

Whether this is a result of “over the fence” conversations or over the fence glimpses of active projects is unclear; it might be neither. But the clustering does suggest that the WRC will always need to be a little more proactive to make that next step— to reach the next sub-basin, say. And that effort is especially crucial given the group’s interest in working with non-agricultural landowners who are also facing the challenges, incursions, and opportunities associated with cleanup.

“What we’re trying to get out is that it doesn’t have to be a large property,” says Myers. “It can be two acres. You’re a landowner, you’re a landowner.” One group to which the WRC is particularly interested in extending its reach is residents of Deer Lodge town— people who own homes within the city limits, but also “community members” more generally. When Myers discusses this possibility, it almost sounds as if she is thinking of the town as one large, relatively paved, and collectively owned property: What kind of conservation projects would appeal to this group, and suit their urban “operation”?

The WRC still has a few detractors. These are folks who question the rightness of using “public” money to pay for conservation work on private lands— especially when the landowner derives economic benefits from the project. Still, Myers is sanguine about the WRC’s prospects. To get funding for a project, she says, “I think all you need to do is show biological value.”

In short, the outlook for the organization is positive. “I think the WRC is recognized as a prime player in the future of the valley,” Ron Hanson says.

Payne agrees. “I think the WRC’s a player,” he summarized. “They’re not going away.”

And Myers is cognizant of broader possibilities, too. “What’s going on here isn’t going on anywhere else in the country,” she points out. “If we, the WRC, and other organizations in the valley can do it right, then we’ll set a precedent, and we’ll be able to teach other watersheds what we have learned through this process.”

And while the WRC’s director is thinking about the lessons the group might someday export from its basin, she is also heading up a team of landowners and other community leaders. Under the banner of the WRC, these individuals are helping Deer Lodge Valley residents guard and grow a profoundly local vision— just as Hollenback and Stone-Manning had hoped at the outset.

#### **FOCAL PRACTICES FOR A TECHNOLOGICAL RESTORATION**

The WRC is facilitating restoration. It is true that the group’s projects and potential roles are diverse; it is also true that ecological restoration— as opposed to conservation more broadly and landowner-friendly conservation particularly— is not necessarily participants’ overriding concern. But what does the core of the WRC’s work produce? Streams with more willows and more water; streams less frequently trampled by cows. The result of the group’s trademark projects is increased ecological integrity throughout the watershed; judgments about what constitutes “integrity” are influenced by scientifically- and culturally-informed understandings of what the Clark Fork looked like in the past— before the worst depredations of mining and years of varyingly sustainable agricultural interventions.

DeArment thinks that what is happening on tributaries like Gold Creek, Brown’s Gulch, and Cottonwood Creek— those “classic” WRC projects—constitutes ecologically valuable restoration in and of itself. Payne believes the resultant increase in overall water availability in the basin will allow the Clark Fork to “make the next jump in aquatic habitat”— that restoring creeks contributes meaningfully to the restoration of the main stem.

If we accept that the WRC is facilitating restoration, the next question is, is that work focal? Granted, a group of ranchers sitting around a conference table under the

fluorescent lights of a government office building does not beg association with the mainstay of the restoration imaginary— that multicultural and multigenerational hodgepodge of urbanites pulling up weeds in parks on the weekends. Higgs asserts that the most lasting lessons of restoration— the ones that distinguish its focal dimensions— are those we learn in the sun, by driving dirt under our fingernails; are we to take him literally? Is his vision of the *process* of restoring ecosystems as essential to defining the focal elements of restoration in Deer Lodge as it is to defining those elements in the Chicago Wilderness or the GGNRA?

Clearly, the process by which restoration is carried out matters; clearly local engagement in that process matters; clearly individual connections with and learning about the land matter. What I would like to submit is that the possible configurations of these elements that give rise to focal restoration are myriad; that they can be hooked together in more ways than the classic model of urban and suburban community-based restoration might lead us to assume. Most of the people who worked with me on those Saturdays in the GGNRA spent Monday through Friday indoors at a desk; the physical, outdoor work of restoration was our best— perhaps even our only— opportunity to learn the land we hoped to heal. It was also our only opportunity to engage in focal practice together, as a community of sorts. At the end of each workday, we melted back into the mosaic of several hundred thousand contiguous urban lives.

In the Deer Lodge Valley, the picture is different. Ranchers like John Hollenback, the Thomases, and Dan McQueary spend a significant amount of every day outdoors— moving cattle, mending and replacing fencing, fixing pivots, and baling hay on the same few hundred or thousand acres. In many cases, they grew up on the land they are working as adults. In some cases, their grandparents grew up on it, too.

The fact that they sometimes hire contractors to implement their restoration projects— or hand over a day of planting to their watershed coordinator and a conveniently underemployed grad student— is, in my opinion, of little consequence. These people have years' worth of Montana dirt under their nails. They bring that to their focal practice of

restoration— even if the process of collectively envisioning, constructing, and realizing projects is largely characterized by conversations carried out in a windowless chamber of a USDA regional office.

This is hard work, too. It is hard work in places where terms like “visioning,” “organizing,” and “outreach” are received with serious, appreciative nods, and the members of the WRC come from a very different culture— one of “get in, get done, get out,” to borrow Ron Hanson’s phrasing; as Scott Payne pointed out, they are not interested in “talking and talking and talking.” Yet they are doing it, and they are achieving results with it. They have developed an approach to collaborative resource management that suits the Deer Lodge Valley, cattle ranching, and the rural intermountain West. They have codified ways of thinking and talking about their watershed as an ecological system that don’t require them to stop seeing it as a working landscape. They have given countless hours to conversations that inevitably circle back on themselves. And they are doing this— all this “challenging, skillful, and sometimes tedious” work in order to maintain ecological integrity and their way of life side by side— in order “to keep something of value alive.”<sup>77</sup>

The question I’m left with, then, is not whether the WRC represents a focal element in the restoration of the Upper Clark Fork. The question whether it is— or will become— enough to secure *good* restoration of the Upper Clark Fork. Recall that good restoration— at least according to Higgs— is in the balance of focal and technological elements. And what is unclear to me is whether the WRC, as a focal element of restoration in the Deer Lodge Valley, is vibrant enough to serve as an adequate counterweight to the technological elements already firmly in place— “adequate,” in other words, to make restoration in the Deer Lodge area meaningful to some critical mass of local residents, and meaningful enough that they will want to maintain it for the long haul.

My fear that the WRC will not be “enough” has nothing to do with my estimation of the dedication of WRC members to their work. Nor does it come out of a sense that they will not strive to move beyond their ranching roots and encompass the diversity of the Deer Lodge community. Rather, my concern is that many of the non-WRC landowners I

talked with don't seem to have any inclination to become involved with the group. For some, the idea of attending more meetings is off-putting. Others are skeptical of any organization that has dealings with a Missoula environmental group. Both of these objections suggest a larger pattern in the way restoration— specifically, *technological* restoration— interfaces with culturally-sanctioned discourses long associated with the rural West, including ill-feeling toward government and a particular set of attitudes and ideas about what it means to have private property rights.

To better understand these interactions, we need to look beyond the WRC and consider the Deer Lodge Valley through the broader lens I originally proposed: How *do* local landowners perceive cleanup and restoration?

The answers to that question vary so dramatically among individuals that the overall picture seems almost incoherent. It is when one asks how landowners see *themselves* that patterns begin to emerge.

## CHAPTER 4

### *The View From the Ranch*

When I moved to Anaconda, I expected to spend the summer interviewing ranchers. Though I was interested in all Deer Lodge Valley landowners' perspectives on the cleanup, I was particularly interested in hearing from those who put their properties to some agricultural use. Investigating restoration in working landscapes was a major goal of the project, after all, and because I was trying to understand the focal elements of restoration particularly, I wanted to get a sense of the ecological knowledge that farmers and ranchers bring to the table— how does it compare to what public lands volunteers acquire (or, claim to acquire) by trial and error? To get at the answers to this and other key questions, I had to learn more about the terms and means by which agriculturalists know the land they use. Because so much of the land in the Deer Lodge Valley is used for grazing and hay, I assumed that if I went looking for “landowners” to interview, I would find *agricultural* landowners, plus a few others— a diverse sample, but one dominated by the group I most needed to get to know.

But, as is often the case in research, my first lessons did not answer my questions; they answered my assumptions. I learned very quickly that there are a *lot* of non-agricultural landowners in the Deer Lodge Valley. I also learned that these are the people one is most likely to catch on the phone in the middle of summer. Ranchers are haying in the middle of the summer— out from first light to last, most days. I had anticipated this much; what I had failed to apprehend, having never before spent a summer in Montana, is that first light is around five in the morning, and last is after ten at night. This doesn't leave a lot of time for *scheduling* interviews— let alone for actually giving them.

I ended up talking to a number of landowners with smaller, primarily residential parcels, many of which are between the river and East Side Road. These individuals had tremendously varied biographies: I met a retired professor from California who now sells Western antiques, artifacts, and memorabilia; a yacht captain (You can identify his house



by the mast protruding from the roof of the barn); a retired soils scientist; an amateur pilot; a woman who raises most of her own food; and an extraordinarily profane, self-styled Ahab with a degree in mine reclamation who moved to Deer Lodge specifically to see how much of his yard he could clean up himself. Unsurprisingly, my interviews with these people yielded fascinating perspectives and insights into life in the Valley.

But at the close of the season, as I took stock of whom I had talked with and what each person had talked about, it became clear that the questions I most wanted to answer had to do with the potential for restoration on larger, intact-ecosystem properties. It was when I focused on these landowners— nine in all— that themes began to emerge. The following discussion describes the five most salient of these themes, however it is not intended to represent the perceptions of the full spread of landowners in the Deer Lodge Valley. Rather, it is an analysis of the perceptions of a particular subset of that group: The major agricultural landowners I was able to interview.<sup>78</sup>

#### HERE FOR OUR USE

The ranchers I interviewed in the Deer Lodge Valley seem to share a fundamental view of nature as something that humans are supposed to use. Their rhetorical habits suggest this subtly: They do not talk about “nature” or the “environment”; they talk about “resources,” “resource management,” and even “the resource,” in reference to the river.

But they also just say as much outright. When I asked one rancher his vision for the future of the Deer Lodge Valley, he replied, “Well, if there’s grass, eat it, if there’s trees, you cut it, and that’s the way it is. This was put here for us to use.” Another participant differentiated himself from “environmentalists” thusly, without any prompting from me: “I believe more in economical values. Instead of looking at a tree and saying, ‘Gee, isn’t that’s a beautiful tree?’ I’m gonna look at it and think, ‘Geez, look at all the houses we could build.’ Not that I’m against the tree— it is a beautiful tree! But let’s use it!”

Unsurprisingly, John Hollenback put it a bit more delicately. “We’re not great ones for believing in fencing something off and never using it,” is what he told me. “We believe that no use is the worst kind of management there is.” This wasn’t his response to a question

about use of the river; I did not ask landowners about their views on the subject of riparian fencing. Hollenback mentioned fencing as an example, in order to make a more general point about how he and his neighbors see themselves in relation to the land where they live and work.

Ranchers' comments on other subjects provided subtler testimony the same value system. For example, I did ask most large landowners how they felt about subdivision, and though their responses often evinced some ambivalence,<sup>79</sup> this much was clear: They think it is a waste to build houses on land that gets good water and grows good grass.

"[Subdivision] just takes that much agricultural ground out of production," one rancher told me, "I guess I'm not plumb against subdividing, if it's in the right place— some ground not really that good for agricultural use. [But] my hay ground and stuff up here? Jeez, you'd hate to see a bunch of houses built up there." Another participant quietly laid out the economic importance of keeping subdivision on the table, but couldn't seem to resign himself to it. His last comment on the subject went unfinished: "I just hate to see good farm ground..."

This is how Hollenback feels when he looks at the sprawl around Bozeman and Billings. "The richest soil they have... is now almost covered up with development. They've soil that's twelve, fifteen feet deep, you know. *Tremendous* soil there. And, of course, that's where people want to build. [It's] covered up with blacktop and concrete. Tragic thing is, that can't go back."

I believe Hollenback really does see tragedy in the parking lots of big box stores on the urban fringe. I once heard him describe Montana's native grasslands as "a beautiful part of God's creation." He is a religious man, not the type who would speak such words lightly, but he is not flashy or particularly public about his faith. He wasn't talking aesthetics, either— not only, anyway. "These [rangelands] don't take a lot of moisture," is what he said next, "And they're kind of fragile, but they're mighty productive, and they're just a tremendous thing." In the *use* value of the range— in its capacity to sustain cattle—one rancher, at least, sees evidence of God.

## TAKING CARE OF LAND; TAKING CARE OF BUSINESS

It follows, then, that Hollenback also believes landowners should take care of the resources they use. He is not alone. DeArment noted this utilitarian, quasi-environmental sensibility as a theme of her interviews with large landowners. “They may not be super-concerned about the environment,” she concedes, “But they’re certainly super-concerned about their land and their operation, which sort of translates into the environment. There’s a loose connection there.”

Most of the ranchers I spoke with attested firmly to at least this much: “Use” is not the same thing as “abuse,” and they know the difference. They *have* to know the difference.

“We do not abuse the land at all. We run so many cattle, we don’t overgraze,” says Lars Olsen. A rancher and life-long resident of the Deer Lodge Valley, Olsen refuses to get involved with the WRC— in part because he knows the group has connections to a Missoula-based environmental organization. When he talks about how ranchers care for their land, his voice rises a bit— just as it does when he talks about the Clark Fork Coalition. “We take care of business,” he emphasizes. “Most of the good ranchers do... If you abuse [your land], you’re dead in the water.”

“We make our livin’ from ranching,” Don Ueland reminds me, leading with Olsen’s ultimate point, “so we want our ranch to be productive and [we] take care of it.”

“I guess the landowner is the one [whose] livelihood is tied to this property,” Dan McQueary says. “He’s got to care about it.”

Jennifer Nicholson, co-owner of one of the largest ranches in the Deer Lodge Valley, keeps it short and sweet: “If we don’t take care of our ground, it’s not gonna take care of us.” As an example, she tells me about her and her husband’s efforts to expand cross-fencing and let pastures “take a break.” She is adamant about limiting the number of cattle on the place. They could run more than they are now, she says, but those numbers would only be sustainable for three or four years. “We want this place to be able to sustain itself... and [to] be able to raise our kids,” she tells me. “This ground’s got to sustain itself. That’s all there is to it.”

The point is clear: Ranchers' economic survival depends upon their ability to distinguish between land that is working and land that is being worked to death. Many of the individuals I interviewed substantiated their claim to this ability in another, slightly back-handed way: By giving me examples of what they *do* regard as irresponsible land use. "The miners," for example: "They flourished and they lived high on the hog," one rancher told me, "I guess they didn't know any better. They *should* have known." Others implied that they know abuse when they see it because they *do* see it now— from non-ranchers.

"People want their two square feet or whatever," McQueary opines, "And a lot of people, once they get their ten or twenty acres, they really don't take very good care of it." Affecting the usual edge, he mutters, "I thought there was people in agriculture that were bad, but there's [worse]... Some of them take excellent care of it and try to manage the weeds, and right next door it looks like it's been plowed."

The ever-cheerful Ueland doesn't go quite that far in his critique of non-agricultural landowners, but he does note a difference: "They're more like, 'Okay, let's put some horses out there for, you know, for the weekend when we need to go riding.' They're not concerned so much [with] weeds or anything like that."

#### **"IT'S NOT AS EASY AS THEY THINK."**

In contrast, ranchers tend to see themselves as people who put a lot of time and effort into taking care of their land. Using resources responsibly is something they want and need to do, but that does not mean it is easy. Managing large rural properties means managing diverse and at-times conflicting demands on those properties. For instance, in addition to keeping his business afloat, the average Deer Lodge Valley rancher must also work with a public that views and values his home as an ecosystem, a game reserve, and even a playground.

Nicholson stressed this to me in our conversation about the Coalition ranch. She is glad they purchased the property because she thinks their efforts will give Missoulians and environmentalists badly-need insight into the challenges Deer Lodge Valley agriculturalists face. "It's not as easy as they think," she said bluntly. "We have to be ultimate stewards of the land in order to make this possible. And that's where they have a lot of

misconceptions.”

The “this” Nicholson is referring to is broad, unspecific— the open lands, the agricultural communities, the rural character of the area— but McQueary speaks to the same idea in a bit more detail. “The public doesn’t understand— some public anyway— that if it wasn’t for [private ranchers], there would be nothing for them to have. What would

#### **THE ACCESS ISSUE: RANCH MANAGEMENT AS RECREATION MANAGEMENT**

Who gets to recreate on private lands, and on what terms, is a subject in which the gulf between ranchers and the public seems to be— or at least seems to have been— particularly wide. Many of the ranchers I talked with emphasized that they like the idea of people enjoying their property. “I think it’s neat that some people want to come out and hunt or fish on your place,” one told me. When recreationists are respectful— and when they take the time and the care to figure out what it means to be respectful in a particular case— sharing the ground is gratifying to landowners, as well.

Of course, it doesn’t always work out that way: People leave behind trash, shells, weeds, and “gut piles” (an image so unpleasant that I did not much like having it left on my tape recorder). People drive through hay fields, cut fencelines, build fires, and poach. Someone drove a camp trailer into one rancher’s upland pastures and lived there for three weeks— without asking. (“We were haying,” the landowner added, by way of explanation for why he did not find the interloper sooner.) Hunters shoot pivots sometimes; other times they shoot cattle; one rancher expressed worry that if too many of them come on his place at once, they might accidentally shoot one another. Still, he rarely turns down a request to hunt.

“To tell you the truth, I don’t think that we’ve denied but maybe two people on this place,” he told me. And those were people he had allowed on once before. “We allowed them the first time and not the second, because they weren’t able to follow directions.”

Another rancher I talked with is more restrictive— or, he is now. The mess is what changed him, he says. “I finally stopped the duck hunting, ‘cause they go down there on the river and they shoot and they shoot, and when they leave, they don’t pick up the cartridges.”

Nicholson can relate. “When we got here, it took us 45 garbage bags to pick up shotgun shells, all the fishing line, all the beer cans, all the wrappers,” she tells me. “We’ve gone through and tried to clean it up as much as possible, and we wanna keep it that way.”

Another rancher once took a truckload of trash *back* to someone who dumped it in one of his pastures. “I don’t mind people enjoying this property,” he insists, “I like them to respect the fact that somebody else has to take care of it.” Nicholson strikes a similar note, saying, “I think there’s just some respect and some responsibility that comes with [access].” In McQueary’s opinion, it cuts both ways: “I guess the goal is to have some open space for people to enjoy this country. I think it’s somewhat the responsibility of people [who] own land like this to provide that.”

Block Management is designed to lessen the inconvenience of that “responsibility” by making it easier for ranchers to allow public access. Contracts limit landowner liability, for instance—something ranchers do worry about. For many landowners, the program is helpful, but it can be hard to farm wildlife management out to FWP— especially on a larger operation like Nicholson’s, and especially for landowners with their own conservation goals.

“[If you] allow everybody with the tag in, then what have you got? You know. Nothin,” one rancher told me. He went on to discuss a recent decline in the antelope population— something he wants to be able take into account when he makes decisions about access, and when he talks with people he lets on his place to hunt. In short, he says, “Over here we know what we want to build up, [and] we know that we have to maintain it within a certain number so it’s not affecting our harvest fields.”

The bottom line is that managing public access takes work, and sometimes it has real costs. “We’re really trying to figure out a good, sustainable thing for everybody,” Nicholson claims. It just isn’t easy.

this look like if they just let it go [and] said everybody could chop off their twenty acres?" he stops here and shakes his head. "Every time I want to see [that]... I go from Missoula to Frenchtown and look on that hillside. Everybody [there] has got their twenty acres."

The first time I visited to Missoula, I arrived by the route McQueary is talking about—from the west on I-90. It was a hot and smoky August, and the grasses were burnished to a metallic colorlessness that used to be tan. The new houses resembled CGI mirages—aggregations of boxes and picture windows blooming weirdly on the flank of the ridge. This is what McQueary thinks his and his neighbors' land would look like if ranchers just "let it go." This is what the invisible hand builds when agriculture gives up.

Agriculture hasn't given up in the Deer Lodge Valley— not yet, anyway. And ranchers think that is at least in part a consequence of their strenuous efforts to consider the whole place, in terms of the many ways it might be used and valued. Speaking for her family's ranch, Nicholson summarizes, "We pay the taxes. We're taking care of the place. We're maintaining it. We're trying to keep the weeds down."

And they don't see all this as a burden— not really. They know they are compensated for their efforts with a lifestyle, not to mention a view, that is envied by desk-bound dreamers all the world over. But they also see the ways the public benefits from the work that they do— and the ways the public makes it difficult for them to continue to do it. So when outsiders, environmental activists, and their neighbors in town express contempt for ranchers and ranching, it doesn't sit very well.

"When we were going to school, we were the 'rich ranchers.' I never figured out where the people got that. Because you owned a piece of ground? Because you owned three tractors and a truck?" McQueary asks. "How do you figure that? You don't even know what the income is. You don't know what it takes to run the place and take care of these ranches."

Ranchers want to manage their land in ways that respect a diversity of uses. They may not always succeed. They may close the gates sometimes; they may let cattle in the creek; they may fight Superfund cleanup, zoning initiatives, or any number of other policies that seem to be in their best interest. But if my time in the Deer Lodge Valley convinced me of

anything, it is this: Ranchers do not do these things because they are careless, ignorant, or inconsiderate— not here, anyway. In most cases, in this area, they do these things because they are very busy trying not to go broke.

#### **RULE #1: RANCHING DOES NOT PAY**

*“I’d like to keep doing what I’m doing, but with the price of calves being so low, and the price of everything else so high, we won’t be too many years and... I mean, I can’t keep going the way I’m going. I think I’m getting a little further behind every year— not a bunch yet, but I think the next few years... you know unless the price of these cattle turn around... It’s just real tough to do, and I think 99% of the ranchers you talk to are gonna tell you the same thing.”*

*- Anonymous Participant  
Interviewed July 2008*

The individual who told me this was slightly off in his predictions— 1% off, to be exact. Because *every* rancher I talked with in the Deer Lodge Valley said something to the same effect. Ueland summarized the general feeling succinctly when he exclaimed, “You can’t make it! You can’t make it farming and ranching.” Myers agrees: Speaking for the landowners she works with in the WRC, she says, “It’s *really* hard to ranch.”

The problem is so marked that it has become a source of black humor among the locals; combined with my standard interview questions, it precipitated irony:

“How do you make a living?”

“Try to make a living raising cows, but in this day and age it’s pretty tough to make any kind of a living [that way].”

“What do you want to do on this property in the future?”

“I’d like to make money, but that’s not working.”

“What would be your idea of an ideal future for this area?”

“I guess it’d be nice if everybody had an oil well or two in their backyard, that way we wouldn’t have to worry about pumping... I guess the ideal deal would [be to] have the price of cattle up there that we can make a living.”

Until that happens, off-ranch incomes are likely to remain the local standard. The Thomases get theirs from the mill; Olsen was a cop for nearly forty years, and his wife Mary Ann worked for the school system for almost thirty. Ueland says many of his non-ranching neighbors “do have the ranching backgrounds and stuff, but, you know, you can’t make a living at it, so they all got other jobs... Had to go off farming to make a living.”

McQueary points out that his place has been in the family for generations, so “there is no debt against the ground.” All but three of the ranchers I interviewed have this longevity of ownership working in their favor as well, but it’s not enough: “Still,” McQueary continues, “If it wasn’t for my wife working...” he trails off. Some sentences, I suppose, are better left unfinished.

I got to talk with Ueland and his brother at the auction barn where they keep offices. The Uelands used to own that business; they sold it in 2002, but they have other, non-ranch enterprises, not to mention a vast amount of land. The Nicholsons are acreage leaders in the Valley, which is perhaps part of the reason they manage without other employment. This is one way to stay afloat, Ueland explains, providing me with a crash course in economies of scale:

[B]igger ranchers, you know, they’re able to grow more products... so they got a whole bunch of little profit margins stacked up. Well, this guy that only has a little bit... as inflation goes on and cost of goods goes up, he falls away... So that’s kind of where I think farmers and ranchers [are going]. The big ones are gonna get bigger and the smaller ones are gonna get smaller.

The forces driving all this are clear to him, too. “We are a bunch of individuals. We can’t go out and control the marketplace. So what we do is throw a whole bunch of products out there and we take whatever money they’ll give us for it,” he says. “And it’s not enough, you know? We have no control over our destiny.”

If this sounds a bit dramatic, it is worth recalling the national headlines in the summer of 2008. By July, I was paying over four dollars a gallon to fill my Volkswagen at the Town Pump in Deer Lodge. And honestly, I was just fine with that— my bank account was hurting, but my politics reminded me that four-dollar-a-gallon fossil fuels are still highly subsidized fossil fuels.



For a rancher, though, four dollars a gallon is sort of like strangulation on top of starvation. Low cattle prices are the starvation, and high energy costs cut off the ranch's air. Nicholson was willing to provide an example of the mechanism— complete with numbers and stark implications:

Between the fuel bill and the power bill, we don't know if we're gonna be able to pull it off. It's just the way it is. I just don't know how we're gonna do it. Last year our utilities were \$40,000. This year they're gonna be over 60. And we haven't changed a thing. That's just how much the kilowatt hours have gone up... It's very, very hard. Very hard.

So now the Nicholsons and their neighbors are getting squeezed on both sides. And like the price of cattle, the costs of fuel and electricity are another factor on the rancher's balance sheet over which he or she has little control.

Of course, there *are* ways for ranchers to decrease operating costs and command higher product prices, and most of these strategies have positive environmental implications. The trouble is that transition costs are high, and the risks can be huge.

Take energy, for example: “We want to take the ranch off the grid as much as possible,” Nicholson says, “Right now we haven't done it because we can't afford to do it.”

Meanwhile, staff at the Clark Fork Coalition are hard at work on the output side of the problem. They talk and think a lot about niche marketing. They actually established a second farmers market in Missoula in order to facilitate the local sale of Deer Lodge beef—and in hopes of showing Deer Lodge Valley ranchers that there are alternatives to the corporate feedlot.<sup>80</sup> When I asked Renée Myers what she thought it would take to make ranching economically viable in the area, she mentioned alternative ranching techniques— “Grass fed beef, things like that”— and threw out a few ideas about labeling and processing, like a line of “Montana-made” products. But it was clear to me, as she pondered these possibilities, that we had shifted into a quite-hypothetical gear. Little wonder: I had not detected much enthusiasm for these types of suggestions from landowners. And I wanted to know why. When I asked Myers, she responded that she did not think the resistance was cultural. “I think it's economically scary. That's the big thing,” she says. If a couple of ranchers took the plunge, and survived, “you'd see more folks around here get involved.”

The Clark Fork Coalition is determined to facilitate such change, and they're willing to take unconventional steps to fill the gaps. Through a unique arrangement with two private funders, the organization was recently able to buy a large ranch in the Deer Lodge Valley. By maintaining the property as a working ranch, they are hoping to play the role of the local risk-taker— the innovator who shows the neighbors what's possible by example. That strategy might eventually yield results, but the suite of opportunities for adding value to beef products available to Deer Lodge Valley ranchers is not likely to change any time soon. Those who hang on will do so— in many cases by the spindly threads of credit and local wage jobs— simply because they love the work and their land, and because they want their kids to have a shot at the same.

“We're not really here to make a buck,” Nicholson summarizes. “We're just here to raise a family.” It is a point she comes back to again and again, but even this fundamental hope is not untouched by her anxiety about the economics of cattle and kilowatt hours. “We just want to be able to raise our family here and hope that our kids will want to stay,” she says, “But on the other hand, we can't strap 'em with so much debt. We just can't do it.”

“They always say it's a way of life that you enjoy. There has still got to be some incentive [in] the way of life,” McQueary muses. After all, he concludes, “It's a hell of a pretty view up here.”

#### **MOTHER NATURE AND THE RIVER**

Most people would agree with McQueary: Aesthetically speaking, the Deer Lodge Valley has plenty of things to boast about. For a long time, though, the Clark Fork tended not to be one of them.

“When I was growing up, it was absolutely totally polluted,” Olsen recalls. “The city dumped their sewage in it, the shops dumped all their oil and stuff from the engines, they serviced trains down here— it all went in the river.” But it was the Anaconda Company that took the proverbial cake. “The smelter dumped everything in the river,” Olsen adds, “And of course the Butte mines [did too].”

The mine runoff was particular memorable— not just because it was particularly toxic, and not just because it was particularly copious; it was also particularly colorful.

“The river would run a copper color,” Hollenback explains. “It ran that way almost to 1980.” McQueary attests to a broader spectrum. “[The river] ran every color under the sun, depending on what happened upstream,” he insists. “You can talk to anybody in town and they can tell you it ran orange and blue and whatever.”

Of course, when McQueary told me this, I was trying to talk to everybody in town. While I won’t pretend that I succeeded, I will say that by the time I quit trying, I was on track to proving him right. The widely-agreed-upon upshot? McQueary again: “It was pretty sick. And I don’t remember a lot of fish.” Then, “it slowly cleaned itself and the fish came back.”

He is making a very important point: When you compare the river now to what it looked like before— “in the ‘50s and earlier,” McQueary specifies— it doesn’t seem that bad. For starters, it is not red. It is the flat olive-black of fine silt and smooth stones deepened and polished by clear water— except when it catches the sky and borrows that completely appropriate blue. There are fish in it, too— not as many as there could be, a biologist will quickly tell you, but that is still an improvement over Olsen’s recollection.

“There wasn’t a fish in there. There was hardly any wildlife and now it’s all come back in pretty good shape,” he says.

Even newcomers note positive changes— without restoration or remediation. “I think it’s healed itself some,” Cline says, referring to a neighbor’s slickens patch. “I guess there’s some areas that I’ve seen [that] kind of healed themselves.”

And as for the remaining, visible scars of contamination— the slickens, mainly— McQueary summarizes, “People live with it. I don’t know who started the litigation or who decided they had to clean it up, or why they decided it was a Superfund site, who was the initiator, [but] most of the people in this valley had come to live with it. It just slowly began healing itself.”

McQueary sees remediation and restoration along the river as a useful way of expediting a process that “Mother Nature would have taken care of”— eventually, and at least for the most part. But landowners’ recollections of how bad the river used to be— and of how much it has improved without Superfund cleanup or aggressive restoration— have led many of them to doubt the necessity of the tremendous expenditure of money and effort that will be dedicated to repairing the floodplain.

Olsen is relatively outspoken about this. Referring back to his observation that the wildlife has returned, and his attendant belief that the river is doing alright, he says, “That’s one of the reasons I [said], leave it alone and do as little as possible to the river.”

It is also one of many reasons some residents of the Deer Lodge Valley think the people who will be managing the cleanup—agencies of the state and federal government— have absolutely no idea what they are doing.

#### **ENTER THE GOVERNMENT**

What we have seen, now, is that ranchers in the Deer Lodge Valley think they are doing a pretty good job managing the challenging and at-times-countervailing demands that come with their deeds and their occupation. But the difficulty of making a living by raising cattle— the increasingly-near-impossibility of it, really— ratchets up the tensions surrounding some of the tough calls. Many of these tensions are articulated through landowners’ interactions with government agencies— the representatives of that diffuse, distant, and often contradictory “public.” The trouble is that in the rural West, government agencies are no blank slate, and the Deer Lodge Valley is no exception to that rule. Collectively, the locals maintain a baseline level of anti-government sentiment that is more or less unremarkable in the regional context— not particularly outrageous, but not notably absent, either.

“I do see it,” Myers agrees. “In some ways it’s actually justified, because there have been government [agencies] in the past that have either not completed projects or haven’t followed [up on] projects, or promis[ed] something and not come through.” In other cases, “It’s just a state of mind that’s been passed down kind of from generation to generation. I grew up on a farm,” she adds, “So I understand a lot of that mentality.”

But the prospect of remediation and restoration has aggravated anti-government sentiment in some corners of the Deer Lodge Valley, pushing past the level attributable to an intrinsic, mostly irrational cultural tick. Cleanup requires (and, indeed, already has required) all sorts of atypical interactions between landowners and government. The agencies are different, too: Landowners have gotten to know the FWP, the NRCS, and even the DEQ over the years, but the EPA and the NRDP are a new ballgame.

“What scares people” about cleanup, Hollenback believes, is that “EPA can— they don’t want to do this, in my approximation— [but if] they have some project that they want to do and the landowners [don’t], they can force their way in and they can do it. They have that power,” he says, almost sadly. “I hope there’s a way that we can work through the process that that power is not used... ‘Cause one lawsuit or one force-your-way-in...” he trails off, and shakes his head, “Everybody hears about that.” He concludes, “There’s still people out there that are very afraid of what’s coming.”

This fear is something I have heard a lot about— back in California, certainly, and even in parts of Montana— including the university town that was my academic-year home. Missoula and Deer Lodge are very much on opposite sides of the West’s urban-rural divide, and politically the former has more in common with Santa Cruz than it does with the Valley. I have heard a lot of city-dwellers and suburbanites characterize the fear Hollenback refers to this way: People hate and fear government because government is an agent of broader cultural change; when such change has to do with the nation’s environmental sensibilities, it is borne into the agricultural heart of America on policies and regulations that may make a dent in a landowner’s bottom line. And landowners don’t much care for that.

And to that I say, true enough. Ranchers’ expectations about their changing economic fortunes probably do factor into this picture pretty substantially. But also I think that urban westerners tend to leave something important out of the story. In some communities, at least— and Deer Lodge seems to be one of them— the “dent” in the bottom line is not a difference between shopping at Whole Foods and shopping at Safeway. It might very well be the difference between breaking even and not; between

breaking even and losing money; between losing money some years and losing money every year; or between losing money and losing the ranch.

Though ranchers' fear of regulation and the government that might bring it can seem like paranoia or greed to outsiders, the precarious economic position of most Deer Lodge Valley ranchers invites anxiety—excesses of anxiety, even. And this is one reason landowners see remediation and restoration on the horizon and respond by fretting or frothing about government.

There are other reasons, too. The specifics of cleanup have not always inspired confidence in those who have planned it. Landowners see the Berkeley Pit remaining at the top of the watershed, slowly filling with groundwater that could make its way back into Silver Bow Creek. They see the Milltown Dam gone, and the sediments dug out from behind it being transported *upstream* for disposal. That reservoir dirt will be used to cap a toxic waste dump near the valley town of Opportunity, which is close to Anaconda; the rationale for that decision was that Milltown sediments are clean relative to the stuff they will be covering up. Still, there is a basic insult in the arrangement that you can't talk past with references to parts per million— not in the Deer Lodge Valley, anyway. “For some reason, from Missoula to Opportunity, it becomes good top soil,” Olsen grouses. “So they tell the people in Opportunity, this is good top soil you're getting. But down in Missoula it's contaminated.” The Olsens ponder this disconnect every night at around 9:30, when the whistle of a freighter signals the transit of boxcars full of dirt and metals, moving in what many perceive as the wrong direction. “We call it the poison train,” Mary Ann adds.

“I think that kind of pissed off a lot of people in this area, right off the bat,” Nicholson muses, “Bringing it all back here, you're re-dumping it in all these areas, re-contaminating this area even more.”

And this is just the beginning of a long list of qualms, quibbles, and concerns about cleanup. It gets longer when you start factoring in the non-agricultural landowners— the folks with small streamside parcels off East Side Road, for example. They see a river that is going to move, naturally, across its flood plain, cutting new oxbows and exposing new

patches of contamination no matter what the government does. Many local residents still don't see the need for anything beyond in situ treatment of toxic hotspots. Others lack personal experience with the round upon round of baseline studies and sampling that precede individual remediation and restoration projects; the discovery that a lot of the settlement funds will go towards such un-tangible enterprises is not always received with the equanimity Cline demonstrates. And then there are the little inconsistencies and unconsummated projects to which Myers alludes.

Nicholson has a particularly aggravating case-in-point, arising from the period when the EPA was needling ARCO to assess contamination and implement other basic control measures— including spraying invasive weeds. “They would come to spray after they had already bloomed and gone to seed,” she says. “Their timing was very, very wrong.”

The point here is not to interrogate the decisions of the EPA, the DEQ, or any other government agency involved in cleanup. The kinds of frustrations landowners describe are all-but-inevitable in a government-driven project targeting damages accrued to a broad geographic area over more than a century. You can't clean up a river as profoundly wounded as the Clark Fork without making tough choices, and even if the EPA had been able to explain its rationale for every decision in a way that every local resident could understand— something the agency tried to do in the Records of Decision— such understanding would not likely have brought about agreement on “right” action; even if there *had* been broad agreement, it would not have prevented a certain number of miscarriages of communication and bad inter-agency coordination.

But it is almost equally inevitable that these same endeavors will touch a nerve in rural agricultural communities like those in the Deer Lodge Valley. Seeing millions of dollars given to a flawed cleanup is hard for people who are having a tough time hanging on. “Some of the comments” Nicholson heard when she first moved to town, “were like, you know, ‘This is just kind of a wasteful money pit.’” She says many locals felt that ARCO *and* the government were doing projects just to be able to say they were doing them— not because the work made a difference. And even if one assumed that the agencies’

intentions were good, the likelihood that good intentions would translate to meaningful results could be questioned. How would the government deliver on its enormously grand promises of ecological and economic transformation if it can't even get ARCO to spray the weed patches before they go to seed?

Look at these points together and it is easy to see multiple reasons why the cleanup might set Deer Lodge Valley ranchers on edge— and why the resultant frustration might be directed at government: First, government is the locally-easy, culturally-sanctioned scapegoat for a lot of diverse ills and woes; second, it's not too hard to get frustrated with the way the government is prosecuting the cleanup particularly.

I believe that anti-government sentiment in the Deer Lodge Valley is linked to the cleanup and restoration of the upper Clark Fork in two distinct ways. First, because the cleanup is fundamentally government-driven, discussions about both remediation and restoration (and even the conversations about longer-term economic planning for the Valley which the cleanup has prompted) are likely to be associated with government— and whatever else government is associated with. If government is generally feared or maligned, the chances that local residents will “embrace the cleanup”— as Stone-Manning once put it— are slim.

But the problems don't stop there, and the second link between anti-government sentiment and cleanup is perhaps more pernicious than the first. Anti-government sentiment plays into another set of beliefs and ideas that are implicitly sanctioned, and sometimes explicitly celebrated, in the rural West— beliefs about the liberties to which those who own land are entitled.



PLATE 5. Remediation in Butte and Anaconda



Butte's Berkeley Pit contains heavy metals and is slowly filling with groundwater. Photo by Dan Spencer; inset courtesy of the EPA.



Golfers enjoy remediation to recreational standards at the Old Works course in Anaconda. Photo by Dan Spencer.

PLATE 6. Contamination in the Deer Lodge Valley



*A close-up view of slickens in the Clark Fork flood plain, just south of Deer Lodge town.*



*A pasture that was once irrigated from the contaminated river now supports only weeds; the location of the ditch itself is visibly barren.*

## Powell County Commissioners respond to EPA's Proposed Plan for the Clark Fork River cleanup.

Everyone agrees that cleaning up the contaminants left along the Clark Fork River after years of mining and smelting operations upstream poses a great challenge. Recently, the Environmental Protection Agency released a Proposed Plan for dealing with the contaminants in the Clark Fork River flood plain.

While we agree with the majority of EPA's Proposed Plan, we disagree with the part of the plan that calls for the removal of approximately 167 acres of contaminated soil along the river. This removal process could take over 10 years to complete, would create great hardship and inconvenience for the individual landowners, and in the end would remove only 5% of the total contaminants in the flood plain.

The Powell County Commissioners believe that in-place treatment of the contaminated soil provides the best possible solution for the Clark Fork River. In-place treatment could be completed in a much shorter time frame and would cause minimal hardship and inconvenience to the landowners. But most of all, **IN-PLACE TREATMENT WORKS!** This technique has been proven successful by the Governor's Demonstration Project of 1990 as depicted below.

### THE PERSPECTIVE



This 1990 photo depicts an area along the Clark Fork River, south of Perkins Road, as it looked prior to the implementation of the Governor's Demonstration Project. The 'slickens' area in the upper right-hand corner is shown in greater detail in the photo to the right.

### THE PROBLEM



This photo, also taken in 1990, provides a closer view of a contaminated 'slickens' area within the Governor's Demonstration Project prior to in-place treatment. This same area is shown in the upper right hand corner of the photo below after successful implementation of in-place treatment.

### THE PROCESS



This 1990 photo shows the in-place treatment in progress at the 'slickens' site. The in-place treatment consists of the application of lime through a deep tilling process that immobilizes the toxic metals in the tailings. Then, vegetation is planted and the area is allowed to return to its natural pre-mining state.

### THE PRODUCT



This picture was taken on July 25, 2002 and shows a lush field of alfalfa growing in the 'slickens' area that received the in-place treatment.

**It just can't get much better than this!**

## It's hard to argue with success. IN-PLACE TREATMENT WORKS!

Courtesy of Ron Hanson.

PLATE 8. WRC Project Sites



*The WRC is helping landowners revegetate this stretch of Brown's Gulch with native willows.*



*Beetle kill— evident in the brown, dead trees on this peak— poses a serious fire risk in the Deer Lodge area. Photo by Dan Spencer.*

PLATE 9. Evidence of Coalitions



*Cattle graze in the uplands of the Clark Fork Coalition's Dry Cottonwood Ranch. Photo by Dan Spencer.*



*WRC founder John Hollenback talks with University of Montana graduate students in his Gold Creek home. Photo by Dan Spencer.*

## CHAPTER 5

### *Achieving Balanced Restoration in Working Landscapes*

“Are you from Montana State?”

“What are you studying?”

“Where are you from originally?”

Most of my initial conversations with prospective interviewees involved these three questions. They were almost always asked in this order, which meant that my answers got worse and worse: No, I’m at the University of Montana. I’m studying Environmental Studies. I’m from California.

Conventional wisdom— or, at least, conventional Montana wisdom— states that there is no worse set of qualifications for a grad student hoping to get an audience in a place like Deer Lodge. Missoula is to Montana what Boulder is to Colorado, what Austin is to Texas, and what San Francisco is to the United States as a whole. And if Missoula is Montana’s San Francisco, UM’s master’s program in Environmental Studies was at one point sort of like the Big Sky version of the Haight Ashbury. The program seemed to have a knack for producing activists who in turn had a knack for pissing off ranchers, farmers, loggers, and miners in conservative districts throughout the state. One year, things got so bad that the legislature voted to cut funding to the department. Of course, they couldn’t *actually* do that— it was a symbolic gesture, and by the time I started the program, things had calmed down considerably. Environmental Studies seemed committed to collaborative conservation, but I wasn’t expecting that folks in Deer Lodge were keeping up with the department’s course offerings.

Then there was the little matter of my being from California. The first time I visited Deer Lodge, I was so nervous about introducing myself to the County Commissioners that, when my turn finally came, I said, “I’m Sarah, I’m in Environmental Studies, I’m

from San Francisco, and I *promise* that as soon as I get my master's degree I am moving back to California!"

The Commissioners laughed. And in the end, not one prospective participant in my project hung up on me when I sheepishly delivered my trinity of unholy answers. In fact, nobody turned down my request for an interview. Every person I spoke with was patient with me, and treated me with decency and respect.

The dog, unfortunately, was somewhat less than accommodating.

I like to say that my 28<sup>th</sup> and final interview was with a border collie. It is a rather witty thing to say, and much less embarrassing than the more accurate version of the story, which is that my 28<sup>th</sup> interview was with a person who gave me rather confusing directions to his home, which resulted in my getting out of my car in the driveway of the wrong house, where I was charged and bitten on the thigh by an absent stranger's defensive pet. It was the penultimate day of my field season, and in two days I was due in Washington state for a meeting of the SER's Northwest Chapter. And about 49 hours after the bite, my fellow UM representative was knocking back beers with the UW contingent around a campfire, in the moss-shrouded periphery of Mt. Rainier.

I was in the campground bathroom, charging my cell phone and trying to discern the substance of a message left for me by the doctor who had treated my bite at an urgent care clinic in Missoula.

I could make out bits and pieces— things like, "...really important..." "...very serious..." "...who you were going to interview..." and— this sentence came through with eerie clarity— "Rabies is *virtually 100% fatal* in humans!"

I managed to avoid reporting the name of the dog's owner until I had found her and spoken with her on the phone myself. Once I had explained how I ended up in her driveway, Kathy<sup>81</sup> told me that the individual I had been trying to interview frequently gave directions which resulted in such misunderstandings. The dog had not bitten anyone before, but she assured me he had all his shots. When I explained that the doctor was

legally obligated to report the name of the dog's owner, and that Animal Control would follow up with her if he did that, and asked her permission to do so, she told me she had "no problem with it"— "Tell them my name and give them my number," was what she said.

Long story short: The dog did not have all of his shots. In fact, he did not have any of his shots. Several days later, I got a call from Renée Myers. She wanted to know why Kathy's sister thought that I was going to sue the family. These developments came as a shock to me. What had changed since Kathy and I talked on the phone?

I called Kathy's sister, hoping to clear things up. Instead, I got an earful. "Kathy doesn't understand what you were doing on her property, uninvited," she said imperiously. "You had no right to be there, sounds like. I'm just saying, I know my sister, and that's what she's going to tell anyone who comes and tries to cause trouble."

After the SERNW meeting at Mt. Rainier, I was supposed to go on vacation. I planned to hang out in Seattle with my high school best friend for a day; then my mom was going to fly up from San Francisco, and we were going to spend a week eating salmon sandwiches and reading trashy mystery novels in a little town by the mud flats of the Puget Sound.

What I had not planned on doing that week was this: Playing go-between for the Missoula and Butte-Silver Bow County Health Departments; exchanging increasingly terse messages with Kathy and various members of her extended family; fielding calls from Butte-Silver Bow Animal Control; arguing with a doctor from a mall clinic about whether I should get a rabies shot; and trying to figure out where a Montana resident with a California address could get a rabies shot in Washington state. I bought a thermometer in Portland, Oregon. I kept it hanging from the corner of my mouth, like a cigarette, for most of the drive back to California on I-5, removing it only to argue with my increasingly distraught mother. Having spent her vacation worrying that I was going to die, she was now explicit about her growing hatred of the entire state of Montana— all of which made me angry at *her*.

Of course, I didn't hate Montana. I wasn't angry at Kathy— not really, anyway. In fact,



I felt guilty. Yeah, okay, keeping an unvaccinated dog is against state law, but I couldn't shake the feeling that *I* was the one who had broken the rules: I had gone onto someone's place and made trouble.

The first time I heard a Deer Lodge Valley landowner refer to private property rights was back in November 2007, in my original interview with Bruce and Tammy Thomas. They talked about this in the same way John Hollenback later would: As something other people have, and upon which they do not wish to infringe. I mean, yes, *theoretically*, Bruce, Tammy, and John believe *they* have certain rights, too, and it is possible that they might assert those rights to justify practices of which I would be ill-disposed to approve. But they weren't asserting those rights for themselves— either to me or, from the sound of it, in their conversations with the Clark Fork Coalition, the DEQ, and the EPA. This made it very easy for me to ignore the issue.

Things changed in the wake of the dog bite. Suddenly, the way landowners in the Deer Lodge Valley were talking about private property rights mattered a lot. Kathy's sister, at least, was appealing to these ideas to justify a choice that was— at least by some estimations— irresponsible and dangerous. In less melodramatic circumstances, they are used to excuse a lot of other behavior, attitudes, and choices that make restoration, and conservation generally, exceedingly difficult. Where do these ideas come from? Why are they so potent? And how can we expect to achieve focal restoration where they are culturally sanctioned?

#### **SHUTTING THE GATES: THE PROMISE OF PRIVATE PROPERTY RIGHTS**

People who believe that government is threatening, wasteful, rude, or inept often derive some comfort from the notion that they can shut the gates and run their own show. Of course, none of us can do that, really, but if you have a few hundred acres to your name, or live ten miles up a bad dirt road, it's a bit easier to pretend that you can. The rhetoric comes naturally to members of America's relatively individualistic society, and if you grant that your neighbor has as much right to his private property as you do to yours,

it also seems pretty fair. This is how Lars Olsen characterizes it: “I’m only into my place, I’m not into anyone else’s. What other people wanna do, that’s fine. They can do it.”

But this kind of talk is not innocuous— not just because it elected Richard Pombo to Congress, exposed me to rabies, and totally ruined my mother’s vacation. One of its broad effects is that it undercuts certain kinds of civic participation— especially the kinds that we find in environmental and land use governance. It does so in both direct and indirect ways. Obviously, people who believe that private landowners’ rights are expansive— people who think that society should err on the side of letting folks do as they please on their own places— are apt to see policies that might infringe upon that freedom as inappropriate incursions into the lives and businesses of others. What’s more, though, they tend not to *stop* seeing it this way under any circumstances— not even when the policies in question would serve them personally and profoundly; not even when they have no intention of engaging in the particular activities such policies are intended to restrict.

This is clearest in Deer Lodge when landowners talk about growth and subdivision: Virtually everyone I interviewed wants to see the Valley maintain its agricultural character. Everybody has seen what happens when a sleepy ranching community becomes the next “hot” place— the next destination for retirees and moneyed out-of-staters looking for a second home with a great view.

But mention minimum lot sizes, conservation easements, and other policy tools intended to curb subdivision and lessen development pressure, and most of these same people start to get pretty squeamish. Take Rick Cline, for example. “Subdivision is pretty far from our thinking,” he assures me. If that strikes you as a rather feeble disavowal, consider the way he prefaces it: “I’m just like everybody else— I don’t want people telling me what I can do with my property.” Cline is typical of his neighbors in this apparent contradiction. It’s not that they are ambivalent about subdivision; they are ambivalent about doing what it takes to *prevent* subdivision. Zoning remains a political hot potato in Powell County: Folks don’t talk about it; they wince about it. Reflecting on other efforts to maintain the rural character and ecological integrity of the Valley, planning board

veteran John Hollenback regularly interrupts himself. “People have private property rights,” he’ll say, before going on to emphasize that neither the board nor the WRC want “to take away all of [those] private property rights.” Together, his comments indicate that local sentiment associated with the idea of private property rights has obstructed the board’s efforts on a number of different fronts.

That’s the direct piece, but discourses around private property rights also undercut local civic participation in a subtler way. They do that by presenting a universal, straightforward solution to the myriad problems of membership in a complex, diverse, and democratic society: “You mind your place and I’ll take care of my place, and then it will all be good.” Little wonder that this proposition is often well-received: The means are automatic and the ends are utopian; individual self-interest yields efficiency for all. If you are beginning to notice a parallel to another discourse, sanctioned by a much larger culture, it should come as no great surprise: The stories westerners tell about individual rights and land ownership rise from the same theoretical and institutional foundations as the greater gospel of neoliberalism, which posits self-regulating markets as the balm for all of society’s malfunction and mess. Importantly, though, the “efficiency” promised by private property rights ideology is not primarily about economics. In Deer Lodge, “You mind your place and I’ll mind mine,” means that both of us can get on with the minding— no community meetings, circular dialogue, or potentially unpleasant interpersonal entanglements required. As long as the approach to resource management implied by the rhetoric of private property rights is viewed as realistic and acceptable in the Deer Lodge Valley, it will be extraordinarily difficult to convince many local residents that those community meetings are worth the effort, the patience, and the time.

#### **BACK TO HIGGS: A FOUR DOMINO PROBLEM**

These patterns of thought related to private property rights have real power in the West. Their potential to undercut EPA-mandated remediation has been relatively clear from the get-go— at least to people like Hollenback, Tracy Stone-Manning, and Scott Payne, all of whom express some concern about the possibility that individual landowners

with contamination on their ground will attempt to deny access to the authorities who come around to clean it up. Such refusals would probably not be *driven* by landowners' beliefs about private property rights; they would be driven by anti-government sentiment and *rationalized* with appeals to beliefs about private property rights.

Olsen's example is instructive here: Though he was wary of the EPA and the DEQ at first, he now characterizes his interactions with state and federal agency employees as positive and productive; he feels he was respected, more or less, and he is satisfied with the treatment plans in place for the slickens on his land. But he still insists that he could close his gates against the government, if he wanted to. "Where my fence starts is where your authority stops," he asserts, playing out his half of a hypothetical confrontation. "I am not gonna have you coming in and telling me what to do on the river. That's not it. I own it from here to here, and that's mine." So the link between private property rights and cleanup is not direct: Anti-government sentiment activates private property rights ideology, which may then get in the way of cleanup, restoration, and conservation.

When it comes to remediation— the part of the work that is mandated under federal Superfund law— Olsen is technically incorrect: The government's authority does *not* stop at his fence— not when it comes to toxic waste, at least. The slickens on his land will be treated whether or not he wants them to be. But this fact does not neutralize the problems of private property rights discourse as combined with government-driven cleanup. For starters, the possibility that landowners will fall back on the rhetoric of the former to justify hostility or indifference to elective restoration is still real— especially among non-agricultural landowners who, in many cases, are not tied to the land by multiple generations and the need to secure a livelihood from it. But what is most disconcerting about private property rights discourses, and subtler, is the potential that the ideology underlying (and reinforced by) the rhetoric will undercut collaborative, watershed-scale restoration initiatives of the sort the WRC is now spearheading. It can do this by reinforcing the idea that such collaboration is not necessary if everyone just minds their own place.

And this seems to be happening in some corners of the Deer Lodge Valley. When I asked if they were involved with the WRC, many people who had grudgingly accepted remediation here threw up their hands— rhetorically if not literally— and insisted that they just don't do that type of thing; that they don't go to meetings; that they prefer to just look after their own.

The implications of these connections are clearest when they are articulated through Higgs' framework for identifying good restoration. Recall the assumptions already in place: The cleanup of toxic sediments in the Deer Lodge Valley— that is, the remediation work required by Superfund law and specified in the ROD for the Clark Fork River Operable Unit, and the restoration that may be undertaken by the DEQ in tandem with cleanup on particular remediation sites— is an example of technological restoration; the more grassroots, collaborative projects the WRC is facilitating represent a focal element of the same process. Recall as well that according to Higgs, part of what characterizes good restoration— along with the pursuit of increased ecological integrity in reference to historical conditions on target sites— is a balance between the focal and the technological.

Now feed the links between restoration, anti-government sentiment, and private property rights through the filter of Higgs' framework as applied in the Deer Lodge Valley. The relationship that emerges looks something like this: Technological restoration may mobilize anti-government sentiment; anti-government sentiment activates ideologies about private property rights; these ideologies legitimate non-participation in restoration initiatives of the sort the WRC is developing— non-participation in *focal* restoration, you might say. I imagine four dominoes: Tip the first of them over, and the others go down one by one. The specter of government-driven technological restoration sets off a chain reaction that, in the end, legitimates non-participation in focal restoration.

How, then, are restoration advocates to achieve the balance Higgs compels us to seek? The good news is that things do not always unfold according to the model I have described. If they did, there would be no focal element to the cleanup and restoration of the Clark Fork at all; there would be no WRC. The weak link in the Deer Lodge Valley—

the domino that didn't do its job, if you will— was between anti-government sentiment and private property rights ideology: John Hollenback saw a technological restoration coming down the pike, he did not like what he saw, and he attributed the failings in the plan to the government. But rather than retreating to his ranch and wrapping himself in isolationist rhetoric, he decided to organize landowners so that they could force their way into the decision-making process. His commitment, and that of the friends and neighbors he brought along with him, was strong enough that when their first grant proposal failed, they did not take it as a sign that their efforts were in vain. Instead, they changed their approach; they began seeking other ways in— ways that did not involve “force.”

The next logical question, then, is why? I have a theory, and it comes from listening to Hollenback tell the story of his own early life. I've heard this story a few times now— in our initial interview, of course, but also when I first met him. That was the same day I was introduced to the Thomases— about two months before I returned to Gold Creek to watch them work cattle in the mud and ice of November. My advisor had arranged a field trip to Deer Lodge for his graduate seminar in restoration ethics, and since there were nine of us students to accommodate, Hollenback sat us down outdoors, on the bright and silky lawn his brick and stucco home shares with the taller white farmhouse where he was born. “I moved all the way from that house to this one,” he likes to say, when he is within pointing distance of both of them.

Winter comes early in this part of Montana, but on that September afternoon it was still Indian summer, all green and gold and lazy. We sprawled in the grass like kids and turned our faces up to listen as Hollenback explained, in his at times deceptively nonchalant way, how he found himself running the family ranch. The story, as he repeats it later, in our interview, goes something like this:

My dad died young... and there was six of us, and we just kind of went in phases. My brother, he was here for a while... my next older brother, he was here, for a couple of years, and he went to school. I was going to go to school, but my younger brother, when he got out of school he had a scholarship, and I didn't have one, so I said, “Oh, go ahead and go and maybe when you come back, I'll go,” and long story short I never got it. So... I took over here and, you know, started running it.

As though it were an afterthought, he adds, “I was seventeen.”

Later on in our conversation, while we are talking about the WRC, Hollenback returns to this biographical moment. “Because I didn’t have Dad to help me...” he stops for a minute, then begins again: “I had so many questions... didn’t know how to do things really properly.” So he went to the local branch of the NRCS— back when it was the Soil Conservation Service. “And I became friends with some of those people,” he explains. “They worked with me.” Hollenback remembers one fellow in particular, a range management specialist who taught him how to write a ranch plan— something the WRC is helping landowners do today.

It was a good fifty years after this that Hollenback heard the Clark Fork might be cleaned up, and when he got that news, he admits he was skeptical. He says this carefully, with several pauses: “I had some of the negative thoughts that... a lot of us had. You know, that they’re going to come in and they’re going to do this thing... government’s going to come in and screw it up.” But Hollenback also had profound, personal experience attesting to the possibility that things need not turn out this way. He still sees his early involvement with the NRCS as “one of the best” choices he has made. “Probably why I’m doing what I’m doing now,” he reflects, “is because I got involved with those people, and they’re great people.”

The moral of this story is clear, at least to me: When Hollenback was a teenager, he needed help, and the government was there. Half a century later, he is resisting socially acceptable but largely unproductive attitudes toward government and about private property rights. He wants to give government the benefit of the doubt; he also wants to repay a debt— though not to government per se; I don’t think he sees it so literally. He seems to feel he owes something to his community as a whole. He acts, I think, from the recognition that what is within his fence line has been good to him in part because what is outside of it has been good to him, too.

He is just, as he says, “glad to offer a little bit back.”

EPILOGUE  
*The Case for Ranching*

Family ranching in the Deer Lodge Valley is in trouble— not, in this case, because ranchers don't know all the tricks of their trade, but because the old tricks aren't working anymore. Not in this economy; not with the price of energy this high, and bound to go higher; not with cheaper cattle coming out of Canada and South America; not when the scenic valleys of Western Montana are increasingly appraised for their value as second home sites for wealthy out-of-staters. And there are plenty of people whose response to all this is, in effect, “good riddance.”

This was one of the most surprising things I learned while getting to know Deer Lodge, but it was not a “research finding.” Like the halfblind ranch dog who put a hole in my light-wash jeans, the attitude I'm describing came at me between interviews— at barbecues, in seminar rooms, and over coffee with friends from high school and college. I'm not saying that everyone in Missoula, Seattle, and California thinks cattle are a pox on the intermountain region, but a few people I know in such places do hold some version of that opinion; a few people who live around Deer Lodge hold it, too.

And I did not expect *any* of that— not at all. I haven't seen a “Cattle free by '93,” bumper sticker since, well, 1993, at the height of a push by hard line environmentalists to stop public lands grazing once and for all. I learned to read at the outset of the 1990s— the decade of the Northern Spotted Owl, the Luna treesit, and the Wise Use Movement. While the 2000s have not exactly been notable for peace and political accord on the national stage, things have been pretty quiet on the Western front— relatively speaking, anyway. Collaborative resource management has not yet been seamlessly institutionalized— some say that is exactly what makes it so promising— but it has been pretty trendy. So I took it for granted that environmentalists— serious, thoughtful ones, at least— did not talk about “welfare cowboys” anymore.<sup>82</sup>



Such language may have fallen out of favor, but it turns out that the sentiments behind it are alive and kicking. Like the inflammatory rhetoric of hardcore private property rights advocates, the idea that ranching is both environmentally deleterious and economically obsolete is elevated by a wingnut fraction, and held, by a moderate more, as a sort of vague impression. It is possible, I think, that for every person in the West who waxes shrill or irrational about his absolute authority over his place, there is another who gets equally riled up about the extent to which public money is supporting the timber, mining, and ranching industries. At the root of the latter set of arguments is the notion that private enterprise has already been given too much— too much subsidy, to be exact. With respect to ranching particularly, the reference is not so much to programs like EQUIP as it is to the grazing leases that allow private ranchers to fatten their cattle on Forest Service allotments at below-market rates. The argument, to put it bluntly, is that ranching should be dead by now. The proposition that the rest of the country should give up anything more to help people earn a living this way is a sign of ignorance on the part of the proposers— or, at least, of some naïvete about the “real” economy of the West.

As I see it, though, asking whether or not government should continue to “subsidize” ranching is asking the wrong question. For starters, the choice of words provokes immediate, and often unconscious, associations with inefficiency, waste, and even corruption. In a very real sense, then, to ask the question is also to answer it— with a resounding negative. Whether one is speaking of Forest Service land leases or smaller grant, cost-share, and outreach programs of state agencies like the NRDP, the language of subsidy has tremendous power to delegitimize other issues that, at least in my opinion, really should remain on the table. The value of local culture, rural communities, and their livelihoods— these considerations should not be cut out of the conversation. The reason they *are* cut out when we talk about subsidy and, by implication, efficiency is that things like “culture” and “community” aren’t easily valued in market-ready terms.

I would be shocked if there is an environmentalist in the West— or, for that matter, anywhere— who does not recognize this problem. And this is precisely the reason I thought the anti-grazing movement was, like false dichotomy of jobs versus owls, just so 1993. The

ranchers I talked with in Deer Lodge express their anxiety in economic terms, but what they are actually trying to hang onto is no more the stuff of cost-benefit analyses than a rare plant community or the opportunity to sleep under the canopy of a roadless forest. Making money from the land is a means to an end; what they really want, as they told me again and again, is to stay on the land, and pass it on to their kids. Geographer James McCarthy made the same observation in his study of the Wise Use movement: “One of the concerns local Wise Use activists expressed most frequently was whether their children would be able to stay in the community or work in the same industry. They expressed pride in working on the same piece of land, or in the same area, for generations.”<sup>83</sup>

Whether and how such concerns are taken into account is the business of all westerners— and all restorationists. If the conversation about land use and environmental policy in the region can stretch to accommodate the non-commodifiable values to which Deer Lodge Valley residents cling so steadfastly, it can also stretch to accommodate the value of open space, wildlife habitat, and the future of biotic communities, as well.

All of us— ranchers, environmentalists, environmentalist ranchers, and everyone in between— have the choice to ask better questions about the future of Deer Lodge and the West— the kinds of questions that expand the conversation instead of truncating it. One of these might be, in effect, “Who are the next John Hollenbacks?” Because one way to think and talk about the Deer Lodge Valley is to start from the idea that there are a lot of grown-up equivalents of the teenage John living and working in that Valley right now. If the citizens of Montana and the country choose to help them by endorsing government collaboration with groups like the WRC, what might the members of such groups give us in fifty years? All over the West we can find individual, unofficial experiments in sustainable, ecologically-sensitive ranching. What might Montana look like if landowners with large ecosystem ranches were both personally motivated and financially empowered to develop offstream water and install wildlife-friendly fencing, as the Thomases have?

But this is not just about what Deer Lodge might become. We have to ask questions that illuminate the value— both social and ecological— of what is there right now. Scan the Valley from I-90, and what you’ll see is cows— and pivots, and, at the end of the summer,

bales of curing golden hay. What that adds up to, in my estimation, is agriculture. And that is no small thing. With increased national awareness of climate change and in the context of Americans' heightened attention to security, the miles our food travels from farm to plate are now the subject of frequent commentary in the popular press. Ranchers may not be the rugged individualists of Western legend, and beef doesn't have the progressive sheen of local veggies, but agricultural communities— even those that don't produce food primarily for local consumption— have a leg-up on the suburbs when it comes to achieving a self-reliant food system.<sup>84</sup> For starters, Deer Lodge has the capacity to diversify its products. Many of the multi-generation ranchers I spoke with recall a Valley in which potatoes and sheep were as common as cattle, and many local residents still generate a wide variety of food products for home consumption in kitchen gardens and on five and ten acre parcels on East Side Road. The imperative to “get big” in cattle may have been an inducement to get out of everything else, but there is no biophysical reason to imagine that a more diversified agriculture cannot exist alongside ranching in Deer Lodge— and help feed the residents of nearby cities like Butte and Missoula.

And regardless of how agriculture in the Valley might change, knowledge about how to make food, generally, and the arable land on which to do it exist there now. Perhaps more importantly, the knowledge is matched to the land. The Thomases and John Hollenback know how to grow grass and cattle in the Gold Creek drainage; Dan McQueary knows how to make the same stuff on his land. In contrast, the average American moves nearly twelve times in his or her life. Such proclivities are not apt to produce citizens who know the ground on which they live— let alone citizens who know that ground well enough to live *off* of it.<sup>85</sup>

The bottom line is that Deer Lodge is still equipped to provide for itself— and nearby cities like Missoula and Butte— in a way that I suspect will be valued increasingly over the next several decades. As Environmental Studies professor and food systems activist Neva Hassanein reminds us, “We cannot predict the future— but we do know that people will have to eat and that food will be grown on soil. Our options are to protect our fertile soils here and now— with all of us, not just farmers, supporting the process— or to pay later

when food shortages and oil prices increase the cost of food coming to us from far-flung anonymous sources.”<sup>86</sup>

And then there is the matter of what isn't in Deer Lodge— the things you can't see from I-90. When I look at that open space, I don't fill in the blanks with the ecological degradation one cannot spot from the road; I imagine, instead, the half-finished subdivisions standing empty on the once-wetlands and former-farms of Contra Costa, Solano, Santa Clara, and Orange Counties back home. A ranch may not be ideal elk habitat, but a subdivision is no habitat at all— and it is much harder to restore. Maybe ranching does have to change, or, in some places, give way, but this is not a transformation that should be allowed to charge ahead unbridled. My status as a Californian may not do a lot for my credibility in Montana, but perhaps it does allow me to argue this much persuasively. In my state, we've been there, we've done that, and now that we are mired in recession and drought, the bill is beginning to come due. I see the damage to the economy and the environment tallied in every day's newspaper headlines.

There is still time to prevent this from happening in Montana. Cleanup and restoration— efforts to enhance ecological integrity on lands that have been degraded or polluted— are part of a better way forward, but ranching has a role to play in that better future as well. It should be recognized as part of our collective defenses— against loss of open space, loss of deep knowledge of the land and its processes, loss of community, and loss of capacity for self-reliance. What is extraordinary about Deer Lodge is that it is a place where ranching and restoration can go forward simultaneously, so that each one reinforces the contributions, and the focal dimensions, of the other. This opportunity is there; the members of the WRC and groups like the Clark Fork Coalition are stepping up to take it. The more support and partners they find, the more of us— Deer Lodge residents, Montanans, people who care about the West— will be able to do what ranchers like the Thomases are striving for: We'll be able to keep what it is about places like Deer Lodge that give them their deeply-felt value.

## NOTES

Though this account makes use of a wide array of source materials, the majority of the data on which it is based comes from original, formal, and unpublished interviews conducted by the author with Clark Fork resource organization professionals and Deer Lodge Valley landowners. This data was employed for two distinct purposes— one scientific and one narrative. Each of these purposes, along with my particular approach to balancing their at times contradictory imperatives, is discussed further in Appendix A; what merits at least a brief mention here is that these purposes suggest different conventions of citation and attribution.

Writing in the social sciences commonly quotes and paraphrases in-depth interview data, as I have done in this analysis, but it is less common to read articles that attribute quotations to specific interviewees. In contrast, this is standard practice in journalistic writing, where such attribution is typically inserted into the main text in signal phrases. This thesis combines the two conventions, utilizing the journalistic style of personal attribution in most cases, but limiting identification to key characteristics (i.e. “Deer Lodge Valley rancher”), as is more common in the social sciences, when privacy considerations require it.

Because none of my interviews are published elsewhere, source information that might be usefully relegated to an endnote is limited. Accordingly, original interview data is not cited in endnotes except under one particular set of circumstances. Several participants in this study had professional experience or training that enabled them to comment on the cleanup and restoration of the Upper Clark Fork from a broader or separate perspective than that afforded by their status as a landowner; for these individuals, I often prepared supplemental interview questions and explicitly solicited their expert opinions on the relevant subject matter. In most cases, their responses to such questions are attributed in the main text of the thesis, just like other interview data. However, when expert opinions are incorporated into the analysis without in-text attribution, the interview is referenced in an endnote. In keeping with the recommendations of the Chicago Manual of Style, neither these interviews nor any others are cited in the Bibliography.

I have broken with Chicago Style in one significant area. As of this writing, the Manual has not yet dispensed with its dictum that uniform resource locators (URLs) should be used in citations of informally published material accessed on the World Wide Web. I consider this convention outdated, however: URLs are unwieldy, difficult to copy, subject to frequent changes, and, consequently, ill-suited to the very purposes for which most reference manuals claim source information should be provided. This is especially true for the web pages cited in this document, all of which are unsigned, and hosted by the state or federal government agencies or established non-profit groups that would be credited as organizational authors of the content. They are not blogs, personal homepages, or Wiki sites. In the short-term, then, the most efficient way to locate these sources will be to conduct a basic internet search for the name of the agency (i.e. EPA) and the title of the page; over the longer-term, the most effective approach will be to contact the agency author directly. Therefore, though I have provided URLs in the endnotes where it seemed particularly helpful to do so, I declined to include this information in bibliographic entries for internet source material. Instead, I have marked all such entries with an asterisk (\*) at the end of the citation to indicate the document type. Original access dates vary, but each online source was checked before the submission of this document. Accordingly, an access date of May 11, 2009 is common to all internet citations.

---

### CHAPTER 1

<sup>1</sup> A word about terminology: Feedlots are generally defined as fenced areas or pens where livestock are fed and fattened. However as the public health and environmental issues associated with conventional industrial food production receive increasing attention in the mainstream media, the term has become widely associated with massive “factory farms” or concentrated animal feeding operations (CAFOs)— that is, with the places where livestock are kept in extremely tight quarters and fed grain (as opposed to grass) just prior to slaughter. There are no feedlots matching this description in the Deer Lodge Valley; the beef raised there is not processed locally. Most ranches *do* have a pen or fenced area where livestock can be gathered temporarily for various purposes. These facilities are locally referred to as “feedlots” (and regulated by the state Department of Environmental Quality (DEQ) as potential point-sources of pollution), however they are not to be confused with the bovine “cities” described in the work of Michael Pollan and Eric Schlosser—places

---

that hold and add heft to tens of thousands of burger-bound cattle at a time. See Pollan, *The Omnivore's Dilemma*, 73 and Schlosser, *Fast Food Nation*, 133-151 for descriptions of what happens to cattle after they are sold off the ranches where they begin their lives. For information on Montana regulations related to concentrated animal feeding operations, see Montana Department of Environmental Quality, "Concentrated Animal Feeding Operations (CAFOs)."

<sup>2</sup> For a "primer" on CERCLA and the Upper Clark Fork Superfund sites, see box on p. 38. More detailed information about the listing process, as well as listing dates for specific sites, are available on the EPA's Superfund website (<http://www.epa.gov/superfund/index.htm>). For the latter, see in particular Environmental Protection Agency, "Superfund Sites Where You Live."

<sup>3</sup> The Upper Clark Fork's standing as *the* largest Superfund complex in the country is accepted fact and common knowledge in and around Missoula, Butte, and most of the towns in between. I suspect the Clark Fork River Technical Assistance Committee deserves some credit for this: Member Pat Munday has a penchant for public radio commentary that proclaims the "largest Superfund site" qualification (see for example "Natural Resource Damages: Make Wise Choices" and "Rally 'Round the Creek"; both are available on CFRTAC's website, <http://www.cfrtac.org>); newspaper articles and magazine features regularly reinforce the apparent facts of the matter (see Devlin, "Montana and Arco settle," and Wilson, "Cleaning up EPA's largest Superfund site"). If one considers the spatial spread of contaminants associated with two point-sources— Silver Bow Creek and the Anaconda smelter stack— and one responsible party, it is probably a fair assumption that the 120-some-odd miles of river (that's oxbows *not* included) carrying the Superfund designation set a national record of some kind.

Unfortunately, the EPA is loathe to rank what are arguably the country's least attractive features by standards that correlate well with "largeness." A bit of qualification is therefore in order: the original source granting area-based Superfund preeminence to the Clark Fork is untraceable, and there are communities that would like to claim the distinction for their own toxic waste sites. Many of the claimants represent unlikely contenders, but the 200 miles of the Hudson River listed in 1984 might actually have something on the Clark Fork. North Country Public Radio's Brian Mann certainly seemed to think so: His three-part program series, which aired in 2001, was titled, "American's Largest Superfund Site: The Hudson River." My subjective experience indicates that no one in Western Montana noticed.

<sup>4</sup> This is the concise explanation regularly given at public meetings by NRDP Restoration Program Chief Carol Fox. I have personally heard her deliver it on at least five separate occasions, most notably at hearings held in Bonner, Deer Lodge, Anaconda, and Butte as part of the public comment period for the Draft Conceptual Framework for the NRDP's Upper Clark Fork Basin Restoration Priorities Road Map. Devlin (see previous note) also recapitulates the distinction concisely: "Federal Superfund law has two prongs[:] one focused on remediation and managed by the Environmental Protection Agency. That work is ongoing in the Clark Fork basin. [Its] intent: To protect humans from health risks caused by the pollution. The second prong focuses on natural resource damages, sought by state governments and intended to restore resources to their precontamination condition." In other words, CERCLA empowers the EPA to remediate hazardous waste, and treatment is determined throughout the country by a standardized process (see box on p. 38); however, the law also empowers *states* to sue responsible parties for additional funds, which states can apply to different purposes, according to their own systems and priorities.

<sup>5</sup> For more information, see Environmental Protection Agency, "Milltown Reservoir Sediments."

<sup>6</sup> The EPA has identified cadmium, copper, arsenic, lead, and zinc in the Clark Fork floodplain. See Environmental Protection Agency, "Superfund Cleanup Proposal: Clark Fork River Operable Unit." "Slickens"— areas in the floodplain that are unvegetated due to high levels of contamination with these metals— are discussed further in Chapter 3.

<sup>7</sup> According to the mill's owner, Sherm Anderson, decreased demand for new construction associated with the sub-prime lending crisis has had a "dramatic" effect on the company. This follows years of decline in the timber industry as a whole. "We're losing money every day," he told me in a July, 2008 interview, "But what happens if I close the doors?" For more information, see Hansen, "Sun Mountain Lumber."

<sup>8</sup> Pete Holloran's work provides a more detailed treatment of the origin and evolution of restoration programs at one GGNRA site. See "Restoring Native Plant Communities at San Francisco's Presidio," and "The Greening of the Golden Gate."

---

<sup>9</sup> See for example Meine, “Conservation, Chicago Style.” Meine subtly associates the conservation community in Northern Illinois with the Midwestern educational institutions that “played a disproportionately important role” in the development of ecological science. He also asserts that the evolving vision governing Chicago’s Forest Preserve District— center of the Chicago Wilderness restoration efforts— “reflect[s] Aldo Leopold’s revolutionary plea that we regard the land ethically, not ‘as a commodity belonging to us,’ but as ‘a community to which we belong.’” For more information on the Chicago Wilderness, see Chapter 9 in Stevens, *Miracle Under the Oaks*, 279-300.

<sup>10</sup> See Chapter 2, note 61.

<sup>11</sup> Egelko, “Off-leash Dog Ban Urged at Two Park Areas”; Martin, “Park Service Workers Favor Reviving Leash Law Over Dogs’ Rights.”

<sup>12</sup> Braxton Little, “Mono Lake.” See also Carvill, “The Lost Creek of Mono.”

<sup>13</sup> Shore, “Controversy Erupts Over Restoration in Chicago Area”; Gobster, “The Other Side.”

<sup>14</sup> The term “restorationist” appears often in the peer-reviewed literature. Though it is sometimes used to distinguish those who support restoration on a particular site from those who oppose it, in most cases it is applied to people who are proponents of ecological restoration as a conservation tool with inherent benefits or potential benefits. I use the term to describe individuals with a commitment to restoration that, while not necessarily absolute or uncritical, transcends the particulars of individual sites. I do *not* use the term to refer to all people who engage in or have engaged in restoration practice, nor do I mean to imply that those who are not “restorationists” necessarily oppose restoration.

## CHAPTER 2

<sup>15</sup> Higgs, *Nature by Design*, 78-92.

<sup>16</sup> *Ibid.*, 78.

<sup>17</sup> *Ibid.*, 79.

<sup>18</sup> *Ibid.*, 79. Higgs notes that in its first few years, *Restoration & Management Notes* was “more a newsletter than a journal.” Though the use of the term restoration ecology is typically dated to Aber and Jordan’s *BioScience* article (see note 19), it is also regularly attributed to Jordan alone.

<sup>19</sup> Aber and Jordan, “Restoration Ecology,” 399.

<sup>20</sup> *Ibid.*

<sup>21</sup> The growth of restoration— as a practice, as a science, and as a basis for business ventures— is widely acknowledged in abstracts in the peer-reviewed literature from restoration ecology and related fields, but it tends to be the stuff of dependent clauses— prefatory or supplemental to authors’ key arguments. I have yet to find a study that systematically charts and characterizes the expansion Higgs has called “explosive.” (*Nature by Design*, 1). Other proxies exist, however. SER describes itself as an organization “infused with the energy of 2300 members... in 37 countries and all 50 US states, with 14 chapters serving regions of North America, England, Europe, Australia and India.” (SER International, “About SER”). The growth of the field can be charted in the editor’s notes of *Restoration Ecology* (see for example Allen, “New Directions and Growth of Restoration Ecology,” 1-2), and a study has been conducted on the emergence of degree programs in restoration (Nelson et al., “Opportunities for Academic Training in the Science and Practice of Restoration,” 225-230). The *Economist* noted the economic footprint of restoration, as well, though that brief article emphasized “applied ecology” and mitigation banking and neglected the presence of firms specializing in the design and implementation of restoration projects on non-bank sites (*Economist*, “Restoration Drama; Conservation”).

<sup>22</sup> See note 61.

<sup>23</sup> Higgs discusses the meaning of this term in his book of the same title. *Nature by Design*, 13.

<sup>24</sup> SER International, “About SER.”

<sup>25</sup> For the complete story of the SER’s “definition wars” and an overview of non-SER attempts to meet the ongoing challenge of defining restoration, see Higgs, *Nature by Design*, 107-110.

<sup>26</sup> *Ibid.*, 109.

<sup>27</sup> Society for Ecological Restoration International Science & Policy Working Group, *Primer*.

<sup>28</sup> Elliot, “Faking Nature,” 81-93.

<sup>29</sup> *Ibid.*

---

<sup>30</sup> Higgs, *Nature by Design*, 94.

<sup>31</sup> Elliot, "Faking Nature," 82.

<sup>32</sup> See for example "The Big Lie," 231-243; "Another Look at Restoration," 37-48; "The Problem of Ecological Restoration," 222-224; "Restoration and Redesign: The Ethical Significance of Human Intervention in Nature," 90-96.

<sup>33</sup> See Katz's argument about the "deeper" problem with believing we can and should "fix" nature ("The Big Lie," 232). Here, Katz argues that restoration is fundamentally anthropocentric, therefore restored ecosystems are "artifacts" and, ultimately, not "natural." This complaint is, like Elliot's argument about authenticity, based on ontology. It is also an artifact of Katz's insistence on maintaining a firm and essential distinction between humans and the natural— an insistence that places him unequivocally on one side of an academic debate. The rich and fascinating literature on whether humans and nature are or should be regarded as separate is widely-recognized for its relevance to restoration, but a treatment of these connections is beyond the scope of this discussion. For an introduction to the general topic, see Cronon, *Uncommon Ground*, or Soule and Lease, *Reinventing Nature?* For a discussion of the subject as it pertains to restoration particularly, see McQuillan, "Defending the Ethics of Ecological Restoration," 27-31.

<sup>34</sup> Katz, "The Big Lie," 232.

<sup>35</sup> Jordan, "Sunflower Forest," 18.

<sup>36</sup> Elliot, "Faking Nature," 87.

<sup>37</sup> Light, "Ecological Restoration and the Culture of Nature," 49-70. Another way of distinguishing between these two approaches to defending restoration is in the terms of the nature-culture dualism: Jordan's broad vision uses restoration to transcend it; Light's argument defends restoration from within it.

Jordan does not dispense with the two categories entirely, but he does argue that humans must recognize ourselves as being part of nature at the same time as we are separate from it, and that we must behave accordingly. This means looking for "constructive" and "mutually beneficial" ways to "participate" in nature-like restoration. Essentially, Jordan is arguing for a dualism in which nature and culture are separated by a permeable membrane; restoration is valuable because it provides one pretty straightforward model of how humans might manage a relationship with nature on these relatively ambiguous terms.

Light, on the other hand, is trying to defend restoration without backing off from a strictly dualist position. What was a "permeable membrane" in Jordan's vision becomes a brick wall again for Light— not because Light is a strict dualist, but because Katz is. Since "it is incredibly difficult to disprove a philosopher's ontology," Light is trying to find a way for restoration and Katz's ontology to coexist. His solution is to accept the premise that restoration can never create nature, and then to attempt to distinguish restoration that (nonetheless) does *good* from restoration that is "bad" for some reason *other* than the deception it allegedly represents. ("Ecological Restoration and the Culture of Nature," 57.)

<sup>38</sup> Light, "Ecological Restoration and the Culture of Nature," 61.

<sup>39</sup> For a thorough discussion of these "re-" words and their respective territories, see Bradshaw, "What do we mean by restoration?" 8-14.

<sup>40</sup> A summary of these tendencies can be found in Higgs, *Nature by Design*, 206-208; for a more involved discussion of mitigation banking and its pitfalls, see Marsh et al., *Mitigation Banking: Theory and Practice*.

<sup>41</sup> Light, "Ecological Restoration and the Culture of Nature," 50.

<sup>42</sup> Ibid.

<sup>43</sup> Ibid., 62.

<sup>44</sup> Higgs, *Nature by Design*, 2.

<sup>45</sup> Jordan, "Sunflower Forest," 18.

<sup>46</sup> Higgs, *Nature by Design*, 95.

<sup>47</sup> Ibid., 156.

<sup>48</sup> Ibid., 186.

<sup>49</sup> Ibid., 192. See also Borgmann, "The Device Paradigm," 40-48.

<sup>50</sup> Higgs, *Nature by Design*, 192.

<sup>51</sup> Ibid., 244.

<sup>52</sup> Ibid., 207.

<sup>53</sup> Ibid., 203.



---

<sup>54</sup> Ibid., 196.

<sup>55</sup> Ibid., 211.

<sup>56</sup> Ibid., 201.

<sup>57</sup> Ibid., 244.

<sup>58</sup> Ibid., 12.

<sup>59</sup> Ibid., 8.

<sup>60</sup> Ibid., 9.

<sup>61</sup> This term originated in the title and thesis of a 2002 book by Storm Cunningham, *The Restoration Economy: The Greatest New Growth Frontier*, and has since come into popular use. In 2006, the Western Governor's Association issued a policy statement which claimed that "the Restoration Economy of the West is emerging as an important component of the region's recent economic growth through activities that provide high-paying jobs throughout the restoration cycle," and in a recent *High Country News* column syndicated throughout the West, former Montana Congressman Pat Williams connected the restoration economy specifically to work on the Upper Clark Fork (Western Governors' Association, "The Restoration Economy"; Williams, "When a dam is demolished, the old ways return"). Williams characterized the removal of the Milltown Dam as a symbol of "the promises of tomorrow here in Montana and throughout the Rockies," and proclaimed optimistically that "yesterday's scars on our landscape are today's pay dirt." He also drew readers' attention to Governor Schweitzer's recent budgeting of \$34 million in state funds for restoration and rehabilitation projects. In addition to that sizeable allocation, Schweitzer has demonstrated his commitment by establishing a statewide Restoration Office, and he has referenced Montana's "restoration economy" in several public appearances (Elliott, "Governor Schweitzer"; Moore, "Governor touts state's booming 'restoration economy'; Schweitzer, Montana Communities and Wildfire Conference).

### CHAPTER 3

<sup>62</sup> Stephens and Smirg, *Fish and Cow*. The film is available for viewing online at the Nature Conservancy's Montana website, <http://www.nature.org/wherework/northamerica/states/montana/news/news2427.html>.

<sup>63</sup> CFRTAC, "What is CFRTAC?" CERCLA requires the establishment of Technical Assistance Committees for all communities near Superfund sites. The Clark Fork TAC administers its own grants program and works to involve citizens of affected communities in the cleanup process. These functions overlap somewhat with those of the NRDP and even the WRC, however CFRTAC's role is distinct—defined by federal law rather than state- and local-level priorities. For more information on the purpose of TACs generally, and the specific role of CFRTAC, see the Committee's website, <http://www.cfrtac.org>.

<sup>64</sup> Montana Department of Justice, "Upper Clark Fork River Basin Remediation and Restoration Advisory Council."

<sup>65</sup> The 1999 settlement contributed \$215 million plus \$15 million in interest; in 2008, another partial settlement yielded an additional \$168 million. A 2005 agreement cemented the terms of the work at Milltown, but did not involve the delineation of damage payments. For an up-to-date summary of the state's legal case against ARCO and the terms of all three settlements, see NRDP, "Summary of 2008 Settlement."

<sup>66</sup> Montana Department of Justice, "Natural Resources Damage Program."

<sup>67</sup> In my interviews, landowners cited a diversity of reasons for choosing to allow access or not, and for their decisions about how to administer that access (i.e. through block management or privately). See box on p. 63 for further discussion of these issues.

<sup>68</sup> Section 319(h) of the 1987 amendments to the Clean Water Act provide funds to supplement *state* efforts to control non-point source pollution. Such initiatives can include data collection for watershed planning purposes. Though the NRDP refused to support the initial East Valley Project proposed on behalf of the WRC by Payne, the state agreed to back the WRC's application for Section 319 funds, and shared the cost of data collection with the federal government. Payne sees this compromise as the result of the WRC taking a more "political" route after its original proposal failed: "At a very high level," he says, "The government and other people said, you know, 'Hey, this is a project that we should care about because these people need to be heard.'" For detailed information on the East Valley Project, see Watershed Restoration Coalition, "East

---

Valley.” For information on Section 319 grants, see Environmental Protection Agency, “Clean Waters Act Section 319” [sic].

<sup>69</sup> Adams, “Did toxic stew cook the goose?”

<sup>70</sup> See also Wyckoff, “Postindustrial Butte.” The author notes on p. 479 that in mining cities, so prone to the ravages of a boom-and-bust economy, it is not uncommon for residents to hold “a shared and often very positive vision of the landscape... Even as the aging industrial setting provides its inhabitants with fewer and fewer means of survival, it accumulates more and more symbolic meaning and significance for them.” In Butte particularly, Wyckoff observes, “cultural symbols of mining” including the historic Uptown district, the Berkeley Pit, and the city’s army of black, skeletal headframes, “provoke complex and often multiple responses from residents as memories of hard work and even economic exploitation combine with a sense of longing for a way of life and a fabric of community that has been lost” (p. 487). He also notes that the EPA’s attention to Butte especially rankled “historic preservationists who do not want mine wastes remediated into pleasant healthy landscapes” (p. 494). Though “pleasant, healthy landscapes” may seem like a universal good—especially when the alternative includes ample arsenic and few jobs— in Butte, such a proposition is unlikely ever to be so uncomplicated.

<sup>71</sup> Devlin, “History’s Troubles.”

<sup>72</sup> The group launched its Milltown effort with an eye to how to leverage a success there in the Deer Lodge Valley. Originally, the Coalition hoped that the Milltown-area residents they mobilized in 2000 would become active advocates for the upper river, as well. Tracy Stone-Manning, who was the Executive Director of the Coalition at the time, explained that the strategy was to use the “sexy dam removal” to build a base of citizens willing to submit comments to the EPA in support of thorough cleanup throughout the watershed. “You use people to engage the agency,” is how Stone-Manning put it. The extension of Missoula-area residents’ interest turned out to be less than crucial, however. Stone-Manning says that by 2001, the EPA “knew what it wanted to do [on the river] and carried the momentum to the Upper Clark Fork.” She meant that in the course of the Milltown environmental assessment and decision-making processes, the agency had become committed to thorough cleanup; they were willing to be more forceful and proactive than they had been in Butte and Anaconda— which might partially account for what Hollenback perceived as a failure to consider the landowner.

<sup>73</sup> The provenance of the berms was described to me by an agency employee who wished not to be identified.

<sup>74</sup> Landowner and mine reclamation professional John Inkret (interview by the author).

<sup>75</sup> Ultimately, it did, though the EPA also attempted to mollify local detractors with “a limited exception” to the removal rule. “Exposed tailings that are 400 square feet or less, less than approximately 2 feet in depth, and contiguous with impacted soils and vegetation areas” will be treated in place. EPA, “Fact Sheet.”

<sup>76</sup> The EPA assessed each instance of contamination in the Clark Fork River Operable Unit and outlined cleanup plans for individual sites in its ROD. The agency also produced maps, aerial photographs, and other literature for each property targeted for remediation action in the ROD, and presented these materials to affected landowners in personalized booklets. At this point, however, the DEQ will take over, serving as the lead agency on the actual removal of contaminated soils and in-place treatment of smaller slickens.

<sup>77</sup> Higgs, *Nature by Design*, 244.

#### CHAPTER 4

<sup>78</sup> For a more involved description of my sampling strategy and participant group, see Appendix A, p. 104

<sup>79</sup> For additional discussion of ranchers’ apparent ambivalence about subdivision, see Chapter 5, p. 79.

<sup>80</sup> Knudsen, interview by the author.

#### CHAPTER 5

<sup>81</sup> Not her real name.

#### EPILOGUE

<sup>82</sup> For more on the decline of the movement against public lands grazing, see Knize, “Winning the War for the West.” For in-depth treatments of the rise of collaborative conservation in the west, see Brick et al., “Across the Great Divide,” and Wondolleck and Yaffee, “Making Collaboration Work.”

---

<sup>83</sup> McCarthy, "First World Political Ecology," 1291-1292.

<sup>84</sup> Kloppenburg et al., "Coming in to the Foodshed," 38. The term "self-reliance" is used to distinguish the aims of local food advocates from an unrealistic and unrealistically isolationist vision of "self-sufficiency."

<sup>85</sup> Hansen, "Geographic Mobility."

<sup>86</sup> Hassanein, "Rooted in the Soil," 32.

## BIBLIOGRAPHY

- Aber, John D., and William R. Jordan III. "Restoration Ecology: An Environmental Middle Ground." *BioScience* 35, no. 7 (July/August 1985): 399.
- Adams, Duncan. "Did toxic stew cook the goose?" *High Country News*, December 11, 1995.
- Allen, Edith B. "New Directions and Growth of Restoration Ecology." *Restoration Ecology* 11, no. 1 (2003): 1-2.
- Bailey, Carol A. "Coding, Memoing, and Descriptions." Chap. 9 in *A Guide to Qualitative Field Research*, 125-141. Thousand Oaks: Sage Publications, Inc., 2001.
- Braxton Little, Jane. "Mono Lake: Victory Over Los Angeles Turns into Local Controversy." *High Country News*, December 8, 1997.
- Borgmann, Albert. "The Device Paradigm." Chap. 9 in *Technology and the Character of Contemporary Life: A Philosophical Inquiry*. Chicago: University of Chicago Press, 1984.
- Bradshaw, Anthony "What do we mean by restoration?" In *Restoration Ecology and Sustainable Development*, edited by Krystyna Urbanska, Nigel Webb, and Peter Edwards, 8-14. Cambridge and New York: Cambridge University Press, 1997.
- Brick, Philip, Don Snow, Sarah Bates Van de Wetering, and Daniel Kemmis. *Across the Great Divide: Explorations in Collaborative Conservation and the American West*. Washington D.C.: Island Press, 2000.
- Carvill, Sarah. "The Lost Creek of Mono: A Homegrown Struggle for Eastern Sierra Water." Bachelor's thesis, University of California, Santa Cruz, 2007.
- Charmaz, Kathy. "Grounded Theory." Chap. 23 in *Approaches to Qualitative Research*, edited by Sharlene Nagy Hesse-Biber and Patricia Leavy, 497-521. New York: Oxford University Press, 2004.
- Clark Fork River Technical Assistance Committee. "What is CFRTAC?""\*
- Corbin, Juliet, and Anselm A. Strauss. "Analyzing Data for Concepts." Chap. 8 in *Basics of Qualitative Research*, 159-193. Thousand Oaks: Sage Publications, Inc., 2007.
- Coyne, Imelda T. "Sampling in Qualitative Research. Purposeful and Theoretical Sampling; Merging or Clear Boundaries?" *Journal of Advanced Nursing* 26 (1997): 623-630.
- Cronon, William ed. *Uncommon Ground: Rethinking the Human Place in Nature*. New York: W. W. Norton & Co., 1996.
- Cunningham, Storm. *The Restoration Economy: The Greatest New Growth Frontier*. San Francisco: Berrett-Koehler Publishers, Inc., 2002.
- Devlin, Sherry. "History's Troubles." *Missoulian (MT)*, January 27, 2002.
- . "Montana and Arco settle." *Missoulian (MT)*, June 20, 1998.
- Economist*. "Restoration Drama; Conservation." August 10, 2002.
- Egelko, Bob. "Off-leash Dog Ban Urged at Two Park Areas; Coalition Says Ocean Beach, Crissy Field in Peril." *San Francisco Chronicle*, August 17, 2005.

- Elliot, Robert. "Faking Nature." *Inquiry* 5, no. 1 (March 1982): 81-93.
- Elliott, Sarah. "Governor Schweitzer: \$34 million new money for restoration." News release, mt.gov, June 28, 2007.
- Environmental Protection Agency. "Clean Waters Act Section 319: Laws, Regulations, Treaties."\*
- . "Fact Sheet on the Record of Decision on the Clark Fork River Operable Unit of the Milltown Reservoir/Clark Fork River." April 2003.\*
- . "Milltown Reservoir Sediments." *Region 8 - Mountains & Plains*. March 27, 2009.\*
- . "Superfund Cleanup Proposal: Clark Fork River Operable Unit of the Milltown Reservoir/Clark Fork River Superfund Site." August 2002.\*
- . "Superfund Sites Where You Live." June 3, 2009.\*
- . "Cleanup Process." June 3, 2009.\*
- Esterberg, Kristin G. "Making Sense of Data." Chap. 8 in *Qualitative Methods in Social Research*, 151-180. Boston: McGraw-Hill Higher Education, 2002.
- Fox, Carolyn (Natural Resources Damage Program). Presentation at a public hearing on the Draft Conceptual Framework for the NRDP's Upper Clark Fork Basin Restoration Priorities Road Map, Anaconda, MT, June 26, 2008.
- . Presentation at a public hearing on the Draft Conceptual Framework for the Restoration Priorities Road Map, Bonner, MT, June 24, 2008.
- . Presentation at a public hearing on the Draft Conceptual Framework for the Restoration Priorities Road Map, Butte, MT, June 19, 2008.
- . Presentation at a public hearing on the Draft Conceptual Framework for the Restoration Priorities Road Map, Deer Lodge, MT, June 30, 2008.
- Gobster, Paul H. "The Other Side: A Survey of the Arguments." *Restoration & Management Notes* 15, no. 1: 32-37.
- Gray, Paul S., John B. Williamson, David A. Karp, and John R. Dalphin. "Intensive Interviewing." Chap. 8 in *The Research Imagination*, 151-178. New York: Cambridge University Press, 2007.
- Hansen, Kristin A. "Geographic Mobility." *Population Profile of the United States*. Washington D.C.: U.S. Census Bureau. July 8, 2008.\*
- Hansen, Pat. "Sun Mountain Lumber— Despite Economy, Mill Owner Remains Cautiously Optimistic." *Montana Standard*, February 7, 2009.
- Hassanein, Neva. "Rooted in the Soil." *Edible Missoula* (Spring 2008): 28-32.
- Higgs, Eric. *Nature by Design: People, Natural Processes, and Ecological Restoration*. Cambridge, MA: MIT Press, 2003.
- Holloran, Pete. "The Greening of the Golden Gate: Community-Based Restoration at the Presidio of San Francisco." *Restoration & Management Notes* 14, no. 2 (Winter 1996): 112-123.

- . “Restoring Native Plant Communities at San Francisco’s Presidio.” *Fremontia* 25, no. 4 (1997): 10-16.
- Jordan, William R., III. “‘Sunflower Forest’: Ecological Restoration as the Basis for a New Environmental Paradigm.” In *Beyond Preservation: Restoring and Inventing Landscapes*, edited by A. Dwight Baldwin Jr., Judith de Luce, and Carl Pletsch, 17-34. Minneapolis: University of Minnesota Press, 1994.
- Katz, Eric. “Another Look at Restoration: Technology and Artificial Nature.” In *Restoring Nature: Perspectives from the Social Sciences and Humanities*, edited by Paul Gobster and R. Bruce Hull, 37-48. Washington D.C.: Island Press, 2000.
- . “The Big Lie: Human Restoration of Nature.” *Research in Philosophy and Technology* 12 (1992): 231-243.
- . “The Problem of Ecological Restoration.” *Environmental Ethics* 18 (1996): 222-224.
- . “Restoration and Redesign: The Ethical Significance of Human Intervention in Nature.” *Restoration and Management Notes* 9 (1991): 90-96.
- Kloppenburg, Jack, Jr., John Hendrickson, and G.W. Stevenson. “Coming in to the Foodshed.” *Agriculture and Human Values* 13, no. 3 (Summer 1996): 33-41.
- Knize, Perri. “Winning the War for the West.” *Atlantic Monthly* 284, no. 1 (July 1999): 54-62.
- Light, Andrew. “Ecological Restoration and the Culture of Nature: A Pragmatic Perspective.” In *Restoring Nature: Perspectives from the Social Sciences and Humanities*, edited by Paul Gobster and R. Bruce Hull, 49-70.
- Mann, Brian. “American’s Largest Superfund Site: The Hudson River.” First broadcast April 30 (Part 1), May 1 (Part 2), and May 2 (Part 3), 2001, by North Country Public Radio.
- . “Rally ‘Round the Creek.” First broadcast on March 19, 2009, by KUFM.
- Marsh, Lindell L., Douglas R. Porter, and David A. Salvesen. *Mitigation Banking: Theory and Practice*. Washington D.C.: Island Press, 1996.
- Martin, Glen. “Park Service Workers Favor Reviving Leash Law Over Dogs’ Rights.” *San Francisco Chronicle*, February 15, 2001.
- McCarthy, James. “First World Political Ecology: Lessons from the Wise Use Movement.” *Environment and Planning A* 34 (2002): 1291-1292.
- McQuillan, Alan. “Defending the Ethics of Ecological Restoration.” *Journal of Forestry* 96, no. 1 (January 1998): 27-31.
- Meine, Curt. “Conservation, Chicago Style,” *Chicago Wilderness Magazine*, Winter 2008.
- Montana Department of Environmental Quality. “Concentrated Animal Feeding Operations (CAFOs).” [mt.gov](http://mt.gov).
- Montana Department of Justice. “Natural Resources Damage Program.”\*
- . “Upper Clark Fork River Basin Remediation and Restoration Advisory Council.”\*

- Moore, Michael. "Governor touts state's booming 'restoration economy,'" *Missoulian (MT)*, October 14, 2007.
- Munday, Pat. "Natural Resource Damages: Make Wise Choices." First broadcast on September 4, 2008, by KUFM.
- Natural Resource Damage Program. "Summary of 2008 Settlement of Clark Fork River Remediation and Natural Resource Damages Claims and Related Restoration Plans." Montana Department of Justice.
- Nelson, Cara R., Tania Schoennagel, and Esther R. Gregory. "Opportunities for Academic Training in the Science and Practice of Restoration within the United States and Canada." *Restoration Ecology* 16, no. 2: 225-230.
- Pollan, Michael. *The Omnivore's Dilemma*. New York: Penguin Press, 2006.
- Sayre, Nathan. "The Need for Qualitative Research to Understand Ranch Management." *Journal of Range Management* 57, no. 6 (November 2004): 668-674.
- SER International, "About SER."\*
- Schlosser, Eric. *Fast Food Nation: The Dark Side of the All-American Meal*. New York: Harper Perennial, 2002.
- Schweitzer, Brian. Speech to the Montana Communities and Wildfire Conference, Helena, MT, March 1, 2006.
- Shore, Debra. "Controversy Erupts Over Restoration in Chicago Area." *Restoration & Management Notes* 15, no. 1 (Summer 1997): 25-31.
- Society for Ecological Restoration International Science & Policy Working Group. *The SER International Primer on Ecological Restoration*. Tuscon, AZ: Society for Ecological Restoration International, 2002. [http://www.ser.org/content/ecological\\_restoration\\_primer.asp](http://www.ser.org/content/ecological_restoration_primer.asp).
- Soule, Michael, and Gary Lease, eds. *Reinventing Nature? Responses To Postmodern Deconstruction*. Washington, D.C.: Island Press, 1995.
- Stephens, Geoff, and Rick Smirg. *Fish and Cow: A Story of Restoring the Upper Big Hole Valley*. DVD. Arlington, VA: The Nature Conservancy, 2007.
- Stevens, William K. *Miracle Under the Oaks: The Revival of Nature in America*. New York: Simon & Schuster, Inc., 1995.
- Watershed Restoration Coalition. "East Valley."\*
- Western Governors' Association. *Policy Resolution 06-18: The Restoration Economy*. Sedona, AZ: June 13, 2006.
- Williams, Pat. "When a dam is demolished, the old ways return." *High Country News*, April 2008.
- Wilson, Drew L. "Cleaning up EPA's largest Superfund site." *Revitalization Online*, October 18, 2007.

Wondolleck, Julia M., and Steven Lewis Yaffee. *Making Collaboration Work: Lessons from Innovation in Natural Resource Management*. Washington D.C.: Island Press, 2000.

Wyckoff, William. "Postindustrial Butte." *Geographical Review* 85, no. 4 (October 1995): 478-496.

Yung, Laurie, and Jill Belsky. "Private Property Rights and Community Goods: Negotiating Landowner Cooperation Amid Changing Ownership on the Rocky Mountain Front." *Society and Natural Resources* 20: 689-703.



## APPENDIX A: RESEARCH METHODS

This thesis was explicitly envisioned as an attempt to combine storytelling and reportage with systematic investigation of particular phenomena. The latter commitment compelled me to give some attention to research methods in the social sciences, and to choose consciously among a number of possible means of gathering and making sense of data. What follows is an overview of my methods, the rationale that led to their selection, and the implications of their use.

### OVERALL APPROACH

My research questions were not fully formed when I began my exploration of restoration in the Deer Lodge Valley, but my emergent interests clearly pointed to a qualitative approach: I was interested in highly subjective dimensions of locals' experiences— in things like worldviews, perceptions, and attitudes; in culture and context rather than quantities. Though my nascent questions were circling around potentially measurable phenomena— “participation” and “involvement,” for example— I could think of no way to operationalize those phenomena as quantitative variables that would be as revelatory as an explicitly qualitative exploration. For example, whether or not a landowner attends EPA or WRC meetings (“participates”) is not necessarily indicative of his or her *investment in the outcome* of cleanup and restoration, nor of his or her feelings about the opportunities for involvement presented and promoted by those agencies or organizations. Ultimately, I was seeking a deep and nuanced comprehension of the social, cultural, and institutional context of the cleanup of the Clark Fork in the Deer Lodge Valley; I wanted to understand how the community was shaping the restoration and how the restoration was shaping the community.

My interest in theorizing around this relationship made grounded theory an attractive methodological match for this project, however time constraints precluded full engagement in the dialectic between data collection and analysis that is fundamental to the grounded theory approach.<sup>1</sup> Specifically, developing theory between interviews and selecting

---

<sup>1</sup> Charmaz, “Grounded Theory,” 497.

subsequent participants in order to test or refine the developing theory would have required quick conversion of recorded interviews to codable transcripts— something my inferior skills as a typist unfortunately precluded. Though I was influenced by and made use of many of the principles and procedures of grounded theory,<sup>2</sup> I did not design this project as an exercise in grounded theory.

## DATA COLLECTION

### *In-Depth Interviews*

Most of the data for this analysis was drawn from in-depth interviews with individuals and couples. The interviews were conducted between November 2007 and July 2008, usually in the homes the interviewees (several interviews were conducted in offices; one took place in a public setting). Interviews were a logical choice because they facilitate the exploration of complex, interrelated issues. The format permits the researcher to work out a detailed understanding of participants' views through supplemental, follow-up, and clarifying questions ("probes").<sup>3</sup> Additionally, because interviews allow participants ample room to demonstrate what *they* consider to be salient about a particular phenomenon (for example, cleanup or the advent of the WRC), research findings are less likely to be limited to those themes and explanatory factors whose significance the researcher anticipates *a priori*.<sup>4</sup>

To ensure that each interview covered roughly the same topical territory, I composed an interview guide listing the questions I intended to ask each participant (Appendix B). Though it was important to me that most of my questions be open-ended, I recognized that it would be necessary to establish basic biographical information about each participant in order to contextualize his or her stated views. When this information could not be accessed

---

<sup>2</sup> Charmaz, "Grounded Theory," 497. For example, the "creation of codes and categories... from the data, not from preconceived hypotheses" and "memoing" are identified by Charmaz as key characteristics of grounded theory. My approach to analysis included both of these strategies; it was in the sequence of data gathering and data analysis that my approach diverged from the methodology she describes.

<sup>3</sup> Gray et al., "Intensive Interviewing," 153.

<sup>4</sup> In an article arguing for increased qualitative research on range management, Sayre provides examples of studies in which in-depth interviews of ranchers led to "the discovery of 'new' factors." See "The Need for Qualitative Research to Understand Ranch Management," 672.

through an open-ended question, a narrower, more direct one was substituted (see for example Question #2).

My questions focused on landowner perspectives on restoration and the river specifically, but I was also interested in elucidating what each participant believed to be the most relevant factors shaping the trajectory and quality of life in the area. These factors might include biophysical considerations (i.e. water availability, fishery health, range quality, and, of course, the contamination from mining activity upstream) as well as social and economic pressures operating at multiple scales (i.e. changes in local timber and agricultural production and the structure of global markets related to these industries; urban-rural migration and development pressure in the rural American West; and the politics of global, national, state-level, and local conservation). I also wanted to know how landowners felt about the changes they anticipated: Understanding what local residents are afraid of losing and what they hope to gain is an indirect source of insight into why these individuals might regard restoration as promising and/or threatening.

### *Sampling Strategy*

I selected participants using purposive sampling.<sup>5</sup> Each participant was asked to recommend other potential participants. The list I compiled from their responses was narrowed to those individuals who seemed most likely to provide information relevant to the objectives of the study. My determinations about “relevance” were based on two goals. First, I wanted to compile a body of data that reflected multiple perspectives on cleanup and restoration. For this reason, after asking participants for referrals and noting their initial responses, I indicated that I was especially interested in interviewing whose opinions differed from theirs and asked for additional names. A second, subordinate goal was to assemble a sample group that reflected at least some diversity across a range of other variables that differentiate Deer Lodge Valley landowners, and which might have bearing on participants’ views on restoration. I gained a sense of the suite of variables to which I should be attentive through my preliminary interviews and review of relevant scholarship. These variables included:

---

<sup>5</sup> Yung and Belsky, “Private Property Rights and Community Goods,” 692.

- **Participants’ residence time in the study area.** This criteria reflects a recognition of the demographic shift occurring in the West, and the likelihood that newcomers bring different attitudes about environmental projects and the degree of exclusivity afforded by a title to property, to name just a couple of examples.<sup>6</sup>
- **Primary use of the property.** Individuals attempting to earn a living from their properties are apt to have different perspectives on issues such as toxic waste contamination and the presence of noxious weeds than those who are primarily interested in scenic or recreational values. Property use can also be a very rough, preliminary proxy for property size. Directly assessing property size can be challenging in rural areas where the leading private land use, on an acreage basis, is ranching, as family operations are often comprised of a patchwork of parcels deeded to varying individual family members and/or limited liability corporations. The most effective way to accurately determine the area controlled by a particular ranch family is to ask one of its members outright. Unfortunately, this approach runs afoul of local custom and sensibility: It is often compared to asking someone how much money he makes. Though property use is by no means a *measure* of property size, the former does provide some relatively accessible information about the latter.
- **Presence and severity of contamination on property.** It is reasonable to imagine that a landowner whose property includes slickens might view cleanup and restoration differently than a landowner who does not own contaminated ground, and whose participation in cleanup and restoration is solely elective. Accordingly, I made an effort to interview landowners with holdings along the main stem of the Clark Fork (where contamination is prevalent) and landowners who draw their water from or adjoin tributaries.

Intentional construction of a sample in reference to a “list of variables” is one of the characteristics that distinguishes the broad category of “selective” sampling, including purposive sampling, from the theoretical sampling associated with grounded theory. In the latter, the sample is also purposefully assembled, but it is constructed in reference to the

---

<sup>6</sup> Yung and Belsky, “Private Property Rights and Community Goods,” 693-695.

theory emerging from the data rather than descriptive or explanatory variables.<sup>7</sup> Thus my sampling strategy, while selective and purposeful, was not theoretical.

### *Sample Characteristics*

Ultimately, I conducted twenty-seven interviews with thirty-one individuals (four interviews were with couples). I focused on landowners who live in the Deer Lodge area because I was most interested in the perspectives of people who know the region and the river.<sup>8</sup> I also interviewed individuals involved with the WRC who are not landowners (i.e. the Executive Director of the organization); current and former staff members of the Clark Fork Coalition in Missoula; and an employee of the Powell County government who has been active in restoration planning. The purpose of these interviews was to gain additional background information on cleanup and the WRC, to enable triangulation with landowners' accounts, and to provide additional context for landowners' perspectives.

I interviewed seven non-landowners and conducted twenty interviews with landowners. Of the landowner interviews, nine (including two with a couple) were with self-identified ranchers, and eleven (again including two with a couple) were with non-ranchers. This meant that roughly a third of the interviews were with non-landowners, roughly a third were with landowners who ranch, and roughly a third were with landowners who did not ranch. Residence time in the study area was relatively consistent within the ranching- and non-ranching landowner groups, but differed strongly between the two groups: Seven of the nine ranchers were born in the Deer Lodge Valley to parents who also ranched in the Deer Lodge Valley, while eight of the eleven non-ranchers were born and raised elsewhere and moved to Deer Lodge in late childhood (one) or as adults (seven). With respect to the presence and extent of contamination on individuals' properties, the circumstances of the ranchers covered the full spectrum of possibilities more or less evenly, but because non-

---

<sup>7</sup> Coyne, "Sampling in Qualitative Research," 625-626.

<sup>8</sup> As an aside, it is worth mentioning that I did not consider the views of absentee landowners irrelevant or uninteresting. In fact, I was repeatedly directed to interview three people meeting that description. Unfortunately— if unsurprisingly— these individuals were exceedingly difficult to reach: Two were the backers of the Clark Fork Coalition's ranching venture, and their desire to retain anonymity precluded referral by name. I failed to contact the third despite two months of dogged effort, though I was able to interview his ranch manager.

ranching landowners tended to live along the river, most of them reported having slickens on their property. Thus the majority of the landowners I interviewed were having to deal directly with the EPA and the DEQ to plan for the federally-mandated remediation of sections of their property.

#### *Additional Data Sources*

Though I was able to assess the validity my interview data as a whole in part by comparing individual interviews, Gray et al. remark on the “powerful synergy that can result from combining intensive interviews with other forms of data collection;”<sup>9</sup> common sense indicates that such combination is apt to provide a more comprehensive and thorough picture of a phenomena than a single approach to data collection in any case would. My use of non-interview data was limited by the viability of other methods of data collection in the study area and my time in the field, but I was able to gain additional insight into the dynamics of cleanup and restoration in the Deer Lodge Valley through a form of participant observation and from archival sources.

My “form of” participant observation entailed three types of activities. First, between Fall 2008 and December 2009, I attended public meetings associated with cleanup and restoration whenever I was in Montana and road conditions permitted safe travel. Second, while living in Anaconda in June and July of 2008, I made a point of attending cultural events in Deer Lodge and spending time in local public spaces, including the library and especially the local coffee shop. Third, when opportunities presented themselves, I arranged to be taken on tours of culturally and economically significant sites in the Deer Lodge Valley and individual properties.

The meetings I attended included five WRC meetings; a series of four public hearings held by the NRDP in June of 2008 to facilitate public comment on the agency’s “road map” for distributing settlement funds (two of these hearings took place in the Deer Lodge Valley; the third was held in Butte and the fourth in Bonner, just east of Missoula); the annual NRDP proposed project site tour, which took place in July of 2008; and two CFRTAC meetings (in January and March of 2008). Observing these experiences allowed

---

<sup>9</sup> Gray et al., “Intensive Interviewing,” 161.

me to get a sense of the “lay of the land,” both at the level of agencies and individuals. The varying aims and roles of CFRTAC, the NRDP and its citizen advisory council, and the WRC became clearer through repeated exposure to what happens in each group’s meetings and the tone and content of discussions, and through noting the institutional, professional, and interest group affiliations of those who showed up. I also got a sense of the range of opinions on specific issues related to cleanup and restoration. Finally, because many of my participants attended some combination of these meetings, I was able to get another view of their relationship to cleanup, restoration, and civic life. When a participant’s comportment with the WRC or in a CFRTAC meeting was marked by the same reticence— or the same bullishness— he or she showed in an interview with me, I gained limited, but nonetheless useful, insight into the relative importance of participant personality and interviewer-participant rapport in the one-on-one conversation.

The time I spent in more informal social situations relevant to life in Deer Lodge gave me increased perspective on the community. I was able to observe ranchers discussing their operations and their politics in the local coffee shop, to note the appearance of “regulars,” and to note regulars noticing each other. Striking up a conversation with the elderly father of one middle-aged participant presented an opportunity to observe for myself a difference in political and environmental sensibilities another middle-aged participant had reported to me in an interview; it was also one of many instances that confirmed the extent to which Deer Lodge is a small town— the kind of place where one can expect to run into people one knows on the street. In contrast, other experiences of “hanging out” in Deer Lodge demonstrated the extent to which it is not: No matter how many times I worked at the library, checked out the wares in Greany’s Dry Goods, and bought lightly salted rice cakes at the Safeway (literally a daily occurrence), nobody seemed to recognize me. In this same category of participant-observation experience, I attended Deer Lodge’s bullriding event, which drew a large crowd. I recognized my participants’ surnames on hand-painted ads encircling the ring, in the winners of the raffle, and in the roster of “muttonbusters”— children who practice a junior version of bullriding by climbing and attempting to stay atop bucking sheep; I also apprehended some of the relatively fine-grain distinctions in rural Western culture, such as that between the ranch subculture and the rodeo

subculture— and that between a rodeo (which includes a number of specific events) and bullriding (one of the events comprising rodeo).

Finally, my personal site tours got me to a variety of important, but out-of-the-way corners of Deer Lodge and allowed me to see them through the eyes of the people who know them best. On the floor of Sun Mountain Lumber Company's facilities, I learned what "working at the mill" looks, sounds, and smells like; landowners showed me their slickens, their weed problems, and the stretches of river on their property where erosion is a problem; and a former warden at the Montana State Prison gave me a tour of the historic facility where he once worked. With the notable exception of my day at the Thomas Ranch, which is described in Chapter 1, I made a point of scheduling these tours at the end of or after interviews with the individuals who gave them, as I felt this would better enable me to maintain an appropriate degree of professional distance during the interview itself. This way, I was free to show my genuine interest and converse naturally during site tours without so much concern about developing "overrapport" that might compromise my perspective in the short-run and/or induce participants to respond to questions in ways that he or she might suspect I "wanted."<sup>10</sup>

Unlike the quasi-participant observation described above, archival data can be gathered unobtrusively and without the risks—to the data and the participant— attendant to more interactive methods. For these reason, I tried to locate archival sources that would enable me to assess the validity of interview data through triangulation; I also sought such resources to help me prepare for interviews, both individually and in the aggregate (i.e. through the constitution of the interview guide). In practice, though, the challenge of locating relevant archival materials proved a formidable obstacle to this approach. Indeed, one of the advantages of using interviews in this project was that there were few alternative sources for in-depth information on local residents' perspectives on cleanup, and fewer still that recorded such perspectives in residents' own words. The towns of Deer Lodge and Anaconda each support a weekly newspaper, however these publications are very small, consisting of a few news articles per edition and almost no features or opinion pieces. Over

---

<sup>10</sup> Gray et al., "Intensive Interviewing," 170-171.



the last ten years, coverage of contamination, cleanup, and restoration in Deer Lodge's *Silver State Post* was limited to a few mentions and public meeting announcements. Suffice to say, Deer Lodge Valley residents' views on this facet of local life are not documented in the active, prolific, and relatively well-funded local press characteristic of more populated areas. And unlike government agencies and more established, formal, and policy-oriented groups, the WRC does not print pamphlets, policy statements, facts sheets, or other "grey literature." The group's website hosts little more than contact information, grant proposals, and a mission statement, of which I ultimately did make limited use, along with articles on the clean-up from the Missoula daily newspaper, the *Missoulian*, and summary documents and reports by state and federal government entities including the EPA and the Governor's office. As would be expected, these sources did not reflect landowner perceptions of restoration in any direct or substantive way, but they were useful in establishing the chronology of the narrative in Chapter 3.

#### ANALYSIS

Most interviews were digitally recorded and transcribed verbatim to facilitate content analysis and accurate quotation. Three interviews were not recorded. The first two were the earliest interviews, which took place in November 2007, five months before the third interview and seven months before the beginning of my field season. This was before I had developed research questions, composed an interview guide, or even formally proposed the project. The interviews were therefore informal and exploratory, though I sought and received permission to undertake preliminary investigations from the University of Montana's Institutional Review Board. The third exception was an interview with Powell County Planner Ron Hanson, during which my tape recorder stopped three minutes into the conversation and could not be made to work again. In all cases where digital recording was impeded or eschewed, I took extensive longhand notes.

My analytical approach involved reading the transcript of each interview "blankly," as I put it— that is, without "looking for" any particular information, theme, or set of themes. I took this method because my first goal was to understand each interview in and of itself, in

terms of what it indicated about the interviewee's key concerns within the intentionally-broad topical area delineated by my questions.

Immediately after re-reading each interview, I recorded my impression of these key concerns, reflecting on the interviewee's emphases within individual responses and across responses; the repetition of particular ideas, beliefs, and complaints; the subjects on which the interviewee found the most to say; and, of course, the content of the responses itself. This stage of my process included a combination of analytic memo-making and "open coding"—the latter of which is the first phase of the two-step coding process recommended for grounded theory researchers.<sup>11</sup> My memos also noted themes that seemed to be consistent or inconsistent with other interviews, but I made a point of recording only impressions and intuitions around such observations: The goal was not to create categories—which might color my reading of subsequent interviews—but rather to "bookmark" areas for further attention in the second (or "axial") coding phase, in which open codes are organized into conceptual categories.<sup>12</sup>

After reading the interview on its own terms (as it were) I attempted to answer, in a new section of the same analytic memo, each of the following questions:

- (a) What does this interviewee gain and lose from participating in restoration?
- (b) What does this interview reveal or suggest about the balance between focal restoration and technological restoration?
- (c) What does this interview reveal or suggest about restoration in working landscapes?

This approach was, in essence, a more structured version of the "bookmarking" described in the previous paragraph, as interview content was considered in reference to research questions drawn from existing literature rather than in reference to other interviews.

---

<sup>11</sup> Analytic memos are discussed in Esterberg, "Making Sense of Data," 165; open coding is described Esterberg, "Making Sense of Data," 158, and Bailey, "Coding, Memoing, and Descriptions," 128. The latter uses the term "initial coding" in lieu of "open coding," but makes reference their near-interchangeability. The two-step coding process is originally described in the first edition of Strauss and Corbin, *Basics of Qualitative Research*, a bestselling methods text now in its third edition with the authors' names reversed. In the book's most recent iteration, the coding process is discussed in Chapter 8, "Analyzing Data for Concepts," 159-193.

<sup>12</sup> Esterberg, "Making Sense of Data," 129.

Taken together, these analytic steps allowed me to isolate key themes from the data as a whole that seemed true to individuals' intentions, meanings, and responses. In the axial coding phase, I used those themes— a combination of open codes and the two types of “bookmarks”— to develop conceptual codes, and revisited the data to see how the content of individual interviewed supported or contradicted the concepts I was developing.

#### CONFIDENTIALITY AND CONSENT

Participants in this study were asked for their perspectives on relatively uncontroversial subject matter. Though many individuals in the Upper Clark Fork Basin hold strong opinions on cleanup, restoration, land use, and ranch management, to my knowledge these issues— which have been discussed publicly in numerous community meetings since the listing of the Clark Fork Superfund sites more than twenty-five years ago— have not prompted vitriol or violence between individuals who disagree. It was therefore not expected that this project would place participants at any significant or unforeseeable risk.

Of course, disclosing personal opinions to a researcher who intends to report on her findings in writing exposes an individual to some risk of retaliation or discrimination from those who hold divergent views. In light of such minor but inevitable risks and in accordance with professional standards for ethical practice in research involving human subjects, interviews commenced only after I solicited and obtained informed consent from potential participants.

In order to guarantee that these individuals were provided with the information necessary to make decisions about whether and on what terms to become involved in the study, I carried to each interview a list of topics to be covered prior to soliciting consent. This “consent guide” can be found in Appendix C.

Though in many cases research participants are asked to read and sign a written consent form, I was concerned that such a document might be unnecessarily intimidating to members of my intended sample group. Verbal consent is better suited to building the rapport between researcher and participant that is necessary to a productive interview. Because the subjects addressed by this study are not especially sensitive in nature and participants were unlikely to include members of vulnerable populations, I requested and

received permission from the University of Montana's Institutional Review Board (IRB) to use a verbal consent procedure in lieu of a written consent form.

Additionally, all participants were provided with a handout including my contact information, contact information for my primary advisor and the chair of the IRB, and a brief description of the project covering similar information as that outlined in the consent guide (see Appendix D, "Information Sheet for Participants").

Finally, I offered all participants a choice between full and selective anonymity. Participants who elected full anonymity (three total) have not been identified by name in this analysis; instead, their comments were attributed to an unspecified representative of a particular group (i.e. "One landowner explained..."). The remainder of the individuals I interviewed chose the selective anonymity option, and mentioned during or after our interview if they wished for any particular comment or subset of comments not to be attributed to them personally in my write-up. In most cases, no such requests were made.

#### **A NOTE ON THE USE OF DATA**

My efforts to present the findings of social research using a voice and structure more characteristic of personal narrative and journalistic writing have compelled me to devote substantial attention, at each phase of the research and writing process, to my use of data. A few notes on my approach— and its limitations— are therefore in order.

When I use my interview data for primarily narrative purposes— to tell the story of the formation of the WRC, for example— I am working as a journalist would, melding a set of overlapping but often incomplete recollections of what happened, where, how, and in what order. The possibility of triangulation among interviews provides a limited, but often sufficient, check against inaccuracy. "Evidence" is provided to the reader in the form of quotations and paraphrases from individual testimonies, and "cited" informally in the text itself, in dependent clauses and signal phrases.

When I use my interview data for primarily analytical purposes— to identify themes across interviews and theorize as to their significance— I am acting more like an academic social scientist. In this genre, formal citations of other scholars' work attests to the validity

of a researcher's methods for gathering and analyzing data. The content of the interviews matters, but the identity of the participant is seldom on the table, except in the most general terms (e.g. "One rancher stated..."; "According to a research agency staffperson..."). Usually, when individual participants are directly quoted or paraphrased in the text, the goal is to illustrate, complicate, or substantiate a theme drawn from either a specified subset of the interviews (i.e. interviews with landowners; interviews with WRC participants; interviews with ranchers) or from the interviews as a whole.

For example, when I quote Jennifer Nicholson describing the financial burden high energy costs place on ranchers, the goal is not to say anything about Nicholson or her ranch particularly. Neither, for that matter, is it the goal to provide evidence of high energy prices in the Deer Lodge Valley. Rather, the goal is to show the many reasons— and the profound extent to which— ranchers in the Deer Lodge Valley perceive that their economic position is becoming untenable. Given this purpose, the individual identity of the person being quoted is essentially irrelevant: With respect to the argument that is being advanced in the section or chapter in question, the purpose of including the quotation in the text (or of paraphrasing it) is *not* to attribute the contents of the quotation to any one individual; it is to illustrate a tendency of the aggregate, and/or to gain insight into such tendencies by examining cases of divergence from the aggregate norm.

Despite the potential pitfalls of attributing quotations to specific individuals in the context of a general analysis, my goals for the thesis as a whole have prompted me to refer to consenting participants by name whenever possible. This project was never intended to be a detached, clinical analysis of "a rural agricultural community in the intermountain West"; rather, and from the first, I had hoped the written outcome of my work in the Deer Lodge Valley would provide a sense of the characters whose histories, proclivities, and quirks are shaping restoration, remediation, and day-to-day life in the area. Making their very particular voices a part of *every* chapter— not just the descriptive or "scene-setting" ones— was, I felt, a necessary part of that agenda.

Put simply, my objectives for particular sections or chapters of this thesis were frequently at odds with my objectives for the thesis as a whole. It was in deference to the

latter that I risked clouding the formal analysis with the quirks and specificities of my individual participants and the particulars of their place.

## APPENDIX B: INTERVIEW GUIDE

Revised June 12, 2008

1. What do you do to make a living?
2. How long have you lived here?
  - If from the area:*
    - a. How long has your family lived in this area?
    - b. Why did your family come to this area?
    - c. What did your family do to make a living?
    - d. What was the river like when you were growing up?
  - If not from the area:*
    - e. Where are you from originally?
    - f. How did you come to live in this area?
3. How has this area changed since you've been here?

*This is a values question, potentially; might reveal feelings about the observed changes.*
4. How did you come to live on this property?
5. How do you use this property?
6. What do you want to do on your property and why?

*Question will provide a sense of what landowners value about their property and what their long-term, big-picture goals are, too. (i.e. preserve the culture, expand, pass the property on to kids)*
7. How did you first hear that the river might be cleaned up?
  - a. How did you feel?
  - b. What did you think?
8. What kind of contact have you had with the DEQ about the plans for your area?
9. What do you think should be done about the river?
  - a. What do you think about the cleanup? Restoration?
  - b. What do you think successful cleanup would look like?
10. How are the goals of the restoration similar to your goals?
  - a. Are there mutual benefits?
11. How do you think the cleanup is going to change this area?
12. What do you think about the WRC?
  - a. Are you involved with the group?

*WRC members:*
    - b. How did you get involved with the WRC?

*Non-WRC members:*
    - c. Is there a particular reason you have not been involved with the WRC?
13. What do you think of the Clark Fork Coalition?
14. What's your idea of an ideal future for the area?
15. Is there anything we haven't talked about that you want to bring up?
16. Who else do you think I should talk with about these issues?
  - a. Can you recommend anyone whose views will probably differ from yours?

## APPENDIX C : CONSENT GUIDE

*The following information was relayed verbally by the researcher to all participants at the outset of initial interviews in order to facilitate informed consent. On March 12, 2008, this procedure was approved by the IRB of the University of Montana as a suitable substitute for standard consent procedures, which utilize a written form.*

**Purpose:** The goals of the project in which you are being asked to participate are to (1) tell the story of how ecological restoration came to be proposed for the Upper Clark Fork River, and (2) to gain understanding of what landowners in the Deer Lodge Valley think about the restoration that is currently being planned for the river, and why. I am seeking the perspectives of individuals who know the region and the river, and who are also the primary decision-makers for the property on which they reside. You are being asked to participate for one or more of the following reasons:

- (a) you own land in or around the study area;
- (b) you are primarily responsible for making decisions about privately owned property in the study area;
- (c) you are or were a staff member of a private, non-profit, or government entity that works with landowners in the study area; or
- (d) another participant recommended that I speak with you on this subject.

I am gathering data through interviews, each of which will be approximately 45 to 75 minutes long.

**Participation is optional and you may opt-out at any time.** If you are uncomfortable answering a question or feel that doing so would put you at any kind of risk, you may either decline to respond or elect to respond anonymously.

**Benefits of the project:** Your participation in this study will help (1) improve awareness of the issues associated with the clean-up and restoration of the Upper Clark Fork River Superfund complex, and (2) increase understanding of the reasons landowners might support and/or feel concerned about ecological restoration.

**Use of project findings:** I will share what I learn with Deer Lodge Valley resource users and management groups, the environmental community in Missoula, and state-level policy-makers working on the Upper Clark Fork clean-up and restoration planning so that they might better understand landowners' experiences and perspectives.

**Confidentiality:** Because it is a goal of this project to present findings in an accessible, readable form, I would like to be able to use participant's names and/or some identifying characteristics in the final write-up. However, all participants have the option to maintain full or selective anonymity. You may choose to participate in either of two ways:

- Selective Anonymity.** If you choose this option, I will regard what you say as "on the record" (not anonymous) unless you tell me that you would like a particular comment or response not to be associated with you specifically. You may say that at any time. If I



use material that you share anonymously in my write-ups, I will attribute your quotations or paraphrasing to an unspecified representative of a particular group rather than to the individual (i.e. “one landowner explained...”), and any identifying characteristics conveyed in the comment will be changed or omitted to protect your identity.

**Full Anonymity:** All comments and responses made by participants who elect full anonymity will be attributed to an unspecified representative of a particular group rather than to an individual. All identifying characteristics will be changed or omitted to protect the participant’s identity.

**Which type of confidentiality arrangement would you prefer?**

**Data storage:** I will keep all of the data I collect from interviews in either password-protected electronic forms, or in a locked file cabinet.

**Compensation for Injury:** Although injury is unlikely to occur during this interview, the following liability statement is required in all University of Montana consent processes:

“In the event that you are injured as a result of this research, you should individually seek appropriate medical treatment. If the injury is caused by the negligence of the University or any of its employees, you may be entitled to reimbursement or compensation pursuant to the Comprehensive State Insurance Plan established by the Department of Administration under the authority of M.C.A., Title 2, Chapter 9. In the event of a claim for such injury, further information may be obtained from the University’s claims representative or University Legal Counsel.”

**Questions:** I will leave you my contact information in case you think of any questions about the project that you want to ask me later on. I’ll also give you the phone number of the chair of the Institutional Review Board at the University of Montana in case you have any questions about your rights as a research participant.

**Do you have any questions about the project that I can answer now?**

**Do you wish to participate in this study?**

**Is it alright if I continue audio-taping our interview?** (You can ask me to turn off the tape recorder at any time.)

## APPENDIX D: INFORMATION SHEET FOR PARTICIPANTS

*The following information was provided to all participants on a single-sided handout (totaling one page in length) at the outset of the initial interview in order to facilitate informed consent. The information sheet was approved by the IRB of the University of Montana on March 12, 2008.*

### LANDOWNER PERCEPTIONS OF ECOLOGICAL RESTORATION IN THE DEER LODGE VALLEY INFORMATION SHEET FOR PARTICIPANTS

**Investigator** Sarah Carvill **Phone:** (831) 359-9282  
**Information:** Environmental Studies Department **E-Mail:** sarah.carvill@umontana.edu  
University of Montana **Advisor:** Dr. Daniel T. Spencer  
Missoula, MT 59812 U.S.A.

University of Montana Institutional Review Board Chair: (406) 243-6670

**Purpose and Benefits:** The goals of the project in which you are being asked to participate are to (1) tell the story of how ecological restoration came to be proposed for the Upper Clark Fork River, and (2) to gain understanding of what landowners in the Deer Lodge Valley think about the restoration that is currently being planned for the river, and why. I am seeking the perspectives of individuals who know the region and the river, and who are also the primary decision-makers for the property on which they reside. You are being asked to participate for one or more of the following reasons:

- (a) you own land in or around the study area;
- (b) you are primarily responsible for making decisions about privately owned property in the study area;
- (c) you are or were a staff member of a private, non-profit, or government entity that works with landowners in the study area; or
- (d) another participant recommended that I speak with you on this subject.

I will share what I learn with Deer Lodge Valley resource users and management groups, the environmental community in Missoula, and state-level policy-makers working on the Upper Clark Fork clean-up and restoration planning so that they might better understand landowners' experiences and perspectives. Your participation in this study will help improve awareness of the issues associated with the clean-up and restoration of the Upper Clark Fork River Superfund complex, and increase understanding of the reasons landowners might support and/or feel concerned about ecological restoration.

**Participation in this study is optional and you may opt-out at any time.** If you are uncomfortable answering a question or feel that doing so would put you at any kind of risk, you may either decline to respond or elect to respond anonymously.

**Confidentiality:** Because it is a goal of this project to present findings in an accessible, readable form, I would like to be able to use participant's names and/or some identifying characteristics in the final write-up. However, all participants have the option to maintain

full or selective anonymity. If there is anything you say that you do not want associated with your name or identifying characteristics, let me know and I will honor that request.

**Compensation for Injury:** Although injury is unlikely to occur during this interview, the following liability statement is required in all University of Montana consent processes:

“In the event that you are injured as a result of this research, you should individually seek appropriate medical treatment. If the injury is caused by the negligence of the University or any of its employees, you may be entitled to reimbursement or compensation pursuant to the Comprehensive State Insurance Plan established by the Department of Administration under the authority of M.C.A., Title 2, Chapter 9. In the event of a claim for such injury, further information may be obtained from the University’s claims representative or University Legal Counsel.”