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ARIDITY IN THE LITERATURE OF THE AMERICAN WEST: WATER IN
STEGNER'S *ANGLE OF REPOSE* AND ABBEY'S *THE MONKEY WRENCH GANG*

A Thesis Presented

by

Annie Frodeman

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of

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Thesis Examination Committee:

John Gennari, Ph.D., Advisor
Dona Brown, Ph.D., Chairperson
Elizabeth Fenton, Ph.D.
Cynthia J. Forehand, Ph.D., Dean of the Graduate College

ABSTRACT

This thesis examines how Wallace Stegner's *Angle of Repose* and Edward Abbey's *The Monkey Wrench Gang* have been molded by water scarcity and in turn have shaped the discourse about water. *Angle of Repose* offers a reliable history of water in the West, showing how the myth of the garden permeated the lives of people who made the journey West at the end of the nineteenth century. Stegner's narrative of the building of the West shows what comes of humanity's desire to change the environment by making the desert bloom. *The Monkey Wrench Gang* complements Stegner's *Angle of Repose* as a counter culture narrative. Abbey exemplifies the environmental theory of deep ecology that values nature for its own sake, not for its potential for human use. Deep ecology offers a philosophical account of our relation to nature that emphasizes that ecosystems are an interconnected web of relations existing in balance, and that humans should respect this balance, and not mess with it, for both practical reasons and because of the inherent rights of animals and ecosystems to exist.

Literature forms an essential part of our cultural understanding. Focusing on two writers, this thesis offers an analysis of the literary arts, where our descriptions and narratives of water are as central to confronting our societal challenges as the facts of science and history. Literature expresses our lives, our hopes, our dreams, and our fears. It provides the narrative framework we live within. Aridity is the unifying property of what we consider to be the West. This elemental fact shapes and is shaped by the way that we think about water in the region's literature.

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INTRODUCTION

Aridity, more than anything else, gives the western landscape its character. It is aridity that gives the air its special dry clarity; aridity that puts brilliance in the light and polishes and enlarges the stars; aridity that leads the grasses to evolve as bunches rather than as turf; aridity that exposes the pigmentation of the raw earth and limits, almost eliminates, the color of chlorophyll; aridity that erodes the earth in cliffs and badlands rather than in softened and vegetated slopes, that has shaped the characteristically swift and mobile animals of the dry grasslands and the characteristically nocturnal life of the deserts. The West, Walter Webb said, is “a semi-desert with a desert heart.” If I prefer to think of it as two long chains of mountain ranges with deserts or semi-deserts in their rain shadow, that is not to deny his assertion that the primary unity of the West is a shortage of water.

--Wallace Stegner, 1991¹

1.

Always essential to life, water is an increasingly fraught topic in our world. Climate change has made water’s importance glaringly obvious as droughts cause massive migration in places like Syria and fires burn millions of acres across arid landscapes throughout Australia and California. As the planet’s poles melt and CO₂ is

¹ From “Thoughts in a Dry Land” first published in *A Western Harvest* in 1991 and reprinted in the collection, *Where the Bluebird Sings to the Lemonade Springs* pages 46-47.

released at exponential rates, there will be an enormous pressure to find useable, clean, un-salinized water.

Water, however, functions as a metaphor as well as a fact. Water is a symbol often associated with the feminine. Rivers are symbolic of both the path of life and the transformation from life to death. As such, they are a part of major religious practices. Baptism, the sprinkling of water onto a person's forehead or a full immersion in water, symbolizes purification or regeneration and admission into Christian life. Water is an important part of burial practices as well; bodies are cleansed with water after death.

Water holds symbolic meaning across religion, culture, and race. In Greek mythology, the River Styx separated the world of the living from the underworld. The waters were fatal to humans, but the story of Achilles involves being strengthened by the waters. His mother dipped him in as a baby, holding him by his heel. He was made invulnerable by the sacred waters—all except for his heel. Rivers held meaning after death: the Greeks believed after death the soul was ferried across the River Styx by Charron to the underworld. In Hinduism, the Ganges River is an embodiment of the goddess Ganga. Despite dangerous levels of pollutants, thousands of people bathe in the Ganges every year to purify their body and soul. Hindus cremate bodies on the banks of the Ganges and allow the ashes to flow downstream. Water operates similarly in other modern and ancient religions and as such has become a symbol that crosses cultural and national boundaries.

Focusing on two writers, this thesis examines how the literature of the American West has been molded by the idea of water scarcity. It also offers an analysis of the literary arts, where our descriptions and narratives of water are as central to confronting

our societal challenges as the facts of science and history. Literature expresses our lives, our hopes, our dreams, and our fears. It provides the narrative framework we live within. Aridity is the unifying property of what we consider to be the “West.” This elemental fact shapes and is shaped by the way that we think about water in the region’s literature.

2.

Like any child growing up in the West, I was aware of the importance of water from a young age. Living in Boulder, Colorado, I was taught not to waste water by my parents, schoolteachers, the news, and even community standards and law. We worried when there was less snow not just because of our love of skiing, but because a smaller snowpack meant a drier summer. Drier summers would raise the potential for fire. There had been a big fire that burned thousands of acres and several homes a few years before I was born, and the scar left by the fire on the foothills was a visual reminder to us of the dangers of drought.

Aridity affected us throughout the summer holidays. Dry summers meant no fireworks. Eventually the city came up with an alternative: laser light shows for the Fourth of July (these were not well received). There was also no playing in sprinklers to cool off (most houses did not have air conditioning. In the past it wasn’t needed.)

One summer, the water in the irrigation ditch behind my family’s house stopped flowing. My sister and I went down to the stagnant puddles left in the ditch, worried about the crawfish and walked in the mostly dry streambed. We biked a few miles to the creek, but the drought affected the water there too. There were some summers the water was so low that we couldn’t float on tubes downstream and we were warned that the

water would have higher concentrations of chemicals because there was less water to dilute pollutants that drained into the creek.

With all the focus on water we felt it our duty to do what we could to help save water. We were told when we could water plants; each part of town had its own days of the week that they could use water for landscaping. In school, teachers told us that we could reuse our shower water for our gardens by collecting it in buckets while showering. They also recommended that we shut off the water while soaping (not a very pleasant way to shower). Our showers were timed; our parents knocked on the door after four or five minutes telling us to hurry. All these measures seemed normal to me and I never thought twice about how much time we spent thinking about water.

In college I was surprised to find that my experience with water and drought was different from many of my peers. I discovered that many people never thought of water as a rare and valued resource; they had never had their parents yell at them to shut off the shower or had to watch laser light shows for the Fourth of July. I went to college in Indiana. Indiana is well east of the line dividing the East from the West, generally marked as the 100th meridian and more precisely as the 98th meridian. This imaginary line runs north-south and passes through the middle of North Dakota, South Dakota, Nebraska and Texas, and the western third of Kansas and Oklahoma. On the east side of this line there is enough rainfall that irrigation is not necessary for cultivating crops, and west of the line irrigation is necessary for crops to grow. To people living in the eastern part of the United States where they got plenty of rain, water was not something they thought much about, but to people from the West, water was precious.

3.

Our awareness of water in the West was decisively advanced by several books published in the 1980s. Donald Worster's *Rivers of Empire* and Marc Reisner's *Cadillac Desert* are two of the leading studies of western water. These books, published respectively in 1985 and 1986, were a part of an increased consciousness of environmental issues that began with Rachel Carson's *Silent Spring* (1962). We are still living off this legacy: the scholarly discussion in these matters is still deeply influenced by Worster's and Reisner's books.²

The context for the discussion of western water practices and history has changed with the advent of climate change. The moment that propelled climate change into the spotlight occurred in 1988, when Dr. James Hansen, a climatologist and computer modeler working at NASA, testified before a U.S. Senate Committee, stating that he was 90% certain that global warming was underway.³ The summer of 1988 was sweltering. The especially hot weather experienced in the late spring and early summer along with enormous fires that burned in Yellowstone lent strength to the argument that the planet was getting warmer.⁴ The extreme weather was part of the reason Congress and the rest of the country seemed ready to accept the idea of a global climate change precipitated by human actions. The heat wave and drought brought about comparisons to the dust bowls of 1934-1936.

² My bibliography for this project in the English field also leans on American Studies, History, and Ecology. In researching water in the West, I have found these books by Worster and Reisner to be useful in providing the history of the West, depicting water in the context of world history as well as U.S. History, and a discussion of politics, law, and policy.

³ Environmental and Societal Impacts Group, NCAR explains that global warming had been discussed in scientific communities before 1988, the first congressional hearings on climate change occurred in 1979. https://sciencepolicy.colorado.edu/admin/publication_files/2000.09.pdf

⁴ These fires eventually affected 36% of Yellowstone National Park.

There is no disputing that the summer of 1988 was unusually hot. According to records, many cities experienced a jump in the number of days with temperatures at or above 90 degrees. For example, in 1988 Kansas City experienced 30 days at 100 degrees or more. They had previously averaged 3.8 days a year over 100 degrees. On summer solstice—relatively early on in the summer—every state outside of New England reached temperatures above 90.⁵

However, thirty-two years later, the record-breaking summer of '88 has come to seem normal, showing that not just the day-to-day weather, but the climate is changing. Last year, 2019, was the second hottest year on record—the hottest overall year was 2016. July of 2019 was the hottest month ever recorded.⁶ Jean-Noël Thépaut, director of Copernicus services⁷, was quoted in the *New York Times* on the warming climate: “The past five years have been the five warmest on record; the last decade has been the warmest on record. These are unquestionably alarming signs” (Fountain). Therefore, a discussion of water in the arid West is more relevant today than it was thirty years ago and literature is an important part of understanding, interpreting, and imparting the role of water in the West.

⁵ John Roach’s article: <https://www.accuweather.com/en/weather-news/heat-wave-was-so-devastating-it-had-americans-declaring-god-is-against-us/481031>

⁶ From Fountain’s *New York Times* article, “2019 was Second-Hottest Year on Record”: “Now European scientists have confirmed what had been suspected: 2019 was a very hot year, with global average temperatures the second highest on record. Only 2016 was hotter, and not by much — less than one-tenth of a degree Fahrenheit.”

⁷ The Copernicus services is the European Union’s “Earth Observation Programme” that uses satellite as well as “in situ systems” (ground stations) that measure things like temperature. The accumulated data is placed into databases that organize it making it easily searchable. These databases show patterns and trends that stretch back decades. The information is intended to assist policymakers.

4.

Amitav Gosh highlights the role of literature in making sense of our changing world. In *The Great Derangement: Climate Change and the Unthinkable* (2016), he argues that literature needs to engage with the question of climate so that climate change becomes a part of popular culture and discussion. It must become a part of our poetry, fiction, film, and art, forcing us to engage with in an everyday fashion. Gosh notes that literary journals and book reviews seldom discuss climate change and, moreover;

When the subject of climate change occurs in these publications, it is almost always in relation to nonfiction; novels and short stories are very rarely to be glimpsed within this horizon. Indeed, it could even be said that fiction that deals with climate change is almost by definition not of the kind that is taken seriously by serious literary journals: the mere mention of the subject is often enough to relegate a novel or a short story to the genre of science fiction. It is as though in the literary imagination climate change were somehow akin to extraterrestrials or interplanetary travel (Gosh 7).

The exclusion of climate change from “serious literary journals” and thus from discussion within the humanities is irresponsible. It perpetuates the general tendency to frame climate change as only a matter of science and politics. In order to respond to the challenge of climate change it needs to become a part of our everyday lives. To accomplish this, the arts need to reflect our world accurately, thereby acting as arbitrators between science, politics, and public perception. Only by depicting climate change in the

arts will we stop the idleness caused by the hope that climate change won't be as bad as scientists predict and begin to take responsibility for our actions.

To explain the role of the arts in our lives—how they are responsible for our understanding, our ability to interpret the world, and for guiding our choices—Gosh gives two examples that include the disparate topics of the popularity of convertibles and novels by Jane Austen. He uses these two cases to demonstrate how our desires, what we want to own and experience, have been shaped by literature. There is nothing intrinsically “cool” about a car without a top—in fact they are somewhat inconvenient—but we have cultivated a desire for convertibles because they have come to be associated with freedom. This allusion was created by Jack Kerouac and has been represented in films with James Dean. Convertibles do not equal freedom, but they have come to give us the impression of freedom through cultural representations.

In a similar way, Gosh shows how our desire for green lawns has come from novels of Jane Austen:

When we see a green lawn that has been watered with desalinated water, in Abu Dhabi or Southern California or some other environment where people had once been content to spend their water thriftily in nurturing a single vine or shrub, we are looking at an expression of a yearning that has been midwifed by the novels of Jane Austen. The artifacts and commodities that are conjured up by these desires are, in a sense, at once expressions and concealments of the cultural matrix that brought them into being (Gosh 10).

Green lawns became a symbol of refinement and gentility. Despite the challenge at finding water to create these verdant gardens in the desert, the idea associating green with wealth and beauty has persisted. Art has an immense hold over our lives. It influences our decisions, making us want things that don't make sense. As Gosh makes clear, the arts should depict climate change so it becomes a part of everyday conversation. We need the arts to incorporate the idea of climate change into our lives instead of ignoring it.

Donald Worster anticipates the arguments made by Gosh in his discussion of the role of literature in mediating our understanding of our world. In *Rivers of Empire*, Worster writes that the Western United States was considered to be a desert by the first explorers and homesteaders. The general opinion of the interior, non-coastal West began to change with advertisements made by boosters (often politicians) who had incentive to get people to move west. Money from the sale of land and especially the building of railroads and towns along the railroad held promise for immense riches. Boosters used evidence made by scientists on the health benefits of a dry climate and the scientific belief that "rain will follow the plow" to convince people to move. In Arizona, sanatoriums were constructed for tuberculosis patients and people came to believe that the Western climate could be beneficial. Fields were plowed in the arid plains of eastern Colorado and western Nebraska and Kansas with the idea that this would induce rain.

In addition to the effort of boosters, Worster finds that authors were also responsible for changing the dominate view of the West as a wasteland. As a Western historian, Worster believes that a history of the West cannot be told without presenting the role of authors and artists in shaping public perspective. He writes:

To seek further and even more revealing evidence of that shifting sense of priorities, we should turn to the two figures who founded what eventually became a popular American tradition of desert nature writing—Mary Austin and John Van Dyke. Both were artists, approaching the desert, not to earn a living from it, but rather to learn about it, write about it, and declare its inner truth (Worster 69).

In the writing of Austin and Van Dyke, the desert came to symbolize more than fear and death. It became a special, sacred space in which people could find silence, discover God, better understand themselves, become closer to nature, and experience the sublime. Through literature, people began to see value in the arid parts of the United States, not just for health or because they had been told they could change the climate, but because artists showed them the importance of the desert.

Worster notes that it would have been simple to ignore the work of these early writers in a history of the American West:

It would be easy to dismiss them thus as cranks [‘a maverick woman who kicked against the traces of marriage and motherhood’ and ‘a middle-aged man troubled by intimations of his own death, driven by antisocial feelings to oppose progress’]. That they were marginal to the story of desert conquest which follows is admitted. But they were not, for that reason, unimportant. Austin and Van Dyke spoke for an alternative side of modern America: one against domination, instrumentalism, the power of capital and technique; one in favor of freedom,

wild, untrammled grandeur, and human humility. The West became a theater for both versions of modernity (Worster 74).

Literature, along with politics and science, is an important part of history. Literature became the means of presenting life in the desert—how life exists and even thrives, proving that humans can too.

5.

In what follows, I offer an account of Wallace Stegner's Pulitzer Prize winning novel, *Angle of Repose* and Edward Abbey's cult favorite, *The Monkey Wrench Gang*. While these books seem to have little in common—*Angle of Repose* is set at the end of the nineteenth century in California, Colorado, and Idaho and *The Monkey Wrench Gang* occurs in the 1960s in Arizona, New Mexico and Utah—they are linked by the central role that water plays. Stegner and Abbey complement each other: their different approaches exemplify how water is a fundamental theme across genre and style in the literature of the West.

Stegner and Abbey are two of the best-known authors of Western literature of the twentieth century. Stegner, born eighteen years before Abbey, writes with a reserved style, while Abbey is full of emotion—especially anger and frustration toward the government. Abbey is older than the youthful protestors of the Vietnam War, but he writes with similar conviction, style, and purpose. Wallace Stegner, a professor of English at Stanford and a Western History scholar, wrote *Angle of Repose* with a self-consciousness that cannot be found in the tongue in cheek tone of Abbey's *The Monkey*

Wrench Gang. The images of water in *Angle of Repose*—the stories of sheep drowning and the weight placed on the drowning of the main character’s daughter in the irrigation canal—are purposeful. Stegner uses these plot devices to illustrate the importance of water in the West, the degree to which people went to bring water to the desert, and the sacrifices made in order to find water. Water in *The Monkey Wrench Gang* is mentioned frequently but more often in an offhand, seemingly unconscious way often having to do with survival in the desert. It is also portrayed through the depiction of dams on the Colorado River. Abbey’s depictions of water are descriptive, highlighting the importance of water to survival and showing rivers to be the defining quality of the desert.

Water has a duality that makes it attractive in literature.⁸ It is necessary for survival, but too much leads to death. This duality is evident in Stegner’s novel as the main characters work for years to bring water to the desert to make life there sustainable. When they finally get the funding and finish the construction of their first irrigation canal, their young daughter drowns as she plays near the water’s edge.

The Monkey Wrench Gang also shows the dueling qualities of water. The gang needs water to survive in the desert; they are always aware of how much water they have left in their canteens. Equal to their desire for water is their desire to see the Glen Canyon Dam destroyed, releasing the water from Lake Powell and restoring the Colorado River to its natural state.

These two novels are also connected by evolving notions of scarcity and abundance. In *Angle of Repose*, the characters are confronted with the aridity of the West

⁸ “The substance that is considered ‘water’ or ‘fire’ varies with culture and epoch. And water is always dual. It tends to stand for the original couple—more often than not for the twins who before creation lay in each other’s arms” (Illich 5).

and as they look out on to the desert landscape, they see how it can be improved with the addition of water. In their view, there is a lack of water in the desert. In *The Monkey Wrench Gang*, the characters are surrounded by desert and the technologies that have been placed in the natural landscape to bring water to “solve” the problems of aridity. Instead of being struck by the lack of water, these characters see water in abundance in select reservoirs, artificially placed by humans. In place of desert, they see green golf courses in Albuquerque and fountains shooting water hundreds of feet in the air in Vegas. The gang sees these artificial signs of water as a bad thing, believing that “progress” has ruined the natural world.

Stegner wrote *Angle of Repose* just four years before Abbey published *The Monkey Wrench Gang*. The two authors had similar environmental concerns but a different focus. Abbey concentrated on anarchy as a means to save the wilderness and Stegner worked to create protection of wild lands through policy. In Abbey’s writing (in both his fiction and nonfiction), there is a conscious desire to change the way that he thinks of the natural world. He wants to be less anthropocentric. Stegner wants to protect the wilderness, but he does not profess a desire to change the way of looking at the world from a humancentric lens. He is interested in thinking through the myths of the American West and the results of these myths.⁹ In *Desert Solitaire*, Abbey follows the teaching of deep ecology, which values nature for its own sake and rejects the idea that “human endeavor is the central aim of life and that all other life is of inherently lesser value” (Cassuto 16). This idea is also found throughout *The Monkey Wrench Gang*,

⁹ These myths include the myth of the frontier, the myth of the garden, the myth that rain follows the plow, the myth of western individualism, manifest destiny, etc.

where the characters work tirelessly bring the desert back to its original pre-human—at least pre-United States—existence.

Abbey and Stegner are often cited in the same books, reviews, and histories because of their connection to Western American literature as well as their links to environmental movements. *The Monkey Wrench Gang* led to the creation of Earth First!, a radical environmental rights group. They used a wrench (as in “monkey-wrenching”) for their symbol and Edward Abbey spoke to the group a number of times. Similarly, Stegner is known for “The Wilderness Letter” in which he advocated for protection for wild areas. His letter facilitated the passage of the Wilderness Act of 1964.

The two authors were also acquaintances. Edward Abbey was in Stegner’s creative writing program at Stanford University for a summer in 1957. Stegner described his experience of teaching Abbey:

He attended faithfully, made great sense in class, had all his later attitudes well in place but did not express them quite so forcibly as he did later... I don’t think he was particularly happy at Stanford—indeed he barely broke the surface—and the reason was the reason for his later great success: he yearned to be back in the sagebrush and not hanging around in classrooms. I respected him greatly, both for his environmental views and for his often manic writing ability, and I think he respected me; but the circumstances were not the kind that permitted the growth of real acquaintance (qtd. in Gessner 11).

In a way that illustrates their difference style as authors, Abbey described Stegner as “baggy-eyed” (Loffler 64). The two authors names also appear in blurbs on the backs of each other’s books. Although they were from different generations, they operated within the same sphere of Western American Literature.

In the following chapters, I offer an account of *Angle of Repose* and *The Monkey Wrench Gang*, showing the role of water in the literature of the American West. With this paper, I hope to highlight the importance of literature in understanding our history and the shaping of our environment, and thus to make prominent the topic of water scarcity in the time of climate change.

CHAPTER ONE: *ANGLE OF REPOSE*: WALLACE STEGNER, TRADITION, AND
NARRATIVES OF THE AMERICAN WEST

1. Background: Wallace Stegner and a Brief History of the American West

Wallace Stegner was known as the “Dean of Western Writers”—an appropriate title for one who spent most of his life thinking about, writing, and living in the American West. Stegner was an anomaly in the mid-twentieth century academy; he grew up in small and large western towns, getting his B.A. from the University of Utah and Ph.D from the University of Iowa. His success as a writer of the West was strengthened by his intimate understanding of the frontier mentality.

Born in 1909 in Lake Mills, Iowa, his childhood was defined by the restlessness of his father, George Stegner. George Stegner cut a larger-than-life figure and became the model for several fictional characters in Stegner’s work, most notably in *Big Rock Candy Mountain*. His mother, born Hilda Paulson, was the daughter of Norwegian immigrants. She was as sweet, supportive, and protective of her children as George Stegner was tough. The Stegner family moved frequently, always off to the next thing that seemed promising. George Stegner looked for ways to make more money faster and often operated outside the law.

In a period of relative stability, the family spent five years as farmers in Eastend, Saskatchewan—as much a frontier town as could be found in the early twentieth century.¹⁰ The family farm thrived at first and produced wheat that sold well in the World

¹⁰ Stegner discusses life in Eastend in *Where the Bluebird Sings to the Lemonade Springs* (5).

War I market. Then came a set of bad years; first too much rain that caused the crop to mold, then several years of drought where fields turned to dust. Eastend was a new town, and with the railroad it had some promise of expansion. The years of drought wore on and after five years of trying to make a life as farmers in Canada, they moved back to the States, first to Montana, then Utah and California. The Stegners faced a life typical of the nineteenth century and the boom and bust cycle of the frontier.

These early years were formative in Wallace Stegner's life. He witnessed first-hand the consequences of the dominant myths, from Manifest Destiny to the myth of the garden, which drove the development of the West.¹¹ His father was a prime example of the type of man who, with hopes and dreams of striking it rich, brought his family west only to be defeated over and over again as the harsh environment did not provide the water or minerals as he hoped.

Wallace Stegner explained in interviews and in his writing that he felt at home in the West and despite the lost opportunities to his career could not stay away. Stegner wrote in his brief autobiography that, "we took the first opportunity to come back west" in what "is not an unusual life-curve for Westerners—to live in and be shaped by the bigness, sparseness, space, clarity, and hopefulness of the West, to go away for study and enlargement and the perspective that distance and dissatisfaction can give, and then to return to what pleases the sight and enlists the loyalty and demands the commitment" (*Where the Bluebird Sings to the Lemonade Springs* 20-21). Stegner left a sought-after

¹¹ The myth of the garden is the belief that a garden can be made to grow in the arid West. It is the idea that it is our God given right to use land and to change the environment as we like. *Angle of Repose* is the story of loss and regret that comes from the misinformation that the land in the West was available, free, and could, with a little hard work, be transformed into a garden. In this novel, Stegner shows both the myth of the frontier and the myth of the garden and the result of their failures to produce the idealism they promoted.

teaching post at Harvard and with his wife moved to California. Although they would move again, they would always remain in the West.

In his nonfiction, Stegner often discussed aridity and how it was chiefly responsible for the shaping of Western ideology, culture, and lives. As he explained,

Aridity has been a difficult fact of life for Americans to accept, and an even more difficult one for them to adapt to. For nearly a half century after Lewis and Clark, we avoided, or hurried through, the dry plains that Pike and Long called the Great American Desert and thought unfit for human habitation. But by the 1860s we were pushing the agricultural frontier out into Kansas and out into the Platte Valley, and were misled by a wet cycle into believing that settlement improved the climate, that rain followed the plow.¹² By the 1880s, when a ten-year drought withered homesteaders at the edge of the semi-arid lands, we began to shift from witchcraft to technology, and attempted to engineer aridity out of existence by damming and redirecting the streams (*Where the Bluebird Sings* xxiii).

Looking back on the history of settlement of the West, the most crucial fact has been a lack of water. While there have been periods in which there was more rain—that ironically occurred at the onset of the settlement—the West is defined by aridity.

Stegner wrote *Angle of Repose* in 1971. By this time, he had established himself as perhaps *the* writer of the American West, having written over twenty novels, short stories, and works of nonfiction that are predominantly set in the Western United States.

¹² An idea adopted by “boosters” such as William Gilpin as he advertised the arid plains of eastern Colorado.

Angle of Repose, often regarded as Stegner's best novel, is a work of historical fiction.¹³ The novel is based on the lives of real people, Mary Hallock Foote and Arthur De Wint Foote (Stegner renamed the couple Susan and Oliver Ward). *Angle of Repose* is the story of life on the frontier and Stegner shows throughout the novel how closely frontier life was tied to water. Like many people who went west in the nineteenth and twentieth centuries, the Wards realized that mining water had more potential than mining minerals and gems. Their choice to move from mountain mining camps to the arid plains of Idaho would eventually, through much trial and error and over decades, lead to a big house on acres of land with an orchard and a rose garden, an embodiment of the Jeffersonian ideal of the yeoman farmer.

The novel is narrated by the grandson of Susan and Oliver Ward, Lyman. Lyman is a retired sociologist writing in the 1960s. He is wheelchair bound after having one of his legs amputated. As the novel moves from the retelling of the lives of Susan and Oliver to the current life of Lyman, *Angle of Repose* is a story within a story. Lyman tries to disappear into the lives of his grandparents, but is constantly brought back to the present as he is forced to deal with his own life and the complications of aging and relationships. He lives alone in his grandparent's house and has decided to make a study of his grandmother's life. He does not type his story but records it on tapes that are then transcribed by a family friend's daughter. As a family history, the spoken voice on the tapes has a personal touch. Lyman speaks as if he is talking to his grandmother, often referring to her as if she was in the room.

¹³ Some reviewers have said that Stegner toed and even crossed the line between fiction and nonfiction in *Angle of Repose* in a way that makes problematic his lack of citation and due respect. I discuss this controversy in the third section of this chapter.

While the story begins in New York with the introduction of Oliver Ward and Susan Burling at a New Year's Eve Party, it does not linger for long in the East. Oliver Ward first goes west in 1868 and Susan joins him there in the summer of 1876. A brief timeline of the history of Anglo settlement of the West provides a framework to the novel. The "West" had been the subject of exploration since the sixteenth century when Spanish explorers first discovered the vast lands to the north of Mexico.¹⁴ The Grand Canyon was shown to Francisco Vasquez de Coronado in 1540 by Hopi guides as he searched for the fabled Seven Cities of Gold. Two hundred and fifty years later, President Jefferson made The Louisiana Purchase (1803). Shortly after, the Lewis and Clark Expedition was organized and set off to explore and map the newly acquired lands (1804 to 1806). However, the years before and between the Spanish explorers' first glimpse of the region and Lewis and Clark's exploration were not empty of people of European descent. There were fur traders, the Daniel Boones and the Kit Carsons. Mormon pioneers settled in the Salt Lake area in late 1847. The first of the gold rushes that brought thousands to the West occurred in 1848. In 1869, John Wesley Powell was the first to lead an expedition down the Colorado River through the Grand Canyon. Colorado became the 38th state in August of 1876. These historical time stamps are important as they place the story of the Wards in the West after the first wave of pioneers. In the

¹⁴ The West had been the subject of exploration since the 1500s, but it was not without people. Dozens of Native American tribes had lived in the West for centuries prior to European exploration. Native Americans developed extensive networks of cities and towns and have since been discovered to have had developed advanced irrigation techniques. They had miles of ditches leading from rivers and streams that provided drinking water and irrigated farmland. The Hohokam tribe (300-1500 A.D.) was one of the biggest and most technically advanced, constructing canals and buildings that rivaled the Romans. Good accounts on the pre-European history of settlement, with specific attention to water projects can be found in Donald Worster's *Rivers of Empire*, Marc Reisner's *Cadillac Desert*, and Philip Fradkin's *A River No More*.

summer of 1876, Susan joined her husband in New Almaden, California in the Capitancillas mountain range near San Jose.

By 1876, the West was an established region with newly forming state governments. Still it was rough and uncivilized, and only the very beginnings of law and order could be found. The women that went west with their families had to bear the harsh winters, the deserts and the unending hardships like the men, but the West was considered to be a man's world. In the brief history provided in the previous paragraph, all the names—names that are familiar in U.S. History—are of white men.¹⁵ In naming Susan Ward the main character of the novel, Stegner shows his desire to show women's role in shaping the West. He could have easily written the story from the perspective of Oliver. By telling the story from Susan's point of view, the exploration of the West has a different tone and takes on a new meaning. Novels and films that take place in the West—Westerns—are about gunslingers, cowboys, gold mines, and cattle ranchers. They are about tough and cool cowboys (e.g. John Wayne) who save a town or family from the bad guys (easily identified by their black hats). In *Angle of Repose* Stegner shows a different side of the American West. Going west was not a dream of Susan's, but she made the most of it, and thrived in ways that her husband did not.

On the surface, *Angle of Repose* is not about water scarcity. It is about the lives of two people who make the journey west and try to lead successful lives on the frontier. However, every story about the West is inescapably tied to water and *Angle of Repose* is no exception. To the first people journeying west, the land west of the one hundredth

¹⁵ Patricia Limerick provides a detailed account of the historiography of the American West in *The Legacy of Conquest*. She gives a fresh perspective of western history by looking at the conquest of the West from the point of view of minorities.

meridian was a desert that they needed to make their way across quickly before winter hit and passage became extremely difficult or impossible. Although he was primarily a scholar of English, Wallace Stegner was interested in history and wrote several histories of the region. In these books and in lectures, he explains how the West was perceived by the first explorers: “Lieutenant Zebulon Pike, sent out in 1806 to explore the country between the Missouri and Santa Fe, had called the plains the Great American Desert. In 1819 the expedition of Major Stephen Long corroborated that finding, and for two generations nobody seriously questioned it” (*Where the Bluebird Sings* 70). The Great American Desert was written on maps across the region between the Mississippi River and the Rocky Mountains. The plains were dry and water was difficult to find. To the first explorers and the pioneers who followed them, this “desert” was simply the space that must be crossed in order to get to the west coast.

Wallace Stegner spent much of his career thinking and writing about the one hundredth meridian. He discovered the writings of Major John Wesley Powell in college and made an effort throughout much of his work to disseminate Powell’s understanding of the ecology of the West. He often wrote about the great mistake Congress made in ignoring Powell’s advice on how to adjust the division of land west of the one hundredth meridian. In “Living Dry,” originally published in 1987 and often reprinted, Stegner explains the importance of the one hundredth meridian: “Actually it is not the arbitrary 98th meridian that marks the West’s beginning, but a perceptible line of real import that roughly coincides with it...This is the isohyetal line of twenty inches, beyond which the mean annual rainfall is less than the twenty inches normally necessary for unirrigated crops” (*The American West as Living Space* 5). The limited amount of rainfall west of

this imaginary line meant that the lives white settlers had lived in the eastern United States and for centuries prior in Europe—the only life that they had ever known or could understand—would be impossible. They would have to shape the land differently, and in turn the land would shape their communities. There was not enough water to adopt the same riparian laws or the same farming methods in the West and no amount of boosterism could change the amount of rainfall.¹⁶ Settlers would have to fight and would often lose the battle against aridity.

The laws concerning homesteading were a part of what John Wesley Powell hoped to change in the West. In *A Report on the Lands of the Arid Region of the United States* (first published in 1878), Powell argued that the lands west of the one hundredth meridian were too dry and must be dealt with differently from those in the east. He foresaw complications both with farming and pasturage. He explained that the practice of the General Land Office of drawing arbitrary lines on a map to form square-shaped one hundred and sixty acre “homesteads” was not fair, nor did it make sense when it came to western land. Many of these plots would be far from any water source and essentially useless. Powell argued that the land west of the one hundredth meridian should not be

¹⁶ Stegner discusses boosterism and its role in the building of the West: “the boosters and the politicians always proclaimed that rain followed the plow; free land and movement westward were ingrained expectations. Habit, politics, and real estate boosterism won out over experience and good sense, and that is part of the history of the West, and of western landscape” (*Where the Bluebird Sings* 51). Marc Reisner has a great explanation for the creation and dominance of the theory “rain will follow the plow.” He writes, “this enormous gush of humanity pouring into a region still marked on some maps as the Great American Desert was encouraged by wishful thinking, by salesmanship, that most American of motivating forces, and, most of all, by natural caprice. For a number of years after 1865, a long humid cycle brought uninterrupted above-average rainfall to the plains. Guides leading wagon trains to Oregon reported that western Nebraska, usually blond from drought or black from prairie fires, had turned opalescent green. Late in the 1870s, the boundary of the Great American Desert appeared to have retreated westward across the Rockies to the threshold of the Great Basin. Such a spectacular climatic transformation was not about to be dismissed as a fluke, not by a people who thought themselves handpicked by God to occupy a wild continent. A new school of meteorology was founded to explain it. Its unspoken principle was divine intervention, and its motto was ‘Rain Follows the Plow.’ Since the rains coincided with the headlong westward advance of settlement, the two must somehow be related” (Reisner 35-36).

divided into one hundred and sixty acre plots, but divided based on the type of land and what homesteaders wanted to do with the land. He also argued for gerrymandering in order to increase the number of plots that had access to water. He made the point that one hundred and sixty acres was far too much land to productively farm in arid country because it would be impossible to stretch the limited water supply to so many acres. Additionally, one hundred and sixty acres was not enough for people who wanted to use the land for pasturage. Grasses in arid climates take longer to regrow after being eaten and so animals would need more land for grazing to prevent erosion. For context, Marc Reisner reports that one hundred and sixty acres was about enough to raise just five cows.¹⁷ Unfortunately, Congress chose not to follow Powell's advice, and because of the resulting poor land management caused disasters like the dust bowls.¹⁸

Powell also correctly identified the future role of the federal government in the West. He understood that because most of the water was located in rivers that were too powerful for a few individuals or even cities and states to tame, the federal government would have to help fund and organize water projects. Stegner wrote about the role of the federal government in the West in "Striking the Rock," one of the essays included in *Where the Bluebird Sings to the Lemonade Springs*. He writes:

¹⁷ Congressmen, eastern news editors, and the General Land Office did not realize that land west of the one hundredth meridian was useless unless homesteading practices changed. "They were unaware that in Utah, Wyoming, and Montana—to pick three of the colder and drier states—there was not a single quarter section on which a farmer could subsist, even with luck, without irrigation, because an unirrigated quarter section was enough land for about five cows" (Reisner 43).

¹⁸ On Powell's *Report*, Stegner wrote: "He might have spared the West the dust bowls of the 1890s, 1930s, and 1950s, as well as the worst consequences of river floods. He might have saved the lives and hopes of all the innocents who put their straddlebugs on dryland homesteads in the Dakotas, Kansas, Nebraska, and Montana. But the boosters and the politicians always proclaimed that rain followed the plow; free land and movement westward were ingrained expectations. Habit, politics, and real estate boosterism won out over experience and good sense and that is part of the history of the West, and of western landscape" (*Where the Bluebird Sings* 50-51).

Early water engineers and irrigators bit off what they and the local community could chew. They harnessed the streams they could manage. Some dreamers did take on larger rivers, as Arthur Foote took on the Boise, and went broke at it. By and large, by 1890, individual, corporate, and cooperative irrigators had gone about as far as they could go with water engineering; their modest works were for local use and under local control...all through the 1890s the unsatisfied boosters called for federal aid to let the West realize its destiny, and in 1902 they got the Newland Act. This permitted the feds to undertake water projects—remember that water was state owned, or at least state regulated—and created the Bureau of Reclamation (79).

The Bureau of Reclamation was responsible for creating large water projects that even states could not manage. Through federal funding, the Bureau dammed large rivers like the Colorado, and sent the water hundreds of miles, up over mountain ranges and across deserts, and sold the water to cities and gave it away at subsidized rates to farmers.¹⁹

The way that towns have been settled and farm and range lands chosen throughout the West is based on decisions made by federal agencies like the Bureau of Reclamation. The locations they picked for water projects and the directions they chose to send the water had a huge impact on communities, both creating and ruining towns and

¹⁹ Donald Worster dives into a description of the beginning of federal presence in the West on page 169 (and continues through most) of *Rivers of Empire*. Marc Reisner does the same beginning on page 120 of *Cadillac Desert*.

farmland.²⁰ Stegner explains the complicated relationship between the need for federal assistance and the western mythology of individualism:

The pervasive presence of the federal government as landowner and land manager, the even more noticeable federal presence as dam builder and water broker, the snarling states' rights and antifederal feelings whose burden Bernard DeVoto once characterized in a sentence—"Get out and give us more money"—those are all consequences, and by no means all the consequences, of aridity (*Where the Bluebird Sings* 61).

Western American identity is tied to independence. This identity formed at the outset of frontier settlement, before statehood and law came to territories in the West. Yet people in the West need the resources of the government more than they would like to admit. In many cases, towns and cities owe their survival to the work of the Bureau of Reclamation.²¹

²⁰ While an example of state, not federal power, the fight over the Owens River is an example of how water projects could change the destiny of towns and cities. The Owens River water was redirected, taken it from the valley and sent to the city of Los Angeles. Farmers in the Owens River Valley could do nothing to keep their water and watched as the city took it and their fields turned to dust. The story of Owens Valley was made famous in the film *Chinatown*.

²¹ Stegner discusses the animosity between westerners and the federal government: "Westerners who would like to return to the old days of free grab, people of the kind described as having made America great by their initiative and energy in committing mass trespass on the minerals, grass, timber, and water of the Public Domain, complain that no western state is master in its own house... There are periodic movements...to get these lands 'returned' to the states, which could then dispose of them at bargain-basement rates to favored stockmen, corporations, and entrepreneurs" (*The American West as Living Space* 13).

2. Water in *Angle of Repose*

An understanding of western United States history provides context for the story presented in *Angle of Repose*. In the following section I show Wallace Stegner's resolve throughout the novel to give readers a sense of the importance of water in the West. Through the use of figurative language and the symbolism around the drowning of Susan and Oliver's daughter, Stegner demonstrates that water is at the center of a novel about life on the frontier. By examining Stegner's wide usage of imagery involving water and his decision to make the drowning of the main character's daughter provide the climax of the novel, I illustrate literature's ability to provide an understanding of environmental issues like water scarcity.

Angle of Repose is filled with references to water, but none are as poignant as the death by drowning of Susan and Oliver's youngest daughter, Agnes. The novel builds to this fatal event and in this process highlights the role of water in the arid West. Water is double-edged; it creates and it destroys. Water creates the possibility for life and when the Wards realize the potential fortune in being able to bring water to the desert, they quit the mines and begin to plot irrigation projects. They work for years trying to find ways to divert water from rivers in order to sustain agriculture, towns, and cities. Water is also a powerful force of nature that can destroy life. While they live near a swift river in Boise Canyon, Susan worries daily that her children will accidentally fall in and be swept away. She does not fear the irrigation canal in Boise in the same way and allows her young daughter to play along the banks where she accidentally falls in. This death symbolizes the cost of building cities in the desert. In order to properly explain this purposeful death—

for Agnes's death has a purpose: it provides Stegner with the means of showing the cost of water manipulation in the West—it is necessary to understand the Wards' dreams, the substantial effort they made, and hardships they endured to create a life for themselves in the West.

The death of their daughter in the canal they have built is a trauma that crosses generations and is part of the reason why Lyman has chosen to tell this story. However, there are many other instances where water, or its opposite aridity, is used as metaphor. The volume of the imagery around water and aridity seeps through the novel, demonstrating how these environmental factors are at the core of the text. In this section, as I examine the novel as a whole, I also provide examples of how water is hidden through the imagery of Lyman descending the stairs in his wheelchair and as a metaphor about Susan's waning hope of finding success on the frontier.

Set in the late 1960s, the novel begins with the disabled narrator Lyman having just moved into his grandparents' house. He worries that his son will force him to move into an assisted living facility if he is unable to show that he can live on his own. The first reference to water is found on the second page with a description of how Lyman moves around his house as he provides readers with the context for his grandparents' life story. Lyman begins:

As a modern man and a one-legged man, I can tell you that the conditions are similar. We have been cut off, the past has been ended and the family has broken up and the present is adrift in its wheelchair...I have a son who, though we are affectionate with each other, is no more my true son than if he breathed through

gills. That is no gap between the generations, that is a gulf. The elements have changed, there are whole new orders of magnitude and kind. This present of 1970 is no more an extension of my grandparents' world, this West is no more a development of the West they helped build, than the sea over Santorin is an extension of that once-island of rock and olives (*Angle of Repose* 17-18).²²

Words like “adrift,” “gills,” and “gulf” all allude to water. Stegner then directly mentions the sea. A few lines later, Lyman says, “My grandparents had to live their way out of one world and into another, or into several others, making new out of old the way corals live their reef upward. I am on my grandparents' side” (*AoR* 18). Finally, he describes the movement of his wheelchair going down the stairs that have been converted into a ramp, “I went down like a diver submerging, the floor flowed over my head” (*AoR* 20). The images continue to describe his thoughts about his son and the experience of moving down the stairs to answer the doorbell in terms of water—specifically in terms of the ocean. Even the nature of Lyman's disability, the fact that he has only one leg (like a stereotypical pirate), brings forward images of the aquatic.

Through understanding the conditions of the Wards' lives in the West, readers are given a glimpse of history, science, and policy. The founding of towns and cities in the arid West was propelled by boosters who claimed to have proof of successful settlement. Powell was the first to attempt to develop a specific western land policy. By pulling at the foundations of this novel and by looking at the portrayal of water, one can see the role of literature in our understanding of our environment. *Angle of Repose* is built entirely

²² From here on, I will use *AoR* in citations for *Angle of Repose*.

around the fundamental condition that the West is arid. Stegner's perspective on the way humans have impacted the environment is important in forming readers' opinion on the treatment and usage of water in the West.

While Oliver starts out as an engineer of mines, he later makes a career of planning diversion projects and dams. In the Western United States, water was mined just as intensely as stones and minerals and it was more important to the survival of settlements and growth. While people were brought west with the promise of nuggets of gold, they stayed and formed towns, cities, and states which needed water to grow crops, raise livestock, and survive.²³ Susan's first question upon arriving in New Almaden demonstrates the importance of water. While looking out the window of the carriage, she asks Oliver, "Trees?...I thought it would be all barren...If there are trees maybe there's a stream. Is there?" Oliver responds, "Not up at our place" and so Susan asks, "Where do we get our water?" to which Oliver somewhat joking replies, "Why, the housewife carries it from the spring" (*AoR* 82). The first thing that Susan wonders about as she arrives in her new home has to do with water. She is surprised because she had pictured living in the dusty, dry land that defines the lower elevations of the mountains in California. She has just traveled by train across the entire country, through the fields of the Midwest, across the Rocky Mountains, into the deserts of the Great Basin, and out over the Sierra Nevadas. Already she has become intensely aware of the importance of water in the West.

²³ Accounts of easily attained riches from the mountains of California give a sense of the hysteria during the Gold Rush. A first person account, "Early recollections of the mines, and a description of the great Tulare valley by J.H Carson" (1852) provides a sense of the excitement: "Then he told me that it was gold, and that he had made it in five weeks at Kelsy's and the dry diggings (where Placerville now is.) I could not believe it but told him the proof would be in his bag, which was soon opened, and out the metal tumbled; not in dust or scales but in pieces ranging in size from that of a pea to hen's eggs; and, says he, 'this is only what I picked out with a knife.'"

Susan and Oliver live in California for a year and give birth to their first child, Lyman's father Ollie. A few months later Oliver quits his job as the lead engineer of the New Almaden Mine and Susan and Oliver separate for a time as he tries to find work elsewhere. Susan and Ollie go back to New York and Oliver works in camps that are unfit for women and children. (One of these camps is the infamous Deadwood). Eventually, Oliver gets a solid job in Leadville, Colorado and sends for his wife and son.

While traveling to Leadville, Susan tells Ollie stories to keep him entertained. Lyman describes one of the stories that he remembers his grandmother telling him as a child and mentions that it was eventually reworked, then published and illustrated as a short story. Lyman imagines that his grandmother would have told his father the original ("true") story during the long train journey:

But he [Ollie] didn't want to go back to sleep. He lay and whined until she diverted him with a story about how some of her grandfather's sheep had been swept down the millrace and drowned, but she and Bessie [Susan's sister] had rescued a lamb and fed it on a bottle until it grew up to be a pet and followed them everywhere like Mary's Little Lamb (*AoR* 283).

The language here is notable. In a story about a dam that has broken and one that tells of sheep that have been drowned, Stegner also uses the word "diverted." In this case he uses "divert" instead of "distract." He could have easily said that Susan tells this story from her childhood to "distract" Ollie from the boredom of the Kansas landscape. The word "diverted" frequently pertains to water, as streams were diverted to water fields and used

as a method in mining, and this word choice cannot have been accidental in a story about a dam that has burst.

Lyman, often sliding from past to present in the narrative of his grandmother's life, writes that the story of drowning sheep was later altered, but still clearly originated from this childhood experience. In what will become important in the novel's climax, he makes a parenthetical comment:

(Years later...she wrote another story about a sick lamb left behind by a Basque herder, and illustrated it, using two of her children as models, and sold it to St. Nicholas...The serious boy of ten or so with his little sister beside him, the two of them hunkered down offering a baby's bottle to the lamb, is incontrovertibly my father. For some reason the picture makes me feel old and sad...I can see her, when she had finished reading to me, sitting in the porch swing with her neat head bent, her lips pursed, thinking. Then, in one eye that I could see, an abrupt round lens of water leaped out, was forced out as if under pressure. It did not run down her cheek, it literally sprang from her eye and hit the page wetly. 'Oh, pshaw!' she said, and rubbed it away angrily with the heel of her hand. Her crying, so sudden and without motivation, puzzled me and made me solemn. Only later, thinking about it, I have come to realize that it was not my father's young face that made her cry, and certainly not the lamb, which died within twenty-four hours. It was the picture of Agnes, the little girl. There was a lamb that was not rescued. Grandmother wore that child like a crown of thorns) (*AoR* 284).

The word choice in this second telling is significant as well. The description of the tear that “leaped out,” “forced out as if under pressure,” and “literally sprang from her eye” is evocative of the moment a dam springs a leak. This story has replaced drowning with sickness, but still the images that come from Stegner’s purposeful syntax of tears springing like broken dams adds more imagery of water to the novel. This childhood remembrance is later shown to be very important in the lives of Susan and Oliver Ward.

The word “divert” and the imagery of Susan crying takes on a larger meaning when taken in the context of the end of the novel when Lyman reveals the story behind Agnes’s death.²⁴ Agnes dies in an irrigation canal that Oliver planned and constructed. He has diverted part of the Boise River, bringing it to the valley so that people can irrigate farms and gardens and make life successful in the arid plains of western Idaho. Stegner’s word choice—especially in conjunction with drowning sheep (frequently symbolic of children)—demonstrates the importance of water in the West. These two stories show how the novel cannot be separated from the subject of water. Both versions of these stories are related to water, having to do with both with water scarcity (water must be diverted and dammed to be used) and abundance (when the dam breaks, the sheep drown.)

When Susan and Oliver arrive in Leadville, they are first very happy. Their separation is over. It is summer and Leadville is a town bursting with promise. They meet some of the biggest names of the day (Helen Hunt Jackson a famous poet and writer, her husband William Jackson a wealthy banker and railroad tycoon, Clarence King the first director of the U.S. Geological Survey, and others of both wealth and learning). During

²⁴ The word “agnes” means lamb in Latin.

the evenings, Susan holds a salon in their one room cabin. They discuss the treatment of Native Americans and the work of the Survey. Powell's name is mentioned, but only in passing. These people are Stegner's heroes, the men and women of the frontier whom he admired greatly. After one of these evenings, King offers Oliver a job with the Survey but he decides to turn it down to stay with his family.

The mine is not as productive as they hope and eventually Susan and Oliver leave Leadville and move to Mexico where Oliver works as the lead engineer in another mine. The mine fails and they move back to the States. Susan and Ollie have a short stay in New York and Susan gives birth to a girl, Bessie. They follow Oliver west again when he sends word that he has found dependable work. This time they find themselves in a camp in Boise Canyon, Idaho. Oliver has begun to study irrigation and instead of working in mines, he surveys rivers and canyons for good locations for dams and diversion projects. Frank Sargent, a friend whom Oliver met and trained as an apprentice engineer in Leadville, has joined them in Idaho. Susan is doubtful about the change in direction of Oliver's work and complains, "'D-doesn't it upset a wife who is staying home and working and h-holding things together to hear that her h-husband isn't doing at all what she-what she thought he was doing, what they'd agreed he'd do, but is out, is off in some *wild* impossible scheme to bring water to two, three, what is it, three hundred thousand? Acres of desert. Didn't *I* deserve to know?'" (*AoR* 366). Susan has been pulled from one place to another as Oliver's work in mines begins with promise and ends in failure due to either a lack of minerals or disagreement with management. Now she has followed him west again, this time for irrigation.

It seems like all of Oliver's projects are doomed to failure and Susan begins to tire from the frequent moves that lead her family further from civilized life onto the frontier. To demonstrate her lost hope, Stegner employs the use of several metaphors, all of which pertain to water and aridity. Oliver asks Susan:

“Will you believe me when I tell you I'm just as confident I can carry water to that desert?”

She saw in his face that he had contracted the incurable Western disease. He had set his cross-hairs on the snowpeak of a vision, and there he would go, triangulating his way across a bone-dry future, dragging her and the children with him, until they all died of thirst. “I believe you're confident,” she said. “I know I'm not” (*AoR* 367).

The figurative language in this passage involves relating human ideas like visions and the future to the environment. The “snowpeak of a vision” is not a typical phrase, but it is representative of the mountainous landscape in which they live. In arid landscapes, snow is a signal of potential and hope as water becomes abundant as it melts in the spring. A “bone-dry future” works in the same way by turning thoughts of the future toward the environment. This figurative language is very picturesque. It brings forth images of the pioneers (who had also “contracted the incurable Western disease”) making their way west over mountain passes (“snowpeaks of a vision”) and across deserts where their work animals died, their bones left for the next pioneers to stumble across (“a bone dry future...until they all died of thirst”). These images are not accidental nor coincidental

but are very purposeful on Stegner's part. Through metaphors like these, he is able to convey the impact that the environment—especially the dryness—had on those who went west during the nineteenth century.

Before the dream of creating a garden in the desert could come true for the Wards, they would have to deal with endless hardship, disappointment, and tragedy. Susan was doubtful of irrigation engineering at first, but still, “Unwillingly she read about damsites, weather, rainfall, storage capacities, topography, soil analyses, placer production from the Snake River sands. She read two interviews with settlers already irrigating out of Boise Creek, and thought them enthusiasts of the same stripe as her husband” (*AoR* 368). She had begun to tire of following her husband to more and more remote places. Although she had followed her husband west, she had always imagined that it was a temporary exile, that eventually they would settle back home in New York. When she doubted how they would make money off of irrigation, Oliver showed her a map and explained, “We don't sell land, we sell water rights and water. The more settlers come in, the greater the need. That's when we'll build the dam and lengthen the canal line clear to the Snake. Here goes the canal, along the edge of the mountain here...” (*AoR* 368). Oliver saw the role that irrigation would play in Idaho. The land was very dry, but there were large rivers like the Boise and Snake, that only needed to be coaxed from their ancient river valleys and canyons and on to the flat land for settlers to make towns and cities in the desert.

As described by Lyman, the years in Boise Canyon were some of the best in Susan's life. After her initial doubt, she became excited about the potential of irrigation and began to embrace the idea of spending the rest of her life in the West. She even wrote her lifelong friend Augusta:

Oh, couldn't you and Thomas homestead a claim and lay the foundations for a western place of visitation? Quite seriously, it would be a profitable thing to do, and on 'desert' or 'timber-culture' claims there is no residence requirement as there is for a homestead. You only have someone make minimal 'improvements,' as they are called, and wait. Don't you want to join us in the making of a new country? Have you no impulse to see the banks of the Snake? Or is that one of those horrid Western names that put you off? (*AoR* 376).

As Susan began to see the potential in Oliver's irrigation schemes, she dreams of having her friends and family join her on the frontier. She wants her friends to buy homesteads in Idaho on worthless plots of dry land that will later be extremely valuable as irrigation canals bring water from the river.

During their time in Boise Canyon, Oliver and Susan have their third child, Agnes. While they don't make any money from the irrigation plans, Susan is able to keep earning money by illustrating novels for other authors and publishing some of her own short fiction stories. It was also during this time that she begins to fall in love with Frank Sargent. Although they begin with hopes and dreams of future green fields and reliable work in Idaho, eventually it becomes too hard to live off of hope. The Wards cannot support life in the Canyon and Frank and the others who have joined Oliver in his work leave for other jobs to make a living. Luckily, Oliver finds work through contacts from his Leadville days and receives a letter from Major John Wesley Powell, who has

succeeded Clarence King as director of the United States Geological Survey. Powell's letter states:

The Survey, recently charged by Congress with surveying all the rivers of the West, designating irrigable lands and spotting reservoir sites, could use his help. Captain Clarence Dutton, who would be in charge of the hydrographic survey, had recommended him warmly (there was an echo of one of these evenings in Leadville.) Major Powell understood that Mr. Ward's own project was temporarily inactive. Would he be willing to take leave from it for perhaps two years and sign on as regional assistant to Captain Dutton, taking as his province the Snake River Basin on which he had already done much work? (*AoR* 432).

Oliver is given an opportunity he cannot turn down and Susan and the children separate from him, moving this time to Victoria, on the west coast of Canada.

This separation was different from the previous ones. The effort to get funding for irrigation projects lead Oliver to drink. He tried and failed to find investors and would come home from Boise intoxicated. Susan, a Quaker, believed this to be a sin and a terrible weakness. When Oliver took the job with the Survey, Susan took her children away and hoped that he would stop drinking. As Lyman comments, "He had a chronic droth of the soul...Every now and then I guess he had to irrigate" (*AoR* 437). This statement provides yet another link to water, as Lyman's thoughts on his grandfather's alcohol problem is metaphorically linked to western water practices. It was disheartening, having a dream to make the land useful by bringing water to it, and having the skills to

get the job done, but not having the money to make it happen. Lyman does not blame his grandfather for drinking, and he does not blame his grandmother for finding comfort in the arms of another man.

Lyman believes that his grandmother and Frank Sargent had an affair. He was not sure if it was merely an emotional affair or also became physical, but imagines that Oliver's drinking and the stress from the unsuccessful attempts at irrigation led Susan to find solace in Frank. After Oliver's work with the Survey, Susan came back to Idaho and back to Oliver. She smelled his breath for signs of alcohol. She hoped that they could return to their old life, before Oliver started drinking. She also intended to forget about Frank, but Oliver had hired Frank to lead the construction of the "Big Ditch."

During his work with the Survey, Oliver was introduced to the right—wealthy and connected—people and was finally able to get the funding he needed to begin work on the irrigation schemes he had dreamed up while living in Boise Canyon. When Susan returns to Idaho, he was beginning work on two canals, nicknamed the Big Ditch and the Susan. In a letter to Augusta, Susan describes the work:

Meantime the 'Big Ditch' is alive with teams and scrapers, and the canyon resounds with blasting. It awes me to see how big this scheme is. In all the years I thought I was helping dream it, I hadn't the imagination to understand what I was dreaming. The big Ditch will be immense, a man-made river, and eventually will water nearly three hundred thousand acres—nearly five hundred square miles. There are countries in the world no bigger than that. There will have to be several storage dams, but those will come later (*AoR* 477).

The canals that Stegner describes are real canals in Idaho. The dams that are mentioned are real dams that are still in place today. The struggle that Oliver endured while trying to get financial support for building irrigation ditches and dams was also a realistic part of the building of the West. Oliver's ability to get funding for the work only after working with the federal government was indicative of how the infrastructure of water projects in the West would be built.

The climax of *Angle of Repose* comes when water finally comes to "the Susan." After years of work, Oliver is successful in getting water to flow through the canal, bringing water to the fields that had previously been sagebrush. However, it was only a partial success; at the same time work was suspended on the "Big Ditch" because the money ran out. Lyman explains that he was never told about this part of his grandparent's lives, but was always aware that something dreadful happened. He has had suspicions about the course of events and has newspaper clippings that seem to support them. He does not really know how to put words to the biggest tragedy in the lives of his grandparents, and so he reads from a newspaper article. As he flips through his clippings he says to the dictograph, "Let me find the crucial one—the first crucial one. Here it is. It says that on the evening of July 7 Agnes Ward, daughter of the chief engineer of the London and Idaho Canal, drowned in the Susan ditch after becoming separated from her mother while taking a walk" (*AoR* 534). Lyman takes this clip along with one written a few days later that states that Frank Sargent committed suicide by shooting himself in the head to form his theory of how Agnes drowned.

Lyman believes that Susan was walking by the canal with Agnes when she met Frank Sargent. He had been leading the construction of the “Big Ditch” which had been suspended indefinitely and was leaving Idaho to find work elsewhere. He imagines that Susan and Frank wanted to have one last meeting and lost track of the young girl as they walked through the brush. He explains,

It would not be easy to see him at her house, where Nellie, the children, John, Wan, the Malletts, Oliver himself, were always coming and going. It would have been awkward to ride up to the canyon camp to see him...But Frank still rode the Susan Canal nearly every day... Suppose she was truly afraid to meet Frank Sargent alone, and didn't dare give him her good-bye with others around? Who might she take along, as camouflage or protection? A child, maybe? A child of five, too young to understand speaking looks or the hidden emphasis of words? Young enough to be sent off to pick flowers or catch polliwogs while two adults held their tense, nearly silent interview? On that bench the sagebrush was four feet tall, tall enough for seated people to be hidden from sight, tall enough for a child to disappear in it within fifty feet (*AoR* 535).

It is too late when they realize that she is gone. Their yells alert Oliver and Ollie who are out riding, and they all search for Agnes. Ollie finds her body floating in the water.

Lyman adds the last sentence of the newspaper notice as proof for his version of events: “efforts by the father and by Mr. Frank Sargent to revive the little girl by artificial respiration proved unavailing.” He wonders, “efforts by the father *and by Mr. Frank*

Sargent. Where did he come from? Did he just pop into the action as he pops into the newspaper story, out of nowhere?" (*AoR* 536). Frank's love for Susan and his impending move from Idaho, the strange unexplained inclusion of Frank in revival efforts, and Frank's suicide supports Lyman's version of the sequence of events that led to Agnes's death. A few days after the funeral Susan, Ollie, and Bessie leave for the East. They drop Ollie off at school and head back to Idaho. Oliver leaves Idaho and does not return home for seven years. Lyman believes that Frank's suicide and Susan and Oliver's separation is proof that Frank and Susan were negligent, leading to Agnes's death.

Stegner's choice to have the young girl drown in the irrigation canal is notable as a statement about what happens when people try to change their environment. The tragedy comes when the desert is turned to a garden, when water is diverted from the river and shuttled miles away to be used to farm arid lands. It is unnatural, just as the death of a young person is unnatural. Stegner uses a well-known literary trope with the death of Agnes; a trope used by Shakespeare that goes back to ancient Greece: hamartia. The tragic flaw that the hero commits, often with the design of changing nature or the natural order, and leads to their death or the death of loved ones. Oliver and Susan want to change the natural order by bringing water to the arid plains. They act with hubris as they take on the role of the gods by changing the natural environment and the cost is their daughter's life.²⁵

3. Stegner's "big boo-boo" and the Place of Water in *Angle of Repose*

²⁵ Other examples where this literary trope is found include *Oedipus Rex* by Sophocles, *King Lear* by Shakespeare, and the movie *Chinatown*.

Angle of Repose is based on the lives of Mary Hallock Foote and her family. Like Susan she was an artist and author of the West. In the 1950s Stegner used Foote's writing in his 'The Rise of Realism' course at Stanford. He also met Janet Micoletau, one of Foote's granddaughters. Before writing *Angle of Repose*, Stegner asked the Foote family if he could use Mary Foote's letters in a novel and they gave him permission. As Susan Salter Reynolds writes in an article for the *LA Times*, Wallace Stegner's

“big boo-boo,” as one critic calls it, has for years been the topic of low-volume academic inquiry and private discussions about whether Stegner got more credit than he deserved for a book he wrote based on the life of fellow Western writer Mary Hallock Foote. Stegner had lifted large amounts of Foote's writing nearly verbatim from her lifetime of correspondence for his most famous novel, 'Angle of Repose' (Reynolds).

Stegner was criticized for how he used the Foote letters and for the lack of credit given to the original source. The only “credit” is in the epitaph where he writes: “My thanks to J.M. and her sister for the loan of their ancestors. Though I have used many details of their lives and characters, I have not hesitated to warp both personalities and events to fictional needs. This is a novel which utilizes selected facts from their real lives. It is in no sense a family history” (*AoR*).

As Reynolds reports, Stegner's biographer estimates that ten percent of “the novel is taken directly from Foote's work” (Reynolds). The controversy over the potentially inappropriate use of the Foote letters was an ongoing discussion within the literary

community. A drama was even created in 2001 in which Mary Hallock Foote and Wallace Stegner meet on stage as Foote watches helplessly as Stegner picks and chooses which of her words to use in his book.²⁶

Stegner often used the lives of real people as models in his novels and *Angle of Repose* was no exception. The difference in *Angle of Repose* from other novels like *Crossing to Safety* is that he copied some of his model's written work word for word. While he did receive written permission from Janet Micoleau to use Mary Foote's letters in a novel, the other Foote grandchildren were not aware that he was writing a book based on their grandmother's life. Reynolds explains that one of the reasons the family was upset by Stegner's use of their grandmother's work was the ways that he *altered* their grandmother's story. She writes that the,

Foote family was just as concerned about how he bent the facts of her life to the needs his fiction. Stegner made his character seem haughty, ill at ease in the West, unhappy with her husband and potentially a lesbian and adulteress. What most rankles the Foote family and fans of Mary Hallock Foote is that Stegner, in depending so heavily on Foote's own words and life in creating Susan, ultimately cast aspersions on the real woman (Reynolds).

Susan's life was closely modeled after Mary Foote. They both lived in many of the same western towns (New Almaden, Leadville, Michoacán, Boise, and Grass Valley) and were both successful artists. However, there were significant differences; the changes that

²⁶ This drama, titled "Fair Use," was written and directed by Sands Hall (Reynolds).

Stegner made to create Susan demonstrates the importance of aridity to literature of the American West.

Like Susan Ward, Mary Foote also lost a child. Unlike the fictional Agnes, the real-life Agnes died at the age of seventeen from complications from appendicitis. Stegner makes a conscious decision to change the cause of death to drowning. Lyman has been building up to the death of Agnes throughout the story of his grandmother's life and ends when he finally discloses this fatal tragedy. He explains to his ex-wife, "It's all over in 1890" (*AoR* 561). Susan lived another fifty years, but to Lyman, the story ends when Oliver and Susan lose a child. It breaks their marriage. After a few years they reconcile in a way, and Oliver comes back to their house in Idaho. But, as Lyman tells his ex, "he never forgave her...She broke something she couldn't mend. In all the years I lived with them I never saw them kiss, I never saw them put their arms around each other, I never saw them touch!" (*AoR* 563).

Published first in 1987, the chapter "Striking the Rock" appears in *Where the Bluebird Sings to the Lemonade Springs*. It is instructive, as it shows Stegner's perspective on humanity's endeavor to change the environment. He tells the story of an architect who proudly showed him a house he has built in the middle of the desert, a house that "didn't fit the country, it challenged it" (78). In his explanation, Stegner proclaims his opinion on this desert house. Examples like this are useful as Stegner's own voice is able to stand out, no longer obscured through the genre of the novel. Such statements suggest that Stegner has Susan and Oliver's daughter drown with the intent of showing what happens when we attempt to change nature. In his concluding thoughts on this desert house, he writes:

That desert house seemed to me, and still seems to me, a paradigm—hardly a paradigm, more a caricature—of what we have been doing to the West in my lifetime. Instead of adapting, as we began to do, we have tried to make country and climate over to fit our existing habits and desires. Instead of listening to the silence, we have shouted into the void. We have tried to make the arid West into what it was never meant to be and cannot remain, the Garden of the World and the home of multiple millions (*Where the Bluebird Sings* 78).

At the climax of his most famous novel, *Angle of Repose*, Stegner shows the consequences of trying “to make country and climate over to fit” human needs and desires by altering the cause of Mary Foote’s daughter’s death from complications from appendicitis to drowning. Even more telling is that she does not drown in a natural river but in a manmade irrigation ditch, thereby implying the consequences of remaking the West into a garden.

4. Stegner’s Legacy: “The Wilderness Letter”

Stegner is perhaps best known for “The Wilderness Letter” written to David Pesonen, a friend and environmental lawyer from the San Francisco area. Written in 1960, this letter was used to introduce The Wilderness Protection Act of 1964. The ideas in Stegner’s letter can be found in the legislation that proclaimed the value of preventing development throughout all areas of the country. In the letter, Stegner argued for the

preservation of the wilderness because of the value that just the *idea* of wilderness holds for American citizens:

What I want to speak for is not so much the wilderness uses, valuable as those are, but the wilderness idea, which is a resource in itself. Being an intangible and spiritual resource, it will seem mystical to the practical minded—but then anything that cannot be moved by a bulldozer is likely to seem mystical to them. I want to speak for the wilderness idea as something that has helped form our character and that has certainly shaped our history as a people (*The Sound of Mountain Water* 140).

Stegner felt strongly about conservation. He wrote the letter to Pesonen, who at that time worked for the ORRRC (Outdoor Recreation for America). As Stegner reflected twenty years later in an article for *The Living Wilderness Magazine*, “I had been lucky enough to grow up next to wilderness, or quasi-wilderness, of several kinds, and I was prepared to argue for the preservation of wilderness not simply as a scientific reserve, or a land-bank, or a playground, but as a spiritual resource, a leftover from our frontier origins that could reassure us of our identity as a nation and a people” (qtd. in “Introduction to the ‘Wilderness Letter’”). The Wilderness Protection Act passed in September 1964, for the first time giving legal support to the value of undisturbed wilderness.

T.H. Watkins, environmental writer and historian of the American West, knew Wallace Stegner for twenty-seven years and provided the afterword to *Where the Bluebird Sings to the Lemonade Springs*. Watkins described Stegner’s legacy as a

conservationist, listing the positions he held within the environmental activist community:

He founded one organization, the Committee for Green Foothills; served for a time as advisor to Interior Secretary Stewart Udall; sat on the National Parks Advisory Board, the board of the Sierra Club, and the governing council of the Wilderness Society; and was emotionally and often directly involved in most of the major conservation issues from the postwar years until his death. Most important in this context, of course, was his writing. He joined a body of environmental writers whose influence, for the first time in our history, was a major force in shaping public policy across a wide variety of conservation issues, from the building of dams in the Grand Canyon to the threatened disposal of the nation's public land system, from species preservation to the Wilderness Act of 1964. What is more, he gave voice to the emotional content of the environmental movement as no one else did, particularly in "Wilderness Coda,"²⁷ in which lies a literary moment, like Thoreau's "In wildness is the preservation of the world," whose echoes will reverberate a generation later and will probably be felt for generations to come: "We simply need that wild country available to us, even if we never do more than drive to its edge and look in. For it can be a means of reassuring ourselves of our sanity as creatures, a part of the geography of hope" (232-233).

²⁷ "The Wilderness Letter" is also referred to as "Wilderness Coda."

Stegner was part of the cohort of environmentalist writers (including Aldo Leopold and Rachel Carson) whose work led to the passage of environmental legislation and changed the public's view on humanity's responsibility to the natural world. A talented writer who was intimately aware of the myths of the frontier, he was uniquely able to argue for the value of keeping some of the land in the United States free from human development. He gave voice to legislation and the words of his letter were borrowed by environmental groups around the globe.²⁸

Stegner's work in conservation and the arguments he makes in "The Wilderness Letter" can also be located in his most famous novel, *Angle of Repose*. The novel is based on the lives of real people and the ways in which Stegner tells their story highlights the issues on the frontier surrounding water. Mary Foote's letters are an important part of the novel, but the figurative language and the dialogue—the artistic license Stegner takes in the telling of Foote's story—show a distinct focus on water. The first question Susan asks upon arriving in the West is about where they will get their water. It is a question she repeats when she arrives in Leadville. Susan tells Ollie of a milldam that breaks and drowns a herd of sheep and fears the swift water in Boise Canyon. Finally, Oliver and

²⁸ Stegner was surprised at the wide dispersal and use of "The Wilderness Letter," writing: "Secretary of the Interior Stewart Udall had picked it up and used it as the basis of a speech before a wilderness conference in San Francisco, and the Sierra Club had published it as a document of that conference. It was published in the Washington Post and the ORRRC report, and I included it in my collection of essays, *The Sound of Mountain Water*. Before long, some friend of mine saw it posted on the wall in a Kenya game park. From there, someone in South Africa or Rhodesia carried it home and had an artist named C. B. Cunningham surround it with drawings of African animals and birds, and turned it into a poster which the Natal Park Board, a Rhodesian kindness-to-animals organization and perhaps other groups have distributed all over south and east Africa. A quotation from it captions a Canadian poster, with a magnificent George Calef photograph of caribou crossing river ice; and I have heard of, but not seen, a similar Australian poster issued with the same intent. The Sierra Club borrowed its last four words, 'the geography of hope,' as the title for Eliot Porter's book of photographs of Baja California. Altogether, this letter, the labor of an afternoon, has gone farther around the world than other writings on which I have spent years" (qtd. in "Introduction to the 'Wilderness Letter'").

Susan's youngest daughter drowns in the very irrigation canal they have staked their lives on. Lyman wants to write a story about his grandmother's life, but he ends it when her daughter drowns. The rest is unimportant; the rest is a story that everyone knows—at least that is how Lyman sees it. Life during World War I, the Great Depression, World War II and the New Deal are of little interest to him. He only finds the story of Susan's early life on the frontier worth telling. The story of the sacrifices that were made in the name of building cities on the arid plains of the West.

CHAPTER 2: *THE MONKEY WRENCH GANG*: EDWARD ABBEY,
COUNTERCULTURE NARRATIVES, AND ANARCHY

1. Background: Ed Abbey and Civil Disobedience

Ed Abbey first traveled west in 1945 after graduating high school, just before being drafted into the U.S. Military. He was drafted before the end of war in the Pacific and he and his fellow trainees believed they would be sent to fight in Japan, with heavy casualties expected. Instead, the U.S. dropped atomic bombs on Hiroshima and Nagasaki and Abbey was sent to Italy as a military policeman. He felt some guilt about his relief upon hearing that we had dropped atomic bombs, forcing Japan to surrender. When he returned home in 1947, he took advantage of the GI Bill, enrolling in classes at Indiana Teacher's College located a few miles from his family's farm.

Abbey's inclination toward civil disobedience became visible in college. While attending classes, Abbey published a letter in the college newspaper, calling readers to either publicly burn draft cards or to mail them to President Truman. Jack Loeffler's biography, *Adventures with Ed*, reproduces the letter:

A LETTER TO ALL STUDENTS AND FACULTY MEMBERS HOLDING
DRAFT CARDS

Tomorrow, the anniversary of Abraham Lincoln's birthday, several thousand American men are going to attempt to emancipate themselves from peacetime conscription by publicly ridding themselves of their draft credentials,

either by mailing them to the President or burning them in public bonfires. This sounds like a foolish, crackpot scheme but it's not. It's much worse than that—it is a form of civil disobedience. That's something rather old-fashioned but in times like these, when America's government is diverting the major portion of its expenditures to armaments and our military leaders are trying to fasten permanent peacetime conscription to the nation, then as Thoreau said, "It is not too soon for an honest man to rebel" (Loffler 29-30).

Abbey goes on to name some well-known academics who will be participating in this form of protest and then ends the letter:

If you are aware of the dangers of peacetime conscription, tomorrow is the time to do something about it. Send your draft card with an explanatory letter to the President. He'll appreciate it greatly, I'm sure.

Signed: Edward Abbey (Loffler 30).

Abbey's discontent at being drafted in the military influenced his later writing. His outlook on the practice of making citizens participate in the armed forces foreshadowed the public outcry of the Vietnam Era. After getting his honorable discharge papers in the mail, he sent them back, writing "RETURN TO SENDER." From this point onward, the FBI kept tabs on Abbey, eventually concluding that he was harmless.²⁹

²⁹ Loeffler writes that "Abbey's letter was the first piece of his writing to catch the eye of the Federal Bureau of Investigation, which was just coming into its own in patriotic post-war America. J. Edgar Hoover, master of paranoia (who would soon share that mantle with Senator Joseph McCarthy), initiated a

After a year at Indiana Teacher's College, Abbey headed west to the University of New Mexico in Albuquerque. He graduated three years later, in 1951, with degrees in Philosophy and English. He also fell in love with the Southwest. Nevertheless, he applied and won a scholarship to be a Fulbright scholar in Edinburgh, Scotland and used this opportunity to travel around Europe. After returning, he began graduate studies at Yale, but left after one semester. He longed to be back out west. He eventually received a master's degree in Philosophy from the University of New Mexico. His thesis explored questions surrounding anarchy and the morality of violence, ideas that show clear connections with his later work.

While Edward Abbey is identified with the culture of the American West, he was from Pennsylvania. Abbey was the first child of Paul Revere Abbey and Mildred Postlewait, was born in Home, Pennsylvania in 1927. He spent most of his childhood on the family farm. His early life was affected by the Great Depression, as his family was forced to leave the farm, living out of their car as they traversed the Northeast and Mid-Atlantic selling the Pennsylvania Farmer's Alamac. When the Depression ended the family eventually made their way back to their farm in Home. While operating the farm, Abbey's father became an outspoken member of the socialist party. Biographers argue that Abbey's later interest in civil disobedience and anarchy were molded by his father's socialist beliefs.³⁰

witch-hunt that lasted for years. At the age of twenty, Abbey had already been recognized as a potential candidate for the stake" (Loffler 32).

³⁰ "Small wonder that individualistic, freedom-loving, bright young Ned [Abbey's nickname as a child], whose cultural environment was shaped and bent by the Great Depression, whose collar was basically blue and whose spirit was fired by the musical repertoire of the Wobblies [part of the Socialist Party], should recognize within himself the soul of an anarchist" (Loffler 29).

Abbey is best known for his environmental writing, especially his work of nonfiction, *Desert Solitaire*. Abbey published *Desert Solitaire* in 1968 about his experience as a park ranger at what is now called Arches National Park. *Desert Solitaire* is often compared to Henry David Thoreau's *Walden*, but as Lawrence Buell explains,

Like John Muir and other western environmental writers, Abbey saw an element of self-deception in Thoreau's professed love of wildness and wanted both to chide and to fulfill Thoreau's self-styled narrative of return to the primal by bonding to a landscape far more primal than Thoreau ever knew: "a country without the slightest traces of human history" (Buell 71).

Abbey looks at the wilderness and attempts to describe what he sees without projecting a human narrative onto plants, animals and landscapes. He elaborates on this eco-centric perspective in *Desert Solitaire*, when he writes that wants to think like a juniper tree.³¹

2. Water in *The Monkey Wrench Gang*

While *Desert Solitaire* remains Abbey's most famous work, *The Monkey Wrench Gang* is a prominent novel set in the American West, replete with eco-anarchists, car chases, and lone rangers. Beneath the action, the issue of water scarcity lies at the core of the novel. Water is constantly on the minds of the characters as they think about the fifteen dams on the Colorado River, and hundreds more in the entire basin. Water is a

³¹ From the chapter "The First Morning" Abbey writes, "The personification of the natural is exactly the tendency I wish to suppress in myself" (*Desert Solitaire* 7).

necessary ingredient of life and Ed Abbey does not obscure it through allusion and metaphor. He simply talks about it because when one suffers from thirst, water becomes an all-consuming need.

Water is framed in three ways in *The Monkey Wrench Gang*: first as a part of the Colorado River, second as a requirement for survival, and third as a force of nature. The Colorado River was a prominent environmental symbol in the 1970s because the controversy over the construction of the Glen Canyon Dam and proposed sites for more dams within the Grand Canyon. These issues enthralled the general public through efforts made by the Sierra Club. The Colorado River became a symbol within the environmental community and sparked the interest of people across the country.

The aridity of the West makes the necessity of water all too clear. The characters find themselves running from the law through the blazing hot desert where the sun is unforgiving, and water is difficult to find. They cannot help but think and worry about water because their survival depends upon it. Water held by dams is extremely powerful. Those who advocate for the damming of rivers explain the benefits not just by the number of acre-feet of water made available for use, but also in terms of potential energy. Enormous power is created when water is forced through turbines and can be sold in the form of electricity. The Glen Canyon dam supplies energy to power the neon lights and air conditioners of Las Vegas, two hundred and sixty miles away. In addition, dams will always hold the potential for failure and this makes them dangerous. The danger of water also becomes apparent in the form of flash floods when a storm comes to the desert. By analyzing these depictions of water, readers gain an understanding of the power of water both as a force of nature and as a basic requirement for all life.

The gang forms on a river trip on the Colorado River. They realize they have similar interests in the preservation of the wilderness and discuss their hatred of the Glen Canyon Dam. The gang consists of four people from New Mexico, Utah, and Arizona. Seldom “Seen” Smith is a Jack Mormon and polygamist from Utah who is an outdoor adventure guide, Doc Sarvis is a wealthy doctor from Albuquerque, Bonnie Abzug is a hippie from the Bronx and receptionist in the Doc’s medical practice, and George Washington Hayduke is a Vietnam Veteran and POW who is angry and lost after returning home from the war. Doc Sarvis and Bonnie have already begun “monkey wrenching” as they spend their nights burning billboards outside of Albuquerque.³² Hayduke has stolen a police car in Flagstaff, leaving it on the train tracks, but has not found a more productive outlet for his anger at the government. Seldom has made enemies with the business community in Utah as he successfully blocked a tourist development by preventing the lease of government land overlooking Lake Powell.

The tone for the novel—joking-yet-serious about preservation of the wilderness—is given by Seldom Seen Smith as he describes the dammed Colorado River and prays to God for its release:

Lake Powell, Jewel of the Colorado, 180 miles of reservoir walled in by bear rock...The blue death, Smith called it. Like Hayduke his heart was full of a healthy hatred. Because Smith remembered something different. He remembered the golden river flowing to the sea. He remembered canyons called Hidden

³² Abbey also burned billboards. Loeffler quotes Abbey’s life-long friend John DePuy: “When he was down at UNM, he and a couple of his friends worked over a billboard or two. But up in Taos, ah—that was the true beginning of the ‘monkey wrench gang’” (Loffler 72).

Passage and Salvation and Last Chance and Forbidden and Twilight and many many more, some that never had a name. He remembered the strange great amphitheaters called Music Temple and Cathedral in the Desert. All these things now lay beneath the dead water of the reservoir, slowly disappearing under layers of descending silt. How could he forget? He had seen too much (*The Monkey Wrench Gang* 32).³³

Lake Powell, the reservoir created by the damming of the Colorado River, flooded Glen Canyon. Few people were able to experience the beauty of Glen Canyon before the water from the dam consumed it in 1966. The names given to the side canyons and amphitheaters relate some of the wondrous beauty that has now been hidden under water and silt. Ed Abbey floated the stretch of the river through Glen Canyon for the first time when it had already been condemned and it impacted his perspective of the canyon and helped form his opinions on human beings' fanatic desire to remake the natural world to fit their needs.³⁴ The words given to Smith show Abbey's anger over the consumption of nature by the U.S. government while trying to relate to readers the beauty of the unspoiled Glen Canyon.

The tone of this section prepares readers to accept the idea that committing crimes can be beneficial and even required to save the wilderness, representing the overall thesis

³³ From this point, I will use *TMWG* in citations for *The Monkey Wrench Gang*.

³⁴ Abbey writes about his trip through Glen Canyon in "Down the River," a chapter in *Desert Solitaire*: "Once it was different there. I know, for I was one of the lucky few (there could have been thousands more) who saw Glen Canyon before it was drowned. In fact, I saw only a part of it but enough to realize that here was an Eden, a portion of the earth's original paradise. To grasp the nature of the crime that was committed imagine the Taj Mahal or Chartres Cathedral buried in mud until only the spires remain visible. With this difference: those man-made celebrations of human aspiration could conceivably be reconstructed while Glen Canyon was a living thing, irreplaceable, which can never be recovered through human agency" (189).

of the novel. By providing an understanding of the Colorado River and what was lost by the construction of the Glen Canyon Dam, the criminal actions of the gang seem not only reasonable, but necessary. Abbey continues with a description of Smith's view from the dam:

Seven hundred feet below streamed what was left of the original river, the greenish waters that emerged, through intake, penstock, turbine and tunnel, from the powerhouse at the base of the dam. Thickets of power cables, each strand as big around as a man's arm, climbed the canyon walls on steel towers, merged in a maze of transformer stations, then splayed out toward the south and west—toward Albuquerque, Babylon, Phoenix, Gomorrah, Los Angeles, Sodom, Las Vegas, Nineveh, Tucson, the cities of the plain.

They stared at it. The dam demanded attention. It was a magnificent mass of cement. Vital statistics: 792,000 tons of concrete aggregate; cost \$750 million and the lives of sixteen (16) workmen. Four years in the making, prime contractor Morrison-Knudsen, Inc., sponsored by the U.S. Bureau of Reclamation, courtesy of U.S. taxpayers (*TMWG* 33).

The Bureau of Reclamation is responsible for most of the dams and diversion projects in the West. Large rivers like the Colorado were too powerful for individuals or even states to bring under control. The federal government was needed to provide funding to build these large dams. The allusion of these western cities to ancient desert civilizations connect the development of the West with failed hydrologic empires. These ancient cities

were all dependent on nearby rivers (the Euphrates, Jordan and Tigris Rivers.) They are also related to the Bible. Gomorrah and Sodom were destroyed by God. Niveveh came close to the same fate, but unlike Gomorrah and Sodom, the citizens showed repentance with a fast. Babylon was also considered to be a place of evil.³⁵ The connection to the Bible shows that Smith's prayer for destruction has precedence in the biblical stories of the cities of the plain.

While at the Glen Canyon dam, in sight of rangers and tourists, Seldom Seen prays that God will strike the dam and return the canyon to its natural state:

“Dear old God,” he prayed, “you know and I know what it was like here, before them bastards from Washington moved in and ruined it all. You remember the river, how fat and golden it was in June when the big runoff come down from the Rockies? Remember the deer on the sandbars and the blue herons in the willows and the catfish so big and tasty and how they'd bite on spoiled salami? Remember that crick that come down through Bridge Canyon and Forbidden Canyon, how green and cool and clear it was? God, it's enough to make a man sick...Listen, are you listenin' to me? There's somethin' you can do for me, God. How about a little old *pre-cision-type* earthquake right under this dam? Okay? Any time...” (*TMWG* 34).

³⁵ The destruction and descriptions of the ancient “Cities of the Plain” can be found in The Book of Genesis and Jonah from the Old Testament, as well as the Book of Revelation from the New Testament. The biblical stories tell of evil, divine wrath, and repentance.

This prayer for the destruction of the dam that represented federal power and money in the West and the freeing of a wild river is a mix of anarchism and violence. Shortly after this scene, Seldom Seen guides a raft trip on the Colorado River and meets Hayduke, Doc Sarvis and Bonnie. During a night of whiskey drinking in front of a campfire in the Canyon, the group decides that they need to do their part to save the West. They take on the job of wilderness protectors and defenders, declaring their resolve to prevent the remaining wilderness from being civilized; from being paved over for industry and tourism.

The Colorado River is described and discussed more than any other river in the novel. Other rivers (the Green, Grand, and Rio Grande) make entrances and warrant description, but the Colorado holds the characters' imagination because of the scale and environmental shock waves created with the construction of Glen Canyon Dam. The Bureau of Reclamation began work on Glen Canyon Dam in 1956, filling the reservoir (named Lake Powell) in 1966. In an agreement with the Sierra Club, the Bureau agreed not to build a dam in Dinosaur National Monument at Echo Park on the Green River if the environmental group promised not to fight them on damming the Colorado River in Glen Canyon. The Sierra Club eventually recognized their mistake in forfeiting Glen Canyon for Echo Park.³⁶

David Bower, leader of the Sierra Club at this time, only realized the wonders of Glen Canyon after work on the dam had commenced. Marc Reisner discusses David Bower and the Sierra Club's involvement in the damming of the Colorado River. Reisner does not blame Bower for his role in the drowning of Glen Canyon and instead explains

³⁶ Ironically, Wallace Stegner was partly responsible for the Sierra Club's choice of favoring Echo Park over Glen Canyon.

that Brower had ample reason to choose Echo Park, “probably the most beautiful canyon flat in all of Utah” (Reisner 284). Echo Park was an easily accessible part of the Green River, but Glen Canyon was not. Bower never saw Glen Canyon until after work on the dam had begun, he:

floated this then almost inaccessible reach of the Colorado River in a dory much like Major Powell’s. He was astonished by the beauty of the place, as were most of the handful of people (a few thousand perhaps) who managed to see Glen Canyon before it was drowned. When the reservoir filled, Brower’s friends actually wondered whether he might shoot himself (Reisner 285).

This experience propelled Bower into action and he vowed that no new dams would be constructed on the Colorado River.

Shortly after the dam at Glen Canyon had been finished, the Bureau of Reclamation declared that more dams were necessary to sustain the demand generated by the Colorado River Storage Project. Bower, with the help of San Francisco advertising men Jerry Mander and Howard Gossage, put in full page advertisements in the *Washington Post*, the *New York Times*, the *San Francisco Chronicle* and the *Los Angeles Times*, making sure that the damming of the Colorado received national attention. Reisner explains these ads:

One of the Bureau’s arguments for building the dams, an argument which it would later regret, was that tourists would better appreciate the beauties of the

Grand Canyon from motorboats. “Should we also flood the Sistine Chapel,” asked one advertisement, “so tourists can get nearer the ceiling?” The response was thunderous... “ninety-five percent of them [letters written to the Bureau] said we’d better keep our mitts off the Grand Canyon and a lot of them quoted the Sierra Club ads” (Reisner 286).

These ads printed in 1966 became a part of American culture and created momentum for conservation efforts. By the time *The Monkey Wrench Gang* was published in 1975, the proposed Grand Canyon dams had failed; people were beginning to recognize the importance of undisturbed nature.

The narrator in *The Monkey Wrench Gang* frequently mentions the Colorado River with reverence. Many of the descriptions are of how the river used to flow freely. Abbey describes how the spring floods, created from the snow that melted in higher elevations of the Rocky Mountains, made their way south. To the characters in the gang, the Colorado River is “The River,” the Grand Canyon “The Canyon” and the Glen Canyon Dam is “The Dam.”³⁷ While Hayduke and Smith do some “work”—monkey wrenching—the narrator describes the country they drive through:

Hayduke and Smith restocked the beer chest and drove on, sunward, downward, riverward, upwind, into the red-rock rimrock country of the Colorado River, heart

³⁷ Fradkin also discusses how the Colorado River was known as “the River.” From *A River No More*: “There is a unity about the Colorado River Country that is established by the River itself—always *the* River. The topographical features, although on a vast scale, have a simple relationship to the central controlling element... And just as the River has formed the landscape so has it determined the course of human history within its basin” (16).

of the heart of the American west. Where the wind always blows and nothing grows but stunted juniper on the edge of a canyon, scattered blackbrush, scrubby cactus. After the winter rains, if any, and again after the summer rains, if any, there will be a brief flourish of flowers, ephemeral things. The average annual rainfall comes to five inches. It is the kind of land to cause horror and repugnance in the heart of the dirt farmer, stock raiser, land developer. There is no water, there is no soil; there is no grass; there are no trees except for a few brave cottonwoods deep in the canyons. Nothing but skeleton rock, the skin of sand and dust, the silence, the space, the mountains beyond (*TMWG* 119).

The omniscient narrator often discusses the West in relation to the river, describing it as the heart of the West and central to the gang's mission.³⁸ This land—land that “causes horror”—is what the gang wants to protect. They want to keep the land wild and free and to stop progress.

The gang drives all around the Southwest, the “red-rock rimrock country,” and while they fight against “the machine” by destroying bulldozers, plucking markers lining new roads, and blowing up train tracks leading to coal plants—always obeying the golden rule that no life should be harmed—they have their eyes set on the Glen Canyon Dam. The long descriptions of the landscape, of the deserts and the rivers, are artful and create a sense of outrage and a desire for redemption from the damage already done. It is difficult to paraphrase since the long prose and lengthy descriptions are important in

³⁸ Others have the same desire to describe the Colorado River as the heart of the American West. Fradkin writes: “The river’s waters and the land surrounding it in the basin—the heartland of the West—are fused together in a common destiny, as are those areas outside the watershed to which Colorado River water is diverted” (Fradkin 16).

producing the feelings that justify the destruction of machines and the waste of millions of taxpayer dollars. In this poignant section, Hayduke and Smith stand on a bridge over a narrow part of the canyon:

The first thing they noticed was that the river was no longer there. Somebody had removed the Colorado River. This was old news to Smith, but to Hayduke, who knew of it only by hearsay, the discovery that the river was indeed gone came as a jolt. Instead of a river he looked down on a motionless body of murky green effluent, dead, stagnant, dull, a scum of oil floating on the surface. On the canyon walls a coating of dried silt and mineral salts, like a bathtub ring, recorded high-water mark. Lake Powell: storage pond, silt trap, evaporation tank and garbage dispose-all, a 180-mile-long incipient sewage lagoon...Somewhere below that still surface, down where the cloudy silt was settling out, the drowned cottonwoods must yet be standing, their dead branches thick with algae, their ancient knees laden with mud. Somewhere under the heavy burden of water going nowhere, under the silence, the old rocks of the river channel waited for the promised resurrection. Promised by whom? Promised by Capt. Joseph 'Seldom Seen' Smith; by Sgt. George Washington Hayduke; by Dr. Sarvis and Ms. Bonnie Abzug, that's whom (*TMWG* 121).

The outrage is palpable and the sense of loss reverberates through the novel through descriptions of the Colorado River.

The Green River is described as the narrator follows Smith back to one of his houses (he has three houses, and three wives.) His house is on farmland (while not working as an adventure guide, he is a watermelon farmer) bordering the river. Further south, the Green joins what used to be called the Grand, and is now known as the Upper Colorado, to become the Colorado River. The Green is the river that was “saved” at Echo Park at the expense of Glen Canyon. The narrator describes this (relatively) free river:³⁹

That river. That river, that golden Green, flowing down from the snows of the Wind River Range, through Flaming Gorge and Echo Park, Split Mountain and The Gates of Lodore, down from the hills of Ow-Wi-Yu-Kuts, from the Yampa, Bitter Creek and Sweetwater down the canyon called Desolation through the Tavaputs Plateau to emerge from the portal of the Book Cliffs—which John Wesley Powell thought ‘one of the most wonderful facades in the world’—and there to roll across the Green River Desert into a second world of canyons, where the river gives itself to Labyrinth and Stillwater and the Confluence with the Grand, under the rim of The Maze and into the roaring depths of Cataract...
(*TMWG* 254-255).

Abbey uses these descriptions of rivers to show those unfamiliar with the region what was lost in the drowning of Glen Canyon. His beautiful prose helps explain to readers why destruction of machines, bridges, and roads is important; why further development

³⁹ While described as free, the Green River has ten dams on its 700 miles to the confluence with the Colorado.

must be stopped. The stunted Colorado is juxtaposed to the free Green to demonstrate the natural state of the river and the wild ecosystem the dam destroyed.

The necessity of water becomes clear quickly in the arid West. Hayduke often trudges across large expanses of desert with only his pack and his thoughts regularly turn to water. He considers how much water he has already consumed, how much he has left, where he will get more, and the color of his urine (for signs of dehydration). On these excursions where Hayduke disables bulldozers and bridges on his own, the narrator describes the intense heat in the desert where respite from the sun is hard to come by. “Hot motherfucking day, thinks Hayduke, wiping the sweat from his nose, wringing the sweat from his thick eyebrows, feeling the sweat trickle from armpits down over ribs. But it felt good to be marching again; the hot dry clean air smelled good to him; he liked the picture of far-off mesas shimmering under heat waves, the glare of sunlight on red stone, the murmur of stillness in his ears” (*TMWG* 102). He stops to take a drink: “Stopped in the shade, removed the Stone—his oversize pack—and drank more water. Only two quarts left” (*TMWG* 102). He rests and when he awakes his first thoughts are again of water: “He might have slept longer, for he was certainly very tired, but thirst, a dry throat and parched tongue, kept him uncomfortable” (*TMWG* 102). He finally fills his empty canteens in a small pond of water found in a wash and pops water purifying tablets in to make the scummy water safe to drink. These descriptions display how in the desert water consumes one’s thinking. Hayduke’s every thought comes back to water. He knows that his survival depends upon how well he plans and on his ability to find water in springs and washes. It is never long before he begins to worry again: “He hung the binoculars on

his neck and took a drink from the canteen. Would soon have to start worrying about water again” (*TMWG* 104).

At the climax of the novel, water again becomes the only thing the gang can think of as they run from the law. They have had to ditch their packs and are only carrying a single canteen each. The water runs out quickly and they begin to recognize signs of extreme dehydration and fatigue. The narrator describes the gang’s thoughts as they walk through the Fins trying to get to the cache of supplies they have hidden in the Maze (part of Canyonlands in Utah):

Water. All they can seriously think about is water. Yet it’s all around them. Mountainous cumuli-nimbi hang above their heads filled with the stuff, in vaporous form. Carloads of water. High over the plateau rims, three thousand feet above Land’s End and all across the canyonlands float huge, massive clouds trailing streamers of rain, all of which evaporates, it’s true, before reaching the earth. Two thousand feet below and only a few miles away, as the bird flies, deep in the trench of Cataract Canyon, the Green and the Colorado pour their united waters through the rapids in roaring tons per second, enough to assuage any thirst, drown any sorrow. If you could reach it (*TMWG* 363).

When they finally find a spring, recognized by Smith, they feel like it is a trap and don’t follow the moist sand to the water’s source. They worry that Utah Search and Rescue is lying in wait, knowing they must seek out water.

Doc and Bonnie are the worst off since they are not used to pushing their bodies as Smith and Hayduke, but they all are in dire need of water. The gang stops again to consider their options and Bonnie notices a small puddle of water under the overhang of the canyon walls. She asks Smith:

“Is this water?” Bonnie says, canteen in hand, kneeling on the lip of a basin-shaped plunge pool below the drop-off. The wet sand on which she kneels is quicksand, slowly shifting beneath her, but she doesn’t notice, yet. In the center of the basin is a pool eighteen inches wide, consisting of what looks like a cloudy broth and smells like decay. A few flies and fleas hover above the soup; a few horsehair worms and mosquito larvae wiggle about within it; on the bottom of the tiny bowl, scarcely visible, is the inevitable blanched cadaver of a drowned centipede, eight inches long...”Can we drink this stuff?” (*TMWG* 369-370).

By including the thoughts of the characters and the facts about water in the desert, water is shown to be a fundamental part of the novel. In these sections, water is all the characters can think of as survival instincts take over.

Water is also destructive. Smith recognizes this as he prays for God to destroy the Dam. He finds himself back at the parking lot overlooking the Colorado and he prays again. He asks God to free the river despite the damage the resulting flood will have. He pleads,

“Okay, God I’m back...It’s me again, Smith, and I see you still ain’t done nothing about this here dam. Now you know as well as me that if them goddamn Government men get this dam filled up with water it’s gonna flood more canyons, suffocate more trees, drown more deer and generally ruin the neighborhood. Why that there water’s gonna back right up under Rainbow Bridge itself if you let them sonsabitches fill that dam. You gonna let them do that?...All we need here, God, is one little *pre*-cision earthquake. Just one surgical strike. You can do it right now, right this very second; me and George here we don’t mind, we’ll go down with the bridge and all these innocent strangers come here from every state in the Union to admire this great work of man. How about it?” (TMWG 157-158).

If the dam burst, the water would rush through the canyons and would take out any animals, trees, humans (tourists, hikers, rafters, backpackers, etc...), and bridges and roads in its path as it drains Lake Powell. To Smith, the destruction of the Dam is worth dying for and he is even willing to sacrifice the lives of his friends.

The power of water is also exhibited at the end of the novel in the finale between the gang and the law. At this point the Utah Search and Rescue is no longer in charge of finding and apprehending the people responsible for the destruction of property (bridges, trains, construction equipment). The federal government has gotten involved. The gang’s crimes have crossed state lines and have involved explosives and firearms. Doc and Bonnie have given themselves up, but for an honorable cause. Bishop Love of the Utah Search and Rescue has suffered some kind of stroke while chasing them through the canyons and they stop running to save his life. Smith holds out a little longer and is able

to climb out of the canyons with Hayduke, but passes out from hunger, thirst and exhaustion and is found by National Park Rangers. Hayduke is the last one remaining and is the most wanted of the gang (known to the authorities as Rudolf the Red). He gets in a shootout with dozens of police and federal agents who have cornered him up against a five-hundred-foot drop above the Maze. They riddle his body (actually a fabricated scarecrow made with his own clothing) with bullets and he is seen falling into the canyon below. This would have meant certain death (if the bullets weren't enough), except that a huge storm had hit the area overnight and dumped inches of rain onto the dry desert floor. The water swept over the land, collecting in the canyons, sending a massive flash flood roaring through the Maze.

Hayduke, stuck with only a lone juniper tree for protection, is able to wedge himself between rocks to hide from the bullets and looks around for an escape. The narrator describes the flash flood as Hayduke surveys his very limited options:

He looks down over the brink and sees, five hundred vertical feet below, a semiliquid red frothy mass of mud hurling itself in a torrent down the canyon floor, a wall-to-wall flash flood hurtling around the bend, thundering over the jump-off, roaring toward the hidden Green River some five or twenty-five (he has no notion of the distance) miles away. Rolling boulders clash and clack beneath the surge, logs float past, uprooted trees pitching on the waves—he'd be not much worse off jumping into a river of lava (*TMWG* 403).

Abbey leaves the details of Hayduke's survival vague; the only explanation given is that the officers were fooled by the scarecrow that at a distance and behind a juniper looked like a man and he somehow escaped over the side of the canyon. The water, full of debris is not a safe way out, but Hayduke knew that the agents were aiming to kill. He takes his chances and somehow survives, disappearing over the canyon's edge.

The Monkey Wrench Gang is a novel that calls for civil disobedience and even archaism as Abbey advocates for the destruction of property to prevent the further desecration of the wilderness for the public good. In a novel that takes place in the Southwest, the issue of water scarcity lies at the heart of the action and is the gang's raison d'être. If water was plentiful, there would be no Colorado River Storage Project, no Glen Canyon Dam, and no catalyst for the gang to form. Not only is water a catalyst, but it is frequently on the minds of the characters as they wander through the desert and its power is shown through the imagined destruction of the Dam and a flash flood. Ed Abbey calls the Colorado River the "heart of the heart of the American West." The river is the heart of the West because its existence creates life in the desert.

3. The Colorado River and Climate Change

It seems that Edward Abbey's dream of tearing down, or blowing up, Glen Canyon Dam is increasingly possible. Climate change researchers have shown that the era of productivity of massive dams is coming to an end. Still, the Bureau of Reclamation does not want to let go of the idea that dams are a requirement in the West. In *The Great Derangement*, Gosh argues that writers need to depict the changing climate in their

novels so that the public takes the idea of climate change seriously. When Abbey advocated for the removal of the dams on the Colorado River, climate change was not part of public consciousness; he wanted the river returned to its natural state for ethical and aesthetic reasons. Climate change scientists have discovered that dams like Glen Canyon make less sense in today's world and we need literature to reflect these new ideas. Perhaps with the help of the humanities, researchers and scientists can convince the federal government that the dams should be torn down.⁴⁰

The argument for the removal of dams on the Colorado River, especially the removal of the dam at Glen Canyon, is more urgent now than during Abbey's life. Climate change scientists looking at the Southwest have found that rising temperatures affect the level of the Colorado River in several ways that in turn affect the levels in Lake Mead and Lake Powell (reservoirs created respectively by Hoover and Glen Canyon dams). Studies by researchers at Colorado State University and the University of Arizona show that the levels in these reservoirs will drop further in the coming years as temperatures rise. The reservoirs are likely to reach levels so low that the dams will no longer be able to effectively produce power—their main economic benefit. (The Bureau of Reclamation sells water from the dams at subsidized rates, at amounts so low that the only possibility of making a return on the costs of construction and upkeep come from the sale of hydroelectric power).⁴¹

⁴⁰ The issue of translating science to the wider population is discussed in a 2003 article, "Humanities for Policy—and a Policy for the Humanities": "Make no mistake; science and technology are essential to providing knowledge about the consequences of alternative courses of action. But humanities-assisted discussions about what constitutes the good life in a global technological society are crucial to identifying desirable policy actions. Given the transformative power of science and technology, now more than ever we need humanities for policy" (Frodeman et al.).

⁴¹ Reisner discusses the subsidized rates for agriculture is discussed in *Cadillac Desert*.

At the end of 2019, three environmental organizations, Save The Colorado, Center for Biological Diversity and Living Rivers, began a lawsuit against the federal government due to their failure to comply with federal laws within the Environmental Protections Act. These organizations believe federal agencies have ignored regulations that specify that they must take climate change into account in what functions as their twenty-year plan for operations. In the lawsuit, these groups assert that, “the U.S. Bureau of Reclamation and the Department of the Interior illegally ignored established climate science in their December 2016 Record of Decision on the Glen Canyon Dam Long-Term Experimental and Management Plan Final Environmental Impact Statement” (“Lawsuit Seeks to Include”).

Scientists looking at the predicted climate change-related impacts on the flow of the Colorado River have found that these large reservoirs are likely to become ineffective, and even detrimental because they cause higher rates of evaporation due to increased surface area. In a report from 2017, scientists “found that Colorado River flows decline by about 4 percent per degree Fahrenheit increase... Thus, warming could reduce water flow in the Colorado by 20 percent or more below the twentieth century average by midcentury, and by as much as 40 percent by the end of the century” (Udall and Overpeck). Studies such as this show that the significance of water in the West has already been transformed by the effects of climate change. Rising temperatures in conjunction with a period of drought indicate that the era of the necessity of dams in the West is coming to a close.⁴²

⁴² In a posting on the Center for Biological Diversity’s website on their recent lawsuit against federal agencies like the Bureau of Reclamation, spokespersons from the Center for Biological Diversity and Save the Colorado River are quoted: “Glen Canyon Dam’s life is close to being over,” said Robin Silver, a cofounder of the Center for Biological Diversity. “It has no function anymore. Lake Powell dropped to

Researching the effects of climate change in the southwest shows that the legacy of Edward Abbey has survived the passage of time. As Terry Odendahl, president and CEO of Global Greengrants Fund, states: “Edward Abbey and his friends had it right, and climate science requires that their vision become real...The federal government must prepare an alternative that includes the decommissioning of Glen Canyon Dam” (Center for Biological Diversity). The call for the removal of dams like Glen Canyon began as an aesthetic movement to preserve the environment, to save the beautiful side canyons and sandy beaches that the water drowned and was exemplified in books like *The Monkey Wrench Gang*. Ideas that originated in literature are now found in the sciences with studies proving that dams are detrimental to both water and energy conservation as the effects of climate change begins to be better understood.

4. Abbey’s Legacy: Environmental and Literary Movements

The Monkey Wrench Gang spurred environmental movements to take a more active stance toward conservation and preservation of the wilderness. Earth First! was started in 1979 by five men who were frustrated with the inaction of mainstream environmentalism. They felt that groups like the Sierra Club were too moderate and that higher goals for the protection of the wilderness needed to be set. In 1985 one of the members published *Ecodefense, A Field Guide to Monkey Wrenching*. Around the same

within about 40 feet of the water level too low to produce power already this year. Dead pool is not too far behind. It’s time that Bureau of Reclamation plans for the dam’s removal.” Gary Wockner, director of Save The Colorado, the lead co-plaintiff states, “As we begin the 2020 water year and more seriously plan for the future, we must throw ‘incrementalism’ out of the toolbox, take climate science seriously, and plan for so-called ‘Black Swan’ drought events on the Colorado River” (“Lawsuit Seeks to Include”).

time another of the founders spent six months in jail for ecotage during a “tree sit” in Oregon.

Ed Abbey spoke to Earth First! on a few occasions. The most notable was on March 21, 1981 when members of Earth First! unrolled a ‘crack,’ a three-hundred foot wedge of black plastic, over the face of the dam to simulate a long fissure. Abbey spoke to the group after the unfurling of the crack, ending his speech with the proclamation: “Earth First, life first, freedom first. God bless America, let’s save some of it. Love the Land—or Leave it alone” (qtd. in Philippon). While never an official member of the group, Abbey was often interviewed on questions concerning the group’s work. The connection between his novel and the philosophy of the group was apparent through the groups self-proclaimed “monkeywrenching” and ecotage.

In addition to energizing environmental movements, Abbey’s writing has added to the literary theory of deep ecology and to a more recent evolution of deep ecology, patch ecology. *The Monkey Wrench Gang* called for a radical approach to environmental protection and *Desert Solitaire* exemplified a new way to look at and discuss the natural world. Deep ecology was first developed in a paper by Arne Næss, a Norwegian philosopher, and has become a sub-branch of literary ecocriticism. It is the theory that there is a balance at work in nature and values nature for its own sake, not for its potential for human use.

The term “deep ecology” was coined in 1973, but its orientation can be found in the work of earlier environmental writers such as Aldo Leopold, Rachel Carson, and

Edward Abbey.⁴³ In late 1950s, Abbey worked for two seasons as a park ranger at Arches National Monument. He spent the next ten years writing about his experiences at Arches and throughout the southwest. At the beginning of *Desert Solitaire*, he writes:

The personification of the natural is exactly the tendency I wish to suppress in myself, to eliminate for good. I am here not only to evade for a while the clamor and filth and confusion of the cultural apparatus but also to confront, immediately and directly if it's possible, the bare bones of existence, the elemental and fundamental, the bedrock which sustains us. I want to be able to look at and into a juniper tree, a piece of quartz, a vulture, a spider, and see it as it is in itself, devoid of all humanly ascribed qualities, anti-Kantian, even the categories of scientific description (7).

He tries to look at the natural world without the prescribed culture and history that colors thought. He wants to be able to see the world with new eyes and learn how to describe it without using human qualifications.

It is difficult to see the world without laying judgement based on human desire and need. In his chapter titled "Water," Abbey describes a conversation he had as a park ranger at Arches with a tourist from Ohio. This is a teaching moment, showing how anthropomorphism affects our outlook of the natural world. Abbey shows the viewpoint of the tourist, who cannot help but look at the desert through a humancentric lens. The

⁴³ Rachel Carson's *Silent Spring* is considered to be a catalyst for the environmental movement, avant de lettre of deep ecology, but instrumental in its development. Aldo Leopold's *A Sand County Alamac* has similar biocentric views that are highlighted by Leopold's proposal of "thinking like a mountain."

man makes a statement: “This would be good country if only you had some water,” to which Abbey responds: “If we had water here, this country would not be what it is. It would be like Ohio, wet and humid and hydrological, all covered with cabbage farms and golf courses. Instead of this lovely barren desert we would have only another blooming garden state, like New Jersey. You see what I mean?” The tourist shakes hands with Abbey, and “goes away pleased, as I am pleased, each of us thinking he has taught the other something new” (*Desert Solitaire* 141).

Further on in the chapter, Abbey tries again to demonstrate to readers how we need to remove anthropocentric tendencies from our thinking and from our description of the environment. He writes:

Water, water, water... There is no shortage of water in the desert but exactly the right amount, a perfect ration of water to rock, of water to sand, insuring that wide, free, open, generous spacing among plants and animals, homes and towns and cities, which makes the arid West so different from any other part of the nation. There is no lack of water here, unless you try to establish a city where no city should be (*Desert Solitaire* 159).

The words we choose to describe the natural world are important in our understanding of nature. By stating that there is a “lack of water” in the desert, we insinuate that there should be more water. To lack something is to be deficient in it. Without meaning to, we constantly qualify the world in terms of human need.

Abbey's legacy has been to promote an environmental ethic that argues for the protection and conservation of the wilderness. As shown throughout *Desert Solitaire*, this ethic involves learning how to see the natural world in its own right, to stop trying to find and proclaim value in the wilderness. Through the work of Abbey and others, people have begun to write and think about nature in different ways with the hope that by removing our anthropocentric tendencies we will find a new respect for undisturbed wilderness.

CONCLUSION

The novels and nonfiction of Wallace Stegner and Edward Abbey immerse readers in aquatic images. Through Stegner we see the role that water has played throughout western history; his voice has been used in U.S. policy and legislation. *Angle of Repose* never allows readers to stray far from the centrality of water. Stegner employs figurative language that evokes water and its opposite—aridity—and places water at the center of his narrative. Stegner offers an aquatic account of western life with the intent of representing the role of water in the shaping of the West.

While Stegner influenced legislation, Edward Abbey is the more overtly political thinker. Through Abbey we gain a new, more political way of looking at the natural world. Abbey spurs us to save what is left. Throughout *Desert Solitaire*, he grapples with the human tendency to think and act anthropocentrically. The descriptions of the Southwest in *The Monkey Wrench Gang*, especially Abbey's depiction of the dammed Colorado River, create the sense that the remaining wild places need protection. Water is central to Abbey's work because of the significance of the Colorado River to the gang and the budding environmental movement, the necessity of water and the difficulty of finding it, and his ideas which would come to join the theory of deep ecology—especially the idea that “there is no shortage of water in the desert but exactly the right amount” (*Desert Solitaire* 159).

The work of Abbey and Stegner remains relevant today. Indeed, their central themes have only gained importance, as we find ourselves propelled into the realities of climate change. An analysis of the literary arts is essential to tackling the societal

challenges that come with the changing climate. Armitage Gosh and Donald Worster attempt to explain the role of literature in the shaping of our lives. Gosh argues that literature needs to depict climate change in order for the public to accept it. Worster shows the role of authors and artists in the creation of a western identity and how their work is instrumental to our understanding of the region's history. The theoretical work of Gosh and Worster highlights the importance of analyzing the depiction of water in the literature of the American West.

The ideas presented in this paper can reach further through the genre of western American literature and affect change in the world. The topic of water scarcity in literature can be found in perhaps all the novels involving the West. I briefly note two examples: *The Grapes of Wrath* and *The Virginian*. In *The Grapes of Wrath*, Steinbeck presents the story of life during the dust bowls of the 1930s when "Okies" were forced to abandon their land and try to find work elsewhere. *The Grapes of Wrath* shows the results of poorly managing water and ignoring the insights of John Wesley Powell.

The Virginian is the story of cowboys and frontier life in Wyoming. The presence and ideology at work in the novel would not be possible in the east, for the space created by aridity is responsible for the creation of the figure of the "cowboy." The immense distances between towns and large expanses of rangeland are all results of water scarcity, for a lack of water discourages large populations from settling near to each other. The environment simply cannot support it. Wister's novel is complete with western individualism, cattle poachers, and a shootout. It is considered to be the first cowboy novel outside the dime novel tradition.

The depictions of water scarcity in literature can change the way that we think about our environment and how we understand the impact that we have made on it. *Desert Solitaire* and *The Monkey Wrench Gang* are filled with beautiful depictions of Glen Canyon as well as Abbey's hatred of the dams on the Colorado River. Abbey was able to experience that river and those canyons before the dam filled them with water. Books like these powerfully evoke the environmental costs of human use. Through repetition, the water metaphors in *Angle of Repose* help readers understand the importance of water to the West and to the creation of the West. It analyzes part of our history; the settlement of the frontier and the costs of bringing water to the desert. Water is everywhere in the novel. The volume and the ways in which Stegner uses figurative language illuminates the issues surrounding the aridity of the West.

The works of Stegner and Abbey form a bridge to understanding the origins of our twenty-first century problems. They provide readers with a much needed historical memory. Wallace Stegner published his first book, *Remembering Laughter* in 1937, *Angle of Repose* was written somewhat later in 1971. Edward Abbey wrote his first novel, *Jonathan Troy*, in 1954; *Desert Solitaire* was published in 1968 and *The Monkey Wrench Gang* in 1975. These authors had access to a tradition and history that included pre-war America. Their lives overlapped with people who had experienced life on the frontier, who had seen the Western United States before progress reached remote areas like the Grand Canyon. Frederick Jackson Turner, developer of the "Frontier Thesis," famous for his remarks in an 1893 address that the frontier was now "closed," was born in 1861 and lived until 1932. John Wesley Powell died just seven years before Wallace

Stegner was born; it is possible that Stegner knew people who had personally known Powell.

Through examples like Turner and Powell, I hope to provide perspective on the period in which Stegner and Abbey lived. To us in 2020, the frontier era seems a very long time ago, but to Stegner and Abbey, it was an era that, for a few years, their lives touched. It is important to analyze works from authors like Abbey and Stegner in order to understand where we have come from, to be able to see what the world used to look and feel like. If we forget their writing, we will forget what the Colorado River used to look like as it flowed through Glen Canyon and how the West went from a feared desert to the home of millions through the diverting and damming of rivers.

Climate change makes this process of acknowledging and rediscovering works of western writers even more vital. Water scarcity was an issue in the West before Europeans came. There were ancient Native American tribes like the Hohokom, who had practiced irrigation and whose empires eventually fell, the people fleeing the region. Water will be one of the most contested resources in the coming decades. According to a United Nations Water Policy Brief from September 2019, “an estimated 3.6 billion people worldwide now live in areas that are potentially water scarce at least one month per year. According to *The United Nations World Water Development Report*, that will increase to 4.8–5.7 billion people by 2050, thus creating unprecedented competition among water users and across political boundaries.”

Books that were written before the era of climate change are integral to our cultural awareness of where we are now compared with fifty or a hundred years ago. It is

easy to forget, but we need to remember what was here before us and to preserve what is left.

The arts, especially literature and film, need to make an effort to show the dangers of climate change for they are critical in how we interpret reality. There is a TV episode that formed an impression on me as a child and has stood out to me for close to twenty years. I remember one New Year's Eve with my family. My parents allowed my sister and me to stay awake longer than usual and we made chocolate chip cookies and watched Turner Classic Movies (TCM). For the special occasion they were playing episodes of *The Twilight Zone*. This night stands out in my memory because one of the episodes freaked me out—still does. The episode I have since discovered is titled: “The Rip Van Winkle Caper” and was first released in the spring of 1961.

All of *The Twilight Zone* episodes were aimed to shock (in that sense they are similar to the modern show, *Black Mirror*.) I have not seen that episode since that New Year's Eve, yet the images of the characters dragging themselves across the desert pleading with strangers for water, are burned into my memory. The plot of the episode was simple: a group of thieves robbed a bank and stole a lot of gold, so much gold that they knew they would never be able to exchange it for money until their crime was forgotten. One of the group was some type of scientist who came up with a way that they could preserve themselves, so they wouldn't age. They slept in this way in a cave in the California mountains for a long time—long enough that no one would be able to remember their crime and know that the gold they were selling was stolen. When they emerge years later from the cave, they find that gold is now ubiquitous. Water is the only

valuable resource. They are unable to sell their gold and they are unable to find water. They all die in the desert.

This story has stuck with me for my whole life, demonstrating the power of the arts. The plot seems prescient for the 1960s, but from today's point of view, a future world where there is no water, seems entirely possible. Water is a requirement for life. We need it in order to survive, in order to grow our food and to raise livestock. We have gotten really good at modifying our environment and making sure we don't have to experience the outside world. In a future, hotter world, we can go from our airconditioned houses to airconditioned cars, to work inside in the air conditioning. We barely have to experience the heat. We can survive these hot days in this manner—and already do. What we cannot do is survive in a place without water. We will be like the Hohokum. Eventually, water will stop flowing, or it will come at too high a cost, and we will have to leave the desert. Still, this reality has not hit most of America. Phoenix, Los Angeles, Las Vegas, and Tucson—the Cities of the Plain—continue to grow in population. They all continue to spend their limited water on turning arid deserts into gardens, they continue to pour water on to golf courses and to shoot it into the air. Perhaps through an understanding of water scarcity in the literature of the American West we can begin to truly see the environment, what it used to be like and what it is like now, and we can begin to accept and work on preventing climate change.

BIBLIOGRAPHY

- Abbey, Edward. *The Monkey Wrench Gang*. New York, HarperCollins, 1975.
- Abbey, Edward. *Desert Solitaire*. New York, The Random House Publishing Group, 1968.
- Buell, Lawrence. *The Environmental Imagination*. Harvard University Press, 1995.
- Carson, James H. "Early Recollections of the Mines, and a Description of the Great Tulare Valley." *San Joaquin Republican*, 1852.
<https://catalog.loc.gov/vwebv/search?searchCode=LCCN&searchArg=31011889&searchType=1&permalink=y>. Abbatt, W., *The Magazine of History*. no. 164, vol. 41, no. 4, 1931, Accessed 15 Jan. 2020.
- Cassuto, David N. "Waging Water: Hydrology vs. Mythology in 'The Monkey Wrench Gang.'" *Interdisciplinary Studies in Literature and Environment*, vol. 2, no. 1, 1994, pp. 13–36. JSTOR, JSTOR, www.jstor.org/stable/44087321.
- Copernicus: Europe's eyes on Earth*. European Union,
<https://www.copernicus.eu/en/services>. Accessed 2 Feb. 2020.
- Fradkin, Philip L. *A River No More: The Colorado River and the West*. Berkeley, The University of California Press, 1981.
- Fountain, John. "2019 Was the Second-Hottest Year on Record." *The New York Times*, 19 Jan 2020. <https://www.nytimes.com/2020/01/08/climate/2019-temperatures.html>. Accessed 10 Feb. 2020.
- Frodeman, Robert, et al. "Humanities for Policy—and a Policy for the Humanities." *Issues in Science and Technology*, vol. 20, no. 1, Fall 2003.
https://issues.org/p_frodeman-2/. Accessed 25 Feb. 2020.
- Gessner, David. *All the Wild That Remains*. W.W. Norton & Company, 2015.
- Gosh, Amitav. *The Great Derangement*. University of Chicago Press, 2016.
- Illich, Ivan. *H2O and the Waters of Forgetfulness*. Berkeley, Heyday Books, 1985.
- . "Introduction to the 'Wilderness Letter.'" *Stanford University Eco-Speak*.
<https://web.stanford.edu/~cbross/Ecospeak/wildernessletterintro.html>. Accessed 28 Feb. 2020.
- . "Lawsuit Seeks to Include Climate Change in Glen Canyon Operations Plan." *Center for Biological Diversity*, 3 Oct. 2019.

<https://biologicaldiversity.org/w/news/press-releases/lawsuit-seeks-include-climate-change-glen-canyon-operations-plan-2019-10-03/>. Accessed 15 Feb 2020.

- Leopold, Aldo. *A Sand County Almanac*. New York, Oxford University Press, 1949.
- Limerick, Patricia N. *The Legacy of Conquest: The Unbroken Past of the American West*. New York, W.W. Norton & Company, 1987.
- Loffler, Jack. *Adventures with Ed: A Portrait of Abbey*. University of New Mexico Press, 2002.
- Philippon, Daniel J. "Edward Abbey's Remarks at the Cracking of Glen Canyon Dam." *ISLE: Interdisciplinary Studies in Literature and Environment*, vol. 11, no. 2, Summer 2004, pp. 161–166, <https://doi.org/10.1093/isle/11.2.161>. Accessed 10 Jan. 2020.
- Pielke Jr, Roger. "Policy History of the US Global Change Research Program: Part I. Administrative development." *Global Environmental Change*, 23 Sept 1991, https://sciencepolicy.colorado.edu/admin/publication_files/2000.09.pdf. Accessed 15 Feb. 2020.
- Powell, John Wesley. *Report on the Lands of the Arid Region of the United States, with a More Detailed Account of the Lands of Utah with Maps*. 2nd Edition. Washington D.C., Government Printing Office, 1879.
- Reisner, Marc. *Cadillac Desert: The American West and Its Disappearing Water*. New York, Viking, 1986.
- Reynolds, Susan R. "Tangle of Repose." *Los Angeles Times*. 23 March 2003, <https://www.latimes.com/archives/la-xpm-2003-mar-23-tm-stegner12-story.html>. Accessed 20 Dec. 2019.
- Roach, John. "Heat Wave and Drought were so Devastating it had American declaring 'God is against us.'" *AccuWeather*, 9 Aug 2019. <https://www.accuweather.com/en/weather-news/heat-wave-was-so-devastating-it-had-americans-declaring-god-is-against-us/481031>. Accessed 12 Feb. 2020.
- Stegner, Wallace. *Angle of Repose*. New York, Doubleday & Company, Inc., 1971.
- Stegner, Wallace. *Beyond the One Hundredth Meridian*. New York, Houghton Mifflin Company, 1954.
- Stegner, Wallace. *The American West as Living Space*. Ann Arbor, The University of Michigan Press, 1987

Stegner, Wallace. *The Sound of Mountain Water: The Changing American West*. First Vintage Books, 1997.

Stegner Wallace. *Where the Bluebird Sings to the Lemonade Springs: Living and Writing in the West*. Modern Library, 2002.

Udall, Brad and Jonathan Overpeck. "Climate Change is Shrinking the Colorado River." *The Conversation*, 13 June 2017. <https://theconversation.com/climate-change-is-shrinking-the-colorado-river-76280>. Accessed 25 Feb. 2020.

---. "UN-Water Policy Brief on Climate Change and Water." *United Nations UN-Water*, 12 July 2019. <https://www.unwater.org/publications/un-water-policy-brief-on-climate-change-and-water/>. Accessed 25 Feb. 2020.

Worster, Donald. *Rivers of Empire: Water, Aridity, and the Growth of the American West*. New York, Pantheon Books, 1985.