Restoring Natural Landscapes vs. Protecting Traditional Landscapes:

Local Communities’ Resistance to Dam Removal in the Pacific Northwest

**Introduction**

In 2009, contractors tore down Savage Rapids Dam. Built in 1921 by the Grants Pass Irrigation District (GPID), the dam diverted Oregon’s Rogue River down canals and onto pears and beets. The intervening years saw massive social changes, in southern Oregon and throughout the American West. Some of these changes drove removals of dams like Savage Rapids. On the face of it, the removal seemed sensible enough – the dam was old and breaking down. The irrigation district replaced it with pumps. But this removal, and removals like it elsewhere, were and continue to be the source of massive controversy, creating a new locus for conflict between local communities and outside interests. On rivers across the region, newly ascendant environmental, recreational, and tribal interests contend with a conservative resistance rooted in more traditional philosophies, lifestyles, and economies. These conflicts turn, not necessarily on economics or ecology, but on cultural values and a sense of unfairness. Local people feel that a precious resource has been unjustly taken from them. The political strife over dam removal raises a new set of questions about equity, land management, and competing visions for the nation’s rivers. The center of these questions is the recreational and cultural role of the artificial lake created by dams, contrasted with the value represented by a free-flowing river.

Environmental justice is typically considered in terms of race and class, and deals with issues of pollution and public health (Brulle & Pellow, 2006; Cutter, 1995; Szasz, 1994; Sze & London, 2008). These issues, by their nature, tend to occur in urban or industrialized settings. The subset of environmental justice problems known as locally unwanted/undesirable land uses (LULUs) focuses largely on the placement of unwanted businesses trafficking in toxic substances or waste disposal (Greenberg, 1993; Liu, 1997; Wilson et al., 2012). In their 2006 review, Brulle and Pellow identify the market economy and racism as the two drivers of environmental injustice. To the extent that dams form part of this literature, the focus is on people displaced by dam construction (eg, Fearnside, 2014).

Western dam removal touches on few of these issues. However, in recent years local communities’ responses to ecological restoration and reallocation of water resources have taken on many of the themes and rhetoric of environmental justice and of LULUs. While stakeholders may disagree with water allocation procedures, outcomes are understood differently (Syme, Nancarrow, and McCreddin, 1999). Nationwide changes prioritizing environmental values may be acceptable on a broad scale, but on a situational level stakeholders may disagree with disruption of the status quo and feel as though they have been unfairly victimized and silenced (Syme, Nancarrow, and McCreddin, 1999). Ecological restoration presents a particularly complex political challenge; a restoration project is likely to cast prior land uses as negative, which may be offensive to local people who believe in those prior uses (Van Wieren, 2008). The involvement of outside forces in management zones that had heretofore been almost entirely the province of local communities may also be deemed offensive.

Partisans of the pre-restoration status quo employ tactics that mirror those of the young environmental movement, forming micro-scale advocacy groups, engaging in public lobbying and emotional appeals, and casting themselves as victims. Where once environmental groups saw themselves and their landscapes as being under attack by large, powerful forces, so now do conservative rural stakeholders. This can be understood as part of the larger backlash of anti-environmentalism that has been rising in the United States since the Sagebrush Rebellion of the 1970s and 1980s (e.g., UNWR, 1980). This sort of policy paradox (Stone, 2002), where two interest groups view the same space in wildly different ways is as politically problematic for rivers, water, and dams as it is for toxic waste or power plants. I approach this tension by investigating the cultural frames through which stakeholders understand the issue of dam removal and river restoration.

How stakeholders understand their landscape and watershed goes far toward explaining the historic transition occurring on the region’s rivers. Lakoff notes that defining the problem and establishing your definition as the essential one can be the key to political success or failure (Lakoff, 2008). In a Stonian sense, a running river can be seen as untapped electricity, fuel for croplands, a Class V rapid, Critical Habitat for native salmon, or a sublime example of wilderness.

The 1990s saw roughly ten removals per year in the United States (Pohl, 2002). Since 2000, there have been, on average, 44 dam removals in the United States per year (American Rivers, 2013). A disproportionate number of them have occurred in the states of California, Oregon, and Washington. These states contain 4% of America’s dams but account for 11% of its removals. This phenomenon is driven in part by the prospect of restoring historically enormous populations of Pacific salmon and sea-run trout (genus *Oncorhynchus*), which barely exist in many other states south of Alaska. At the same time, dams and water control play a crucial role in the lives of these states as well – each has an important agricultural sector that relies heavily on irrigation. The three states are also America’s top three producers of hydroelectricity (USEIA, 2014).

Philosophically, dam removal and restoration imply a fundamental reconsideration of the relationship between human beings and nature (Gross, 2006; Light & Higgs, 1996). Historically, nature was at first something to be feared, then, with America’s increasing mastery of the New World, something to be exploited, then, in more recent decades, something to be protected and preserved – presumably from the depredations of other people (Gross, 2008). This meshes closely with the 21st-century idea of the Anthropocene Era and humanity’s responsibility for environmental ills (Crutzen, 2002). Of course, each of these perspectives has been present throughout history to varying degrees, and they contend with one another to this day, but all share the sense of human beings as essentially antagonistic toward nature (Gross, 2008; Nash, 2001). The layering of these attitudes in American society and shifts in their relative power drive perceptions of fairness and belonging.

These attitudes are abundantly present in questions of dam removal. Over 1000 major dams were installed in American rivers every decade since 1900, peaking at nearly 20,000 in the 1960s (USACE, 2014). This wholesale dam construction was driven by a desire not just for dams’ social services or economic production, but for environmental conquest, a 20th-century extension of Manifest Destiny (Babbitt, 2002; Grossman, 2002; Reisner, 1993). This perspective is borne out by the rhetoric of some of the powerful forces behind dam construction. In the 1930s, when massive dams were under construction on the Columbia River, the Bonneville Power Administration hired now-legendary folk singer Woody Guthrie to compose songs glorifying the effort: tunes like “Grand Coulee Dam” and “Roll on Columbia.” Thirty-four years and tens of thousands of dams later, Bureau of Reclamation (BOR) Commissioner Floyd Dominy famously declared that “to have a deep blue lake, where no lake was before, seems to bring man a little closer to God” (BOR, 1965).

This ideology was particularly resonant in the American West, where arid conditions and rugged geography put great demands on water engineering and American lifestyles. To many rural Westerners, dams and reservoirs symbolized (and still do symbolize) progress and prosperity (Reisner, 1993). Reservoirs are also common recreational destinations – by far the most common primary use for dams is recreation (USACE, 2014**)**. In dry landscapes, these impoundments are likely to provide the only flat water available. The entire state of Texas, for instance, has only one large natural lake (CLI, 2014).

**Methods**

I investigated dam removal by performing case studies. Case studies suffer from their narrow scope and lack of generalizability (Bennet & Elman, 2006). But when studying dam removal politics, the case study is not only the best method – it is the only one. Dam removals are idiosyncratic, their circumstances varying tremendously depending on the river, its species, and its uses as well as the size, age, construction, and function of the dam. Moreover, dam removals are not broadly or consistently documented. The only current database of dam removals, the one kept by the environmental advocacy group American Rivers, lists only a few nonuniform details about each case. I selected the three largest functioning dams to be removed on the west coast: 39-foot Savage Rapids Dam, mentioned above, 47-foot Marmot Dam, in Oregon’s Sandy River, and the Elwha/Glines Canyon complex in the Elwha River, Washington.

I approached each case with the goal of identifying important political variables and issues – dam removal is a new phenomenon that has only been lightly studied. I began by tracing the political processes of each dam removal from the first time the removal was suggested until the dam became a (de)construction site. I conducted in-person semi-structured interviews with key informants for each dam removal. At the end of each interview, I identified subsequent informants through snowball sampling (Coleman, 1958).

I confirmed and supplemented informants’ accounts with archival research. I focused on newspapers as presenting the most consistent and reliable account of the issue as it was happening. I read each dam removal-related article to appear in each community’s local newspaper. I also read each environmental impact statement for each removal, as well as other relevant written sources when they existed. These sources included legal documents, meeting minutes, interest-group mailings, and in the case of the Elwha, unreviewed dissertations. Large but inconsistent masses of this material were available. Using these sources, I assembled a coherent narrative of each dam removal. I analyzed each case to understand stakeholders’ values and the way that they interacted with the process, and then compared findings in my three cases to suggest some common themes in northwestern dam removal.

**Savage Rapids Dam**

The Rogue River runs west from the Cascade Mountains to the Pacific Ocean. When the Grants Pass Irrigation District built its dam at Savage Rapids, it had the right to divert 230 cubic feet per second (cfs) to irrigate some 18,000 acres of Southern Oregon. The middle Rogue River Valley is an arid pocket of western Oregon, with 26-31 inches of precipitation annually, and irrigation was considered a godsend by local people; the dam was featured on postcards in the early 1920s (Momsen, 2009).

The dam proved a significant barrier for the Rogue’s salmon populations. The state, the Irrigation District, and local fishing groups worked to maintain and improve fish passage at the dam through most of the twentieth century, but never made the dam a model of fish passage efficiency (Hamilton, 2011). Savage Rapids Dam was not the only impact on salmon, and populations declined in rivers throughout the region, but Savage Rapids was eventually labeled “the number one killer on the Rogue” (Hunter, 2011). It would retain the “fish killer” nickname until its removal.

In the irrigation season between April and October, the dam was raised to its full height to divert water into GPID’s canals. This formed Savage Rapids Lake, a narrow impoundment that allowed for water skiing and other flat-water recreation. Several motels operated around the lakeshore, catering to weekend tourists. The lake formed a vibrant part of summer in Grants Pass.

In the early 1980s, the Oregon Water Resources Department (OWRD) set out to check GPID’s water right, to ascertain the quantity of water the district was using, and to make sure that was going toward the intended beneficial use (irrigation). The district no longer had very many active farms (many of its patrons were retirees), and it only applied 97 cfs to its lands. GPID objected to this, arguing that their seepage provided a public service by greening the landscape of Grants Pass and surrounding communities (GPID, 1994b).

Negotiations between GPID and the state proceeded at a leisurely pace into the 1980s. Local environmental and fishing groups, though, saw an opportunity to improve fish passage and perhaps remove the “fish killer,” which they had always abhorred (Hunter, 2011). Fish passage was considered along with water use efficiency, and in 1994 BOR recommended that the dam be removed and replaced with pumps (BOR, 1995). The GPID Board voted to go along with these findings and the demands of environmental groups, keep the water right, and remove the dam. The Board did this regretfully – most members wanted to keep the dam and its lake. In a letter to the rest of the board, two members who voted for dam removal put it thus:

“The dam has been a fixture in this community for many, many years and thousands of people have fond memories of family picnics on the summer lake, or learning to water-ski there, and of watching fish jump the ladders. Many people had also built boat docks on the lake, and enjoy the still water view during the irrigation season. These are the images that tug at our hearts.” But let’s look at the facts…” (GPID, 1994a).

The vote was contingent on a variety of factors, most notably finding external funding to pay for the removal and the pumps. Betweentimes, GPID would be allowed to divert at a compromise rate of 150 cfs.

These negotiations ran counter to the desire of the local community. Most citizens of Grants Pass and the Rogue Valley hinterland had no tangible connection to the dam but had long enjoyed the lake. Disgruntled citizens (and some disgruntled former GPID board members) rallied to save the dam. Some micro-scale advocacy organizations were formed, and a petition circulated through the community (Bender, 1997). There was even talk of a dam sit, much as some environmentalists sit in threatened trees. People saw the dam as the guarantor of beauty and greenery. Protest organizer Don Greenwood believed that “Without this water, not only would wells run dry, but the entire area would revert to a dry, dusty landscape with the local Indian tribes called ‘the brown desert.’” This formulation, of a wasteland in the eyes of the native tribes, was repeated many times throughout the controversy. It has currency to this day, though after a search in the archives of the Josephine County Historical Society, it appears to have no basis in history (Brewitt, personal observation). The moral, quasi-religious role of the dam was perhaps best expressed by Lewis Ledbetter:

“And the lord God planted a garden east of the Pacific Coast, namely Oregon. He planted in the midst of this garden a tree bearing the fruits of the knowledge of good and evil, and the tree of life. And he placed his man in this garden to dress it and keep it. He had placed in this paradise the Rogue River that was controlled by dams to supply Southern Oregon. Then he warned his man that he eat not of this tree of good and evil, that id he did, he would be punished, so much he’d rather be dead, and finally would be dead. Well we read his son, Adam, did eat, and our nation was hypnotized from our presidents to our governors by a group of powers to take away our legal rights to our river and to remove its dam, at our expense. That we could not more heap the harvest of this beautiful valley, nor control its flooded rivers or even had water in large areas. I ask the Lord to awaken the hypnotics or, if not, to be merciful to us sinners.”

(Ledbetter, 1997)

As Ledbetter’s letter implies, resistance was fueled not only by the looming loss of the lake, but by a reactionary resentment of outsiders. The same concerns that fueled the Sagebrush Rebellion and the Wise Use movement – a desire for local control of public resources and a belief in extractive land uses – moved pressure groups like the Association to Save Savage Rapids Dam and Lake and its sympathizers (Bender, 1997). In addition to these issues – common across the rural west – southern Oregon has been suspicious of outsiders for decades. There is a quite earnest separatist movement that hopes to secede from Oregon, along with the northernmost counties of California, form the State of Jefferson (Jefferson Statehood Project, 2014). The separatists no longer have the rifles out, as they did in the early 1940s, but the state flag and seal are often to be seen across the region, and the sense of dissonance with far-off Portland and San Francisco remains strong (Brewitt, personal observation).

In 1994, these groups found some success by appealing to state senator Brady Adams (R-Grants Pass). Adams was sympathetic to the community and its desire to keep the dam (Adams, 2011). He quickly passed several motions to guarantee GPID its water rights and its dam but these were vetoed by Democratic Governor John Kitzhaber. The two men compromised by assembling a task force to study the issue, but its recommendation, to keep the dam, was lukewarm and lacked the full support of the delegates.

Back in Grants Pass, an aroused citizenry elected a strongly anti-removal board. The board tried to balance the demands of the state and the district’s patrons while finding a way to keep the dam, but the federal listing of the Rogue’sCoho salmon[[1]](#footnote-1) as threatened added an obstacle the board could not overcome. After years of negotiation, the National Marine Fisheries Service (NMFS) took GPID to court under Section Seven of the Endangered Species Act because the operation of the dam killed salmon. Legal bills began to mount, and the patrons of the district, most of whom had had little involvement in the issue, resented having their dues rise and their water threatened (Tappan, 2011).

The board was gradually voted out of office, and in 2000 GPID agreed to cooperate to remove the dam. In 2001, all parties signed a consent decree formalizing this agreement. All parties lobbied Congress for funding, and the Oregon delegation, seeing a chance to restore the environment and secure water for farmers (as they saw it), provided funding. In 2009 the dam came down.

**Elwha and Glines Canyon Dams**

The Elwha River runs north from the glaciers of the Olympic Mountains to the Strait of Juan de Fuca. While many western rivers have famous historic fisheries, there is no doubt that the Elwha was one of the most productive salmon rivers in the Northwest. The entire stream is only 45 miles long, but it contained ten different runs of anadromous salmonid, including immense returns of pink salmon (*O. gorbuscha*) estimated at a quarter-million spawning adults, and huge Chinook that weighed over 100 pounds (typically Chinook weigh 40 pounds (NMFS, 2014**)**). The wealth of the ecosystem sustained the Lower Elwha Klallam Tribe for many years. An industrialist named Thomas Aldwell staked a claim on the Elwha in order to put a hydroelectric dam there. The105-foot Elwha Dam (ED) began to churn out electricity in 1913. It was also a complete barrier to upstream salmon migration. In 1926, 210-foot Glines Canyon Dam (GCD) was built eight miles upstream. There was no need to build fish passage on to it, because there were no more salmon or steelhead that high up the river. In 1939 the interior of the Olympic Peninsula, including Glines Canyon Dam, was made into Olympic National Park. This protected a significant amount of the Olympic Peninsula from logging and other development. From the beginning, some local people did not like the park. Economically and culturally, the community was tied to the forest industry, and the establishment of a national park ran contrary to their beliefs. The threat of government control loomed in their minds as well – semi-founded conspiracy theories about the Park Service throwing all the people off the Olympic Peninsula run rampant to this day (Hewett, 2011, Chastain, 2011).

The two dams at first provided power for much of the nearby town of Port Angeles, but as electricity requirements grew in the region, their power was only able to supply 35-40% of the consumption of the Crown Zellerbach paper plant (Peninsula Daily News 1987). This was valuable, though, as timber and forest products drove the economy of the Northern Olympic Peninsula for most of the 20th century.

A five-mile river cannot support as many fish as a 45-mile river. In the decades following the Elwha Dam, the river’s salmonid populations crashed. Three runs went extinct or nearly extinct, and the giant Chinook have not been seen for decades. This was devastating for the fishing economy, as well as for the Lower Elwha Klallam Tribe. At this point, the definition of localism and traditional definitions of environmental justice become part of the issue. The Elwhas, along with several other bands of natives in the area, had treaty rights to fish at their accustomed places, but they could not catch fish that weren’t there. The traditional economy of the Elwhas depended heavily on the river and its productivity. With few other options, the Elwhas have had to struggle on without this mainstay for most of the twentieth century, and many tribal members are quite poor. The Caucasian proponents of keeping the dams and demanding local control are shaded by the far more profound claim to local status of the Lower Elwha Klallams (Busch, 2008).

In the 1970s, Crown Zellerbach began to look into renewing Glines Canyon Dam’s license, and looked into getting a license for the Elwha Dam – as the Federal Energy Regulatory Commission (FERC) did not exist in 1913, the dam had never been licensed. They found themselves in something of a quandary – how could the dams be brought up to meet the environment regulations of the 1970s? Could a dam in a national park be licensed at all? Could the fish runs be restored? These were open questions, and FERC issued a series of one-year temporary licenses as negotiations continued.

In 1986, four environmental groups decided to intervene in the licensing process in hopes of restoring the river. This group, which operated in concert throughout the issue despite new organizations signing on in the future, was known as the Conservation Interveners (CI’s). The common thread among them was a belief that the river had been harmed by the dam. The construction of the dam was often described as a crime (due to Aldwell’s underhanded dubious agreement over the hatchery) and their environmental mission was to rectify that crime. The Lower Elwha Klallam Tribe intervened in the same year. The tribe had been involved in the issue since the late 1960s, but had lacked the resources to move the issue much.

After some years of debate, the companies (there were several, as the plant was sold several times in a series of reorganizations) agreed to removal, provided that the government buy the dams and ensure a continuing adequate supply of affordable power. At this time, until 1992, letters to the editor in the Peninsula Daily News were generally supportive of dam removal and fish restoration. As in the case of Savage Rapids Dam, the united stakeholders appealed to the federal government to pass Elwha legislation. The bill’s supporters, Rep. Al Swift, D-WA, and Senator Bill Bradley, D-NJ, found that they could not gather support from many of their colleagues for an act ordering the removal of a dam. For this reason, the Elwha Act mandated river restoration, which all could support, and ordered the National Park Service, NMFS, and the Tribe to study what river restoration would entail. All active stakeholders knew that restoration would demand dam removal, and when the Elwha Report was released in 1994, this was indeed its recommendation (Department of the Interior, Department of Commerce, & Lower Elwha S’Klallam Tribe, 1994).

At around this time, a resistance movement was springing up in Port Angeles. Again, as on the Rogue, resistance, embodied by a group called Rescue Elwha Area Lakes (REAL), focused on the recreational and aesthetic qualities of the artificial lakes the dams created, and on a feeling of separation from environmentalists and urban elites. The Olympic Peninsula is physically and ecologically distinct from the rest of Washington, and the common tension between rural and urban populations is accentuated there. Moreover, Olympic National Park became a United Nations World Heritage site in 1981, strengthening an undercurrent of suspicion of the UN and its motives among local people. The UN has been incorporated into the theory of local people being forced off of the peninsula, a theory which is supported by the founders of REAL (Chastain, 2011).

REAL was the most active part of the resistance movement, but far from the only one. Representative Norm Dicks (D-WA), visiting Port Angeles for the first time after it was redistricted into his district, tells a story of walking into a town meeting of about 120 people, and hearing a voice say something like “Let’s tell the Congressman how we feel about taking the dam out on the Elwha! All opposed!?” At which 115 people stood up (Dicks, 2013). Businesses in downtown Port Angeles sprouted Save Our Dam signs in the windows. To Port Angeles, the dam was not only an important energy generator for one of the biggest employers in the region, but was also a recreational and aesthetic enhancement of the natural landscape. As the issue heated up in the mid-1990s, letter writers in the Peninsula Daily News lauded the recreation opportunities on the artificial lakes, and worried about their “wildlife and ecosystem” (Johnson, 1994).

During this time, Senator Slade Gorton (R-WA), decided to burnish his anti-environmentalist credentials by removing his support for the dam removal. Gorton’s power base was in the traditional ranchlands of eastern Washington, where a much larger dam removal, on the Snake River, was under debate. Gorton displayed his support for his anti-removal constituents by opposing the Elwha removal, on the grounds of the community objecting. Gorton chaired the Interior Appropriations Subcommittee, putting him in position to limit the flow of money to fund the Elwha Act, releasing a few millions dollars per year. The total cost of the removal project was $325million (NPS, 2014).

Faced with this challenging situation, a working group of environmentalists assembled a committee of widely respected community members to reach some consensus on the dam removal and combat the perception that REAL spoke for the community. After intensive study, the committee’s recommendation was to gradually remove the dams. This turned the political tide. Between 1997 and 2011 appropriations came in regular doses. In September 2011, demolition began on the Elwha Dam.

The start of the Elwha Dam removal was a massive celebration. The Elwha tribe, environmental groups, anglers, scientists, and politicians came together to ring in the removal project. Interior Secretary Ken Salazar spoke warmly of the administration’s focus on healthy rural landscapes and economies, and Port Angeles was full of fanfare and support for restoration (Brewitt, personal observation). The Elwha Dam was gone by spring 2012. The Glines Canyon Dam removal is expected to be complete some time in 2014.

**Marmot Dam**

The Sandy River runs northwest, 56 miles from Oregon’s Mt. Hood to the Columbia River. The river contains five runs of anadromous salmonid (FERC, 2003). The river mouth is less than twenty miles east of Portland, Oregon’s biggest city, and for this reason it is one of the state’s most popular fishing destinations (Alsbury, 2012). The Marmot and Little Sandy Dams were built in 1912-13 to provide electricity to the area. The dams and their associated infrastructure were licensed as the Bull Run Hydroelectric Project and operated by Portland General Electric (PGE), a private utility. Knowing that the city of Portland might form its own public utility, PGE made sure to sell its power cheaply, so Marmot Dam’s value was somewhat deflated early on (Kirkendall, 2011, Jensen, 2012).

The Bull Run Project was something of a landscape-scale Rube Goldberg machine. The Marmot Dam diverted part of the Sandy River’s flow through flumes to the Little Sandy River. The Little Sandy Dam diverted this water along with the entire flow of the Little Sandy into a forebay called Roslyn Lake. Roslyn Lake was not part of any river at all – it was essentially a meadow with berms lining the sides. The water in the lake was released into the Bull Run Powerhouse.

To the community of Sandy, Roslyn Lake was a recreational resource. The lake was stocked with rainbow trout, allowing children and disabled people to fish in a stable and relatively safe environment. An estimated 60,000 people visited the lake each summer (Trevison, 2005). The town of Sandy’s population was less than 10,000 as of 2012 (USCB, 2014). This situation was quite stable for most of the 20th century as Sandy grew and the city of Portland expanded toward it along Highway 26. The old dam’s wooden structure was reinforced in concrete in 1989, and PGE expected that Marmot Dam would last for decades (Goranson, 1989).

Bull Run’s FERC license was set to expire in 2004. In the late 1990s, PGE initially approached the license with the assumption that they would apply for renewal in this case as well and assembled a working group of stakeholders to work out the process. But when PGE took a hard look at the expense of upgrading the dams and their operations, and the value of the power the project would produce, the company decided that it was not worthwhile to renew the license and began to look into license surrender, and the decommissioning of the project (Keil, 2011, Esler, 2012). This would mean the removal of Marmot and Little Sandy Dams.

There were three main impediments to dam removal (Keil, 2011**)**. One of them was technical – the action of the silt that had built up behind the structure was uncertain. Another was management-based – Marmot Dam served to separate wild upstream salmon from hatchery-bred downstream salmon, which had significant implications for fishing in the stream. The last issue was cultural – decommissioning the project meant draining Roslyn Lake.

When PGE, the city of Portland, and the governor’s office announced the decommissioning plan in May 1999, the local *Sandy Post* supported the decision, and so did the Sandy River Basin Watershed Council. Both bodies expressed concern, however, about the social impact of losing Roslyn Lake. Roslyn groundskeeper Caddy Grantz suggested that the community would “throw a big old fit” (Esteve, 1999a). And indeed it did (Muck, 2012, Sandy Post 1999, Rowley 1999). PGE and the other regulatory stakeholders held public meetings to share information and give local people a chance to share their views. They were not opposed to the dam removal, but they wanted to keep their lake.

These meetings quickly grew heated. People decried the speed with which the decision was being made, expressing a sense of voicelessness (Austin, House-Peters, & Skees-Gregory, 2010) and asked whether there was some way to keep the lake without the dam (SP 6/9/99. Some people spied the hand of the city of Portland in the issue and worried about a water rights grab (Esteve, 1999b**,** Lewis 1999). They waxed nostalgic about the centrality of the “pristine lake” to the community and worried about the wildlife that lived in and around it (SP 6/16/99, SP 8/4/99). Overwrought letters to the editor flew in, saying that “it would be impossible to imagine life without Roslyn Lake” (Sandy Post, 1999). The most telling rhetorical blow was dealt by ten year-old Molly Courtney: “If you want to hurt hundreds of little children’s feelings, then go ahead and do it” (Lewis, 1999).

Lurking in Roslyn Lake was a second issue: water supply. Roslyn served as the primary water source for part of the Sandy Fire District. This was easily mended by installing a hydrant on the city of Portland’s line near the Roslyn Lake Fire Station. More challenging politically was the question of groundwater. There were no homes on the lake’s shore, but there were up to 58 wells that might be affected (Cox, 2000). Would taps actually run dry, and what response would be appropriate if they did? It seemed unlikely that anyone’s well would actually be affected (and in the end none were) but it was difficult to know (Heintzman, 2012). PGE (with its senior water right) was not legally responsible for the water in private wells, but it was ready to provide bottled water (and perhaps a “city” of porta potties) to be on the safe side (Heintzman, 2012). This did not assuage the concerns of well owners or the Bull Run Community Association, an area planning group.

Their dander up, the defenders of Roslyn Lake constructed phone trees (Esteve, 1999a), held forums (McMullen, 1999a), and formed an advocacy group called the Keeping Water in the Lake Committee (Irving, 2000). They hoped that the city of Portland, with its enormous water rights in the Bull Run basin, might be open to filling the lake suggested digging a smaller, deeper, spring-fed lake (Esteve, 1999c). PGE and the city were amenable to keeping the lake if a solution could be found, and they searched for alternatives as well. But this proved challenging – there had not been a natural lake at the site, and as it was five to seven cubic feet of water seeped out of the lake every second (FERC 2003). It turned out to be unfeasible to fill the lake with Portland water (Kucas, 2011). Clackamas County Parks was mooted as a possible lake manager, but they lacked the revenue (McMullen, 2000). PGE made the lake available to any other user willing to maintain it, but no such body arose.

The *Sandy Post* editors, reflecting on the furor, astutely identified the crux of the problem: “the company owns Roslyn Lake, which has seemed like a public place, but, in reality, never was” (Lewis, 1999) Oregonians, the paper said, were unwilling to pay the necessary levies for public parks, but if they relied on private facilities for their recreation, they were setting themselves up for disappointments like this one (Lewis, 1999).The public would not pay for Roslyn Lake Park, but they did feel ownership, and they would fight for it. PGE’s decision to slow down the removal project was driven partly by the community’s unexpected anger. When the announcement was made in the summer of 2000, the *Sandy Post* headline was “Roslyn Lake gets reprieve from PGE” (McMullen 2000).

Faced with an unexpectedly complicated and emotional political landscape, PGE reassessed the project (Keil, 2009). In 2002, they convened a diverse working group of 23 organizations. The group included every user group or authority on the Sandy River, from the city of Sandy to the Oregon Governor’s Office to Alder Creek Kayak Supply. PGE hired a neutral mediator, Debra Nudelman, to facilitate the negotiation. Nudelman receives widespread credit for her work on Bull Run (Heintzman, 2012; Jensen, 2012; Keil, 2009; Young, 2011). Her skilled approach likely made the difference between success and failure – between a thoroughly planned and managed removal and an abandoned hydro project. She was goal-oriented, kept the diverse stakeholders headed in the same direction, and, crucially, formed sub-groups with the skills and regulatory responsibilities to overcome the technical challenges (Kucas, 2012).

Some stakeholders felt that PGE delayed negotiations for the roughly 18 months between the end of the first process and the start of the second (Young, 2011; Gray, 2012). From PGE’s perspective, it was working almost the entire time to sort out what was needed to find success the next time around.

The group was working against the clock – Bull Run’s license expired on November 21, 2004. If PGE did not submit its license renewal or surrender application to FERC two years before the expiration date, the dams would be orphaned. In 10 months, the stakeholders hammered out an agreement to remove Marmot Dam, Little Sandy Dam, Roslyn Lake, and their flumes and infrastructure.

Public resistance to the draining of Roslyn Lake faded in 2002. While the sentiments remained (a 2010 study still found disgruntled people in Sandy after the dam removal (Austin, 2010), no organization seriously challenged the removal. The Keeping Water in the Lake Committee does not appear in the Sandy Post or the Portland Oregonian after 2000, and there were few comments about Roslyn in FERC’s Final Environmental Impact Statement (FERC, 2003).

This successful diminution of the issue came through PGE’s straightforward approach and its hope to keep the Roslyn area for public recreation (Plaeger, 2012; Lazenby, 2012). PGE’s public outreach might have been awkward initially, but after a series of meetings and public attempts to identify methods to retain the lake, no one who was involved in the issue could doubt that all options had been tried. The utility would not turn the park over to the several potential buyers who wanted to log it (Esler, 2012). Pleas to save the lake remained (Janssens, 2007; Hathcock, 2008), but they came to nothing. PGE spokesman Mark Fryburg, reviewing PGE’s efforts, noted empathetically that the people of PGE enjoyed Roslyn Lake, themselves, and would miss it too (Trevison, 2007).

The next summer, with minimal disturbance, 15-foot Little Sandy Dam came out, and Roslyn Lake was drained. In the absence of a buyer willing to make the lake into a park, the land will become a resting facility for the elephants of the Portland Zoo (Lazenby, 2012; Sandy, OR Chamber of Commerce 2013). The old tunnel that had guided the flume through the hillside is being made into bat habitat (Lazenby, 2012). PGE’s holdings in the Sandy Basin are being donated to Western Rivers Conservancy, which will eventually transfer them to the Bureau of Land Management. In the Sandy river, the returning fish are fitter and nesting better than they had in the past, while the Little Sandy, dewatered for decades, has seen an immediate return of Chinook, Coho, and steelhead (Arendt, 2012).

**Discussion**

On the Elwha and the Rogue, all antagonists looked at the dam, the lake, and the river, and saw a transformed landscape. The conflict came over what that transformation meant. To local people, the creation of “a deep blue lake, where no lake was before” was an improvement, using the raw materials offered by nature to make a better landscape – a landscape with a lake (an artificial lake, but no matter) in it. Part of the mindset of western settlement over the years was to take a wild landscape and make it into a pacified replication of Europe or the East. A lake was part of this vision. To some local people, this lake was not just an improvement on nature – it was natural and pristine. The lake was a public resource, and although it belonged to the dam operators, it was a part of everyone’s common heritage.

Aside from the artificial lake, the function of the dam in relation to the larger landscape also helped realize the traditional vision of beneficial transformation. In the timber country of the North Olympic Peninsula, powering a paper mill was the most beneficial thing that a river could do. In Southern Oregon, though, the impact was greater – the dam let the landscape bloom, creating a green paradise in an arid country. Even in the exurban town of Sandy, the lake was a place of beauty and natural enjoyment. This green and pleasant land was far better than the natural arid setting that surrounded it in most of the rest of Oregon.

To environmentalists, fishers, and the Elwha tribe, the dam’s impact on the landscape was more like a blight. To them, the common-pool resource was the river, sullied by the dam. This has been and continues to be a common theme for environmentalists, ever since the battle over the damming of Hetch Hetchy Valley in the first decades of the 20th century (Fox, 1981). The difference (aesthetic preferences aside) lay in what the two sides saw as appropriate forces for shaping the landscape. While traditional interests in the community believed that the river was there to be used and diverted, environmentalists believed in a river shaped by the forces of nature, from a natural riparian zone to unimpeded fish migration.

In both cases, the fish played a key role in the environmental understanding of dam removal. Along with being a powerful cultural symbol, fish represented an overlooked resource that, if restored, could be expected to outweigh the dams’ advantages in hydropower or irrigation water. The removal of the Savage Rapids Dam was expected to result in 22% more returning adult salmon each year, each representing a boost in the region’s recreational fishing economy along with its ecological contribution (BOR, 1995). The Elwha removals are expected to have similar impacts. The fishes’ benefits for the Elwha tribe, culturally and socially as well as economically, were difficult to calculate but undoubtedly large. Local people in the North Olympic Peninsula valued fishing as well, but some locals claimed that dam removal not restore but would in fact harm the Elwha’s fish (Chastain, 2011**)**. The companies and, later, REAL, advocated for a restoration plan that kept the dam in place. On Savage Rapids, with its semi-functional fish ladder and a hatchery far upstream, the disbelief was even greater. Local people had watched salmon ascend the dam for many years, so it seemed obvious to them that the dam worked (McMurray, 2011). The ladders’ poor construction, the delays in ascending it, the fishes’ exposure to predators at the dams’ choke point, their difficulty in navigating the upstream lake, and juveniles’ even greater problems as they passed through the structure on their way downstream, were not intuitively clear to local observers and were not easy to explain. The unconvincing response to questions about dead fish bodies, from removal advocate Bob Hunter, was that “there are invisible fish” (BOR, 1995).

The rise in salmon runs and fishing points to a broader source of conflict between Old and New West perspectives – river-based recreation. The flat-water recreation favored by dam advocates was to be replaced not just by fishing but also, in the Rogue’s case, with a better river for kayaking and whitewater rafting. While local kayakers were disappointed when Savage Rapids turned out to be named not for the savagery of the rapids but for a local pioneer family called Savage, the connection between upstream and downstream reaches allowed boaters to float unimpeded from the Cascades to the Pacific Ocean. Many people in Sandy, Oregon, wanted to relax by the shores of Roslyn Lake – these same people may not have wanted to kayak down the Sandy River. To local people, the replacement of recreation they liked and were used to with recreation that they did not enjoy seemed an inadequate trade.

Like many issues in the rural west, a core part of these conflicts was local vs. outside control of the landscape, and the definition of what “local” actually means. This was a more complex subject than it might have first appeared. As the layers of Old and New West values and lifestyles have always been present in many places, so they were in these places. One of the longest-standing and most effective proponents of dam removal on the Elwha was Dick Goin, whose family had moved to Port Angeles when he was a small child in the 1930s and had homesteaded along the river. He, like many people in those days, had been a subsistence fisherman, fishing daily out of necessity (Goin, 2012). By the 1990s, he was one of the few people who could remember catching massive Chinook (he estimates his larger catches to have weighed 75 pounds) and could express the dams’ impacts as few could. The leader of REAL, Marv Chastain, was a retired technician from Seattle. By the same token, the face of the Savage Rapids Removal effort was Bob Hunter, who lived in the Rogue Valley in the nearby town of Medford. To some extent, these complex identities were lost in adherence to a larger narrative, one that had been established in the Northwest in the 1980s in the environmental cataclysm of the Northern Spotted Owl and its effects on logging in National Forests (Dietrich, 1992; Seideman, 1993). For many dam removal stakeholders, the Owl Wars drew battle lines and cast its shadow over the dam removals in spite of the very different issues and resources at stake (Tappan, 2011, Hamilton, 2011, Prather, 2012). This changed the political calculus permanently and forced environmentalists to cast about for local credibility. Friends of the Earth (which was for some years the leader environmental group on the Elwha) made an effort to start up a local pro-removal organization (called Friends of the Elwha) in order to have some credibility in the community. Political defenders of the dam like Brady Adams and Slade Gorton found it easy to carry the standard of local rural people and to vilify the greens from the city without paying much attention to who those people actually were.

At the heart of dam removal is the thorny issue of ecological restoration. Restoration is an offensive action, a political goal with different dimensions than halting a LULU or changing the siting of a factory. Dam removal makes an implicit statement that the construction of the dam was a bad thing, and so, by extension, were the people who built it. This deemed unfair and offensive to the local people whose parents or grandparents had built that dam and had celebrated and benefitted from its effects. They would not see their reservoirs as a blight, but as a natural lake, beneficial to all. Local people retained a strong affection for the dams and their reservoirs, and to the landscapes that those dams built. The culture that built the region as it exists in the 21st century retains strong ties to its dams and reservoirs, and it will defend them with the same emotional zeal as environmental advocates defend their rivers. While people had the opportunity to comment, their uses of the dam and the river were not given seats at the political table, and the result was outcry and controversy as they defended their culture and history as best they could. These cultures and histories must be born strongly in mind as we study the dynamic and developing politics of ecological restoration.

**Works Cited**

American Rivers. (2013). *63 dams removed to restore rivers in 2012*.

Austin, T., House-Peters, L., & Skees-Gregory, D. (2010). Community Stakeholder Perceptions of the Bull Run Hydroelectric Project Decommissioning Process. Portland, OR: Portland State University.

Babbitt, B. (2002). What Goes Up, May Come Down. *BioScience*, *52*(8), 656–658.

Bender, P. (1997). Restoring the Elwha, White Salmon, and Rogue Rivers: a comparison of dam removal proposals in the Pacific Northwest. *Journal of Land, Resources and Environmental Law*, *189*(17), 1–48.

Bennet, A., & Elman, C. (2006). Qualitative research: recent developments in case study methods. *Annual Review of Political Science*, *9*, 455–76.

BOR. (1965). *Lake Powell, Jewel of the Colorado*. Washington, DC: US Government Printing Office.

BOR. (1995). *Planning Report and Final Environmental Impact Statement: Josephine County Water Management Improvement Study, Oregon*. Rogue River Basin, Oregon.

Brulle, R. J., & Pellow, D. N. (2006). Environmental Justice: Human Health and Environmental Inequalities. *Annual Review of Public Health*, *27*, 103–124. doi:10.1146/annurev.publhealth.27.021405.102124

Busch, R. (2008). Tribal Advocacy for Elwha River Dams Removal on Washington’s Olympic Peninsula. *Golden Gate University Environmental Law Journal*, *2*, 5–21.

CLI (Caddo Lake Information) (2014) “Caddo Lake Information” URL: <http://www.caddolake.info/>. Last accessed 4/7/2014

Coleman, J. S. (1958). Field Methods and Techniaues Relational Analysis : The Study of Social Organizations with Survey Methods. *Human Organization*, *17*, 28–36.

Cox, J. (2000, September 20) 1/2a Future of Roslyn Lake dubious as power plant is taken off-line. *Sandy Post.*

Crutzen, P. J. (2002). Geology of mankind. *Nature*, *415*(6867), 23. doi:10.1038/415023a

Cutter, S. L. (1995). Race, class and environmental justice. *Progress in Human Geography*, *19*(1), 111–122. doi:10.1177/030913259501900111

Department of the Interior, Department of Commerce, & Lower Elwha S’Klallam Tribe. (1994). The Elwha Report: Restoration of the Elwha River Ecosystem and Native Anadromous Fisheries.

Dietrich, W. (1992). *The Final Forest: The Battle for the Last Great Trees of the Pacific Northwest*. New York: Simon and Schuster.

Esteve, H. (1999a, June 14) e01 Residents Rally to Fight Roslyn Lake Closure: a Project Manager for PGE says the Company Will Not Halt Demolition of the Dams Feeding the Popular Recreation Spot. *Portland Oregonian.*

Esteve, H. (1999b, June 15) Esteve c02 PGE Takes Heat From Audience About Roslyn Lake. *Portland Oregonian.*

Esteve, H. (1999c, August 2) e01 Supporters Rally to Preserve Lake, Fishing: PGE’s Plan to Remove Two Dams is Inspiring Efforts to Save Roslyn lake and a Hatchery Program that Stocks the Sandy River. *Portland Oregonian.*

Fearnside, P. M. (2014). Brazil’s Madeira River Dams: A Setback for Environmental Policy in Amazonian Development. *Water Alternatives*, *7*(1), 256–269.

FERC. (2003). *Final Environmental Impact Statement: Bull Run Project, Oregon, FERC No. 477-024*. Washington, DC.

Fox, S. (1981). *The American Conservation Movement: John Muir and His Legacy*. Madison, WI: University of Wisconsin Press.

Goranson, T. (1989, October 27) e13 New, Stronger Dam on Sandy River to be Dedicated by PGE on Saturday. *Portland Oregonian.*

Grants Pass Irrigation District Board meeting minutes 1/26/94

Grants Pass Irrigation District Board meeting minutes 1/5/94

Greenberg, M. (1993). Proving environmental inequities in siting locally unwanted land uses. *Risk – Issues in Health and Safety*, *4*, 235–52.

Gross, M. (2006). Beyond expertise: Ecological science and the making of socially robust restoration strategies. *Journal for Nature Conservation*, *14*(3-4), 172–179. doi:10.1016/j.jnc.2006.05.004

Gross, M. (2008). Return of the wolf: ecological restoration and the deliberate inclusion of the unexpected. *Environmental Politics*, *17*(1), 115–120. doi:10.1080/09644010701643159

Grossman, E. (2002). *Watershed: the Undamming of America*. New York: Counterpoint.

Hathcock, M. (2008, March 26) 1/4A PGE sets drain date for Roslyn Lake. *Sandy Post.*

Irving, D. (2000, April 11) b02 Roslyn Lake Backers Want to Tap Portland Supply. *Portland Oregonian.*  
Janssens, E. (2007, September 12) 12A Save Roslyn Park for the future. *Sandy Post.*

Jefferson Statehood Project (2014). “Jefferson: the 51st State” URL: <http://jeffersonstate.com/>. Last accessed 4/7/2014

Johnson, H. (1994, September 18) a10 “Project upsets visitors Letter to the editor. *Peninsula Daily News*.

Keil, J. (2009). Bull Run Decommissioning: Paving the Way for Hydro’s Future. *Hydroworld*, *28*(2).

Lakoff, G. (2008). *Don’t think of an elephant: Know your values and frame the debate*. White River Junction, VT: Chelsea Green Publishing.

Ledbetter, L. (11/26/97) Wake up before the dam is gone at our expense (Letter to the editor). *Grants Pass Daily Courier.*

Lewis, S. (1999, June 16) 1a/3a PGE takes a punch from local residents over dam breachings. *Sandy Post.*

Light, A., & Higgs, E. S. (1996). The Politics of Ecological Restoration. *Environmental Ethics*, *18*, 227–247.

Liu, F. (1997). Dynamics and Causation of Environmental Equity, Locally Unwanted Land Uses, and Neighborhood Changes. *Environmental Management*, *21*(5), 643–56.

McMullen, D. (1999a, June 9) 1/3a Residents discuss proposed dam breachings. *Sandy Post.*

McMullen, D. (1999b, September 15) 1/2a Roslyn Lake forum attracts 40 citizens. *Sandy Post.*

McMullen, D. (2000, June 14) 1a/3a “Roslyn Lake gets reprieve from PGE. *Sandy Post.*

Momsen, J. (2009). *The Dam Picture Book*. Grants Pass, OR: Josephine County Historical Society.

Nash, R. (2001). *Wilderness and the American Mind*. New Haven, CT: Yale University Press.

National Marine Fisheries Service (2014). “Chinook Salmon *(Oncorhynchus tshawytscha)*” URL: <http://www.nmfs.noaa.gov/pr/species/fish/chinooksalmon.htm>. Last accessed 4/7/2014

National Park Service (2014). “Frequently Asked Questions” URL: <http://www.nps.gov/olym/naturescience/elwha-faq.htm>. Last accessed 4/7/2014

O’Loughlin, D. (1995, October 28) Savage Rapids problem still not addressed. *Grants Pass Daily Courier.*

O’Loughlin, D. (1996, February 19) Dam panel selects Becklin as chairman. *Grants Pass Daily Courier*

Peninsula Daily News (No Byline) (1987, November 27) “James River keeps ownership of dams” a1-2 *Peninsula Daily News*.

Pohl, M. M. (2002). Bringing Down Our Dams : Trends in American Dam Removal Rationales. *Journal Of The American Water Resources Association*, *38*(6), 1511–1519.

Reisner, M. (1993). *Cadillac Desert*. New York: Penguin Books.

Rowley, D. (1999, August 4) Draining Roslyn will ruin memories” Letter to the Editor, *Sandy Post*.

Sandy Post (No byline) (1999, June 23) 1a Try fishing? *Sandy Post.*

Sandy, OR Chamber of Commerce. “Andy” (2013) “The elephants are coming! The elephants are coming!” URL: <http://www.sandyoregonchamber.org/news/the-elephants-are-coming-the-elephants-are-coming/>. Last accessed 4/7/2014

Seideman, D. (1993). *Showdown at Opal Creek: the Battle for America’s Last Wilderness*. New York: Carrol and Graf.

Stone, D. (2002). *Policy Paradox: the Art of Political Decision Making*. New York: W.W. Norton and Company.

Syme, G. ., Nancarrow, B. ., & McCreddin, J. . (1999). Defining the components of fairness in the allocation of water to environmental and human uses. *Journal of Environmental Management*, *57*(1), 51–70. doi:10.1006/jema.1999.0282

Szasz, A. (1994). *EcoPopulism: Toxic waste and the movement for environmental justice*. Minneapolis, MN: University of Minnesota Press.

Sze, J., & London, J. K. (2008). Environmental Justice at the Crossroads. *Sociology Compass*, *2*(4), 1331–1354. doi:10.1111/j.1751-9020.2008.00131.x

Trevison, C. (2005, November 15) b04 Plan to remove Marmot Dam and Roslyn Lake flows forward. *Portland Oregonian.*

Trevison, C. (2007, September 6) 01 Roslyn Lake --one last time. *Sandy Post.*

USACE (US Army Corps of Engineers) (2014) “CorpsMap: the National Inventory of Dams” URL: <http://geo.usace.army.mil/pgis/f?p=397:12>:. Last accessed 4/7/2014

USCB (United States Census Bureau). (2014). “Sandy (city), Oregon” URL: <http://quickfacts.census.gov/qfd/states/41/4165250.html>. Last accessed 4/7/2014

USEIA (United States Energy Information Administration) (2014). URL: <http://www.eia.gov/state/?sid=CA/> (OR/WA). Last accessed 4/7/2014

UNWR (United States News and World Report) (No Byline) (1980) “The Sagebrush Rebellion. Accessed via the Virginia Center for Digital History. URL: <http://www2.vcdh.virginia.edu/PVCC/mbase/docs/sagebrush.html>. Last accessed 4/7/2014

Van Wieren, G. (2008). Ecological Restoration as Public Spiritual Practice, *12*, 237–254. doi:10.1163/156853508X360000

Wilson, S. M., Fraser-Rahim, H., Williams, E., Zhang, H., Rice, L., Svendsen, E., & Abara, W. (2012). Assessment of the distribution of toxic release inventory facilities in metropolitan Charleston: an environmental justice case study. *American Journal of Public Health*, *102*(10), 1974–80. doi:10.2105/AJPH.2012.300700

Interviews (Name, Organization, Date)

Savage Rapids Dam

Brady Adams Oregon Senate 8/31/11

Bob Hamilton Bureau of Reclamation 7/25/11

Bob Hunter Waterwatch of Oregon 6/16/11

Tom McMurray GPID Board 8/5/11

Nandy Tappan GPID Board 8/30/11

Elwha Dam

Norm Dicks US House of Representatives 10/7/13

Dick Goin Naturalist/Subsistence Angler 1 2/18/12

Pearl Hewett Olympic National Park In-holder 11/10/11

Marv Chastain REAL 9/9/11

Marmot Dam

Todd Alsbury ODFW 3/12/12

Kathryn Arendt US Forest Service 3/16/12

John Esler PGE 1/30/12

Ann Gray US Fish and Wildlife Service 2/10/12

Dave Heintzman PGE 3/19/12

Keith Jensen Alder Creek Kayak 1/25/12

Julie Keil PGE 9/6/11

Keith Kirkendall National Marine Fisheries Service 9/2/11

Scott Lazenby City of Sandy 2/8/12

Jim Muck ODFW 9/7/12

Russell Plaeger Sandy River Basin Watershed Council 8/20/12

Dick Prather BLM 2/18/12

Doug Young USFS 11/8/11

1. The Rogue is part of the Southern Oregon-Northern California Evolutionarily Significant Unit (ESU). ESU’s are the units in which the National Marine Fisheries Service lists anadromous fish populations. [↑](#footnote-ref-1)