Great River of the West

Essays on the Columbia River

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What Has Happened to the Columbia? A Great River's Fate in the Twentieth Century

BY WILLIAM L. LANG

At the end of the twentieth century and the dawn of a new millennium, the life of a great river has entered a dangerous phase. Reports from researchers and environmental watch groups warn that the magnificent and multi-millennial Columbia River may have been changed too much, accumulated too much pollution, or become so compromised that it has been indelibly transmogrified from a living river to an engineered, industrial sluice. Some declare the river critically unhealthy. They cite the decline in salmon returning to spawn in the Columbia and its tributaries and the federal government's use of the Endangered Species Act in 1992 to save the native Snake River sockeye salmon as symptoms of an ecological and political illness that may be fatal. Other warnings include documentation of industrial toxins and radioactive isotopes in the river and fundamental changes in water quality caused by logging and agricultural chemical run-offs. The future of the modern river, these reports suggest, is hanging in some kind of contingent but obscured balance, and it may be too late to avoid a regional catastrophe.[1]

The apocalyptic descriptions of the Columbia's future are matched by

assurances from engineers and many scientists that what ails the river can be mitigated, remedied, and even reversed. Some deny that the Columbia is threatened in any serious way, arguing that while the river is a robust provider of human needs it is also perhaps the most scrutinized, monitored, and cared-for stream in North America. Nonetheless, federal and state governments have assiduously studied the Columbia—222 official reports were completed between 1956 and 1992—and have strenuously acted to mitigate the perceived problems. Between 1981 and 1996, for example, government agencies expended more than three billion dollars to protect wild salmon and improve fish runs. The Northwest Power Planning Council—mandated to monitor river management to equalize considerations afforded environmental, industrial, agricultural, and commercial concerns—has issued annual reports and drawn up several comprehensive plans for addressing the Columbia's problems. But no easy solutions have emerged. The industrial and agricultural users of the river, Indian tribes who fish and use the Columbia as guaranteed by treaty rights, recreational users, and environmental groups disagree about what should be done. Worse, the political process has put interest groups at odds over how and under what terms they can use the river. Underscoring their disagreements are strikingly different definitions of the river and depictions of its history, viewpoints that disclose fundamentally different understandings of what the Columbia means. The differences are buried deep in representations about history and place. This is where we should begin if we hope to sort out what has happened to the Columbia in our time.[2]

Writing about another place and another era in America's past, one of our nation's great poets put it exactly right when he characterized history as a relative of poetics, as a way of understanding the world that engages our curiosity, challenges our intelligence, and invokes our imagination.

> Historical sense and poetic sense should not, in the end, be contradictory, for if poetry is the little myth we make, history is the big myth we live, and in our living, constantly remake.[3]

Robert Penn Warren wrote these lines in reflection on the Civil War, but he could have been writing about our historical relationship with the Columbia River. It is a relationship that has been at the center of our lives in the Pacific Northwest for thousands of years, from the era when human groups first fished on the Columbia to the twentieth-century assault on the river to make it a generator of kilowatts, a source of irrigation water, a commercial conduit, and a playground. Throughout the history of our engagement with the river, there has been no clear line between what we have extracted from the river in material things and what the Columbia has meant to the spirit of the people. Because this division between the material and the spiritual has been so difficult to draw, our relationship with the river has been enigmatic, often as instrumental as spiritual, as inspirational as remunerative. In short, the Columbia is our largest living myth and the progenitor of a thousand other myths that we constantly have remade and have invited to remake us.

As a physical and environmental reality, the Columbia has been our life cord. The river's meaning to its human communities is embedded in the stories we have told about the river and especially in the images we have created to represent it. It has affected the human geography of our place more than any other force. We have settled by it, built towns along it, fished it, ridden it, siphoned it, bridged it, dammed it, and protected it. The Columbia is nothing if it is not a river that turbulently blends the historic and poetic senses. If what Robert Penn Warren wrote is correct, then how we have described, understood, and used the Columbia says as much about us as it does about the river. The corpus of stories we have created stands both as a catalog of our culture's mythic vision and as a measurement of the historically powerful effects of the Great River of the West.

The relationship between the Columbia and its people during this century has been more dynamic and disruptive than at any time in the past. Between the 1890s and the 1990s, human ingenuity physically altered the Columbia in ways that stagger. For millennia it had been a river so powerful that only vulcanism and catastrophic Pleistocene floods changed its course, but applied engineering has made it a mutant. Today's Columbia is characterized by massive impoundments, control gates and locks, and altered environments. The relationship between people and river during the twentieth century has been especially unequal, with the Columbia suffering and partially sacrificing itself to human desires. In the sketchiest history of the river, the Columbia's biography is recounted in measurements of sustenance or gain, its benefits calculated in fish caught, hydropower generated, and commerce tallied. In telling its more complex history, we know that the river has been given valuations other than its worth in the exchange of goods or as a provider of industrial energy. In these stories, the Columbia embodies the spiritual energy people desire from their environment, where human action participates in the broadest dramas of life. This story includes Native American tales of Coyote's distribution of salmon in the Columbia River Basin, descriptions by Euroamerican explorers of a pastoral and dangerous place, and an idealized river landscape protected by the 1986 Columbia River Gorge National Scenic Area Act. Making sense of the Columbia's fate during the twentieth century requires investigating these often contradictory perspectives.[4]

Two images dominate our views of the Columbia: the river as spiritual force and the river as cornucopian provider of economic value. At the center of both images is the Columbia's existence as nature. The raw and often terrible force of its current, the volume of its flow, and its extensive geologic and biotic environment make the Columbia a governing natural presence. Little that is natural or artificial within its 259,000-square-mile drainage area exists outside of the river's influence, from fish and wildlife to spinning turbines and barges transporting wheat. But what constitutes the natural and artificial on the Columbia, as historian Richard White recently argued, is a slippery conundrum; and once articulated, it raises additional questions about how we perceive the river as environment and human space. For twelve thousand years, the Columbia's environment has been the product of human and nonhuman forces, but during the last four decades the mixture has become much more dynamic and potentially confusing. Advocates to the new ecology, such as Daniel Botkin, argue that human-disturbed environ-

ments are little different in their components than their undisturbed counterparts. They are still places where natural processes and evolutionary dynamics operate and where flora and fauna exist in Darwinian niches and play out their lives. Our perceptions of the Columbia are no less contingent. From one angle, the river looks controlled and domesticated, prompting us to create images that are bold in engineering metaphors. From another angle, the river appears powerfully unpredictable, generative, and mesmerizing, which stimulates us to portray it in romantic, mystical, and even utopian terms.[5]

Images of the river as an economic and Edenic place run through the earliest Euroamerican descriptions of the Columbia. George Vancouver's men, in their fall 1792 survey of the river from the mouth to near modern-day Camas, Washington, wrote of the Columbia's pastoral beauty and commercial potential. Similarly, Meriwether Lewis and William Clark described the middle portion of the Columbia, from the mouth of the Snake River to present-day Astoria, Oregon, in terms that emphasized the fabulous wealth in anadromous fish and the clear opportunities for entrepreneurial investment. By the onset of "Oregon Fever" during the 1840s, the Columbia beckoned as wilderness environment and region for settlement, where Americans could extract wealth and establish homes. But it was the British Hudson's Bay Company that rushed to exploit the place, especially its fur-bearing animals. During the 1830s and 1840s, their descriptions and activities enhanced the Columbia's image as a cornucopia, where economic gain ruled human action, where, as geographer Cole Harris has argued, everything "turned around management, order, and property."[6] By mid-century, newly settled Americans in the Columbia River valley had extended the fur traders' reduction of the landscape to an ordered and commodified place, including the Oregon Steam Navigation Company's nearly monopolistic control of river passage from Portland to the Snake River. The image of the Columbia widened and lengthened through its identification with commerce to make it a political place, prompting Washington Territorial Governor Isaac Stevens to remark in 1860:

> It is a matter of national defense, the development of our interior, the availing ourselves of our geographical position. . . . It is not a fiction, the great vision of Columbus. It is a fact that if we stand firmly on our geographical position, and show a wise forecast in the measures looking to the development of our country [Columbia River Basin] we will have the means of diverting a large portion of the trade of Asia, and causing it to flow through our own land.[7]

A strain of thought throughout the twentieth century reiterates Stevens's representation of the Columbia as an economic destiny, a place that contained the means for an enriching future. Beginning with the first significant engineered alterations to the river during the 1880s and 1890s, the work of controlling the river increased in intensity and accomplishment throughout the twentieth century. As the work of building the first federal dams on the river got underway in 1933–1934, the images of a controlled river defined the Columbia's benefits as both regionally and nationally strategic. Damming the Columbia and controlling the riverine environment, Portland river transportation company owner Homer Shaver argued in 1934, "means the increasing of population here through the development of power and industries." The great hydroelectric projects became the vehicle for modernity and for creation of a new region in the basin. The prospect was both dynamic and benign. The region would become dramatically energized while it would also create a new civilization that could avoid and correct the mistakes that already littered the nation's industrial history. "We will have small cities," Shaver prophesied, "with industries rather than large cities as in the East." A decade later, during World War II, the images of a region electrified by falling water merged with visions of the Columbia as a cultural savior and bulwark for the nation. Speaking in late 1943, Bonneville Power Administration head Paul Raver pledged the river to a new future:

> We are going to pay off our war debt. We are going to provide jobs for returning men and soldiers coming home and people displaced

> in their employment through this war. The harnessing of that resource—the river—is but a method, a device, if you please, for paying off the mortgage—the war debt.[8]

This portrait of the Columbia takes instrumentality beyond commerce or defending regional wealth. In this vision, the river became a national property that could increase American prosperity and repay Americans for sacrifices made during the war years. By the time the nation and region had adjusted to a peacetime economy, river managers had revised their evaluations of the Corps of Engineers' earlier studies of the Columbia's potential as a controlled waterway—the famous "308 Reports." A predicted power shortage, continued agitation by the transportation lobby for an "improved river," and the demand for more irrigation impoundments led to authorization for McNary Dam near the mouth of the Umatilla River. It was the beginning of a rationalized river, where water in all tributaries would funnel into the mainstem to be used by a growing number of claimants. It was also the beginning of the post-New Deal construction of big dams on the Columbia that concluded in 1975, when the last of four dams on the lower Snake River went on line. "It will be a rare drop of water," a government official remarked in 1949, "which reaches the Columbia's broad mouth without having done some useful work for the Northwest."[9]

Twin images of control and efficiency guided engineers on the Columbia. Falling water meant hydroelectric generation, while impounded water meant transportation and storage for irrigation and flood control. Dams could both drop water and impound it, and multipurpose dams after World War II offered the promise that the Columbia would be a willing servant of important economic constituencies and a friendlier river that would stay within its banks. As the engineers stated clearly in the revised "308 Report," the goal was a fully managed Columbia River Basin that included numerous storage dams on tributaries and "run of the river" dams on the Columbia and Snake. Engineers promised that the new river would control or prevent the periodic and powerful flushings that had been part of the great river system for thousands of years. During the nineteenth century alone, floods had drowned low areas in 1861, 1876, and 1894. The 1894 flood of record pushed 1,240,000 cubic feet per second past The Dalles. The river trickled by the same point in 1937 at only 36,000 cfs, the lowest documented flow on record. The image of a regulated river included eliminating these enormous swings and the seasonally erratic flow, which annually ran more than three times larger from May to August than from September to April. The engineers wanted to flatten out the river, to make it an equalized and regulated stream that could provide hydroelectricity on demand.[10]

Using the image of an engineered river knew few limits. Referring to anticipated difficulties in creating an integrated power network on the river in 1936, one engineer flatly promised: "There are no problems that cannot be solved, and their solution depends so completely on demands for power and their location, that preliminary planning is of rather academic value." It was an optimism that fueled itself on the seemingly limitless hydroelectric power that the Columbia offered. The future beckoned to the developers and to dreamers of an electrified river. Plans reified the dreams. Between 1931 and 1975, the Corps of Engineers conducted four major studies of the Columbia River Basin's navigable rivers and streams; other federal agencies completed another ten investigations that surveyed the region's riverine resources for development. Each plan concluded that mounds of data and sophisticated analyses proved the efficacy and rewards of operating the Columbia as a system, perhaps best as an improved natural system but nonetheless as a system. Increasingly, the evaluative measurement became economic. An extreme but not unrepresentative statement of this perspective appeared in the "Joint Policy Statement" issued by the negotiators of the U.S.-Canada Columbia River treaty in 1964:

> Cooperative development of the water resources of the Columbia River Basin, designed to provide optimum benefits to each country, requires that the storage facilities and downstream power produc-

> tion facilities proposed by the respective countries will, to the extent it is practicable and feasible to do so, be added in order of the most favorable benefit-cost ratio.

After more than three decades of refining the system, the definition of the Columbia had edged toward a reality best expressed on graph paper, with lines of hydrological measurements intersecting those of kilowatt production and reservoir volumes.[11]

Despite the Columbia's apparent confiscation by the actuaries of modern engineering and hydroelectric development, other images had lived alongside these calculations and suggested a much different river. "Alone of all the rivers of the West," Samuel Bowles wrote in 1865, the Columbia

> has broken these stern barriers [mountains] and the theatre of the conquering conflict offers, as might naturally be supposed, many an unusual feature of nature, river and rock have striven together, wrestling in close and doubtful embrace—sometimes one gaining ascendancy, again the other but finally the subtler and seductive element worrying its rival out, and gaining the western sunshine, broken and scarred and foaming with hot sweat, but proudly victorious, and forcing the withdrawing arms of its opponent to hold up eternal moments of its triumph.

This image of power is no less impressive than the image of hydroelectric energy produced by spinning turbines a century later, but it is an organic strength that is depicted in a contested and natural drama. The image is both romantic and animistic, a portrait of the Columbia wrestling with its confining earthen structure to make its way to the sea. Seen from this viewpoint, there is blood, muscle, and heart in the river. For Bowles, the Columbia epitomized the raw and untamed nature that characterized the American West, a stereotypical image of exceptionalism that seems to emerge wholesale from the landscape.[12]

This Columbia—the romantic river—attracted investment of a different kind. By the end of the nineteenth century, when railroad and steamboat travel extended tourism to the Pacific West, the Columbia became part of a monumental landscape that exuded geographical and aesthetic power. The centerpiece was the 100-mile-long gorge that the Columbia had cut through the Cascade Mountains on its way to the Pacific. Towering cliffs, spectacular waterfalls, and a dense forest cover made it a place that prompted Scottish naturalist David Douglas in 1827 to call it "wild and romantic," a place that "is grand beyond description." By 1891, when regional historian Frances Fuller Victor wrote of the Columbia Gorge as a place where "wonder, curiosity, and admiration combine to arouse sentiments of awe and delight," Portland-based steamboats regularly cruised upriver to the Cascades with tourists who marveled as "each moment affords a fresh delight to the wondering senses."[13]

The river provided an inspiration that nearly matched its commercial potential. It seemed, as travel writer Henry Finck suggested in 1890, that nature had purposefully created the Gorge to embellish human life and improve health. Writing in *The Pacific Coast Tour*, Finck told readers he had "seen a great part of three continents,"

> but if I were asked what I considered the best investment of a five-dollar bill I had ever made for combined aesthetic enjoyment and hygienic exhilaration, I should name this return trip on the Columbia River. Tourists who have time for one trip only should go up the river, because in that direction the scenery is arranged most effectively, becoming ever grander and wilder till the climax is reached in the marvelous rapids above Dalles City.

This was landscape with purpose and dramatic effect. More than that, the river offered travelers an intimate connection with a domineering natural place, engendering awe and respect as well as aesthetic enjoyment. Steaming upriver into the Columbia's great, verdant gorge, large

sternwheelers brought passengers and profits to steamboat companies. They also engaged an increasingly urbanized population in an intimate romance with a geography of scale so immense that it dwarfed human agency and a physical power so indomitable that it tested the steamboats' mechanical strength. Tourists always left the river impressed. The place overwhelmed in its open displays of emotional and psychological power. It compelled most commentators and publicists to plumb the mythic and mystic dimensions of human experience for descriptive analogs and comparisons, language to convey the inner strength of the place. Writers often located the source of the river's magical power deep in the landscape itself. "Much has been written concerning the beauty of the Columbia," a 1924 guidebook informed,

> but no word painting can adequately describe this masterpiece of nature's handiwork. There is a mystic beauty lurking in its vales and dells, which lifts the soul above the realms of time and space, and makes the beholder sense the presence of the divine.[14]

That sense of "the presence of the divine" on the Columbia coexisted with the depiction of the river as mundane but cornucopian. Throughout the twentieth century, these two distinctive images of the river engaged in a contingent relationship that defies easy characterization. It was not so much a tussle of contending visions as it was a dance of suitors who all desired a cultural claim on the river's future. It was in the projections of imagined futures that the distinctions became sharpest, when the instrumentalist exploitation of the Columbia's power and riches diverged strongly from the idealist preservation of the river's aesthetics and spirituality. But there were times when the two views overlapped and lines blurred, when development of the river merged human purpose with providence. Speaking at the dedication of The Dalles–Celilo Canal in 1915, Portland civic leader and investor Joseph Nathan Teal pressed both touchstones in his accolade to the creation of an artificial waterway around the great obstruction Lewis and Clark had called the "Long Narrows" and David Thompson had described as "this immense body of

water under such compression, raging and hissing, as if alive." On May 5, 1915, Teal spoke enthusiastically under a hot sun to the largest crowd that had assembled in The Dalles since Oregon Trail days.

> This mighty work symbolizes the stern, unfaltering determination of the people that our waters shall be free—free to serve the uses and purposes of their creation by a Divine Providence. . . . It means the recognition by all that throughout this vast territory there is no division of interest. This a common country with a common purpose, a common destiny; and this stream, from its source to where it finally weds the ocean and is lost in the mighty Pacific, is one river—our river—in which we all have a common share.[15]

Mingled in the portrait Teal drew of the new canal, the powerful Columbia, and the future of the region were pictures of organic unity, the work of human ingenuity, divine purpose, and the merged fates of a river and its people. There is great cultural power in Teal's portrait, a communication that historian William Robbins has labeled a "celebratory breast beating" that became emblematic of the "instrumentalist designs of the dominant culture." It was that, but it was also more. For the power in Teal's imagery is in the wedding of the organic and the economic in the minds of his audience. No one could deny how the Columbia dominated in relationships between the river and its people, how the river's geography had provided opportunity for human activity and created obstacles to navigation. That was Teal's point when he proclaimed "that our waters shall be free—free to serve the uses and purposes of their creation by a Divine Providence." It was science and engineering, in other words, that allowed the Columbia to do what it could and what it should for humanity.[16]

The Columbia's instrumentalist future expanded well beyond Teal's imagination in 1915 and even the utility of the canal he helped dedicate. By the early 1920s, The Dalles–Celilo Canal had proven to be an economic failure. Nonetheless, for river developers like Teal and Nelson Blalock—who had told "Open Rivers Congress" in 1908 that creating an

open river to Wenatchee could be "quickly and easily done" with a "few blasts"—the image of the Columbia as a thriving artery of commerce was a siren that continued to lure, culminating in the construction of dams on the lower Snake River more than fifty years later.[17]

As engineering changed the Columbia, however, the images of a natural environment continued to inform discussions and often provided countervalence to the drive to extract economic value from the river. During the first decade of big dam-building, for example, regional planners approached development on the Columbia as something of a trade-off between economic benefits and aesthetics. The location of Bonneville Dam provoked the issue, because it straddled the Columbia at the western end of the scenic Columbia Gorge and planners knew that low-cost electrical power could attract major industries to the site. The image of the great gorge forested with smokestacks rather than Douglas firs seemed appalling. B. H. Kizer, chairman of the Washington State Planning Commission in 1937, feared that once the dam began delivering low-cost power the Gorge would be "doomed and not all society's feeble contrivances can save it." The report of the planning commission echoed Kizer's warning:

> The introduction, into an area of great beauty, of that type of land use and construction which, of all the works of man, is least characterized by attractive appearance of architectural consideration, would be a visual incongruity which no subsequent effort could overcome. . . . The views from its summit [Beacon Rock] would overlook slag heaps and iron roofs, and all the miscellaneous jumble required by heavy chemical or metallurgical processing plants.[18]

In 1926, one of the seven commission members, highway builder Samuel C. Lancaster, had written a panegyric to the river which included: "The Columbia is peerless. Its grandeur speaks to men, and tells of Him who gathered the waters together into one place, and lifted up the mountains." The planners had a larger agenda. The likelihood of industrial developments in one of the most scenic portions of the river's mainstem forced them to ask difficult questions. Just what makes the Columbia special? What are the limits of development? What should be preserved or protected? The planning commission's Columbia Gorge Committee answered that their planning effort was not meant

> to restrict the play of the physical and economic forces released by the Bonneville project and the consequent inevitable developments in or near the Gorge, but to urge the parallel consideration of all of the social and economic forces and developments, and to protect real economic values involved in recreational facilities and scenery.[19]

The text of the committee's report reflected a measured evaluation of Bonneville Dam's potential to change the area and elevate the economic over the aesthetic. "If the unique scenic values of the Columbia Gorge are to survive," the planners concluded, "natural conditions and appearances must be largely retained." But they knew full well that preservation could go no further than protecting the landscape not affected by the dam itself. "The dam is calculated to serve future as well as present generations," their report surmised, "likewise, the Gorge if preserved, would be of continuing value." Their rationalizing planning process forced them to equate the "peerless" qualities of the river with economic valuations, suggesting that the Gorge "is a major asset to the surrounding territory" and "is of such importance that it may fairly be considered a national treasure for which the Federal government should manifest a protective concern." The benefits for people were manifest and manifold, but they had to be evaluated as economic assets, the "demonstrated power of attracting tourist travel . . . a large-scale income-bearing property," rather than as a contribution to public pleasure or a valued spiritual resource.[20]

Damming the Columbia compelled the river managers, especially the U.S. Army Corps of Engineers and the Bonneville Power Administration, to increasingly view the river as one vast plumbing system. The first

run-of-the-river dams blocked the mainstem at the limits of flow within the United States at Bonneville and Grand Coulee. Additional dams, built by the federal government and public utility districts by the late 1960s, strung out between Bonneville and Grand Coulee, making the engineered Columbia the most productive hydroelectric river in the world and among the most controlled. The approval of the Columbia River Treaty between Canada and the United States in 1964 brought three additional mainstem dams on line by the mid-1970s. Completion of the lower Snake River dams and major storage dams on tributaries, such as Libby and Dworshak on the Kootenay and Clearwater rivers, filled out a system that required the daily regulation of water flows from more than two hundred fifty dams in the Columbia's drainage basin. In the plans of the river-manipulators, the purpose of the river could not be more obvious: "Every day this great river runs to the sea with any stretch of it unharnessed constitutes another day of wasted resources."[21] By the mid-1970s, engineers had "tamed" the Columbia by transmogrifying it from a predictably fluctuating river that flooded unpredictably and allowed water to flow "wasted" to the Pacific into a regulated stream understood best in acre-feet volumes in storage pools, feet of "head" behind dams, and millions of peak and "firm" kilowatts. It became what Richard White has called a "virtual river," a river represented in computer models created to predict salmon behavior in a Columbia that is littered with impediments and dangers for anadromous fish. In ways barely dreamed of by the planners during the 1930s, the refashioned Columbia had become the leading edge of the Pacific Northwest, the harbinger and vehicle for a braver new world. "The Columbia River of the future," an engineer prophesied in 1969, would become

> a model of resources development which will be the envy of the entire world. By then [1980s] sufficient new knowledge concerning migratory fish will exist to permit adjustment of the now rigid water quality standards. . . . for a revitalized salmon industry, and for a high quality municipal supply.[22]

As magnificent as that imagined future might have seemed in 1969, there was a down side that the engineer acknowledged in his vision of the new river—the critical decline in anadromous fish runs in the mainstem and tributaries. No image of the manipulated river is bleaker or more disheartening than a Columbia without salmon fighting their way upstream to spawning beds, some swimming more than nine hundred miles and climbing more than sixty-five hundred feet from the ocean. That picture is the verso of the brilliant image of spinning turbines and the high-voltage transmission of low-cost electricity throughout the Pacific Northwest and as far south as southern California. This Janus-faced portrait of the modern Columbia represents both a vexing conundrum for Pacific Northwesterners and a battleground over what the river means to the human community.

From the earliest descriptions of the great river, the symbol of riverine fecundity had been the teeming millions of salmon that swam upriver in seasonal runs. Lewis and Clark had described a river "Crouded with Salmon in maney places" and reported sightings of "emence quantities of fish" near the mouth of the Snake River in their 1805 descent of the Columbia. The estimates of migrating salmon invited exaggeration and fantastic stories, but the exceptional harvests by commercial fishers using seines, traps, and fishwheels seemed to justify the tales. A fishwheel at Cascade Locks scooped up 54,000 pounds of salmon in one day in 1894, and fifty years later a seine operated at The Dalles caught 70,000 pounds in a single day. The image of fecundity beyond belief had its penultimate expression in one of the great stories often repeated on the river and recorded by Patrick Donan in 1898:

> Citizen George Francis Train, many years ago, left this statement—that would be remarkable anywhere else: "This is to certify, that I have today, with my slippers on, walked across the Columbia River, at The Dalles of Oregon, on the backs of the salmon, without getting my feet wet;—Colonel N. B. Sinott was a witness of the feat."[23]

Salmon migrating up the Columbia became vulnerable to nets and spears at Celilo Falls, where native fishers had garnered one-third of their annual caloric needs from the Columbia for thousands of years. They caught perhaps as much as 18 million pounds each year from six seasonal runs. Among pre-contact fisheries in North America none was more productive than at the series of rapids, basalt cliffs, and falls that curved across the river at Celilo. And at no place did salmon so dominate the lives of native peoples. Because of the singular importance of salmon, Indian fishers honored the captured fish through elaborate ceremonies. Each year at the first catch, Yakama fishers deposited the bones of the first salmon on the river bottom as a beckoning to the millions of salmon to follow. The ceremony recognized the ecological character of salmon behavior and signified the people's gratitude for the salmon's sacrifice. "They came to provide us an example of sacrifice," Yakama leader Ted Strong has reminded, "and we thank the creator that gave the salmon the feeling of servitude."[24]

In the late twentieth century, the fate of the salmon has become a litmus test of the river's ecological health, and salmon have become an icon for all that is natural and spiritual in the Columbia. The picture of salmon swimming against strong current or leaping waterfalls confirms the specialness of this animal, while it also characterizes the river's power in a way quite different from the image of a revolving turbine. Although Indian people have always revered salmon, it was not until the numbers of migrating fish went into a steep decline after the mainstem dams were built that non-Indians made salmon iconographic. The closing off of fish habitat by the dams—especially in the streams made inaccessible to fish by Grand Coulee Dam—combined with increasing commercial fisheries in the rivers and the ocean and the spoilating consequences of agriculture, timber, and industry to push salmon stocks to the edge of extinction. Fisheries biologists such as Joseph Craig had warned about these consequences as early as 1935, but the river managers made their choices regardless of the caveats. By 1947, with Bonneville and Grand Coulee in place and plans for three additional dams on the drawing boards, one official wrote: "It is, therefore, the conclusion of

all concerned that the overall benefits to the Pacific Northwest from a thorough-going development of the Snake and Columbia are such that the present salmon run must be sacrificed." The trade-off could not be more simply stated. Dams and development, the economic river, triumphing over salmon, the natural and spiritual river. Dams became the contrary icon to salmon, the personification of a damaged environment and altered relationships with the river. There was enthusiasm for dams as symbols of progress and improved living conditions, but there was also anger at what the dams killed in the river and how they inundated the past. Yakama leader Bill Yallup remembered tribal members standing on a hill above Celilo watching the river cover the falls: "Some of them sang songs like a funeral. They were very sacred songs. Three days and nights with no sleep. It was a sad day for them." Others acted out their concern. When the Corps of Engineers began preparing for The Dalles Dam, a young Ed Edmo remembered joining with other Indian boys to register an objection: "When the workmen finished surveying at the end of the day, some of us would pull out the stakes from the ground, fill the holes, and make a small fire out of the stakes. . . . In our own small way, we tried to stop the dam." Edmo and his friends knew they could not win. Nothing could stop the dams.[25]

By the 1980s, when the clarion call sounded to stem the decline of salmon runs, the dams became the focus of harsh criticism from nearly everyone who wanted the Columbia full of salmon again. Each group that contends for control of the river's future reaches back for historical justification of its wishes. Fishers bemoan the changes that have diminished salmon, and they long for a return to a river more congenial to their pursuits. Tribal governments, using the power inherent in their treaties and confirmed in recent court decisions, remind government agencies and private concerns that all changes that deprive them of access to salmon in the river and diminish salmon violate their heritage and religion. The dams, by casting themselves as "the future river," sharply abandon history and seem to stand outside of the river's historical narrative. Their existence literally swamps the past and verges on desecrating what remains. To embrace the river's past, in some sense, is to

challenge the dams and to question the Columbia's future. And it is anything but a romantic past, as lower Columbia fisherman Kent Martin's comments make clear: "Everything people said in the 1940s is coming true like a curse." Portrayed in these ways, the Columbia's story invites historicizing and polemics. Nonetheless, the most powerful narrative is found in representations of how the river has shaped the human condition and how human actions have shaped the modern river. The public seems to identify with both the economic and the spiritual Columbia. Opinion polls consistently reflect popular support for "saving the salmon," but they also indicate that people hesitate to change the management of the river without guaranteed results. At the end of the twentieth century, the story of the Columbia has become an inescapable conundrum.[26]

The compelling mythic story, even in the face of the most difficult choices, is a miraculous blend of both views of the river. In 1959, for example, the Oregon League of Women Voters addressed the threats to the Columbia in a widely distributed pamphlet:

> Even with the abundance of water in the Columbia there already have arisen certain conflicts in use, as for instance between fish and power. It is not likely, however, that it will happen here as that which has occurred in some other sections of the country—we shall have to decide: fish or power! We can still have water for humans and fish, water for crops and forests, unspoiled streams for esthetic appreciation and water for fun IF, through comprehensive planning, the right choices and compromises are made in time.[27]

The compromises boil down to the conflict underscored by the League of Women Voters in 1959: Will it be fish or power? In each strategy devised by river managers and fisheries experts since 1959, promises of sufficient water for both fish and power have been constants. Neither view has been abandoned. As recently as 1993, Representative Ron Wyden commented on how the Columbia should be protected from degradation:

> For people on both sides of the river, the Columbia is much more than a transportation route. For generations, the Columbia has been a source of exploration, inspiration and recreation. . . . We can either make some targeted investments right now or pay more in the long run.

The investments have been incredible, yet the solution to preserving the spiritual and historic river continues to elude us. The previously unimaginable strategy of removing dams has emerged from planning meetings into the full light of day. Tribal representatives want fish in the Columbia, while power and water users hope they can retain their claim on the river. The discussion, the story, and the expensive remediations roll on like the river itself, with no one quite sure how to stop the flow and decide which river to enshrine. "Either we ought to make enough changes to give the salmon a chance of coming back," former Northwest Power Planning Council Chairman Angus Duncan concluded, "or we shouldn't be spending any of this money at all." Yet, the will to have both power and salmon drive the storyline hard. In the political arena, the two goals remain joined, the two rivers still flow together. Oregon Governor John Kitzhaber put it bluntly: "You can't solve power issues without solving the fish issues, and you can't solve the fish issues without solving the power issues."[28]

This is part of the myth that pervades the Pacific Northwest, a part that runs rich in Robert Penn Warren's historic and poetic senses. For the Columbia, the myth is a mixed blessing at best, while for the people of the Columbia it is simply how the river is understood. There are few children of the region who do not have both rivers flowing through them; there are few who are entirely immersed in the economic or the spiritual river. It is what makes the questions about the Columbia's future so intractable. No one is quite free of the power of the competing visions of the river. Nonetheless, in the Pacific Northwest, the Columbia River has given life to all. Oregon novelist and poet H. L. Davis put it just right in his "Rivers to Children":

We rivers, we torrents,
We heavy-backed waters
Browned out of the green ocean,
Came, clouds, from the plunging
Sea restless as flame.
One-willed and unchanging,
We rained and flowed westward.
We crossed these same meadows.
We touched and knew children
Like you; not the same.[29]

What has happened to the Columbia River during the twentieth century has happened to the entire region. Like the river that has been changed so much, none of us is quite the same.

NOTES

1. For discussions of the crisis on the Columbia, see Joseph Cone, *A Common Fate: Endangered Salmon and the People of the Pacific Northwest* (New York: Henry Holt, 1995); Kai N. Lee, *Compass and Gyroscope: Integrating Science and Politics for the Environment* (Washington, D.C.: Island Press, 1993), esp. chap. 2; William L. Lang, "River of Change: Salmon, Time, and Crisis on the Columbia River," in *The Northwest Salmon Crisis: A Documentary History*, ed. Joseph Cone and Sandy Ridlington (Corvallis: Oregon State University Press, 1996): 348–63. On radioactive nuclides, see Hanford Health Information Network, "Potential Health Problems from Exposure to Selected Radionuclides" (Olympia: Washington State Department of Health, 1994), and http://www.doh.wa.gov/hanford/.

2. For a recent discussion of the effort to save salmon on the Columbia, see the pro–Corps of Engineers study, Lisa Mighetto and Wes Ebel, *Saving the Salmon* (Seattle: HRA, 1994), and Jonathan Brinckman, "$3 Billion Later, Columbia Basin Salmon Dwindle," *Oregonian*, July 27, July 28, 1997.

3. Robert Penn Warren, *Brother to Dragons: A Tale in Verse and Voices*, ix, quoted in Michael Kammen, *Mystic Chords of Memory: The Transformation of Tradition in American Culture* (New York: Vintage Books, 1991), 29.

4. For discussions of the Native American landscape, see Eugene Hunn, *Nich'i-Wána "The Big River": Mid-Columbia Indians and Their Land* (Seattle: University of Washington Press, 1990), and Jarold Ramsay, *Coyote Was Going There: Indian Literature of the Oregon Country* (Seattle: University of Washington Press, 1979). For the Columbia River Gorge, see Carl Abbott, Sy Adler, and Margery Post Abbott, *Planning a New West: The Columbia River Gorge National Scenic Area* (Corvallis: Oregon State University Press, 1997).

5. Richard White, *The Organic Machine* (New York: John Wiley, 1995), esp. chap. 1. On the new ecology, see Daniel Botkin, *Discordant Harmonies: A New Ecology for the Twenty-First Century* (New York: Oxford, 1990).

6. Cole Harris, *The Resettlement of British Columbia: Essays on Colonialism and Geographical Change* (Vancouver: University of British Columbia Press, 1997), 34. For discussion of HBC and views about nature, see Elizabeth Vibert, *Traders' Tales: Narratives of Cultural Encounters in the Columbia Plateau, 1807–1846* (Norman: University of Oklahoma Press, 1997), 19–21.

7. Isaac Stevens, speaking in Vancouver, Washington Territory, May 20, 1860, in the *Pioneer and Democrat* (Olympia, Washington), May 23, 1860. On the Columbia and early historical descriptions, see William L. Lang, "Creating the Columbia: Historians and the Great River of the West, 1890–1935," *Oregon Historical Society Quarterly* 93 (Fall 1992): 235–62. For a thorough discussion of American settlement and its effects on the environment in the lower Columbia River region, see Robert Bunting, *The Pacific Raincoast: Environment and Culture in an American Eden, 1778–1900* (Lawrence: University Press of Kansas, 1997), esp. chap. 7.

8. Homer T. Shaver, comments at IEWA Board Meeting, Wenatchee, Washington, October 20, 1934, and Paul Raver, address to IEWA Convention, Lewiston, Idaho, October 9, 1943, Inland Empire Waterways Association Collection, Pacific Northwest and Whitman College Archives, Whitman College, Walla Walla, Washington. For discussion of similar arguments, see White, *Organic Machine*, 64–70.

9. Quoted in Murray Morgan, *The Columbia* (Seattle: Superior, 1949), 283.

10. Gus Norwood, *Columbia River Power for the People: A History of Policies of the Bonneville Power Administration* (Portland, Ore.: Bonneville Power Administration, 1981), 180–1; J. A. Krug, *The Columbia: A Comprehensive Report on the Development of Water Resources of the Columbia River Basin* (Washington, D.C.: Bureau of Reclamation, 1947), 274–5; White, *Organic Machine*, 76–7.

11. H. V. Carpenter to Marshall N. Dana, January 6, 1936, Pacific Northwest River Basins Commission Papers, Box 41, RG 315, NARS, Pacific Northwest Branch, Seattle, Washington; John V. Krutilla, *The Columbia River Treaty: The Economics of an International River Basin Development* (Baltimore: Johns Hopkins University Press, 1967), 60. For a list of Columbia River Basin plans, see

"Briefing on Columbia River Tributaries," September 17, 1975, Pacific Northwest River Basins Commission Papers, Box 29.

12. Samuel Bowles, *Across the Continent: A Summer's Journey to the Rocky Mountains, the Mormons, and the Pacific States* (New York: Hurd & Houghton, 1865), 185–6.

13. David Douglas, *Memoir of the Late Mr. David Douglas* (London, 1901), 104; Frances Fuller Victor, *Atlantis Arisen, or Talks of a Tourist about Oregon and Washington* (Philadelphia: J. B. Lippincott, 1891), 54, 55, quoted in Abbott et al., *Planning a New West*, 1, 5.

14. Henry T. Finck, *The Pacific Coast Tour* (New York: Charles Scribner's Sons, 1890), 189; J. H. & J. F. Oppenlander, *The Columbia River Guide and Panorama, From Portland to The Dalles* (Portland: J. H. Oppenlander, 1924), 1.

15. J. B. Tyrell, ed., *David Thompson: Narrative of His Explorations in Western America, 1784–1812* (Toronto: Champlain Society, 1916), 496–7; "Address of Joseph Nathan Teal, The Dalles–Celilo Celebration, Big Eddy, Oregon, May 5, 1915," *Oregon Historical Quarterly* 16 (Fall 1916): 107–8.

16. William G. Robbins, "The World of Columbia River Salmon: Nature, Culture, and the Great River of the West," in *Northwest Salmon Crisis*, ed. Cone and Ridlington, 14.

17. Nelson Gates Blalock, "Address to Open Rivers Congress," Wenatchee Commercial Club, Wenatchee, 1908, Nelson Gates Blalock Papers, Cage 1644, Washington State University Library Special Collections, Pullman. On continuing desire for navigation improvements, see Lang, "River of Change," 354–7.

18. B. H. Kizer to Washington State Planning Board, January 1937; Gorge Committee of the Pacific Northwest Regional Planning Commission, *Report on the Problem of Conservation and Development of Scenic and Recreational Resources of the Columbia Gorge in Washington and Oregon* (Portland: PNWRPC, 1937), 17–18. For additional context and discussion, see Abbott et al., *Planning a New West*, 34–7.

19. Samuel C. Lancaster, *The Columbia: America's Great Highway* (Portland: J. K. Gill, 1926), 1; *Report on the Problem of Conservation*, ix.

20. *Report on the Problem of Conservation*, 20–1, 28, 32.

21. Committee on Interior and Insular Affairs, *Upper Columbia River Development*, 84th Cong., 2d sess. Rept. No. 2831 (Washington: GPO, 1956), 1–2. The statements quoted are the comments of Senator James Murray of Montana.

22. White, *Organic Machine*, 106; Robert T. Jaske, "Columbia River of the Future," MS of a speech delivered in Richland, Washington, April 15, 1969, 5–6, VF 2233, Washington State University Special Collections, Pullman.

23. Gary Moulton, ed., *The Journals of the Lewis and Clark Expedition*, vol. 5 (Lincoln: University of Nebraska Press, 1988), 286, 298; William Ashley to President Andrew Jackson, in *Message from the President . . . relative to the Columbia*, 21st Cong., 2d sess., Ex. Doc. 1, 1831 (Serial Set 203), 18; Patrick Donan, *The Columbia River Empire* (Portland: Oregon Railroad and Navigation Company, 1898), 59. For Columbia River fisheries statistics, see Courtland Smith, *Salmon Fishers of the Columbia* (Corvallis: Oregon State University Press, 1979).

24. Ted Strong, quoted in *Los Angeles Times*, February 23, 1997, 5. On the importance of salmon and the first-salmon ceremony, see Hunn, *Nich'i-Wána*, 148–54; Robert T. Boyd, *People of The Dalles: The Indians of Wascopam Mission* (Lincoln: University of Nebraska Press, 1996), 127–9.

25. Memo, Julius Krug, Acting Chairman of Interior Department's Pacific Northwest Coordination Committee, March 6, 1947, RG 48, Records Concerning Regional Field Committees, Box 19, Entry 887, National Archives, Washington, D.C.; Bill Yallup, quoted in *Los Angeles Times*, February 3, 1997, 5; Ed Edmo, "After Celilo," in *Talking Leaves: Contemporary Native American Short Stories*, ed. Craig Lesley (New York: Laurel, 1991), 71–2. For a critique of salmon as a regional icon, see John M. Findlay, "A Fishy Proposition: Regional Identity in the Pacific Northwest," in *Many Wests: Place, Culture, and Regional Identity*, David M. Wrobel and Michael C. Steiner (Lawrence: University of Kansas Press, 1997), 37–70.

26. Kent Martin, quoted in *Mother Earth News*, August 1, 1994.

27. Oregon League of Women Voters, "Our Columbia River" (Portland: Oregon Historical Society, 1959).

28. Ron Wyden, quoted in *The Oregonian*, March 23, 1993; Angus Duncan and John Kitzhaber, quoted in *The Oregonian*, July 27, 1997.

29. H. L. Davis, "Rivers to Children," in *Selected Poems* (Boise: Ahsahta Press, 1978), 26.