The Appalachian Power Company Along the New River: The Defeat of the Blue Ridge Project in Historical Perspective

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ABSTRACT

The Appalachian Power Company is an operating company of the American Electric Power Company, the largest electricity producing private electric system in the United States since 1953. The Appalachian Power Company held almost exclusive development rights along the New River since its 1911 charter. From then until the 1940s, it built a few small dams, a very large hydroelectric dam with the highest generating capacity of its time, and the largest steam plant in Virginia on the New River. Besides a few navigation issues, conflicting developments, and brief clashes with the federal government, seen in Chapter Two of this thesis, the Appalachian Power Company's developments along the New River went largely unchallenged until the late-1960s.

The Blue Ridge Project was the utility's next large hydroelectric project on the New River. It was slated to impound the waters of the upper New River in Grayson County, Virginia, with two reservoirs extending into the river's headwaters in the counties of Ashe and Alleghany in northwestern North Carolina. Though the initial project met no serious opposition, environmental lawyers and the State of North Carolina defeated a considerably enlarged version of the proposal after a legal battle lasting over a decade. Why was this double impoundment not successfully constructed? What had changed in the last decades to influence Appalachian Power's previously unchallenged right to generate electricity along the New River? The purpose of this thesis is to answer these questions.

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INTRODUCTION

"If you want to see what a dam does, all you have
to do is go over to Virginia, because they've
dammed the river over there and it's ugly."

-Polly Jones[1]

I moved to the lower New River Valley in the summer of 2002. One afternoon, while fishing a part of the New River near Radford, Virginia, I decided to wade across a waist-deep section of the river's main channel to an island. A few hours and a few spunky rock bass later, I started wading back across the river to my truck. It did not take long to realize that the water level had risen considerably and the current was much stronger. The water was now as high as my shoulders. As I struggled against the increased water flow, trying to cross the river and avoid being smashed into rocks, I wondered how this could happen. Wasn't this the same route I took across the river to the island? Had a storm raised the water level and I just failed to notice the rain? I had never seen such a dramatic rise in water level while fishing the upper New River in North Carolina. A few days later, curiosity led me to the Virginia Department of Game and Inland Fisheries website. Its webpage containing a detailed map of the New River states: "Be sure not to camp too close to the shore or *get caught wading in mid-river when APCO is releasing water*." I soon found out that "APCO" was the Appalachian Power

[1] Polly Jones, interviewed by Leland R. Cooper and Mary Lee Cooper, in *The People of the New River: Oral Histories from the Ashe, Alleghany and Watauga Counties of North Carolina* (Jefferson, NC: McFarland & Company, Inc., Publishers, 2001), 247.

Company, and that the water came from Claytor Dam, a few miles upriver from Radford.[2]

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The Blue Ridge Project was the utility's next large hydroelectric project on the New River. It was slated to impound the waters of the upper New River in Grayson County, Virginia, with two reservoirs extending into the river's headwaters in the counties of Ashe and Alleghany in northwestern North Carolina. Though the initial project met no serious opposition, environmental lawyers and the State of North Carolina defeated a considerably enlarged version of the proposal after a legal battle lasting over a decade. Why was this double impoundment not successfully constructed? What had changed in the last decades to influence Appalachian Power's previously unchallenged right to generate electricity along the New River?

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[2] Italics added. Virginia Department of Game and Inland Fisheries, "New River – Maps and Access," available from: http://www.dgif.state.va.us/fishing/waterbodies/display.asp?id=163&section=maps.

[3] Charter of the Appalachian Power Company, AppCo vs. DE Delaney File, Farrier Family Papers (Ms74-001), Box 10, VT. Graham Claytor, talk given to an unidentified banking group in 1953, Graham W. Claytor (1886-1971) Papers, 1907-55 (Ms81-095), Box 3, *Ibid*.

The purpose of this thesis is to answer these questions. New environmental legislation passed during a growing environmental movement in the United States provided a fresh political landscape that facilitated active opposition to the Blue Ridge Project. A previously unavailable set of legislative tools presented a chance for success to the opponents of reservoir construction and farmland inundation. Before the entry of environmental awareness into national politics during the 1960s, development and increased electrical capacity generally implied progress. Opposition to this ethos was either silent or never seriously considered. By the 1970s, environmental organizations had developed a strong voice in Washington, DC, and created a new body of legislation to aid their efforts.

Two new acts helped defeat the Blue Ridge Project. The Wild and Scenic Rivers Act of 1968 and the National Environmental Policy Act (NEPA) of 1969 provided opponents with powerful legal weapons to fight the large hydroelectric project. The detailed environmental impact statement provision of the NEPA required archeological studies of the area to be inundated. What these archeological studies found was invaluable for American history and southern Appalachian culture. The Appalachian Power Company and the Federal Power Commission (FPC) kept this information secret and absent from the public record for ten years, until opponents of the Blue Ridge Project discovered it.

The Wild and Scenic Rivers Act provided an effective tool not only for environmentalists, but also for historical preservationists. It states that “certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition.” When all information was made public, this act and the NEPA helped to save the upper New River Valley from an

inundation that would bury important historic, cultural, and geological information that pertained to the entire United States East Coast.[4]

It is even more remarkable that environmental legislation managed to defeat the Blue Ridge Project during a worldwide energy shortage. In the 1970s, an oil embargo, violence in the Middle East, and continuing cold war politics created a desperate national situation characterized by rising fuel prices and unemployment, particularly in the construction industry. Oil explorations began on Alaska's northern shore, construction proceeded on the Alaskan oil pipeline, and Venezuela nationalized its oil industry. In early 1976, an economist from the Massachusetts Institute of Technology speculated that these problems might bring on another long worldwide economic depression. The defeat of the Blue Ridge Project is truly remarkable when considered alongside these national and international energy problems.[5]

Another aim of this thesis is to place the Blue Ridge Project within a broader context of environmental history, which studies the way humans and nature interact. Environmental historian Ted Steinberg writes, "For most Americans, history unfolds against a stable environmental backdrop. Nature is taken for granted and passed over in the rush to discuss what really mattered." Environmental history seeks to insert nature

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[4] Samuel P. Hays, *A History of Environmental Politics Since 1945* (Pittsburgh: University of Pittsburgh Press, 2000), 132. *Wild and Scenic Rivers Act*, Section 1(b) (P.L. 90-542, as amended) (16 U.S. Code 1271-1287), available from: http://www.nps.gov/rivers/wsract.html.

[5] Bill Richards and Thomas O'Toole, "U.S. to Develop Reactor," *The Washington Post* (Jan. 3, 1976), Sec. A, p1. James L. Rowe, Jr., "Natural Gas Price Rise is Approved," *The Washington Post* (Jan. 1, 1976), Sec. G, p8. Hobart Rowen, "Problems Likened to Pre-Depression," *The Washington Post* (Jan. 1, 1976), Sec. G, p11. Peter Cole, "Battle Against Terror Turns International," *The Washington Post* (Jan. 1, 1976), Sec. E, p1. "Venezuela's Oil Industry is Formally Nationalized," *The New York Times* (Jan. 2, 1976), p35. "The Nation in 1975, Seen Through the Camera's Eye," *The New York Times* (Jan. 2, 1976), p27. Reginald Stuart, "Producers of Gas are Split On End to Pipeline Loans," *The New York Times* (Jan. 1, 1976), p31. "U.S. Calls Mideast Envoys," *The Washington Post* (Jan. 3, 1976), Sec. A, p9. Clayton Fritchey, "Angola and U.S. Politics," *The Washington Post* (Jan 3, 1976), Sec. A, p19. "Oil Pipeline 40% Finished In Alaska," *The Washington Post* (Jan. 3, 1976), Sec. D, p4. Bill Richards, "Gulf of Alaska Oil Leasing Delay Seen," *The Washington Post* (Jan. 1, 1976), Sec. C, p15.

as a powerful and potent variable in human history. Factors such as cold winters, dust storms, and resource exhaustion, to name a few, are powerful historical actors that can exert an amazing amount of influence on events past and present. In the last twenty-five years, environmental history has become an accepted field and gathered much support. An outgrowth of the social history of the 1960s, its development closely parallels advances made in the environmental sciences. There are three major levels of study within the field. Most studies fit into one of these or synthesize two of them. On the first level are histories written about change in the natural world over time. The second deals with the various ways people have tried to transform nature in order to survive or produce commodities. The third level examines human ideas, perceptions, and values regarding nature. This thesis is a synthesis of the second and third levels.[6]

A few environmental historians discuss the importance of the Blue Ridge Project without giving it serious, thorough treatment. However, those who do mention it hail it as an important environmental victory. Samuel Hays, for example, calls the battle against the Blue Ridge Project one of the two "most publicized successful efforts" to halt dam construction, the other being the Hell's Canyon on Idaho's Snake River. Tim Palmer calls it "a landmark case, as conservationists stopped a utility company's dam even after land had been bought." To this day only one detailed account about the Blue Ridge Project exists.[7]

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[6] Ted Steinberg, *Down to Earth: Nature's Role in American History* (Oxford: Oxford University Press, 2002), ix. Mart A. Stewart, "Environmental History: Profile of a Developing Field," *The History Teacher* 31:3 (May 1998), 351-368. Alfred W. Crosby, "The Past and Present of Environmental History," *American Historical Review* 100 (October 1995), 1177-1189. William Cronon, "The Uses of Environmental History," *Environmental History Review* 17 (Fall 1993), 1-22. Donald Worster, "Appendix: Doing Environmental History," in *The Ends of the Earth: Perspectives on Modern Environmental History*, ed. Donald Worster (Cambridge: Cambridge University Press, 1988), 289-307. Carolyn Merchant, *The Columbia Guide to American Environmental History* (New York: Columbia University Press, 2002), xiii-xviii. John Opie, *Nature's Nation: An Environmental History of the United States* (New York: Harcourt Brace College Publishers, 1998), 1-7. John Opie, *Americans and the Environment: The Controversy over Ecology* (Lexington, Massachusetts: D.C. Heath and Company, 1971), vii-xii.

The main book about the Blue Ridge Project is *The New River Controversy*, by Thomas J. Schoenbaum, a law professor and legal representative of the State of North Carolina against the reservoirs. It is a detailed account of the legal proceedings between 1962 and 1976, written in 1979, with a second edition scheduled for publication in the spring of 2007. Though Schoenbaum's book provides an important study of a damming controversy that environmental history seems to have forgotten, his study does not contain crucial information about the Appalachian Power Company's previous developments along the New River, and it only provides limited information about the general environmental movement.

In this thesis, I argue that the fight against the Blue Ridge Project began as a local issue involving affected landowners who were motivated to oppose the dams by a desire to maintain a traditional way of life and protect a beloved landscape. However, as the conflict progressed, a new body of federal environmental legislation and the political skills of national environmental groups considerably aided local residents. Unlike Schoenbaum's book, this thesis presents an important history of previous development along the New River based on newly discovered primary documents, which places the fight against the Blue Ridge Project within a richer and fuller context. I have added fresh elements found in previously untapped sources, while also correcting and clarifying a few details of Schoenbaum's study using documents encountered while conducting extensive primary research. This thesis offers the first written history of the Appalachian Power Company and its early developments along the New River. It is my contention that a broader context will provide the reader with a more complete understanding of the

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[7] Samuel P. Hays, *Beauty, Health, and Permanence: Environmental Politics in the United States, 1955-1985* (Cambridge: Cambridge University Press, 1987), 106. Tim Palmer, *Endangered Rivers and the Conservation Movement* (Lanham, MD: Rowman & Littlefield Publishers, Inc, 2004), 111.

Blue Ridge Project, the New River, the Appalachian Power Company, and general hydroelectric development in the southern Appalachian Mountains.

This study joins a small but growing body of historical studies of eastern rivers. Most environmental histories of rivers examine waterway development controversies in the western United States. It is absolutely critical to study eastern river systems, since they drain, water, and feed the most populated area of the United States. Most river studies that take place in the East concern northern rivers or southern wetland issues. One history involving northern rivers is Ted Steinberg's *Nature Incorporated*, a pioneering environmental history of eastern waterways. In this important work, he examines how the dams that facilitated the early stages of industrial capitalism damaged New England resident's food supplies during the spring spawning runs of anadromous fish species. Before Steinberg's book, many historians examined the effect of industrialization's new mode of production on workers and traditional life in certain locales. However, *Nature Incorporated* is one of the first works of environmental history to examine industrialization's long term, ecological effects, as well as its "potential to touch people and places far removed from the actual site of production."[8]

Only a few works of history involve inland southeastern waterways, including the rivers of the Appalachian Mountains. Many of these are studies about the Tennessee Valley Authority and their alterations of the Tennessee River, such as Thomas McCraw's *TVA and the Power Fight* and William Chandler's *The Myth of TVA*. These studies provide an important understanding of twentieth-century waterway alterations, since they critically examine the effects of a public utility company's activities during the Great Depression, when dams and irrigation projects were seen as vital outlets for the nation's

[8] Merchant, *The Columbia Guide to American Environmental History*, 395-404. Ted Steinberg, *Nature Incorporated: Industrialization and the Waters of New England* (Cambridge: Cambridge University Press, 1991), 15.

surplus labor force. McCraw's book details the New Deal conflict between private and public power companies. Chandler's work examines the way that perceptions of the Tennessee Valley Authority have changed over time, and critically evaluates the results of past developments in relation to power companies from neighboring states.[9]

One study that involves the Tennessee River, but does not focus solely on the Tennessee Valley Authority, is Jeffrey Stine's *Mixing the Waters*. It details the controversy surrounding the creation of the Tennessee-Tombigbee waterway, the most extensive domestic project ever undertaken by the Army Corps of Engineers, which ultimately connected the Tennessee River with the Gulf of Mexico for trade purposes. Like this thesis, Stine's book examines the conflict developers encountered between their historically approved, mission-oriented, plans and the growing influence of the American environmental movement. Also, both *Mixing the Waters* and this thesis follow a development controversy through the national media, courtrooms, and background political dealings during the mid-twentieth century. Perhaps most importantly, during the construction of the Tennessee-Tombigbee waterway, 1972-1985, the fight against Blue Ridge Project intensified considerably, and was ultimately defeated in 1976 as construction on the waterway proceeded.[10]

Another book concerning inland, southeastern river studies is Richard Bartlett's *Troubled Waters*. It examines how Champion International's paper mill in Canton, North Carolina, polluted the Pigeon River since 1908. Bartlett follows the long process of cleaning up the river, as the issue became a conflict between reducing pollution and keeping area jobs. The Pigeon River flows from North Carolina into one of the most

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[9] Thomas K. McCraw, *TVA and the Power Fight, 1933-1939* (Philadelphia: Lippincott Publishers, 1971). William U. Chandler, *The Myth of TVA: Conservation and Development in the Tennessee Valley, 1933-1983* (Cambridge, MA: Ballinger Publishing Company, 1984).

[10] Jeffrey K. Stine, *Mixing the Waters: Environment, Politics, and the Building of the Tennessee-Tombigbee Waterway* (Akron: The University of Ohio Press, 1993), 1-11.

economically depressed counties in Tennessee, which provided the initial source of pollution protests. Like Bartlett's history, this thesis involves an inter-state, environmental issue where the largest outcry came from an underdeveloped region in an adversely affected state. During the Blue Ridge Project, two counties in northwestern North Carolina provided the greatest outcry against the dams. Though slated for construction in Virginia, the impoundment would cover valuable farmland in some of North Carolina's least-developed mountain counties.[11]

This thesis involves a private utility company, the Appalachian Power Company, and its energy production activities along one stream, the New River. It is not limited to damming activities and attempts, but includes information about steam plants and the legal right of locals to oppose developer's plans for their land. As a social history, it details how residents of a highland river valley defied developer's attempts to replace their traditional economy and culture. As an environmental history, it shows the effective legal avenue that the environmental movement provided for the opponents of dam construction. As a legal history, it examines the new legislation spawned by the environmental movement and how it affected general river development. Most of all, this thesis specifically seeks to contribute to the growing body of southeastern inland river studies by providing the most complete history to date concerning alterations made to the ancient New River.

This thesis also seeks to contribute to the historiography of the environmental movement. It singles out the defeat of the Blue Ridge Project as a clear demonstration of the effectiveness of environmental legislation against unsound and unwelcome developments. Environmental historian Benjamin Kline writes that as environmental

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[11] Richard A. Bartlett, *Troubled Waters: Champion International and the Pigeon River Controversy* (Knoxville: The University of Tennessee Press, 1995).

groups became “buoyed by public enthusiasm”, “their work led to an ambitious array of legislative initiatives, regulations, and legal precedents.” In the following thesis, the entry of environmentalism into popular politics led to the creation of new legislation that aided the opponents of the Blue Ridge Project. Similarly, Samuel Hays writes that the environmental legislation of the “late 1960s and early 1970s represented a historic stage in the public assertion that environmentally harmful use of private property was not acceptable.” This process is also detailed in the following thesis. The rise of environmental awareness into the popular American mind gave many people a reason and others an avenue to oppose developments that harmed land, water, and people. Hays also writes that as environmentalism received official government sanction, private developers “faced new agencies and new branches of old ones that displayed missions they objected to…” responding “with disbelief that it [clean air and clean water legislation] had come onto the statue books.” This is exactly the process detailed in the following thesis, when the Appalachian Power Company ignored many new regulations, restrictions, and agencies until they were forced to comply by the courts.[12]

However, as mentioned above, the fight against the Blue Ridge Project is largely absent from most works of environmental history. Though this thesis does not substantially alter the historical narrative of the environmental movement, it does reinforce many of the main points about its development and the legislative tools it created. Environmental historian Kirkpatrick Sale writes that the movement entered the 1970s with a “newfound sense that the environmental game could be played best of all in Washington, where a vigilant national government could be made to see to the wide and prudent management of national resources as well as the fair and healthful

[12] Samuel P. Hays, “The Politics of Environmental Administration,” in *Explorations in Environmental History*, ed. Samuel P. Hays (Pittsburgh: University of Pittsburgh Press, 1998), 428. Samuel P. Hays, *A History of Environmental Politics since 1945* (Pittsburgh: University of Pittsburgh Press, 2000), 80. Benjamin Kline, *First Along the River: A Brief History of the U.S. Environmental Movement* (San Francisco: Acada Books, 1997), 88.

regulation of dangerous industries." Though many government officials still allied themselves with industries since economic concerns remained paramount, as they have in the United States since the colonial period, a new legal framework with official government sanction helped environmental advocates to oppose dangerous or unwanted developments successfully. The defeat of the Blue Ridge Project is a clear example of environmentalists using their newfound power, even overcoming certain government officials who allied themselves with the Appalachian Power Company.[13]

A new body of professional environmentalists emerged along with the new legislation. Environmental historian John Opie writes that in the 1970s, there was a "discernible shift… from dedicated amateurs to highly skilled professionals" within the environmental movement. The presence of such professionals is obvious in the following thesis. Lawyers aided local dam opponents, skillfully maneuvering through the many obstacles created for them by using the new tools that federal legislation had to offer. The reports of archeologists and biologists also aided environmental advocates, providing important reinforcement for the case against the project. Without so much professional cooperation, construction on the Blue Ridge Project probably would have proceeded unopposed outside of the upper New River Valley.[14]

The failure of the Blue Ridge Project took place within an unprecedented framework in which utility companies no longer received unanimous approval for their hydroelectric projects. The fact that the Appalachian Power Company was denied another opportunity to develop along the New River says something about larger trends within American society that go far beyond specific local objections to the project. A new

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[13] Kirkpatrick Sale, *The Green Revolution: The American Environmental Movement, 1962-1992* (New York: Hill and Wang, 1993), 28.

[14] John Opie, *Nature's Nation: An Environmental History of the United States* (Fort Worth, TX: Harcourt Brace and Company, 1998), 422.

social situation created a restrictive set of guidelines for development in the natural world. There were previously ignored pre-construction factors for utilities to consider and a newly popular ecological view of rivers for developers to contend with. The growing influence of the environmental movement had a profound effect on the general success of the Appalachian Power Company's development plans in the New River Valley. When combined with strong local opposition, legislation spawned by environmentalists created formidable challenges for one of the most powerful utilities in the country.

1: THE NEW RIVER VALLEY, A BRIEF HISTORY

> "We crossed only dry mountains and dry valleys and when for several days we followed the river [New River] in the hope that it would lead us out, we found ourselves only deeper in the wilderness, for the river now ran north, now south, now east, now west, in short to all points of the compass!"
>
> -Bishop Augustus Gottlieb Spangenberg, December 1752[15]

The people of the New River Valley love their home. Local residents have a strong connection to both their ancestral lands and the ancient, mighty river that waters their highland counties. The following chapter examines the remarkable history of the New River Valley. It explains the differing pace of development in the lower and upper valleys, and explores the basic reasons for fierce opposition to the Blue Ridge Project. More specifically, an examination of the history of the upper New River Valley shows why local residents were so attached to the land they fought so hard to save from inundation. This chapter also shows why upper valley residents so deeply treasured the river that led their ancestors into the Blue Ridge highlands hundreds-of-years ago, and why saving it from alteration was so important to them.

The New River is the second oldest river in the world. According to the American Rivers Council, the river is between three and 300 million years old.[16] Another source

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[15] Quoted in Leland R. Cooper and Mary Lee Cooper, "Introduction," in *The People of the New River: Oral Histories from the Ashe, Alleghany and Watauga Counties of North Carolina*, eds. Leland R. Cooper and Mary Lee Cooper (Jefferson, NC: McFarland & Company, Inc., Publishers, 2001), 5.

[16] American Rivers, "The Rivers and Streams of North Carolina," available from: http://www.americanrivers.org/site/DocServer/northcarolinafactsheet.pdf?docID=708.

estimates that the New is older than 500 million years.[17] It also flows from south to north, which is rare among the world's rivers. The New River begins its 320-mile journey in the northwestern highlands of North Carolina, in Watauga and Ashe Counties. The North Fork springs begins at over 4,700 feet above sea level, near the top of Snake Mountain in western Ashe County, close to the Tennessee border. The South Fork's headwaters drain some of Watauga County's highest elevations, as high as 5,518 feet above sea level. The South Fork also connects to creeks that drain the towns of Boone and Blowing Rock, and a smaller Middle Fork. The two forks meet in Ashe County at a place called Twin Rivers, three miles south of the Virginia state line. This is where the ancient river officially begins its long, winding journey across the Appalachian Mountains.[18]

After entering Virginia at 2,400 feet above sea level, the New River meanders eastward along the Virginia-North Carolina state line. It winds eastward through the Blue Ridge Mountains, dipping back down into North Carolina's Alleghany County for a few miles before returning to Virginia. It turns north in eastern Grayson County and meanders into the Shenandoah Valley. The river faces its first man-made impoundment at Claytor Lake, near the town of Radford. Below Claytor Dam, the river continues north

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[17] Attorney Notes, New River Papers, Ed Adams Series, National Committee for the New River Subseries, Blue Ridge Project – Environmental and Economic Impact Statements, Reports, Box 13, Folder 7, ASU.

[18] Thomas J. Schoenbaum, *The New River Controversy* (Winston Salem, NC: John F. Blair, Publisher, 1979), 2-3. Ina Woestemeyer Van Noppen and John J. Van Noppen, *Western North Carolina Since the Civil War* (Boone, NC: The Appalachian Consortium Press, 1973), 371-373. Letter from Don Baker and the North Carolina Wildlife Resources Commission, to Ed Adams, Sparta, 1 February 1974, Transcript from New River Papers, Ed Adams Series, National Committee for the New River Subseries, Blue Ridge Project – Environmental and Economic Impact Statements, Reports, Box 13, Folder 7, ASU. Inter-Agency Archeological Salvage Program, *An Appraisal of the Archeological Resources of the Blue Ridge Project: Grayson County, Virginia & Alleghany and Ashe Counties, North Carolina* (Smithsonian Institution: River Basin Surveys, September 1965), New River Papers, Dam Fight Series, Reports, Box 1, Folder 6, ASU. Noah Adams, *Far Appalachia: Following the New River North* (New York: Delacorte Press, 2001), 6. American Rivers, "The Rivers and Streams of North Carolina," available from: http://www.americanrivers.org/site/DocServer/northcarolinafactsheet.pdf?docID=708. Wikipedia, The Free Encyclopedia, "New River (West Virginia)," available from: http://en.wikipedia.org/wiki/New_River_%28West_Virginia%29.

across the Shenandoah Valley, turning sharply northwest in Montgomery County. At the north end of this valley, the river crashes into the Alleghany Mountains in Giles County, Virginia. It winds through this region for about thirty miles before crossing the West Virginia border at 1,500 feet above sea level. In West Virginia, the river enters the lower valley region historically dependent on coal mining. It is not in West Virginia long before facing another impoundment named Bluestone Lake. North of Bluestone Dam, the river winds through the New River Gorge's steep canyon walls. Soon after exiting the Gorge, the New River joins with the Gauley River forty miles from Charleston and becomes the Kanawha River. The Kanawha connects with the Ohio River on the West Virginia – Ohio border, which flows westward into the Mississippi River. The New River drops 3,216 feet in elevation from its headwaters to its end in West Virginia.[19]

There are many different theories about how the New River was named. Thomas Schoenbaum wrote that "legend holds" that the New River received its name from Thomas Jefferson's father, Peter Jefferson, who surveyed the valley in the eighteenth century. A few other historians speculate that it earned its name by being the first river explorers encountered that flowed beyond the Eastern Continental Divide. Another theory is that a Native American name for the stream, Kanawha, was pronounced with a partial slur to make it sound like "nawha." This resembles "neu," the German word for

[19] The Appalachian Power Company, *An Economic Survey of Twenty-Two Coal Producing Counties Located in Southwestern Virginia and Southern West Virginia* (Bluefield, WV: Appalachian Power Company, 1959), 3. Schoenbaum, *The New River Controversy*, 3-4. Dean A. Roseberry, "Game Fisheries Investigation of Claytor Lake: A Main Stream Impoundment of New River, Pulaski County, Virginia, with Emphasis on Micropterus punctulatus (Rafinesque)" (Ph.D. diss., Virginia Polytechnic Institute, 1950), 1-3. Inter-Agency Archeological Salvage Program, *An Appraisal of the Archeological Resources of the Blue Ridge Project: Grayson County, Virginia & Alleghany and Ashe Counties, North Carolina* (Smithsonian Institution: River Basin Surveys, September 1965), found in New River Papers, Dam Fight Series, Reports, Box 1, Folder 6, ASU. Adams, *Far Appalachia*, 25.

"new," which sounds like "noy" in English. While the true origin of the name remains obscure, it is certain is that the river is not "new" at all.[20]

The New River is geologically older than the Appalachian Mountains it crosses. Called the Teays River by geologists, this ancient river drained mountains that formed when the African continental plate collided with eastern North America before the creation of the Atlantic Ocean. These mountains were once higher than the present day European Alps. The Teays drained these predecessors of the Appalachians, flowing northwest into the great inland sea that covered the Great Plains during prehistoric times. These ancestors to the Appalachian Mountains faced much erosion and many valleys filled in with runoff creating a high, relatively flat plateau. The Teays settled into this flattened area and took on a winding character. After several more million years, another uplifting occurred that created the modern Appalachians.[21]

Before the formation of the modern Mississippi and Ohio Rivers, the Teays was the principal river of North America. Geologists believe that in present day West Virginia, the Teays reached a width of two miles, and further downstream reached a width of fifteen miles. However, the Ice Age changed all this. Glaciers covered the lower Teays River in present day Ohio. The receding glaciers created the Ohio River, the Great Lakes, and the Mississippi River. The glaciers failed to cover the upper Teays River Valley, however, and this remains the only intact portion of the once mighty river. This

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[20] Cooper and Cooper, "Introduction," in *The People of the New River*, 5-9. Schoenbaum, *The New River Controversy*, 5.

[21] Inter-Agency Archeological Salvage Program, *An Appraisal of the Archeological Resources of the Blue Ridge Project: Grayson County, Virginia & Alleghany and Ashe Counties, North Carolina* (Smithsonian Institution: River Basin Surveys, September 1965), found in New River Papers, Dam Fight Series, Reports, Box 1, Folder 6, ASU. Schoenbaum, *The New River Controversy*, 5. Raymond E. Janssen, "The Teays River, Ancient Precursor of the East," *Scientific Monthly* LXXVII (December, 1953), 306-314.

unique history explains why today the New is the only river to cross the Appalachians from east to west.[22]

The earliest human artifacts in the New River Valley date from the Paleo-Indian Period. Big-game hunting defined this period, which ended around 8,000 BC, when many big game animals, such as mastodons, mammoths, camels, and long-horned bison, became extinct. Humans first extensively occupied the New River Valley during the Archaic period. The valley served as an important passage route through the Appalachians for early settlers. At this point, Native Americans used fish dams and weirs to get food from the New River and hunted watering animals along its banks and tributaries. Around 1,000 BC, the agricultural production of corn, squash, beans, and chili peppers spread into the New River Valley from the south. The floodplains of the river provided a perfect site for cultivating these new sources of nutrition. Clay pottery and earthen burial mounds began to appear in the region. The New River Valley was the southeast corner of the Hopewell culture and served as a route for trade with other Woodland cultures of the southeastern United States. The Native Americans found in the region by Europeans, the Shawnee and Cherokee, only settled in the region during late prehistoric times.[23]

Before European settlement in the region, the New River Valley saw many intense battles between the Shawnee and Iroquois to the north and the Cherokee to the

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[22] Schoenbaum, *The New River Controversy*, 5-7. Inter-Agency Archeological Salvage Program, *An Appraisal of the Archeological Resources of the Blue Ridge Project: Grayson County, Virginia & Alleghany and Ashe Counties, North Carolina* (Smithsonian Institution: River Basin Surveys, September 1965), found in New River Papers, Dam Fight Series, Reports, Box 1, Folder 6, ASU.

[23] Charles Hudson, *The Southeastern Indians* (Knoxville: University of Tennessee Press, 1976), 38-97. Schoenbaum, *The New River Controversy*, 7-12. Inter-Agency Archeological Salvage Program, *An Appraisal of the Archeological Resources of the Blue Ridge Project: Grayson County, Virginia & Alleghany and Ashe Counties, North Carolina* (Smithsonian Institution: River Basin Surveys, September 1965), found in New River Papers, Dam Fight Series, Reports, Box 1, Folder 6, ASU.

south. During the signing of the Sycamore Shoals treaty of 1775, in which a private group of settlers purchased parts of central Kentucky and north-central Tennessee from Cherokee chief Attakullakulla, Dragging Canoe, the chief's son, opposed the sale and warned the settlers that they were buying a "dark and bloody ground," a Native American nickname for the region. Conflict in this area kept parts of Kentucky, West Virginia, Tennessee, and southwestern Virginia mostly uninhabited. Only small, sparse settlements existed in the area, but large Native American parties frequented it on hunting expeditions.[24]

Early English explorers thought the New River ran west into a vast ocean. Most historians accept that Captain Abraham Wood discovered the New River in 1654. The New was known as "Wood's River" in colonial times. Some historians believe that Spanish explorer Hernando De Soto crossed the river even earlier, in 1540, but he crossed many southeastern rivers without naming them. The English and French colonists disagreed over who owned the New River Valley region, as it was on the edge of the French territories west of the Appalachian Mountains. Early English policy encouraged colonists to settle the Shenandoah Valley region, but few actually did so. The Shenandoah Valley, or the "Great Valley," formed a long corridor between the Blue Ridge and Alleghany Mountains stretching from Pennsylvania to Chattanooga, Tennessee. Before European settlement in North America, Native Americans used the valley as a giant warpath. By 1740, however, waves of German, Scots-Irish, Scottish

[24] United States Army Corps of Engineers, *Bluestone Lake, West Virginia* (Huntington, WV: United States Army Corps of Engineers, 1976). Schoenbaum, *The New River Controversy*, 13. E. Garnett Mellen, "The Appalachian Cultural Landscape Along the New River," (M.A. Thesis, Virginia Polytechnic Institute and State University, 1994), 15. Inter-Agency Archeological Salvage Program, *An Appraisal of the Archeological Resources of the Blue Ridge Project: Grayson County, Virginia & Alleghany and Ashe Counties, North Carolina* (Smithsonian Institution: River Basin Surveys, September 1965), found in New River Papers, Dam Fight Series, Reports, Box 1, Folder 6, ASU. Attakullakulla means "little carpenter." Mary French Caldwell, *Tennessee: The Dangerous Example, Watauga to 1849* (Nashville, TN: Aurora Publishers, 1974), 35.

Highlanders, English, Irish, and Welsh settlers began to flow into the Shenandoah Valley from Pennsylvania, Maryland, and eastern Virginia.[25]

The New River Valley became an arena for the French and Indian Wars and intense battles forced many settlers to move out of the region. When the Peace of Paris ended the French North American Empire in 1763, the New River Valley became British territory. That same year King George III tried to improve strained English-Indian relations. He issued a proclamation nullifying colonial land companies' claims west of the Eastern Continental Divide, making the New River Valley the eastern edge of a vast Indian territory. A few European settlers remained in this western region and some land companies ignored the proclamation and continued to sell land along the Holston and Clinch Rivers. People such as George Washington and Benjamin Franklin had their eyes on this land. Private citizens made deals with individual tribes for land, some establishing their own territories, such as the Watauga settlement and the State of Franklin. A treaty of 1768 opened up the lower New River for European settlement, but the upper New River (the portion in present-day North Carolina) remained Native American territory and the personal property of Lord Granville. More treaties further compromised this western

[25] Aaron Spencer Fogleman, *Hopeful Journeys: German Immigration, Settlement, and Political Culture in Colonial America, 1717-1775* (Philadelphia: University of Pennsylvania Press, 1996), 8, 85, 121. Schoenbaum, *The New River Controversy*, 13-19. Cratis Williams, "Introduction," in *Western North Carolina Since the Civil War*, eds. Ina Woestemeyer Van Noppen and John J. Van Noppen (Boone, NC: The Appalachian Consortium Press, 1973), ix. Mellen, "The Appalachian Cultural Landscape Along the New River," 8. John Anthony Caruso, *The Appalachian Frontier: America's First Surge Westward* (Indianapolis: The Bobbs-Merrill Company, Inc., 1959), 13-42. Kirsten Fischer, *Suspect Relations: Sex, Race, and Resistance in Colonial North Carolina* (Ithaca: Cornell University Press, 2002), 94. B.F. Nuckolls, *Pioneer Settlers of Grayson County, Virginia* (Bristol, TN: The King Printing Company, 1914), 104, 190, 205. Lewis Preston Summers, *History of Southwest Virginia, 1746-1786, Washington County, 1777-1870* (Johnson City, TN: The Overmountain Press, 1903), 10, 20-23, 43, 55. Adams, *Far Appalachia*, 83-84. Inter-Agency Archeological Salvage Program, *An Appraisal of the Archeological Resources of the Blue Ridge Project: Grayson County, Virginia & Alleghany and Ashe Counties, North Carolina* (Smithsonian Institution: River Basin Surveys, September 1965), found in New River Papers, Dam Fight Series, Reports, Box 1, Folder 6, ASU.

Indian territory, and on the eve of the American war for independence, the entire New River Valley was officially out of Native American hands.[26]

After the war for independence, the New River Valley entered a period of relative isolation. Poor roads and rugged terrain left inhabitants somewhat isolated to develop an agrarian lifestyle, with the small family farm as the basic economic unit. In the Shenandoah region, the New River Valley saw the most travelers, usually heading west to Kentucky and Tennessee. Travelers on this Wilderness Road crossed the New River at Ingles Ferry, near Radford. The portion of the New River north of the Shenandoah Valley remained isolated until the discovery of coal in the region in the late 1800s. The upper New River Valley, especially the portions within present day North Carolina, remained more isolated than the lower portions in the Shenandoah. This was due to an almost impenetrable barrier of high mountains that offered no easily accessible gaps or passes and a restriction on land ownership until after the war for independence. After the war, North Carolinians from the southeast and Virginians from the Shenandoah Valley settled the area. Farming provided the livelihood for most settlers and was the region's major economic activity, but the discovery of iron ore, lead, manganese, zinc, copper, and small quantities of coal brought others to settle in the region, as did timber operations. After 1800, two textile mills drew settlers to the upper New River Valley. These mills used the power of the New River at Mouth of Wilson and Fries, Virginia.[27]

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[26] Schoenbaum, *The New River Controversy*, 19-31. Mellen, "The Appalachian Cultural Landscape Along the New River," 15. Summers, *History of Southwest Virginia, 1746-1786, Washington County, 1777-1870*, 56-58. Inter-Agency Archeological Salvage Program, *An Appraisal of the Archeological Resources of the Blue Ridge Project: Grayson County, Virginia & Alleghany and Ashe Counties, North Carolina* (Smithsonian Institution: River Basin Surveys, September 1965), found in New River Papers, Dam Fight Series, Reports, Box 1, Folder 6, ASU.

[27] Mellen, "The Appalachian Cultural Landscape Along the New River," 15-18. Schoenbaum, *The New River Controversy*, 32-33. Mr. Fries was a North Carolinian who owned textile mills there, and opened one of the two on the New River. The Fries mill operated until the fall of 1988. For a time, the company owned the town and all its stores, where scrip was used as currency. Adams, *Far Appalachia*, 51-53, 68, 84. Traveling with wagons in the mountains was

During the Civil War, the Confederate government altered the New River to improve its navigability in and north of the Shenandoah region. It formed the river bottom into a flat surface using explosives and created channels with straight edges to circumvent rapids. From then until the early 1900s, attempts to improve the navigability of the river continued, and an approximately 111-mile portion of the river provided transportation for local products. This section extended from Allisonia, Virginia, south of present-day Claytor Lake, to Hinton, West Virginia, north of present-day Bluestone Lake. This portion of the river facilitated the movement of iron ore, pig iron, lumber, tobacco, produce, and merchandise in the region, but had no access to any seaports. Transportation on the rocky, sometimes shallow river required the use of flat bottom barges called keelboats. These boats were fifty to seventy feet long, with a bottom draft of two feet and carrying capacity of ten to twelve tons. Efforts to use the river for transportation continued until the beginning of the twentieth century. Falls, rapids, the river's rocky character, and low summer water levels thwarted these attempts, and rail transportation eventually proved far more efficient. The New River Gorge Region of present day West Virginia remained relatively unsettled until 1873, when the Chesapeake and Ohio railroad line opened the area's coalfields to exploitation.[28]

Due to its relative isolation from the rest of the United States, most of Appalachia consisted of small, self-sufficient farm units and communities along waterways until the beginning of the twentieth century. A few acres of level land fed a family, and surrounding hillsides supported apple, peach, and cherry orchards, as well as providing pastures for cattle and sheep. In the forests people hunted game, harvested wood for

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quite difficult. When going downhill, many immigrants tied them from tree to tree, locking brake mechanisms to maintain control. Fogleman, *Hopeful Journeys*, 121.

[28] United States v. Appalachian Electric Power Co., 311 U.S. 377 (1940). Schoenbaum, *The New River Controversy*, 32. Mellen, "The Appalachian Cultural Landscape Along the New River," 19. Adams, *Far Appalachia*, 140-141, 168.

fuel, and gathered wild plants. They bartered for goods and services, and sometimes sold surplus produce to nearby market centers. As the region became less isolated - first due to the influence of mining and textile industries, and later due to radios, roads, automobiles, and television - the region's traditionally agrarian lifestyle changed. Mountaineers wanted luxury goods, basic medical care, and other things that the rest of the United States enjoyed. Many people began to leave their Appalachian family farms to find better paying jobs elsewhere.[29]

Serious outside examination of southern Appalachian mountain people did not begin until the 1880s, and with it came a series of dangerous stereotypes about the mountaineer. Authors such as Mary Noailles Murfree brought national recognition to the area with their fictional works. Murfree painted a compassionate, though highly romanticized, portrait of mountain people. As early as the 1880s, a rival group of writers earned the name "mountain muckrakers" by depicting a mountain life full of poverty, desperation, violence, and extreme cruelty towards women and children. Around 1900 another vision of southern Appalachia emerged. A new group of writers idealized southern mountain communities as the last foothold of Anglo-Saxon Americans whose lifestyle was superior to the rest of the nation, uncomplicated as the region was by industrialization, urbanization, and foreign immigrants. In 1913, a new stereotypical element appeared when Horace Kephart published *Our Southern Highlanders*. This book depicted southern mountaineers as having no sense of community or effective leadership. The word "hillbilly" was often applied to Appalachian residents, since many

[29] Richard A. Bartlett, *Troubled Waters: Champion International and the Pigeon River Controversy* (Knoxville: University of Tennessee Press, 1995), 13-14. Mellen, "The Appalachian Cultural Landscape Along the New River," 20-21.

mountain settlers from Ireland's Ulster province brought songs about William of Orange with them.[30]

Stereotypes fail to capture the diversity of Appalachia. The uniqueness of individual communities, even those a few miles apart or separated by high mountains, makes it difficult to apply any broad generalizations. An example of such regional variances in the southern Appalachians becomes evident when comparing the histories of the upper and lower New River Valley. However geographically separated the valleys may be, a surprisingly high degree of labor mobility exists within Appalachia. For example, in the mid 1900s at least two residents of Ashe County, North Carolina, migrated over 105 miles to work in West Virginia coal mines, returning home every two weeks. Today, many people work seasonal jobs in the upper New River Valley: construction or guiding river canoe trips during the summer, working in the Christmas tree fields during the fall, and moving over to ski mountains during the coldest winter months.[31]

It was no accident that public interest in southern Appalachia coincided with the beginning of large-scale energy and timber interests in the region. The writers mentioned above, especially the "mountain muckrakers," provided development-minded power companies with excellent justifications for their rosy pictures of projects to modernize the region. These companies conveniently perceived southern Appalachia as an open, peripheral, and easy area to develop with a lack of strong political power to oppose their

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[30] William "Billy" of Orange's Protestant army defeated a Catholic force at the battle of Boyne in 1690. Durwood Dunn, *Cades Cove: The Life and Death of A Southern Appalachian Community, 1818-1937* (Knoxville: The University of Tennessee Press, 1988), xiii-xvi. Adams, *Far Appalachia*, 60. Christal Presley, "Mary Noailles Murfree," Summer 1998, available from: http://athena.english.vt.edu/~appalach/writersM/murfree.html.

[31] Dunn, *Cades Cove*, xiii-xvi. James Bard and Russell Colvard, interviewed by Cooper and Cooper, in *The People of the New River*, 25-26, 157. Adams, *Far Appalachia*, 30. Christal Presley, "Mary Noailles Murfree," Summer 1998, available from: http://athena.english.vt.edu/~appalach/writersM/murfree.html.

projects. They promised to transform the region with jobs, electricity, and modern conveniences. These developers represented big business from the northeastern United States who openly benefited from the Progressive Era's rural development ethos. Outside ownership of industries prevailed and generated capital did not stay in the region. For example, in 1967, almost twice as much capital flowed out of Appalachia as into it, much of it entering New York financial markets. Absentee owners developed monopolies over entire towns. They could dictate labor conditions, wages, and commodity prices at company stores. This easily and quickly established pattern dominated most of the region during the twentieth-century.[32]

The upper New River Valley contained one of the most unsettled portions of Western North Carolina's "lost provinces," and lack of development continued until around 1900. Most of the families in the region descended from the original pioneer settlers of the region: the Gambills, Greers, Blevinses, Neavses, Reeveses, Sturgells, Phippses, and Waddels. The region moved slowly and painfully out of what Cratis Williams called the "dark period of economic and social disintegration" that gripped it after the Civil War. During the war, the area was raided regularly by predatory bands from Tennessee and suffered much military damage due to its general support for Union troops. After the war, lingering violence caused Ashe County to revert to a destructive state of lawlessness. The county called upon federal military aid from Salisbury, North Carolina, to restore order. The upper New River Valley remained extremely isolated until highway 16 connected the central North Carolina piedmont with Ashe County in the 1920s. Before then, Ashe County had a closer relationship with Virginia than North Carolina due to an 1887 wagon road built by convict labor connecting Jefferson to

[32] John Gaventa, "In Appalachia: Property is Theft," *Southern Exposure* 1:2 (Summer/Fall, 1973), 43. Joseph Hughes, "Case Study: Taking Back Power," *Southern Exposure* 1:2 (Summer/Fall, 1973), 55.

Marion, Virginia. A 1914 rail line also connected Ashe County with Abingdon, Virginia, to facilitate the region's short timber boom. Due to this long period of relative isolation, there were no large population centers in the upper New River Valley. The towns of Boone and Blowing Rock, in Watauga County, Jefferson and West Jefferson, in Ashe County, and Sparta, in Alleghany County, were, and still are, the largest in the region. Boone was, and still is, the only urban community in the area, and home to the local state university. However, as late as 1915 Boone still transported goods by wagon to Lenoir in the southeast, rather than the northern route to Virginia, like Ashe County.[33]

The population of Ashe County was 8,777 in 1850. By 1880, this figure rose to 14,436. In 1950, the population of Ashe County was 21,878. This figure dropped to 19,100 by 1960, with only a small rise to 19,571 in 1970. Alleghany County showed a similar pattern. Created in 1859, the population of Alleghany County was 5,486 by 1880. This figure rose to 8,155 by 1950, and decreased to 7,600 by 1960. In 1970, the population of Alleghany County was 8,134. The population decreases of Ashe and Alleghany County between 1950 and 1960 reflected a general trend throughout Western North Carolina. Many ambitious young people left the area due to better economic opportunity elsewhere created by the post-World War II boom.[34]

Ashe County was a significant producer of beef and dairy products as early as 1893. By 1973, Ashe County led the state in fine beef production. Farmers used the Devon, or Shorthorn, breed of cattle. The lush grass of the northwestern North Carolina's mountain balds provided excellent fattening forage for cattle. Dairying was also a major industry for the region. A number of cheese factories opened in Ashe

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[33] Schoenbaum, *The New River Controversy*, 32-45. Cratis Williams, "Introduction," ix. Woestemeyer Van Noppen and Van Noppen, *Western North Carolina Since the Civil War*, 8, 333, 367. Ora Blackmun, *Western North Carolina: Its Mountains and Its People to 1880* (Boone, NC: The Appalachian Consortium Press, 1977), 336-337, 349-350, 359. Adams, *Far Appalachia*, 4.

[34] Woestemeyer Van Noppen and Van Noppen, *Western North Carolina Since the Civil War*, 20, 368-369. Schoenbaum, *The New River Controversy*, 32-45.

County before World War I. By 1964, Alleghany County was the third highest dairy producing county in North Carolina. Today Ashe contains North Carolina's only cheese plant.[35]

Tobacco was the major crop in the region. Burley tobacco, more suited for pipes than cigarettes, spread into northwestern North Carolina from Tennessee in 1929. Thirty years later, Ashe County was the third-largest producer of burley tobacco in the state, Watauga County was the sixth, and Alleghany County the ninth. For a few years, Watauga boasted the region's only tobacco warehouse. However, a second warehouse was soon built in Ashe County. Though Alleghany County farmers grew tobacco, they never produced as much as Ashe and Watauga.[36]

By 1976, the unemployment rate of Ashe and Alleghany counties was 5.8 percent and 2.2 percent, respectively. These figures were much lower than the national average of 7.9 percent. Small factories provided several thousand jobs for the area without displacing the region's traditional agrarian lifestyle. Farmers supplemented their diet with fish from the New River and its tributaries. Many upper and lower valley residents used Native American fishdams, or "Indian fish traps," made of a stone "V" pointed downstream as late as the 1950s. Many of these stone structures still existed in the 1970s.[37]

In neighboring Grayson County, Virginia, high surrounding ridges form the county boundaries. The Blue Ridge forms the southern boundary, while Mount Rogers and the

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[35] Woestemeyer Van Noppen and Van Noppen, *Western North Carolina Since the Civil War*, 20, 269-287, 368-369. Schoenbaum, *The New River Controversy*, 45.

[36] Woestemeyer Van Noppen and Van Noppen, *Western North Carolina Since the Civil War*, 20, 269-287, 368-369. Schoenbaum, *The New River Controversy*, 42.

[37] Woestemeyer Van Noppen and Van Noppen, *Western North Carolina Since the Civil War*, 20, 269-287, 368-369. Schoenbaum, *The New River Controversy*, 45. "Fishdams," Transcript from New River Papers, Dam Fight Series, Reports (The Revised Blue Ridge Project: An Archeological Survey and Summary, by C.C. Holland), Box 1, Folder 1, ASU. Adams, *Far Appalachia*, 99.

Grayson Highlands form the western and northern boundaries. The New River runs along the Blue Ridge portion of the North Carolina/Virginia state line, across Grayson's southern portion, and turns north near the eastern edge of the county. The region is a rolling plateau, characterized by Virginia's highest peaks in the northern and western sections of the county. Settlers streamed into this portion of the upper New River Valley long before they entered the North Carolina portion of it, establishing small family farms in the river bottoms. Many of these settlers came down the Shenandoah Valley from Pennsylvania, but others came from eastern Virginia and North Carolina. Most settlers came through present-day Grayson County on their way to Ashe, Alleghany, and Watauga Counties. A few of Grayson County's pioneering families share names with those of Ashe County, such as Phipps and Reeves. Most area residents primarily engaged in farming, but some lead and iron mining was also present. After 1800, the county was home to two early textile mills along the New River, at Fries and Mouth of Wilson. Galax was a thriving center of commerce due to its location on a railroad line. Galax and Independence were, and still are, the two largest towns in the county. Today beef cattle ranching is a major industry for Grayson County.[38]

The New River Valley is a varied region inhabited by the descendents of many pioneer settler families. A self-sustaining way of life combined with relative isolation produced an independent spirit and fierce individualism in area settlers, especially so in the upper New River Valley. Settlers in the lower valley were considerably less isolated and partially dependent on markets outside the region. However, isolated does not mean impoverished, as demonstrated by the healthy upper valley productive sector mentioned

[38] Nuckolls, *Pioneer Settlers of Grayson County, Virginia*, xiv, 1, 19, 167, 183-189. Mellen, "The Appalachian Cultural Landscape Along the New River," 18, 62. Grayson County Board of Supervisors, Argument in Support of Motion to Reopen the Record for Additional Evidence on Environmental Impact of Project, Transcript from National Committee for the New River Papers, Dam Fight Series, Federal Power Commission Subseries, Motions, 1971-1972, Box 1, Folder 4, ASU. Adams, *Far Appalachia*, 51.

above. During the twentieth-century, all New River Valley residents began to see more and more of the outside world. Utilities expanded their electrical infrastructure into the area, taking advantage of geographical benefits, low land values, and lack of development in the area.

2: THE APPALACHIAN POWER COMPANY ALONG THE NEW RIVER, 1911-1962

"The New River has been checked, pooled,
and portioned out to generate electricity."

-Noah Adams[39]

The following chapter contains the history of the Appalachian Power Company and its developments along the New River before the Blue Ridge Project. The Appalachian Power Company has been involved with almost every energy production plan along the New River since its 1911 company charter. The following chapter explores the Appalachian Power Company's relation to the New River, the development pattern that existed before the environmental legislation of the 1960s, and the existence of opposition to Appalachian Power's plans along the river before the environmental movement.

America was developing rapidly in the early twentieth century. Electric power provided the energy needed for modernization and quickly spread across the nation. Between 1902 and 1936, the United States' total installed generating capacity rose from 2,112,000 to 36,597,000 kilowatts. The southern Appalachian Mountains were somewhat less developed. However, hydroelectric power provided by individual promoters brought limited industrial expansion to the southern Appalachians between 1909 and 1919, mostly south of the New River Valley. These mountains were well suited for hydroelectric production. The highest elevations in the eastern United States, large volumes of year-round precipitation, as well as falls and rapids gave the region a perfect environment for hydroelectric facilities. This development created more labor opportunities and a remarkable increase in the output of manufactured goods for North

[39] Noah Adams, *Far Appalachia: Following the New River North* (New York: Delacorte Press, 2001), 100.

and South Carolina, Georgia, Alabama, and Tennessee. In 1922, K.C. McMurry wrote, "few parts of the country at present are better supplied with electric power than is this region which is commonly thought of as backward in industrial development and methods." National electrification proceeded quickly in most of the nation. However, by 1935, 15-45 percent of rural areas in the northeastern and western parts of the United States had electricity, while only 1-15 percent of southeastern areas did. This 1-15 percent included North Carolina but not Virginia and Florida, where 5-15 percent of rural areas had electricity. [40]

People have manipulated the flow of rivers for thousands of years to provide irrigation and harnessed streamflow to generate raw power with water wheels. In the twentieth century, however, the United States led the world in intensifying the use of waterways, prompting completely new types of aquatic development. Hydroelectricity created a revolution in waterpower applications. The basic components of a hydroelectric generation system consist of a reservoir for water storage and pipe to carry water from the top of the dam to the bottom, rotating turbine blades along the way. The blades turn a rotor, which provides movement within the electric generator, where wire coils pass by stationary coils and make electricity. In larger projects, engineers combined aquatic bodies. They dug tunnels through mountains to dump one river into another, or grouped many reservoirs together that released water to canals, pipes, and turbines. Thomas Edison built the first hydroelectric generator on Wisconsin's Fox River

[40] Thomas J. Schoenbaum, *The New River Controversy* (Winston Salem, NC: John F. Blair, Publisher, 1979), 42. K.C. McMurry, "Electric Power in the Southern Appalachians," *The Bulletin of the Geographical Society of Philadelphia* 22:1 (Jan, 1924), 22-23. The Appalachian Power Company, *Hydroelectric Power in the Southwest Virginias* (Bluefield, WV: Appalachian Power Company, 1913), 19. David E. Nye, *Electrifying America: Social Meanings of a New Technology, 1880-1940* (Cambridge, MA: The Massachusetts Institute of Technology Press, 1990), 299, Figure 7.2. Ina Woestemeyer Van Noppen and John J. Van Noppen, *Western North Carolina Since the Civil War* (Boone, NC: The Appalachian Consortium Press, 1973), 333, 354-355. Until 1835, people believed that the mountains of New Hampshire were the highest on the East Coast. -John Preston Arthur, *Western North Carolina: A History, from 1730 to 1913* (Spartanburg, SC: The Reprint Company, 1973), 8.

in 1882, though it only generated enough power for 250 light bulbs. The first major hydroelectric plant was built at Niagara Falls in 1896. By 1900, hydroelectric power supplied 57 percent of the United States' electricity. However, from 1900 to 1950, hydroelectric power only supplied 33 percent of the nation's energy, due to the growing use of fossil fuels.[41]

The demand for power in the United States kept climbing in the early twentieth century. By 1930, 90 percent of urban residents used electric power. However, only 10 percent of rural residents had electricity. This figure made a slow rise since 1910, when only 2 percent of American farms had electricity. Franklin Delano Roosevelt's administration sponsored rural electrification programs that sought to expand electrical infrastructure across the United States. Rural electrification became a social program, discussed in terms of rights and minimal standards instead of profits. During the progressive period of the early twentieth-century, the federal government promoted state-run hydroelectric operations as the encouraged form of power development to avoid monopoly control over electricity and provide power to the public at a reasonable price. In 1933, President Roosevelt signed the Tennessee Valley Authority Act, in which he asked Congress to create "a corporation clothed with the power of government but possessed of the flexibility and initiative of a private enterprise." The Tennessee Valley Authority (TVA) controlled a watershed that stretched from Mississippi to southwest Virginia, servicing all of Tennessee, as well as parts of Mississippi, Alabama, Georgia, North Carolina, Virginia, and Kentucky. The TVA not only sought to produce electric power, but also improve agriculture, facilitate flood control, reforestation and navigation,

[41] Tim Palmer, *Endangered Rivers and the Conservation Movement* (Lanham, MD: Rowman & Littlefield Publishers, Inc, 2004), 18-19. William R. Lowry, *Dam Politics: Restoring America's Rivers* (Washington, DC: Georgetown University Press, 2003), 30-37. Richard White, *Organic Machine: The Remaking of the Columbia River* (New York: Hill and Wang, 1995), 48-51. Tennessee Valley Authority, "Hydroelectric Power," available from: http://www.tva.gov/power/hydro.htm. Wikipedia, The Free Encyclopedia, "Hydroelectricity," available from: http://en.wikipedia.org/wiki/Hydroelectricity.

and prevent soil erosion. Located on the northeastern edge of TVA territory, the Appalachian Power Company saw tremendous potential in hydroelectric development for the New River Valley.[42]

The Appalachian Power Company was well established by the time they felt any TVA competition. The utility formed from the merger of several small power plants along the New River in 1911. The American Electric Power Company (AEP), called the American Gas and Electric Company (AGE) until 1958, purchased the Appalachian Power Company in 1925. Parts of AGE started in 1889. AGE's purchase of the Appalachian Power Company was part of a larger trend of expansion. Between 1922 and 1926, AGE purchased many smaller power companies, gaining dominance over an area stretching from southwest Virginia to Michigan, across some of the nation's largest coal reserves.[43]

Despite progressive development's attempt to break up monopolistic, investor owned, private utilities during the 1920s, AGE and the Appalachian Power Company managed to stay powerful and intact. In 1928, the Federal Trade Commission launched a wide-ranging investigation of monopolies within the electric power industry. The

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[42] Nye, *Electrifying America*, 288, 304, 307. Samuel P. Hays, *Beauty, Health, and Permanence: Environmental Politics in the United States, 1955-1985* (Cambridge: Cambridge University Press, 1987), 14-15. David E. Whisnant, *Modernizing the Mountaineer: People, Power, and Planning in Appalachia* (Knoxville: The University of Tennessee Press, 1994), 44-48. Philip Sporn, President, American Gas and Electric Company, "Observations on Private vs. Public Power," an address delivered as part of the Cooper Foundation Series, Swarthmore College, April 15, 1954, Graham W. Claytor (1886-1971) Papers, 1907-55 (Ms81-095), Box 3, VT. Tennessee Valley Authority, "From the New Deal to a New Century: A short history of TVA," available from: http://www.tva.gov/abouttva/history.htm.

[43] John Bauer and Nathaniel Gold, *The Electric Power Industry: Development, Organization, and Public Policies* (New York: Harper & Brothers Publishers, 1939), 3-4. Graham Claytor, talk given to an unidentified banking group in 1953, Graham W. Claytor (1886-1971) Papers, 1907-55 (Ms81-095), Box 3, VT. Graham Claytor, talk given to engineering college professors at AGE office, December 12, 1952, *Ibid*. United States Army Corps of Engineers, "Private Hydroelectric Dam: Efforts to Construct a Private Hydroelectric Dam to Bluestone Dam," available from: http://www.lrh.usace.army.mil/about/history/bluestone/hydro/. The American Electric Power Company, "History of AEP: A Century of Firsts," available from: http://www.aep.com/about/history/default.asp.

commission's inquiry led to the passage of the Public Utility Holding Company Act in 1935. This act forced the division of many other power companies and some of AGE's assets. However, AGE's "Central System," stretching from Virginia to Michigan, remained intact and even received acclaim as a model of what an integrated power system should be.[44]

Early Developments along the River

The Appalachian Power Company built its first two dams on the New River by the end of 1912, less than two years after its establishment in Virginia. The utility constructed a dam at Byllesby and another three miles downstream at Buck, in Carroll County, Virginia. These two dams had a combined capacity of more than 67,140 kilowatts. Appalachian Power built 402 miles of transmission lines from these dams to the towns, mines, and industries of the region. The fifty-foot high Byllesby Dam was twice as productive as Buck Dam, though the two worked together to generate power, creating a small reservoir between them called Fowler's Ferry. Appalachian Power took advantage of a long, narrow island in the New River when constructing Buck Dam. The

[44] The American Electric Power System, *Appalachian Power Company and the American Electric Power System: Building Tomorrow Today* (Roanoke, VA: American Electric Power System, 1962), front cover, 2. The American Electric Power Company, "History of AEP: A Century of Firsts," available from: http://www.aep.com/about/history/default.asp. The Appalachian Power Company was one of AEP's seven operating companies in 1976. Others included the Indiana & Michigan Electric Company, Kentucky Power Company, Kingsport Power Company, Michigan Power Company, Ohio Power Company, and Wheeling Electric Company. The entire system served people in Indiana, Michigan, Ohio, Kentucky, West Virginia, Virginia, North Carolina, and Tennessee. In 1962, the Appalachian Power Company served over 1.75 million people in 1,232 communities in Virginia and West Virginia. By 1976, these numbers increased to over 2.153 million people in 1,654 communities in Virginia, West Virginia and Tennessee. Today, American Electric Power operates its own system of inland barges and owns considerable amounts of land in its service area. The Appalachian Power Company, *Annual Report 1976* (American Electric Power System: 1977), 3. Bob Hall, "Investigating Your Local Utility," *Southern Exposure* 1:2 (Summer/Fall, 1973), 69. Today, AEPs headquarters are in Columbus, Ohio. Frank J. Calzonetti and Muhammad A. Choudhry, "The Power Trade Alternative," in *Power from the Appalachians: A Solution to the Northeast's Electricity Problems?*, eds. Frank J. Calzonetti, Timothy Allison, Muhammad A. Choudhry, Gregory G. Sayre, and Tom S. Witt (New York: Greenwood Press, 1989), 87. Wikipedia, The Free Encyclopedia, "American Electric Power," available from: http://en.wikipedia.org/wiki/American_Electric_Power.

utility constructed a 1,000-foot long concrete spillway along the North side of the island, which forced increased water flow through mounted waterwheels. These two dams invigorated the newly created utility and led it to consider other developments along the river and fight other developers attempting hydroelectric projects.[45]

The Appalachian Power Company's early developments along the New River proceeded virtually unchallenged. However, in 1925, the Eastern States Development Company of Wheeling, West Virginia, applied to the Federal Power Commission for permission to construct a reservoir on the New River in Grayson County, Virginia. The proposed dam would produce a fifteen-mile reservoir upstream, and a tunnel through the Blue Ridge of the Appalachian Mountains would divert some of this water through a generator into North Carolina's Fisher River and the Yadkin-Pee Dee River basin. The Farrier law firm of Pearisburg, Virginia, legal representatives of the Appalachian Power Company, argued that the move was "in violation of states rights" and would affect the water supply of downstream communities. It also contended that the proposed reservoir and water diversion tunnel were "in violation of the fundamental laws of riparian rights." The reservoir would reduce the power capacity of Appalachian Power's dams at Buck and Byllesby, and at the Washington Mills plant at Fries, Virginia. The attorneys claimed that the Appalachian Power Company used about 82 percent of the New River's entire flow for power production. This potentially disastrous impoundment was never

[45] Later, during the battle against the Blue Ridge Project, Appalachian Power used these two dams to argue that the river was already impounded and therefore not a free flowing stream worthy of wild and scenic status. They did this in spite of the fact that these two small dams were only a fraction of the size of the proposed Blue Ridge Project dams. The Appalachian Power Company, *Hydroelectric Power in the Southwest Virginias*, 18-21. Virginia Department of Game and Inland Fisheries. "New River – Maps and Access." Available from: http://www.dgif.state.va.us/fishing/waterbodies/display.asp?id=163&section=maps.

constructed. Diverting the water into North Carolina could have decimated water levels and aquatic life in the entire lower New River Valley.[46]

However, the utility's heavy investment in coal led to its first major development along the New, demonstrating that it was not just interested in using the flow of the river to generate power. In 1917, the Appalachian Power Company decided to construct a large steam power plant along the river's banks in rural Giles County, Virginia. Appalachian Power's cornerstone for regional development was this steam power plant in Glen Lyn on the New River, which it finished constructing in 1918. The Glen Lyn plant produced electricity by burning coal rather than using waterpower. This large, modern, and reportedly efficient steam plant had a capacity of 59,680 kilowatts. Appalachian Power built it less than one-hundred yards from the West Virginia border, along the railroad lines that provided furnaces with easy access to the vast amounts of coal shipped out of that state. Its location on the river gave it an available source for water used in the steam condensation process. The company claimed that the plant's purpose was to make up for "shortages, overloads or troubles that may develop in other lines." By 1953, the Glen Lyn plant represented the base of their operations. In a pamphlet from that year, the utility reported that 90 percent of its power came from burning coal, and that "several small water-power plants… supplement the main steam stations." From Glen Lyn, the company constructed power lines to reach Pulaski, Pearisburg, and Pembroke, Virginia.[47]

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[46] New River Diversion Folder, Farrier Family Papers (Ms74-001), Box 12, VT. Adams, *Far Appalachia*, 51-54, 67-68. The Appalachian Power Company, *Power in Southwestern Virginia: A Great Mountain Empire* (Bluefield, WV: The Appalachian Power Company, 1918-1936[?]), 7-9.

[47] When you compare this 59,680 kilowatt steam plant with Appalachian Power's other main power producers, 2 small dams on the New River in Carroll and Pulaski Counties, Virginia, it produces almost as much power as the two dams, which combine to produce "not less than" 67,140 kilowatts, depending upon water flow in the river. The Appalachian Power Company, *Hydroelectric Power in the Southwest Virginias*, 18. The Appalachian Power Company, *Power in Southwestern Virginia*, 7-9. The Appalachian Electric Power Company, *The Story of the Reusens*

Appalachian Power's plans for expansion in the region did not receive universal support. The ambitious private utility had trouble purchasing land and spring rights surrounding the plant. It offered to purchase property from Glen Lyn residents, but would condemn it if their offer was not accepted. Land acquisition for transmission lines did not proceed smoothly. At least four residents sued in court claiming damages to land and crops in the Glen Lyn area. During the construction of power lines, the company set fire to at least three people's land, damaging valuable timber, corn, and apple crops. Additionally, dangerous pesticides used in clearing right-of-ways for the power lines damaged the native black locust tree, a nitrogen-fixing tree that increases the fertility of generally poor mountain soil.[48]

Indeed, people were afraid of the new power lines and had already heard of the damage they could inflict. Many of them were made of un-insulated copper wires. They heard that one of Appalachian Power's lines recently fell in nearby Smyth County, Virginia, killing a man. Falling lines set a house on fire, and livestock, corn, apple, and timber crops sustained similar damage. Residents feared the volumes of smoke from burning coal and many lands crossed by power lines suffered a decline in value. Appalachian Power completed construction on the steam plant at Glen Lyn in 1918. It had acquired all necessary land and spring rights by 1942, evicting property owners with

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Hydro-Electric Station, Tracing its Development over a Thirty-year Period 1903-1931 (Lynchburg, VA: Appalachian Electric Power Company, 1931), 1-7. The Appalachian Electric Power Company, *The Lynchburg District Office Building of Appalachian Electric Power Company: Dedicated to Public Service* (Appalachian Power Company, 1953), 1-11. Giles County Administration, "Giles County, Virginia: Home to 37 Miles of the New River," available from: http://www.gilescounty.org/.

[48] AppCo vs. DE Delaney File, Farrier Family Papers (Ms74-001), Box 10, VT. Narrows Fire Claims File, *Ibid*. Options-Narrows-Pembroke Line File, *Ibid*. App. Elec. Power Co. – Davis File, *Ibid*. AppCo vs. Clarence H. Johnson File, *Ibid*. Appalachian Power Company File, *Ibid*. Appalachian Power Co. – 1923 File, *Ibid*. App. Co. (Descriptions) File, *Ibid*. App. Co. General Papers File, *Ibid*. Appco vs. C.H. Johnson File, *Ibid*. App. Power Co. File, *Ibid*. General File, *Ibid*. Misc. File, *Ibid*. Edgar Bullman Schroeder, "An Investigation of the Factors Governing the Effect of 2,4-D on the Locust Tree on the Right-of-ways of the Appalachian Electric Power Company," (B.S. Thesis, Virginia Polytechnic Institute, 1955), 3.

legal sanction if they would not sell. Section I, part five of the 1911 Appalachian Company Charter, gave the corporation the right to condemn "land, sand, earth, gravel, water or other material necessary to be taken and used" to construct and maintain an electrical infrastructure. The company could seize disputed property due to "the incapacity of the owner, or inability to agree upon the price or terms, or because the owner cannot, with reasonable diligence, be found in this State… under the restrictions prescribed by the laws of the State of Virginia."[49]

Appalachian Power's next regional power project was the hydroelectric generation of electricity. Smaller dams generated power along the New River during the early twentieth century, most of them owned by the Appalachian Power Company or local manufacturers. However, Appalachian Power had plans for a much larger dam, the first major dam on the New River, in the traditionally most populated area of the New River Valley. The utility constructed this dam south of Radford, Virginia, creating the 4,500-acre Claytor Lake between 1937 and 1939. The dam was 1150 feet long, 130 feet high and 108 feet thick at its base. This impoundment covered one of the first sections of

[49] AppCo vs. DE Delaney File, Farrier Family Papers (Ms74-001), Box 10, VT. Narrows Fire Claims File, *Ibid*. Options-Narrows-Pembroke Line File, *Ibid*. App. Elec. Power Co. – Davis File, *Ibid*. AppCo vs. Clarence H. Johnson File, *Ibid*. Appalachian Power Company File, *Ibid*. Appalachian Power Co. – 1923 File, *Ibid*. App. Co. (Descriptions) File, *Ibid*. App. Co. General Papers File, *Ibid*. Appco vs. C.H. Johnson File, *Ibid*. App. Power Co. File, *Ibid*. General File, *Ibid*. Misc. File, *Ibid*. Steve Wussow, "Paying for Clean Air… Elsewhere: Southwest Virginia Still Lost in the Loopholes of Pollution Law," *Appalachian Voice* (Late Winter 2006), 12-13. Charter of the Appalachian Power Company, AppCo vs. DE Delaney File, Farrier Family Papers (Ms74-001), Box 10, VT. The Glen Lyn Steam Plant is still generating electricity today, as a regional cornerstone of Appalachian Power's electrical infrastructure. It is the oldest power plant in Virginia and still uses coal-burning technology from the mid-1900s.The plant burns hundreds of train-car loads of coal every day. Pollution from the Glen Lyn steam plant kills twenty-one people a year in the Blacksburg, Virginia, area, as reported by an advocacy newspaper quoting the Environmental Protection Agency. Also, this was not the last time area residents would protest Appalachian Power's electrical transmission lines. In 1990, Giles County residents organized more effectively, creating a thirteen-year delay for one of Appalachian Power's high voltage lines slated to cut across the region. The American Electric Power System, *Appalachian Power Company and the American Electric Power System*, 21-map. The Appalachian Power Company, *Annual Report 1976*, 24-map. Adams, *Far Appalachia*, 136. Heidi Lockhart Utz, "Collective Identity in Appalachia: Place, Protest and the AEP Power Line" (M.A. Thesis, Virginia Polytechnic Institute and State University, 2001), 1-6.

the New River Valley settled by European immigrants, but no evidence of contemporary protests over this project exists.[50]

We can guess what lies underneath Claytor Lake by examining the history of the area. Members of the modern day Church of the Brethren, historically called Dunkards or New Baptists, from Germany and Switzerland, settled in the flooded area before 1745. Their settlement became known as Dunkard's Bottom. Appalachian Power constructed Claytor Dam a few miles upstream from a ferry owned by William Ingles, a pioneer from Northern Ireland, along the historic Wilderness Road that led settlers west to Kentucky and Tennessee. In 1755, a Shawnee war party raided the Drapers Meadow settlement in present-day Blacksburg and captured his wife, Mary Draper Ingles, along with others, taking them to Ohio. Mary Ingles escaped and walked all the way back to Virginia along the New River, taking refuge in Fort Frederick in Dunkard's Bottom, until opening Ingles Ferry in 1762. English settlers in the flooded area included William Mack, who had a creek and mountain named after him, and Colonel William Christian, Patrick Henry's brother-in-law. After George III returned western territories, including the New River Valley, to Native Americans in 1763, Colonel Christian and the Dunkards refused to leave and Christian massed an army for defense. They defeated a Native American force in 1774, and soon after wrote the famous Fincastle Resolutions. In defiance of England, the resolutions stated that "we are deliberately and resolutely determined never to surrender… to any power upon earth but at the expense of our lives." Colonel Christian's stone chimney still stands on the west side of Claytor Lake, in the state park area. What settlements, other ferries, forts, war remnants, and artifacts lie deep down on

[50] The Appalachian Electric Power Company, *Power for Progress at Claytor Dam* (Appalachian Electric Power Company, 1950), 1-4. Edward Gordon Simpson, "Pioneer Trails Through Southwest Virginia," (M.A. Thesis, Virginia Polytechnic Institute and State University, 1971), 48-53, map inside back cover. Dean A. Roseberry, "Fishery Management of Claytor Lake: An Impoundment on the New River in Virginia," *Transactions of the American Fisheries Society* 80 (1950), 194.

the bottom of Claytor Lake? Now that hundreds of feet of water cover it, we may never know.[51]

Though no one objected to the historical loss associated with flooding this area, the proposal to construct a dam near Radford did generate legal conflict. The New River Development Company initiated the Radford dam project in 1925 and soon afterwards, it became the project of the Appalachian Power Company. The Army Corps of Engineers carried out a survey and found that the river was navigable. The Rivers and Harbors Act of 1899 made it illegal construct a dam in any navigable water of the United States without Congressional approval. Damming a navigable river could interfere with interstate and international commerce. Approval by the Federal Power Commission (FPC) was required to initiate dam construction since the commission's 1920 creation by the Federal Water Power Act. The FPC issued a report that the New River was navigable in 1932. However, Appalachian Power began construction on the dam anyway in 1934. In 1935, the United States filed an injunction against the dam since the project had not received FPC approval. Both the District Court and the Circuit Court of Appeals claimed the New River was not navigable. The federal government took the case all the way to the Supreme Court of the United States in 1940, after dam construction finished in 1939. The Supreme Court found that the New River was not navigable and had not

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[51] United States v. Appalachian Electric Power Co., 311 U.S. 377 (1940). Schoenbaum, *The New River Controversy*, 4. Aaron Spencer Fogleman, *Hopeful Journeys: German Immigration, Settlement, and Political Culture in Colonial America, 1717-1775* (Philadelphia: University of Pennsylvania Press, 1996), 22, 102. Adams, *Far Appalachia*, 83-84. Charles Craig Bonds, "Assessment of the Response of Piscivorous Sportfishes to the Establishment of Gizzard Shad in Claytor Lake, Virginia," (M.A. Thesis, Virginia Polytechnic Institute and State University, 2000), 1. The Appalachian Electric Power Company, *Power for Progress at Claytor Dam*, 1-4. Edward Gordon Simpson, "Pioneer Trails Through Southwest Virginia," (M.A. Thesis, Virginia Polytechnic Institute and State University, 1971), 48-53, map inside back cover. Adams, *Far Appalachia*, 83-87. Virginia Department of Conservation and Recreation, "Virginia State Parks: Claytor Lake State Park," available from: http://www.dcr.state.va.us/parks/claytor.htm#History. Virginia Department of Game and Inland Fisheries, "New River: Maps and Access," available from: http://www.dgif.state.va.us/fishing/waterbodies/display.asp?id=163&section=maps. Virginia Department of Game and Inland Fisheries, "New River," available from: http://www.dgif.state.va.us/fishing/waterbodies/display.asp?id=163.

been a transportation route since the early 1900s. The first major impoundment of the New River was successfully constructed.[52]

Claytor Dam was the largest of the Appalachian Power Company's twelve hydroelectric plants, with a total generating capacity of 83,000 kilowatts. It generated more electricity than any dam built before 1936, and reflected an upward trend in hydroelectric power generation. Between 1895 and 1936, the generating capacity of dams rose considerably. A dam at Niagara Falls generated 3,300 kilowatts, while Hoover Dam in Boulder, Colorado, generated 76,700 kilowatts. The AEP system mirrored this upward trend. Between 1935 and 1944, the AEP system doubled its generating capacity. Today, Claytor Dam is still the largest of Appalachian Power's hydroelectric facilities. When generating power, the dam at Claytor Lake can suddenly raise the water level in the lower New River two or three feet.[53]

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[52] United States v. State of West Virginia, 295 U.S. 463 (1935). United States v. Appalachian Electric Power Co., 311 U.S. 377 (1940).

[53] Bauer and Gold, *The Electric Power Industry*, 32. Graham Claytor, talk given to an unidentified banking group in 1953, Graham W. Claytor (1886-1971) Papers, 1907-55 (Ms81-095), Box 3, VT. Adams, *Far Appalachia*, 127. Virginia Department of Conservation and Recreation, "Virginia State Parks: Claytor Lake State Park," available from: http://www.dcr.state.va.us/parks/claytor.htm#History. Virginia Department of Game and Inland Fisheries, "New River: Maps and Access," available from: http://www.dgif.state.va.us/fishing/waterbodies/display.asp?id=163&section=maps. Since then, Claytor Lake has drawn considerable tourism from fishing in its deep waters and altered the ecosystem of the New River. Several months before flooding, workers cut all timber products in the basin to a stump height of twelve inches and burned them. This permitted the growth of a bottom mat of vegetation, which decomposed immediately after flooding, releasing nutrients, which produced an abnormally fertile lake. This high fertility contributed to a strong forage base for large game fish. The continued stocking of the lake with northern breeds of walleye came at the expense of the New River's unique native species of walleye. The saltwater striped bass was successfully introduced to the lake sometime after 1950, as it was in many lakes around the United States. This stocking came at the expense of largemouth bass, smallmouth bass, muskellunge, and walleye populations, as forage suffered a corresponding reduction, especially so since the illegal introduction of gizzard shad in the late 1980s. Charles Craig Bonds, "Assessment of the Response of Piscivorous Sportfishes to the Establishment of Gizzard Shad in Claytor Lake, Virginia," ii. George C. Palmer, "Genetic Characterization of Intermixed Walleye Stocks in Claytor Lake and the Upper New River, Virginia," 1-3. Dean A. Roseberry, "Game Fisheries Investigation of Claytor Lake: A Main Stream Impoundment of New River, Pulaski County, Virginia, with Emphasis on Micropterus punctulatus (Rafinesque)" (Ph.D. diss., Virginia Polytechnic Institute, 1950), 9, 16-17.

The next major impoundment of the New River appeared in its lower region, near the Virginia-West Virginia border. A group of southeastern West Virginia residents conceived of a 2,000-acre impoundment in 1910 as a way to produce power for the region. This interested group proposed the New River Bluestone Dam Project to different utility companies, hoping to bring hydroelectric power to the region. The Appalachian Power Company took up the offer sometime between 1911 and 1925. The Federal Power Commission delayed the project for a considerable period as it considered and re-considered the navigability of the New River, and many courts evaluated its decision. The debate over the New River's navigability was an often-repeated issue in the courts, as detailed in the above section on the construction of Claytor Lake.[54]

Against the Appalachian Power Company's wishes, an executive order from President Roosevelt made Bluestone Dam an Army Corps of Engineers project in 1935. In the eastern United States, the corps built many of the dams used to generate electricity. The Continental Congress created the Army Corps of Engineers in 1775 to help General George Washington's army build fortifications during the American war for independence. After its formal organization in 1799, the corps' primary mission was to support the United States military, but it performed many other functions. The corps administered Yellowstone Park before the creation of the National Park Service, built the Alaskan Highway, and helped construct the atomic bomb. Corps involvement with waterways began in 1823, when it surveyed part of Lake Erie for canal development. The next year, Congress gave the corps 74,000 dollars to remove Ohio River sandbars and dead trees that damaged steamboats. The corps was soon performing the same

[54] United States v. Appalachian Electric Power Co., 311 U.S. 377 (1940). United States v. State of West Virginia, 295 U.S. 463 (1935). West Virginia Division of Natural Resources, "Bluestone State Park: Recreation," available from: http://www.bluestonesp.com/recreation.html. United States Army Corps of Engineers, "Private Hydroelectric Dam: Efforts to Construct a Private Hydroelectric Dam to Bluestone Dam," available from: http://www.lrh.usace.army.mil/about/history/bluestone/hydro/.

task on the Mississippi River. Between 1910 and 1929, the corps constructed forty-six dams and locks on the Ohio River, and ninety-one dams on its tributaries. By 1935, it had constructed ten dams on the Kanawha River to improve navigation and was working on two others.[55]

Between 1918 and 1926, the corps built Wilson Dam, the nation's first multi-purpose high concrete dam on the Tennessee River near Sheffield, Alabama. It provided for power generation and stable navigation conditions on a portion of the Tennessee River. The corps built its next large dam in West Virginia on the Tygart River after its 1935 authorization. Improving the navigability of the nation's rivers was the corps' main function until the late 1930s, when it began concentrating on flood control reservoirs. However, improving navigability never ceased to be a function of the corps. Bluestone Lake is an example of the corps flood control reservoir construction in the Appalachians. The corps has constructed about four hundred large flood control dams all over the United States.[56]

Construction on Bluestone Dam officially began in 1942 as a response to the Franklin Delano Roosevelt's executive order of September 1935. This order authorized the construction of a reservoir dam on the New River "for the reduction of flood heights in the Kanawha and Ohio Valleys," to reduce downstream pollution, and possibly generate electric power. Congress included provisions for the Bluestone Project in the

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[55] Samuel P. Hays, *Beauty, Health, and Permanence* (Cambridge: Cambridge University Press, 1987), 14-15. John Opie, *Nature's Nation: An Environmental History of the United States* (Fort Worth, TX: Harcourt Brace and Company, 1998), 308. Palmer, *Endangered Rivers and the Conservation Movement*, 22-27. United States v. State of West Virginia, 295 U.S. 463 (1935). United States Army Corps of Engineers, "Background and Planning of Bluestone Dam," available from: http://www.lrh.usace.army.mil/about/history/bluestone/background/.

[56] Hays, *Beauty, Health, and Permanence*, 14-15. Opie, *Nature's Nation*, 308. Palmer, *Endangered Rivers and the Conservation Movement*, 22-27. United States v. State of West Virginia, 295 U.S. 463 (1935). United States Army Corps of Engineers, "Background and Planning of Bluestone Dam," available from: http://www.lrh.usace.army.mil/about/history/bluestone/background/.

Flood Control Acts of 1936 and 1938. Work on the project was suspended in 1944 due to the United States' involvement in World War II. Construction was approximately 28 percent complete at this point.[57]

Work on the dam resumed in January 1946. The construction of the lake required the acquisition of an estimated 420 tracts of land. By 1947, the Army Corps of Engineers had acquired 22 percent of the land needed for lake construction, a figure that increased to 35 percent by the next year. By 1950, 290 of the 420 tracts had been acquired through purchase or condemnation proceedings. In that year, construction on the entire project was only 83 percent complete, though according to the Army Corps of Engineers annual report, dam construction was finished by 1949.[58]

Area residents report receiving "a fair price" from the federal government for their land before it was inundated by Bluestone Lake. The Civilian Conservation Corps removed old cemeteries and tore down houses before flooding the valley. The Appalachian Power Company owned much of the land around the Bluestone Project area and was in another period of rapid growth. Between 1944 and 1952, the generating capacity of the AEP system doubled again. When the Army Corps of Engineers began condemnation proceedings for the land required for the dam, the invigorated, privately

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[57] United States War Department, *Annual Report of the Chief of Engineers, US Army Corps of Engineers 1944*, Part I, Vol. II (Washington, D.C.: Government Printing Office, 1945), 1191-1192. Opie, *Nature's Nation*, 308-309. United States Army Corps of Engineers, "Construction of Bluestone Dam: Phase One (1941-1944)," available from: http://www.lrh.usace.army.mil/about/history/bluestone/conI/. United States Army Corps of Engineers, "Private Hydroelectric Dam: Efforts to Construct a Private Hydroelectric Dam to Bluestone Dam," available from: http://www.lrh.usace.army.mil/about/history/bluestone/hydro/.

[58] United States War Department, *Annual Report of the Chief of Engineers, US Army Corps of Engineers 1946*, Part I, Vol. II (Washington, D.C.: Government Printing Office, 1947), 1740-1741. United States War Department, *Annual Report of the Chief of Engineers, US Army Corps of Engineers 1947*, Part I, Vol. II (Washington, D.C.: Government Printing Office, 1948), 1784. United States War Department, *Annual Report of the Chief of Engineers, US Army Corps of Engineers 1949* Part I, Vol. II (Washington, D.C.: Government Printing Office, 1950), 1813. David E. Whisnant, *Modernizing the Mountaineer: People, Power, and Planning in Appalachia* (Knoxville: University of Tennessee Press, 1994), 78.

owned power company argued that an executive order was not an adequate basis for the exercise of eminent domain. Appalachian Power obtained a temporary injunction suspending dam construction. Bluestone was the first Army Corps of Engineers project in the Ohio River Division to be stopped by the courts.[59]

The federal government had to prove that a portion of the New River was navigable for it to fall under its jurisdiction. The government also theorized that building Bluestone Lake would improve the overall navigability of the river. The Supreme Court's decision of November 10, 1941 stated that 111 miles of the New River were navigable, from Allisonia, Virginia, to Hinton, West Virginia. Also, Bluestone's inclusion in the Flood Control Act of 1936 made the legality of federal construction of Bluestone Dam irrelevant. Bluestone was the last of the Ohio River Division's unemployment relief projects to be completed. The Appalachian Power Company lost the case and abandoned plans for its own dam in the Bluestone region, though it did not forget about the dam's hydroelectric potential. The Bluestone case was probably the first successful challenge to the investor owned utility's development rights along the New River, but it would not be the last.[60]

Bluestone Lake's primary purpose was water control to reduce flood damages in the New, Kanawha, Ohio, and Mississippi Rivers, not hydroelectric power generation. However, the corps built sluiceways, or penstocks, to guide water to the dam's

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[59] Leland R. Johnson, *The Ohio River Division, U.S. Army Corps of Engineers: The History of a Central Command* (Cincinnati, OH: U.S. Army Corps of Engineers, Ohio River Division, 1992), 145. Graham Claytor, talk given to an unidentified banking group in 1953, Graham W. Claytor (1886-1971) Papers, 1907-55 (Ms81-095), Box 3, VT. Adams, *Far Appalachia*, 159-160. United States Army Corps of Engineers, "Private Hydroelectric Dam: Efforts to Construct a Private Hydroelectric Dam to Bluestone Dam," available from: http://www.lrh.usace.army.mil/about/history/bluestone/hydro/.

[60] Johnson, *The Ohio River Division, U.S. Army Corps of Engineers*, 145. United States Army Corps of Engineers, "Private Hydroelectric Dam: Efforts to Construct a Private Hydroelectric Dam to Bluestone Dam," available from: http://www.lrh.usace.army.mil/about/history/bluestone/hydro/.

generators “in the event that hydroelectric power generation is added as an additional function of the dam.” In 1962, the Appalachian Power Company tried to harness the hydroelectric potential of Bluestone again as a part of the original Blue Ridge Project proposal. It claimed that the 160,000-acre feet of flood storage Blue Ridge would provide could lessen the flood control pressure on Bluestone by 130,000-acre feet. This flood control relief would make the “long contemplated” generation of power at Bluestone possible. Appalachian Power claimed that “in terms of equity and fair play,” the rights to the power generated there should be theirs, since the construction of Blue Ridge would make it possible. However, in 1966, the Federal Power Commission dismissed that part Appalachian Power’s application because of Congress’ earlier decision that the federal government should develop Bluestone’s power potential. Because of this ruling, the FPC lacked licensing jurisdiction over the site. The Congress for Appalachian Development discussed proposing public development of Bluestone’s hydroelectric potential in October 1966, but never did so. The Bluestone Dam never generated electricity. In 1976, the Army Corps of Engineers Huntington office still handled dam operations, not the Appalachian Power Company.[61]

[61] United States Army Corps of Engineers, *Bluestone Lake, West Virginia* (Huntington, WV: United States Army Corps of Engineers, 1976). Statement of A. Joseph Dowd On Behalf of the Appalachian Power Company Before the Committee on Public Works United States Senate, April 14, 1970, Transcript from New River Papers, Dam Fight Series, Testimony Subseries, Box 1, Folder 2, ASU. Stephen William Foster, *The Past is Another Country: Representation, Historical Consciousness, and Resistance in the Blue Ridge* (Berkeley: University of California Press, 1985), 125-126. Whisnant, *Modernizing the Mountaineer*, 78, 232, 237n.22. In 1998, the Corps of Engineers considered improvements to the dam, fearing that without necessary repairs and possible augmentation, the dam would fail if the water reached the “probable maximum flood” level. Today, you can drive to the top of Bluestone Dam. The dam does release excess water that generates power at Hawks Nest Dam, a private structure spanning two-thirds of the lower New River Gorge. The New-Kanawha Power Company and the Electro Metallurgical Company built the dam. Both were subsidiaries of Union Carbide & Carbon Corporation from New York. During the 1930s, workers from all over the United States dug a three-mile tunnel through the dangerous lung-scarring silica deposits of Gauley Mountain to divert water to the power station’s turbines. The electricity powers a nearby metallurgical plant. Adams, *Far Appalachia*, 160-161, 215-223. United States v. State of West Virginia, 295 U.S. 463 (1935). Johnson, *The Ohio River Division, U.S. Army Corps of Engineers*), 145. United States Environmental Protection Agency, “Public Meetings for the Draft Environmental Impact Statement, Bluestone Dam Safety Assurance

The Appalachian Power Company's defeated plans for Bluestone Dam did not considerably hamper its overall strength. The American Electric Power system quadrupled its generating capacity between 1935 and 1952. By 1953, AEP was the largest energy producing electric system in the United States except TVA. The company's electricity still mainly came from coal. Both AEP and Appalachian Power served rural areas, proudly stating that they did not "operate in a single big city." In 1953, the average community they supplied had 2,000 residents. They actively lured manufacturers out of the industrial centers of "Chicago, Philadelphia, and Cincinnati," to small communities where there was cheap real estate and "less labor trouble." By 1953, half of AEP's customers lived in rural areas and 98 percent of the farms in their coverage area had electricity. In the 1950s, the utility argued persistently against the competition of public power companies. However, in doing so it was not out of step with the federal government, as shall be seen in the next chapter. In 1952, publicly owned power companies produced 20 percent of the United State's total electric supply, a figure that rose from 6 percent in 1932. In a 1954 speech, Philip Sporn, the president of AEP, claimed that the "basis for federal government development has virtually disappeared since the late 30's."[62]

Between 1951 and 1961, American Electric Power almost tripled its generating capacity and more than doubled its energy sales and net earnings. In 1962, the AEP system led all other investor owned utilities in total capacity of power plants, the sale of

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Project, Hinton, WV," available from: http://www.epa.gov/EPA-IMPACT/1998/March/Day-11/i6204.htm.

[62] Graham Claytor, talk given to an unidentified banking group in 1953, Graham W. Claytor (1886-1971) Papers, 1907-55 (Ms81-095), Box 3, VT. Graham Claytor, talk given to engineering college professors at AGE office, December 12, 1952, *Ibid*. Philip Sporn, President, American Gas and Electric Company, "Observations on Private vs. Public Power," an address delivered as part of the Cooper Foundation Series, Swarthmore College, April 15, 1954, *Ibid*. The American Electric Power System, *Appalachian Power Company and the American Electric Power System*, front cover, 2. The Appalachian Power Company, *When Men and Mountains Meet* (Bluefield, WV: Appalachian Power Company, 1966).

energy, and in the extent of its transmission-distribution network. The Appalachian Power Company and the AEP system entered the 1960s as a dominant force within in the utility industry, ready to wield their heavy influence when necessary. The utility set its development-minded eyes on hydroelectric generation in higher altitudes of the upper New River Valley. However, something had happened on the national level that would change the local development pattern. The American environmental movement created new obstacles for the Appalachian Power Company's development plans in the New River Valley.[63]

[63] Graham Claytor, talk given to an unidentified banking group in 1953, Graham W. Claytor (1886-1971) Papers, 1907-55 (Ms81-095), Box 3, VT. Graham Claytor, talk given to engineering college professors at AGE office, December 12, 1952, *Ibid*. Philip Sporn, President, American Gas and Electric Company, "Observations on Private vs. Public Power," an address delivered as part of the Cooper Foundation Series, Swarthmore College, April 15, 1954, *Ibid*. The American Electric Power System, *Appalachian Power Company and the American Electric Power System*, front cover, 2.

3: CONCERN FOR THE ENVIRONMENT

> "This nation began with the belief that its landed possessions were illimitable and capable of supporting all the people who might care to make our country their home. We began with an unapproached heritage of forests; more than half of the timber is gone. We began with coal fields more extensive than those of any other nation and with iron ores regarded as inexhaustible, and many experts now declare that the end of both iron and coal is in sight."
>
> -Theodore Roosevelt, 1908[64]

The American environmental movement created new obstacles for all utilities considering energy developments. The following chapter contains a brief history of the environmental movement from its birth to the passage of federal legislation in the late 1960s that aided Blue Ridge Project opponents. It emphasizes the growing environmental appreciation of rivers as well as past fights over the control and manipulation of them. Though rivers have long provided important transportation routes, water sources, and well irrigated bottomlands for agricultural production, widespread concern about their cleanliness and biological health only developed in the last fifty years.

From the time European colonists first settled in North America, they used the vast bounty of natural resources as inexhaustible commodities to increase personal wealth. The European demand for wood led to massive deforestation in New England. Deforestation destroyed animal habitats, made temperatures more extreme, decreased soil fertility, and increased erosion. The fur trade was another economic activity in which lack of resource management led to scarcity. Overexploitation of fur-bearing animal populations for export to European markets, along with habitat destruction due to

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[64] Theodore Roosevelt, "Introduction," in *Nixon and the Environment: The Politics of Devastation*, ed. James Rathlesberger (New York: A Village Voice Book, 1972), 7.

deforestation, created wildlife scarcity. In fact, deforestation and the fur trade combined to push colonists further and further into the frontier, in search of new "inexhaustible" sources of these valuable raw materials. This lack of planning in natural resource management and extraction continued until the post-Civil War period.[65]

During the late nineteenth-century, however, North American attitudes toward nature underwent a profound transformation. Declining wildlife, deteriorating water quality, growing urban areas, and disappearing wilderness fostered a new American concern about nature and calls for better management practices.

The American conservation movement's origin lay in the European science of forestry management. Used in Europe since the seventeenth and eighteenth centuries, the practice of forest management spread to the United States in the late nineteenth century. Its aim was to prolong wood supplies so that they might remain exploitable in perpetuity. Early conservationists in the United States recognized the importance of forested areas and initially took a stand against timber companies and their ruinous quest for quick, short-term profits. Clear-cut lands in the eastern United States appeared as unsightly wastelands devoid of animal or plant life, deeply influencing public opinion. In 1875, a group of concerned Americans started the American Forestry Association. This group of botanists, estate owners, and landscape gardeners promoted the study of arboriculture, the aesthetic quality of forests, and the study of individual trees.[66]

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[65] Ted Steinberg, *Down to Earth: Nature's Role in Environmental History* (Oxford: Oxford University Press, 2002), 32-38. Clayton R. Koppes, "Efficiency, Equity, Esthetics: Shifting Themes in American Conservation," in *The Ends of the Earth: Perspectives on Modern Environmental History*, ed. Donald Worster (Cambridge: Cambridge University Press, 1989), 230. John F. Reiger, *American Sportsmen and the Origins of Conservation* (Corvallis: Oregon State University Press, 2001), 3-4. William Cronon, *Changes in the Land: Indians, Colonists and the Ecology of New England* (New York: Hill and Wang, 2003), 75, 94-97, 124-126.

[66] Samuel P. Hays, *Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890-1920* (Pittsburgh: University of Pittsburgh Press, 1999), 15, 27-28. Koppes, "Efficiency, Equity, Esthetics," 230-233. Paul S. Sutter, *Driven Wild: How the Fight against Automobiles Launched the Modern Wilderness Movement* (Seattle and London:

In the 1890s, the United States forestry movement shifted its emphasis away from saving forests from ruin, towards sustained-yield forestry management. This management practice aimed to provide a steady supply of future timber by keeping annual cutting below annual growth. It also encouraged loggers to use waste materials and reduce damage to timber caused by disease and fire. Gifford Pinchot was a Yale graduate who afterward studied sustained-yield forestry in France and Germany. In 1898, he replaced German-born and trained Bernhard Fernow as Chief of the Division of Forestry. Under Pinchot, the Division of Forestry helped landowners draw up scientific management plans and offered the services of federal foresters to harvest timber. However, not all concerned citizens agreed with Pinchot's forestry policies.[67]

Conservationists did not always agree on issues of resource management. The two main conflicting forces within the broader American conservation movement were conservationists and preservationists. Conservationists, such as Pinchot, were utilitarian foresters who wanted to use natural resources as commodities, but more carefully to prolong their exploitation for the public good. Preservationists, such as the naturalist, writer, and Sierra Club founder John Muir, believed that utilitarian forestry could lead to further commercial exploitation and ruin virgin wilderness areas, for which they felt a spiritual attachment. The two schools of thought often conflicted with each other over natural resource issues on land and water. However, Pinchot's utilitarian ideas about conservation generally overshadowed the ideas of preservationists. President Theodore

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University of Washington Press, 2002), 14-15. John Opie, *Nature's Nation: An Environmental History of the United States* (Fort Worth, TX: Harcourt Brace and Company, 1998), 305-306. Steinberg, *Down to Earth*, 138-141. Wikipedia, The Free Encyclopedia, "Conservation Movement," available from: http://en.wikipedia.org/wiki/Conservation_movement.

[67] Gifford Pinchot, "Wild Land is Wasted Land," in *Americans and Environment: The Controversy over Ecology*, ed. John Opie (Lexington, MA: D.C. Heath and Company, 1971), 40-45. Hays, *Conservation and the Gospel of Efficiency*, 27-28. Koppes, "Efficiency, Equity, Esthetics," 230-237. Sutter, *Driven Wild*, 14-15. Opie, *Nature's Nation*, 305-306. Steinberg, *Down to Earth*, 138-141. Wikipedia, The Free Encyclopedia, "Conservation Movement," available from: http://en.wikipedia.org/wiki/Conservation_movement.

Roosevelt, the national leader who initiated many of the first conservation efforts, tended to sympathize with Muir but vote with Pinchot.[68]

America followed Europe's lead in applying conservation methods to natural areas. Vanderbilt and Cornell established the first American forestry schools in the late 1890s, both run by Germans. Conservationists and preservationists also helped establish the first national park in the world, called Yellowstone National Park, in 1872. Soon after, in 1890, John Muir fought for the creation of the Yosemite National Park after he saw the disastrous effects of state mismanagement in the area and feared the damming of the Tuolumne River in the Yosemite Valley. Muir founded the Sierra Club two years later, an organization that would lead later efforts to save rivers from damming. Government involvement with the scientific management of natural resources began under President Theodore Roosevelt. Concerning waterways, Roosevelt's policy of scientific management initially justified impoundments to improve overall waterway navigability. However, dam opposition did not begin with preservationists such as Muir and the Sierra Club. As will be seen below, private dams have hampered public access to valuable aquatic resources in the United States for centuries.[69]

In spite of the dominant American attitude that private land ownership should be unrestricted by government controls, public rights to water and rivers have been

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[68] Tim Palmer, *Endangered Rivers and the Conservation Movement* (Lanham, MD: Rowman & Littlefield Publishers, Inc, 2004), 54. Theodore Roosevelt, "Wilderness Makes Men New," in *Americans and Environment: The Controversy over Ecology*, ed. John Opie (Lexington, MA: D.C. Heath and Company, 1971), 28-31. John Muir, "In Wilderness is the Preservation of the World," in *Americans and Environment: The Controversy over Ecology*, ed. John Opie (Lexington, MA: D.C. Heath and Company, 1971), 31-40. Pinchot, "Wild Land is Wasted Land," 40-45. Koppes, "Efficiency, Equity, Esthetics," 233-234. Sutter, *Driven Wild*, 14-15. Opie, *Nature's Nation*, 305-306. Steinberg, *Down to Earth*, 138-141. Wikipedia, The Free Encyclopedia, "Conservation Movement," available from: http://en.wikipedia.org/wiki/Conservation_movement.

[69] Hays, *Conservation and the Gospel of Efficiency*, 91-92. Sutter, *Driven Wild*, 14-15. Palmer, *Endangered Rivers and the Conservation Movement*, 55. Roosevelt, "Wilderness Makes Men New," 28-31. Pinchot, "Wild Land is Wasted Land," 40-45. Wikipedia, The Free Encyclopedia, "Conservation Movement," available from: http://en.wikipedia.org/wiki/Conservation_movement.

recognized since the nineteenth-century. These rights were initially established for improving waterway navigation for the common good. Between 1790 and 1860, the United States population increased from 4,000,000 to 31,000,000. In 1860, the United States was the world's largest wheat exporter, and the third largest producer of manufactured goods behind Britain and France. Average per-capita wealth increased in the early 1800s, and economic development led to the expansion of cities. Between 1790 and 1860, the urban population of the United States increased substantially from 202,000 to 6,217,000. An early industrial revolution enveloped the North and began the nation's transformation into a financial powerhouse. This early industrial capitalism involved not only the injection of new technology into economic production, but also represented what environmental historian Ted Steinberg called "an ecological regime based on the streamlining of nature." These new factories first turned their sights on the potential energy offered by the nation's rivers and streams. This expansion of private industrial production prompted a shift in the use of rivers and restricted the public's right to use previously public United States waterways.[70]

Private development transformed rivers from a source of spring fish for farmers to a supply of power for early industrial production. Farmers and commercial anglers relied on spring spawning runs of shad, alewives, eels, striped bass, and salmon for food when winter supplies ran low. Malthusian population pressure increased the local need for anadromous fish during the spring period of scarcity. In the late eighteenth-century, the owners of blast furnaces and textile mills began erecting dams along Northern rivers to supply their factories with production power. These dams, combined with increased erosion from a larger number of farms that damaged spawning grounds, led to a

[70] Palmer, *Endangered Rivers and the Conservation Movement*, 55. Steinberg, *Down to Earth*, 55-56. Koppes, "Efficiency, Equity, Esthetics," 233. James L. Anderson, "Property Rights, Fisheries, Aquaculture, and the Future," in *Evolving Property Rights in Marine Fisheries*, ed. Donald R. Leal (New York: Rowman and Littlefield Publishers, Inc., 2005), 254.

tremendous decline in the spring fish runs. As time went on, the dams grew larger and more numerous until the fish spawning runs ended altogether. Industrial interests transformed northern rivers into long, privately owned power canals instead of public waterways offering sustenance to farmers in their time of need. Most eastern coastal rivers followed the trend as industrialization proceeded south. By 1823, Bosher Dam, on the James River in Richmond, Virginia, blocked seasonal runs of spawning anadromous fish.[71]

Developers also applied the prevailing conservation ethic of utility to the country's waterways in the late nineteenth-century. In the arid regions of the United States' newly acquired western territories, federal irrigation programs' major focus was providing year-round water supplies. Reservoir construction allowed the storage of spring floodwaters for use in the dry season and periodic hydroelectric power production. The Newlands Reclamation Act passed in 1902, creating the Reclamation Service to dam the rivers of seventeen western states and provide irrigation to local farmers. The Reclamation Service's projects were funded through the sale of water and public lands, which were then stored in the Reclamation Fund. Reclamation Service projects included the construction and maintenance of dams, reservoirs, and canals. The goal of this act was to irrigate western lands and encourage more settlers, not speculators, to move West. In line with both the Conservation and Progressive development ethos, the focus of the

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[71] Steinberg, *Down to Earth*, 56-59. Palmer, *Endangered Rivers and the Conservation Movement*, 19. Ted Steinberg, *Nature Incorporated: Industrialization and the Waters of New England* (Cambridge: Cambridge University Press, 1991), 4, 29, 49. On the James River, dams in Richmond and Lynchburg prevented the spawning runs of American shad, hickory shad, alewife, blueback herring, striped bass, and other anadromous fish species. A fishway was constructed into Bosher Dam in 1999 to allow the fish their first spawning runs since 1823. Today the Virginia Department of Game and Inland Fisheries shows a "shadcam" built into the fishway on their website, available from: http://www.dgif.state.va.us/fishing/shadcam/. Virginia Department of Game and Inland Fisheries, "On the Road to Recovery: American Shad Restoration," available from: http://www.dgif.state.va.us/fishing/shad/shad.html. Virginia Department of Game and Inland Fisheries, "Bosher's Dam and Fishway: March 1, 1999 – a great day in Virginia history!," available from: http://www.dgif.state.va.us/fishing/shad/boshers.html.

Reclamation Service was to facilitate the establishment of agrarian communities comprised of small farmers in the West. However, large agribusiness soon gained control over most of the west's irrigated farmland and the federal government's safeguard against monopolistic land control in the West became irrelevant. The Reclamation Service was renamed the Bureau of Reclamation in 1923. Today the Bureau of Reclamation is the largest wholesaler of water in the country and the second largest publicly owned producer of hydroelectric power, behind the Tennessee Valley Authority.[72]

After 1908, water conservation shifted its emphasis to a concept of multiple-purpose river development. Multiple-purpose projects sometimes brought public and private developers together. However, vying for control of hydroelectric developments created substantial conflict between the public and private spheres that dominated the world of electricity for the first half of the twentieth century. The Progressive Movement of 1900-1917 gave the federal government the main role in public and private water developments. The scientific management of waterways began under President Roosevelt. The General Dam Act of 1906 granted federal authority to prohibit certain private power dams. Theodore Roosevelt promoted public development of the nation's waterways as a cheap source of hydroelectricity. He also promoted public development to prevent private companies from gaining a monopoly over power production. Roosevelt did not act to save free flowing streams, but acted to save at least eighteen rivers from

[72] Nancy Langston, *Where Land and Water Meet: A Western Landscape Transformed* (Seattle: University of Washington Press, 2003), 50-51. Mark W. T. Harvey, *A Symbol of Wilderness: Echo Park and the American Conservation Movement* (Albuquerque: University of New Mexico Press, 1994), xiv-xv. Palmer, *Endangered Rivers and the Conservation Movement*, 28. Donald Worster, *Rivers of Empire: Water, Aridity, and the Growth of the American West* (New York: Pantheon Books, 1985), 7. Koppes, "Efficiency, Equity, Esthetics," 235-236. Donald Worster, "The Challenge of the Arid West," National Humanities Center website, available from: http://www.nhc.rtp.nc.us:8080/tserve/nattrans/ntwilderness/essays/aridwestd.htm. Bureau of Reclamation, "Bureau of Reclamation: About Us," available from: http://www.usbr.gov/main/about/.

private damming during his presidency. Roosevelt's primary conservation advisor, Gifford Pinchot, recognized the peaceful social revolution being brought about by electrical power and fought for public ownership of utilities throughout his career in politics. The states of New York and Wisconsin similarly fought against private hydroelectric development on their rivers.[73]

Evidence of monopolistic power companies was obvious in the early stages of electrical development. These monopolies controlled entire areas and dictated the price of local electricity, extracting huge profits from the sale of over-priced electricity to their customers. In California, Southern California Edison controlled the south while Pacific Gas and Electric spread its domination throughout the north. These California companies centered generating activity in the Sierra Nevada Mountains. A lack of coal deposits and lack of knowledge about California's vast undiscovered oil fields prompted utility companies to pursue hydroelectric developments along the many rivers cascading westward out of the mountains.[74]

In response to the monopolies of the utility industry, Congress passed the Federal Power Act in 1920. This act established national control and regulation over hydroelectric development along the country's waterways. It was a response to a growing demand that the federal government take steps to conserve and regulate the nation's remaining potential waterpower for the greater good and larger interests of the people. This act required potential dam builders to apply for Federal Power Commission

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[73] Palmer, *Endangered Rivers and the Conservation Movement*, 54-56. Opie, *Nature's Nation*, 304-324. Hays, *Conservation and the Gospel of Efficiency*, 5, 100-101. Robert W. Righter, *The Battle over Hetch Hetchy: Americas Most Controversial Dam and the Birth of Modern Environmentalism* (Oxford: Oxford University Press, 2005), 167. "Federal Power Act," available from: http://ipl.unm.edu/cwl/fedbook/fedpower.html. Old and Sold Antiques Digest, "Federal Water Power Act," available from: http://www.oldandsold.com/articles32n/law-39.shtml.

[74] Righter, *The Battle over Hetch Hetchy*, 167-168. Philip Sporn, President, American Gas and Electric Company, "Observations on Private vs. Public Power," an address delivered as part of the Cooper Foundation Series, Swarthmore College, April 15, 1954, Graham W. Claytor (1886-1971) Papers, 1907-55 (Ms81-095), Box 3, VT.

(FPC) permits. The commission gave preference to state and municipal governments when issuing permits, but promoted dam construction in general. The act established state control over hydroelectric development parameters and electricity prices, though it did not regulate interstate power companies. Where state controls were absent, the Federal Power Commission stepped in to regulate. However, the commission was not required to consider alternatives and could allow dam construction in national parks. The FPC did prevent the construction of some impoundments, such as one planned by Los Angeles' in 1923, slated for the San Joaquin and Kaweah Rivers.[75]

Dam Opposition: From Hetch Hetchy to Echo Canyon

Dam construction continued without general opposition for many years, even though impoundments created many unwanted side effects. They prevented fish migrations and destroyed entire aquatic ecosystems. A weak dam could fail and kill thousand of people, such as the privately constructed one at Johnstown, Pennsylvania, that killed two thousand people in 1889. Yet even these problems did not raise the first public objection to dams. Dams only saw nationwide opposition when they threatened to inundate spectacular landscapes in national parks, areas with officially sanctioned natural beauty.[76]

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[75] John Bauer and Nathaniel Gold, *The Electric Power Industry: Development, Organization, and Public Policies* (New York: Harper & Brothers Publishers, 1939), 264-265. Palmer, *Endangered Rivers and the Conservation Movement*, 56. Federal Energy Regulatory Commission, "Student's Corner: History of FERC," available from: http://www.ferc.gov/students/whatisferc/history.htm. Old and Sold Antiques Digest, "Federal Water Power Act," available from: http://www.oldandsold.com/articles32n/law-39.shtml.

[76] Opie, *Nature's Nation*, 322. Palmer, *Endangered Rivers and the Conservation Movement*, 47. Benjamin Kline, *First Along the River: A Brief History of the U.S. Environmental Movement* (San Francisco: Acada Books, 1997), 53-71. Tim Palmer, *The Wild and Scenic Rivers of America* (Washington, DC: Island Press, 1993), 10-11. "Dam Failures and Disasters," Transcript from New River Papers, Dam Fight Series, Miscellaneous Subseries, Box 1, Folder 1, ASU.

On the western edge of the country, San Francisco was growing rapidly. City officials first filed a claim on the Tuolumne River in 1901 with a plan to flood the Hetch Hetchy Valley to supply water. No land needed to be bought in the area as it was publicly owned, but because the proposed site fell within the boundaries of Yosemite National Park, the city required a permit from the Secretary of the Interior and Congressional approval to go ahead with its plan. President Theodore Roosevelt's first Secretary of the Interior, E.A. Hitchcock, refused to issue a permit because the dam proposal violated the protection of Yosemite as a natural landscape. The Hetch Hetchy valley remained dry.[77]

The San Francisco earthquake and fire of 1906 changed everything. The public sympathy that sprang from this natural disaster was enough to make the city's plea for water a humanitarian issue. Muir wrote to Roosevelt asking him to save Hetch Hetchy the following year. The newly defined issue widened the rift between preservationists and conservationists. Gifford Pinchot, a close friend of President Roosevelt's and the chief forester of the United States, wrote that "conservation stands emphatically for the development and use of water-power now, without delay." The preservationist-oriented Muir disagreed. However, Roosevelt's new interior secretary, James Garfield, a friend of Pinchot, issued a permit for dam construction in 1908. The debate entered the press and began to involve the public. The only remaining obstacle to the dam was Congressional approval. In 1913, senators voted 43 to 25 to allow the dam. John Muir died the next year, following the inundation of his beloved Hetch Hetchy Valley.[78]

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[77] Righter, *The Battle over Hetch Hetchy*, 167-169. Palmer, *Endangered Rivers and the Conservation Movement*, 47-48. Opie, *Nature's Nation*, 389. Kevin Wehr, *America's Fight over Water: The Environmental and Political Effects of Large-Scale Water Systems* (New York: Routledge, 2004), 50-51. Kline, *First Along the River*, 61-63. Steinberg, *Down to Earth*, 139.

[78] Palmer, *Endangered Rivers and the Conservation Movement*, 48-52. Steinberg, *Down to Earth*, 139. Opie, *Nature's Nation*, 389. Wehr, *America's Fight over Water*, 50-51. Kline, *First Along the River*, 61-63.

The opponents of Hetch Hetchy failed in their bid to prevent the damming of the area even though the site was inside Yosemite National Park. Presidents Roosevelt and Wilson, and their respective Interior Secretaries Garfield and Lane, disagreed with dam opponents. Both the House and Senate approved the bill with a large majority of votes. The point, though, is that the controversy took place at all. People read articles and letters pleading to save the landscape from inundation, thousands of them wrote their representatives about the issue, and some politicians began to argue for wilderness preservation. The struggle proved that people could become motivated and committed to save a special piece of land. Those promoting public ownership of power generated at Hetch Hetchy failed in their cause. Congress fully expected San Francisco to purchase and develop a municipally owned power network. However, the Pacific Gas and Electric Company and the Great Western Power Company were well ahead of the city. They had already built an extensive infrastructure by 1913, secured the necessary rights-of-way, and attracted local customers. Neither company wanted to sell a profitable enterprise to the city. To this day, Pacific Gas and Electric owns the rights to distribute power to residents and corporations in and around San Francisco.[79]

The preservationists had their own legal victory when the National Parks Act established the National Park Service in 1916. The act stated that "the fundamental purpose of the… parks … is to conserve the scenery and the natural historic objects and the wildlife therein, and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." Congress ordered the National Park Service to preserve areas in their natural state but also to promote the parks for visitors. Preservationists such as John Muir and the Sierra

[79] Righter, *The Battle over Hetch Hetchy*, 169.Steinberg, *Down to Earth*, 139. Palmer, *Endangered Rivers and the Conservation Movement*, 52-53. Opie, *Nature's Nation*, 389. Palmer, *The Wild and Scenic Rivers of America*, 10-11. Wehr, *America's Fight over Water*, 50-51. Kline, *First Along the River*, 61-63.

Club initially supported an increase in wilderness accessibility. However, the National Park Service vigorously encouraged tourism and built gaudy hotels, like Yosemite's Ahwahnee, inside the parks. After 1918, the park service allowed automobiles inside national parks. Beginning as a trickle, a flood of tourists came after World War II. However, the park service did not completely fail the preservationists. One of the National Park Service's first tests was to stop the licensing of hydroelectric dams in national parks.[80]

In 1920, Idaho irrigation districts proposed the construction of three dams in the Falls River basin of Yellowstone National Park. The preservationist-oriented National Parks Association argued that allowing one such dam in a national park would set a dangerous precedent. "Within five years," it argued, "all our national parks will be controlled by local irrigationists, and complete commercialization inevitably will follow." The bill allowing construction passed in the Senate but was defeated on the House floor. Again, dam opposition only existed because the slated development was inside national park boundaries. The Yellowstone case never received national attention like Hetch Hetchy, but it was probably the first successful opposition to a major dam proposal.[81]

The Great Depression created a social situation where opposing dam construction was equal to opposing national interests and further hindering the depressed financial state of the nation. During the 1930's, the United States government saw hydroelectric development as both an outlet for surplus labor and a potential economic boost. The federal government promoted publicly owned power companies and encouraged damming for flood control. Consistent with these goals, the federal

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[80] Koppes, "Efficiency, Equity, Esthetics," 237-238. Wehr, *America's Fight over Water*, 50-51. Sutter, *Driven Wild*, 16. Palmer, *Endangered Rivers and the Conservation Movement*, 56. Palmer, *The Wild and Scenic Rivers of America*, 10-11. Wikipedia, The Free Encyclopedia, "Conservation Movement," available from: http://en.wikipedia.org/wiki/Conservation_movement.

[81] Palmer, *Endangered Rivers and the Conservation Movement*, 56.

government created the Tennessee Valley Authority, construction proceeded on the first Army Corps of Engineers dam, the first major flood control act passed, and the nation saw the creation of many new dams and public power companies. People who were sick of coal burning pollution, in underdeveloped regions or dry areas, invested hope in publicly owned and controlled hydroelectric dams. They offered a cleaner source of energy than burning coal, as well as an outlet for labor in a time riddled with unemployment. The promotion of larger multiple-use projects also began during this time. The prototype for these projects was the Bureau of Reclamation's Boulder Dam, later renamed Hoover Dam. Construction on the dam spanned thirteen years, from its approval in 1928 to its completion in 1941. At the time, it was the world's largest dam at 726 feet high and is still America's largest single-site public works project. The dam incorporated irrigation, hydropower, and flood control to serve the growing cities and industry of the West. Progressive politicians foresaw a system based on the widespread use of electricity, federal transmission of power, public preference, the disappearance of private utilities, and low power rates. They desired the widest possible use of all generated electrical power for the greater good. However, many dam projects initially planned for public ownership reverted to private hands as they became dependent on industry as their main customer and had to compete with investor-owned utilities.[82]

[82] Palmer, *Endangered Rivers and the Conservation Movement*, 14, 30-31, 200. Richard White, *The Organic Machine: The Remaking of the Columbia River* (New York: Hill and Wang, 1995), 59-81. Elmo Richardson, *Dams, Parks and Politics: Resource Development and Preservation in the Truman-Eisenhower Era* (Lexington, KY: The University Press of Kentucky, 1973), 1-2. Robert Kelley, "The Context and the Process: How They Have Changed over Time," in *Water Resources Administration in the United States: Policy, Practice, and Emerging Issues*, ed. Martin Reuss (East Lansing, MI: Michigan State University Press, 1993), 15-16. Rutherford H. Platt, "Geographers and Water Resource Policy," in *Water Resources Administration in the United States*, 48. Wehr, *America's Fight over Water*, 51. Leonard Shabman, "Bargaining, Markets, and Watershed Restoration: Some Elements of a New National Water Policy," in *Water Resources Administration in the United States*, 97. Kline, *First Along the River*, 53-71. Koppes, "Efficiency, Equity, Esthetics," 230-243. Jack Sutters, "From Coal to Furniture," American Friends Service Committee, March 2002, available from: http://www.afsc.org/about/hist/2002/furn.htm. Bonneville Power Administration, "Who Are We? BPA: focusing on the Northwest," available

After World War II, increased productivity, suburban expansion, and technological progress shaped the politics of dam construction. Traditionally progressive visions for public hydropower based on equitable and environmentally sound regional planning ended. Resource agencies, industrial interests, and their political allies provided the most active opposition to legislation against dams and other wilderness issues. President Eisenhower reversed the trend of publicly owned hydroelectric projects. Instead, he stressed a federal partnership with state and private development projects, stating that the "competitive spirit of individuals and groups within our free economy are needed to assure the greatest efficiency and progress at the least cost to the public." He called the Tennessee Valley Authority "creeping socialism," promoted private investment in future damming projects, and put a stop to further Bureau of Reclamation and Army Corps of Engineers projects.[83]

The next proposed dam to receive national attention was in the 1940s, slated for Echo Park Canyon, where the Green and Yampa Rivers meet. Located near the northern Colorado-Utah border, the dam was to flood land with tremendous archeological significance. Dinosaur skeletons trapped in sediment prompted President Wilson to designate eighty acres of the area as Dinosaur National Monument in 1915. President Franklin Roosevelt enlarged the monument to a protected area of one hundred square miles in 1938. In 1943, the Bureau of Reclamation proposed two reservoirs that upper-basin states could use for irrigation, but would still provide

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from: http://www.bpa.gov/corporate/About_BPA/. Bureau of Reclamation, "Hoover Powerplant," available from: http://www.usbr.gov/power/data/sites/hoover/hoover.html.

[83] Koppes, "Efficiency, Equity, Esthetics," 243-249. Jeffrey Morgan Empfield, "Wilderness Rivers: Environmentalism, the Wilderness Movement, and River Preservation during the 1960s" (M.A. Thesis, Virginia Polytechnic Institute and State University, 1994), 23-26. Sutter, *Driven Wild*, 260-261. Palmer, *Endangered Rivers and the Conservation Movement*, 68-69. Philip Sporn, President, American Gas and Electric Company, "Observations on Private vs. Public Power," an address delivered as part of the Cooper Foundation Series, Swarthmore College, April 15, 1954, Graham W. Claytor (1886-1971) Papers, 1907-55 (Ms81-095), Box 3, VT.

California, Nevada, Utah, Wyoming, and Arizona with water. These projects were part of a series of dams slated for construction to provide western states with water. Most western states experienced tremendous economic and population growth during World War II, leaving them thirsty for water and electricity at the conflict's end. The Bureau of Reclamation responded to this need with a modified dam project called the Colorado River Storage Project. Many "participating projects," such as the Central Utah Project, were tied into the Colorado River Storage Project. In the postwar period, the project became a symbol of economic growth, progress, and prosperity to a newly powerful western region.[84]

A conflict of interest with a private power company, which wanted to develop the site itself, delayed the project for a while. However, in the early 1950s, environmental organizations led the fight against the dam. David Brower became the first full-time executive director of the Sierra Club in 1952. The Echo Park issue was his first major challenge and under his leadership the Sierra Club organized opposition to the dam. The Izaak Walton League, the Wilderness Society, and the Audubon Society joined the Sierra Club in the battle against the project. These organizations were almost alone in their struggle. National Park Service employees were not allowed to testify since the agency and the Bureau of Reclamation were within the Department of the Interior. In Congressional hearings, Brower held up photographs of Hetch Hetchy before and after inundation, saying, "if we heed the lesson learned from the tragedy of the misplaced dam in Hetch Hetchy, we can prevent a far more disastrous stumble in Dinosaur National Monument." Along with Brower, other opponents appeared before Congress,

[84] Harvey, *A Symbol of Wilderness*, xi-xiii. Koppes, "Efficiency, Equity, Esthetics," 250. Sutter, *Driven Wild*, 260. Wehr, *America's Fight over Water*, 195-211. Palmer, *Endangered Rivers and the Conservation Movement*, 69-70. Opie, *Nature's Nation*, 390-391. Palmer, *The Wild and Scenic Rivers of America*, 10-11. Richardson, *Dams, Parks and Politics*, 129-152. Steinberg, *Down to Earth*, 243-246.

such as Pennsylvania's John Saylor, Hubert Humphrey, and Richard Neuberger. Governor Johnson of Colorado also opposed the dam, calling it "atrocious." The project was defeated through a compromise in 1956 that allowed for the flooding of Glen Canyon.[85]

The controversy over Echo Park proved that dam opponents could successfully use the political process and mobilize public support for their cause. Over seventy-eight organizations joined the fight to save Echo Park Canyon. Some historians believe the Echo Park controversy marks the birth of the environmental movement. Other historians call it the first major post-war clash between preservationists and dam builders. Still others call it an evolution within the maturing conservation movement, since those participating called themselves "conservationist," not "environmentalist." More organizations fought against the Echo Park project than the controversy over Hetch Hetchy. Also, during the controversy river supporters used technical arguments and congressional leaders aided dam opponents, unlike the fight against Hetch Hetchy. However, the aim of preventing the Echo Park project was still the salvation of a national monument. Few objected to the loss of a free-flowing river outside of a national park.[86]

The post-war economic boom created rapidly rising levels of affluence and education in the United States. Increased population pressure and urbanization prompted many to explore the outdoors in the 1950s. Americans flocked to national parks and began to perceive wild lands as sources of clean water and air. This led to

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[85] Palmer, *Endangered Rivers and the Conservation Movement*, 49, 70-74. . Koppes, "Efficiency, Equity, Esthetics," 250. Opie, *Nature's Nation*, 390-391. Sutter, *Driven Wild*, 260. Kline, *First Along the River*, 75. Wehr, *America's Fight over Water*, 195-211. Palmer, *The Wild and Scenic Rivers of America*, 10-11. Richardson, *Dams, Parks and Politics*, 129-152. Steinberg, *Down to Earth*, 243-246. Daniel Glick, "A Dry Red Season: Drought drains Lake Powell – uncovering the glory of Glen Canyon," *National Geographic* 209:4 (April 2006), 64-81.

[86] Harvey, *A Symbol of Wilderness*, xv, 51, 287-290. Sutter, *Driven Wild*, 260-261. Palmer, *Endangered Rivers and the Conservation Movement*, 75. Steinberg, *Down to Earth*, 243-246. Opie, *Nature's Nation*, 390-391. Wehr, *America's Fight over Water*, 195-211. Palmer, *The Wild and Scenic Rivers of America*, 10-11. Richardson, *Dams, Parks and Politics*, 129-152.

more road and trail construction in wild areas, generated environmental awareness, and gave rise to new pollution issues. A post-war housing shortage produced enormous "planned sprawl" suburbanization projects in every American community, creating even more pollution problems. Public membership in active conservation organizations skyrocketed. A growing number of these organizations addressed a wider variety of issues. The post-war period gave birth to a new generation of preservationists. Groups such as the Wilderness Society and the newly reinvigorated Sierra Club challenged the traditional view of rivers as something to be managed.[87]

In the 1960s, a new environmental awareness rose to the surface of national politics. The excesses of rampant post-World War II developments, the resulting pollution, and a rise in general education levels caused this widespread emergence. A post-war transformation of values regarding nature had occurred. These new values defined nature in broader terms, connecting human health concerns, quality of life, and biodiversity to the excessive byproducts of unbridled development. People sought the outdoors more, leading to the creation of more parks, camps, and retreats. They wanted to experience nature in increasingly interactive ways, not to overcome, streamline, or subdue it.[88]

Also during the 1960s, the public first became conscious of popular ecology. The 1962 publication of Rachel Carson's *Silent Spring* created widespread awareness about the connections between chemical industries, pesticides, animal health, and human health. Suddenly, human beings recognized their vulnerability to their own created

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[87] Hays, *Beauty, Health, and Permanence*, 2-3, 32. Lisa McGirr, *Suburban Warriors: The Origins of the New American Right* (Princeton, NJ: Princeton University Press, 2001), 40. Adam Rome, *The Bulldozer in the Countryside: Urban Sprawl and the Rise of American Environmentalism* (Cambridge: Cambridge University Press, 2001), 3, 101, 121, 173, 230-236, 248. Empfield, "Wilderness Rivers," 23-26. Sutter, *Driven Wild*, 260-261. Palmer, *Endangered Rivers and the Conservation Movement*, 68-69. Harvey, *A Symbol of Wilderness*, xv.

[88] Hays, *Beauty, Health, and Permanence*, 2-3, 32. Harvey, *A Symbol of Wilderness*, xv. Empfield, "Wilderness Rivers," 22-26.

excesses. Historian Roderick Nash characterizes the new environmental awareness of the 1960s as a perceptual shift from the "Gospel of Efficiency," promoted by Gifford Pinchot and other conservationists, to the "Gospel of Ecology." Americans began viewing the elements of nature as an interconnected, ecological system, or ecosystem, rather than a resource for their efficient exploitation.[89]

The concept of an ecosystem was not new in the 1960s. The science of ecology had been around since at least the 1930s, when the federal government gave it some attention following the Dust Bowl disaster in the Southern Great Plains. Historian Donald Worster speculates that the term *oecology* was one hundred years old before its 1960s entry into common usage. Eugene Odum was the most famous and influential ecologist of the post-World War II period. Odum offered explanations to Americans at a time when they were becoming increasingly frightened about the condition of their natural world. The concept of an ecosystem gave people a way of understanding the forces at work around them and a model for returning a balance to the natural world. Ecology explained how man-made pollution hurt the environment and moved up the food chain to damage human life. According to Odum, coping with the growing amount of increasingly toxic synthetic waste and larger volumes of organic waste was the most important application of ecology that existed.[90]

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[89] Roderick Nash, *The Rights of Nature: A History of Environmental Ethics* (Madison: University of Wisconsin Press, 1989), 81. Empfield, "Wilderness Rivers," 6-28. Hays, *Beauty, Health, and Permanence*, 2-3, 26-32. Rachel Carson, "Biology or Oblivion?," in *Americans and Environment: The Controversy over Ecology*, ed. John Opie (Lexington, MA: D.C. Heath and Company, 1971), 67-91. Frank Graham, Jr., "The Resulting Outcry," in *Americans and Environment*, 91-101. Shawn Perich, "Architects of Wildlife Maintenance," *Outdoor America* 62:3 (Summer, 1997), 24.

[90] Hays, *Beauty, Health, and Permanence*, 2-3, 26-32. Empfield, "Wilderness Rivers, 30-33. Donald Worster, *Dust Bowl: The Southern Plains in the 1930s* (Oxford: Oxford University Press, 2004), chapter 13. Donald Worster, *Nature's Economy: A History of Ecological Ideas* (Cambridge: Cambridge University Press, 1977), 192.

Soon after World War II, conservationism gave way to popular environmentalism. The traditional stress on the efficient use of natural resources succumbed to the rising popular interest in the quality of life that went beyond ensuring competent production practices. Resources long considered commodities became priceless amenities with aesthetic qualities, forming valuable links in the general ecosystem. Conservationists and environmentalists often disagreed over the use of natural resources. A growing popular movement called for developers to leave rivers, forests, wetlands, and deserts in the most undeveloped and undisturbed state possible. Whole regions acquired a new significance for being relatively undisturbed. [91]

Even as environmentalists began to cherish the value of rivers, efforts to control bodies of water expanded further and further into river headwaters to use the entire flow of river basins. After the Second World War, there was a boom in multipurpose river development. This tendency strongly contradicted the growing environmental movement and its emphasis on the importance of free-flowing streams unimpeded by large dams and other engineering structures. The erosion and siltation that accompanied dams had seriously negative effects on aquatic life in waterways. The Soil Conservation Service helped farmers fight erosion since its establishment in 1935. It even paid farmers to take up approved soil conservation practices. However, in the 1950s soil conservation policies shifted their emphasis to enhance land and facilitate greater productivity. Participating farm districts received funds for reservoir construction and were encouraged to straighten, or channel, streams. The purpose of channelization was to speed up water flow through flood-prone areas or to drain swampland. However, channelization destroyed valuable aquatic habitats, increased erosion, and destroyed the fragile ecosystem of wetlands, which increased general aridity. A lack of streamside

[91] Hays, *Beauty, Health, and Permanence*, 3, 12, 13-14, 38.

shade and plant growth hurt fish populations by excessively heating the water and destroying available spawning grounds. Channelization's destruction of aquatic habitats actually decreased available forage for the dietary supplement of small farmers. As small farmers realized that waterway alteration hindered fish populations, another growing group of anglers noticed the same thing.[92]

In the twentieth century, the numbers of recreational anglers grew rapidly. These sportspersons developed a direct interest in protecting healthy bodies of water. Theodore Roosevelt and Gifford Pinchot were avid anglers, which partly prompted them to protest the clear cutting of forests due to erosion's devastating effect on fragile fish habitats. Some historians take this link even further, arguing that sportsmen were the founders of American conservation. According to environmental historian John Reiger, "the first challenge to the myth of inexhaustibility that succeeded in arousing a substantial segment of the public was not the dwindling forests, but the disappearance, in region after region, of game fishes, birds, and mammals."[93]

After World War II, recreational fishing gained increasing popularity as more and more people flocked to the countryside. Of course, fishing is more accessible to urban residents than hunting, and its popularity grew in large waterfront cities. By the 1970s, recreational fishing was more popular than hunting, attracting forty-nine-million license holders. This new generation of fishing enthusiasts developed direct relationships with river ecosystems, contributing to the nation's newfound concern over the quality of its

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[92] Hays, *Beauty, Health, and Permanence*, 15-21. Brent Blackwelder, "Water Resources Development," in *Nixon and the Environment*, 60-73. One of these farmers was my great grandfather, John Roscoe Barrett, who was a small tobacco farmer in Pitt County, North Carolina. In eastern North Carolina, organizations built ponds for farmers and straightened their streams. According to my family's oral history, John Roscoe Barrett complained endlessly about channelization's effect on the local Bluegill and Largemouth Bass fishery.

[93] Donald W. Klinko, "Antebellum American Sporting Magazines and the Development of a Sportsmen's Ethic," (Ph.D. diss., Washington State University, 1986), iv-v. Reiger, *American Sportsmen and the Origins of Conservation*, 3-4, 61-62, chapter 7. Hays, *Beauty, Health, and Permanence*, 19-21. Empfield, "Wilderness Rivers," 55-57.

waterways. The concern for fish and game also brought outdoorsmen into closer contact with environmental enthusiasts who emphasized wildlife appreciation. These interested parties' aims often conflicted with conservation's activities involving water, forests, and soil conservation. [94]

This new type of conservation's entry into national politics is well documented. In 1961, President John F. Kennedy stated that "our common goal" was a society of "open spaces, fresh water, of green country – a place where wildlife and natural beauty cannot be despoiled." In 1962, Kennedy created the Bureau of Outdoor Recreation to address the growing demand for outdoor recreation and to incorporate more planning in the development of outdoor recreation areas. Congress also played a role, passing unprecedented levels of environmental legislation addressing quality of life issues in the early 1960s. Stuart Udall, Secretary of the Interior under Presidents Kennedy and Johnson, had a tremendous influence on the development of river protection in the 1960s, serving as the Johnson administration's point man for wild river legislation. He wanted some rivers to remain clean and wild, as representatives of America's "rich outdoor heritage." He named many endangered wild rivers, many of which served as precedents to the Wild and Scenic Rivers System. By 1966, President Lyndon Johnson believed that human pollution had entered, altered, and damaged every American river system.[95]

The above developments also prompted President Johnson to sign the Wilderness Act on September 3, 1964. The main aim of the act was to protect

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[94] Klinko, "Antebellum American Sporting Magazines and the Development of a Sportsmen's Ethic," iv-v. Reiger, *American Sportsmen and the Origins of Conservation*, 3-4, 61-62, chapter 7. Hays, *Beauty, Health, and Permanence*, 19-21. Empfield, "Wilderness Rivers," 55-57.

[95] Empfield, "Wilderness Rivers," 34-38, 57-59, 71. Palmer, *Endangered Rivers and the Conservation Movement*, 160-166. Martin V. Melosi, "Lyndon Johnson and Environmental Policy," in *The Johnson Years, Volume Two: Vietnam, the Environment, and Science*, ed. Robert A. Divine (Kansas: University Press of Kansas, 1987), 113-149.

wilderness areas in perpetuity; it said little about waterways. After the signing, the Department of Interior immediately began work on wild river legislation. This work became the seed for the Wild and Scenic Rivers Act of 1968. The Wild and Scenic River system originally included twelve rivers, and a list of more for future consideration. The final version of the bill called for three classifications of rivers. Wild rivers were "vestiges of primitive America." Scenic Rivers had "shorelines or watersheds still largely primitive and shorelines largely underdeveloped but accessible in places by roads." Recreational rivers were "readily accessible by roads" and saw "some development along their shorelines." These different river classes gave confusing complexity to the Wild and Scenic Rivers Act. Some thought that wild rivers ought to contain perilous whitewater rapids and others though that designating a river as recreational would flood it with tourists. Debates over the bill centered on the classification of rivers and what they meant in the larger context, focusing on the social meaning of waterways rather than the larger question about protecting them from damming. Some states, such as Tennessee, Ohio, and Maryland, took their own protective measures by starting state river systems in 1968.[96]

The Wild and Scenic Rivers act prohibited dams and other federal projects that would damage designated rivers. Shoreline protection was encouraged through zoning, public ownership, and government management. However, most riverside residents were allowed to keep their property. To add a river to the system, Congress first voted for a study of it. Congress charged the National Park Service or Forest Service with collecting information, writing a report, receiving reviews, deciding if the river qualified and which class it belonged to, and recommending an agency to manage it. After

[96] Palmer, *Endangered Rivers and the Conservation Movement*, 158, 166-168. Empfield, "Wilderness Rivers," 106-109, 139-141, 169-170. Schoenbaum, *The New River Controversy*, 67-68.

approval by the Office of Management and Budget, the recommendation went to Congress, where a vote was needed for national designation. However, there was a simpler, alternate route for river designation. A state governor could take a state designated scenic river and present it to the Secretary of Interior for national designation. This approach required an environmental impact statement but no Congressional vote.[97]

This new social situation created new challenges for developers in the natural world. The growth of the environmental movement and its inclusion in more and more spheres of American life altered people's attitudes concerning corporations' unrestrained rights to natural resources, even in rural, "depressed," areas of the southern Appalachians. A new appreciation for free-flowing rivers and healthy natural areas created a new set of hurdles for developers interested in hydroelectric production. The Appalachian Power Company was about to discover this the hard way.

[97] Palmer, *Endangered Rivers and the Conservation Movement*, 168. Empfield, "Wilderness Rivers," 164-171. Schoenbaum, *The New River Controversy*, 67-68. *Wild and Scenic Rivers Act*, (P.L. 90-542, as amended) (16 U.S. Code 1271-1287), available from: http://www.nps.gov/rivers/wsract.html.

4: THE BLUE RIDGE PROJECT

> "I hope people don't discover us. We're trying to hold the land for our children to come back, and our grandchildren. They've already picked a spot out. We worry about what people will do to our river bottoms. We're not going to do anything to it."
>
> -Polly Jones[98]

The Appalachian Power Company's interest in hydroelectric generation in the upper New River Valley began in 1962. Before studying the area, it had to secure the approval of the Federal Power Commission (FPC), the federal agency responsible for granting permission to any nonfederal organization interested in hydroelectric development. On March 11, 1963, the FPC gave Appalachian Power a permit to begin a two-year feasibility study of the proposal. The private utility filed an application with the FPC for permission to build two dams on the upper New River two years later, on February 27, 1965.[99]

The proposed Blue Ridge Project was not a simple series of hydroelectric dams. It called for a combined pumped-storage facility, which required a two-reservoir system. Pure pumped-storage facilities only store energy. Combined pumped-storage hydroelectric systems differ from pure pumped-storage facilities in that they both store and produce electricity by moving water between reservoirs at differing elevations.

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[98] Polly Jones, interviewed by Leland R. Cooper and Mary Lee Cooper, in *The People of the New River: Oral Histories from the Ashe, Alleghany and Watauga Counties of North Carolina* (Jefferson, NC: McFarland & Company, Inc., Publishers, 2001), 250.

[99] Stephen William Foster, *The Past is Another Country: Representation, Historical Consciousness, and Resistance in the Blue Ridge* (Berkeley: University of California Press, 1985), 125. Thomas J. Schoenbaum, *The New River Controversy* (Winston Salem, NC: John F. Blair, Publisher, 1979), 47. The Appalachian Power Company, *The Blue Ridge Development: A Two-Dam Pumped-Storage and Hydro-Electric Project*, Pamphlet from New River Papers, Ed Adams Series, National Committee for the New River Subseries, Appalachian Power Company, Box 13, Folder 4, ASU.

During low-demand periods, on weekends and at night, operators pump water from the lower reservoir to the upper one. During high-demand periods, daytime and early evening hours, the upper dam releases water from the upper reservoir through turbines that generate electricity. Due to water evaporation from the reservoir surface and inefficient energy conversion methods, it is only possible to recover 70 to 85 percent of the electricity used in pumping water to the upper reservoir during the process. When considered in isolation, a combined pumped-storage facility seems quite wasteful. However, these multiple reservoir systems generally supplement the regional infrastructure of a utility during high-demand periods. Economically, pumped-storage facilities benefit utility companies. They provide an outlet for the excess energy produced by coal-burning plants during low-demand periods. Allowing coal furnaces to cool down and reheat takes a great amount of energy and time, so most utilities keep them burning. A pumped-storage facility uses the coal burned during low-demand periods, utilizing previously wasted energy to move water to the upper reservoir, which then produces energy during high-demand periods.[100]

The Appalachian Power Company intended to use the Blue Ridge pumped-storage facility as a supplement to its larger electric system. The private utility generated most power at its large coal burning steam plants in southwest Virginia and its hydroelectric facility at Claytor Dam. Between 1972 and 1976, over 86 percent of Appalachian Power's electricity came from burning coal. Its largest steam plants were the Glen Lyn steam plant on the New River near Blacksburg, discussed in Chapter 2, and the Clinch River power plant near Bristol. The Glen Lyn steam plant generated

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[100] Schoenbaum, *The New River Controversy*, 47. The Appalachian Power Company, *The Blue Ridge Development: A Two-Dam Pumped-Storage and Hydro-Electric Project*, Pamphlet from New River Papers, Ed Adams Series, National Committee for the New River Subseries, Appalachian Power Company, Box 13, Folder 4, ASU. Wikipedia, The Free Encyclopedia, "Pumped-storage hydroelectricity," available from: http://en.wikipedia.org/wiki/Pumped-storage_hydroelectricity.

electricity since the late 1910s, and the Clinch River plant since its construction in the 1950s. The pumps used in the Blue Ridge Project would be fired by burning coal. Appalachian Power estimated that the facility would require the burning of 350,000 tons of coal every year. In the same document, the utility admitted that less coal would be required for a conventional steam plant to produce the same amount of electricity. In this brochure promoting the Blue Ridge Project, Appalachian Power wrote that "Pumping operations at Blue Ridge alone will require the consumption of an estimated 350,000 tons of coal in an average year – coal that will be burned elsewhere on the Appalachian system. This is more coal – some 30,000 tons a year – than would be required at a conventional steam plant to produce the same amount of electricity as the hydro project will produce." Appalachian Power already began construction on one pumped-storage facility on Virginia's Roanoke River in 1960. This massive impoundment created present-day Smith Mountain Lake.[101]

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[101] The Appalachian Power Company, *Annual Report 1976* (American Electric Power System, 1977), 19. Steve Wussow, "Paying for Clean Air… Elsewhere: Southwest Virginia Still Lost in the Loopholes of Pollution Law," *Appalachian Voice* (Late Winter 2006), 12-13. The Appalachian Power Company, *The Blue Ridge Development: A Two-Dam Pumped-Storage and Hydro-Electric Project*, Pamphlet from New River Papers, Ed Adams Series, National Committee for the New River Subseries, Appalachian Power Company, Box 13, Folder 4, ASU. Statement of A. Joseph Dowd, On Behalf of the Appalachian Power Company, Before the Committee on Public Works United States Senate, April 14, 1970, Transcript New River Papers, Dam Fight Series, Testimony Subseries, Box 1, Folder 2, ASU. Honorable Dan Daniel of Virginia, "Appalachian's Message," US Congress, House of Representatives, December 26, 1973, Transcript from National Committee for the New River Papers, Dam Fight Series, Government Publications Subseries, Excerpts, Congressional Record – Extensions of Remarks, 1973-1976, Box 1, Folder 1, ASU. The Appalachian Power Company, "Work Begins At Smith Mountain," *Illuminator* 11:9 (June 1960), 1. The Appalachian Power Company, "Construction Under Way On One Of Two Dams In Hydro Project," *Illuminator* 11:10 (July 1960), 1. The Appalachian Power Company, "Dam Site At Smith Mountain Gap Busy Scene As Work Progresses," *Illuminator* 12:2 (November 1960), 1. All issues of the *Illuminator* found in Graham W. Claytor (1886-1971) Papers, 1907-55 (Ms81-095), Box 6, VT. "System Disturbance Report," *Ibid*., Box 1, Correspondence Folder. In 1967, the dam enclosing the Appalachian Power Company's "ash-settling lagoon" at their Clinch River steam plant failed, releasing caustic waste into the river. It killed fish for ninety miles downstream, in Virginia and Tennessee. Tennessee Valley Authority, *Fish-kill on Clinch River Below Steam-Electric Power Plant of the Appalachian Power Company, Carbo, Virginia* (Tennessee Valley Authority, July 7, 1967), 1. Dino A. Mattorano, "Health Hazard Evaluation Report 95-0393-2633, Clinch River Power Plant, Cleveland, Virginia," National Institute of Occupational Safety and Health, April 1997, available from: http://www.cdc.gov/niosh/hhe/reports/pdfs/1995-0393-2633.pdf.

The Blue Ridge Project would have an estimated total installed capacity of 960 megawatts. Only 222 of these would be provided by the natural river flow, while 738 megawatts, over three-fourths of the generated power, would come from burning coal. The surface area on the upper reservoir would be 16,600 acres, while its impounding dam would stand 210 feet high. The lower reservoir's surface area would be 2,850 acres, with a ninety-foot high dam. Appalachian Power also included a request to install two thirty-megawatt units at the federal government's Bluestone Dam with the original Blue Ridge Project proposal. It claimed that the 160,000 acre-feet of water storage slated for the project would alleviate some of the flood control pressure on Bluestone and Claytor Dams. The private utility felt that this flood control service entitled it to develop Bluestone Dam for hydroelectric generation.[102]

This initial plan did not meet widespread opposition in the upper New River Valley. Representatives of the Appalachian Power Company contacted community leaders to convince them of the project's economic and recreational benefits. Most local residents felt that electric power represented general progress, as it provided many amenities previously unavailable to mountain residents. Some of them did object to the initial project and wrote letters to their political representatives. However, they received no response.[103]

In June 1966, the FPC considered Appalachian Power's proposal. Commissioners dismissed the part of the proposal relating to Bluestone Dam on the

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[102] Statement of A. Joseph Dowd, On Behalf of the Appalachian Power Company, Before the Committee on Public Works United States Senate, April 14, 1970, Transcript from New River Papers, Dam Fight Series, Testimony Subseries, Box 1, Folder 2, ASU. The Appalachian Power Company, *The Blue Ridge Development: A Two-Dam Pumped-Storage and Hydro-Electric Project*, Pamphlet from New River Papers, Ed Adams Series, National Committee for the New River Subseries, Appalachian Power Company, Box 13, Folder 4, ASU. Schoenbaum, *The New River Controversy*, 47.

[103] Schoenbaum, *The New River Controversy*, 48-49. Foster, *The Past is Another Country*, 125-129.

grounds that Congress already decided that the federal government should develop that site's hydroelectric potential. Because of this previous decision in Congress, the FPC ruled that Appalachian Power lacked jurisdiction over Bluestone. Then the Department of the Interior added another dimension to the Blue Ridge Project. At the time, the Department of the Interior was busy trying to clean up the nation's waterways. Concerned about the waste that chemical plants, coal mines, and other industries were dumping into the Kanawha River around Charleston, West Virginia, agency officials recommended enlarging the proposed reservoirs of the Blue Ridge Project. The enlarged reservoirs would have enough storage capacity to facilitate water releases during low-flow periods to dilute pollution downstream. During hearings in 1967, FPC commissioners required Appalachian Power to modify its proposal to include the Department of the Interior's demand for larger reservoirs.[104]

In June 1968, the Appalachian Power Company submitted its proposal for the Modified Blue Ridge Project, almost doubling the size of the originally planned facility. The size of the upper reservoir increased to 26,000 acres, while the lower one increased to 12,390 acres. The new proposal included a powerhouse in each dam and a spillway. The upper dam would be 300 feet high and 1,500 feet long. The lower dam would be 236 feet high and 2,000 feet long. The two reservoirs required the inundation of 27,900 acres in Grayson County, Virginia, representing 9.6 percent of the county's total area. The dams would also flood 5,800 acres in Alleghany County, North Carolina (4 percent of total county area), and 8,400 acres in Ashe County, North Carolina (3 percent of total county area). The finished project would force the relocation or destruction of 893 homes, hundreds of family farms, forty-one summer cabins, ten industrial employers,

[104] Statement of A. Joseph Dowd On Behalf of the Appalachian Power Company Before the Committee on Public Works United States Senate, April 14, 1970, Transcript from New River Papers, Dam Fight Series, Testimony Subseries, Box 1, Folder 2, ASU. Schoenbaum, *The New River Controversy*, 49.

twenty-three commercial facilities, five post offices, fifteen churches, twelve cemeteries, and an estimated 2,700 people. The Agricultural Extension Service estimated that the affected counties would lose 13,500,000 dollars per year in crop and livestock sales. An annual 5,000,000-dollar labor payroll at the dams would replace this amount, offering less than half of the lost cropland values. Farms that belonged to the area's pioneer families for hundreds of years would be lost. Elderly people lived in most of them and were unlikely to receive a fair value for their property. Many of these homes were nineteenth-century farmhouses whose historical value far exceeded their contemporary market value. The reservoirs would flood the upper valley's richest agricultural lands, including farms along forty-four miles of the New River's main stem, twenty-seven miles of its South Fork, and twenty-three miles of its North Fork. Over 200 miles of surrounding tributary streams would also be flooded. One-fourth of the state's total burley tobacco croplands would be flooded, producing an annual loss of about 9,582,300 dollars. Entire towns, such as Virginia's Mouth of Wilson, would be under hundreds of feet of water.[105]

The Appalachian Power Company argued that the Blue Ridge Project would provide jobs and modernization for the upper New River Valley. A tourism-based economy built around the new reservoirs would draw an average of 6,230,000 people annually, replacing the traditional agricultural-based economy of the area. The utility left out the fact that most jobs would only be short term, during dam construction. The local

[105] Agricultural Extension Service Report, North Carolina State University School of Agriculture and Life Sciences, Transcript from National Committee for the New River Papers, Dam Fight Series, Federal Power Commission Subseries, Comments and Responses to Draft Environmental Impact Statement, 1973, (United States of America Before the Federal Power Commission), Box 2, Folder 6, ASU. Testimony of Edmund I. Adams of Sparta, North Carolina, Before the Public Works Committee, House of Representatives, Washington, September 16, 1971, Transcript from New River Papers, Dam Fight Series, Testimony Subseries, Box 1, Folder 2, ASU. Testimony of Ray Rimmer of Appalachian Outfitters, Before the House Rules Committee, July 30, 1976, Transcript from National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, N-S, 1976, Box 2, Folder 4, ASU. Noah Adams, *Far Appalachia: Following the New River North* (New York: Delacorte Press, 2001), 45-47. Schoenbaum, *The New River Controversy*, 49-51, 57, 89, 149-150.

economy was not weak enough to warrant this desperate measure. In 1962, agriculture and food processing were the strongest business forces in the area. The tourist industry demonstrated steady growth, while the production of lumber, mineral resources, and small textile plants also generated substantial revenue. The productive sector of the local economy benefited greatly from the waterpower of the New River. Most of these factories and farms were on the river's banks. The flooding of the upper valley would force them to relocate their business, or to start a new one serving lake tourists. Appalachian Power claimed that besides redefining the local economy, generating electricity, expanding the local tax base, and providing employment opportunities, the proposed dams would also dilute pollution downstream in West Virginia, helping to clean up waste coming from that state's industrial and mining enterprises. The utility promised a state park on each side of the North Carolina – Virginia border, including thirty-one islands formed from mountain peaks with a combined size of 475 acres.[106]

Many people of the upper New River Valley felt that Appalachian Power exaggerated the potential recreation benefits of the project. Word spread quickly that the utility left out the fact that drawdowns necessary for power generation and pollution dilution would make swimming extremely dangerous, producing long mudflats along the lake's edge instead of the proposed beach areas. The periodic forty-four foot drawdown

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[106] North Carolina State Stream Sanitation Committee, *New River Basin Pollution Survey Report* (Raleigh, NC: State Department of Water Resources Division of Stream Sanitation and Hydrology, 1962), page 7, Transcript from New River Papers, Ed Adams Series, Monograph Subseries, Box 17, Folder 2, ASU. The Appalachian Power Company, *The Blue Ridge Development: A Two-Dam Pumped-Storage and Hydro-Electric Project*, Pamphlet from New River Papers, Ed Adams Series, National Committee for the New River Subseries, Appalachian Power Company, Box 13, Folder 4, ASU. Testimony by Ray Rimmer, before the subcommittee on National Parks and Recreation, Committee on Interior and Insular Affairs, May 6, 1976, Transcript from National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, N-S, 1976, Box 2, Folder 4, ASU. Statement of A. Joseph Dowd On Behalf of the Appalachian Power Company Before the Committee on Public Works United States Senate, April 14, 1970, Transcript from New River Papers, Dam Fight Series, Testimony Subseries, Box 1, Folder 2, ASU. Schoenbaum, *The New River Controversy*, 50-53.

of the lower reservoir would leave hillsides eroded and create mudflats for over half-a-mile around the edge. On the larger upper reservoir, water fluctuations would produce forty to seventy foot mudflats around its edge. The construction of marinas and boat-access areas would be nearly impossible on such a muddy foundation. The mudflats would also make bank fishing extremely difficult. Anglers with boats would benefit the most, if marinas could be constructed. The supplementary forage provided by local fish populations would cease to benefit local people who could not afford boats. Rich tourists would eat the fish that were once valuable to local diets. Not only that, but fish populations would have to be maintained by stocking due to the difficulty of shallow-water spawning under such conditions. Electric generation would become even more inefficient in twenty years due to silt accumulation, and in fifty years, siltation would make the dams useless. The project would create 1,500-2,000 jobs during the five years of construction, probably importing union labor from outside the region. The power generated was not even destined for the Appalachian region, North Carolina, or Virginia, but for export to large urban manufacturing areas in the Northeastern and Midwestern United States. In addition, opponents claimed that Appalachian Power only included actual farmland to be inundated in its loss estimates, not uplands for pasture and timber. While some highlands would not be under water, they would be useless without the accompanying lowland for haying and crops.[107]

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[107] Statement of James H. Watkins, III, and the Coalition to Save the New River of West Virginia, Before the Subcommittee on National Parks and Recreation, May 6, 1976, Transcript from National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, T-W, 1976, Box 2, Folder 5, ASU. Statement of Jack Curran, Legislative Director of Laborers' International Union of No. Am., AFL-CIO, Before the Subcommittee on National Parks and Recreation of the Committee on Interior and Insular Affairs, May 6, 1976, Transcript from National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, A-C, 1976, Box 2, Folder 1, ASU. Anonymous Federal Power Commission testimony, 1971, Transcript found in New River Papers, Dam Fight Series, Testimony Subseries, Box 2, Folder 9, ASU. Schoenbaum, *The New River Controversy*, 50-54, 172. Foster, *The Past is Another Country*, 127-129.

A few local leaders stepped up to fight the Blue Ridge Project and organize local opposition. One of these was Floyd Crouse, who was born and raised on the New River. He held degrees from the University of North Carolina and Harvard Law School, where he was the roommate of former Senator Sam Ervin. He had been practicing law in Sparta all his life. Another local opponent of the project was Lorne Campbell, an attorney from Grayson County and President of the New River Chapter of the Izaak Walton League, a national conservation organization founded in 1922. The two men founded the Upper New River Valley Association to oppose the Modified Blue Ridge Project. Though Crouse died of cancer on October 22, 1969, he arranged for a replacement, Sidney Gambill, who grew up in Ashe County and practiced tax law in Pittsburgh, Pennsylvania, before returning to Ashe County for his retirement. These men became strong local leaders against the Blue Ridge Project who used their legal experience and national ties to help area residents oppose land inundation.[108]

The Federal Power Commission held a new set of hearings on the Modified Blue Ridge Project from February to July 1969 before Judge William C. Levy. Levy graduated from Harvard with a law degree in 1938. During his early career, he worked for the War Production Board in Washington. In the 1940s and 50s, he served as an administrative law judge with the Justice Department. In the early 1960s, he became an administrative law judge with the Federal Power Commission. At the 1969 hearings, the Department of the Interior, Army Corps of Engineers, and FPC staff counted among the project's

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[108] Maitland S. Sharpe, Statement of The Izaak Walton League of America Relative to S.2439, A Bill to Include A Portion of the New River in Virginia and North Carolina In the Wild and Scenic Rivers System, Before the Senate Interior Subcommittee on Parks and Recreation, February 7, 1974, Transcript from National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on Public Lands, U.S. Senate, P-V, 1974, Box 1, Folder 8, ASU. Schoenbaum, *The New River Controversy*, 53. Foster, *The Past is Another Country*, 132. Jack Lorenz, "A Lifelong Affair With Water," *Outdoor America* 62:3 (Summer, 1997), 13-17. United States Congress, "Ervin, Samuel James, Jr., (1896-1985)," Biographical Directory of the United States Congress, available from: http://bioguide.congress.gov/scripts/biodisplay.pl?index=E000211.

supporters. The State of North Carolina and Commonwealth of Virginia aligned themselves with the citizens of the upper New River Valley for the moment, arguing against the water-quality storage provision of the project intended to dilute downstream pollution as an out-of-state transfer of natural resources. North Carolina's Governor, Bob Scott, called for limiting upper reservoir drawdowns to ten feet to facilitate recreation. Two rural electric cooperatives argued that the federal government should develop the site, not a private company. The City of Danville, Virginia, requested a share of the facility's ownership.[109]

Despite the protests, Judge Levy's decision granted Appalachian Power's license to construct the Modified Blue Ridge Project on October 1, 1969. He called for 400,000 acre-feet of water storage for pollution dilution when the facility opened in 1975, which would increase to 650,000 acre-feet by 1987. Levy placed a limit of ten feet on upper reservoir drawdowns during the summer season to enhance the recreational benefits of the project, and twelve feet the rest of the year. He did not consider recreation on the lower reservoir to be possible due to its necessarily considerable drawdowns. He denied the request of local cooperatives that the federal government develop the facility and the City of Danville's request to own a share of the project.[110]

Virginia and North Carolina were not satisfied and filed exceptions to Judge Levy's decision. The FPC heard oral arguments concerning Levy's assessment on February 2, 1970. The Attorney General of West Virginia joined project opponents, arguing against the drawdowns' possible impact on the lower New River's fishery. He also argued that downstream chemical industries ought to provide at-the-source water

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[109] Schoenbaum, *The New River Controversy*, 53-54. Foster, *The Past is Another Country*, 126-128. Harvard University, "In Memorium," *Harvard Law Bulletin* (Spring 2002), available from: http://www.law.harvard.edu/alumni/bulletin/2002/spring/memoriam_main.html.

[110] Schoenbaum, *The New River Controversy*, 54. Foster, *The Past is Another Country*, 126.

treatment, adding that releasing clean water for pollution dilution there was not only unnecessary but also illegal. This was a surprising break with West Virginia Governor Arch Moore's policy of supporting the Appalachian Power Company. On April 7, 1970, FPC commissioners overturned Judge Levy's decision and ordered that further hearings take place. Seven days later, the Senate Committee on Public Works held hearings to examine the flood control and water quality provisions of the New River Basin. The only witnesses called during this hearing were affiliates of the Appalachian Power Company, the American Electric Power Company, the Army Corps of Engineers, and the Department of Interior.[111]

At this point, the Upper New River Valley Association called upon regional and national environmental groups to support them. The Izaak Walton League's West Virginia Division joined the fight, offering the support of its noted environmental attorney, Edward Berlin. The Conservation Council of Virginia, West Virginia Highlands Conservancy, West Virginia Natural Resources Council, Appalachian Research and Defense Fund, Congress for Appalachian Development, New River Pioneer Chapter of the Daughters of the American Revolution, Alleghany Farm Bureau, North Carolina Farm Bureau, Ashe County, and Alleghany County also joined the fight against the Modified Blue Ridge Project. The Congress for Appalachian Development brought attorney Paul J. Kaufman to the case, while Sparta lawyer Ed Adams represented Ashe and Alleghany Counties. Adams became one of the main spokespersons against the project, alongside Campbell and Gambill.[112]

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[111] John R. Quarles, Jr., Chauncy H. Browning, Jr., and Edward Berlin, Supplemental Memorandum, United States of America Federal Power Commission, Transcript from National Committee for the New River Papers, Dam Fight Series, Federal Power Commission Subseries, Motions, 1971-1972, Box 1, Folder 4, ASU. Schoenbaum, *The New River Controversy*, 54. Congress, Senate, Committee on Public Works, *Blue Ridge Hydroelectric Power Project, Part I*, 91st Cong., 2nd sess., 14 April 1970.

[112] Martha Nudel and Denny Johnson, "An IWLA Retrospective: 1922 to 1997," *Outdoor America* 62:3 (Summer, 1997), 24. Jack Lorenz, "A Lifelong Affair With Water," *Outdoor America*

Judge Levy held the next round of hearings between July and December of 1970. With all opponents of the project present, these were the stormiest hearings yet. At this point conservation groups were not against the license, but objected to its large size and water-quality storage provision. North Carolina, Virginia, and West Virginia only attempted to ensure that recreation on the reservoirs would be accessible and attractive for tourists. A new round of testimonials centered around low-flow augmentation in the lower New River and its effect on fishing in that area, the adequacy of at-the-source treatment technology, and the recreational benefits created by the reservoirs.[113]

Judge Levy passed down his second decision on June 21, 1971. The FPC called it a Supplemental Initial Decision. It re-stated that the Modified Blue Ridge Project should be licensed, but it contained two small modifications. The judge slightly lessened the downstream release rate of the lower reservoir to appease West Virginia and limited year-round upper reservoir drawdowns to ten feet after 1985. If the FPC commissioners accepted this new decision and approved the project, land condemnation and dam construction could begin immediately.[114]

However, new environmental legislation created another obstacle for those in favor of the Modified Blue Ridge Project before FPC commissioners even heard Judge

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62:3 (Summer, 1997), 14-17. Schoenbaum, *The New River Controversy*, 54-55. John R. Quarles, Jr., Chauncy H. Browning, Jr., and Edward Berlin, Supplemental Memorandum, United States of America Federal Power Commission, Transcript from National Committee for the New River Papers, Dam Fight Series, Federal Power Commission Subseries, Motions, 1971-1972, Box 1, Folder 4, ASU.

[113] Oral Argument of Grayson County, Virginia, December 21, 1970, United States of American Before the Federal Power Commission, National Committee for the New River Papers, Dam Fight Series, Federal Power Commission Subseries, Miscellaneous Documents, 1971-1973, Box 3, Folder 6, ASU. Schoenbaum*, The New River Controversy*, 55. Reply Brief of the Conservation Council of Virginia, Inc., The West Virginia Natural Resources Council, Inc., and the Izaak Walton League, West Virginia Division on Reopened Hearing, April 30, 1971, United States of America Before the Federal Power Commission, Transcript from National Committee for the New River Papers, Dam Fight Series, Federal Power Commission Subseries, Briefs, April-August, 1971, Box 1, Folder 7, ASU.

[114] Schoenbaum, *The New River Controversy*, 55-56.

Levy's decision. Congress passed the National Environmental Policy Act (NEPA), which took effect on January 1, 1970, after President Nixon's signing. The NEPA became the cornerstone of American environmental policy, containing a clear statement about American environmental values. This new law required that a detailed environmental impact statement must accompany every proposal for "major federal action having a significant impact on the human environment." These statements had to circulate to government agencies and the public. The act also created the Council on Environmental Quality to set overall policies, enforce the act, advise the president, and ultimately judge environmental impact statements.[115]

The new NEPA regulations required that both the FPC and Appalachian Power write impact statements. The intended purpose of these environmental impact statements was to ensure that developers and agencies considered ecological, cultural, and environmental values along with economic ones in coming to any decision. Both parties had to demonstrate their awareness of the environmental costs of a project and show that they considered these costs in their decision-making process. Though NEPA requirements were in effect before the second round of hearings, the FPC did not order Appalachian Power to submit an environmental impact statement until December 1970. The Appalachian Power Company submitted its environmental impact statement to Judge Levy on January 25, 1971. The EPA considered this report incomplete and inadequate and requested a more detailed version, relaying this directly to the FPC.

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[115] J. Brooks Flippen, *Nixon and the Environment* (Albuquerque: University of New Mexico Press, 2000), 46, 50-51, 225-227. Schoenbaum, *The New River Controversy*, 56. Kaiman Lee and Lauren L. Koumjian, *Environmental Impact Statement: A Reference Manual for the Architect/Planner* (Boston: Environmental Design Research Center, 1978), 2-5. Charles H. Eccleston, *The NEPA Planning Process: A Comprehensive Guide with Emphasis on Efficiency* (New York: John Wiley & Sons, Inc., 1999), 16-19. Thomas C. Winter, "CEQ and its Role in Environmental Policy," in *Environmental Impact Analysis: Philosophy and Methods*, eds. Robert B. Ditton and Thomas L. Goodale (Green Bay: University of Wisconsin Sea Grant Program, 1972), 23-28. Samuel P. Hays, *A History of Environmental Politics Since 1945* (Pittsburgh: University of Pittsburgh Press, 2000), 132.

However, the FPC submitted an almost identical environmental impact statement to the Judge on April 20, 1971. Judge Levy issued his official second decision to license the project on June 21, 1971.[116]

The opponents of the Blue Ridge Project considered both impact statements completely inadequate in their analysis of environmental factors, but Judge Levy accepted them both. The Appalachian Regional Commission found four major ways that the environmental impact statement failed to meet NEPA requirements. First, it claimed that Appalachian Power did not include all necessary basic data about the environmental effects of construction or estimates and assessments of probable post-construction changes in the region. Second, the environmental impacts of the project were only considered in relation to the fluctuating water levels and other operations of the pumped-storage facility. Proponents failed to consider the impact that construction and the facility's actual presence would have on ecological systems. Third, Appalachian Power ignored any upstream effects of the reservoirs, concentrating only on the downstream impact. Fourth, the private utility either ignored or inadequately treated issues concerning air and water quality, and land use. The impact statements also failed to consider alternative sites for construction of a similar facility. Opponents of the project made a list of over thirty-one alternative sites for a pumped-storage facility in the region. Only three of them cost more than the Blue Ridge Project. Another alternative was energy conservation through rate reform. These rate reform suggestions included increasing the price of electricity during peak-load hours, called "peak-load pricing," and

[116] Detailed Comments on the Draft Environmental Impact Statement For the Modified Blue Ridge Project No. 2317, Prepared by the Environmental Protection Agency, April 1973, Transcript from National Committee for the New River Papers, Dam Fight Series, Federal Power Commission Subseries, Comments and Response to Draft Environmental Impact Statement, 1973, Box 2, Folder 8, ASU. Schoenbaum, *The New River Controversy*, 56. Letter from Regional Administrator, Region III, Environmental Protection Agency, to Mr. John N. Nassikas, Chairman Federal Power Commission, Transcript from National Committee for the New River Papers, Dam Fight Series, Federal Power Commission Subseries, Comments and Responses to Final Environmental Impact Statement, Box 2, Folder 9, ASU.

requiring industrial and other "big users of electricity" to pay the same price as residential customers. Other opponents of the Blue Ridge Project charged that the preparing organization submitted its impact statements too late. These should have been prepared before the second round of hearings.[117]

The project opponents were correct. While FPC commissioners were still deciding whether to approve Judge Levy's second decision, the United States Court of Appeals reached a decision in another FPC case involving electrical transmission lines in New York. The court ruled that the FPC acted illegally by preparing its environmental impact statement after the completion of hearings. Opponents of the Blue Ridge Project thought it obvious that the FPC had committed the same error in its proceedings. Many of them rejoiced and assumed that Judge Levy's decision would be overturned. The FPC strongly opposed the Court of Appeal's decision and asked the Supreme Court to reverse the holding. The Supreme Court denied review on October 10, 1972 and let the

[117] The Appalachian Regional Commission, Response to FPC Environmental Statement, National Committee for the New River Papers, Dam Fight Series, Federal Power Commission Subseries, Miscellaneous Documents, 1971-1973, Box 3, Folder 6, ASU. Grayson County Board of Supervisors, Argument in Support of Motion to Reopen the Record for Additional Evidence on Environmental Impact of Project, Transcript from National Committee for the New River Papers, Dam Fight Series, Federal Power Commission Subseries, Motions, 1971-1972, Box 1, Folder 4, ASU. Alleghany County, North Carolina, and Ashe County, North Carolina, Interveners', Ashe County, North Carolina and Alleghany County, North Carolina, Brief Opposing Exceptions, United States of America Before the Federal Power Commission, September 30, 1971, National Committee for the New River Papers, Dam Fight Series, Federal Power Commission Subseries, Briefs, September 1971, Box 1, Folder 8, ASU. Environmental Protection Agency, Attorney General of West Virginia, Conservation Council of Virginia, Inc., West Virginia Natural Resources Council, Inc., and the Izaak Walton League, West Virginia Division, Supplemental Memorandum, United States of America Federal Power Commission, Transcript from National Committee for the New River Papers, Dam Fight Series, Federal Power Commission Subseries, Motions, 1971-1972, Box 1, Folder 4, ASU. "Cost of Alternative Pumped-Storage Projects as of September, 1968," Transcript found in National Committee for the New River Papers, Dam Fight Series Federal Power Commission Subseries, Miscellaneous Documents, 1971-1973, Box 3, Folder 6, ASU. Ray Rimmer, Testimony before the Subcommittee on National Parks and Recreation, Committee on Interior and Insular Affairs, May 6, 1976, Transcript from National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, N-S, 1976, Box 2, Folder 4, ASU. Schoenbaum, *The New River Controversy*, 56-57. From 1972 to 1976, residential customers paid much more than industrial ones. There were higher numbers of residential customers, but industry used far more electricity. –The Appalachian Power Company, *Annual Report 1976*, 19.

Court of Appeals' decision stand. On November 2, 1972, the FPC acquiesced and refused to approve the project for a second time. This sent the Blue Ridge Project into a third round of hearings under Judge Levy.[118]

The new environmental impact statement bore a remarkable resemblance to the original one. The FPC staff consulted with engineers and officials from Appalachian Power and American Electric Power and made no real modifications. The FPC staff filed this Final Environmental Impact Statement with Judge Levy on June 18, 1973. Levy held a third round of hearings on the project and impact statement on July 24 and 25, 1973. Legal representatives of those opposing the Blue Ridge Project cross-examined FPC staff members during these meetings. These witnesses freely admitted that there was no new information about the costs of the project or their comparison with the price of project alternatives. No new studies or information existed for the purpose of new review. Judge Levy prevented opponents of the Blue Ridge Project from presenting their own witnesses to contradict the presentations and findings of FPC staff. It seemed like nothing could stop the Blue Ridge Project's construction.[119]

At this point, something important changed in North Carolina. The publication of the Draft Environmental Impact Statement in January 1973 coincided with the beginning of Governor James Holshouser Jr.'s administration. He was North Carolina's first twentieth-century Republican governor and brought many new people into state government. One of these was Dr. Arthur "Art" Cooper. Cooper was a nationally known ecologist on leave from an academic position at North Carolina State University, who

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[118] Schoenbaum, *The New River Controversy*, 57-58. Greene County Planning Board v. Federal Power Commission, 455 F2d 412 (2d Cir. 1972).

[119] Petition for Rehearing by the New River Chapter of the Izaak Walton League of America, Inc., Upper New River Valley Association, New River Pioneer Chapter of the Daughters of the American Revolution, and Young's Chapel Baptist Church, United States of America Before the Federal Power Commission, July 15, 1974, Transcript found in National Committee for the New River Papers, Dam Fight Series, Federal Power Commission Subseries, Petitions for Rehearing, 1974, Box 2, Folder 3, ASU. Schoenbaum, *The New River Controversy*, 59-60.

became assistant secretary of the North Carolina Department of Natural and Economic Resources. These new officials resolved to review a variety of state policies. When one of Cooper's aides came across the environmental impact statement for the Blue Ridge Project, he conveyed his shock to his superiors. He told them about the displacement of 2,700 people, the impact on the economy of the two North Carolina counties, and the inefficient electric generation involved with the pumped-storage facility. Cooper presented his recommendation that the state try to kill the project to his boss, James Harrington. Harrington held meetings with American Electric Power officials and the Upper New River Valley Association. After these meetings, Harrington decided that the state must oppose the Blue Ridge Project due to the economic and social disruptions that would occur in the valley and the out of state transfer of North Carolina's natural resources. In March 1973, Harrington and Cooper held meetings with Governor Holshouser, who quickly agreed to oppose the project.[120]

Holshouser grew up in the town of Boone and was well aware of the family farm culture of the area. In fact, he knew of the project since campaigning in Ashe County in 1972, when a man approached him in tears describing what the project would do to his family's farm. From this moment on, the State of North Carolina was firmly aligned with the environmentalists and counties opposing the project even though the Republican Governor had no prior record of commitment to environmental policies. This cooperation between state government and environmentalists represented a vital turning point in the project. Art Cooper wrote the official state's comment against the Draft Environmental Impact Statement. In this document, he accused the FPC of overstating the project's recreational benefits while ignoring its impact on the fish and people of the upper New

[120] Edmund Adams, interviewed by Cooper and Cooper, in *The People of the New River*, 222-227. Schoenbaum, *The New River Controversy*, 60-61. Foster, *The Past is Another Country*, 129. State of North Carolina, "James Eubert Holshouser, Jr.," available from: http://www.itpi.dpi.state.nc.us/governors/holshouser.html.

River Valley. Governor Holshouser wrote a personal letter to Kenneth Plumb, the secretary of the FPC, on July 11, 1973. In this letter, he expressed that North Carolina's official position regarding the project had changed. This chain of events created an unusually direct confrontation between state and federal government officials.[121]

The opposite situation occurred in Virginia. It also had a new administration resulting from the 1972 Republican landslide, under Governor Mills Godwin. However, Godwin ended all state opposition to the Blue Ridge Project and firmly aligned Virginia with the Appalachian Power Company. Grayson County, Virginia, and its attorney Lorne Campbell, remained steadfast in their opposition to the project even after their abandonment by the Commonwealth of Virginia. Residents of Grayson County formally complained that their politicians were poorly representing their county. "To read the Virginia newspapers," they wrote, "you would think that only the two affected North Carolina Counties… and their representatives, object to the project." Virginia's Senator Bill Scott told the Senate that the people in Pulaski county were "all for" the dam, demonstrating that he did not know it was Grayson, not Pulaski County, that was to be inundated. Grayson County citizens responded to this absurdity, stating, "We agree that if polled the citizens of Pittsburg(h) or Singapore might also have no objections to the project."[122]

In a positive turn of events for the project opponents, the issue entered the national media in 1971. The *New York Times* ran a series of articles that featured the

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[121] Edmund Adams, interviewed by Cooper and Cooper, in *The People of the New River*, 222-227. Schoenbaum, *The New River Controversy*, 61-62, 101. State of North Carolina, "James Eubert Holshouser, Jr.," available from: http://www.itpi.dpi.state.nc.us/governors/holshouser.html.

[122] Statement on Behalf of the Concerned Citizens of Grayson County, Transcript from National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Miscellaneous, 1967-1975, Box 2, Folder 9, ASU. Schoenbaum, *The New River Controversy*, 62, 80. Letter from Mills Godwin, Governor of Virginia, to Roy A. Taylor, Chairman of Subcommittee on National Parks and Recreation, April 30, 1976, Transcript found in National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, D-G, 1976, Box 2, Folder 2, ASU.

pollution dilution issue, questioning why rural mountain citizens of the upper New River Valley had to pay for industrial pollution in Charleston, West Virginia. National Education Television featured a documentary by Bill Moyers entitled “A Requiem for Mouth of Wilson,” a small quiet town to be completely inundated by the project. It featured interviews with the town’s inhabitants and commentary about the larger issue. Stewart Udall, Secretary of the Interior under Presidents Kennedy and Johnson, wrote an article about the issue for *Newsday* on April 24, 1971. He announced that his previously favorable view of the pollution dilution provision of the project was “misguided.” He called upon the FPC to reject the water-quality storage component of the project, stating that “responsibility for industrial pollution must rest on the polluters, not the consumers who… face higher electric power rates to pay for the low-flow augmentation features of dams.”[123]

The 1973 hearings under Judge Levy centered on the legality of the pollution dilution issue. There was little doubt that regularizing stream flow offered substantial economic benefits and some environmental ones to downstream residents and industries. However, the costs of these lower valley benefits were quite high and would be borne by customers of the Appalachian Power Company and the American Electric Power Company, as well as the citizens, fish, and wildlife of the upper New River Valley.[124]

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[123] Letter from A. Joseph Dowd, vice president and general council for the American Electric Power Service Corporation, to Mr. Daniel Snyder, Regional Administrator, Region III, Environmental Protection Agency, November 7, 1973, Transcript from New River Papers, Dam Fight Series, Testimony Subseries, Before EPA Panel, 5 November 1973, Box 1, Folder 5, ASU. Schoenbaum, *The New River Controversy*, 57, 64-65, 187.

[124] Letter from the Appalachian Regional Commission to Kenneth F. Plumb, Secretary, Federal Power Commission, June 29, 1971, Transcript found in National Committee for the New River Papers, Dam Fight Series, Federal Power Commission Subseries, Miscellaneous Documents, 1971-1973, Box 3, Folder 6, ASU. Schoenbaum, *The New River Controversy*, 63-64.

Congress passed the Federal Water Pollution Control Act Amendments on October 18, 1972. This act provided that "in the survey or planning of any reservoir by (any) Federal agency, consideration shall be given to inclusion of storage for regulation of stream flow for the purpose of water quality control, *except that* any such storage and water releases shall not be provided as a substitute for adequate treatment or other methods of controlling waste at the source." During the 1973 FPC hearings, both sides offered expert testimony supporting their stance regarding the availability of at-the-source waste treatment. The Department of the Interior produced studies and witnesses claiming that no technology for at-the-source treatment existed. Environmentalists and the attorneys general of North Carolina, West Virginia, and Virginia produced witnesses who testified that such technology did exist. The water-quality storage component of the Blue Ridge Project was a serious issue since it was the main reason for the modified project's substantial increase in reservoir size.[125]

The Federal Water Pollution Act contained a section introduced by Senator Sam Ervin about pollution dilution. This section required that FPC licenses for hydropower facilities, including provisions for water quality storage or streamflow regularization, receive the approval of the Environmental Protection Agency (EPA). Congress created the agency after NEPA's enactment in 1970. While Congress charged the agency with cleaning up United States waters and providing guidance for future development, its mandate extended to cover many other environmental factors. The EPA was heavily involved in the environmental impact statement process and published a weekly notice in the Federal Register about recently filed statements. Judge Levy could no longer

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[125] Italics added. Schoenbaum, *The New River Controversy*, 64-65. Brief of Commission Staff Counsel Opposing Exceptions in Remanded Proceeding, Before the Federal Power Commission, March 19, 1974, Transcript found in National Committee for the New River Papers, Dam Fight Series, Federal Power Commission Subseries, Briefs, March, 1974, Box 1, Folder 11, ASU. United States Environmental Protection Agency, "Clean Water Act," available from: http://www.epa.gov/r5water/cwa.htm.

decide whether the water-quality storage provision was necessary or not. The EPA reviewed the record of proceedings and decided, on April 9, 1973, that no convincing case had been made to demonstrate that at-the-source treatment technology did not exist. This decision prohibited any water-quality storage component for the Blue Ridge Project.[126]

This decision legally bound the FPC to follow EPA directions, though the FPC did register its objections. Opponents of the Modified Blue Ridge Project expected the project to return to its original size and considered the EPA's ruling a triumph. However, Judge Levy's decision demonstrated that this was an empty victory. In his third decision, on January 23, 1974, he rejected the smaller project and again recommended the licensing of the Modified Blue Ridge Project. He deleted the water-quality storage provision, but increased the flood-storage capacity from the original 160,000 to 346,000 acre-feet. He also added an extra 130,000 acre-feet of water storage to improve "fishing and recreation" in the lower New River Valley, even though environmental groups already argued that streamflow regulation would actually damage downstream fish populations and prevent the possibility of anglers wading in the river. His decision prompted outrage in people all over the New River Valley.[127]

It seemed like nothing could prevent the construction of the modified Blue Ridge Project. While he deleted the water-quality storage provision of the enlarged project,

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[126] Detailed Comments on the Draft Environmental Impact Statement For the Modified Blue Ridge Project No. 2317, Prepared by the Environmental Protection Agency, April 1973, Transcript from National Committee for the New River Papers, Dam Fight Series, Federal Power Commission Subseries, Comments and Response to Draft Environmental Impact Statement, 1973, Box 2, Folder 8, ASU. Eccleston, *The NEPA Planning Process*, 16-19. Schoenbaum, *The New River Controversy*, 65. United States Environmental Protection Agency, "EPA Commemorates its History and Celebrates is 35th Anniversary," available from: http://www.epa.gov/history/.

[127] Response by Commission Staff Counsel to Comments of Environmental Protection Agency, Before the Federal Power Commission, Transcript from National Committee for the New River Papers, Dam Fight Series, Federal Power Commission Subseries, Comments and Responses to Final Environmental Impact Statement, Box 2, Folder 9, ASU. Schoenbaum, *The New River Controversy*, 65-66.

Judge Levy managed to create other reasons for enlarged reservoirs. Opponents of the Blue Ridge Project had to form a new strategy. They began researching other legislative tools that could aid their cause. Their legal strategists discovered the usefulness of recently passed environmental legislation and began to consider the applicability of one act in particular to their cause.

5: SCENIC RIVER DESIGNATION

> "It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations."
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> -Wild and Scenic Rivers Act[128]

Before Judge Levy issued his decision, opponents of the Blue Ridge Project had developed another strategy to prevent the dams in case of an unfavorable outcome. In the summer of 1973, Sidney Gambill of the Upper New River Valley Association suggested a look at the Wild and Scenic Rivers Act. If the organization could get the federal government to designate the New as a scenic river, the FPC could not legally allow dam construction on the declared section. In 1971, dam opponents forced the FPC to place a four-year moratorium on the construction of a hydroelectric project on the Hell's Canyon section of the Snake River in Idaho, while Congress considered the river's inclusion in the National Wild and Scenic River System. Even if Congress failed to declare the New River wild or scenic, a request for such designation would give Blue Ridge Project opponents time to consider yet another strategy.[129]

It was time for quick action. Senator Sam Ervin and Congressman Wilmer Mizell, both representing North Carolina, introduced identical bills in the Senate and House of Representatives to begin a study of the New River that examined its suitability for

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[128] *Wild and Scenic Rivers Act*, Section 1(b) (P.L. 90-542, as amended) (16 U.S. Code 1271-1287), available from: http://www.nps.gov/rivers/wsract.html.

[129] Thomas J. Schoenbaum, *The New River Controversy* (Winston Salem, NC: John F. Blair, Publisher, 1979), 67. Tim Palmer, *Endangered Rivers and the Conservation Movement* (Lanham, MD: Rowman & Littlefield Publishers, Inc, 2004), 107-110.

designation as a national scenic river. Congress did not immediately act on the bills since their introduction came right before the end of the 1973 session.[130]

Between January 24, 1973 and March 21, 1974, the North Carolina General Assembly declared 4.5 miles of the New River as a state scenic river. This section extended from the confluence of the North and South Forks to the Virginia state line. State designation would not block the Blue Ridge Project but could aid Congressional efforts to designate it a federal scenic river and add another element for the FPC commissioners to consider while ruling on Judge Levy's decision. The General Assembly also passed a resolution to study the South Fork of the New River as an addition to the state scenic river system.[131]

On the national level, Senator Ervin and North Carolina's other senator, Jesse Helms, re-introduced the bill to Congress calling for a study of the New as a potential wild and scenic river. This was a multiple-part process. First, the New River had to be added to section five of the Federal Wild and Scenic Rivers Act as a potential addition to the system. The Department of Interior would then conduct a two-year feasibility study and report its findings to Congress. Then a separate law would designate the New as a national scenic river and block the Blue Ridge Project's construction. The Public Lands Subcommittee of the Senate Interior Committee held hearings on the bill on February 7, 1974. Joseph Dowd, legal counsel for the American Electric Power Company, called upon the committee to leave the matter to the FPC. The Izaak Walton League and American Rivers Conservation Council called the upper New River Valley a biological resource that included approximately sixty-eight fish species, eleven of which were rare

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[130] Congress, House, Committee on Interior and Insular Affairs, Subcommittee on National Parks and Recreation, *Wild and Scenic Rivers Act Amendments, Part 2*, 93rd Cong., 1st sess., 30 October 1973. Schoenbaum, *The New River Controversy*, 67-68.

[131] Schoenbaum, *The New River Controversy*, 68.

or endangered, and eight rare vascular flora. Senator Ervin argued that the river must be studied for inclusion in the scenic river system before the Blue Ridge Project destroyed it. Ed Adams, legal representative for Ashe and Alleghany Counties, asked for favorable consideration of the river and added that the people of the upper New River Valley just wanted to be left alone. The Department of the Interior asked for a deferral of the bill and only wanted a study of the upper forks of the New River, which was not within the project area and would not impede its construction.[132]

North Carolina's Governor Holshouser decided to take personal action regarding the scenic river bill. In March 1974, he held a meeting with Rogers Morton, the Secretary of the Interior, to persuade the Department of the Interior to agree with North Carolina's position. Morton, who was to serve as President Ford's campaign chairperson in the 1976 primary against Ronald Reagan, knew that Holshouser was a key Southern Republican Governor and could provide substantial support for Ford. Morton therefore aligned himself and his department with North Carolina. On April 5, 1974, the Public Lands Subcommittee unanimously approved the New River bill and sent it on to the Senate Interior Committee. On May 2, that committee adopted the bill by unanimous voice vote and passed it onto the Senate.[133]

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[132] Maitland S. Sharpe, Statement of The Izaak Walton League of America Relative to S.2439, A Bill to Include A Portion of the New River in Virginia and North Carolina In the Wild and Scenic Rivers System, Before the Senate Interior Subcommittee on Parks and Recreation, February 7, 1974, Transcript found in National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on Public Lands, U.S. Senate, P-V, 1974, Box 1, Folder 8, ASU. Statement of Bill Painter, Director, American Rivers Conservation Council, on S.2439, to add a section of the New River, NC, VA, to Sec. 5 (a) of the Wild and Scenic Rivers Act, Before the Senate Interior and Insular Affairs Committee, Subcommittee on Public Lands, Transcript found in National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on Public Lands, U.S. Senate, P-V, 1974, Box 1, Folder 8, ASU. Congress, Senate, Committee on Interior and Insular Affairs, Subcommittee on Public Lands, *To Amend the Wild and Scenic Rivers Act, Part 2*, 93rd Cong., 2nd sess., 7 February 1974. Schoenbaum, *The New River Controversy*, 68-69.

[133] Senate Committee on Interior and Insular Affairs, *Amending the Wild and Scenic Rivers Act by Designating a Segment of the New River for Study for Possible Inclusion in the*

The bill faced intense debate in the Senate on May 28, 1974. Two Virginia Senators, Harry F. Byrd and William L. Scott, led the opposition to the scenic river bill. They argued that the controversy over the Blue Ridge Project was a dispute between states and that Virginia would receive considerable benefits from the pumped-storage facility. They wanted the decision to be left to the FPC and stated that "a state with only 21 miles of a 254-mile stream has… far less interest in a project than… Virginia and West Virginia." They claimed that the Blue Ridge Project would provide "new clean energy without cost" at a time when nationwide concern about energy and the environment were paramount. When the Senate voted on that same day, they passed the bill creating a study of the New River by a vote of forty-nine to nineteen.[134]

However, the FPC had already decided to take its own emergency action. It granted the license to Appalachian Power on June 14, 1974, but delayed its implementation until January 2, 1975. This gave Congress a seven-month deadline to decide the issue, or construction on the Blue Ridge Project would proceed. FPC commissioners accepted Judge Levy's recommendations to eliminate the water-quality storage component and limit upper reservoir drawdowns to a ten-foot maximum. They slightly decreased the total surface area of both reservoirs from 44,000 to 42,000 acres by excluding 186,000 of the total 346,000 acre-feet Judge Levy recommended for flood control. They claimed that flood control would reduce property damage in Virginia's New River Valley by 72 percent and highlighted the fact that Appalachian Power would donate land to Virginia and North Carolina for state parks on the reservoir shore. However, the commissioners accepted the Judge's 130,000 acre-feet to augment the lower river's natural flow, which would allegedly improve West Virginia's fishing and

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National Wild and Scenic Rivers System, report, 93rd Cong., 2nd sess., 9 May 1974, Report 93-831. Schoenbaum, *The New River Controversy*, 69-70.

[134] Schoenbaum, *The New River Controversy*, 71-72.

downstream recreation. They rejected the scenic river study option, claiming that the project's benefits outweighed the elimination of a free-flowing river.[135]

In early 1974, biological studies of the New River's endangered species surfaced. They found that the Kanawha minnow, a large stream fish, was only present in the New River drainage. This species was especially present in the upper valley, less common in Virginia, and virtually nonexistent in West Virginia. The studies found that Claytor and Bluestone Lakes hampered the species' movement downstream from the Shenandoah region, and siltation, mine waste, and other pollution contributed to the species' rarity or complete absence in West Virginia. The saddled darter also exclusively inhabited the New River drainage of North Carolina. Other endangered fish species found in the upper New River were the flat-head chub, the New River shiner, and the Kanawha darter. The endangered New River snail, which only existed on a single river bluff opposite Radford in Pulaski County, Virginia, near Claytor Lake, was also part of the report. Biologists found two rare and threatened species of cave scud, or blind crustaceans, in Giles County, Virginia, and another just across the West Virginia border. On August 2, 1974, North Carolina representative Wilmer Mizell read a report by the Fish and Wildlife Service to the House floor regarding these endangered species. However, while these species' rarity was part of the record, it was never a leading factor against the project and remained absent from the environmental impact statements.[136]

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[135] Schoenbaum, *The New River Controversy*, 72-74.

[136] Patrick S. Hambrick, Robert E. Jenkins, and James H. Wilson, "Distribution, Habitat and Food of the Cyprinid Fish *Phenacobius Teretulus*, A New River Drainage Endemic," *Copeia*, 1 (1975), 172-176. Memorandum and report to Ed Adams from Don Baker, N.C. Wildlife Resources Commission , February 1, 1974, Transcript from New River Papers, Ed Adams Series, National Committee for the New River Subseries, Blue Ridge Project – Environmental Economic Impact Statements, Reports, Box 13, Folder 7, ASU. Honorable Wilmer Mizell, "Concern Expressed for Certain Endangered Species Unless the New River is Saved," US Congress, House of Representatives, August 2, 1974, Transcript from National Committee for the New River Papers, Dam Fight Series, Government Publications Subseries, Excerpts, Congressional Record – Extensions of Remarks, 1973-1976, Box 1, Folder 1, ASU. Scientists had not yet discovered the unique walleye species, *Stizostedion vitreum*, of the upper New River. George C. Palmer,

On August 21, 1974, the National Parks Subcommittee of the House Interior Committee approved the scenic river study bill by a vote of twenty-one to fifteen. It sent the bill on to the House Rules Committee, which had to vote favorably before bringing the bill to the full House of Representatives. In the fall of 1974, lobbyists on both sides of the debate put intense pressure on the members of the House Rules Committee. The electric-utility industry, the Virginia congressional delegation, Virginia's Governor Godwin, Virginia Attorney General Andrew P. Miller, the AFL-CIO, and other organized labor groups all lobbied actively in opposition to the scenic river study bill. The North Carolina congressional delegation, the North Carolina State Government, the Department of Interior, and Congressman Ken Hechler of West Virginia all lobbied for the bill.[137]

The chair of the House Rules Committee, Ray J. Madden of Indiana, acted to delay the bill. He refused to permit a vote until the Senate Interior Committee agreed to enlarge the Indiana Dunes National Park on the shore of Lake Michigan. In the words of legal historian Thomas J. Schoenbaum, "one piece of environmental legislation was being held hostage for another." The delay extended until December 1974, when Madden succumbed to the pressure from the North Carolina delegation and his own constituents. The December 11 vote denied the bill an opportunity to pass on the House floor by a vote of thirteen to two. Proponents of the scenic river study bill were simply

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"Genetic Characterization of Intermixed Walleye Stocks in Claytor Lake and the Upper New River, Virginia" (M.S. Thesis, Virginia Polytechnic Institute and State University, 1999), page ii.

[137] House Committee on Interior and Insular Affairs, *Amending the Wild and Scenic Rivers Act of 1968 by Designating a Segment of the New River as a Potential Component of the National Wild and Scenic Rivers System*, report, 93rd Cong., 2nd sess., 3 October 1974, Report 93-1419. Schoenbaum, *The New River Controversy*, 74-75.

out-lobbied by the powerful combined force of the utility industry, organized labor, and the Commonwealth of Virginia.[138]

North Carolina then tried another strategy. Under House rules, members could vote to suspend procedural regulations to pass the scenic river bill if the House leadership agreed. However, if voted on this way, the bill required a two-thirds majority to pass. Carl Albert, the Speaker of the House, consulted both the North Carolina and Virginia delegations. Governor Holshouser sent a personal telegram to Albert asking him to suspend the rules and allow a full House vote. Albert agreed and brought the bill before the house on December 16, 1974, but limited debate time to forty minutes. Once again, lobbying pressure was intense. Governor Holshouser wrote personal telegrams to all 435 House members. North Carolina Representatives Roy Taylor and Wilmer Mizell spoke against the Blue Ridge Project, the FPC, and the power monopoly wielded by utilities and labor unions. Some FPC members were financially invested in the utility industry. One of these was Carl Bagge, who acted as commissioner and president of the National Coal Association. Opponents of the Blue Ridge Project pointed out that Rogers Morton, Secretary of the Interior and newly appointed chair of the President's Energy Resources Council, agreed with their stance. Congressman Ken Hechler of West Virginia compared the idea of damming the New River to "dynamiting the pyramids." William C. Wampler, a Virginia representative whose district included Grayson County, called for the scenic river bill's rejection. When the scheduled vote occurred on December 18, the bill received a small majority of 196 to 181, with fifty-seven not voting. Without a two-thirds favorable vote, the New River lost. A new Congress would only

[138] Schoenbaum, *The New River Controversy*, 75-77. On the Indiana Dunes National Park, see Andrew Hurley, *Environmental Inequalities: Class, Race, and Industrial Pollution in Gary, Indiana, 1945-1980* (Chapel Hill: University of North Carolina Press, 1995).

convene after Appalachian Power's license was in effect and the utility was now free to proceed with land condemnations and dam construction.[139]

Thomas J. Schoenbaum, an environmental law professor at the University of North Carolina, entered the fray in August 1974. He held a law degree from the University of Michigan and a doctorate from the University of Cambridge. He also had taught law at Tulane University, the University of Georgia, George Washington University, and many international universities. Throughout his career, Schoenbaum has issued over one-hundred publications on environmental and international law. From August until October 1974, he prepared a detailed brief raising three basic arguments against the FPC's decision to issue the Blue Ridge Project license. First, the FPC violated the NEPA by refusing to allow consideration of the New as a national scenic river before issuing the Blue Ridge Project license. Second, the FPC violated the NEPA by not considering energy conservation as a project alternative before issuing the license. Third, the FPC's environmental impact statement was inadequate and failed to reveal the project's true costs. Schoenbaum knew that even if the wild and scenic river designation failed in Congress, the inadequacy of the environmental impact statement could delay dam construction for a time. The precedent was set in a recent Supreme Court case regarding a dam in California. However, this would just delay the project, not permanently protect the river and prevent the dams.[140]

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[139] Schoenbaum, *The New River Controversy*, 77-78. The Ralph Nader Congress Project, *The Environmental Committees: A Study of the House and Senate Interior, Agriculture, and Science Committees* (New York: Grossman Publishers, a Division of the Viking Press, 1975), 67.

[140] Schoenbaum, *The New River Controversy*, 81-91. Stephen William Foster, *The Past is Another Country: Representation, Historical Consciousness, and Resistance in the Blue Ridge* (Berkeley: University of California Press, 1985), 130. Cornell Maritime Press, "Tidewater Publishers: Thomas J. Schoenbaum," available from: http://cmptp.com/tschoenbaum.htm. The George Washington University Law School, "G.W. Law Profiles: Thomas J. Schoenbaum," available from: http://www.law.gwu.edu/Faculty/profile.aspx?id=5950. University of Georgia Law Department, "Thomas J. Schoenbaum, Dean and Virginia Rusk Professor of International Law," available from: http://www.law.uga.edu/intranet/archives/academics/profiles/schoenbaum.html.

Even after its defeat on the House floor, the scenic river bill was not dead. Section two (a)(ii) of the Wild and Scenic Rivers Act stated that the Governor of any state could apply to the Secretary of the Interior to add a state scenic river to the federal scenic river system. In his or her application, the Governor had to include two things. First, he or she needed to demonstrate that the river segment was a designated state scenic river. Second, the state must adopt a management plan that delegates river management to a state agency, to be funded by the state and not the United States. However, informal guidelines also dictated that the state designated stream segment must be at least twenty-five miles long. North Carolina had only designated 4.5 miles of the New River at that point. There was, however, a portion stating that a shorter river segment possessing outstanding qualifications could be included in the federal river system. The procedure in section two (a)(ii) of the act had never been used before on a river that Congress didn't include with section five as a potentially wild and scenic river. On December 12, 1974, Governor Holshouser sent his personal application to the Department of the Interior.[141]

On December 20, 1974, the State of North Carolina filed a motion with the Court of Appeals in Washington, DC, asking for a stay for the effective license date. The Court of Appeals held exclusive jurisdiction to review an FPC license. North Carolina also filed a motion for expedited consideration for their stay, due to the closeness of the date when Appalachian Power's license would take effect. However, judicial review of an agency decision regarding the Wild and Scenic Rivers Act must take place in the federal district court. Therefore, just to be safe, the State of North Carolina, along with many

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[141] Schoenbaum, *The New River Controversy*, 91-94. *Wild and Scenic Rivers Act*, Section 2(a)(ii) (P.L. 90-542, as amended) (16 U.S. Code 1271-1287), available from: http://www.nps.gov/rivers/wsract.html. Foster, *The Past is Another Country*, 129-130.

property owners along the New River, filed a complaint and motion to enjoin with the federal district court in Greensboro, North Carolina on December 19, 1974.[142]

In Greensboro, Judge Eugene Gordon told representatives of the Appalachian Power Company that even "if the dam is built when I get to a decision… it is not going to make any difference to me. It will have to be torn down." This statement demonstrated that the FPC and Appalachian Power could no longer count on the January 2 effective date of their license. While proceedings were underway in Greensboro, Appalachian Power wrote to the Court of Appeals and agreed to delay dam construction until January 31, 1975. After receiving the letter, the Court of Appeals denied North Carolina's motion for expedited consideration of the stay since Appalachian's concession gave the court more time to act. Meanwhile, the Department of the Interior stated that it would not act on governor Holshouser's scenic river application unless a court enjoined the project. On January 31, 1975, the Court of Appeals came to a decision. They granted North Carolina's petition delaying the Blue Ridge Project's construction until further review of the FPC's order. Also in January 1975, Senator Jesse Helms and Congressman Steve Neal, Wilmer Mizell's replacement, introduced scenic river study bills in the new Congressional session.[143]

A few local problems existed in the upper New River Valley. The Appalachian Power Company had already purchased substantial amounts of land there through its real estate subsidiary, Franklin Realty, as pessimistic residents moved out of the valley thinking they were facing the inevitable. According to one resident, the utility only made one offer and would not allow price negotiations. Also, many local people misunderstood

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[142] Schoenbaum, *The New River Controversy*, 94-96. *Wild and Scenic Rivers Act*, (P.L. 90-542, as amended) (16 U.S. Code 1271-1287), available from: http://www.nps.gov/rivers/wsract.html.

[143] Schoenbaum, *The New River Controversy*, 96-100, 108. Foster, *The Past is Another Country*, 130. Judges of the United States, "Gordon, Eugene Andrew," available from: http://www.fjc.gov/servlet/tGetInfo?jid=887.

what a “national scenic river” meant for them and their lands. Some pictured a large national park that would restrict the use of their own property to accommodate canoeists, campers, and hikers. Many local residents, fueled by a natural distrust of politicians, resented federal control of their lands more than the power project. The Appalachian Power Company played on these fears by mounting propaganda campaigns in national and local newspapers, radio stations, local billboards, and meetings. The utility campaign created scenic-river opposition groups in the upper New River Valley like the Grayson Business Development Association and the Ashe County Citizens Committee. These local groups adopted the slogan “Dam the Scenic.” However, many local residents realized that the only alternative to the Blue Ridge Project was scenic river designation. Local opponents of the Blue Ridge Project handed out thousands of bumper stickers showing their slogan “The New River Like It Is.” To ease doubts about the scenic river designation and reveal its true effect on landownership, Art Cooper and Ernie Carl set up public meetings in Boone and Sparta on January 27 and 28, 1975. Cooper personally presided over the meetings. The American Rivers Conservation Council published a local landowner’s guide to the National Wild and Scenic Rivers Act to assuage local doubts and reveal the advantages of such a designation.[144]

The Appalachian Power Company faced legal trouble elsewhere. In February 1975, the West Virginia Public Service Commission denied the utility 9 percent of its 10.5 percent rate increase implemented in 1971. The Commission ordered Appalachian

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[144] American Rivers Conservation Council, *Landowners Guide to the National Wild and Scenic Rivers Act*, Transcript from New River Papers, Dam Fight Series, Reports, Box 1, Folder 6, ASU. Testimony of Charles S. Cassell, Secretary, Grayson Business Development Association, Before the Subcommittee on National Parks and Recreation, May 6, 1976, Transcript from National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, A-C, 1976, Box 2, Folder 1, ASU. Schoenbaum, *The New River Controversy*, 101-108. Foster, *The Past is Another Country*, 123-160. Polly Jones, interviewed by Leland R. Cooper and Mary Lee Cooper, in *The People of the New River: Oral Histories from the Ashe, Alleghany and Watauga Counties of North Carolina* (Jefferson, NC: McFarland & Company, Inc., Publishers, 2001), 244. Beulah Blevins, interviewed by Cooper and Cooper, in *The People of the New River*, 111.

Power to reimburse 39.3 million dollars to its West Virginia customers. Company officials announced that the utility might have to defer some investment plans due to its financial condition. Other troublesome developments for Appalachian Power were underfoot in West Virginia, ones to protect the New River. On March 7, 1974, the West Virginia State Senate passed a resolution requesting Congress to include the New in the National Wild and Scenic Rivers System. On March 9, 1975, both of West Virginia's houses passed legislation that included the New River Gorge in the West Virginia Natural Streams Preservation System.[145]

Meanwhile, the Department of the Interior told the State of North Carolina that it would be best to designate more than 4.5 miles of the New River's main stem as a state scenic river. By April 1975, the North Carolina Department of Natural and Economic Resources had a new plan to extend the scenic river section of the New River. It recommended including a section of the river between Twin Rivers, where the North and South Forks meet, and Dog Creek in the state scenic river system. When added to the already designated 4.5 miles, this section would total 26.5 miles. To gain local landowner support, the plan called for state, not federal, ownership of 200 to 400 acres that would contain four recreation areas. The plan would not upset farming activity, remove bridges, or construct foot trails along the river. It only prohibited building construction or land development in the scenic area along the river's shore. To explain the plan and gain local support, Art Cooper held more local meetings on April 8 in Ashe

[145] Statement by Representative Ken Hechler, D-W.Va., Before the Subcommittee on National Parks and Recreation, May 6, 1976, Transcript from National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, H-M, 1976, Box 2, Folder 3, ASU. Schoenbaum, *The New River Controversy*, 109.

County's Central High School. Local support grew for the scenic river option as soon as these details were revealed.[146]

In May 1975, both houses of the North Carolina General Assembly passed the bill to lengthen the segment of the South Fork of the New River for inclusion in the North Carolina Natural and Scenic River System. However, Rogers Morton, the Secretary of the Interior who strongly supported North Carolina's position against the Blue Ridge Project, resigned in April to accept a new position as Secretary of Commerce. President Ford's nomination to succeed Morton, Stanley K. Hathaway, was a previous governor of Wyoming. His record there was disastrous in the eyes of many environmental groups like the Sierra Club and the Audubon Society, who decided to actively oppose his nomination. Governor Holshouser decided to support Hathaway's confirmation and testified in favor of it. On July 15, Holshouser personally delivered the amendment to his scenic river study application including the other twenty-two miles of the New River's South Fork. However, the day after that Hathaway entered a hospital suffering from exhaustion and mental strain. On July 25, 1975, Hathaway resigned from his position as Secretary of the Interior. The fate of the New River remained uncertain. Opponents of the Blue Ridge Project held "The Festival of the New" on July 26, 1975 to solidify support for the scenic river bill. Over 3,000 people attended, including representatives from national environmental groups.[147]

The new acting Secretary of the Interior was D. Kent Frizzell. He wanted to delay stating a position on the scenic river bill until he received President Ford's official nomination for the position. Meanwhile in Greensboro, North Carolina, Judge Gordon

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[146] Schoenbaum, *The New River Controversy*, 108-112.

[147] Tom Dillon, "Celebrating the River," *Winston Salem Journal* (July 27, 1975), Sec. A, p1. Schoenbaum, *The New River Controversy*, 112-119. Foster, *The Past is Another Country*, 130. Heidi Lockhart Utz, "Collective Identity in Appalachia: Place, Protest and the AEP Power Line" (M.A. Thesis, Virginia Polytechnic Institute and State University, 2001), 18.

reached a decision. He refused to rule whether Governor Holshouser's scenic river application was legal and claimed that his court had no jurisdiction over the matter. He claimed that the application's validity had to be determined by the Court of Appeals in Washington. Thomas Schoenbaum and the other legal representatives of the State of North Carolina decided to appeal Judge Gordon's decision to the Court of Appeals in Richmond, Virginia, since they were not sure that the Washington Court of Appeals would agree to take jurisdiction. The Richmond Court of Appeals scheduled to hear arguments in the fall of 1975. The case already before the Court of Appeals in Washington was also scheduled for fall argument. North Carolina officials called for a delay of the proceedings in Richmond so that they would still have a legal venue for their fight if the Washington court ruled against them. On August 26, 1975, the Richmond Court of Appeals agreed to a delay until the Washington Court of Appeals reached its own decision.[148]

On September 9, 1975, President Ford nominated Thomas S. Kleppe to the Secretary of Interior post. Frizzell was disappointed but freed from the pre-nomination political pressure that surrounded him. He wrote to Governor Holshouser on September 12, telling him that the Department of the Interior would support the scenic river application. He ordered the Bureau of Outdoor Recreation to prepare the Department of the Interior's environmental impact statement regarding the scenic river preservation plan. By October 1975, Thomas Kleppe had been confirmed as Secretary of the Interior. He was a former Congressman who had no discernable record demonstrating his position on environmental matters.[149]

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[148] Schoenbaum, *The New River Controversy*, 120-123.

[149] Schoenbaum, *The New River Controversy*, 123-124. Foster, *The Past is Another Country*, 130. United States Government, "Thomas S. Kleppe," White House press release, September 9, 1975, available from: http://www.ford.utexas.edu/library/exhibits/cabinet/kleppe.htm.

Another important development surfaced in August 1975. At the FPC's request, the Appalachian Power Company funded two archeological surveys of the upper New River Valley. Dr. Harvard Ayers of Appalachian State University produced a Smithsonian Institution study in 1965. Dr. Charlton Holland of the University of Virginia carried out the other in 1969, after Appalachian Power doubled the size of the Blue Ridge Project reservoirs. FPC officials had never seen the surveys nor were they exhibited at any FPC hearings. Though incomplete due to inadequate funding and time constraints, the studies contained critical information about the area to be inundated. They showed that humans lived in the upper New River Valley since at least 8,000 BC and that the river was an important path for early humans in North America. During his two-week survey, Holland found forty-two archeological sites, 1,459 pottery pieces, 415 arrowheads, and many other stone artifacts on the ground surface without even excavating. He even found a "very large Indian village" and several camps dating from the archaic period. They could only guess at what was beneath the ground. The *Winston Salem Journal* published an article about the omission on August 31, 1975. The opponents of the Blue Ridge Project also brought the issue to the Court of Appeal's attention.[150]

For the first time, the court received copies of both archeological surveys. North Carolina officials charged Appalachian Power with keeping the surveys secret. They also alleged that the FPC never asked for the results, even after requiring Appalachian Power

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[150] Inter-Agency Archeological Salvage Program, *An Appraisal of the Archeological Resources of the Blue Ridge Project: Grayson County, Virginia & Alleghany and Ashe Counties, North Carolina* (Smithsonian Institution: River Basin Surveys, September 1965), New River Papers, Dam Fight Series, Reports, Box 1, Folder 6, ASU. Bob Poole, "New's Archeological Resources Were Not Protected," *Winston Salem Journal* (August 31, 1975), Section A, p1. Interview with Dr. Harvard Ayers, Professor of Anthropology at Appalachian State University, Boone, N.C., August 19, 1975, Transcript found in New River Papers, Dam Fight Series, Interview Notes, Box 1, Folder 1, ASU. Sworn Affidavit of Robert M. Poole, Watauga County, North Carolina, September 10, 1975, Transcript found in National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Miscellaneous, 1967-1975, Box 2, Folder 9, ASU. Schoenbaum, *The New River Controversy*, 124-126.

to conduct the survey. A 1974 amendment to the Historic Preservation Act required any federal agency that finds or knows of a federally licensed project that "may cause irreparable loss or destruction of significant scientific, prehistorical, historical or archeological data" to inform the Secretary of the Interior in writing so the Department of the Interior can survey and act to protect the area. The FPC responded by saying it would have issued Appalachian Power's license even if the reports were included in the record. The FPC claimed that during the construction of the dams there would be time for archaeological surveys and relocation. It estimated that survey and salvage costs would not exceed five-thousand dollars. Harvard Ayers and Charlton Holland dismissed these estimates as "ridiculous," saying that forty-thousand or fifty-thousand dollars were more accurate figures and that this work would take three or four years. The Court of Appeals in Washington set oral arguments for October 23, 1975.[151]

The day before oral arguments began, the Department of Interior told North Carolina officials that the Bureau of Outdoor Recreation approved of their management plan for the scenic river. The bureau then started work on a draft environmental impact statement, which would take several months. Following its completion, the proposal to declare the New a national scenic river would circulate to other agencies for comment for a ninety-day period.[152]

Oral arguments in the Washington, DC, Court of Appeals began on October 23, before Judge David Bazelon, Associate Judge Spottswood Robinson III, and Associate

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[151] Schoenbaum, *The New River Controversy*, 126-128. *Wild and Scenic Rivers Act*, (P.L. 90-542, as amended) (16 U.S. Code 1271-1287), available from: http://www.nps.gov/rivers/wsract.html.

[152] Letter from George W. Humphreys and the White House to Donald C. Cook, April 26, 1976, Transcript found in National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, D-G, 1976, Box 2, Folder 2, ASU. Department of Interior News Release, April 14, 1976, Transcript found in National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, D-G, 1976, Box 2, Folder 2, ASU. Schoenbaum, *The New River Controversy*, 129.

Judge Roger Robb. The judges heard North Carolina's argument that the FPC did not consider peak-load pricing or scenic river designation in its license evaluation. The judges chastised FPC attorney Steven Taube, asking why the agency ignored the existence of the archeological evidence. They then asked North Carolina if their 1974 filed petition for rehearing included the scenic river and peak-load pricing issues. It did not. The judges said that the court might lack jurisdiction to consider these new points if they were not properly brought to the FPC's attention earlier. The judges handed down their opinion much later, on March 24, 1976. They upheld the FPC license grant, revoked the stay order, and said the FPC could declare the Blue Ridge License effective immediately. The judges refused to consider the above contentions because they were not properly raised in the Petition for Rehearing filed with the FPC.[153]

The issue received more national coverage in newspapers and on television. Opponents of the Blue Ridge Project organized another Festival of the New for January to draw attention to new issues. The Committee for the New River had expanded its scope and changed its name to the National Committee for the New River. They circulated the new information through the mail, encouraging committee members to send letters and petitions to the Department of Interior. Secretary of the Interior Kleppe began circulating North Carolina's scenic river application along with the Interior's draft environmental statement to other federal agencies on November 28, 1975. The statute dictating the phases of the project required a ninety-day review period. Meanwhile, by January 1976, the New River issue appeared in more than 150 nationwide newspapers and magazines, including *Newsweek*, *Time*, and *The Washington Post*. Dan Rather

[153] Letter from George W. Humphreys and the White House to Donald C. Cook, April 26, 1976, Transcript found in National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, D-G, 1976, Box 2, Folder 2, ASU. Schoenbaum, *The New River Controversy*, 129-130, 141. Foster, *The Past is Another Country*, 131.

featured the New River on his CBS News program. National environmental organizations, including the Izaak Walton League, the Sierra Club, and the Audubon Society, printed articles about the river in their newsletters. Secretary Kleppe received an average of fifty letters per day against the Blue Ridge Project from every part of the nation.[154]

The American Electric Power Company created a media blitz of its own. AEP had used this strategy in 1974, spending around three-million dollars on full-page advertisements in newspapers and magazines. The *New York Times*, the *Wall Street Journal*, *Time*, and *Newsweek* all ran these advertisements attacking the sulfur-dioxide emission controls of the Clean Air Act. That AEP media campaign had worked. After February 1, 1976, full-page advertisements called "The Truth about The Blue Ridge Project" appeared in many newspapers around the nation. In these ads, AEP called the press prejudiced and North Carolinian opponents of the project "selfish elitists." AEP took advantage of a national energy shortage, claiming that the Blue Ridge Project would conserve national resources by consuming no oil or gas, provide emergency reserve power for the east coast, and "consume less fuel than any available alternative means of generation." The utility went on to claim that the project would "facilitate the economic development of depressed Appalachia." Farmers of the upper New River joked about being called elitists by the nation's largest private utility company. Many of AEP's offensive advertisements actually convinced more people to support the scenic river designation. [155]

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[154] Schoenbaum, *The New River Controversy*, 131-135. Foster, *The Past is Another Country*, 130-131.

[155] "The truth about The Blue Ridge Project – in contrast to the abridged and biased version," *Time* (February 2, 1976), advertisement, found in New River Papers, Ed Adams Series, National Committee for the New River Subseries, Appalachian Power Company, Box 13, Folder 4, ASU. Schoenbaum, *The New River Controversy*, 135-137.

Governor Holshouser was President Ford's southern campaign chair for the 1976 primary against Ronald Reagan. Holshouser briefed Ford on the New River issue in February 1976 with an extensive memorandum. On February 6, 1976, Reagan announced that he favored the scenic river designation of the New River while campaigning in Greensboro, North Carolina. Ford decided to support North Carolina's scenic river application and told the Department of the Interior to prepare its own final impact statement, though he was hesitant to publicly announce his support. Interior completed the impact statement on March 12, 1976. The next day, Kleppe announced that he would sign the official order designating the New as a national scenic river. However, legal guidelines required him to wait thirty days before signing the order. After the Washington Court of Appeals decision on March 24, no one could be sure that Kleppe would still sign the scenic river designation on April 13 as stated. Even if he did, the order might not be valid.[156]

The FPC filed an order making modifications on the Blue Ridge license two days after the court's decision. No one in North Carolina received notice of this order. Appalachian Power had its license at last. However, the FPC had not received a mandate from the Court of Appeals, normally issued twenty-one days after its decision. As North Carolina prepared a flurry of legal activity to appeal the court's decision, the Department of Interior formally designated the New a scenic river on April 13, 1976. Secretary Kleppe presented Governor Holshouser the Department of Interior's "Outdoor Recreation Achievement Award" for his work to preserve the New River. North Carolina

[156] Letter from George W. Humphreys and the White House to Donald C. Cook, April 26, 1976, Transcript found in National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, D-G, 1976, Box 2, Folder 2, ASU. Department of Interior News Release, April 14, 1976, Transcript found in National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, D-G, 1976, Box 2, Folder 2, ASU. Schoenbaum, *The New River Controversy*, 139-143. Foster, *The Past is Another Country*, 130-131.

now had formal designation for the New as a national scenic river, which granted it the protection detailed in the Wild and Scenic Rivers Act. [157]

Though this should have officially prevented the Blue Ridge Project, river designation created an unprecedented conflict between two federal agencies. Under the Federal Power Act, the FPC had ultimate authority to license hydroelectric projects. Under the Wild and Scenic Rivers Act, the Department of Interior had final authority to act on state applications and designate a river. This created a stalemate that halted the political process. The judicial branch could decide the issue but might be reluctant to hear it. North Carolina could also re-introduce the scenic river bill to Congress for approval. Meanwhile, Appalachian Power had its license and could proceed with construction. Opponents of the Blue Ridge project decided it was time to present the issue to Congress again.[158]

Congressman Neal and Senator Helms introduced bills to the House and the Senate to designate the full 26.5 miles section of the upper New as a national scenic river and block the Blue Ridge Project. In the House, the bills were deferred to the Subcommittee on National Parks and Recreation whose chair, Roy Taylor, represented a western North Carolina district. He scheduled a hearing on the bill for May 6. The American Rivers Conservation Council and the Sierra Club testified favorably for the bill, stating that the valley should be used for farmland, much of which was being gobbled up by cities around the nation. Representative Ken Hechler of West Virginia argued that if the scenic river bill were not approved, water releases from the Blue Ridge Project and Claytor Lake would produce sudden water level fluctuations downstream in the New

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[157] Department of Interior News Release, April 14, 1976, Transcript found in National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, D-G, 1976, Box 2, Folder 2, ASU. Schoenbaum, *The New River Controversy*, 146-153.

[158] Schoenbaum, *The New River Controversy*, 146-154.

River Gorge, adding that "we've been repeatedly robbed and raped in West Virginia by out-of-state profiteers." Residents of West Jefferson, North Carolina, Mouth of Wilson, Virginia, and Grayson County, Virginia, reiterated their support for the scenic river bill. The AFL-CIO claimed that the "cruelly depressed state of the Construction Industry" was reason enough to approve the Blue Ridge Project and that scenic river designation would enhance this "depressed state." Joseph Dowd, legal representative for the Appalachian Power Company, argued that coal-fired alternatives to the project would cost more than five-hundred-million more dollars to build. He even threatened to sue for compensation in the Court of Claims and ask for five-hundred-million dollars from the United States. He claimed that the license was Appalachian Power's legal property and was therefore irrevocable. [159]

[159] Remarks made by Mrs. Ed M. Anderson before the House Interior Subcommittee on National Parks and Recreation, May 6, 1976, Transcript found in National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, A-C, 1976, Box 2, Folder 1, ASU. Testimony of Charles Clusen, Washington Representative of the Sierra Club, Before the National Parks and Recreation Subcommittee of the House Interior and Insular Affairs Committee, May 6, 1976, *Ibid*. Statement of Jack Curran, Legislative Director of Laborers' International Union of North America, AFL-CIO, Before the Subcommittee on National Parks and Recreation of the Committee on Interior and Insular Affairs, May 6, 1976, *Ibid*. Statement of A. Joseph Dowd, Senior Vice President and General Counsel of the American Electric Power Service Corporation, Before the Subcommittee on National Parks and Recreation of the House Committee on Interior and Insular Affairs, May 6, 1976, Transcript from National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, D-G, 1976, Box 2, Folder 2, ASU. Testimony of Hal H. Eaton, Mouth of Wilson, VA, Before the House Subcommittee on Parks and Recreation, May 6, 1976, *Ibid*. Testimony of Bill Painter, Representing the American Rivers Conservation Council, Before the Subcommittee on National Parks and Recreation, House Committee on Interior and Insular Affairs, May 6, 1976, Transcript from National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, N-S, 1976, Box 2, Folder 4, ASU. Statement of Nancy Blanton Smith, Before the Subcommittee on National Parks and Recreation, May 6, 1976, *Ibid*. Statement of James H. Watkins, III, and the Coalition to Save the New River of West Virginia, Before the Subcommittee on National Parks and Recreation, May 6, 1976, Transcript found in National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, T-W, 1976, Box 2, Folder 5, ASU. Statement by Representative Ken Hechler, D-W.Va., Before the Subcommittee on National Parks and Recreation, May 6, 1976, Transcript from National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, H-M, 1976, Box 2, Folder 3, ASU. Congress, House, Committee on Interior and Insular Affairs, Subcommittee on National Parks and Recreation, *Designation of New River Segment as a Component of the Wild and Scenic*

Appalachian Power used this threat of a five-hundred-million-dollar lawsuit to delay proceedings further and allow more lobbying time. However, a license is not a contract or a piece of property, just a grant from a federal agency. North Carolina decided to call Appalachian Power's bluff since there were no grounds for its threat. Despite the claims of Appalachian Power and the wishes of Virginia's Governor, Chairman Roy Taylor permitted a vote on May 10 and the bill passed in the subcommittee.[160]

As the bill passed into Senate and House Committees, the National Committee for the New River, the Sierra Club, and other environmental organizations encouraged people to write their representatives, also urging constituents to make personal visits to their representative committee members. Walter Cronkite of CBS, Harry Reasoner of ABC, and David Brinkley of NBC ran programs on their evening television programs about the issue. National Public Radio's "All Things Considered" featured the issue on its June 24, 1976 program. The National Committee for the New River invited friendly congressional representatives on canoe trips on the river. New River Valley farmers walked the halls of Congress. Governor Holshouser declared July 18, 1976, an official "Day of Prayer for the New River."[161]

Meanwhile, AEP faced criticism from two small towns in Indiana and Michigan, where municipally owned electric cooperatives accused AEP of trying to eliminate them by bowing out of the power wholesale business. They occasionally bought power from

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Rivers System, 94th Cong., 2nd sess., 6 May 1976. Schoenbaum, *The New River Controversy*, 154-162. Don Kendall, "Land Inventory Begun," *The Washington Post* (Jan. 3, 1976), Sec. B, p6.

[160] Letter from Mills Godwin, Governor of Virginia, to Roy A. Taylor, Chairman of Subcommittee on National Parks and Recreation, April 30, 1976, Transcript found in National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, D-G, 1976, Box 2, Folder 2, ASU. Schoenbaum, *The New River Controversy*, 154-165. Foster, *The Past is Another Country*, 132.

[161] Schoenbaum, *The New River Controversy*, 169-170. Foster, *The Past is Another Country*, 130-131.

one of AEP's operating companies, Indiana & Michigan Power Company (I&M). When I&M announced its withdrawal from the wholesale energy market, the cities worried that they would be forced to become part of I&M's retail system. They asked the FPC to hold hearings on the Blue Ridge Project's anti-competitive edge and investigate possible violations of the antitrust laws. Individual unions, including the United Mine Workers and the Amalgamated Clothing Workers of America, were also breaking with the AFL-CIO stance and expressing their approval of the scenic river bill.[162]

The bill entered the House Interior Committee on May 19, 1976, where it passed by a vote of fifteen to two. In the Senate Interior Committee, the American Rivers Conservation Council pointed out that AEP sells "a substantial portion of its electricity to other systems," demonstrating that they were not failing to meet any demand. The bill quickly passed out of the Senate Interior Committee with a seven to three vote and was then forwarded on to the Senate. However, the bill still had to pass in the House Rules Committee, where labor was lobbying against it. Appalachian Outfitters, a North Carolina guide service offering trips to the New River, urged committee members to resist the pressure from utility and labor lobbyists. On August 4, 1976, the bill passed with a ten to six vote. When the vote came to the full House of Representatives floor, it passed easily, with a 311 to seventy-three vote. Now only the Senate had to pass the bill. A final avalanche of letters and telegrams poured in to representatives. To the delight of scenic river proponents, George Meany and the AFL-CIO withdrew opposition to the bill on August 19, 1976. The two Virginia Senators, William Scott and Harry Byrd, Jr., tried desperately to organize last minute opposition to the bill. The final vote in the senate was sixty-nine to sixteen in favor of the bill. President Ford signed it into law on September 11, 1976. The Blue Ridge Project was finally defeated. The upper New River remained a

[162] Schoenbaum, *The New River Controversy*, 170-171.

free flowing stream. After signing the bill, President Ford declared: “When a decision has to be made between energy production and environmental protection … you must ask what is the will of the people involved … It is clear in this case [that] the people wanted the New River like it is.” [163]

[163] Testimony of Bill Painter, American Rivers Conservation Council, Before the Senate Interior Committee Regarding Preservation of the New River, May 20, 1976, Transcript from National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on Public Lands, U.S. Senate, N-V, 1976, Box 2, Folder 8, ASU. Testimony of Ray Rimmer of Appalachian Outfitters, Before the House Rules Committee, July 30, 1976, Transcript from National Committee for the New River Papers, Dam Fight Series, Testimony Subseries, Before the Subcommittee on National Parks and Recreation, U.S. House, N-S, 1976, Box 2, Folder 4, ASU. Congress, Senate, Committee on Interior and Insular Affairs, Subcommittee on Environmental and Land Resources, *New River*, 94th Cong., 2nd sess., 20 and 21 May 1976. House Committee on Interior and Insular Affairs, *Amending the Wild and Scenic Rivers Act (82 Stat. 906; 16 U.S.C. 1271)*, report, 94th Cong., 2nd sess., 14 June 1976. Senate Committee on Interior and Insular Affairs, *Designating a Segment of the New River, North Carolina, as a Component of the National Wild and Scenic Rivers System*, report, 94th Cong., 2nd sess., 16 June 1976. Schoenbaum, *The New River Controversy*, 166-181. Foster, *The Past is Another Country*, 132.

CONCLUSION

> "When the time comes for the historian to tell the story of these troubled times, I believe he will recount a tale of unbelievable clumsiness, irresponsibility and missed opportunities, with the resulting national agony."
>
> -Donald C. Cook, Chairman,
> The American Electric Power Company[164]

In this thesis, I have argued that the fight against the Blue Ridge Project began as a local issue involving the preservation of ancestral lands, an agrarian way of life, and love for a free-flowing river. However, if left alone, local residents could not have won the fight against the dams. Project opponents' efforts were successful due to the aid provided by national environmental groups and the applicability of new legislation to their cause. The history of the Appalachian Power Company and its early developments along the New River found in this thesis provides an important context that helps the reader more fully understand the importance of the American environmental movement to the defeat of the Blue Ridge Project. Though only a master's thesis, this work seeks to contribute to the history of the New River, the Appalachian Power Company, private development in the southern Appalachian Mountains, the growing body of eastern river studies, and the larger American environmental movement. This thesis also offers the story of the Blue Ridge Project as a lesson for those interested in opposition to large, environmentally unsound developments on waterways and elsewhere. During the controversy, project opponents had to shift strategies regularly, often putting many forces into motion at the same time in different legal arenas. In spite of the lobbying

[164] "The Energy Crisis Revisited," Address by Donald C. Cook, Chairman of the American Electric Power Company, Inc., before the Charleston Area Chamber of Commerce, Charleston, West Virginia, Transcript from New River Papers, Dam Fight Series, Reports, Box 1, Folder 6, ASU.

efforts of energy interests and big business, environmentalists prevailed due to the applicability of new federal legislation to their cause. Though much of the same environmental legislation is still in place, after the defeat of the Blue Ridge Project the political climate in the United States shifted and hampered its effectiveness.

The strength of the environmental legislation created during the 1960s waned considerably towards the end of the 1970s. In 1977, Congress reorganized the Federal Power Commission, renaming it the Federal Energy Regulatory Commission (FERC). The FERC promoted "gradual deregulation," developed "simpler" approval procedures, and eliminated "direct oversight of utilities." The Council on Environmental Quality's (CEQ) executive influence has since declined considerably. Post-Watergate legislation made the executive branch more accountable to the public, while lessening the CEQ's advisory role. During his presidency, Ronald Reagan fired its entire staff and drastically reduced its budget, greatly inhibiting its influence and capability. However, the CEQ remains today, despite repeated attempts to eliminate it.[165]

The importance of the environmental impact statement cannot be overstated. If the FPC required an impact statement before the flooding of Claytor Lake in the late 1930s, what would it have found? Claytor Dam was dangerously close to one of the oldest routes west for Virginia settlers, the Wilderness Road. It definitely inundated a historical fort location and the area's Dunkard settlement, leaving behind only a road named "Dunkard's Bottom." What valuable archeological and historical information is buried deep in Claytor Lake? We may never know. What was lost under Bluestone Lake? Though the area was not as historically populated or heavily traveled, it is

[165] J. Brooks Flippen, *Nixon and the Environment* (Albuquerque: University of New Mexico Press, 2000), 46, 50-51. Government in the Sunshine Act of 1976, P.L. 94-409. Lynton Keith Caldwell, *The National Environmental Policy Act: An Agenda for the Future* (Bloomington: Indiana University Press, 1998), 72, 100, 159-160. Federal Energy Regulatory Commission, "Student's Corner: History of FERC," available from: http://www.ferc.gov/students/whatisferc/history.htm.

impossible to know. A recent drought uncovered ancient settlements and the gorgeous scenery of Utah's Glen Canyon, as the edges of man-made Lake Powell (1969) receded following reduced snowfall levels. Perhaps a similar drought might reveal what lies beneath Claytor and Bluestone Lakes, though it would be disastrous for area farmers and residents.[166]

The notoriety that the New River gained during the battle against the Blue Ridge Project has made it a popular recreation destination. After the defeat of the dams, more vacation homes appeared along the river, especially in the upper valley, and a greater volume of tourists sought to canoe the New. A greater consciousness about the river emerged and today its entire length is celebrated for excellent fishing, canoeing, and white-water rafting. The New River Gorge National Park, or the "Grand Canyon of the East," was established in 1978 to protect that section of the river in West Virginia. Whitewater kayakers from as far away as New Zealand know of the gorge's tough rapids. The gorge also represents West Virginia on its 2005 issue state quarter. One hardly hears about the New without learning that it is the second oldest river in the world, even in travel brochures found at rest stops along interstate highways in Virginia, West Virginia, and North Carolina. In 1998, President Clinton traveled to Ashe County for a ceremony that designated the New as one of fourteen American Heritage Rivers. In the town of Boone, which the river's headwaters drain, signs on sewer covers warn potential polluters not to litter, telling them that what goes into the roadside gutters ends up in the New River.[167]

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[166] Daniel Glick, "A Dry Red Season: Drought drains Lake Powell – uncovering the glory of Glen Canyon," *National Geographic* 209:4 (April 2006), 64-81.

[167] Edmund Adams, interviewed by Cooper and Cooper, in *The People of the New River*, 222-227. Adams, *Far Appalachia*, 158, 234. Donald Sheets, interviewed by Cooper and Cooper, in *The People of the New River*, 232. United States Environmental Protection Agency, "New River (NC, VA, WV): An American Heritage Designated River," available from: http://www.epa.gov/rivers/98rivers/new.html.

That is not to say that the river is unpolluted, or safe from pollution outside of its upper drainage. Industrial manufacturing plants in the Virginia region of the New River began using polychlorinated biphenyls (PCBs) as lubricants, coolants, paper coatings, hydraulic fluids, plasticizers, inks, paints, adhesives, and insulators as early as 1931. Although PCBs were outlawed in 1977, a large amount had already settled on the floor of the New River. Below Claytor Lake, carp and catfish pick them up off the river bottom with their food. In Claytor Lake, largemouth bass, smallmouth bass, striped bass, walleye, and all sunfish varieties are affected. The Environmental Protection Agency considers PCBs carcinogens that can affect the immune, reproductive, and nervous systems. They can also harm glands, skin, eyes, and the liver, as well as increasing blood pressure and cholesterol. There is also speculation that PCBs have damaged the historically abundant smallmouth bass population of the lower New River. A sizeable manufacturing district still exists around Radford. The largest plant makes rocket fuel for the U.S. Army and owns an entire horseshoe bend in the river that is the size of a small town. Down the river towards the West Virginia border, a Celanese Plant on the riverbanks in Narrows, Virginia, manufactures cigarette filters and emits a papery smell, as it has for over 65 years. Much farther downriver, deep in West Virginia, you can still see the many industrial plants and energy companies along the Kanawha River. Numerous barges loaded with coal move up and down the man-made bodies of water created by the river's locks. Drive up Interstate 77 north to Charleston, and you will see the Kanawha's barges, locks, and industries parallel to the road several miles before you see the capital of West Virginia.[168]

[168] Tim Thornton, "Troubled Waters: Many of Southwest Virginia's lakes and rivers now carry warnings about contaminants in fish," *The Roanoke Times* (April 10, 2006), Sec. A, p1. Richard Severo, "Decision is Awaited on Move by State to Bar Dumping PCB's in the Hudson," *The New York Times* (Jan. 3, 1976), p25. Noah Adams, *Far Appalachia: Following the New River North* (New York: Delacorte Press, 2001), 105, 109-110, 131. In 1943, the Appalachian Power Company's attorneys, the Farrier law firm, told Celanese not to worry about dumping its fly ash

Despite concerns about PCBs and the existence of Claytor and Bluestone Lakes, the waters of the New River upstream from West Virginia contain a relatively unaltered ecosystem. This portion of the river supports many rare and endangered aquatic species, as well as some of the best fishing on the East Coast. The upper New River's north and south forks provide an excellent trout habitat and the portion in Virginia has produced state-record smallmouth bass, walleye, spotted bass, and muskellunge. Above Claytor Lake, a unique species of southeastern river spawning walleye exists. Today, the New River has one of the highest levels of aquatic biodiversity on the East Coast. It is home to many threatened and endangered species of minnows, salamanders, mussels, and some of the rarest aquatic snails in North America. Siltation from continuing residential and road development along the river, pesticides, leaking septic systems, and black water spills from coal mining still threaten aquatic life in the New River.[169]

Many lands slated for flooding in Grayson, Alleghany, and Ashe counties remain somewhat abandoned. You can see them today while driving south from Mouth of Wilson, Virginia, on highway 16 along the New River and its North Fork. Abandoned farmhouses and miles of open land exist in the area, interrupted by a few Christmas tree farms and cattle fields. This leaves a ready land market for tourists, many from Florida,

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directly into the New River. Celanese Corp. of America (fly ash opinion) File, Farrier Family Papers (Ms74-001), Box 15, VT. Virginia Department of Health, Division of Health Hazard Control, "New River Basin," available from: http://vdh.state.va.us/HHControl/NewRiver.asp.

[169] George C. Palmer, "Genetic Characterization of Intermixed Walleye Stocks in Claytor Lake and the Upper New River, Virginia" (M.S. Thesis, Virginia Polytechnic Institute and State University, 1999), page ii-iii. Jess Clarke, "Protecting a Global Hotspot of Biodiversity in Virginia," *Appalachian Voice* (Late Summer, 2005), 12-13. The Appalachian Power Company, *An Economic Survey of Twenty-Two Coal Producing Counties Located in Southwestern Virginia and Southern West Virginia* (Bluefield, WV: Appalachian Power Company, 1959), 3. Schoenbaum, *The New River Controversy*, 45-46. Virginia Department of Game and Inland Fisheries, "VA State Record Fish List," available from: http://www.dgif.state.va.us/fishing/state_record_fish.html. United States Environmental Protection Agency, "Pesticides: Endangered Species Protection Program, Pulaski County, Virginia," available from: http://www.epa.gov/espp/virginia/pulaski.htm.

who visit the region often for local ski mountains, cheap land values, and the natural beauty of the highest area on the East Coast. Boone's Appalachian State University continues to expand, creating more pollution for the upper New River to absorb. Christmas tree farming is the most popular and profitable agricultural product in the region, but cattle and sheep farming remain important, as does North Carolina's only cheese plant in Ashe County. In the words of Ed Adams, the economy in the North Carolina section of the upper New River Valley is "in good shape." However, I have heard that recently, as manufacturing jobs leave Grayson County, Virginia, many local people express regret about the defeat of the Blue Ridge Project. In their minds, the two dams and state park would have brought many new jobs into the area. Of course, it is more difficult to blame globalization than environmental advocates for sustained job loss.[170]

After the wild and scenic river designation, the Securities and Exchange Commission ordered American Electric Power's real estate company, Franklin Realty, to sell all lands acquired for the project along the New River. By that time, much of the farmland they purchased had been out of production for years, creating financial losses that hindered the strength of the local economy. In their 1976 annual report, the private utility admitted to a limited "growth of operating revenues." However, the Appalachian Power Company and the American Electric Power System did not see sustained economic damage after the defeat of the Blue Ridge Project. In 1989, AEP still generated more electricity for resale than any private utility in the nation.[171]

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[170] Edmund Adams, interviewed by Cooper and Cooper, in *The People of the New River: Oral Histories from the Ashe, Alleghany and Watauga Counties of North Carolina*, 224-226. Adams, *Far Appalachia*, 27.

[171] Rose Gambill, interviewed by Leland R. Cooper and Mary Lee Cooper, in *The People of the New River: Oral Histories from the Ashe, Alleghany and Watauga Counties of North Carolina* (Jefferson, NC: McFarland & Company, Inc., Publishers, 2001), 20. Stephen William Foster, *The Past is Another Country: Representation, Historical Consciousness, and Resistance in the Blue Ridge* (Berkeley: University of California Press, 1985), 132. The Appalachian Power

The Appalachian Power Company still dominates electrical development in the lower New River Valley. Its coal burning plants at Glen Lyn and Bristol continue using 1950s technology, with only inexpensive precipitators to catch ash. Appalachian Power delays installing massive filters, or scrubbers, on its smokestacks, which could greatly reduce sulfur dioxide pollution, saying that it would cost two-hundred-seventy-million dollars to clean up both plants. Once again, environmental critics suggest that Virginia look at the example of North Carolina, whose 2002 Clean Smokestacks Bill not only provided cleaner air but also created manufacturing and construction jobs. The utility's actions and methods earned it a negative image in the entire New River Valley. In 1990, Appalachian Power announced plans to construct a 765,000-volt power line across national forest land and the New River from Wyoming, West Virginia to Botetourt County, Virginia. The utility claimed that if the line was not built, the area would suffer power shortages. Residents expressed environmental, land, and health concerns, writing thousands of letters against the high-voltage power line. They succeeded in delaying the project for thirteen years and changing the route of the line, which is now constructed. In 2000, a census taker in the Blacksburg region eventually had to make a sign saying "I am not from the Appalachian Power Company" so that riverside property owners would not fire warning shots at her as she approached their land. She only made the sign after growing tired of yelling the phrase while approaching area residents' homes.[172]

Company, *Annual Report 1976* (American Electric Power System: 1977), 20. Frank J. Calzonetti, "Introduction," in *Power from the Appalachians: A Solution to the Northeast's Electricity Problems?*, eds. Frank J. Calzonetti, Timothy Allison, Muhammad A. Choudhry, Gregory G. Sayre, and Tom S. Witt (New York: Greenwood Press, 1989), 6.

[172] Steve Wussow, "Paying for Clean Air… Elsewhere: Southwest Virginia Still Lost in the Loopholes of Pollution Law," *Appalachian Voice* (Late Winter 2006), 12-13. Paul Dellinger, "End of the line," *The Roanoke Times* (May 9, 2006), available from: http://www.roanoke.com/news/roanoke/wb/64323. Heidi Lockhart Utz, "Collective Identity in Appalachia: Place, Protest and the AEP Power Line" (M.A. Thesis, Virginia Polytechnic Institute

The New River continues to flow as it has for hundreds-of-millions of years. The notoriety the river gained during the Blue Ridge Project has since prevented environmentally unsound large-scale developments along its banks, and will help it remain as natural as possible for the enjoyment, recreation, and sustenance of generations to come. The greatest present-day threat to the New River is reckless development, concern about pesticides and herbicides in the Christmas tree fields, the lingering effects of PCBs, and the continued existence of heavy manufacturing along its banks. However, thanks to the efforts of local people and environmentalists, the New River has a strong chance of avoiding further developments that would completely destroy its cleaner, scenic qualities. This thesis is dedicated to the hopeful future of the mighty and beautiful New River.

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and State University, 2001), 1-6. The Appalachian Power Company, “Wyoming-Jacksons Ferry 765 kV Project,” available from: http://www.appalachianpower.com/news/765kv/default.asp.

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1. National Committee for the New River Papers
2. New River Papers

VT Special Collections, Digital Library and Archives, University Libraries, Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

1. Graham W. Claytor (1886-1971) Papers, 1907-55 (Ms81-095)
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