THE UNEVEN GEOGRAPHY OF RIVER CONSERVATION IN THE U.S.:

INSIGHTS FROM THE APPLICATION OF THE

WILD AND SCENIC RIVERS ACT

by

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DISSERTATION ABSTRACT

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Rivers are vital for sustaining biodiversity and human development, yet globally only a small fraction of rivers enjoy protection and those with protections are often impaired or modified. Rapid rates of freshwater species' extinctions indicate current conservation practices are failing. Despite over fifty years of scientific evidence justifying river conservation, it remains that less attention is focused on protecting ecosystems than on developing water resources for economic growth. This disparity is indicative of the 'nature as resource' versus 'conservation of nature' paradigm. Today, this paradigm is complicated by new attentions centering both on water resource development projects and conservation policy as climate change adaptation strategies. Policies protecting rivers are recommended for contending with more intense storms and flooding, increasing resilience for species, forests, and agricultural areas, and fostering some types of water security. Creating, implementing, and managing climate adaptation policies will require a strong state presence in water resource governance. We know, however, the aforementioned paradigm hinders conservation policymaking. Therefore, understanding how conservation policy has already been rationalized, implemented, and managed is critical to advancing

climate adaptation policymaking. Yet, little empirical research has been conducted on federal river conservation policy creation or application across the U.S.

To that end, this dissertation, presented in three discrete original research articles, examines the National Wild and Scenic Rivers System. Specifically, this study investigates the socio-ecological drivers behind the creation of the Wild and Scenic Rivers Act of 1968 and the spatial dimensions of the policy's application and management over time. This study is grounded empirically in extensive archival materials, interviews with federal land management agency personnel, conservation advocates, and technical experts, as well as spatial and temporal analysis of a geodatabase. Together, these methods were employed to answer the following research questions which guide this study:

(1) What factors influence the temporal and spatial distribution of river segments protected under the Wild & Scenic Rivers Act?

(2) What does the history of management in designated segments suggest about emerging trends and patterns in river conservation?

(3) How are competing environmental values and ideologies understood and reconciled in the context of river conservation?

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[1] Newton, Isaac. "Letter from Sir Isaac Newton to Robert Hooke". Historical Society of Pennsylvania.

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This dissertation is dedicated to my children Bodhi Kai and Rio Ash.
You are my sunshine on these rainy Oregon days.

TABLE OF CONTENTS

Chapter Page

Chapter Page

LIST OF FIGURES

Figure Page

Figure Page

LIST OF TABLES

CHAPTER I

INTRODUCTION

"We must begin thinking like a river if we are to leave a legacy of beauty and life for future generations." — David Brower

Stepping away from boisterous bidders at a silent auction to a quiet space in Boise's Riverside Lodge, longtime river advocate Thomas O'Keefe of American Whitewater, states matter-of-factly, "The adjectives 'Wild and Scenic Outstandingly Remarkable Values' just don't get politicians on your side." Referring to advocacy efforts to advance river protection through the Wild and Scenic Rivers Act (WSRA hereinafter), O'Keefe highlights a general sentiment held by many conservation advocates and river managers – there is a lack of political will exhibited by many Congressional delegates for legislative initiatives to bestow permanent protection on the nation's river resources. As we stroll along, I suggest reframing what are commonly referred to as ORVs as ecosystem services, giving him the pitch about how they depart from "old" conservation norms of protecting cute critters to a "new" logic that positions ecological processes in line with constituents (Dempsey, 2016). As I finish, he exclaims, "That's the missing link!"

Thomas's enthusiasm comes with a recognition that such a framing situates biodiversity and river conservation within the dominant political-economic field by placing value on the ecosystem processes upon which humanity depends, (e.g., species' habitat, fresh water, food, flood mitigation, cultural values, and recreation) (MEA, 2005) – an approach that in turn provides policymakers a tool to evaluate tradeoffs between development and conservation (Liu, Costanza, Farber, & Troy, 2010). To get a river designated, as many of my subsequent interview subjects would come to tell me, "it takes

a champion," a politician willing to spend their social capital on a river. And to politicians, "Dollars matter" (IV16, 2016).

Winding our way back to see who would win a multi-day adventure with OARS down the famous Yampa River, our conversation returns to the hubbub of fundraising activities in this rambling space along the banks of the Boise River. In the Grand Ball ballroom, we are surrounded by nearly four hundred conservation-minded river professionals gathered for a week-long symposium held by the River Management Society (RMS, 2016). Every two years, federal land management personnel, advocates, activists, and scholars migrate from across the country to a riverfront host city for networking and training opportunities facilitated by these symposiums (2016's theme was *Rivers and Recreation in a Changing Climate*). A wide range of experts coalesce at these meetings to gain or share technical expertise related to river management and conservation. Professionals represent the fields of landscape architecture, stream ecology, natural resource management, geography, outdoor recreation management, and law, among others. Notwithstanding attendee accreditation, the auctioning of donated items serves as reminder that overall less attention is focused on the conservation of river ecosystems than on expanding water resources development (Butchart et al., 2010; Vörösmarty et al., 2010).

Freshwater habitats are estimated to support 126,000 species of fish, mollusks, reptiles, insects, plants, and mammals collectively (IUCN, 2017). Despite over fifty years of scientific evidence justifying conservation, globally a small fraction of rivers enjoy protection, and those that do are often impaired or modified (Abell, Allan, & Lehner, 2007; Ormerod, 2014). In the United States there are somewhere between 75,000 (Graf,

1999) and 90,500 dams fragmenting watersheds for hydropower, irrigation, municipal use, navigation, flood control and recreation (ASCE, 2017). Of this estimated range of dams, 9,200 are considered large dams, towering 15 meters or more (International Rivers, 2016). Globally, there are 58,519 large dams and countless thousands of lesser size dams (ICOLD, n.d.) situated on 65 percent of the world's rivers. With more than 50 percent of available freshwater and 25 percent of the global sediment load trapped behind foreboding barriers (Strayer & Dudgeon, 2010), dam development is exemplary of the tensions between pressures for economic development and biodiversity conservation (Gleick, n.d.; Vörösmarty et al., 2010).

Compounding alterations to river ecosystems, diversions, lateral confinement and channelization, and pollution from point and non-point sources factor into river degradation (Bernhardt & Palmer, 2011; Harden et al., 2014; Strayer & Dudgeon, 2010; Wohl, 2005). A striking 65 percent of river habitat is already threatened at moderate to high levels as a result of water engineering projects and pollution (Vörösmarty et al., 2010). Consequently, estimates place the number of species that are extinct or endangered as a result of these modifications somewhere at between 10,000 to 20,000 (between 7 and 15 percent of all species) (IUCN, 2017; Strayer & Dudgeon, 2010; Vörösmarty et al., 2010). Wilson (1988) and Myers (1988) found that while extinctions are a part of life on Earth, current extinction rates are rising exponentially as compared to the "background rate" of extinctions (as quoted in Dempsey, 2016, p. 38). Climate change, population growth, and political agendas are likely to intensify these trends, further troubling river ecosystems.

As the RMS symposium theme suggests, climate change poses increased concerns for river managers working to protect biodiversity. Already complicated dynamics of balancing conservation and development are poised for further stress by hydrological changes and growing population demands for water resources (Amos, 2006; Chan, Shaw, Cameron, Underwood, & Daily, 2006; Strayer & Dudgeon, 2010). Even while debates persist on whether hydropower constitutes renewable, clean energy (see for instance IPCC, 2008; Tortajada, 2014; Scudder, 2005; Zinn, 2007), dams are receiving renewed attention as climate change adaptation solutions to meet increasing energy demands (Green Climate Fund, n.d.; UNESCO, 2009), control flooding (IPCC, 2008), and provide water for irrigation (Perry & Praskievicz, 2017). Albeit bleak, conversations in Boise signal a potential future for freshwater biodiversity far different from what the current scenario of threatened biodiversity suggests. *If* conservation policy can be more broadly supported and applied, there is hope.

With the 50th anniversary of the Wild and Scenic Rivers Act drawing near in 2018, conservation advocates are looking to expand protection to at least 5,000 additional river miles (American Rivers, 2017). Moreover, as biodiversity is increasingly linked to ecosystem services provided to society by rivers (Henstra, 2015; IPCC, 2008; Palmer et al., 2008; Thompson, 2015; UNESCO, 2009), countries around the globe are pursuing conservation policies to balance their development trajectories (Harrison et al., 2016; Moir, K., Thieme & Opperman, 2016). Multilateral environmental agreements are striving to protect biodiversity for its potential production value (Collard & Dempsey, 2017). For instance, the Convention on Biological Diversity (CBD) Aichi Biodiversity

targets[2] for 2020 called on countries to conserve and manage freshwater ecosystems and their services to promote adaptation and resilience to climate change impacts on water resources (CBD, 2010; Harrison et al., 2016). Resilience is the capacity of a complex system to maintain its structures and processes in the face of external pressure and internal change (Garmestani and Benson, 2013). The basis for climate adaptation is to make adjustments address real or expected climate changes in the service of socio-ecological resilience (Henstra, 2015). Ecosystem-based adaptation measures are considered to be low-cost win-win solutions for adaptation that can supplement or replace hard infrastructure investments that are typically more expensive (Munang et al., 2013).

Implementing and enforcing such policies for climate change adaptation and ecosystem protection at a large scale will require the involvement of the state since the private sector and community based organizations lack the capacity and/or the will to address broadly reaching impacts. Parenti (2015) proposes that the state build upon the environmental legibility acts it already conducts to create adaptation policies. According to Scott (1998) legibility –or the state's way of controlling territory and governing resources by making them legible through exercises such as surveying, inventorying, cataloging, making laws and policies, and managing natural resources—is central to the state territorial project. Legibility acts are conducted to *territorialize* natural resources. States employ these exercises for numerous purposes, among them to promote and maintain the state's legitimate role to govern its territory and people, to distinguish the

[2] The CBD meeting in Aichi, Japan set out 20 targets fitting within five strategic goals: A) Address causes of biodiversity loss by mainstreaming biodiversity across government & society; B) Reduce pressures on biodiversity & promote sustainable use; C) Improve biodiversity status by safeguarding ecosystems, species & genetic diversity; D) Enhance benefits to all from biodiversity & ecosystem services; E) Enhance implementation through participatory planning, knowledge management & capacity building (CBD, 2010).

bounds of resource governance in a federalist system, and to serve as mediator and adjudicator in matters concerning the public and/or private sectors.

First, governments are entrusted to provide for the safety and wellbeing of their population. As representatives of the people, when governments are called to task to maintain a healthy environment and avenues toward prosperity, the state must respond or risk losing its legitimate right to govern people and territory (UNESCO, 2009). Against that backdrop, legibility exercises can serve to provide basic resources and security to citizens through water resource infrastructure projects that supply drinking water and sanitation and/or provide electricity. In addition, legibility exercises function to ensure the quality of the environment through regulations that limit emissions and effluent.

In federalist states, such as the United States, governance responsibilities are devolved or shared across distinct levels of government –from the national to state and local municipalities (Doyle, 2012). Water rights are largely left to state laws, though exceptions exist (i.e. where federal or tribal entities maintain reserved rights). Legibility exercises such as resource surveys and inventories can render the environment legible to the responsible governing bodies. The National Hydrography Dataset, an inventory of the nation's water resources, can inform decisionmakers across the United States. Once resources are made legible, governments can formulate institutions –laws, policies, and programs –to manage and adjudicate those resources across scales such as in the case of tribal water rights in the U.S. Southwest (Perramond, 2013).

The next application of legibility stems from the last. Through the establishment of laws and policies, the state renders the public and private sectors legible and thus governable. That is to say, through a system of codes, laws, and courts, the state serves to

mediate and adjudicate rights among private entities and between the public and private sector (i.e. property and water rights). The Clean Water Act, the Prior Appropriation Doctrine, and riparian rights are but a few examples of such policies.

Reflecting then on Parenti's call to engage legibility for climate adaptation, there are numerous models of environmental policies that can be adopted to promote policy adoption for any given sector. For rivers, many countries are turning to the United States WSRA for such a model in the absence of a proprietary river conservation policy. For instance, Chinese scholars attending the RMS symposium in Boise came looking for insights from the Wild and Scenic Rivers System to apply to select rivers in their own country.

Research Problem and Context

The first policy of its kind in the world, the National Wild and Scenic Rivers Act of 1968 set out to protect rivers of unique national and regional significance (WSRA, 1968). Federal land management agencies were mandated to survey and inventory free-flowing rivers and their Outstandingly Remarkable Values for possible inclusion in the system. This dissertation frames this exercise, in line with Scott (1998), as a state act of legibility, or the surveying, cataloging, and governance of natural resources. As of May 2017, the legibility exercise conducted through the National Wild and Scenic Rivers System has come to protect 12,708.8 miles of river through 227 distinct designations over the course of nearly 49 years (WSR, n.d.-a). For comparison, there are over 250 thousand rivers coursing over 3.5 million miles in the United States (NOAA, n.d.). The tiny fraction of overall protected river miles raises myriad questions about the factors shaping the application of the policy. Reading any map of the system reveals clusters of

designations concentrated in certain areas, whereas others are devoid of any Wild and Scenic River. These spatial variations beg the question of what influences the uneven distribution of a policy seemingly designed for broad application. With designations in 40 states and Puerto Rico, what role does territory play in conservation decision-making? If O'Keefe is correct about ORVs not sparking political interest in conservation, what does actually work to produce protective actions for river resources?

Aside from objective technical papers detailing the policy authorities and management criteria (Brougher, 2008; Diedrich, 1998; Diedrich et al., 1999; Diedrich, 2002; WSR, n.d.-b, 2014; Marsh, 2014), there is a paucity of literature critiquing the dynamics around the management and authority of the WSRA, though there are a few key pieces (Bonham, 2000; Burce, 2008). Moreover, the work this policy does to protect river ecosystems is virtually invisible. As conservation policies are increasingly championed as mechanisms to adapt to climate change, increase resilience of human-ecological systems, and promote sustainability, the lack of critical analysis troubles the potential use of the WSRA and other policies for such purposes (Abell et al., 2007). To that end, this project investigates how river resources are rationalized and managed through acts of legibility in relation to the WSRA and ORVs. In this examination, the project plumbs new veins of understanding about *territory*'s role in conservation and fills a recognized void in analyses of the implications of *ecosystem services* (Barnaud & Antona, 2014).

This study builds on the general understanding of legibility as a reductionist action deployed by the central state to simplify and make efficient the management of resources as part of its territorial project. But this study is unlike Scott's (1998) findings

that legibility in practice can inadvertently prove detrimental to abstracted nature and adjacent communities –findings reiterated in other studies examining legibility's role in the territorialization of water resources (see for instance Linton, 2014, Perramond, 2013, Kirsch 2002). Instead, this dissertation expands thinking on legibility, shedding light on potential positive outcomes of the state exercise on water. Following McCarthy (2002), legibility can be deployed as a mechanism to address environmental problems or conflicts in a federalist state system. Moreover, policy frameworks designed to render resources legible across jurisdictions can in turn render decision-making transparent and accessible for stakeholders across scales. Ultimately the utilization of legibility acts has the potential for both positive and negative outcomes.

By applying the legibility concept to the WSRA this study sets out to examine the federal government's attempt to restructure its authority over river resources. It also undertakes an examination of prior state acts of legibility that laid the foundation for the WSRA and regulatory policies germane to river conservation today. Through exploration of these themes, this dissertation advances state theory on the *territorialization of water resources.* New advances by this dissertation in theoretical understanding of *first world political ecology* (Walker, 2003; McCarthy, 2002) are accompanied by much needed analyses of the interactions between conservation policies and the environment (Vaccaro, Beltran, & Paquet, 2013). Three research questions guide this study:

(1) What factors influence the temporal and spatial distribution of river segments protected under the Wild and Scenic Rivers Act?

(2) What does the history of Wild and Scenic River governance suggest about emerging trends and patterns in river conservation?

(3) How are competing environmental values understood and reconciled in the context of river conservation?

Drilling down to specifics, this study asks what environmental values and knowledge factored into the initial creation and application of the Wild and Scenic Rivers Act, how that has changed over time, and what system-limiting factors exist. The aim of these questions is to unpack the "nature as resource" versus "conservation of nature" paradigm to understand how and why river resources are protected and managed, or not. Ultimately, the goal of this study is to contribute to an understanding of how conservation governance can be improved to do more work for river ecosystem protection both in the United States and abroad.

Literature Review

My efforts to deal with an unequal and sparse application of river conservation policy in the world necessitated engagement with four bodies of literature. First, state theory on the *territorialization* of water resources particularly informed my approach to understanding political ecology literature focused on First World regional analysis. A ripe body of ecosystem services literature in turn grounded works on climate adaptation and policy.

Making Water Legible as a Territorial Project

Territory constitutes the basis for organization of the modern state system. Thus, understanding territoriality theory (Sack, 1983) is important, as it informs work on state authority over certain geographic regions (Murphy, 1996; Murphy, 2013), resources

(Vandergeest & Peluso, 1995), and conservation spaces (Holmes, 2014; McCarthy, 2002; Vaccaro, Beltran & Paquet, 2013; Zimmerer, 2000). As state economic priorities evolve, the territorial project depends on scientific practices of legibility as they relate to the environment – practices that are often pursued as part of a quest for capital accumulation and legitimacy. Perhaps the most vital resource for centralizing state power is water (Bakker & Morinville, 2013; Linton, 2014; Wittfogel, 1957).

Legal scholars point to law's role, across scales, in facilitating legibility (Tomlins, 2012) through federal projects that have led to the commodification and development of U.S. water resources: the Land Ordinance of 1785 and Public Land Survey System, the Homestead Acts, the 1855 Prior Appropriation Doctrine of water allocation, and the Hardrock Mining Law of 1872 (Benson, 2012; Gates, Getches, MacDonnell, & Wilkinson, 1993; Wilkinson, 1992). The Federal Reclamation Act of 1902 and (after 1933) the Tennessee Valley Authority reconfigured river flows through dam, reservoir, and canal construction (UNESCO, 2009; Wilkinson, 1992; Worster, 1985). Environmental historians and political ecologists argue that these foundational state policies and projects led to the territorialization of water resources for economic expansion and consolidation of federal power in the West (Worster, 1985; Meehan, 2012) –often at the expense of non-human nature. Thus, following major federal efforts to develop water resources for capital accumulation, concern with reproducing capital led to the development of conservation policies (Kelly, 2011; Roberts, 2008) founded in legibility exercises.

Conservation initially helped to promote industrial development without concern for the environment per se. National reserves and management agencies were established

through legibility exercises. For instance, National Forests containing headwater streams were delimited and the U.S. Forest Service was established to manage them. In this era, a patchwork of National Parks was diverted from development's path to be preserved instead as tourism spectacles operated by the National Park Service (Brulle, 2000, Hays, 1999; Kelly, 2011).

Decades later, the environmental impacts of economic development led to species decline and significant air and water pollution, threatening a burgeoning tourism industry and national health. In response, conservation again arrived through legibility, with the establishment of protected natural areas and regulatory policies not only for the reproduction of capital, but also for state legitimacy and preservation purposes: the Wilderness Act of 1964 (Olson, 2010), the Clean Water Act of 1972 (Doyle, Lave, Robertson, & Ferguson, 2013) and the Endangered Species Act of 1973 (ESA) (Gerrard, 2015). These Acts, along with McCarthy's (2002) study on Wise Use, suggest that centralized state-resource governance through legibility is not always negative, but that they can in fact provide positive social and ecological consequences, findings that break from previous assessments of legibility. Yet federal river conservation remains unstudied. I depart from this point to investigate the National Wild and Scenic Rivers System as a state territorial legibility exercise of river conservation in a federalist state system.

First World Political Ecologies of the Region

Most political ecologists lean on Marxist notions of the commodification of nature for capital accumulation (Braun & Castree, 1998; Escobar, 1996; Katz, 1998), integrating an analysis of political economy and ecological studies (Peet & Watts, 1996)

to examine uneven power dynamics in relation to environmental disputes (Baldwin & Stanley, 2013; Bryant, 1998). The region provides an appropriate scale for addressing many First World political ecology questions rooted in the complex relationships among and between territory, knowledge, policy, and power (Robbins, 2006; Walker, 2003). For instance, the marked distinction from east to west in U.S. water rights regimes makes regional analysis appropriate for understanding questions that arise when adaptive management policies are applied and governance configurations are changed (Tickner & Acreman, 2013). Regional analysis further facilitates comparative studies, for example between the arid Southwest and the Andes (Scott et al., 2013). Work on modern capitalist transformations in rural areas provides a lens to examine regional trends in the 'new west' (Schroeder, St. Martin, & Albert, 2006; Sheridan, 2007; Walker, 2003; Walker & Fortmann, 2003) where property rights and conservation tensions are increasingly central themes (Walker & Hurley, 2011). Economic restructuring in the international geography of production and consumption is marked in the West by the decline of historically dominant and economically significant natural resource industries due to increased competition, resource exhaustion, declining federal subsidies, and increased environmental regulation (McCarthy, 1998). Meanwhile, as amenity industries (Che, 2006) and data economies emerge in response to territorial competition and economic restructuring in resource-dependent areas, attracting development and new residents to rural areas where public lands are abundant, it is imperative to investigate the structural and economic disparities that affect society and ecosystems (Wilson, 2014).

Political ecology conceptions of territory, state, science, and policy are appropriate for assessing the security and adaptation strategies that conservation

organizations and government entities develop to facilitate societal and ecological adjustment to new climate regimes (Mawdsley, O'Malley, & Ojima, 2009). Institutions respond as the boundaries of protected spaces no longer align with landscapes and species (Wilson, 2014), and while actors seek to conserve nature per se (Hinchliffe, 2008). Lessons from First World political ecologies are critical to assessing and updating resource management policies (Robbins, 2006) and understanding the role of science in water resource governance (Lave, 2012).

Significant questions remain about nature commodification and capital accumulation through a neoliberal economic valuation of ecosystem services (Gomez-Baggathun & Ruiz-Perez, 2011). In turn, these services comprise part of the current U.S. federal conservation expansion plan (Darst, Huffman, & Jarvis, 2009). As political ecology narratives surface during protected area expansion and retirement of traditional land uses, the call to look "up" towards the state remains germane. Moreover, since First World capitalism is responsible for climate change (Wainwright, 2010) identifying embedded social, political, and environmental structures that perpetuate climate change is critical for developing adaptation strategies (Cosens, Gunderson, Allen, & Benson, 2014; Meehan, 2012).

Ecosystem Services as a dominant political-economic discourse

Society depends on nature for human well-being and economic activity derived from the goods and services ecosystems provide, such as biodiversity, fresh water, food, recreation, and natural infrastructure (Boyd, 2010; Boyd & Banzhaf, 2007). As public goods and services that otherwise traditionally have no market value, ecosystem service valuation seeks to place value on these services and goods (Braat & de Groot, 2012;

Collard & Dempsey, 2017). Purportedly this process is neutral and objective. Ecosystem services are made legible to state and capital through an accounting calculus for optimizing the services non-human nature provides –all the while attempting to avoid the problems Scott (1998) found in abstractions of nature (Dempsey, 2016).

Ecosystem services are much critiqued by geographers for lacking consistent framings and applications (Barnaud & Antona, 2014; Dempsey, 2013; Kull, Arnauld de Sartre, & Castro-Larrañaga, 2015), for neoliberalizing nature (Robertson, 2004), and for commodifying ecosystems (Dempsey & Robertson, 2012). Yet, ecological economists praise ecosystem services as effective mechanisms for advancing conservation policy (Daily, 1997; Liu et al., 2010), as providing "a means to an end" (Dempsey, 2016, p. 5). Moreover, ecological scientists continue to use ecosystem services to rally for increased biodiversity protection and resilience in the face of climate change (Di Baldassarre, Kemerink, Kooy, & Brandimarte, 2014; Fleishman et al., 2011; Seppälä, Buck & Katila, 2009).

Quoting from Jessica Dempsey's foray to synthesize the evolution of biodiversity politics, ecosystem services can be "better understood as a political-scientific strategy to create new interests in nature, to prevent 'stupid decisions'" than as a means of creating new market commodities (Dempsey, 2016, p. 10). According to Boyd (2010), the responsibility to implement policies for sustainability and resilience rests with governments given the pubic nature of ecosystem goods and services and their need for protection and management. I depart from this point to investigate if and how ecosystem services have figured into the legibility exercise of federal river conservation and the potential this concept has for advancing biodiversity protection policy in the future.

Policy Solutions for Climate Change Risk

Ultimately climate change poses hazards and risks to society and ecosystems, an undertheorized relationship of capital and crises (Baldwin & Stanley, 2013; L. Johnson, 2013). Climate change is but the latest manifestation of society's quest to adapt to risks posed by nature (Baldwin & Stanley, 2013). To be clear, societies have been adapting to climate since time immemorial, but ecological and social changes spurred by anthropogenic climate change are occurring at accelerated rates around the globe. Thus climate adaptation in this context refers to the process of adjusting to actual or expected climate and its effects (Henstra, 2015). These changes are reflected in values regarding natural resource management and conservation policies (Fleishman et al., 2011). Perceptions of threat can influence public support for policy-making and implementation (Stern, 2000). Moreover, adaptation concepts entrenched in current political demands seemingly pique interest from decision makers, thus making policy adoption more likely (Schmidt-Thomé, Klein, Nockert, Donges, & Haller, 2013).

While all sorts of adaptation measures are advocated, path-dependent[3] engineering solutions for water resource management remain the norm (Gleick, 2003; Pahl-Wostl et al., 2008). These techno-managerial solutions are increasingly coupled with financial mechanisms to insure against risk (L. Johnson, 2013). Yet, studies find that stakeholders often prefer 'no-regrets' adaptation strategies, which offer long-term hazard protections, notwithstanding climate change (Munang et al., 2013; Schmidt-Thomé et al., 2013). Such

[3] Path dependence refers to feedback mechanisms that reinforce previous policies and projects (Olsson, Bodin, & Folke, 2010). For example, growing non-native crops on a large scale in an arid area often requires irrigation water provided by dams and diversions. Increasing demands for water resources, thus may spur supply-side investments in new dam developments or augmentation instead of demand side alternatives such as changing crop types.

strategies include the designation of public lands as ecological refuges, as well as the restoration and protection of riparian buffer areas through government entities (Boyd, 2010). Yet, conservation policy is contentious in public policy debates due to the norms and environmental values of constituents (Henstra, 2015). Moreover, little research is conducted on the decision-making process for public resources, especially for climate adaptation policy (Boyd, 2010; Henstra, 2015). Thus, identifying adaptation possibilities and needs requires interdisciplinary cooperation among scholars and between scientists and stakeholders (Adger et al., 2009; Dessai & Hulme, 2004; Schmidt-Thomé et al., 2013). Against this backdrop, and heeding Cronon's (1995) call, this project investigates conflicting ideologies in conservation policy decision-making and ORV management to begin a dialog between the academy and decision makers about the use of federal river conservation policy for climate adaptation. The study sets out to understand how the U.S. government restructures its role in water resource governance, responds to changing environmental values through policy, and approaches decision-making over contested river resources in the context of climate change. Research along these lines stands to aid policymakers and conservation practitioners in their efforts to understand how they impact society through their actions (Smith & Moore, 2011).

Explanation of the Dissertation Format

This dissertation unfolds with a chapter dedicated to the methodological approach to the study, followed by three discrete chapters in article format. The first article, "Legible Rivers, Resilient Rivers: Lessons for climate adaptation policy from the Wild and Scenic Rivers Act" draws principally on archival research to illuminate the

environmental values and political ideologies that motivated the creation of the legibility exercise to protect the Nation's water resources through the WSRA. The paper draws on policy analysis, geospatial techniques, and interviews to assess the legibility exercise's visibility, efficacy, and flexibility. In turn, these methods inform the assessment of this policy's potential to serve as climate adaptation policy. The article will be submitted to *Climate Policy* (potentially as part of a special issue on Legibility Acts and Climate Adaptation).

The second article, "A Political Ecology of Federal River Conservation: 50 years and counting of the Wild & Scenic Rivers Act" relies predominantly on interviews and spatial and temporal analysis of a GIS database to parse out the environmental values driving the application, distribution, and management of the policy over time. It undertakes the identification of regional differences in policy application and management to reveal emerging trends and patterns in river conservation. Finally it identifies areas of improvement for the policy's use as climate adaptation policy. The article will be submitted to *Environment and Planning C.*

The third and final article, "[Re] Framing Regions and Outstandingly Remarkable Values for Ecosystem Based Resilience and Adaptation" is forthcoming in a special issue of the *International Journal of Wilderness* covering the Wild and Scenic Rivers Act. The piece examines the ways the WSRA is influenced by notions of regionalization and territory in river resource management. The article also explores the limitations of these concepts for conservation purposes. It draws on spatial and temporal analysis of a GIS database, qualitative data analysis of interviews and archival documents to offer

alternative methods of framing the national conservation system within the dominant political-economic discourse of ecosystem service protection.

Key Findings

This research resulted in several broad conclusions and key themes, each of which I present here in brief. Detailed elucidation of the study, including elaborations on research methods and data analysis, empirical evidence, and detailed discussions are found in the three subsequent articles.

> **(1) The legibility exercise that is the Wild and Scenic Rivers Act, is a state attempt to reconfigure its authority over water resources in a federalist system where water governance is largely devolved to individual States.** As federal agencies survey and catalog rivers and their Outstandingly Remarkable Values, or ecosystem services, they render these resources legible for stakeholders to consider the options between development and conservation. Interest groups seeking the preservation of free-flowing waters and other resources deemed worthy of protection and enhancement look to the state for Wild and Scenic designations. River resources are territorialized by the state through the establishment of boundaries and the development of Comprehensive River Management Plans, rendering them inaccessible to certain development interests and impacts. Thus, gaining protection both requires and reifies the legitimacy of the federal government to govern land and water resources in a federalist system.

(2) The sparse and uneven distribution of the WSRA over time is the product of distinct jurisdictional genealogies governing land and water resources. Relatively large concentrations of Wild and Scenic Rivers on public lands juxtaposed against scarce designations on private lands signals that policy application is limited by discrete regional development histories and environmental priorities. As such, awareness of situated identities and environmental knowledge is vital for assessing the needs and means for both designating and managing river resources. Moreover, the legibility exercise of identifying river resources is complicated by an interagency system that exists in a variegated patchwork of regional configurations, ultimately producing inconsistent resource identification and management strategies.

(3) A strong relationship exists between designations and the larger political-ecological trends in state and federal administrations. Evidenced by lopsided trends in designation types and correlations to political administrations, this study revealed that while stakeholders may care about the preservation of water resources, environmental priorities often align more with economic growth priorities. The lack of salience with politicians in turn contributes to limited human resources and financial capacity for the National Wild and Scenic Rivers System. To engender support for advancing the policy objective, resource managers and advocates should work to frame preservation and conservation values in the dominant political-economic discourse of the day, namely in terms of protecting ecosystem services. Such a framing can make Outstandingly Remarkable Values legible in salient terms for policy-makers and constituents.

The aim of this dissertation is to further discussions of using legibility acts as climate change adaptation policy. Guided by the research questions, this study contributes to:

(1) Understanding how legibility is employed through state conservation policy to territorialize water resources in a federalist system;

(2) Discerning how the WSRA distribution across an interagency system reflects distinct regional and national political-ecological phenomena; and

(3) Understanding how linguistic and regional framings of river resources can both render conservation policy legible and illegible to stakeholders.

CHAPTER II

METHODOLOGY

Methodological Framework

This study takes a mixed methods, meta-analysis approach to understanding the creation, application, and management of federal river conservation policy across the United States over time. It was conducted in three phases over the course of 16 months between 2015 and 2017. Exemption approval from the University of Oregon's Institutional Review Board ("Human Subjects") to conduct this research was granted due to my minimal risk research protocol. The exemption is for IRB Protocol Number 01212016.025.

Semi-structured Interviews

The dissertation aims to uncover the complex nature of interjurisdictional river conservation and management in an institutional framework comprised of a federalist state system, four federal land management agencies (e.g. United States Forest Service, Bureau of Land Management, United States Fish and Wildlife Service, and the National Park service) (see Figure 1 for regional agency configurations), and two national conservation organizations (e.g., American Rivers and American Whitewater). I conducted 50 semi-structured interviews (see Table 1). Respondents were chosen based on regional configurations: one person identifying with a title of "Wild and Scenic River Program Manager" or "Lead" was interviewed from each region per agency (n=34) or advocacy group (n=12). Additional respondents included technical consultants (n=4). Interviews were conducted over the phone and lasted between 50 and 130 minutes (the average interview lasted 90 minutes). Interviews were digitally recorded and later

transcribed into text, or hand-recorded as field notes. To facilitate a fluid conversation and tone, the interviews were designed around open-ended questions, as recommended by Aberbach and Rockman (2002). The aim of this interview method is to engender a comfortable climate in which respondents felt free to draw from their reservoir of experiences, glean nuance from the surface, search the depths for premise and reasoning, and not limit themselves to a particular stream of consciousness. Respondents were asked a set of 15 semi-structured questions centered on their role in river conservation, their perceptions of the National System governance, the WSRA authority, and climate change (see Table 2).

Direct observation from professional meetings supplemented the interview data (n=2). Meetings were chosen for their broad and narrow focus. I attended the River Management Society's 2016 Symposium in Boise, Idaho, from May 16-20, 2016. This extensive meeting entailed educational sessions and networking opportunities for professionals working in matters of river conservation and management. On November 12, 2016, I attended a one-day intensive meeting of American Whitewater in Troutdale, Oregon. Here I attended a board meeting in the first portion of the day and a members meeting in the evening. During the meetings, participants discussed regional conservation challenges, institutional and policy obstacles, capacity concerns, and future programs. Field notes were hand recorded during meetings.

Following Doyle et al. (2013), I used the grounded theory approach (Glaser & Strauss, 1967) to code results, breaking up the data through abstraction to uncover the environmental discourses present in the policy process (Mazza & Rydin, 1997). In coding, I looked for patterns and developed typologies of environmental values and

policy decisions over time and space (Spencer, Ritchie, & O'Connor, 2003). Interviews were coded using NVivo Qualitative Data Analytic software, to reveal common themes. 225 codes emerged from the process, which I situated within six broad categories: 1) environmental values/ideologies, 2) location, 3) stakeholders, 4) policy, 5) capacity, and 6) science. Primary documents were collected to inform and complement the data collected from interviews and observations. Materials include the Wild and Scenic Rivers Act, technical white papers, monthly professional and advocacy news reports, and webpages associated with the each entity.

Archival Research

To understand the environmental values and political ideologies that led to the creation and initial implementation of the Wild and Scenic Rivers Act, four weeks of archival research were conducted at two archives in the National system: The LBJ Presidential Library Archives in Austin, Texas, and the National Archives at Denver. Aiming to procure primary resources that would illuminate national and regional concerns over water resource governance, I searched through archival boxes, many of which had not yet been processed or opened (LBJ (n=134) and Denver (n=17)) looking for communications between President Lyndon Baines Johnson, the First Lady, Lady Bird Johnson, Secretary of the Interior Stewart Udall, White House aides, Congressional delegates, concerned citizens, and other advisers. Other materials procured included technical and committee reports on the environment and economy, proceedings from White House conferences, policy documents related to natural resource governance, and the Congressional Record. Archival materials were photographed and later converted to PDF files for qualitative data analysis in NVivo software. Files were coded to reveal

common themes and then situated within the six categories that emerged from the interview analysis: 1) environmental values/ideologies, 2) location, 3) stakeholders, 4) policy, 5) capacity, and 6) science. This data was analyzed in an iterative process with the interview data. To ensure rigor, the data-analysis phase centered on triangulation, or the combination of both quantitative and qualitative methodologies (Jick, 1979).

Discourse Analysis

Foucauldian discourse analysis was employed to guide the analysis of both the interview and archive materials. “Discourses constitute the world as much as they express multiple visions, ideologies, and interests” (Clement, 2013, p. 148). They reveal how actors regard the world, shape actions, and exert power (Clement, 2013). Discourse emerges as serious speech acts or the organized statements of experts that validate them as “truth” (Peet & Hartwick, 2009, p. 205). In this sense, discourse is generated and monumentalized through documentation of power struggles, in the process shaping history and leading to more monumental transactions (Foucault, 1972, p. 7; Foucault, 1980, p. 102). Simply put, discourse is “speech making things change” (Robbins, 2012, p. 150).

It is important to show how discourse and changes to discourse influence policy (Sharp & Richardson, 2001). This is an important approach for policy analysis as it recognizes the need for historical and cultural specifics related to knowing the environment in particular ways. Environmental discourse is a “complex entity that extends into the realms of ideology, strategy, language and practice, and is shaped by the relations between power and knowledge” (Sharp & Richardson, 2001, p. 195). It is also important to note that Foucault believed power to be diffuse, spread out across social

practices, not held by particular agents such as individuals, the state, or singular interest groups (Humphrey Blake, 2012). Conducting discourse analysis of interview and archival data reveals how environmental knowledge and policy are at once shaped, confined, and advanced through discursive power.

Database Analysis

To understand how time and space influenced the uneven distribution of rivers in the national system, I compiled a GIS database for analysis. Utilizing ArcGIS software to visualize the spatial and temporal data for the 208 designations, I used publically available qualitative and quantitative geospatial datasets from the National Parks Service (NPS), U.S. Geological Survey (USGS), and the Bureau of Land Management (BLM, that included: 1) public lands data, 2) PRISM 30-year Normal Precipitation data, 3) EPA Level III Ecoregions, 4) the Nationwide Rivers Inventory, 5) Wild and Scenic Rivers, and 6) National hydrograph. These extant datasets contained both similar and some unique attributes, so the database was completed using secondary sources. To complement this data, I created datasets containing political data relating to: 1) presidential administrations, 2) Congressional Sessions, 3) bill sponsors, and 4) population data. The database contains the following data for each river segment: a) designated river names; b) involved states; c) WSRA designation date (s); d) presidential administration; e) party of Congressional majority; f) bill sponsor(s) and party affiliation; g) public policy name designating each segment; h) managing agency(ies); i) protected mileage by agency; j) designation status (Wild, Scenic, Recreational); k) designated ORVs by segment; l) qualitative descriptions of each protected segment; m) the Nationwide Rivers Inventory

data; n) failed designations data; o) total land and water area by state; and p) ecoregion data (See Appendices K-O for database segments).

TABLE 1. List of interviews (50) conducted in summer/fall/winter 2016-2017.

ID	Affiliation	Region	Recorded
A	NPS	Alaska	yes
B	NPS	Mid West	yes
C	NPS	North East	yes
D	NPS	Intermountain	yes
E	NPS	California	yes
F	NPS	South East	yes
G	NPS	National	no
H	NPS	North East	yes
I	NPS	Pacific West	yes
J	BLM	National	yes
K	BLM	CA	yes
L	BLM	AZ	yes
M	BLM	Idaho	yes
N	BLM	Alaska	yes
O	BLM R	Idaho	yes
P	BLM	Idaho	yes
Q	BLM	National	yes
R	BLM	Arizona	yes
S	BLM	Colorado	yes
T	BLM	Colorado	yes
U	USFS	Region 6	yes
V	USFS	National	yes
W	USFS	National	no
X	USFS	Region 8	yes
Y	USFS	Region 2	yes
Z	USFS	Region 1	yes
AA	USFS	Region 3	yes
BB	USFS	Region 4	yes
CC	USFS	Region 6	yes
DD	USFS	Region 6	yes
EE	USFWS	1	yes
FF	USFWS	7	yes
GG	USFWS	7	yes
HH	BLM	National	yes
1	AR	National	yes

2	AR	N. Rockies	yes
3	AR	N. Rockies	yes
4	AR	California	yes
5	AR	Mississippi R.	yes
6	AW	National	yes
7	AW	National	yes
8	AW	Northeast	yes
9	AW	California	yes
10	AW	Colorado	yes
11	AW	PNW	yes
12	AW	Pacific West	yes
13	Tech	National	yes
14	Tech	National	yes
15	Tech	National	yes
16	Tech	National	yes

FIGURE 1. Regional Jurisdictions of Federal land management agency (Source: Author).

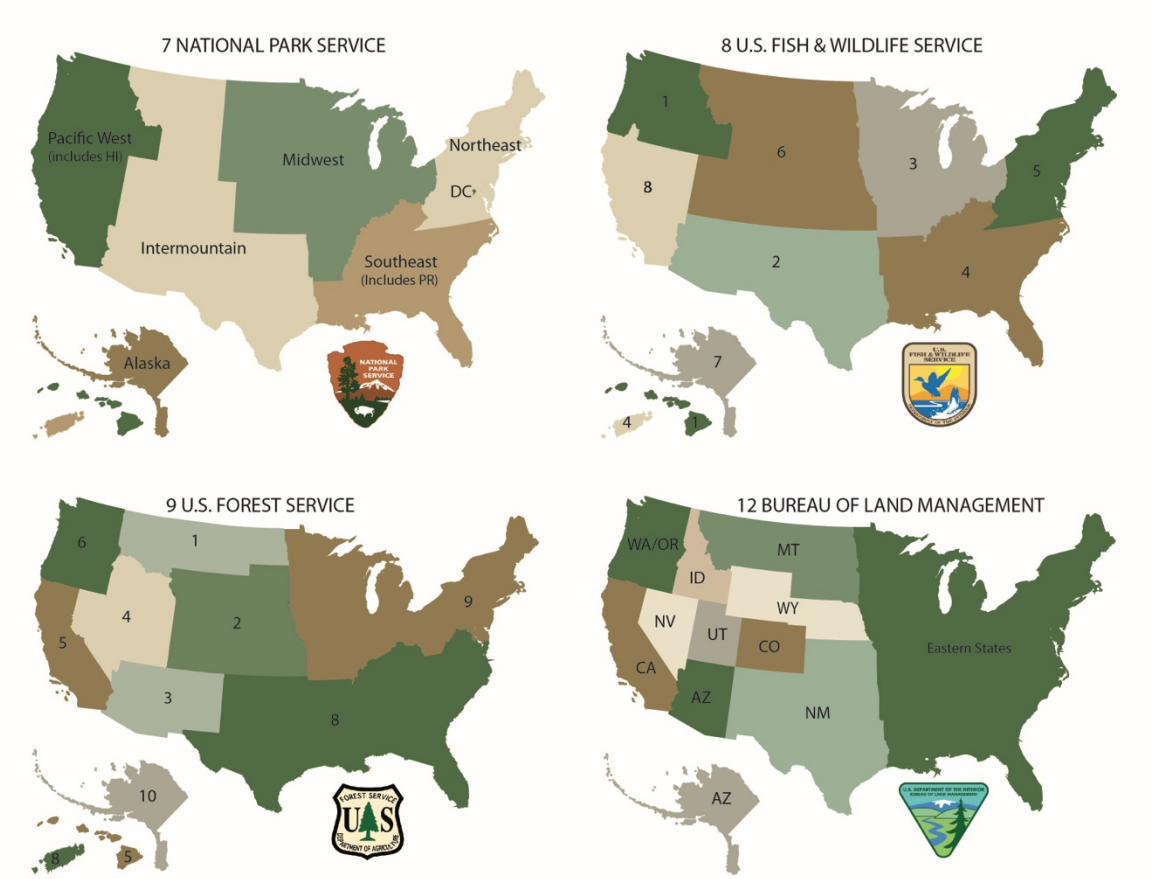

TABLE 2. Interview Questions and Themes

Personal Data and Background with River Conservation

1. What is your name and who do your work for? What's your job title?
2. What is your educational background?
3. How did you get involved in river conservation?
4. Why is it important to protect rivers?
5. How does your work intersect with the Wild and Scenic Rivers System?

Perceptions of the Wild and Scenic River System and Act Authority

6. Do you feel that the system has reached its potential for protecting rivers?
7. Do you think the governance of the system has room to expand, adapt, or change?
8. Do you feel that the state and local governments in your region are amenable to the system?
9. Do you feel that the citizens or land owners in your region are amenable to the system?
10. How is your region different than other regions?
11. How is the national system different than State scenic river systems?
12. Do you feel that the WSRA has underutilized powers to preserve more rivers?
13. Some people see the WSRA as a response to a threat. Do you see it that way or can it be viewed in any other way?
14. What does it take to get a river designated?

Climate Change

15. Do you feel that climate change is making an impact on decision-making for ORV identification or management within the WSR System?

CHAPTER III

LEGIBLE RIVERS, RESILIENT RIVERS: LESSONS IN ADAPTATION FROM THE WILD AND SCENIC RIVERS ACT

Introduction

From floods and droughts to species invasions and extirpations, climate change portends to deliver a whole host of impacts to river resources as a result of changing flow regimes and increasing societal demands (M. a. Palmer et al., 2009). Ecosystem-based approaches to climate change adaptation,[4] which utilize natural capital, offer measures that take an interconnected view of climate change, biodiversity, and sustainable resource management. To that end, a key tenet in this adaptation approach is ecosystem protection (Munang et al., 2013). Yet, engaging entities that do not prioritize adaptation or "who are not required by law to take it into account" is difficult (Tuusa, Kankaanpää, Viinanen, Yrjölä & Juhola, 2013, p. 59). Given these limitations to implementing climate adaptation policies, Parenti (2015) suggests the state will be called upon to address the climate crisis by expanding upon the legibility practices it already conducts.

Against that backdrop, I ground this analysis in the concept of **legibility** – "a reductive process, geared explicitly towards representation of *what interests the state*, and it is thus tied closely to the surveillance, regulation, and control of both people and environments" (Kirsch, 2002, p. 556). By these standards, legibility produces nature in an abstract way for capital (Scott, 1998). Thus, this article shows how the state has adapted

[4]For the purposes of this paper, I turn to Parry, Canziani, Palutikof, Linden, and Hanson (2007) in defining adaptation as the adjustment in natural and human systems in response to actual or expected climatic stimuli, or their effects which moderates harm or exploits beneficial opportunities (p. 6).

to climate and ecological degradation through legibility acts that territorialized water resources *in part* for preservation purposes and to foster legitimacy, but *also* for capital accumulation.

Initially the state reclaimed water in arid regions and controlled floods in humid regions. From periods of economic expansion to ones of contraction, across the American landscape dams served to produce capital and foster state legitimacy – making it an example of a hydraulic society (Meehan, 2012; Parenti, 2015; Worster, 1985). While economically stimulating and highly profitable for those directly benefitting from state-subsidized water development projects, abstracting water by these legibility acts led to degradation of other resources that rivers provide, for instance clean water, recreation opportunities, and fisheries. Over time, and through social relations of production centered on resource conservation, the U.S. government intervened in the trajectory of development set on course half a century before. Driven by notions of scarcity and ecological crisis, the state turned once again towards the familiar practice of legibility, thus pursuing a policy that could strike a balance between two forms of capital production reliant on rivers – on the one hand technical water resource development projects, and on the other, the conservation of ecosystems services through the Wild and Scenic Rivers Act of 1968.

This project exposes the Wild and Scenic Rivers Act not as a standalone policy, but instead as part of a complex of multiple unprecedented policies shaped by legibility acts grounded on notions of scarcity and security, reflecting an era of evolving national environmental priorities (See Figure 2). After threading these policies together in the first section, I show how the legibility imperative has driven federal agencies to *survey* and

inventory rivers, *catalog* Outstandingly Remarkable Values, and establish *policy* to protect and ultimately *manage* them. In a federalist system, the state's legibility exercise set out to restructure its governance of river resources now deemed important to society. I further argue that the identification of ORVs reflects the emergence of a new environmental paradigm –that of ecosystem services. I then draw on Foucault's rhetoric of discourse and biopower to argue for situating climate change within an ecosystem service framing. This approach can serve to transform state resource governance practices through linguistic practices that facilitate the incorporation of adaptation strategies into river conservation policy (Kendrick, 2012; Rose, O'Malley, & Valverde, 2006; Sharp & Richardson, 2001). Moreover, the lack of knowledge about adaptation and why it is relevant stands as a barrier to implementing adaptation policies (Urwin & Jordan, 2008; Wilson, 2006). Hence, this framing can draw attention to the relevance of climate adaptation to river conservation policy.

Territorializing Rivers through Legibility: from Scarcity to Security

The United States has a long history of dam building. Geographers have shown this history of water development is inextricably linked to the history of nation building through the territorialization of water (Graf, 1999; Meehan, 2012; Vogel, 2012). Developers rationalized projects on abstracted scientific notions of the hydrologic cycle by quantifying availability, codifying laws to govern resources, and devising management regimes, ultimately rendering water legible to the state and those that would develop its resources (Linton, 2014). Legibility practices, as Scott (1998) suggests, are central to the state territorial project for capital accumulation through natural resource

development. Parenti (2015) explains, “managing, mediating, delivering, and producing the environment is a core and foundational feature of the modern, territorially defined, capitalist state” (p. 830). Water development projects that shape, move, control, and employ water thus exemplify the “environment making” legibility acts conducted by the state. According to Collard and Dempsey (2017), laws and policies authorize, create, and reconfigure nature’s role in capital. Yet in seeking simplification for legibility through measurement, as Perramond (2013) notes, states can unintentionally produce scarcity conditions. Such is the case with the national policy of dam building in distinct regions of the country.

In the west, despite compelling recommendations by Major John Wesley Powell[5] to divide the territory according to physiographic characteristics based on water availability, Congress elected instead to pursue a simplified system of property allocation based on geometry and the rectangular land survey (Kirsch, 2002). The territorial project of land allocation, lacking concern for environmental limitations, led to state-produced water scarcity. Scarcity manifested itself in limited mining potential outside of streambeds and farms with little to no water to support crops and livestock. Quickly realizing the environmental limitations on production in these arid lands of the American Frontier, the Prior Appropriation Doctrine was adopted as a temporal water rights system devised to govern the development and allocation of waters far removed from real property (Benson, 2012; Gates, Getches, MacDonnell, & Wilkinson, 1993; Wilkinson, 1992).

Launched by the Bureau of Reclamation and the Federal Reclamation Act of 1904, a marriage of policy and agency soon came to focus on facilitating economic expansion

[5] Powell’s suggestion was grounded in his exhaustive government surveys of the region (Kirsch, 2002).

and federal state building in the West. Spurred by development-minded interest groups that, according to Polanyi (1944), call upon the state when it serves to advantage them, an 'iron triangle' of Congressional committees and federal agencies imposed a system of state-funded dams, reservoirs, and irrigation canals in an arid region—in the process reconfiguring flows and consolidating federal power in the West (Lawrence, 2005; McCool, 1987; Meehan, 2012; Worster, 1985).

In quick succession, as the U.S. reeled from the Great Depression, capital found new ways to tap rivers for production. New Deal economic stimulus policies and the Congressional Authorization of the Tennessee Valley Authority in 1933 promoted public works projects, further advancing the state territorial project. Increased dam development brought power to poverty-stricken rural areas of the southeast and the Pacific Northwest and worked to reclaim flood-prone lands for development. In so doing, the state produced nature to combat depressed economics, protect assets in the built environment, and later to fuel the military industrial complex for national security purposes (Evenden, 2009). Dams are such a pillar of development in the U.S. that today somewhere between 75,000 (Graf, 1999) and 90,500 dams are used for energy production, agriculture, municipal use, navigation, flood control, and recreation (ASCE, 2017).

The great wealth and security generated through the development of water resources did not, however, come without a price. Collectively these dams fragment nearly every major river basin (Graf, 1999). As Scott (1998) demonstrates in his examination of German scientific forestry, legibility projects, no matter how well intentioned, can have ramifications that ripple out from project nuclei to negatively impact society and the environment in profound and unforeseen ways. Following Marx, capital's "mindless

exploitation" of nature lacks foresight to consider remote externalities of production because its focus rests on reaping immediate accumulation successes (Harvey, 2001, p. 53). In this sense, as the state capitalized on dams, these structures simultaneously trapped water and sediment, altered habitat and cut off migration corridors for aquatic and terrestrial species, ultimately degrading the nation's river ecosystems (Strayer & Dudgeon, 2010). Moreover, mining, manufacturing, and agriculture sectors stimulated by these projects produced polluting effluent problems, thereby compounding ecosystem impairment (Bernhardt & Palmer, 2011; Harden et al., 2014; Strayer & Dudgeon, 2010; Wohl, 2005). And dams displaced people (WCD, 2001). Thus, fueled by desires to preserve nature, conserve vital water resources, and capitalize on recreation opportunities after decades of building monolithic nature-modifying structures, a movement took shape to brake the state trajectory of dam construction. One major outcome of this movement was the National Wild and Scenic Rivers Act of 1968, a legibility act created to identify and protect free-flowing rivers and their Outstandingly Remarkable Values.

Inspired by Parenti's (2015) call to improve upon the legibility acts the state already conducts, this piece seeks to uncover the rationale for the federal river conservation policy. In so doing, I ask, how did legibility, changing environmental values, scientific discourse, and notions of scarcity factor into shaping the Wild and Scenic Rivers Act? How in turn did this complex rationale guide the reconfiguration of the state's water resources policy from one of development to one of conservation? Through answering these questions, lessons emerge that can assist in shaping ecosystem-based adaptation policies grounded in legibility to promote resilient river ecosystems in the face of climate change.

Methodology

Investigation for this project proceeded largely through extensive archival research at the LBJ Presidential Library Archives in Austin, Texas, and the National Archives at Denver. For three 40-hour weeks in July 2016, I examined 134 boxes of White House files related to legislation, programs, budgets, and personal communications concerned with water and other natural resource policies during the LBJ administration (1963-1968). Given the limited temporal scope captured in these materials, I traveled to the National Archives at Denver for an additional three days of research to examine 17 boxes of files from the Department of Interior containing similar materials from previous and subsequent presidential administrations. The purpose of collecting archival materials was twofold.

First, the objective was to expose empirical details related to the policy itself: how the actual act was designed. Because "it is important to show how discourse, or changes in discourse, make a difference to what happens in policy processes or in society more broadly" (Sharp & Richardson, 2001, p. 196), the second goal was to uncover the lesser known, yet inherently linked, environmental policies, programs, and values factoring into the WSRA, situating a critical eye on knowledge that was taken for granted. I coupled this research with spatial and temporal analysis of a GIS database containing both qualitative and quantitative datasets relevant to the National Wild and Scenic Rivers System to reveal the distribution of designated rivers. Finally, semi-structured interviews with land management agency personnel (n=34), conservation advocates (n=12), and technical consultants (n=4) were coded and analyzed using NVivo QDA software. I

triangulated qualitative and quantitative methods ensured rigor in data analysis (Jick, 1979).

Making Biopower Legible in the Landscape

> "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. The Congress declares that the established national policy of dams and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes."
>
> President Lyndon B. Johnson October 2, 1968

As President Johnson so elegantly proclaimed, the national Wild and Scenic Rivers Act was established to fulfill the conservation needs of the United States at a time when rapid degradation from water development projects threatened the nation's river heritage. This Act signifies a shifting focus from a national policy of engineering development projects for economic growth and human development to one of protecting rivers for posterity and recognizing the value of nature *per se*. Generally, the WSRA is considered a manifestation of attempts to reconcile over 30 years of tensions between the national preservation movement and regional interests centered on dam development (Burce, 2008; Daniels, 2009; Palmer, 1993). Yet, probing deeper reveals that LBJ's words also signal a sea change in national environmental values around water resources and their role in capital accumulation.

Archival research at the LBJ Library revealed the WSRA is not a standalone policy. Instead it sits within a complex of multiple unprecedented state legibility

exercises and water resource policies that reflect an era of evolving national environmental priorities. As evidenced by archival documents such as Figures 3 features, discourses on rapid urbanization, the population explosion, and the management of finite resources were all driving environmental policies to govern ecosystem services (though the term was not in use at that time). The initial sea change over river resource development stemmed from three interconnected socio-economic phenomena: urbanization, population growth, and the rise of the outdoor recreation industry.

In the post-World War II baby boom era, the United States, like the rest of the world, underwent exponential population growth and rapid rates of urbanization.[6] Outdoor recreation became capital's new environmental focus as the rural areas once regarded as sources of raw materials for capital now became new sites of accumulation through tourism. As evidenced from the following excerpt culled from the Bureau of Outdoor Recreation's (now defunct) declaration of intent (Appendix B), shifting environmental priorities began with recreation as a new focus for land management – both in economic terms – with burgeoning industries for technical equipment[7] and travel and in social terms –as a partial solution to problems attributed to rapid rates of urbanization and increasing leisure time.

> There needs to be public understanding that recreation is not only a renewing experience but also serious business. It is serious national business both because of its economic impact and its beneficial effect on the physical, cultural, social and moral well-being of the American People. It is a partial solution to the social problems created by urbanization and leisure time. It is a solution, at least in part, to

[6] From the period of 1950 to 1960, population in the United States grew by 28.6 million people or 19 percent going from 150.7 to 179.3 million (Hobbs & Stoops, 2002). As the economy shifted from primary agricultural production to secondary manufacturing, people moved to the cities *en masse* from 1940-1970 (Platt, Bunten, Hearey, Platt Boustan, & Bunten, 1913).

[7] Appendix C exemplifies how recreation equipment industries viewed preservation of nature as "good business" and supported conservation policies to advance their economic interests.

> the fact that man is not wholly suited physiologically to meet the technological demands placed upon him. Most of the hospitalizations in the country today are emotionally based. In this vein I like to think of the new organization as the Bureau of Re-Creation. We have heard much of ORRRC. Now I like to think in terms of BORC for the Bureau of Outdoor Re-Creation.
> Edward C. Crafts Director, Bureau of Outdoor Recreation June 21, 1962

According to Foucault "the welfare of the population, the improvement of its condition, the increase of its wealth, longevity, health, etc. become the object of government" (Agrawal, 2005, p. 219). In essence, nature became a way of insuring the reproduction of labor power through people's positive interactions with the environment. For Foucault (2003) labor power is biopower. Building on this regard of labor, I expand in the following section the concept of eco-governmentality,[8] applied by Biermann & Mansfield's (2014) analysis of conservation policy for non-human nature to include human nature and its influence on river conservation.

On the one hand, the tourism industry sought to capitalize on the production of recreation spaces made legible through resource surveys conducted in 1961 by the Outdoor Recreation Resources Review Council (ORRRC). This exercise resulted in recommendations for conservation policies which would ultimately territorialize recreation spaces. As Olson (2010) indicates briefly in his study of the ORRRC, these surveys paved the way for the Wild and Scenic Rivers Act. For instance, documents at the National Archives at Denver reveal ORRRC suggestions that certain rivers with unusual values remain free-flowing for recreation purposes (Appendix D). Subsequently, an official interagency study for determining such rivers through a national survey was

[8] Eco-governmentality expands Foucault's biopower and governmentality concepts to include the state's interactions with nature.

announced in 1963 (Appendix E). In 1964, the Wild Rivers Bill, the first iteration of what would four years later become the WSRA, was proposed (Appendix F).

Thus it can be argued that the ORRRC's philosophy of "*re-creation*" providing public health benefits influenced the *territorialization* of river resources through conservation policy. Further, this territorialization aligns with notions of *eco-governmentality through legibility practices* (Agrawal, 2005). Moreover, the protection of ecosystem services provided by rivers not only offered economic opportunities in an expanding tourism industry, but also gave rise to public health benefits through bio-power. This eco-governmentality led to Multiple Use mandates for public lands resource planning to include recreation among the historical, exploitative resource uses (see Figure 4). In this way discourse on recreation, along with its invocations of broad benefits to society, was able to transform state practices of resource governance from one solely focused on extraction to one of ecosystem conservation.

Neo-Malthusian discourses of out-of-control population growth, or the "Population Bomb" as it was known (Robbins, 2012), factored squarely into demarcating the public estate[9] for conservation spaces. To Malthus, land was the primary factor of capital production (Brown, Bergstrom & Loomis, 2006). As evidenced by the 1964 population bulletin (Figure 3), land and water resources now valued for recreational potential by a burgeoning tourism industry were considered at risk due to "excess procreation." Scarcity was then produced by new demands on recreational lands by

[9] The federal government owns more than a quarter million hectares of land in the United States totaling nearly one-third of all lands (Stein, Scott, & Benton, 2008). These lands were withdrawn from private settlement in 1891 though government leases still permit extractive practices on the land (Pincetl, 2006).

growing populations. Concurrently ecological science was expressing concerns over population's impacts on species and the necessity for ecosystem conservation.

Water: The Wellspring of Ecological Planning Concerns Based on Rationality

Just as Rachel Carson's (1962) *Silent Spring* launched the environmental movement of the 1960s by linking pesticide use to species decline, interest in ecological science swelled in the U.S. and abroad. Local, regional, and international evidence of a biodiversity 'crisis' mounted, indicating rapid species extinctions were eminent. The state (at the behest of special interest groups) pursued what Dempsey (2013) explains as the mobilization of policy to protect water and biodiversity's interconnected role in providing potential future value to capital. White House files revealed nearly 200 exchanges with concerned citizens regarding growing pollution problems in the nation's waterways, while concern for posterity heightened (see Figure 5). [10] In 1966 the Clean Rivers Restoration Act and the Water Pollution Control Act amendments were passed to contend with these growing pollution issues (see figure 6). Other correspondence highlighted concerns over the potential impact of dam development on beloved rivers and the human and non-human communities they support (See Figure 7 and 8 for examples).

Perhaps the most compelling evidence was the 1965 Pacific Marine Fisheries[11] report detailing salmon and steelhead losses on the Columbia River at such a high level that "the future of the anadromous fishery resources may be endangered" on account of

[10] A typical excerpt from a response letter from Lady Bird Johnson "… Every week I read letters from children –and their parents -- in Florida, or Ohio, or New York, or Arizona, and they, too, have polluted rivers, and they, too, want to do something about cleansing them." Mrs. Lyndon B. Johnson, 1965

[11] Pacific Marine Fisheries was founded in 1947 as interstate compact agency tasked with sustaining the fishing industry across five States: California, Oregon, Washington, Idaho, and Alaska (PSMFC, 2012).

dams in that watershed[12] (See Appendix G)(James, 1966, p. 6). Recognizing needs to maintain free-flowing rivers for spawning habitat connectivity, the agency recommended permanent protection of the Salmon and Clearwater Rivers in Idaho and the Klamath River in California in the form of the proposed Wild Rivers Bill (James, 1966). This mobilization of policy by regional special interests through the agency exemplifies the state's move to secure biodiversity in crisis through the protection of ecosystem services. As evidenced from the cover of the 1968 Washington Report featured in Figure 9, which surfaced just two months before the WSRA was finally codified, human impacts on rivers were at the forefront of ecological concerns in Washington.

Meanwhile, the International Union for the Conservation of Nature[13] (IUCN) beseeched the U.S. to assume a leading role in promoting the rational use of resources and to promote preservation of wild nature, particularly "rare and vanishing species" (Appendix H). Calling on the United States' "record of accomplishment in conservation," the IUCN extended an invitation of membership in hopes the U.S. presence would catalyze other countries (i.e. the United Kingdom) to join. That same year, The Nature Conservancy, a member of the IUCN, directly entreated the U.S. to protect "biotic communities," suggesting "the earth's most valuable natural resources is its stock of different species, races and strains of living organisms, each of which has unique attributes and potentialities" (see Appendix H). Cold War geopolitics ultimately limited direct U.S. engagement in IUCN due to conflict with states represented by the

[12] Collectively, there are 32 dams on the rivers that drain the entire Columbia River basin. Eight of those dams are on the main stem Columbia, blocking passage between the Pacific Ocean and Idaho (Vogel, 2012).

[13] Founded in 1948, the IUCN in 1965 consisted of private organizations and societies from 62 countries with 35 from the U.S. alone. In addition, eight international NGOs and 22 countries were members of the IUCN.

organization, namely China and Vietnam. However, the Washington recommended action was for "an internal subdivision of the" U.S. Government to participate. The Department of the Interior, specifically the National Park Service, would be the candidate. However, it would not be until 1981, according to Farnham in Dempsey (2016), that the government *per se* really found its way into a serious engagement with biological diversity. Nonetheless, this archival evidence suggests the IUCN and its many members (largely U.S. based interest groups) factored squarely into discussions over questions of biodiversity conservation in U.S. natural resource policy. In 1967 the Fish and Wildlife Conservation and Protection Act, precursor to the 1973 Endangered Species Act, was passed to address concerns over biodiversity loss.

Notions of rational resource use factored into the emergence of another paradigm of water resource management. This time legibility centered on the river basin as the organizing principle for integrating sustainable water management strategies (Biswas, 2009). In line with Powell's century-old recommendation, this paradigm influenced the application of what would later come to be called "integrated water resource management" (IWRM) principles[14] in the form of the Water Resources Planning Act that

[14] IWRM was conceived as: "a process which promotes the coordinated development and management of water, land and related resources in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems" (Hering & Ingold, 2012). "The success of integrated water management strategies depends on striking a balance between human resource use and ecosystem protection" (Vörösmarty et al., 2010, p. 555). This fact complicates the application of IWRM principles "in emerging economies where the 21st-century challenge of balancing social, economic, and environmental water needs is greatest" in the face of climate change (Tickner & Acreman, 2013, p. 137). What is more, the implementation of panacea policies designed as 'one shoe fits all' often excludes consideration of the variabilities found from one location to the next (Meinzen-Dick, 2007). Compromise "between social equity, ecological integrity and economic growth" is seen as a problematic reality in IWRM decision making as water intensive economic development initiatives threaten to subjugate water needs to land-use decisions (Bakker & Morinville, 2013, p. 4). Though seemingly based on parity, in IWRM decision making today there is a perceived lack of commitment to addressing the socio-ecological impacts of "large dam construction, canals, irrigation schemes, hydroelectric facilities, and

established a Water Resources Council and River Basin Commissions "to plan for the best use and development of the resources of the river and adjoining land" (see Figure 10 for details) (Johnson, 1969).

The Wild and Scenic Rivers Act was taken into consideration in making river basins legible to interests concerned with development and conservation (Figure 11). No longer would federally funded development be left to construct projects without taking into consideration the negative externalities on non-human nature, the environment per se, and society. This was achieved through WSRA eligibility and suitability studies, which set out to investigate a) extant water development projects that impaired flow, quality, and/or values; b) the degree to which plans existed for new projects; and c) the future water development needs of the communities. Accordingly, the WSRA three-tiered classification system of Wild, Scenic, or Recreational provided a framework for designations to take into consideration future development as different levels of development are permitted within each classification type. This legibility system seemingly provided an IWRM model for sustainable ecosystem development.

The WSRA was signed into effect in 1968 – after 10 years of negotiations. Taking into consideration population growth, ecosystem services, water quality, biodiversity, and integrative planning, the Act is a unique policy designed for flexibility with generalizable parameters and intended for broad U.S. application (the major components are summarized in Appendix I). Federal land management agencies were mandated to survey rivers in their jurisdiction to identify segments that met two minimum requirements:

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other destructive projects with major consequences for watersheds and local populations" (Conca, 2006, p. 145).

possession of free-flowing waters and at least one Outstandingly Remarkable Value (ORV). ORVs include Scenic, Recreation, Historic, Cultural, Fish, Wildlife, Geologic, and Other similar values to "fulfill other vital national conservation purposes" (WSR, n.d.-a).

In line with Scott's (1998) definition of legibility being a state exercise of abstracting resources from nature through surveying, cataloging, and management practices, this survey is arguably part of a state legibility exercise to territorialize river resources in a federalist system. Moreover, adopting Gretchen Daily's (1997) definition,[15] I argue that ORVs, while humbly named, are the epitome of complex ecosystem services deemed important for the production and reproduction of capital, culture, and human development. Moreover, the state designates river segments and ORVs through legibility exercises rationalized on notions of scarcity and efficiency to be worthy of protection and enhancement in perpetuity. Included in part of this state territorialization project is the establishment of protected riparian zones of up to a quarter-mile wide on either side of the protected river segment to capture values that are not in the immediate river channel and banks, yet that are river dependent and/or connected (i.e. waterfalls, fossils, historic and cultural sites, and amphibious species' habitat) (Diedrich and Thomas, 1999).

[15] Ecosystem services are the conditions and processes through which natural ecosystems, and the species which make them up, sustain and fulfill human life. They maintain biodiversity and the production of ecosystem goods, such as seafood, forage, timber, biomass fuels, natural fiber, and many pharmaceuticals, industrial products, and their precursors. In addition to the production of goods, ecosystem services are the actual life-support functions, such as cleansing, recycling, and renewal, and they confer many intangible aesthetic and cultural benefits as well (Daily, 1997, p. 3).

Federally funded infrastructure development, with the potential to diminish the river's free-flowing nature, water quality, and/or the integrity of ORVs, is subject to NEPA and WSRA Section 7 review within the designated boundaries[16]. The crown jewel of this legibility exercise, the Nationwide Rivers Inventory (NRI), catalogs eligible rivers identified for potential inclusion in the National Wild and Scenic River System (WSR, n.d.-b). Today, there are 227 individual designations that protect 495 rivers, forks, and named tributaries (See figure 12) (Palmer, in press). In addition, there are more than 3,200 rivers officially listed on the NRI and countless others deemed eligible by land management agencies since the last update in the 1990s waiting for suitability assessment (IVG, 2017). The overall design of the National Wild and Scenic Rivers System and policy authority reflects an environmental era under the Johnson administration centered on protecting and managing water resources through rational planning.

Adapting the Language of Legibility Toward Climate Resilience and Policy

The underlying themes in today's environmental discourse are much the same as those of LBJ's era. Debates on population, water, and economic expansion, as well as the U.S. role in geopolitics, are still paramount in the public arena. However, today's war is on terror instead of communism, and a shroud of denial hangs over climate change instead of civil rights.[17] Yet, despite a climate of denialism (Kenrick, 2013; McCright &

[16] The National Environmental Policy Act of 1969 (NEPA) requires federal agencies to examine the environmental impacts of their real or proposed actions, generally through an Environmental Impact Assessment (EIA) (Harm Benson & Garmestani, 2011). Section 7 of the WSRA, one of the most powerful parts of the policy, provides a process for river-administering agencies to evaluate and prevent certain federally-assisted projects from proceeding, if they fail to meet the standards in the WSRA (IVG, 2017).
[17] The Civil Rights Movement (1954-1968) culminated during the LBJ Administration. As minority groups pressed for equal rights and segregation's end, many people in the public and government spheres resisted, preferring instead to deny the merit of these changes. Meanwhile the Cold War against communist totalitarianism waged forth (Catsam, 2008).

Dunlap, 2011; Wainwright, Joel and Mann, 2012), as of 2008 anthropogenic climate change is listed alongside terrorism as a threat to national security, a narrative that surfaced in the early 2000s (Baldwin, 2013; Campbell et al., 2007; CAN, 2007; Schwartz and Randall, 2003). Resilience to climate change "attacks" depends on securing ecological infrastructure to ensure state vitality (Baldwin, 2013). Though Baldwin sets vital ecosystem security apart from conservation or ecosystem protection practices per se, the notions he borrows from Walker, Holling, Carpenter, and Kinzig (2004) ring true for rivers: those of cultivating socio-ecological systems resilient to turbulence that support life in all forms through ecosystem services.

Consider the case of forests, which capture and manage carbon and then release carbon in circulatory operations that provide climate-regulating ecosystem security (Baldwin, 2013). For rivers, floodplains capture and store water during floods, later releasing it in dry periods, providing a vital water security function. Reserve areas, such as the quarter-mile protected zones contiguous to Wild and Scenic Rivers, thus provide a flexible adaptive buffering function in flood-prone areas (Adger, Kelly & Ninh, 2001; Knieling & Fellmer, 2013). Furthermore, protected free-flowing rivers, such as Wild and Scenic Rivers, stand to be the most resistant[18] and resilient to climate change--buffering against temperature and flow variations, unlike clear-cut or urbanized watersheds (Palmer et al., 2009, p. 1058).

Despite compelling evidence of climate change impacts and potential adaptation strategies, Henstra (2015) time and again found that this knowledge was not being

[18] Resistance refers to a system's ability to endure disturbance without losing significant function (Glick, Staudt, & Stein, 2009).

incorporated into action by specialists. These findings are reflected in the responses to an interview question I posed, which simply asked “Do you feel climate change is making an impact on decision-making for ORV identification or management within the WSR System?” Respondents signaled that climate change was being discussed at the upper levels of agencies, but that it had yet to trickle down to field offices and was far from factoring into the Comprehensive River Management Plans (CRMPs) mandated by the WSRA for ORV protection and enhancement strategies.

For conservationists to be effective at implementing climate adaptation policy, water resources must “create strategies that engage and transform the state” (Parenti, 2015, p. 829). Transformation in the bureaucratic engines of the federal government does not have to be top down. Instead it can work through the web of social production, employing power in diffuse ways through discourse mobilization. “The normative model of social change is that ‘changes at the social level can be constituted in part through changes in linguistic practices’ (Hastings, 1999, p. 93). In that vein, Sharp and Richardson (2001) found that reforming institutional structures can produce those linguistic changes. Henstra (2015) explains that an important method for bridging the adaptation gap is mobilizing knowledge through relationships between research producers and users.

One way to accomplish the mobilization of climate knowledge is through social production networks comprised of river advocacy groups and technical experts (Munang et al., 2013). First, personnel working within federal agencies and advocacy groups are trained in scientific fields well positioned to conduct and apply such research (See Appendix J for list of degrees). For example, Scott Bosse of American Rivers (founded in

1973 for the sake of ensuring WSRA mandate compliance) not only advocates for rivers; he produces climate resiliency knowledge. During his interview he shared:

> "Since I earned my master's degree in environmental studies, I worked as a fishery biologist and then transitioned into river conservation and have been doing that ever since. I have always been very interested in rivers, I've been a fishing guide, a commercial fisherman in Alaska, and I have been a fishery biologist. So fish and the habitats in which they dwell have been a path of mine for my entire adult life and before that as a child as well. I crossed over into the advocacy arena because while I was commercial fishing in Alaska in 1989, the Exxon Valdez oil spill happened and I ended up working on that spill and cleaning up that spill opened my eyes to the challenges that we as a society face and that pointed me in the direction of advocacy and I decided it's great to have a scientific background, but I really want to get dirty in the public policy arena" (IV2, 2016).

In actuality, Bosse employs his scientific training in the production of knowledge relevant to public policy. Bosse's 2010 piece, "Conserving Native Trout at the Landscape Scale using the Wild and Scenic Rivers Act" directly informed the one reported case of climate refugia[19] used in an eligibility study for ORV identification. Not coincidentally, the study focused on a network of headwaters streams in Bosse's territory, Montana, which are under consideration in the current legislative session (2017) for designation. This example encapsulates an arena ripe for consideration: the use of 'climate refugia' in the "Other" ORV category can render this policy useful for climate adaptation. The policy's flexible design means it can be used to advance new environmental priorities deemed important to society, or as the WSRA diplomatically states, "to fulfill other vital national conservation purposes" (WSRA, 1968).

The work of the River Management Society (RMS) provides another example of a social production network mobilizing climate knowledge. Through symposiums offered

[19] Refugia refers to the natural habitats to which species have adapted which offer physical features such as cool water pools, well-connected tributaries, and riparian shading, helping the species survive periodic temperature changes and other disturbances (Glick et al., 2009)

every two years, this organization provides technical training and expertise to river managers from federal and state agencies as well as conservation advocates. These symposia facilitate knowledge exchange (the 2016 theme was *Rivers and Recreation in a Changing Climate*). Advocacy groups, such as American Rivers and American Whitewater, can employ the language of climate resilience through ecosystem service protection in their interactions with politicians and constituents. For instance, Thomas O'Keefe of American Whitewater frequents Washington, D.C., to advocate for Wild and Scenic designations and recreation access to rivers. Reflecting on these experiences during an interview, he told me "the adjectives 'Wild and Scenic Outstandingly Remarkable Values' just don't get politicians on your side" (IV11, 2016).

O'Keefe highlights a general sentiment held by many conservation advocates and river managers: grounding calls for environmental protection at what is perceived to be the expense of economic development engenders a general lack of political will in many Congressional delegates. When I suggested framing ORVs as ecosystem services, he exclaimed "that's the missing link!" Reflecting on his training in limnology and ecological economics,[20] O'Keefe's enthusiasm comes with a recognition that such a framing situates biodiversity and river conservation within the dominant political-economic field by placing value on the ecosystem processes on which humanity depends, (e.g. species' habitat, fresh water, food, flood mitigation, cultural values, and recreation) (MEA, 2005). This approach in turn provides policymakers a tool to evaluate tradeoffs between development and conservation (Liu, Costanza, Farber, & Troy, 2010).

[20] O'Keefe trained under Steve Carpenter at University of Madison, Wisconsin.

Daniel Henstra's (2015) work analyzing adaptation policy options included Gifford and Comeau's (2011) findings that messages emphasizing potential benefits to individuals and communities increased motivated behavior changes geared toward climate action and adaptation. Negative messages centered on consequences, according to Henstra's review of studies, were less effective at inciting adaptation actions. Thus, for river conservation policy to work as climate adaptation policy, supplementing the adjectives ORVs with ecosystem service descriptions (See Table 3 for example), may institutionalize climate knowledge and reform structures that currently prevent the broad application of the policy. As Albrechts (2001, p. 738) notes, "institutionalization is a process by which ideas and practices become durable reference points for social action. Institutionalization requires a certain degree of consensus about underlying values and a commitment to administrative and financial agreements between different levels of government, sectors and private institutions" (Küle, Briede, Kļaviņš, Eberhards, & Loĉmanis, 2013, p. 71). The Interagency Wild and Scenic Rivers Coordinating Council (IWSRCC) has the power to institutionalize such ecosystem service language in river study and Comprehensive River Management Plan (CRMP) guidelines. Just as recreation transformed state resource governance practices with public health discourse, discourse on broad ecosystem-based adaptation benefits can be employed in negotiating new river designations today.

Conclusions

Increasing population demands, extensive water pollution, and habitat degradation leading to species decline, prolonged drought, and the awareness that water resources were finite all collectively produced notions of scarcity. As Parenti notes, if the functions

of non-human nature are key sources of wealth, the state with its territorial imperative delivers those ecosystem services to capital (2015, p. 830). In this vein, the state sets out to protect these commonly held ecosystem services and goods in a compendium of water-centered environmental laws, policies, and programs (Collard & Dempsey, 2017). From the establishment of research partnerships at Land Grant universities, to water quality standards on interstate water bodies, to legislation protecting endangered species and their habitat, the Johnson Administration set a policy course that led to a focus on studying, cleaning, restoring, protecting, and enhancing water resources for human development, recreation, and biodiversity protection (refer back to Figure 2). That course culminated in the 1968 passing of the Wild and Scenic Rivers Act.

Today, there is a resurgence of big infrastructure projects aimed at meeting water management and energy production challenges around the world in the face of climate change (Perry & Praskievicz, 2017). However, ecosystem-based adaptation measures are gradually being seen as complementary to, or substitutes for, more costly infrastructure investments (Munang et al., 2013), thus providing win-win solutions for resilient rivers. Just as the state mobilized recreation as an alternative mental-health solution through eco-governmentality of biopower, the state can mobilize legibility for ecosystem-based adaption to simultaneously reproduce conditions for capital accumulation, protect biodiversity, and preserve nature.

'How the state responds to the climate crisis is a different question: sometimes it fails, but always it is called" (Parenti, 2015, p. 829). Just as the state responded to the emerging biodiversity crisis in the 1960s by mobilizing land management agencies to protect important river ecosystems, today those agencies can play a pivotal role in climate

adaptation by identifying ORVs with resilience characteristics. Even as the federal government debates the role it wants to take in international conventions and national policies centered on curbing climate changing emissions,[21]Congress can designate more rivers to provide ecosystem-based adaptation measures to promote resilience and contend with the impacts of changing climate.

More broadly, integrated water resource management (IWRM) is encouraged for countries across the developing world seeking to establish human water security for the first time while preserving biodiversity. In places where IWRM practices are desired for resiliency across sectors, the WSRA provides a framework to address these concerns. Through its eligibility and suitability study designs for ORV (ecosystem service) identification, as well as the classification framework provided to distinguish between river corridors that are Wild, Scenic, or Recreational, these legibility exercises can inform IWRM strategies in the service of sustainable development for resilient river ecosystems.

Finally, just as agencies stepped in when the IUCN called on the U.S. "record of conservation success" for assistance in addressing global issues of biodiversity during the LBJ administration, today agencies can help other countries shape policies for resilient rivers taking lessons from the WSRA. Such collaborative efforts are already underway with the U.S. Forest Service as the agency offers policy insights and training to China for the protection of select rivers (IVV, 2017). The legibility exercise that is the Wild and

[21] As concerns for posterity take center stage in court, prominent examples such as the Our Children's Trust case have been brought against the U.S. Government for shirking its duty to protect the nation's atmospheric heritage (Wood & Woodward, 2016), while the Trump Administration considers exiting the recently brokered Paris Climate Accords (Nuccitelli, 2017).

Scenic Rivers Act, with its flexible design could serve as a model around the globe for biodiversity conservation and climate adaptation.

Taking into consideration the myriad drivers that led to the creation and design of the Wild and Scenic Rivers Act in 1968 and its potential to expand river conservation and for use as a climate adaptation policy framework presented in this chapter, the following chapter, A Political Ecology of Federal River Conservation: 50 Years and Counting of The Wild and Scenic Rivers Act, considers the spatial and temporal distribution of the policy. Chapter IV provides insights to understand what socio-political and ecological factors both limit and increase the application of the WSRA in certain places over time.

FIGURE 2. Timeline of Federal Water Related Policies Leading up to WSRA.

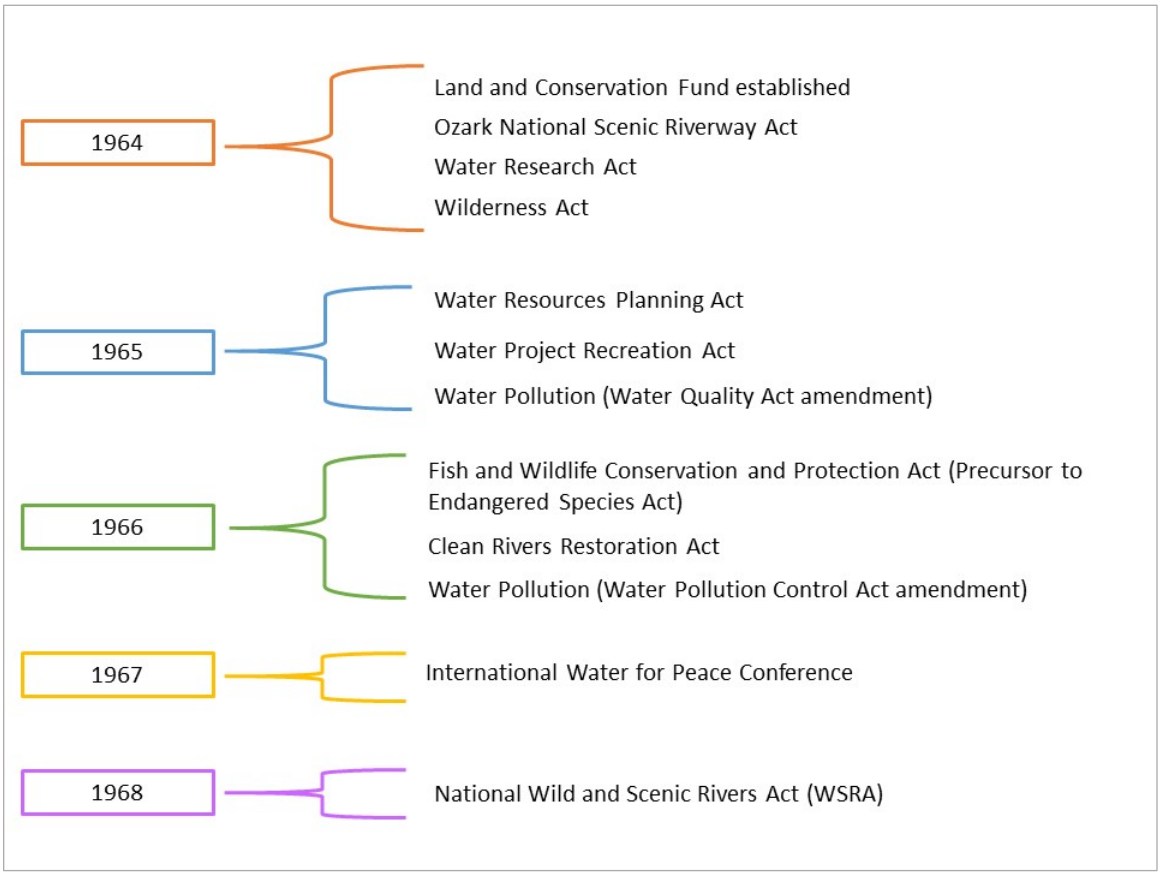
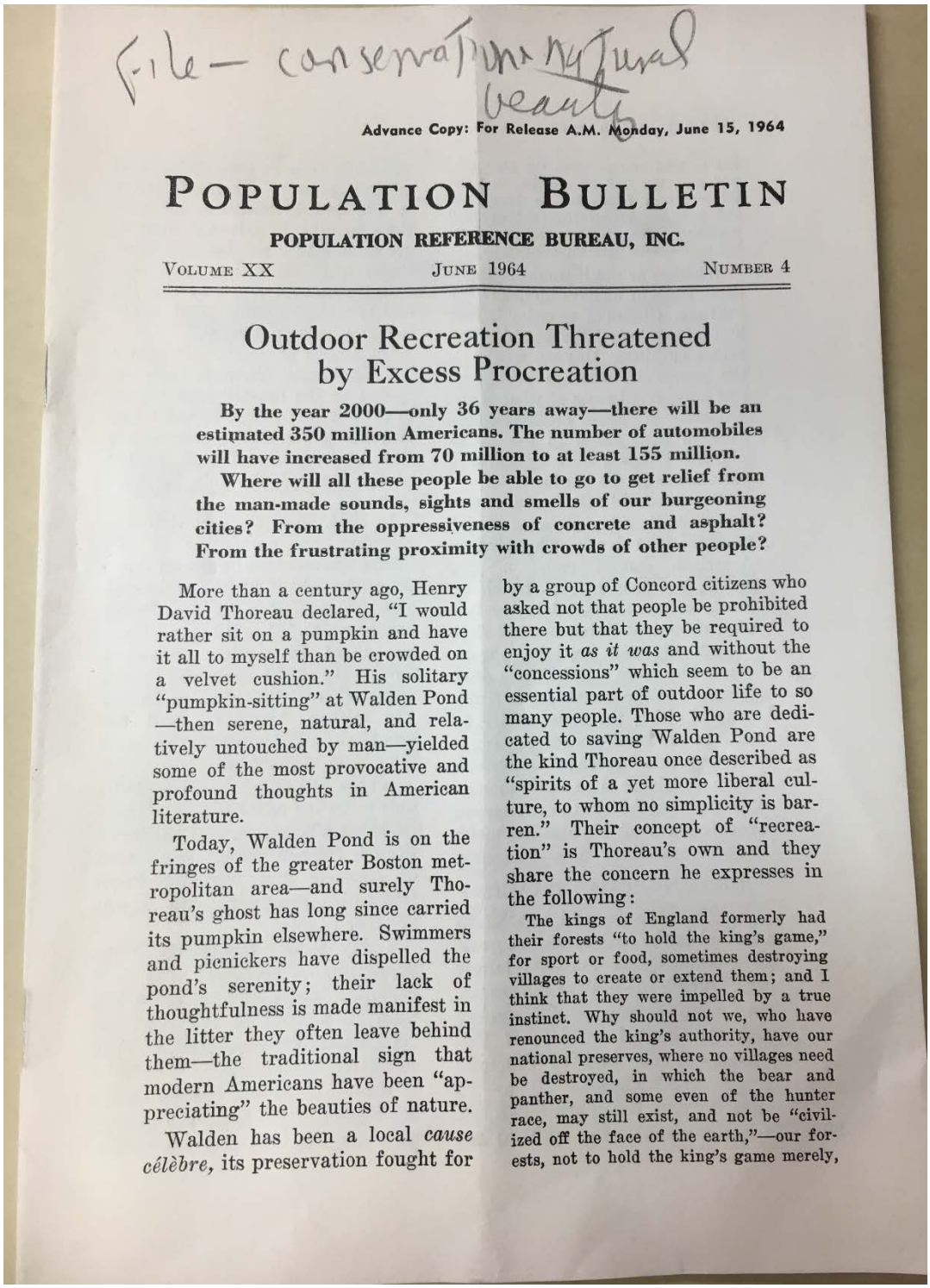


FIGURE 3 . Population growth spurred notions of scarce recreational lands.



File — conservation × natural beauty

Advance Copy: For Release A.M. Monday, June 15, 1964

POPULATION BULLETIN

POPULATION REFERENCE BUREAU, INC.

VOLUME XX JUNE 1964 NUMBER 4

Outdoor Recreation Threatened by Excess Procreation

By the year 2000—only 36 years away—there will be an estimated 350 million Americans. The number of automobiles will have increased from 70 million to at least 155 million.

Where will all these people be able to go to get relief from the man-made sounds, sights and smells of our burgeoning cities? From the oppressiveness of concrete and asphalt? From the frustrating proximity with crowds of other people?

More than a century ago, Henry David Thoreau declared, "I would rather sit on a pumpkin and have it all to myself than be crowded on a velvet cushion." His solitary "pumpkin-sitting" at Walden Pond —then serene, natural, and relatively untouched by man—yielded some of the most provocative and profound thoughts in American literature.

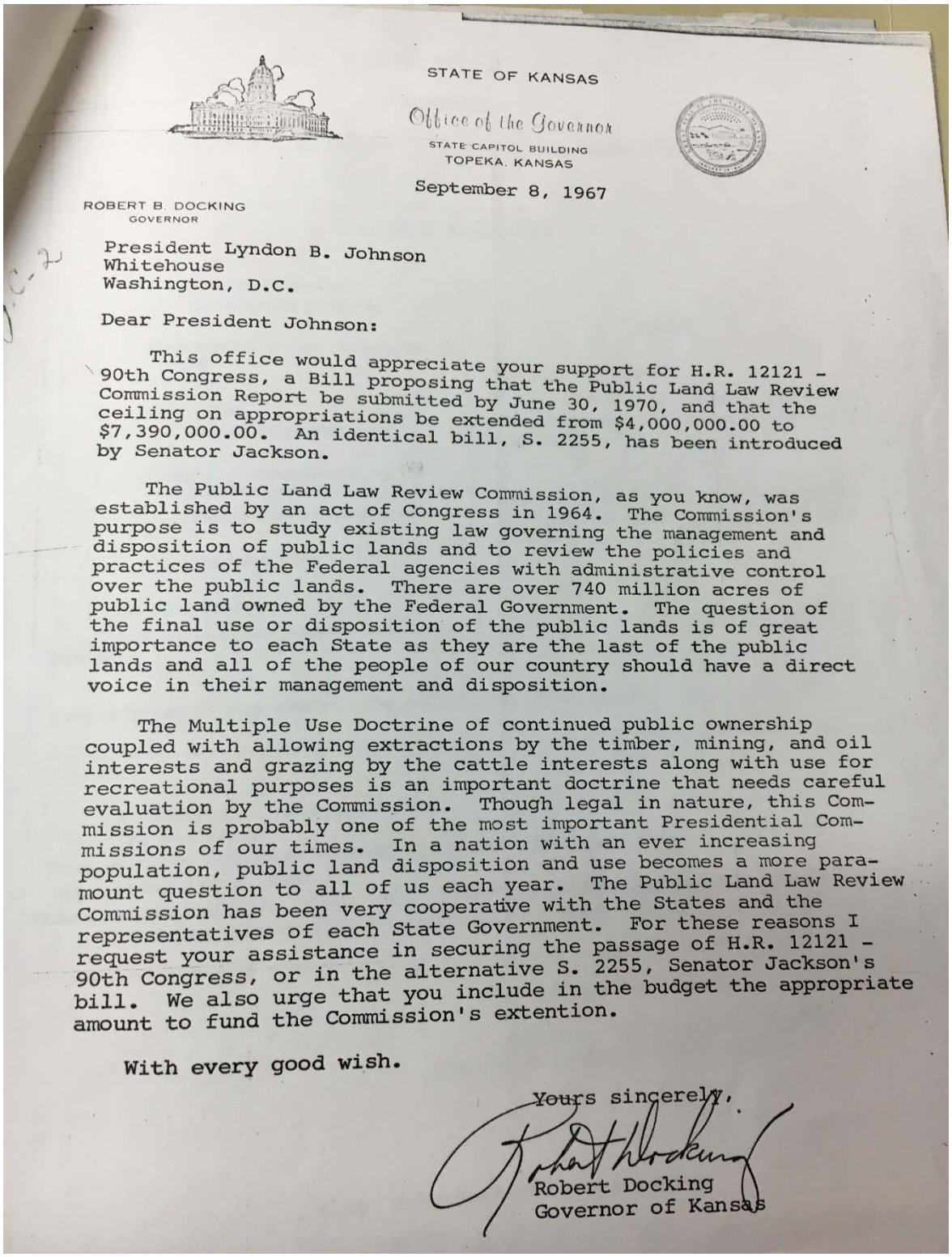
Today, Walden Pond is on the fringes of the greater Boston metropolitan area—and surely Thoreau's ghost has long since carried its pumpkin elsewhere. Swimmers and picnickers have dispelled the pond's serenity; their lack of thoughtfulness is made manifest in the litter they often leave behind them—the traditional sign that modern Americans have been "appreciating" the beauties of nature.

Walden has been a local *cause célèbre,* its preservation fought for by a group of Concord citizens who asked not that people be prohibited there but that they be required to enjoy it *as it was* and without the "concessions" which seem to be an essential part of outdoor life to so many people. Those who are dedicated to saving Walden Pond are the kind Thoreau once described as "spirits of a yet more liberal culture, to whom no simplicity is barren." Their concept of "recreation" is Thoreau's own and they share the concern he expresses in the following:

> The kings of England formerly had their forests "to hold the king's game," for sport or food, sometimes destroying villages to create or extend them; and I think that they were impelled by a true instinct. Why should not we, who have renounced the king's authority, have our national preserves, where no villages need be destroyed, in which the bear and panther, and some even of the hunter race, may still exist, and not be "civilized off the face of the earth,"—our forests, not to hold the king's game merely,

Source: Population Reference Bureau. (1964). *Population Bulletin* (Volume XX, Number 4). White House Aide Files Box 386. Austin, TX: LBJ Presidential Library.

FIGURE 4 . Multiple use doctrine for public lands concerned states as well as citizens



STATE OF KANSAS

Office of the Governor

STATE CAPITOL BUILDING
TOPEKA, KANSAS

September 8, 1967

ROBERT B. DOCKING
GOVERNOR

President Lyndon B. Johnson
Whitehouse
Washington, D.C.

Dear President Johnson:

This office would appreciate your support for H.R. 12121 - 90th Congress, a Bill proposing that the Public Land Law Review Commission Report be submitted by June 30, 1970, and that the ceiling on appropriations be extended from $4,000,000.00 to $7,390,000.00. An identical bill, S. 2255, has been introduced by Senator Jackson.

The Public Land Law Review Commission, as you know, was established by an act of Congress in 1964. The Commission's purpose is to study existing law governing the management and disposition of public lands and to review the policies and practices of the Federal agencies with administrative control over the public lands. There are over 740 million acres of public land owned by the Federal Government. The question of the final use or disposition of the public lands is of great importance to each State as they are the last of the public lands and all of the people of our country should have a direct voice in their management and disposition.

The Multiple Use Doctrine of continued public ownership coupled with allowing extractions by the timber, mining, and oil interests and grazing by the cattle interests along with use for recreational purposes is an important doctrine that needs careful evaluation by the Commission. Though legal in nature, this Commission is probably one of the most important Presidential Commissions of our times. In a nation with an ever increasing population, public land disposition and use becomes a more paramount question to all of us each year. The Public Land Law Review Commission has been very cooperative with the States and the representatives of each State Government. For these reasons I request your assistance in securing the passage of H.R. 12121 - 90th Congress, or in the alternative S. 2255, Senator Jackson's bill. We also urge that you include in the budget the appropriate amount to fund the Commission's extention.

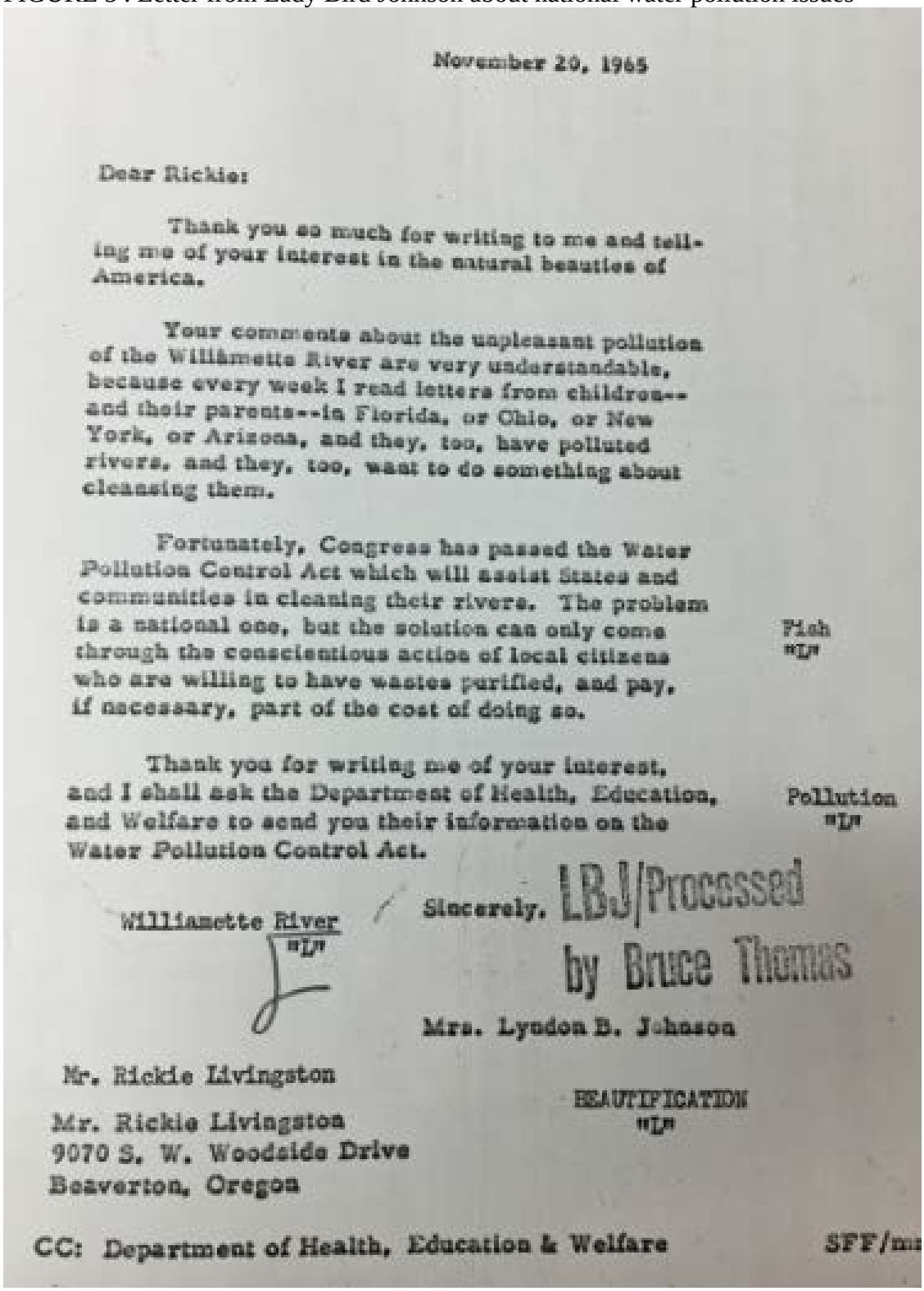
With every good wish.

Yours sincerely,

Robert Docking
Governor of Kansas

(Docking, 1967)

FIGURE 5 . Letter from Lady Bird Johnson about national water pollution issues



November 20, 1965

Dear Rickie:

Thank you so much for writing to me and telling me of your interest in the natural beauties of America.

Your comments about the unpleasant pollution of the Willamette River are very understandable, because every week I read letters from children--and their parents--in Florida, or Ohio, or New York, or Arizona, and they, too, have polluted rivers, and they, too, want to do something about cleansing them.

Fortunately, Congress has passed the Water Pollution Control Act which will assist States and communities in cleaning their rivers. The problem is a national one, but the solution can only come through the conscientious action of local citizens who are willing to have wastes purified, and pay, if necessary, part of the cost of doing so.

Fish "L"

Thank you for writing me of your interest, and I shall ask the Department of Health, Education, and Welfare to send you their information on the Water Pollution Control Act.

Pollution "L"

Williamette River "L"

Sincerely, LBJ/Processed by Bruce Thomas

Mrs. Lyndon B. Johnson

Mr. Rickie Livingston

BEAUTIFICATION "L"

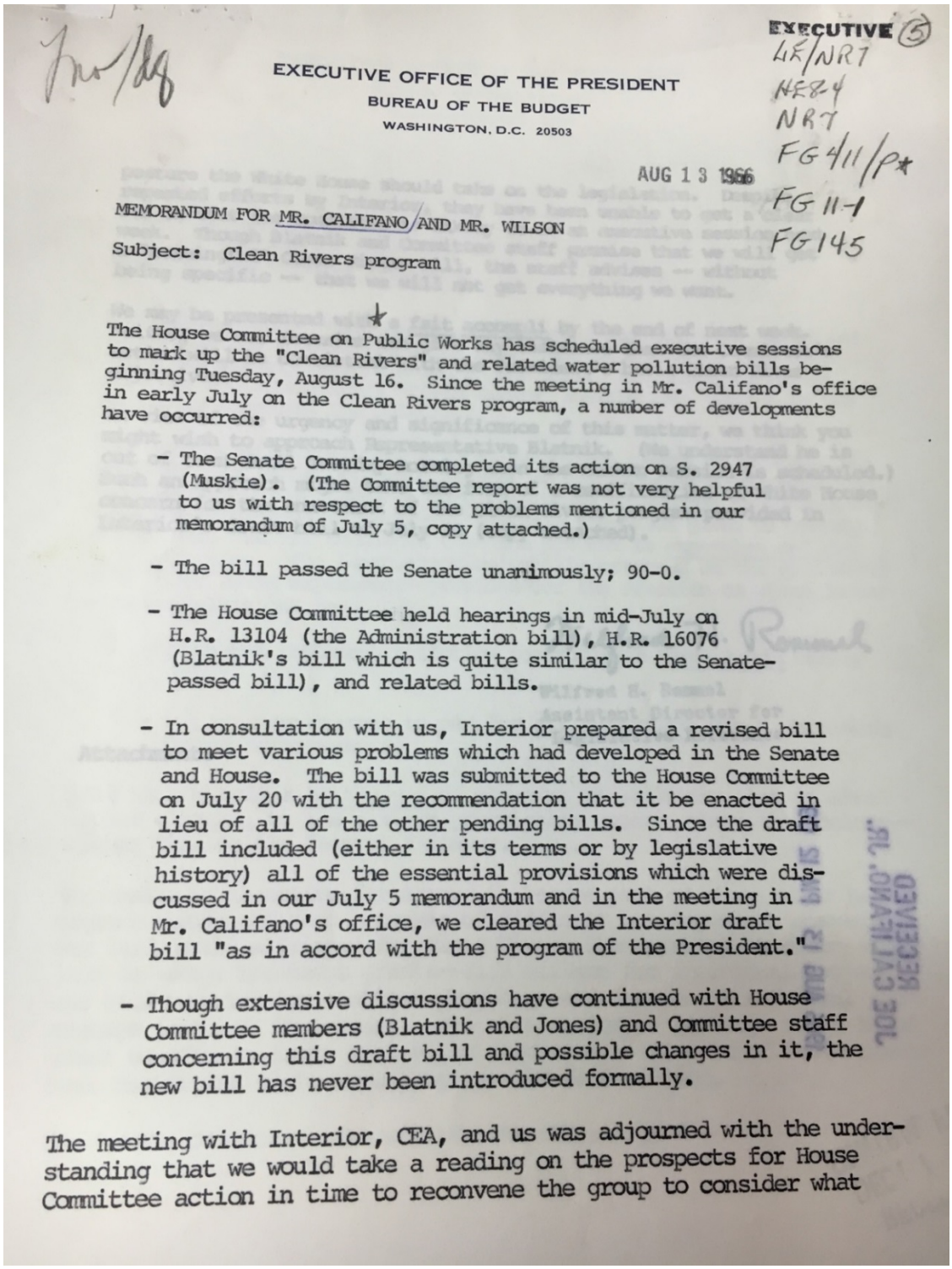
Mr. Rickie Livingston
9070 S. W. Woodside Drive
Beaverton, Oregon

CC: Department of Health, Education & Welfare

SFF/m

(Johnson, 1965)

Figure 6. Details on proposed bills aimed at curbing water pollution sent to White House



EXECUTIVE (5)
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FG 145

EXECUTIVE OFFICE OF THE PRESIDENT
BUREAU OF THE BUDGET
WASHINGTON, D.C. 20503

AUG 13 1966

MEMORANDUM FOR MR. CALIFANO AND MR. WILSON

Subject: Clean Rivers program

★

The House Committee on Public Works has scheduled executive sessions to mark up the "Clean Rivers" and related water pollution bills beginning Tuesday, August 16. Since the meeting in Mr. Califano's office in early July on the Clean Rivers program, a number of developments have occurred:

- The Senate Committee completed its action on S. 2947 (Muskie). (The Committee report was not very helpful to us with respect to the problems mentioned in our memorandum of July 5, copy attached.)

- The bill passed the Senate unanimously; 90-0.

- The House Committee held hearings in mid-July on H.R. 13104 (the Administration bill), H.R. 16076 (Blatnik's bill which is quite similar to the Senate-passed bill), and related bills.

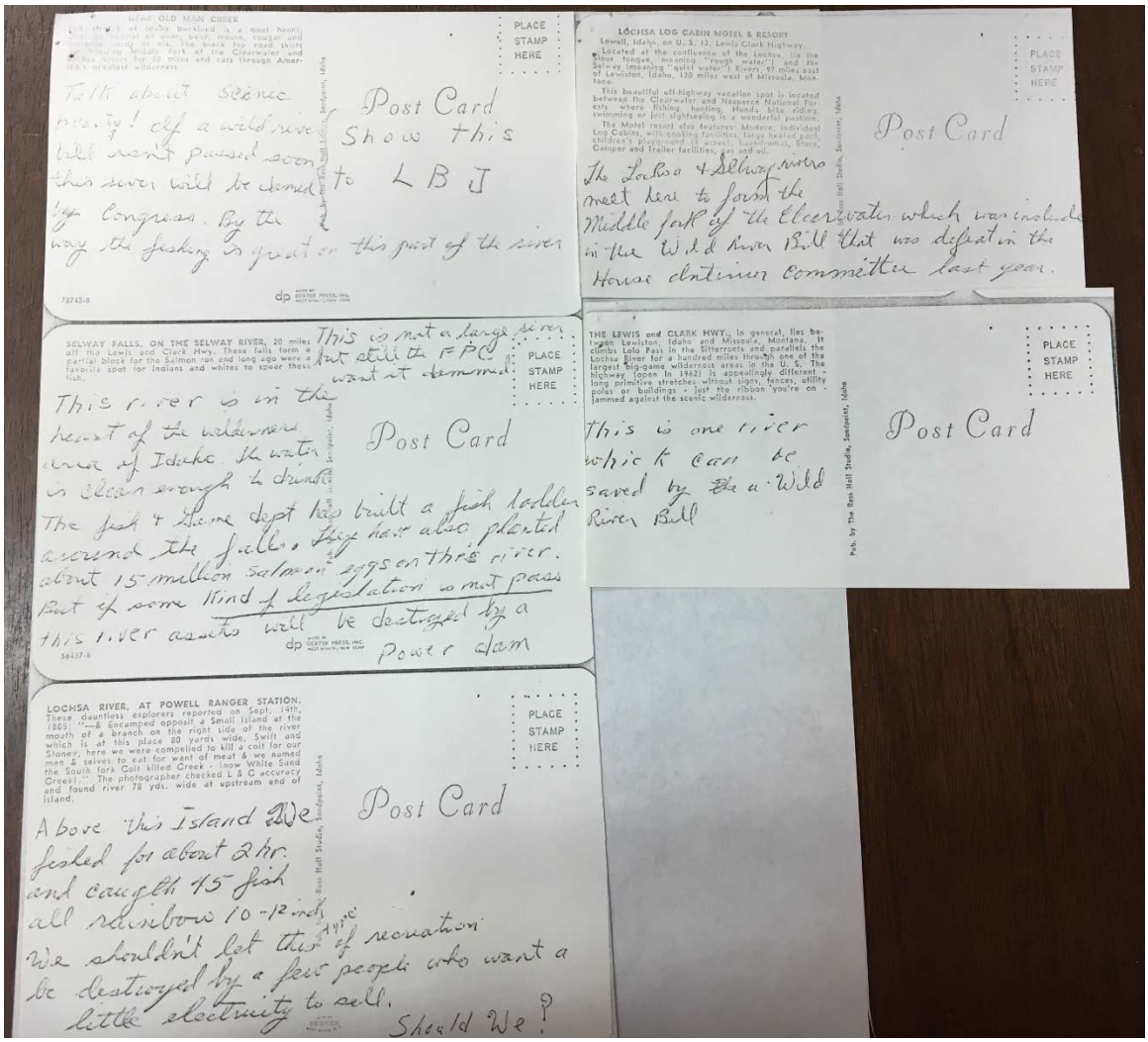
- In consultation with us, Interior prepared a revised bill to meet various problems which had developed in the Senate and House. The bill was submitted to the House Committee on July 20 with the recommendation that it be enacted in lieu of all of the other pending bills. Since the draft bill included (either in its terms or by legislative history) all of the essential provisions which were discussed in our July 5 memorandum and in the meeting in Mr. Califano's office, we cleared the Interior draft bill "as in accord with the program of the President."

- Though extensive discussions have continued with House Committee members (Blatnik and Jones) and Committee staff concerning this draft bill and possible changes in it, the new bill has never been introduced formally.

The meeting with Interior, CEA, and us was adjourned with the understanding that we would take a reading on the prospects for House Committee action in time to reconvene the group to consider what

(Bureau of Budget, 1966)

Figure 7 Postcards from concerned citizens detailing fears over Salmon River dams

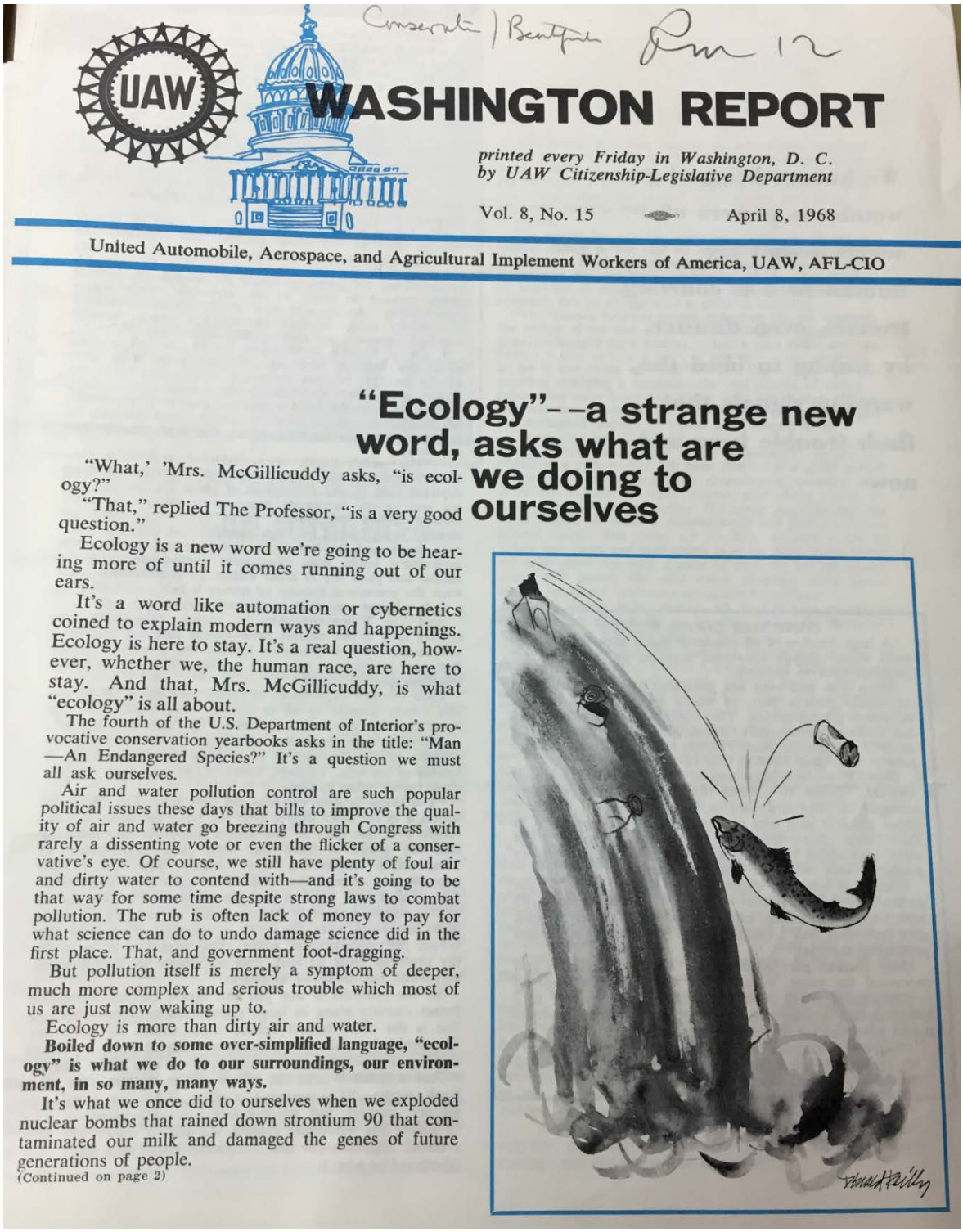


(Hagen, 1967)

Figure 8. LBJ contemplates the compromise between dams and preservation.

(Brinkman, 1965)

Figure 9. Ecological concerns about water flooded reports informing organized labor



UAW

WASHINGTON REPORT

printed every Friday in Washington, D. C. by UAW Citizenship-Legislative Department

Vol. 8, No. 15 — April 8, 1968

United Automobile, Aerospace, and Agricultural Implement Workers of America, UAW, AFL-CIO

"Ecology"--a strange new word, asks what are we doing to ourselves

"What,' 'Mrs. McGillicuddy asks, "is ecology?"

"That," replied The Professor, "is a very good question."

Ecology is a new word we're going to be hearing more of until it comes running out of our ears.

It's a word like automation or cybernetics coined to explain modern ways and happenings. Ecology is here to stay. It's a real question, however, whether we, the human race, are here to stay. And that, Mrs. McGillicuddy, is what "ecology" is all about.

The fourth of the U.S. Department of Interior's provocative conservation yearbooks asks in the title: "Man —An Endangered Species?" It's a question we must all ask ourselves.

Air and water pollution control are such popular political issues these days that bills to improve the quality of air and water go breezing through Congress with rarely a dissenting vote or even the flicker of a conservative's eye. Of course, we still have plenty of foul air and dirty water to contend with—and it's going to be that way for some time despite strong laws to combat pollution. The rub is often lack of money to pay for what science can do to undo damage science did in the first place. That, and government foot-dragging.

But pollution itself is merely a symptom of deeper, much more complex and serious trouble which most of us are just now waking up to.

Ecology is more than dirty air and water.

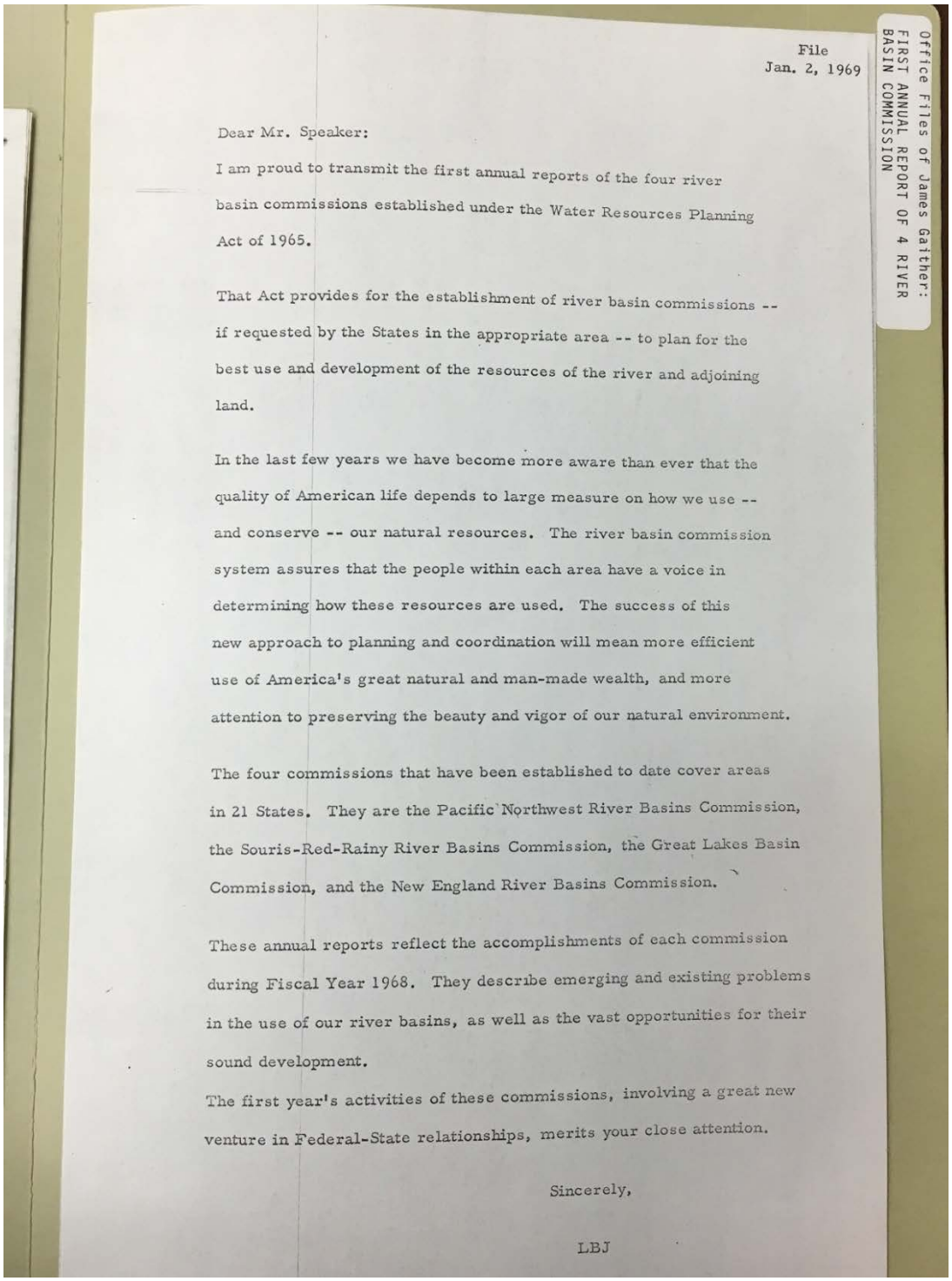
Boiled down to some over-simplified language, "ecology" is what we do to our surroundings, our environment, in so many, many ways.

It's what we once did to ourselves when we exploded nuclear bombs that rained down strontium 90 that contaminated our milk and damaged the genes of future generations of people.

(Continued on page 2)

(UAW, 1968)

Figure 10 . LBJ spoke on river basin commissions and integrated water management



File
Jan. 2, 1969

Dear Mr. Speaker:

I am proud to transmit the first annual reports of the four river basin commissions established under the Water Resources Planning Act of 1965.

That Act provides for the establishment of river basin commissions -- if requested by the States in the appropriate area -- to plan for the best use and development of the resources of the river and adjoining land.

In the last few years we have become more aware than ever that the quality of American life depends to large measure on how we use -- and conserve -- our natural resources. The river basin commission system assures that the people within each area have a voice in determining how these resources are used. The success of this new approach to planning and coordination will mean more efficient use of America's great natural and man-made wealth, and more attention to preserving the beauty and vigor of our natural environment.

The four commissions that have been established to date cover areas in 21 States. They are the Pacific Northwest River Basins Commission, the Souris-Red-Rainy River Basins Commission, the Great Lakes Basin Commission, and the New England River Basins Commission.

These annual reports reflect the accomplishments of each commission during Fiscal Year 1968. They describe emerging and existing problems in the use of our river basins, as well as the vast opportunities for their sound development.

The first year's activities of these commissions, involving a great new venture in Federal-State relationships, merits your close attention.

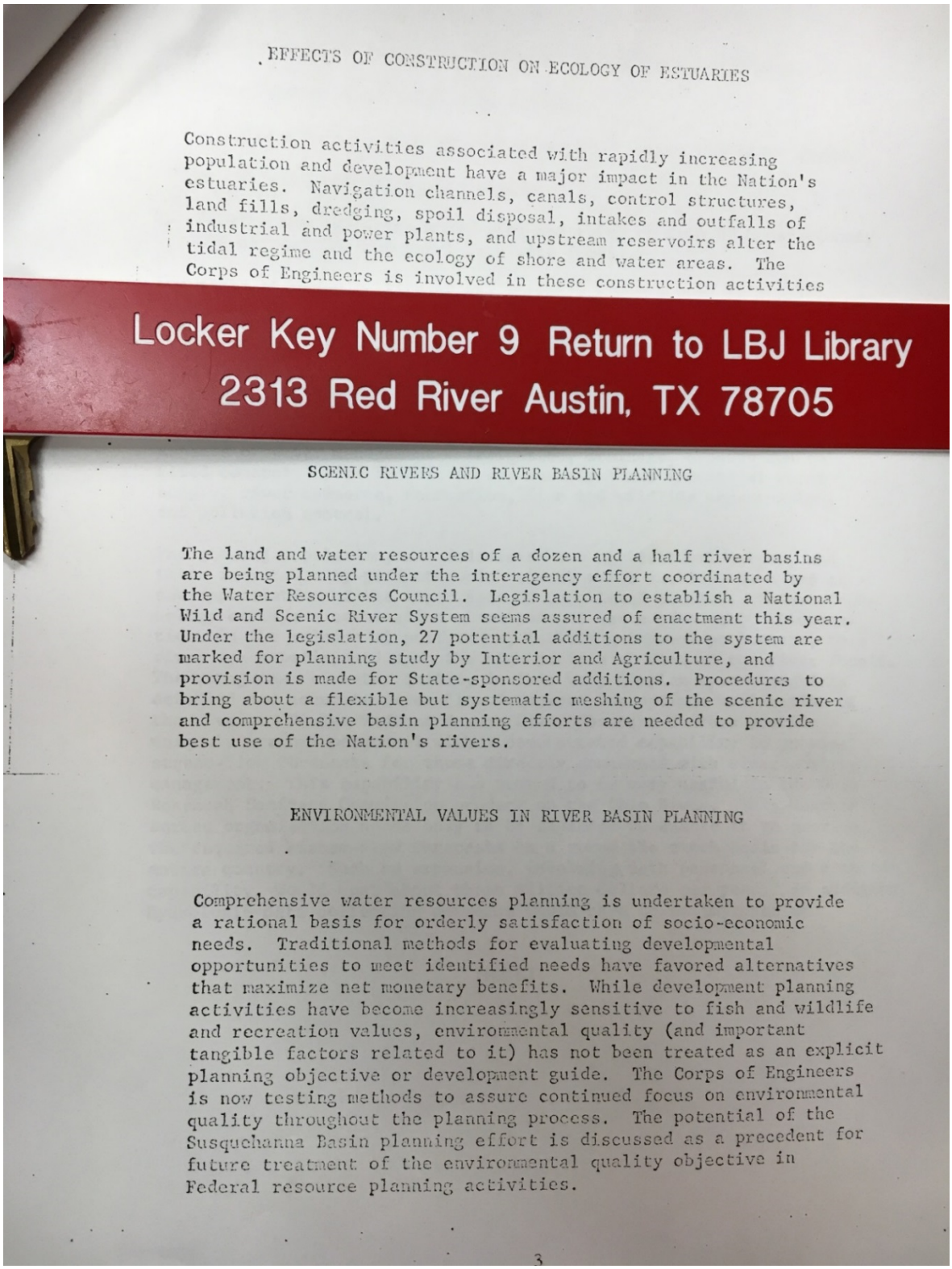
Sincerely,

LBJ

Office Files of James Gaither:
FIRST ANNUAL REPORT OF 4 RIVER BASIN COMMISSION

(Johnson, 1969)

Figure 11. Wild and Scenic and Rivers and river basin management planning



EFFECTS OF CONSTRUCTION ON ECOLOGY OF ESTUARIES

Construction activities associated with rapidly increasing population and development have a major impact in the Nation's estuaries. Navigation channels, canals, control structures, land fills, dredging, spoil disposal, intakes and outfalls of industrial and power plants, and upstream reservoirs alter the tidal regime and the ecology of shore and water areas. The Corps of Engineers is involved in these construction activities

SCENIC RIVERS AND RIVER BASIN PLANNING

The land and water resources of a dozen and a half river basins are being planned under the interagency effort coordinated by the Water Resources Council. Legislation to establish a National Wild and Scenic River System seems assured of enactment this year. Under the legislation, 27 potential additions to the system are marked for planning study by Interior and Agriculture, and provision is made for State-sponsored additions. Procedures to bring about a flexible but systematic meshing of the scenic river and comprehensive basin planning efforts are needed to provide best use of the Nation's rivers.

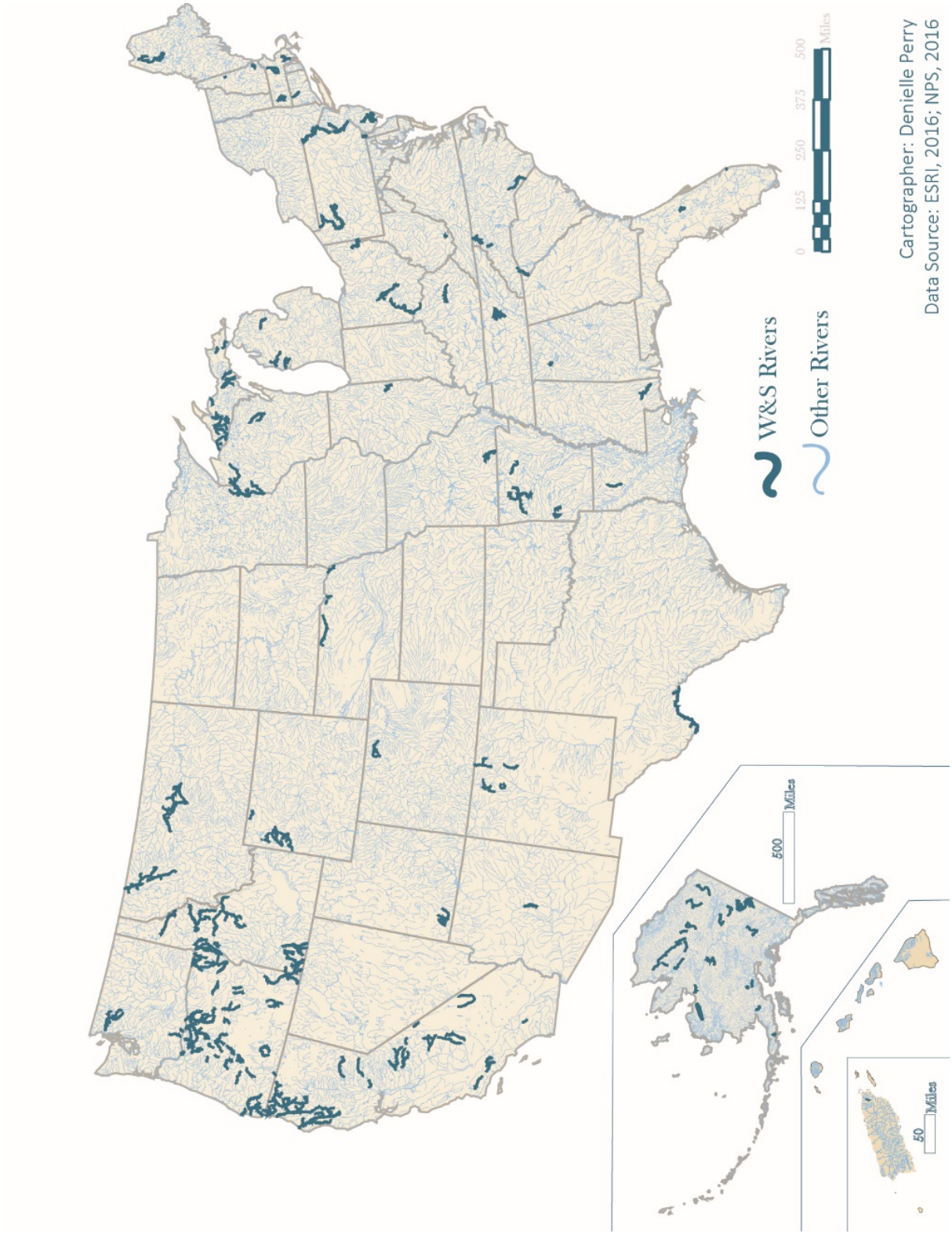
ENVIRONMENTAL VALUES IN RIVER BASIN PLANNING

Comprehensive water resources planning is undertaken to provide a rational basis for orderly satisfaction of socio-economic needs. Traditional methods for evaluating developmental opportunities to meet identified needs have favored alternatives that maximize net monetary benefits. While development planning activities have become increasingly sensitive to fish and wildlife and recreation values, environmental quality (and important tangible factors related to it) has not been treated as an explicit planning objective or development guide. The Corps of Engineers is now testing methods to assure continued focus on environmental quality throughout the planning process. The potential of the Susquehanna Basin planning effort is discussed as a precedent for future treatment of the environmental quality objective in Federal resource planning activities.

3

(Macy, n.d.)

Figure 12. 12,708.8 Miles of Wild and Scenic River. *Source: author.*



CHAPTER IV

A POLITICAL ECOLOGY OF FEDERAL RIVER CONSERVATION: 50 YEARS AND COUNTING OF THE WILD & SCENIC RIVERS ACT

INTRODUCTION

> "Have you also learned that secret from the river; that there is no such thing as time? That the river is everywhere at the same time, at the source and at the mouth, at the waterfall, at the ferry, at the current, in the ocean and in the mountains, everywhere and that the present only exists for it, not the shadow of the past nor the shadow of the future."
> ― Hermann Hesse, *Siddhartha*

As with Siddhartha's river, such is the case for the over 350 million miles of water flowing in more than 250 thousand river systems in the U.S. and its territories (NOAA, n.d.). These rivers support a plethora of aquatic and terrestrial species, contributing to the overall biodiversity of the planet – humans included. Moreover, rivers provide ecosystem services on which both non-human nature and society depend (Boyd, 2010; Boyd & Banzhaf, 2007; Palmer, Filoso, & Fanelli, 2014). In 1968, Congress recognized the need to protect the nation's unique river ecosystems and their Outstandingly Remarkable Values (ORVs) from water development projects and pollution by passage of The Wild and Scenic Rivers Act. Despite these protections, river ecosystems in the U.S. are still in danger from development threats and human demands on water resources. This is not news - evidence to this effect has been mounting for decades (American Rivers, 2017a). In fact, despite over fifty years of scientific evidence justifying river conservation, scholars find that less attention is paid to protecting rivers than to developing them for economic expansion (Vörösmarty et al., 2010).

Today, however, tangible and projected impacts of anthropogenic climate change on freshwater ecosystems and riparian communities *are* news (Davis et al., 2015; IPCC, 2008; Johnson & Spildie, 2014; Poff, N.L. et al., 2015; Strayer & Dudgeon, 2010; Viers & Rheinheimer, 2011; Vörösmarty et al., 2010). Despite protections, Wild and Scenic Rivers (hereinafter WSR) similarly stand to be affected by climate change, as human-induced climatic changes compound and amplify present risks in many of the watersheds containing protected rivers by altering precipitation patterns, temperature regimes, and runoff, as well as disrupting biological communities and severing ecological linkages (USGCRP, 2008, pp. 6–3). Consequently, calls to implement climate adaptation policies are rising (Archie, Dilling, Milford, & Pampel, 2012; Jantarasami, Lawler, & Thomas, 2010; Kemp et al., 2015; Smith & Travis, 2010; USGCRP, 2008). As one report states, "the anticipation of climate change effects requires both reactive and proactive management responses if the nation's valuable river assets are to be protected" (CCSP, 2008, pp. 6–3). Yet, the report from which this quote was taken from the U.S. Environmental Protection Agency (EPA) website, is no longer available. Instead, clicking the hyperlink will result in an error message such as the one pictured in Figure 13.

The removal of the report – which recommends more river segments be designated 'Wild and Scenic' and that adjacent lands be acquired to increase protection of river values at a time of increasing climate-induced stressors – is indicative of the politically-charged nature of climate change under the Trump administration. Climate adaptation, in essence, challenges longstanding political ideologies opposed to regulatory intervention and environmental values based on the notion that nature should be exploited

for economic growth[22] (Henstra, 2015; Wainwright & Mann, 2013). These ideologies, according to Gramsci (1971), are employed by the political elite to maintain hegemony, or "domination at the level of ideas" (Rose, O'Malley, & Valverde, 2006, p. 85). Thus, we could interpret the Trump administration's[23] claims of climate change being a 'hoax' as a politically motivated attempt to maintain hegemony through an ideology of denial (Dunlap, McCright, & Yarosh, 2016; McCright & Dunlap, 2011). To many, adapting to climate change would go against ideologies championing small government and free-market, *laissez-faire* economic policies related to resource development.

This is not the first time that political ideologies have entered the river conservation policy arena. In fact, as this article makes clear, the entire 50-year history of the Wild and Scenic River System is dictated by competing ideologies. The reason is simple: national river resources span many policy arenas, including food production and energy generation (Sauer et. al, 2010), making water increasingly central to the cost and benefit distribution of economic growth and burgeoning populations (Agnew, 2011). The territorialization of rivers for conservation purposes in turn creates a dialectical problem, which Sayre (2002) describes as being rooted in tensions between "nature produced and nature producing" (*xviii*). This dialectic is otherwise known as the 'conservation of nature vs. nature as resource paradigm'.

As the 50th anniversary of the Wild and Scenic Rivers Act (WSRA hereinafter) approaches in 2018, advocates are calling for an increase in river designations to expand

[22] According to Merriam Webster's definition, ideology is "the integrated assertions, theories and aims that constitute a sociopolitical program" (Merriam-Webster, 2017a). Ideologies in turn influence environmental values or the "relative worth, utility, or importance" one places on the environment (Merriam-Webster, 2017b).

[23] Donald Trump assumed the Presidency in 2017, and both Houses of Congress in the first legislative session are Republican controlled.

the national conservation program for greater ecosystem protection and climate adaptation (American Rivers, 2017b). However, according to Parenti (2015), "[H]ow the state responds to the climate crisis is a different question: sometimes it fails, but always it is called" (p. 829). While it remains to be seen what will become of the Trump administration's policy of climate denial, this article, grounded in a focus on the *territorialization* of river resources through legibility acts, sets out to reveal those political ideologies and environmental values that factor into the distribution and capacity of the WSRA.

Aimed at uncovering national and regional trends, this project is extensive in nature and draws on a mixed-method iterative approach based on spatial and temporal analysis of a GIS database. To provide empirical evidence from the ground to contextualize findings from the database analysis, I conducted semi-structured interviews of federal employees and conservation advocates which I then coded and analyzed employing NVivo qualitative data analytic software. This methodology revealed that policy distribution is dictated by a triad of oft-competing environmental ideologies across scales. Following de Haan (2000), I refer to these ideologies as the *exploitationist*, c*onservationist*, and *preservationist*. Moreover, the analysis showed that the decision to designate particular rivers, but not others, reflects physical geographic complexities and a federalist system with distinct regional variations in water rights across the United States These circumstances and attendant ideologies – along with a general lack of policy awareness – in turn has influenced the capacity of federal land management agencies to protect and enhance the nation's Outstandingly Remarkable Values as mandated by the WSRA. This analysis is not without limitations, which I discuss in the conclusions.

Manifest Destiny and the production of Wild and Scenic Spaces

In the United States, the monetary and moral justification for capitalizing on natural resources and removing native peoples from their ancestral lands can be summarized by the celebrated axiom, 'manifest destiny' (Brulle, 2000). For Delaney (2009), manifest destiny is an ideology devoted to positioning power over territory. "Territory," geographer Alexander Murphy explains, "is so important to political governance in part because it provides a locus for the exercise of political authority over a range of interests and initiatives" (1996, p. 110). Controlling western territory was in the state's interest as it served to improve the national economy centered in the East as well as to bolster its position in global trade (Wilkinson, 1992). Grounded in *laissez-faire* governance based on free-market ideologies, manifest destiny generated a semblance of duty to exploit nature (Brulle, 2000; Wilkinson, 1992). Following Haan's and Turner's (1988) work on world views, I adopt the term *exploitationist* ideology to refer to this view (de Haan, 2000). Commodified nature derived from the minerals, open lands, and waters of the U.S. laid the foundation for the mining, ranching, and agriculture industries that came to characterize the primary economic activities in regional markets that are still dominant today.[24]

This growth did not come without a price. Decades of environmental degradation ensued from the quest for capital accumulation spurred by manifest destiny ideology (Zellmer, 2009). Federal agencies conceived in Washington, D.C., were established to manage natural resources on which the state came to depend (Brulle, 2000).[25] Considered a project of high modernity, efficiency

[24] In the East, private property and riparian water rights fragmented the territory early on. Colonizers eager to stake a claim in expanding western territory were supported by state policies that commodified and developed resources and encouraged permanent settlement. In turn, the territorialization exercise depended on development opportunities for settlers to ensure the ambitious project's success (Davis, 1997).
[25] The U.S. Forest Service (USFS) and the U.S. Reclamation Service (later the U.S. Bureau of Reclamation (USBOR)) were two such agencies.

was achieved through science and technology (Brulle, 2000; Schmidt, 2014; Zellmer, 2009). A *laissez-faire* approach no more, the newly centralized resource governance was grounded in a *conservationist* ideology (de Haan, 2000). Scientific forestry and water resource management were devised as a provision mechanisms to satisfy the material needs of a democratic society seeking to achieve continuous economic growth (Brulle, 2000; Hays & Hays, 1987).

Despite conservation practices, dams and deforestation continued to alter public lands set aside as national parks and national forests, even as opponents voiced concerns about the destruction of wilderness and the need to protect pristine nature from destructive development forces. Diverging from previous alliances with conservationists, the *preservationist* ideology gained momentum, with interest groups setting out to ensure that public lands would continue to provide solitude and majesty to the people through the designation of wilderness spaces (Brulle, 2000).[26]

Alan Watson of the Aldo Leopold Wilderness Institute asserts that, "Collective decisions to protect lands in their primitive condition can reflect several things about a society, including their relative wealth of natural resources, their commitment to future generations and demonstration of commitment to human and environmental well-being" (2013, p. 598). Reflective of such social realities in the United States, a policy centered on protecting vital rivers from dams and pollution materialized with the creation of the Wild and Scenic Rivers Act of 1968 (WSRA hereinafter) (Brulle, 2000; Palmer, 1993). At first glance, the distribution of the Wild and Scenic segments seen in Figure 12 makes little sense given its grounding in a supposedly flexible policy with generalizable parameters meant for broad application across the U.S. Recognizing that a mere 12,708.8 miles of river are protected, a particularly poignant fact when one considers there are over

[26] Sierra Club, founded by John Muir and the Forest Service's Arthur Carhart and Aldo Leopold (Brulle, 2000)

350 million miles of water flowing through 250 thousand river veins and arteries coursing across the U.S. territory, the question remains: What factors influence the temporal and spatial distribution of river segments protected under the Wild and Scenic Rivers Act?

For many scholars, the action and objectivity of territorializing conservation spaces through boundary making is problematic (Braun & Castree, 1998; Robbins, 2012; Walker & Hurley, 2011; Zimmerer, 2000). To Zimmerer (2000), designations can "precipitate the loss of access to social-environmental entitlements among residents and resource users alike" (p. 358). Could it then be that the triad of ideologies previously described set the stage for power struggles over environmental policies seemingly at odds with different interest groups and resource uses? How then are competing environmental values understood and reconciled in the context of river conservation?

Methodology

To answer these questions, this study takes its methods from geo-spatial database analysis and semi-structured interviews, and then presents its findings in an iterative narrative. The purpose of this methodology is to provide new insights into the factors driving distribution of the WSRA over time. To that end, the first aim of this study was to *see* the system. Geographer Mei-Po Kwan (2003, 2004) explains that GIS allows the meaningful analysis of spatial and temporal patterns of human activity by incorporating large amounts of geographic data. To analyze such spatio-temporal data, I compiled a GIS database from extant publically available datasets (See appendices K-O for list of data categories). Using ArcGIS software, I spatially analyzed both qualitative and quantitative data pertaining to the Wild and Scenic Rivers System.

To begin, I used the USGS Hydrography dataset (USGS, 2016) to visualize the WSR System on the national network of streams. Next, for the period 1981-2010 I used PRISM 30-year Normal Precipitation data made available from the PRISM Climate Group at Oregon State University (PRISM, 2010). The resulting map (see Figure 14) was used to show how surface water availability correlated with decision-making for the national system of river conservation. Then, to understand how property rights influence the application of river conservation policy, I coupled this data with a Federal Lands data layer (see figure 15) (ESRI, 2017). The next step was to perform a temporal analysis of the database to reveal the overall distribution of designations, taking into consideration the political make-up of the presidential administrations and Congressional sessions at the time of each designation. This analysis took form both cartographically (figure 16) and in graphic figures (figure 17, 18, & 20).

Although patterns appear in these modes of visualizations, such spatio-temporal methods lack the ability to explain nuances in the WSRA distribution. Hence, I needed to *know* the system. Knowing meant learning about the system from those most intimately connected with the National Wild and Scenic River System (NWSRS). Thus, to uncover the complex nature of interjurisdictional river conservation in an institutional framework comprised of a federalist state system, I conducted 50 semi-structured interviews with the following subjects: conservation advocates from American Rivers and American Whitewater identifying as regional or national directors (n=12); federal agents from the U.S. Forest Service, Bureau of Land Management, U.S. Fish & Wildlife Service, and the National Park Service identifying as regional WSR or national directors or WSR program leads (n=34); and technical experts who provide training (n=1) as well as legal (n=1) and

resource management consultation (n=2) to the aforementioned groups. Respondents were asked a set of 15 semi-structured questions centered on their role in river conservation, their perceptions of the NWSRS, and climate change (see Table 2).

In addition, I attended two professional meetings – one five-day symposium organized by the River Management Society in May 2016 (RMS, 2016) and an American Whitewater national board meeting held in November 2016. Such meetings, while distinct in size and duration, served to bring together regional representatives from across the country, thus providing important insights into regional variations in river advocacy and management challenges and successes. Following Doyle, Lave, Robertson, & Ferguson (2013), I used grounded theory[27] (Glaser and Strauss 1967) to code results, breaking up data through abstraction, to uncover environmental discourses related to conservation (Mazza and Rydin, 1997). In coding, I looked for patterns and developed typologies of values and policy decisions over time and space (Spencer, Ritchie, & O'Connor, 2003). Interviews were coded using NVivo Qualitative Data Analytic software to reveal common themes. I situated the 225 emergent codes in six broad categories: 1) environmental values/ideologies, 2) location, 3) stakeholders, 4) policy, 5) capacity, and 6) science. Primary documents were collected to inform and complement the data collected from interviews and observations. Materials included the WSRA, technical white papers, monthly professional and advocacy news reports, and associated webpages.

[27] Geographers Mei-po Kwan and LaDona Knigge (2006) recommend analyzing qualitative and quantitative data through grounded theory and visualization in an iterative process to develop explanatory theory of social processes and situated knowledge. Grounded theory breaks up data through coding to identify the "six C's" of social processes (causes, contexts, contingencies, consequences, covariances, and conditions) (Strauss & Corbin, 1998).

Fears of Dispossession by Designation in Places Where Land and Water Meet

Along with the initial eight designations in 1968, Congress authorized the suitability study of 27 additional rivers over the next ten years. In 1974, 29 more rivers were authorized for study. By 1980, 47 more rivers were designated (See Appendix K for full list of designations over time). Then, according to Jackie Diedrich, "in the mid-80s into the early 90s we decided as a society that that [river conservation] is not the way we wanted to allocate resources." This sentiment is echoed by scholars who point to a divergence in party politics over matters of the environment when the "economy is bad," inflation is growing (Shipan & Lowry, 2001, p. 255), and unemployment is high (Tanger, Laband, & Zeng, 2011). Not coincidentally, these changes occurred during a period of economic structural adjustment brought about by neoliberal ideology.[28] While the government was reducing expenditures on big-infrastructure projects such as dams (Holden, 1980; Perry & Praskievicz, 2017), ideological discourse of small government and fiscal restraint incited increased distrust in the government that continues to this day, resulting in budget reductions for conservation purposes (Pincetl, 2006). These exploitationist, ideology-driven constraints are the biggest challenge to protecting the nation's river resources, as they affect the capacity to designate more rivers and manage rivers already protected by the National Wild and Scenic Rivers System.

When discussing the process of designation, Thomas O'Keefe of American Whitewater stated "The adjectives Wild and Scenic Outstandingly Remarkable Values just don't get politicians on your side" (IV11, 2016). According to Shipan and Lowry

[28] I define neoliberalism here as a three pronged economic ideology grounded in privatization of resources through government decentralization, deregulation of the environment, and market liberalization in the form of free-trade (Perry & Berry, 2016).

(2001), while the environment may be of concern to politicians and constituents, it lacks salience. Fundamentally, conservation prescribes what activities can and cannot take place within designated boundaries, affecting access to, control over, and management of resources. Rivers that are Wild and Scenic embody the dialectic of "nature produced and nature producing," as is the case in Sayre's Buenos Aires National Wildlife Refuge (2002, p. *xviii*). That is to say that the production of a protected river by delimiting a boundary and creating a Comprehensive River Management Plan (CRMP) is a corollary of the geographical production of territory, which inherently situates the state within the boundary, while seemingly limiting access to others. Such policy-making can generate struggles based on "competing economic, social, and environmental discourses" (Sharp & Richardson, 2001, p. 198).

Riverscapes: Spaces of Conservation, Contestation, and Change

Spatial analysis of land tenure patterns reveals large concentrations of Wild & Scenic Rivers in Alaska, the Pacific Northwest, the Pacific, and the Great Lakes regions (Figure 15). This distribution suggests that the territorialization of conservation spaces are often "deeded through the territorial legacy of resource management" (Zimmerer, 2000). In other words, these designations correspond to areas that have large concentrations of public lands and reflect both the preservationist and conservationist ideologies that drove the initial eight river designations. Yet upon closer investigation, they are also troubled by the exploitationist ideology, in what Pincetl calls a "dynamic co-existence" (2006, p. 247). As I demonstrate below, the absence and/or sparse distribution of designations is indicative of a legacy of exploitationist and conservationist

ideology, though in some areas that legacy is changing as new environmental priorities emerge.

Often, managing nature requires treating it as a commodity (Escobar, 1996). This reality poses a conundrum for Federal land management agencies tasked with managing the national river conservation system of Wild and Scenic Rivers. Such is the case because designation serves to signify that certain river resources are deemed valuable in their "natural" form through capitalist practices of legibility and conservation territorialization. However, those new conservation areas do not exist in a void. Instead, other nature production realities that are dependent on extraction have traditionally been practiced on those federal lands. For instance, interviews revealed that National Forests provide timber stands for harvesting (IVZ, 2016) and prime habitat for hunting game (IVX, 2017), while ranchers depend on public lands for grazing (IVO, 2016) and the National Park Service, concerned with tourism, capitalizes on maximizing access to park lands (IV14, 2017). Yet, in many cases protecting and enhancing WSR values depends on placing restrictions on these aforementioned activities. Thus, conservation spaces conjure notions of David Harvey's (2003) accumulation by dispossession –in this case accumulation by the state and certain interest groups by dispossessing others.

Questions of conservation through enclosure often center on concepts that scarce resources need to be protected from the people who are most closely associated with their use: locals (Kelly, 2011). *Those* people are often seen by conservation advocates as not possessing the right environmental ethic, ultimately not caring enough about nature (Dempsey, 2016) or not possessing legitimate ecosystem knowledge (Robbins, 2006). For Wild and Scenic Rivers, these topics become heated debates over resource

management plans that dictate land use practices within riparian areas. Moreover, Wild and Scenic designations include the establishment of up to a quarter-mile protected areas on either side of the river, carving out newly produced territories through ecosystem protection from "places of heavier human use and inhabitation" (Zimmerer, 2000, p. 362). Following Langston (2003), efforts to protect riparian areas are clearly muddy as these river side zones "confuse the clear boundaries between water and land and public and private" (p. 144).

Take, for instance, grazing and mining in the rural west. Debates over resource access drive tensions between long-time ranchers, miners, conservation advocates, and federal land management agents tasked with multiple-use mandates to protect and enhance ORVs in areas where lands have been 'traditionally'[29] used for resource extraction (Brulle, 2000; Davis, 1997; Nero, 2009). Langston (2003) details tensions stemming from a federalist approach to water rights in cases from eastern Oregon. Here rivers were designated in 1988 to protect critical stream habitat for salmonids. The BLM was held accountable by the WSRA authority to prepare an Environmental Impact Assessment (EIA) on grazing allotments that were degrading water quality. While the fish concerned landowners and ranchers, the "perceived threat to private property rights" and proposed grazing restrictions dominated the ensuing conflict (Langston, 2003, p. 144).

The Endangered Species Act (ESA) Spotted Owl controversy in the Pacific Northwest in the early 1990s negotiations for an Omnibus bill in Washington State to a

[29] I refer to the time period specifically after the U.S. acquired territory through treaties and secessions in the mid-nineteenth century. Prior to this period large numbers of indigenous peoples inhabited the land (Wilkinson, 1992).

screeching halt (IVK, 2017). This change was brought about by fears of dispossession resulting from timber harvest restrictions (Pincetl 2006). Reeling from such restrictions, fears of alienating their constituents with WSR designations loomed large for years with Washington's Congressional delegation (IVI, 2016). It's only now that proposals for WSR designations are gaining traction in Washington (IVI, 2016; IV11, 2016). The new willingness to consider WSR designations is fueled in part by a lapse in time since the controversy. However, according to interviews the biggest driving factor is a change in economic activity – namely the presence of coveted employment opportunities in the outdoor industry.[30] Such is the case in the Puget Sound area where employers endorse the "Wild Olympics" campaign proposal to designate 19 new WSR and their tributaries, among other conservation initiatives, in an effort to attract labor to expanding tech and service industries, such as Alaska Airlines, in the region (IVI, 2016). The campaign website showcases such testimonial as:

> As a businessman, I believe that protecting our natural environment is a key to providing steady and sustainable income to our rural economics. Here in Grays Harbor, salmon sport fishing, clamming, bird watching and other forms of outdoor recreation all contribute to our local economic health and are critical to attracting and retaining the highly skilled employees that growing, technology-based companies like ours will require (Wild Olympics, 2017).

This scenario affirms and supplements investigations of capitalist transformations in the 'new west' (Walker, 2003; Walker & Fortmann, 2003; Sheridan, 2007; Schroeder et al., 2006) and indicates that designations may be more likely in communities experiencing

[30] According to the Outdoor Industry Association's recent study, "these jobs attract active and healthy workers whose lifestyles inspire and uplift their neighbors. Beyond the industry itself, outdoor recreation infrastructure has proven an invaluable asset for economic development offices and chambers of commerce seeking to attract new employers. Towns and cities that invest in their outdoor assets attract employers and employees who value the work-life balance outdoor access provide" (OIA, 2017; 8).

such changes in their economic bases from resource extraction to services, whether tech or amenity based.

The application of the act also reflects distinct water governance institutions across the U.S. As depicted in Figure 14, the 100th Meridian loosely divides the U.S. into an eastern region where riparian water rights correlate to private property and a western region where the doctrine of prior appropriation dominates along with large concentrations of public lands (Amos, 2006; Davis, 2001; Doyle et al., 2013). From this image, the presence of federal lands *coupled with* high rates of precipitation and distribution of rivers appears to drive the largest concentrations of designations. Despite having large concentrations of public lands, water in the arid west is scarce with lower drainage density, or more widely spaced rivers. While often unfounded, fears of a federal reserved water right curbing existing water rights drives aversion to WSR designations in Colorado, Utah, Nevada, and Arizona (IVT, 2016). However, recent designations in Montana, Wyoming, and Arizona suggest this history is changing as economies change and new priorities emerge such as recreation in Arizona and fishing in Wyoming.

In the Midwest and the East in general, the distribution of WSR, or overall lack thereof is limited by private property and a legacy of water resource development since early settlement in these areas. The Midwestern region is considered by WSR experts to be the most intensively developed land in the country due to agricultural land uses, which helps explain the dearth of designations in this region (IVB, 2017; IV5, 2017). Meanwhile, the northeast is limited by the lack of free-flowing stretches due to intensive dam building. As is seemingly the case everywhere, there is increasing fear of government interference with private property rights since the Reagan era.

To address these concerns, the partnership model for river designations on private lands in eastern states has increased in use since the 1990s (IVH, 2017). These designations consist of river management agreements between a federal agency (usually the National Park Service) and a combination of state, local, NGO, and/or tribal entities. White Clay Creek in Delaware and Pennsylvania was designated as a partnership river in 2000, an effort so successful that in 2014, additional mileage was added to the overall protected river and its tributaries. Unfortunately, the southeast region is experiencing some of the fastest rates of freshwater extinctions in the world (Finlayson et al., 2005.; Strayer & Dudgeon, 2010), so expediting the designation process is at the fore of many river professionals' concerns (IVF, 2017; IVX, 2017; IV6, 2017).

Unlike the rest of the U.S., Alaska presents a unique case. As one federal employee put it: "What's not wild and scenic here? It's all in perception, it's all relative…what's not wilderness up here?" (IVN, 2016). This quote exemplifies a reactive approach to conservation policy – that if there's no threat, no perceived sense of scarce resources, then there's no need to apply policy in a proactive fashion. The 25 Alaskan Wild and Scenic Rivers, all flowing on federal lands, were designated as part of the Alaska National Interest Lands Conservation Act (ANILCA) in 1980 when the U.S. staked its territorial claims. Alaska, however, is similar to other states with long-standing federal-state tensions over water rights. In Alaska, as in other states, mining claims pose a challenge for river managers as the Federal government maintains the uplands and the State "maintains" navigability and the water column (IVN, 2016).

How to get a River Designated: Where There's a Will, There's a Way

In an effort to understand whether adaptation policies should be both proactive and reactive (CCSP, 2008), I asked interview subjects whether they felt that Wild and Scenic designation was a response to a threat, or if it could be viewed in another way. Sixty percent of those interviewed indicated that, in general, the WSRA is deployed only when there's a tangible threat to a river. Jackie Diedrich, retired Forest Service agent and longtime member of the Interagency Wild and Scenic Rivers Coordinating Council (IWSRCC) explained:

> A threat is the best way to get a river designated still, unfortunately. We're not forward thinking as much as we could be. When somebody says I'm about to build 'X' project and 'X' is bad in a river corridor suddenly, well, Wild and Scenic as a designation seems more palatable than 'X' (IVU, 2017).

This scenario exemplifies a conservative and reactionary approach to conservation, something Dempsey highlighted in her 2016 work. In the following quote, advocate Michael Fiebig of American Rivers offers another perspective:

> Sometimes it's a little harder sell for folks especially in the rural west where people are independent minded and have a self-sufficient 'can do' attitude. Oftentimes I hear 'hey if the river's still in good shape right now and we can't imagine it being threatened next year or the year after why should we protect this and why should we have another federal law or engage a federal agency that we're not totally sure about when things are fine? We try to tell them that 'hey, it's an insurance policy and if you're smart about buying insurance you buy it before you have an accident not after and it's way cheaper. It is cheaper to protect a river proactively than it is to protect it reactively and it's *way* cheaper to protect a river proactively than it is to restore it after damages and pollution, orders of magnitude cheaper than restoration. So, it's just good fiscal sense' - that narrative really resonates with some folks. (IV3, 2016)

Here the lack of proactive designations is influenced by conservative ideologies grounded in a desire for limited land use regulations and a general distrust of the government. Yet, at the same time, Fiebig offers a perspective that factors favorably into conservative

ideology discourse about small government and fiscal restraint—an approach that may yield otherwise unlikely supporters.

Whether fear-based or visionary, once a river is deemed worthy of designation the challenging work begins for what can be a 5-10-year campaign. When I asked, “what does it take to get a river designated,” several quipped that it “requires the stars to align” (IVGG, 2016), “an act of God” (IVS, 2017) or “magic” (IVZ, 2017; IVY, 2017). As methods for assessing these esoteric mechanisms are nonexistent, I turned to my database which showed that designations largely depend on control of Congress by the Democratic Party. As Figure 17 illustrates, 80 percent of all designations took place under this political configuration. These findings support the literature citing party divergence over questions of the environment and conservation (Shipan & Lowry, 2001; Tanger et al., 2011). In other words, fears of dispossession by conservation alienate constituents and politicians, who may view natural resource extraction as a means to stimulate economic activity. It can be expected then that designations will have a negative correlation to unemployment rates when political agendas tend to focus on growth by developing resources.

Despite party divergence on environmental issues, designations have been championed by all major parties, as Figure 18 illustrates. As one BLM agent explained, “if you don't have somebody in Congress that’s going to champion it for you, it [a river bill] won't go anywhere. It takes a connection to place and the people” (IVK, 2017). It seems clear the connection is most often grounded in a conservationist ideology centered on ecosystem service protection, as seen in remarks offered by David Moryc of American Rivers.

> The intent of the act is to create a balance. The framers of the document have for decades viewed rivers as something to be utilized for economic benefit. Designations are partly about risk, but also a recognition of the inherent values so it's actually preserving the benefits as well as avoiding threats. If you look at the values and why they should be protected as Wild and Scenic – some are aesthetic as well as cultural, but also economic- increasing clean water, recreation, or the other services that rivers provide. That also goes to the heart of why and how decision makers view whether or not they would support conservation of new Wild and Scenic Rivers. It's not what always motivates people to get involved – that's personal connection – but the decision makers who may not have a passion for a particular place, they are motivated by those more economically justifiable reasons for protecting place. (IV1, 2017)

That is not to say that preservationist ideologies do not enter the designation arena, however. In line with Schmidt-Thomé, et al. (2013), framing conservation in terms of already dominant policy priorities can create relevancy for conservation policy, including adaptation. A salient example comes from the 40 rivers designated in the 1988 omnibus bill championed by Republican Senator Mark Hatfield. This designation focused on protecting salmonid habitat, a vital ecosystem service for Pacific fisheries and thus the State of Oregon. Hatfield's conservationist ideology secured him a legacy as a champion for WSR and placed Oregon as the leading state in overall designations (IVU, 2017).

Congress is not the only route to WSR designation, however. Archival documents revealed that in creating the policy, there were Congressional roadblocks based on exploitationist ideologies. As seen in Figure 19, Congressman Wayne Aspinall (D-CO), known for favoring water resource development projects (Sturgeon, 2002), was "reported cool to the Wild River proposal because he thinks it is essentially a Washington [D.C.] notion lacking grass roots support" (LE/NR7LBJ Archives). In reality, there was plenty of grassroots support for the WSRA as evidenced by archival documents such as those featured in Figures 20 & 21. Instead, such coolness stemmed from resistance to the

notion of federal policy governing rivers, a policy principally heretofore left up to States (Amos, 2006). To address these concerns, the LBJ administration encouraged all 50 States to establish proprietary scenic river systems allowing them to maintain management of vital waters coursing through their territories. The 1977 Wyoming establishment of a state river protection system in lieu of federal designations, as featured in Figure 22, exemplifies the tensions between states and the federal government over water governance.

If they so desired, states could subsequently request that their protected rivers be added to the National System through Section 2(a)(ii) of the WSRA, should they want additional protection or prestige offered by the federal WSRA policy. Despite being a fast track to federal designation, Figure 23 demonstrates that only 10 percent of designations have occurred this way. This fact is worthy of discussion. At one point, there were 32 active State systems. Today, there are just a handful; the rest are inactive or defunct.[31] David Moryc of American Rivers explains "It was anticipated that the State systems would be a thriving part of the overall conservation of rivers, but it hasn't. I think mainly due to State budget pressures we've seen an erosion of State support and the elimination of these State systems" (IV1, 2017).

Such was the case in 2016 for the Oklahoma Scenic Rivers Commission, after over 30 years in existence (Layden, 2016; Layden, 2015). These findings substantiate Parenti's (2015) claim that implementing and sustaining large scale environmental programs requires a strong state (federal) presence. Regarding Wild and Scenic Rivers,

[31] The exact number is unknown by either RMS or the IWSRCC. Notably Barring this fact, many states do have other forms of river conservation policies and programs including scenic trail systems and outstanding resource waters.

this finding is noteworthy because, without state systems, increasing WSR designations for ecosystem protection and climate adaptation depends almost entirely on Congressional designations – a process largely blocked today by exploitationist ideologies.

Temporal analysis, however, revealed that 56 percent of protected miles were designated in just four years. Three of those years, circled in red in Figure 24, correspond to the 20th, 25th, and 40th anniversaries of the WSRA, which coincided with Republican administrations.[32] Considering party divergence over conservation policy, the numerous anniversary designations indicate the influence of two ideologies: conservationist and preservationist. As a conservationist initiative, these clusters aimed at achieving efficiency in the political process by capitalizing on a significant date – a sentiment echoed by interview participants (IVG, 2016; IVI, 2016; IV3, 2017; IV P, 2017). As a preservationist initiative these designations aligned with notions of posterity, or fulfilling a duty to future generations (Gündling, 1990; Keitner, 1997). To others, preserving natural heritage and sublime nature serves nationalistic purposes; territory encapsulates the state's authority in a physical sense (Sack, 1983). In this vein, territorializing rivers in a National System, imbues those rivers with an authority constituting "America." The eligibility process of identifying rivers that are "regionally and nationally significant," in line with Murphy (2013), reifies nationalist and regionalist identity narratives grounded in characteristics of the environment.

[32] The 39 designations made in early 2009 were negotiated during the G.W. Bush administration.

Seeking saliency in the shadow of land: If a river runs through it does anyone care?

Even when rivers are designated Wild and Scenic, they receive far less attention than conservation land units. Rivers and their ORVs often receive inadequate protections, let alone enhancement. Following Abell, Allan and Lehner (2007), in some cases that is because they are not recognized as being unique entities worthy of special care; in others, budgetary restraints limit resources specifically dedicated to their management. In either case, lack of attention is a symptom of capacity issues and policy awareness. For instance, interviews across all four land management agencies revealed that rivers, even those designated Wild and Scenic, receive far less attention than other conservation units such as wilderness areas, national parks, wildlife refuges, or national monuments– even if the river runs through it.

The disparity can be measured in many ways. Federal employees working in Wilderness Areas have the luxury of attending specialized training at the Arthur Carhart National Wilderness Training Center in Montana, operated by an interagency team (IVX, 2016; IVAA, 2017), which according to their website logo, aims at "fostering interagency excellence in wilderness stewardship." Meanwhile WSR managers have had no such institution. Instead they rely heavily on the RMS biennial symposium for capacity training and networking (IV15, 2016). Other educational opportunities come from regional trainings organized at the request of a field office and conducted by technical experts, often retired agents (IVAA, 2017; IVP, 2017; IVW, 2017). Recognizing the need for comprehensive and cohesive training across the interagency system, RMS, the IWSRCC, and federal land agencies are currently working to create a WSR training institute similar to the Wilderness Center. Considering the uncertainty of federal budgets,

the river institute will likely be an independent entity, outside of the government, unlike the Carhart Institute (IV15, 2017).

Whereas designations have increased over time, there is an overall lack of capacity and awareness of the policy authority that together influence the distribution and management of WSR values. For instance, rivers running through National Park units are often not prioritized for designation. From within the NPS there is a long-held, yet evolving sentiment by some agents that these rivers are already afforded protection due to their location within Park boundaries. However, other interview participants expressed concerns that the WSRA affords river protections that the NPS mission does not (IV14, 2017; IVA, 2017; IVG, 2017). Ultimately for some Park agents, designating Park rivers is a question of money and human resources for management. The added responsibility of CRMP would burden already tight budgets. For other NPS personnel, fears of increased visitation to parks already challenged by user capacities would bring management challenges that would be hard to address with limited financial and labor resources (IVE, 2017; IVD, 2017). Nonetheless, there is a recognition that designations increase awareness (Palmer, 1993) and that rivers such as the iconic Colorado River flowing through Grand Canyon National Park or the rivers in Olympic National Park are equally deserving of the WSR title and associated prestige (IVA, 2017).

Concerns about capacity were echoed by every advocate and agent in my study. Ultimately continued budget cuts and personnel reductions limit the capacity of the National System to execute the mission of the WSRA and provide a comprehensive river conservation program across the United States. Such is the case because financial capacity influences the ability for outreach and education in communities, training and

engaging personnel in river-specific management duties, or understanding and enforcing the WSRA to its full extent as evidenced by the following quotes:

> I wear many hats… it's difficult for lots of the agencies to keep someone on board that understands the law and the policy. It's an ongoing challenge (IVK, 2017).
>
> I don't want to speak for the entire agency because my context is only in the southwest, but our Forests are undertrained and understaffed, particularly when it comes to eligible rivers, but across the board including designated rivers (IVAA, 2017).
>
> None of my salary is funded to work on Scenic Rivers…I don't know if that's even an agency thing as much as it is a Congressional thing (IVF, 2017).

In general, the WSRA is virtually invisible to the general population, partially due to the challenge of representing protected streams on maps as vector features. Protected land units, by comparison, are readily apparent polygons easily distinguishable from surrounding areas. Hence, increasing the legibility of protected streams to raise System awareness demands new outreach attention through visual representation. To that end, the IWSRCC worked with ESRI to develop a story map and interactive GIS database for the public in anticipation of the upcoming WSRA 50th anniversary. The website went live in February of 2017 (WSR, n.d.). Perhaps the visibility will make the system salient with constituents and result in much needed financial support.

Meanwhile, Tim Palmer found that the 227 named designations do not total the actual number of rivers protected.[33] This dearth of place names does not truly exemplify the conservation work being done by the system and complicates management by diminishing public visibility. Another concern mentioned was the lack of capacity to complete Comprehensive River Management Plans (CRMPS) within the three-year

[33] Official designations actually protect 495 rivers, forks, and named streams (Palmer, in press).

policy-specified timeline, a delay that has sometimes proven to be problematic for locals and managers alike. Recognizing these challenges, recent efforts to negotiate CRMPS during suitability studies and Congressional hearings on proposed designations may alleviate some of the tensions that arise when unforeseen resource use restrictions are imposed after designation (IV12, 2016).

Perhaps one of the biggest challenges in growing the system is the inability to update, add to, and manage the NRI in a comprehensive fashion. The NRI hasn't been updated since the 1990s, though rivers are found eligible when agencies update resource management plans. Essentially this is a problem of sharing and managing large amounts of data across an interjurisdictional system with no dedicated central repository or reporting mechanism. Such a system is critical for protecting rivers with vital ecosystem services and moving forward with designations. A complete list of eligible rivers would provide a roadmap for stakeholders to decide what rivers are most deserving of protection.

From Waste to Worthy: Widening the Scope of Ecosystem Protection for Species Resilience

The state employs laws to territorialize nature, in the process facilitating nature's role in capital. In so doing, according to Collard and Dempsey (2017), law produces the conditions for markets and produces bodies worthy of state protection and investment as well as inferior bodies.[34] As land management agencies conduct resource management

[34] Collard and Dempsey argue that a hierarchical production of nature is critical for value production in the capitalist system, thus understanding the "natures that are not directly valued" can shed light on those natures that are, and to what end (Collard and Dempsey, 2017, p. 82).

plan updates, free-flowing rivers containing ORVs, or ecosystem services important to the state, are deemed "eligible," while others with no distinguishable value are ineligible, or wastes. Moreover, both Robbins (2012) and Zimmerer (2000) found that territorializing conservation spaces through legibility acts is problematic, as mapped spaces containing surveyed and cataloged values rarely coincide with the extent of ecosystem functions and outside influences. For instance, the initial WSR preservationist and conservationist ideologies centered largely on protecting long stretches of impressive arterial riverscapes such as the Rogue River and Rio Grande, overlooking smaller rivers and tributary streams deemed unworthy of the crown jewel of river protection. However, with new knowledge and priorities, these wastes may find new value form for capital (Collard & Dempsey, 2017). Such is the case for the evolution of river designations over time.

With advances in stream ecology and the recognition that river ecosystems depend also on humble headwater streams and tributaries, more recent designations have included these more mundane, yet vital veins of river anatomy (Bosse, 2010). This appreciation for tributaries and headwater streams comes with the realization that they often experience less human alteration than main-stem rivers. These unaltered stretches in turn provide habitat for native species otherwise hindered downstream where developments have impaired their habitat. Focusing conservation efforts on these tributary and/or headwater streams can therefore aid in biodiversity protection (Pracheil, McIntyre, & Lyons, 2013). Recognizing the potential for greater ecosystem protection and biodiversity resilience, conservation advocacy groups, together with federal agencies, have identified stretches of rivers for inclusion in the National System. The past decade

has seen an uptick in such designations and proposed legislation to that end, encompassing areas such as Wyoming's Snake River Headwaters and Utah's Virgin River system (2009).

Since WSRA mandates that only free-flowing stretches of river can be designated while impounded segments of rivers, generally from the dam to the top of the reservoir, are deemed wastes. However, the WSRA specifies that the intent of the Act is to protect, enhance, and restore clean water in the U.S. It follows that, as outdated dams are decommissioned across the country and rivers are restored, the potential to designate streams possessing protection-worthy ORVS into the system is ripe for expansion. After 99 years, a diversion dam was removed from Arizona's spring-fed Fossil Creek, restoring flows and ecosystem function to the dry river segment (Fuller et al., 2011; Muehlbauer et al., 2008). These restoration efforts also resulted in the first Wild and Scenic designation in the State, which now provides highly sought-after species habitat and recreational opportunities in a desert oasis (WSR, n.d.).

Conclusions: The next 50 years of Wild and Scenic Rivers

As Siddhartha's rivers, WSR flow everywhere at once and serve many purposes, often at competing odds. Political and ecological legacies unique to different regions gave rise to the creation of a flexible policy design, shaped to facilitate the protection of rivers in a national system. Yet those same legacies dictating land and water use over time serve to limit the scope of the policy's application and efficacy. The few examples I was able to illustrate in these brief pages do not do justice to the complexity of an interagency system that was designed to protect a non-substitutable flow resource that does not conform to any scale of jurisdictional boundaries. As this study reveals,

conservation is an exercise in determining not only who can access resources territorialized by policy in particular places near rivers, but also who can access financial resources in distant political spaces for environmental protection.

Through coordinated efforts to engender consistent river management practices in the interagency system, the IWSRCC provides benefits critical to the integrity and vitality of the system. With more capacity, the council could improve and expand upon the system that is already in place to provide win-win protections for ecosystem services and climate adaptation. Ultimately the system is limited by a lack of awareness and salience with stakeholders, which ultimately limits its ability to address limiting factors. That said, earnest efforts are being made through agency partnerships with industry and non-profit entities to address capacity and visibility issues. While designations to date are linked to a Democratic Congress, constituents concerned with ecosystem protection and adaptation can influence Congress through their voting power. Appealing to the "good fiscal sense" of ecosystem service protection versus restoration is one mean of advancing the goal of protecting another 5000 miles of river for the upcoming 50th anniversary of the WSRA (American Rivers, 2017b).

This project finds that Federal lands are important for biodiversity protection and ecosystem services conservation as they provide space for large concentrations of WSRs. When it comes to rivers, ensuring the vitality of federal land management agencies is paramount. Given the dependence on federal lands for river conservation, situations like the recent Malheur Wildlife Refuge standoff and vociferous State's rights discourses advocating the so-called "return" of federal public lands to the States pose a palpable

threat to the National Wild and Scenic River System and the ecosystem services it protects (Paulson, 2017).[35] Other attempts by Congressional delegates to roll back protections at the individual designation level also pose a risk to the system (Perry & Praskievicz, 2017). Ultimately, advocates and activists must be vigilant and the land management agents must be discerning when it comes to policy changes driven by ideology, especially in the present political climate.

A meta-analysis of the Wild and Scenic Rivers Act, such as that presented in this article, does not come without limitations. First of all, constructing the database required finding and merging incomplete and/or incorrect datasets in need of reconciling band culling from other sources. This deficiency, in and of itself, is telling of the National Wild and Scenic Rivers System's lack of technical and human resource capacity to manage substantial amounts of data across the interagency system. Nonetheless, some data relating to ORVs were never found, or found to be non-existent. Second, there are numerous ways to analyze spatial data extensively. While I chose to focus on precipitation, land tenure, and political boundaries, further analyses utilizing datasets concerning water quality and dams would likely yield results that complement and advance this study's findings. Further limitations stem from the inability to conduct intensive field work on the ground. Instead, empirical evidence illuminating the local scale was largely generated through interview responses. Given that each participant had varying roles and years of affiliation with the National Wild and Scenic Rivers System, the study was both enriched and limited by their contributions, or lack thereof. To

[35] See for instance Peter Walker's forthcoming book for more detail about the Malheur Wildlife Refuge.

advance this study, collection of empirical evidence through intensive case studies would serve to flesh out regional and local factors driving the uneven distribution of the policy.

Building on notions articulated within this chapter regarding regional and ideological differences influencing the National Wild and Scenic Rivers System, the subsequent chapter identifies areas for improvement that could prove useful for expanding the system. Chapter V, [Re]Framing Regions and Outstandingly Remarkable Values for Ecosystem Based Resilience and Adaptation, examines the management of the interagency system to reveal how discursive and spatial framings of river resources can be reconfigured to advance the policy agenda of providing a national river conservation system.

Figure 13. Error Message from EPA Website Indicating Climate Research Removal

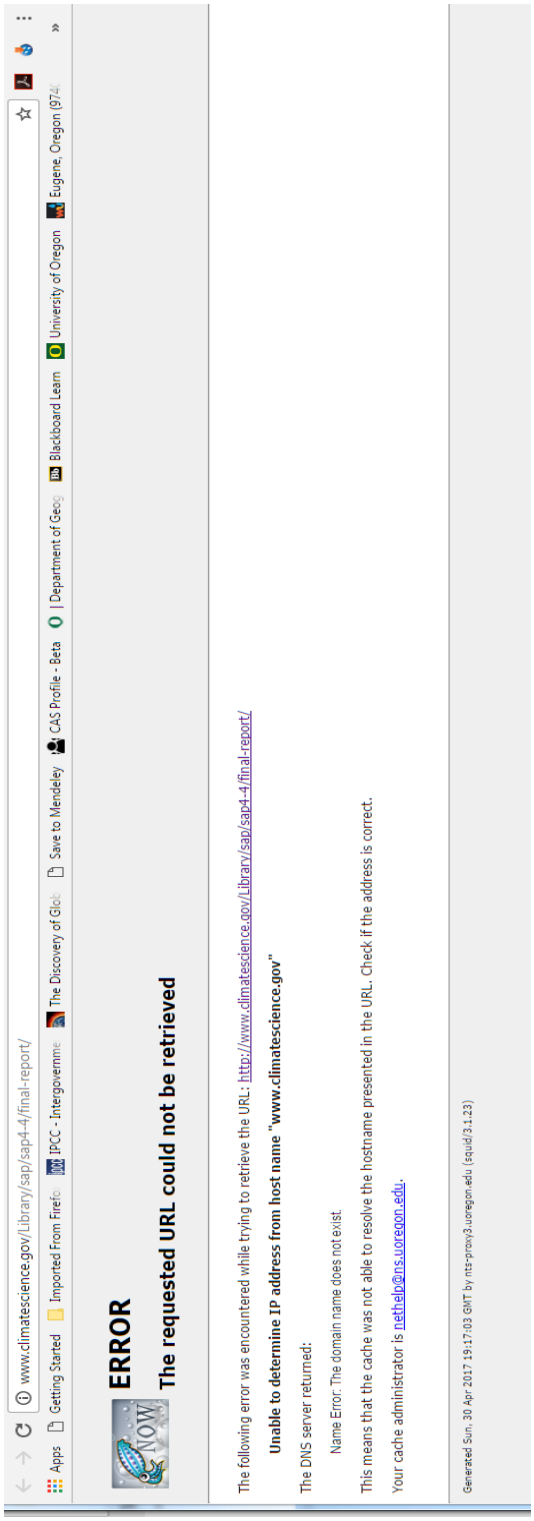


Figure 14. The 100th Meridian dictates designations and precipitation

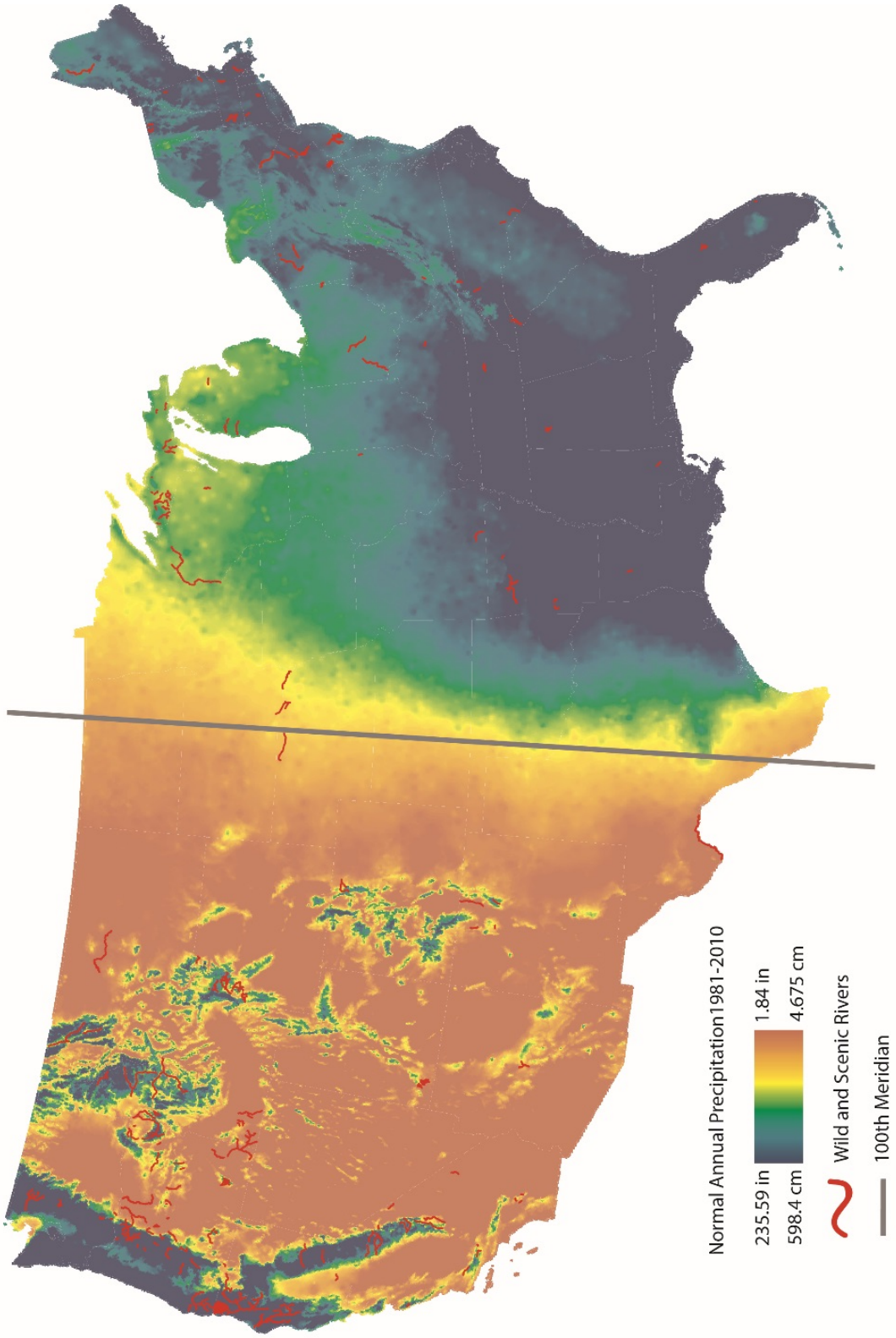


Figure 15. Large concentrations of designations correlate to federal lands

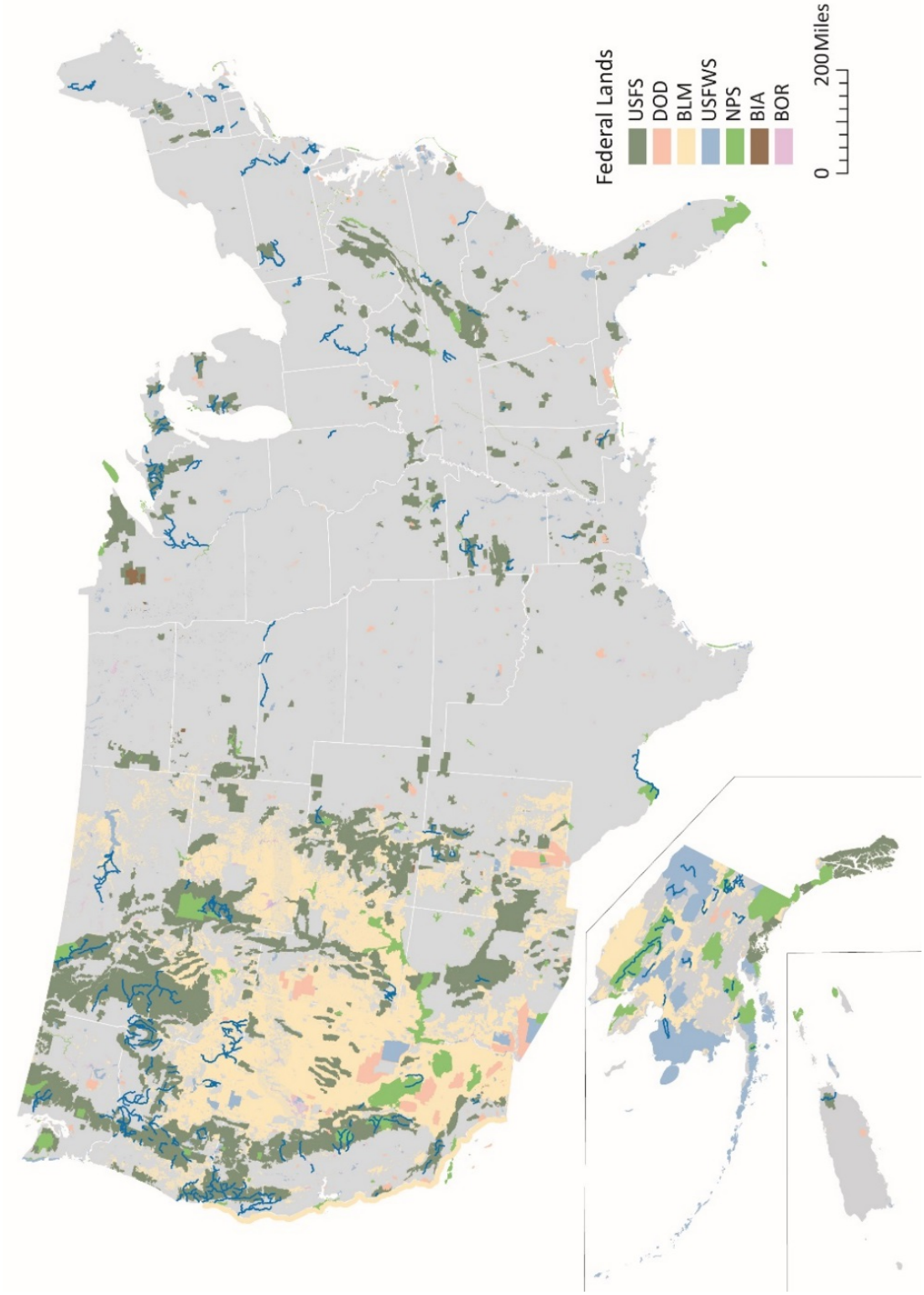


Figure 16. Forty States and Puerto Rico have at least one federal WSR.

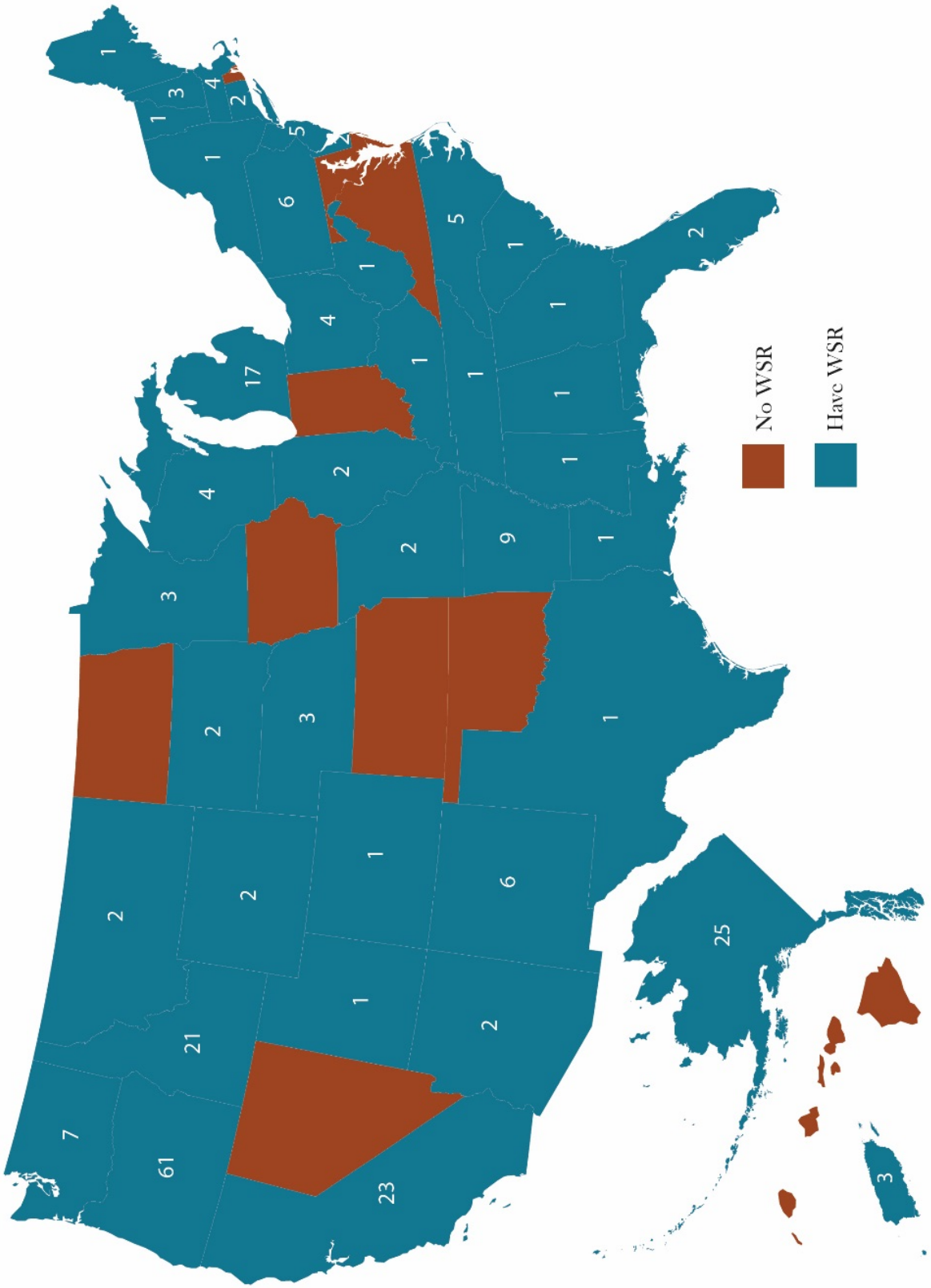
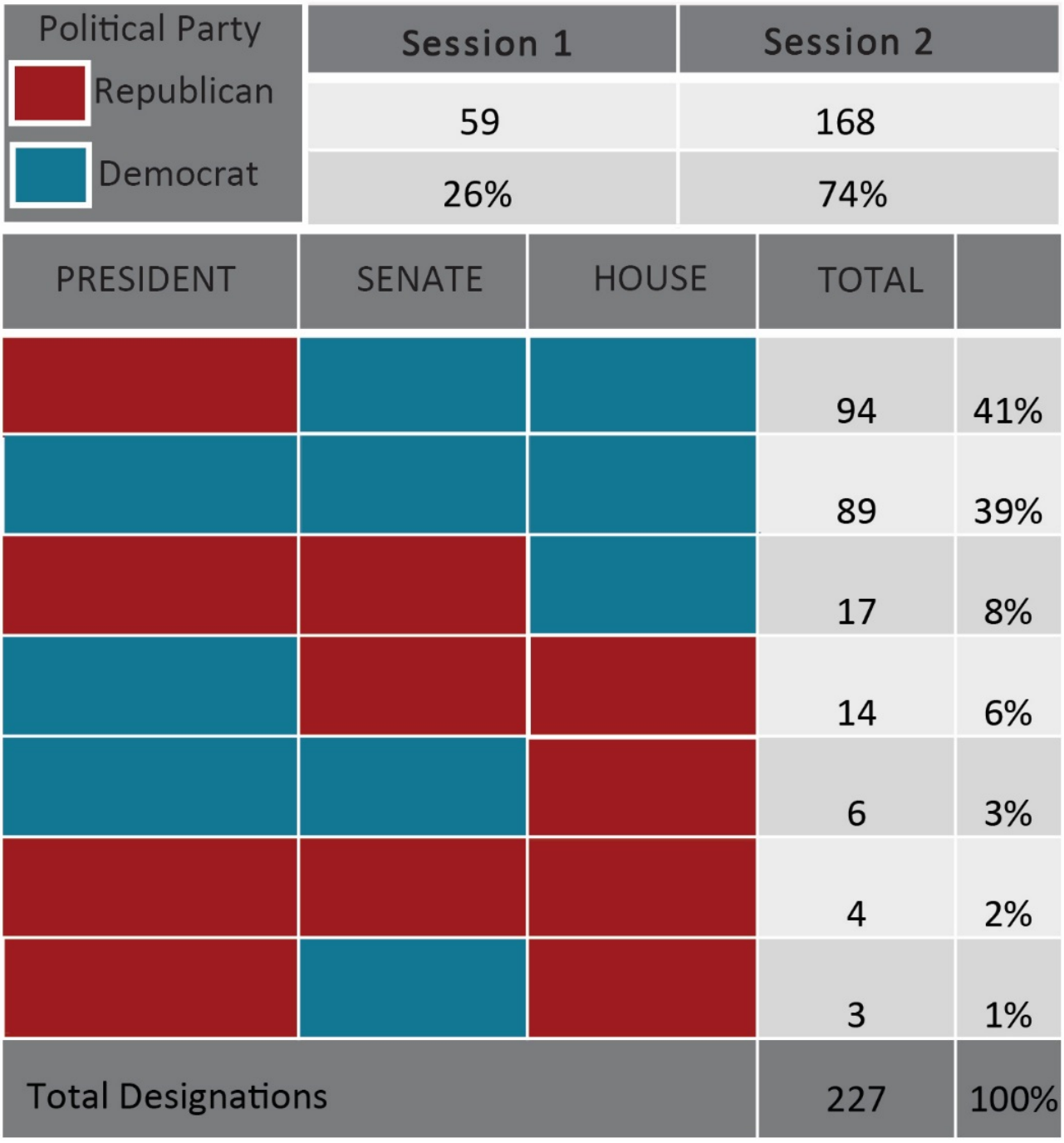


Figure 17. 80 Percent of all designations take place in democratically controlled Congressional sessions[36].



(Source: author)

[36] There have been 227 individual designations over the past 49 years, however, with multiple designations on one river, the number of rivers with protected segments totals 208 named rivers.

Figure 18. There are designation Champions on all sides of the political spectrum

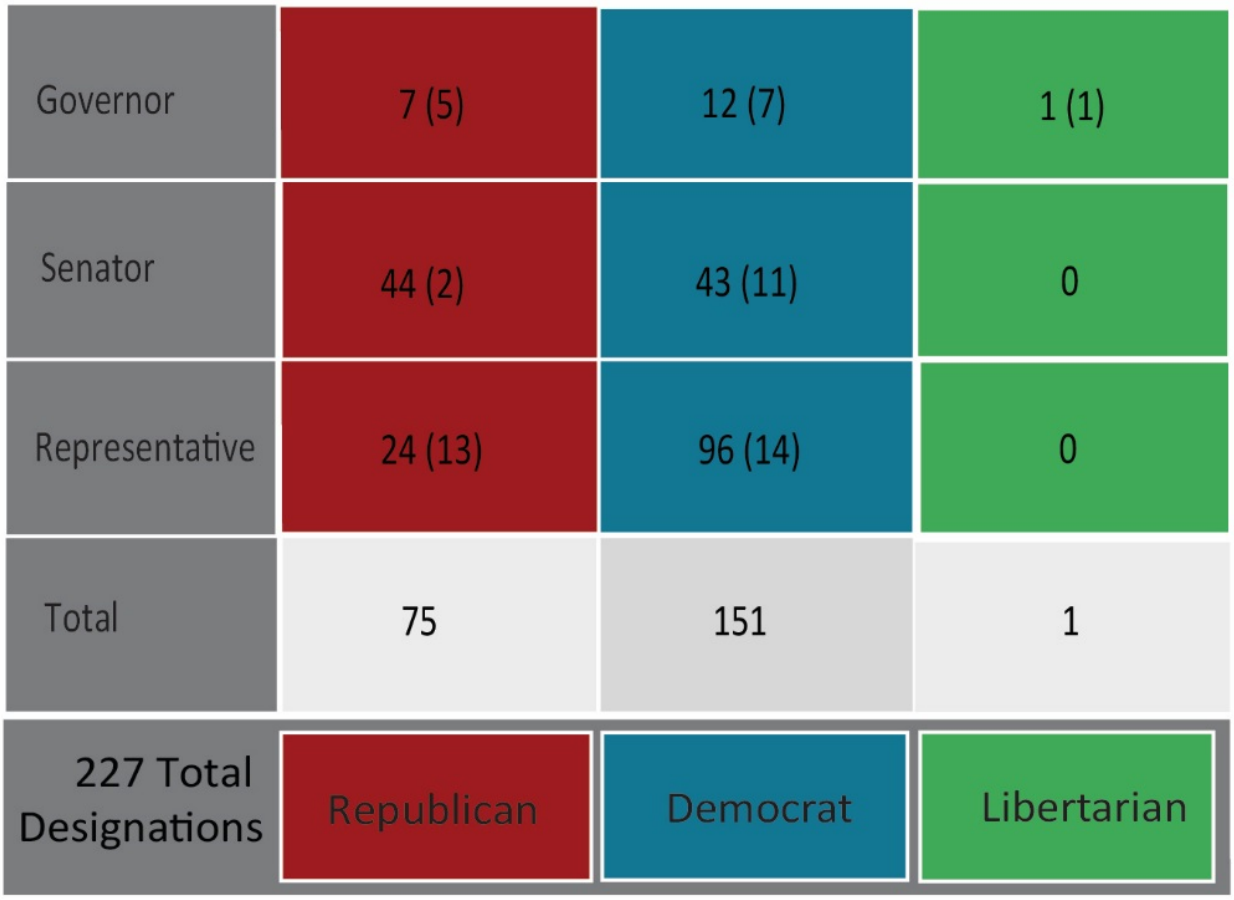
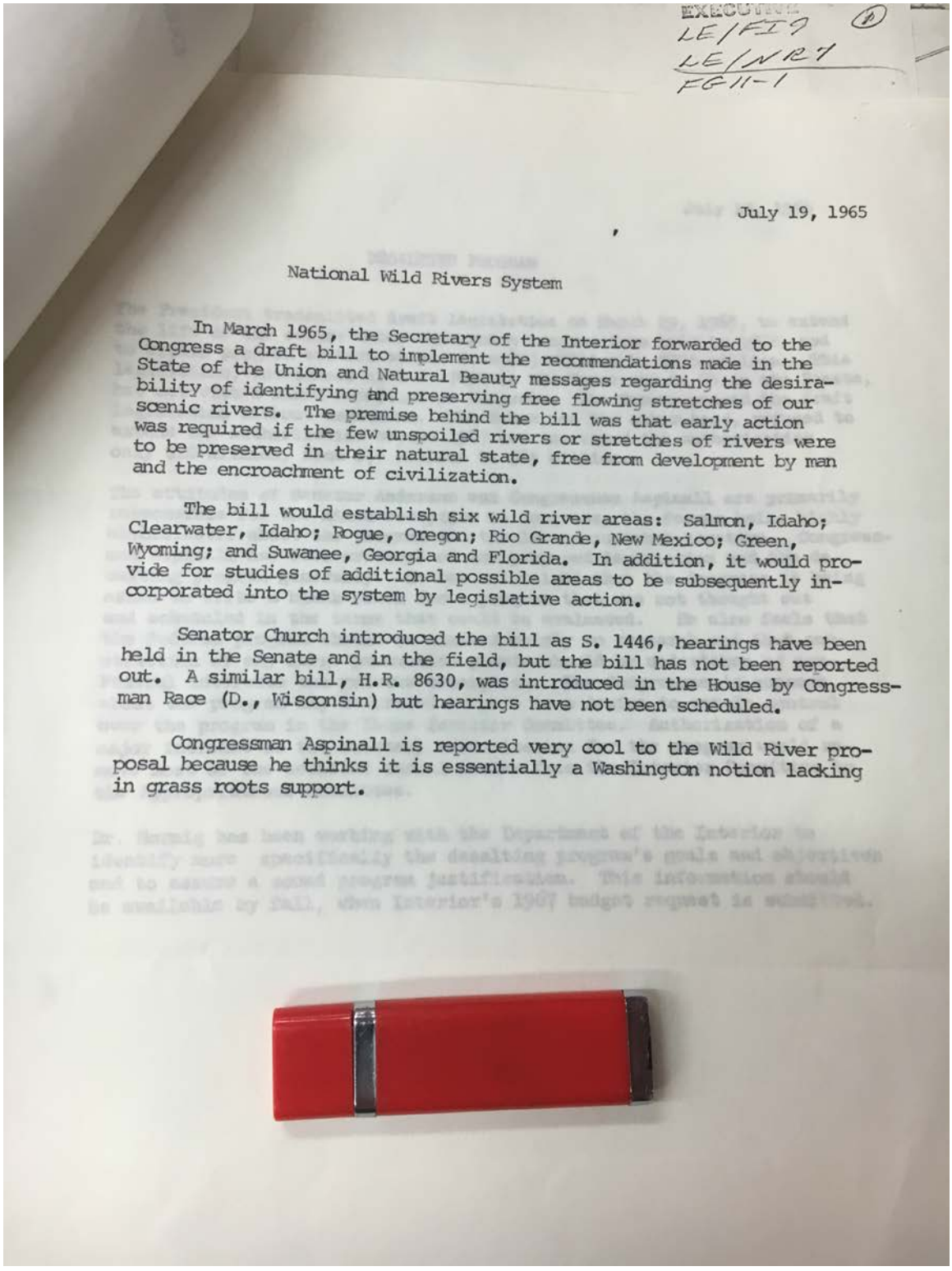


Figure 19. Congressman Aspinall "Cool" to Wild and Scenic Rivers System



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FG 11-1

July 19, 1965

National Wild Rivers System

In March 1965, the Secretary of the Interior forwarded to the Congress a draft bill to implement the recommendations made in the State of the Union and Natural Beauty messages regarding the desirability of identifying and preserving free flowing stretches of our scenic rivers. The premise behind the bill was that early action was required if the few unspoiled rivers or stretches of rivers were to be preserved in their natural state, free from development by man and the encroachment of civilization.

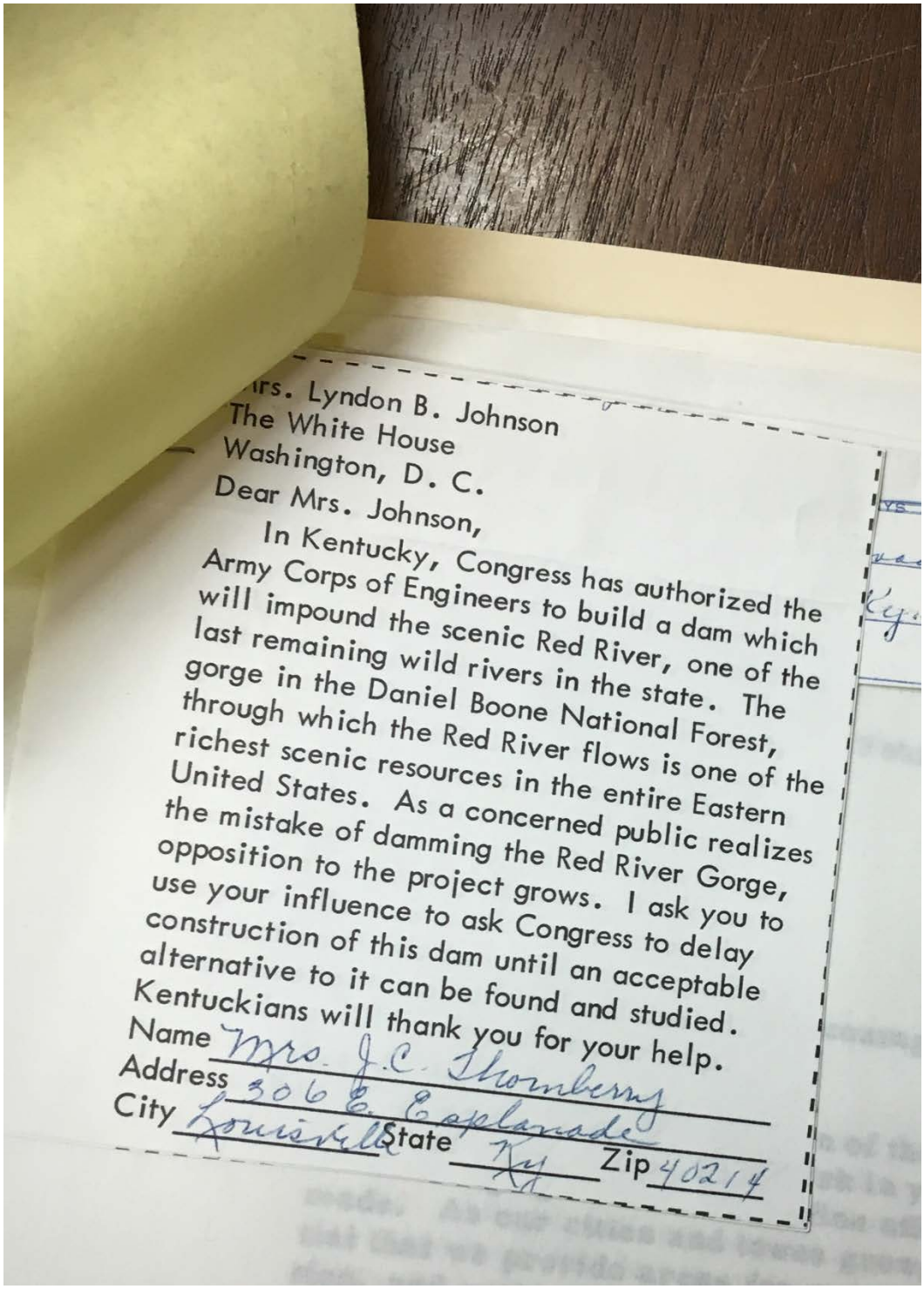
The bill would establish six wild river areas: Salmon, Idaho; Clearwater, Idaho; Rogue, Oregon; Rio Grande, New Mexico; Green, Wyoming; and Suwanee, Georgia and Florida. In addition, it would provide for studies of additional possible areas to be subsequently incorporated into the system by legislative action.

Senator Church introduced the bill as S. 1446, hearings have been held in the Senate and in the field, but the bill has not been reported out. A similar bill, H.R. 8630, was introduced in the House by Congressman Race (D., Wisconsin) but hearings have not been scheduled.

Congressman Aspinall is reported very cool to the Wild River proposal because he thinks it is essentially a Washington notion lacking in grass roots support.

(Bureau, 1965)

Figure 20. Grassroots campaigns sent letters to the White House



Mrs. Lyndon B. Johnson
The White House
Washington, D. C.

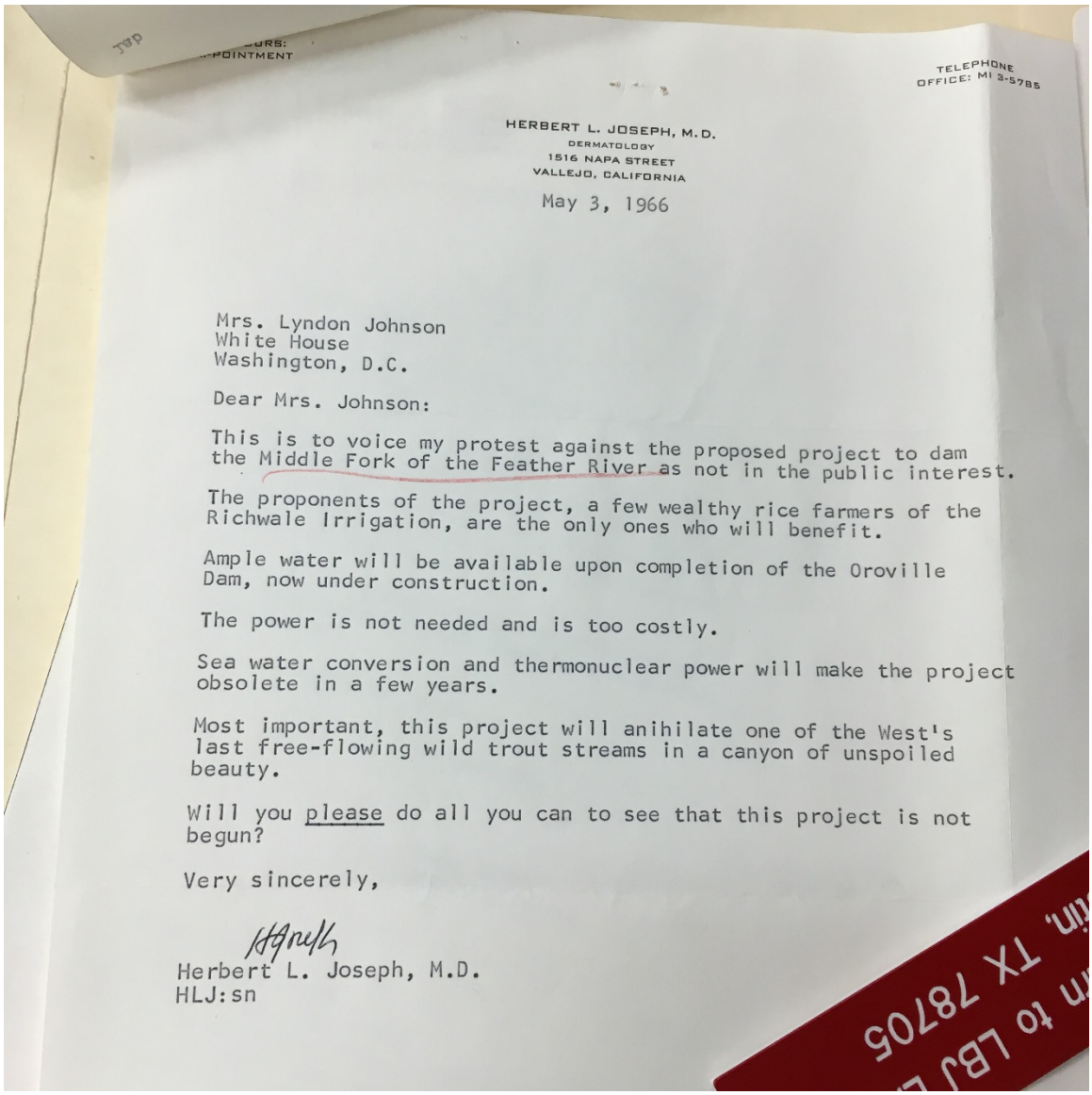
Dear Mrs. Johnson,

In Kentucky, Congress has authorized the Army Corps of Engineers to build a dam which will impound the scenic Red River, one of the last remaining wild rivers in the state. The gorge in the Daniel Boone National Forest, through which the Red River flows is one of the richest scenic resources in the entire Eastern United States. As a concerned public realizes the mistake of damming the Red River Gorge, opposition to the project grows. I ask you to use your influence to ask Congress to delay construction of this dam until an acceptable alternative to it can be found and studied. Kentuckians will thank you for your help.

Name Mrs. J.C. Thornberry
Address 306 E. Esplanade
City Louisville State Ky Zip 40214

(Thornby, 1968)

Figure 21. River loving professionals sent letters opposing dams that would ruin fish habitat and ruin views.



HERBERT L. JOSEPH, M.D.
DERMATOLOGY
1516 NAPA STREET
VALLEJO, CALIFORNIA

TELEPHONE
OFFICE: MI 3-5785

May 3, 1966

Mrs. Lyndon Johnson
White House
Washington, D.C.

Dear Mrs. Johnson:

This is to voice my protest against the proposed project to dam the Middle Fork of the Feather River as not in the public interest.

The proponents of the project, a few wealthy rice farmers of the Richwale Irrigation, are the only ones who will benefit.

Ample water will be available upon completion of the Oroville Dam, now under construction.

The power is not needed and is too costly.

Sea water conversion and thermonuclear power will make the project obsolete in a few years.

Most important, this project will anihilate one of the West's last free-flowing wild trout streams in a canyon of unspoiled beauty.

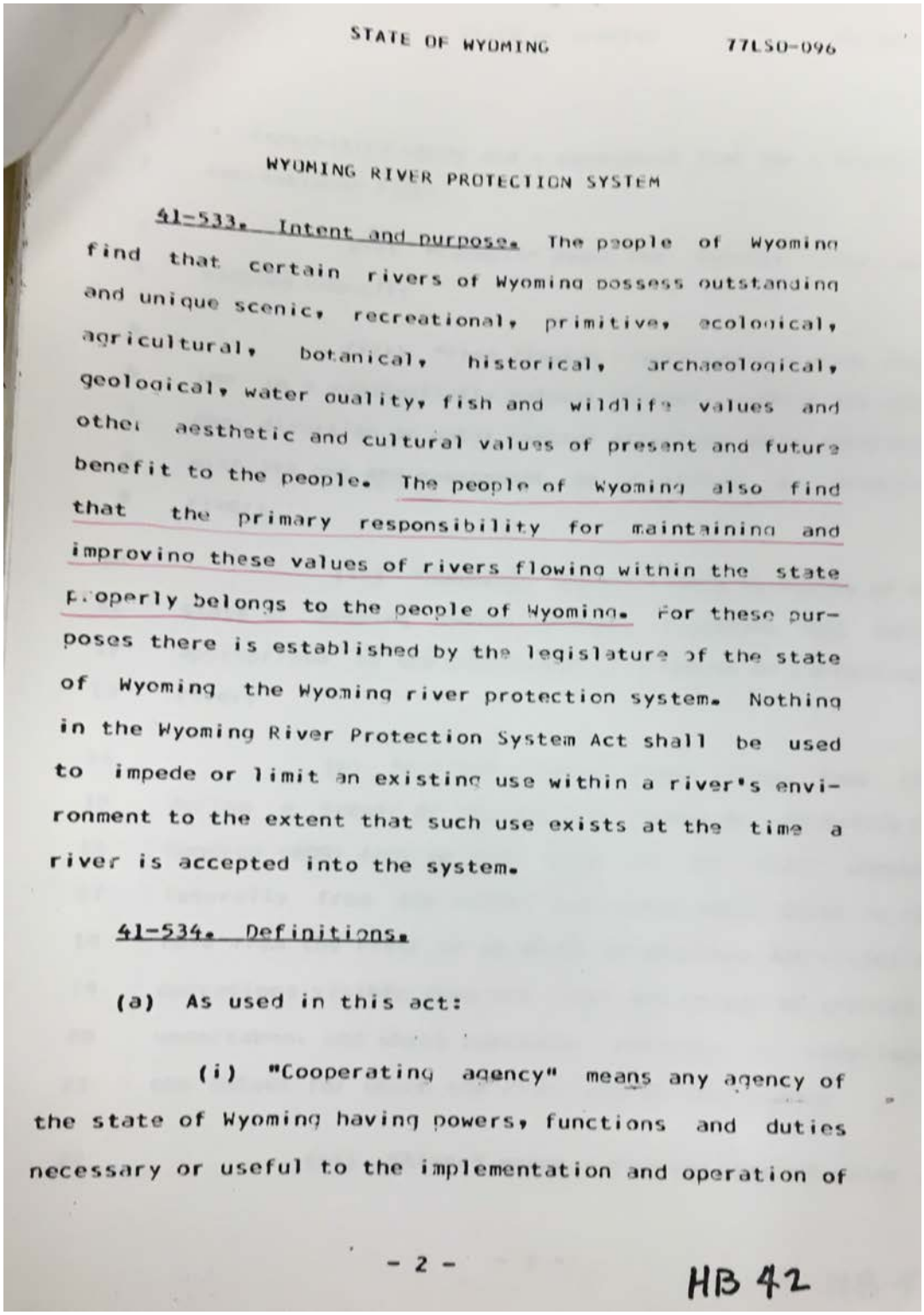
Will you please do all you can to see that this project is not begun?

Very sincerely,

Herbert L. Joseph, M.D.
HLJ:sn

(Herbert, 1966)

Figure 22. Wyoming establishes a state river protection system



STATE OF WYOMING 77LSO-096

WYOMING RIVER PROTECTION SYSTEM

41-533. Intent and purpose. The people of Wyoming find that certain rivers of Wyoming possess outstanding and unique scenic, recreational, primitive, ecological, agricultural, botanical, historical, archaeological, geological, water quality, fish and wildlife values and other aesthetic and cultural values of present and future benefit to the people. The people of Wyoming also find that the primary responsibility for maintaining and improving these values of rivers flowing within the state properly belongs to the people of Wyoming. For these purposes there is established by the legislature of the state of Wyoming the Wyoming river protection system. Nothing in the Wyoming River Protection System Act shall be used to impede or limit an existing use within a river's environment to the extent that such use exists at the time a river is accepted into the system.

41-534. Definitions.

(a) As used in this act:

(i) "Cooperating agency" means any agency of the state of Wyoming having powers, functions and duties necessary or useful to the implementation and operation of

- 2 -

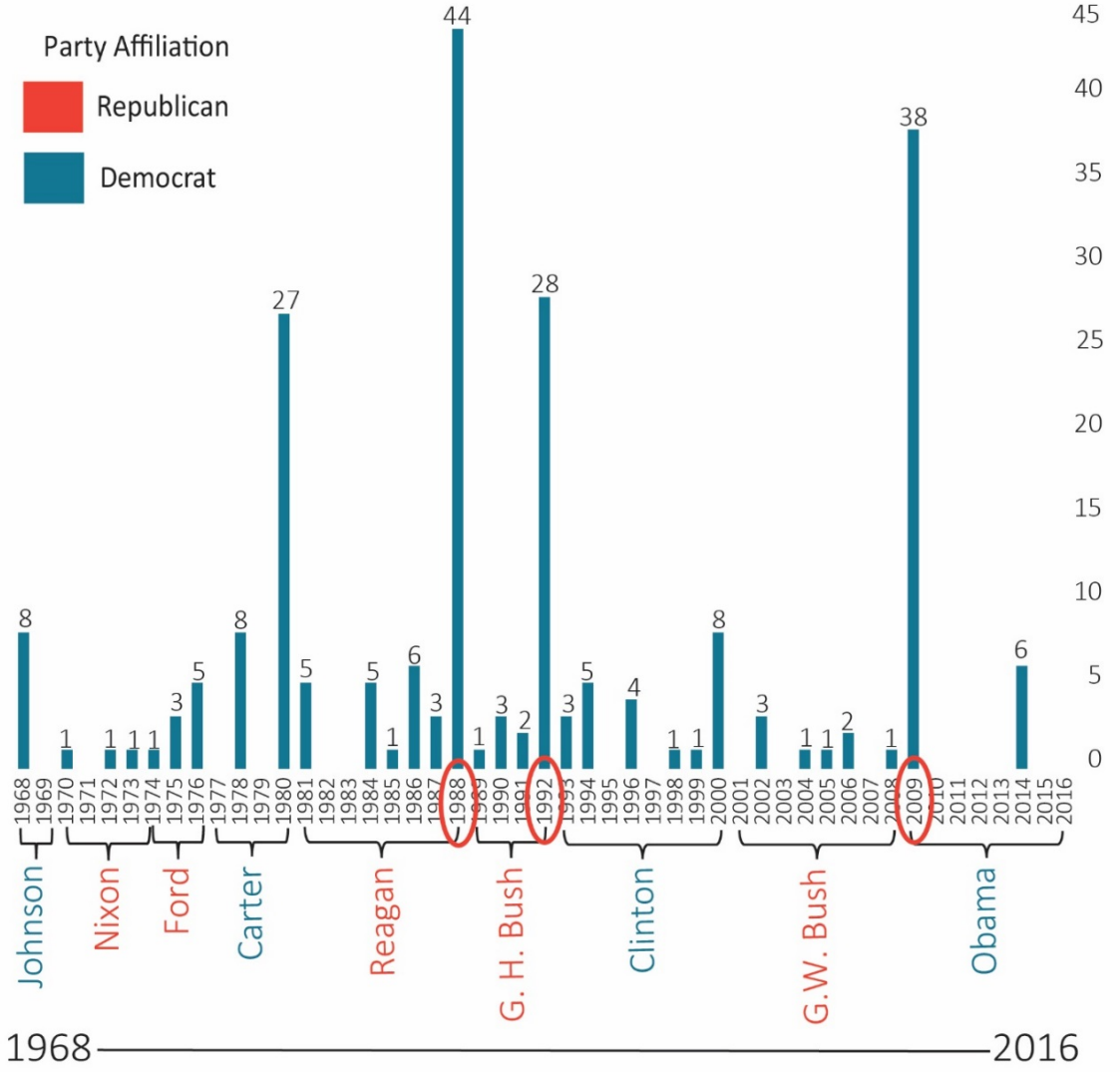
HB 42

(WHB 42, 1977)

Figure 23. Congressional designations make up the majority of all designations

DESIGNATING AUTHORITY	ADMINISTERING AUTHORITY	CATEGORY	TOTAL
Secretary of Interior Section 2(a)(ii)	States with NPS oversight	Wild, Scenic, Recreational, or any combination of these three	19
Congress Section5(a)	Federal or partnership with state, local, tribal, and/or NGO entities		188

Figure 24. Anniversaries spark interest in protections



CHAPTER V

[RE]FRAMING REGIONS AND OUTSTANDINGLY REMARKABLE VALUES FOR ECOSYSTEM BASED RESILIENCE AND ADAPTATION

Abstract

Increasing societal demands on water resources and climate change make river conservation urgent. The Wild and Scenic Rivers Act provides a flexible policy framework ready to protect the nation's rivers. However, the small fraction of overall protected river miles suggests forces are restraining the flow of new designations into the system. Taking an ecosystem based approach to adaptation can serve to garner support from stakeholders and decision makers otherwise reluctant to limit water resource development. Thus, framing the "Outstandingly Remarkable Values" (ORVs) of Wild and Scenic Rivers as ecosystem services positions the policy in relevant water resource management terms, illustrates benefits conservation provides to society, and may increase application of the WSRA for river conservation. Moreover, using a standardized ecoregion framework would address the complexity of interjurisdictional management of the National System by providing consistency in ORV identification and management, thus fostering a holistic comprehensive river conservation system. Examining the WSRA distribution through EPA's Level III Ecoregion framework sheds light on areas ripe for conservation expansion. Together, these [re]framings could aid in the increased application of conservation policy for ecosystem based adaptation for river resources.

Introduction

Rivers are in urgent need of increased protections as growing societal demands and climate change add pressures on water resources – exacerbating already troubled

freshwater ecosystems (Strayer & Dudgeon, 2010; Vörösmarty, Mcintyre, et al., 2010). Protection policies are recommended for contending with more frequent and intense floods and droughts, along with increasing resilience for species, forests, and agricultural areas (Strayer & Dudgeon, 2010; Thompson, 2015). Resilience constitutes the ability of a complex system to maintain its structures and processes in the face of external stresses and pressures as well as internal flux (Garmestani and Benson, 2013). Ecosystem-based adaptation measures are seen as providing low-cost win-win solutions for adaptation that complement or even substitute for more costly hard infrastructure investments (Munang et al., 2013). In turn, climate adaptation is the process of adjusting to actual or expected climate and its effects (Henstra, 2015). Thus, expanding and improving upon conservation policies the state already has in place may facilitate such adaptation policies (Parenti, 2015). The Wild and Scenic Rivers Act (WSRA hereinafter) is one such policy.

Carefully crafted to incorporate a complex interjurisdictional landscape of regionally distinct water rights and land tenure patterns, the WSRA was designed to protect and enhance the free-flowing nature, water quality, and Outstandingly Remarkable Values (ORVs) of rivers across the United States territory. The eight specified ORVs include Recreation, Scenic, Fish, Wildlife, Culture, Geologic, Historic, and Other similar values. This policy was meant to complement a heretofore national policy of water resources development projects centered on dams and diversions. The visionary WSRA, intended to "fulfill other vital national conservation purposes," was flexibly designed for broad application to achieve a national river conservation system (WSR, n.d.). Yet in 2017, designations total only 227, protecting just 12,708.8 miles. As

Figure 12 illustrates, these miles comprise a mere fraction of a percent of the over 3.5 million river miles stretching out over more than 250 thousand rivers (NOAA, 2017).

The uneven distribution and low number of overall protected river miles across 40 states and Puerto Rico (See Figure16) suggests application of the WSRA is complicated by forces both internal and external to the National Wild and Scenic River System. Consequently, engaging the policy for ecosystem-based adaptation depends on knowing what factors influence WSRA implementation. To that end, this article employed a mixed-methods analysis to reveal that a lack of standardized guidelines for determining a "region of comparison" limits the scope of the policy to provide a holistic national river conservation system. Moreover, the descriptive language of the policy's conservation objective lacks relevance for many stakeholders. Thus, standardizing region of comparison models and reframing ORVS as ecosystem services may advance policy objectives.

Methodology

This article draws from a mixed-methods approach that consisted of three distinct research phases. First, I conducted spatial and temporal analyses of a GIS database comprised of datasets related to the National System. Datasets include: designated rivers and their corresponding ORVS; the Nationwide Rivers Inventory; the Environmental Protection Agency's (EPA) Level III Ecoregions; federal jurisdictional boundaries for land management agencies, States, and territories; and political party affiliations for legislative and executive office terms. These data were analyzed with ArcMap and Excel software.

The second phase consisted of discourse analysis of historical documents procured from 134 archive boxes at the LBJ Presidential Library and 17 boxes at the National archives at Denver. Next, I conducted semi- structured interviews with personnel attendant to the WSRA from each distinct region of the four federal land management agencies (n=34) and two national river conservation organizations American Rivers and American Whitewater (n=12), as well as associated technical experts (n=4). Questions (n=15) centered on their role in river conservation and the governance of the National Wild and Scenic Rivers System. In accord with grounded theory (Glaser and Strauss 1967), the interviews and archival data were coded using NVivo QDA software to break up the data, revealing six broad categories of factors influencing the landscape of the National System, namely environmental values/ideologies, location, policy, stakeholders, capacity, and science. Figure 25 illustrates the most frequently used terms by all 50 participants –excluding the words Wild, Scenic, and Rivers.

Protecting & Enhancing ORVs – A Conservation Challenge Across Regions

Section 5(d)(1) of the WSRA directs the U.S. Forest Service (USFS), Bureau of Land Management (BLM), National Park Service (NPS), and the U.S. Fish and Wildlife Service (USFWS) to identify, evaluate, and recommend rivers for potential inclusion in the National System. Agencies may propose legislation for consideration by the federal Administration, though they may not actively advocate for designations (IVU, 2017). To be deemed eligible for inclusion in the National System, a river must be free-flowing and in possession of at least one ORV. Among the criteria for determining ORVs is the nature of its contribution “to the functioning of the river ecosystem” (Diedrich & Thomas, 1999,

p. 13). As Wild and Scenic Rivers are intended to be unique unto the nation and their region, a Region of Comparison (ROC) or the "geographic area of consideration for each outstandingly remarkable value that will serve as the basis for meaningful comparative analysis" must be established to assess the unique qualities of river resources (USFS, 2015, p. 4). However, no standardized guidelines exist for defining a ROC. Instead the policy affords agency and personnel discretion in the process (IVT, 2016). While discretion is beneficial, the lack of consistency may thwart ORV recognition and thus possible protection of vital resources.

For example, regional eligibility of ORVs can be determined in several ways, including by comparison across ecoregions. However, ecoregion frameworks are inconsistent throughout the interagency system and across the intra-agency boundaries depicted in Figure 1. For instance, personnel from distinct BLM regions revealed that in one region The Nature Conservancy (TNC) ecoregion model was applied whereas the USGS physiographic provinces were utilized in another. One agent stated "there's many different ways to look at regions and how you make that split as far as trying to determine regionally significant. It all comes down to interpretation" (IVT, 2016). Fundamentally, the selection process is a question of regionalization, a problematic exercise due to the subjective nature of selecting region-defining features (Murphy, 1991; Walker, 2003). For Wild and Scenic Rivers, the process is complicated by a lack of standardized guidelines as each agency either adopts a model or uses proprietary models based on resource management priorities. What may be a significant conservation goal for one agency in a particular region may not translate to the next (Omernik & Griffith, 2014).

Thus, advancing a holistic national river conservation policy, calls for a standardized, nonpartisan ROC model.

This objective is particularly important because freshwater ecosystems have high rates of endemism, or the presence of unique populations of species found nowhere else on the planet (Abell et al., 2008). Endemism makes freshwater ecosystems susceptible to high rates of extinction as impaired and modified rivers lead to local extirpations or extinctions. The risk of such extinctions is rising with climate change and population growth (Strayer & Dudgeon, 2010). Therefore, protecting a suite of rivers from each ecoregion could increase species resilience and advance the Act's purpose of fulfilling today's vital conservation needs.

The EPA's Level III Ecoregion model is arguably the most appropriate framework for such a purpose. Chosen for its longevity, level of refinement over 30 years, and independence from land agency agendas, this framework addresses core regionalization challenges (Omernik & Griffith, 2014). Spatial analysis of designated rivers using this model reveals in Figure 26 an uneven distribution of ecoregion representation within the National System. For instance, a single ecoregion contains 24 protected rivers while 35 ecoregions contain none. The question then remains, what other factors are driving this uneven distribution?

Creating Conservation Relevancy: Reframing ORVS as Ecosystem Services

Interview participants attributed challenges to designating more rivers to several factors. First, a lack of political will is grounded in perceptions that conservation curtails economic growth by limiting water resources development and entrenching fiscal resources. In a similar vein, constituents fear increased federal oversight and land use

restrictions, especially on private property. Third, there is a general lack of understanding about how the WSRA functions. As one conservation advocate explained, "The adjectives Wild and Scenic Outstandingly Remarkable Values just don't get politicians on your side" (IV11, 2016).

To contend with the 'nature as resource' versus 'conservation of nature' paradigm, Henstra (2015) suggests reframing current conservation policies to reflect the "urgency" expressed in calls to advance conservation policy such as Strayer and Dudgeon's 2010 aforementioned call for freshwater ecosystem protections. The suggestion stems from the view that perceptions of threat can influence public support for policy-making and implementation (Stern, 2000). Moreover, adaptation concepts rooted in current political demands seemingly pique interest from decision makers, thus fostering acceptability of policy adoption (Schmidt-Thome et al., 2013). Hence, advancing the WSRA application for river conservation will require framing those adjectives in terms germane to stakeholder concerns.

An ecosystem service framing is supported as a method to situate biodiversity within an influential political-economic construct by placing value on the services rivers provide to society, including clean water, flood reduction, groundwater recharge, fisheries, and recreation (Vorosmarty, et al., 2010; Tickner & Acreman, 2013; Palmer, et al., 2008). This framing, in turn, provides policymakers a tool to evaluate the tradeoffs between development and conservation (Liu, Costanza, Farber, & Troy, 2010). Thus, ecological economists praise ecosystem services as an effective mechanism for advancing conservation policy (Daily, 1997; Liu et al., 2010), as "a means to an end" (Dempsey, 2016, p. 5). Ecologists use ecosystem services to rally for increased biodiversity

protection and resilience in the face of climate change (Di Baldassarre, Kemerink, Kooy, & Brandimarte, 2014; Fleishman et al., 2011; Seppälä, Buck & Katila, 2009). Quoting Jessica Dempsey, ecosystem services can be "better understood as a political-scientific strategy to create new interests in nature, to prevent 'stupid decisions'" than as a means of creating new market commodities (2016, p. 10).

Though the term ecosystem services did not exist during the environmental policy era of the 1960s when the WSRA was being negotiated, the designation of river stretches arguably centered on the protection of ecosystem services. For example, facing losses from dam developments in the Columbia Basin, the Pacific Marine Fisheries Commission sought protection for anadromous fish spawning habitat in Idaho's Salmon River as evidenced from archival documents (James, 1966). Over time as ecological science and education progressed, river resources fitting the characteristics of ecosystem services were included in "Other" ORV designations as shown in figure 27. One agent reported:

> It was very uncommon to see 'ecology' or 'ecological' used in ORV analysis, but I'm starting to see that more and more often and typically in BLM what that means is that we've got a kind of intact ecosystem that provides all the services. It's got a full range of flows, it's got a nice riparian area, it's got a bird population, it's got the fish there that should be there, and you know we're putting it forth like "wow, this is an outstanding example of a river that is functioning ecologically like it should" and I've noticed how people react to that and that's a very strong selling tool…we say hey 'one of the things is that this [river] is a completely high to low full range of elevation, full range of species, full range of ecological functions, it still works and that alone is a reason to protect it' and people say 'oh' … they think of it as a whole system, they don't think of it as it's great recreation or it's great fishing (IVT, 2017).

Against that backdrop, I adapted Tickner and Acreman's (2013) typology to situate ORVs within the four widely used categories of ecosystem services to demonstrate the benefits they provide and to examine the utility of using the WSRA as an ecosystem—based adaptation policy. Table 3 illustrates that ORVs often span multiple categories, potentially providing a host of benefits to society such as food security; public and mental health; a tourism industry; natural infrastructure for flood and drought mitigation; resilience; scientific study; and cultural renewal, among others.

Conclusion: adapting a visionary policy for a resilient future

As we look towards a future characterized by climate change and greater demands on water resources, the Wild and Scenic Rivers Act provides an ecosystem-based adaptation policy framework. Federal land management agencies play a vital role in identifying and protecting river resources important to society through their resource management plans. Yet, despite an ostensibly broadly applicable framework for protecting rivers, the variegated patchwork of land management agencies and a lack of political support troubles both the identification and designation of any broadly applicable, holistic river conservation system. Thus, re[framing] the WSRA and its Outstandingly Remarkable Values as a policy designed to protect ecosystem services may help advance three matters ripe for improvement within the National System: resource protection, training, and relevancy (TNC, 2016).

First, utilizing consistent framings for ecoregion identification while taking into consideration the distribution of rivers across those ecoregions provides an opportunity to better protect a complete portfolio of ecosystem services (i.e. biodiversity, erosion control, fisheries, flood mitigation) across a broad spatial distribution. The NRI provides

a starting point for closing the gap in underrepresented ecoregions (depicted in Figure 28). As climate change makes river conservation urgent, this approach to fulfilling the WSRA's conservation intent could expand resource protection while mitigating impacts of climate change on river resources. Given the flexible design of the WSRA and afforded agency discretion, standardizing ecoregion models could be accomplished through a directive from the Interagency Wild and Scenic Rivers Coordinating council.

Second, if conservation advocates and agency personnel adopt a consistent framework for ecoregion identification, such as the EPA's Level III Ecoregions, this method could serve to streamline training as well as eligibility and suitability studies for designations, ultimately reducing human and financial resources. Agencies may be reluctant to replace their proprietary system, but moving toward standardization may facilitate interagency coordination for administering the national system

Finally, framing ORVS as ecosystem services situates the descriptive language of the policy's 'Wild and Scenic' and 'Outstandingly Remarkable Values' within a widely accepted political-economic framing and offers stakeholders a model for weighing the tradeoffs between conservation and development – essentially making ORVS relevant to decisionmakers. After all, if you can frame the protection of an intact riparian forest or floodplain in terms of reducing the risk of impacts brought by more frequent and intense floods (or droughts) in the face of climate change - essentially an insurance policy for which the federal government pays the premium - then landowners and politicians might turn an otherwise deaf ear toward negotiations over conservation policy. Moreover, as the WSRA was negotiated during an era of increased understanding of the environment through ecological science, we must adapt the policy to incorporate new scientific

understandings of climate impacts on river resources. Suggesting this trend may be underway, “climate refugia,” an ecosystem service for fisheries resilience, recently factored into ORV assessments of proposed designations in Montana’s cold headwaters streams (IV7, 2016).

Figure 25. Most frequently used terms by interview participants (excluding the words wild, scenic, and river)

Figure 26. Wild and Scenic River Distribution Across Ecoregions

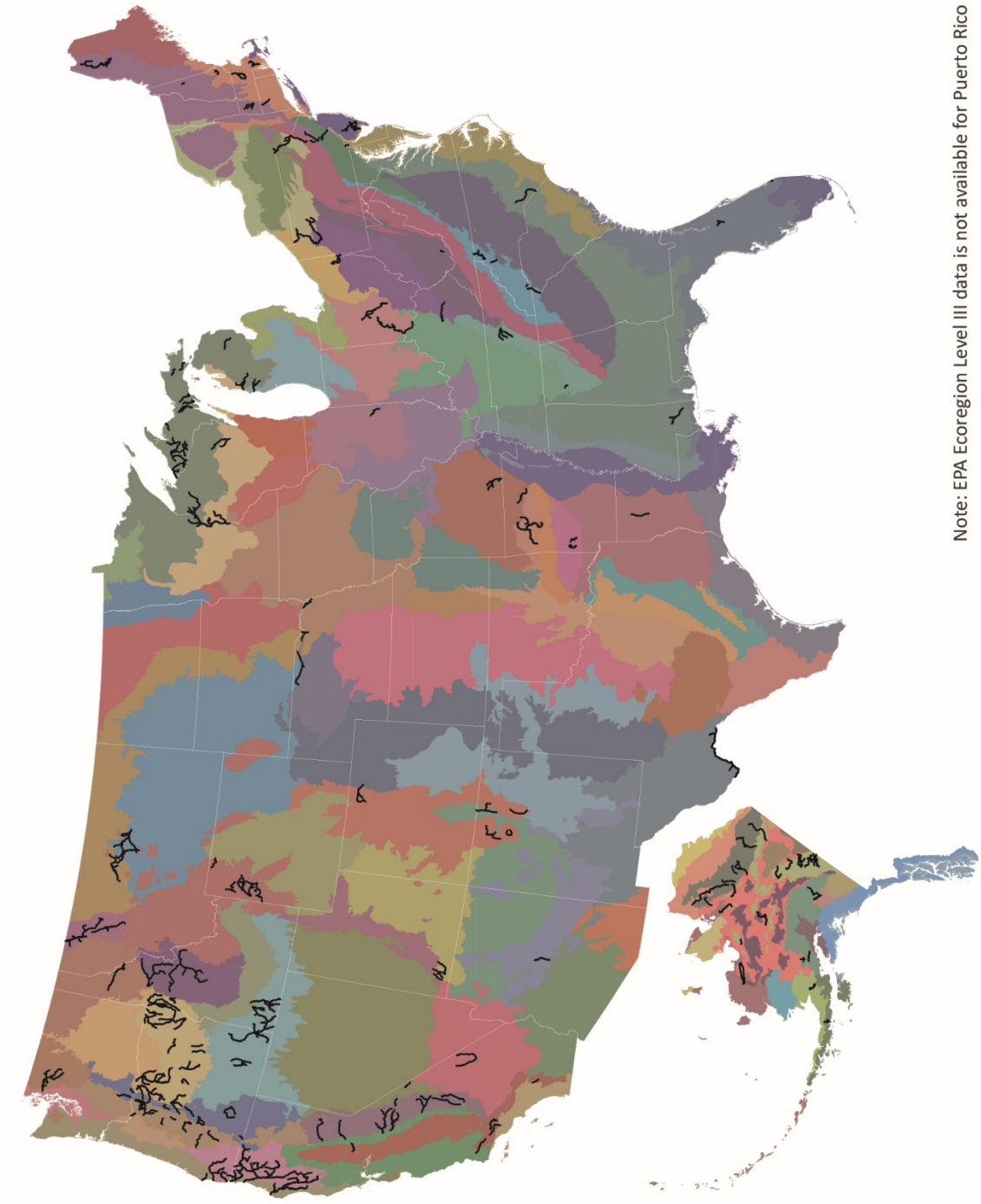
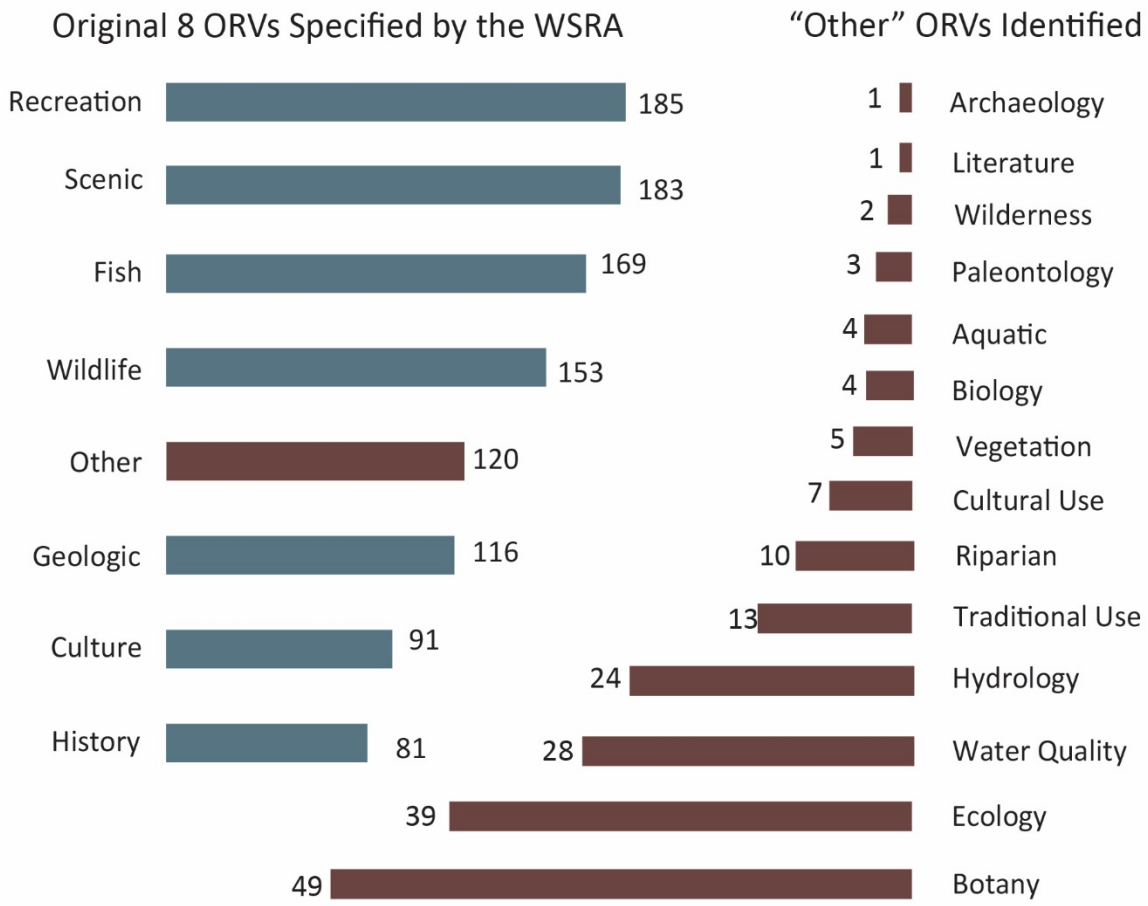


Figure 27. Designated Outstandingly Remarkable Values of the WSRA



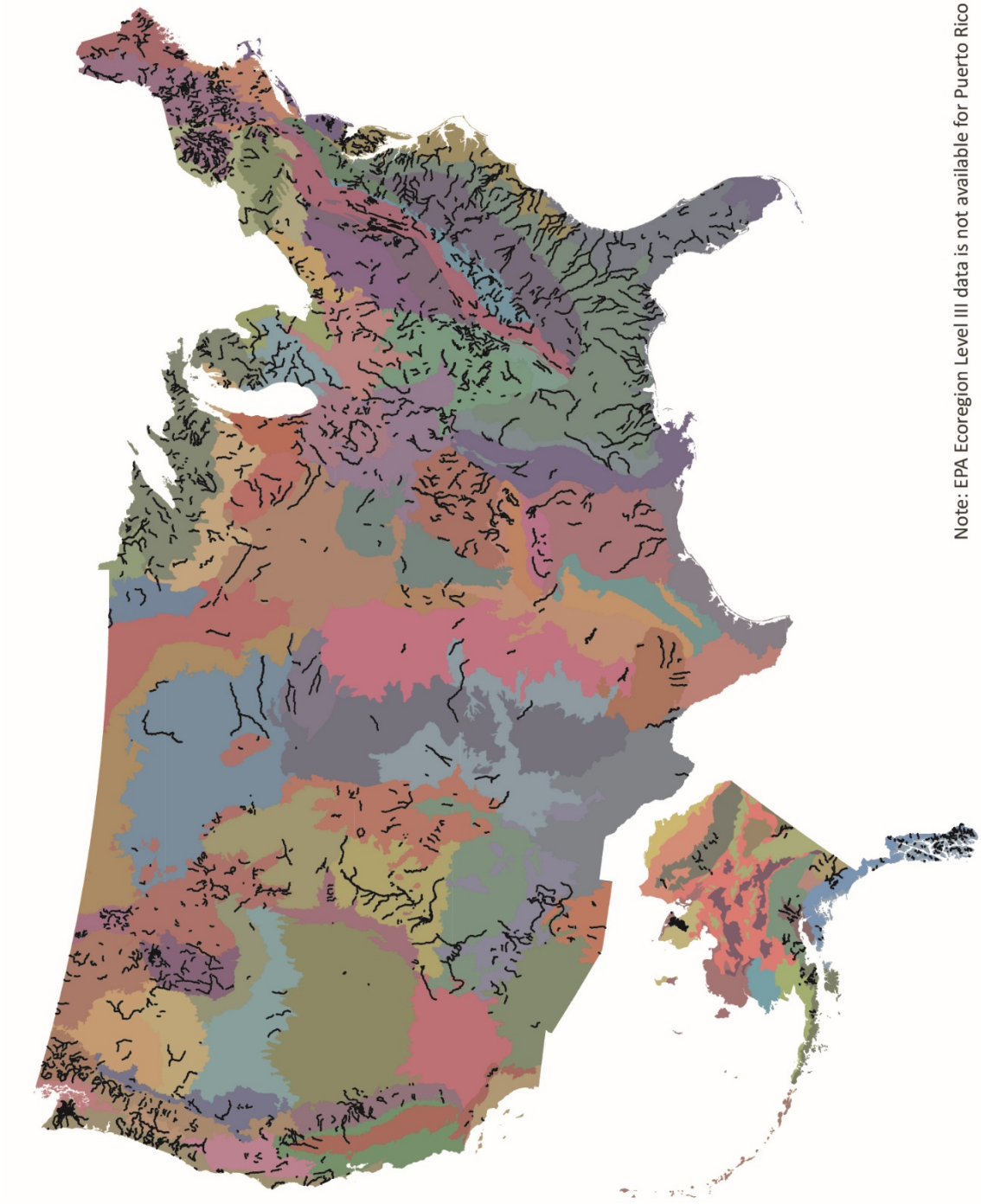
Note: Total indicates number of Wild and Scenic Rivers with particular ORV designated for protection and enhancement. Rivers may have multiple ORVS.

Table 3. ORVs in an Ecosystem Service Framework

	PROVISIONING SERVICES	REGULATING SERVICES	SUPPORTING SERVICES	CULTURAL SERVICES
ECOSYSTEM SERVICES	**Food**: Production of fish, wild game, fruits, grains, etc. **Fresh Water**: Storage & retention of water, provision of water for irrigation & drinking. **Fiber and Fuel**: Production of timber, fuelwood, peat, fodder, aggregates. **Genetic materials**: Medicine; etc. **Biodiversity**: Species gene pool.	**Climate Regulation**: greenhouse gases, temperature, precipitation, & other climatic processes; chemical composition of atmosphere. **Hydrological regimes**: Groundwater recharge & discharge, storage of water for agriculture & industry. **Pollution control and detoxification**: Retention, recovery, & removal of excess nutrients & pollutants. **Erosion**: Soil retention & prevention of structural change (bank slumping). **Natural Hazards**: Flood & storm protection.	**Biodiversity**: Habitats for resident & transient species. **Soil formation**: Sediment retention & accumulation of organic matter. **Nutrient cycling**: Storage, recycling, processing, & acquisition of nutrients **Pollination**: support for pollinators.	**Spiritual & inspirational**: Personal feelings & wellbeing, religious significance. **Recreational**: Opportunities for (eco)tourism & recreational activities. **Aesthetic**: appreciation of natural features. **Educational**: Opportunities for formal & informal education & training**.**
ORVS	Fish, Wildlife, Riparian, Biology, Hydrology, Botany, Ecology, Traditional Use, Water quality, Vegetation, Aquatic, Wilderness	Geologic, Riparian, Biology, Hydrology, Botany, Ecology, Water Quality, Vegetation, Aquatic, Wilderness	Geologic, Riparian, Biology, Ecology, hydrology, Aquatic, Botany, Water Quality, Vegetation, Wilderness	Culture, Fish, wildlife, Geologic, Recreation, Scenic, Historic, Water Quality, Biology, Aquatic, Ecology, Riparian, Hydrology, Traditional Use, Cultural Use, Paleontology, Botany, Vegetation, Wilderness, Literature, Archeology
BENEFIT	Food security, national security, public health, resilience, resource management, economic security, sustainability	Natural infrastructure, resilience, flood mitigation, drought mitigation, public health, national security	Food security, climate refugia, resilience, sustainability, flood recession agriculture	Tourism industry, cultural renewal, mental health, scientific study, economic diversity, resilience

(Adapted from Finlayson et al, 2005; Tickner and Acreman, 2013)

Figure 28. The Nationwide Rivers Inventory contains 3213 Eligible Rivers for Protection



CHAPTER VI

CONCLUSION

This dissertation sheds light on the factors that drive and limit the sparse and uneven application of federal river conservation policy--an important issue given the many decades of evidence suggesting that more protections are needed for river ecosystems. The foregoing articles detail distinct influences on the National Wild and Scenic Rivers System. They shed light on the environmental ideologies, values, and knowledge that initially shaped the policy, and they offer new understandings of how these elements have worked to both constrain and amplify the policy's application and efficacy over time and space.

The three articles that comprise this dissertation detail key aspects of the river conservation system. The first article made the point that the Wild and Scenic Rivers Act is a legibility exercise of eco-governmentality; it was a consequence of the territorialization of water resources deemed important to society for the ecosystem services that rivers provide. As economies centered on outdoor recreation boomed, and as ecological knowledge advanced, the state devised a complex of multiple legibility-based policies and programs to adapt water resource governance practices to meet evolving national environmental priorities. The WSRA was one such policy. This article proposes that lessons be taken from these past government approaches to environmental challenges through adaptive governance to address new pressures on river resources from climate change and increasing societal demands

The second article examines the application of the WSRA and subsequent management of the National System, taking into consideration the environmental ideologies that have worked to shape the uneven and sparse distribution of the WSRA over time and space. Three distinct ideologies emerged from this exploration: exploitationist, conservationist, and preservationist. Sometimes competing, sometimes coalescing, these ideologies are at the heart of how decision makers have approached Wild and Scenic River governance. This article suggests that, taken together, this triad of ideologies is a dynamic force, pegged to and shaped by the larger political-economic currents at the local, national, and global scales.

The final article focuses on the interjurisdictional nature of the National System to investigate how regions factor into the policy's efficacy. This third article investigates the internal limitations of the system in an effort to point to ways in which current management practices can be adapted to facilitate the expansion of the system as a means of providing ecosystem-based adaptation for climate resilience. Specifically, I pose the reframing of the "Outstandingly Remarkable Values" concept in relevant political-economic terms--as ecosystem services. I then argue for reconfiguring guidelines for the identification of rivers that are regionally and nationally significant, basing them on a standard ecoregion framework instead of political jurisdictional boundaries or proprietary models. In so doing, the policy would be configured in a way that could facilitate holistic national river conservation for a fuller suite of river resources.

Key Findings

Looking back on the initial questions that drove this study--(1) What factors influence the temporal and spatial distribution of river segments protected under the Wild and Scenic Rivers Act? (2) What does the history of Wild and Scenic River governance suggest about emerging trends and patterns in river conservation? (3) How are competing environmental values understood and reconciled in the context of river conservation? – this study produced several key findings. First, I showed that *the Wild and Scenic Rivers Act is a state-making legibility project attempting to reconfigure federal water governance through the territorialization of rivers.* As such, the Wild and Scenic Rivers Act was designed to address scarcity problems induced from previous legibility exercises imposed on the territory of the United States. This new territorializing exercise was conducted to protect and enhance river resources identified as important to society - namely Outstandingly Remarkable Values. These ORVs, in turn, can be considered synonymous with ecosystem services. While legibility exercises have been critiqued for producing scarcity, this study finds they too can prove useful in mitigating emergent environmental problems.

The second finding draws on the previous one: *The Wild and Scenic Rivers Act is a product of distinct jurisdictional genealogies governing water*. As such, there are myriad benefits to a territorialized approach to river management and advocacy. Given the diversity in the legal, economic, and biophysical landscape of rivers across the vast territory of the United States, strategically placing personnel with science-policy training in areas of ecological concern can mobilize pertinent knowledge through their network interactions. To that end, expanding the territory in which advocacy groups currently

operate to include less visible, but still critical regions for conservation purposes may lead to advances in policy application. The arid Southwest, the Midwest, and Southeast are areas particularly ripe for expansion.

As evidenced in Chapter IV, a major hurdle facing the system is the Manifest Destiny exploitationist ideology driving fear of government oversight and infringement on private property entitlements. Michael Fiebig offered a potential solution to that end – framing the Wild and Scenic Rivers Act as an insurance policy for maintaining the status quo. For people with situated identities involving environmental characteristics such as open spaces and access to water resources, framing the WSRA as an insurance policy to protect those interests may have salience. For others, addressing fiscal concerns consistent with conservative ideologies could be accomplished by framing the WSRA as low-cost, win-win solutions for ecosystem based adaptation policy. Ultimately, having situated knowledge about people's environmental priorities and ideologies is important for fostering productive dialog with constituents. Geography matters.

The last finding concerns *the distribution of the Wild and Scenic Rivers Act as a corollary of evolving national environmental priorities and knowledge*. A strong relationship exists between the rate of conservation decision-making and larger environmental and political-ecological trends in state and federal administrations. From local land owners and voting constituents to advocacy groups, land management agencies, Congressional delegations, and presidential administrations, ideologies centered on notions of nature and its role in capital drive approaches to WSRA designations and management. It follows that application of the WSRA inherently depends on framing conservation benefits in such a way that prospective designations fit within the dominant

political-economic discourse of the state today. If the adjectives 'Wild and Scenic Outstandingly Remarkable Values' don't get politicians excited about conservation, then it stands to reason that the policy must be reframed in terms that are meaningful to politicians and constituents alike. As national environmental priorities have evolved to include 'security' concerns, the language of the Wild and Scenic Rivers Act has not kept pace with this dominant discourse, ultimately limiting the potential for its application. Meanwhile the lack of resonance with the priorities of politicians limits the financial and human resource capacity of the system. Against this backdrop, I propose that ORVS be reframed as ecosystem services to better reflect their role in nature-society relations and provide a linguistically germane platform for stakeholders to consider the tradeoffs between development and conservation.

Looking Back Toward a Resilient Future – Legibility for Adaptation

Inspired by Parenti's call to build upon and improve the state legibility acts already being conducted on the environment, this dissertation first theorized the Wild and Scenic Rivers Act as a legibility exercise. I found that the WSRA fits within Scott's definition of legibility as a state project of territorializing water resources to fortify state power. This eco-governmentality led to Multiple Use mandates for public lands, transforming state practices of resource governance, a necessary process for socio-ecological change.

Faced with social and ecological ramifications of drought, pollution, unchecked dam development, urbanization, and population growth, the crafters of the Wild and Scenic Rivers Act sought to strike a balance in their capital pursuits of nature. Achieving

such a balance was challenged by an interjurisdictional federalist system governing water across disparate regions of the United States with distinct land tenure and water rights legacies. Against this backdrop, the policy was designed with a flexible three-tiered classification system for designations to accommodate these regional distinctions. I found that this design embodies the concepts of integrated water resources management planning grounded in notions of efficiency. However, as time would tell, ecosystem protection has not been proactively prioritized; instead action is withheld until an eminent threat presents.

Moving toward a more holistic, comprehensive national river conservation system will require the United States to proactively work toward filling the large gaps in the types of ecosystems represented by WSR designation, particularly in the 35 ecoregions that have no designations. The legibility exercise of the WSRA, which resulted in the Nationwide Rivers Inventory, provides a springboard for increasing the number of protected rivers from today's 208 to well over 3,200. The NRI, however, is just a starting place. Just as the WSRA was negotiated during an era of increased scientific understanding of the environment through ecology, the policy must be adapted to incorporate new scientific understandings of ecosystems and climate impacts on river resources into ORV identification and management practices while keeping the ecosystem-services framing at the fore of decision-making. I don't recommend this for the potential markets these services may interest, but instead as a way to identify a complete portfolio of rivers with the greatest potential for resilience and therefore biodiversity protection. These efforts have national and international implications.

Ecosystem management occurs across a multiplicity of boundaries –political, cultural, and biophysical. Nowhere is that more apparent than on a map of wild and scenic rivers. The Interagency Wild and Scenic Rivers Coordinating Council is well aware of the challenges posed by interjurisdictional and inter-scalar governance of water. Thus, ensuring the vitality and enhancing the capacity of this entity to continue to work toward a unified, holistic national river conservation system is imperative for the future of the system. Moreover, given the inability for most individual States to sustain their scenic rivers systems, retaining federal control over public lands will ensure that rivers already protected by the National Wild and Scenic Rivers System continue protecting river ecosystem services as well as maintaining the possibility of policy expansion on those federal lands.

Where from here? The next 50 years await.

Climate change and increasing societal demands make the expansion of river conservation policy imperative for biodiversity protection and ecosystem resilience around the globe. As decision makers seek policy options for adaptation and sustainability, the Wild and Scenic Rivers Act offers a flexible, adaptable framework that can be applied across scales. To that end, I will apply lessons from this dissertation research and database compilation through partnerships with public agencies and NGOs in the U.S. and abroad to inform public policy debates and inter-agency discussions on the value of expanding the system for ecosystem based adaptation and resilience.

The first project involves partnering with the Interagency Wild and Scenic Rivers Coordinating Council and scholars to apply lessons from this research in the creation of a

plan for the next 50 years of the Federal Wild and Scenic Rivers System. One portion of the plan involves choosing and using a standard ecoregion framework, such as the EPA Level III Ecoregions I proposed in Chapter IV, as the official framework for determining region of comparison to identify Outstandingly Remarkable Values. Another part of the new plan consists of incorporating the discourse of ecosystem services into ORV descriptions and identification tools. To do so, case study assessments of individual rivers will be conducted to understand how the WSRA has already worked to protect ecosystem services through ORV management and to assess what the socio-ecological impacts of those protections have been on local communities. To select case-study rivers, I will draw on the database compiled for this dissertation to choose rivers from the represented ecoregions. Preliminary selection criteria entail: timeframe of designation; ecoregion; designation type (Wild, Scenic, Recreational); designating authority (Section 2(a)ii and Section 5(a)); number and type of ORVs designated for protection. The research team will then employ the InVest model for ecosystem service valuation to ascertain the economic influence of WSRA designation, while remaining committed to expressing the intrinsic non-monetary values these river ecosystems provide to society and nature.

Another project centers on the identification of a suite of eligible rivers across un- or under-represented ecoregions across the United States to include in the system by utilizing the NRI portion of the database. This analysis will include collaboration with scholars to investigate the potential impacts of various climate-change and policy scenarios on eligible rivers to then identify rivers that exhibit the most potential for resilience and resistance to climate change and other environmental stressors. As land management agents cannot actively advocate for river designation, the results of this

study will be used to inform advocacy group campaigns for new designations. Moreover, these results have the potential to inform public policy decisions at the local and regional scale for water resource management.

Given that river restoration is gaining traction as a means to promote sustainability and resilience, I will draw on my database to conduct further analyses utilizing the National Inventory of Dams to identify rivers that, but for impoundments, would make eligible rivers worthy of inclusion in the National Wild and Scenic Rivers System. This analysis could help inform the decommissioning of dams in strategic locations for restoration and conservation purposes. The database analysis will be coupled with investigations of the transformation of Arizona's Fossil Creek from one of impounded stream to restored Wild and Scenic River.

Conducting policy analysis in a vast territory with distinct water rights and land tenure patterns such as those found in the United States provides insights into hypothetical scenarios based on ideas about how applying a policy like the WSRA might work in other countries. Thus, resituating the scope of this study to the international scale, this research stands to inform strategies for creating adaptation and conservation policies abroad. This point takes me to my next project, which is taking shape in the form of investigation of how different countries might adopt the Wild and Scenic Rivers Act framework. For instance, through collaboration with scholars in other countries, the international branch of the United States Forest Service, and The Nature Conservancy, I will investigate the process by which the U.S. and other countries exchange knowledge through internships and on-site workshops regarding the adoption of the policy and management practices. The first project in this vein is an investigation of China's

adoption of the policy framework. In this project, I am particularly interested in what aspects of the WSRA China chooses to adopt and the arguments for river conservation that the government officials and conservation advocates employ in the creation of protected river spaces. Conservation advocates from Costa Rica, Chile, Peru, Croatia, and France are among the other countries seeking policy insights in their initiatives to protect rivers. As these countries make progress it will be important to study their successes and failures so we can better understand how legibility is applied the factors that drive river conservation in other political-ecological spaces across time. Ultimately, there is much potential for analysis and application of the Wild and Scenic Rivers Act framework to promote another 50 years of river conservation.

My hope is that this project, grounded in the concept of legibility, will illuminate new paths of investigation into the conservation and climate adaptation policy arenas. Taking lessons from this study that legibility engenders both positive and negative social and ecological benefits, there is room to examine any number of resource management and policy questions through this lens to look for viable solutions to today's emerging environmental problems. For instance, compiling and querying a database such as the one utilized in this study could reveal political and ecological trends previously unrecognized in the governance of natural resources. Research in this vein would be fitting for scholars across the academy interested in the designation of wilderness areas or the restoration of land and water resources, from geographers to political scientist, conservation biologists, and ecologists, to name but a few disciplines in which I could envision such studies.

APPENDICES

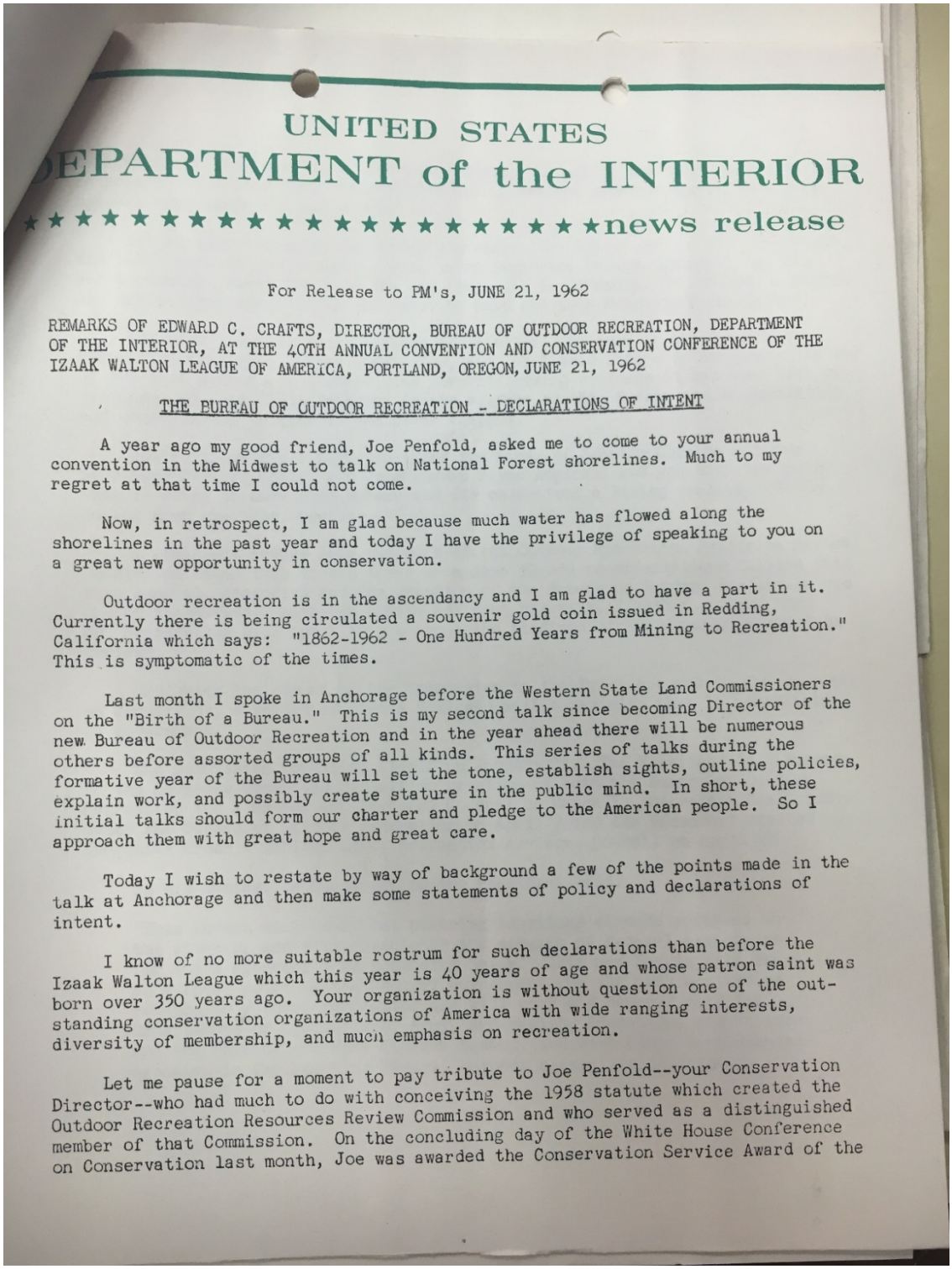
APPENDIX A

LIST OF ACRONYMS

AR	American Rivers
AW	American Whitewater
BLM	Bureau of Land Management
CWA	Clean Water Act
DOI	Department of Interior
DOA	Department of Agriculture
DOE	Department of Energy
ES	Ecosystem Services
ESA	Endangered Species Act
IWSRCC	Interagency Wild and Scenic Rivers Coordinating Council
IPCC	Intergovernmental Panel on Climate Change
NEPA	National Environmental Policy Act
NPS	National Park Service
ORRRC	Outdoor Recreation Resources Review Council
ORV(s)	Outstandingly Remarkable Value(s)
TVA	Tennessee Valley Authority
USFS	Untied States Forest Service
USFWS	United States Fish and Wildlife Service
WSRA	Wild and Scenic Rivers Act
WSR	Wild and Scenic River
WSRS	Wild and Scenic Rivers System

APPENDIX B

THE ORRRC DECLARES RECREATION A FIX FOR SOCIETY



UNITED STATES
DEPARTMENT of the INTERIOR
★★★★★★★★★★★★★★★★★★★★★news release

For Release to PM's, JUNE 21, 1962

REMARKS OF EDWARD C. CRAFTS, DIRECTOR, BUREAU OF OUTDOOR RECREATION, DEPARTMENT OF THE INTERIOR, AT THE 40TH ANNUAL CONVENTION AND CONSERVATION CONFERENCE OF THE IZAAK WALTON LEAGUE OF AMERICA, PORTLAND, OREGON, JUNE 21, 1962

THE BUREAU OF OUTDOOR RECREATION - DECLARATIONS OF INTENT

A year ago my good friend, Joe Penfold, asked me to come to your annual convention in the Midwest to talk on National Forest shorelines. Much to my regret at that time I could not come.

Now, in retrospect, I am glad because much water has flowed along the shorelines in the past year and today I have the privilege of speaking to you on a great new opportunity in conservation.

Outdoor recreation is in the ascendancy and I am glad to have a part in it. Currently there is being circulated a souvenir gold coin issued in Redding, California which says: "1862-1962 - One Hundred Years from Mining to Recreation." This is symptomatic of the times.

Last month I spoke in Anchorage before the Western State Land Commissioners on the "Birth of a Bureau." This is my second talk since becoming Director of the new Bureau of Outdoor Recreation and in the year ahead there will be numerous others before assorted groups of all kinds. This series of talks during the formative year of the Bureau will set the tone, establish sights, outline policies, explain work, and possibly create stature in the public mind. In short, these initial talks should form our charter and pledge to the American people. So I approach them with great hope and great care.

Today I wish to restate by way of background a few of the points made in the talk at Anchorage and then make some statements of policy and declarations of intent.

I know of no more suitable rostrum for such declarations than before the Izaak Walton League which this year is 40 years of age and whose patron saint was born over 350 years ago. Your organization is without question one of the outstanding conservation organizations of America with wide ranging interests, diversity of membership, and much emphasis on recreation.

Let me pause for a moment to pay tribute to Joe Penfold--your Conservation Director--who had much to do with conceiving the 1958 statute which created the Outdoor Recreation Resources Review Commission and who served as a distinguished member of that Commission. On the concluding day of the White House Conference on Conservation last month, Joe was awarded the Conservation Service Award of the

5. A need exists to professionalize recreation education in the Nation's colleges and universities.

6. The Bureau of Outdoor Recreation is and should continue to be small in terms of men and dollars.

7. There will be no empire-building in the Bureau of Outdoor Recreation, no intent to place the clammy hand of restraining bureaucracy on the initiative of other Federal bureaus, States or private organizations providing outdoor recreation opportunities.

8. The Bureau will not manage any public lands: its duties will be policy, planning, long-range programs and coordination.

9. Much of the Bureau's emphasis will be on the East and on the West Coast where the population is concentrated.

10. In the Federal area, the Bureau's function will be coordination, programing, and promotion of Federal acquisition of certain properties needed to further the recreation aims of the National Forest and Park Systems, the Wildlife Refuges and Game Ranges and the Federal reservoirs.

11. The Bureau's job of correlation of governmental recreation activity likely will be achieved through legislative review, budgetary review, conference, consultation and through the respect and stature which the Bureau expects to gain over a period of time and through the force of public opinion which may support it.

12. The Bureau is by no means another National Park Service or another Forest Service. Its orientation, scope, approach, and objectives are quite different from that of any presently existing agency of government, State or Federal.

13. A Citizens Advisory Council to the Bureau of Outdoor Recreation should be created. This recommendation will be made to Secretary of the Interior Stewart L. Udall.

14. The Bureau's emphasis will be on the recreation needs of people rather than on the utilization of resources.

15. The Bureau will push vigorously for the legislation, funds, and policies which it believes in the public interest.

16. Emphasis in the Bureau of Outdoor Recreation will be on action; there will be no participation in academic or stratospheric planning which finds use only in libraries or with doctoral candidates.

"Outdoor recreation is in the ascendancy and I am glad to have a part in it," Director Crafts told the Izaak Walton League. He said he hoped to be one of its foremost advocates and he added that he expected to maintain a balance between enthusiasm and realism.

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Department of the Interior by Secretary Udall. In making the award that afternoon Secretary Udall said that Joe reminded him of western mountain men of days gone by--not very large but all cougar.

Let me also recognize Assistant Secretary John Carver who is here today and who will speak to you tonight. John is my long-time friend, presently my boss, and a country lawyer who made the big time. He is likeable, forthright, a fighter and has put his shoulder to the wheel to help get this Bureau off-the-ground.

Tomorrow you will hear Laurance Rockefeller, Chairman of the Outdoor Recreation Resources Review Commission, who, as I said before in Anchorage, is one of the most dedicated, sincere, and forward-looking citizens it has ever been my privilege to know. His interest in the welfare of this Bureau and in recreation and conservation in general has never flagged.

Add to these men I have mentioned the names of Senator Clinton Anderson, Secretary Stewart Udall, and Congressman Wayne Aspinall and you have the group that is going to make this Bureau and its objectives a living reality. We are coming down the pike together.

I shall not review here the work of the Outdoor Recreation Resources Review Commission other than to say there were some 50-odd recommendations falling into five general categories and the creation of the Bureau of Outdoor Recreation was one of these five. Although I have not seen his talk, I rather suspect that Mr. Rockefeller will speak to you about the findings of the Commission which he chaired.

Following the report of the Commission to the President and to the Congress on January 31, a series of events followed with a rapidity that is remarkable in government.

The Commission committed itself on January 31. The President in a message to the Congress committed himself to creation of both the Bureau of Outdoor Recreation and a Recreation Advisory Council on March 1. Secretary Udall activated the Bureau of Outdoor Recreation on April 2 and the President created by Executive Order a Cabinet-level Recreation Advisory Council on April 27.

In his message on Conservation the President said:

"This Bureau will carry out planning functions already assigned to the Interior and will administer the program of Federal assistance for State agencies I am proposing below. This new Bureau will serve as a focal point in the Federal Government for the many activities related to outdoor recreation and will work and consult with the Departments of Agriculture, Army, and Health, Education, and Welfare and the Housing and Home Finance Agency, and with other Governmental agencies in implementing Federal outdoor recreation policies."

EXECUTIVE ORDER

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PROVIDING FOR COORDINATION WITH RESPECT TO
OUTDOOR RECREATION RESOURCES AND ESTABLISHING

In the Secretarial Order of April 2, the Secretary declared that the Bureau of Outdoor Recreation would be responsible for:

Coordination of related Federal programs;

Stimulation of and provision for assistance to the States;

Sponsorship and conduct of research;

Encouragement of interstate and regional cooperation;

Conduct of recreation resources surveys;

Formulation of a nationwide recreation plan on the basis of State, regional, and Federal plans.

The Executive Order regarding the advisory council declared that: "The Council shall provide broad policy advice to the Heads of Federal Agencies on all important matters affecting outdoor recreation resources and shall facilitate coordinated efforts among the various Federal agencies."

In the same Order, the Secretary of the Interior was made responsible, in consultation with other members of the Council "for developing methods and procedures for improved interagency coordination in the development and carrying out of National outdoor recreation policies and programs."

In addition, pending legislation (S. 3117 by Senator Anderson and others and HR 11165 and identical bills by Congressman Aspinall and others) would authorize the Secretary of the Interior to:

Prepare and maintain an inventory of outdoor recreation needs and resources;

Prepare a system of classification of outdoor recreation resources;

Conduct studies, public information, and carry out education and interpretation programs;

Request information, data, and reports of other Federal agencies;

Assist the States in meeting the outdoor recreation needs of their citizens and visitors by providing financial assistance on a matching basis for the preparation of plans for State outdoor recreation programs.

Hearings have been completed on S. 3117 by the Senate Committee on Interior and Insular Affairs and I think the companion House measures may be considered shortly. It is always dangerous to predict Congressional action but I think this bill has a reasonable chance of enactment this session. One other measure, S. 543, would direct a study of the recreational qualifications of certain specified

THE WHITE HOUSE

EXECUTIVE ORDER

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PROVIDING FOR COORDINATION WITH RESPECT TO OUTDOOR RECREATION RESOURCES AND ESTABLISHING

shorelines, of shorelines within the National Forests, and would authorize $25 million matching grants to the States to acquire lands for outdoor recreation purposes along our shorelines. Land conservation fund bills to provide for Federal acquisition of lands for recreation purposes are also pending.

These are the basic guidelines for the Bureau. Where do we stand with respect to progress?

Organizationally we are fortunate to have Lawrence Stevens, formerly Deputy Director for Studies of the Outdoor Recreation Resources Review Commission, as Associate Director of the Bureau. John Shanklin, a long-time and widely known and respected career forester on the staff of the Secretary of the Interior is to be one of two Assistant Directors. The other may be announced shortly. There will be six divisions: Planning and Surveys, Cooperative Services, Federal Programs, Research, Education and Interpretation, and Administration. The responsibility for certain functions heretofore carried out by the Park Service under the Act of June 23, 1936, in nationwide planning and in cooperation with the States has been assigned to the Bureau. In time there will be field offices.

In the top staff we are seeking individuals whose backgrounds and experience will give us needed balance between the various Federal agencies primarily involved in recreation, the States, educational and research institutions, and conservation organizations. We are also seeking balance in the various phases of recreation including parks, fish and game, mass recreation use, wilderness, and recreation both as part of a complex of uses and as the dominant use.

It is our hope soon to have the first meeting of the President's Recreation Advisory Council. We are moving to establish procedures for promoting improved interagency coordination in outdoor recreation. A number of special projects have been assigned to the Bureau for broad-scale, high-level examination. These include the Pictured Rocks area in northern Michigan, the so-called Whiskeytown Complex which involves the Trinity, Lewiston, Shasta, and Whiskeytown reservoirs in northern California, the Allagash area in Maine, the Allegheny and Raystown reservoir areas in Pennsylvania, and so on.

I come now to sixteen declarations of intent. These are my personal creed. They are what I believe. They are the policies I intend to pursue.

1. Outdoor recreation needs to be vigorously advocated across this land and in chambers where policy is made. I hope to be one of those advocates and to balance enthusiasm with realism. Sometimes a tinge of evangelism may even be in order. My old Dean and mentor, Sam Dana of the University of Michigan, once told me that the trouble with me was that I was all logic and no emotion. I hope to prove him wrong.

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...AND ESTABLISHING

2. There needs to be national and nonpolitical leadership in recreation. The Bureau of Outdoor Recreation as a career service should provide that leadership. It should be intellectual leadership, ... aggrandizement. There needs to be ... effective articulation that reaches the public heart and mind. This we shall try to do.

3. There needs to be public understanding that recreation is not only a renewing experience but also serious business. It is serious national business both because of its economic impact and its beneficial effect on the physical, cultural, social and moral well-being of the American people. It is a partial solution to the social problems created by urbanization and leisure time. It is a solution, at least in part, to the fact that man is not wholly suited physiologically to meet the technological demands placed upon him. Most of the hospitalizations in the country today are emotionally based. In this vein I like to think of the new organization as the Bureau of Outdoor Re-Creation. We have heard much of ORRRC. Now I like to think in terms of BORC for the Bureau of Outdoor Re-Creation.

4. The recreation business is ... great hope for economic improvement of certain rural portions of this country that are otherwise depressed. Further the manufacture and marketing of recreation equipment and provision of recreation facilities have a major impact on our economy. Think for a moment of what is involved in the manufacture, use and operation of sporting arms, fishing tackle, camping equipment, pleasure boats, winter sports equipment, pleasure trailers, recreation roads, resort hotels, motels, lodges and dude ranches, and the recreation press. All of this we recognize in the new Bureau.

5. There is need to professionalize recreation education in our colleges and universities and with the broad gauge orientation which I am now trying to describe. Those currently engaged in the work of providing recreation for others are made up of a multitude of disciplines--geographers, foresters, landscape architects, zoologists, physical education majors, engineers, and so on. I look forward to the day when recreation conservation may be recognized professionally as fully as forestry is today.

There is the other side of the coin too, namely the education of those who wish to partake intelligently and effectively of recreation opportunities. I think more is being done in this field than in the education of the professional technician in outdoor recreation.

6. This Bureau is and should continue to be small in terms of personnel and money. My hope is that though it be small in men and dollars, it may loom large in policy and in contribution to the welfare of the American people.

EXECUTIVE ORDER

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There will be no empire-building in this Bureau. We have no intention to place the clammy hand of restraining bureaucracy on the initiative of other Federal bureaus, States, or the private sector. The primary emphasis of the Bureau should be on assistance to the States, to local instrumentalities of government, and to private enterprise. We hope to facilitate, to aid, and to be a catalytic agent.

8. This Bureau will not be a land-managing agency. Its duties will be policy, planning, long-range programs and coordination. As it gains stature my hope is that it might function in the Federal heirarchy somewhat as an appellate court in the field of recreation. The emphasis should be on the quality not quantity, improvement of standards and facilities, attraction of better personnel, and broadening of vision.

9. An unfortunate fact of life is that most of the people are where the land is not. This was dramatically impressed upon me recently as I flew nonstop from Anchorage to Chicago over Alaska and northern Canada with its tremendous scenery and millions of lakes but without a sign of human habitation or encroachment. Recreation opportunities need to be brought close to people, so much of the emphasis of the Bureau will necessarily be in the East and on the West Coast where our population concentrations occur.

10. In the Federal area the Bureau function will be coordination, programing, and promotion of Federal acquisition of certain properties needed for the furtherance of the recreation aims of our National Forest and Park Systems, our Wildlife Refuges and Game Ranges, and the Federal reservoirs.

11. "Coordination" is a difficult word and in many ways an onerous one. No power has been conferred on the Bureau by statute or by Executive fiat, to impose its will on any other government entity. "Correlation" is perhaps a better word. This objective of correlation or coordination may be achieved through legislative review, budgetary review, conference, consultation, and the respect and stature which the Bureau may gain over a period of time as well as the force of public opinion which may develop behind it.

12. This Bureau is by no means another National Park Service or another Forest Service. Its orientation, its scope, its approach and objectives are quite different from any existing agency of government, Federal or State. It is in a very real sense a new experiment in government.

13. There should be, in my opinion, a Citizens Advisory Council to the Bureau and it is my hope to recommend one soon to Secretary Udall.

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THE WHITE HOUSE

EXECUTIVE ORDER

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The emphasis of this Bureau needs to be on the needs of the people whereas too often in the past the emphasis in outdoor recreation has been on the utilization of a resource.

15. During the few years that I shall be Director of this Bureau I intend to push vigorously for the legislation, funds and policy that to me are in the public interest. There will be no "pussy-footing" around; but by the same token political expertese will be involved here and the meshing of goals with the art of the possible.

16. Finally, I should say I have little patience with plans that do not lead to action. I have no desire that this Bureau engage in academic or stratospheric planning which finds its use only in the libraries and with doctoral candidates. Planning and programing to me are primarily significant in direct relation to the results stemming from them.

In conclusion, let me remind you of two points which the President made in his talk at the recent White House Conference on Conservation. In emphasizing the need to apply science to conservation, the President said that the successful application of science to conservation may result in a great deal more lasting benefit to a particular country than being first in space. He also said: "I don't think there is anything that could occupy our attention with more distinction than trying to preserve for those who come after us this beautiful country which we have inherited."

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Outdoor Recreation File

IMMEDIATE RELEASE

April 28, 1962

Office of the White House Press Secretary

THE WHITE HOUSE

EXECUTIVE ORDER

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PROVIDING FOR COORDINATION WITH RESPECT TO
OUTDOOR RECREATION RESOURCES AND ESTABLISHING
THE RECREATION ADVISORY COUNCIL

WHEREAS it is necessary, through the conservation and wise use of resources, to preserve, develop, and make accessible to all our people outdoor recreation of such quantity and quality as will make possible the individual enjoyment of, and will assure the physical, cultural, and spiritual benefits of, such recreation; and

WHEREAS the Federal Government has major nationwide responsibilities with respect to outdoor recreation resources; and

WHEREAS it is necessary to improve the effectiveness of Federal participation in the field of outdoor recreation; and

WHEREAS a new Bureau of Outdoor Recreation has recently been established in the Department of the Interior; and

WHEREAS improvements in the development of national outdoor recreation policies and the carrying out of national outdoor recreation programs will be facilitated by the provision of more adequate interagency consultation and advice:

NOW, THEREFORE, by virtue of the authority vested in me as President of the United States, it is ordered as follows:

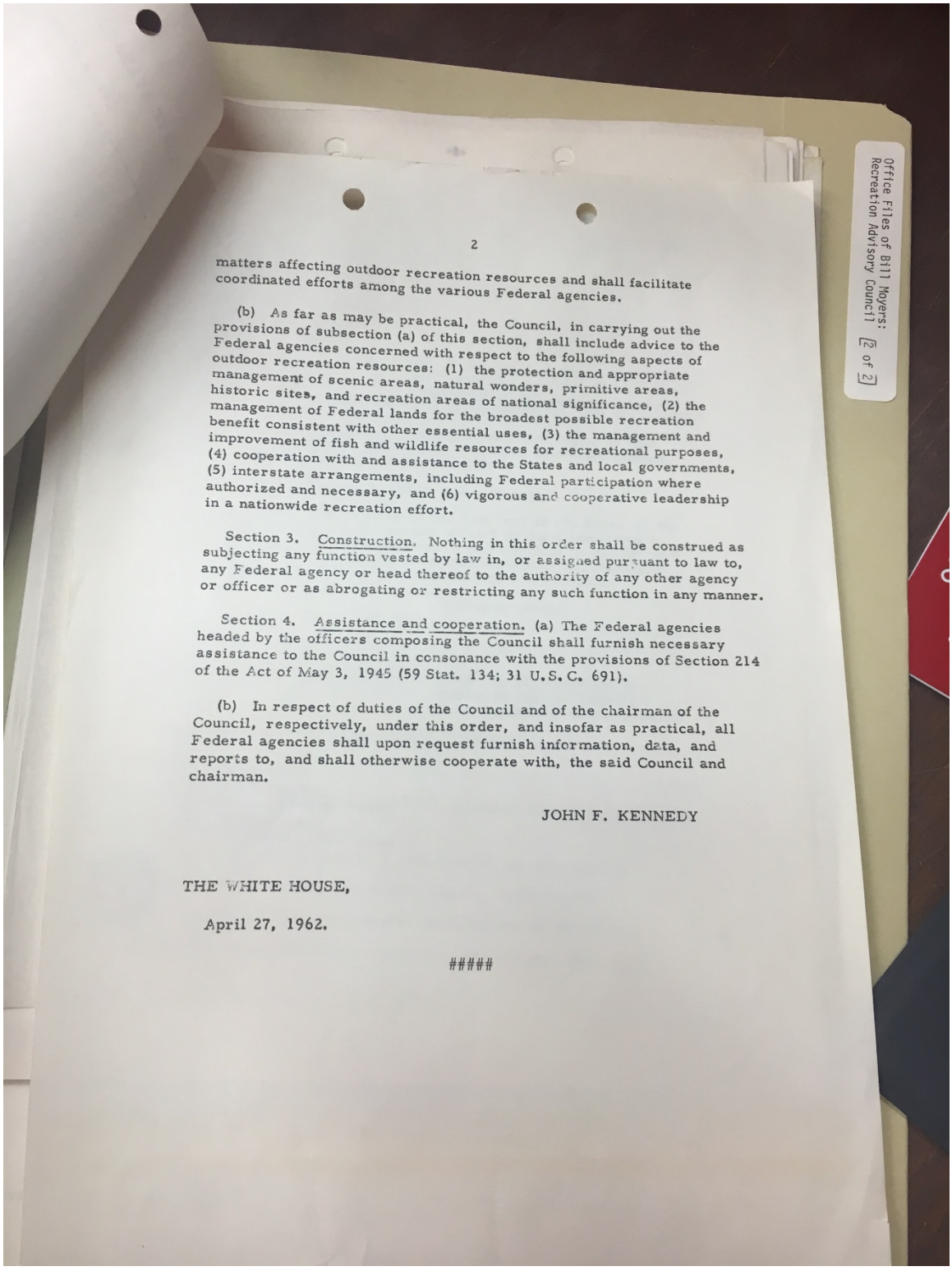
Section 1. Recreation Advisory Council. (a) There is hereby established the Recreation Advisory Council (hereinafter referred to as the Council). The Council shall be composed of the Secretary of the Interior, the Secretary of Agriculture, the Secretary of Defense, the Secretary of Health, Education, and Welfare, and the Administrator of the Housing and Home Finance Agency. The chairmanship of the Council shall rotate among these officials in the order named and for terms of two years each. Each of the foregoing officers may appoint a delegate to represent him in Council activity. When matters affecting the interests of Federal agencies (including, as used in this order, executive departments and other executive agencies) the heads of which are not members of the Council are to be considered by the Council, the chairman of the Council shall invite such heads to participate in the deliberations of the Council.

(b) The Secretary of the Interior, in consultation with the other members of the Council, shall be responsible for developing methods and procedures for improved interagency coordination in the development and carrying out of national outdoor recreation policies and programs.

Section 2. Functions of the Council. (a) The Council shall provide broad policy advice to the heads of Federal agencies on all important

more

Office Files of Bill Moyers: Recreation Advisory Council [2 of 2]



matters affecting outdoor recreation resources and shall facilitate coordinated efforts among the various Federal agencies.

(b) As far as may be practical, the Council, in carrying out the provisions of subsection (a) of this section, shall include advice to the Federal agencies concerned with respect to the following aspects of outdoor recreation resources: (1) the protection and appropriate management of scenic areas, natural wonders, primitive areas, historic sites, and recreation areas of national significance, (2) the management of Federal lands for the broadest possible recreation benefit consistent with other essential uses, (3) the management and improvement of fish and wildlife resources for recreational purposes, (4) cooperation with and assistance to the States and local governments, (5) interstate arrangements, including Federal participation where authorized and necessary, and (6) vigorous and cooperative leadership in a nationwide recreation effort.

Section 3. Construction. Nothing in this order shall be construed as subjecting any function vested by law in, or assigned pursuant to law to, any Federal agency or head thereof to the authority of any other agency or officer or as abrogating or restricting any such function in any manner.

Section 4. Assistance and cooperation. (a) The Federal agencies headed by the officers composing the Council shall furnish necessary assistance to the Council in consonance with the provisions of Section 214 of the Act of May 3, 1945 (59 Stat. 134; 31 U.S.C. 691).

(b) In respect of duties of the Council and of the chairman of the Council, respectively, under this order, and insofar as practical, all Federal agencies shall upon request furnish information, data, and reports to, and shall otherwise cooperate with, the said Council and chairman.

JOHN F. KENNEDY

THE WHITE HOUSE,

April 27, 1962.

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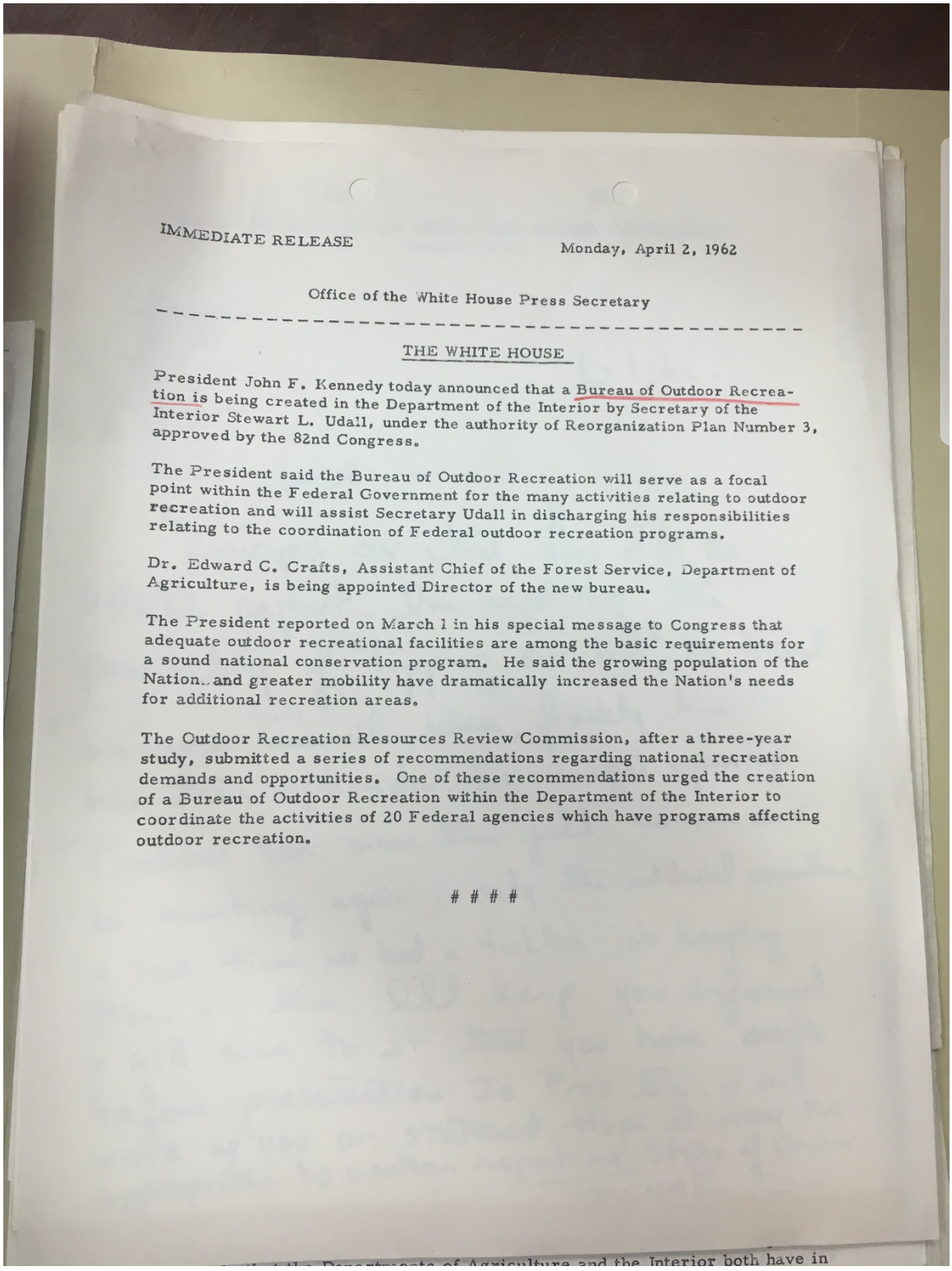

IMMEDIATE RELEASE

Monday, April 2, 1962

Office of the White House Press Secretary

THE WHITE HOUSE

President John F. Kennedy today announced that a Bureau of Outdoor Recreation is being created in the Department of the Interior by Secretary of the Interior Stewart L. Udall, under the authority of Reorganization Plan Number 3, approved by the 82nd Congress.

The President said the Bureau of Outdoor Recreation will serve as a focal point within the Federal Government for the many activities relating to outdoor recreation and will assist Secretary Udall in discharging his responsibilities relating to the coordination of Federal outdoor recreation programs.

Dr. Edward C. Crafts, Assistant Chief of the Forest Service, Department of Agriculture, is being appointed Director of the new bureau.

The President reported on March 1 in his special message to Congress that adequate outdoor recreational facilities are among the basic requirements for a sound national conservation program. He said the growing population of the Nation and greater mobility have dramatically increased the Nation's needs for additional recreation areas.

The Outdoor Recreation Resources Review Commission, after a three-year study, submitted a series of recommendations regarding national recreation demands and opportunities. One of these recommendations urged the creation of a Bureau of Outdoor Recreation within the Department of the Interior to coordinate the activities of 20 Federal agencies which have programs affecting outdoor recreation.

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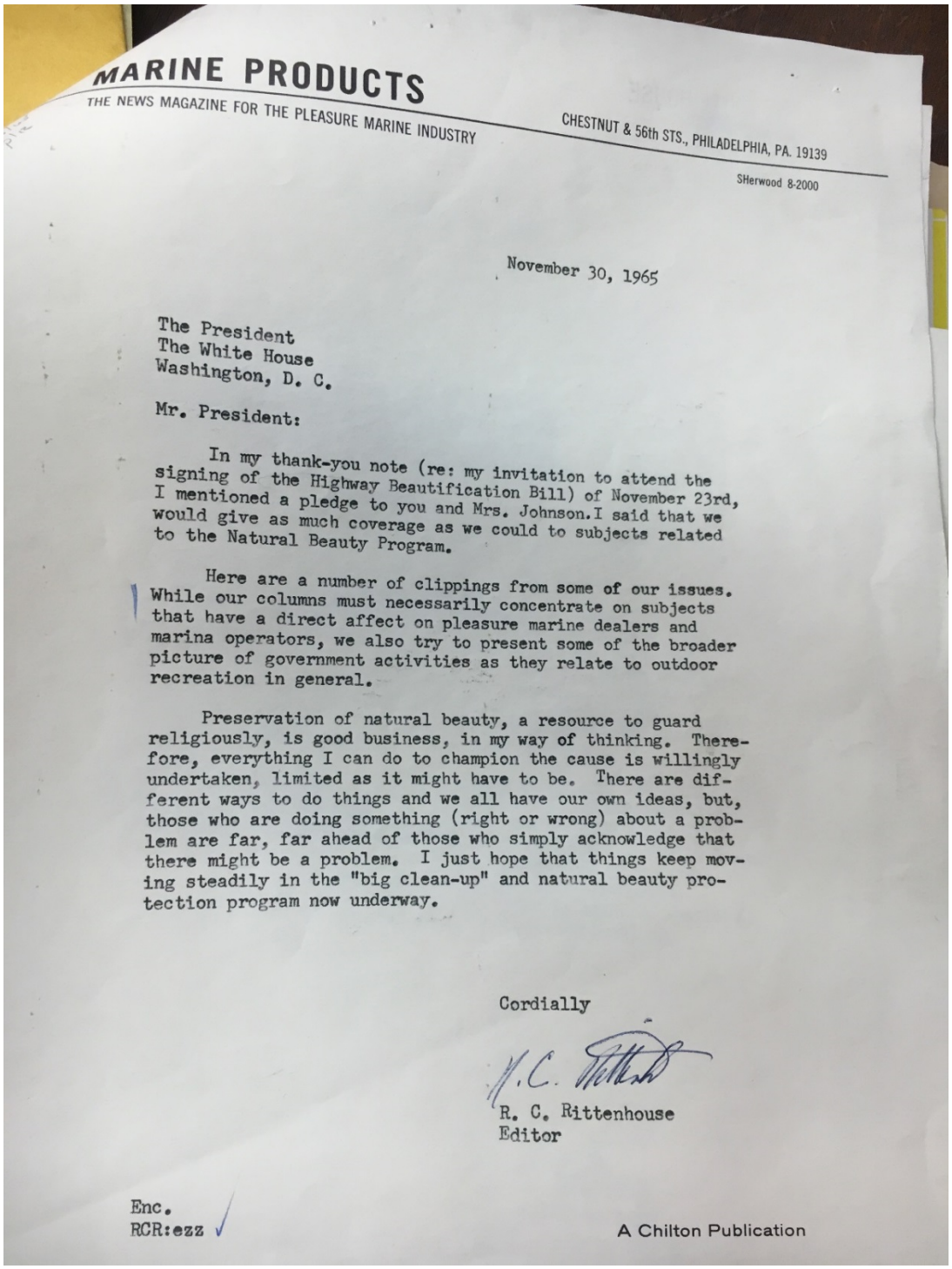
(Crafts, 1962)

APPENDIX C

RECREATION INDUSTRIES SUPPORTED PRESERVATION POLICIES FOR BUSINESS INTERESTS



MARINE PRODUCTS
THE NEWS MAGAZINE FOR THE PLEASURE MARINE INDUSTRY
CHESTNUT & 56th STS., PHILADELPHIA, PA. 19139
SHerwood 8-2000

November 30, 1965

The President
The White House
Washington, D. C.

Mr. President:

In my thank-you note (re: my invitation to attend the signing of the Highway Beautification Bill) of November 23rd, I mentioned a pledge to you and Mrs. Johnson. I said that we would give as much coverage as we could to subjects related to the Natural Beauty Program.

Here are a number of clippings from some of our issues. While our columns must necessarily concentrate on subjects that have a direct affect on pleasure marine dealers and marina operators, we also try to present some of the broader picture of government activities as they relate to outdoor recreation in general.

Preservation of natural beauty, a resource to guard religiously, is good business, in my way of thinking. Therefore, everything I can do to champion the cause is willingly undertaken, limited as it might have to be. There are different ways to do things and we all have our own ideas, but, those who are doing something (right or wrong) about a problem are far, far ahead of those who simply acknowledge that there might be a problem. I just hope that things keep moving steadily in the "big clean-up" and natural beauty protection program now underway.

Cordially

R. C. Rittenhouse
Editor

Enc.
RCR:ezz

A Chilton Publication

White House Conference on Natural Beauty

Water and waterfronts panel urges strong action for stream renewal

A panel of the White House Conference on Natural Beauty agreed on the need for increased emphasis on measures to preserve the beauty of urban waters and waterfront areas. The Panel on Water and Waterfronts stressed the urgency of prompt action to halt the growing use of water and waterfront areas in ways that degrade and destroy their value as scenic and recreational resources.

There was general agreement among the seven panel members on the need to protect water and waterfront areas through such means as purchases, easements and leaseholds; on the need to plan for protection and improvement of entire river basins rather than isolated sites; and on the potential value of a concept of "stream renewal" comparable in breadth to the concept of urban renewal.

A wide range of suggestions for governmental action was advanced by individual panel members. Conrad L. Wirth, former director of the Department of the Interior's National Park Service, urged establishment of a Federal Water Control Commission to pass on all projects involving "water impoundments, diversions and other unnatural uses of our rivers and streams."

Mr. Wirth also advocated a Federal pollution abatement tax on effluent discharged into designated streams, rivers, lakes, bays, and ocean water. He estimated the annual yield from such a tax at several billion dollars and proposed allocating 75 percent of the total to "cleaning up our waters and preventing further pollution." The remainder would be used to purchase easements and other rights that would prevent undesirable uses of water resources and land around major bodies of water.

Senator Philip A. Hart of Michigan placed major emphasis on prompt acquisition by the Federal Government of waterfront areas needed for recreational purposes. He warned that rising prices for waterfront property would prevent their acquisition for public use if action is not taken promptly. In addition to urging greater Federal efforts, he called on State governments to undertake similar activities, particularly where this would result in the acquisition of waterfront areas at lower costs to taxpayers. Senator Hart's statement was presented by Rep. John Dingell of Michigan.

Christopher Tunnard, Professor of City Planning at Yale University's School of Art and Architecture, recommended that State and county governments create urban waterfront districts, under which portions of

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waterfront areas could be set aside as "scenic zones." He urged that appropriate agencies of local government refuse to permit commercial, industrial, and residential development of shoreline property unless adequate provision is made for sanitary sewage disposal.

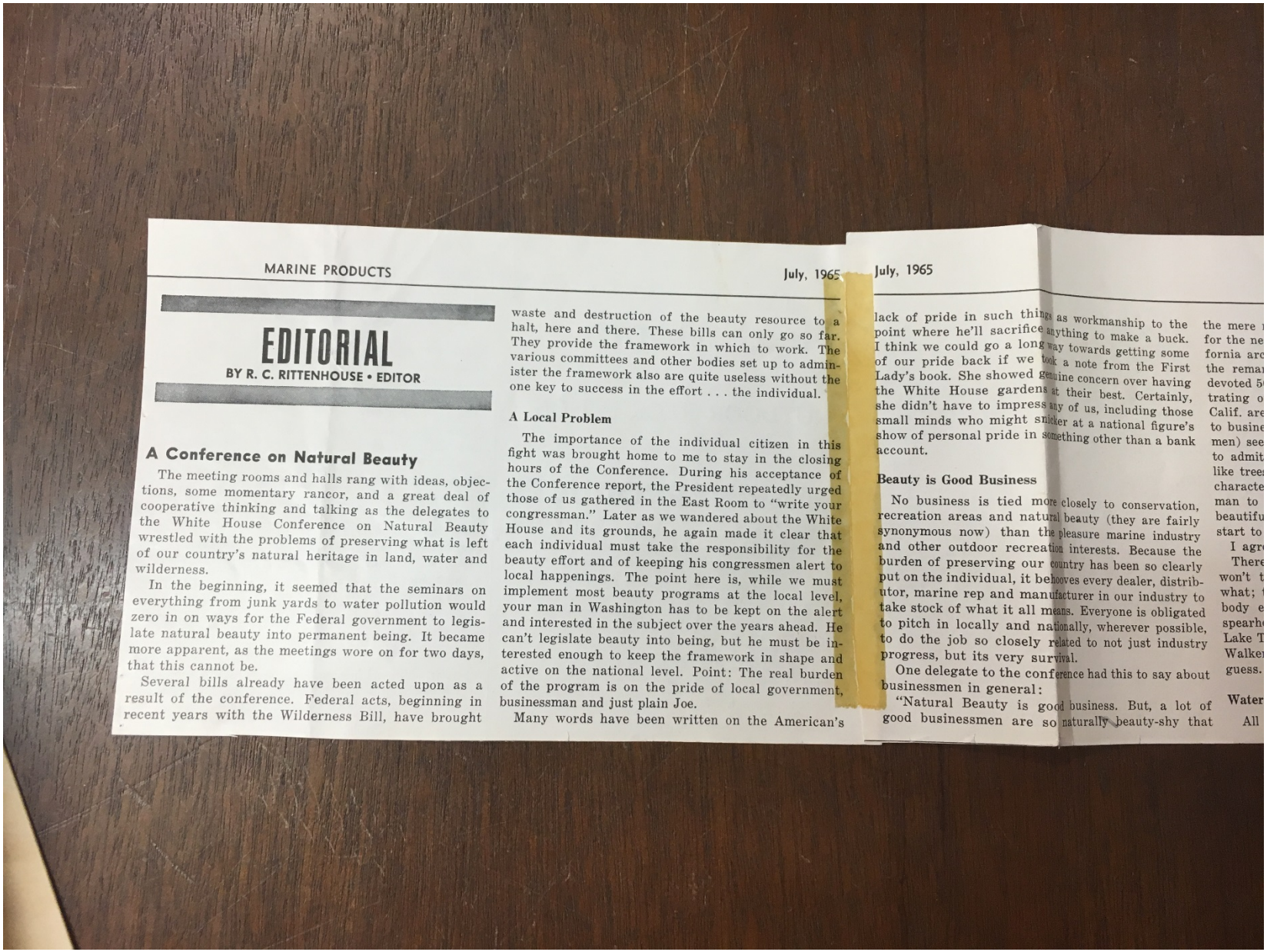
Leonard Dworsky, Director of Cornell University's Water Resources Center, warned that present sewage treatment technology is not adequate to cope with the total water pollution problem as it currently stands and will not be equal to the even greater problems which the future will bring. He urged that Federal and State agencies and industry undertake more vigorous research and development programs to devise new techniques for treatment or increase the effectiveness of existing methods. But he also placed great emphasis on the need for increased application of the available technology, and suggested the establishment of a national policy setting a basic level of secondary treatment as a minimum for handling sewage and industrial wastes.

Carl Feiss of Washington, D. C., an urban planning consultant, recommended that measures to assure protection of the beauty and scenic value of water and waterfront areas be included in pending Federal legislation concerned with urban improvement programs. He said that Federal grants for urban beautification under the pending Housing Act of 196 ought to be available for projects which include shorelines and bodies of water in the category of open spaces and public land.

Henry P. Caulfield, Jr., Director of the Resources Program Staff of the Department of the Interior, called for private groups to devote increased efforts to raising public awareness of the need for preventing desecration of water areas. He also stressed the need for comprehensive planning of water and waterfront use by Federal, State, and local governments and urged broad support of pending Federal legislation which would facilitate such planning.

Grady Clay, of Louisville, Kentucky, Chairman of the Panel, urged increased application of conservation techniques to develop urban watershed areas. He also called for measures to prevent silt pollution of rivers and suggested that the Federal Government take the initiative in applying such measures to construction and other projects under its jurisdiction.

Representative Frances P. Bolton of Ohio, citing her own experience in efforts to preserve Mount Vernon as a historical shrine, called for the development of new approaches to public and private cooperation in protecting water areas. She said that tax reform legislation to encourage donation of scenic easement was one approach that her experience had shown to be of value.



EDITORIAL

BY R. C. RITTENHOUSE • EDITOR

A Conference on Natural Beauty

The meeting rooms and halls rang with ideas, objections, some momentary rancor, and a great deal of cooperative thinking and talking as the delegates to the White House Conference on Natural Beauty wrestled with the problems of preserving what is left of our country's natural heritage in land, water and wilderness.

In the beginning, it seemed that the seminars on everything from junk yards to water pollution would zero in on ways for the Federal government to legislate natural beauty into permanent being. It became more apparent, as the meetings wore on for two days, that this cannot be.

Several bills already have been acted upon as a result of the conference. Federal acts, beginning in recent years with the Wilderness Bill, have brought waste and destruction of the beauty resource to a halt, here and there. These bills can only go so far. They provide the framework in which to work. The various committees and other bodies set up to administer the framework also are quite useless without the one key to success in the effort . . . the individual.

A Local Problem

The importance of the individual citizen in this fight was brought home to me to stay in the closing hours of the Conference. During his acceptance of the Conference report, the President repeatedly urged those of us gathered in the East Room to "write your congressman." Later as we wandered about the White House and its grounds, he again made it clear that each individual must take the responsibility for the beauty effort and of keeping his congressmen alert to local happenings. The point here is, while we must implement most beauty programs at the local level, your man in Washington has to be kept on the alert and interested in the subject over the years ahead. He can't legislate beauty into being, but he must be interested enough to keep the framework in shape and active on the national level. Point: The real burden of the program is on the pride of local government, businessman and just plain Joe.

Many words have been written on the American's lack of pride in such things as workmanship to the point where he'll sacrifice anything to make a buck. I think we could go a long way towards getting some of our pride back if we took a note from the First Lady's book. She showed genuine concern over having the White House gardens at their best. Certainly, she didn't have to impress any of us, including those small minds who might snicker at a national figure's show of personal pride in something other than a bank account.

Beauty is Good Business

No business is tied more closely to conservation, recreation areas and natural beauty (they are fairly synonymous now) than the pleasure marine industry and other outdoor recreation interests. Because the burden of preserving our country has been so clearly put on the individual, it behooves every dealer, distributor, marine rep and manufacturer in our industry to take stock of what it all means. Everyone is obligated to pitch in locally and nationally, wherever possible, to do the job so closely related to not just industry progress, but its very survival.

One delegate to the conference had this to say about businessmen in general:

"Natural Beauty is good business. But, a lot of good businessmen are so naturally beauty-shy that

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One delegate to the conference had this to say about businessmen in general:

"Natural Beauty is good business. But, a lot of good businessmen are so naturally beauty-shy that the mere mention of the phrase starts them looking for the nearest exit." William Penn Mott, Jr., a California architect, who headed one of 15 panels, made the remarks before the Conference began. He has devoted 56 years to the subject, most recently concentrating on convincing businessmen in the Oakland, Calif. area how important community environment is to business. "Don't ask me why, but they (businessmen) seem to mask their feelings as if they are afraid to admit that they really do find pleasure in things like trees, flowers. . . . Maybe it just doesn't seem in character for a hard as nails, no nonsense businessman to be concerned about making . . . something beautiful. Anyway, some of them get nervous and start to fidget the minute the subject is mentioned."

I agree.

There are too damned many people around who won't talk about anything but martinis; who owns what; the last profit and loss statement; and somebody else's mistakes. Years ago, Mr. Mott helped spearhead the planning for recreational facilities at Lake Tahoe, Oregon's Crater Lake and Nevada's Lake Walker. If that isn't good business for us I miss my guess.

Water and Waterfronts

All of the panel chairmen made recommendations for action in their conference reports. Most of it has been amply covered since then by newspapers and other media, so I won't amplify on the subject. Because of its immediate importance to us the full Water and Waterfronts Panel report can be found on page 29. Some of these points may have seen action since this was written.

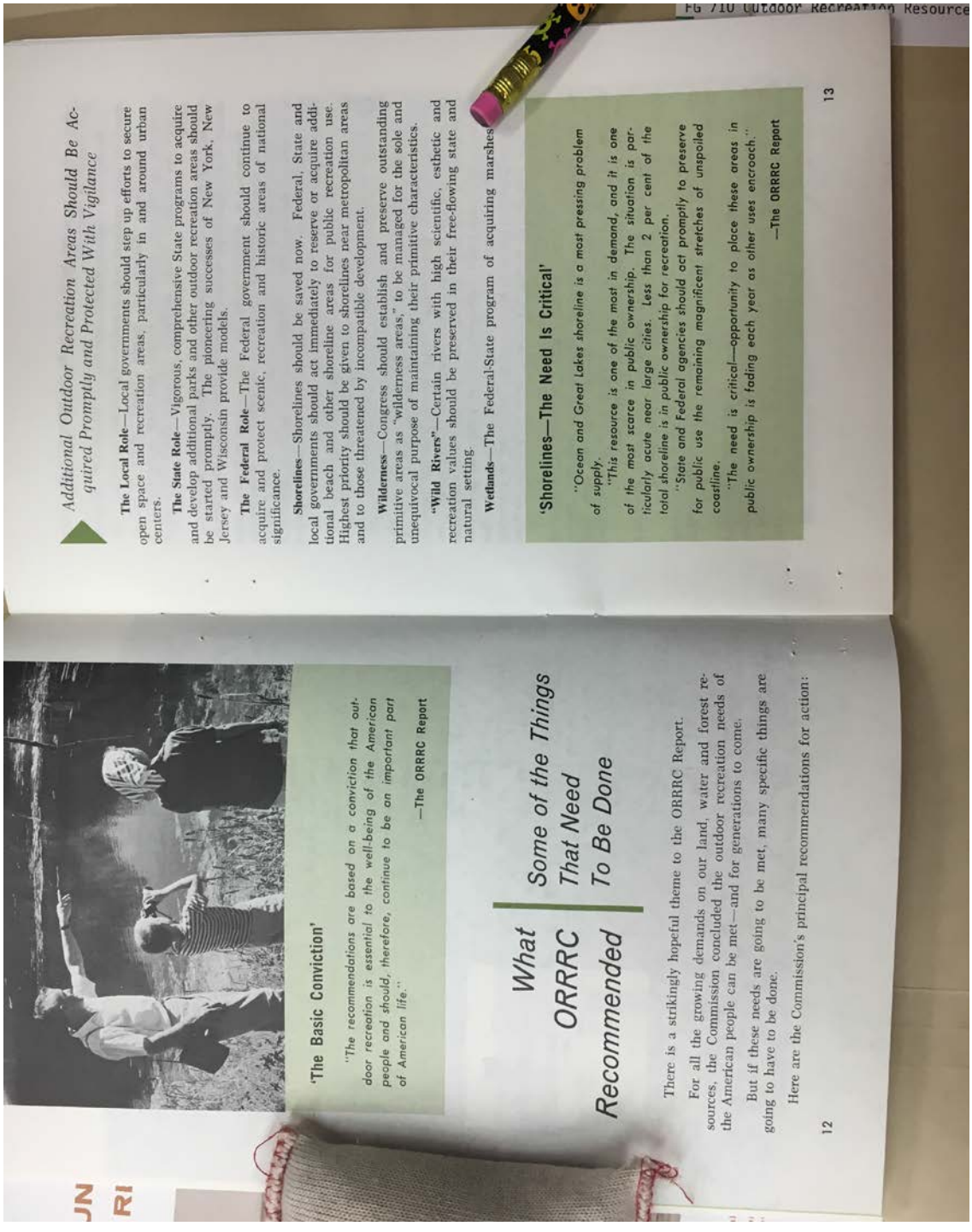
Where were the pleasure marine people?

I noted with particular concern that pleasure marine people were conspicuous by their absence at the Conference. Delegates and press were there by invitation only. Two major associations were ably represented by Fred Lifton and Joe Choate. There may have been more representatives of our industry present, but, if there weren't, I wonder where we have been. Apparently, people of our industry are not recognized as knowledgeable in a field on which we are so completely dependent. Wake up pleasure marine businessman! Get interested and do your share before it is too late. Others are carrying the ball to preserve your business. Isn't it unfortunate that some people have been calling some conservationists "kooks" all these years? True, we can't always agree on certain things. But, this country needs a lot less chicken-hearted conformity and a lot more pride of beauty, or "kookiness," if you prefer. It's good business.

(Rittenhouse, 1965)

APPENDIX D

ORRRC RECOMMENDS PROTECTION OF FREE-FLOWING RIVERS IN 1964



What ORRRC Recommended

Some of the Things That Need To Be Done

There is a strikingly hopeful theme to the ORRRC Report.

For all the growing demands on our land, water and forest resources, the Commission concluded the outdoor recreation needs of the American people can be met—and for generations to come.

But if these needs are going to be met, many specific things are going to have to be done.

Here are the Commission's principal recommendations for action:

12

'The Basic Conviction'

"The recommendations are based on a conviction that outdoor recreation is essential to the well-being of the American people and should, therefore, continue to be an important part of American life."

—The ORRRC Report

Additional Outdoor Recreation Areas Should Be Acquired Promptly and Protected With Vigilance

The Local Role—Local governments should step up efforts to secure open space and recreation areas, particularly in and around urban centers.

The State Role—Vigorous, comprehensive State programs to acquire and develop additional parks and other outdoor recreation areas should be started promptly. The pioneering successes of New York, New Jersey and Wisconsin provide models.

The Federal Role—The Federal government should continue to acquire and protect scenic, recreation and historic areas of national significance.

Shorelines—Shorelines should be saved now. Federal, State and local governments should act immediately to reserve or acquire additional beach and other shoreline areas for public recreation use. Highest priority should be given to shorelines near metropolitan areas and to those threatened by incompatible development.

Wilderness—Congress should establish and preserve outstanding primitive areas as "wilderness areas," to be managed for the sole and unequivocal purpose of maintaining their primitive characteristics.

"Wild Rivers"—Certain rivers with high scientific, esthetic and recreation values should be preserved in their free-flowing state and natural setting.

Wetlands—The Federal-State program of acquiring marshes

'Shorelines—The Need Is Critical'

"Ocean and Great Lakes shoreline is a most pressing problem of supply.

"This resource is one of the most in demand, and it is one of the most scarce in public ownership. The situation is particularly acute near large cities. Less than 2 per cent of the total shoreline is in public ownership for recreation.

"State and Federal agencies should act promptly to preserve for public use the remaining magnificent stretches of unspoiled coastline.

"The need is critical—opportunity to place these areas in public ownership is fading each year as other uses encroach."

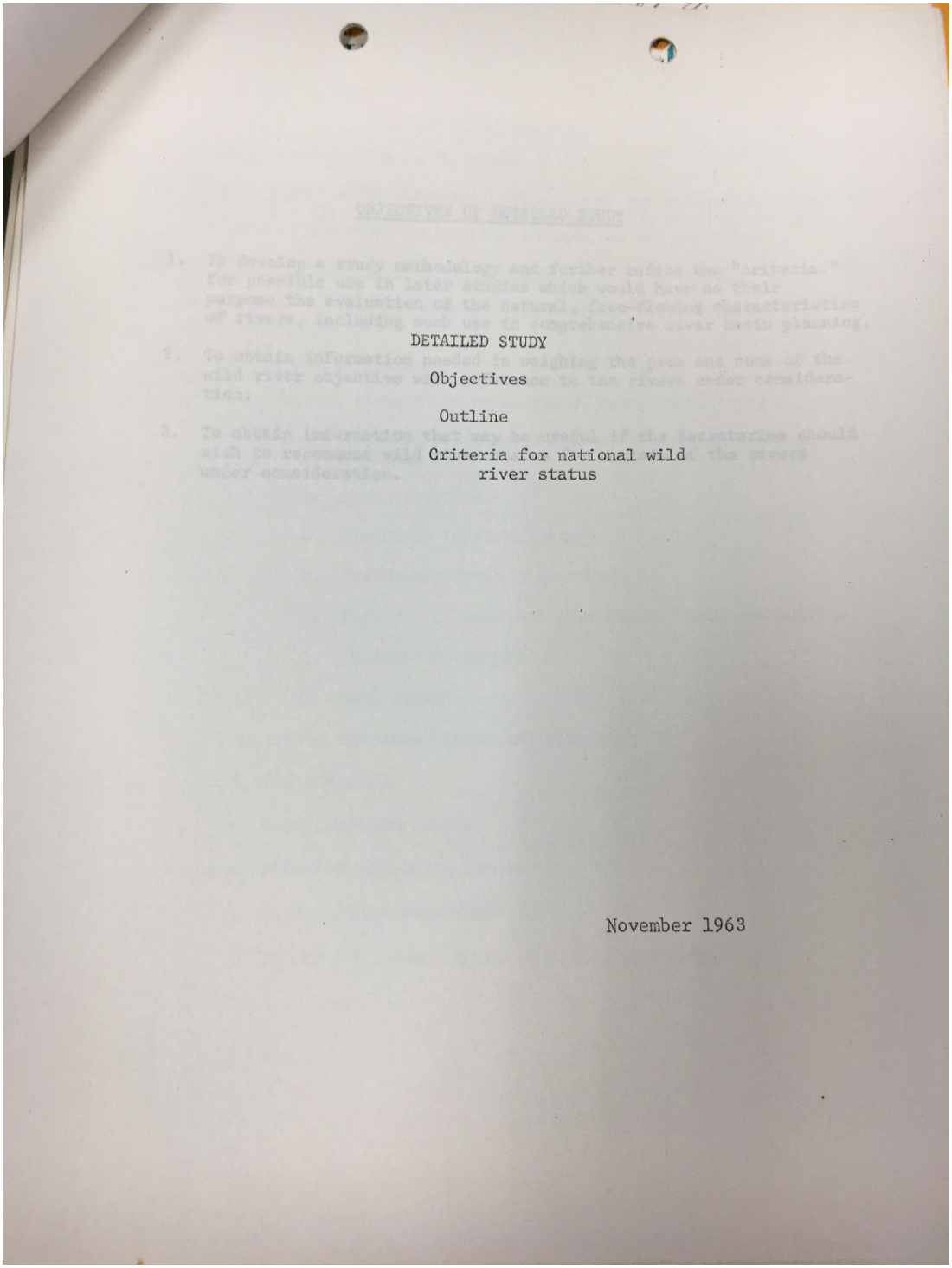
—The ORRRC Report

13

(ORRRC, 1964)

APPENDIX E

WILD RIVERS STUDY AND INVENTORY GUIDELINES



DETAILED STUDY

Objectives

Outline

Criteria for national wild river status

November 1963

OBJECTIVES OF DETAILED STUDY

1. To develop a study methodology and further refine the "criteria." for possible use in later studies which would have as their purpose the evaluation of the natural, free-flowing characteristics of rivers, including such use in comprehensive river basin planning.

2. To obtain information needed in weighing the pros and cons of the wild river objective with reference to the rivers under consideration.

3. To obtain information that may be useful if the Secretaries should wish to recommend wild river status for certain of the rivers under consideration.

DETAILED STUDY OUTLINE

I Summary - concise resume of report

II Introduction - short background statement of the wild rivers study, including a description of the preliminary study of 64 rivers and analysis of the river as measured against the six criteria

III General information about study area

A. Location - state(s), county(ies), and segment(s) of river (locate on map)

B. Description of river:

1. Source, river miles under study, major tributaries

2. Volume (flow in cfs), depth and width (include seasonal fluctuations)

3. Water characteristics:

a. Clearness (clear or murky)

b. Freshness (fresh or brackish)

c. Purity - if polluted give degree, kind and sources

d. Temperature ranges

e. Weed growth

4. Course characteristics and stability

5. Bed material

6. Bank characteristics

C. Description of adjoining lands:

1. Terrain characteristics

2. Vegetative cover (types, quality, quantity, etc.)

D. Outstanding qualities (other than fish and wildlife discussed below):

1. Archeologic
2. Biologic
3. Esthetic
4. Geologic
5. Historic
6. Other

E. Fish and wildlife:

1. Fishery (sport and commercial) - species, populations, trends, management, habitat, etc.
2. Wildlife - species, populations, trends, management, habitat, etc.

F. Recreation use and demand:

1. Use - type (camping, hunting, fishing, wilderness experience, boating, hiking, swimming, etc.) quantity and quality
2. Population pressure - population within 2 hours, 6 hours and 12 hours driving time. Major nearby population centers.
3. Season(s) of use

G. Other opportunities for outdoor recreation in the general area (such as parks, forests, reservoirs, resorts, etc.) - locate on map, describe and give estimate of use

H. Weather characteristics (by seasons):

1. Precipitation
2. Temperature
3. Other

I. Undesirable natural features (poisonous snakes or plants, biting insects, dangerous water, floods, etc.)

J. Ownership (key to map if possible)

1. Land - legal interests and property values including mineral rights if separate from other ownership

2. Water - appropriative rights in and above the study area, riparian rights, stream bed ownership

K. Access:

1. Type, amount and ownership of access routes

2. Limitations - physical and legal

L. Socio-economic characteristics of the general area in which the study area is located:

1. Population characteristics - general description of the population, major industries, and employment of the labor force based on the Statistical Supplement

2. Pattern of economic activity - general description of industrial activity and trends based on the Statistical Supplement

3. Status of recreation oriented industry - general description of visitor oriented business with an assessment of potential growth based on observation, interviews and judgment

M. Commercial activities and trends - describe the types of activities and trends and their effects on the wild river qualities of the study area:

1. Existing:

a. Water developments - hydro-electric, flood control, irrigation, domestic water supply, navigation

b. Agriculture

c. Forestry

d. Industry

e. Mining

f. Transportation (land and air)

g. Recreation

h. Residential

i. Other

2. Proposed or potential (those of major significance) - generally it will be possible to provide this information in detail only if up-to-date plans for the future use and development of the area are available.

N. Actions of Federal, State, and local agencies and governments to protect the wild qualities of the study area (pollution abatement, reforestation, legal controls, etc.)

IV. Analysis of Alternatives:

A. Analyze the types and extent of activities and developments (existing, proposed and potential) that could be permitted and still allow retention of sufficient wild river qualities so that the river or segments would still meet the criteria

B. Analyze the effects of wild river status on present and future use and development of the study area and its surrounding general area

C. Analyze the effects on the study area were there to be no special action taken to protect its wild river qualities and present trends of use and development were allowed to continue

V. Conclusions: From the standpoint of the public interest, what is the highest use of the study area. This conclusion should be reached only after a careful appraisal of the long term wild river qualities involved, as compared with the potential of the area for commercial use and development.

VI. Recommendations:

A. If national wild river status is justified:

1. Designate the boundaries required to adequately protect the national and recreation values of the study area.

2. Present a plan for securing the necessary control of the area through the use of easements, zoning, covenants, acquisition, etc.

3. Outline a plan of development and management that will effectively protect, restore, and enhance the wild river qualities of the area

4. What is the recommended maximum use the area might absorb without unduly impairing the natural values or quality of the experience

5. Suggest the type of executive or legislative action that might be taken to obtain wild river status.

CRITERIA FOR NATIONAL WILD RIVER STATUS

1. CONDITION: The river is relatively free-flowing and unpolluted, and the scene as viewed from the river is pleasing, whether of true wilderness character or somewhat modified by man, or these conditions are practicably restorable.

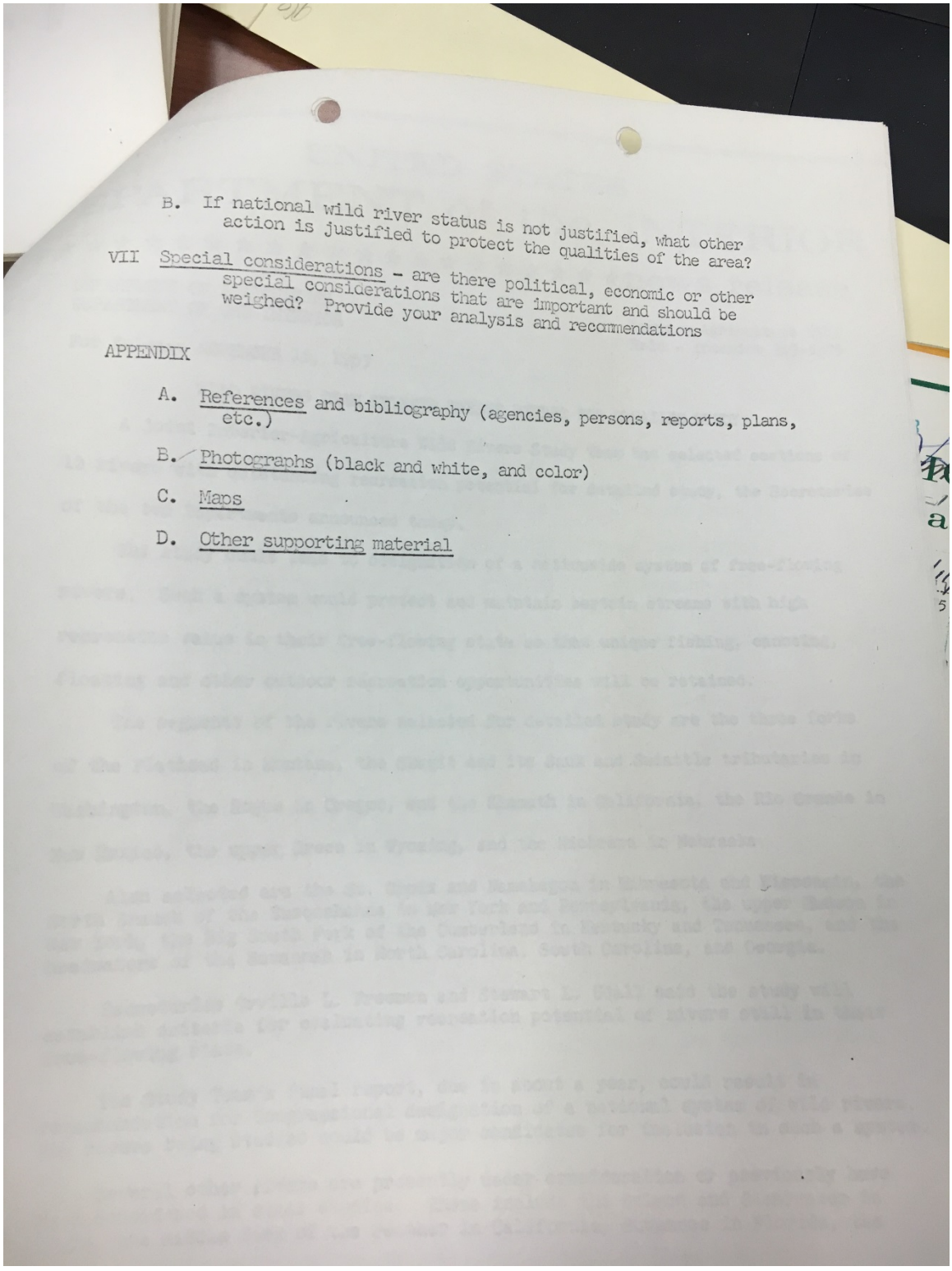
2. QUALITY: The river and its setting possess natural and recreation values of outstanding quality.

3. CAPACITY: The river and its setting are large enough to sustain existing recreation use or to accommodate more without undue impairment of the natural values of the resource or quality of the recreation experience.

4. SIGNIFICANCE: The combined quality, size, and uniqueness of the river and its setting are of sufficient importance to attract visitation from beyond the local area and state borders.

5. HIGHEST USE: Retention of the river in its natural, free-flowing condition appears to outweigh alternative uses.

6. PRESENT STATUS: There are no projects at the construction stage that would permanently and drastically impair the existing natural and recreation values of the river and its setting.



B. If national wild river status is not justified, what other action is justified to protect the qualities of the area?

VII Special considerations - are there political, economic or other special considerations that are important and should be weighed? Provide your analysis and recommendations

APPENDIX

A. References and bibliography (agencies, persons, reports, plans, etc.)

B. Photographs (black and white, and color)

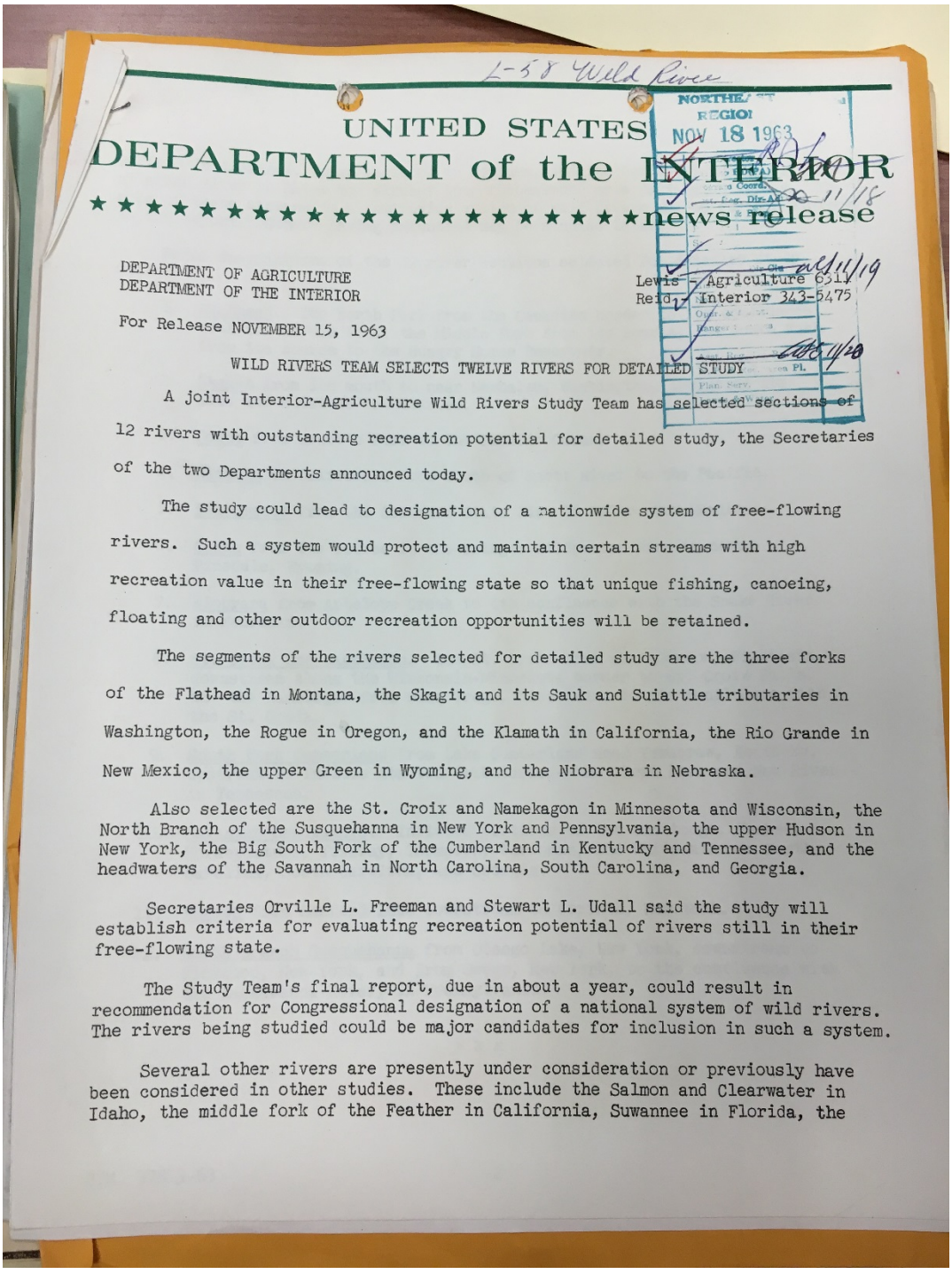
C. Maps

D. Other supporting material

(BOR, 1963)

APPENDIX F

INTERAGENCY RIVER STUDY ANNOUNCED



L-58 Wild Rivers

NORTHEAST REGION NOV 18 1963

UNITED STATES
DEPARTMENT of the INTERIOR
★ news release

DEPARTMENT OF AGRICULTURE
DEPARTMENT OF THE INTERIOR

Lewis - Agriculture 6311
Reid - Interior 343-5475

For Release NOVEMBER 15, 1963

WILD RIVERS TEAM SELECTS TWELVE RIVERS FOR DETAILED STUDY

A joint Interior-Agriculture Wild Rivers Study Team has selected sections of 12 rivers with outstanding recreation potential for detailed study, the Secretaries of the two Departments announced today.

The study could lead to designation of a nationwide system of free-flowing rivers. Such a system would protect and maintain certain streams with high recreation value in their free-flowing state so that unique fishing, canoeing, floating and other outdoor recreation opportunities will be retained.

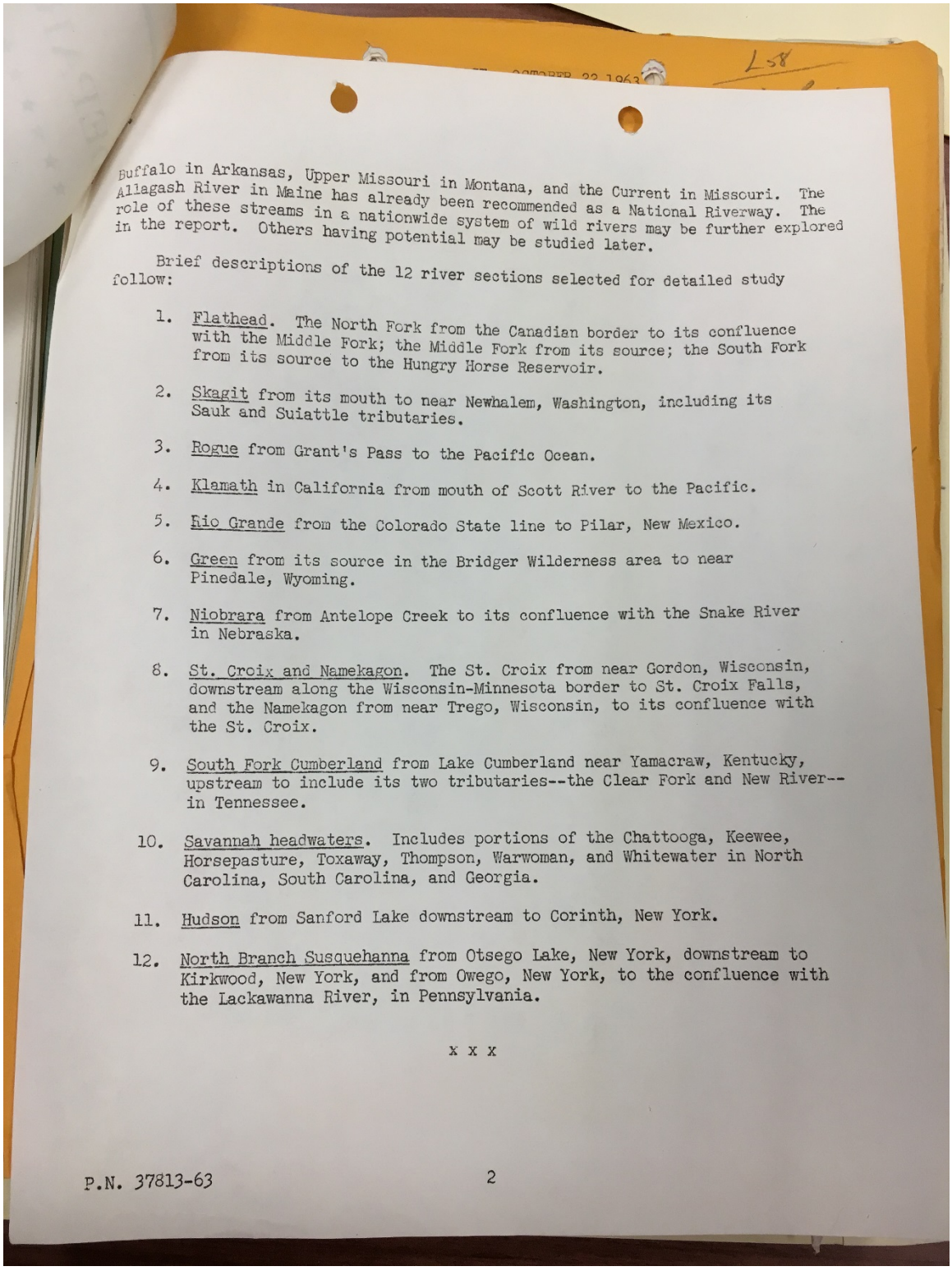
The segments of the rivers selected for detailed study are the three forks of the Flathead in Montana, the Skagit and its Sauk and Suiattle tributaries in Washington, the Rogue in Oregon, and the Klamath in California, the Rio Grande in New Mexico, the upper Green in Wyoming, and the Niobrara in Nebraska.

Also selected are the St. Croix and Namekagon in Minnesota and Wisconsin, the North Branch of the Susquehanna in New York and Pennsylvania, the upper Hudson in New York, the Big South Fork of the Cumberland in Kentucky and Tennessee, and the headwaters of the Savannah in North Carolina, South Carolina, and Georgia.

Secretaries Orville L. Freeman and Stewart L. Udall said the study will establish criteria for evaluating recreation potential of rivers still in their free-flowing state.

The Study Team's final report, due in about a year, could result in recommendation for Congressional designation of a national system of wild rivers. The rivers being studied could be major candidates for inclusion in such a system.

Several other rivers are presently under consideration or previously have been considered in other studies. These include the Salmon and Clearwater in Idaho, the middle fork of the Feather in California, Suwannee in Florida, the



Buffalo in Arkansas, Upper Missouri in Montana, and the Current in Missouri. The Allagash River in Maine has already been recommended as a National Riverway. The role of these streams in a nationwide system of wild rivers may be further explored in the report. Others having potential may be studied later.

Brief descriptions of the 12 river sections selected for detailed study follow:

1. Flathead. The North Fork from the Canadian border to its confluence with the Middle Fork; the Middle Fork from its source; the South Fork from its source to the Hungry Horse Reservoir.

2. Skagit from its mouth to near Newhalem, Washington, including its Sauk and Suiattle tributaries.

3. Rogue from Grant's Pass to the Pacific Ocean.

4. Klamath in California from mouth of Scott River to the Pacific.

5. Rio Grande from the Colorado State line to Pilar, New Mexico.

6. Green from its source in the Bridger Wilderness area to near Pinedale, Wyoming.

7. Niobrara from Antelope Creek to its confluence with the Snake River in Nebraska.

8. St. Croix and Namekagon. The St. Croix from near Gordon, Wisconsin, downstream along the Wisconsin-Minnesota border to St. Croix Falls, and the Namekagon from near Trego, Wisconsin, to its confluence with the St. Croix.

9. South Fork Cumberland from Lake Cumberland near Yamacraw, Kentucky, upstream to include its two tributaries--the Clear Fork and New River--in Tennessee.

10. Savannah headwaters. Includes portions of the Chattooga, Keewee, Horsepasture, Toxaway, Thompson, Warwoman, and Whitewater in North Carolina, South Carolina, and Georgia.

11. Hudson from Sanford Lake downstream to Corinth, New York.

12. North Branch Susquehanna from Otsego Lake, New York, downstream to Kirkwood, New York, and from Owego, New York, to the confluence with the Lackawanna River, in Pennsylvania.

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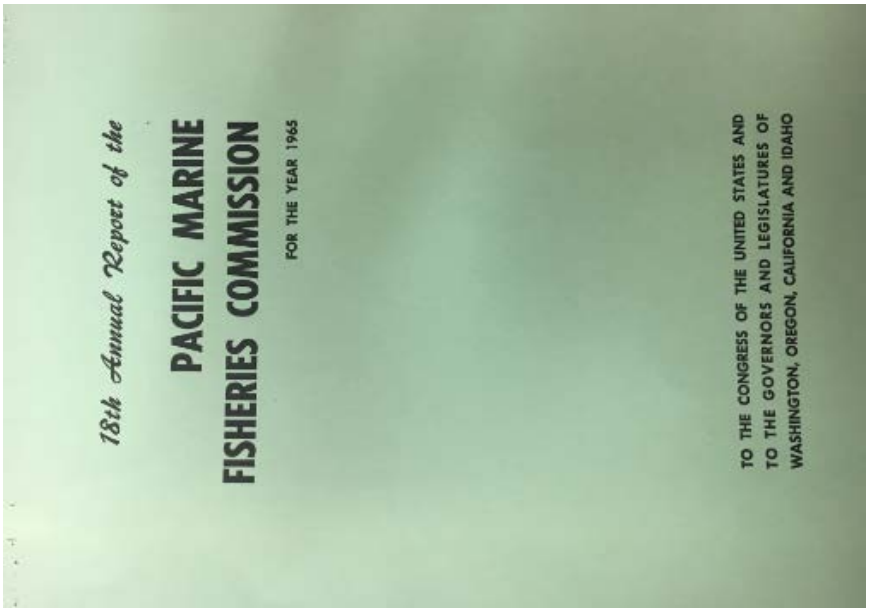
(DOI, 1963)

APPENDIX G

PACIFIC MARINE FISHERIES COMMISSION RESOLUTION IN FAVOR OF WSR DESIGNATIONS

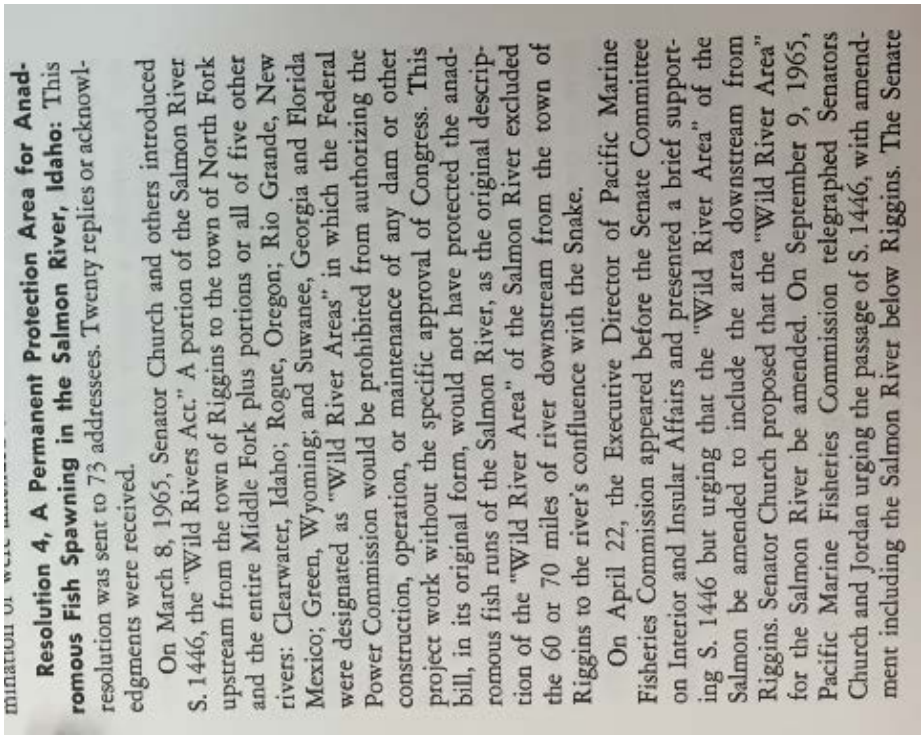


18th Annual Report of the

PACIFIC MARINE FISHERIES COMMISSION

FOR THE YEAR 1965

TO THE CONGRESS OF THE UNITED STATES AND TO THE GOVERNORS AND LEGISLATURES OF WASHINGTON, OREGON, CALIFORNIA AND IDAHO



mination of

Resolution 4, A Permanent Protection Area for Anadromous Fish Spawning in the Salmon River, Idaho: This resolution was sent to 73 addressees. Twenty replies or acknowledgments were received.

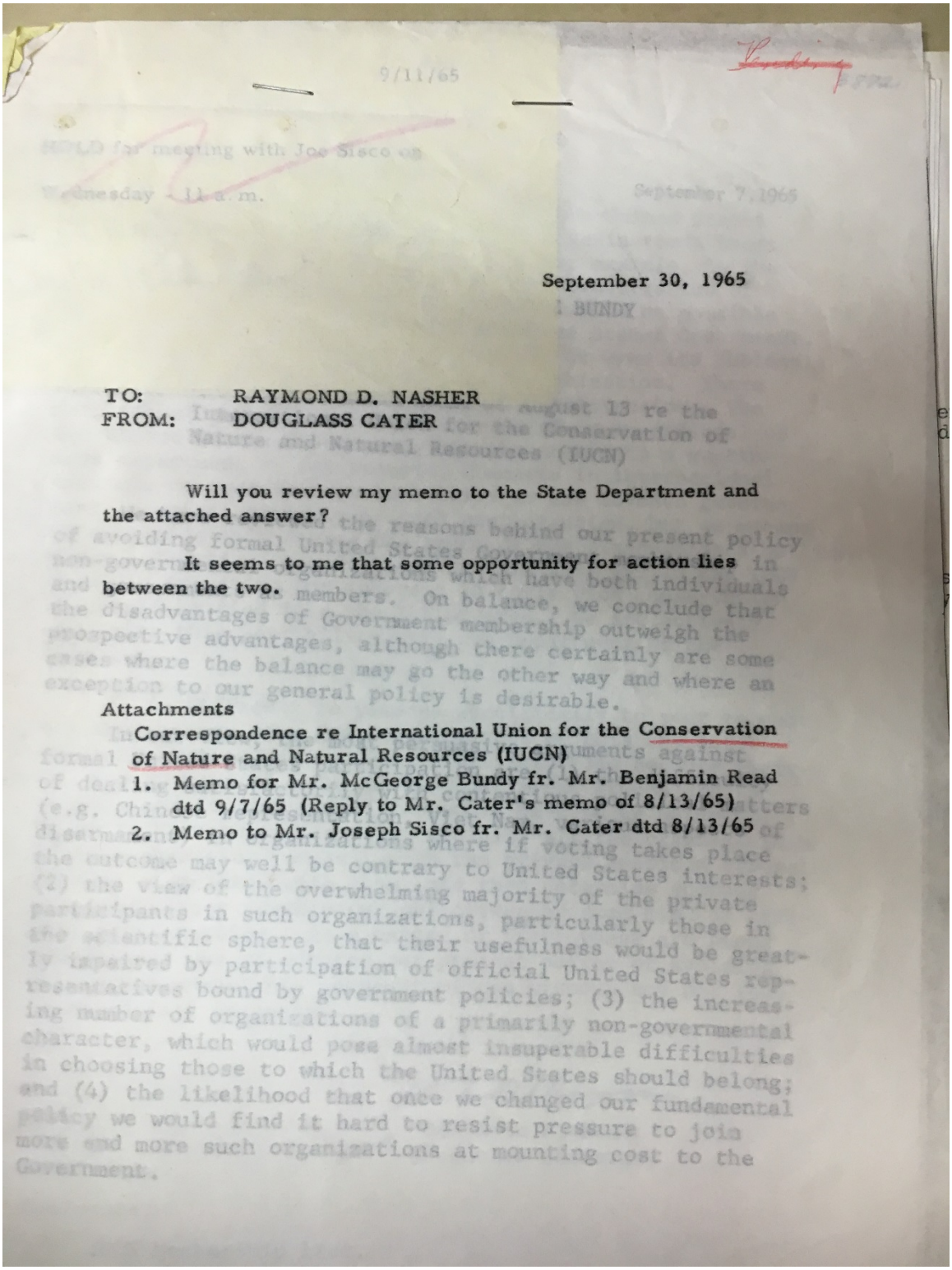
On March 8, 1965, Senator Church and others introduced S. 1446, the "Wild Rivers Act." A portion of the Salmon River upstream from the town of Riggins to the town of North Fork and the entire Middle Fork plus portions or all of five other rivers: Clearwater, Idaho; Rogue, Oregon; Rio Grande, New Mexico; Green, Wyoming; and Suwanee, Georgia and Florida were designated as "Wild River Areas" in which the Federal Power Commission would be prohibited from authorizing the construction, operation, or maintenance of any dam or other project work without the specific approval of Congress. This bill, in its original form, would not have protected the anadromous fish runs of the Salmon River, as the original description of the "Wild River Area" of the Salmon River excluded the 60 or 70 miles of river downstream from the town of Riggins to the river's confluence with the Snake.

On April 22, the Executive Director of Pacific Marine Fisheries Commission appeared before the Senate Committee on Interior and Insular Affairs and presented a brief supporting S. 1446 but urging that the "Wild River Area" of the Salmon be amended to include the area downstream from Riggins. Senator Church proposed that the "Wild River Area" for the Salmon River be amended. On September 9, 1965, Pacific Marine Fisheries Commission telegraphed Senators Church and Jordan urging the passage of S. 1446, with amendment including the Salmon River below Riggins. The Senate

(James, 1966).

APPENDIX H

IUCN SEEKS U.S. INVOLVEMENT IN BIODIVERSITY PROTECTION



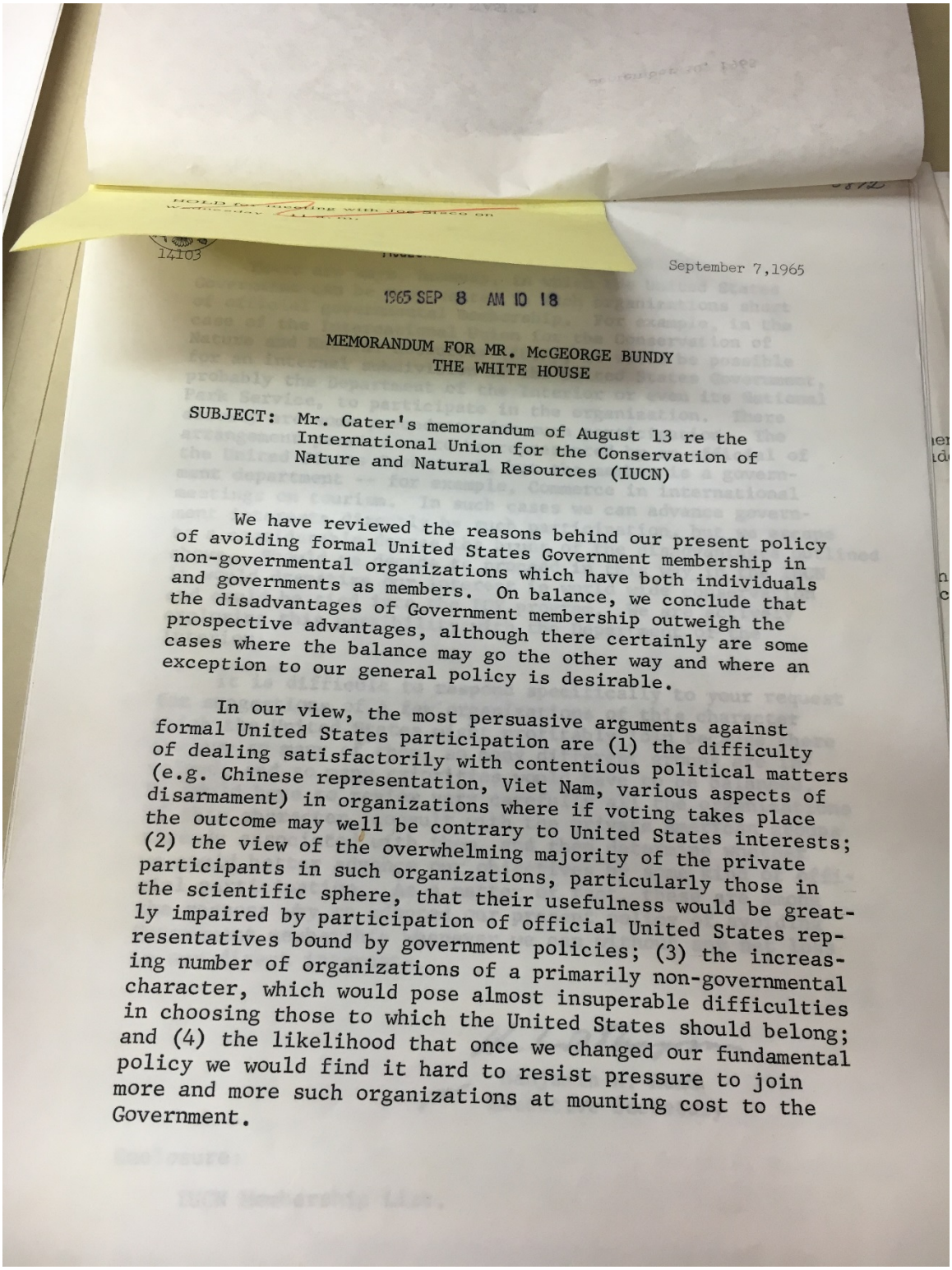
September 30, 1965

TO: RAYMOND D. NASHER
FROM: DOUGLASS CATER

Will you review my memo to the State Department and the attached answer?

It seems to me that some opportunity for action lies between the two.

Attachments
Correspondence re International Union for the Conservation of Nature and Natural Resources (IUCN)
1. Memo for Mr. McGeorge Bundy fr. Mr. Benjamin Read dtd 9/7/65 (Reply to Mr. Cater's memo of 8/13/65)
2. Memo to Mr. Joseph Sisco fr. Mr. Cater dtd 8/13/65



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September 7,1965

1965 SEP 8 AM 10 18

MEMORANDUM FOR MR. McGEORGE BUNDY
THE WHITE HOUSE

SUBJECT: Mr. Cater's memorandum of August 13 re the International Union for the Conservation of Nature and Natural Resources (IUCN)

We have reviewed the reasons behind our present policy of avoiding formal United States Government membership in non-governmental organizations which have both individuals and governments as members. On balance, we conclude that the disadvantages of Government membership outweigh the prospective advantages, although there certainly are some cases where the balance may go the other way and where an exception to our general policy is desirable.

In our view, the most persuasive arguments against formal United States participation are (1) the difficulty of dealing satisfactorily with contentious political matters (e.g. Chinese representation, Viet Nam, various aspects of disarmament) in organizations where if voting takes place the outcome may well be contrary to United States interests; (2) the view of the overwhelming majority of the private participants in such organizations, particularly those in the scientific sphere, that their usefulness would be greatly impaired by participation of official United States representatives bound by government policies; (3) the increasing number of organizations of a primarily non-governmental character, which would pose almost insuperable difficulties in choosing those to which the United States should belong; and (4) the likelihood that once we changed our fundamental policy we would find it hard to resist pressure to join more and more such organizations at mounting cost to the Government.

There are ways, however, in which the United States Government can be represented in such organizations short of official governmental membership. For example, in the case of the International Union for the Conservation of Nature and Natural Resources (IUCN), it would be possible for an internal subdivision of the United States Government, probably the Department of the Interior or even its National Park Service, to participate in the organization. There already are some precedents for such participation. The arrangement permits us to be represented by an official of the United States Government, but the member is a government department -- for example, Commerce in international meetings on tourism. In such cases we can advance government interests directly by such participation, but we escape to a considerable degree the brunt of the disadvantages outlined above. Should we decide to proceed in this way in the IUCN it would dramatize our interest in world wide conservation and could be tied into the ICY program. We are actively exploring this possibility with the Department of the Interior.

It is difficult to respond specifically to your request for suggestions of a few organizations of this character which the United States might profitably join because there are now so many of them, so many different groups are involved, and so many priorities would have to be balanced. We would have to review very carefully all the organizations of this character, consult with the private American groups already associated with them, and then determine whether we could better advance our objectives by some kind of official participation. As a matter of fact, these are among the reasons why we adopted our present policy of avoiding Government membership whenever we can without any net loss to our direct interests.

Sincerely,

Benjamin H. Read
Executive Secretary

Enclosure:

IUCN Membership List.

International Union for the Conservation of Nature and Natural Resources (IUCN)

The IUCN is a private organization founded in 1948, to which a number of governments have adhered.

Its membership consists of:

1. Organizations and Societies (Private) - these are the core of the IUCN

   A. 195 from 62 countries

   B. Including 35 US Private Organizations Members of IUCN

American Association of Zoological Parks and Aquariums, Ogleby Park, Wheeling, West Virginia

American Committee for International Wild Life Protection, New York Zoological Park, New York, N.Y.

American Museum of Natural History, Central Park West at 79th Street, New York, N.Y.

American Nature Study Society, RD 1, Homer, N.Y.

American Society of Mammalogists, c/o Sec.-Treas. Bryan P. Glass, Zoology Department, Oklahoma State U., Stillwater, Oklahoma

Boone and Crockett Club, c/o American Museum of Natural History, New York, N.Y.

California Academy of Sciences, Golden Gate Park, San Francisco

American Ornithologists' Union, c/o R. J. Newman, Museum of Zoology, Louisiana State U., Baton Rouge, La.

Chicago Zoological Society, Chicago Zoological Park, Brookfield, Ill.

Committee for the Preservation of the Tule Elk, 5502 Markland Drive, Los Angeles, California

Conservation Associates, Mills Tower, 220 Bush Street, San Francisco

The Conservation Foundation, 30 East 40th Street, New York, N.Y.

Defenders of Wildlife, 809 Dupont Circle Bldg, Washington, DC

The Desert Protective Council, PO Box 3, Banning, California

Foresta Institute for Ocean and Mountain Studies, Box 621, Carson City, Nevada

The Garden Club of America, 598 Madison Ave., New York, New York

The Mountaineers, Box 122, Seattle, Washington

National Association of Biology Teachers of USA, c/o Department of Conservation, University of Michigan, Ann Arbor, Michigan

National Audubon Society, 1130 Fifth Ave., New York, New York

National Parks Association, 1300 New Hampshire Avenue, Washington, DC.

National Research Council, 2101 Constitution Avenue, Washington, DC

National Wildlife Federation, 1412 Sixteenth Street, Washington, DC

Natural Resources Council of America, 322 Bond Building, Washington, DC

National Zoological Park, Smithsonian Institution, Washington, DC

The Nature Conservancy, 2039 K Street, Washington, DC

New York Zoological Society, 630 Fifth Ave., New York, New York

North American Wildlife Foundation, 709 Wire Building, Washington, DC

Save-the-Redwoods League, University of California, Berkeley, California

Sierra Club, 220 Bush Street, San Francisco

Soil Conservation Society, 7515 Northeast Ankeny Road, Ankeny, Iowa

Southern Illinois University, Carbondale, Ill.

The Wilderness Society, 2144 P Street, Washington, DC

Wildlife Management Institute, Wire Building, Washington, DC

The Wildlife Society, 5921 Anniston Road, Bethesda, Maryland

Zoological Society of San Diego, Box 551, San Diego, California

2. International Organizations (Non-Governmental)

Commission Internationale pour la Protection des Regions Alpines, c/o Dr. E.P. Dottrens, Directeur du Musee d'Histoire Naturelle, Geneva, Switzerland

Commission des Reserves Naturelles du Groupement Europeen des Ardennes et de l'Eifel, 7, avenue Jos. Vandermissen, Brussels, Belguim

International Council for Bird Preservation, c/o British Museum (Natural History), Cromwell Road, London, U.K.

International Youth Federation for the Study and Conservation of Nature, c/o Pres.: Derek S. Davis, 56 Altmore Avenue, Eastham, London, U.K.

Pacific Science Association, c/o Bernice P. Bishop Museum, Honolulu, Hawaii

Union Internationale de Directeurs de Jardins Zoologiques, c/o Treas.: Mr. Harold Tong, Whipsnade Park, Dunstable, Bedfordshire, U.K.

The Fauna Preservation Society, c/o the Zoological Society, Regent's Park, London, U.K.

The International Society for the Protection of Animals

3. Governments

Belgium	Kenya	Senegal
Cambodia	Luxembourg	Sudan
Dahomey	Madagascar	Switzerland
Denmark	Malaya	Thailand
Ecuador	Monaco	Venezuela
Germany	Morocco	Vietnam
Italy	Netherlands	Zambia
Ivory Coast		

U. S. membership in I. U. C. N.
as part of the International Cooperation Year

The United States government could contribute immeasureably to friendly cooperation among nations by becoming a member of the International Union for Conservation of Nature and Natural Resources. IUCN is an independent international body whose primary purpose is to promote and support action that will ensure the preservation of wild nature and assure the perpetuation of an attractive landscape through rational use of natural resources. The Union is concerned largely with man's modification of the natural environment through the rapid spread of urban and industrial development and the irrational exploitation of the earth's renewable resources.

Although the IUCN is not a member of the United Nations, it enjoys consultative status with UN agencies, as ECOSOC, UNESCO, FAO, and WHO. Membership in the Union comprises states, irrespective of their political and social systems, government departments, private organizations, and international bodies. Organized in 1948, IUCN membership at present consists of some international organizations such as the International Council for Bird Preservation, nearly 300 private conservation groups and 25 countries, among which none of the "big powers" is numbered.

There is an outstanding opportunity for the United States government to assume positive leadership in conservation on a world scale through membership in IUCN. No country has a record of accomplishment in conservation remotely comparable to that of the United States. Yet we have strangely failed to export our conservation knowledge; it is scarcely to be found in the great range of our foreign technical assistance and in our cultural exchanges. Even more strange is the absence of the United States among the governmental members of the Union. There is good reason to believe that U. S. membership would serve as a strong catalyst in bringing other countries into IUCN, both small and large. Such action, for example, might well swing the decision of the United Kingdom, presently being urged to join the Union by British conservation organizations. Private groups in both the U. K. and the U. S. have strongly supported IUCN over the years and have found private funds to finance the greater portion of its budget. Official U. S. membership would provide inestimable moral support, in addition to the very welcome aid that would be forthcoming from the $4000 annual dues.

The work of IUCN is accomplished largely through five major Commissions whose membership consists of volunteer workers from throughout the world. The Survival Service Commission (Chairman: Peter Scott, U. K.) maintains a roster

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of rare plant and animal species and encourages action to preserve them and the habitats which support them. A special "Operations Room" at IUCN headquarters keeps records up-to-date -- reports, maps, photographs, etc. -- and serves as a clearing house for action. This Commission works closely with the World Wildlife Fund which has a program of obtaining popular support and contributions to acquire needed habitats for preserving rare and vanishing species.

The Education Commission (Chairman: L. K. Shaposhnikov, U.S.S.R.) takes the leadership in the informational efforts of the Union, including publication of occasional pamphlets and booklets on the relation of conservation to the welfare of the peoples of the world. It serves also as a clearing house for exchange of conservation literature and, through the IUCN Secretariat, functions as a reference bureau on current conservation problems and their possible solutions.

The Commission on National Parks (Chairman: H. J. Coolidge, U.S.A.) provides unique leadership in fostering the formation of national parks and equivalent reserves throughout the world. Under its guidance the Union has undertaken a number of reviews in various countries, and organized the First World Conference on National Parks at Seattle, Wshington, in July 1962, with representatives from 63 countries. A provisional list of the world's national parks and equivalent reserves has been prepared under the Commission's guidance and published by the United Nations; a more comprehensive revised list is now being completed.

The Commission on Ecology (Chairman: E. H. Graham, U.S.A.) serves as the scientific advisory body of the Union, assuring that the actions and programs of the Union are basically sound. Its services are available to other Commissions and to the Secretariat, and it provides guidance for special symposia sponsored by the Union from time to time. This Commission is also responsible for the technical meetings held in conjunction with the Union's General Assembly, convened every three years, the next of which will take place at Lucerne, Switzerland in June, 1966. This Commission has an active Committee on Landscape Planning, which relates ecology and conservation to problems of urban-regional development and the quality of the human environment.

A recently organized Commission on Legislation (Chairman: W. Burhenne, West Germany) is undertaking the task of compiling major statutes, legislation, etc., relating to conservation from all countries. This effort has already proven its value in enabling various countries, particularly the developing nations, to obtain legislative information useful to them in organizing their own conservation efforts.

In addition to the work of the permanent Commissions, special projects are sometimes mounted by IUCN, such as the African Special Project (ASP), which was organized in three stages. Stage I consisted of the review of the land use-wildlife situation in some 16 African countries. Stage II comprised a conference on Conservation of Nature and Natural Resources in Modern African States held at Arusha, Tanzania, in September, 1961. Stage III, just completed, consisted of technical missions to 14 countries, at their request, to assist in outlining practical programs of wildlife conservation in relation to the land use and economies of the countries. In this effort FAO financed the missions which were under IUCN guidance and leadership. Largely as a result of this special project, FAO has inaugurated a wildlife management section in its organization at Rome.

Day-by-day operations of the Union are undertaken by a small Secretariat at Morges, Switzerland, a small town some 60 miles from Geneva on Lake Lemon. The staff is under the direction of a Secretary-General who reports to an Executive Board of eighteen members. The budget is currently about $100,000 annually.

It should be emphasized that IUCN is the only international body devoted exclusively to the conservation of nature and natural resources. It now has a commendable record of accomplishments in spite of its small staff and the limited funds that have been available to it. It should furthermore be noted that the problems to be solved by conservation -- air and water pollution, erosion and siltation, depletion of forests and rangeland, destroyed wildlife habitat and landscape values -- are everywhere alike, in the East and in the West, in developing and in advanced countries. Opportunities for constructive cooperation in this field are enormous and in the interest of all humanity. The leadership and guidance which this country could provide in such cooperative effort would be incomparable if the United States became a government member of the International Union for Conservation of Nature and Natural Resources.

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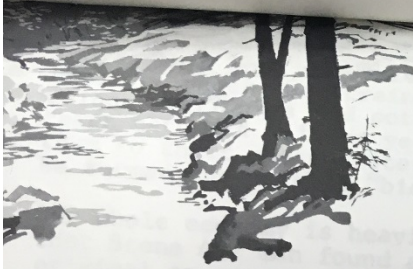

NATURAL AREA COUNCIL

ROOM 318 / 205 EAST 42nd STREET, NEW YORK, N.Y. 10017

212 MUrray Hill 6-0342

RICHARD H. POUGH, *President*

August 4th, 1965

Mr. Roger D. Fisher
Harvard Law School
Harvard University
Cambridge, Massachusetts

Dear Mr. Fisher:

I am sorry to have been a bit slow on the IUCN matter. Here is a 3 page outline of its organizational structure, purposes and programs.

Dr. Edward H. Graham, Route 2, Box 233 of Vienna, Virginia (telephone 703 385-6063) who is chairman of its Commission on Ecology can provide you with whatever else you may need as he has been closely associated with the IUCN for many years.

I can't stress too much the stake the United States has in the success of the work of the Union. Our plant introduction people are constantly searching wild areas for new plants of value to us. Our entomologists seek beneficial insects to control insect pests. Our zoos seek birds and animals for display and our museums and research laboratories continually dip into the storehouse of biological treasures contained in the remaining wild areas around the world.

Hoping that you can do something about United States membership in the Union. I am

Sincerely yours,

Richard Pough

Richard H. Pough

RHP:sdd

Enclosures

P. S. If you do want a 1 page summary to which the 3 page statement could be attached, I am sure Dr. Graham could prepare it.

WHY PRESERVE WILDLIFE?

The earth's most valuable natural resource is its stock of different species, races and strains of living organisms, each of which has unique attributes and potentialities. At the very least, it has taken nature a billion years to produce these forms of life and bring them to their present state of development, and they can very properly be termed the earth's "biological elements."

Our whole economy is heavily dependent on a few plants and animals that Stone Age man found available and put to use. Probably the original ancestors of our domestic plants were only slightly better adapted to man's needs than others primative man might have chosen. Slowly, as they were cultivated, selection and hybridization made them ever more useful, and the process continues to this day. Undoubtedly, thousands of other potentially valuable living organisms have yet to be recognized as such.

Recent developments have made it clear that we are on the threshold of a biological age in which we shall learn how to put many more forms of life to use. Witness the extraordinary development in the past few years of the antibiotics derived from molds and the recent announcement that an obscure bacteria is capable of producing a promising blood plasma extender. The potentialities for finding in wild plants hitherto unknown chemical compounds that have values as drugs seems almost limitless. One need only cite the great advances in the treatment of mental illness that the drugs originally obtained from rauwolfia has made possible.

There is a very real danger, however, that many of these "biological elements" may be lost before we get around to uncovering their value to man. Modern man, as his numbers increase, is unthinkingly destroying the storehouses that contain these treasures. These storehouses are the natural aggregations of plants and animals that collectively we speak of as a woodland, a marsh, or a grassland and the ecologists call biotic communities.

Each climatic region, each soil type, each moisture regime, has developed its own distinctive community composed of organisms adapted by a long period of evolution and mutual adjustment to the peculiarities of the local environment. When the last local unit of such a community is destroyed by plowing, lumbering or drainage, many local strains and races of living things become extinct. In some cases, as among the little studied organisms that make up the fauna and flora of the soil, we may never know what we have lost.

Some of the biotic communities that are the living storehouses for these precious "biological elements" are safeguarded in existing parks, refuges and natural areas, but many are not. Every year sees precious last remnants of once extensive plant-animal communities vanish. The biological staffs of the universities of the country are greatly concerned over this trend and would like to see their institutions acquire samples of each of the biotic communities of their region for use as outdoor laboratories and research areas. They realize that no living organism may be adequately studied or fully understood except within

e of reference provided by the living community of which it
lly a functioning member. Divorced from such surroundings,
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nt form.

the growing demand for land, the need for immediate action
l -- far more urgent, in fact, than in many of the fields
hilanthropic foundations are devoting substantial sums. A
factor is involved. In the case of many areas it is liter-
r never. A fraction of what has been contributed to our
ums to collect and preserve the artistic works of man would
finance a very adequate program to set up a national system
preserves to safeguard the precious, the irreplaceable raw
of the earth.

al that an individual can set up will last as long as a
rea and nature makes no charge for its maintenance. A Natural
tead of depreciating, becomes increasingly valuable to
nd will be more cherished with each passing generation.

Richard H. Pough

Research Reserves for the Universities of America

Here and there in every state, one can still find an occasional track of land occupied by most or all of the plants and animals that lived on it when the first white settler arrived. The members of such wild communities having lived together for thousands of years have achieved a stable relationship with each other and all have been adapted by evolutionery development to the local climate and soil and to each other's presence.

Living organisms exist in nature as members of one or more of these complex communities, and the role the organism plays in the community is what gives meaning to its physical form, its habits and its attributes. Only within the frame of reference provided by the biotic community of which it is a functional unit can it be fully understood.

These small remnants of once widespread communities are not only a continuing source of organisms that mankind will learn how to put to use as his knowledge of the living world grows, but they are the real laboratories of the biological sciences. Without their continuing availability as check areas where research results can be evaluated and organisms studied under the conditions that molded them to their present form, the vitality of both the teaching and research programs of America's educational institutions will be greatly impaired. Attached is a list of areas that the members of the life science departments of the colleges and universities of your state are either currently using or foresee a need to keep available for future use as their programs develop.

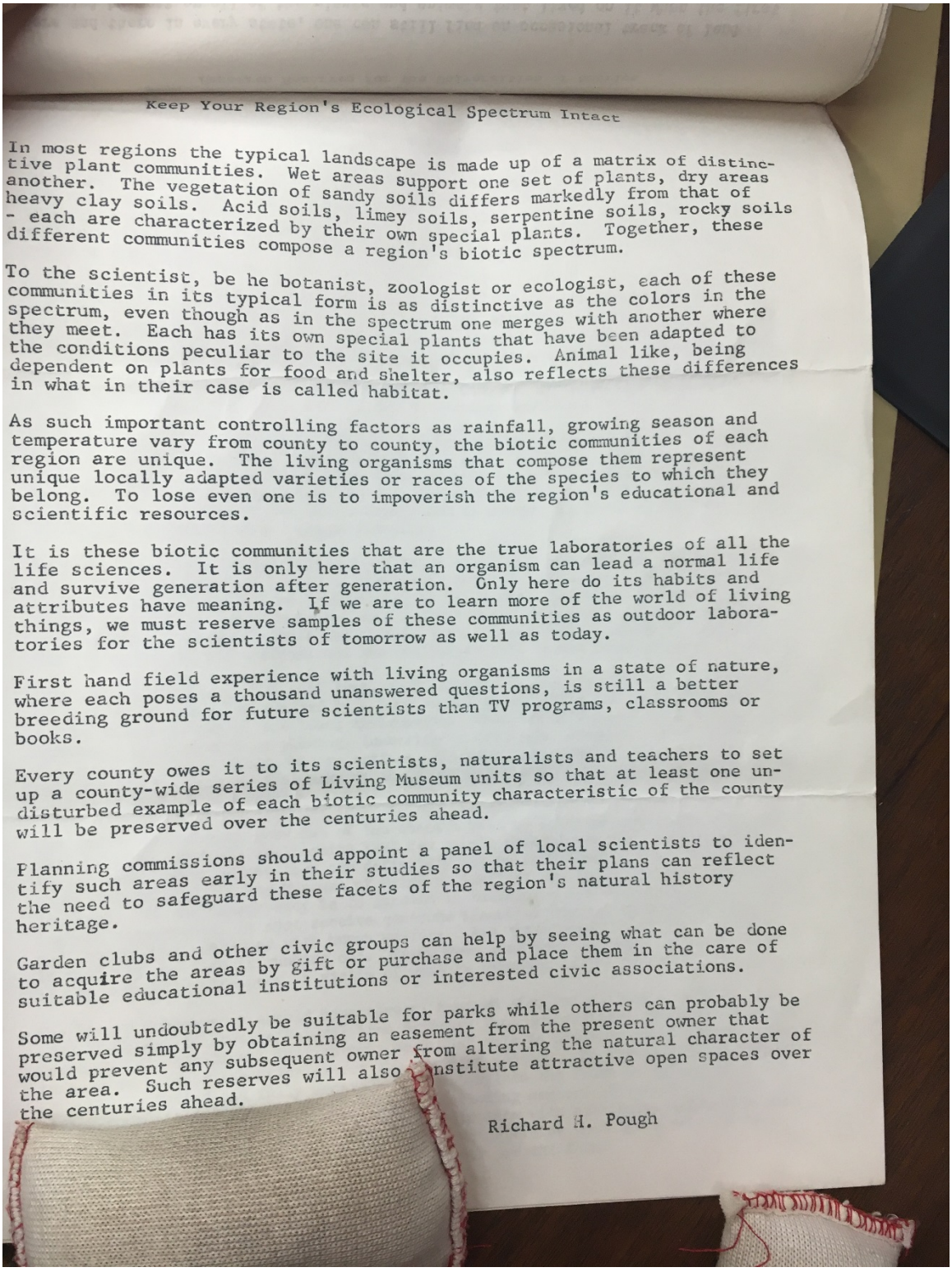
Over the past few years, many millions of dollars have been spent for buildings to house these departments while virtually nothing has been spent to acquire the field laboratories on which they will become increasingly dependent as civilization continues to alter the natural character of most of the landscape.

In a very real sense, we have been putting the cart before the horse. Laboratory buildings can always be built, but research reserves cannot always be acquired. In fact, the period during which they can still be acquired is short and time is rapidly running out. Looked at objectively, it is hard to see why the program for their purchase has lagged. Unlike buildings, they never wear out or depreciate. The funds invested in them go into an indestructible asset - land - that will continually grow more valuable. Most important of all, without them biological studies and teaching programs will in the future be increasingly divorced from the reality that contact with organisms in a state of nature provides.

The local chapters of Nature Conservancy are putting on drives to obtain the areas that their state's teaching and research institutions must continue to have available. Areas that every scientific institution in the country will be free to use, and that fifty or a hundred years from now will be unique and valuable beyond price.

Years from now, when all the money in the world couldn't buy such areas those who make use of these islands of undisturbed nature are likely to say of those who support this program, "what vision they has."

Richard H. Pough



Keep Your Region's Ecological Spectrum Intact

In most regions the typical landscape is made up of a matrix of distinctive plant communities. Wet areas support one set of plants, dry areas another. The vegetation of sandy soils differs markedly from that of heavy clay soils. Acid soils, limey soils, serpentine soils, rocky soils - each are characterized by their own special plants. Together, these different communities compose a region's biotic spectrum.

To the scientist, be he botanist, zoologist or ecologist, each of these communities in its typical form is as distinctive as the colors in the spectrum, even though as in the spectrum one merges with another where they meet. Each has its own special plants that have been adapted to the conditions peculiar to the site it occupies. Animal like, being dependent on plants for food and shelter, also reflects these differences in what in their case is called habitat.

As such important controlling factors as rainfall, growing season and temperature vary from county to county, the biotic communities of each region are unique. The living organisms that compose them represent unique locally adapted varieties or races of the species to which they belong. To lose even one is to impoverish the region's educational and scientific resources.

It is these biotic communities that are the true laboratories of all the life sciences. It is only here that an organism can lead a normal life and survive generation after generation. Only here do its habits and attributes have meaning. If we are to learn more of the world of living things, we must reserve samples of these communities as outdoor laboratories for the scientists of tomorrow as well as today.

First hand field experience with living organisms in a state of nature, where each poses a thousand unanswered questions, is still a better breeding ground for future scientists than TV programs, classrooms or books.

Every county owes it to its scientists, naturalists and teachers to set up a county-wide series of Living Museum units so that at least one undisturbed example of each biotic community characteristic of the county will be preserved over the centuries ahead.

Planning commissions should appoint a panel of local scientists to identify such areas early in their studies so that their plans can reflect the need to safeguard these facets of the region's natural history heritage.

Garden clubs and other civic groups can help by seeing what can be done to acquire the areas by gift or purchase and place them in the care of suitable educational institutions or interested civic associations.

Some will undoubtedly be suitable for parks while others can probably be preserved simply by obtaining an easement from the present owner that would prevent any subsequent owner from altering the natural character of the area. Such reserves will also constitute attractive open spaces over the centuries ahead.

Richard H. Pough

BIOLOGICAL TREASURE HOUSES

The earth's most valuable potential resource is its stock of different species, races and strains of living organisms. Each of these thousands of forms of life, with the variant genes each population group contains, represents a unique combination of attributes and potentialities. At the very least, it has taken five hundred million years to produce these forms of life and bring them to their present state of development.

Man has to date learned how to exploit only a few of these plants and animals, that can very properly be called the earth's BIOLOGICAL ELEMENTS. In fact, we are still heavily dependent on species that Stone Age men thought promising and put to use. Probably the original ancestors of our domestic plants and animals were only slightly better adapted to man's needs than hundreds of others primitive man might have chosen. Slowly, as they were cultivated, selection and hybridization made these plants and animals ever more useful, and the process continues to this day.

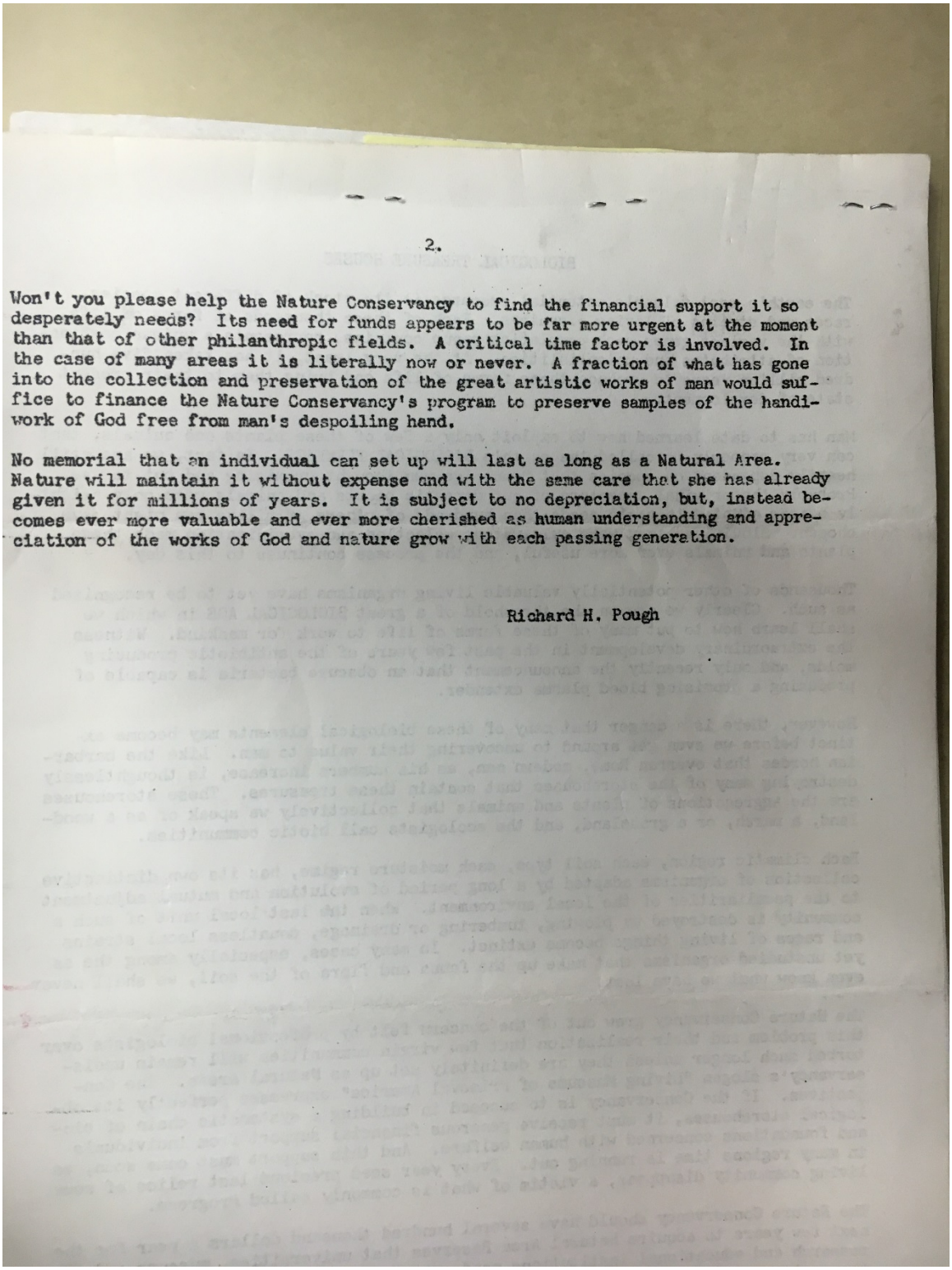
Thousands of other potentially valuable living organisms have yet to be recognized as such. Clearly we are on the threshold of a great BIOLOGICAL AGE in which we shall learn how to put many of these forms of life to work for mankind. Witness the extraordinary development in the past few years of the antibiotic producing molds, and only recently the announcement that an obscure bacteria is capable of producing a promising blood plasma extender.

However, there is a danger that many of these biological elements may become extinct before we even get around to uncovering their value to man. Like the barbarian hordes that overran Rome, modern man, as his numbers increase, is thoughtlessly destroying many of the storehouses that contain these treasures. These storehouses are the aggregations of plants and animals that collectively we speak of as a woodland, a marsh, or a grassland, and the ecologists call biotic communities.

Each climatic region, each soil type, each moisture regime, has its own distinctive collection of organisms adapted by a long period of evolution and mutual adjustment to the peculiarities of the local environment. When the last local unit of such a community is destroyed by plowing, lumbering or drainage, countless local strains and races of living things become extinct. In many cases, especially among the as yet unstudied organisms that make up the fauna and flora of the soil, we shall never even know what we have lost.

The Nature Conservancy grew out of the concern felt by professional biologists over this problem and their realization that few virgin communities will remain undisturbed much longer unless they are definitely set up as Natural Areas. The Conservancy's slogan "Living Museums of Primeval America" expresses perfectly its objectives. If the Conservancy is to succeed in building a systematic chain of biological storehouses, it must receive generous financial support from individuals and foundations concerned with human welfare. And this support must come soon, as in many regions time is running out. Every year sees precious last relics of some living community disappear, a victim of what is commonly called Progress.

The Nature Conservancy should have several hundred thousand dollars a year for the next few years to acquire Natural Area Reserves that universities, museums and other research and educational institutions need, not only to preserve local organisms but to provide outdoor laboratories for the study of ecology. No living organism may be adequately studied and fully understood except within the frame of reference of the living community of which it is a normal functioning member. Divorced from such surroundings, it is just a curious bit of protoplasm with attributes and habits that are meaningless. Only in such a setting can we determine what the forces are that have guided its evolution and molded it into its present form.



2.

Won't you please help the Nature Conservancy to find the financial support it so desperately needs? Its need for funds appears to be far more urgent at the moment than that of other philanthropic fields. A critical time factor is involved. In the case of many areas it is literally now or never. A fraction of what has gone into the collection and preservation of the great artistic works of man would suffice to finance the Nature Conservancy's program to preserve samples of the handiwork of God free from man's despoiling hand.

No memorial that an individual can set up will last as long as a Natural Area. Nature will maintain it without expense and with the same care that she has already given it for millions of years. It is subject to no depreciation, but, instead becomes ever more valuable and ever more cherished as human understanding and appreciation of the works of God and nature grow with each passing generation.

Richard H. Pough

(Cater, 1965)

APPENDIX I

MAJOR COMPONENTS OF WILD AND SCENIC RIVERS ACT

APPENDIX J

LIST OF DEGREES HELD BY INTERVIEW PARTICIPANTS

Degree	BA/BS	MA/MS	PhD	Total
Anthropology	1			1
Biology	1			1
Biology	4			4
Business Administration	1			1
Communication	1			1
Comparative Public Policy Forestry		1		1
Conservation and Resource Studies	1			1
Conservation Social Science		1		1
Ecology	3		1	4
Economics	2	1	1	4
Education		1		1
Engineering Product Design	1			1
Environmental Law		1		1
Environmental Policy		1		1
Environmental Science	4	3		7
Forestry	3	1	2	6
Geography	8	2		10
Geology	1			1
Landscape Architecture		3		3
Marketing	1			1
Natural Resource Management	2	7	2	11
Neuroscience	1			1
Outdoor Recreation		1		1
Park Protected Area Management		1		1
Park Resource Management	1			1
Philosophy	2	1		3
Planning Administration		1		1
Political Science	2			2
Pre-Physical Therapy	1			1
Psychology	1	1		2
Recreation and Resource Manageme	2		1	3
Recreation Management		3		3
Religion	1			1
Resource Development and Liminology		1		1
Social Science	1			1
Sociology	1			1
Water Resource Management		1		1
Wildlife Resource Management	2	2	1	5
Wildlife Policy				
Zoology	1	2	1	4
Total	**50**	**36**	**9**	**95**

Other Degrees	
Certificate Wilderness Management	2
JD	4
Leisure Studies	1
Natural History and Outdoor Recreation	1
Unknown	3
AA Forestry	1
Total	12

APPENDIX K

DATABASE A: DESIGNATIONS OVER TIME AND ADMINISTRATION

RIVER	STATE[S]	DES Date	LEG ACT	SPONSOR	PRESIDENT	H	S	Juris	TOTAL
Clearwater (MF)	ID	10/2/1968	P.L. 90-542	Sen Church [ID]	JOHNSON	D	D	Fed	185.0
Eleven Point	MO	10/2/1968	P.L. 90-542	Sen Church [ID]	JOHNSON	D	D	Fed	44.4
Feather	CA	10/2/1968	P.L. 90-542	Sen Church [ID]	JOHNSON	D	D	Fed	77.6
Rio Grande	NM	10/2/1968	P.L. 90-542	Sen Church [ID]	JOHNSON	D	D	Fed	55.7
Rogue	OR	10/2/1968	P.L. 90-542	Sen Church [ID]	JOHNSON	D	D	Fed	84.5
Salmon (MF)	ID	10/2/1968	P.L. 90-542	Sen Church [ID]	JOHNSON	D	D	Fed	104.0
St. Croix	MN, WI	10/2/1968	P.L. 90-542	Sen Church [ID]	JOHNSON	D	D	Fed	200.0
Wolf	WI, MI	10/2/1968	P.L. 90-542	Sen Church [ID]	JOHNSON	D	D	Tribe	24.0
Allagash Wilderness Waterway	ME	7/19/1970	Sec. Des.	Gov Curtis	NIXON	D	D	State	92.5
St. Croix (Lower)	MN, WI	10/25/1972	P.L. 92-560	Govs Anderson & Lucey	NIXON	D	D	Fed	27.0
Little Miami	OH	8/20/1973	Sec. Des.	Gov Gilligan	NIXON	D	D	State	66.0
Chattooga	GA, NC, SC	5/10/1974	P.L. 93-279	Rep Taylor (NC-11)	NIXON	D	D	Fed	58.7
Little Beaver	OH	10/23/1975	Sec. Des.	Gov Rhodes	NIXON	D	D	State	33.0
Rapid	ID	12/31/1975	P.L. 94-199	Sen Church [ID]	NIXON	D	D	Fed	26.8
Snake	ID, OR	12/31/1975	P.L. 94-199	Sen Church [ID]	NIXON	D	D	Fed	67.5
New	NC	4/13/1976	Sec. Des.	Gov Holshouser	NIXON	D	D	State	26.5
St. Croix (Lower)	MN, WI	6/17/1976	Sec. Des.	Govs Anderson & Lucey	NIXON	D	D	State	25.0
Flathead	MT	10/12/1976	P.L. 94-486	Sen Metcalf [MT]	NIXON	D	D	Fed	219.0
Missouri	MT	10/12/1976	P.L. 94-486	Sen Metcalf [MT]	NIXON	D	D	Fed	149.0
Obed	TN	10/12/1976	P.L. 94-486	Sen Metcalf [MT]	NIXON	D	D	Fed	45.3
American (NF)	CA	11/10/1978	P.L. 95-625	Sen Church [ID]	CARTER	D	D	Fed	38.3
Delaware (Middle)	NJ, PA	11/10/1978	P.L. 95-625	Sen Church [ID]	CARTER	D	D	Fed	40.0
Delaware (Upper)	NY, PA	11/10/1978	P.L. 95-625	Sen Church [ID]	CARTER	D	D	Fed	73.4
Missouri	NE, SD	11/10/1978	P.L. 95-625	Sen Church [ID]	CARTER	D	D	Fed	59.0
Pere Marquette	MI	11/10/1978	P.L. 95-625	Sen Church [ID]	CARTER	D	D	Fed	66.4
Rio Grande	NM, TX	11/10/1978	P.L. 95-625	Sen Church [ID]	CARTER	D	D	Fed	191.2
Saint Joe	ID	11/10/1978	P.L. 95-625	Sen Church [ID]	CARTER	D	D	Fed	66.3
Skagit	WA	11/10/1978	P.L. 95-625	Sen Church [ID]	CARTER	D	D	Fed	158.5
Little Miami	OH	1/28/1980	Sec. Des.	Gov Rhodes	CARTER	D	D	State	28.0
Salmon	AK	7/23/1980	P.L. 96-312	Sen Church [ID]	REAGAN	D	D	Fed	125.0
Alagnak	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	67.0
Alatna	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	83.0
Andreafsky,	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	262.0

RIVER	STATE[S]	DES Date	LEG ACT	SPONSOR	PRESIDENT	H	S	Juris	TOTAL
Aniakchak	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	63.0
Beaver Creek	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	127.0
Birch Creek	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	126.0
Charley	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	208.0
Chilikadrotna	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	11.0
Delta	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	62.0
Fortymile	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	392.0
Gulkana	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	181.0
Ivishak	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	80.0
John	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	52.0
Kobuk	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	110.0
Koyukuk (NF)	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	102.0
Mulchatna	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	24.0
Noatak	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	330.0
Nowitna	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	225.0
Salmon	ID	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	70.0
Selawik	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	160.0
Sheenjek	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	160.0
Tinayguk	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	44.0
Tlikakila	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	51.0
Unalakleet	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	80.0
Wind	AK	12/2/1980	P.L. 96-487	Rep Udall [AZ-2]	CARTER	D	D	Fed	140.0
American (Lower)	CA	1/19/1981	Sec. Des.	Gov Brown	CARTER	D	R	State	23.0
Eel (FN 2)	CA	1/19/1981	Sec. Des.	Gov Brown	CARTER	D	R	Fed	398.0
Klamath	CA	1/19/1981	Sec. Des.	Gov Brown	CARTER	D	R	State	285.0
Smith (FN 1)	OR	1/19/1981	Sec. Des.	Gov Victor Atiyeh	CARTER	D	R	Fed	325.4
Trinity(FN 2)	CA	1/19/1981	Sec. Des.	Gov Brown	CARTER	D	R	Fed	203.0
Verde	AZ	8/28/1984	P.L. 98-406	Rep Udall [AZ-2]	REAGAN	D	R	Fed	40.5
Tuolumne	CA	9/28/1984	P.L. 98-425	Rep Burton [CA-5]	REAGAN	D	R	Fed	83.0
Au Sable	MI	10/4/1984	P.L. 98-444	Sen Levin [MI]	REAGAN	D	R	Fed	23.0
Illinois	OR	10/4/1984	P.L. 98-444	Sen Levin [MI]	REAGAN	D	R	Fed	50.4
Owyhee (Main)	OR	10/4/1984	P.L. 98-444	Sen Levin [MI]	REAGAN	D	R	Fed	120.0
Loxahatchee	FL	5/17/1985	Sec. Des.	Gov Bob Graham	REAGAN	D	R	State	7.6
Horsepasture	NC	10/26/1986	P.L. 99-530	Rep Hendon [NC--11]	REAGAN	D	R	Fed	4.2

RIVER	STATE[S]	DES Date	LEG ACT	SPONSOR	PRESIDENT	H	S	Juris	TOTAL
Black Creek	MS	10/30/1986	P.L. 99-590	Rep Vento [MN-4]	REAGAN	D	R	Fed	21.0
Cache la Poudre	CO	10/30/1986	P.L. 99-590	Rep Vento [MN-4]	REAGAN	D	R	Fed	76.0
Saline Bayou	LA	10/30/1986	P.L. 99-590	Rep Vento [MN-4]	REAGAN	D	R	Fed	19.0
Klickitat	WA	11/17/1986	P.L. 99-663	Rep Young [OR-4]	REAGAN	D	R	Fed	10.8
White Salmon	WA	11/17/1986	P.L. 99-663	Rep Young [OR-4]	REAGAN	D	R	Fed	7.7
Merced	CA	11/2/1987	P.L. 100-149	Rep Coehlo [CA-15]	REAGAN	D	D	Fed	114.5
Kern	CA	11/24/1987	P.L. 100-174	Sen Cranston [CA]	REAGAN	D	D	Fed	151.0
Kings	CA	11/24/1987	P.L. 100-174	Sen Cranston [CA]	REAGAN	D	D	Fed	81.0
Big Marsh Creek	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	15.0
Bluestone	WV	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	10.0
Chetco	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	44.5
Clackamas	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	47.0
Deschutes	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	174.4
Eagle Creek (Wallowa-Whitman NF)	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	28.9
Elk	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	19.0
Grande Ronde	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	43.8
Imnaha	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	77.0
John Day	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	147.5
John Day (NF)	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	54.1
Joseph Creek	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	8.6
Little Deschutes	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	12.0
Lostine	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	16.0
Malheur	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	13.7
Malheur (NF)	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	25.5
McKenzie	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	12.7
Metolius	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	28.6
Minam	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	41.9
North Powder	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	6.4
North Umpqua	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	33.8
Owyhee NF	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	9.6
Powder	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	11.7
Quartzville Creek	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	12.0

RIVER	STATE[S]	DES Date	LEG ACT	SPONSOR	PRESIDENT	H	S	Juris	TOTAL
Roaring	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	13.7
Rogue (Upper)	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	40.3
Salmon	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	CARTER	D	D	Fed	33.5
Sandy	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	24.9
Sipsey Fork of the WF	AL	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	61.4
Smith (NF)	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	13.0
South Fork John Day	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	47.0
Sprague (NF)	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	15.0
Squaw Creek	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	15.4
Sycan	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	59.0
Wenaha	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	21.6
West Little Owyhee	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	57.6
White	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	46.8
Wildcat Brok River	NH	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	14.5
Willamette (NFMF)	OR	10/26/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	42.3
Crescent Creek	OR	10/28/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	10.0
Crooked (NF)	OR	10/28/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	33.7
Crooked Lower	OR	10/28/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	17.8
Donner und Blitzen	OR	10/28/1988	P.L. 100-557	Sen Hatfield [OR]	REAGAN	D	D	Fed	72.7
Rio Chama	NM	11/7/1988	P.L. 100-633	Sen Bingaman [NM]	REAGAN	D	D	Fed	24.6
Vermilion (MF)	IL	5/11/1989	Sec. Des.	Gov Thompson	BUSH I	D	D	State	17.1
Jemez (EF)	NM	6/6/1990	P.L. 101-306	Rep Richardson [NM-3]	BUSH I	D	D	Fed	11.0
Pecos	NM	6/6/1990	P.L. 101-306	Rep Richardson [NM-3]	BUSH I	D	D	Fed	20.5
Clarks Fork Yellowstone	WY	11/28/1990	P.L. 101-628	Rep Udall [AZ-2]	BUSH I	D	D	Fed	20.5
Missouri	NE, SD	5/24/1991	P.L. 102-50	Sen Exon [NE]	BUSH I	D	D	Fed	39.0
Niobrara	NE	5/24/1991	P.L. 102-50	Sen Exon [NE]	BUSH I	D	D	Fed	104.0
Bear Creek	MI	3/3/1992	P.L. 102-249	Rep Kildee [MI-7]	BUSH I	D	D	Fed	6.5
Black	MI	3/3/1992	P.L. 102-249	Rep Kildee [MI-7]	BUSH I	D	D	Fed	14.0
Carp	MI	3/3/1992	P.L. 102-249	Rep Kildee [MI-7]	BUSH I	D	D	Fed	27.8
Indian	MI	3/3/1992	P.L. 102-249	Rep Kildee [MI-7]	BUSH I	D	D	Fed	51.0
Manistee	MI	3/3/1992	P.L. 102-249	Rep Kildee [MI-7]	BUSH I	D	D	Fed	26.0
Ontonagon	MI	3/3/1992	P.L. 102-249	Rep Kildee [MI-7]	BUSH I	D	D	Fed	170.0

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Paint	MI	3/3/1992	P.L. 102-249	Rep Kildee [MI-7]	BUSH I	D	D	Fed	52.0
Pine	MI	3/3/1992	P.L. 102-249	Rep Kildee [MI-7]	BUSH I	D	D	Fed	25.0
Presque Isle	MI	3/3/1992	P.L. 102-249	Rep Kildee [MI-7]	BUSH I	D	D	Fed	72.0
Sturgeon (Hiawatha N. Forest)	MI	3/3/1992	P.L. 102-249	Rep Kildee [MI-7]	BUSH I	D	D	Fed	43.9
Sturgeon (Ottawa N. Forest)	MI	3/3/1992	P.L. 102-249	Rep Kildee [MI-7]	BUSH I	D	D	Fed	28.0
Tahquamenon (East Branch)	MI	3/3/1992	P.L. 102-249	Rep Kildee [MI-7]	BUSH I	D	D	Fed	13.2
Whitefish	MI	3/3/1992	P.L. 102-249	Rep Kildee [MI-7]	BUSH I	D	D	Fed	33.6
Yellow Dog	MI	3/3/1992	P.L. 102-249	Rep Kildee [MI-7]	BUSH I	D	D	Fed	4.0
Allegheny	PA	4/20/1992	P.L. 102-271	Sen Heinz [PA]	BUSH I	D	D	Fed	86.6
Big Piney Creek	AR	4/22/1992	P.L. 102-275	Sen Bumpers [AR]	BUSH I	D	D	Fed	45.2
Buffalo,	AR	4/22/1992	P.L. 102-275	Sen Bumpers [AR]	BUSH I	D	D	Fed	15.8
Cossatot	AR	4/22/1992	P.L. 102-275	Sen Bumpers [AR]	BUSH I	D	D	Fed	20.1
Hurricane Creek	AR	4/22/1992	P.L. 102-275	Sen Bumpers [AR]	BUSH I	D	D	Fed	15.5
Little Missouri	AR	4/22/1992	P.L. 102-275	Sen Bumpers [AR]	BUSH I	D	D	Fed	15.7
Mulberry	AR	4/22/1992	P.L. 102-275	Sen Bumpers [AR]	BUSH I	D	D	Fed	56.0
North Sylamore Creek	AR	4/22/1992	P.L. 102-275	Sen Bumpers [AR]	BUSH I	D	D	Fed	14.5
Richland Creek	AR	4/22/1992	P.L. 102-275	Sen Bumpers [AR]	BUSH I	D	D	Fed	16.5
Big Sur	CA	6/19/1992	P.L. 102-301	Rep Lagomarsino [CA-19]	BUSH I	D	D	Fed	19.5
Sespe Creek	CA	6/19/1992	P.L. 102-301	Rep Lagomarsino [CA-19]	BUSH I	D	D	Fed	31.5
Sisquoc	CA	6/19/1992	P.L. 102-301	Rep Lagomarsino [CA-19]	BUSH I	D	D	Fed	33.0
Merced	CA	10/23/1992	P.L. 102-432	Rep Condit [CA-15]	BUSH I	D	D	Fed	8.0
Great Egg Harbor	NJ	10/27/1992	P.L. 102-536	Rep Hughes [NJ-2]	BUSH I	D	D	Part	129.0
Westfield	MA	11/2/1993	Sec. Des.	Gov Weld	CLINTON	D	D	State	43.3
Maurice	NJ	12/1/1993	P.L. 103-162	Rep Hughes [NJ-2]	CLINTON	D	D	Part	35.4
Red	KY	12/2/1993	P.L. 103-170	Rep Rogers [KY-5]	CLINTON	D	D	Fed	19.4
Cossatot	AR	2/2/1994	P.L 102-275	Sen Bumpers [AR]	CLINTON	D	D	State	10.7
Big and Little Darby Creeks	OH	3/10/1994	Sec. Des.	Gov Voinovich	CLINTON	D	D	State	85.9
Rio Grande	NM	5/4/1994	P.L. 103-242	Sen Bingaman [NM]	CLINTON	D	D	Fed	12.5
Farmington (West Branch)	CT	8/26/1994	P.L. 103-313	Rep Johnson [CT-6]	CLINTON	D	D	Part	14.0
Klamath	OR	9/22/1994	Sec. Des.	Gov Chiles	CLINTON	D	D	State	12.0
Wallowa (FN 2)	OR	7/23/1996	Sec. Des.	Gov Chiles	CLINTON	R	R	State	10.0
Elkhorn Creek	OR	9/30/1996	P.L. 104-208	Rep Livingston [LA-1]	CLINTON	R	R	Fed	6.4

RIVER	STATE[S]	DES Date	LEG ACT	SPONSOR	PRESIDENT	H	S	Juris	TOTAL
Clarion	PA	10/19/1996	P.L. 104-314	Rep Clinger [PA-5]	CLINTON	R	R	Fed	51.7
Lamprey	NH	11/12/1996	P.L. 104-333	Rep Young [OR-4]	CLINTON	R	R	Part	11.5
Lumber	NC	9/28/1998	Sec. Des.	Gov Hunt Jr.	CLINTON	R	R	State	81.0
Sudbury, Assabet, Concord	MA	4/9/1999	P.L. 106-20	Rep Crane [IL-8]	CLINTON	R	R	Part	29.0
Lamprey	NH	5/2/2000	P.L. 106-192	Rep Hyde [IL-6]	CLINTON	R	R		12.0
Wilson Creek	NC	8/18/2000	P.L. 106-261	Rep Ballenger [NC-10]	CLINTON	R	R	Fed	23.3
Wekiva	FL	10/13/2000	P.L. 106-299	Rep McCollum [FL-8]	CLINTON	R	R	Part	41.6
White Clay Creek	DE, PA	10/24/2000	P.L. 106-357	Sen Biden DE	CLINTON	R	R	Part	190.0
Donner und Blitzen	OR	10/30/2000	P.L. 106-399	Rep Walden [OR-2]	CLINTON	R	R		14.8
Kiger Creek	OR	10/30/2000	P.L. 106-399	Rep Walden [OR-2]	CLINTON	R	R		4.3
Wildhorse and Little Wildhorse	OR	10/30/2000	P.L. 106-399	Rep Walden [OR-2]	CLINTON	R	R	Fed	9.6
Delaware (Lower)	NJ, PA	11/1/2000	P.L. 106-418	Sen Lautenberg [NJ]	CLINTON	R	R	Part	67.3
Rio de la Mina	PR	12/19/2002	P.L. 107-365	Rep Acevedo-Vila [PR]	BUSH II	R	R	Fed	2.1
Rio Icacos	PR	12/19/2002	P.L. 107-365	Rep Acevedo-Vila [PR]	BUSH II	R	R	Fed	2.3
Rio Mameyes	PR	12/19/2002	P.L. 107-365	Rep Acevedo-Vila [PR]	BUSH II	R	R	Fed	4.5
Westfield	MA	10/29/2004	Sec. Des.	Gov Mitt Romney	BUSH II	R	R	State	34.8
White Salmon	WA	8/2/2005	P.L. 109-44	Rep Baird [WA-3]	BUSH II	R	R	Fed	20.0
Black Butte	CA	10/17/2006	P.L. 109-362	Rep Thompson [CA-1]	BUSH II	R	R	Fed	21.0
Musconetcong	NJ	12/22/2006	P.L. 109-452	Sen Corzine [NJ]	BUSH II	R	R	Part	24.2
Eightmile	CT	5/8/2008	P.L. 110-229	Rep Ross [AR-4]	BUSH II	D	D	Part	25.3
Amargosa	CA	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	26.3
Battle Creek	ID	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	23.4
Bautista Creek	CA	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	9.8
Big Jacks Creek	ID	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	35.0
Bruneau	ID	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	39.3
Bruneau (WF)	ID	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	0.4
Clackamas (SF)	OR	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	4.2
Collawash	OR	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	17.8
Cottonwood Creek	CA	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	2.6
Cottonwood Creek	ID	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	21.5
Deep Creek	ID	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	13.1
Dickshooter Creek	ID	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	9.3
Duncan Creek	ID	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	0.9
Eagle Creek (Mt. Hood NF)	OR	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	8.3
Elk	OR	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	9.2

RIVER	STATE[S]	DES Date	LEG ACT	SPONSOR	PRESIDENT	H	S	Juris	TOTAL
Fifteenmile Creek	OR	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	11.1
Fish Creek	OR	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	13.5
Fossil Creek	AZ	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	16.8
Fuller Mill Creek	CA	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	3.5
Hood (EF)	OR	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	13.5
Hood (MF)	OR	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	3.7
Jarbidge	ID	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	28.8
Little Jacks Creek	ID	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	12.4
Owens River Headwaters	CA	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	19.1
Owyhee	ID	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	67.3
Owyhee (NF)	ID	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	20.8
Owyhee (South Creek)	ID	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	31.4
Palm Canyon Creek	CA	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	8.1
Piru Creek	CA	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	7.3
Red Canyon Creek	ID	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	4.6
Roaring (SF)	OR	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	4.6
San Jacinto (NF)	CA	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	10.2
Sheep Creek	ID	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	25.6
Snake River Headwaters	WY	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	387.5
Taunton	MA	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Part	40.0
Virgin	UT	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	169.3
Wickahoney Creek	ID	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	1.5
Zigzag	OR	3/30/2009	P.L. 111-11	Rep Holt [NJ-12]	OBAMA	D	D	Fed	4.3
Illabot Creek	WA	12/19/2014	P.L. 113-291	Rep Barletta [R-PA11]	OBAMA	R	D	Fed	14.3
Missisquoi & Trout	VT	12/19/2014	P.L. 113-291	Rep Barletta [R-PA11]	OBAMA	R	D	Part	46.1
Pratt	WA	12/19/2014	P.L. 113-291	Rep Barletta [R-PA11]	OBAMA	R	D	Fed	9.5
River Styx	OR	12/19/2014	P.L. 113-291	Rep Barletta [R-PA11]	OBAMA	R	D	Fed	0.4
Snoqualmie (MF)	WA	12/19/2014	P.L. 113-291	Rep Barletta [R-PA11]	OBAMA	R	D	Fed	27.4
White Clay Creek	DE	12/19/2014	P.L. 113-291	Rep Barletta [R-PA11]	OBAMA	R	D	Part	9.0

APPENDIX L

DATABASE B. DESIGNATIONS BY JURISDICATION

RIVER	STATE(S)	YEAR	BLM-T	NPS-T	USFWS-T	USFS-T	State-T	TOTAL
Clearwater [MF)	ID	1968	0.0	0.0	0.0	185.0	0.0	185.0
Eleven Point	MO	1968	0.0	0.0	0.0	44.4	0.0	44.4
Feather	CA	1968	0.0	0.0	0.0	77.6	0.0	77.6
Rio Grande	NM	1968	51.4	0.0	0.0	4.3	0.0	55.7
Rogue	OR	1968	47.0	0.0	0.0	37.5	0.0	84.5
Salmon (MF)	ID	1968	0.0	0.0	0.0	104.0	0.0	104.0
St. Croix	MN, WI	1968	0.0	200.0	0.0	0.0	0.0	200.0
Wolf	WI, MI	1968	0.0	24.0	0.0	0.0	0.0	24.0
Allagash Wilderness Waterway	ME	1970	0.0	0.0	0.0	0.0	92.5	92.5
St. Croix (Lower)	MN, WI	1972	0.0	27.0	0.0	0.0	0.0	27.0
Little Miami	OH	1973	0.0	0.0	0.0	0.0	66.0	66.0
Chattooga	GA, NC, SC	1974	0.0	0.0	0.0	58.7	0.0	58.7
Little Beaver	OH	1975	0.0	0.0	0.0	0.0	33.0	33.0
Rapid	ID	1975	0.0	0.0	0.0	26.8	0.0	26.8
Snake	ID, OR	1975	0.0	0.0	0.0	67.5	0.0	67.5
New	NC	1976	0.0	0.0	0.0	0.0	26.5	26.5
St. Croix (Lower)	MN, WI	1976	0.0	0.0	0.0	0.0	25.0	25.0
Flathead	MT	1976	0.0	51.6	0.0	167.4	0.0	219.0
Missouri	MT	1976	149.0	0.0	0.0	0.0	0.0	149.0
Obed	TN	1976	0.0	45.3	0.0	0.0	0.0	45.3
American (NF)	CA	1978	12.0	0.0	0.0	26.3	0.0	38.3
Delaware (Middle)	NJ, PA	1978	0.0	40.0	0.0	0.0	0.0	40.0
Delaware (Upper)	NY, PA	1978	0.0	73.4	0.0	0.0	0.0	73.4
Missouri	NE, SD	1978	0.0	59.0	0.0	0.0	0.0	59.0
Pere Marquette	MI	1978	0.0	0.0	0.0	66.4	0.0	66.4
Rio Grande	NM, TX	1978	0.0	191.2	0.0	0.0	0.0	191.2
Saint Joe	ID	1978	0.0	0.0	0.0	66.3	0.0	66.3
Skagit	WA	1978	0.0	0.0	0.0	158.5	0.0	158.5
Little Miami	OH	1980	0.0	0.0	0.0	0.0	28.0	28.0
Salmon	AK	1980	0.0	0.0	0.0	125.0	0.0	125.0
Alagnak	AK	1980	0.0	67.0	0.0	0.0	0.0	67.0
Alatna	AK	1980	0.0	83.0	0.0	0.0	0.0	83.0
Andreafsky,	AK	1980	0.0	0.0	262.0	0.0	0.0	262.0

RIVER	STATE(S)	YEAR	BLM-T	NPS-T	USFWS-T	USFS-T	State-T	TOTAL
Aniakchak	AK	1980	0.0	63.0	0.0	0.0	0.0	63.0
Beaver Creek	AK	1980	111.0	0.0	16.0	0.0	0.0	127.0
Birch Creek	AK	1980	126.0	0.0	0.0	0.0	0.0	126.0
Charley	AK	1980	0.0	208.0	0.0	0.0	0.0	208.0
Chilikadrotna	AK	1980	0.0	11.0	0.0	0.0	0.0	11.0
Delta	AK	1980	62.0	0.0	0.0	0.0	0.0	62.0
Fortymile	AK	1980	392.0	0.0	0.0	0.0	0.0	392.0
Gulkana	AK	1980	181.0	0.0	0.0	0.0	0.0	181.0
Ivishak	AK	1980	0.0	0.0	80.0	0.0	0.0	80.0
John	AK	1980	0.0	52.0	0.0	0.0	0.0	52.0
Kobuk	AK	1980	0.0	110.0	0.0	0.0	0.0	110.0
Koyukuk (NF)	AK	1980	0.0	102.0	0.0	0.0	0.0	102.0
Mulchatna	AK	1980	0.0	24.0	0.0	0.0	0.0	24.0
Noatak	AK	1980	0.0	330.0	0.0	0.0	0.0	330.0
Nowitna	AK	1980	0.0	0.0	225.0	0.0	0.0	225.0
Salmon	ID	1980	0.0	70.0	0.0	0.0	0.0	70.0
Selawik	AK	1980	0.0	0.0	160.0	0.0	0.0	160.0
Sheenjek	AK	1980	0.0	0.0	160.0	0.0	0.0	160.0
Tinayguk	AK	1980	0.0	44.0	0.0	0.0	0.0	44.0
Tlikakila	AK	1980	0.0	51.0	0.0	0.0	0.0	51.0
Unalakleet	AK	1980	80.0	0.0	0.0	0.0	0.0	80.0
Wind	AK	1980	0.0	0.0	140.0	0.0	0.0	140.0
American (Lower)	CA	1981	0.0	0.0	0.0	0.0	23.0	23.0
Eel (FN 2)	CA	1981	32.0	0.0	0.0	35.0	331.0	398.0
Klamath	CA	1981	1.5	0.0	0.0	222.3	61.2	285.0
Smith (FN 1)	OR	1981	0.0	0.0	0.0	296.4	29.0	325.4
Trinity(FN 2)	CA	1981	17.0	0.0	0.0	135.0	51.0	203.0
Verde	AZ	1984	0.0	0.0	0.0	40.5	0.0	40.5
Tuolumne	CA	1984	3.0	54.0	0.0	26.0	0.0	83.0
Au Sable	MI	1984	0.0	0.0	0.0	23.0	0.0	23.0
Illinois	OR	1984	0.0	0.0	0.0	50.4	0.0	50.4
Owyhee (Main)	OR	1984	120.0	0.0	0.0	0.0	0.0	120.0
Loxahatchee	FL	1985	0.0	0.0	0.0	0.0	7.6	7.6
Horsepasture	NC	1986	0.0	0.0	0.0	4.2	0.0	4.2

RIVER	STATE(S)	YEAR	BLM-T	NPS-T	USFWS-T	USFS-T	State-T	TOTAL
Black Creek	MS	1986	0.0	0.0	0.0	21.0	0.0	21.0
Cache la Poudre	CO	1986	0.0	12.0	0.0	64.0	0.0	76.0
Saline Bayou	LA	1986	0.0	0.0	0.0	19.0	0.0	19.0
Klickitat	WA	1986	0.0	0.0	0.0	10.8	0.0	10.8
White Salmon	WA	1986	0.0	0.0	0.0	7.7	0.0	7.7
Merced	CA	1987	4.0	81.0	0.0	29.5	0.0	114.5
Kern	CA	1987	0.0	27.0	0.0	124.0	0.0	151.0
Kings	CA	1987	0.0	55.5	0.0	25.5	0.0	81.0
Big Marsh Creek	OR	1988	0.0	0.0	0.0	15.0	0.0	15.0
Bluestone	WV	1988	0.0	10.0	0.0	0.0	0.0	10.0
Chetco	OR	1988	0.0	0.0	0.0	44.5	0.0	44.5
Clackamas	OR	1988	0.0	0.0	0.0	47.0	0.0	47.0
Deschutes	OR	1988	120.0	0.0	0.0	54.4	0.0	174.4
Eagle Creek (Wallowa-Whitman NF)	OR	1988	0.0	0.0	0.0	28.9	0.0	28.9
Elk	OR	1988	0.0	0.0	0.0	19.0	0.0	19.0
Grande Ronde	OR	1988	24.9	0.0	0.0	18.9	0.0	43.8
Imnaha	OR	1988	0.0	0.0	0.0	77.0	0.0	77.0
John Day	OR	1988	147.5	0.0	0.0	0.0	0.0	147.5
John Day (NF)	OR	1988	0.0	0.0	0.0	54.1	0.0	54.1
Joseph Creek	OR	1988	0.0	0.0	0.0	8.6	0.0	8.6
Little Deschutes	OR	1988	0.0	0.0	0.0	12.0	0.0	12.0
Lostine	OR	1988	0.0	0.0	0.0	16.0	0.0	16.0
Malheur	OR	1988	0.0	0.0	0.0	13.7	0.0	13.7
Malheur (NF)	OR	1988	0.0	0.0	0.0	25.5	0.0	25.5
McKenzie	OR	1988	0.0	0.0	0.0	12.7	0.0	12.7
Metolius	OR	1988	0.0	0.0	0.0	28.6	0.0	28.6
Minam	OR	1988	0.0	0.0	0.0	41.9	0.0	41.9
North Powder	OR	1988	0.0	0.0	0.0	6.4	0.0	6.4
North Umpqua	OR	1988	8.4	0.0	0.0	25.4	0.0	33.8
Owyhee NF	OR	1988	9.6	0.0	0.0	0.0	0.0	9.6
Powder	OR	1988	11.7	0.0	0.0	0.0	0.0	11.7
Quartzville Creek	OR	1988	12.0	0.0	0.0	0.0	0.0	12.0

RIVER	STATE(S)	YEAR	BLM-T	NPS-T	USFWS-T	USFS-T	State-T	TOTAL
Roaring	OR	1988	0.0	0.0	0.0	13.7	0.0	13.7
Rogue (Upper)	OR	1988	0.0	0.0	0.0	40.3	0.0	40.3
Salmon	OR	1988	8.0	0.0	0.0	25.5	0.0	33.5
Sandy	OR	1988	12.5	0.0	0.0	12.4	0.0	24.9
Sipsey Fork of the WF	AL	1988	0.0	0.0	0.0	61.4	0.0	61.4
Smith (NF)	OR	1988	0.0	0.0	0.0	13.0	0.0	13.0
South Fork John Day	OR	1988	47.0	0.0	0.0	0.0	0.0	47.0
Sprague (NF)	OR	1988	0.0	0.0	0.0	15.0	0.0	15.0
Squaw Creek	OR	1988	0.0	0.0	0.0	15.4	0.0	15.4
Sycan	OR	1988	0.0	0.0	0.0	59.0	0.0	59.0
Wenaha	OR	1988	0.0	0.0	0.0	21.6	0.0	21.6
West Little Owyhee	OR	1988	57.6	0.0	0.0	0.0	0.0	57.6
White	OR	1988	24.7	0.0	0.0	22.1	0.0	46.8
Wildcat Brok River	NH	1988	0.0	0.0	0.0	14.5	0.0	14.5
Willamette (NFMF)	OR	1988	0.0	0.0	0.0	42.3	0.0	42.3
Crescent Creek	OR	1988	0.0	0.0	0.0	10.0	0.0	10.0
Crooked (NF)	OR	1988	17.2	0.0	0.0	16.5	0.0	33.7
Crooked Lower	OR	1988	17.8	0.0	0.0	0.0	0.0	17.8
Donner und Blitzen	OR	1988	72.7	0.0	0.0	0.0	0.0	72.7
Rio Chama	NM	1988	11.2	0.0	0.0	13.4	0.0	24.6
Vermilion (MF)	IL	1989	0.0	0.0	0.0	0.0	17.1	17.1
Jemez (EF)	NM	1990	0.0	0.0	0.0	11.0	0.0	11.0
Pecos	NM	1990	0.0	0.0	0.0	20.5	0.0	20.5
Clarks Fork Yellowstone	WY	1990	0.0	0.0	0.0	20.5	0.0	20.5
Missouri	NE, SD	1991	0.0	39.0	0.0	0.0	0.0	39.0
Niobrara	NE	1991	0.0	96.0	8.0	0.0	0.0	104.0
Bear Creek	MI	1992	0.0	0.0	0.0	6.5	0.0	6.5
Black	MI	1992	0.0	0.0	0.0	14.0	0.0	14.0
Carp	MI	1992	0.0	0.0	0.0	27.8	0.0	27.8
Indian	MI	1992	0.0	0.0	0.0	51.0	0.0	51.0
Manistee	MI	1992	0.0	0.0	0.0	26.0	0.0	26.0
Ontonagon	MI	1992	0.0	0.0	0.0	170.0	0.0	170.0

RIVER	STATE(S)	YEAR	BLM-T	NPS-T	USFWS-T	USFS-T	State-T	TOTAL
Paint	MI	1992	0.0	0.0	0.0	52.0	0.0	52.0
Pine	MI	1992	0.0	0.0	0.0	25.0	0.0	25.0
Presque Isle	MI	1992	0.0	0.0	0.0	72.0	0.0	72.0
Sturgeon (Hiawatha N. Forest)	MI	1992	0.0	0.0	0.0	43.9	0.0	43.9
Sturgeon (Ottawa N. Forest)	MI	1992	0.0	0.0	0.0	28.0	0.0	28.0
Tahquamenon (East Branch)	MI	1992	0.0	0.0	0.0	13.2	0.0	13.2
Whitefish	MI	1992	0.0	0.0	0.0	33.6	0.0	33.6
Yellow Dog	MI	1992	0.0	0.0	0.0	4.0	0.0	4.0
Allegheny	PA	1992	0.0	0.0	0.0	86.6	0.0	86.6
Big Piney Creek	AR	1992	0.0	0.0	0.0	45.2	0.0	45.2
Buffalo,	AR	1992	0.0	0.0	0.0	15.8	0.0	15.8
Cossatot	AR	1992	0.0	0.0	0.0	20.1	0.0	20.1
Hurricane Creek	AR	1992	0.0	0.0	0.0	15.5	0.0	15.5
Little Missouri	AR	1992	0.0	0.0	0.0	15.7	0.0	15.7
Mulberry	AR	1992	0.0	0.0	0.0	56.0	0.0	56.0
North Sylamore Creek	AR	1992	0.0	0.0	0.0	14.5	0.0	14.5
Richland Creek	AR	1992	0.0	0.0	0.0	16.5	0.0	16.5
Big Sur	CA	1992	0.0	0.0	0.0	19.5	0.0	19.5
Sespe Creek	CA	1992	0.0	0.0	0.0	31.5	0.0	31.5
Sisquoc	CA	1992	0.0	0.0	0.0	33.0	0.0	33.0
Merced	CA	1992	8.0	0.0	0.0	0.0	0.0	8.0
Great Egg Harbor	NJ	1992	0.0	129.0	0.0	0.0	0.0	129.0
Westfield	MA	1993	0.0	0.0	0.0	0.0	43.3	43.3
Maurice	NJ	1993	0.0	35.4	0.0	0.0	0.0	35.4
Red	KY	1993	0.0	0.0	0.0	19.4	0.0	19.4
Cossatot	AR	1994	0.0	0.0	0.0	0.0	10.7	10.7
Big and Little Darby Creeks	OH	1994	0.0	0.0	0.0	0.0	85.9	85.9
Rio Grande	NM	1994	12.5	0.0	0.0	0.0	0.0	12.5
Farmington (West Branch)	CT	1994	0.0	14.0	0.0	0.0	0.0	14.0
Klamath	OR	1994	11.0	1.0	0.0	0.0	0.0	12.0
Wallowa (FN 2)	OR	1996	4.1	0.0	0.0	0.0	5.9	10.0
Elkhorn Creek	OR	1996	0.6	0.0	0.0	5.8	0.0	6.4

RIVER	STATE(S)	YEAR	BLM-T	NPS-T	USFWS-T	USFS-T	State-T	TOTAL
Clarion	PA	1996	0.0	0.0	0.0	51.7	0.0	51.7
Lamprey	NH	1996	0.0	11.5	0.0	0.0	0.0	11.5
Lumber	NC	1998	0.0	0.0	0.0	0.0	81.0	81.0
Sudbury, Assabet, Concord	MA	1999	0.0	29.0	0.0	0.0	0.0	29.0
Lamprey	NH	2000	0.0	12.0	0.0	0.0	0.0	12.0
Wilson Creek	NC	2000	0.0	0.0	0.0	23.3	0.0	23.3
Wekiva	FL	2000	0.0	41.6	0.0	0.0	0.0	41.6
White Clay Creek	DE, PA	2000	0.0	190.0	0.0	0.0	0.0	190.0
Donner und Blitzen	OR	2000	14.8	0.0	0.0	0.0	0.0	14.8
Kiger Creek	OR	2000	4.3	0.0	0.0	0.0	0.0	4.3
Wildhorse and Little Wildhorse	OR	2000	9.6	0.0	0.0	0.0	0.0	9.6
Delaware (Lower)	NJ, PA	2000	0.0	67.3	0.0	0.0	0.0	67.3
Rio de la Mina	PR	2002	0.0	0.0	0.0	2.1	0.0	2.1
Rio Icacos	PR	2002	0.0	0.0	0.0	2.3	0.0	2.3
Rio Mameyes	PR	2002	0.0	0.0	0.0	4.5	0.0	4.5
Westfield	MA	2004	0.0	0.0	0.0	0.0	34.8	34.8
White Salmon	WA	2005	0.0	0.0	0.0	20.0	0.0	20.0
Black Butte	CA	2006	0.0	0.0	0.0	21.0	0.0	21.0
Musconetcong	NJ	2006	0.0	24.2	0.0	0.0	0.0	24.2
Eightmile	CT	2008	0.0	25.3	0.0	0.0	0.0	25.3
Amargosa	CA	2009	26.3	0.0	0.0	0.0	0.0	26.3
Battle Creek	ID	2009	23.4	0.0	0.0	0.0	0.0	23.4
Bautista Creek	CA	2009	0.0	0.0	0.0	9.8	0.0	9.8
Big Jacks Creek	ID	2009	35.0	0.0	0.0	0.0	0.0	35.0
Bruneau	ID	2009	39.3	0.0	0.0	0.0	0.0	39.3
Bruneau (WF)	ID	2009	0.4	0.0	0.0	0.0	0.0	0.4
Clackamas (SF)	OR	2009	0.0	0.0	0.0	4.2	0.0	4.2
Collawash	OR	2009	0.0	0.0	0.0	17.8	0.0	17.8
Cottonwood Creek	CA	2009	2.6	0.0	0.0	0.0	0.0	2.6
Cottonwood Creek	ID	2009	4.1	0.0	0.0	17.4	0.0	21.5
Deep Creek	ID	2009	13.1	0.0	0.0	0.0	0.0	13.1
Dickshooter Creek	ID	2009	9.3	0.0	0.0	0.0	0.0	9.3
Duncan Creek	ID	2009	0.9	0.0	0.0	0.0	0.0	0.9
Eagle Creek (Mt. Hood NF)	OR	2009	0.0	0.0	0.0	8.3	0.0	8.3
Elk	OR	2009	0.0	0.0	0.0	9.2	0.0	9.2

RIVER	STATE(S)	YEAR	BLM-T	NPS-T	USFWS-T	USFS-T	State-T	TOTAL
Fifteenmile Creek	OR	2009	0.0	0.0	0.0	11.1	0.0	11.1
Fish Creek	OR	2009	0.0	0.0	0.0	13.5	0.0	13.5
Fossil Creek	AZ	2009	0.0	0.0	0.0	16.8	0.0	16.8
Fuller Mill Creek	CA	2009	0.0	0.0	0.0	3.5	0.0	3.5
Hood (EF)	OR	2009	0.0	0.0	0.0	13.5	0.0	13.5
Hood (MF)	OR	2009	0.0	0.0	0.0	3.7	0.0	3.7
Jarbidge	ID	2009	28.8	0.0	0.0	0.0	0.0	28.8
Little Jacks Creek	ID	2009	12.4	0.0	0.0	0.0	0.0	12.4
Owens River Headwaters	CA	2009	0.0	0.0	0.0	19.1	0.0	19.1
Owyhee	ID	2009	67.3	0.0	0.0	0.0	0.0	67.3
Owyhee (NF)	ID	2009	20.8	0.0	0.0	0.0	0.0	20.8
Owyhee (South Creek)	ID	2009	31.4	0.0	0.0	0.0	0.0	31.4
Palm Canyon Creek	CA	2009	0.0	0.0	0.0	8.1	0.0	8.1
Piru Creek	CA	2009	0.0	0.0	0.0	7.3	0.0	7.3
Red Canyon Creek	ID	2009	4.6	0.0	0.0	0.0	0.0	4.6
Roaring (SF)	OR	2009	0.0	0.0	0.0	4.6	0.0	4.6
San Jacinto (NF)	CA	2009	0.0	0.0	0.0	10.2	0.0	10.2
Sheep Creek	ID	2009	25.6	0.0	0.0	0.0	0.0	25.6
Snake River Headwaters	WY	2009	0.0	96.8	0.0	290.7	0.0	387.5
Taunton	MA	2009	0.0	40.0	0.0	0.0	0.0	40.0
Virgin	UT	2009	21.8	147.5	0.0	0.0	0.0	169.3
Wickahoney Creek	ID	2009	1.5	0.0	0.0	0.0	0.0	1.5
Zigzag	OR	2009	0.0	0.0	0.0	4.3	0.0	4.3
Illabot Creek	WA	2014	0.0	0.0	0.0	14.3	0.0	14.3
Missisquoi & Trout	VT	2014	0.0	46.1	0.0	0.0	0.0	46.1
Pratt	WA	2014	0.0	0.0	0.0	9.5	0.0	9.5
River Styx	OR	2014	0.0	0.0	0.0	0.4	0.0	0.4
Snoqualmie (MF)	WA	2014	0.0	0.0	0.0	27.4	0.0	27.4
White Clay Creek	DE	2014	0.0	9.0	0.0	0.0	0.0	9.0

APPENDIX M

DATABASE C. RIVERS AND DESIGNATED ORVS

RIVER	STATE(S)	OUTSTANDINGLY REMARKABLE VALUES (ORV)	OTHER ORV
Clearwater (MF)	ID	Fish, Historic, Recreation, Scenic, Wildlife	Botany, Traditional Use, Cultural Use, Water Quality
Eleven Point	MO	Fish, Geologic, Historic, Recreation, Scenic, Wildlife	
Feather	CA	Fish, Geologic, Historic, Recreation, Scenic	
Rio Grande	NM	Cultural, Fish, Geologic, Recreation, Scenic, Wildlife	
Rogue	OR	Fish, Recreation, Scenic	
Salmon (MF)	ID	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	Botany, Traditional Use, Cultural Use, Water Quality
St. Croix	MN, WI	Cultural, Recreation, Scenic	Aquatic, Riparian
Wolf	WI, MI		
Allagash Wilderness Waterway	ME	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	Botany, Ecology, Hydrology, Traditional Use, Water Quality
St. Croix (Lower)	MN, WI	Cultural, Recreation, Scenic, Other	Aquatic, Riparian
Little Miami	OH	Fish, Geologic, Historic, Recreation, Wildlife	
Chattooga	GA, NC, SC	Cultural, Geologic, Historic, Recreation, Scenic	
Little Beaver	OH	Fish, Geologic, Historic, Recreation, Scenic, Wildlife	
Rapid	ID	Cultural, Fish, Historic, Scenic	Water Quality
Snake	ID, OR	Cultural, Fish, Geologic, Recreation, Scenic, Wildlife	Botany, Ecology
New	NC		
St. Croix (Lower)	MN, WI	Cultural, Recreation, Scenic	Aquatic, Riparian
Flathead	MT	Fish, Geologic, Historic, Recreation, Scenic, Wildlife	Botany, Traditional Use, Cultural Use, Water Quality, Paleontology
Missouri	MT	Recreation, Scenic, Wildlife	
Obed	TN	Cultural, Fish, Geologgy, Recreation, Scenic, Wildlife	Ecology, Vegetation, Aquatic
American (NF)	CA	Cultural, Recreation, Scenic	Water Quality
Delaware (Middle)	NJ, PA	Cultural, Recreation, Scenic	Ecology
Delaware (Upper)	NY, PA	Cultural, Geologic, Recreation, Scenic	Ecology
Missouri	NE, SD	Cultural, Fish, Historic, Recreation, Scenic, Wildlife	
Pere Marquette	MI	Cultural, Fish, Historic, Recreation, Scenic	
Rio Grande	NM, TX	Fish, Geologic, Recreation, Scenic, Wildlife	
Saint Joe	ID	Fish, Recreation, Scenic, Wildlife	Water Quality
Skagit	WA	Fish, Scenic, Wildlife	
Little Miami	OH	Fish, Geologic, Historic, Recreation, Wildlife	
Salmon	AK	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	Botany, Traditional Use, Cultural Use, Water Quality
Alagnak	AK	Cultural, Fish, Recreation, Scenic, Wildlife	
Alatna	AK	Recreation, Scenic	
Andreafsky,	AK		
Aniakchak	AK	Fish, Geologic, Recreation, Scenic	Ecology
Beaver Creek	AK	Fish, Geologic, Recreation, Scenic, Wildlife	
Birch Creek	AK	Fish, Recreation, Scenic	
Charley	AK	Cultural, Recreation	
Chilikadrotna	AK	Fish, Historic, Recreation, Scenic	
Delta	AK	Cultural, Fish, Recreation, Scenic, Wildlife	
Fortymile	AK	Geologic, Historic, Recreation, Scenic, Wildlife	
Gulkana	AK	Fish, Recreation, Scenic, Wildlife	
Ivishak	AK		
John	AK	Cultural, Scenic, Wildlife	
Kobuk	AK	Cultural, Fish, Geologic, Recreation, Scenic	
Koyukuk (NF)	AK	Cultural, Historic, Recreation, Scenic	

RIVER	STATE(S)	OUTSTANDINGLY REMARKABLE VALUES (ORV)	OTHER ORV
Mulchatna	AK	Fish, Historic, Recreation, Scenic	
Noatak	AK	Cultural, Fish, Recreation, Scenic, Wildlife	
Nowitna	AK	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	
Salmon	ID	Cultural, Recreation, Wildlife	
Selawik	AK	Cultural, Fish, Geologic, Recreation	
Sheenjek	AK	Cultural, Recreation, Scenic, Wildlife	
Tinayguk	AK	Recreation	
Tlikakila	AK	Fish, Geologic, Historic, Recreation, Scenic, Wildlife	
Unalakleet	AK	Fish, Scenic, Wildlife	
Wind	AK		
American (Lower)	CA	Fish	
Eel (FN 2)	CA	Fish	
Klamath	CA	Fish	
Smith (FN 1)	OR	Fish, Geologic, Recreation, Scenic	
Trinity(FN 2)	CA	Fish	
Verde	AZ	Cultural, Fish, Historic, Scenic, Wildlife	
Tuolumne	CA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	Ecology
Au Sable	MI	Fish, Historic, Recreation, Scenic, Wildlife	
Illinois	OR	Fish, Recreation, Scenic	Botany, Water Quality
Owyhee (Main)	OR	Cultural, Geologic, Recreation, Scenic, Wildlife	
Loxahatchee	FL	Fish, Recreation, Scenic, Wildlife	Ecology
Horsepasture	NC	Geologic, Recreation, Scenic	Botany
Black Creek	MS	Historic, Recreation, Scenic, Wildlife	
Cache la Poudre	CO	Cultural, Recreation, Scenic	Hydrology, Water Quality, Ecology
Saline Bayou	LA	Recreation, Scenic	
Klickitat	WA	Cultural, Fish, Geologic	Hydrology
White Salmon	WA	Cultural, Fish, Geologic, Recreation	Hydrology
Merced	CA	Cultural, Fish, Geologic, Historic, Recreation, Wildlife, Scenic	Biology, Hydrology, Botany
Kern	CA	Cultural, Fish, Geologic, Recreation, Scenic	Botany
Kings	CA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	
Big Marsh Creek	OR	Geologic, Scenic, Wildlife	Vegetation
Bluestone	WV	Fish, Recreation, Scenic, Wildlife	Water Quality
Chetco	OR	Fish, Recreation	Water Quality
Clackamas	OR	Cultural, Fish, Recreation, Wildlife	Ecology
Deschutes	OR	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	Botany
Eagle Creek (Wallowa-Whitman NF)	OR	Cultural, Fish, Geologic, Historic, Recreation, Scenic	Paleontology
Elk	OR	Fish, Scenic	Botany, Water Quality
Grande Ronde	OR	Fish, Recreation, Scenic, Wildlife	
Imnaha	OR	Fish, Historic, Recreation, Scenic, Wildlife	Botany, Traditional Use, Cultural Use
John Day	OR	Fish, Geologic, Historic, Recreational, Scenic, Wildlife	Archeology, Paleontology
John Day (NF)	OR	Fish, Historic, Recreation, Scenic, Wildlife	
Joseph Creek	OR	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	
Little Deschutes	OR	Geologic, Scenic	
Lostine	OR	Fish, Recreation, Scenic, Wildlife	Botany, Water Quality*
Malheur	OR	Geologic, Historic, Scenic, Wildlife	

RIVER	STATE(S)	OUTSTANDINGLY REMARKABLE VALUES (ORV)	OTHER ORV
Malheur (NF)	OR	Fish, Geologic, Scenic, Wildlife	
McKenzie	OR	Fish, Geologic, Recreation, Scenic	Water Quality
Metolius	OR	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	Botany, Ecology, Hydrology, Traditional Use, Cultural Use
Minam	OR	Fish, Geologic, Recreation, Scenic, Wildlife	
North Powder	OR	Recreation, Scenic	
North Umpqua	OR	Cultural, Fish, Recreation, Scenic	Water Quality
Owyhee NF	OR	Recreation, Scenic, Wildlife	
Powder	OR	Cultural, Fish, Recreation, Scenic, Wildlife	
Quartzville Creek	OR	Recreation, Scenic	
Roaring	OR	Fish, Recreation, Scenic, Wildlife	Botany, Water Quality
Rogue (Upper)	OR	Cultural, Geologic, Historic, Scenic	Botany, Hydrology, Water Quality
Salmon	OR	Fish, Recreation, Scenic, Wildlife	Botany, Hydrology
Sandy	OR	Fish, Geologic, Recreation, Scenic	Botany
Sipsey Fork of the WF	AL	Geologic, Recreation, Scenic	
Smith (NF)	OR	Fish, Scenic	Water Quality
South Fork John Day	OR	Fish, Recreation, Scenic, Wildlife	Botany
Sprague (NF)	OR	Geologic, Scenic	
Squaw Creek	OR	Cultural, Fish, Geologic, Scenic	Hydrology, TraditionalUse, Cultural Use
Sycan	OR	Fish, Geologic, Scenic, Wildlife	
Wenaha	OR	Fish, Recreation, Scenic, Wildlife	
West Little Owyhee	OR	Recreation, Scenic, Wildlife	
White	OR	Fish, Geologic, Historic, Recreation, Scenic, Wildlife	Botany, Hydrology
Wildcat Brok River	NH	Historic, Recreation, Scenic	
Willamette (NFMF)	OR	Fish, Geologic, Historic, Recreation, Scenic, Wildlife	
Crescent Creek	OR	Scenic	
Crooked (NF)	OR	Cultural, Scenic	Botany
Crooked Lower	OR	Fish, Recreation, Scenic	
Donner und Blitzen	OR	Fish, Geologic, Recreation, Scenic, Wildlife	Vegetation
Rio Chama	NM	Cultural, Geologic, Historic, Recreation, Scenic, Wildlife	
Vermilion (MF)	IL	Historic, Recreation, Scenic	Ecology
Jemez (EF)	NM	Fish, Geologic, Recreation, Scenic, Wildlife	
Pecos	NM	Cultural, Historic, Recreation, Scenic	
Clarks Fork Yellowstone	WY	Historic, Recreation, Scenic	
Missouri	NE, SD	Cultural, Recreation, Scenic	Ecology
Niobrara	NE	Cultural, Fish, Geologic, Recreation, Scenic, Wildlife	Ecology
Bear Creek	MI	Recreation, Scenic, Wildlife	
Black	MI	Fish, Geologic, Historic, Recreation, Scenic, Wildlife	
Carp	MI	Fish, Geologic, Historic, Recreation, Wildlife	Ecology
Indian	MI	Fish, Recreation, Scenic, Wildlife	Hydrology
Manistee	MI	Fish, Recreation, Wildlife	
Ontonagon	MI	Fish, Geologic, Recreation, Scenic, Wildlife	
Paint	MI	Fish, Recreation, Wildlife	
Pine	MI	Recreation, Scenic	
Presque Isle	MI	Fish, Geologic, Scenic, Wildlife	
Sturgeon (Hiawatha N. Forest)	MI	Cultural, Historic, Wildlife	Botany, Ecology, Hydrology

RIVER	STATE(S)	OUTSTANDINGLY REMARKABLE VALUES (ORV)	OTHER ORV
Sturgeon (Ottawa N. Forest)	MI	Fish, Geologic, Recreation, Scenic, Wildlife	
Tahquamenon (East Branch)	MI	Fish	Hydrology
Whitefish	MI	Fish, Historic, Recreation, Scenic, Wildlife	
Yellow Dog	MI	Geologic, Scenic, Wildlife	
Allegheny	PA	Fish, Historic, Recreation, Scenic	Ecology
Big Piney Creek	AR	Fish, Geologic, Recreation, Scenic, Wildlife	Botany
Buffalo,	AR	Scenic	Water Quality
Cossatot	AR	Fish, Geologic, Recreation, Scenic, Wildlife	
Hurricane Creek	AR	Scenic	Botany
Little Missouri	AR	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	
Mulberry	AR	Fish, Recreation	
North Sylamore Creek	AR	Fish, Recreation, Wildlife	Botany
Richland Creek	AR	Geologic, Recreation	Botany
Big Sur	CA	Fish, Recreation, Scenic, Wildlife	
Sespe Creek	CA	Fish, Geologic, Recreation, Scenic, Wildlife	
Sisquoc	CA	Cultural, Fish, Historic, Recreation, Scenic, Wildlife	
Merced	CA	Cultural	Biology
Great Egg Harbor	NJ	Historic, Recreation, Wildlife,	Hydrology, Traditional Use
Westfield	MA	Fish, Geologic, Historic, Recreation, Scenic, Wildlife	Biology, Hydrology, Ecology
Maurice	NJ	Cultural, Fish, Recreation, Wildlife	Ecology, Water Quality
Red	KY	Cultural, Fish, Geologic, Historic, Recreation, Scenic	
Cossatot	AR	Fish, Geologic, Recreation, Scenic, Wildlife	
Big and Little Darby Creeks	OH		Biology, Hydrology
Rio Grande	NM	Cultural, Fish, Recreation	Riprarian
Farmington (West Branch)	CT	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	Ecology, Hydrology, Traditional Use, Water Quality
Klamath	OR	Fish, Historic, Recreation, Scenic, Wildlife	Traditional Use
Wallowa (FN 2)	OR	Fish, Recreational, Scenic, Wildlife	
Elkhorn Creek	OR	Fish, Scenic	
Clarion	PA	Recreation, Scenic	
Lamprey	NH	Cultural, Fish, Historic, Wildlife	Botany, Ecology, Hydrology
Lumber	NC	Fish, Recreation, Scenic, Wildlife	Botany
Sudbury, Assabet, Concord	MA	Historic, Recreation, Scenic, Wildlife	Ecology, Literature
Lamprey	NH	Cultural, Fish, Historic, Wildlife	Botany, Ecology, Hydrology
Wilson Creek	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	Botany, Ecology*
Wekiva	FL	Fish, Historic, Recreation, Scenic, Wildlife	
White Clay Creek	DE, PA	Fish, Geologic, Wildlife	Botany
Donner und Blitzen	OR	Fish, Geologic, Recreation, Scenic, Wildlife	Vegetation
Kiger Creek	OR	Fish, Scenic, Wildlife	
Wildhorse and Little Wildhorse	OR	Recreation, Scenic, Wildlife	Botany
Delaware (Lower)	NJ, PA	Cultural, Geologic, Recreation, Scenic	Ecology
Rio de la Mina	PR	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	
Rio Icacos	PR	Cultural, Fish, Historic, Scenic, Wildlife	Ecology
Rio Mameyes	PR	Fish, Recreation, Scenic, Wildlife	
Westfield	MA	Fish, Geologic, Historic, Recreation, Scenic, Wildlife	Biology, Hydrology, Ecology
White Salmon	WA	Cultural, Fish, Geologic, Recreation	Hydrology
Black Butte	CA	Cultural, Fish	
Musconetcong	NJ	Cultural, Geologic, Historic, Recreation, Scenic	Ecology

RIVER	STATE(S)	OUTSTANDINGLY REMARKABLE VALUES (ORV)	OTHER ORV
Eightmile	CT	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	Botany, Ecology, Hydrology, Traditional Use, Water Quality
Amargosa	CA	Cultural, Geologic, Historic, Recreation, Scenic, Wildlife	Wilderness
Battle Creek	ID	Fish, Geologic, Recreation, Scenic, Wildlife	Botany
Bautista Creek	CA	Cultural, Historic, Wildlife	Botany
Big Jacks Creek	ID	Fish, Recreation, Scenic, Wildlife	Riparian
Bruneau	ID	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	Botany
Bruneau (WF)	ID	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	
Clackamas (SF)	OR	Fish	
Collawash	OR	Fish, Geologic	
Cottonwood Creek	CA	Fish, Recreation, Scenic, Wildlife	Riprarian, Vegetation
Cottonwood Creek	ID	Recreation, Scenic, Wildlife	Riprarian
Deep Creek	ID	Fish, Geologic, Recreation, Scenic, Wildlife	
Dickshooter Creek	ID	Fish, Geologic, Recreation, Wildlife	
Duncan Creek	ID	Fish, Recreation, Scenic, Wildlife	
Eagle Creek (Mt. Hood NF)	OR	Fish, Wildlife	
Elk	OR	Fish	Water Quality
Fifteenmile Creek	OR	Fish, Geologic, Historic, Recreation, Scenic, Wildlife	Ecology, Hydrology, Water Quality
Fish Creek	OR	Fish	
Fossil Creek	AZ	Cultural, Fish, Geologic, Historic, Recreation, Wildlife	Botany
Fuller Mill Creek	CA	Recreation, Wildlife	
Hood (EF)	OR	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	Ecology
Hood (MF)	OR	Fish, Geologic, Historic, Recreation, Scenic, Wildlife	Ecology
Jarbidge	ID	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	Botant
Little Jacks Creek	ID	Fish, Recreation, Scenic, Wildlife	Riprarian
Owens River Headwaters	CA	Geologic, Recreation, Scenic, Wildlife	Botany
Owyhee	ID	Fish, Geologic, Recreation, Scenic, Wildlife	Botany
Owyhee (NF)	ID	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	Botany
Owyhee (South Creek)	ID	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	
Palm Canyon Creek	CA	Cultural, Scenic	Botany
Piru Creek	CA	Geologic	
Red Canyon Creek	ID	Fish, Geologic, Recreation, Scenic, Wildlife	
Roaring (SF)	OR	Wildlife	
San Jacinto (NF)	CA	Scenic, Wildlife	
Sheep Creek	ID	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	
Snake River Headwaters	WY	Cultural, Fish, Geologic,Historic, Recreation, Scenic, Wildlife	Ecology
Taunton	MA	Fish, Historic, Recreation, Scenic	Botany, Ecology, Hydrology, Traditional Use, Water Quality
Virgin	UT	Cultural, Fish, Geologic, Recreation, Scenic, Wildlife	
Wickahoney Creek	ID	Cultural, Fish, Historic, Scenic, Wildlife	
Zigzag	OR	Geologic, Scenic	
Illabot Creek	WA		
Missisquoi & Trout	VT	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife	Water Quality
Pratt	WA	Fish, Recreation, Wildlife	Ecology
River Styx	OR		
Snoqualmie (MF)	WA	Fish, Recreation, Wildlife	
White Clay Creek	DE	Fish, Geologic, Wildlife	Botany

APPENDIX N

DATABASE D: NRI TOTALS BY STATE

State	# of Rivers	GIS Miles	CULT	FISH	GEOL	HIST	RECR	SCEN	WILD	OTHER
Alabama	45	1552	19	40	22	20	44	43	37	0
Alaska	225	5367	31	122	50	44	98	132	103	34
Arizona	144	2352	30	74	55	21	66	110	79	59
Arkansas	45	1846	2	27	23	5	6	35	28	8
California	185	2393	35	92	32	29	77	116	41	52
Colorado	63	1265	10	43	32	15	46	58	40	6
Connecticut	14	119	0	13	11	2	5	5	4	8
Delaware	37	256	13	13	13	37	13	13	23	37
Florida	63	1843	16	53	20	19	63	61	51	9
Georgia	50	3079	26	42	44	27	50	50	40	0
Hawaii	36	270	2	23	0	1	4	21	3	4
Idaho	95	1945	2	76	49	10	52	65	29	29
Illinois	77	2433	4	33	10	0	39	33	9	35
Indiana	15	1119	0	7	7	3	13	9	4	3
Iowa	9	613	5	8	5	5	7	8	8	2
Kansas	20	873	2	14	11	5	18	18	13	0
Kentucky	49	1523	14	43	32	13	47	45	40	8
Louisiana	10	637	0	7	2	3	10	10	9	0
Maine	71	1504	0	25	15	15	25	18	10	53
Maryland	64	1084	5	27	11	15	31	7	26	42
Massachusetts	24	189	1	8	6	4	4	2	4	11
Michigan	97	3264	7	42	15	11	77	67	7	5
Minnesota	53	2688	1	1	10	4	20	47	2	0
Mississippi	26	1546	8	25	16	9	26	26	26	0
Missouri	39	2039	2	29	15	11	32	37	25	3
Montana	129	1299	13	57	35	12	53	72	12	4
Nebraska	9	623	5	6	4	2	3	8	6	2
Nevada	9	259	1	7	3	0	5	6	1	2
New Hampshire	82	1302	5	55	30	13	46	27	5	43
New Jersey	63	455	24	15	15	38	47	22	34	53
New Mexico	8	408	2	5	4	4	8	8	5	1
New York	175	3271	9	38	30	16	66	65	7	97
North Carolina	97	2829	53	76	54	53	78	89	84	10
North Dakota	7	468	6	4	3	5	4	5	4	1
Ohio	39	1466	4	17	7	19	33	23	8	5
Oklahoma	7	448	1	7	4	1	6	7	6	0
Oregon	132	3454	14	96	38	20	56	66	41	26
Pennsylvania	38	641	2	0	20	10	13	10	0	16
Puerto Rico	8	17	0	5	0	0	2	8	0	2
Rhode Island	9	52	0	3	1	4	6	0	0	1
South Carolina	36	2110	29	36	26	29	36	36	36	0
South Dakota	10	1043	7	7	5	4	6	9	4	1
Tennessee	96	2470	21	68	63	27	91	91	65	1
Texas	19	1586	5	7	8	8	17	19	14	5
Utah	96	1902	36	22	71	7	73	88	47	22
Vermont	64	854	7	12	11	20	10	16	9	27
Virginia	85	2446	10	6	30	35	34	11	1	41
Washington	243	3729	33	151	70	42	127	160	115	19
Washington, D. C.	1	6	0	0	0	1	1	0	0	0
West Virginia	56	1203	1	8	8	6	44	26	3	7
Wisconsin	53	1786	0	9	10	3	36	38	6	3
Wyoming	86	1170	7	21	26	30	44	64	30	19

APPENDIX O

DATABASE E: NRI DETAILS 3214 RIVERS, 78,170 MILES

River	Miles	State	Outstandingly Remarkable Value (ORV)
Irish Creek	8	AK	Cultural, Fish
Keku Creek	15	AK	Cultural, Fish
Chickamin River	43	AK	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Talkeetna River	40	AK	Cultural, Fish, Geologic, Recreation, Scenic
Clear Creek	10	AK	Cultural, Fish, Geologic, Recreation, Scenic
Fish Creek	17	AK	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Unuk River	26	AK	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Karta River, Salmon Lake	7	AK	Cultural, Fish, Historic, Recreation, Wildlife
Anderson Creek	7	AK	Cultural, Fish, Historic, Recreation, Wildlife
McGilvery Creek	7	AK	Cultural, Fish, Historic, Recreation, Wildlife
Naha River	17	AK	Cultural, Fish, Historic, Recreation, Wildlife
Sarkar Creek	7	AK	Cultural, Fish, Historic, Scenic, Wildlife
Sarkar Creek and Lakes, NE Stream and Lake	4	AK	Cultural, Fish, Historic, Scenic, Wildlife
Sarkar Creek and Lakes, North Stream and Lake	3	AK	Cultural, Fish, Historic, Scenic, Wildlife
Shipley Creek and Lake	3	AK	Cultural, Fish, Historic, Scenic, Wildlife
Moose Creek	58	AK	Cultural, Fish, Recreation
Kroto Creek	59	AK	Cultural, Fish, Recreation
Deshka River	33	AK	Cultural, Fish, Recreation
Lake Creek	63	AK	Cultural, Fish, Recreation, Scenic
Little Susitna River	91	AK	Cultural, Fish, Recreation, Scenic
Nancy Lake Creek	10	AK	Cultural, Fish, Recreation, Scenic
Alexander Creek	42	AK	Cultural, Fish, Recreation, Scenic, Wildlife
Lower Sucker Creek	15	AK	Cultural, Fish, Recreation, Scenic, Wildlife
Hasselborg River and Lakes	9	AK	Cultural, Fish, Recreation, Wildlife
Kah Sheets Creek and Lake	6	AK	Cultural, Fish, Recreation, Wildlife
Talachulitna River	69	AK	Cultural, Fish, Scenic
Talachulitna Creek	21	AK	Cultural, Fish, Scenic
Fall Dog Creek	3	AK	Cultural, Fish, Scenic, Wildlife
Goodhope River (including tributaries)	462	AK	Cultural, Geologic, Recreation, Wildlife
Portage Creek	12	AK	Cultural, Historic
Chisana River	47	AK	Cultural, Historic, Scenic, Wildlife
Fish Creek	6	AK	Fish
Hamilton Creek	19	AK	Fish
Keta River	20	AK	Fish
Kushneahin Creek	8	AK	Fish
Kutlaku Creek and Lake	2	AK	Fish
Niblack Lakes and Streams	5	AK	Fish
Sockeye Creek, Hugh Smith Lake	4	AK	Fish
Tunehean Creek	16	AK	Fish
Kook Lake and Creek	8	AK	Fish, Geologic
Ikagluik Creek	23	AK	Fish, Geologic, Historic, Wildlife, Other
Red Bluff Bay Tributaries	9	AK	Fish, Geologic, Recreation, Scenic, Other
Taku River,Twin Glaciers Lake	19	AK	Fish, Geologic, Recreation, Scenic, Other
Kulik River	2	AK	Fish, Geologic, Recreation, Scenic, Wildlife
Katzehin River	13	AK	Fish, Geologic, Scenic
Benzeman River and Lake	12	AK	Fish, Geologic, Scenic
Black River	11	AK	Fish, Geologic, Scenic, Other
Rainbow River	16	AK	Fish, Geologic, Wildlife
Kandik River	33	AK	Fish, Historic, Other
Alecks Creek and Lake	5	AK	Fish, Historic, Recreation
Hatchery Creek and Lake	1	AK	Fish, Historic, Recreation
Petersburg Creek	15	AK	Fish, Historic, Recreation, Scenic
Kadake Creek	13	AK	Fish, Historic, Recreation, Scenic, Wildlife
Stikine River	16	AK	Fish, Historic, Recreation, Scenic, Wildlife, Other
Naknek River	8	AK	Fish, Historic, Recreation, Wildlife
Nuka River	12	AK	Fish, Historic, Scenic, Wildlife
Johnson Lake and Streams	4	AK	Fish, Other
Gambier Bay Tributaries	6	AK	Fish, Other
Bakewell Creek and Badger Lake	10	AK	Fish, Recreation
Brooks River	2	AK	Fish, Recreation
Eagle River and Lake	14	AK	Fish, Recreation
Olive Creek	6	AK	Fish, Recreation
Pavlof River and Lake	11	AK	Fish, Recreation
Santa Anna Creek and Lake Helen	4	AK	Fish, Recreation
Sitkoh Creek	6	AK	Fish, Recreation
North Fork Porterfield Creek	3	AK	Fish, Recreation
Porterfield Creek	6	AK	Fish, Recreation
Mill Creek	3	AK	Fish, Recreation
Ward Creek and Lake	4	AK	Fish, Recreation
Hunter Bay Lakes and Streams	14	AK	Fish, Recreation
Earl West Creek	9	AK	Fish, Recreation
Cascade Creek	11	AK	Fish, Recreation, Scenic
Kegan Lake and Streams	5	AK	Fish, Recreation, Scenic
Tazimina River and Lakes	57	AK	Fish, Recreation, Scenic
Whiting River	23	AK	Fish, Recreation, Scenic
Oerns Creek	9	AK	Fish, Recreation, Scenic, Wildlife
Aaron Creek	19	AK	Fish, Recreation, Scenic, Wildlife
Berg Creek	6	AK	Fish, Recreation, Scenic, Wildlife
American Creek	39	AK	Fish, Recreation, Scenic, Wildlife
Big River	21	AK	Fish, Recreation, Scenic, Wildlife

Duncan Salt Chuck Creek	19	AK	Fish, Recreation, Scenic, Wildlife
Kunk Lake and Creek	4	AK	Fish, Recreation, Scenic, Wildlife
Marten Lake and Creek	8	AK	Fish, Recreation, Scenic, Wildlife
Moraine Creek	28	AK	Fish, Recreation, Scenic, Wildlife
Nooya Creek	1	AK	Fish, Recreation, Scenic, Wildlife
Resurrection River	17	AK	Fish, Recreation, Scenic, Wildlife
Thorne River	15	AK	Fish, Recreation, Scenic, Wildlife
Hatchery Creek	19	AK	Fish, Recreation, Scenic, Wildlife
Walker Creek and Lake	4	AK	Fish, Recreation, Scenic, Wildlife
Bear Glacier River	7	AK	Fish, Recreation, Scenic, Wildlife
Addison Creek	3	AK	Fish, Recreation, Scenic, Wildlife
Delight Creek	4	AK	Fish, Recreation, Scenic, Wildlife
Nutkwa Streams	8	AK	Fish, Recreation, Scenic, Wildlife
Berners River	16	AK	Fish, Recreation, Scenic, Wildlife
Big Creek	5	AK	Fish, Recreation, Scenic, Wildlife
Orchard Creek and Lake	21	AK	Fish, Recreation, Scenic, Wildlife, Other
Swikshak River	11	AK	Fish, Recreation, Scenic, Wildlife, Other
Anan Creek	12	AK	Fish, Recreation, Wildlife
Castle River	17	AK	Fish, Recreation, Wildlife
Harding River	23	AK	Fish, Recreation, Wildlife
Main Creek	17	AK	Fish, Recreation, Wildlife
Porcupine Creek	3	AK	Fish, Recreation, Wildlife
Wolverine Creek, McDonald Lake	6	AK	Fish, Recreation, Wildlife
Blind River	10	AK	Fish, Recreation, Wildlife, Other
Falls Creek and McHenry Lake	3	AK	Fish, Scenic
Andrews Creek	14	AK	Fish, Scenic, Wildlife
Essowah Lakes and Streams	4	AK	Fish, Scenic, Wildlife
Farragut River	28	AK	Fish, Scenic, Wildlife
Funnel Creek	10	AK	Fish, Scenic, Wildlife
Hulakon River (aka Eulachon River)	9	AK	Fish, Scenic, Wildlife
Klakas Lakes and Streams	9	AK	Fish, Scenic, Wildlife
Mud Bay River	11	AK	Fish, Scenic, Wildlife
Salmon Bay Lake and Stream	5	AK	Fish, Scenic, Wildlife
Bradfield River, North Fork	26	AK	Fish, Scenic, Wildlife
Bradfield River, East Fork	26	AK	Fish, Scenic, Wildlife
Hallo Creek	9	AK	Fish, Scenic, Wildlife
Chuck River	18	AK	Fish, Scenic, Wildlife, Other
Kadashan River	9	AK	Fish, Scenic, Wildlife, Other
Chandler River	32	AK	Fish, Wildlife
Headwaters Creek	18	AK	Fish, Wildlife
Humpback Creek and Lake	3	AK	Fish, Wildlife
King Salmon River	12	AK	Fish, Wildlife
Marten River	25	AK	Fish, Wildlife
Nation River	17	AK	Fish, Wildlife
Wilson River and Lake	15	AK	Fish, Wildlife
Anaktuvuk River	37	AK	Fish, Wildlife, Other
Ernie Creek	16	AK	Geologic
Kuzitrin River (including tributaries)	258	AK	Geologic
West Fork Texas Creek	7	AK	Geologic
Texas Creek	2	AK	Geologic
Salmon River, Tributary from Salmon Glacier	2	AK	Geologic
Salmon River, To Portland Canal	10	AK	Geologic
Soda Creek and Lake	4	AK	Geologic
Kuskulana River	28	AK	Geologic, Historic
Noxapaga River (including tributaries)	269	AK	Geologic, Historic
White River	33	AK	Geologic, Historic
Yukon River	130	AK	Geologic, Historic
Chitina River	131	AK	Geologic, Historic, Recreation, Scenic, Wildlife
Martin Creek	13	AK	Geologic, Historic, Recreation, Scenic, Wildlife
Ukak River	12	AK	Geologic, Historic, Recreation, Scenic, Wildlife
Serpentine River	49	AK	Geologic, Historic, Scenic
Serpentine River, North Fork	49	AK	Geologic, Historic, Scenic
Serpentine River, South Fork	29	AK	Geologic, Historic, Scenic
Chitistone River	24	AK	Geologic, Historic, Scenic, Wildlife
Mageik Creek	12	AK	Geologic, Historic, Scenic, Wildlife
Nugnugaluktuk River (including estuary and tributaries)	310	AK	Geologic, Historic, Wildlife
Savonoski River	41	AK	Geologic, Historic, Wildlife
Wolverine Falls Creek	17	AK	Geologic, Historic, Wildlife
Kugrak River	22	AK	Geologic, Other
Glacial River	11	AK	Geologic, Other
Eagle River	9	AK	Geologic, Recreation, Scenic
Antler River	15	AK	Geologic, Recreation, Scenic, Wildlife
Copper River	72	AK	Geologic, Recreation, Scenic, Wildlife
Lace River	22	AK	Geologic, Recreation, Scenic, Wildlife
Patterson River	17	AK	Geologic, Recreation, Scenic, Wildlife
Gilkey River	9	AK	Geologic, Scenic
Knife Creek	14	AK	Geologic, Scenic
Juhle Creek	6	AK	Geologic, Scenic
Lethe River	16	AK	Geologic, Scenic
Fred's Creek	6	AK	Geologic, Scenic, Other
Spring Creek, Lake Shelokum	2	AK	Geologic, Scenic, Other

Blue River	15	AK	Geologic, Scenic, Wildlife, Other
Seventymile River	27	AK	Geologic, Wildlife, Other
Katmai River	24	AK	Historic
Skagway River, North Fork	6	AK	Historic
Kijik River	23	AK	Historic
Taiya River	19	AK	Historic, Other
Meshik River	24	AK	Historic, Recreation, Wildlife, Other
Nizina River	47	AK	Historic, Scenic
Nabesna River	31	AK	Historic, Scenic, Wildlife
Itkillik River	41	AK	Other
Reed River	40	AK	Other
Harris River	13	AK	Recreation
Kelly River	56	AK	Recreation
Alsek River	34	AK	Recreation, Scenic
Cathedral Falls Creek	9	AK	Recreation, Scenic
Espenberg River	10	AK	Recreation, Scenic
Herbert River	6	AK	Recreation, Scenic
Nigu River	27	AK	Recreation, Scenic, Other
Big Goat Creek and Lake	5	AK	Recreation, Scenic, Wildlife
Rudyerd Creek	17	AK	Recreation, Scenic, Wildlife
Tebay Lake and River	25	AK	Recreation, Scenic, Wildlife
Baird Glacier	22	AK	Recreation, Scenic, Wildlife
Desire Creek	3	AK	Recreation, Scenic, Wildlife
Etivluk River, East Fork	20	AK	Recreation, Scenic, Wildlife, Other
Shakes Slough	8	AK	Recreation, Scenic, Wildlife, Other
Chokotonk River	23	AK	Scenic
Crescent River	13	AK	Scenic
Lake Fork Crescent River	23	AK	Scenic
North Fork Crescent River	16	AK	Scenic
Granite Creek, Manzoni Lake	5	AK	Scenic
LeConte Glacier	6	AK	Scenic
Maksoutof River Complex	12	AK	Scenic
Neacola River	25	AK	Scenic
Punchbowl Creek	2	AK	Scenic
Red River	5	AK	Scenic
Scenery Creek	11	AK	Scenic
Necons River	45	AK	Scenic
Stony River	39	AK	Scenic
Tanalian River	8	AK	Scenic
Canoe Point Stream	2	AK	Scenic
Alpine Creek	7	AK	Scenic
Beaver Creek	37	AK	Scenic
Tawah Creek	8	AK	Scenic, Other
Lost River	6	AK	Scenic, Other
Telaquana River	44	AK	Scenic, Other
Big Branch Inlet Stream	11	AK	Scenic, Other
Bremner River	44	AK	Scenic, Wildlife
Bremner River, North Fork Lobe	24	AK	Scenic, Wildlife
Bremner River, Middle Fork Lobe	17	AK	Scenic, Wildlife
Bremner River, South Fork (Fan Glacier)	16	AK	Scenic, Wildlife
Dangerous River	15	AK	Scenic, Wildlife
Endicott River	26	AK	Scenic, Wildlife
Hanagita River	26	AK	Scenic, Wildlife
Klahini River	17	AK	Scenic, Wildlife
Tana River	39	AK	Scenic, Wildlife
Cinder River	26	AK	Wildlife
Left Fork West Glacier Creek	14	AK	Wildlife
Right Fork West Glacier Creek	4	AK	Wildlife
West Glacier Creek	7	AK	Wildlife
Middle Glacier Creek	7	AK	Wildlife
East Glacier Creek	10	AK	Wildlife
Killik River	73	AK	Wildlife, Other
Lisianski River	8	AK	Wildlife, Other
Trail River	7	AK	Wildlife, Other
Black Warrior River, Locust Fork	91	AL	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Buttahatchee River	80	AL	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Cahaba River	36	AL	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Cahaba River	21	AL	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Chickasaw Creek	33	AL	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Halawakee Creek	19	AL	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Little River, East Fork	0	AL	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Little River, West Fork	9	AL	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Little River	21	AL	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Big Black Creek	15	AL	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Coosa River	7	AL	Cultural, Fish, Geologic, Historic, Recreation, Wildlife
Conecuh River	75	AL	Cultural, Fish, Historic, Recreation, Scenic
New River	24	AL	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Sipsey River	150	AL	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Tallapoosa River	24	AL	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Tallapoosa River	40	AL	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Uchee Creek	34	AL	Cultural, Fish, Historic, Recreation, Scenic, Wildlife

Little Uchee Creek	12	AL	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Noxubee River	24	AL	Cultural, Fish, Historic, Recreation, Wildlife
Black Warrior River, Mulberry Fork	50	AL	Fish, Geologic, Recreation, Scenic, Wildlife
Cowarts Creek	10	AL	Fish, Geologic, Recreation, Scenic, Wildlife
Choctawhatchee River, East Fork	54	AL	Fish, Geologic, Recreation, Scenic, Wildlife
Choctawhatchee River	51	AL	Fish, Geologic, Recreation, Scenic, Wildlife
Line Creek	19	AL	Fish, Geologic, Recreation, Scenic, Wildlife
Little Cahaba River	27	AL	Fish, Geologic, Recreation, Scenic, Wildlife
Shoal Creek	8	AL	Fish, Geologic, Recreation, Scenic, Wildlife
Styx River	38	AL	Fish, Geologic, Recreation, Scenic, Wildlife
Yellow River	34	AL	Fish, Geologic, Recreation, Scenic, Wildlife
Warrior Creek	5	AL	Fish, Geologic, Recreation, Scenic, Wildlife
Majors Creek	7	AL	Fish, Historic, Scenic, Wildlife
Big Canoe Creek	32	AL	Fish, Recreation, Scenic
Elk River	33	AL	Fish, Recreation, Scenic
Choccolocco Creek	54	AL	Fish, Recreation, Scenic, Wildlife
Conecuh River	103	AL	Fish, Recreation, Scenic, Wildlife
Hatchet Creek	38	AL	Fish, Recreation, Scenic, Wildlife
Little River	9	AL	Fish, Recreation, Scenic, Wildlife
Saugahatchee Creek	50	AL	Fish, Recreation, Scenic, Wildlife
Bear Head Creek	4	AL	Fish, Recreation, Scenic, Wildlife
Bear Creek	7	AL	Fish, Recreation, Scenic, Wildlife
Blackwater River	3	AL	Fish, Recreation, Scenic, Wildlife
Sixmile Creek	27	AL	Geologic, Recreation, Scenic
Bear Creek	55	AL	Recreation, Scenic
Blackwater River	23	AL	Recreation, Scenic
Chickasaw Bogue	42	AL	Recreation, Scenic
Cypress Creek	24	AL	Recreation, Scenic
North Fork Sylamore Creek	3	AR	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Illinois Bayou, Middle Fork	15	AR	Cultural, Scenic
Buffalo River	138	AR	Fish, Geologic, Historic, Scenic, Wildlife
War Eagle Creek	63	AR	Fish, Geologic, Historic, Scenic, Wildlife
Illinois Bayou	37	AR	Fish, Geologic, Recreation, Scenic, Wildlife
Richland Creek	13	AR	Fish, Geologic, Recreation, Scenic, Wildlife
Strawberry River	115	AR	Fish, Geologic, Scenic
Cadron Creek	75	AR	Fish, Geologic, Scenic, Wildlife
Cadron Creek, North Fork	31	AR	Fish, Geologic, Scenic, Wildlife
Cadron Creek, East Fork	58	AR	Fish, Geologic, Scenic, Wildlife
Cossatot River	14	AR	Fish, Geologic, Scenic, Wildlife
Kings River	92	AR	Fish, Geologic, Scenic, Wildlife
Little Missouri River	17	AR	Fish, Geologic, Scenic, Wildlife
Little Red River, Middle Fork	66	AR	Fish, Geologic, Scenic, Wildlife
Ouachita River	90	AR	Fish, Geologic, Scenic, Wildlife
Piney Creek (AKA Big Piney Creek)	27	AR	Fish, Geologic, Scenic, Wildlife
Alum Fork Saline River	45	AR	Fish, Geologic, Scenic, Wildlife
Saline River, North Fork	38	AR	Fish, Geologic, Scenic, Wildlife
Saline River, Middle Fork	38	AR	Fish, Geologic, Scenic, Wildlife
Spring River	58	AR	Fish, Geologic, Scenic, Wildlife
Eleven Point River	41	AR	Fish, Historic, Scenic, Wildlife
Saline River	201	AR	Fish, Historic, Scenic, Wildlife
South Fork Saline River	30	AR	Fish, Recreation, Scenic, Wildlife
Little Red River (lower)	21	AR	Fish, Scenic
L'Anguille River	94	AR	Fish, Scenic, Wildlife
Bayou DeView	47	AR	Fish, Scenic, Wildlife, Other
Current River	36	AR	Fish, Wildlife
White River (upper)	41	AR	Fish, Wildlife
Little Buffalo River	21	AR	Geologic, Recreation, Scenic, Wildlife
Big Creek	35	AR	Geologic, Scenic
Falling Water Creek	11	AR	Geologic, Scenic
Lower Arkansas River	41	AR	Geologic, Scenic, Wildlife
Illinois Bayou, East Fork	5	AR	Other
Illinois Bayou, East Fork	1	AR	Other
Illinois Bayou, East Fork	4	AR	Other
Illinois Bayou, East Fork	7	AR	Other
Second Creek	21	AR	Other
Illinois Bayou	3	AR	Recreation
Illinois Bayou, Middle Fork	3	AR	Scenic
Illinois Bayou, Middle Fork	4	AR	Scenic
Little Buffalo River, East Fork	11	AR	Scenic
Illinois Bayou, North Fork	23	AR	Scenic, Other
Cole Creek Branch	9	AR	Scenic, Wildlife, Other
Champagnolle Creek	58	AR	Wildlife
Dorcheat Bayou	45	AR	Wildlife
Little Colorado River, South Fork	9	AZ	Cultural
Marijilda Creek	8	AZ	Cultural
Pigeon Creek	5	AZ	Cultural
Pigeon Creek	10	AZ	Cultural
Colorado River	236	AZ	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Colorado River	11	AZ, CA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Colorado River	42	AZ	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Colorado River	17	AZ	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other

Paria River	29	AZ	Cultural, Fish, Geologic, Recreation, Scenic
Burro Creek	14	AZ	Cultural, Fish, Geologic, Recreation, Scenic, Wildlife
Burro Creek	10	AZ	Cultural, Fish, Geologic, Recreation, Scenic, Wildlife
Burro Creek	7	AZ	Cultural, Fish, Geologic, Recreation, Scenic, Wildlife
Burro Creek	9	AZ	Cultural, Fish, Geologic, Recreation, Scenic, Wildlife
Burro Creek	15	AZ	Cultural, Fish, Geologic, Recreation, Scenic, Wildlife
Gila River	16	AZ	Cultural, Fish, Geologic, Recreation, Scenic, Wildlife, Other
Gila River	8	AZ	Cultural, Fish, Geologic, Recreation, Scenic, Wildlife, Other
Gila River	3	AZ	Cultural, Fish, Geologic, Recreation, Scenic, Wildlife, Other
Gila River	86	AZ	Cultural, Fish, Geologic, Scenic, Wildlife
Blue River	32	AZ, NM	Cultural, Fish, Historic, Other, Recreation, Scenic, Wildlife
Blue River	27	AZ	Cultural, Fish, Historic, Other, Recreation, Scenic, Wildlife
San Pedro River	50	AZ	Cultural, Fish, Recreation, Scenic, Wildlife, Other
Verde River, Upper	43	AZ	Cultural, Fish, Scenic, Wildlife
Wright Creek	12	AZ	Cultural, Fish, Wildlife
Wet Beaver Creek	15	AZ	Cultural, Geologic, Recreation, Scenic, Other
Wet Beaver Creek	6	AZ	Cultural, Geologic, Recreation, Scenic, Other
Paria River	3	AZ	Cultural, Geologic, Recreation, Scenic, Wildlife
Little Colorado River	3	AZ	Cultural, Geologic, Scenic
Black River, West Fork	10	AZ	Cultural, Other
Turkey Creek	3	AZ	Cultural, Recreation, Scenic
Kanab Creek	13	AZ	Fish
Leonard Canyon	24	AZ	Fish
Cienega Creek	28	AZ	Fish
Oak Creek	13	AZ	Fish, Geologic, Historic, Recreation, Scenic, Other
Cima (Winn Falls) Creek and Lower Cave Creek	3	AZ	Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Cima (Winn Falls) Creek and Lower Cave Creek	8	AZ	Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Clear Creek	11	AZ	Fish, Geologic, Recreation, Scenic
Boucher Creek	4	AZ	Fish, Geologic, Recreation, Scenic
Hermit Creek	6	AZ	Fish, Geologic, Recreation, Scenic
Kanab Creek	20	AZ	Fish, Geologic, Recreation, Scenic, Wildlife
San Francisco River, Lower	4	AZ	Fish, Geologic, Recreation, Scenic, Wildlife
San Francisco River, Lower	4	AZ	Fish, Geologic, Recreation, Scenic, Wildlife
Black River	11	AZ	Fish, Geologic, Recreation, Scenic, Wildlife, Other
Black River	1	AZ	Fish, Geologic, Recreation, Scenic, Wildlife, Other
Black River	7	AZ	Fish, Geologic, Recreation, Scenic, Wildlife, Other
Salt River	38	AZ	Fish, Geologic, Recreation, Scenic, Wildlife, Other
Chevelon Canyon	19	AZ	Fish, Geologic, Scenic, Other
Gila River	6	AZ	Fish, Geologic, Scenic, Wildlife
Gila River	12	AZ	Fish, Geologic, Scenic, Wildlife
Gila River	14	AZ	Fish, Geologic, Scenic, Wildlife
Santa Maria River	14	AZ	Fish, Geologic, Scenic, Wildlife
Santa Maria River	23	AZ	Fish, Geologic, Scenic, Wildlife
Tonto Creek	22	AZ	Fish, Geologic, Scenic, Wildlife, Other
Shinumo Creek	12	AZ	Fish, Historic
Home Creek	10	AZ	Fish, Historic, Other
Black River, West Fork	5	AZ	Fish, Historic, Recreation
Black River, West Fork	3	AZ	Fish, Historic, Recreation, Scenic
Black River, East Fork	13	AZ	Fish, Historic, Recreation, Scenic, Wildlife
Spring Creek	6	AZ	Fish, Other
Spring Creek	13	AZ	Fish, Other
Stone Creek	3	AZ	Fish, Other
Sycamore Creek	4	AZ	Fish, Recreation, Other
Aravaipa Creek	9	AZ	Fish, Recreation, Scenic, Wildlife
Bill Williams River	10	AZ	Fish, Recreation, Scenic, Wildlife
Little Colorado River, East Fork	11	AZ	Fish, Recreation, Scenic, Wildlife, Other
Bonita Creek	15	AZ	Fish, Recreation, Wildlife, Other
Sycamore Canyon	6	AZ	Fish, Recreation, Wildlife, Other
Barbershop Canyon	15	AZ	Fish, Scenic
Black River	96	AZ	Fish, Scenic
Clear Creek, East	38	AZ	Fish, Scenic
Little Colorado River	114	AZ	Fish, Scenic
Bear Wallow Creek	5	AZ	Fish, Scenic, Other
Big Sandy River	22	AZ	Fish, Scenic, Wildlife
Big Sandy River	7	AZ	Fish, Scenic, Wildlife
Cherry Creek	7	AZ	Fish, Scenic, Wildlife
Cherry Creek	15	AZ	Fish, Scenic, Wildlife
Francis Creek	8	AZ	Fish, Scenic, Wildlife
Blue River	7	AZ	Fish, Scenic, Wildlife, Other
Virgin River	6	AZ	Fish, Scenic, Wildlife, Other
Eagle Creek	34	AZ	Fish, Wildlife
Hot Springs Canyon	7	AZ	Fish, Wildlife
Swamp Springs Canyon	4	AZ	Fish, Wildlife
Bill Williams River	5	AZ	Fish, Wildlife
Chuar Creek	4	AZ	Geologic
Kwagunt Creek	9	AZ	Geologic
Nankoweap Creek	10	AZ	Geologic
Oak Creek, West Fork	11	AZ	Geologic, Historic, Recreation, Scenic, Wildlife, Other
Rucker Canyon	6	AZ	Geologic, Recreation, Scenic
Cave Creek, South Fork	7	AZ	Geologic, Recreation, Scenic, Wildlife, Other
Cave Creek, South Fork	1	AZ	Geologic, Recreation, Scenic, Wildlife, Other

Salt River	9	AZ	Geologic, Recreation, Scenic, Wildlife, Other
Salt River	15	AZ	Geologic, Recreation, Scenic, Wildlife, Other
Deer Creek	8	AZ	Geologic, Scenic
Tapeats Creek	11	AZ	Geologic, Scenic
Thunder Creek	1	AZ	Geologic, Scenic
Havasu Creek	3	AZ	Geologic, Scenic, Other
Virgin River	3	AZ	Geologic, Scenic, Other
Willow Creek	16	AZ	Geologic, Scenic, Wildlife, Other
Sabino Creek	12	AZ	Historic, Recreation, Scenic, Wildlife
Sabino Creek	4	AZ	Historic, Recreation, Scenic, Wildlife
Ash Creek	10	AZ	Historic, Scenic, Other
Verde River, Lower	9	AZ	Historic, Wildlife
Verde River	3	AZ	Historic, Wildlife
Verde River, Lower	1	AZ	Historic, Wildlife
Virgin River	18	AZ	Other
Virgin River	8	AZ	Other
Bill Williams River	12	AZ	Recreation, Scenic
Black River, East Fork	5	AZ	Recreation, Scenic
Tonto Creek	34	AZ	Recreation, Scenic
Agua Fria River	7	AZ	Recreation, Scenic, Wildlife
Agua Fria River	15	AZ	Recreation, Scenic, Wildlife
Chitty Creek	6	AZ	Recreation, Scenic, Wildlife
Hassayampa River	73	AZ	Recreation, Scenic, Wildlife
Little Colorado River, West Fork	3	AZ	Recreation, Scenic, Wildlife
Little Colorado River, West Fork	4	AZ	Recreation, Scenic, Wildlife
Little Colorado River, West Fork	3	AZ	Recreation, Scenic, Wildlife
Romero Canyon	8	AZ	Recreation, Scenic, Wildlife
Romero Canyon	2	AZ	Recreation, Scenic, Wildlife
Clear Creek, West	35	AZ	Recreation, Scenic, Wildlife, Other
Clear Creek, West	4	AZ	Recreation, Scenic, Wildlife, Other
Colorado River	32	AZ, CA	Recreation, Scenic, Wildlife, Other
Canada del Oro	7	AZ	Scenic
Canada del Oro	5	AZ	Scenic
Post Creek	3	AZ	Scenic
Redfield Canyon	10	AZ	Scenic
Sardine Creek	9	AZ	Scenic
Willow Springs Canyon	3	AZ	Scenic
KP Creek	13	AZ	Scenic
Gila River	94	AZ, NM	Scenic, Geologic, Fish, Wildlife, Cultural
Grant Creek	6	AZ	Scenic, Other
Verde River, East	19	AZ	Scenic, Other
Arnett Creek	3	AZ	Scenic, Other
Telegraph Creek	2	AZ	Scenic, Other
Crystal Creek	18	AZ	Scenic, Recreation, Geologic, Fish
Chevelon Canyon	51	AZ	Scenic, Wildlife
Salome Creek	20	AZ	Scenic, Wildlife
Eagle Creek	41	AZ	Scenic, Wildlife, Other
Parker Creek	9	AZ	Scenic, Wildlife, Other
Woods Canyon	5	AZ	Scenic, Wildlife, Other
Workman Creek	3	AZ	Scenic, Wildlife, Other
Workman Creek	7	AZ	Scenic, Wildlife, Other
Canyon Creek	5	AZ	Wildlife, Other
Tonto Creek	9	AZ	Wildlife, Other
Verde River, East	13	AZ	Wildlife, Other
Verde River, East	21	AZ	Wildlife, Other
Boles Creek	17	CA	Cultural
Willow Creek	16	CA	Cultural
Deer Creek	2	CA	Cultural, Fish
Salmon River, South Fork	8	CA	Cultural, Fish
Deer Creek	11	CA	Cultural, Fish, Geologic, Historic, Scenic
Salmon River, South Fork	11	CA	Cultural, Fish, Geologic, Scenic
Mill Creek	2	CA	Cultural, Fish, Geologic, Scenic, Wildlife, Other
Mill Creek	9	CA	Cultural, Fish, Geologic, Scenic, Wildlife, Other
Sacramento River	26	CA	Cultural, Fish, Historic, Other, Recreation, Scenic
Kings River	19	CA	Cultural, Fish, Historic, Recreation, Scenic
McCloud River	24	CA	Cultural, Fish, Historic, Scenic
Sulphur Creek	3	CA	Cultural, Fish, Historic, Scenic
Sulphur Creek, East Fork	3	CA	Cultural, Fish, Historic, Scenic
Mill Creek	0	CA	Cultural, Fish, Historic, Scenic
Stanislaus River, Middle Fork	5	CA	Cultural, Fish, Historic, Wildlife
Wooley Creek (Extension)	15	CA	Cultural, Fish, Recreation, Scenic, Other
Deer Creek	8	CA	Cultural, Fish, Scenic
Deer Creek	7	CA	Cultural, Fish, Scenic
Kern River, South Fork	17	CA	Cultural, Fish, Scenic, Other
Deer Creek	6	CA	Cultural, Fish, Scenic, Wildlife
Merced River, North Fork	13	CA	Cultural, Geologic, Historic, Other
Merced River, North Fork	7	CA	Cultural, Geologic, Historic, Other
San Joaquin River, North Fork	6	CA	Cultural, Geologic, Recreation, Wildlife
San Joaquin River, North Fork	4	CA	Cultural, Geologic, Scenic, Wildlife
Mokelumne River, North Fork	4	CA	Cultural, Historic
Mokelumne River, North Fork	14	CA	Cultural, Historic

Bourland Creek	12	CA	Cultural, Historic, Other
Clark Fork	9	CA	Cultural, Historic, Scenic
Bell Creek	8	CA	Cultural, Historic, Scenic, Other
Mill Creek	14	CA	Cultural, Historic, Scenic, Wildlife, Other
Walker River, East	8	CA	Cultural, Recreation, Scenic, Other
Tuolumne River, South Fork	15	CA	Cultural, Scenic
Tuolumne River, South Fork	12	CA	Cultural, Scenic
Whitewater River, North Fork	6	CA	Cultural, Scenic
Antelope Creek, South Fork	7	CA	Fish
Antelope Creek, North Fork	3	CA	Fish
Antelope Creek, North Fork	5	CA	Fish
Fall River	22	CA	Fish
Mattole River	72	CA	Fish
Rubicon River	10	CA	Fish
Rubicon River	12	CA	Fish
Rubicon River	9	CA	Fish
Virgin Creek	13	CA	Fish
Mill Creek	6	CA	Fish
Mill Creek	15	CA	Fish
Deep Creek	3	CA	Fish
San Joaquin River, Middle Fork	9	CA	Fish, Geologic
San Joaquin River, Middle Fork	10	CA	Fish, Geologic
San Joaquin River, Middle Fork	2	CA	Fish, Geologic
San Joaquin River, Middle Fork	5	CA	Fish, Geologic
Mokelumne River, North Fork	20	CA	Fish, Geologic, Recreation, Scenic
Sespe Creek	23	CA	Fish, Geologic, Recreation, Scenic, Wildlife
Sespe Creek	1	CA	Fish, Geologic, Recreation, Scenic, Wildlife
McCloud River	2	CA	Fish, Geologic, Scenic
McCloud River	18	CA	Fish, Geologic, Scenic
McCloud River	6	CA	Fish, Geologic, Scenic
San Joaquin River	15	CA	Fish, Geologic, Scenic
Hot Creek	2	CA	Fish, Geologic, Wildlife, Other
Klamath River, Upper	6	CA	Fish, Historic, Recreation, Scenic, Wildlife
Big River	42	CA	Fish, Historic, Recreation, Scenic, Wildlife
Virginia Creek	2	CA	Fish, Historic, Recreation, Scenic, Wildlife
Virginia Creek	1	CA	Fish, Historic, Recreation, Scenic, Wildlife
Battle Creek	35	CA	Fish, Historic, Recreation, Scenic, Wildlife, Other
Dog Creek	8	CA	Fish, Historic, Wildlife
Clavey River	6	CA	Fish, Other
McCloud River	7	CA	Fish, Recreation
Sacramento River	96	CA	Fish, Recreation
Carson River, East Fork	29	CA	Fish, Recreation, Scenic
Carson River, East Fork	8	CA	Fish, Recreation, Scenic
Carson River, East Fork	19	CA, NV	Fish, Recreation, Scenic
Fall River	5	CA	Fish, Recreation, Scenic
Gualala River, South Fork	37	CA	Fish, Recreation, Scenic
Rancheria Creek	37	CA	Fish, Recreation, Scenic
Walker River, West	55	CA, NV	Fish, Recreation, Scenic
Gualala River	3	CA	Fish, Recreation, Scenic
Navarro River	28	CA	Fish, Recreation, Scenic
Salmon River, North Fork (Extension)	9	CA	Fish, Recreation, Scenic, Other
Deep Creek	5	CA	Fish, Recreation, Scenic, Wildlife
Clavey River	17	CA	Fish, Recreation, Scenic, Wildlife, Other
Sacramento River	9	CA	Fish, Recreation, Scenic, Wildlife, Other
Sacramento River	4	CA	Fish, Recreation, Scenic, Wildlife, Other
Feather River	36	CA	Fish, Recreation, Wildlife, Other
Independence Creek	3	CA	Fish, Recreation, Wildlife, Other
Deer Creek	9	CA	Fish, Scenic
Gualala River, Wheatfield Fork	35	CA	Fish, Scenic
Olema Creek	8	CA	Fish, Scenic
Shasta River	3	CA	Fish, Scenic
Squaw Valley Creek	7	CA	Fish, Scenic
Squaw Valley Creek	5	CA	Fish, Scenic
Stanislaus River, North Fork	7	CA	Fish, Scenic
Trinity River, North Fork	13	CA	Fish, Scenic
Yuba River, Middle	28	CA	Fish, Scenic
Yuba River, Middle	14	CA	Fish, Scenic
Redwood Creek	42	CA	Fish, Scenic, Other
Lytle Creek, South Fork	5	CA	Fish, Scenic, Wildlife
Van Duzen River	26	CA	Fish, Scenic, Wildlife
Deep Creek	2	CA	Fish, Scenic, Wildlife, Other
Atastra Creek	3	CA	Fish, Wildlife
Big Sycamore River	10	CA	Fish, Wildlife
Green Creek	3	CA	Fish, Wildlife
Rough Creek	4	CA	Fish, Wildlife
Bear Creek	9	CA	Fish, Wildlife
Trinity River, South Fork	30	CA	Fish, Wildlife
Clavey River	8	CA	Fish, Wildlife, Other
George Creek	5	CA	Fish, Wildlife, Other
Butte Creek (Upper Segment)	11	CA	Geologic, Historic, Scenic
Deer Creek	8	CA	Geologic, Historic, Scenic, Wildlife

San Joaquin River, North Fork	8	CA	Geologic, Recreation
Rock Creek	2	CA	Geologic, Recreation, Other
Cottonwood Creek, South Fork	14	CA	Geologic, Recreation, Scenic
Stanislaus River, Middle Fork	13	CA	Geologic, Recreation, Scenic, Other
Stanislaus River, South Fork	14	CA	Geologic, Recreation, Scenic, Other
Cherry Creek	12	CA	Geologic, Scenic
Kaweah River, Marble Fork	15	CA	Geologic, Scenic
Kaweah River, Middle Fork	19	CA	Geologic, Scenic
Niagara Creek	2	CA	Geologic, Scenic
San Joaquin River, South Fork	3	CA	Geologic, Scenic
American River, South Fork	22	CA	Historic, Recreation
Yuba River, South	22	CA	Historic, Recreation, Scenic
Yuba River, South	7	CA	Historic, Recreation, Scenic
Yuba River, South	6	CA	Historic, Recreation, Scenic
Yuba River, South	7	CA	Historic, Recreation, Scenic
Lily Creek	12	CA	Other
Disaster Creek	5	CA	Other
Long Valley Creek	5	CA	Other
Eagle Creek	8	CA	Other
Santa Ana River	4	CA	Other
Tuolumne River, Middle Fork	18	CA	Other
Bear Creek	10	CA	Recreation
Big Chico Creek	35	CA	Recreation
Russian River	92	CA	Recreation
Eel River, Middle Fork	14	CA	Recreation, Fish, Wildlife, Cultural
Cosumnes River, Middle Fork	8	CA	Recreation, Other
Cosumnes River, Middle Fork	2	CA	Recreation, Other
Cosumnes River, Middle Fork	3	CA	Recreation, Other
Cosumnes River, Middle Fork	9	CA	Recreation, Other
Cosumnes River, Middle Fork	3	CA	Recreation, Other
Cosumnes River, North Fork	13	CA	Recreation, Other
Cosumnes River, North Fork	7	CA	Recreation, Other
Cosumnes River, North Fork	5	CA	Recreation, Other
Santa Ana River	14	CA	Recreation, Other
Santa Ana River, South Fork	6	CA	Recreation, Other
Cosumnes River, North Fork	25	CA	Recreation, Other
Cosumnes River, Middle Fork	20	CA	Recreation, Other
Deep Creek	1	CA	Recreation, Other
Cache Creek	29	CA	Recreation, Scenic
Clark Fork	10	CA	Recreation, Scenic
Clear Creek	5	CA	Recreation, Scenic
Cottonwood Creek, Middle Fork	9	CA	Recreation, Scenic
Cottonwood Creek, North Fork	11	CA	Recreation, Scenic
Beegum Creek	5	CA	Recreation, Scenic
Mokelumne River, North Fork	10	CA	Recreation, Scenic
San Joaquin River, South Fork	13	CA	Recreation, Scenic
Stanislaus River	2	CA	Recreation, Scenic
Stanislaus River, North Fork	8	CA	Recreation, Scenic
Tuolumne River, Middle Fork	14	CA	Recreation, Scenic
Walker River, West	11	CA	Recreation, Scenic
Walker River, West	12	CA	Recreation, Scenic
Walker River, West	15	CA	Recreation, Scenic
Kern River, Lower	21	CA	Recreation, Scenic, Wildlife
Piru Creek	13	CA	Recreation, Scenic, Wildlife
Stanislaus River, Middle Fork	12	CA	Recreation, Scenic, Wildlife
Stanislaus River, North Fork	19	CA	Recreation, Scenic, Wildlife, Other
Cosumnes River	53	CA	Recreation, Wildlife, Other
Cherry Creek, East Fork	15	CA	Scenic
Cherry Creek, North Fork	17	CA	Scenic
Cherry Creek, West Fork	18	CA	Scenic
Lytle Creek, Middle Fork	2	CA	Scenic
Buck Meadow Creek	8	CA	Scenic
Relief Creek	5	CA	Scenic
Stanislaus River, Middle Fork	3	CA	Scenic
Whitewater River, Middle Fork	3	CA	Scenic
Whitewater River, South Fork	11	CA	Scenic
Whitewater River, East Fork	4	CA	Scenic
Eel River, North Fork	1	CA	Scenic, Fish
Eel River, South Fork	4	CA	Scenic, Fish
Pacific Creek	5	CA	Scenic, Other
Paynes Creek	7	CA	Scenic, Other
Redwood Creek	19	CA	Scenic, Other
Summit Creek	8	CA	Scenic, Other
Tuolumne River, South Fork	2	CA	Scenic, Other
Pit River	59	CA	Scenic, Wildlife
Stanislaus River, Middle Fork	8	CA	Scenic, Wildlife
San Joaquin River, South Fork	2	CA	Scenic, Wildlife
San Joaquin River, South Fork	2	CA	Scenic, Wildlife
Yampa River	47	CO	Cultural, Fish, Geologic, Recreation, Scenic, Wildlife
Yampa River	84	CO	Cultural, Fish, Geologic, Recreation, Scenic, Wildlife
Purgatoire River	41	CO	Cultural, Fish, Geologic, Scenic, Wildlife

Purgatoire River	80	CO	Cultural, Fish, Geologic, Scenic, Wildlife
Arikaree River	51	CO,KS	Cultural, Fish, Historic, Wildlife
Dolores River	110	CO	Cultural, Geologic, Recreation, Scenic, Other
Rio Grande River	10	CO	Cultural, Geologic, Recreation, Scenic, Wildlife
Chacuaco Canyon	46	CO	Cultural, Geologic, Scenic, Wildlife
Rio Grande River	7	CO	Cultural, Recreation, Scenic, Wildlife
Huerfano River	9	CO	Cultural, Scenic
Animas River	48	CO	Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Colorado River	32	CO	Fish, Geologic, Recreation, Scenic
Badger Creek	34	CO	Fish, Geologic, Recreation, Scenic
Arkansas River	14	CO	Fish, Geologic, Recreation, Scenic, Wildlife
Arkansas River	20	CO	Fish, Geologic, Recreation, Scenic, Wildlife
Arkansas River	27	CO	Fish, Geologic, Recreation, Scenic, Wildlife
Arkansas River	33	CO	Fish, Geologic, Recreation, Scenic, Wildlife
Big Thompson River	16	CO	Fish, Geologic, Recreation, Scenic, Wildlife
Piedra River	32	CO	Fish, Geologic, Recreation, Scenic, Wildlife
South Platte River	6	CO	Fish, Geologic, Recreation, Scenic, Wildlife
South Platte River	11	CO	Fish, Geologic, Recreation, Scenic, Wildlife
South Platte River	10	CO	Fish, Geologic, Recreation, Scenic, Wildlife
Arkansas River	31	CO	Fish, Geologic, Recreation, Scenic, Wildlife
Conejos River, North Fork	4	CO	Fish, Geologic, Recreation, Scenic, Wildlife
Conejos River, Middle Fork	5	CO	Fish, Geologic, Recreation, Scenic, Wildlife
Conejos River, El Rito Azul Fork	5	CO	Fish, Geologic, Recreation, Scenic, Wildlife
Conejos River	6	CO	Fish, Geologic, Recreation, Scenic, Wildlife
Conejos River	15	CO	Fish, Geologic, Recreation, Scenic, Wildlife
Beaver Creek	14	CO	Fish, Geologic, Recreation, Scenic, Wildlife, Other
Taylor River	18	CO	Fish, Historic, Recreation, Scenic
Gunnison River, Lake Fork	1	CO	Fish, Historic, Recreation, Scenic, Wildlife
San Juan River, East Fork	10	CO	Fish, Historic, Recreation, Scenic, Wildlife
San Juan River, West Fork	11	CO	Fish, Historic, Recreation, Scenic, Wildlife
San Juan River	7	CO	Fish, Historic, Recreation, Scenic, Wildlife
Cache la Poudre, North Fork	32	CO	Fish, Historic, Scenic, Wildlife
East River	37	CO	Fish, Historic, Scenic, Wildlife
Big Thompson River, North Fork	8	CO	Fish, Recreation, Scenic
Elk River, North Fork	8	CO	Fish, Recreation, Scenic, Other
Elk River	3	CO	Fish, Recreation, Scenic, Other
Elk River, South Fork	14	CO	Fish, Recreation, Scenic, Other
Elk River, Middle Fork	4	CO	Fish, Recreation, Scenic, Other
White River, North Fork	29	CO	Fish, Recreation, Scenic, Wildlife
North St. Vrain Creek	10	CO	Fish, Recreation, Scenic, Wildlife
Curecanti Creek	1	CO	Fish, Scenic
Coal Creek	0	CO	Fish, Scenic, Wildlife
Encampment River, West Fork	8	CO	Fish, Wildlife, Other
North St. Vrain Creek	9	CO	Fish, Wildlife, Other
Encampment River	15	CO	Fish, Wildlife, Other
Rio Grande River	17	CO	Geologic, Historic, Scenic, Wildlife
Los Pinos River	22	CO	Geologic, Recreation, Scenic
White River, South Fork	39	CO	Geologic, Recreation, Scenic
Los Pinos River, Rincon La Vaca	5	CO	Geologic, Recreation, Scenic
Los Pinos River, North Fork	4	CO	Geologic, Recreation, Scenic
Gunnison River	14	CO	Geologic, Scenic, Other
Arkansas River	3	CO	Historic, Recreation
Crystal River	24	CO	Historic, Recreation, Scenic
Crystal River, South Fork	8	CO	Historic, Recreation, Scenic
Crystal River, North Fork	9	CO	Historic, Recreation, Scenic
Colorado River	23	CO	Historic, Recreation, Scenic, Wildlife
Fall River	8	CO	Recreation, Scenic, Wildlife
Blue Creek	2	CO	Scenic
Gunnison River, Lake Fork	14	CO	Scenic
West Elk Creek	0	CO	Scenic, Wildlife
Bigelow Brook	10	CT	Fish, Geologic, Other
Mount Hope River	16	CT	Fish, Geologic, Other
Natchaug River	11	CT	Fish, Geologic, Other
Blackledge River	16	CT	Fish, Geologic, Recreation
Farmington River	7	CT	Fish, Geologic, Recreation
Jeremy River	8	CT	Fish, Geologic, Recreation
Salmon River	10	CT	Fish, Geologic, Recreation
Connecticut River	9	CT	Fish, Geologic, Scenic, Wildlife, Other
Eight Mile River	3	CT	Fish, Geologic, Scenic, Wildlife, Other
Lord Creek	3	CT	Fish, Geologic, Scenic, Wildlife, Other
Selden Creek	2	CT	Fish, Geologic, Scenic, Wildlife, Other
Quinebaugh River	11	CT	Fish, Historic, Scenic
Connecticut River	7	CT	Fish, Recreation, Other
Bantam River	6	CT	Historic
Rock Creek	6	DC	Historic, Recreation
Appoquinimink River	15	DE	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Augustine Creek	5	DE	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Blackbird Creek	17	DE	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Broadkill River	13	DE	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Cedar Creek	16	DE	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Cedar Swamp	4	DE	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other

Little River	8	DE	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Mispillion River	11	DE	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Murderkill River	14	DE	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Smyrna River	7	DE	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Duck Creek	4	DE	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
St. Georges Creek	2	DE	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
St. Jones River	11	DE	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Baker Mill Branch	2	DE	Historic, Other
Broad Creek	7	DE	Historic, Other
Cow Marsh Creek	7	DE	Historic, Other
Deep Creek	13	DE	Historic, Other
Gravelly Branch	14	DE	Historic, Other
Gum Branch	3	DE	Historic, Other
Layton-Vaughn Ditch	5	DE	Historic, Other
Mifflin Ditch	6	DE	Historic, Other
New Ditch	2	DE	Historic, Other
McColleys Branch	2	DE	Historic, Other
Rum Bridge Branch	3	DE	Historic, Other
Toms Dam Branch	8	DE	Historic, Other
Tubbs Branch	1	DE	Historic, Other
Tyndall Branch	1	DE	Historic, Other
Duck Creek	14	DE	Historic, Wildlife, Other
Herring Branch	4	DE	Historic, Wildlife, Other
Hitch Pond Branch	2	DE	Historic, Wildlife, Other
James Branch	3	DE	Historic, Wildlife, Other
Leipsic River	14	DE	Historic, Wildlife, Other
Mahon River	2	DE	Historic, Wildlife, Other
Old Womans Gut	2	DE	Historic, Wildlife, Other
Muddy Branch	7	DE	Historic, Wildlife, Other
Green Creek	5	DE	Historic, Wildlife, Other
Simons River	2	DE	Historic, Wildlife, Other
Ochlockonee River	65	FL	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Peace River	94	FL	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Santa Fe River	80	FL	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
St. Marks River	39	FL	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Wacissa River	13	FL	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Wakulla River	10	FL	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Withlacoochee River	12	FL	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Conecuh River	1	FL	Cultural, Fish, Historic, Recreation, Scenic
Escambia River	56	FL	Cultural, Fish, Historic, Recreation, Scenic
Black Creek, South Fork	11	FL	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Black Creek	13	FL	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Econlockhatchee River	44	FL	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Estero River	4	FL	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
St. Johns River	44	FL	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Tomoka River	11	FL	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Shell Creek	18	FL	Cultural, Historic, Recreation, Scenic
Apalachicola River	109	FL	Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Aucilla River	62	FL	Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Alafia River	25	FL	Fish, Geologic, Recreation, Scenic, Wildlife
Alapaha River	23	FL	Fish, Geologic, Recreation, Scenic, Wildlife
Cowarts Creek	8	FL	Fish, Geologic, Recreation, Scenic, Wildlife
Chipola River	93	FL	Fish, Geologic, Recreation, Scenic, Wildlife
Choctawhatchee River	92	FL	Fish, Geologic, Recreation, Scenic, Wildlife
Econfina Creek	37	FL	Fish, Geologic, Recreation, Scenic, Wildlife
Hillsborough River	37	FL	Fish, Geologic, Recreation, Scenic, Wildlife
Holmes Creek	26	FL	Fish, Geologic, Recreation, Scenic, Wildlife
Myakka River	41	FL	Fish, Geologic, Recreation, Scenic, Wildlife
Withlacoochee River	28	FL	Fish, Geologic, Recreation, Scenic, Wildlife
Withlacoochee River	118	FL	Fish, Geologic, Recreation, Scenic, Wildlife
Arbuckle Creek	25	FL	Fish, Historic, Recreation, Scenic, Wildlife
Blackwater River	49	FL	Fish, Recreation, Scenic, Wildlife
Boiling Creek	5	FL	Fish, Recreation, Scenic, Wildlife
Holley Creek	4	FL	Fish, Recreation, Scenic, Wildlife
Chassahowitzka River	6	FL	Fish, Recreation, Scenic, Wildlife
Econfina River	28	FL	Fish, Recreation, Scenic, Wildlife
Fisheating Creek	55	FL	Fish, Recreation, Scenic, Wildlife
Hendry Creek	5	FL	Fish, Recreation, Scenic, Wildlife
Ochlockonee River	35	FL	Fish, Recreation, Scenic, Wildlife
Ocklawaha River	27	FL	Fish, Recreation, Scenic, Wildlife
Silver River	6	FL	Fish, Recreation, Scenic, Wildlife
Ocklawaha River	11	FL	Fish, Recreation, Scenic, Wildlife
Perdido River	63	FL,AL	Fish, Recreation, Scenic, Wildlife
St. Sebastian River, South Prong	10	FL	Fish, Recreation, Scenic, Wildlife
St. Sebastian River	3	FL	Fish, Recreation, Scenic, Wildlife
Caney Creek	9	FL	Fish, Recreation, Scenic, Wildlife
Big Swamp Creek	5	FL	Fish, Recreation, Scenic, Wildlife
Shoal River	44	FL	Fish, Recreation, Scenic, Wildlife
Orange River	9	FL	Fish, Recreation, Scenic, Wildlife
St. Lucie, North Fork	20	FL	Fish, Recreation, Scenic, Wildlife
St. Lucie, South Fork	7	FL	Fish, Recreation, Scenic, Wildlife

Waccasassa River	26	FL	Fish, Recreation, Scenic, Wildlife
Yellow River	68	FL	Fish, Recreation, Scenic, Wildlife
Big Coldwater Creek, East Fork	2	FL	Fish, Recreation, Wildlife
Big Coldwater Creek	8	FL	Fish, Recreation, Wildlife
New River	3	FL	Recreation, Scenic, Other
New River	6	FL	Recreation, Scenic, Other
New River	11	FL	Recreation, Scenic, Other
New River	26	FL	Recreation, Scenic, Other
Sopchoppy River, East Branch	6	FL	Recreation, Scenic, Other
Sopchoppy River, West Branch	8	FL	Recreation, Scenic, Other
Sopchoppy River	14	FL	Recreation, Scenic, Other
Sopchoppy River	17	FL	Recreation, Scenic, Other
Sopchoppy River	8	FL	Recreation, Scenic, Other
Alcovy River	63	GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Altamaha River	134	GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Amicalola Creek	30	GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Aucilla River	14	GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Canoochee River	104	GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Chattahoochee River	46	GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Blood Mountain Creek	3	GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Dicks Creek	7	GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Chestatee River	33	GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Conasauga River	80	GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Coosawattee River	13	GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Etowah River	138	GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Flint River	165	GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Middle Oconee River	16	GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Ochlockonee River	66	GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Ocmulgee River	242	GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Oconee River	148	GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Ohoopee River	119	GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Satilla River	246	GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Sope Creek	7	GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
St. Marys River, North Prong	9	GA, FL	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
St. Marys River	122	GA, FL	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Brier Creek	108	GA	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Sweetwater Creek	36	GA	Cultural, Geologic, Historic, Recreation, Scenic
Talking Rock Creek	22	GA	Cultural, Geologic, Historic, Recreation, Scenic
Oostanaula River	47	GA	Cultural, Historic, Recreation, Scenic
Cedar Creek	22	GA	Fish, Geologic, Recreation, Scenic
Big Cedar Creek	12	GA	Fish, Geologic, Recreation, Scenic
Towaliga River	20	GA	Fish, Geologic, Recreation, Scenic
Alapaha River	164	GA	Fish, Geologic, Recreation, Scenic, Wildlife
Apalachee River	64	GA	Fish, Geologic, Recreation, Scenic, Wildlife
Broad River, Middle Fork	42	GA	Fish, Geologic, Recreation, Scenic, Wildlife
Broad River	51	GA	Fish, Geologic, Recreation, Scenic, Wildlife
Flat Shoal Creek	43	GA	Fish, Geologic, Recreation, Scenic, Wildlife
Flint River	103	GA	Fish, Geologic, Recreation, Scenic, Wildlife
Ichawaynochaway Creek	84	GA	Fish, Geologic, Recreation, Scenic, Wildlife
Jacks River	19	GA, TN	Fish, Geologic, Recreation, Scenic, Wildlife
Kinchafoonee Creek	85	GA	Fish, Geologic, Recreation, Scenic, Wildlife
Muckalee Creek	48	GA	Fish, Geologic, Recreation, Scenic, Wildlife
North Oconee River	18	GA	Fish, Geologic, Recreation, Scenic, Wildlife
Spring Creek	37	GA	Fish, Geologic, Recreation, Scenic, Wildlife
Withlacoochee River	87	GA, FL	Fish, Geologic, Recreation, Scenic, Wildlife
Ebenezer Creek	17	GA	Fish, Recreation, Scenic, Wildlife
Little Ohoopee River	24	GA	Fish, Recreation, Scenic, Wildlife
Murder Creek	36	GA	Fish, Recreation, Scenic, Wildlife
Anderson Creek	13	GA	Geologic, Recreation, Scenic
Tickanetley Creek	5	GA	Geologic, Recreation, Scenic
Cartecay River	19	GA	Geologic, Recreation, Scenic
South River	33	GA	Geologic, Recreation, Scenic
South Chickamauga Creek	15	GA	Historic, Recreation, Scenic, Wildlife
Kahakuloa Stream	6	HI	Cultural, Fish
Hanalei River	16	HI	Cultural, Fish, Scenic, Wildlife, Other
Kalihiwai River	11	HI	Fish
Kaiwilahilahi Stream	7	HI	Fish
Kaawalii Stream	7	HI	Fish
Honomu Stream	8	HI	Fish
Honolewa Stream	2	HI	Fish
Kapehu Stream	8	HI	Fish
Kapia Stream	6	HI	Fish
Manoloa Stream	5	HI	Fish
Ninole Stream	6	HI	Fish
Paheehee Stream	7	HI	Fish
Paukauila System	3	HI	Fish
Pelekunu Stream	2	HI	Fish
Hanakoa Stream	2	HI	Fish
Opea Stream	4	HI	Fish
Hanakapiai Stream	5	HI	Fish, Recreation, Scenic
Koloa Gulch	3	HI	Fish, Scenic

Limahuli Stream	3	HI	Fish, Scenic
Honolii Stream	32	HI	Fish, Scenic
Waikolu Stream	5	HI	Fish, Scenic, Wildlife
Wailau Stream	3	HI	Fish, Scenic, Wildlife
Waimanu Stream	4	HI	Fish, Scenic, Wildlife, Other
Kahana Stream	6	HI	Historic, Scenic, Other
Palikea Stream Including Pipiwai Stream and Oheo Gulch	8	HI	Recreation, Scenic
Wailuku River	28	HI	Recreation, Scenic
Kaluanui Stream	5	HI	Recreation, Scenic, Wildlife
Halawa Stream	7	HI	Scenic
Kalalau Stream	3	HI	Scenic
Kawainui Stream (Papalaua Valley)	3	HI	Scenic
Koaie Stream	10	HI	Scenic
Kolekole Stream	12	HI	Scenic
Nualolo Aina Stream	4	HI	Scenic
Waialae Stream	9	HI	Scenic
Lumahai River	10	HI	Scenic, Other
Hanawi Stream	10	HI	Scenic, Wildlife
Turkey River	134	IA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Other
Maquoketa River	81	IA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Yellow River	32	IA	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Cedar River	31	IA	Cultural, Fish, Wildlife
Yellow River	4	IA	Cultural, Geologic, Historic, Recreation, Scenic, Wildlife
Wapsipinicon River	215	IA	Fish, Geologic, Historic, Scenic, Wildlife
Boone River	26	IA	Fish, Recreation, Scenic, Wildlife
Middle Raccoon River	17	IA	Fish, Recreation, Scenic, Wildlife
Upper Iowa River	73	IA	Scenic, Recreation, Geologic, Fish, Wildlife
White Bird Creek	6	ID	Cultural, Fish, Geologic
Yankee Fork	2	ID	Cultural, Fish, Geologic, Historic, Recreation
Boise River, South Fork	4	ID	Fish
Boise River, South Fork	12	ID	Fish
Coeur d' Alene River, North Fork	37	ID	Fish
Pack River	16	ID	Fish
Salmon River	167	ID	Fish
Salmon River, East Fork	10	ID	Fish
Snake River	29	ID	Fish, Geologic
Slate Creek	16	ID	Fish, Geologic, Historic
Slate Creek	6	ID	Fish, Geologic, Historic
Yankee Fork	7	ID	Fish, Geologic, Historic, Recreation
Yankee Fork	7	ID	Fish, Geologic, Historic, Recreation
Salmon River	112	ID	Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Lake Creek	10	ID	Fish, Geologic, Historic, Recreation, Wildlife, Other
Lake Creek	4	ID	Fish, Geologic, Historic, Recreation, Wildlife, Other
Snake River	63	ID	Fish, Geologic, Recreation, Scenic, Wildlife
Clearwater River, South Fork	63	ID	Fish, Geologic, Recreation, Scenic, Wildlife
Henrys Fork	36	ID	Fish, Geologic, Recreation, Wildlife
Henrys Fork	26	ID	Fish, Geologic, Recreation, Wildlife
Meadow Creek	1	ID	Fish, Geologic, Recreation, Wildlife, Other
Big Creek	2	ID	Fish, Geologic, Scenic
Big Creek	34	ID	Fish, Geologic, Scenic
French Creek	25	ID	Fish, Geologic, Scenic
Monumental Creek	18	ID	Fish, Geologic, Scenic
Monumental Creek	8	ID	Fish, Geologic, Scenic
Salmon River, South Fork	57	ID	Fish, Geologic, Scenic
Salmon River, South Fork	13	ID	Fish, Geologic, Scenic
Salmon River, South Fork	20	ID	Fish, Geologic, Scenic
Big Creek	11	ID	Fish, Geologic, Scenic
Three Links Complex	26	ID	Fish, Geologic, Scenic, Other
Moose Creek Complex	148	ID	Fish, Geologic, Scenic, Wildlife, Other
Running Creek	14	ID	Fish, Geologic, Wildlife
Running Creek	7	ID	Fish, Geologic, Wildlife
Meadow Creek	43	ID	Fish, Geologic, Wildlife, Other
Deadwood River	22	ID	Fish, Recreation, Scenic
Kelly Creek	15	ID	Fish, Recreation, Scenic
Kelly Creek	11	ID	Fish, Recreation, Scenic
Marsh Creek	4	ID	Fish, Recreation, Scenic
Marsh Creek	10	ID	Fish, Recreation, Scenic
Payette River	8	ID	Fish, Recreation, Scenic
Payette River, North Fork	23	ID	Fish, Recreation, Scenic
Salmon River, East Fork	27	ID	Fish, Recreation, Scenic
Secesh River	29	ID	Fish, Recreation, Scenic
White Sand Creek	8	ID	Fish, Recreation, Scenic
White Sand Creek	5	ID	Fish, Recreation, Scenic
Payette, North Fork	41	ID	Fish, Recreation, Scenic
Camas Creek	11	ID	Fish, Recreation, Scenic, Wildlife
Camas Creek	6	ID	Fish, Recreation, Scenic, Wildlife
Johns Creek	20	ID	Fish, Recreation, Scenic, Wildlife
Cayuse Creek	36	ID	Fish, Recreation, Scenic, Wildlife
Priest River	20	ID	Fish, Recreation, Scenic, Wildlife
Clearwater River, North Fork	66	ID	Fish, Recreation, Scenic, Wildlife, Other
Bear Valley Creek	4	ID	Fish, Recreation, Wildlife

Bear Valley Creek	5	ID	Fish, Recreation, Wildlife
Clearwater River, Little North Fork	26	ID	Fish, Recreation, Wildlife, Other
Clearwater River, Little North Fork	11	ID	Fish, Recreation, Wildlife, Other
Fish Creek	5	ID	Fish, Recreation, Wildlife, Other
Hungery Creek	14	ID	Fish, Recreation, Wildlife, Other
Boise River, North Fork	50	ID	Fish, Scenic
Boise River, South Fork	13	ID	Fish, Scenic
Blackfoot River	37	ID	Fish, Scenic
Boise River	11	ID	Fish, Scenic
Warm River	8	ID	Geologic, Historic, Recreation, Scenic, Wildlife
Snake River	11	ID	Geologic, Historic, Recreation, Wildlife, Other
Payette River, South Fork	10	ID	Geologic, Recreation, Scenic
Payette River, South Fork	14	ID	Geologic, Recreation, Scenic
Payette River, South Fork	22	ID	Geologic, Recreation, Scenic
Payette River, South Fork	11	ID	Geologic, Recreation, Scenic
Pahsimeroi River, East Fork	7	ID	Geologic, Scenic
Gedney Creek, West Fork	5	ID	Geologic, Scenic, Other
Clearwater River, North Fork	16	ID	Recreation, Fish
Deadwood River	2	ID	Recreation, Scenic
Deadwood River	13	ID	Recreation, Scenic
Deadwood River	9	ID	Recreation, Scenic
Hayden Creek	6	ID	Recreation, Scenic
Hayden Creek	6	ID	Recreation, Scenic
Payette River, South Fork	5	ID	Recreation, Scenic
Bargamin Creek	16	ID	Recreation, Scenic, Other
Bargamin Creek	10	ID	Recreation, Scenic, Other
Falls River	12	ID	Recreation, Scenic, Wildlife
Panther Creek	48	ID	Recreation, Scenic, Wildlife
Bear Creek	23	ID	Scenic, Geologic, Fish, Other
Crow Creek	5	ID	Scenic, Geologic, Fish, Other
Cub Creek	17	ID	Scenic, Geologic, Fish, Other
Paradise Creek	14	ID	Scenic, Geologic, Fish, Other
Spruce Creek	6	ID	Scenic, Geologic, Fish, Other
Granite Creek	7	ID	Scenic, Geologic, Fish, Other
Wahoo Creek	10	ID	Scenic, Geologic, Fish, Other
Big Creek		ID	Scenic, Geologic, Fish, Other
Eben Creek	3	ID	Scenic, Geologic, Fish, Other
Squaw Creek	5	ID	Scenic, Geologic, Fish, Other
Gardiner Fork	3	ID	Scenic, Geologic, Fish, Other
Brushy Fork Creek	8	ID	Scenic, Geologic, Fish, Other
Long Canyon Creek	15	ID	Wildlife, Other
Big Creek	10	IL	Cultural, Fish, Geologic, Other
Lusk Creek	6	IL	Cultural, Fish, Recreation, Scenic, Wildlife, Other
Big Muddy River	28	IL	Cultural, Geologic, Recreation, Scenic, Wildlife
Hutchins Creek	4	IL	Cultural, Geologic, Recreation, Wildlife
Big Bureau Creek	5	IL	Fish, Other
Buck Creek	16	IL	Fish, Other
Goose Creek	20	IL	Fish, Other
Henline Creek	18	IL	Fish, Other
Johnny Run	30	IL	Fish, Other
Jordan Creek	12	IL	Fish, Other
Kishwaukee River	31	IL	Fish, Other
LaMoine River	15	IL	Fish, Other
Little Vermillion River	28	IL	Fish, Other
Mackinaw River	65	IL	Fish, Other
Manhattan Creek	8	IL	Fish, Other
Mazon River	10	IL	Fish, Other
Otter Creek	22	IL	Fish, Other
Panther Creek	27	IL	Fish, Other
Piscasaw Creek	9	IL	Fish, Other
Ramsey Creek	16	IL	Fish, Other
Riley Creek	15	IL	Fish, Other
Rush Creek	16	IL	Fish, Other
Spoon River	14	IL	Fish, Other
Sugar River	5	IL	Fish, Other
Ten Mile Creek	19	IL	Fish, Other
Vermilion River	16	IL	Fish, Other
Vermillion River, Middle Fork	4	IL	Fish, Other
Crabapple Creek	6	IL	Fish, Other
Walnut Creek	25	IL	Fish, Other
West Branch Little Wabash River	12	IL	Fish, Other
West Okaw River	19	IL	Fish, Other
Hadley Creek	21	IL	Fish, Other
Big Creek	2	IL	Fish, Recreation, Other
Big Grand Pierre Creek	16	IL	Fish, Recreation, Scenic, Wildlife
Embarras River	74	IL	Fish, Recreation, Scenic, Wildlife
Mazon River	19	IL	Geologic, Recreation
Apple River	50	IL	Geologic, Recreation, Scenic
Fox River	29	IL	Geologic, Recreation, Scenic
Ohio River	129	IL, KY	Geologic, Recreation, Scenic
Vermilion River	45	IL	Geologic, Recreation, Scenic

Bay Creek	40	IL	Geologic, Recreation, Scenic
Lusk Creek	26	IL	Geologic, Recreation, Scenic, Wildlife, Other
Drummer Creek	18	IL	Other
Eagle Creek	11	IL	Other
Fox River	41	IL, WI	Recreation
Kankakee River	21	IL	Recreation
Kaskaskia River	47	IL	Recreation
Little Muddy River	25	IL	Recreation
Mackinaw River	65	IL	Recreation
Plum Creek	16	IL, IN	Recreation
Rock River	90	IL	Recreation
Spring Creek	33	IL	Recreation
Illinois River	21	IL	Recreation
Cache River	36	IL	Recreation, Scenic
Cache River	31	IL	Recreation, Scenic
Des Plaines River	55	IL	Recreation, Scenic
Embarras River	38	IL	Recreation, Scenic
Big Muddy River	8	IL	Recreation, Scenic
Kishwaukee River	17	IL	Recreation, Scenic
Little Wabash River	32	IL	Recreation, Scenic
Little Wabash River	70	IL	Recreation, Scenic
McKee Creek	31	IL	Recreation, Scenic
Pecatonica River	79	IL	Recreation, Scenic
Sangamon River	183	IL	Recreation, Scenic
Spoon River	147	IL	Recreation, Scenic
Sugar Creek	36	IL	Recreation, Scenic
Vermilion River, Middle Fork	27	IL	Recreation, Scenic
Vermilion River, Salt Fork	38	IL	Recreation, Scenic
Big Creek	1	IL	Recreation, Scenic
Kaskaskia River	49	IL	Recreation, Scenic, Wildlife
Beaucoup Creek	33	IL	Scenic
Beaver Creek	23	IL	Scenic
Big Indian Creek	23	IL	Scenic
Big Muddy River	52	Il	Scenic
Shoal Creek	13	IL	Scenic
Crooked Creek	33	IL	Scenic, Wildlife
Miller Creek	8	IL	Wildlife, Other
White River, East Fork	53	IN	Fish, Geologic, Historic, Recreation, Scenic
White River, West Fork	248	IN	Fish, Historic, Wildlife, Other
Wabash River	55	IN, IL	Fish, Recreation
Wabash River	153	IN, IL	Fish, Recreation
Muscatatuck River	54	IN	Fish, Recreation, Scenic, Wildlife
Big Blue River	51	IN	Fish, Recreation, Wildlife
Tippecanoe River	153	IN	Fish, Recreation, Wildlife
Lost River	88	IN	Geologic, Historic, Other
Big Pine Creek	20	IN	Geologic, Recreation, Scenic
Big Walnut Creek	27	IN	Geologic, Recreation, Scenic
Sugar Creek	43	IN	Geologic, Recreation, Scenic
Mud Pine Creek	9	IN	Geologic, Recreation, Scenic
Little Blue River	37	IN	Geologic, Recreation, Scenic, Other
Blue River	47	IN	Recreation, Scenic
Laughery Creek	81	IN	Recreation, Scenic
Kansas River	57	KS	Cultural, Fish, Recreation, Scenic, Wildlife
Cimarron River	149	KS	Cultural, Historic
Caney River	62	KS	Fish, Geologic, Historic, Recreation, Scenic
Cottonwood River, South Fork	26	KS	Fish, Geologic, Recreation, Scenic, Wildlife
Fall River	59	KS	Fish, Geologic, Recreation, Scenic, Wildlife
Grouse Creek	64	KS	Fish, Geologic, Recreation, Scenic, Wildlife
Mill Creek, West Branch	29	KS	Fish, Geologic, Recreation, Scenic, Wildlife
Mill Creek, East Branch	15	KS	Fish, Geologic, Recreation, Scenic, Wildlife
Mill Creek, South Branch	7	KS	Fish, Geologic, Recreation, Scenic, Wildlife
Mill Creek	36	KS	Fish, Geologic, Recreation, Scenic, Wildlife
Saline River	48	KS	Fish, Geologic, Recreation, Scenic, Wildlife
Chikaskia River	53	KS, OK	Fish, Historic, Recreation, Scenic, Wildlife
Otter Creek, North Branch	15	KS	Fish, Recreation, Scenic
Otter Creek	14	KS	Fish, Recreation, Scenic
Lyon Creek	35	KS	Fish, Recreation, Scenic, Wildlife
Cedar Creek	16	KS	Geologic, Recreation, Scenic
Middle Creek	9	KS	Geologic, Recreation, Scenic
Cimarron River	97	KS, OK	Historic
Medicine (Lodge) River	22	KS	Historic, Recreation, Scenic, Wildlife
Medicine (Lodge) River	60	KS	Recreation, Scenic, Wildlife
Cumberland River, Big South Fork	15	KY	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Cumberland River, Martins Fork	10	KY	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Green River	100	KY	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Harrods Creek	23	KY	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
South Fork Harrods Creek	5	KY	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Licking River	112	KY	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Red River	30	KY	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Rockcastle River	31	KY	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Shillalah Creek	5	KY	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife

Tygarts Creek	24	KY	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Red River	12	KY	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Red River	56	KY	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Stoner Creek	73	KY	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Red River	9	KY	Cultural, Geologic, Scenic, Other
Boone Creek	18	KY	Fish, Geologic, Recreation, Scenic
Salt River, Floyds Fork	46	KY	Fish, Geologic, Recreation, Scenic
Buck Creek	53	KY	Fish, Geologic, Recreation, Scenic, Wildlife
Cumberland River	29	KY	Fish, Geologic, Recreation, Scenic, Wildlife
Cumberland River	76	KY	Fish, Geologic, Recreation, Scenic, Wildlife
Cumberland River	29	KY	Fish, Geologic, Recreation, Scenic, Wildlife
Gasper River	39	KY	Fish, Geologic, Recreation, Scenic, Wildlife
Little River	12	KY	Fish, Geologic, Recreation, Scenic, Wildlife
Nolin River	8	KY	Fish, Geologic, Recreation, Scenic, Wildlife
Otter Creek	17	KY	Fish, Geologic, Recreation, Scenic, Wildlife
Red River, Elk Fork	19	KY	Fish, Geologic, Recreation, Scenic, Wildlife
Red River, West Fork	34	KY	Fish, Geologic, Recreation, Scenic, Wildlife
Russell Fork	17	KY	Fish, Geologic, Recreation, Scenic, Wildlife
Sinking Creek	36	KY	Fish, Geologic, Recreation, Scenic, Wildlife
War Fork	13	KY	Fish, Geologic, Recreation, Scenic, Wildlife
Station Camp Creek	7	KY	Fish, Geologic, Recreation, Scenic, Wildlife
Bad Branch	3	KY	Fish, Geologic, Recreation, Scenic, Wildlife, Other
Horse Lick Creek	21	KY	Fish, Geologic, Recreation, Scenic, Wildlife, Other
Jessamine Creek	14	KY	Fish, Geologic, Scenic, Wildlife, Other
Barren River	46	KY	Fish, Recreation, Scenic
Barren River	34	KY	Fish, Recreation, Scenic
Eagle Creek	54	KY	Fish, Recreation, Scenic
North Elkhorn Creek	51	KY	Fish, Recreation, Scenic, Wildlife
Elkhorn Creek	18	KY	Fish, Recreation, Scenic, Wildlife
Kinniconick Creek	46	KY	Fish, Recreation, Scenic, Wildlife
Licking River, South Fork	61	KY	Fish, Recreation, Scenic, Wildlife
Little River, Muddy Fork	7	KY	Fish, Recreation, Scenic, Wildlife
Red River, South Fork	8	KY	Fish, Recreation, Scenic, Wildlife
Salt River	47	KY	Fish, Recreation, Scenic, Wildlife
Beaver Creek	7	KY	Fish, Recreation, Scenic, Wildlife, Other
Kentucky River, South Fork	44	KY	Recreation
Rock Creek	18	KY	Recreation, Other
Station Camp Creek, South Fork	27	KY	Recreation, Scenic
Cumberland River, Little South Fork	44	KY	Recreation, Wildlife
Marsh Creek	15	KY	Recreation, Wildlife
Bayou DeLoutre	56	LA	Fish, Geologic, Recreation, Scenic
Bayou D'Arbonne	28	LA	Fish, Historic, Recreation, Scenic, Wildlife
Calcasieu River	123	LA	Fish, Historic, Recreation, Scenic, Wildlife
Corney Bayou	26	LA	Fish, Historic, Recreation, Scenic, Wildlife
Bogue Chitto River	51	LA	Fish, Recreation, Scenic, Wildlife
Spring Creek	37	LA	Fish, Recreation, Scenic, Wildlife
Whisky Chitto Creek	71	LA	Fish, Recreation, Scenic, Wildlife
Kisatchie Bayou	53	LA	Geologic, Recreation, Scenic, Wildlife
Bayou D'Arbonne	41	LA	Recreation, Scenic, Wildlife
Pearl River	151	LA, MS	Recreation, Scenic, Wildlife
Millers River	8	MA	Cultural
Nashua River	8	MA	Fish
Konkapot River	4	MA	Fish
Housatonic River	18	MA	Fish, Geologic
North River	9	MA	Fish, Geologic, Historic, Other
Farmington River, West Branch	14	MA	Fish, Geologic, Recreation
Deerfield River	11	MA	Fish, Historic
Deerfield River	6	MA	Fish, Other
Mashpee River	2	MA	Fish, Other
Nashua River	6	MA, NH	Geologic
Ashley Hill Brook	1	MA	Geologic, Scenic
Bash Bish Brook	2	MA	Geologic, Scenic
Ipswich River	17	MA	Historic
Millers River	8	MA	Historic
Bog Brook	1	MA	Other
Cold River	14	MA	Other
Connecticut River	14	MA	Other
Gulf Brook	4	MA	Other
Pamet River	4	MA	Other
Charles River	15	MA	Recreation, Other
Parker River	9	MA	Recreation, Wildlife, Other
Plum Island River	2	MA	Recreation, Wildlife, Other
Scantic River	6	MA, CT	Wildlife
South River	6	MA	Wildlife
Conococheague Creek	13	MD	Cultural
Little Gunpowder Falls	22	MD	Cultural
Potomac River	107	MD, VA	Cultural, Fish, Geologic, Historic, Recreation, Scenic
Patapsco River	6	MD	Cultural, Recreation
Patapsco River, South Branch	6	MD	Cultural, Recreation
Deer Creek	54	MD, PA	Fish, Geologic, Other
Susquehanna River	4	MD	Fish, Geologic, Other

Mattawoman Creek	8	MD	Fish, Recreation, Other
Youghiogheny River	19	MD	Fish, Recreation, Scenic, Other
Tred Avon River	13	MD	Fish, Recreation, Wildlife
Nanticoke River	52	MD, DE	Fish, Recreation, Wildlife, Other
Battle Creek	5	MD	Fish, Recreation, Wildlife, Other
Big Annemessex River	9	MD	Fish, Recreation, Wildlife, Other
Blackwater River	26	MD	Fish, Recreation, Wildlife, Other
Chester River	28	MD	Fish, Recreation, Wildlife, Other
Chicamacomico River	15	MD	Fish, Recreation, Wildlife, Other
Choptank River	46	MD	Fish, Recreation, Wildlife, Other
Little Choptank River	7	MD	Fish, Recreation, Wildlife, Other
Marshyhope Creek	16	MD	Fish, Recreation, Wildlife, Other
Patuxent River	21	MD	Fish, Recreation, Wildlife, Other
Pocomoke River	16	MD, VA	Fish, Recreation, Wildlife, Other
Sassafras River	22	MD, DE	Fish, Recreation, Wildlife, Other
Transquaking River	15	MD	Fish, Recreation, Wildlife, Other
Mason Branch	14	MD	Fish, Recreation, Wildlife, Other
Tuckahoe Creek	21	MD	Fish, Recreation, Wildlife, Other
Wicomico Creek	7	MD	Fish, Recreation, Wildlife, Other
Wicomico River	21	MD	Fish, Recreation, Wildlife, Other
Wye East River	13	MD	Fish, Recreation, Wildlife, Other
Wye River	13	MD	Fish, Recreation, Wildlife, Other
Pomonkey Creek	3	MD	Fish, Scenic
Manokin River	22	MD	Fish, Wildlife, Other
Little North East Creek	6	MD	Geologic
Fifteenmile Creek	10	MD	Geologic, Historic
Potomac River	21	MD, VA	Geologic, Historic, Recreation, Scenic, Other
Potomac River	5	MD, VA	Geologic, Other
Zekiah Swamp Run	22	MD	Geologic, Other
Hill Top Fork	4	MD	Geologic, Wildlife, Other
Nanjemoy Creek	11	MD	Geologic, Wildlife, Other
Port Tobacco River	4	MD	Geologic, Wildlife, Other
Antietam Creek	19	MD	Historic
Bucklodge Branch	7	MD	Historic
Choptank River	9	MD	Historic
Great Seneca Creek	21	MD	Historic
Seneca Creek	7	MD	Historic
St. Mary's River	18	MD	Historic
Choptank River	12	MD, DE	Historic, Other
Tidy Island Creek	3	MD, DE	Historic, Other
Potomac River	50	MD, WV	Historic, Other
Great Bohemia Creek	5	MD	Historic, Recreation
Bohemia River	5	MD	Historic, Recreation
Little Bohemia Creek	7	MD	Historic, Recreation
Gunpowder Falls	5	MD	Other
Long Green Creek	6	MD	Other
Monocacy River	53	MD	Other
Pocomoke River	9	MD	Other
Pocomoke River	15	MD	Other
Sweathouse Branch	2	MD	Other
Gunpowder Falls	18	MD	Recreation
Pocomoke River	14	MD	Recreation, Other
Catoctin Creek	30	MD	Scenic, Other
Potomac River	12	MD, VA	Scenic, Other
Potomac River	10	MD, VA	Scenic, Other
Dividing Creek	5	MD	Wildlife
Wicomico River	15	MD	Wildlife
Androscoggin River	16	ME	Fish
Back River	5	ME	Fish
Cathance Stream	14	ME	Fish
Cross River	6	ME	Fish
Dennys River	23	ME	Fish
East Machias River	25	ME	Fish
Piscataquis River	40	ME	Fish
Sheepscot River	11	ME	Fish
Union River, West Branch	17	ME	Fish
Pleasant River	11	ME	Fish, Historic, Other
Piscataquis River	8	ME	Fish, Historic, Recreation
Dyer River	5	ME	Fish, Historic, Recreation, Scenic, Other
Marsh River	3	ME	Fish, Historic, Recreation, Scenic, Other
Deer Meadow Brook	5	ME	Fish, Historic, Recreation, Scenic, Other
Sheepscot River	48	ME	Fish, Historic, Recreation, Scenic, Other
Sheepscot River, West Branch	6	ME	Fish, Historic, Recreation, Scenic, Other
Abagadasset River	15	ME	Fish, Historic, Recreation, Wildlife, Other
Androscoggin River	6	ME	Fish, Historic, Recreation, Wildlife, Other
Cathance River	14	ME	Fish, Historic, Recreation, Wildlife, Other
Eastern River	13	ME	Fish, Historic, Recreation, Wildlife, Other
Kennebec River	6	ME	Fish, Historic, Recreation, Wildlife, Other
Kennebec River	14	ME	Fish, Historic, Recreation, Wildlife, Other
Muddy River	4	ME	Fish, Historic, Recreation, Wildlife, Other
Androscoggin River	17	ME	Fish, Other

Ellis River	23	ME	Fish, Other
Pleasant River	33	ME	Fish, Other
Dead River	3	ME	Fish, Other
St. George River	17	ME	Fish, Other
Sunday River	14	ME	Fish, Other
Carrabasset River	39	ME	Fish, Scenic
Kennebec River	14	ME	Fish, Scenic
Machias River	46	ME	Fish, Wildlife
Kennebec River	13	ME	Geologic, Historic, Scenic, Other
Cold Stream	9	ME	Geologic, Other
Hoyt Brook	15	ME	Geologic, Other
Little Cold Stream	4	ME	Geologic, Other
Machias River	33	ME	Geologic, Other
Narraguaus River	53	ME	Geologic, Other
Schoodic Brook	2	ME	Geologic, Other
Passadumkeag River	47	ME	Geologic, Other
Penobscot River	18	ME	Geologic, Other
Pollard Brook	3	ME	Geologic, Other
Seboeis River	28	ME	Geologic, Other
Stillwater River	9	ME	Geologic, Other
Sunkhaze Stream	27	ME	Geologic, Other
Moose River	44	ME	Geologic, Recreation, Other
Nezinscot River, East Branch	19	ME	Geologic, Scenic
Allagash River	6	ME	Other
Aroostook River	45	ME	Other
Aroostook River	19	ME	Other
Big Black River	30	ME	Other
Little Black River	29	ME	Other
Molunkus Stream	10	ME	Other
Macwahoc Stream	25	ME	Other
Mattawamkeag River	49	ME	Other
St. John River	74	ME	Other
St. John River, Southwest Branch	62	ME	Other
Ossipee River	7	ME	Recreation
Saco River	13	ME	Recreation
Katahdin Stream	9	ME	Recreation
Penobscot River, West Branch	22	ME	Recreation, Scenic
Fish River	45	ME	Recreation, Scenic, Other
Kennebec River	29	ME	Recreation, Scenic, Other
Kibby Stream	16	ME	Recreation, Scenic, Other
Spencer Stream	14	ME	Recreation, Scenic, Other
Dead River	15	ME	Recreation, Scenic, Other
Mosquito Brook	9	ME	Recreation, Scenic, Other
Saco River	37	ME	Recreation, Scenic, Other
Baker Branch Saint John River	48	ME	Scenic, Other
Damariscotta River	14	ME	Wildlife, Other
St. Croix River	32	ME	Wildlife, Other
Platte River	4	MI	Cultural, Fish, Geologic, Recreation
Clinton River	45	MI	Cultural, Fish, Historic, Recreation
Whitefish River, West Branch	24	MI	Cultural, Fish, Scenic
Grand River	188	MI	Cultural, Geologic, Historic, Recreation, Scenic
White River, North Branch	25	MI	Cultural, Recreation
North Branch Paw Paw River	10	MI	Cultural, Recreation, Scenic
Paw Paw River	38	MI	Cultural, Recreation, Scenic
Mosquito River	6	MI	Fish, Geologic, Recreation, Scenic
Ontonagon River	24	MI	Fish, Geologic, Recreation, Scenic
Miners River	7	MI	Fish, Geologic, Scenic
Brule River	36	MI, WI	Fish, Historic, Recreation
Huron River	77	MI	Fish, Historic, Recreation
Flat River	69	MI	Fish, Historic, Recreation, Scenic
Fence River, West Branch	9	MI	Fish, Recreation
Fence River	17	MI	Fish, Recreation
Flint River	76	MI	Fish, Recreation
Manistee River	43	MI	Fish, Recreation
Paint River	25	MI	Fish, Recreation
Thunder Bay River	27	MI	Fish, Recreation
Thunder Bay River, North Branch	34	MI	Fish, Recreation
Smith Creek	10	MI	Fish, Recreation
Au Gres River, East Branch	15	MI	Fish, Recreation
Betsie River	48	MI	Fish, Recreation, Scenic
Boardman River	25	MI	Fish, Recreation, Scenic
Huron River	37	MI	Fish, Recreation, Scenic
Jordan River	23	MI	Fish, Recreation, Scenic
Baldwin River	14	MI	Fish, Recreation, Scenic
Sanborn Creek	6	MI	Fish, Recreation, Scenic
Pere Marquette River, Big South Branch	49	MI	Fish, Recreation, Scenic
Pere Marquette River, Little South Branch	26	MI	Fish, Recreation, Scenic
Pere Marquette River, Middle Branch	20	MI	Fish, Recreation, Scenic
Platte River	17	MI	Fish, Recreation, Scenic
Rifle River	54	MI	Fish, Recreation, Scenic
Rifle River, West Branch	13	MI	Fish, Recreation, Scenic

White River, South Branch	19	MI	Fish, Recreation, Scenic
Ontonagon River, Middle Branch	5	MI	Fish, Recreation, Scenic
Ontonagon River, South Branch	33	MI	Fish, Recreation, Scenic
Muskegon River	77	MI	Fish, Recreation, Scenic
Fox River	35	MI	Fish, Recreation, Scenic, Other
Au Sable River	79	MI	Fish, Recreation, Scenic, Wildlife
Pigeon River	46	MI	Fish, Recreation, Scenic, Wildlife
Rogue River	39	MI	Fish, Recreation, Scenic, Wildlife
Ocqueoc River	34	MI	Fish, Scenic
Presque Isle River, West Branch	3	MI	Fish, Scenic
Yellow Dog River	27	MI	Fish, Scenic
Kalamazoo (Lower) River	21	MI	Fish, Scenic, Wildlife, Other
Black River	24	MI	Geologic, Recreation, Scenic
Manistique River, West Branch	43	MI	Geologic, Recreation, Scenic
Sturgeon River	66	MI	Geologic, Recreation, Scenic
East Branch Tahquamenon River	14	MI	Geologic, Recreation, Scenic
Presque Isle River	13	MI	Geologic, Recreation, Scenic, Other
Crystal River	3	MI	Geologic, Recreation, Scenic, Wildlife, Other
Cass River	62	MI	Geologic, Recreation, Wildlife
Little East Branch Huron River	3	MI	Geologic, Scenic
East Branch Huron River	12	MI	Geologic, Scenic
Huron River	8	MI	Geologic, Scenic
Cass River, North Branch	5	MI	Historic
Saginaw River	11	MI	Historic, Recreation
White River	16	MI	Historic, Recreation
Muskegon River	14	MI	Historic, Scenic
Sturgeon River	14	MI	Historic, Scenic, Wildlife
Sturgeon River	8	MI	Historic, Scenic, Wildlife, Other
Black River	49	MI	Recreation
Chippewa River	92	MI	Recreation
Escanaba River, East Branch	13	MI	Recreation
Escanaba River, West Branch	29	MI	Recreation
Ford River	101	MI	Recreation
Kalamazoo River	83	MI	Recreation
Portage Creek	11	MI	Recreation
Red Cedar River	23	MI	Recreation
West Branch Sturgeon River	41	MI	Recreation
Sturgeon River	25	MI	Recreation
White River, South Branch	30	MI	Recreation
St. Joseph River	200	MI, IN	Recreation
Ford River, North Branch	35	MI	Recreation, Scenic
Fox River, East Branch	35	MI	Recreation, Scenic
Jordan River	2	MI	Recreation, Scenic
Manistique River	71	MI	Recreation, Scenic
Muskegon River	66	MI	Recreation, Scenic
Muskegon River	21	MI	Recreation, Scenic
Paw Paw River	22	MI	Recreation, Scenic
Pentwater River	14	MI	Recreation, Scenic
Pentwater River	11	MI	Recreation, Scenic
Pentwater River	19	MI	Recreation, Scenic
Presque Isle River, South Branch	5	MI. WI	Recreation, Scenic
Tahquamenon River	90	MI	Recreation, Scenic
Thornapple River	58	MI	Recreation, Scenic
Tittabawassee River	61	MI	Recreation, Scenic
Ontonagon River, West Branch	11	MI	Recreation, Scenic
Two Hearted River	24	MI	Recreation, Scenic, Other
Driggs River	36	MI	Scenic
Little Muskegon River	24	MI	Scenic
Montreal River	27	MI	Scenic
West Branch Net River	17	MI	Scenic
Net River	15	MI	Scenic
West Branch Upper Rainy River	5	MI	Scenic
Rainy River	23	MI	Scenic
Pigeon River	1	MN	Cultural, Geologic, Recreation, Scenic
Manitou River	26	MN	Fish, Geologic, Scenic
Mississippi River	35	MN	Geologic, Historic, Recreation, Scenic, Wildlife
Pigeon River	9	MN	Geologic, Historic, Scenic
Minnehaha Creek	5	MN	Geologic, Recreation, Scenic
Pigeon River	22	MN	Geologic, Recreation, Scenic
Root River	82	MN	Geologic, Recreation, Scenic
Vermilion River	42	MN	Geologic, Recreation, Scenic
Brule River	40	MN	Geologic, Scenic
Little Fork River	142	MN	Geologic, Scenic
Turtle River	49	MN	Historic
Minnesota River	283	MN	Historic, Recreation, Scenic, Wildlife
Ash River	29	MN	Recreation
Des Moines River, West Fork	111	MN	Recreation
Rum River	85	MN	Recreation
Shell Rock River	12	MN	Recreation
Big Fork River	168	MN	Recreation, Scenic
Blue Earth River	86	MN	Recreation, Scenic

Cannon River	23	MN	Recreation, Scenic
Cloquet River	61	MN	Recreation, Scenic
Cloquet River	38	MN	Recreation, Scenic
Crow Wing River	65	MN	Recreation, Scenic
Red Lake River	126	MN	Recreation, Scenic
Snake River	39	MN	Recreation, Scenic
Wild Rice River	97	MN	Recreation, Scenic
Bear River	27	MN	Scenic
Black River	43	MN	Scenic
Caldwell Brook	50	MN	Scenic
Clearwater River	53	MN	Scenic
Embarrass River	33	MN	Scenic
Lower Tamarack River	39	MN	Scenic
Middle River	55	MN	Scenic
Moose River	24	MN	Scenic
Prairie River	50	MN	Scenic
Prairie River	36	MN	Scenic
Rapid River	56	MN	Scenic
Rapid River, East Fork	30	MN	Scenic
Rapid River, North Branch	24	MN	Scenic
Rat Root River, East Branch	13	MN	Scenic
Rice River	37	MN	Scenic
Roseau River	22	MN	Scenic
Sand Creek	31	MN	Scenic
Sauk River	83	MN	Scenic
Schoolcraft River	29	MN	Scenic
Shell River	9	MN	Scenic
St. Francis River	46	MN	Scenic
Dark River	19	MN	Scenic
Sturgeon River	28	MN	Scenic
Temperance River	27	MN	Scenic
Whiteface River	64	MN	Scenic
Willow River	38	MN	Scenic
Rat Root River	21	MN	Scenic
Crow River	25	MN	
Current River	101	MO	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Jacks Fork	35	MO	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
White River, North Fork	68	MO	Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Castor River	62	MO	Fish, Geologic, Recreation, Scenic
Big Piney River	102	MO	Fish, Geologic, Recreation, Scenic, Wildlife
Gasconade River	265	MO	Fish, Geologic, Recreation, Scenic, Wildlife
South Fabius River	29	MO	Fish, Geologic, Scenic
Warm Fork Spring River	24	MO, AR	Fish, Geologic, Scenic, Wildlife
South Fork Spring River	83	MO, AR	Fish, Geologic, Scenic, Wildlife
Locust Creek	18	MO	Fish, Historic, Recreation, Scenic, Wildlife
Shoal Creek	81	MO, KS	Fish, Historic, Recreation, Scenic, Wildlife
Osage Fork of the Gasconde River	79	MO	Fish, Historic, Recreation, Scenic, Wildlife, Other
Cedar Creek	52	MO	Fish, Recreation, Scenic
Cuivre River, West Fork	42	MO	Fish, Recreation, Scenic
Elk River	23	MO	Fish, Recreation, Scenic
Indian Creek	21	MO	Fish, Recreation, Scenic, Other
Spring Creek	20	MO	Fish, Recreation, Scenic, Other
Beaver Creek	52	MO	Fish, Recreation, Scenic, Wildlife
Bourbeuse River	76	MO	Fish, Recreation, Scenic, Wildlife
Mineral Fork	15	MO	Fish, Recreation, Scenic, Wildlife
Niangua River	31	MO	Fish, Recreation, Scenic, Wildlife
Spring River	59	MO, KS, OK	Fish, Recreation, Scenic, Wildlife
Little Black River	46	MO	Fish, Recreation, Scenic, Wildlife, Other
Little Niangua River	54	MO	Fish, Recreation, Wildlife
Swan Creek	38	MO	Fish, Recreation, Wildlife
Locust Creek	29	MO	Fish, Scenic
Marrowbone Creek	29	MO	Fish, Scenic
North Fork Middle Fabius River	37	MO	Fish, Scenic, Wildlife
Middle Fabius River	75	MO	Fish, Scenic, Wildlife
Meramec River	85	MO	Geologic, Historic, Recreation, Scenic, Wildlife
St. Francis River	77	MO	Geologic, Historic, Recreation, Scenic, Wildlife
Cedar Creek	35	MO	Geologic, Recreation, Scenic
Little St. Francois River	19	MO	Geologic, Recreation, Scenic
Big Sugar Creek	26	MO	Geologic, Recreation, Scenic, Wildlife
Black River	14	MO	Geologic, Recreation, Scenic, Wildlife
Bryant Creek	42	MO	Historic, Recreation, Scenic
Courtois Creek	24	MO	Historic, Recreation, Scenic, Wildlife
Huzzah Creek	32	MO	Historic, Recreation, Scenic, Wildlife
Little Piney Creek	39	MO	Recreation, Scenic, Wildlife, Other
Bayou Pierre	103	MS, LA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Buttahatchee River	45	MS	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Chickasawhay River	149	MS	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Big Black River	242	MS	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Hatchie River	10	MS	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Jourdan River	16	MS	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Noxubee River	114	MS	Cultural, Fish, Historic, Recreation, Scenic, Wildlife

Pascagoula River	67	MS	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Black Creek	53	MS	Fish, Geologic, Recreation, Scenic, Wildlife
Black Creek	35	MS	Fish, Geologic, Recreation, Scenic, Wildlife
Big Black Creek	6	MS	Fish, Geologic, Recreation, Scenic, Wildlife
Bogue Chitto River	38	MS	Fish, Geologic, Recreation, Scenic, Wildlife
Bouie River	22	MS	Fish, Geologic, Recreation, Scenic, Wildlife
Chunky River	26	MS	Fish, Geologic, Recreation, Scenic, Wildlife
Chunky Creek	8	MS	Fish, Geologic, Recreation, Scenic, Wildlife
Leaf River	51	MS	Fish, Geologic, Recreation, Scenic, Wildlife
Magees Creek	11	MS	Fish, Geologic, Recreation, Scenic, Wildlife
Okatoma River	28	MS	Fish, Geologic, Recreation, Scenic, Wildlife
Red Creek	90	MS	Fish, Geologic, Recreation, Scenic, Wildlife
Strong River	86	MS	Fish, Geologic, Recreation, Scenic, Wildlife
Homochitto River	70	MS	Fish, Historic, Recreation, Scenic, Wildlife
Pearl River	132	MS	Fish, Recreation, Scenic, Wildlife
Tchoutacabouffa River	22	MS	Fish, Recreation, Scenic, Wildlife
Tuxachanie Creek	32	MS	Fish, Recreation, Scenic, Wildlife
Wolf River	63	MS	Fish, Recreation, Scenic, Wildlife
Bluff Creek	27	MS	Geologic, Recreation, Scenic, Wildlife
Judith River, Middle Fork	5	MT	Cultural
Crooked Creek	8	MT	Cultural, Fish, Geologic, Scenic, Other
Rock Creek	15	MT	Cultural, Fish, Recreation, Scenic
Rock Creek	23	MT	Cultural, Fish, Recreation, Scenic
Rock Creek	6	MT	Cultural, Fish, Recreation, Scenic
Trail Creek	12	MT	Cultural, Geologic
Deadman Creek	12	MT	Cultural, Historic, Recreation, Wildlife
Clark Fork River	17	MT	Cultural, Recreation
Rattlesnake Creek	18	MT	Cultural, Recreation, Other
Wise River	16	MT	Cultural, Recreation, Scenic
Canyon Creek	14	MT	Cultural, Recreation, Scenic, Wildlife
Danaher Creek	19	MT	Cultural, Scenic
Swan River, Upper	6	MT	Cultural, Scenic
Badger Creek, North	8	MT	Fish
Beaver Creek	6	MT	Fish
Browns Canyon Creek	6	MT	Fish
Clack Creek	2	MT	Fish
Coal Creek	20	MT	Fish
Coal Creek, South Fork	8	MT	Fish
Cyclone Creek	5	MT	Fish
Elk River	4	MT	Fish
Elk River	10	MT	Fish
Granite Creek	8	MT	Fish
Hallowat Creek	8	MT	Fish
Langford Creek	2	MT	Fish
Little Blackfoot River	6	MT	Fish
Little Blackfoot River	6	MT	Fish
Little Salmon Creek	6	MT	Fish
Mathias Creek	4	MT	Fish
Moose Creek	7	MT	Fish
Morrison Creek	7	MT	Fish
Morrison Creek	7	MT	Fish
Quintonkon Creek	8	MT	Fish
Red Meadow Creek	13	MT	Fish
Schafer Creek	4	MT	Fish
Shorty and South Fork Shorty Creek	4	MT	Fish
Spotted Bear River	19	MT	Fish
Spotted Bear River	15	MT	Fish
Sullivan Creek	17	MT	Fish
Tenderfoot Creek	9	MT	Fish
Whale Creek	15	MT	Fish
Willow Creek, South	10	MT	Fish
Boulder River	9	MT	Fish, Geologic, Recreation, Scenic
Boulder River	5	MT	Fish, Geologic, Recreation, Scenic
Boulder River	3	MT	Fish, Geologic, Recreation, Scenic
Boulder River	14	MT	Fish, Geologic, Recreation, Scenic
Missouri River	2	MT	Fish, Geologic, Recreation, Scenic, Wildlife
Smith River	22	MT	Fish, Geologic, Recreation, Scenic, Wildlife
Stillwater River	31	MT	Fish, Geologic, Recreation, Scenic, Wildlife
Black Canyon Creek	4	MT	Fish, Geologic, Wildlife
Kootenai River	9	MT	Fish, Historic, Scenic
Kootenai River	10	MT	Fish, Historic, Scenic
Kootenai River	9	MT	Fish, Historic, Scenic
Kootenai River	9	MT	Fish, Historic, Scenic
Kootenai River	10	MT	Fish, Historic, Scenic
Blackfoot River, North Fork	16	MT	Fish, Recreation
Madison River, West Fork	6	MT	Fish, Recreation
Madison River, West Fork	9	MT	Fish, Recreation
Madison River, West Fork	8	MT	Fish, Recreation
Madison River, West Fork	6	MT	Fish, Recreation
Madison River, West Fork	4	MT	Fish, Recreation
Gallatin River	21	MT	Fish, Recreation, Scenic

Madison River	8	MT	Fish, Recreation, Scenic
Gallatin River	18	MT	Fish, Recreation, Scenic, Wildlife
Slough Creek	18	MT, WY	Fish, Recreation, Scenic, Wildlife
Cooper Creek	7	MT	Fish, Wildlife
Bitterroot River, West Fork	7	MT	Geologic
Lake Creek	5	MT	Geologic
Lake Creek, Unnamed Fork	1	MT	Geologic
Warm Springs Creek	8	MT	Geologic
Youngs Creek	14	MT	Geologic
Fish Creek, West Fork	11	MT	Geologic, Other
Lolo Creek, South Fork	12	MT	Geologic, Recreation
Rock Creek	16	MT, WY	Geologic, Recreation
Rock Creek	2	MT, WY	Geologic, Recreation
Judith River	28	MT	Geologic, Recreation, Scenic
Lost Horse Creek	15	MT	Geologic, Recreation, Scenic
Rosebud Creek, East	10	MT	Geologic, Recreation, Scenic
Rosebud Creek, East	8	MT	Geologic, Recreation, Scenic
Rosebud Creek, West	9	MT	Geologic, Recreation, Scenic
Rosebud Creek, West	11	MT	Geologic, Recreation, Scenic
Birch Creek, North Fork	7	MT	Geologic, Scenic
Blodgett Creek	0	MT	Geologic, Scenic
Blodgett Creek	7	MT	Geologic, Scenic
Blodgett Creek	5	MT	Geologic, Scenic
Gateway Creek	5	MT	Geologic, Scenic
Little Bitterroot River	12	MT	Geologic, Scenic
Rock Creek, Lake Fork	11	MT	Geologic, Scenic
Rock Creek, West Fork	18	MT	Geologic, Scenic
Straight Creek, Green Fork	5	MT	Geologic, Scenic
White River	19	MT	Geologic, Scenic
Mill Creek	7	MT	Historic, Scenic
Vermilion River	15	MT	Historic, Scenic
Yaak River	24	MT	Historic, Scenic
Yaak River	10	MT	Historic, Scenic
Yaak River	12	MT	Historic, Scenic
Yaak River	9	MT	Historic, Scenic
Cache Creek	10	MT	Recreation
Straight Creek	9	MT	Recreation
Sun River, North Fork	27	MT	Recreation
Sun River, South Fork	27	MT	Recreation
Big Creek	8	MT	Recreation, Scenic
Little North Fork	2	MT	Recreation, Scenic
Good Creek	4	MT	Recreation, Scenic
Lookout Creek	5	MT	Recreation, Scenic
Big Creek, South Fork	7	MT	Recreation, Scenic
Big Creek, North Fork	8	MT	Recreation, Scenic
Copeland Creek	2	MT	Recreation, Scenic
Morrell Creek	9	MT	Recreation, Scenic
Swan River, Lower	12	MT	Recreation, Scenic
Yellowstone River	13	MT	Recreation, Scenic
Yellowstone River	3	MT	Recreation, Scenic
Lookout Creek, East Fork	3	MT	Recreation, Scenic
Gallatin River	27	MT, WY	Recreation, Scenic, Wildlife
Sun River, North Fork	2	MT	Recreation, Wildlife
Clearwater River	20	MT	Recreation, Wildlife, Other
Basin Creek	7	MT	Scenic
Big Salmon Creek	14	MT	Scenic
Big Salmon Creek	1	MT	Scenic
Bull River	10	MT	Scenic
Bull River	16	MT	Scenic
Bull River, Middle Fork	7	MT	Scenic
Dearborn River	19	MT	Scenic
Glacier Creek	2	MT	Scenic
Glacier Creek	1	MT	Scenic
Glacier Creek	3	MT	Scenic
Lion Creek	8	MT	Scenic
Strawberry Creek	10	MT	Scenic
Bull River, North Fork	7	MT	Scenic
Big Laurel Creek	29	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Big Laurel Creek	5	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Black River	67	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Cape Fear River	58	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Catawba River	26	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Cedar Creek	3	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Chowan River	52	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Dan River	91	NC, VA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Dan River	9	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Deep River	51	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Fishing Creek	72	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
French Broad River	29	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
French Broad River	8	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
French Broad River	7	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife

French Broad River	71	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Haw River	67	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Little Tennessee River	23	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Mayo River	16	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Mitchell River	22	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Thompsons Branch	6	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Neuse River	126	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Neuse River	36	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
New River, South Fork	67	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Oconaluftee River	19	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Pee Dee River	44	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Rocky Creek	13	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Smith River	5	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Tar River	96	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Tuckasegee River	40	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Watauga River	27	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Yadkin River	91	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Cullasaja River	19	NC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Bennetts Creek	19	NC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Cane Creek	18	NC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Cape Fear River	33	NC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Caraway Creek	26	NC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Dutchman's Creek	5	NC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Great Coharie Creek	42	NC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Johns River	19	NC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Drowing Creek	43	NC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Lumber River	32	NC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Moores Creek	4	NC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Mountain Creek	15	NC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Waccamaw River	48	NC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Snowbird Creek	12	NC	Cultural, Fish, Historic, Scenic, Wildlife
Snowbird Creek	9	NC	Cultural, Fish, Historic, Scenic, Wildlife
Davidson River	13	NC	Cultural, Fish, Historic, Wildlife
Uwharrie River	63	NC	Cultural, Historic, Scenic
White Oak River	19	NC	Cultural, Historic, Scenic, Wildlife, Other
White Oak River	12	NC	Cultural, Historic, Scenic, Wildlife, Other
White Oak River	10	NC	Cultural, Historic, Scenic, Wildlife, Other
White Oak River, North Prong	1	NC	Cultural, Historic, Scenic, Wildlife, Other
Nantahala River	21	NC	Cultural, Historic, Wildlife, Other
Eno River	20	NC	Fish, Geologic, Recreation, Scenic
Cane River	39	NC	Fish, Geologic, Recreation, Scenic, Wildlife
Green River	17	NC	Fish, Geologic, Recreation, Scenic, Wildlife
South Fork Mills River	28	NC	Fish, Geologic, Recreation, Scenic, Wildlife
Mills River	6	NC	Fish, Geologic, Recreation, Scenic, Wildlife
New River, North Fork	43	NC	Fish, Geologic, Recreation, Scenic, Wildlife
North Toe River	51	NC	Fish, Geologic, Recreation, Scenic, Wildlife
Pigeon River, Little East Fork	8	NC	Fish, Geologic, Recreation, Scenic, Wildlife
Ramsey Creek	3	NC	Fish, Geologic, Recreation, Scenic, Wildlife
Potecasi Creek	42	NC	Fish, Geologic, Recreation, Scenic, Wildlife
Whitewater River	6	NC	Fish, Geologic, Recreation, Scenic, Wildlife, Other
Little Marsh Swamp	19	NC	Fish, Recreation, Scenic, Wildlife
Gallberry Swamp	3	NC	Fish, Recreation, Scenic, Wildlife
Big Swamp	30	NC	Fish, Recreation, Scenic, Wildlife
Cashie River	19	NC	Fish, Recreation, Scenic, Wildlife
Catawba River, Henry Fork	39	NC	Fish, Recreation, Scenic, Wildlife
Cold Springs Creek	6	NC	Fish, Recreation, Scenic, Wildlife
Colly Creek	39	NC	Fish, Recreation, Scenic, Wildlife
Fisher River	21	NC	Fish, Recreation, Scenic, Wildlife
Little River	74	NC	Fish, Recreation, Scenic, Wildlife
Northeast Cape Fear River	119	NC	Fish, Recreation, Scenic, Wildlife
South River	84	NC	Fish, Recreation, Scenic, Wildlife
Black River	2	NC	Fish, Recreation, Scenic, Wildlife
Town Creek	33	NC	Fish, Recreation, Scenic, Wildlife
Little Coharie Creek	30	NC	Fish, Recreation, Wildlife
Barnes Creek	12	NC	Fish, Wildlife
Goshen Swamp	19	NC	Fish, Wildlife
Big Mountain Creek	10	NC	Fish, Wildlife
Six Runs Creek	28	NC	Fish, Wildlife
Steels Creek	12	NC	Geologic, Recreation, Scenic
Upper Creek	6	NC	Geologic, Recreation, Scenic
Catawba River, Warrior Fork	6	NC	Geologic, Recreation, Scenic
Rocky River	37	NC	Geologic, Recreation, Scenic
Nantahala River (below lake)	18	NC	Geologic, Recreation, Scenic, Wildlife
Upper Little River	52	NC	Geologic, Recreation, Scenic, Wildlife
Thompson River	6	NC	Geologic, Recreation, Scenic, Wildlife, Other
Toxaway River	6	NC	Geologic, Recreation, Scenic, Wildlife, Other
Linville River	23	NC	Geologic, Scenic
Linville River	15	NC	Geologic, Scenic
Linville River	2	NC	Geologic, Scenic
Tellico River	6	NC	Other
Ararat River	24	NC	Recreation, Scenic

Pigeon River, East Fork	4	NC	Scenic
Pigeon River, East Fork	3	NC	Scenic
Little Missouri River	40	ND	Cultural, Fish, Geologic, Historic, Recreation
Little Missouri River	26	ND	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Missouri River	60	ND	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Missouri River	1	ND	Cultural, Fish, Recreation, Scenic, Wildlife
Missouri River	1	ND, MT	Cultural, Historic
Little Missouri River	231	ND	Cultural, Historic, Scenic
Pembina River	109	ND	Geologic, Scenic, Wildlife
Niobrara River	112	NE	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Niobrara River	21	NE	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Niobrara River	11	NE	Cultural, Fish, Geologic, Scenic, Wildlife
Niobrara River	40	NE	Cultural, Geologic, Scenic, Wildlife
Calamus River	106	NE	Cultural, Scenic, Wildlife
Long Pine Creek	42	NE	Fish
Snake River	115	NE	Fish, Recreation, Scenic, Wildlife
Middle Loup River	104	NE	Fish, Scenic, Wildlife
Dismal River	72	NE	Scenic
Cold River	24	NH	Cultural, Fish
Ashuelot River	65	NH	Cultural, Fish, Geologic, Historic, Recreation, Wildlife
Merrimack River	25	NH	Cultural, Fish, Geologic, Recreation, Other
Merrimack River	3	NH	Cultural, Fish, Recreation, Other
Gale River	13	NH	Cultural, Recreation
Beech Hill Brook	1	NH	Fish
Cocheco River	9	NH	Fish
Cocheco River	18	NH	Fish
Exeter River	41	NH	Fish
Fresh River	3	NH	Fish
Great Brook	6	NH	Fish
Isinglass River	17	NH	Fish
Lovell River	11	NH	Fish
Piscassic River	15	NH	Fish
Souhegan River	13	NH	Fish
Baker River	37	NH	Fish, Geologic, Historic, Recreation
Baker River, South Branch	5	NH	Fish, Geologic, Historic, Recreation
Bearcamp River	27	NH	Fish, Geologic, Other
Whiteface River	7	NH	Fish, Geologic, Other
Cold River	10	NH	Fish, Geologic, Other
Wonalancet River	8	NH	Fish, Geologic, Other
Swift River	7	NH	Fish, Geologic, Other
Pine River	19	NH	Fish, Geologic, Recreation, Other
Dry River	10	NH	Fish, Geologic, Recreation, Scenic, Other
Ellis River	16	NH	Fish, Geologic, Recreation, Scenic, Other
Hancock Branch	4	NH	Fish, Geologic, Recreation, Scenic, Other
Saco River, East Branch	13	NH	Fish, Geologic, Recreation, Scenic, Other
Saco River, Rocky Branch	13	NH	Fish, Geologic, Recreation, Scenic, Other
Sawyer River	9	NH	Fish, Geologic, Recreation, Scenic, Other
Swift River	26	NH	Fish, Geologic, Recreation, Scenic, Other
Dead Diamond River	19	NH	Fish, Geologic, Recreation, Scenic, Wildlife
Pemigewasset River	5	NH	Fish, Geologic, Recreation, Scenic, Wildlife, Other
Ammonoosuc River	4	NH	Fish, Geologic, Scenic
Blackwater River	10	NH	Fish, Historic, Recreation
Contoocook River	12	NH	Fish, Historic, Recreation
Hampton Falls River	7	NH	Fish, Historic, Recreation
Hampton River	2	NH	Fish, Historic, Recreation
Taylor River	12	NH	Fish, Historic, Recreation
Warner River	19	NH	Fish, Historic, Recreation
Connecticut River	19	NH, VT	Fish, Historic, Recreation, Scenic, Other
Merrimack River	16	NH	Fish, Historic, Recreation, Wildlife
Androscoggin River	3	NH	Fish, Other
Androscoggin River	12	NH	Fish, Other
Israel River	23	NH	Fish, Other
Soucook River	25	NH	Fish, Recreation
Piscataquog River, Middle Branch	10	NH	Fish, Recreation, Other
Piscataquog River	32	NH	Fish, Recreation, Other
Piscataquog River, South Branch	20	NH	Fish, Recreation, Other
Contoocook River	25	NH	Fish, Recreation, Scenic
Connecticut River	27	NH, VT	Fish, Recreation, Scenic, Other
Swift Diamond River	20	NH	Fish, Recreation, Scenic, Other
North River	16	NH	Fish, Scenic
Wild Ammonoosuc River	15	NH	Fish, Scenic
Indian Stream	18	NH	Fish, Scenic, Wildlife, Other
Saco River	44	NH	Geologic
Ossipee River	9	NH	Geologic, Fish, Other
Ammonoosuc River	15	NH	Geologic, Recreation, Other
Zealand River	8	NH	Geologic, Recreation, Other
Franconia Branch	8	NH	Geologic, Recreation, Scenic, Other
Norcross Brook	3	NH	Geologic, Recreation, Scenic, Other
Magalloway River	18	NH, ME	Geologic, Recreation, Scenic, Wildlife
Pemigewasset River, East Branch	2	NH	Geologic, Scenic, Other
Sugar River	8	NH	Historic

Contoocook River, North Branch	17	NH	Historic, Recreation, Other
Connecticut River	45	NH, VT	Other
Connecticut River	24	NH, VT	Other
Lamprey River	23	NH	Other
Peabody River	13	NH	Other
Peabody River, West Branch	6	NH	Other
Perry Stream	20	NH	Other
Phillips Brook	20	NH	Other
Contoocook River	30	NH	Recreation
Suncook River	21	NH	Recreation
Pemigewasset River	7	NH	Recreation, Geologic, Fish, Other
Pemigewasset River	20	NH	Recreation, Geologic, Fish, Other
Androscoggin River	15	NH	Recreation, Other
Pemigewasset River, East Branch	11	NH	Recreation, Scenic
Pemigewasset River, North Fork East Branch	8	NH	Recreation, Scenic
Souhegan River	9	NH	Recreation, Scenic
Connecticut River	28	NH, VT	Recreation, Scenic, Other
Blackwater River	9	NH	Scenic
Nash Stream	15	NH	Scenic, Other
Back Creek	5	NJ	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Cedar Creek	6	NJ	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Delaware River (Delaware River/Bay System)	6	NJ, DE	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Dennis Creek	9	NJ	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Dividing Creek	11	NJ	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Fishing Creek	2	NJ	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Hope Creek	5	NJ	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Mad Horse Creek	4	NJ	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Little Creek	4	NJ	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Turner Fork	2	NJ	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Nantuxent Creek	5	NJ	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Oranoaken Creek	10	NJ	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Salem River	20	NJ	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Stow Creek	16	NJ	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
West Creek	6	NJ	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Cedar Creek	9	NJ	Cultural, Historic, Other
Batsto River (Pine Barrens River System)	15	NJ	Cultural, Historic, Recreation, Scenic, Wildlife, Other
Deep Run	4	NJ	Cultural, Historic, Recreation, Scenic, Wildlife, Other
Penn Swamp Branch	4	NJ	Cultural, Historic, Recreation, Scenic, Wildlife, Other
Roberts Branch	5	NJ	Cultural, Historic, Recreation, Scenic, Wildlife, Other
Skit Branch	6	NJ	Cultural, Historic, Recreation, Scenic, Wildlife, Other
Springers Brook	7	NJ	Cultural, Historic, Recreation, Scenic, Wildlife, Other
Cedar Creek	1	NJ	Cultural, Other
Cedar Creek	6	NJ	Cultural, Wildlife, Other
Chamberlain Branch	6	NJ	Historic, Other
Cohansey River	17	NJ	Historic, Other
Daniels Branch	3	NJ	Historic, Other
Newbolds Branch	3	NJ	Historic, Other
Webbs Mill Branch	6	NJ	Historic, Other
Albertson Brook	6	NJ	Historic, Recreation, Wildlife, Other
Alquatka Branch	3	NJ	Historic, Recreation, Wildlife, Other
Ballinger Creek	4	NJ	Historic, Recreation, Wildlife, Other
Bass River	2	NJ	Historic, Recreation, Wildlife, Other
Great Swamp Branch	4	NJ	Historic, Recreation, Wildlife, Other
Landing Creek	5	NJ	Historic, Recreation, Wildlife, Other
Mullica River	49	NJ	Historic, Recreation, Wildlife, Other
Nacote Creek	4	NJ	Historic, Recreation, Wildlife, Other
Nescochague Creek	6	NJ	Historic, Recreation, Wildlife, Other
Pine Creek	2	NJ	Historic, Recreation, Wildlife, Other
Sleeper Branch	6	NJ	Historic, Recreation, Wildlife, Other
Cave Cabin Branch	3	NJ	Other
Forked River, North Branch	5	NJ	Other
Great Brook	6	NJ	Other
Oswego River	15	NJ	Other
Passaic River	8	NJ	Other
Passaic River	11	NJ	Other
Wading River, West Branch	11	NJ	Other
Beaver Run	3	NJ	Recreation
Berrys Creek	2	NJ	Recreation
Hackensack River	3	NJ	Recreation
Hospitality Brook	2	NJ	Recreation
Lamington-Black River	25	NJ	Recreation
Little Hauken Run	2	NJ	Recreation
Passaic River	7	NJ	Recreation
Tulpehocken Creek	8	NJ	Recreation
Wading River	10	NJ	Recreation
Wading River, West Branch	8	NJ	Recreation
Dark Branch	2	NJ	Recreation, Other
Great Egg Harbor River	3	NJ	Recreation, Other
Long Brook	3	NJ	Recreation, Other
Maple Root Branch	3	NJ	Recreation, Other
Toms River	13	NJ	Recreation, Other

Factory Branch	8	NJ	Wildlife, Other
Canones Creek	20	NM	Cultural, Fish, Geologic, Recreation, Scenic
San Francisco River	104	NM, AZ	Cultural, Fish, Recreation, Scenic, Other
Pecos River	109	NM	Fish, Historic, Recreation, Scenic
Costilla Creek	9	NM	Fish, Recreation, Scenic, Wildlife
Gallinas Creek	21	NM	Fish, Recreation, Scenic, Wildlife
Canadian River	111	NM	Geologic, Historic, Recreation, Scenic, Wildlife
Mora River	21	NM	Geologic, Historic, Recreation, Scenic, Wildlife
Rio Guadalupe	13	NM	Geologic, Historic, Recreation, Scenic, Wildlife
Walker River, East	30	NV	Cultural, Recreation, Scenic, Other
Big Wash, South Fork	5	NV	Fish
Owyhee River, South Fork	25	NV	Fish, Geologic, Recreation
Owyhee River, South Fork	60	NV	Fish, Geologic, Recreation
Virgin River	31	NV	Fish, Geologic, Scenic, Wildlife
Carson River, East Fork	12	NV	Fish, Recreation, Scenic
Jarbidge River, West Fork	18	NV	Fish, Recreation, Scenic
Marys River	26	NV	Fish, Scenic
Little Humboldt River, North Fork	52	NV	Scenic, Other
Red River	9	NY	Cultural, Fish, Scenic
Oswegatchie River	21	NY	Cultural, Fish, Scenic, Other
Oswegatchie River, Middle Branch	44	NY	Cultural, Fish, Scenic, Other
Marion River	5	NY	Cultural, Historic
Delaware River, East Branch	15	NY	Cultural, Recreation, Other
Delaware River, East Branch	13	NY	Cultural, Recreation, Other
Kaikout Kill	2	NY	Cultural, Scenic
Blockhouse Creek	0	NY	Cultural, Scenic
Raquette River	54	NY	Cultural, Scenic
Grasse River	5	NY	Fish
Indian River	8	NY	Fish
Cohocton River	46	NY	Fish, Geologic, Recreation
Ausable River, West Branch	34	NY	Fish, Geologic, Recreation, Scenic
Cedar River	36	NY	Fish, Geologic, Recreation, Scenic, Wildlife, Other
Allegheny River	13	NY	Fish, Historic
Hudson River	5	NY	Fish, Historic, Other
Kinderhook Creek	42	NY	Fish, Historic, Recreation
Neversink River, East Branch	7	NY	Fish, Historic, Recreation, Scenic
Neversink River, West Branch	8	NY	Fish, Historic, Recreation, Scenic
Sacandaga River	32	NY	Fish, Historic, Recreation, Scenic
Oswegatchie River, West Branch	41	NY	Fish, Historic, Scenic, Other
Scriba Creek	15	NY	Fish, Other
Cattaraugus Creek	13	NY	Fish, Recreation
Fish Creek	14	NY	Fish, Recreation
Poultney River	33	NY, VT	Fish, Recreation
East Bay	10	NY, VT	Fish, Recreation
Black River	8	NY	Fish, Recreation, Scenic
Boquet River	46	NY	Fish, Recreation, Scenic
Esopus Creek	27	NY	Fish, Recreation, Scenic
Fish Creek, East Branch	17	NY	Fish, Recreation, Scenic
Grasse River, South Branch	45	NY	Fish, Recreation, Scenic
Peconic River	17	NY	Fish, Recreation, Scenic
Rondout Creek	35	NY	Fish, Recreation, Scenic
East Canada Creek	26	NY	Fish, Recreation, Scenic, Other
Sacandaga River, West Branch	38	NY	Fish, Recreation, Scenic, Other
West Branch Fish Creek	24	NY	Fish, Recreation, Wildlife
St. Regis River, West Branch	54	NY	Fish, Scenic
Ausable River	21	NY	Fish, Scenic, Other
Oswegatchie River, West Branch	15	NY	Fish, Scenic, Other
Sacandaga River, East Branch	25	NY	Fish, Scenic, Other
Independence River	28	NY	Fish, Scenic, Wildlife
Sangerfield River	11	NY	Fish, Scenic, Wildlife
Otter Brook	9	NY	Fish, Scenic, Wildlife, Other
Chemung River	7	NY	Geologic
Indian River	53	NY	Geologic
Neversink River	16	NY	Geologic
Schoharie Creek	14	NY	Geologic
South Sandy Creek	33	NY	Geologic
Wappinger Creek	17	NY	Geologic
Gulf Stream	16	NY	Geologic
Chateaugay River	7	NY	Geologic, Historic
Black River	43	NY	Geologic, Historic, Recreation, Other
Bear Gulf	4	NY	Geologic, Other
Chateaugay River	3	NY	Geologic, Other
Hoosic River	8	NY	Geologic, Other
Independence River	5	NY	Geologic, Other
Otter Creek	1	NY	Geologic, Other
Roaring Brook	6	NY	Geologic, Other
Shingle Gulf	4	NY	Geologic, Other
Tomhannock Creek	3	NY	Geologic, Other
Cattaraugus Creek	16	NY	Geologic, Recreation
Cattaraugus Creek	23	NY	Geologic, Recreation, Other
Poesten Kill	15	NY	Geologic, Recreation, Other

Schoharie Creek	18	NY	Geologic, Recreation, Other
Spring Creek	2	NY	Geologic, Recreation, Other
Genesee River	23	NY	Geologic, Recreation, Scenic
Hudson River	79	NY	Geologic, Recreation, Scenic, Other
Moose River	15	NY	Geologic, Recreation, Scenic, Other
Chateaugay River	6	NY	Geologic, Scenic, Other
Schroon River	57	NY	Geologic, Scenic, Wildlife, Other
Clyde River	10	NY	Historic
Mohawk River	11	NY	Historic
Wallkill River	17	NY	Historic
Hudson River	6	NY	Historic, Other
Hudson River	6	NY	Historic, Other
Saranac River	55	NY	Historic, Recreation, Scenic
Wallkill River	18	NY, NJ	Other
Abijah Creek	2	NY	Other
Ampersand Brook (Adirondack Province River System)	8	NY	Other
Blue Mountain Stream	9	NY	Other
Boquet River, North Branch	21	NY	Other
Cold River	15	NY	Other
Conewango Creek	27	NY	Other
Deer River	46	NY	Other
East Stony Creek	28	NY	Other
Fox Creek	7	NY	Other
Genesee River	21	NY	Other
Grasse River, Middle Branch	14	NY	Other
Hoosic River	12	NY, VT	Other
Indian River	16	NY	Other
Little Hoosic River	6	NY	Other
Long Pond Outlet	21	NY	Other
Mad River	22	NY	Other
Marble River	8	NY	Other
Mill Creek	15	NY	Other
Mohawk River	19	NY	Other
Mongaup Creek	2	NY	Other
Henry Brook	3	NY	Other
Moose Creek	6	NY	Other
Opalescent River	11	NY	Other
Otselic River	18	NY	Other
Otter Creek	18	NY	Other
Ouluska Pass Brook	3	NY	Other
Piseco Lake Outlet	5	NY	Other
Pleasant Lake Stream	7	NY	Other
Round Lake Outlet	3	NY	Other
Sacandaga River, North Branch West Branch	6	NY	Other
East Fork Salmon River	10	NY	Other
Salmon River	11	NY	Other
Salmon River, North Branch	6	NY	Other
Sandy Creek	14	NY	Other
Sandy Creek (Sandy Creek System)	23	NY	Other
Saranac River, North Branch	17	NY	Other
Silver Lake Outlet	5	NY	Other
South Branch Opalescent River/Skylight Brook	6	NY	Other
St. Regis River, West Branch	20	NY	Other
The Branch	13	NY	Other
Thirteenth Brook	5	NY	Other
Trout Brook	7	NY	Other
Upper Twin Brook	4	NY	Other
Lower Twin Brook	2	NY	Other
Wallkill River	8	NY	Other
West Stony Creek	18	NY	Other
Canisteo River	39	NY	Recreation
Carmans River	7	NY	Recreation
Catskill Creek	35	NY	Recreation
Claverack Creek	10	NY	Recreation
Hunger Kill	5	NY	Recreation
Blockhouse Creek	0	NY	Recreation
Kayaderosseras Creek	8	NY	Recreation
Normans Kill	19	NY	Recreation
Salmon River	11	NY	Recreation
Shawangunk Kill River	32	NY	Recreation
Taghkanic Creek	30	NY	Recreation
Black River	19	NY	Recreation, Other
Connetquot Brook	6	NY	Recreation, Other
Genesee River	40	NY	Recreation, Other
Genesee River	54	NY	Recreation, Other
Unadilla River	45	NY	Recreation, Other
Batavia Kill	13	NY	Recreation, Scenic
Beaver Kill	22	NY	Recreation, Scenic
Black River	13	NY	Recreation, Scenic
Cattaraugus Creek, South Branch	13	NY	Recreation, Scenic
Fall Stream	6	NY	Recreation, Scenic

Moose River, Middle Branch	12	NY	Recreation, Scenic
Rondout Creek	14	NY	Recreation, Scenic
Schoharie Creek	29	NY	Recreation, Scenic
Susquehanna River	63	NY	Recreation, Scenic
Bog River	19	NY	Recreation, Scenic, Other
Round Lake Outlet	2	NY	Recreation, Scenic, Other
Boreas River	22	NY	Recreation, Scenic, Other
St. Regis River	65	NY	Recreation, Scenic, Other
West Canada Creek	34	NY	Recreation, Scenic, Other
West Canada Creek, South Branch	19	NY	Recreation, Scenic, Other
Black Creek	33	NY	Recreation, Wildlife
Oak Orchard Creek	52	NY	Recreation, Wildlife
Ausable River, East Branch	33	NY	Scenic
Chautauqua Creek	14	NY	Scenic
Chateaugay River	4	NY	Scenic
Deer River	7	NY	Scenic
Great Chazy River	10	NY	Scenic
Oswegatchie River	41	NY	Scenic
Oswegatchie River	8	NY	Scenic
Rock River	9	NY	Scenic
Boquet River, North Fork	7	NY	Scenic, Other
Boquet River, South Fork	6	NY	Scenic, Other
Jordan River	24	NY	Scenic, Other
Kunjamuk River	20	NY	Scenic, Other
Moose River, North Branch	19	NY	Scenic, Other
Moose River, South Branch	35	NY	Scenic, Other
Osgood River	15	NY	Scenic, Other
St. Regis River, East Branch	24	NY	Scenic, Other
Basher Kill	12	NY	Wildlife
Grasse River, North Branch	29	NY	Wildlife
Nissequogue River	7	NY	
Mad River	27	OH	Cultural, Fish, Historic, Recreation
Blanchard River	59	OH	Cultural, Historic, Recreation
Loramie Creek	2	OH	Cultural, Historic, Recreation
Great Miami River	97	OH, IN	Cultural, Historic, Recreation, Scenic
Kokosing River	64	OH	Fish, Geologic, Recreation
Big Darby Creek	3	OH	Fish, Geologic, Recreation, Scenic, Wildlife
Grand River	59	OH	Fish, Geologic, Scenic
Mill Creek	33	OH	Fish, Geologic, Scenic
Little Muskingum River	59	OH	Fish, Historic, Recreation, Scenic
Cranenest Fork	4	OH	Fish, Historic, Recreation, Scenic
Wolfpen Run	2	OH	Fish, Historic, Recreation, Scenic
Auglaize River	85	OH	Fish, Historic, Recreation, Wildlife, Other
Stillwater River	50	OH	Fish, Recreation, Other
Cuyahoga River	20	OH	Fish, Recreation, Scenic
Cuyahoga River, East Branch	7	OH	Fish, Recreation, Scenic
Four Mile Creek	18	OH	Fish, Recreation, Scenic
Vermillion River, East Fork	15	OH	Fish, Recreation, Scenic
Vermillion River	21	OH	Fish, Recreation, Scenic
White Oak Creek	29	OH	Fish, Recreation, Scenic
Big Darby Creek	13	OH	Fish, Recreation, Wildlife
Pymatuning Creek	34	OH	Fish, Scenic, Wildlife
Paint Creek	94	OH	Geologic, Historic, Scenic, Other
Black River, West Branch	47	OH	Geologic, Historic, Scenic, Wildlife
Vermillion River	33	OH	Geologic, Recreation, Wildlife
Conneaut Creek	50	OH, PA	Historic, Other
Sandusky River	57	OH	Historic, Recreation
Scioto River	117	OH	Historic, Recreation
Black River, East Branch	55	OH	Historic, Recreation, Scenic
Hocking River	43	OH	Historic, Recreation, Scenic
Ohio River	9	OH, WV	Historic, Recreation, Scenic
Ohio River	25	OH, KY	Historic, Recreation, Scenic
Tuscarawas River	78	OH	Historic, Recreation, Scenic
Mohican River	14	OH	Historic, Recreation, Wildlife
Huron River, West Branch	29	OH	Recreation
Sandusky River	25	OH	Recreation
St. Mary's River	30	OH	Recreation
Twin Creek	26	OH	Recreation
Salt Creek	25	OH	Recreation, Scenic, Wildlife
Chagrin River	8	OH	Recreation, Scenic, Wildlife, Other
Lee Creek (AKA Lee's Creek, Big Lee Creek)	58	OK, AR	Cultural, Fish, Recreation, Scenic, Wildlife
Blue River	141	OK	Fish, Geologic, Recreation, Scenic, Wildlife
Mountain Fork Creek (AKA Upper Mountain Fork Creek)	34	OK	Fish, Geologic, Recreation, Scenic, Wildlife
Washita River	20	OK	Fish, Geologic, Recreation, Scenic, Wildlife
Washita River	41	OK	Fish, Geologic, Recreation, Scenic, Wildlife
Glover Creek	33	OK	Fish, Historic, Recreation, Scenic, Wildlife
Kiamichi River	121	OK	Fish, Scenic, Wildlife
Tualatin River	80	OR	Cultural
Molalla River, Table Rock Fork	13	OR	Cultural
Sandy River	13	OR	Cultural, Fish, Recreation
Sandy River	12	OR	Cultural, Fish, Recreation, Scenic

Willamette River	168	OR	Cultural, Fish, Recreation, Wildlife, Other
Coquille River, North Fork	55	OR	Cultural, Fish, Wildlife
Chetco River, North Fork	13	OR	Cultural, Fish, Wildlife
ZigZag River	9	OR	Cultural, Historic
Yamhill River, South	64	OR	Cultural, Other
Luckiamute River	61	OR	Cultural, Other
Santiam River, Middle	8	OR	Cultural, Other
Crabtree Creek	2	OR	Cultural, Recreation, Scenic, Wildlife, Other
Drift Creek	10	OR	Fish
Drift Creek	20	OR	Fish
Fall Creek	12	OR	Fish
Lobster Creek	17	OR	Fish
Lobster Creek	5	OR	Fish
Fish Creek	6	OR	Fish
Greenleaf Creek	8	OR	Fish
Siuslaw River	15	OR	Fish
Siuslaw River	22	OR	Fish
Siuslaw River	32	OR	Fish
Whittaker Creek	6	OR	Fish
Siuslaw River	11	OR	Fish
Siuslaw River, South Fork	10	OR	Fish
Marten Creek	7	OR	Fish
Bear Creek	4	OR	Fish
Yaquina River	54	OR	Fish
Little Nestucca River	20	OR	Fish
Trask River, South Fork	9	OR	Fish
Clackamas River, North Fork	14	OR	Fish
Jack Creek	5	OR	Fish
Browns Creek	2	OR	Fish
Canton Creek	11	OR	Fish
Siuslaw River, North Fork	5	OR	Fish
Williamson River	30	OR	Fish, Geologic
Chetco River	11	OR	Fish, Geologic
Alsea River, South Fork	20	OR	Fish, Geologic, Recreation
Siletz River	67	OR	Fish, Geologic, Recreation, Scenic
John Day River	82	OR	Fish, Geologic, Recreation, Scenic
Deschutes River	31	OR	Fish, Geologic, Recreation, Scenic
Squaw Creek, Lower	8	OR	Fish, Geologic, Recreation, Scenic, Wildlife, Other
Sprague River and North Fork	105	OR	Fish, Geologic, Scenic
Santiam River, Middle	6	OR	Fish, Geologic, Scenic
Santiam River, Middle	2	OR	Fish, Geologic, Scenic
New River	8	OR	Fish, Geologic, Scenic, Wildlife, Other
Smith River	17	OR	Fish, Historic
Cow Creek	27	OR	Fish, Historic
Umpqua River, South	75	OR	Fish, Historic
Steamboat Creek	3	OR	Fish, Historic
Steamboat Creek	1	OR	Fish, Historic
Steamboat Creek	20	OR	Fish, Historic
Umpqua River	64	OR	Fish, Historic, Recreation, Scenic
Quartzville Creek	8	OR	Fish, Historic, Recreation, Scenic, Wildlife
Quartzville Creek	5	OR	Fish, Historic, Recreation, Scenic, Wildlife
Sevenmile Creek	6	OR	Fish, Historic, Scenic, Wildlife
Santiam River, South	15	OR	Fish, Historic, Scenic, Wildlife
Alsea River	17	OR	Fish, Recreation
Nestucca River	8	OR	Fish, Recreation
Nestucca River	9	OR	Fish, Recreation
Nestucca River	11	OR	Fish, Recreation
Nestucca River	9	OR	Fish, Recreation
Nestucca River	14	OR	Fish, Recreation
Trask River	19	OR	Fish, Recreation
Kilchis River	16	OR	Fish, Recreation
Nehalem River	124	OR	Fish, Recreation
Santiam River, North	26	OR	Fish, Recreation
Clackamas River	15	OR	Fish, Recreation
Umpqua River	16	OR	Fish, Recreation
Alsea River	12	OR	Fish, Recreation
Alsea River	19	OR	Fish, Recreation
John Day River, North Fork	57	OR	Fish, Recreation, Other
McKenzie River	12	OR	Fish, Recreation, Scenic
Santiam River, North	19	OR	Fish, Recreation, Scenic
Little North Santiam River	17	OR	Fish, Recreation, Scenic
McKenzie River	8	OR	Fish, Recreation, Scenic
Minam River	9	OR	Fish, Recreation, Scenic
Alsea River, North Fork	5	OR	Fish, Recreation, Scenic, Wildlife
Wilson River	30	OR	Fish, Recreation, Wildlife
Trask River, North Fork	12	OR	Fish, Scenic
Alsea River, North Fork	11	OR	Fish, Scenic, Wildlife
Smith River, North Fork	3	OR	Fish, Scenic, Wildlife
Smith River, North Fork	7	OR	Fish, Scenic, Wildlife
Smith River, North Fork	10	OR	Fish, Scenic, Wildlife
Smith River	62	OR	Fish, Wildlife

Coquille River, East Fork	35	OR	Fish, Wildlife
Pistol River, South Fork	12	OR	Fish, Wildlife
Wassen Creek	5	OR	Fish, Wildlife, Other
Siletz River, North Fork	11	OR	Fish, Wildlife, Other
Little Deschutes River	62	OR	Geologic
Little Deschutes River	29	OR	Geologic
Joseph Creek	40	OR, WA	Geologic, Historic
Santiam River, Little North Fork	10	OR	Geologic, Historic, Scenic
Hood River, Middle Fork	1	OR	Geologic, Recreation, Other
Molalla River	13	OR	Geologic, Recreation, Scenic
Breitenbush River, North Fork of North Fork	4	OR	Geologic, Recreation, Scenic, Other
Takenitch Creek	3	OR	Geologic, Recreation, Scenic, Wildlife
Crescent Creek	7	OR	Geologic, Scenic
Paulina Creek	9	OR	Geologic, Scenic
Lostine River	14	OR	Geologic, Scenic
Crooked River	71	OR	Geologic, Scenic
Opal Creek	4	OR	Geologic, Scenic, Other
Deschutes River, Upper	9	OR	Geologic, Scenic, Other
Tenmile Creek	1	OR	Geologic, Scenic, Wildlife
Tenmile Creek	1	OR	Geologic, Scenic, Wildlife
Tenmile Creek	2	OR	Geologic, Scenic, Wildlife
Tenmile Creek	1	OR	Geologic, Scenic, Wildlife
Siltcoose River	1	OR	Geologic, Wildlife
Antelope Creek	2	OR	Historic
Antelope Creek	5	OR	Historic
Willamette River, Middle Fork	12	OR	Historic, Recreation, Scenic, Wildlife, Other
Willamette River, Middle Fork	14	OR	Historic, Recreation, Scenic, Wildlife, Other
Walker Creek	3	OR	Other
Little Luckiamute River	27	OR	Other
Clackamas River, Oak Grove Fork	10	OR	Other
Fall River	11	OR	Other
Hood River, East Fork	2	OR	Other
Sharps Creek	11	OR	Recreation
Breitenbush River	10	OR	Recreation
Wassen Creek	8	OR	Recreation, Scenic, Wildlife, Other
Wassen Creek	5	OR	Recreation, Scenic, Wildlife, Other
Miller Creek	6	OR	Scenic
Barnes Valley Creek	6	OR	Scenic
Boulder Creek	8	OR	Scenic
Breitenbush River, South Fork	5	OR	Scenic
Breitenbush River, South Fork	6	OR	Scenic
Malheur River	4	OR	Scenic, Other
Drift Creek	3	OR	Scenic, Wildlife, Other
Drift Creek	12	OR	Scenic, Wildlife, Other
Crooked River, South Fork	26	OR	
Crooked River, South Fork	9	OR	
Crooked River, South Fork	17	OR	
Conococheague Creek	17	PA	Cultural
Brandywine Creek	8	PA, DE	Cultural, Historic, Recreation
Conewago Creek	25	PA	Geologic
Little Juniata River	13	PA	Geologic
Octoraro Creek, East Branch	13	PA	Geologic
Slippery Rock Creek	7	PA	Geologic
French Creek	17	PA	Geologic, Historic, Other
Double Run	3	PA	Geologic, Historic, Recreation, Scenic
Dry Run	4	PA	Geologic, Historic, Recreation, Scenic
Kettle Creek	7	PA	Geologic, Historic, Recreation, Scenic
Ogdonia Creek	0	PA	Geologic, Historic, Recreation, Scenic
Loyalsock Creek	57	PA	Geologic, Historic, Recreation, Scenic
Devils Race Course	4	PA	Geologic, Other
Rattling Run	1	PA	Geologic, Other
Hell Run	3	PA	Geologic, Other
Slippery Rock Creek	5	PA	Geologic, Other
Stony Creek	23	PA	Geologic, Other
Susquehanna River	10	PA	Geologic, Other
Beech Creek	15	PA	Geologic, Recreation
Lehigh River	23	PA	Geologic, Recreation
Penns Creek	30	PA	Geologic, Scenic
Susquehanna River, West Branch	32	PA	Geologic, Scenic
Kinzua Creek	28	PA	Historic
Wissahickon Creek	5	PA	Historic, Recreation, Other
Susquehanna River	27	PA	Historic, Scenic, Other
Casselman River	18	PA	Other
French Creek	24	PA	Other
Muddy Creek	9	PA	Other
Octoraro Creek	11	PA	Other
Susquehanna River	14	PA	Other
Susquehanna River, West Branch	55	PA	Other
Susquehanna River, West Branch	6	PA	Other
Black Moshannon Creek	18	PA	Recreation
Clarion River	7	PA	Recreation

Indian Creek	31	PA	Recreation
Moshannon Creek	25	PA	Recreation
Clarion River	27	PA	Scenic
Laurel Hill Creek	19	PA	Scenic
Río Espíritu Santo	3	PR	Fish, Scenic, Wildlife
Río Espíritu Santo	0	PR	Fish, Scenic, Wildlife
Río Espíritu Santo	3	PR	Fish, Scenic, Wildlife
Río Espíritu Santo (tributary)	3	PR	Fish, Scenic, Wildlife
Río Espíritu Santo (tributary)	1	PR	Fish, Scenic, Wildlife
Río Sabana	2	PR	Recreation, Scenic, Other
Río Sabana	0	PR	Recreation, Scenic, Other
Río Fajardo	5	PR	Scenic
*Buckeye Brook	3	RI	Fish, Historic, Recreation
Lockwood Brook	2	RI	Fish, Historic, Recreation
Warner Brook	1	RI	Fish, Historic, Recreation
Pawcatuck River	17	RI	Geologic
Pawcatuck River	6	RI	Historic
Chipuxet River	3	RI	Other
Wood River	10	RI, CT	Recreation
Wood River	5	RI	Recreation
Wood River	5	RI	Recreation
Jones Swamp Creek	12	SC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Ashepoo River	54	SC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Black River	112	SC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Broad River	62	SC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Broad River	18	SC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Catawba River	33	SC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Congaree River	45	SC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Edisto River, South Fork	102	SC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Edisto River	101	SC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
South Edisto River	19	SC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Enoree River	109	SC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
North Santee River	18	SC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Pee Dee River	177	SC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Saluda River	7	SC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Santee River	71	SC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
South Santee River	16	SC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Savannah River	196	SC, GA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
North Tyger River	3	SC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Tyger River	47	SC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Wateree River	77	SC	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Combahee River	53	SC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Coosawhatchie River	34	SC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Four Hole Swamp	49	SC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Little Pee Dee River	118	SC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Lumber River	17	SC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Great Swamp	2	SC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
New River	41	SC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Salkehatchie River	51	SC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Waccamaw River	98	SC	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Taylor Creek	5	SC	Fish, Geologic, Recreation, Scenic, Wildlife
Chauga River	24	SC	Fish, Geologic, Recreation, Scenic, Wildlife
Edisto River, North Fork	87	SC	Fish, Geologic, Recreation, Scenic, Wildlife
Fairforest Creek	26	SC	Fish, Geologic, Recreation, Scenic, Wildlife
Lynches River	152	SC	Fish, Geologic, Recreation, Scenic, Wildlife
Turkey Creek	34	SC	Fish, Geologic, Recreation, Scenic, Wildlife
Little Salkehatchie River	40	SC	Fish, Recreation, Scenic, Wildlife
James River	164	SD	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Little Minnesota River	52	SD, MN	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Yellow Bank River, South Fork	23	SD	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Cheyenne River	245	SD	Cultural, Fish, Historic, Scenic, Wildlife
Big Sioux River	23	SD	Cultural, Geologic, Recreation, Scenic
White River	333	SD	Cultural, Geologic, Scenic
French Creek	25	SD	Cultural, Recreation, Scenic
Belle Fourche River	122	SD	Fish
Little Spearfish Creek	14	SD	Fish, Recreation, Scenic
Whetstone River, North Fork	42	SD	Fish, Scenic, Wildlife
Bledsoe Creek	13	TN	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Clinch River	32	TN	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Cumberland River, Big South Fork	22	TN	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
French Broad River	33	TN	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Harpeth River	112	TN	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Hatchie River	197	TN	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Holston River	53	TN	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Little Pigeon River, Middle Prong	4	TN	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Little Pigeon River	19	TN	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
North Chickamauga Creek	18	TN	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Powell River	67	TN	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Red River	19	TN	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Red River	43	TN	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Roaring River	37	TN	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife

Stones River, East Fork	19	TN	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Sycamore Creek	14	TN	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Elk River	99	TN	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Stones River	26	TN	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Piney River	14	TN	Cultural, Historic, Recreation, Scenic
White Oak Creek	16	TN	Cultural, Historic, Recreation, Scenic
Wolf River	26	TN	Cultural, Historic, Scenic
Stones River, West Fork	10	TN	Fish, Geologic, Historic, Recreation, Scenic
Stones River, West Fork	12	TN	Fish, Geologic, Historic, Recreation, Scenic
Big Fiery Gizzard Creek	17	TN	Fish, Geologic, Recreation, Scenic
Obey River, West Fork	29	TN	Fish, Geologic, Recreation, Scenic
Red River, Sulphur Fork	27	TN	Fish, Geologic, Recreation, Scenic
Bee Creek	23	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Big Turnbull Creek	13	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Calfkiller River	21	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Calfkiller River	7	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Cane Creek of Caney Fork	34	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Clear Creek	31	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Clinch River	25	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Collins River	63	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Crab Orchard Creek	20	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Crooked Fork Creek	6	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Cumberland River, Caney Fork	38	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Cumberland River, Caney Fork	27	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Emory River	23	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Emory River	12	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Falling Water River	45	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Green River	12	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Jones Creek	17	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Obey River	7	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Obey River, East Fork	27	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Red River, Elk Fork	8	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Red River, South Fork	22	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Rock Creek	11	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Rocky River	31	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Sequatchie River	116	TN	Fish, Geologic, Recreation, Scenic, Wildlife
Smith Fork	29	TN	Fish, Geologic, Recreation, Scenic, Wildlife
South Harpeth River	14	TN	Fish, Geologic, Recreation, Scenic, Wildlife
West Harpeth River	20	TN	Fish, Historic, Recreation, Scenic
Stones River, Middle Fork	17	TN	Fish, Historic, Recreation, Scenic, Wildlife
Charles Creek	16	TN	Fish, Recreation, Scenic
Long Creek	8	TN	Fish, Recreation, Scenic
White Creek	9	TN	Fish, Recreation, Scenic
Yellow Creek	9	TN	Fish, Recreation, Scenic
Dry Creek of Smith Fork	15	TN	Fish, Recreation, Scenic, Wildlife
Flynn Creek	16	TN	Fish, Recreation, Scenic, Wildlife
Goose Creek	19	TN	Fish, Recreation, Scenic, Wildlife
Little Sequatchie River	20	TN	Fish, Recreation, Scenic, Wildlife
Mountain Creek	24	TN	Fish, Recreation, Scenic, Wildlife
Obion River	55	TN	Fish, Recreation, Scenic, Wildlife
Sink Creek	22	TN	Fish, Recreation, Scenic, Wildlife
Sweden Creek	12	TN	Fish, Recreation, Scenic, Wildlife
Overall Creek	15	TN	Fish, Recreation, Wildlife
Pine Creek of Caney Fork	14	TN	Fish, Recreation, Wildlife
Red River, West Fork	15	TN	Fish, Recreation, Wildlife
Rock Creek	11	TN	Fish, Recreation, Wildlife
Big Creek	8	TN	Fish, Scenic, Wildlife
Cumberland River, Little South Fork	2	TN	Geologic, Recreation, Scenic
Little Pigeon, West Prong	10	TN	Geologic, Recreation, Scenic
New River	9	TN	Geologic, Recreation, Scenic
Nolichucky River	9	TN, NC	Geologic, Recreation, Scenic
North White Oak Creek	27	TN	Geologic, Recreation, Scenic
Piney Creek	16	TN	Geologic, Recreation, Scenic
Spring Creek	27	TN	Geologic, Recreation, Scenic
Stinking Creek	21	TN	Geologic, Recreation, Scenic
Hickory Creek	10	TN	Geologic, Recreation, Scenic
Anthony Creek	3	TN	Geologic, Recreation, Scenic, Wildlife
Abrams Creek	27	TN	Geologic, Recreation, Scenic, Wildlife
Roaring River, Blackburn Fork	16	TN	Geologic, Recreation, Scenic, Wildlife
Clear Fork, North Prong	22	TN	Geologic, Recreation, Scenic, Wildlife
Cumberland River, Clear Fork of South Fork	27	TN	Geologic, Recreation, Scenic, Wildlife
Cripple Creek	15	TN	Geologic, Recreation, Scenic, Wildlife
Crooked Creek	18	TN	Geologic, Recreation, Scenic, Wildlife
Conasauga River	14	TN, GA	Historic, Recreation, Scenic
French Broad River	8	TN	Historic, Scenic, Other
Hiwassee River	32	TN	Recreation, Scenic
Ocoee River	12	TN	Recreation, Scenic
Richland Creek	74	TN	Recreation, Scenic
Tellico River	49	TN	Recreation, Scenic
Little Tennessee River	30	TN	Recreation, Wildlife
Doe River	5	TN	Scenic

Watauga River	2	TN	Scenic
Devils River	43	TX	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Pecos River	140	TX	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Colorado River	74	TX	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Concho River	18	TX	Cultural, Fish, Historic, Recreation, Scenic, Wildlife
Red River, Prairie Dog Town Fork	87	TX	Cultural, Geologic, Historic, Recreation, Scenic
Nueces River (AKA East Nueces River)	50	TX	Fish, Geologic, Recreation, Scenic, Wildlife
Neches River	233	TX	Fish, Recreation, Scenic, Wildlife
Village Creek and Big Sandy Creek	119	TX	Fish, Recreation, Scenic, Wildlife
Colorado River	26	TX	Geologic, Recreation, Scenic
Guadalupe River	115	TX	Geologic, Recreation, Scenic, Other
Sabinal River	56	TX	Geologic, Recreation, Scenic, Wildlife, Other
Terlingua Creek	45	TX	Geologic, Scenic, Other
Frio River	48	TX	Historic, Recreation, Scenic, Wildlife
Pedernales River	126	TX	Historic, Recreation, Scenic, Wildlife
Sabine River	66	TX	Historic, Scenic, Wildlife
Medina River	21	TX	Recreation, Scenic
Sabine River	121	TX, LA	Recreation, Scenic, Wildlife
Brazos River	119	TX	Recreation, Scenic, Wildlife, Other
Neches River	79	TX	Recreation, Scenic, Wildlife, Other
Escalante River	36	UT	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Paria River	60	UT	Cultural, Fish, Geologic, Recreation, Scenic
Paria River	4	UT	Cultural, Fish, Geologic, Recreation, Scenic
Courthouse Wash	12	UT	Cultural, Fish, Geologic, Recreation, Scenic, Wildlife
Escalante River	80	UT	Cultural, Fish, Geologic, Recreation, Scenic, Wildlife
Green River	31	UT	Cultural, Fish, Geologic, Recreation, Scenic, Wildlife
Colorado River	45	UT	Cultural, Fish, Geologic, Scenic, Wildlife
Fremont River	13	UT	Cultural, Geologic, Historic, Other, Recreation, Scenic
Halls Creek	41	UT	Cultural, Geologic, Historic, Recreation, Scenic
Pleasant Creek	7	UT	Cultural, Geologic, Historic, Recreation, Scenic
White Canyon Creek	8	UT	Cultural, Geologic, Historic, Scenic
Cow Canyon Creek	9	UT	Cultural, Geologic, Recreation, Scenic, Wildlife
Coyote Creek	15	UT	Cultural, Geologic, Recreation, Scenic, Wildlife
Dark Canyon Creek	4	UT	Cultural, Geologic, Recreation, Scenic, Wildlife
Davis Creek	9	UT	Cultural, Geologic, Recreation, Scenic, Wildlife
Dirty Devil River	23	UT	Cultural, Geologic, Recreation, Scenic, Wildlife
Explorer Canyon Creek	4	UT	Cultural, Geologic, Recreation, Scenic, Wildlife
Fiftymile Creek	12	UT	Cultural, Geologic, Recreation, Scenic, Wildlife
Halls Creek	9	UT	Cultural, Geologic, Recreation, Scenic, Wildlife
Harris Wash	8	UT	Cultural, Geologic, Recreation, Scenic, Wildlife
Llewellyn Creek	8	UT	Cultural, Geologic, Recreation, Scenic, Wildlife
Moqui Canyon Creek	5	UT	Cultural, Geologic, Recreation, Scenic, Wildlife
Reflection Canyon Creek	3	UT	Cultural, Geologic, Recreation, Scenic, Wildlife
San Juan River	96	UT	Cultural, Geologic, Recreation, Scenic, Wildlife
Twenty-five Mile Creek	6	UT	Cultural, Geologic, Recreation, Scenic, Wildlife
White Canyon Creek	5	UT	Cultural, Geologic, Recreation, Scenic, Wildlife
Clearwater Canyon Creek	9	UT	Cultural, Geologic, Recreation, Scenic, Wildlife
Castle Creek	4	UT	Cultural, Geologic, Recreation, Scenic, Wildlife, Other
Fortymile Creek	6	UT	Cultural, Geologic, Recreation, Scenic, Wildlife, Other
Green River	21	UT	Cultural, Geologic, Scenic, Other
Dirty Devil River	59	UT	Cultural, Geologic, Scenic, Wildlife
Bowns Canyon Creek	6	UT	Cultural, Geologic, Scenic, Wildlife, Other
Nine Mile Creek	20	UT	Cultural, Scenic
Nine Mile Creek	16	UT	Cultural, Scenic
Green River	72	UT	Fish, Geologic, Historic, Recreation, Scenic
Green River	16	UT	Fish, Geologic, Historic, Recreation, Scenic
Birch Creek	6	UT	Fish, Geologic, Recreation, Scenic
Colorado River	16	UT	Fish, Geologic, Recreation, Scenic, Wildlife
Deep Creek	13	UT	Fish, Geologic, Recreation, Scenic, Wildlife
Green River	59	UT	Fish, Geologic, Recreation, Scenic, Wildlife
North Fork Virgin River	19	UT	Fish, Geologic, Recreation, Scenic, Wildlife
Rock Creek	13	UT	Fish, Geologic, Recreation, Scenic, Wildlife
Salt Wash	7	UT	Fish, Geologic, Recreation, Scenic, Wildlife
Trout Creek	8	UT	Fish, Geologic, Scenic, Other
Green River	47	UT	Fish, Geologic, Scenic, Wildlife
Green River	37	UT	Fish, Recreation
White River	71	UT	Fish, Recreation, Scenic, Wildlife
Whiterocks River	10	UT	Fish, Recreation, Scenic, Wildlife
Virgin River	60	UT, AZ	Fish, Scenic, Wildlife, Other
Muddy Creek	19	UT	Geologic, Recreation, Scenic
Muddy Creek	3	UT	Geologic, Recreation, Scenic
Muddy Creek	13	UT	Geologic, Recreation, Scenic
Muddy Creek	14	UT	Geologic, Recreation, Scenic
San Juan River	70	UT	Geologic, Recreation, Scenic
San Rafael River	49	UT	Geologic, Recreation, Scenic
San Rafael River	6	UT	Geologic, Recreation, Scenic
San Rafael River	17	UT	Geologic, Recreation, Scenic
San Rafael River	10	UT	Geologic, Recreation, Scenic
San Rafael River	30	UT	Geologic, Recreation, Scenic
San Juan River	26	UT, CO	Geologic, Recreation, Scenic
San Juan River	2	UT	Geologic, Recreation, Scenic

Wilson Creek	5	UT	Geologic, Recreation, Scenic, Other
Colorado River	32	UT	Geologic, Recreation, Scenic, Wildlife
Fence Canyon Creek	7	UT	Geologic, Recreation, Scenic, Wildlife
Horsethief Canyon Creek	8	UT	Geologic, Recreation, Scenic, Wildlife
Stevens Creek	17	UT	Geologic, Recreation, Scenic, Wildlife
Trachyte Creek	3	UT	Geologic, Recreation, Scenic, Wildlife
Salt Creek	10	UT	Geologic, Recreation, Wildlife, Other
White Canyon Creek	38	UT	Geologic, Scenic
White Canyon Creek	4	UT	Geologic, Scenic
White Canyon Creek	4	UT	Geologic, Scenic
Green River	30	UT	Geologic, Scenic, Other
Green River	23	UT	Geologic, Scenic, Other
Camp Creek	5	UT	Recreation
Coalpits Wash	10	UT	Recreation, Other
Scoggins Wash	5	UT	Recreation, Other
American Fork Creek	2	UT	Recreation, Scenic
Muddy Creek	12	UT	Recreation, Scenic
Muddy Creek	2	UT	Recreation, Scenic
Virgin River, East Fork	0	UT	Recreation, Scenic
Virgin River, North Fork	1	UT	Recreation, Scenic, Other
Price River	93	UT	Recreation, Scenic, Wildlife
Range Creek	38	UT	Recreation, Scenic, Wildlife
Horseshoe Canyon	4	UT	Recreation, Wildlife, Other
Argyle Creek	27	UT	Scenic
Whiterocks River	6	UT	Scenic
Lake Fork River	14	UT	Scenic, Other
Rock Creek	12	UT	Scenic, Other
Uinta River	19	UT	Scenic, Other
Yellowstone River	17	UT	Scenic, Other
Willow Creek	8	UT	Scenic, Recreation, Geologic, Wildlife
French Creek	2	UT	Scenic, Recreation, Geologic, Wildlife, Cultural
Soft Step Creek	2	UT	Scenic, Recreation, Geologic, Wildlife, Cultural, Other
Mikes Cayon Creek	3	UT	Scenic, Recreation, Geologic, Wildlife, Other
Dolores River	26	UT, CO	
Dolores River	6	UT	
Shenandoah River, South Fork	43	VA	Cultural, Fish, Geologic, Historic, Recreation, Scenic
Back Creek	42	VA	Cultural, Geologic
Maury River	28	VA	Cultural, Geologic, Historic, Other, Recreation
Cedar Creek	27	VA	Cultural, Geologic, Historic, Recreation
Craig Creek	84	VA	Cultural, Geologic, Historic, Recreation
Passage Creek	39	VA	Cultural, Geologic, Historic, Recreation
Shenandoah River, North Fork	47	VA	Cultural, Geologic, Historic, Recreation
Jackson River	25	VA	Cultural, Geologic, Recreation, Other
Goose Creek	6	VA	Cultural, Historic, Recreation
Jackson River	9	VA	Cultural, Historic, Scenic
Jackson River	13	VA	Fish, Recreation
Great Wicomico River	13	VA	Fish, Recreation, Wildlife, Other
Rucker Run	6	VA	Geologic
Slate River	49	VA	Geologic
South Fork Tye River	5	VA	Geologic
Tye River	4	VA	Geologic
Cub Creek	23	VA	Geologic, Historic
Falling River	36	VA	Geologic, Historic
Roanoke River	77	VA	Geologic, Historic
James River	21	VA	Geologic, Historic, Other
Rappahannock River	60	VA	Geologic, Historic, Other
Hazel River	48	VA	Geologic, Historic, Recreation
Rapidan River	17	VA	Geologic, Historic, Recreation
Rappahannock River	29	VA	Geologic, Historic, Recreation
James River	48	VA	Geologic, Historic, Recreation, Scenic, Other
Big Otter River	31	VA	Geologic, Other
Chickahominy River	34	VA	Geologic, Other
Yarmouth Creek	9	VA	Geologic, Other
Dan River	11	VA	Geologic, Recreation
Russell Fork	7	VA	Geologic, Recreation
North River	5	VA	Geologic, Recreation, Scenic
Big Reed Island Creek	58	VA	Geologic, Scenic
Jackson River	8	VA	Geologic, Scenic
Laurel River	3	VA	Geologic, Scenic
Bull Run	6	VA	Historic
Goose Creek	43	VA	Historic
James River	57	VA	Historic
Willis River	62	VA	Historic
Appomattox River	47	VA	Historic, Other
Appomattox River	75	VA	Historic, Other
Dragon Swamp River	36	VA	Historic, Other
James River	21	VA	Historic, Other
Catoctin Creek	14	VA	Historic, Recreation
James River	57	VA	Historic, Recreation
North Anna River	27	VA	Historic, Recreation
North Anna River	5	VA	Historic, Recreation

Robinson River	24	VA	Historic, Recreation
South Anna River	29	VA	Historic, Recreation
South Anna River	66	VA	Historic, Recreation
Catoctin Creek, South Fork	2	VA	Historic, Recreation
Bullpasture River	26	VA, WV	Historic, Recreation, Scenic, Other
Cowpasture River	75	VA	Historic, Recreation, Scenic, Other
Big Otter River	10	VA	Other
Blackwater River	70	VA	Other
Blackwater River	8	VA, NC	Other
Clinch River	17	VA	Other
Coan River	7	VA	Other
Deep Creek	30	VA	Other
Glebe Creek	4	VA	Other
Holston River, South Fork	21	VA	Other
Brush Creek	15	VA	Other
Little River	79	VA	Other
Meherrin River	40	VA	Other
Northwest River	16	VA	Other
Nottoway River	44	VA	Other
Nottoway River	81	VA	Other
Pamunkey River	33	VA	Other
Poropotank River	16	VA	Other
Rivanna River	31	VA	Other
St. Mary's River	8	VA	Other
Tye River	12	VA	Other
Ware Creek	6	VA	Other
York River	12	VA	Other
South River	2	VA	Other
Mattaponi River	24	VA	Other
Covington River	7	VA	Recreation
Dan River	27	VA	Recreation
Hardware River	23	VA	Recreation
Hardware River	19	VA	Recreation
Rush River	13	VA	Recreation
Chickahominy River	30	VA	Recreation, Other
Rapidan River	8	VA	Recreation, Other
Russell Fork	25	VA	Scenic
Dan River	18	VA	Scenic, Other
Powell River	53	VA	
Gihon River	9	VT	Cultural, Geologic
Lamoille River	20	VT	Cultural, Geologic
Waterman Brook	5	VT	Cultural, Geologic
Nulhegan River, East Branch	18	VT	Cultural, Other
Nulhegan River, North Branch	16	VT	Cultural, Other
Nulhegan River	10	VT	Cultural, Other
Walloomsac River	11	VT, NY	Cultural, Other
Batten Kill	12	VT	Fish, Historic, Other
Roaring Branch	4	VT	Fish, Historic, Other
Roaring Branch	4	VT	Fish, Historic, Other
Warm Brook	1	VT	Fish, Historic, Other
Lye Brook	7	VT	Fish, Historic, Other
Lye Brook	1	VT	Fish, Historic, Other
Branch Pond Brook	3	VT	Fish, Historic, Other
White River, First Branch	26	VT	Fish, Historic, Scenic
White River, Second Branch	28	VT	Fish, Historic, Scenic
White River, Third Branch	30	VT	Fish, Historic, Scenic
Lewis Creek	33	VT	Geologic
New Haven River	15	VT	Geologic
New Haven River	5	VT	Geologic
Batten Kill	19	VT, NY	Geologic, Historic, Scenic
Winooski River	9	VT	Geologic, Other
Rock River	14	VT	Geologic, Recreation, Scenic
West River	11	VT	Geologic, Recreation, Scenic
Lamoille River	6	VT	Geologic, Wildlife
Black River	8	VT	Historic
East Creek	6	VT	Historic
Lemon Fair River	34	VT	Historic
Otter Creek	12	VT	Historic
Otter Creek	13	VT	Historic
Waits River	25	VT	Historic
White River	24	VT	Historic, Fish, Scenic
White River	18	VT	Historic, Fish, Scenic
Otter Creek	31	VT	Historic, Other
Dead Creek	8	VT	Other
Dead Creek, East Branch	16	VT	Other
Dead Creek, West Branch	18	VT	Other
Deerfield River	19	VT	Other
Green River	15	VT	Other
Huntington River	21	VT	Other
Old City Brook	8	VT	Other
Otter Creek	28	VT	Other

Paul Stream	18	VT	Other
East Creek, South Fork	4	VT	Other
Mad River	11	VT	Recreation
Ottauquechee River	27	VT	Recreation
White River	15	VT	Recreation
Wardsboro River	4	VT	Recreation, Scenic
Wardsboro River	9	VT	Recreation, Scenic
West River	21	VT	Recreation, Scenic
West River	7	VT	Recreation, Scenic
Winhall River	18	VT	Recreation, Scenic
West River	4	VT	Scenic
Brewster River	8	VT	Scenic, Other
Lamoille River	14	VT	Scenic, Other
Barton River (South Bay-Barton River System)	13	VT	Wildlife
Black River	14	VT	Wildlife
Bolles Brook	6	VT	Wildlife
Walloomsac Brook, Roaring Branch	2	VT	Wildlife
City Stream (Walloomsac Brook)	5	VT	Wildlife
Missisquoi River	8	VT	Wildlife
Missisquoi River	4	VT	Wildlife, Other
Burgess Branch	6	VT	Wildlife, Other
Lamoille River	15	VT	
Queets River	48	WA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Nooksack River, North Fork	4	WA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Nooksack River, North Fork	13	WA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Nooksack River, North Fork	19	WA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Nooksack River, North Fork	5	WA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Nooksack River, North Fork	0	WA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Skagit River	11	WA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Stehekin River	12	WA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Stehekin River	11	WA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Bridge Creek	10	WA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Agnes Creek	1	WA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Stehekin River	2	WA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Stehekin River, Agnes Creek	0	WA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Stehekin River, Bridge Creek	0	WA	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Greenwater River	9	WA	Cultural, Fish, Historic
Greenwater River	14	WA	Cultural, Fish, Historic
Yellowjacket Creek	7	WA	Cultural, Fish, Recreation, Scenic, Other
Yellowjacket Creek	2	WA	Cultural, Fish, Recreation, Scenic, Other
Ozette River	5	WA	Cultural, Fish, Recreation, Scenic, Wildlife
Columbia River	62	WA	Cultural, Fish, Wildlife
Ohanapecosh River	6	WA	Cultural, Geologic, Historic, Scenic
Ohanapecosh River	7	WA	Cultural, Geologic, Historic, Scenic
Ohanapecosh River	3	WA	Cultural, Geologic, Historic, Scenic
Cle Elum River	2	WA	Cultural, Historic, Recreation, Scenic
Cle Elum River	5	WA	Cultural, Historic, Recreation, Scenic
Cle Elum River	6	WA	Cultural, Historic, Recreation, Scenic
Cle Elum River	8	WA	Cultural, Historic, Recreation, Scenic
Snoqualmie River, South Fork	31	WA	Cultural, Historic, Wildlife
Cispus River	37	WA	Cultural, Recreation, Scenic
Cispus River	8	WA	Cultural, Recreation, Scenic
Cispus River	8	WA	Cultural, Recreation, Scenic, Other
Wenatchee River	19	WA	Cultural, Recreation, Scenic, Wildlife
Wenatchee River	10	WA	Cultural, Recreation, Scenic, Wildlife
Soleduck River (Sol Duc River)	8	WA	Fish
Soleduck River (Sol Duc River)	8	WA	Fish
Soleduck River (Sol Duc River)	2	WA	Fish
Soleduck River (Sol Duc River)	3	WA	Fish
Soleduck River (Sol Duc River)	11	WA	Fish
Soleduck River (Sol Duc River)	23	WA	Fish
Soleduck River (Sol Duc River)	13	WA	Fish
Buck Creek	10	WA	Fish
Wynoochee River	5	WA	Fish
Tolt River, South Fork	5	WA	Fish
Humptulips River	5	WA	Fish
Humptulips River	23	WA	Fish
Humptulips River, West Fork	13	WA	Fish
Little Wenatchee River	9	WA	Fish
Wind River	19	WA	Fish
Wynoochee River	6	WA	Fish
Wynoochee River	46	WA	Fish
Buck Creek	1	WA	Fish
Quinault River	232	WA	Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Skokomish River, North Fork	15	WA	Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Elwha River	557	WA	Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Quinault River, North Fork	142	WA	Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Rustler Creek	48	WA	Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Grande Ronde River	39	WA, OR	Fish, Geologic, Recreation, Scenic
Hoh River	29	WA	Fish, Geologic, Recreation, Scenic, Wildlife
Chilliwack River	15	WA	Fish, Geologic, Recreation, Scenic, Wildlife

Hoh River	28	WA	Fish, Geologic, Recreation, Scenic, Wildlife
Mount Tom Creek	9	WA	Fish, Geologic, Recreation, Scenic, Wildlife
Hoh River, South Fork	15	WA	Fish, Geologic, Recreation, Scenic, Wildlife
Yakima River	47	WA	Fish, Geologic, Recreation, Wildlife
Yakima River	25	WA	Fish, Geologic, Recreation, Wildlife
Yakima River	3	WA	Fish, Geologic, Recreation, Wildlife
Yakima River	11	WA	Fish, Geologic, Recreation, Wildlife
Duckabush River	5	WA	Fish, Geologic, Scenic
Duckabush River	5	WA	Fish, Geologic, Scenic
Duckabush River	2	WA	Fish, Geologic, Scenic
Gray Wolf River	7	WA	Fish, Geologic, Scenic
Gray Wolf River	1	WA	Fish, Geologic, Scenic
Wind River	12	WA	Fish, Geologic, Scenic
Klickitat River	9	WA	Fish, Geologic, Scenic
Duckabush River	14	WA	Fish, Geologic, Scenic, Wildlife
Lost River	11	WA	Fish, Geologic, Scenic, Wildlife
Lost River	3	WA	Fish, Geologic, Scenic, Wildlife
Lost River	0	WA	Fish, Geologic, Scenic, Wildlife
Baker River	12	WA	Fish, Geologic, Scenic, Wildlife
Tye River	15	WA	Fish, Historic, Recreation, Scenic, Wildlife
Stillaguamish River, South Fork	16	WA	Fish, Historic, Recreation, Scenic, Wildlife, Other
Stillaguamish River, South Fork	37	WA	Fish, Historic, Recreation, Scenic, Wildlife, Other
White River	22	WA	Fish, Historic, Recreation, Wildlife
White River	18	WA	Fish, Historic, Recreation, Wildlife
Tucannon River	63	WA	Fish, Historic, Wildlife
Taylor River	1	WA	Fish, Recreation
Taylor River	6	WA	Fish, Recreation
Snoqualmie River, North Fork	12	WA	Fish, Recreation
Snoqualmie River, North Fork	8	WA	Fish, Recreation
Snoqualmie River, North Fork	2	WA	Fish, Recreation
Snoqualmie River, North Fork	5	WA	Fish, Recreation
Lewis River, East Fork	11	WA	Fish, Recreation
Lewis River, East Fork	13	WA	Fish, Recreation
Lewis River, East Fork	19	WA	Fish, Recreation
Taylor River	1	WA	Fish, Recreation
Chiwawa River	7	WA	Fish, Recreation, Scenic
Chiwawa River	6	WA	Fish, Recreation, Scenic
Granite Creek	13	WA	Fish, Recreation, Scenic
Chiwawa River	28	WA	Fish, Recreation, Scenic
Humptulips River, West Fork	8	WA	Fish, Recreation, Scenic
Ruby Creek	2	WA	Fish, Recreation, Scenic
Ruby Creek	1	WA	Fish, Recreation, Scenic
Canyon Creek	10	WA	Fish, Recreation, Scenic
Canyon Creek	1	WA	Fish, Recreation, Scenic
Bogachiel River	26	WA	Fish, Recreation, Scenic, Wildlife
Bogachiel River	22	WA	Fish, Recreation, Scenic, Wildlife
White Chuck River	12	WA	Fish, Recreation, Scenic, Wildlife
White Chuck River	13	WA	Fish, Recreation, Scenic, Wildlife
Twisp River	1	WA	Fish, Recreation, Scenic, Wildlife
Twisp River	15	WA	Fish, Recreation, Scenic, Wildlife
Twisp River	10	WA	Fish, Recreation, Scenic, Wildlife
Twisp River	5	WA	Fish, Recreation, Scenic, Wildlife
Methow River	7	WA	Fish, Recreation, Scenic, Wildlife
Methow River	3	WA	Fish, Recreation, Scenic, Wildlife
Methow River	11	WA	Fish, Recreation, Scenic, Wildlife
Methow River	65	WA	Fish, Recreation, Scenic, Wildlife
Methow River (Chewuch River)	8	WA	Fish, Recreation, Scenic, Wildlife
Methow River (Chewuch River)	1	WA	Fish, Recreation, Scenic, Wildlife
Methow River (Chewuch River)	25	WA	Fish, Recreation, Scenic, Wildlife
Methow River (Chewuch River)	9	WA	Fish, Recreation, Scenic, Wildlife
Skykomish River, North Fork	7	WA	Fish, Recreation, Scenic, Wildlife
Skykomish River, North Fork	10	WA	Fish, Recreation, Scenic, Wildlife
Skykomish River, North Fork	12	WA	Fish, Recreation, Scenic, Wildlife
Skykomish River, South Fork	50	WA	Fish, Recreation, Scenic, Wildlife
Bogachiel River, North Fork	8	WA	Fish, Recreation, Scenic, Wildlife
Klickitat, Upper	17	WA	Fish, Recreation, Scenic, Wildlife, Other
Snoqualmie River, Middle Fork	5	WA	Fish, Recreation, Wildlife
Foss River	5	WA	Fish, Recreation, Wildlife
Beckler River	14	WA	Fish, Recreation, Wildlife
Miller River	3	WA	Fish, Recreation, Wildlife
Snoqualmie River, Middle Fork	7	WA	Fish, Recreation, Wildlife
Dosewallips River	14	WA	Fish, Scenic
Dosewallips River	2	WA	Fish, Scenic
Carbon River	24	WA	Fish, Scenic
Dosewallips River	8	WA	Fish, Scenic
Dosewallips River	6	WA	Fish, Scenic
Dungeness River	5	WA	Fish, Scenic
Dungeness River	2	WA	Fish, Scenic
Dungeness River	4	WA	Fish, Scenic
Dungeness River	6	WA	Fish, Scenic
Dungeness River	3	WA	Fish, Scenic

White River	4	WA	Fish, Scenic
White River	14	WA	Fish, Scenic
White River	13	WA	Fish, Scenic
Baker River	2	WA	Fish, Scenic, Wildlife
Wolf Creek	2	WA	Fish, Scenic, Wildlife
Wolf Creek	6	WA	Fish, Scenic, Wildlife
Wolf Creek	2	WA	Fish, Scenic, Wildlife
Clearwater River	5	WA	Fish, Wildlife
Clearwater River	7	WA	Fish, Wildlife
Deer Creek	24	WA	Fish, Wildlife
Downey Creek	10	WA	Fish, Wildlife
Downey Creek	1	WA	Fish, Wildlife
Stillaguamish River, North Fork	50	WA	Fish, Wildlife
Boulder River	6	WA	Fish, Wildlife
Boulder River	9	WA	Fish, Wildlife
Lennox Creek	7	WA	Fish, Wildlife
Nooksack River, South Fork	5	WA	Fish, Wildlife
Nooksack River, South Fork	3	WA	Fish, Wildlife
Nooksack River, Bell Creek	3	WA	Fish, Wildlife
Nooksack River, South Fork	13	WA	Fish, Wildlife
Nooksack River, South Fork	21	WA	Fish, Wildlife
Lennox Creek	0	WA	Fish, Wildlife
Illabot Creek	2	WA	Fish, Wildlife
Canyon Creek, South Fork	1	WA	Fish, Wildlife, Other
Canyon Creek, South Fork	8	WA	Fish, Wildlife, Other
Canyon Creek	12	WA	Fish, Wildlife, Other
Palouse River	90	WA	Geologic
Rock Creek	57	WA	Geologic
Green River	5	WA	Geologic, Historic, Recreation, Scenic
Green River	5	WA	Geologic, Historic, Recreation, Scenic
Green River	3	WA	Geologic, Historic, Recreation, Scenic
Royal Creek	6	WA	Geologic, Recreation, Scenic
Clear Creek	5	WA	Geologic, Recreation, Scenic
Clear Creek	6	WA	Geologic, Recreation, Scenic
Muddy River	3	WA	Geologic, Recreation, Scenic
Muddy River	5	WA	Geologic, Recreation, Scenic
Muddy River	11	WA	Geologic, Recreation, Scenic
Smith Creek	8	WA	Geologic, Recreation, Scenic
Thunder Creek	16	WA	Geologic, Recreation, Scenic
Fisher Creek	13	WA	Geologic, Recreation, Scenic
White Salmon River	18	WA	Geologic, Recreation, Scenic, Other
Toutle River	5	WA	Geologic, Recreation, Scenic, Wildlife
Toutle River	13	WA	Geologic, Recreation, Scenic, Wildlife
Big Beaver Creek	16	WA	Geologic, Recreation, Scenic, Wildlife
White River, West Fork	8	WA	Geologic, Recreation, Scenic, Wildlife, Other
Nisqually River	29	WA	Geologic, Scenic
Napeequa River	17	WA	Geologic, Scenic
Napeequa River	1	WA	Geologic, Scenic
Cowlitz River	47	WA	Geologic, Scenic
Muddy Fork Cowlitz River	5	WA	Geologic, Scenic, Wildlife
Muddy Fork Cowlitz River	1	WA	Geologic, Scenic, Wildlife
Muddy Fork Cowlitz River	3	WA	Geologic, Scenic, Wildlife
Kettle River	34	WA	Historic, Recreation, Scenic
Kettle River	29	WA	Historic, Recreation, Scenic
Deception Creek	9	WA	Historic, Wildlife
Deception Creek	1	WA	Historic, Wildlife
Humptulips River, East Fork	14	WA	Recreation
Humptulips River, East Fork	12	WA	Recreation
Cameron Creek	9	WA	Recreation, Scenic
Carbon River	4	WA	Recreation, Scenic
Carbon River	5	WA	Recreation, Scenic
Lewis River	5	WA	Recreation, Scenic
Lewis River	30	WA	Recreation, Scenic
Lewis River	3	WA	Recreation, Scenic
Little White Salmon River	3	WA	Recreation, Scenic
Siouxon Creek	11	WA	Recreation, Scenic
Siouxon Creek	3	WA	Recreation, Scenic
Humptulips River, West Fork	14	WA	Recreation, Scenic
Gray Wolf River	9	WA	Recreation, Scenic
Grand Creek	8	WA	Recreation, Scenic
Diobsud Creek	3	WA	Recreation, Wildlife
Diobsud Creek	9	WA	Recreation, Wildlife
Calawah River, South Fork	17	WA	Scenic
Hamma Hamma River	6	WA	Scenic
Hamma Hamma River	6	WA	Scenic
Cowlitz River, Clear Fork	10	WA	Scenic
Entiat River	20	WA	Scenic
American River	19	WA	Scenic
American River	6	WA	Scenic
Waptus River	13	WA	Scenic
Waptus River	1	WA	Scenic

Entiat River	11	WA	Scenic
Entiat River	5	WA	Scenic
Hamma Hamma River	2	WA	Scenic
Hamma Hamma River	4	WA	Scenic
Pasayten River	17	WA	Scenic
Quartz Creek	8	WA	Scenic
Quartz Creek	2	WA	Scenic
Cowlitz River, Clear Fork	8	WA	Scenic
Sauk River, South Fork	2	WA	Scenic, Wildlife
Sauk River, South Fork	8	WA	Scenic, Wildlife
Silesia Creek	11	WA	Wildlife
Stillaguamish River, North Branch of North Fork	5	WA	Wildlife
Nooksack River, North Fork, (Wells Creek)	4	WA	Wildlife
Nooksack River, North Fork (Wells Creek)	4	WA	Wildlife
Nooksack River, Middle Fork	2	WA	Wildlife
Nooksack River, Middle Fork	10	WA	Wildlife
Nooksack River, Middle Fork	8	WA	Wildlife
Troublesome Creek	4	WA	Wildlife
Troublesome Creek	0	WA	Wildlife
Cady Creek, West	5	WA	Wildlife
Cady Creek, West	3	WA	Wildlife
Noisy Creek	6	WA	Wildlife, Other
Flambeau River, South Fork	24	WI	Fish, Historic, Recreation, Scenic, Other
Brule River	17	WI, MI	Fish, Recreation
Sugar River	28	WI, IL	Fish, Recreation
Wolf River	43	WI	Fish, Recreation
Presque Isle River, East Branch	7	WI	Fish, Recreation, Scenic
Bois Brule River	38	WI	Fish, Recreation, Scenic
Chippewa River, East Fork	21	WI	Fish, Recreation, Scenic, Wildlife
Flambeau River, South Fork	33	WI	Fish, Recreation, Scenic, Wildlife
Waupaca River	39	WI	Fish, Recreation, Scenic, Wildlife
Wisconsin River	51	WI	Geologic, Recreation
Black River	62	WI	Geologic, Recreation, Scenic
Peshtigo River	32	WI	Geologic, Recreation, Scenic
South Branch Pike River	22	WI	Geologic, Recreation, Scenic
Pike River	16	WI	Geologic, Recreation, Scenic
North Branch Peshtigo River	15	WI	Geologic, Recreation, Scenic, Other
Peshtigo River	28	WI	Geologic, Recreation, Scenic, Other
Bad River	51	WI	Geologic, Scenic
Kickapoo River	108	WI	Geologic, Scenic
Potato River	27	WI	Geologic, Scenic
Fox River	17	WI	Historic, Recreation
Fox River	61	WI	Historic, Recreation
Des Plaines River	22	WI	Recreation
Mecan River	21	WI	Recreation
Menominee River	29	WI, MI	Recreation
Plover River	25	WI	Recreation
Popple River	14	WI	Recreation
Crystal River	12	WI	Recreation
Chippewa River	56	WI	Recreation, Scenic
Chippewa River	48	WI	Recreation, Scenic
Chippewa River, East Fork	32	WI	Recreation, Scenic
Flambeau River	46	WI	Recreation, Scenic
South Fork Jump River	34	WI	Recreation, Scenic
Milwaukee River	66	WI	Recreation, Scenic
North Branch Pine River	17	WI	Recreation, Scenic
Pine River	46	WI	Recreation, Scenic
White River	43	WI	Recreation, Scenic
North Branch Popple River	11	WI	Recreation, Wildlife
Popple River	33	WI	Recreation, Wildlife
South Branch Popple River	11	WI	Recreation, Wildlife
Black River, East Fork	58	WI	Scenic
Clam River	45	WI	Scenic
North Fork Jump River	26	WI	Scenic
Jump River	33	WI	Scenic
LaCrosse River	40	WI	Scenic
Marengo River	14	WI	Scenic
Nemadji River	26	WI	Scenic
Oconto River	19	WI	Scenic
North Branch Pike River	30	WI	Scenic
Pine River	21	WI	Scenic
Somo River	23	WI	Scenic
Thornapple River	64	WI	Scenic
Totagetic River	39	WI	Scenic
Yellow River	42	WI	Scenic
New River	67	WV	Cultural, Geologic, Recreation, Wildlife
Greenbrier River	103	WV	Fish, Geologic, Historic, Recreation, Scenic
Greenbrier River	51	WV	Fish, Geologic, Historic, Recreation, Scenic
Greenbrier River, East Fork	11	WV	Fish, Recreation
Greenbrier River, West Fork	19	WV	Fish, Recreation
Seneca Creek	3	WV	Fish, Recreation

Seneca Creek	2	WV	Fish, Recreation
Seneca Creek	5	WV	Fish, Recreation, Scenic
Blackwater River	26	WV	Fish, Recreation, Scenic, Other
Potomac River, South Branch	55	WV	Geologic
Potomac River, South Fork of the South Branch	63	WV, VA	Geologic, Recreation, Other
Potomac River, South Branch	5	WV	Geologic, Recreation, Scenic
Potomac River, South Branch	8	WV	Geologic, Recreation, Scenic, Wildlife
Big Sandy Creek	11	WV	Geologic, Scenic
Little Kanawha River	50	WV	Historic
Mud River	83	WV	Historic
Greenbrier River, East Fork	9	WV	Historic, Recreation
Potomac River, South Branch	4	WV	Historic, Recreation, Scenic
Cranberry River	25	WV	Other
Elk River	25	WV	Other
North River	52	WV	Other
Buckhannon River	45	WV	Recreation
Cheat River, Dry Fork	14	WV	Recreation
Cheat River, Glady Fork	4	WV	Recreation
Cheat River, Glady Fork	9	WV	Recreation
Cheat River, Glady Fork	4	WV	Recreation
Cheat River, Glady Fork	15	WV	Recreation
Shavers Fork	3	WV	Recreation
Shavers Fork	9	WV	Recreation
Laurel Fork	16	WV	Recreation
Laurel Fork	5	WV	Recreation
Laurel Fork	1	WV	Recreation
Middle Fork River	22	WV	Recreation
Middle Fork River	13	WV	Recreation
Potomac River, South Branch	5	WV	Recreation
Seneca Creek	4	WV	Recreation
Tygart Valley River	62	WV	Recreation
Blackwater River	3	WV	Recreation, Scenic
Blackwater River	6	WV	Recreation, Scenic
Shavers Fork	16	WV	Recreation, Scenic
Shavers Fork	27	WV	Recreation, Scenic
Cherry River, North Fork	17	WV	Recreation, Scenic
Gauley River	25	WV	Recreation, Scenic
Laurel Fork	7	WV	Recreation, Scenic
Otter Creek	13	WV	Recreation, Scenic
Potomac River, North Fork of South Branch	4	WV	Recreation, Scenic
Red Creek	6	WV	Recreation, Scenic
Red Creek	7	WV	Recreation, Scenic
Williams River	27	WV	Recreation, Scenic
Shavers Fork	18	WV	Recreation, Scenic, Other
Shavers Fork	11	WV	Recreation, Scenic, Other
Cherry River, South Fork	17	WV	Scenic
Holly River, Left Fork	15	WV	Scenic
Hughes River, North Fork	11	WV	Scenic
Potomac River, North Fork of South Branch	16	WV	Scenic
Cheat River	49	WV	Wildlife, Other
Powder River, Middle Fork	33	WY	Cultural, Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Lamar River	48	WY	Cultural, Fish, Historic, Recreation, Wildlife
Powder River, Middle Fork	15	WY	Cultural, Geologic, Historic, Recreation, Scenic, Wildlife
Wiggins Fork	34	WY	Cultural, Geologic, Scenic, Wildlife
Deer Creek	2	WY	Cultural, Recreation, Scenic
Oasis Spring Creek	2	WY	Cultural, Recreation, Scenic
Porcupine Creek	11	WY	Cultural, Recreation, Scenic
Currant Creek	21	WY	Fish
Currant Creek, Dripping Springs Fork	4	WY	Fish
Currant Creek, East Fork	2	WY	Fish
Currant Creek, Middle Fork	3	WY	Fish
Currant Creek, West Fork	2	WY	Fish
Tongue River, North Fork	23	WY	Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Tongue River	13	WY	Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Tongue River, South Fork	15	WY	Fish, Geologic, Historic, Recreation, Scenic, Wildlife
Firehole River	32	WY	Fish, Geologic, Historic, Recreation, Scenic, Wildlife, Other
Fontanelle Creek	71	WY	Fish, Geologic, Historic, Scenic, Wildlife
Madison River	18	WY, MT	Fish, Geologic, Historic, Scenic, Wildlife
Bechler River	23	WY	Fish, Geologic, Recreation, Scenic, Wildlife
Pacific Creek	41	WY	Fish, Historic
Green River	6	WY	Fish, Historic, Recreation, Scenic, Wildlife
Green River	29	WY	Fish, Historic, Recreation, Scenic, Wildlife
Hams Fork	44	WY	Fish, Historic, Recreation, Scenic, Wildlife
Yellowstone River	27	WY	Fish, Historic, Scenic, Wildlife, Other
Yellowstone River	26	WY	Fish, Recreation, Scenic, Wildlife
Thorofare Creek	26	WY	Fish, Scenic, Wildlife, Other
Bear Creek, North Fork	14	WY	Geologic, Historic, Recreation, Scenic, Other
Gros Ventre River	3	WY	Geologic, Historic, Recreation, Scenic, Wildlife
Soda Butte Creek	18	WY, MT	Geologic, Historic, Scenic, Wildlife
Tosi Creek	12	WY	Geologic, Recreation
Tosi Creek	8	WY	Geologic, Recreation

Granite Creek	1	WY	Geologic, Recreation, Scenic
Pine Creek	10	WY	Geologic, Recreation, Scenic
Hoback River	6	WY	Geologic, Recreation, Scenic, Wildlife
Hoback River	15	WY	Geologic, Recreation, Scenic, Wildlife
Greys River	57	WY	Geologic, Recreation, Scenic, Wildlife, Other
Greys River	10	WY	Geologic, Recreation, Scenic, Wildlife, Other
Fontanelle Creek, South Fork	14	WY	Geologic, Scenic
Big Fall Creek	5	WY	Geologic, Scenic, Other
Swift Creek	5	WY	Geologic, Scenic, Other
Swift Creek	6	WY	Geologic, Scenic, Other
Atlantic Creek	7	WY	Geologic, Wildlife, Other
LaBarge Creek	9	WY	Historic
Powder River (Cantonment Reno)	3	WY	Historic
Beartrap Creek, Lower	4	WY	Historic, Recreation, Scenic
Powder River, North Fork of Red Fork	6	WY	Historic, Recreation, Scenic
Powder River, South Fork of Red Fork	9	WY	Historic, Recreation, Scenic
Sweetwater River	25	WY	Historic, Recreation, Scenic
Salt River	13	WY	Historic, Recreation, Scenic
Salt River	0	WY	Historic, Recreation, Scenic
Falls River	29	WY	Historic, Recreation, Wildlife
Canyon Creek	14	WY	Historic, Scenic
Powder River, Main Fork of Red Fork	2	WY	Historic, Scenic
Gibbon River	35	WY	Historic, Scenic, Wildlife, Other
Beaver Creek (Horn area)	3	WY	Other
Corpe Creek	2	WY	Other
Crazy Woman Creek, South Fork	2	WY	Other
Horse Creek, North	1	WY	Other
Horse Creek, South	2	WY	Other
Pole Creek	2	WY	Other
Steel Creek	2	WY	Other
Cliff Creek	3	WY	Recreation, Scenic
Crazy Woman Creek, Middle Fork	4	WY	Recreation, Scenic
Little Greys River	8	WY	Recreation, Scenic
Little Greys River	18	WY	Recreation, Scenic
Marten Creek	4	WY	Recreation, Scenic
Piney Creek, North	6	WY	Recreation, Scenic
Poison Creek	4	WY	Recreation, Scenic
Piney Creek, Roaring Fork	3	WY	Recreation, Scenic
Gardner River	30	WY, MT	Recreation, Scenic, Wildlife
Snake River	1	WY	Recreation, Scenic, Wildlife
Willow Creek	5	WY	Recreation, Wildlife, Other
Beaver Creek (Barnum)	7	WY	Scenic
Beef Steer Creek	6	WY	Scenic
Box Canyon Creek	4	WY	Scenic
Gardner Creek	1	WY	Scenic
June Creek	3	WY	Scenic
Little Bighorn River	10	WY	Scenic
Little Bighorn River, Dry Fork	6	WY	Scenic
Little Red Creek	5	WY	Scenic
Pass Creek	4	WY	Scenic
Red Creek	18	WY	Scenic
Roaring Fork Creek	15	WY	Scenic
Little Bighorn River	4	WY	Scenic
Sweetwater River	72	WY	Scenic, Recreation, Wildlife, Historic
Shoshone River	4	WY	Wildlife

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CHAPTER I. INTRODUCTION

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CHAPTER II. METHODOLOGY

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CHAPTER III. LEGIBLE RIVERS, RESILIENT RIVERS: LESSONS IN ADAPTATION FROM THE WILD AND SCENIC RIVERS ACT

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