River Protection Program Development in Colorado

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Executive Summary

The National Wild and Scenic Rivers Act of 1968 (NWSRA or Act) was created to preserve "designated free-flowing rivers for the benefit and enjoyment of present and future generations and to complement the then-current national policy of constructing dams and other structures along many rivers." The Act currently provides the highest standard of river protection in the United States. However, only one river in Colorado, the Cache la Poudre, has been designated as wild and scenic under the NWSRA. Rivers throughout the state are threatened by the impacts of climate change, dams and diversions, over-appropriation, population growth, pollution, and other consequences of anthropogenic actions. In Colorado, a state that relies on its rivers and streams for drinking water, outdoor recreation, agriculture, and economic well-being, the impacts of these hydrologic changes could be detrimental. Due to the state's unique political, social, and ecological landscape and limited water resources, an alternative river protection program may be better suited for Colorado. This document provides a detailed discussion of the NWSRA, various analogous state-level wild and scenic programs, and provides alternative policy options that may be better suited for Colorado.

After researching various forms of Wild and Scenic River designations, other river protection tools being utilized in Colorado and other parts of the country, and conducting interviews with several key stakeholders in Colorado's water sector, the following policy options were developed:

Continued Use of Federal Wild and Scenic Designations in Colorado: Despite the barriers to getting more river miles designated under the NWSRA in Colorado, the NWSRA currently provides the highest standard of river protection in the country and should therefore be considered an option for Colorado moving forward. Federal designations under the NWSRA are anchored in federal funding and provide robust management for rivers throughout the United States. However, many water users across Colorado may be fearful of federal oversight of the state's water resources.

Utilization of the Partnership Wild and Scenic Model in Colorado: Although PWSR designations are currently only being utilized in the Eastern United States, this model could prove successful in Colorado if adapted to fit the Prior Appropriation Doctrine and Colorado's large amount of federally owned public lands. With a strong emphasis on local management and collaboration, PWSR designations may receive broader support from a multitude of stakeholders across Colorado.

Implementation of a State-Level Wild and Scenic Program in Colorado: State-level wild and scenic programs are being utilized throughout the country and often vary on a state-by-state basis. Thus, a state-level program in Colorado could be tailored to best fit the state's needs. Placing the management of rivers in the hands of the state may also increase support of river protections in Colorado.

¹ Congressional Research Service. (2015). *The National Wild and Scenic Rivers System: A Brief Overview.* Retrieved from: https://www.everycrsreport.com/files/20150922 R42614 0a758540c12265f01b583458c75ee18d29a9824f.pdf>

Section 1: Background

The National Wild and Scenic Rivers System and Wild and Scenic Rivers Act of 1968

To date, more than 75,000 dams have been built throughout the country, modifying over 600,000 miles of America's rivers.² In response to the consequences of obstructing and developing thousands of rivers across the country, the Wild and Scenic Rivers Act of 1968 (P.L. 90-542, 16 U.S.C. §§1271 et seq.) (NWSRA) was enacted. The purpose of the NWSRA was to preserve free-flowing rivers with natural, cultural, and recreational values, "for the benefit and enjoyment of present and future generations." It encourages collaboration across political boundaries, promotes public participation in river protection, and is notable for safeguarding the "special character" of some of America's outstanding free-flowing rivers.⁴ As of 2019, the NWSRA protects 13,413 miles of 226 rivers in 41 states and the Commonwealth of Puerto Rico.⁵

There are three classes of wild and scenic rivers (WSRs) that have been established by the NWSRA, each of which reflects the characteristics of the rivers at the time of designation and affects the type and amount of development allowed after designation:

- (1) *Wild* Rivers designated as *wild* are free from any impoundments, such as dams or diversions, and are generally inaccessible, except by trail. The surrounding watersheds are usually primitive and there is little to no development along the shoreline.
- **(2)** *Scenic* Rivers designated as *scenic* are free from any impoundments and are generally located in undeveloped areas, but can be accessible by road in several places.
- (3) Recreational Rivers designated as recreational are usually readily accessible, have some development on the shoreline, and may possess some impoundments or diversions so long as the river remains free-flowing.⁶

For rivers or sections of rivers to be designated as wild and scenic, they must be free-flowing and have at least one outstandingly remarkable value (ORV). The following are ORVs that may be identified on designated rivers: scenic, recreational, geologic, fish and wildlife, historical, cultural, or other similar values. These values must be determined to have rare, unique, or exemplary qualities that are directly linked to regional or national importance. Once the river or river segment receives designation, the NWSRA mandates the ORVs of the river segment be protected and enhanced by the managing agency or agencies.⁷

² National Wild and Scenic Rivers System. (n.d.). About the WSR Act. Retrieved from: https://www.rivers.gov/wsr-act.php

³ Congressional Research Service. (2015). The National Wild and Scenic Rivers System: A Brief Overview. Retrieved from:

https://www.everycrsreport.com/files/20150922 R42614 0a758540c12265f01b583458c75ee18d29a9824f.pdf>

⁴National Wild and Scenic Rivers System. (n.d.). *About the WSR Act*. Retrieved from: https://www.rivers.gov/wsr-act.php

⁶ Congressional Research Service. (2015). The National Wild and Scenic Rivers System: A Brief Overview. Retrieved from:

https://www.everycrsreport.com/files/20150922 R42614 0a758540c12265f01b583458c75ee18d29a9824f.pdf>

⁷ National Park Service. (2011). Fact Sheet: Outstandingly Remarkable Values. (2011, September). Retrieved from:

https://www.nps.gov/orgs/1912/upload/ORV 9 2011.pdf>

Most rivers added to the National Wild and Scenic Rivers System (National System) first undergo a study process by one or more federal administering agencies such as the National Park Service (NPS), United States Forest Service (USFS), or the Bureau of Land Management (BLM). Rivers are identified for study by one of two methods. The first is through congressional authorization under section 5(a) of the NWSRA. Congressionally authorized studies are often initiated at the request of local residents, river conservation organizations, user groups, or an individual congressional delegate having an interest in a particular river. Congress identifies the agency responsible for conducting the study and may provide direction for the study's scope. Studies of congressionally identified rivers typically take several years to complete. Before the study begins, Congress convenes an interdisciplinary study team, composed of members of federal agencies and contracted personnel, which is responsible for conducting the study. While this study team leads the research, input from the public and interest groups provides vital knowledge to the study process. The team then identifies and assesses the qualities and resources of the particular river segment, eventually determining the river's eligibility. Congressionally authorized studies often include intensive public involvement, especially when involved with rivers that flow through nonfederal lands. In fact, public participation often contributes substantially to the study process.

Agency-identified studies, which occur under section 5(d)(1) of the NWSRA, are the second way in which potential WSRs are identified. These studies usually occur through the regular land use planning processes of federal agencies. The study process for agency-identified rivers is similar in many ways to the congressional identification process. Agency-identified studies also employ an interdisciplinary study team of specialists and typically take between two to five years to complete. Determinations of eligibility by a federal agency are reviewed during the regular land planning process of that agency, which typically occurs every 10 to 15 years.

Both congressionally authorized and agency-identified studies require determinations to be made regarding the eligibility, classification, and suitability of the candidate river. For a river to be deemed eligible, it must be free-flowing and possess one or more ORVs. Once rivers are deemed eligible and suitable for designation, they can be added to the National System in one of two ways. The more common way to designate a river is through an act of Congress. When the NWSRA was created in 1968, 789 miles across eight rivers were initially designated as part of the National System. In 1972, Congress began to expand this System through Congressional designations. In some cases, Congress will first create legislation that requires a study be conducted to determine whether a river is suitable for WSR designation. Congress may or may not specify who is to conduct the study, but it is generally carried out by the Secretary of the Interior or Agriculture, as appropriate. Under the NWSRA, studies must address the ORVs that make the area worthy of being added to the System, current land ownership or use, potential future uses of the area that could be affected by designation, which federal agency would manage the area, and the distribution of costs shared by state and local agencies. Congress also has the authority to direct the Secretaries of Agriculture and the Interior to evaluate rivers for inclusion in the

8 Interagency Wild & Scenic Rivers Coordinating Council. (1999). The Wild & Scenic River Study Process. Retrieved from:

https://www.rivers.gov/documents/study-process.pdf

⁹ Ibid.

¹⁰ Congressional Research Service. (2015). The National Wild and Scenic Rivers System: A Brief Overview. Retrieved from:

https://www.everycrsreport.com/files/20150922 R42614_0a758540c12265f01b583458c75ee18d29a9824f.pdf>

¹¹ Riddle, Anne A. (2019). Wild and Scenic Rivers: Designation, Management, and Funding. Retrieved from:

 $^{$$ \}begin{array}{l} < https://www.everycrsreport.com/files/20190828_R45890_3f1325bf400d44366a513417d872ff7a0ca2071d.pdf > 12 Ibid. \end{array} $$$

National System through agency planning processes. However, Congress may decide to designate rivers as part of the System without first requiring a study.¹³

Although most rivers in the National System are added through Congressional action, the Secretary of Interior can also add WSRs to the National System through administrative action under section 2(a)(ii) of the NWSRA. Under section 2(a)(ii), the Governor of a state can apply to the Secretary of Interior for national designation. The NPS, after evaluating whether the requirements of section 2(a)(ii) have been met, then prepares a draft environmental impact assessment required under the National Environmental Policy Act (NEPA). If the requirements of the environmental impact assessment and section 2(a)(ii) of the NWSRA are met, the NPS can recommend designation. After a 90-day comment period for federal agencies and a 90-day public comment period, the NPS then advises the Secretary of Interior on their recommendations. The Secretary of Interior then has the authority to either approve or deny the addition into the National System.¹⁴ Rivers designated under section 2(a)(ii) of the NWSRA receive the same level of protection as rivers designated by Congress.¹⁵

Once a river is designated, the federal agency tasked with overseeing the management of the river has three years to create and implement a Comprehensive River Management Plan (CRMP). The CRMP must include what actions must be taken to protect and enhance the ORVs identified on the river, including "resource protection, development of lands and facilities, user capacities, and other management practices necessary or desirable to achieve the purpose of [the NWSRA]." Additionally, some federally designated WSRs may receive a federal reserved water right. This federal water right ensures that there is sufficient water to fulfill the purposes of the NWSRA. Although this water right is held by the federal government, they are adjudicated in accordance with state water laws. While this is not a necessary component of a federal WSR designation, federal reserved water rights can be a beneficial tool to protect the existing stream flows in designated rivers.

Partnership Wild and Scenic Rivers (PWSR)

In the late 1970s, multiple amendments were made to the NWSRA to promote cooperative federal, state, and local planning conservation efforts.¹⁷ Additionally, an increased desire for community involvement in the management of rivers in private ownership spurred the development of the Partnership Wild and Scenic Rivers program in the Eastern United States.

Partnership designations generally exist on non-federal lands and are managed at the local, county, or state level. PWSRs are usually congressionally designated and are managed in partnership between the NPS and other stakeholders at the local, state, and regional levels. Although the NWSRA does not define PWSRs, the term is used to describe WSRs that possess the following features: lands are not federally owned; there is a previously existing river management plan created at the local level that is overseen by a

¹³ Riddle, Anne A. (2019). Wild and Scenic Rivers: Designation, Management, and Funding. Retrieved from:

Haas, D. (2007). Designating Rivers Through \overline{S} ection $\overline{2(a)}(ii)$ of the Wild & Scenic Rivers Act. Retrieved from:

https://www.rivers.gov/documents/2aii.pdf

¹⁵ Ibid.

¹⁶ Turner, S. (2009). Wild and Scenic Rivers: The Importance of Federal River Protection in the Rockies. Retrieved from:

https://www.coloradocollege.edu/dotAsset/182c171e-354f-46a0-b7f5-cc9f9ea4794e.pdf

¹⁷ Deeds, S. S. (n.d.). *PWSR Toolkit*. Retrieved from: https://rms.memberclicks.net/PWSRToolkit.

local organization; overall administration is the responsibility of the NPS, but land use and management are governed by entities at the local or state level. ¹⁸ Management costs are shared between federal, state, and local levels. PWSRs also usually receive a congressional designation, although exceptions exist. ¹⁹ For example, the Westfield River in Massachusetts was designated as a PWSR through state nomination instead of the standard congressional nomination. ²⁰

Since the creation of the Partnership model, more than 700 miles of rivers within eight states have received designation.²¹ Due to its emphasis on local management and collaboration between multiple scales, Partnership programs are considered one of the country's best examples of programs that link government and citizens.²² PWSRs are federally designated and often receive federal funding, even though they are managed locally. They also receive two year interim protections while a management plan is being created with the NPS serving as an advisory role.²³

One example of a successful PWSR is the Great Egg Harbor in New Jersey. Segments and tributaries of the river were designated in 1992 and became a part of the National Wild and Scenic Rivers System.²⁴ Responsibility for managing this PWSR falls on the NPS through approval from the Secretary of the Interior. This management occurs through cooperative agreements with local and state entities. The Great Egg Harbor was the first Wild and Scenic rivers to be managed locally and did not have a management plan prior to designation.²⁵ Additionally, it is considered a unit of the National Park system. The NPS "conducted an Environmental Assessment with management alternatives after designation, which, along with the CRMP, was completed in eight years."²⁶

The Musconetcong River is another example of a successful PWSR. This river is a tributary of the Delaware River, located in northwestern New Jersey. The Musconetcong is "managed in partnership with local governments and non-government organizations by the Musconetcong River Management Council (MRMC).²⁷ With this kind of management, the NPS "does not own, manage, or police the river and surrounding riparian areas as it does within the boundaries of the Delaware Water Gap National Area."²⁸

State-Level Wild and Scenic Programs

Although Partnership rivers emphasize local involvement and collaboration at the local, state, and federal levels, some states have developed their own state-level wild and scenic program to further emphasize local decision-making and reduce federal involvement. Thirty-three states have implemented their own state-level wild and scenic programs.²⁹ Many of these programs use the NWSRA as a framework but alter

¹⁸ Riddle, Anne A. (2019), Wild and Scenic Rivers: Designation, Management, and Funding. Retrieved from:

https://www.everycrsreport.com/files/20190828 R45890 3f1325bf400d44366a513417d872ff7a0ca2071d.pdf>

¹⁹ Ibid.

²⁰ Ibid.

²¹ River Management Society. (n.d.). Partnership Wild and Scenic Rivers. Retrieved from:

https://rms.memberclicks.net/assets/PWSRToolkit/PWSRnewsletters/20YearsSuccess2018 PWSRforweb Issue5.pdf>

²² Ibid.

²³ Ibid.

²⁴ National Park Service. (2020). *Designation Origin Stories: Great Egg Harbor*. Retrieved from:

https://www.nps.gov/articles/000/designation-origin-stories-great-egg-harbor.htm

²⁵ Ibid.

²⁶ Ibid.

²⁷ Musconetcong Watershed Association. (n.d.). Wild & Scenic River History. Retrieved from:

²⁸ Ibid.

²⁹ Turner, Sarah. (2009). Wild and Scenic Rivers: The Importance of Federal River Protection in the Rockies. Retrieved from:

https://www.coloradocollege.edu/dotAsset/182c171e-354f-46a0-b7f5-cc9f9ea4794e.pdf

the program to be more specific to the context of the state. These programs can vary quite significantly in the level of protections that they offer.

The California Wild and Scenic Rivers Act (Pub. Res. §§ 5093.50 through .71) was passed in 1972 in order to "preserve designated rivers possessing extraordinary scenic, recreation, fishery, or wildlife values." Consistent with the NWSRA, rivers designated under California's state-level program can be classified as "wild," "scenic," or "recreational" based on the level of existing development at the time of designation. In general, California's state-level program prohibits the construction of new dams, reservoirs, diversions, or other water impoundment facilities on any river segment included in the System, with a few exceptions. Waters in designated rivers are considered fully appropriated, thereby precluding future development of new diversions (23 CCR § 734). Similar to the federal program, California's Act designates segments as either wild, scenic, or recreational. However, the Act also protects individual river segments that are not designated as wild, scenic, or recreational and instead manages segments to maintain specific qualities (e.g., Smith River prohibits new dams or reservoirs; McCloud River managed as wild trout fishery). Unlike the NWSRA, California's State Act does not contain a river corridor protection concept, and classification as wild, scenic, or recreational is a duty of the California Legislature instead of the river manager. Over 189,000 river miles within California have been designated by the California Wild and Scenic Rivers Act since its creation in 1972.

Idaho's State Protected Rivers program (Idaho Code Ann. § 42-1734A (4) (5)) also establishes protections similar to the NWSRA. Under the Idaho State Water Plan, the Idaho Board of Water Resources is given the authority to designate rivers as "natural" or "recreational" depending on the amount of existing development located within and along the river corridor. "Natural" rivers are generally free of any significant developments within and along the waterway and riparian corridor. "Recreational" waters have a certain level of existing development. The General Assembly is tasked with designation as part of Idaho's Water Plan updates, and there is no nomination process. Designation prevents any future water resource projects or developments that would compromise the ORVs of the rivers and their corridors, such as dams, hydropower, diversions, in-channel mining, alterations of the stream bed, mineral, sand, or gravel extraction. Since 1996, over 1,700 miles of river throughout Idaho have been protected under this state-level program.

Oregon's Scenic Waterways Act (Or. Rev. Stat. § 390.805-.925), established in 1970, has been one of the most robust state-level programs in the country. Similarly to 2(a)(ii) designation under the NWSRA, designating a river under Oregon's Scenic Waterways program requires approval from the Governor, who must "formally designate them after a recommendation from Oregon Parks and Recreation Commission and concurrence from Oregon Water Resources Commission." The process of river designation requires

³⁰Water Education Foundation. (n.d.). California Wild and Scenic Rivers Act. Retrieved from:

 $<\!\!\!\text{https://www.watereducation.org/aquapedia/california-wild-and-scenic-rivers-act}\!\!>\!\!\!$

³¹ Ibid.

³² Ibid

³³ Ibid.

³⁴ Turner, Sarah. (2009). Wild and Scenic Rivers: The Importance of Federal River Protection in the Rockies. Retrieved from:

https://www.coloradocollege.edu/dotAsset/182c171e-354f-46a0-b7f5-cc9f9ea4794e.pdf

³⁵ Idaho Legislature. (n.d.). Idaho Statutes. Retrieved from: https://legislature.idaho.gov/statutesrules/idstat/title42/t42ch17/sect42-1734a/

³⁶ Turner, Sarah. (2009). Wild and Scenic Rivers: The Importance of Federal River Protection in the Rockies. Retrieved from:

https://www.coloradocollege.edu/dotAsset/182c171e-354f-46a0-b7f5-cc9f9ea4794e.pdf

³⁷ Oregon State Parks. (n.d.). Scenic Waterway Studies. Retrieved from: www.oregon.gov/oprd/BWT/Pages/SSW-proposed.aspx

the Oregon Parks and Recreation Department (OPRD) to study rivers for potential nomination, per the Oregon Legislature's direction.³⁸ The OPRD carries out an assessment of eligibility based on the following criteria: "free-flowing nature of the waterway, scenic quality, as viewed from the river, natural and recreational resources, including the ability of the waterway and its setting to sustain recreational use." The Act restricts the construction of dams, reservoirs, water impoundments, water diversions, and roads. Timber harvests within the river corridor require permits, and any improvements on adjoining land requires written authority. There are currently 23 designated rivers under this program.

Virginia's Scenic Rivers Program forges a partnership "between citizens, local governments and the state" to protect rivers' characteristics and values for future generations. 40 Local citizens are able to have a voice in river conservation through the Board of Conservation and Recreation, which advises the Director of the Virginia Department of Conservation and Recreation (DCR).⁴¹ In order for a river or river segment to be considered for designation, it must first be studied by the DCR. These studies are typically "initiated at the request of local governments."⁴² River segments must be "at least 5 miles long, publicly accessible or listed in a standard canoeing guide, and have identifiable start and end points."43 Once a preliminary study is conducted, the river or river segment will then be evaluated for eligibility.⁴⁴ Eligibility is determined based on the following criteria: vegetation, streamflow obstructions or modifications, development, historic features, landscape, fishery quality, endangered species, natural features, water quality, parallel roads, crossings, aesthetics, recreation, and permanent protection. 45 Additionally, when a river is proposed for designation, "support from four sectors of the community is imperative for the successful designation of a river."46 These sectors are: "riparian landowners, civic and environmental groups, local boards of supervisors, city councils and other affected local government entities, and local members of the General Assembly,"47 Virginia has designated over 30 river segments through its state-level program, with 6 new designations added in 2020 alone.⁴⁸

Although many of these state-level programs vary significantly in how rivers are nominated, designated, administered, and managed, many of them build off of the framework set forth in the NWSRA. California's Wild and Scenic Rivers Act, which is consistent with the NWSRA, has seen more support throughout the state than the federal program. Idaho's State Protect Rivers Program, one of the only state-level programs in the Rocky Mountains, is integrated within the state's Water Plan updates. Oregon's Scenic Waterways Act, one of the most robust state-level programs in the country, has supplemented the thousands of miles of federally designated WSRs in the state. Virginia's Scenic Rivers Program emphasizes local involvement in river conservation throughout the state. Each of these programs are unique and seek to fit the characteristics of the state. Although they have been met with varying

38 Ibid.

⁴⁰ Virginia Department of Conservation and Recreation. (n.d.). *Scenic Rivers Program*. Retrieved from:

https://www.dcr.virginia.gov/recreational-planning/srmain

⁴¹ Ibid.

⁴² Ibid.

⁴³ Ibid.

⁴⁴ Virginia Department of Conservation and Recreation, (n.d.), Virginia Scenic Rivers Program: Evaluation Criteria. Retrieved from:

https://www.dcr.virginia.gov/recreational-planning/document/sr-eval.pdf

⁴⁶ Virginia Department of Conservation and Recreation. (n.d.). Virginia Scenic Rivers Program. Retrieved from:

https://www.dcr.virginia.gov/recreational-planning/document/sr-benefits.pdf

⁴⁷ Ibid.

⁴⁸ Ibid.

degrees of success, there are several disadvantages to state-level programs. For instance, funding has been a major obstacle for many of the 33 state-level programs. Developing and implementing CRMPs can be both time consuming and costly, and many state agencies often lack the resources and capacities to take on such a duty.

Key Differences Between Federal, Partnership, and State-Level Wild and Scenic Designations

Various approaches to wild and scenic designations, whether it be at the federal level, through local partnerships, or at the state level, have been utilized to provide the best protections to rivers given certain conditions and circumstances. Each option takes a different approach in terms of nomination and designation, management, water rights, and funding. The table below compares and contrasts the three existing forms of WSR programs.

	Designation & Nomination	Management	Water Rights	Funding
Federal	-Act of Congress (legislation)State nomination with approval from the Secretary of the Interior (Section 2(a)(ii))River must be free-flowing & possess at least one ORV.	-Federal agency must create & implement CRMPProhibits water resource projects (dams & diversions) that interfere with ORVs or public useProtects 1/4 mile river corridor from uses that interfere with ORVs & public useDoes not infringe on private property rights.	-May receive a Federal Reserve Water Right. -Does not impede previously existing water rights.	-Funds allocated by Congress through annual appropriations. -Generally more funding than PWSRs & state-level programs.
Partnership	-Act of Congress (legislation)Administered by Secretary of Interior through NPSRiver must be free-flowing & possess at least one ORV.	-Cooperative agreement between NPS, local governments, councils, watershed groups & NGOsUsually used where a river runs through primarily private landsNo river corridor protections.	-Currently used in areas with Riparian water governance, so no water rights currently attached.	-Funds allocated from Congress to NPS. -Additional funding from local- and state-level managers.
State-Level	-Varies from state to stateGenerally nominated by a state agency, but exceptions existGenerally designated through legislation, but exceptions existGenerally, a river must be free-flowing & possess at least one ORV.	-Varies from state to stateMost prohibit water resource projects (dams & diversions) that interfere with ORVs or public use.	-Varies from state to state, especially dependent on Riparian or Prior Appropriation governance frameworks.	-Varies from state to stateOften limited due to lack of funding.

Section 2: Colorado River Protection Landscape

Water Rights Issues and Historical Barriers to River Protection

Colorado's legal framework for water management is largely a product of 19th century agricultural and mining practices.⁴⁹ The 1862 Homestead Act and the 1866 Mining Act allowed settlers in Colorado to divert water on public lands for their own private use through the building of ditches and reservoirs.⁵⁰ Colorado's current water management framework evolved from this ability to appropriate water for private use. Known as the Prior Appropriation Doctrine, this framework was used in most of the West starting in the late 1800s to move water away from its natural course for use in other areas.⁵¹ Under the Doctrine, water is considered a public resource that can be appropriated by private users, a public agency, or businesses so long as they put that water to a beneficial use.⁵² According to Article XVI, Section 6, of the Colorado Constitution, "[t]he right to divert the unappropriated waters of any natural stream to beneficial uses shall never be denied."⁵³

Colorado's history of consumptive use under the Prior Appropriation Doctrine has resulted in the over-appropriation of some of the state's rivers, especially on the Front Range.⁵⁴ Consequently, as water resources began to decline in the mid-to-late 1800s trans-basin diversions became increasingly popular and continuous growth along the Front Range has already prompted several large water diversions from the Western Slope. The Front Range, where nearly 90 percent of Colorado's population resides, only contains about 20 percent of the state's water supply.⁵⁵ On the other hand, 80 percent of Colorado's water supply is located on the Western Slope, where only 10 percent of the state's population resides.⁵⁶ Although trans-basin diversions have helped allocate water to the growing population along the Front Range, this mechanism for transporting water has also resulted in economic and environmental costs, as well as increased tensions between the East and West Slopes of Colorado.⁵⁷

By the end of the 19th century, federal agendas transitioned away from the unmitigated use of natural resources to more progressive conservation.⁵⁸ By the mid-1960s, there was a strong shift from policies that favored water development to policies that promoted environmental protection and preservation.⁵⁹ Several federal policies, such as the Wilderness Act, National Environmental Policy Act, Clean Water Act, Endangered Species Act, Federal Land and Policy Management Act, and the National Wild and Scenic Rivers Act have placed limits on the development of new water projects across the United States.⁶⁰

⁴⁹ Nichols, P. D., Murphy, M. K., Kenney, D. S. (2001). Water and Growth in Colorado: A Review of Legal and Policy Issues. Retrieved from:

https://scholar.law.colorado.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1029&context=books_reports_studies

⁵⁰ Hobbs Jr., G. J. (2004). Citizen's Guide to Colorado Water Law. Retrieved from:

https://www.colorado.gov/pacific/sites/default/files/Citizen%27s%20Guide%20to%20Colorado%20Water%20Law.pdf

⁵¹ Nichols, P. D., Murphy, M. K., Kenney, D. S. (2001). *Water and Growth in Colorado: A Review of Legal and Policy Issues*. Retrieved from: "> thttps://scholar.law.colorado.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1029&context=books_reports_studies>"> thttps://scholar.law.colorado.edu/cgi/viewcontent.cgi?referer=&ht

⁵³ Ibid.

⁵⁴ Ibid.

⁵⁵ Water Education Colorado. (2014). Citizen's Guide to Colorado's Transbasin Diversions. Retrieved from:

https://issuu.com/cfwe/docs/cfwe cgtb web>

⁵⁶ Ibid

⁵⁷ Nichols, P. D., Murphy, M. K., Kenney, D. S. (2001). Water and Growth in Colorado: A Review of Legal and Policy Issues. Retrieved from:

https://scholar.law.colorado.edu/cgi/viewcontent.cgi/referer=&httpsredir=1&article=1029&context=books reports studies>

⁵⁸ Hobbs Jr., G. J. (2004). Citizen's Guide to Colorado Water Law. Retrieved from:

shttps://www.colorado.gov/pacific/sites/default/files/Citizen%27s%20Guide%20to%20Colorado%20Water%20Law.pdf

⁵⁹ Ibid.

⁶⁰ Ibid.

While these federal policies promoted environmental protection, they also led to increased conflicts over water and created an uneasy coexistence of state and federal laws.⁶¹ Federal laws associated with interstate resources, federal lands and projects, Indian treaties, and environmental protections have complicated the implementation of the Prior Appropriation Doctrine in Colorado by imposing limitations on new water projects and creating more stringent protections for water resources and the surrounding lands.⁶²

State-level agendas have also started to see a shift in more environmentally-minded initiatives. For instance, Colorado's Instream Flow (ISF) program has worked to keep water in rivers since 1973.⁶³ Through the ISF program, the Colorado Water Conservation Board (CWCB) is able to acquire water rights from other appropriators in order to preserve streamflows for the environment. Since the creation of the program, the CWCB has appropriated ISF rights on 1,700 stream segments, covering over 9,700 miles of streams across the state.⁶⁴ Additionally, in 2001, local communities (cities, counties, water conservation/conservancy districts) also began utilizing Recreational In-Channel Diversions (RICDs) to place limits on water rights in order to preserve the "minimum stream flow necessary for a reasonable recreation experience in and on the water."⁶⁵ Although RICDs can restrict future upstream development, the CWCB, in its administrative oversight, will not approve a RICD if it does not promote the maximum beneficial use of the water, will impair Colorado's ability to fully develop its compact entitlements, or if it will adversely impact ISF rights held by the CWCB.⁶⁶

In addition to tools that protect flows, Colorado has also implemented programs aimed at protecting water quality and aquatic organisms. Colorado's Outstanding Waters (OWs) program operates under the federal Clean Water Act's (CWA) Outstanding National Resource Waters initiative to "protect outstanding waterways, maintain water quality, protect fish and other wildlife, and support recreation." In order for a river to be designated as an OW, it must be recreationally or ecologically significant. Management of rivers designated through Colorado's OWs program falls under the responsibility of the Water Quality Control Commission (WQCC). To date, Colorado has designated over 4,000 miles of river across 59 segments as OWs. Colorado Parks and Wildlife's (CPW) Gold Medal designation, which is utilized to protect and maintain wild trout populations throughout the state, has also been a useful tool for river protection. Gold Medal waters are "the highest quality cold water habitats and have the capability to produce many quality size (14 inches or longer) trout." CPW may designate a segment of a river as a Gold Medal water if it produces a minimum trout standing stock of 60 pounds per acre and produces a minimum average of 12 quality trout per acre.

⁶¹ Nichols, P. D., Murphy, M. K., Kenney, D. S. (2001). Water and Growth in Colorado: A Review of Legal and Policy Issues. Retrieved from: <a href="https://scholar.law.colorado.edu/cgi/viewcontent.cgi?referer=&https://scholar.law.colorado.edu/cgi/viewcontent.cgi/viewcontent.cgi/viewcontent.cgi/viewcontent.cgi/viewcontent.cgi/viewcontent.cgi/viewcontent.cgi/viewcontent.cgi/viewcontent.cgi/viewcontent.cgi/viewcontent.cgi/viewcontent.cgi/viewcontent.cgi/viewcontent.cgi/viewcontent.cgi/viewcontent.cgi/viewcontent.cgi/viewcontent.cgi/viewcontent.cgi/viewcon

⁶² Ibid

⁶³ CWCB (2021). Rules. Retrieved from: https://cwcb.colorado.gov/rules

⁶⁴ CWCB (2021). Rules. Retrieved from: https://cwcb.colorado.gov/rules

⁶⁵ Ibid

⁶⁶ Ibid.

⁶⁷ Cordan, Nicole. (2021). More U.S. Rivers Deserve 'Outstanding' Designation. Retrieved from:

https://www.pewtrusts.org/en/research-and-analysis/articles/2021/05/04/more-us-rivers-deserve-outstanding-designation

⁶⁸ Western Resource Advocates. (n.d.). Outstanding National Resource Waters in Colorado. Retrieved from:

https://www.arcgis.com/apps/webappviewer/index.html?id=291e70f60b9a4cee9cf8ffa91a0d352e

⁶⁹ CPW. (n.d.). Colorado Parks and Wildlife Commission Policy: Wild and Gold Medal Trout Management. Retrieved from:

https://cpw.state.co.us/Documents/Commission/2019/June/Item.15a-POLICY_Wild_Gold_Medal-Katie_Lanter-DNR.pdf

Although Colorado has successfully developed several river protection strategies over the years, many barriers to implementing robust river protections still exist. Colorado's rivers are being threatened by climate change, rapid population growth, and over-appropriation; thus, more stringent measures are needed in order to mitigate these impacts to waters throughout the state. In some states, the NWSRA has proved one of the most successful tools in preserving and enhancing rivers.

Wild and Scenic in Colorado: The Cache la Poudre River

Starting in the 1860s, irrigators dammed and diverted water from the Cache la Poudre River to irrigate farmlands and provide water to cities and industries.⁷¹ In the late 1890s, some farmers and ranchers began to worry about the timber industry's effects on the river and how it would affect irrigation practices. This led to a campaign to establish a national forest surrounding the upper reaches of the Poudre. Despite opposition, the area fell under federal oversight in 1905, and became the Roosevelt National Forest in 1932.⁷² By the 1960s and 70s, residents near the Poudre began to fear that the river could not sustain the level of use and population growth that was occurring. Conflicts erupted over how the Cache la Poudre River should be used, whether it be for recreation, irrigation, industrial use, and more.

When the NWSRA was passed in 1968, it identified the Cache la Poudre as a potential candidate for designation. A 1975 amendment to the NWSRA required the USFS and the State of Colorado to conduct a study to determine whether or not the Cache la Poudre was eligible for inclusion in the National System. After the Final Environmental Impact Statement and Study Report (FEIS/SR) determined that 83 miles of the Poudre were eligible, community leaders, environmental groups, and representatives from water users associations worked together to develop a legislative proposal for designation into the National System.⁷³ However, following months of negotiating around issues of water rights and water development, it was decided that only 76 miles of the Cache la Poudre would be designated as wild and scenic under Public Law 99-590.74 In 1986, the Poudre received its WSR designation, deeming 30 miles as 'wild' and 46 miles as 'recreational.'75

Fourteen miles of the Cache la Poudre WSR flow through Rocky Mountain National Park, and are therefore administered by the NPS. The remainder of the 76 miles are located within the boundaries of the Roosevelt National Forest, and are therefore administered by the USFS.⁷⁶ Public Law 99-590 amended the NWSRA to require the USFS to prepare a management plan aimed at "resource protection, development of lands and facilities, user capacities, and other management practices" for the section of the Poudre located in Roosevelt National Forest. 77 The management of the fourteen miles of the Poudre located within Rocky Mountain National Park are addressed in an addendum to the Park's General Master Plan.78

⁷¹CSU Public Lands History Center. (n.d.). Protecting the Poudre: The Rise of Environmentalism. Retrieved from:

https://publiclands.colostate.edu/digital_projects/dp/poudre-river/enjoying-protecting/environmental-protection/ ⁷² CSU Public Lands History Center. (n.d.). *Protecting the Poudre: The Rise of Environmentalism.* Retrieved from:

https://publiclands.colostate.edu/digital_projects/dp/poudre-river/enjoying-protecting/environmental-protection/

⁷³ USDA. (1990). Cache La Poudre Wild and Scenic River Final Management Plan. Retrieved from:

https://www.rivers.gov/documents/plans/cache-la-poudre-plan.pdf

⁷⁵ National Wild and Scenic Rivers System. (n.d.). Cache la Poudre River, Colorado. Retrieved from:

https://www.rivers.gov/rivers/cache-la-poudre.php

⁷⁶ United States Department of Agriculture. (1990). Cache La Poudre Wild and Scenic River Final Management Plan. Retrieved from: https://www.rivers.gov/documents/plans/cache-la-poudre-plan.pdf

⁷⁷ Ibid.

⁷⁸ Ibid.

Immediately downstream of the Cache la Poudre Wild and Scenic Area is the Cache la Poudre National Heritage Area (CALA). Designated by Congress in 2009, the CALA was the first National Heritage Area (NHA) designation west of the Mississippi.⁷⁹ NHAs are managed in partnership between the NPS, states, and local communities. The CALA NHA designation recognizes the lower Cache la Poudre as the "best example of a working river in the western United States" as it has historically met the many water needs of multiple interests within the area, such as agriculture, municipal, industry, power, and recreation.⁸⁰

Despite the first 76 miles of the Poudre being protected in perpetuity through the NWSRA, the lower parts of the Poudre are still open to further development and diversion. The Poudre now lies at the center of a heated debate over the balance between meeting human needs and protecting the environment. The proposed Northern Integrated Supply Project (NISP), headed by the Northern Colorado Water Conservancy District (Northern Water), plans to divert water near the mouth of the Poudre Canyon and divert it to the proposed 170,000 acre-foot Glade Reservoir. The construction of the NISP would provide 40,000 acre-feet of water annually to meet growing municipal water needs and would cost approximately \$426 million split between 15 communities and water districts. The project, which is currently in its sixteenth year of a complex permitting process, has led to debate over whether or not such large water projects should be allowed just below the Cache la Poudre WSR Area. "Only time will tell whether new water supply projects that meet human needs while protecting the environment can be built, and whatever happens, whether the National Heritage segment of the river will continue to live up to its name as an excellent example of a working river." The Poudre Working in the center of the river will continue to live up to its name as an excellent example of a working river."

Alternatives to Wild and Scenic in Colorado

Although 76 miles of the Cache la Poudre are now protected in perpetuity, the Poudre remains the only federally designated WSR in Colorado to date. However, no new WSRs have been designated in Colorado since 1986. In response, several alternatives to wild and scenic designations have been developed throughout the state.

Arkansas River Voluntary Flow Management Program

The BLM conducted studies between 1989 and 1992 found that segments of the Arkansas River were suitable for inclusion in the National System. ⁸⁵ Parts of the Arkansas River were found to possess several significant ORVs, such as recreation, scenery, wildlife, botany, fish, and cultural values. The Arkansas River is home to some of the best wild brown trout fisheries in Colorado and is a popular whitewater rafting and kayaking destination. However, the Arkansas River never received a federal WSR designation, despite the BLM finding it suitable for inclusion into the National System.

⁷⁹ National Park Service. (n.d.) *Cache la Poudre River National Heritage Area*. Retrieved from: https://www.nps.gov/places/cache-la-poudre-river-national-heritage-area.htm

⁸⁰ Turner, Sarah. (2009). Wild and Scenic Rivers: The Importance of Federal River Protection in the Rockies. Retrieved from:

https://www.coloradocollege.edu/dotAsset/182c171e-354f-46a0-b7f5-cc9f9ea4794e.pdf

⁸¹ Turner, Sarah. (2009). Wild and Scenic Rivers: The Importance of Federal River Protection in the Rockies. Retrieved from:

https://www.coloradocollege.edu/dotAsset/182c171e-354f-46a0-b7f5-cc9f9ea4794e.pdf

⁸² Ibid.

⁸³ Ibid.

⁸⁴ Ibid.

⁸⁵ BLM. (2015). Draft Wild & Scenic River Eligibility Report for the Royal Gorge Field Office. Retrieved from: https://eplanning.blm.gov/public projects/lup/39877/59427/64618/RGFO Draft WSR Eligibility Report.pdf>

In 1992, the Arkansas River Voluntary Flow Management Program (VFMP) was established to protect the trout fishery, one of the major ORVs identified on the Arkansas. The VFMP is a cooperative effort between CPW, Colorado Trout Unlimited (TU), the Southeastern Colorado Water Conservancy District (SCWCD), and the Arkansas River Outfitter Association (AROA), and is operated by the U.S. Bureau of Reclamation (BOR). Under the VFMP, the BOR releases water from upstream reservoirs between July 1st and August 15th each year to maintain a minimum cubic feet per second (cfs) for boating and year-round flows of 250 cfs or greater to enhance the trout fishery.⁸⁶

Colorado Water Conservation Board's Wild and Scenic Rivers Fund

In 2009, the Colorado General Assembly established the CWCB's Wild and Scenic Rivers Fund, which allocates \$400,000 annually to "stakeholders within the State of Colorado to develop protection of river-dependent resources as an alternative to wild and scenic river designation under the federal Wild and Scenic Rivers Act." The Fund serves the purpose of supporting local resource protection groups in developing and exploring different community- and resource-specific approaches to river protection that act as an alternative to designation under the NWSRA. The mission of the CWCB is to "conserve, develop, protect, and manage Colorado's water for present and future generations." Thus, this Fund allows the CWCB to promote river and water conservation while also avoiding any potential federal reserved water rights or other limitations on water development that might result from federal WSR designations.

The Fund is currently being utilized by several groups throughout the state. The River Protection Group in the San Juan River Basin is using a portion of the Fund to protect endangered fish species like the Razorback Sucker and Colorado Pikeminnow. The Upper Colorado Wild and Scenic Stakeholder Group is utilizing the Fund to implement management strategies that were developed in order to protect ORVs on the Upper Colorado River. The Lower Dolores Plan Working Group is also using a portion of the Fund to restore and protect the Lower Dolores River.

South Platte River Protection Program

The South Platte Protection Plan (SPPP) is yet another river protection tool that has developed as an alternative to WSR designation in Colorado. In 2003, the USFS completed a study to determine whether or not the South Platte River was suitable for a federal WSR designation. However, similar to the Upper Colorado Wild and Scenic Alternative Management Plan, the SPPP was developed by a group of stakeholders to enhance and preserve ORVs identified on the South Platte River in lieu of a WSR designation. The SPPP recognized that Colorado's Front Range relies heavily upon the South Platte's water for municipal and industrial uses, drinking water, and agriculture. Thus, the SPPP recognized that ORVs identified on the South Platte must be protected in order to preserve these working functions of the River.

The SPPP includes aims to protect the South Platte through eight different strategies: (1) A commitment not to build new water projects in the Cheesman and Elevenmile Canyons; (2) A Flow Management Plan;

⁸⁶ Arkansas River Outfitters Association. (2015). Media Kit 2015. Retrieved from:

https://arkansasriveroutfitters.org/files/uploads/2015%20Voluntary%20Flow%20Management%20Program.pdf.

⁸⁷ Colorado Water Conservation Board. (2018). *Terms and Conditions for the Allocation of Funds from the Wild and Scenic Rivers Fund*. Retrieved from: https://dnrweblink.state.co.us/cwcbsearch/ElectronicFile.aspx?docid=210766&dbid=0

⁸⁹ Colorado Water Conservation Board. (n.d.). About Us. Retrieved from: https://cwcb.colorado.gov/about-us

(3) A management partnership between CPW and the USFS to protect ORVs; (4) Cooperative water quality initiatives; (5) A \$1 million endowment provided by Front Range water providers and governments; (6) The creation of the South Platte Enhancement Board (SPEB); (7) Withdrawal of 1986 applications for conditional storage rights; and (8) A voluntary 20 year moratorium on applications for development of Denver's right-of-way. Through these strategies, local governments, water utilities, state and federal governments, and other stakeholders have been able to pool resources while preserving a high level of water management flexibility under the Plan.

Upper Colorado Wild and Scenic Alternative Management Plan

In 2007, a BLM study identified that 54.4 miles of the Upper Colorado River possessed numerous ORVs, deeming it eligible for a wild and scenic designation. However, local water rights holders objected to federal WSR designation because it would impede new water projects on the River. Although the Upper Colorado never received a federal WSR designation, various state agencies, local governments, environmental groups, recreationists, landowners, and water providers saw the benefit in developing a plan to protect the identified ORVs on the River. In 2008, the Upper Colorado River Wild and Scenic Stakeholder Group was formed with the goal of creating an alternative management plan for the Upper Colorado River. Colorado River.

After more than twelve years of cooperative efforts, the Stakeholder Group established the Upper Colorado Wild and Scenic Alternative Management Plan. The Plan acts as an alternative to the proposed federal WSR designation on the Upper Colorado and its goal is to balance the protection of ORVs identified on the Upper Colorado while also allowing flexibility for water users. One advantage of the Plan is that it facilitates cooperative and voluntary efforts of interested water users, local governments, and other stakeholders in coordination with federal agencies in order to protect and enhance ORVs on the Upper Colorado.

While the Plan illustrates the successes that can ensue from collaboration across sectors, it has still been met with many challenges. For instance, the Stakeholder Group began negotiating back in 2008 but the Plan was not formally accepted by the BLM and USFS until June of 2020. Additionally, with much of the available water appropriated, in dry years there is little the group can do to bolster flows that protect those ORVs affected by streamflow.

Section 3: Colorado Wild and Scenic Program Options

Despite the alternative river protection programs that have culminated in response to the lack of WSR designations in Colorado, rivers throughout the state are still in need of further protection. The NWSRA, PWSRs, and various state-level WSR programs have all proven successful in providing robust protections for rivers across the United States and could be a solution for rivers in Colorado. After researching various forms of Wild and Scenic River designations, other river protection tools being utilized in Colorado and other parts of the country, and conducting interviews with several key stakeholders in

⁹⁰ South Platte Enhancement Board. (2011). South Platte Protection Plan. Retrieved from:

http://southplatte.org/wp-content/uploads/2011/06/SPPP.pdf

⁹¹ Upper Colorado Wild and Scenic Stakeholder Group. (2020). Amended and Restated Upper Colorado River Wild and Scenic Stakeholder Group Management Plan. Retrieved from:

⁹² Ibid.

Colorado's water sector, the following policy options were developed: (1) continued use of federal wild and scenic designations in Colorado; (2) utilization of the Partnership wild and scenic model in Colorado; and (3) implementation of a state-level wild and scenic program in Colorado.

For each of these options, consideration should be given to new research surrounding the reframing of ORVs to better identify the ecosystem-based services that rivers provide. Some scholars have identified that using the concept of ecosystem services as a replacement for ORVs, "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." Through this reframing, value is placed on river services that society relies on for things like clean water, flood mitigation, groundwater recharge, fisheries and recreation. By placing value on these river services, it provides an economic and political incentive for governing bodies to maintain robust management practices.

Option 1: Continued Use of Federal Wild and Scenic Designations in Colorado Overview

The National Wild and Scenic Rivers Act of 1968 was created to protect free-flowing rivers across the United States and Puerto Rico from dams and other water projects that could negatively impact their ORVs. Thus far, the Act has protected 13,412 river miles across 226 rivers. The state of Colorado currently only has one federally designated WSR, the Cache la Poudre River. Designated in 1986, 30 miles of the Cache la Poudre have been designated as 'wild' and 46 miles as 'recreational,' totalling 76 miles of designated river. The state of Colorado currently only has one federally designated as 'wild' and 46 miles as 'recreational,' totalling 76 miles of designated river.

Little to no literature currently exists that suggests why there is a lack of designated WSRs in Colorado. Interviews with key stakeholders within the water sector provided insight into what have been perceived as barriers to WSR designation in Colorado. The challenges and barriers that were most commonly mentioned were: (1) fear of federal management; (2) Colorado's legal and political landscape surrounding water; (3) difficulties in balancing protection and development of water resources; and (4) fear of reduced flexibility for future water use.

Despite the challenges of securing federal WSR designations in Colorado, the advantages of such designations could still prove beneficial for rivers and communities across the state. Therefore, the continued use of federal designations under the NWSRA should be considered as an option for protecting Colorado's rivers.

Nomination & Designation

Nomination and designation would follow the rules and processes outlined in the NWSRA (P.L. 90-542, 16 U.S.C. §§1271 et seq.). In order to be designated as a WSR, rivers must be free-flowing and possess at least one ORV. ORVs are first identified in agency eligibility and suitability reports, and then the NWSRA identifies these ORVs through authorized legislation and CRMPs. Once the river or river segment

⁹³ Perry, D. (2019). Reframing the Wild and Scenic Rivers Act. Retrieved from: https://ijw.org/reframing-the-wsra/

⁹⁴ Ibid.

⁹⁵ National Wild and Scenic River System. (n.d.). National Wild and Scenic River System in the U.S. Retrieved from:

https://nps.maps.arcgis.com/apps/MapJournal/index.html?appid=ba6debd907c7431ea765071e9502d5ac#

⁹⁶ National Wild and Scenic River System. (n.d.). Cache la Poudre River, Colorado. Retrieved from:

https://www.rivers.gov/rivers/cache-la-poudre.php

receives designation, the Act mandates that the ORVs of the designated WSR be protected and enhanced by the managing agency or agencies. A river can be added to the National System in one of two ways: (1) through an act of Congress; (2) through nomination by a state's Governor with the approval of the Secretary of the Interior.

Management & Protections

Under the NWSRA, the federal agency tasked with overseeing the management of the designated river has three years from the date of initial designation to create and implement a CRMP. The management plan must include the processes and actions necessary to protect the ORVs identified on the river, which may include "resource protection, development of lands and facilities, user capacities, and other management practices necessary or desirable to achieve the purpose of the Act." ⁹⁷

Funding

Funding for Federal designations generally occurs through legislation. The NWSRA allocates funding to federal agencies such as the BLM, USFS, NPS, and USFWS to use towards the creation of the CRMP and for the management of designated rivers. If the designated river flows through BLM land, the BLM receives funding from the NWSRA to manage the river. The same is true for rivers that flow through land under the jurisdiction of the USFS, USFWS, and the NPS. A strong funding structure is a major advantage of the federal program, as it provides managers with the resources and capacity necessary to provide strong protections and implement adequate management strategies on designated rivers.

Water Rights

The NWSRA allows for the creation of a federal reserved water right to protect the flow of the river, if necessary. However, WSRs do not always possess a federal reserved water right. Across much of Colorado rivers are already fully or over-appropriated, making federal reserved water rights essentially ineffective on some streams since there is no water left to appropriate. Additionally, the priority date for the federal reserve water right would be the date of WSR designation. Therefore, any federal reserved rights associated with a WSR would be junior to any previous rights that existed on that river, ensuring that no injury is caused to prior appropriators. Alternative flow protection tools could be utilized to garner public support while also protecting flows. The CWCB's ISF program would likely be a good state-level alternative to a federal reserved water right. ISF water rights could be utilized on federally designated WSRs in Colorado in order to protect flows and flow-dependent ORVs while avoiding federal oversight of water.

Advantages & Disadvantages

Utilizing federal designations under the NWSRA can be advantageous for many reasons. First and foremost, it is one of the most robust tools for river protection that currently exists in the United States. Access to federal funds and technical assistance allows the federal program to implement robust protections on designated rivers. Federally designated WSRs also have the potential to increase tourism and recreational opportunities, and therefore positively contribute to local economic development. Yet another advantage of federal designation is that it is often quite flexible to fit certain circumstances or

⁹⁷ Turner, S. (2009). Wild and Scenic Rivers: The Importance of Federal River Protection in the Rockies. Retrieved from:

https://www.coloradocollege.edu/dotAsset/182c171e-354f-46a0-b7f5-cc9f9ea4794e.pdf

⁹⁸ River Network. (2008). Celebrating 40 Years: The Wild and Scenic Rivers Act. Retrieved from:

https://www.rivernetwork.org/wp-content/uploads/2016/04/River-Voices-v18n3-2008 The-Wild-and-Scenic-Rivers-Act.pdf>

geographical areas. The Cache la Poudre WSR, for example, includes provisions for flexibility with future water development in order to keep up with growing populations and increased demand for water.

There are also some disadvantages of utilizing federal designations under the NWSRA, as well as several barriers and challenges to getting rivers designated. Especially in the West where the Prior Appropriation Doctrine serves as a framework for water management, it is not uncommon for water users to be fearful of federal control of water resources. Designations also often place limits on future river development projects, such as dams and diversions, which has also been a barrier to implementation in more arid Western states. Federal designations under the NWSRA can also place burdens on managing agencies that are already limited in terms of resources and capacity. Yet another disadvantage of the federal designation under the NWSRA is that, despite being one of the best tools for river protection that currently exists, there is still room to improve in terms of holistic ecosystem protection across entire watersheds. Although the NWSRA contains language to protect adjacent riparian lands, destructive activities can still occur both up and downstream from designated sections. Thus, more comprehensive tools are needed in order to protect the entire watershed in which a federally designated river exists.

Option 2: Utilize the Partnership Wild and Scenic Model in Colorado

Overview

Although PWSR designations are currently only being utilized in the Eastern United States, this model could prove successful in Colorado if adapted to fit the Prior Appropriation Doctrine and Colorado's large amount of federally owned public lands. With a strong emphasis on local management and collaboration, PWSR designations may receive broader support from a multitude of stakeholders across Colorado. If Colorado were to implement such a program, rivers would still receive federal designation, but management and decision making would emphasize local- and state-level involvement.

Nomination & Designation

In order to be designated as a PWSR, rivers must be free-flowing and possess at least one ORV. Additionally, PWSRs must already be managed and protected at the local level prior to designation. PWSRs are identified through agency eligibility and suitability reports or through congressionally authorized studies. Following nomination, the NPS must work with local and state entities to create a CRMP that outlines how the ORVs identified on the river will be protected and enhanced. Following the creation of the CRMP, Congress then designates PWSRs through legislation and they are added to the National System. In addition to the NPS, the BLM and USFS will likely take on the responsibility of managing PWSRs in Colorado due to the large amount of federally owned public lands throughout the state.

Management & Protections

In the Eastern United States, local- and state-level protections such as local zoning ordinances generally exist on PWSRs prior to their inclusion into the National System. The identification of each river section requires the legal consent of the administration of each affected locality which makes this technique especially long-lasting. A comprehensive designation study, stakeholder involvement, and approval by

⁹⁹ River Network. (2008). Celebrating 40 Years: The Wild and Scenic Rivers Act. Retrieved from:

 $< https://www.rivernetwork.org/wp-content/uploads/2016/04/River-Voices-v18n3-2008_The-Wild-and-Scenic-Rivers-Act.pdf > 100 lbid.$

each municipality's Town Meeting or City Council are essential components of this process.¹⁰¹ The study must identify river characteristics that are valued by the local community and inform them about what these protections would imply.

In Colorado, where there is a larger amount of federally owned public land than there is in the Eastern states that currently utilize the PWSR model, new protections and management of Partnership rivers must be incorporated into previously existing forest plans, resource management plans, and other federal planning initiatives. Thus, forest plans and resource management plans would need to be amended in order to include the protections needed for designated Partnership rivers in Colorado. Throughout the process of updating management plans, there must also be efforts to collaborate between local, state, and federal entities. Although the creation of a new CRMP will be anchored in federal funding and technical assistance through the NPS, BLM, or USFS, state and local involvement will need to be prioritized.

Funding

One major benefit of the Partnership model is that it is anchored by federal funding and technical assistance, but also leverages substantial funding from state, local, and private entities that take part in managing designated rivers. When rivers are added to the National System Congress generally provides funds for operations and maintenance through annual congressional appropriations to the relevant agencies. Congress generally allocates between \$300,000-500,000 to each designated river for the creation of a CRMP. This money goes toward studies and plans, federal agency staff, public engagement, and other means necessary to create the CRMP. The cost is often spread out over several years.

Once designated, Partnership rivers usually receive approximately \$250,000 annually for the support of federal staffing to help with planning, monitoring, technical assistance and restoration projects. This level of funding is generally maintained each year by Congress for the ongoing management and protection of designated rivers. Funds are also indirectly allocated to local entities, often non-profit organizations, that work in coordination with the managing federal agency to provide management and oversight of the designated river. Most Partnership rivers receive federal funding through the NPS; however, in Colorado the responsibility of providing funding and technical assistance could also be in the hands of the BLM or USFS.

Water Rights

The PWSR model is currently only utilized in states that use a Riparian water governance instead of the Prior Appropriation Doctrine, which is used in Colorado and other Western states. The Riparian Doctrine maintains that every private property owner with land adjacent to a natural stream or lake has an equal right to reasonable use of the water.¹⁰⁴ However, states with Riparian water governance have different

¹⁰¹ Field-Juma, A., and Roberts-Lawler, N. (2021). *Using Partnerships and Community Science to Protect Wild and Scenic Rivers in the Eastern United States.* Retrieved from: https://www.mdpi.com/2071-1050/13/4/2102/htm

¹⁰² Riddle, Anne A. (2019). Wild and Scenic Rivers: Designation, Management, and Funding. Retrieved from:

https://www.everycrsreport.com/files/20190828 R45890 3f1325bf400d44366a513417d872ff7a0ca2071d.pdf>

¹⁰³ B. Ratcliffe (Division Manager Conservation and Outdoor Recreation Programs, National Park Service). (December 1, 2021). Personal Communication.

¹⁰⁴ Meyers, S. (2019). Wisconsin's Wild River Act was First of its Kind in the Nation. Retrieved from:

https://www.wpr.org/wisconsins-wild-river-act-was-first-its-kind-nation

water rights requirements than Prior Appropriation states. Therefore, provisions would need to be added in order for the PWSR model to be adapted and utilized in Colorado.

Federal Reserve Water Rights can be included in federal designations under the NWSRA to protect streamflow if necessary; however, federal oversight of state water resources can be a major point of contention in the state of Colorado. Therefore, a state-level streamflow protection tool like the Colorado Water Conservation Board's Instream Flow (ISF) program might be a more appropriate option. Through the ISF program, the CWCB is able to acquire water rights from other appropriators in order to preserve streamflows for the environment. Although it can take more than five years to secure ISF rights on a river, this tool has proven successful at reserving minimum stream flows necessary to protecting aquatic ecosystems and ORVs identified on streams. Another applicable option, especially for rivers with recreation-related ORVs, is a Recreational In-Channel Diversion (RICD). Cities, counties, water conservancy districts and other local community entities can obtain RICD water rights in order to preserve minimum flows necessary for reasonable recreational experiences on the water. It is important that potential future Partnership rivers include a flow protection component to ensure maintenance of flow-related ORVs, and both the ISF program and RICDs would be a way to protect streamflow through state and local means.

Advantages and Disadvantages

Should it be adapted to better fit Colorado, the Partnership model could be a successful tool in protecting rivers across the state. The model's strong focus on local decision making and management may reduce fears surrounding federal oversight that is often exhibited with federal WSR designations in Colorado. The Partnership model also emphasizes collaborative efforts at the local, state, and federal levels. Cooperative partnerships are at the center of many of the recent river protection programs that have been developed as alternatives to WSR designations, making it clear that collaboration between sectors is something that many Coloradoans want in river protection programs. The Partnership model also provides opportunities for funding from multiple entities, including local governments, watershed groups, federal agencies, and more.

There are also several aspects of the Partnership model that may prove challenging to implement in Colorado. Although the emphasis on local-level management may generate some support, PWSRs are ultimately a federal designation and this federal aspect might result in opposition from some water users. Additionally, collaboration between federal, state, and local entities and coordination of many diverse perspectives across the water sector may prove challenging. Incorporating local decision making into forest planning or other federal-level planning efforts could also be a difficult task. Coming up with a way to incorporate water rights into the Partnership model may also be a challenge. While CWCB's ISF program could be a good fit, the program still receives opposition from water users across the state and can be extremely time consuming to secure. Additionally, while federal funding is often available for PWSRs, budgets for WSRs have been declining in recent years. ¹⁰⁵

¹⁰⁵ Congressional Research Service. (2019). Wild and Scenic Rivers: Designation, Management, and Funding. Retrieved from: https://sgp.fas.org/crs/misc/R45890.pdf

Option 3: Implement a State-Level Wild and Scenic Program in Colorado

Overview

Thirty-three states have developed state-level river protection programs that are modeled after the NWSRA. However, no such program exists in Colorado or much of the Rocky Mountain Region. In fact, Idaho is the only state in the Rockies with a state-level wild and scenic program. State-level programs are often favorable with stakeholders due to their ability to protect rivers while also leaving control of the management of rivers to the state government instead of the federal government. ¹⁰⁶ In a state such as Colorado, where there is a history of complex political ideologies surrounding water, placing the management of WSRs in the hands of the state might result in increased support, quality, and flexibility of river protections. This program could include provisions that appeal to Colorado's diverse water users, while also protecting ORVs or ecosystem services that Colorado's rivers provide.

Nomination & Designation

The process of how rivers can be nominated and designated can vary between different state-level programs. In California's state-level program, rivers are nominated for designation by the Secretary of the Department of Natural Resources and are then designated through legislation. In Idaho, eligible rivers are identified and designated through the state's Water Plan updates. Additionally, some states have public processes for nominating rivers. In Colorado, the most feasible option would be to give the managing state agency (whether it be CWCB, CPW, etc.) the authority to nominate rivers, which are then designated through legislation. A public nomination process could also be integrated into a state-level program in Colorado as well. The Colorado OWs program allows any person to nominate a river for designation by filing a petition with the Colorado Water Quality Control Commission (WQCC). A similar process could be utilized for a state-level WSR program in Colorado to generate more public input on designations.

Management & Protections

A state agency would need to be identified to take responsibility for the management of state-level WSR designations in Colorado. Some additional ORVs that would qualify for designation are: climate refugia, scientific research, and botanical. They could be identified by any person claiming a river or river segment has characteristics of any one of these values. Additionally, the state agency responsible for managing the state-level designations would be the same agency crafting the management plan.

Funding

Funding state-level programs can often be difficult. Although 33 state-level wild and scenic programs currently exist in the United States, many of these programs have not had the funding and resources to implement protections on rivers as robust as the federal program. Many state agencies in Colorado currently lack the capacity and resources to take on the responsibility of managing a state-level WSR program. Therefore, funds would need to be specifically allocated towards hiring full time employees to manage the program, create management plans, and implement strategies for protecting designated rivers. This money could come from several sources, such as CWCB's Wild and Scenic Fund, congressional allocations, state agencies, or private entities.

¹⁰⁶ River Network. (2008). Celebrating 40 Years: The Wild and Scenic Rivers Act. Retrieved from:

https://www.rivernetwork.org/wp-content/uploads/2016/04/River-Voices-v18n3-2008 The-Wild-and-Scenic-Rivers-Act.pdf>

Water Rights

Protecting flows is a crucial part of ensuring the protection of ecosystems, habitat, recreation, and other flow-dependent ORVs. In order to preserve and enhance identified ORVs, a state-level WSR program must include a flow protection component. The CWCB's ISF program could be utilized to secure state-level water rights for designated rivers in order to protect flows and ORVs. Although the ISF program has successfully protected flows in rivers throughout the state, ISF water rights often take years to administer, are junior to any prior appropriations, and are still met with significant amounts of opposition across Colorado. For rivers that have more recreation-focused ORVs, RICDs could also be utilized to protect instream flow. However, RICDs would only be able to be utilized for designated rivers with recreational ORVs and the construction component could be a potential downfall. American Whitewater believes RICD water rights should be adjusted so that recreational flows can still be protected without the construction of a whitewater park.¹⁰⁷

Advantages and Disadvantages

A state-level WSR program could be a successful alternative to the federal program, especially in Colorado where there has only been one federally designated WSR to date. Placing management and decision making in the hands of the state could reduce fears many Coloradoans have surrounding the involvement of the federal government in the federal WSR program. Additionally, state agencies have increased knowledge on issues pertaining to the state's rivers, and can therefore manage rivers in a way that is most beneficial to the environment and the communities that rely on Colorado's rivers.

Many state-level programs also face challenges in terms of funding and administration. Unlike federally designated WSRs, state-level programs do not have access to federal funding or technical assistance. This can create obstacles to implementing robust protections because many state agencies might lack the resources and staff necessary to manage and implement a WSR program on their own. Thus, some sort of additional funding source might be needed to carry out such a program. Additionally, many rivers throughout Colorado flow through federal lands which might make it difficult for state agencies to manage WSR designations. State and federal agencies will need to coordinate actions to protect WSR designations with priorities that federal agencies have for the management of federal lands designated rivers flow through.

Conclusion

The NWSRA was created to preserve "designated free-flowing rivers for the benefit and enjoyment of present and future generations and to complement the then-current national policy of constructing dams and other structures along many rivers." Although the Act is currently one of the best forms of river protection in the United States, the Cache la Poudre is the only river in Colorado that has received such a designation. Due to the state's unique political landscape and limited water resources, an alternative river protection program may be better suited for Colorado.

¹⁰⁷ Blevins, J. (2021). Should River Towns be Forced to Build Costly Parks to Get Recreational Water Rights? Retrieved from: https://coloradosun.com/2021/09/28/recreational-in-channel-diversion-ricd-water-rights-colorado/

¹⁰⁸ Congressional Research Service. (2015). The National Wild and Scenic Rivers System: A Brief Overview. Retrieved from: https://www.everycrsreport.com/files/20150922 R42614 0a758540c12265f01b583458c75ee18d29a9824f.pdf

Other forms of WSR programs exist in addition to the original federal designations outlined in the NWSRA of 1968. Specifically, the Partnership model and state-level programs have been developed to better suit the needs of rivers and water users in various areas of the country. PWSRs, which currently only exist in the Eastern United States, are federally designated rivers that are managed in coordination between local, state, and federal entities. State-level programs have developed in 33 states to implement protections similar to those outlined in the NWSRA, but with the responsibilities of management in the hands of state-level entities.

This paper shed light on the different WSR programs that exist and how they might fit into Colorado's current political, social, and ecological landscape surrounding water management and use. Three potential river protection options for the state of Colorado were developed with these different WSR programs in mind: (1) continue the use of federal wild and scenic designations in Colorado; (2) utilize the Partnership wild and scenic model in Colorado; and (3) implement a state-level wild and scenic program in Colorado. Each of these options has its own unique advantages and challenges and will need to be adapted to best fit individual circumstances within Colorado.