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Private Instream Rights: Western Water Oasis or Mirage? An Examination Of The Legal And Practical Impediments To Private Instream Rights In Alaska

George A. Kimbrell*

“The law is a mechanism for getting things done, for accomplishing the purposes of society, for requiring some things and forbidding others. If the people of the United States or of a state desire to keep water in a stream or to put it back in a stream, a law can be framed that will do that job.”¹

I. INTRODUCTION

The nineteenth century settlement of the arid American West created a doctrine that rewarded hasty diversion and “beneficial” water use: prior appropriation.² The result was the exploitation of water resources in the quest for economic, agricultural, and industrial development.³ During the last twenty-five years, prior appropriation states slowly became aware that traditional water distribution mechanisms do not adequately protect against over-appropriation.⁴ Fish and wildlife depend on flows of water to survive. For example, salmon need timely flows of cold, clean water to migrate to and from the ocean. Continuous development and diversions over the past 150 years have depleted flows in many places to the point of exhaustion.⁵

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1. Frank J. Trelease, *The Legal Bases for Instream Flows*, 2 Am. Fisheries Socy. Instream Flow Needs, 1-21 (1976).

2. See generally *Waters and Water Rights*, vol. 2, §§ 11-12 (Robert E. Beck, ed., Michie 1991); Steven J. Shupe & Lawrence J. MacDonnell, *Recognizing the Value of In-place Uses of Water in the West: An Introduction to the Laws, Strategies, and Issues*, in *Instream Flow Protection in the West* 1-1 (Lawrence J. Macdonnell et. al. eds., U. of Colo. Sch. of L. Nat. Resources L. Ctr. 1993); Brian Morris, *When Rivers Run Dry under a Big Sky: Balancing Agricultural and Recreational Claims to Scarce Water Resources in America and the American West*, 11 Stan. Envtl. L.J. 259, 260 (1992); Janet Neuman, *Implementing Instream Flow Protections in Prior Appropriation Systems: Continuing Challenges*, in *Rivers* vol. 7, 345 (2000).

3. A 1933 quote from a U.S. senator is a perfect synopsis of the prevailing philosophy: “It is emblematic of the dawning of that day when every rippling stream that flows down the mountain side and winds its way through the meadows to the sea shall be harnessed and made to work for the welfare and comfort of man.” David M. Gillilan & Thomas C. Brown, *Instream Flow Protection: Seeking a Balance in Western Water Use* 34 (Island Press 1997) (quoting former Tennessee Senator George Norris).

4. Barton H. Thompson Jr., *Markets for Nature*, 25 Wm. & Mary Envtl. L. & Policy Rev. 261, 268-269 (2000) (noting that the “prior appropriation doctrine ... promoted the very depletion of the West’s rivers that is now a source of serious environmental concern”).

5. For a pertinent example of how human development has almost eviscerated the Pacific Northwest wild salmon, see Michael C. Blumm, *Sacrificing the Salmon: A Legal and Policy History of the Decline of Columbia Basin Salmon* (BookWorld Publications 2002) (describing the impact of altered stream flows on salmon in the Pacific Northwest); see generally Marc Reisner, *Cadillac Desert: The American West and Its Disappearing Water* (Viking Press 1986); Tom Annear et al., *Instream Flows for*

In response to changing public values and increased biological and hydrological awareness in the last quarter of the twentieth century, state legislatures, agencies, and interested parties tried numerous methods to protect instream flows.⁶ Early efforts included “wild and scenic” river laws,⁷ conditioning consumptive water rights for instream flows,⁸ or creating statutory minimum flow levels.⁹ Other efforts include application of the waste¹⁰ and public trust doctrines,¹¹ federal reserved rights,¹² tribal rights,¹³ federal environmental statutes,¹⁴ leasing instream rights,¹⁵ and acquisition of instream rights by state agencies.¹⁶ Every effort in this smorgasbord of legislative, judicial, and administrative solutions has two common denominators: first, each is public, involuntary, and/or regulatory in nature; second, each has failed to adequately protect instream flows. Since the beginning of the modern instream “awakening,” however, some observers have heralded the use of another, different method to protect instream flows: privately held instream rights.¹⁷

Riverine Resource Stewardship (Instream Flow Council 2002) (noting that “competing uses have resulted in degraded river ecosystems in every region of the United States and Canada”); Donald Worster, *Rivers of Empire: Water, Aridity, and the Growth of the American West* (Pantheon Books 1985); Barton H. Thompson Jr., *Water Allocation and Protection: A United States Case Study*, in *Earth Systems: Processes and Issues* 476, 479 (W.G. Ernst ed., Cambridge U. Press 2000) (noting that river depletion has led to the extinction of some fish species and serious population declines in other species of fish and wildlife). For an excellent discussion of the effects of stream depletion in California and an argument for preservation of instream flow there, see Gregory A. Thomas, *Conserving Aquatic Biodiversity: A Critical Comparison of the Legal Tools for Augmenting Streamflows in California*, 15 *Stan. Envtl. L.J.* 3, 5-12 (1996).

6. For a general discussion of various in-stream flow protection devices tried by states, see Gillilan & Brown, *supra* n. 3; for a survey of western state instream flow programs, see Cynthia F. Covell, *A Survey of State Instream Flow Programs in the Western United States*, 1 *U. Denv. Water L. Rev.*, 177, 180 (1998).

7. Jack Sterne, *Instream Rights & Invisible Hands: Prospects for Private Instream Water Rights in the Northwest*, 27 *Envtl. L.* 203, 212-213 (1997) (discussing Oregon’s 1915 efforts to protect the waterfalls of the Columbia Gorge).

8. Cal. Water Code Ann. §§ 1257.5, 1253 (West Supp. 1993); Brian E. Gray, *A Reconsideration of Instream Appropriative Water Rights in California*, 16 *Ecology L. Q.* 667 (1989).

9. Examples include 1955 Or. Laws 707; Wash. Rev. Code § 75 (1963 and Supp. 1993).

10. Karen Russell, *Wasting Water in the Northwest: Eliminating Waste as a Way of Restoring Stream Flows*, 27 *Envt. L.* 151 (1997).

11. Richard Ausness, *Water Rights, the Public Trust Doctrine, and the Protection of Instream Uses*, 1986 *U. Ill. L. Rev.* 407 (1987); see also Michael C. Blumm, & Thea Schwartz, *Mono Lake and the Evolving Public Trust in Western Water*, 37 *Ariz. L. Rev.* 701, 727-33 (1995).

12. *Water and Water Rights*, *supra* n. 2 at § 37; *Winters v. U.S.*, 207 *U.S.* 564 (1908); Gillilan & Brown, *supra* n. 3, at 177-223.

13. Gillilan & Brown, *supra* n. 3, at 193-197.

14. See e.g., A. Dan Tarlock, *The Endangered Species Act and Western Water Rights*, 20 *Land & Water L. Rev.* 1 (1985); Thompson, *supra* n. 5, at 479; see generally Gillilan & Brown, *supra* n. 3, at 255-296.

15. See James D. Crammond, *Leasing Water Rights for Instream Flow Uses: A Survey of Water Transfer Policies, Practices and Problems in the Pacific Northwest*, 26 *Envtl. L.* 225 (1996); see also Holly Franz, *Montana’s Instream Flow Experience: Past, Present, and Future*, 7 *Rivers* 245 (2000).

16. See generally Covell, *supra* n. 6.

17. Many authors have advocated for the creation of private water markets and as part of such, the ability to privately hold instream rights. See James Huffman, *Instream Water Use: Public and Private Alternatives*, in *Water Rights: Scarce Resource Allocation, Bureaucracy, and the Environment* 273-280

Conceptually, private instream rights are just what they sound like: a vested usufructuary property right of a private individual or organization, held instream for purposes of beneficial use. Proponents argue that the supplementation of public rights¹⁸ with privately held rights offers more effective solutions to protecting stream flows because private participation would eliminate the financial, enforcement, and bureaucratic deficiencies of agency-only systems through market mechanisms.¹⁹ They maintain that the constraint on ownership of instream rights is directly opposed to one of the basic principles of prior appropriation: water should be available to anyone who puts it to "beneficial use" without waste.²⁰

In response, western states have in large part balked at permitting privately held instream flows.²¹ The state legislatures' objections ranged from the philosophical (the unique public nature of water instream) to the economic (speculation concerns) to the political (agricultural interests).²² As a result, the debate over the effectiveness of private instream rights has remained theoretical.

Alaska, however, is an anomaly in the American West: it has yet to develop to the detriment of its riverine systems and instream flows. Alaska was also the first state to statutorily create private instream rights.²³ This

(Terry Anderson ed., Ballinger Pub. Co. 1983); Clay J. Landry, *Saving Our Streams Through Water Markets: A Practical Guide* (PERC 1998); Terry L. Anderson & Pamela Snyder, *Water Markets: Priming the Invisible Pump* (Cato Inst. 1997); John Leshy, *Instream Flow Rights: The Private and Public Roles*, 616 ALI-ABA 163, 172 (1991); Sterne, *supra* n. 7; Thomas, *supra* n. 5; but cf. generally Michael C. Blumm, *The Fallacies of Free Market Environmentalism*, 15 Harv. J.L. & Pub. Policy 371 (1992) (arguing that markets and private ownership are not always the answer to resource problems); Joe Delapenna, *The Importance of Getting Names Right: The Myth of Markets for Water*, 25 Wm. & Mary Envtl. L. & Policy Rev. 317 (2000); Eric T. Freyfogle, *Water Rights and the Common Wealth*, 26 Envtl. L. 27 (1996).

18. A public or publicly held instream right is a water right held by a state agency or by the state in trust. David Getches, *Water Law in a Nutshell* 96 (West 1997). For the purposes of this paper, "publicly held" and "agency held" will be used interchangeably.

19. Sterne, *supra* n. 7, at 205.

20. Christopher Meyer, *Instream Flows: Integrating New Uses and New Players into the Prior Appropriation System*, in *Instream Flow Protection in the West* 2-13 (Lawrence J. MacDonnell & Teresa A. Rice, eds., Univ. of Colo. Sch. of L. Nat. Resources L. Ctr. 1993).

21. See generally Covell, *supra* n. 6; see also Sterne, *supra* n. 7, at 204. For an enlightening example of the narrow interpretation of a state statute as to not permit private holding of instream rights and how it fundamentally altered the mission of a trail-blazing organization, see Janet Neuman & Cheyenne Chapman, *Wading into the Water Market: The First Five Years of the Oregon Water Trust*, 14 J. Envtl. L. & Lit. 135 (1999).

22. Thompson, *supra* n. 4, at 288; Neuman & Chapman, *supra* n. 21, at 170-17; Meyer, *supra* n. 20, at 2-13.

23. Alaska Stat. § 46.15.145 (LEXIS 2001); A. Dan Tarlock, *Future Issues in Instream Flow Protection in the West*, in *Instream Flow Protection in the West* 8-13 (Lawrence J. Macdonnell & Teresa A. Rice, eds., Univ. of Colo. Sch. of L. Nat. Resources L. Ctr. 1993). Idaho, Montana, Nebraska, Oregon, Utah, Colorado, and Wyoming permit only state agencies to hold instream rights. Joseph Sax et al., *Legal Control Of Water Resources* 114 (3rd ed., West 2000). Alaska, Arizona, Nevada, California, and New Mexico all provide some opportunity for private parties to hold instream rights. Neuman, *supra* n. 2, at 346. Arizona has interpreted "beneficial use" to include instream uses and therefore approved of private instream rights. See Ariz. Rev. Stat. Ann. § 45-141A (West 1998); see also *McClellan v. Jantzen*, 547 P.2d 494 (1976) (holding that since the state legislature added instream uses to the statutory list of beneficial uses, a diversion is not necessary to receive a water right under state law). For

statutory right—coupled with Alaska's legal and developmental infancy, lack of appropriative pressure on water, and focus on natural resources—creates a seemingly ideal situation for effective instream flow protection through a private instream flow market.²⁴ But instead, a combination of factors has discouraged and frustrated attempts at private instream flow protection in Alaska.²⁵ This paper examines private instream water right opportunities and problems in Alaska, and their implications on effectuating private instream rights elsewhere.

The paper begins, in section II, with a comparative analysis of the ideological and practical arguments for publicly held versus privately held instream water rights. Section III provides a background of water issues and water law in Alaska. Section IV examines the Alaska 1980 instream flow statute and its results. Section V dissects the inherent statutory weaknesses that made instream rights in Alaska inferior to consumptive water rights, and sabotaged any chance for effective instream flow protection. Section VI revisits the arguments for private instream rights in light of Alaska's experience and suggests lessons to be learned, concluding that private instream rights still hold promise for instream advocates. However, Alaska's experience illustrates some crucial practical limitations to consider (especially the need for state agency cooperation and support) and legal pitfalls to avoid (specifically, provisions that make instream rights inferior to consumptive rights) if this instream water oasis is not to become a mere mirage.

II. PUBLIC V. PRIVATE

There has been a philosophical debate²⁶ over the nature and ownership of instream flow rights in prior appropriation water law since such rights were first proposed.²⁷ Instream water rights²⁸ are arguably vested property

further discussion of the similarities between the problems acquiring private instream flows in Arizona and in Alaska, *see infra* n. 174. Nevada also has implicitly recognized the legal legitimacy of private instream flows through administrative channels. Gillilan & Brown, *supra* n. 3, at 116. In California and New Mexico private parties can hold instream rights but only if they are transferred or dedicated from existing consumptive uses. Neuman, *supra* n. 2, at 346. Montana allows for private leasing, but not permanent ownership, for instream purposes. Mont. Code Ann. § 85-2-408 (1999).

24. Alaska has been called "the greatest opportunity for private citizen involvement in an instream flow program." Covell, *supra* n. 6, at 193; Nina Burkardt, *Paradise Confounded: The Status of Alaska Instream Flow Program*, 7 Rivers 361 (2000).

25. Christopher Estes, *Annual Summary of Instream Flow Reservations and Protections in Alaska*, in *Fishery Data Series No. 96-45 10-14* (Alaska Dept. of Fish and Game 1996).

26. *See supra*, n. 17 and accompanying text.

27. The first hurdle for instream flow rights in prior appropriation states was the requirement for diversion. Virtually all states which have instream flow rights have either legislatively or judicially altered their codes to allow for beneficial use without diversion. Meyer, *supra* n. 20, at 2-1, 2-2; A. Dan Tarlock, *Appropriation for Instream Flow Maintenance: A Progress Report on New Public Western Water Rights*, 1978 Utah L. Rev. 211, 221 (1978) (foreseeing that "actual diversion requirement serves no function that cannot be served by other water law doctrines... instream uses should be valid and...presumed beneficial"). For an argument that prior appropriation's distinguishing feature is it's

rights²⁹ and therefore may be a more permanent method of protecting flows than any type of regulation.³⁰ The majority of western states have chosen to permit only publicly held instream rights.³¹

A. *The Rationale behind Publicly Held Instream Rights*

Numerous arguments have been made that ownership of instream rights must be limited solely to state agencies. The first argument is philosophical: flowing water is by its nature the quintessential “public good.”³² Water instream provides public benefits—aesthetics, water quality, recreation, fish and wildlife protection—that, according to some, are not properly controlled by private parties.³³ It therefore is logical such rights, in contrast with consumptive, diversionary uses which grant exclusive benefits, be held solely by public agencies.³⁴ The economic corollary is that public goods like water are frequently under-produced by markets because of difficulty measuring their worth, and the “free rider” problem.³⁵ These problems are endemic to public goods such as schools, fire and police protection, roads, and parks, thus frequently necessitating control by the public sector. Free-flowing water falls in this category and therefore the argument follows that it is better controlled by public agencies.³⁶

adaptability in the face of changing western values, see A. Dan Tarlock, *The Future of Prior Appropriation in the New West*, 41 Nat. Resources J. 769 (2001).

28. An instream appropriative water right is defined as “an amount of water to be allowed to flow through a stretch of stream in order to protect fish and wildlife, scenic beauty or water-borne recreation.” Getches, *supra* n. 18, at 75.

29. In Alaska and Colorado, for example, a water right is a property right. *Owischek v. Guide Licensing & Control Bd.*, 763 P.2d 488, 493 (Alaska 1988); *Navajo Dev. Co. v. Sanderson*, 655 P.2d 1374, 1377 (Colo. 1982). A water right in most prior appropriation states is a right to use beneficially but not wholly exclude, a usufructory right as opposed to a possessory right. Getches, *supra* n. 18, at 75.

30. Gillilan & Brown, *supra* n. 3, at 144. See argument *infra* II(C) for advantages of property rights over regulation.

31. See *supra* n. 23.

32. Dellapenna, *supra* n. 17, at 329 (arguing that water markets for privately held instream flows are bound to fail, among other reasons, because of the public good characteristics of water and society’s unique valuation of water). Often used metaphors for public goods—like “spillover effects” and “common pool resource”—come from water. *Id.* The term “public good” means resources characterized by non-rivalry and non-excludability in consumption. Bonnie G. Colby, *Benefits, Costs and Water Acquisition Strategies: Economic Considerations in Instream Flow Protection*, in *Instream Flow Protection in the West* 6-1, 6-22 (Lawrence J. Macdonnell & Teresa A. Rice, eds., Univ. of Colo. Sch. of L. Nat. Resources L. Ctr. 1993).

33. Gillilan & Brown, *supra* n. 3, at 120 (noting the argument that private ownership might not be compatible with the state’s public trust duties to water); *Protecting Instream Flows Under Western Water Law: Selected Papers*, in *Instream Flow Information Paper No. 2* 18 (Berton Lamb, ed. U.S. Fish and Wildlife Service 1978) (noting that “Water is preserved so that the public may enjoy the beauty of a waterfall, the thrill of rafting down a wild river, or the joy of catching a trout on a dry fly”) [hereinafter *Western Water*].

34. Neuman & Chapman, *supra* n. 21, at 170.

35. Colby, *supra* n. 32, at 6-22. The “free rider” problem is that public goods will tend to be under produced by market forces alone because demand will be underestimated. People count on others to produce the necessary amount of a good with public benefit; they can then use it at no cost.

36. *Id.*

The second argument for agency-only instream systems stems from fears of speculation, either for economic or environmental motives.³⁷ Instream rights by their nature forego the traditional diversion requirement of prior appropriation, which proves the appropriator is diligently putting water to "beneficial use."³⁸ Since the beneficial uses of instream rights are necessarily instream, private instream owners could appropriate for "beneficial use without doing anything at all," giving investors an economic disincentive to develop and reason to hold water for speculation instead.³⁹ Similarly, because of the relatively low cost and ease of instream appropriation, all remaining unappropriated water could be "tied up," not by economic speculators, but by conservationists, and therefore become unavailable for future development purposes.⁴⁰

If instream rights must exist, traditional consumptive users prefer state agency control, where they have political leverage, over ownership by private, independent organizations.⁴¹ The fear of speculation is probably the largest impetus behind states limiting instream ownership to public agencies.⁴²

B. *The Criticism of Public Instream Rights*

Prior appropriation states' decisions to permit only public instream rights produced a less than ideal record for evaluation. In light of that record, some commentators argue that agencies alone are inadequate to provide instream protection.⁴³ First, they argue, agencies do not have enough funding to adequately acquire and properly administer instream rights.⁴⁴ Water rights, especially senior rights, can cost a great deal to purchase, and agen-

37. Gillilan & Brown, *supra* n. 3, at 123; Thompson, *supra* n. 4, at 289.

38. Gillilan & Brown, *supra* n. 3, at 123.

39. *Id.* See also *Western Water*, *supra* n. 33, at 17 (noting "It is the willingness of an appropriator to invest his time and financial resources in the diversion and use of water which demonstrate his sincerity and evidences that he wants the water for its value to him and not simply for speculative purposes").

40. Gillilan & Brown, *supra* n. 3, at 123 (citing fears of water hoarding by "lunatics" in Colorado, "radicals" in Nebraska, and "environmentalists" in Oregon); Gordon Fassett, *Wyoming's Instream Flow Law*, in *Instream Flow Protection in the West* 21-4 (Lawrence J. Macdonnell & Teresa A. Rice, eds., Univ. of Colo. Sch. of L. Nat. Resources L. Ctr. 1993) (hypothesizing that state ownership of instream rights stems from concern that "radical" interests would acquire all available waters and hamper development); Thompson, *supra* n. 4, at 288.

41. Gillilan & Brown, *supra* n. 3, at 123; Thompson, *supra* n. 4, at 288; see also Janet Schmitt, *Instream Water Rights in Oregon: To Hold or Not to Hold?* 39 (unpublished Master's Thesis, Harvard University 1995) (copy on file with the Oregon Water Trust).

42. Gillilan & Brown, *supra* n. 3, at 123. This speculative fear is the "crux of the argument" for publicly held rights. *Id.* Ironically, given the states' initial intent to protect flows, seem to have placed the burden of instream rights solely on state agencies to "discourage rather than encourage instream flow protection." *Id.* at 127.

43. Sterne, *supra* n. 7, at 215-219.

44. *Id.* at 216.

cies are not adequately budgeted for such expenses.⁴⁵ At best, agencies can only acquire rights with junior priority dates and preserve the status quo.⁴⁶

Funding problems are also related to a second criticism: inadequate enforcement of water rights and bias in resolution of water disputes. Agencies do not continually monitor streams; instead, they respond to complaints of violations.⁴⁷ An agency-held right might not have a defender against diversionary users' challenges or a watchman to ensure the water is truly left instream.⁴⁸ Unlike most federal environmental statutes, the public has no enforcement role with agency held instream rights.⁴⁹ Further, if the agency is both the owner of a right and the enforcer, the state's sovereign and proprietary roles blur.⁵⁰ The result most often is to the detriment of the instream right. One commentator noted that the close ties of traditional water users to their watermasters⁵¹ makes state officials uncooperative in enforcing instream flow rights.⁵² These agency deficiencies and biases may therefore short-change any publicly held instream rights.⁵³

Third, agencies bring bureaucratic baggage. Red tape and administrative delay, as well as a susceptibility to political ideological shifts, limit the effectiveness of agencies in instream rights acquisition and protection.⁵⁴

45. *Id.* at 221.

46. *Id.* at 215.

47. Neuman & Chapman, *supra* n. 21, at 172.

48. Janis E. Carpenter, *Enforcement of Instream Water Rights* 18-21 (Northwest Water Law & Policy Project 1995) (available from Northwest Water Law & Policy Project, Northwestern School of Law of Lewis and Clark College). Since the owner of the right must complain, the general public would not be able to intervene on behalf of the instream right being violated. *Id.*

49. Lori Potter, *People Preserving Rivers: The Public and its Changing Role in Protecting Instream Flows*, in *Instream Flow Protection in the West* 3-2 (Lawrence J. Macdonnell & Teresa A. Rice, eds., Univ. of Colo. Sch. of L. Nat. Resources L. Ctr. 1993). For arguments how and why the public should have an enforcement role for public instream rights, see Lori Potter, *The Public's Role in the Acquisition and Enforcement of Instream Flows*, 23 Land and Water L. Rev. 419, 432 (1988).

50. Neuman & Chapman, *supra* n. 21, at 172.

51. Watermasters are the state agency water enforcement officers. Carpenter, *supra* n. 48, at 19.

52. Thompson, *supra* n. 4, at 283; Carpenter, *supra* n. 48, at 20. Another commentator interprets these "close ties" not as an inherent conflict in the state's role but as a flaw in the prior appropriation system itself: prior appropriation changes its rules (or the rules are altered by those with power) to protect the existing status quo. Reed Benson, *Maintaining the Status Quo: Protecting Established Water Uses in the Pacific Northwest, Despite the Rules of Prior Appropriation*, 28 *Env'tl. L.* 881, 909 (1998) (noting that "[i]nstream uses probably suffer most under the status quo policy"). The result is the same: inadequate representation and protection of instream rights.

53. Sterne, *supra* n. 7, at 217-218; Leshy, *supra* n. 17 at 170.

54. Sterne, *supra* n. 7, at 218.

*C. The Case for Privately Held Instream Rights*⁵⁵

The problems identified above could be alleviated by permitting privately held instream rights to supplement public agency rights. First, a private owner who has a financial investment in a property right likely will be a more effective defender of this right, both in monitoring for violations and in pursuing enforcement.⁵⁶ As one commentator noted, "people using the water rights are in the best position to know whether their rights are being damaged by the actions of others."⁵⁷ The private owner will not have any "dual role" loyalty problems inherent to the state; private ownership would grant each instream right a proper "champion and a defender, not dependant on the vagaries of state funding or politics for its protection."⁵⁸

Second, fear of speculation where a state permits private rights is unfounded, because state water code procedures provide that each application for an instream right is subject to the same administrative reviews and checks as diversionary rights. Agencies therefore can reject or condition speculative or suspect applications.⁵⁹ Moreover, privately owned instream rights do not hamper water development any more than consumptive rights. Every resource use, instream or diversionary, has opportunity costs.⁶⁰ Finally, priority prevents any senior right from being affected by a junior right, including instream rights.⁶¹

Third, private ownership and market forces would do a better job than the state determining correct allocation of instream rights. Private acquisition creates a more efficient market for water rights because of lowered transaction costs,⁶² increased flexibility, and local knowledge and interest.⁶³ Local individuals arguably are in a better position to determine the necessity of instream protections than harried state agencies.⁶⁴ Private rights

55. A private instream right, for the purposes of this paper, is one held by a private individual or organization.

56. Janet Neuman et al., *Restoring the Waters* 17 (Univ. of Colo. Sch. of L. Nat. Resources L. Ctr. 1997).

57. Gillilan & Brown, *supra* n. 3, at 125.

58. Neuman & Chapman, *supra* n. 21, at 172. The general public cannot enforce an agency held right. *See supra* n. 49.

59. Leshy, *supra* n. 17, at 172; Thompson, *supra* n. 4, at 291. Almost all prior appropriation states also subject applications for water rights to a public interest review. For discussion on public interest review, *see infra*, n. 147 and accompanying text.

60. Meyer, *supra* n. 20, at 2-13.

61. "Priority" is an essential feature of the doctrine of prior appropriation. An appropriator who is "first in time" has the highest priority, and therefore a right to use the water (beneficially) before others. Getches, *supra* n. 18, at 101. His right cannot be injured by those junior to him. *Id.*

62. Whether transactions costs can actually be lowered is debatable. For discussion on the role of the "no injury" rule, *see infra* nn. 105, 146, and 165.

63. Crammond, *supra* n. 15, at 240; Neuman et al., *supra* n. 56, at 17; Gillilan & Brown, *supra* n. 3, at 125.

64. Grey, *supra* n. 8, at 705. "Local fishermen, rafting companies, recreational users, and conservation organizations are likely to be far more aware both of impeding threats to a particular river and of the benefits of preserving a certain level of streamflow than would a government agency charged with managing all instream appropriations in the state." *Id.*

could create even higher standards for flows than the “political median” of the state.⁶⁵ Also, because the science of instream flows is still young, permitting private flows would provide an opportunity for increased scientific dialogue.⁶⁶ Because agencies would also still hold rights, their existence would balance long-term instability inherent in a purely private market system.

Fourth, private ownership of instream water rights creates a different type of protection: a type of property right.⁶⁷ As a property right, such a right theoretically would not be subject to shifting political winds, as are regulatory restrictions. The constitutional protection afforded property rights, which cannot be taken by state or federal government without compensation, are fundamentally distinct from any state water system.⁶⁸

Finally, a market of privately held instream flow rights should be permitted to supplement agency-held rights because the agency-only limitation is contrary to the basic tenets of the doctrine of prior appropriation. Historically, water rights were available to anyone who put water to beneficial use without waste.⁶⁹ Now that most states recognize beneficial instream uses, there should be no further restraint on the natural market system. The public character of instream flows—their nonexclusive benefits and “public-good” characteristics⁷⁰—suggests only that it should not be left entirely up to private organizations to provide flows; it does not logically exclude private supplementation of public flows through marketplace mechanisms.⁷¹ Instream uses can be valued economically just like diversionary uses—the value of any water use is dependent on the opportunity costs of other possible uses.⁷² If the law allows and the value of instream use is greater than that of other uses, the water will remain instream. The main obstacles to market transfers of water instream are then the legal impediments that states

65. Thompson, *supra* n. 4, at 286; Leshy, *supra* n. 17, at 173. Where agency might be reluctant to apply for an instream appropriation because of political repercussions, a private organization might not have those apprehensions. Leshy, *supra* n. 17, at 173.

66. Thompson, *supra* n. 4, at 286. For more on how scientific difficulties hamper private instream rights, see *infra* section V(C).

67. In appropriation states, a water right is a usufructuary right, not a possessory right, but still a property right. See *supra* n. 29.

68. Meyer, *supra* n. 20, at 2-13; Sterne, *supra* n. 7, at 220; Neuman et al., *supra* n. 56, at 17. The benefit of “holding” instream rights can be seen through the experience of the Oregon Water Trust (OWT). The organization was originally formed to buy and hold instream rights in Oregon; however agency officials interpreted the 1987 state instream statute as only permitting state agencies to hold such rights. Neuman & Chapman, *supra* n. 21, at 137-138, 167-168; Or. Rev. Stat. Ann. §537.348(1), 537.332(3) (2001). OWT therefore became a sort of broker: buying consumptive water rights for use instream and transferring them to the state. However if the Oregon legislature alters the relevant statute to disallow such transfers or the status of agency rights, OWT will not have any property to claim taken—just funding and efforts wasted. Neuman & Chapman, *supra* n. 21, at 167-168.

69. Meyer, *supra* n. 20, at 2-13; Sterne, *supra* n. 7, at 220. The argument that all traditional water uses were out of stream is short-sighted: all of the “beneficial uses” of the original inhabitants—fishing, commerce, and navigation—took place instream. Gillilan & Brown, *supra* n. 3, at 9.

70. See *supra* n. 32-36 and accompanying text.

71. Thompson, *supra* n. 4, at 289; Gillilan & Brown, *supra* n. 3, at 126.

72. Huffman, *supra* n. 17, at 276-277.

enact—like constraints on ownership and transfer—not the nature of water itself.⁷³

If the concern is the “public good” character of water, it is hardly clear why it is safe or fair to trust private individuals to own that good by holding a usufructuary right offstream but not instream.⁷⁴ The same administrative checks—beneficial use and public interest review—can and do exist in either use; access and ownership should therefore be the same for both types of water use.⁷⁵ Some private parties, like hydroelectric power, hold state granted non-consumptive appropriations.⁷⁶ Finally, in comparison, the riparian rights doctrine—the water law of the eastern half of the United States—recognizes private rights instream.⁷⁷

D. Analysis of the Debate

First, arguments for the addition of privately held instream flows are theoretically more persuasive than any rationalization of public-only systems. A prior appropriation state with agency-held instream flow rights (or a mandated minimum flow⁷⁸ reserved from appropriation) supplemented by the opportunity to appropriate and hold instream rights privately seems to offer the model system. Specifically, the agency problems of funding, enforcement, and bureaucratic lethargy are mitigated by private market impetus while private, market-based motives, which alone would be too unstable and subject to individual caprice, are supported by a layer of public control.

Second, in many ways the debate illustrates that the real driving force behind the restriction on private ownership of instream flows is the opposition of traditional consumptive water users of the American West, especially irrigation agriculture.⁷⁹ Fears of adverse effects from private instream rights and a general distrust of change outweigh any state legislature’s concern over protection of flows.⁸⁰ It is, according to the defenders of the status quo, better to have the water held instream by the state, where decision makers are accountable through elections and lobbying, than in the hands of

73. *Id.* at 278-280; Colby, *supra* n. 32, at 6-21. The Alaska experience as discussed *supra* section V arguably illustrates this point.

74. Gillilan & Brown, *supra* n. 3, at 126; Leshy, *supra* n. 17, at 171 (questioning if there are “genuine differences between allowing a rancher, farmer, utility, city, or industry to gain private rights in water, and allowing the local rod and gun club or the Nature Conservancy from doing the same”).

75. Gillilan & Brown, *supra* n. 3, at 126.

76. Leshy, *supra* n. 17, at 172. The benefit of such use is also arguably public.

77. *Los Angeles v. Aitken*, 52 P.2d 585 (Cal. App. 1935) (stating riparian rights extend to “aesthetic value” of the water instream as opposed to requiring diversion).

78. For discussion on minimum flow reservations, see *infra* discussion section VI(B).

79. This opposition is not the only example of traditional water users altering the basic tenets of prior appropriation to protect the status quo. Benson, *supra* n. 52, at 909.

80. Federal agencies and environmental organizations, two prime candidates for private instream rights, are also generally mistrusted by the traditional agricultural community. Gillilan & Brown, *supra* n. 3, at 123.

private individuals—even if such command and control regulation runs counter to the current of prior appropriation.⁸¹

In one western state, however, traditional water users did not push watersheds to the brink of exhaustion before the instream flow awakening; economic development has not yet reached the point of draining the river flows. Alaska's developmental youth, coupled with the relative absence of irrigation interests, makes it unique among western states and helps explain why it opted for a different approach to instream flow rights.⁸² The next section examines why Alaska's experience is a revealing case study in prior appropriation states' experiments with private instream flow rights.

III. ALASKA AS THE LABORATORY: WATER AND WATER LAW IN ALASKA

A. *Water in Alaska: A Golden Opportunity*

As noted earlier, Alaska was the first and remains one of the few states to enact legislation permitting privately held instream rights.⁸³ This statutory anomaly alone makes Alaska one of a few possible empirical case studies for private instream purposes. An examination of several other Alaskan characteristics, however, is essential to fully understand the Alaska private instream flow experiment. First, compared to other prior appropriation states, water opportunities abound in Alaska. Alaska has more than 40% of the entire United States' surface water resources.⁸⁴ It has over three million lakes, more than 12,000 rivers, and thousands of streams and creeks.⁸⁵ Despite these attractive hydrologic figures, water remains largely unappropriated—less than 1% of Alaska's rivers and lakes have appropriations.⁸⁶ By one count, there are 15,000 fish-bearing bodies of water in Alaska, or 60,000 potential instream flow rights.⁸⁷ Alaska therefore is in a unique position: it has a chance to integrate instream flows into its prior appropriation system before, not after, most developmental water appropriation.

81. Meyer, *supra* n. 20, at 2-13. In an oft-quoted (but overstated) argument, Meyer characterized the limitation of instream rights to public agencies as a principle of "socialism." *Id.*

82. Mary Ray White, *Opportunities To Protect Instream Flows in Alaska* 8 (Biological Services Program, U.S. Fish and Wildlife Service 1982).

83. Alaska Stat. § 46.15.145; *see infra*. n. 23.

84. Christopher Estes, Address to the American Society of Civil Engineers World Water and Environmental Resources Congress 1 (May 2001) (copy of transcript on file with the Alaska Dept. of Fish and Game).

85. Mary Lu Harle & Christopher Estes, *An Assessment of Instream Flow Protection in Alaska*, in *Instream Flow Protection in the Western United States*, 9-1 (Lawrence J. Macdonnell & Teresa A. Rice, eds., Univ. of Colo. Sch. of L. Nat. Resources L. Ctr. 1993). Of the thirty largest rivers in the United States, six are in Alaska. Robert Anderson, *Alaska Considers Innovative Instream Flow Law*, 2 *Rivers* 255, 256 (1992).

86. Alaska Dept. of Fish and Game, *Instream Flow Program, State Aquatic Resources Coordination Unit Home Page* <http://www.sf.adfg.state.ak.us/statewide/INSTFLOW/isfhome.htm> (accessed November 2, 2002).

87. Estes, *supra* n. 25, at 10. This number was reached by estimating four different instream flow reaches, a conservative estimate, for each water body. *Id.* These rights would be for fish and wildlife beneficial uses.

Second, water instream is arguably more important in Alaska than anywhere else in the United States. Flowing water was historically and is presently critical in Alaska for a number of economic, recreational, and aesthetic reasons, such as native subsistence and cultural survival,⁸⁸ commercial and sport fishing,⁸⁹ tourism,⁹⁰ transportation for boats and planes,⁹¹ water-related recreational opportunities like canoeing, hiking, camping, kayaking, and hunting, and instream industrial uses like placer mining⁹² and small hydroelectric projects.⁹³ The importance of water to Alaska's economy would seem to make Alaska a perfect model for privately owned instream flows.⁹⁴

B. Water Law in Alaska

Alaska's constitution and water code also foster an opportunity for private instream flow rights. Article VIII, section 13 of the Alaska Constitution establishes Alaska as a prior appropriation state where "[p]riority of appropriation shall give prior right."⁹⁵ Appropriation of water is limited to "stated uses," and equal preference is given to "beneficial uses,"⁹⁶ with a preference only to the public water supply.⁹⁷ When appropriated, water becomes a type of property right, a usufructuary or use right.⁹⁸ As a property right, water rights are protected from "involuntary divestment."⁹⁹ How-

88. Ryan Peel, Katie John v. United States: *Balancing Alaska State Sovereignty with a Native Grandmother's Right to Fish*, 15 *BYU J. Pub. L.* 263, 266 (2001); Anderson, *supra* n. 85, at 256.

89. After oil and government, commercial and sport fishing are the largest economic industries in the state. Estes, *supra* n. 84, at 1.

90. Tourism is the fourth largest industry in the state. *Id.*

91. Transportation, for both commodities and people, is dependent on float or ski plane in many communities of roadless Alaska. Anderson, *supra* n. 85, at 256.

92. Placer mining involves obtaining minerals from placers by instream washing or dredging.

93. Harle & Estes, *supra* n. 85, at 9-1. Despite the abundance of water, areas of present and future conflict with consumptive uses exist. Population growth, urbanization, oil, mining, hydroelectric development, municipal water supplies, and most recently, large scale water export and bottling, all raise potential water allocation questions and conflicts. *Id.*; Estes, *supra* n. 84, at 2. Large scale water exporting was statutorily approved in 1992. *Id.* For more on water export in Alaska, see *infra* n. 153 and accompanying text.

94. Two examples might be the owner of a remote fishing lodge who needs to guarantee she will have enough water for fly-in fishing tourists, or an isolated native village needing to guarantee it will have enough flow for both fishing and transportation.

95. Alaska Const. art. VIII, § 13; see also *Paug Vik, Inc. v. Wards Cove Packing Co.*, 633 P.2d 1015 (Alaska 1981).

96. Beneficial uses are enumerated statutorily. Alaska Stat. § 46.15.260(3) (LEXIS 2001). The list now includes four instream uses. *Id.* For further discussion on instream beneficial uses, see *infra* n. 110 and accompanying text.

97. *Id.*

98. *Owsicheck*, 763 P.2d at 493.

99. Alaska Const. art. VIII, § 16. The exception of divestment of right is only for "superior beneficial use or public purpose and then only with just compensation and by operation of law." *Id.* The only constitutionally "superior" beneficial use is the public water supply. Alaska Const. art. VIII, § 13.

ever, any appropriation of water in Alaska is also constitutionally subject to “the general reservation of fish and wildlife.”¹⁰⁰

The Alaska Water Use Act of 1966¹⁰¹ (Water Use Act) established the Alaska water code and empowered the Alaska Department of Natural Resources (ADNR) with the authority to manage and allocate water resources.¹⁰² The water code is similar to that of other prior appropriation states, where applicant-appropriators must apply for a permit for specified “beneficial uses.”¹⁰³ After a public notice period, a permit for appropriation may issue, which grants the applicant the opportunity to establish beneficial use by developing the water. Once the applicant has “proved up” her claim by meeting the permit conditions and statutory requirements, ADNR issues a certificate of appropriation.¹⁰⁴ Transfer, lease, or sale of water rights must all be approved by ADNR.¹⁰⁵ The right has the priority of the original date of application and can be conditioned or denied by ADNR to meet the public interest.¹⁰⁶ An extensive list of public interest criteria—including some instream benefits—is enumerated statutorily.¹⁰⁷

IV. THE 1980 INSTREAM FLOW ACT AND ITS RESULTS

A. *The Instream Flow Act*

The Alaska legislature amended the Water Use Act in 1980 in three significant ways. First, lawmakers altered the statutory provision permitting the appropriation of water—otherwise reserved for the public—to also

100. Alaska Const. art. VIII, § 13. This “general reservation” clause can be interpreted as merely granting the legislature the ability to enact laws automatically reserving water for fish and wildlife or as a constitutional mandate to do so. Harle and Estes, *supra* n. 85, at 9-5. The Alaska Supreme Court has not yet directly addressed this constitutional question. See *Tulkisarmute Native Community Council v. Heinze*, 898 P.2d 935, 952 (Alaska 1995). The clause at the very least illustrates a constitutional understanding of the importance of water instream in Alaska.

101. *Water Use Act*, Alaska Stat. §§ 46.15.010- 46.15.270 (LEXIS 2001).

102. Alaska Stat. § 46.15.010; Alaska Stat. §§ 46.15.040-46.15.140 (LEXIS 2001).

103. Alaska Stat. § 46.15.040; Alaska Stat. § 46.15.080 (LEXIS 2001).

104. Alaska Stat. § 46.15.040.

105. Any transfer of water in prior appropriation states is subject to the “no injury” rule: any transfer of right or change in use cannot harm junior appropriators (senior appropriators are protected by priority). The burden of proving that there is no harm is on the party seeking the transfer. Sax et al., *supra* n. 23, at 230; *Southeastern Colorado Water Conservancy Dist. v. Fort Lyon Canal Co.*, 720 P.2d 133, 146 (Colo. 1986); *W.S. Ranch Co. v. Kaiser Steel Corp.*, 439 P.2d 714 (N.M. 1968).

106. Alaska Stat. § 46.15.050 (LEXIS 2001).

107. Alaska Stat. § 46.15.080(b):

“In determining the public interest, the commissioner shall consider:

- (1) the benefit to the applicant resulting from the proposed appropriation;
- (2) the effect of the economic activity resulting from the proposed appropriation;
- (3) the effect on fish and game resources and on public recreational opportunities;
- (4) the effect on public health;
- (5) the effect of loss of alternate uses of water that might be made within a reasonable time if not precluded or hindered by the proposed appropriation;
- (6) harm to other persons resulting from the proposed appropriation;
- (7) the intent and ability of the applicant to complete the appropriation; and
- (8) the effect upon access to navigable or public water.”

permit reservation of instream flows.¹⁰⁸ Legislators also amended the definition of “appropriation” to include an instream reservation of flow.¹⁰⁹ Second, the new legislation enlarged the statutory list of appropriative “beneficial” uses by adding three new uses—all instream.¹¹⁰ Third, lawmakers created a new statutory section, section 46.15.145, entitled “Reservation of Water.”¹¹¹ Section 46.15.145 established the requirements necessary for an applicant to receive a certificate of reservation and incorporated them into the water code, to be administered by ADNR.¹¹² The amendments are collectively known as the Instream Flow Act. ADNR formulated the Alaska Administrative Code (AAC) regulations for instream flow rights three years later, in 1983, fleshing out the amendments.¹¹³

Private instream flow advocates find the magic language of the Instream Flow Act in subsection (a) of 46.15.145, which states “the state, an agency or a political subdivision of the state, an agency of the United States *or a person* may apply to the commissioner to reserve sufficient water to maintain a specified instream flow.”¹¹⁴ Quite simply, this statutory language remains the clearest, most explicit statement by any prior appropriation state on private ownership of instream water rights. That wording explains why Alaska offers, as one commentator put it, “the greatest opportunity for private citizen involvement in an instream flow program.”¹¹⁵ Interestingly, although there was support for instream flow rights for fish and wildlife and economic uses,¹¹⁶ the chief motivation behind its passage was entirely different. State officials, concerned over new federal reserved water policies, thought the act would sway the balance of the state-federal conflict over water control in their favor.¹¹⁷

108. Alaska Stat. § 46.15.030 (LEXIS 2001). “Wherever occurring in a natural state, the water is reserved to the people for common use and is subject to appropriation and beneficial use *and to reservation of instream flows* and levels of water, as provided in this chapter.” *Id.* (Emphasis added).

109. Alaska Stat. § 46.15.260(2) (LEXIS L. 2001). “[A]ppropriation means the diversion, impounding, or withdrawal of a quantity of water from a source of water for a beneficial use or the reservation of water under AS 46.15.145.” *Id.*

110. Alaska Stat. § 46.15.260(3). The added uses are navigation, transportation, and maintenance of water quality. Two other instream beneficial uses, fish and wildlife and recreational uses, existed before the 1980 amendments. *Id.*

111. Alaska Stat. § 46.15.145.

112. *Id.*

113. Alaska Admin. Code tit. 11, §§ 93.141-147 (2002). For relevant definitions, *see* Alaska Admin. Code tit. 11, 93.970 (2002).

114. Alaska Stat. § 46.15.145(a) (LEXIS 2001) (emphasis added). A “person” as used is defined as “an individual, partnership, association, public or private corporation, state agency, political subdivision of the state, and the United States.” Alaska Stat. § 46.15.260(7) (LEXIS 2001).

115. Covell, *supra* n. 6, at 193.

116. Senate Resources Committee, *File on Maintenance of Stream Flows and Levels of Water*, 1980 Alaska Sess. L. ch. 11-118, 2.

117. The federal reserved water rights (FRWR) doctrine recognizes that federal lands set aside for a particular purpose an adequate quantity of water to fulfill that purpose. *Cappaert v. U.S.*, 426 U.S. 128, 138 (1976). In 1978, state and federal officials were in the middle of negotiations over FRWRs in Alaska. Since 49% of Alaska is federal land, the amount of water in question was significant. The federal reservations included instream uses, which presented a problem: the state water code did not have a

B. *The Results: "Paradise Confounded"*¹¹⁸

The history of private instream flow rights in Alaska can be summed up in one word: abysmal. After twenty-two years, 1980-2002, no private party yet owns a certificate of reservation—only two private applicants completed and “proved up” their applications satisfactorily enough to warrant an agency adjudication.¹¹⁹ Between 1980 and 2000, there were 237 applications for instream rights—76 by the Alaska Department of Fish and Game (ADF&G), 156 by the federal government, but only 8 by private parties.¹²⁰ Of those eight, four were by the Anchorage Audubon Society, two by private individuals, one by the student chapter of the American Fisheries Society (AFS), and one by the Juneau Chapter of Trout Unlimited (TU).¹²¹ ADNR rejected the four Audubon applications for insufficient scientific information.¹²² ADNR also rejected the two applications by private individuals—submitted in 1982 for water quality purposes and lake level, respectively—for preceding the implementing AAC regulations, and therefore void.¹²³ ADNR accepted the remaining two private applications, of TU and AFS, who each then “proved up their claim” with the necessary data,¹²⁴

process for reserving water instream. Christopher Estes, *Alaska Response to WSWC Survey Regarding Federal Reserved Water Rights*, in *Report for the Western States Water Council: Federal Non-Indian Claims to Water 3* (February 22, 1999). That same year, the U.S. Department of the Interior issued a new opinion claiming the existence of “federal non-reserved water rights,” which would arise from actual use instead of reservation. Department of the Interior Solicitor’s Opinion No. M-36914, *Federal Water Rights of the National Park Service, Fish and Wildlife Service, Bureau of Reclamation and the Bureau of Land Management*, 86 Interior Dec. 553 (1979). With these new rights federal agencies could claim instream flows even if no prior federal reservation existed or the state did not recognize appropriations of instream flows. State officials feared these new “non-reserved” rights would permit unilateral federal determination of the water in question. Legislators also believed an instream bill, if enacted, created an adjudication “mechanism” to quantify FRWRs in state procedure and, in the case of disagreement, state court. It was the prevention of a federal incursion of state control, especially in light of the new federal policy that could encompass much more water, that made the instream bill a priority to pass. Estes, *supra* n. 117, at 3. Ironically, legislators were wrong on both accounts: the non-reserve rights opinion was short-lived and never acted upon and it took another amendment to the Alaska water code—six years later—to solve the state-federal dispute. Sax et al., *supra* n. 23, at 872; Alaska Stat. §§ 46.15.165-169 (LEXIS 2002).

118. Burkhardt, *supra* n. 24, at 1.

119. Interview with Christopher Estes, Instream Flow Coordinator, Alaska Dept. of Fish and Game (July 18, 2002).

120. Christopher Estes, *Annual Summary of Instream Flow Reservations and Protections in Alaska*, in *Fishery Data Series No. 98-0*, 9 (ADF&G 1998). Since 1998, ADF&G has not completed any new applications due to internal re-organization and training. Agency instream applications will resume in 2003. Telephone Interview with Christopher Estes, Instream Flow Coordinator, ADF&G (November, 2002).

121. *Id.*

122. *Id.* The scientific requirements for instream flow applications are quite extensive and time-consuming. This problem is explored *infra*, section V(c).

123. Harle and Estes, *supra* n. 85, at 9-13.

124. This data collection must use an approved methodology and include both the quantity and biological/chemical justifications for the reservation. 11 Alaska Admin. Code tit. 93 § 147 (2001). For example, a reservation for fish propagation and migration must include temporal evidence of when and what seasonal fish activity occurs, the types of fish and lifecycles present, the amount and depth of water present each month at any time in the stretch of water in question, the water’s daily temperature

they now await final adjudication by ADNR for their certificate of reservation. ADNR, however, has not adjudicated an instream water right since 1990, and consequently these applications are still pending. No private individuals or organizations applied for instream flow rights after 1991 until The Nature Conservancy of Alaska (TNC) in 2000.¹²⁵ During the same period, from 1980-2003, state and federal agencies were more prolific in filing applications, but did not fair much better in result.¹²⁶ Alaska is therefore a tale of great expectations and very limited instream flow right successes. A close examination of the statute reveals the reasons for such discrepancy between opportunity and result.

V. LEGAL HANDICAPS: THE ANATOMY OF A "SECOND CLASS" RIGHT

A. Name Games: Reservation or Right?

Although the 1980 statute authorized private instream water rights and therefore the possibility of a market, it also created many substantial barriers. The first potential barrier is present in both the title and the language of the statute—is this “reservation of water”¹²⁷ a property right? A “reservation” in western water law normally refers to the state power to reserve a minimum or automatic flow *from* appropriation, not a type of appropriation. A survey of states illustrates that some authorize “appropriations” of instream rights;¹²⁸ some have “reserved” a minimum instream flow from appropriation.¹²⁹ A “reservation” in Alaska, however, is despite the confusing language, a property right. First, the statutory definition of “appropriation” was explicitly altered to include a reservation under section 46.15.145 of

and velocity, and other factors necessary to determine how much water is necessary to guarantee the “beneficial use” is fulfilled. This problem is explored further *infra*, section V(c).

125. ADNR accepted TNC’s application and TNC is currently collecting the hydrologic data necessary for ADNR to eventually adjudicate it: median flow temperatures, depth, ph, and current speed measured daily for three years by remote gage. The application’s stated purpose is fish propagation and migration in Lower Talerik Creek, a well-known salmon and trout fishery appurtenant to TNC land in Western Alaska. Interview with Paul Jackson, Program Director, TNC of Alaska (July 1, 2002).

126. Among federal agencies, both the Bureau of Land Management (BLM) and the United States Fish & Wildlife Service (USFWS) have applied for instream rights—four by the BLM and 152 by the USFWS (12 rivers and 140 lakes). Estes, *supra* n. 120, at 9. ADNR approved and granted only one of those applications: BLM’s first application, for fish and wildlife habitat and recreation use on Beaver Creek National Wild River, in 1989. Harle and Estes, *supra* n. 85, at 9-13. It remains the only federal agency instream right ADNR has ever granted. Estes, *supra* n. 120, at 9. Among Alaska state agencies, only the ADF&G has applied for instream rights. Harle and Estes, *supra* n. 85, at 9-12. Beginning in 1986, ADF&G filed 76 (75 rivers and one lake) applications for flows. Estes, *supra* n. 120, at 9. ADNR approved 10 instream rights to ADF&G for fish and wildlife between 1987 and 1989, but not one since. *Id.*

127. Alaska Stat. § 46.15.145. The statute never uses the term instream water right, instead using “reservation of water” instream. *Id.*

128. Ariz. Rev. Stat. Ann. § 45-151A (West Supp. 1997); Colo. Rev. Stat. § 37-92-102(3) (1997); Wyo. Stat. Ann. § 41-3-1001(b) (1997); Idaho Code § 42-1501 (1997); Or. Rev. Stat. Ann. § 536.310(7) (1997); Nev. Rev. Stat. § 533.030 (1995); Neb. Rev. Stat. § 46-202 (1997). Except Arizona and Nevada, these states limit ownership of such rights to state agencies.

129. Alaska Stat. § 46.15.145(a); Kan. Stat. Ann. §§ 82a-703b (1997).

the water code.¹³⁰ Second, the term “reservation” usually refers to an action of the state, either legislative or administrative,¹³¹ a statute cannot logically permit a regulation to be held by a private individual. Third, Alaska’s statutory scheme treats section 46.15.145 exactly like a right: it is incorporated into the Water Use Act, and it must be adjudicated by ANDR like other water rights. Finally, ADNR agency policy is that instream reservations are similar to property rights.¹³² This confusing wording, however, foreshadows another more serious statutory weakness. While section 46.15.145 creates a property right, it is a second-class right.

B. A Defensible Right: The Review Provision

Subsection (f) of 46.15.145 states that an instream reservation, once granted, must be reviewed at least every ten years by the ADNR commissioner for continuing “purpose” and “findings.”¹³³ If the ADNR commissioner determines that the “purpose, or part or all of the findings” are no longer applicable, she may revoke or modify the right.¹³⁴ Consumptive water rights are not subject to such a mandatory review.¹³⁵ Further, the commissioner can review at his or her discretion the instream reservation *at any time* before the statutory ten years under several circumstances, including if water is unavailable for a subsequent consumptive applicant, who protests the justification for the existing instream reservation.¹³⁶ Other circumstances in which the instream reservation can be reviewed include a “sig-

130. Alaska Stat. § 46.15.260(1). Montana’s also defines appropriation to include reservation of instream flow. Mont. Code. Ann. § 85-2-102(1)(b) (1997).

131. Leshy, *supra* n. 17, at 165; Covell, *supra* n. 6, at 191.

132. ADNR, *Fact Sheet: Reserving Water for Instream Use* http://www.dnr.state.ak.us/mlw/factsht/wtr_fs/instream.pdf (last accessed Feb. 29, 2004) (“reservation of water for instream use is a water right...”); *Tulkisarmute*, 898 P.2d at 941 (quoting the definition of “appropriation,” which includes instream reservation, and then holding the “appropriator is entitled to a water right, a full and permanent property right in that quantity of water”).

133. Alaska Stat. § 46.15.145(f) (LEXIS 2001). The “purpose” is the beneficial uses statutorily permitted for instream reservations: “(1) protection of fish and wildlife habitat, migration, and propagation; (2) recreation and parks purposes; (3) navigation and transportation purposes; and (4) sanitary and water quality purposes.” Alaska Stat. § 46.15.145(a)(1-4) (LEXIS 2001). The “findings” are those original conclusions of the commissioner that in granting the instream reservation: “(1) the rights of prior appropriators will not be affected by the reservation; (2) the applicant has demonstrated that a need exists for the reservation; (3) there is unappropriated water in the stream or body of water sufficient for the reservation; and (4) the proposed reservation is in the public interest.” Alaska Stat. § 46.15.145(c)(1-4) (LEXIS 2001).

134. Alaska Stat. § 46.15.145(f). Proper notice and hearing requirements must be met in any such revocation or modification, as well as a written determination that doing so “is in the best interests of the state.” *Id.*

135. The legislative history of the Instream Flow Act shows the review provision was intended both to be a check on overzealous amounts of instream appropriation and to replace the traditional doctrine of abandonment for instream uses. Since there would be little or not construction to “abandon,” the legislators argued, instream rights must be reviewed for purpose. Alaska H. Res. and Sen. Resource Comm. Audio Tapes, *Hearings on HB 118*, 11th Leg., 2nd Sess., (April 18, 1980) (as listened to by the author, available at Anchorage AK Law Library).

136. Alaska Admin. Code tit. 11, § 93.147(a)(3) (2001).

nificant change” to the watershed or if the reservation was granted but conditioned to an earlier review.¹³⁷

This review provision makes instream water rights in Alaska second-class rights because they are defeasible, not vested. Unlike diversionary water rights, an instream right’s worth is clouded by the uncertainty caused by ADNR’s ability to modify or revoke that right at will. The advantages of private property (protection from political instability) and market-based solutions (what is the value of such a defeasible right?) dissolve when diluted by such a review provision. This large disincentive explains the relative lack of interest in privately held instream flow rights in Alaska.

C. “Demonstrated Need”: The Scientific Burden on the Applicant

For those private parties who choose to apply for instream rights despite the review provision, the instream act and its regulations create a very high informational burden that is placed on no other water appropriations.¹³⁸ First, an application must include the type and description of data analysis, the physical, biological, chemical, and socio-economic data substantiating the need, and an identification and explanation of the type of methodology to be used in quantification.¹³⁹ This information is necessary just to get to the permit stage.¹⁴⁰ If granted, the applicant is given a three-year time frame to gather the data necessary to “prove up” her scientific claim.¹⁴¹ For consumptive rights, this “proving up” is usually the construction of means of diversion; for instream rights, this “proving up” is usually collecting and analyzing the necessary data to prove the claim of need. The necessary expertise for these sophisticated scientific requirements and analyses is beyond the capability of most private would-be applicants.¹⁴²

137. Alaska Admin. Code tit. 11, §§ 93.147(a)(1-2) (2001).

138. Alaska Stat. § 46.15.145(c)(2) (the applicant must demonstrate the need for the reservation). Note that the majority of private applicants were unable to meet the initial application burden. See discussion *supra*, section IV(B). Even a national conservation organization like The Nature Conservancy might not have a hydrologist on staff. In July 2002 the author—as a summer legal intern, not a scientific graduate assistant—accompanied scientists contracted from ADF&G in the installation of necessary flow gauges for TNC’s instream application on Lower Talarik Creek in Western Alaska. These scientific burdens even challenge state agencies with much more expertise in the still developing science of instream flow measurement. Estes, *supra* n. 25, at 10-11.

139. Alaska Admin. Code tit. 11, § 93.142 (2001).

140. As noted in discussion on the Water Use Act, *supra*, in section III(B), after ADNR accepts an application for a water right, ADNR grants the applicant a permit. The applicant must then “prove up” her claim in the specified time. This stage is called the permit stage.

141. Alaska Admin. Code tit. 11, § 93.142. While there is a time limit on the applicant, ADNR has no time frame under which it must adjudicate applications. This partially explains the long delay for the two private instream claims that have successfully proven their need. See *supra* n. 119 and accompanying text.

142. Herb Diship, *Instream Flow Water Rights: Arizona’s Approach*, in *Instream Flow Protection in the West 10-4* (Lawrence J. Macdonnell & Teresa A. Rice, eds., Univ. of Colo. Sch. of L. Nat. Resources L. Ctr. 1993) (citing the same problem in Arizona). For more on similar problems in Arizona, see *infra* n. 164.

The difficulty of meeting this scientific burden is compounded by a problem unique to Alaska: the limited availability of hydrologic data. For example, in 1998, only 78 United States Geologic Survey (USGS) stream flow gauges were active in Alaska, an average of one every 7,500 square miles.¹⁴³ In almost every case then, a private party attempting to prove up an application for an instream flow right must first transport and install the gauges and equipment necessary to gather the requisite flow information. These data difficulties and expenses are exacerbated by collection impediments caused by limited road systems, extreme weather, and loss of equipment to wildlife, such as bears.¹⁴⁴ State agencies like ADNR and ADF&G require such basic water gauge data for all applications, not to mention for the enforcement and management of existing rights; its absence is an intimidating barrier to any private (or agency) instream rights.¹⁴⁵ These scientific challenges therefore present yet another disincentive to applicants, as well as adding market uncertainty and transaction/acquisition costs—another disabling blow to any private market.¹⁴⁶

D. The Missing Provisions: Inherent Agency Discretion and Budgetary Limitations

As exemplified in subsection (f) of 46.15.145—the review provision—and the extensive list of “public interest” criteria,¹⁴⁷ ADNR has a great deal of discretion in administering instream water rights.¹⁴⁸ In fact, ADNR does not theoretically have to administer them at all: the statute lacks any time frame in which instream water rights must be adjudicated by ADNR. This loophole, coupled with ADNR’s indifferent-at-best attitude towards instream flow rights, is part of the reason the agency has not adjudicated any instream rights since 1991.¹⁴⁹

143. Estes, *supra* n. 120, at 11. This average is compared with an average of 1 gauge every 377 square miles in the Pacific Northwest. *Id.*

144. *Id.*

145. For example, no hydrologic data or field gauge existed for Lower Talarik Creek, the fishery TNC applied for an instream right on in Western Alaska. *See supra* n. 138.

146. The Alaska Administrative Code regulations also create a larger market constraint: if and when a certificate of reservation is issued, it may not be transferred, conveyed, assigned, or converted. Alaska Admin. Code tit. 11, § 93.146(c)(1) (2001). This regulation seems a superfluous measure since any transfers are subject to the “no injury” rule. *See supra* n. 105. This added constraint has less of a negative impact in Alaska, where there is plenty of unappropriated water, than other western states; still, since consumptive rights can be transferred, instream rights are again inferior second class rights. Further, without a right of alienation, a market for such rights could never function properly. *See infra* n. 164.

147. In order to grant any water right, the commissioner must find it is “in the public interest.” Alaska Stat. § 46.15.145(c)(4). Alaska’s extensive statutory list of factors, *see supra* n. 104, and the amorphous nature of the term “public interest” seem to lend themselves to the personal choice of the commissioner.

148. All agency decisions are however appealable to the Alaska superior court. Alaska Stat. § 46.15.133(e) (LEXIS 2001).

149. This delay in adjudication has two possible repercussions. First, although applications are by statute given a priority date once accepted by ADNR, the longer they remain unadjudicated (and not

There is a second reason for the adjudication standstill: lack of adequate state budget appropriations to administer the program.¹⁵⁰ One early commentator foresaw this problem, noting the predication of the statutory scheme on the “assumption that the Department of Natural Resources Water Management Section has sufficient staffing to process applications promptly. In fact, the Section is undermanned and underfunded and backlogged. Applications under the statute will necessarily be last on the list.”¹⁵¹ This deficiency worsened as fiscal cuts in the mid-1990’s reduced ADNR budget and re-configured the department, subsuming the Division of Water Resources into the Division of Mining, Land & Water Resources.¹⁵²

E. Lack of Agency/Political Support and The “Blue Lake” Reservations

Despite statutory weaknesses, scientific challenges, and budgetary constraints, ADNR reserved water instream when the Alaska political environment demanded it. In 1992, ADNR quickly adjudicated two instream reservations at the request of the City and Borough of Sitka. Both were state-held reservations necessary to complete a consumptive water rights application to export large quantities of water from the Blue Lake Watershed.¹⁵³ Earlier that same year, the legislature amended the Water Use Act again, adding section 46.15.037—a provision authorizing large quantity, out-of-basin water export.¹⁵⁴ Legislative instream advocates, while failing to defeat the bill, were nevertheless able to attach a provision mandating a minimum reservation of water for fish and wildlife if the water body was “fish bearing.”¹⁵⁵ Therefore, in order to export water from Blue Lake, a reservation of water for the protection of fish was necessary for both Blue Lake and its tributary, Sawmill Creek.

At the time, some Alaska politicians and businessmen believed large scale water export to Asia and the contiguous states could be the next natural resource boom.¹⁵⁶ The strong political and economic will behind the export appropriation, therefore, played a large role in the prompt adjudication process of all the necessary water rights and permits, including the

property rights), the more uncertain some change in regulation or statute—perhaps to adjudicate preferentially by need—may cause them to lose their “place in line.” Second, the adjudication backlog is top-heavy with instream applications. Budget constraints have created a backlog of consumptive applications as well. If forced to choose which to complete, ADNR adjudications of more traditional consumptive rights will most likely be given priority over instream applications.

150. Sterne, *supra* n. 7 at 216.

151. White, *supra* n. 82, at 8. This commentator incorrectly predicted staff and funding increases would solve the problem.

152. This combination—mining and water—adds a conflict of interest element between the two formerly separate agencies’ directives. The order, “Mining, Land & Water,” may also explain much about Alaska politics.

153. Alaska Stat §§ 46.15.035, 46.15.037 (LEXIS 2001); Estes, *supra* n. 84, at 6.

154. Alaska Stat. § 46.15.037.

155. Interview with Christopher Estes, *supra* n. 119.

156. Estes, *supra* n. 84, at 6.

instream reservations.¹⁵⁷ The reservations under section 45.15.037 of the Alaska Water Code were adjudicated in less than a year by ADNR, while a reservation filed by ADF&G under section 46.15.145 for Sawmill Creek—the same body of water—is still pending adjudication more than ten years later.¹⁵⁸ The Blue Lake reservations show that despite the scientific or financial difficulties, when the political environment demands it, ADNR can adjudicate instream flow rights in a timely manner.

A temporal examination of the Alaska instream flow application history reveals two distinct periods: a short period of ADNR's relative cooperation and support, followed by a long period of its disinterest, or even hostility. First, between 1987 and 1989, ADNR adjudicated and granted ten instream rights for fish and wildlife.¹⁵⁹ ADNR also accepted two private applications, the TU and AFS applications, and began their adjudication. All signs indicated that, although hampered by financial and staffing constraints, ADNR was not adamantly opposed to granting instream rights.¹⁶⁰ Then in 1991, as discussed above, all processing of instream applications ceased, except the aforementioned Blue Lake reservations. This dramatic stoppage¹⁶¹ further illustrates the lesson: section 46.15.145 of the Alaska Water Code requires political support (and therefore ADNR's support) to function.¹⁶²

VII. THE LAW DEFEATS THE MARKET: CASE STUDY CONCLUSIONS

A. *Public versus Private*

Alaska's experience clarifies some of the criticisms of agency-only instream flow states. First, adding private funding¹⁶³ will not solve the problem of agency budgetary constraints; agency adjudication will still at least partially determine the ability of private parties to gain instream rights. Second, as seen distinctly with ADNR, political susceptibility and bureau-

157. *Id.* The City of Sitka projected it would earn between 30-80 million dollars per year under ideal export projections. *Id.*

158. *Id.* Ironically, after the initial rush, the Blue Lake project is still in limbo, building the necessary infrastructure for exportation. Interview with Christopher Estes, *supra* n. 119.

159. Harle and Estes, *supra* n. 85 at, 9-12. The ten instream rights held by ADF&G are for the following watersheds: Terror river, Willow creek, Rabbit creek, Little Rabbit creek, Little Survival creek, upper Little Sustina river, Campell Creek (2 stretches), Indian river, and Cottonwood creek. Christopher Estes, *Annual Summary of Instream Flow Reservations and Protections in Alaska* 12 (1991 Summary).

160. *Id.*

161. One commentator attributed this agency policy shift to the change in the political administration at the time: Walter Hickel (R) replaced Steve Cowper (D) as Governor of Alaska in 1990. Interview with Christopher Estes, *supra* n. 119.

162. Recent communications point to a new period of agency cooperation in finding solutions to both budgetary and backlog issues; perhaps a new period of cooperation in Alaska is beginning. Telephone Interview with Christopher Estes, ADF&G (November 11, 2002); *Memoranda of Understanding between ADNR and ADF&G Regarding Instream Issues*, (June and October 2002) (copies on file with the author).

163. See *supra* discussion in sections II(B)-(C).

cratic baggage prevalent in agency-only systems also are not solved by private involvement; political support of the adjudicating agency is still necessary.

Alaska's experience also highlights some possible misconceptions in the case for supplementation of public instream rights by market based private rights. First, an effective market cannot be achieved without eliminating the other problems—uncertainty of title, uncertainty of science, constraint on transfer—as well as the constraint on ownership.¹⁶⁴ Private interest and funding will not and cannot flow to market through “invisible hands” with such disincentives.¹⁶⁵ Second, two major benefits of privately held rights—private enforcement authority and private property autonomy—are only important if and when those rights are challenged; the benefits are therefore predicated on the assumption that the state agency grants the water right, establishing it as a property right. In early policy or state planning conflicts, where the very idea of private instream flow rights is challenged and establishment itself is the barrier, the enforcement and autonomy benefits cannot be realized.

B. *Lessons for Instream Protection Advocates and Market Advocates Alike*

Alaska's problems support the conclusion that, if the goal is the protection of water instream, a system in which both the state and private organizations depend on defeasible water rights alone is a less efficient means of protection than an instream appropriation system built upon a foundational minimum or automatic regulatory reservation from appropriation. An automatic or minimum flow reservation¹⁶⁶ is important because it creates a

164. As noted earlier, transfers of instream rights are not permitted in Alaska. See *supra* n. 146. For a transfer market to function, this regulatory bar must be removed; however in Alaska the regulation is presently less of an impediment to private rights than in other states because of the plethora of unappropriated water. Even without the regulation ban, any instream transfers in prior appropriation states are subject to the “no injury” rule. It does not follow, however, that private instream markets cannot occur primarily through transfers. A diversionary right transferred to an instream right remains the same right: that is, it presents no more of a threat to current rights than did the original owner. In fact, since the water will be left instream, other appropriators are arguably better off and the “no injury” rule should have less effect than a transfer between two diversionary users. There is some caselaw to support this logical inference. In Arizona, the only other state to permit the appropriation of private instream rights and grant one, the injury claims of other appropriators were dismissed in the case granting the private instream right, because “since there was no actual, physical diversion or storage nor a substantial consumptive use of public waters, no conflict would occur.” Lori Potter, *The Public's Role in the Acquisition and Enforcement of Instream Flows*, 23 Land and Water L. Rev. 419, 432 (1988) (citing Arizona Nature Conservancy, No. 33-78421 (Dept. of Water Resources April 29, 1983) (Decision and Order at 8). This case was a new appropriation, however, not a transfer. The *Ramsey Creek* case and Arizona's private instream right history is discussed *infra* n. 174.

165. Sterne, *supra* n. 7, at 203.

166. Water law experts generally define a minimum or base flow reservation as a specific quantity of flow that below which later in time appropriations will not be permitted. Gillilan & Brown, *supra* n. 3, at 138. The downside to this type of protection is that it does not affect any rights established prior to the reservation, a large disadvantage in most prior appropriation states where rivers were completely appropriated long ago. Oregon's legislature, for example, first established a minimum flow reservation law which proved ineffective; it was later replaced by a statute permitting state-held instream rights.

baseline below which flows may not fall.¹⁶⁷ Because Alaska has not established an automatic minimum instream flow except for in the case of large water exports,¹⁶⁸ the inherent weaknesses in Alaska's instream appropriation statute not only defeats any private opportunities at instream rights, but also creates difficulties for Alaska's state agency entrusted with keeping water instream for fish and wildlife, ADF&G.¹⁶⁹

While ADF&G has other means of instream flow protection, the problem of ascertaining instream water rights under section 46.15.145 of the Alaska Water Code is the greatest impediment to their instream directive. Alaska instream advocates, realizing this problem, attempted to pass bills establishing automatic, state-held reservations of flow in both 1989 and 1991.¹⁷⁰ Both bills were defeated.¹⁷¹ Given the track record of agency instream rights in Alaska since then, states attempting to keep water instream would do well not to place their respective water agencies in ADF&G's position—lacking an automatic flow reservation provision, limited to attempting to acquire defeasible rights in the face of bureaucratic opposition.¹⁷²

Second, Alaska provides a compelling example of the conclusion that political opposition remains the biggest obstacle to protecting instream flows through private instream flow rights.¹⁷³ Institutional agency problems exacerbate these political tensions: ADNR must consider comparatively new and different issues, weighing instream use versus diversionary use, in the framework of a pre-existing system. ADNR's inability (or lack of will) to integrate and adapt manifests itself in bureaucratic foot-dragging. The antidote to this apathy is public education, interagency cooperation, and private party-agency cooperation. Public education can increase awareness and political popularity for private instream rights. It can also lead to a more active role for private organizations, which can then take the initiative in lobbying for instream rights where agencies will not. Interagency cooperation will help bridge agency animosity and institutional aversion to change.

Neuman & Chapman, *supra* n. 21, at 137. In Alaska however, less than 1% of the water is appropriated; a minimum flow established with a present priority date would be much more effective than elsewhere.

167. Another downside of a minimum flow reservation is of course that it is a regulation not a property right and therefore susceptible to state regulatory review. See *supra* n. 67 and accompanying text.

168. For discussion on the water export amendment, see *supra* discussion section V(E).

169. The Alaska Fish and Game Act requires ADF&G to "manage, protect, maintain, improve, and extend the fish, game and aquatic plant resources of the state in the interest of the economy and general well-being of the state." Alaska Stat. § 16.05.020 (LEXIS 2002). The Act also enables the ADF&G to acquire water rights to further its objectives or purposes. Alaska Stat. § 16.05.050(2) (LEXIS 2002).

170. Harle and Estes, *supra* n. 85, at 9-9, 9-11; Anderson, *supra* n. 85, at 259.

171. Harle and Estes, *supra* n. 85, at 9-9.

172. The lack of an automatic minimum flow reservation for fish and wildlife in Alaska is especially frustrating given the constitutional language seemingly mandating one. See *supra* n. 100 and accompanying text.

173. Alaska does not seem to be alone in this regard, nor is the author the first to reach this conclusion about instream flows in prior appropriation states. See Neuman, *supra* n. 2, at 349 (specifically discussing Oregon); A. Dan Tarlock, *supra* n. 27, at 778; Barton H. Thompson, Jr., *Institutional Perspectives on Water Policy and Markets*, 81 Cal. L. Rev. 671 (1993).

When coupled with public support, both the applicant agency (ADF&G) and the adjudicating agency (ADNR) can achieve their directives. Private party-agency cooperation can also overcome the initial private application barriers of scientific know-how, while mitigating the agency's own funding limitation. The TNC-ADF&G partnership on TNC's recent application is a good example.

Finally, Alaska's experience plainly illustrates that unless instream flow rights are integrated into a water appropriation system, they will be unable to create a viable market and/or provide effective instream flow protection. Full integration must mean making effort to create an equal instream right. To that end, review provisions and transfer rules must be required of all rights—consumptive or instream—or not at all.

C. Conclusion

The viability of private instream rights has failed or at least stalled in Alaska. However, Alaska's problems should not squelch the idea of private instream flows. Rather, they illustrate a problematic application. Legal constraints and practical barricades will defeat a market even if private parties are permitted to hold instream rights. This conclusion is buttressed by an examination of one of the few other prior appropriation states to experiment with private instream rights: Arizona. Arizona's experience proves Alaska is not alone in its mistakes.¹⁷⁴

Instream rights—private or agency held—if adopted as part of a state's water appropriation system, must be equal to consumptive rights. If hampered by statutory and practical inequalities, their advantages never materialize. The more hurdles and inequalities in an instream statute, the less the statute will be used. This leads to fewer instream rights being created, and leads away from possible solutions to instream flow issues. Private instream water rights, for market advocates and conservationists alike, are not yet a reality, because so far, a law has not been “framed that will do that job.”¹⁷⁵

174. Arizona is the only other state to permit private instream flow appropriation. See *infra* n. 23. After a 1976 judicial opinion interpreted instream “beneficial use” to permit instream appropriation, the Arizona Department of Water Resources (ADWR) approved an application from TNC to appropriate water instream on Ramsey Creek for recreation and wildlife purposes. TNC needed 7 years (1983-1990) to “prove up” the application to support their beneficial use claim due to the high informational burden. ADWR issued a certificate of water right in 1990; it was the first instream right issued in Arizona. TNC's instream right remains the only private instream right in Arizona. Dishlip, *supra* n. 142, at 10-9; Sterne, *supra* n. 7, at 227. The Arizona limitations are similar to those in Alaska: a high informational burden (5 years of data), a constraint on ownership not placed on consumptive rights (appurtenance to land), and a statutory hierarchy effectively making instream rights second class (in times of conflict the beneficial use of fish and wildlife can be superceded by domestic and municipal use, irrigation and stock watering, and power and mining uses). Ariz. Rev. Stat. Ann. § 45.157A-B (West 2001); Telephone interview with Robert Wigington, Western Water and Land Attorney, TNC (November 15, 2002).

175. Trelease, *supra* n. 1, at 1.