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THE DOWNSTREAM PEOPLE: TREATING INDIAN TRIBES AS STATES UNDER THE CLEAN WATER ACT

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I. INTRODUCTION: THE DOWNSTREAM PEOPLE

In the early summer of 1763, a party of French adventurers led by Father Jacques Marquette, a Jesuit priest, and Louis Joliet, a *cours de bois*, came upon a group of villages at the confluence of the Arkansas and Mississippi Rivers. The villagers were Siouan speakers who called themselves the Quapaw, or Downstream People.[1] Exactly when the Quapaw moved into the lower Arkansas watershed is not certain, but their entry on the scene was concurrent, evidently, with the migration of four cognate groups, the Osage, Kanza, Ponka, and Omaha, into the region that now lies within the states of Arkansas, Oklahoma, and Kansas. Nor were the Quapaw the only members of this loose affiliation who named themselves with reference to human geography. Their kinsmen, the Omaha, were the Upstream People.[2] In fact, the Quapaw and Omaha recognized a fundamental ecological and economic truth: in the watersheds in which we live, all of us are Upstream or Downstream People, and most of us are both. As Upstream and Downstream People, we exist in a complex web of ecological and economic connections with our watersheds and with each other. The degradation of many of our rivers is a conspicuous example of our failure to take these connections into full account.

The policy question that prompts this paper is whether Indian tribes should be given regulatory authority (like states) under the Clean Water Act. As someone who enthusiastically supports the enlargement of tribal sovereignty,[3] I am tempted to say "of course they should." Instead, I offer a warning inspired by the Up and Downstream People: we do not need more political fragmentation of our water quality programs, but less. My principal concern is that empowering tribes to establish their own water quality standards and unilaterally enforce them upstream will lead us further away from integrated watershed management. Watershed management has become a shiboleth in policy circles for environ-

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* Associate Research Professor of Law, University of Arkansas. I owe much to Bob Laurence, Susan Pilcher, Rebecca Tsosie, Judith Royster, Jim Grijalva, Angie Elsperger, Nick Chase and Amy Oatfield, who know why.

1. For the history of the Quapaw, see W. DAVID BAIRD, THE QUAPAW INDIANS: A HISTORY OF THE DOWNSTREAM PEOPLE (1980).

2. *See* VELMA SEAMSTER NIEBERDING, THE QUAPAWS (THOSE WHO WENT DOWNSTREAM) 1–3 (1976).

3. *See* John S. Harbison, *The Broken Promise Land: An Essay on Native American Tribal Sovereignty over Reservation Resources*, 14 STAN. ENVTL. L.J. (forthcoming 1995).

mentally sensitive regulatory programs,[4] and buzzwords, we all know, tend "to carry powerful prescriptive and hortatory meanings but lack descriptive specificity."[5] The watershed management concept, however, is respectably concrete.[6] My goal is to encourage tribes to use the leverage they would acquire by being treated as states under the Clean Water Act to promote a watershed approach to water quality protection.

In Part II of this article, I provide some essential background to this issue by describing the basic regulatory structure of the Clean Water Act and introducing the notion of Clean Water Act federalism. Part II also relates Clean Water Act federalism to tribal state relations. This institutional background is important, for as William Goldfarb has pointed out, "[t]he trend toward watershed management is a response to . . . A) [t]ransboundary water management problems; B) [i]mplications of federalism and separation of powers; and C) [v]ariability of water law among political units."[7] The fact is that the current structure of Clean Water Act federalism—based as it is on political, rather than geographic boundaries—does not correspond with the physical reality of numerous water quality problems. As a result, water quality management is rife with jurisdictional conflicts and substantive uncertainty.

In Part III, I show that from an economic perspective, Clean Water Act federalism as it is currently structured is inefficient. It is inefficient in the sense that some level of degradation is economically optimal, and that this optimal level will not likely be achieved in a multijurisdictional watershed. But Part III also demonstrates that an economically optimal level of pollution (or cleanliness) is even more unlikely to be achieved by nationalizing water quality standards. Localized standards are always more efficient than national standards, and the relevant locality for the purpose of achieving optimality is a jurisdictionally integrated watershed. Watershed management is not only more likely to be environmentally sound; it is also more likely to be economically efficient because it permits the complete internalization of all the costs of both environmental degradation and remediation. In fact, this is an important way in which sound environmentalism and good economics converge.

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4. For a non-technical introduction to the concept of watershed management see ENTERING THE WATERSHED: A NEW APPROACH TO SAVE AMERICA'S RIVER ECOSYSTEMS (Doppelt et al., eds. 1993) (stressing advantages from an environmental perspective). For a more scientifically rigorous introduction, see WATERSHED MANAGEMENT: BALANCING SUSTAINABILITY AND ENVIRONMENTAL CHANGE (R.J. Naiman, ed. 1994).

5. William Goldfarb, *Watershed Management: Slogan or Solution?*, 21 B.C. ENVT'L AFF. L. REV. 483, 483 (1994).

6. *See infra* notes 83-100 and accompanying text (discussing watershed management concepts).

7. Goldfarb, *supra* note 5, at 483.

In Part IV, I conclude with a few remarks on watershed planning. Like ecosystem management, sustainable development, and biodiversity preservation, watershed planning is meant to convey the notion of a more holistic approach to environmental management than has been tried in the past. Each of these concepts has become a catch phrase in current environmental policy, but we are only beginning to understand what they would mean in practical terms if we were to put them into action. Part IV looks briefly at an ambitious effort on the Tennessee River to implement watershed planning. One thing clear from the Tennessee experience is that there are serious institutional obstacles to basinwide planning. Certainly, no tribal government could be expected to shoulder the burden of basinwide organization in a large watershed, but I do conclude that tribes can and should use the bargaining power that comes with regulatory authority to further a new version of Clean Water Act federalism based on the watershed approach.

II. CURRENT CLEAN WATER ACT FEDERALISM

A. STRUCTURE OF THE CLEAN WATER ACT

In the structure of the Clean Water Act, there is a faultline. On one side, the statute calls for the enforcement of nationally uniform, technology based effluent limitations intended to reduce or stop pollution at the end of a discharge pipe. On the other, the statute calls for locally determined, water quality based effluent standards applicable to the receiving water. Here, I want to describe briefly the features of this bifurcated regulatory system. In doing so, I want to set the stage for a discussion of pollution optimality. The existence of both national and local effluent limitations produces a tension along this faultline that I can illustrate by depicting a hypothetical river that I call the Freestone, a classic cold water trout stream.

Section 306 of the Clean Water Act, the source of technology based limitations, requires that new industrial sources utilize pollution controls that reflect "the greatest degree of effluent reduction which the Administrator determines to be achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives."[8] The technologies required by these new source performance standards are nationally uniform and unrelated to the water quality objectives of any given watershed. New industrial sources that comply with them are then exempted for ten years from more stringent controls. The exemption is an award for voluntary

8. 33 U.S.C. § 1316(a)(1) (1988).

compliance, and perhaps justifiable given the large capital investment compliance may require. The exemption is not complete, however, for it does not apply to more stringent pollution controls needed to achieve state water quality based standards.[9]

On this other side of the Clean Water Act faultline, Section 303 calls for water quality based effluent limitations to be imposed on polluters when technology based limitations will not result in attainment of the local water quality standard.[10] First, the state classifies the types of uses that will be made of its waters. It then determines which pollution criteria should be associated with each use—or, in other words, the maximum concentrations of scheduled pollutants that can occur without making a given use unachievable. Next, it seeks approval of its use and criteria determinations from the federal Environmental Protection Agency (EPA), which reviews them to ensure that the criteria will achieve the classified uses.[11] Finally, the state applies its use and criteria classifications to specified stream segments within its borders.

Let us say, for example, that the state decides to designate a segment of the Freestone River as Class A. In other words, this segment would be used for recreation, primarily trout fishing. Trout generally insist on well oxygenated water. They can survive in low oxygen levels only when the water temperature is low, so in the summer it is particularly important that the waters of the Freestone are oxygen saturated. They also need enough dissolved nutrients in the water to support the aquatic plant life that is the bottom link of the trout food chain, but a nutrient level too high could lead to fishery disaster by depleting the river's oxygen.[12] The problem is that agriculture, and the extraction of water for domestic and industrial uses, can make the water warmer (increasing the need for dissolved oxygen) and richer in dissolved nutrients (potentially depleting whatever dissolved oxygen there is). If the state wanted to preserve the recreational values of the Freestone, it would develop water quality based standards to deal with these problems. The state might say, for example, that there must be no less than twenty parts per million of dissolved oxygen in July and August.[13] To achieve this

9. *See, e.g.*, Natural Resources Defense Council v. EPA, 822 F.2d 104 (D.C. Cir. 1987).

10. 33 U.S.C. § 1313 (1988).

11. For a case in which a state challenged EPA's disapproval of its water quality standards, see Mississippi Comm'n on Natural Resources v. Costle, 625 F.2d 1269 (5th Cir. 1980). Could a polluter challenge a state's water quality standard by arguing that it is too stringent with respect to the contemplated uses? *See* Homestake Mining Co. v. EPA, 477 F. Supp. 1279 (D.S.D. 1979) (yes). The leading law review article on the subject is Jeffrey M. Gaba, *Federal Supervision of State Water Quality Standards Under the Clean Water Act*, 36 VAND. L. REV. 1167 (1983).

12. Interview with Susan L. Pilcher, a Very Knowledgeable Person about trout and their waters, at her breakfast table, Fayetteville, Arkansas (February 5, 1995).

13. The state is going to be concerned about a number of other things that might affect water

goal, the state would apply water quality based limitations against new industrial nutrient sources in the Freestone watershed more stringent than the national technology based limitations already in effect.

To implement this new standard, the state would obtain EPA approval of its own National Pollution Discharge Elimination System (NPDES).[14] The NPDES permit program is the point of contact between technology based and water quality based limitations. This means that the permit must be written in a way that allows translation between technology and water quality standards, not easy for anyone with a tin ear for environmental engineering. The permitting process involves bargain and compromise between the EPA, the state, and the permittee. In part, this is because technology standards and water quality standards do not fit together seamlessly. In part, it is because the permit may be tailored to a site specific situation. William Rodgers describes the permit process like this:

> [t]he ultimate standards of compliance, notably the fishable/swimmable and no discharge goals and the various "best technology" formulations, are decidedly aspirational in tone, strongly suggesting definition by bargaining, exchange, and compromise. . . . The "schedule of compliance" extends over time, and the same can be said of the relationship between the permittee and the agency. Reporting, monitoring, and other permit duties assure that polluter agency contact is frequent, is built upon sporadic exchanges of information, and results in incremental decisions (disregarding that upset, overlooking this reporting deadline, construing ambiguity in that way).[15]

Regulation by bargaining may not have been intended by Congress when it enacted the Clean Water Act, but it certainly should have been expected.[16] A state NPDES program may entail the issuance of thousands of permits, each involving numerous determinations.

The example of the Freestone, to which I will return, is highly simplified, since it singles out one resource value and a limited set of

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quality, of course, such as turbidity, salinity, and acidity, which affect fisheries. In fact, its most troublesome and difficult problem may be inorganic toxics that are ingested and magnified in the food chain. *Id.*

14. Clean Water Act § 402, 33 U.S.C. § 1342(b) (1988). In 1993, 37 states had obtained EPA approval of NPDES permit programs. WILLIAM H. RODGERS, JR., ENVIRONMENTAL LAW 363 n.15 (2d ed. 1994).

15. RODGERS, *supra* note 14, at 364 (footnotes omitted).

16. For a case study of regulation-by-bargaining, and an argument that it is expectable when the regulator and the regulated party have long-term, ongoing relations, see John S. Harbison, *Hard Times in the Softwoods: Contract Terms, Performance, and Relational Interests in National Forest Timber Sales*, 21 ENVTL. L. 863 (1991).

pollution problems. Most Clean Water Act regulatory programs are far more complex. This will be clear from the discussion of pollution optimality in Part III, where the Freestone will figure prominently. But before reaching that point, I want to show how the regulatory faultline just decribed is exposed in a political system in which jurisdictional boundaries often cut across geographic watersheds. And as the optimality discussion in Part III will show, this fracturing of regulatory authority increases the tension generated by the underlying fault.

B. DOWNSTREAM STATES

When the Upstream People in one state discharge effluents into a river that are carried downstream to a second state, do the Downstream People have any recourse under the Clean Water Act? Which state's substantive law applies? What remedies are available? In two recent cases, *International Paper Co. v. Ouellette*,[17] and *Arkansas v. Oklahoma*,[18] the Supreme Court started to explore these questions. *Ouellette* arose out of a nuisance suit brought by Vermont landowners on the Vermont side of Lake Champlain in a Vermont state court against a pulp mill located on the New York side of the lake.[19] The pulp mill was operating in compliance with an NPDES permit issued by the state of New York.[20] *Arkansas* involved the discharge of effluent from Fayetteville, Arkansas's wastewater treatment plant into an unnamed tributary of the Illinois River twenty two miles above the Arkansas Oklahoma border.[21] The treatment plant was operating under an NPDES permit issued by the EPA, because the state of Arkansas had not yet received approval of its own NPDES program.[22] The holdings and dicta of these cases answer some basic questions, while raising others.

The main question in *Ouellette* was whether the landowners could obtain damages and injunctive relief in the Vermont court under Vermont nuisance law.[23] The Court held that the Clean Water Act precludes a downstream state from using its nuisance law to impose more stringent pollution controls than are required under the NPDES permit.[24] This holding was not surprising, though it has been criticized.[25] The

17. 479 U.S. 481 (1987).
18. 112 S. Ct. 1046 (1992).
19. 479 U.S. 481, 484 (1987).
20. *Id.* at 490 n.10.
21. 112 S. Ct. 1046, 1051 (1992).
22. *Id.*
23. *Ouellette*, 479 U.S. at 484.
24. *Id.*
25. *See, e.g.*, RODGERS, *supra* note 14, at 287 (asserting that the Court erred twice in methodology and once in applying the substantive law).

Court had previously held that the federal common law of interstate water pollution, under which federal courts could require upstream states to strengthen their water pollution regulations, was preempted by the Clean Water Act.[26] Left open, though, is the prospect of obtaining a nuisance remedy under the law of the upstream state. The Vermont landowners could sue International Paper in a New York state court, or in a federal court sitting in Vermont or New York, under New York nuisance law.[27] The Downstream People can invoke the substantive law of the polluter's state, which is not likely to be very different from their own anyway. In fact, International Paper eventually settled with the Vermont landowners, apparently to foreclose that possibility.[28]

More important however, may be *Ouellette's* dicta regarding federalism issues under the Clean Water Act. In this area, the Court said that before an NPDES permit may be issued, an affected downstream state must be given notice and an opportunity to object at a public hearing, and the permitting state "must consider the objections and recommendations . . . before taking action."[29] The downstream state cannot block the upstream state's permit decision, but it can petition the EPA Administrator, who could veto a permit "if he concludes that the discharges will have an undue impact on interstate waters."[30] But in issuing the NPDES permit, does the upstream state have to do more than take the downstream state's interest into consideration? That was the issue addressed by the Supreme Court in *Arkansas v. Oklahoma*.[31] In *Ouellette*, the Court made some rather broad statements about the inapplicability of the downstream state's law.[32] In *Arkansas*, nevertheless, the EPA decided that the Clean Water Act requires an NPDES permit to impose any effluent limitations needed to satisfy the water quality standards of downstream states.[33] The Oklahoma effluent standards provided that zero degradation of water quality would be

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26. Milwaukee v. Illinois, 451 U.S. 304, 317 (1981).

27. *Ouellette*, 479 U.S. at 497.

28. RODGERS, *supra* note 14, at 288. What about an action under the Clean Water Act itself? Section 505 of the statute, codified at 33 U.S.C. § 1365(a) (1987), allows citizen suits against polluters for violations of effluent standards. Monetary damages are not awarded, but the civil penalties can be stiff and attorneys fees are recoverable. In addition, Section 505 contains a bureaucracy-forcing provision that allows a private action against the administering agency for failure to perform a non-discretionary function. 33 U.S.C. § 1365(h) (1988).

29. *Ouellette*, 479 U.S. at 490. Presumably, these procedures could be invoked through a Section 505 citizen suit.

30. *Id.* at 491. For an instance in which this has happened, see Champion Int'l v. EPA, 850 F.2d 182, 185 (4th Cir. 1988), in which the Administrator vetoed a Tennessee NPDES permit issued to a paper mill that polluted the Pigeon River 26 miles above the Tennessee-North Carolina border.

31. 112 S. Ct. 1046 (1992).

32. *See, e.g., Ouellette*, 479 U.S. at 494 (noting that "the CWA precludes a court from applying the law of an affected State against an out-of-state source").

33. *Arkansas*, 112 S. Ct. at 1051-52.

allowed in the upper Illinois River, including the segment immediately downstream from the Arkansas Oklahoma border.[34]

The state of Arkansas argued that imposition of this standard in the permit for the Fayetteville treatment plant was forbidden by *Ouellette*.[35] The Supreme Court disagreed. Although the Court held that the Clean Water Act does not *require* that NPDES permits meet downstream water quality standards, it concluded that such a requirement was within the discretionary powers of the EPA Administrator.[36] Section 402 of the Clean Water Act provides that "[t]he Administrator shall prescribe conditions for such permits to assure compliance with the requirements of [the statute] and such other requirements as he deems appropriate."[37] The Administrator had promulgated a regulation stating that no permit would be issued "[w]hen the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected States."[38] The Court decided that this was "a perfectly reasonable exercise of the Agency's statutory discretion . . . [because] [t]he application of [downstream] state water quality standards in the interstate context is wholly consistent with the Act's broad purpose."[39] The purpose, in the words of the statute, is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."[40] The irony of *Arkansas v. Oklahoma* was that the segment of the Illinois River in issue was already in violation of the Oklahoma water quality standard.[41] Because it appeared that operation of the Fayetteville treatment plant would not result in a detectable change in the river's water quality, the EPA approved the NPDES permit.[42] Theoretically, any additional outfall pipe on the river would further degrade a river already falling short of the applicable standards. But as the Court pointed out, "if every discharge that had some theoretical impact on a downstream State were interpreted as 'degrading' the downstream waters, downstream States might wield an effective veto over upstream discharges."[43]

It should be noted, however, that the Court's decision merely limits the range of such a veto. If the Fayetteville outfall pipe would have resulted in detectable degradation of the already degraded Illinois, the

34. *Id.* at 1051.
35. *Id.* at 1056-57.
36. *Id.* at 1056-57.
37. 33 U.S.C. § 1342(a)(2) (1988).
38. 40 C.F.R. § 122.4(d).
39. *Arkansas*, 112 S. Ct. at 1056.
40. Clean Water Act § 101, 33 U.S.C. § 1251(a) (1988).
41. *Arkansas*, 112 S. Ct. at 1052.
42. *Id.* at 1051.
43. *Id.* at 1059.

EPA would have been unable to issue the City a permit under its regulation. Would this have been a bad thing? Not necessarily. As the Court of Appeals noted in its opinion in Oklahoma v. EPA,

> [t]he full ramifications of Arkansas' formulation of the Clean Water Act issue are exposed once it is realized that an upstream state has the ability (if not the legal right) largely to control the quality of the waters of a downstream state. It can accomplish this simply by setting and enforcing its own water quality standards and releasing water of that quality to the downstream state.[44]

This is the predicament of the Downstream People. By locating regulatory authority along political boundaries—that is, by vesting it in individual states as opposed to a collective association of all affected parties—the Clean Water Act inevitably begets conflicts among upstream and downstream users asserting superior rights.

How ought tribal sovereignty be accommodated in the Clean Water Act's federal system? That is the last piece of background that must be supplied before exploring the optimality issue in Part III.

C. CLEAN WATER ACT FEDERALISM AND TRIBAL-STATE RELATIONS

In 1987, Congress amended the Clean Water Act by adding Section 518, authorizing the EPA to treat Indian tribes as states for certain regulatory purposes.[45] Most significantly, this allows a tribe to establish its own water quality based effluent standards under Section 303 of the Act.[46] The tribe can designate the uses of water resources under its jurisdiction and promulgate narrative and numerical standards designed to protect the ascribed uses.[47] Tribal discharge permits must comply with these standards.[48] The lesson of *Arkansas*, of course, is that permits issued by upstream regulatory authorities must also be conditioned so as to comply with the tribe's downstream effluent standards. In December, 1993, the EPA approved the first tribal water quality standards under Section 518.[49] The standards were promulgated by Isleta Pueblo, New

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44. 908 F.2d 595, 602 (10th Cir. 1990), *rev'd by* Arkansas v. Oklahoma, 112 S. Ct. 1046 (1992). The Court of Appeals held not only that the EPA was *authorized* by the Clean Water Act to impose Oklahoma's downstream standards, but that the Fayetteville permit would violate the Clean Water Act even though the treatment plant would not have resulted in detectable degradation, since the river was already out of compliance. The Supreme Court agreed with the first part of this holding, but disagreed with the last. Arkansas v. Oklahoma, 112 S. Ct. 1046 (1992).

45. 33 U.S.C. § 1377 (1988).

46. *Id.*

47. *Id.*

48. *Id.*

49. *New Mexico: Indian Pueblo Granted Authority by EPA to Set Water Quality Standards for*

Mexico, and applied to waters within the tribe's jurisdiction.[50] When the EPA announced its approval of the Pueblo's standards, it indicated that upstream dischargers would have to comply.[51]

Isleta Pueblo, a community of about 4,500 people, straddles the Rio Grande River ten miles below the City of Albuquerque.[52] Soon after the EPA approved the Isleta standards, Albuquerque sought a preliminary injunction to stop enforcement.[53] The City's main concern was that the Pueblo standards would have to be incorporated in a permit being renewed for the Albuquerque waste treatment facility.[54] The City was preparing to meet a new and tougher state standard on the discharge of ammonia.[55] The Isleta standard on ammonia was even more strict.[56] At the point of discharge about five miles above the Pueblo boundary, the City's wastewater stream contained ten times more ammonia than the Isleta standard allowed.[57] Albuquerque estimated that it would have to spend $250 million to comply with Isleta's water quality-based standards, or $220 million more than the new state ammonia rule would require.[58] The EPA could not consider costs to Albuquerque, however, in its review of Isleta's standards.[59]

A notable feature of Isleta's water quality standards is that they designate ceremonial use for the Rio Grande's waters.[60] Pueblo members were reluctant to describe the ceremonial use in detail, but said that it includes ingestion.[61] When Albuquerque's request for a preliminary injunction came before the court, the ceremonial use designation allowed the City to make a rather novel claim under the Clean Water Act. Albuquerque argued that in approving a ceremonial use, the EPA violated the Constitution's establishment clause by promoting the Isleta Pueblo's religious practices at the City's expense.[62] The Pueblo conceded that its goal was to ensure that water it diverted from the river would be fit for religious purposes.[63] The EPA argued, however, that the primary purpose *of its approval* of the standards was to

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River, 23 Env't Rep. (BNA) 1685, 1993 (available in WESTLAW, BNA-Environment File).

50. *Id.*

51. *Id.*

52. Michael Haederle, *Pueblo's Water Uses Could Cost Albuquerque Dearly*, L.A. TIMES, Mar. 9, 1993, at A5.

53. *Id.*

54. *Id.*

55. *Id.*

56. *Id.*

57. Haederle, *supra* note 52, at A5.

58. *Id.*

59. *See, e.g.*, Homestake Mining Co. v. EPA, 477 F. Supp. 1279, 1283 (S.D. Fla. 1988).

60. Albuquerque v. Browner, 865 F. Supp. 733, 740 (D. N.M. 1993).

61. *Id.*

62. *Id.*

63. *Id.*

achieve the secular goals of the Clean Water Act.[64] The court agreed that there was no entanglement of governmental and religious purposes significant enough to make the EPA's approval unconstitutional,[65] though the administrative record reflects EPA participation in discussions with Isleta about the appropriate stringency of standards designed to achieve the ceremonial use designated.[66]

Albuquerque also argued that the EPA misconstrued Section 518 by (a) approving tribal water quality standards more strict than the EPA minimum standards and (b) imposing them on upstream dischargers. The crux of these arguments was that tribes are not really supposed to be treated like states in all respects, and they were given short shrift by the trial court. With respect to the first, the court pointed out that this construction of Section 518 would make the provision nugatory.[67] If a tribe can promulgate water quality standards neither more nor less stringent than EPA's minimums, it seems pointless to grant it rule-making authority in the first place. Such a construction contradicts the time-honored canon that Congress does not make empty gestures. With respect to Albuquerque's second argument, the court simply drew the City's attention to *Arkansas*[68] and the court held that there was no distinction between imposing the water quality standards of downstream states on upstream states, on one hand, and imposing the standards of downstream Indian tribes on upstream states, on the other. Discretionary authority of the EPA administrator.

The court was not altogether comfortable with this situation, however, and at the end of the opinion it said so. It pointed out that in *Arkansas* the EPA took the position that the criterion for determining the bearing of a downstream standard on an upstream discharge is whether the discharge will *measurably* affect downstream water quality.[69] With respect to the Isleta standards, however, the EPA was prepared to condition the Albuquerque wastewater permit even though it had not determined that water quality at Isleta would be measurably improved. The court provided an example: the Pueblo's arsenic standard for the Rio Grande is 1,000 times more stringent than the federal minimum.[70] It is actually below the concentration that can be accurately measured with modern laboratory tools. Isleta threatened to impose this standard on Albuquerque even though arsenic occurs naturally at higher levels in the

64. *Id.*
65. *Browner*, 865 F. Supp. at 740-41.
66. *Id.*
67. *Id.* at 739.
68. *Id.* at 740 (citing Arkansas v. Oklahoma, 112 S. Ct. 1046 (1992)).
69. *Id.* at 741. *See supra* notes 42-44 and accompanying text.
70. *Browner*, 865 F. Supp. at 742.

region's well water and is not discharged by any industrial facility in the City. No matter what the NPDES permits would say about it, arsenic levels in water flowing by the Pueblo would probably exceed Isleta's water quality standards.

Under Clean Water Act federalism as currently structured, there is a fundamental choice. Either downstream regulators can impose regulatory obligations on upstream users or upstream users can impose damages on those downstream. In *Arkansas*, the EPA and the Supreme Court took the side of the downstream users, but Should any jurisdiction (state or tribe) be able to unilaterally impose costs up or downstream? Viewing the problem as a matter of sovereign right one might say yes, but one would still have to decide where the right resides. The consequence for states and tribes is that the extent of regulatory sovereignty under Clean Water Act federalism is largely dependent on whether they are Upstream or Downstream people. For upstream tribes (of which there are many) the current system threatens to impose costs (mitigation costs, cleanup costs, or the costs of forgone development) for the benefit of downstream states. A more environmentally sensitive and fiscally sound regulatory system would not involve these geographic contingencies. This brings us back at last to the Freestone River.

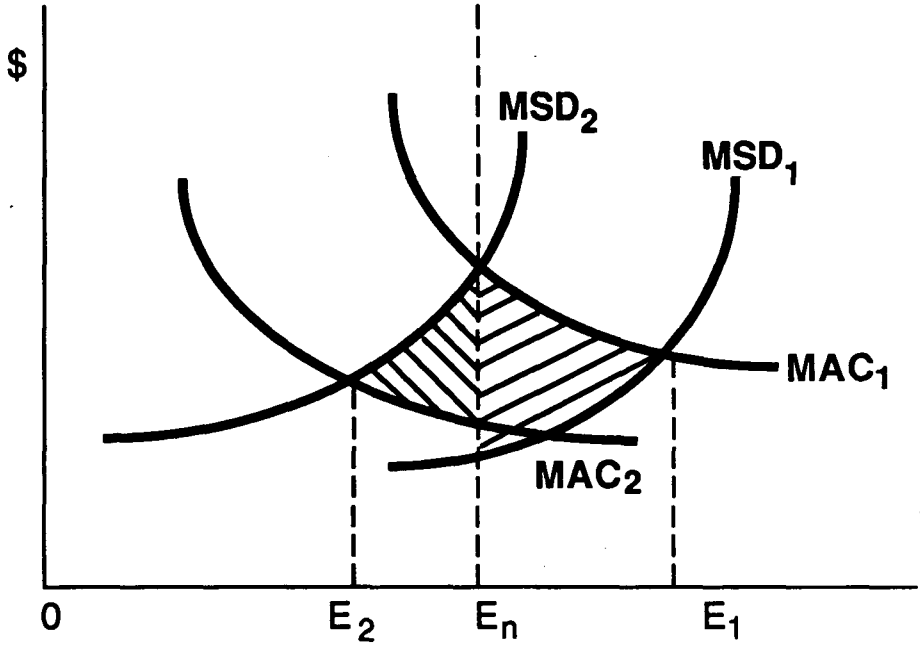
III. THE ECONOMICS OF POLLUTION

A. ECONOMIC INEFFICIENCY OF THE CLEAN WATER ACT APPROACH

In the language of economics, "the economically optimal level of environmental quality is that for which the marginal social damages of waste discharges equal marginal abatement cost."[71] In other words, we do not want to pay more for pollution abatement than we get in return, and at some point in any effort to abate pollution, we will reach the stage where an additional investment of one dollar will yield less than a dollar's worth of environmental benefits. The economist will say that the last marginal investment made before that point is reached is the last one that should be made; that the amount of environmental quality purchased up to that point is the amount of environmental quality that is economically optimal; or, seen from the opposite direction, that the amount of pollution that persists after that point is the amount of pollution that is economically optimal. The wisdom of the Clean Water Act is that it decentralizes water quality-based effluent standards. Conversely, nationally uniform technology-based standards are

71. WILLIAM J. BAUMOL & WALLACE OATES, THE THEORY OF ENVIRONMENTAL POLICY 285 (2d ed. 1988).

inefficient because the optimal level of pollution is always local. The following graph[72] shows why this is so.



The lesson is that any two regulatory jurisdictions may have different economically optimal pollution levels. The optimal level of pollution in each jurisdiction is the point where the marginal social damages of waste equal the marginal social costs of abatement. On the graph, the amount of pollution damage caused by releasing effluent into the river is located on the horizontal axis. The amount of dollars spent on abatement is on the vertical axis. For each jurisdiction, the point of economically optimal pollution is reached where the curves labelled MSD (marginal social damages) and MAC (marginal social costs) cross. So, the optimal pollution level for each jurisdiction is represented on the bottom line as E_1 and E_2, respectively, with E_1 being the jurisdiction in which the optimal level is higher. The question, of course, is why do MSD_1–MAC_1 and MSD_2–MAC_2 lie on separate points on the graph? The answer is that in almost all cases the comparative marginal social damages of pollution and costs of abatement are different.

72. *See id.* at 286 (providing a graph on which this article's graph is modeled).

Consider the curves labelled MSD. These curves "represent a vertical summation of individual curves of willingness-to-pay to avoid the damages associated with the indicated levels of waste emission."[73] This is econo-speak for the proposition that people with a demand curve of MSD_2 are willing to pay more to avoid a given level of pollution than people with a demand curve of MSD_1. Why would they be willing to do so? Perhaps it is a matter of cultural commitment. Assume that the people of MSD_2 are the members of Isleta Pueblo. The Isletans have a greater willingness to pay for a given level of pollution than the people of MSD_1, the Albuquerqueans, because the Isletans, unlike the Albuquerqueans, ingest water for religious purposes. There are, of course, numerous other possibilities. In fact, the most likely scenario is that the people of MSD_2 are simply city dwellers and the people of MSD_1 are not. The aggregate willingness-to-pay curve is usually higher for city dwellers just because there are many of them in a congested place. And that is okay. Urbanites had better be willing to pay more than their country cousins for a given level of pollution control because they produce more pollution in the first place, and the more pollution there is, the higher the marginal costs of cleanup.

Consider next the curves labelled MAC. Their positions on the graph reflect the fact that the *costs* of avoiding a given level of pollution may be different, too. The Freestone River, the reader will remember, is a classic trout stream, but one of a special type. Let us say that it is a snowmelt stream that careens through boulder-strewn passages filled with rapids whose stirring action adds oxygen to the water, which trout demand. Because the Freestone's bed is mostly granitic, however, it is alkaline-poor, low in nutrients, and the trout are small. The Chalk River, on the other hand, is a classic trout stream quite different in character. It originates in permeable limestone hills where rainfall sinks into the ground before resurfacing from alkaline-rich springs that feed the river. The Chalk meanders quietly through a wide valley. Its alkaline water promotes the growth of weedbeds and insect populations in the river's pools. There is not much oxygen to spare in these pools, but the well-fed trout that live in them are large. The Freestone and the Chalk offer anglers different, but equally gratifying, experiences. Those who lobby the legislature want assurances that both rivers will be fishable in the future.

For a number of reasons, the cost of maintaining healthy trout stocks in the Chalk River is going to be considerably higher than in the

73. *Id.*

Freestone. Let us say that the Chalk runs through a well-populated and fertile valley where there are many farms, some small towns, and several factories. Because there is already a significant amount of agricultural, municipal, and industrial waste going into the river, the marginal costs of abatement are relatively high. In fact, they are high relative specifically to the marginal costs of avoiding pollution of the Freestone because the latter runs through a mountainous area where the main economic activities are logging and livestock grazing. There is some siltation from these activities, but that can be abated with better management practices, most importantly by leaving riparian buffer zones. There are no municipal waste treatment plants, and problems associated with septic systems can be handled with more stringent design and location regulations. The cost of installing septic tanks will be higher, but probably not by much.

For these reasons alone, the marginal costs of pollution abatement in the Freestone will be lower than in the Chalk, but there are other factors that will also make that the case. The first has to do with stream geomorphology. The fast moving waters of the Freestone will flush pollutants more rapidly and add oxygen to the water more readily. This means natural, cost-free mitigation of siltation and de-oxygenation from logging and grazing. The second has to do with trout physiology. Since the mountain waters of the Freestone are colder that those of the lowland Chalk, the trout need less oxygen anyway. Trout in the Chalk demand more oxygen, the slow moving river itself furnishes less, and the heavily fertilized farms, with their nitrate and phosphate runoffs, put more de-oxygenating material in the water. Add it all up and the Chalk River is represented by the higher cost curve labelled MAC_1 on the graph; the Freestone by MAC_2. If the MSD curves accurately reflect willingness-to-pay to avoid pollution in the two watersheds, the economically optimal level of pollution in the Chalk River, E_1, is higher than in the Freestone, E_2. In short, local standards yield optimal levels of pollution.

The graph drives this point home by showing the negative outcome that would result from nationally uniform water quality-based standards. Assume that these standards would yield water pollution levels at E_n. The thing to note is that because the national standards do not take local conditions into account, the amount of pollution abatement achieved is optimal for neither E_1 nor E_2. Our economist would say that the shaded area represents an aggregate welfare loss (relative to the localized standards) equal to "the excess of damages over abatement costs over the range E_2 to E_n (the loss in jurisdiction two) plus the excess of control

costs over damages from E_n to E_1 (the loss in jurisdiction one)."[74] In other words, there would be too much pollution in E_2 and too much expenditure on abatement in E_1. The first constitutes an economic loss because it means that some damages could be efficiently avoided with additional effort. The second constitutes an economic loss because it means that some measures to abate pollution cost more than the value of the environmental benefits produced. The losses in both watersheds would be the result of national water quality-based standards. Recall that the federal government does establish nationally uniform technology-based standards.[75] These yield the same negative outcomes demonstrated on the graph. They either obtain too little pollution abatement or cost too much, depending on local conditions.[76]

B. HOW TO ACHIEVE EFFICIENCY

If national water quality-based standards are inherently inefficient, the next question is how to identify the appropriate locality for setting water quality standards. The answer is fairly straightforward. The key to establishing locally optimal pollution levels is that the locality must be large enough to contain all of the costs and benefits of pollution control. The Isleta Pueblo case is a good example. Because Isleta Pueblo does not contain all the costs and benefits of pollution control, *Albuquerque v. Browner* is a zero-sum game. Depending on who has the right, either Albuquerque can continue dumping amounts of arsenic excessive by Isletan standards in the Rio Grande regardless of the social cost to Isleta, or Isleta can prohibit it and impose the economic cost of prevention on Albuquerque. Given the context, the latter result holds considerable appeal. The Downstream People, after all, are innocent victims of the Upstream People's effluent emissions, and they may be defenseless as well. And, of course, this is the position adopted by the EPA and upheld by the Supreme Court in Arkansas v. Oklahoma.[77]

Consider another example. In any watershed, some pollutants will be flushed downstream, some will settle into bottom sediments where they will remain, and some will contaminate the river's fish. For many

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74. *Id.* at 285.

75. *See supra* notes 8-9 and accompanying text.

76. In a very polluted river, for example, uniform technology-based standards could yield less than the optimal amount of pollution. In such a case, of course, the local water quality standards would, if they were accurate, kick in and ratchet pollution control downward. In an unpolluted river, uniform technology-based standards could require unnecessary expenditures. In that case, on the other hand, the local water quality standards would not help since they do not ratchet pollution control downwards.

77. *See supra* notes 36-44 and accompanying text.

tribes, the last possibility is particularly worrisome. Water quality standards are set so that the (nationally) average person has one extra chance in 100,000 of getting cancer from eating fish.[78] This risk assessment is based on the assumption that the (nationally) average person consumes fewer than two ounces of fish each week. This amount is far less, however, than the average consumption of the many Native Americans whose diet is based on fish. A study recently conducted by the Columbia River Intertribal Fish Commission found that the average Nez Perce, for example, eats twelve times more fish than the average person on whom the EPA risk assessment is based, which would translate to at least ten extra cancers per million.[79]

The Columbia River tribes are understandably concerned about pulp and paper mills discharging dioxins and other pollutants that enter the food chain. The Isletans may be able to distill the water they remove from the Rio Grande for religious purposes, at tremendous expense to themselves, but the only way to deal with carcinogenic fish-other than to quit eating it-is to control pollution at the source. To do that, the Columbia River tribes have announced their intention to seek EPA approval of their own water quality-based effluent standards, enforceable upstream. As one tribal leader put it, "[w]e will not quit eating fish. Fish is not just food to us. It is a way of life."[80] On the other side, the pulp and paper mills upstream are worried (also understandably) about the costs of complying with stringent tribal regulations. Spokesmen for the mills suggest that the regulations *should* be based on the EPA's (nationally) average person rather than on the average person in "a sensitive population."[81] Both sides have legitimate concerns. On one hand, the tribes of the Columbia watershed are "sensitive populations" largely in relation to a national standard set by the EPA. On the other, they share the Columbia basin with many non-tribal members.

In fact, the economically optimal solution is one that takes the benefits and costs imputed to both tribal and non-tribal members into account. In the world of our economist, *homo economicus* tries to externalize costs wherever he can. If he is an owner of a pulp or paper mill, he may try to do so by discharging untreated effluent in the river where it will flow downstream and do no harm to him. If he is a

78. *See* EPA, QUALITY CRITERIA FOR WATER, Appendix B (1986).

79. *See* Paul Shukovsky, *Tribes Take on Pollution: Greater Risk in Eating Fish Spurs Action*, SEATTLE POST–INTELLIGENCER, Sept. 7, 1993, at A1. Many individual Nez Perce consume 67 times the average amount factored into the EPA risk assessment. *Id.* Other tribes in the Columbia basin are now conducting their own studies. It is expected that they will also reveal consumption levels far above the national average. *Id.*

80. *Id.* (quoting Harry Smiskin, tribal elder, Nez Perce tribe).

81. *Id.* (quoting Konrad Liegel, attorney representing several pulp and paper companies).

downstream regulator, he may try to do so by shifting pollution control costs upstream. Even if the Isletans *could* distill enough water for their religious uses at a relatively modest cost, they might try to send the costs of purification upstream anyway, unless they are paradigm-busting altruists whose sole concern is the larger general welfare. If the "locality" is not geographically large enough to contain all benefits and costs of pollution and pollution control, these negative externalities will likely persist.

The ideal locality for regulatory purposes is one in which all such costs and benefits are internalized. Internalization prompts stakeholders to make completely informed decisions about tolerable levels of pollution. Pulp and paper mills, for example, are prompted to consider not just the costs of land, labor, and capital in making production decisions, but also the environmental damage their production processes cause. Just as importantly, the beneficiaries of production are prompted to consider how many goods and services they would be willing to relinquish to obtain a cleaner environment. Continuing the Columbia River example, local tribes might have to consider how many job opportunities for tribal members they would forgo to obtain a given level of pollution reduction. Defining regulatory authority as a *collective* power (by defining jurisdiction so as to encompass *all* interested parties, upstream and downstream) effectively internalizes the cost of pollution and abatement, and forces all interested parties to engage in rational decision making. This is why we should be concerned about further balkanizing the Clean Water Act by giving tribes the regulatory status of states and, for the same reason, about giving *states* the regulatory status of states, too.

Istead, the obvious locality for internalizing costs and benefits is at the level of the watershed, defined as "a geographic area in which water, sediments, and dissolved materials drain to a common outlet, a point on a larger stream, a lake, an underlying aquifer, or an ocean."[82] Peter Menell and Richard Stewart describe the basic concept of watershed management as follows:

> The [watershed protection] approach would administer watersheds as complete units defined by their underlying hydrology, rather than managing individual portions of watersheds according to arbitrarily defined political boundaries. This administrative structure would include management of all waters, including surface and ground waters,

82. EPA OFFICE OF WATER, THE WATERSHED PROTECTION APPROACH: AN OVERVIEW 1 (1991) [hereinafter WATERSHED PROTECTION APPROACH].

> and both inland and coastal waters. In addition, it would encompass management of the land from which water drains into a particular watershed. All aspects of the watershed's quality would be considered under this approach in an integrated way, including chemical water quality, physical water quality, habitat quality, and biodiversity. Issues of water quantity, including basic demand and supply, would also be included in the [watershed protection] approach.[83]

Essentially, watershed management is a risk-prioritized regulatory system that takes into account the ecological and hydrological structure of the basin, the sources and types of pollution problems, the economic uses of the water, and the level of resources available for watershed protection and restoration.

The stages through which a watershed plan is developed and implemented are also described by Menell and Stewart:

> First appropiate watersheds are identified and mapped. Second, all of the "stakeholders" in the watershed are assembled to analyze the threats to the watershed, and to devise responses to these threats based on a risk-based analysis. These stakeholders would include state governmental, public health, agriculture, and natural resource agencies, local environmental regulatory boards and commissions, Indian tribes, representatives of the public and of environmental groups, and industry and development interests. In the third step, the selected response mechanisms are applied to the watershed's problems. Progress towards achieving water quality goals is then regularly monitored, and adjustments are made in response mechanisms as required.[84]

This basic approach to water quality protection is likely to be increasingly important. It is sensible on ecological grounds and, it accounts for all costs, benefits, and related risks. Reaching consensus in this multi-party setting, of course, is much easier said than done. In fact, three rather sticky transaction problems immediately arise. The first of these is whether things like religious impacts and health effects can actually be assigned a monetary value. A second is whether anything like complete information on costs and benefits can be acquired. The third is whether stakeholders can expend the time and effort necessary to

83. PETER S. MENELL & RICHARD B. STEWART, ENVIRONMENTAL LAW AND POLICY 514 (1994).
84. *Id.* at 514-15.

reach bargained-for solutions.[85] My intuition is that these various obstacles are formidable, but not necessarily insuperable.

An example is the Stillaguamish Watershed Protection Project in Washington state.[86] The Stillaguamish is a relatively small watershed. The river begins on the west slope of the north Cascades and runs for a little more than 100 miles to its outlet into Puget Sound. The principal pollutants are bacteria from livestock wastes, sediment from farms, logging operations, and development, and wastewater from sewage disposal systems. In the 1980s, pollution in the watershed forced the shutdown of commercial shellfishing in Port Susan at the river's mouth. In 1988, the Stillaguamish and Tulalip Tribes obtained a grant from the State of Washington's Department of Ecology to form a watershed task force to develop a plan to deal with these problems. The resulting Watershed Management Committee includes representatives of the tribes, county and city governments, environmental and business interest groups, and citizens' organizations. Scientists from the Department of Ecology and the EPA serve on a Technical Advisory Committee. The Stillaguamish Watershed Action Plan, completed in 1989, consists of integrated source control programs, a monitoring and enforcement system, and a public education agenda that has facilitated implementation. The result has been a community-based effort that has led to a broader understanding of environmental problems and how to deal with them.

IV. CONCLUSION: PRACTICAL PROBLEMS AND THE ROLE OF TRIBAL GOVERNMENTS IN REGULATORY REFORM

The hard question, of course, is what comprehensive basinwide management should entail in a watershed as large as the Rio Grande's. A good place to look for the answer is across the country from the Stillaguamish, in the Tennessee River Valley. Three years ago, the Tennessee Valley Authority (TVA) adopted the goal of making the Tennessee River "the cleanest and most productive commercial river system in the United States by the year 2000."[87] At 652 miles, the Tennessee River is the sixth largest river system in the United States, with a watershed encompassing parts of six states.[88] TVA plans to employ multi-disciplinary River Action Teams in each of the system's twelve

85. For a good introduction to valuation issues and information costs in cost-benefit analysis, see *id.* at 82-101.

86. WATERSHED PROTECTION APPROACH, *supra* note 82, at 4.

87. TVA, FISHNET ACTION PLAN: CREATING ECONOMIC ADVANTAGE THROUGH ENVIRONMENTAL STEWARDSHIP, SUMMARY 2 (1993) [hereinafter FISHNET ACTION PLAN].

88. The states are Kentucky, Tennessee, North Carolina, Georgia, Alabama, and Mississippi.

relatively distinct sub-basins.[89] Their mandate is "to coordinate efforts across political boundaries."[90] Their members are technical experts who spend much of their time working with non-experts (resource users, communities, industries, special interest groups, and other government agencies) to "develop and promote strategies that balance human use and ecological integrity of the resource."[91] This has the ring, no doubt, of bureaucratic mumbo-jumbo, but in this case, the early results actually seem promising.[92] Here, I merely want to highlight two sets of issues with which TVA is dealing.

First, and critical to any effective watershed approach, is a comprehensive monitoring program. TVA's goes beyond the conventional physio-chemical assessment techniques to include bioassessment, a technique using living organisms to assess water quality, which is especially important in monitoring and assessing the health of fish populations. TVA is now "a leader in biomonitoring applications [with] other agencies [expected] to follow TVA's lead over the next decade."[93] In addition, the River Action Teams are "breaking new ground in the approach they are using in interpreting and digitizing airphoto data,"[94] which permits analysis of land use patterns and trends. The collection of physical, chemical, biological, and visual data enables the agency to recommend holistic approaches to watershed problems, but this also requires a clear understanding of the linkage between resource conditions and the pollutant sources that cause degradation. It is essential if assessment is actually to lead to integrated regulation by the states, local governments, and other regulatory authorities in the watershed.[95]

Second, the move from comprehensive assessment to integrated regulation provides a benchmark for comparison, a vision of the watershed's desired future condition, and a set of implementable management goals. In a multijurisdictional watershed, these require a manageable geographic scale, a party willing to take the lead in consensus building, a strong public education effort, inclusion of

89. FISHNET ACTION PLAN, *supra* note 87, at 4. These include six segments of the mainstem and the six main tributaries.

90. *Id.*

91. *Id.* at 5.

92. Water Quality 2000, an organization composed of 70 national governmental and non-governmental groups working in the water quality field, was recently invited to evaluate the TVA program. The Water Quality 2000 report holds up the TVA program as a watershed model. *See* WATER QUALITY 2000, A NATIONAL WATER AGENDA FOR THE 21ST CENTURY, WATER QUALITY 2000 FINAL REPORT, 3 (1992).

93. *Id.* at 8.

94. *Id.* at 12.

95. *Id.*

stakeholders, coordination of monitoring efforts, and flexibility in the planning and regulatory process.[96] The agency has developed a systematic procedure for identifying hierarchically nested watershed management units.[97] Each of the twelve Tennessee Valley sub-basins is divided into several resource units ranging in size from 72 to 351 square miles. At these sub-basin and resource unit levels, water quality planning can be reduced to manageable proportions, while at the same time basinwide monitoring and assessment can give a picture of the entire watershed.

Clearly, the Tennessee River program is an ambitious undertaking. Can tribal governments be asked, realistically, to take on anything like such a project? Few watersheds are as small as the Stillaguamish and its sister streams that drain the west slope of the Cascades into Puget Sound. In a watershed like the Rio Grande or the Tennessee, the transaction costs associated with comprehensive watershed planning will be very large. Integrated management *could* be implemented by defining sub-basin management units on the basis of hydrology, physiographic boundaries, problem areas, and critical issues. That would reduce transaction costs, but certainly not eliminate them. Stakeholders might agree on goals for conventional and toxic pollutant levels, water temperature, channel morphology, health of biotic communities, and so on. They might reach consensus on the tools needed to meet these objectives: standards for ambient water quality, best management practices for non-point source pollution, end-of-the-pipe standards for point source pollution, and remediation of degraded stream segments.[98] They might even agree to accommodate hard-to-monetize values like the ceremonial uses of Isleta Pueblo, but the organizational effort that would be required to reach these kinds of decisions could be expensive indeed.[99]

Still, there is another lesson from Isleta Pueblo. After winning in the trial court on the substantive issue of whether its ceremonial use standards were permissible under the Clean Water Act, the Pueblo

96. *Id.* at 29.

97. *Id.* at 7.

98. WATERSHED PROTECTION APPROACH, *supra* note 82, at 2.

99. This may be the main reason why the TVA model will be difficult to apply outside of the TVA context. The TVA is an experiment in something larger than even watershed planning; it is an experiment in a new kind of federalism itself. The TVA has had valuable experience in forging cooperative working relationships with other federal, state, and local agencies. For the history of the TVA, see WILMON HENRY DROZE, HIGH DAMS AND SLACK WATERS: TVA REBUILDS A RIVER (1986); WILLIAM U. CHANDLER, THE MYTH OF TVA: CONSERVATION AND DEVELOPMENT IN THE TENNESSEE VALLEY, 1933–1983 (1984); A.S. BARNES, TVA: BRIDGE OVER TROUBLED WATERS (1980). One could hardly say that the agency has an admirable record as an environmental steward, but if it really has turned a new leaf, it has the institutional capacity to be a watershed consensus-builder. That may be much more difficult for tribal governments, or, indeed, for *any* other governmental institution in a large watershed without a regional mandate.

returned to the table with Albuquerque and agreed on the disputed water quality effluent limitations that both parties have now accepted.[100] The agreed upon standard is the result of Isleta's using its leverage as a new player in watershed decision making to achieve some of its goals while accommodating other interests to some extent as well. This leverage can be acquired by any tribal government obtaining status as a state under the Clean Water Act. For that matter, it is a leverage that can be used by downstream states. If we consider the reach of river between Albuquerque and Isleta Pueblo as a distinct sub-basin from the perspective of environmental geography, we begin to see how the Downstream People can use their jurisdictional authority to change the outlines of Clean Water Act federalism for the better.

The current structure of the Clean Water Act, which vests regulatory authority in political units unrelated to environmental geography, is fractured along lines that lead away from either good economics or good environmental policy. Moreover, giving tribes the status of states under the Clean Water Act opens the fractures even wider, something the basic principles of ecology and economics would surely counsel against. We do not need *less* integrated planning on a basinwide scale. Nevertheless, as long as Clean Water Act federalism is structured as it is, one is hard-put to suggest that tribal governments accept this counsel. Tribes ought to seek regulatory authority under the Clean Water Act simply to assure that their voices will be heard in the arena of watershed politics. But obtaining such status begs the central question raised in this paper: if tribal members acquire the bargaining power that belongs to the Downstream People in our current federal system, what should they do with it? My answer is that they should use their new leverage against upstream polluters to promote good economics *and* good environmental policy by encouraging a shift toward regulatory planning at a watershed scale. Political boundaries are contingencies of human history; we come to geographical boundaries with our hats in our hands.

100. *New Mexico, Daily Environment Report, State Roundup* (BNA), 1994 DEN 219 (April 26, 1994) (available in WESTLAW, BNA–Environment File). Albuquerque's appeal of the trial court's decision is thus limited to procedural issues related to the EPA's determination that Isleta Pueblo would be granted the status of a state. *Id.*