TAKINGS AND TRANSITIONS

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I. INTRODUCTION

"He who rejects change is the architect of decay. The only human institution which rejects progress is the cemetery."

Harold Wilson

"Progress might have been all right once but it has gone on too long."

Ogden Nash

Regulatory takings doctrine, which determines whether the government is constitutionally required to compensate property owners for regulations that reduce the value of their property, is famously incoherent.¹ The Supreme Court concedes that it has

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^{1.} See, e.g., Jed Rubenfeld, Usings, 102 YALE L.J. 1077, 1078 n.2 (1993) (compiling from the literature descriptions of the doctrine's incoherence).

never been able to articulate a generally applicable test for regulatory takings with any kind of detailed content.² In fact, the Court has announced at least two different tests that it applies haphazardly and with little explanation. Moreover, the Court has allowed cases that appear inconsistent with one another to stand, and even continues to cite them from time to time. Perhaps takings doctrine must inevitably remain subtle, nuanced, and vague,³ but property owners, governments, and society in general would seem to be entitled to a clearer explanation of the principles underlying decisions.

The introduction in the last few decades of "categorical" or "*per* se" takings, tests that make one factor determinative of an obligation to compensate, might have been expected (and intended) to clear up some of this confusion, but it has not.⁴ Indeed, the Court's two most recent land use takings cases, *Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency*,⁵ and *Palazzolo v. Rhode Island*,⁶ step back from categorical tests, returning to the notion that most regulatory takings claims must be evaluated on an *ad hoc*, case-by-case basis. Yet these recent cases perpetuate the Court's pronounced lack of guidance on how that evaluation should be conducted.

The persistence of incoherence, instability and incomplete explanations in this area of the law suggests that the Court itself is dissatisfied with the tests it has developed, yet is unable to produce a more satisfying jurisprudence. It is generally agreed that the original understanding of the Takings Clause reached only physical occupation or acquisition of property by the government.⁷ Because it has no basis in constitutional history, some thoughtful commentators have argued that the entire doctrine of regulatory takings is fundamentally misguided.⁸ But it is unlikely to

^{2.} *See, e.g.*, Palazzolo v. Rhode Island, 533 U.S. 606, 617 (2001) ("Since *Mahon*, we have given some, but not too specific, guidance to courts confronted with deciding whether a particular government action goes too far and effects a regulatory taking.").

^{3.} See Marc R. Poirier, *The Virtue of Vagueness in Takings Doctrine*, 24 CARDOZO L. REV. 93 (2002).

^{4.} Professor Thompson suggests that the Court's categorical tests, by analogizing to physical confiscation of property, the extreme case widely agreed upon as requiring compensation, attempt to finesse the need for the Court to come to agreement on a rationale for takings decisions. He notes, however, that the lack of principles makes the categorical tests themselves impossible to defend. Barton H. Thompson, Jr., *The Allure of Consequential Fit*, 51 ALA, L. REV, 1261, 1270 (2000).

^{5. 535} U.S. 302 (2002).

^{6. 533} U.S. 606 (2001).

^{7.} See William Michael Treanor, *The Original Understanding of the Takings Clause and the Political Process*, 95 COLUM. L. REV. 782, 785-97 (1995).

^{8.} See, e.g., John F. Hart, Land Use Law in the Early Republic and the Original Meaning of the Takings Clause, 94 NW. U. L. REV. 1099 (2000); J. Peter Byrne, Ten Arguments for the

disappear. The doctrine responds to some widely held intuitions, and the Court shows no sign of renouncing it. It therefore seems more realistic, and more useful, to seek incremental improvement. I suggest that one key problem with current regulatory takings doctrine, and therefore an opportunity for improvement, is the Court's failure to focus directly on the key feature of those claims.

Regulatory takings claims are fundamentally conflicts over legal transitions.⁹ They arise when the rules change, those changes are costly (in economic or other terms), and the people bearing the costs believe that they are being unfairly singled out. The problem is not the content of the new rules in the abstract, but simply that the rules are different than they once were. A viable regulatory takings claim assumes that the government has acted to prohibit some activity that once was allowed, or at least had not been explicitly prohibited. That is true even in the most extreme case, when regulation denies all viable use of land. In Lucas v. South Carolina Coastal Council,¹⁰ which announced the rule that complete regulatory wipeouts ordinarily require compensation, the core of the problem was not that Lucas could not build what he wanted to on his lots. Rather, it was that when he bought the lots, Lucas expected that he could build luxury homes on them, and later changes in the rules precluded him from doing so.¹¹ The Court explicitly recognized the importance of change in Lucas, noting that compensation is not required when "background principles of State's law" render land unusable, only when newly declared rules have that effect.¹²

In most instances, takings claims also involve another kind of change: the effect of legal changes typically falls on property owners seeking to change the physical status quo. Governments rarely seek to regulate away established uses. So these claims nearly always arise when property owners seek to develop their property for a new use or to otherwise alter its physical condition, and find that the current regulations in force will not permit that change.

The quotations that opened this article illustrate the two faces of change: change is inevitable and necessary, often promising new opportunities and improvements. It represents evolution and progress, touchstones of the American ideal. But it is also stressful, disruptive and costly. It undermines and unsettles. Both the

Abolition of the Regulatory Takings Doctrine, 22 ECOL. L. Q. 89 (1995).

^{9.} *Cf.* Carol M. Rose, *Property and Expropriation: Themes and Variations in American Law*, 2000 UTAH L. REV. 1, 18 (2000) (describing the underlying problem of the controversial regulatory taking cases as one of the transitions).

^{10. 505} U.S. 1003 (1992).

^{11.} Id. at 1008-09.

^{12.} Id. at 1029.

positive and the negative aspects of change are highlighted in the context of legal rules. Abrupt alteration of those rules can greatly reduce the expected return on investments made in reliance on a stable regulatory regime, and discourage future investment. Even without economic costs, people tend to fear and resist change. Change in the governing rules may threaten deeply ingrained ways of life or denigrate strongly held values, casting people emotionally adrift. Yet the ability to revise and update rules is essential to the public welfare, allowing society to respond to changed circumstances, changed understandings, and changed goals that render the old regime unsuitable for addressing the future.

Unfortunately, the dynamic aspect of takings law has been little developed by the Court. It was acknowledged in a backhanded fashion in *Penn Central Transportation Co. v. City of New York*¹³, by the inclusion of "distinct investment-backed expectations" as one factor to consider in determining whether a regulatory taking has occurred,¹⁴ and again in *Lucas*, when the Court agreed that limitations that inhere in the title to property do not raise regulatory takings concerns.¹⁵ It also implicitly informs Hodel v. Irving¹⁶ and Babbitt v. Youpee,¹⁷ cases in which the extent to which abrupt departure from a long-established property rule led the Court to find a taking. But the Court has never made a serious direct attempt to grapple with the fundamental question about transitions: under what circumstances is it fair (the Court's ultimate touchstone for takings claims¹⁸) to impose the economic costs of a change in the rules governing property upon owners who seek to change the physical condition of their land?

Careful examination of that question is overdue. *Tahoe-Sierra* and *Palazzolo* make it clear that the current Court is disinclined to extend its narrow bright line rules. It is therefore well past time to give greater content to the *ad hoc* balancing test that will decide most regulatory takings cases. Focusing more directly on law as a dynamic phenomenon, on the benefits and costs of transitions, and on other factors that may encourage or impede transitions might

^{13. 438} U.S. 104 (1978).

^{14.} Id. at 124.

^{15. 505} U.S. at 1027.

^{16. 481} U.S. 704 (1987).

^{17. 519} U.S. 234 (1997).

^{18.} The most often quoted statement in the Court's modern takings jurisprudence describes the Takings Clause as "designed to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole." Armstrong v. United States, 364 U.S. 40, 49 (1960). Indeed, as Professor Thompson puts it, "[t]he 'parroting' of this sentence from *Armstrong* has become almost a joke." Thompson, *supra* note 4, at 1286.

bring some coherence to this famously incoherent area of the law, providing a clearer explanation for some of the Court's results and giving reason to question others.

That is not to say that focusing on transitions will make takings cases easy. Law has long had difficulty dealing with change. Because change is understood to be legitimate and necessary in a variety of circumstances, it is essentially never foreclosed. But when change occurs, the law has struggled with who should be subject to the new rules and on what terms. Several of the most consistently daunting areas of law deal with transitions from one regulatory regime to another, including the limits of retroactivity,¹⁹ the appropriate role of stare decisis,²⁰ and when and to what extent land use rights become vested.²¹ We should not expect takings doctrine to be clearer or more predictable than these other doctrines of change. But we can expect that focusing on the right questions will help illuminate principles that will make the decisions seem less ad hoc.

My aim here is not to develop an algorithm that will provide absolute predictability for takings claims. I agree with Marc Poirier that clear rules for regulatory takings claims are unlikely to materialize, and indeed are not desirable.²² But it is one thing to employ clear principles whose application to any particular set of facts may be contested. It is another to be entirely vague about the principles that govern the decision. In my view, the Court's current takings jurisprudence goes too far in both the direction of certainty

^{19.} See E. Enter. v. Apfel, 524 U.S. 498 (1998); United States v. Winstar Corp., 518 U.S. 839 (1996). For commentary on retroactivity, see generally Symposium, When Does Retroactivity Cross the Line? Winstar, Eastern Enterprises and Beyond, 51 ALA. L. REV. 933 (2000); Jill E. Fisch, Retroactivity and Legal Change: An Equilibrium Approach, 110 HARV. L. REV. 1055 (1997).

^{20.} See, e.g., Thomas Healy, Stare Decisis as a Constitutional Requirement, 104 W. VA. L. REV. 43 (2001); Caleb Nelson, Stare Decisis and Demonstrably Erroneous Precedents, 87 VA. L. REV. 1 (2001); Richard H. Fallon, Jr., Stare Decisis and the Constitution: An Essay on Constitutional Methodology, 76 N.Y.U. L. REV. 570 (2001); Thomas R. Lee, Stare Decisis in Economic Perspective: An Economic Analysis of the Supreme Court's Doctrine of Precedent, 78 N. C. L. REV. 643 (2000); Rafael Gely, Of Sinking and Escalating: A (Somewhat) New Look at Stare Decisis, 60 U. PITT. L. REV. 89 (1998); Thomas R. Lee, Stare Decisis in Historical Perspective: From the Founding Era to the Rehnquist Court, 52 VAND. L. REV. 647 (1999); Henry Paul Monaghan, Stare Decisis and Constitutional Adjudication, 88 COLUM. L. REV. 723 (1988).

^{21.} See, e.g., Laura S. Underkuffler, On Property: An Essay, 100 YALE L. J. 127, 130-31 (1990); Andrea L. Peterson, The Takings Clause: In Search of Underlying Principles Part I — A Critique of Current Takings Clause Doctrine, 77 CAL. L. REV. 1301, 1313-16 (1989); Grayson P. Hanes & J. Randall Minchew, On Vested Rights to Land Use and Development, 46 WASH. & LEE L. REV. 373 (1989); CHARLES L. SIEMON ET AL., VESTED RIGHTS: BALANCING PUBLIC AND PRIVATE DEVELOPMENT EXPECTATIONS (1982).

^{22.} *See* Poirier, *supra* note 3 (arguing that vagueness in regulatory takings doctrine may be inevitable and may promote social discussions that reinforce sense of community).

and ambiguity, because the Court has failed to find a comfortable middle. On one side, the Court has grasped at clear categorical rules, even when the results those rules produce seem silly. On the other side, beyond the extreme cases to which those categorical rules apply, the Court has been unable to articulate any standard clearer than unadorned "fairness".²³ I believe we can and should aspire to a more principled takings jurisprudence, and that focusing on the pressures for and against regulatory change can help us develop one.

Regulatory takings jurisprudence should take into account the fact that resistance to legal change is already high, and should not impose additional barriers to necessary change. The Court should, however, seek principles that will help sort justified from unjustified change and protect against majoritarian political oppression. Two relatively simple steps would tie regulatory takings claims much more closely to the element of change. First, the Court should require that a regulatory takings claimant identify a change in applicable legal principles. Second, the Court should reconsider and refine its *ad hoc* takings test, focusing more directly on the transition problem. The key factors to consider in allocating the costs of rule transitions between property owners and the government are the justification for the transition, its foreseeability, its abruptness, and its generality.

II. THE TANGLED TAKINGS KNOT

The foundation of regulatory takings doctrine is *Pennsylvania Coal Co. v. Mahon*,²⁴ the 1922 case in which the Court held that the government was required to compensate a coal mining company for the effects of a statute prohibiting the mining of anthracite coal in such a way as to cause subsidence of the surface. That prohibition effectively forced the mining company to leave some coal in place in order to support the surface, even where it had sold the surface with the express reservation of the right to withdraw support.²⁵

In the course of its decision, the Court said that "if regulation goes too far it will be recognized as a taking,"²⁶ suggesting that the magnitude and effect of the regulation alone, regardless of other factors, may create an obligation to compensate. At the same time, it noted that most run-of-the-mill regulations would not require

^{23.} Armstrong, 364 U.S. at 49.

^{24. 260} U.S. 393 (1922).

^{25.} Id. at 412-13.

^{26.} Id. at 415.

compensation because "[g] overnment hardly could go on" if it had to pay for every change in the law that diminishes property values.²⁷

Ever since *Pennsylvania Coal*, the Court has struggled to find a principled means of identifying regulations that cross that boundary. In *Armstrong v. United States*,²⁸ the Court articulated a general description it has repeated frequently in recent cases: the Takings Clause exists to prevent the government from "forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole."²⁹ But that description seemed to bring the Court no closer to a general test distinguishing ordinary regulations, whose costs would fall where they might, from those that went too far, for which the government must bear the costs.

Finally, in *Penn Central Transportation Co. v. City of New York*,³⁰ upholding the city's historic landmark law against a takings challenge, the Court provided something approaching a general test for regulatory takings. It listed two factors as having "particular significance"³¹ to regulatory takings claims: 1) the economic impact of the regulation, especially the extent to which it interfered with "distinct investment-backed expectations;"³² and 2) the "character of the governmental action," with regulations that approach physical invasions receiving more scrutiny than those that merely adjust the benefits and burdens of economic life.³³ Subsequent cases have separated the first factor into two distinct elements: economic impact and interference with investment-backed expectations.³⁴

Because it actually formulated a test for regulatory takings, *Penn Central* has been called "the most important regulatory takings opinion."³⁵ But it can hardly be said to have brought clarity to the doctrine. The Court has many times repeated the list of *Penn Central* factors, but has never refined the meaning of those factors, or explained how they should be weighted. Its decisions since *Penn Central* have sown nothing but confusion. The lack of investmentbacked expectations, for example, has been decisive in some cases³⁶

35. ROBERT MELTZ ET AL., THE TAKINGS ISSUE: CONSTITUTIONAL LIMITS ON LAND USE CONTROL AND ENVIRONMENTAL REGULATION 130 (1999).

^{27.} Id. at 413.

^{28. 364} U.S. 40 (1960).

^{29.} Id. at 49.

^{30. 438} U.S. 104 (1978).

^{31.} Id. at 124.

^{32.} Id.

^{33.} Id.

^{34.} See, e.g., Brown v. Legal Found. of Wash., 123 S. Ct. 1406, 1409 (2003); Palazzolo v. Rhode Island, 533 U.S. 606, 617 (2001); Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1071 (1992).

^{36.} Ruckelshaus v. Monsanto Co., 467 U.S. 986 (1984).

and irrelevant in others.³⁷ Litigants would be hard-pressed to distill from the cases any principles that explain the distinctions.

To make matters worse, two years after *Penn Central*, in *Agins* v. *City of Tiburon*,³⁸ the Court articulated a different, due-process based, standard that bears some similarities to the *Penn Central* factors,³⁹ but with an important difference. According to *Agins*, a regulation affecting property interests is a taking if it either does not substantially advance a legitimate state interest (a somewhat more intrusive standard than the ordinary test for whether regulation is within the government's power) or denies all economically viable use of property.⁴⁰ As if this were not enough confusion, in 1987 the Court upheld a statute virtually identical to the one in *Pennsylvania Coal* against a takings challenge, with little explanation and without overruling or even questioning *Pennsylvania Coal*.⁴¹ Faced with the Court's obscure pronouncements on regulatory takings, lower courts could surely be forgiven for throwing up their hands in despair.

In 1982, and again in 1992, the Court added another layer to takings analysis by introducing categorical rules that should, in principle, have simplified the analysis. First, in *Loretto v. Teleprompter Manhattan CATV Corp.*⁴² the Court held that "permanent physical occupation,"⁴³ no matter how small or economically insignificant, always requires compensation. Then in *Lucas v. South Carolina Coastal Council*,⁴⁴ it held that compensation is always required if a regulation denies all economically viable use, with the important exception of regulations that merely make clear existing "background principles" of state law. But rather than provide clarity, these *per se* takings rules have simply encouraged unproductive arguments about what constitutes physical "occupation"⁴⁵ and what "denominator" the plaintiff's loss should be measured against.⁴⁶

^{37.} Hodel v. Irving, 481 U.S. 704 (1987).

^{38. 447} U.S. 255 (1980).

^{39.} The *Agins* test was foreshadowed in *Penn Central* by the Court's reference to regulations promoting the public welfare. Penn Cent. Transp. v. City of New York, 438 U.S. 104, 109 (1978).

^{40.} Agins v. City of Tiburon, 447 U.S. 255, 260 (1980).

^{41.} Keystone Bituminous Coal Ass'n v. DeBenedictis, 480 U.S. 470 (1987). The distinction between *Keystone* and *Pennsylvania Coal* is discussed *infra* in Part V(B)(3).

^{42. 458} U.S. 419 (1982).

^{43.} Id. at 427.

^{44. 505} U.S. 1003 (1992).

^{45.} See Yee v. City of Escondido, 503 U.S. 519 (1992).

^{46.} See, e.g., Lucas, 505 U.S. at 1016 n.7; Dist. Intown Props, Ltd. v. Dist. of Columbia, 198 F.3d 874, 879 (D.C. Cir. 1999); Benjamin Allee, Drawing the Line in Regulatory Takings Law: How a Benefits Fraction Supports the Fee Simple Approach to the Denominator Problem, 70 FORDHAML. REV. 1957 (2002); Frank I. Michelman, Property, Utility, and Fairness: Comments

The Court's two most recent land-use regulation takings cases retreat from the quixotic search for *per se* rules, reemphasizing the ad hoc test developed in Penn Central.⁴⁷ In Palazzolo v. Rhode Island, the Court responded to a wave of cases from the lower courts on the importance of notice in the takings context. Palazzolo became the legal owner of some undeveloped coastal wetlands in 1978, when the company of which he was the sole shareholder had its corporate charter revoked for failure to pay income taxes.⁴⁸ By that time, Rhode Island had in place both legislation and implementing regulations sharply limiting allowable development on coastal wetlands.⁴⁹ When he was denied the right to develop, Palazzolo brought a takings claim.⁵⁰ The Rhode Island Supreme Court rejected that claim on the ground that Palazzolo, because he acquired the parcel after the state's wetland regulations went into effect, could not have had any investment-backed expectation that the property could be developed free of those regulations.⁵¹ Essentially it held, as many other courts had done,⁵² that those who acquire property after regulations are put in place are never entitled to compensation.

The U.S. Supreme Court rejected that conclusion, ruling that "[t]he State may not put so potent a Hobbesian stick into the Lockean bundle."53 Justice Kennedy wrote for the majority that while some prospective new rules may limit the value of land without requiring compensation, "other enactments are unreasonable and do not become less so by passage of time."54 Without providing any more guidance, the Court remanded with directions to conduct a *Penn Central* analysis.⁵⁵ That was a rather odd step, since presumably the Rhode Island court felt that it had already gone through the *Penn Central* factors. Because Palazzolo had no reasonable investment-backed expectations, the state court implicitly concluded that the economic impact of the regulation on him was not unfair. Since the regulation in no way authorized physical occupation of Palazzolo's property, Penn Central seems to call for precisely the result the state court came to, although that

53. Palazzolo v. Rhode Island, 533 U.S. 606, 627 (2001).

on the Ethical Foundations of "Just Compensation" Law, 80 HARV. L. REV. 1165, 1193-94 (1967).

^{47.} Tahoe, 535 U.S. at 302.

^{48.} Id. at 606-07.

^{49.} Id.

^{50.} *Id.* at 606.

^{51.} Palazzolo v. State ex rel. Tavares, 746 A.2d 707 (R.I. 2000).

^{52.} See infra note 192.

 $^{54. \} Id.$

^{55.} Id. at 632.

court could have been more explicit about its consideration of factors other than investment-backed expectations.

In the Supreme Court, the multitude of separate opinions in *Palazzolo* evidenced considerable disagreement about the application of the *Penn Central* test. Justice Scalia described notice of the regulation as simply irrelevant to the takings analysis,⁵⁶ while Justice Stevens would have agreed with the state court that notice precludes a takings claim.⁵⁷ Justices O'Connor and Breyer (each writing separately) argued that notice was a relevant but not determinative factor that must, in some unspecified fashion, be taken into account in the specific context of each dispute.⁵⁸

A year later, the Court issued another regulatory takings decision, Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency.⁵⁹ At issue in Tahoe-Sierra was a development moratorium that essentially prohibited any development on the plaintiffs' property for a period of nearly three years.⁶⁰ The moratorium was imposed to give the local planning agency time to plan for the rational distribution of the Lake Tahoe basin's limited capacity to absorb additional development.⁶¹ The District Court decided the moratorium was not a taking under the Penn Central test, but that it was a taking under the categorical Lucas test because it denied all economic use of the property, if only for a limited time.⁶² The property owners declined to appeal the Penn Central holding, but the Tahoe Regional Planning Agency appealed the Lucas ruling.⁶³ The Ninth Circuit reversed that ruling, holding that the moratorium was not a categorical taking,⁶⁴ and the Supreme Court affirmed.⁶⁵ As it had in *Palazzolo*, a majority of the Court emphasized the need for individual analysis of each case, and the limited applicability of the Court's *per se* takings rules.⁶⁶

Palazzolo and Tahoe-Sierra emphasize the continued importance of the *ad hoc Penn Central* test, but provide no more guidance about the application of that test than the Court's earlier decisions. We are left with the clear statement that in the most extreme cases

^{56.} Id. at 636-37 (Scalia, J., concurring).

^{57.} Id. at 637 (Stevens, J., dissenting).

^{58.} Id. at 633 (O'Connor, J., concurring); id. at 654-55 (Breyer, J., dissenting).

^{59. 535} U.S. 302 (2002).

^{60.} *Id.* at 306. Rehnquist, dissenting, interpreted the moratorium as being in effect for considerably longer than three years. *See id.* at 344-45 (Rehnquist, J., dissenting).

^{61.} Id. at 310.

^{62.} Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg'l Planning Agency, 992 F. Supp. 1218 (D. Nev. 1998).

^{63.} *Id*.

^{64.} *Id*.

^{65.} Tahoe-Sierra, 535 U.S. at 302.

^{66.} Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1015 (1992).

(permanent physical occupation and newly-declared rules denying all economic use) compensation is automatically required, but the vast majority of the cases must be evaluated individually to see if the burdens of regulation are fairly distributed. We have very little clue how the Court intends that analysis to be conducted.

III. CHANGE IS CENTRAL TO REGULATORY TAKINGS CLAIMS

Although the Court has implicitly recognized the importance of change to regulatory takings claims, its explicit discussion of those claims is quite static. In *Penn Central*, for example, the Court said that whether the regulation goes too far, requiring compensation, "may be narrowed to the question of the severity of the impact of the law on appellants' parcel."⁶⁷ Perhaps implicit in that characterization is the notion that the impact must be judged by comparing the world before and after the regulation, but the focus is more on the cost to the landowner than on the notion of change. Focusing more directly on the dynamic nature of regulatory takings claims, and indeed of regulation in general, should help develop a more principled regulatory takings jurisprudence.

Regulatory takings claims are all about change. They are obviously about distribution of the costs of regulatory transitions between landowners and society. At a more subtle level, they are also about both the practical ease and the moral acceptability of such transitions. Requiring compensation increases the barriers to change in two ways. First, it superimposes a budgetary check on existing political hurdles. Second, it suggests that property owners hold entitlements to act that government should not infringe. By reframing the debate, judicial declaration that compensation is required is likely to raise political, as well as budgetary, barriers to regulation.

Like all legal rules, property rules *must* be dynamic to some extent. Indeed, the rules governing real property must be more open to change than others. Land is the ultimate durable good; it cannot be created by human action,⁶⁸ and it is not destroyed by human action or the passage of time. But at the same time that land's durability increases the need for flexibility in the governing rules, it complicates transitions. In other contexts, transitions may be eased by applying new rules prospectively. But new property rules can never be wholly forward-looking. Although they can be

^{67. 438} U.S. 104, 136 (1978).

^{68.} Land's features can be greatly altered, but it cannot be newly created. Filling wetlands, for example, puts solid ground where it was not previously found, but it does not create new land. There already is land under wetlands, streams, and the oceans; it is simply covered with water.

applied only to new activities, they can never be limited to new land. It is always possible for a landowner to complain that new rules conflict with her long-standing plans for the land.

The Court should begin its analysis of regulatory takings claims with the premise that a particular type of change is absolutely essential to a viable claim.⁶⁹ For a regulatory taking to occur, there must be a change, brought about by the government, in the rules governing property. "Rules" in this context mean the principles of decision, not the factual circumstances that determine how those principles apply to a particular parcel of land.

The Supreme Court has long recognized the importance of change in regulatory takings cases, but only in a glancing, offhand kind of way. In *Pennsylvania Coal*, for example, it noted that government could hardly go on if compensation were required for every change in the general law, and described the issue for decision as "upon whom the loss of the changes desired should fall."⁷⁰ In *Lucas*, it made change an element of a "total taking" claim, noting that the government can, without paying compensation, assert a pre-existing limitation on property use that inheres in the owner's title through background principles of state law even if the effect is "confiscatory."⁷¹ That makes strong logical, as well as pragmatic, sense. The term "taking" implies the loss of something once held, which means a change in one's property rights. There can be no taking without change.

But the converse is not true; a change does not automatically imply a taking. Only certain types of change implicate the concerns that motivate regulatory takings doctrine. The problem to which the doctrine of regulatory takings responds is the unique power of the government to make and modify the rules under which property is held. Only when *regulatory change* goes too far should a regulatory taking be found. That means that the rate and extent of change, rather than the absolute level of regulatory intrusion, are determinative. Even Justice Scalia, who comes closest of the members of the current Court to proclaiming that land ownership implies some minimum level of development rights, implicitly recognized the importance of regulatory change in his *Lucas* opinion by providing an exemption from compensation where a regulation

^{69.} The Court has never held, and I am not persuaded, that some minimum level of recognition of property is guaranteed by the federal Constitution. In any case, that point is not important to my discussion here. As a matter of fact, government in the United States has recognized property rights to an extent surely sufficient to meet any minimum requirement. The issue now is whether and to what extent property rights previously recognized, implicitly or explicitly, can be constricted free of the obligation to compensate.

^{70. 260} U.S. 393, 416 (1922).

^{71. 505} U.S. at 1028-29.

merely makes explicit "background principles" of law.⁷² Law has always shaped property rights. That is not inherently problematic. What is problematic is a regulatory transition too drastic or abrupt to permit any response, or imposition of the costs of transition on only a subset of similarly situated landowners.

Only a change in applicable legal principles should support a regulatory taking claim. Mere application of existing principles, even vague ones such as the rules of nuisance, to new circumstances should not be enough. Broad principles serve an important changefacilitating function, allowing the law to make small adjustments to respond to new circumstances. By providing some notice of the potential for future application, such principles can encourage foresight and adaptability. The great virtue of notoriously vague nuisance law, for example, is its ability to respond to the new land use conflicts that have followed new technological developments since the industrial revolution.

A change in factual circumstances can bring serious economic loss, but generally will not invoke concerns about government oppression. Indeed, in most circumstances we want to encourage people to anticipate the changes in factual circumstances that will inevitably occur, so that society can respond nimbly to those changes. There is one conspicuous exception to this rule, tied to our special solicitousness for physical invasions. The legal principle of sovereign immunity, taken to the extreme, could allow the government to trespass with impunity. If the Takings Clause is to have any application to the forced expropriations it most clearly seeks to remedy, it cannot require a change in legal rules in that context. Where the government physically invades or expropriates property, therefore, it should be required to compensate where the facts permitting that invasion are peculiarly within its control.⁷³ In the regulatory taking context, however, a change in the facts should never be sufficient to require compensation. Since regulatory takings claims rest on abuse by the government of its regulatory power, a change in the legal rules under which property is held should be essential to making out such a claim.⁷⁴

^{72.} In *Lucas*, Scalia seemed to want to declare that some building must be permitted on all land, but felt constrained to acknowledge that background principles must be consulted. *See id.* at 1031 ("It seems unlikely that common-law principles would have prevented the erection of any habitable or productive improvements on petitioner's land; they rarely support prohibition of the "essential use" of land.").

^{73.} For a discussion of how this requirement would apply in practice, *see infra* text accompanying notes 133-52.

^{74.} Physical takings may be viewed as different in this respect. If the background legal rules include sovereign immunity, limiting takings claims to changes in the legal rules could potentially allow the government to trespass with impunity. Given the historic evidence that

IV. CALIBRATING REGULATORY CHANGE

Because compensation rules will inevitably affect the ease of legal transitions, regulatory takings doctrine should, to the extent possible, be calculated to encourage adaptive change at a tolerable pace. In practice, because society is far more likely to be overly change-averse than overly change-seeking, a narrow interpretation of compensation requirements for regulations will almost certainly be more adaptive than a broad one.

A. Impulsiveness, Inertia, and Plasticity

In a study of corporate management behavior,⁷⁵ David Hirshleifer and Ivo Welch provide a very useful taxonomy of openness to change. They call excessive resistance to change *inertia*, excessive willingness to change *impulsiveness*, and the happy medium of readiness to change as appropriate in response to new information or circumstances *plasticity*. In the regulatory context, both inertia and impulsiveness have significant costs. The doctrine of takings should therefore be calibrated, to the extent practicable, to push governments away from the extremes and toward adaptive plasticity.

1. The Problem of Impulsiveness

The perils of impulsiveness include unfairness, inefficiency, the imposition of unnecessary transition costs, and the psychological costs of disturbing settled expectations. Changing the rules after people have adjusted their conduct on the basis of those rules often seems unfair, because we generally think that people are entitled to, and indeed should, govern their behavior according to the existing rules. Transitions can seem especially unfair where the choices made in reliance on the old regulatory regime cannot be readily undone or modified, as in the case of retroactive criminal liability, or of extensive physical modification of land. Regulatory change also can raise concerns about opportunities for oppression of political minorities. Some commentators argue that there are structural reasons to expect such oppression in the land use context, because development decisions often give voter/residents the opportunity to transfer wealth to themselves at the expense of

the Takings Clause was intended to address actual physical invasions or seizures of property, we should not go that far. In the physical invasion context, a factual change, invasion of the property by the government, can be the trigger for a takings claim. In that context, the Takings Clause ensures a tort-type remedy against the government.

^{75.} David Hirshleifer and Ivo Welch, An Economic Approach to the Psychology of Change: Amnesia, Inertia, and Impulsiveness, 11 J. ECON. & MGMT. STRATEGY 379 (2002).

absentee landowners.⁷⁶ A related concern is that early developers, by blocking later development by others, may increase the scarcity value and accordingly the profitability of their own development.

Economic efficiency, as generally understood to mean the sum of preference satisfaction or welfare across society, can also be implicated by impulsiveness. One concern is that of "fiscal illusion":⁷⁷ that government will not take into account the societal costs of rule changes if those costs do not come out of its budget. Budgetary signals, of course, are not the only, or even the most powerful, signals to which political actors respond.⁷⁸ Some commentators believe that fiscal illusion, though, might indirectly reduce the political strength of opposition to regulation. According to Saul Levmore, the public choice model of political decisionmaking suggests that the prospect of increasing taxes to support new regulation will arouse political opposition that might not otherwise materialize.⁷⁹ Daniel Farber, however, interprets the public choice consequences differently, and to my mind more plausibly. Noting that a key insight of public choice theory is that "small groups with high stakes have a disproportionately great influence on the political process,"80 he suggests it is unlikely that the diffuse mass of taxpayers will mobilize more effectively against a government project than those who stand to lose their property without compensation.⁸¹ On this view, the opposition incited by the

^{76.} See, e.g., WILLIAM A. FISCHEL, REGULATORY TAKINGS: LAW, ECONOMICS, AND POLITICS 132-40 (1995).

^{77. &}quot;Fiscal illusion" is the term generally used to describe underweighting by regulators of costs they do not have to bear. *See* Lawrence Blume & Daniel L. Rubinfeld, *Compensation for Takings: An Economic Analysis*, 72 CAL. L. REV. 569, 620-22 (1984).

^{78.} Louis Kaplow describes the fiscal illusion argument as "deeply flawed" because neither the costs nor the benefits of government action are borne directly by regulators. Louis Kaplow, *An Economic Analysis of Legal Transitions*, 99 HARV. L. REV. 509, 568, 606 (1986). It is also worth noting that compensation creates its own economic inefficiencies. The government may face short-term budgetary constraints that prevent it from paying for regulations which would, in the long run, provide substantial net positive benefits. Glynn S. Lunney, Jr., *Takings, Efficiency, and Distributive Justice: A Response to Professor Dagan*, 99 MICH. L. REV. 157, 167 (2000). Raising tax money to pay compensation also leads to dead weight losses that increase the net costs of regulation to society. Barton H. Thompson, Jr., *People or Prairie Chickens: The Uncertain Search for Optimal Biodiversity*, 51 STAN. L. REV. 1127, 1181-82 (1999).

^{79.} Saul Levmore, *Changes, Anticipations, and Reparations*, 99 COLUM. L. REV. 1657, 1673 (1999). *See also* Pennell v. City of San Jose, 485 U.S. 1, 22 (Scalia, J., concurring) ("The politically attractive feature of regulation is not that it permits wealth transfers to be achieved that could not be achieved otherwise; but rather, that it permits them to be achieved 'off budget,' with relative invisibility and thus relative immunity from normal democratic processes.").

^{80.} Daniel A. Farber, *Public Choice and Just Compensation*, 9 CONST. COMMENT. 279, 289 (1992).

^{81.} See also Marc R. Poirier, Takings and Natural Hazards Policy: Public Choice on the Beachfront, 46 RUTGERS L. REV. 243, 247 (1993) (concluding that uncompensated prohibitions

direct impact of an uncompensated regulation will typically be far more important to the political calculus than the marginal political consequences of imposing the economic costs of regulation on taxpayers.

Another efficiency concern is the worry that an unstable regulatory climate will inhibit investment, particularly investment that takes a long period of time to mature.⁸² Instability may also encourage the wrong kind of investment, or investment at the wrong time. If property rights can be securely vested through development, for example, regulatory instability will tend to encourage inefficiently early development.⁸³ Of course, investors could account for predictable changes in the legal rules just as they factor in the predictable threat of natural disasters. It may be that regulatory change is less predictable, at least less formally or mathematically predictable, than earthquakes or hurricanes, although there appears to be little empirical support for this view.⁸⁴

Beyond these uncertainty concerns, as Michael Van Alstine points out, regulatory change by its very nature imposes some other costs on society.⁸⁵ These "transition costs," as Van Alstine terms them, include the costs of learning to understand the new rule, including the work individuals and organizations put into understanding it, the increased costs of professional advice as the professionals must continually update their expertise, and the efforts of courts and legal scholars to flesh out the new rule's content.⁸⁶ In addition, there is always a risk that the new rule will

on beachfront construction "protect the public from predictable, long-term interest group subsidies that cannot otherwise be prevented.").

^{82.} See, e.g., Michelman, supra note 46, at 1216-17 (arguing that predictability allows confidence in investment in capital projects); John O. McGinnis & Michael B. Rappaport, Symmetric Entrenchment: A Constitutional and Normative Theory, 89 VA. L. REV. 385, 432-33 (2003) ("The threat of a future taking would deter individuals from making the long-term investments that productive economic activity, especially in the modern world, requires."). 83. David A. Dana, Natural Preservation and the Race to Develop, 143 U. PA. L. REV. 655 (1995).

^{84.} In fact, there is a market in prediction of regulatory risks. The PRS Group, a consulting firm which claims to supply information to more than 80% of the world's largest companies, produces an International Country Risk Guide providing "financial, political, and economic risk ratings for 140 countries." The PRS Group, International Country Risk Guide, *available at* http://www.prsgroup.com/icrg/icrg.html, (last visited July 16, 2003). The Guide includes such indicators as "Risk of Expropriation," "Risk of Repudiation of Contracts by Governments," and "Corruption in Government." Philip Keefer & Stephen Knack, *Boondoggles and Expropriation: Rent-seeking and Policy Distortion When Property Rights are Insecure*, 14-15 (Oct. 11, 2002), *available at* http://econ.worldbank.org/files/20746_wps2910.pdf (last visited July 16, 2003). *Cf.* Kaplow, *supra* note 79, at 605 (concluding that arguments for takings compensation based on investment incentives "are highly suspect").

Michael P. Van Alstine, *The Costs of Legal Change*, 49 UCLA L. REV. 789 (2002).
 Id. at 816-45.

not in fact be an improvement on the old, and that society will eventually want to change back. That sort of "policy whiplash"⁸⁷ is surely both wasteful and disconcerting.⁸⁸

Finally, it has been argued that regulatory transitions carry special psychological costs. In his influential 1967 article, Frank Michelman contended that uncompensated regulatory changes impose "demoralization costs" in excess of natural disasters causing an equivalent loss, both because they are less predictable and because they appear purposive.⁸⁹ He argued that such transitions can demoralize not only the individuals or entities directly affected. but also others who empathize with those losses.⁹⁰ He suggested that demoralization costs must be taken into account in any efficiency calculation of the consequences of an uncompensated government taking of property.⁹¹ Others have questioned Michelman's inclusion of demoralization costs only on the property owner's side of the ledger. They point out that failure to regulate, or imposition of regulatory costs on taxpayers, may demoralize those whose expectations are violated by unregulated use of property, particularly where that use affects common resources.⁹²

As explained below,⁹³ there does indeed seem to be a special psychological cost associated with the loss of an entitlement. That does not solve the symmetry problem, however, because entitlements are frequently uncertain or contested. Society may believe it is entitled to the continued existence of an endangered species, for example, at the same time that an owner of land within the species' habitat believes she is entitled to develop her property, even at the expense of the species. But there may be another way to view "demoralization" that is asymmetric in the way that Michelman posits. As Carol Rose points out, regulatory transitions whose costs fall especially hard on a small class of persons can convey a message that those persons are not full members of

^{87.} Bryan G. Norton, Which Morals Matter? Freeing Moral Reasoning from Ideology (forthcoming 2003).

^{88.} How much drag correction of policy errors is likely to impose on society, of course, is very hard to determine or even estimate. People are likely to have very different views about that *a priori*, depending upon their level of optimism about new law. There is a great deal of literature focused on why law might be made badly, but Levmore suggests there are also plausible reasons to suppose that most new law improves on the old. *See* Levmore, *supra* note 81, at 1662. My own intuition is that truly adaptive, "good", law is not likely to be changed often, given the barriers to change detailed below. While a particular policy experiment may not work well, it may nonetheless provide information that will make the next attempt more likely to succeed.

^{89.} Michelman, supra note 46, at 1214-17.

^{90.} Id. at 1214.

^{91.} Id. at 1214-15.

^{92.} Poirier, *supra* note 3, at 182-83.

^{93.} See infra Part IV(B).

society.⁹⁴ That apparent exclusion no doubt brings with it a demoralization that the advocates of a new regulation, who are by definition the winners of a social battle, are not likely to experience whether or not the losers are compensated.

2. The Hazards of Inertia

Just as there are reasons to be concerned about impulsiveness, there are problems associated with inertia, which implies that the legal regime does not keep up with demands. A variety of factors, including new information, new technology, new circumstances, and new social mores may call for changes in regulation.⁹⁵ Because land is both peculiarly persistent and fundamentally limited, not being within human power to produce, the rules governing land ownership and use will inevitably need to change in response to such triggers. Inertia, which delays or prevents those changes, means that the law will not accurately reflect societal goals. That in turn will surely make achievement of those goals more elusive.

New information may reveal that activities once believed to be socially neutral or even beneficial have a harmful aspect. Wetlands destruction is an example. Throughout the early history of the country, wetlands filling was actively encouraged as a means of putting "waste" areas to beneficial agricultural use.⁹⁶ Within the last half-century, however, ecologists have taught us that wetlands provide a variety of valuable ecosystem services, including water filtration and flood control.⁹⁷

New technology can create the need for new regulations by greatly reducing the costs of activities that were once impractical, by creating new impacts on resources, or by creating new demands on resources.⁹⁸ Wetlands destruction once again illustrates the first

^{94.} Rose, supra note 9, at 27-29, 37.

^{95.} See Poirier, *supra* note 3, at 179 ("Technological shifts, shifts in mores or tastes, new socioeconomic situations, and new scientific information can *all* prompt regulatory readjustment of property rights.").

^{96.} NATIONAL RESEARCH COUNCIL, WETLANDS: CHARACTERISTICS AND BOUNDARIES 16 (1995).

^{97.} Fred P. Bosselman, *Limitations Inherent in the Title to Wetlands at Common Law*, 15 STAN. ENVTL. L.J., June 1996, at 247, 258-59 (1996); Katherine C. Ewel, *Water Quality Improvement by Wetlands*, in NATURE'S SERVICES: SOCIETAL DEPENDENCE ON NATURAL ECOSYSTEMS 329, 329-31 (Gretchen C. Daily, ed., 1997).

^{98.} Price and Duffy contend that technological change (and presumably any other shift that makes a change in law plausible) can also provide an excuse or front for judges, and perhaps legislatures, to push a pre-existing agenda. Monroe E. Price & John F. Duffy, *Technological Change and Doctrinal Persistence: Telecommunications Reform in Congress and the Court*, 97 COLUM. L. REV. 976 (1997). I do not doubt that claim, although I am skeptical of the long-term success of such "hidden agendas." I argue here only that there is a reasonably large class of cases in which changed circumstances of some kind actually do alter the effectiveness or appropriateness of existing legal rules.

possibility. For many years, the only practical means of making most wetlands dry enough to support construction were the addition of fill material to above the water table or the digging of drainage ditches. The equipment used to drain wetlands inevitably, albeit not intentionally, dumped substantial amounts of soil well away from the ditch. Under the circumstances, regulating the placement of fill in wetlands was sufficient to effectively prevent most wetland conversion. But the regulation of filling created economic pressure for the development of new technologies that would escape its coverage. In some places where land values are high, it is now apparently economically possible to create and use tightly sealed earth-moving equipment capable of digging drainage channels while minimizing the redeposit of dredged soil in the wetland.⁹⁹ That new technology may undermine the effectiveness of wetland protection unless its use is limited by the adoption of new regulations.

New impacts on resources are often a consequence of new technology, and eventually a motivation for new regulations. The development of chlorofluorocarbons (CFCs) as refrigerants, for example, led unexpectedly to destruction of the tropospheric ozone that shields the earth against ultraviolet radiation. Once that impact was recognized, CFC use was regulated.¹⁰⁰ Internal combustion engines and fossil-fuel-fired electricity plants have provided undoubted societal benefits, but have also drastically accelerated the anthropogenic production of carbon dioxide, leading to global warming.¹⁰¹ Although the federal government has not yet responded, a number of states are beginning to impose restrictions on carbon dioxide production as the undesirable effects of global warming become more apparent.¹⁰²

The new demands technology can create for resources that did not previously seem valuable are most clearly illustrated by the development of air flight. When people were tethered to the ground,

^{99.} See Clean Water Act Regulatory Programs, 58 Fed. Reg. 45,008, 45,016 (Aug. 25,1993) (describing developer's use of sophisticated machinery and techniques to drain hundreds of acres of ecologically valuable pocosin wetlands while evading the regulatory jurisdiction of the Corps of Engineers).

^{100.} T. Nicolaus Tideman, *Takings, Moral Evolution, and Justice*, 88 COLUM. L. REV. 1714, 1720-21 (1988).

^{101.} INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2001: THE SCIENTIFIC BASIS (2001); NATIONAL RESEARCH COUNCIL, CLIMATE CHANGE SCIENCE: AN ANALYSIS OF SOME KEY QUESTIONS (2001).

^{102.} See, e.g., John Dernbach et al., Moving the Climate Change Debate from Models to Proposed Legislation: Lessons from State Experience, 30 ENVTL. L. REP. 10933 (2000); BARRY G. RABE, GREENHOUSE & STATEHOUSE: THE EVOLVING STATE GOVERNMENT ROLE IN CLIMATE CHANGE (2002), (available at http://www.pewclimate.org); CAL. HEALTH & SAFETY CODE § 43018.5 (2003)(requiring state Air Resources Board to develop regulations to achieve the maximum feasible reduction of greenhouse gas emissions from passenger cars and light-duty trucks).

the sky was not a valuable resource. Not surprisingly, the common law routinely described land ownership as extending from the center of the earth to the sky.¹⁰³ That vivid depiction emphasized the security of ownership, and carried little cost. It served well as mining technology developed, providing a convenient means of distributing mineral rights. But once airplanes were invented, the sky became an important corridor for commerce, tied to the surface only at the points of take-off and landing, and requiring passage in between over any number of individual parcels. The rights of landowners to control that corridor were promptly reconsidered.¹⁰⁴

New circumstances, too, can alter the marginal costs and benefits of activities that society has not previously thought required regulation. Resource congestion, to use the economists' term, can cause a sharp increase in the costs of environmental modification, particularly where there are thresholds of irreversibility.¹⁰⁵ Destruction of a whooping crane roosting site in the course of land development, for example, would have been no great loss when the birds were plentiful. But by 1993, when the population in the wild was down to 160 birds,¹⁰⁶ a single lost roost could tip the species toward extinction. Similarly, the first few homes built along the shores of Lake Tahoe caused little impact on the lake, but as the amount of impervious surface surrounding the lake has increased, the marginal effects of additional homes on the lake's water quality have risen sharply. Accordingly, although it is often argued that it is unfair to deny latecomers the opportunity to build on the easy regulatory terms that were available to early developers.¹⁰⁷ in fact tighter regulation of later development may be

Id. at 261.

^{103.} See United States v. Causby, 328 U.S. 256, 260-61 (1946) ("It is ancient doctrine that at common law ownership of the land extended to the periphery of the universe — Cujus est solum ejus est usque ad coelum.").

^{104.}

But that doctrine has no place in the modern world. The air is a public highway, as Congress has declared. Were that not true, every transcontinental flight would subject the operator to countless trespass suits. Common sense revolts at the idea. To recognize such private claims to the airspace would clog these highways, seriously interfere with their control and development in the public interest, and transfer into private ownership that to which only the public has a just claim.

^{105.} Rose, *supra* note 9, at 16-18, notes that resource congestion can justify new regulation. Levmore discusses congestion in a more literal sense, noting that speed limits may have to be adjusted as the number of cars using a roadway increases. Levmore, *supra* note 79, at 1664.

^{106.} United States Fish & Wildlife Serv., Region 2, *Whooping Crane Recovery Plan iv* (1994), *available at* http://ecos.fws.gov/docs/recovery_plans/1994/940211.pdf.

^{107.} See, e.g., Richard A. Epstein, *The Ebbs and Flows in Takings Law: Reflections on the Lake Tahoe Case*, ALI-ABA Course of Study, Sept. 26-28, 2002, Inverse Condemnation and Related Government Liability (available on Westlaw as SH025 ALI-ABA 247, 268-69) ("[T]he

justified by the higher marginal costs that development imposes on the resource. $^{108}\,$

Changes in moral understanding can also affect society's view of the need for regulation. In the property context, the most striking example is the elimination of slavery.¹⁰⁹ In the environmental context, commentators beginning with Aldo Leopold have argued for a new moral understanding of our relationship with the land.¹¹⁰ At the moment, environmental ethics are at best contested, but if society ever did reach a consensus recognizing an obligation to preserve land health or ecological integrity, that consensus might well counsel additional regulation of land use.

Delay in transitions made necessary by changed understanding, goals, or circumstances, will be costly even if it is later corrected. Delay will permit investment that in the long run turns out to be socially undesirable. Requiring compensation for the value lost in that sort of investment when a transition occurs will exacerbate the problem, encouraging overinvestment in reliance on stable legal rules.¹¹¹

B. Status Quo Bias and the Dominance of Regulatory Inertia

In the real world, policy inertia is likely to dominate policy impulsiveness, and adaptive plasticity is likely to prove elusive. Experience suggests that it is extraordinarily difficult to change the law. Law and policy choices often seem to hang on long after their

law must insist on a consistent interpretation of the law of tort for early and latecomers alike . . . the same regime has to be applied going forward to early and latecomers."). 108.

Aside from securing owners' expectations, one fairness reason for this 'grandfathering' is that the early private uses may well not have damaged public resources, such as air, water, or wildlife, as much as the later uses of the same sort. In economic terms, the marginal costs of early uses may still be low — unlike latecomers' added uses, which have increasing marginal costs.

Carol M. Rose, A Dozen Propositions on Private Property, Public Rights, and the New Takings Legislation, 53 WASH. & LEE L. REV. 265, 285-86 n.78 (1996).

^{109.} Tideman, *supra* note 100, at 1720 ("Only 125 years ago, our laws incorporated the idea that it was possible for one human being to own another.").

^{110.} See ALDO LEOPOLD, A SAND COUNTY ALMANAC AND SKETCHES HERE AND THERE 224-25 (1949) ("A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."). Eric Freyfogle is a leader among more recent writers who have taken on the task of articulating how a Leopoldian ethic would alter societal understanding of the terms of landownership. See, e.g., Eric T. Freyfogle, Owning the Land: Four Contemporary Narratives, 13 J. LAND USE & ENVTL. L. 279, 298-300 (1998); Eric T. Freyfogle, The Construction of Ownership, 1996 U. ILL. L. REV. 173; Eric T. Freyfogle, The Owning and Taking of Sensitive Lands, 43 UCLA L. REV. 77 (1995); Eric T. Freyfogle, The Land Ethic and Pilgrim Leopold, 61 U. COLO. L. REV. 217 (1990).

^{111.} This is the familiar problem of moral hazard, explained in Blume & Rubinfeld, supra note 77, at 593.

original purpose has evaporated. Subsidies for crop production, agricultural water use and the like, for example, persist generations after agriculture has fallen from its status as an important national social institution or economic mainstay.¹¹² A perceived crisis or special alignment of the political stars is typically needed to overcome the barriers to legislative, or even regulatory, change.¹¹³

The apparent dominance of inertia should inform judicial interpretation of the Takings Clause, and indeed legislative treatment of compensation requests. We should worry more that the imposition of broad compensation obligations might stand as an additional barrier to adaptive change, than that narrow compensation requirements would make regulatory change too attractive.

Both cognitive psychology and political theory offer explanations for the resistance of law to change. Cognitive psychology tells us that, as a rule, people seek to limit change. Considerable evidence supports the existence of an "endowment effect" or "status quo bias." People prefer what they understand to be the status quo. So the traditional welfare economics assumption that people will be indifferent to whether they are buying or selling when they assign a value to a particular good or entitlement turns out not to be true

^{112.} The widely recognized barriers to legal reform explain why the failure to repeal or amend a statute is generally not taken to mean that the statute continues to enjoy broad political support:

Equating an absence of congressional repeal with an affirmative delegation ignores the fact that any repealing legislation must overcome procedural hurdles in Congress as well as a potential presidential veto. Thus, even though a majority of Congress may disagree with a broad interpretation of the Antiquities Act, they may not be able to amend the Act.

James R. Rasband, *Utah's Grand Staircase: The Right Path to Wilderness Preservation?* 70 U. COLO. L. REV. 483, 554 n. 311 (1999).

The complicated check on legislation erected by our Constitution creates an inertia that makes it impossible to assert with any degree of assurance that congressional failure to act represents (1) approval of the status quo, as opposed to (2) inability to agree upon how to alter the status quo, (3) unawareness of the status quo, (4) indifference to the status quo, or even (5) political cowardice. (internal quotations and citation omitted).

Johnson v. Transp. Agency, 480 U.S. 616, 671-72 (1987) (Scalia, J., dissenting)

^{113.} See, e.g., Cary Coglianese, Social Movements, Law, and Society: The Institutionalization of the Environmental Movement, 150 U. PA. L. REV. 85, 91 (2001) (attributing the politically powerful environmental movement of the late 1960s and 1970s to the grassroots response to perceived ecological disasters); David J. Hayes, Federal-State Decisionmaking on Water: Applying Lessons Learned, 32 ENVTL. L. REP. 11253 (2002) (contending that "a strong triggering event," i.e. a crisis, is one of the required elements for resolving water policy conflicts); J.B. Ruhl, The Fitness of Law: Using Complexity Theory to Describe the Evolution of Law and Society and Its Practical Meaning for Democracy, 49 VAND. L. REV. 1407, 1460-61 (1996) (describing the convergence of circumstances in the 1970s that produced environmental law's "statutory moment").

in many situations. In a classic experiment, half of a class of students were given university-logo coffee mugs available at the bookstore for \$6.¹¹⁴ When a market was set up, the median price demanded by students with mugs was \$5.25, while the median offer from those without mugs was no more than \$2.75.¹¹⁵ As that experiment suggests, the endowment effect can be remarkably strong; according to Chris Guthrie, the empirical evidence suggests that "losses generally loom at least twice as large as equivalent gains."¹¹⁶ The effect is not limited to goods, which is why it might be more accurately described as status quo bias. The preference expressed by electric utility customers for reliable service, for example, depends heavily on the reliability of their current service.¹¹⁷

The endowment effect is context-dependent, and the factors that affect it are not all well understood,¹¹⁸ but some generalizations are possible. The effect is strongest when it is difficult to compare the items being exchanged, such as when there is no market for the item or no apparent substitute for it.¹¹⁹ It is also enhanced when the owner thinks of the item as something held for use, not something she plans to exchange in a market.¹²⁰ A sense of entitlement, or of having earned the status quo, also increases the endowment effect.¹²¹ The effect does not seem to attach to expectations. The right to collect a commodity does not give as strong an effect as even brief possession of the commodity itself,¹²² and forgone gains are not the same as losses.¹²³

It seems reasonable to assume that these individual cognitive biases will affect public decisions. Although Guthrie reports that experimental evidence is mixed on whether groups show status quo

115. Id.

^{114.} Daniel Kahneman et al., *The Endowment Effect, Loss Aversion, and Status Quo Bias*, 5 J. ECON. PERSP. 193, 195-96 (1991).

^{116.} Chris Guthrie, *Prospect Theory, Risk Preference, and the Law*, 97 NW. U. L. REV. 1115, 1119 (2003).

^{117.} Kahneman et al., supra note 114, at 198.

^{118.} Russell Korobkin, *The Endowment Effect and Legal Analysis*, 97 Nw. U. L. REV. 1227, 1236 (2003). Of course, we must interpret the experimental data that supports the endowment effect in light of the important caveat that behavior in experiments may or may not actually predict behavior in the real world. Tanina Rostain, *Educating Homo Economicus: Cautionary Notes on the New Behavioral Law and Economics Movement*, 34 LAW & SOC'Y REV. 973, 985 (2000).

^{119.} Korobkin, supra note 118, at 1237-38.

^{120.} Id. at 1239.

^{121.} Jeffrey J. Rachlinski & Forest Jourden, *Remedies and the Psychology of Ownership*, 51 VAND. L. REV. 1541, 1557 (1998).

^{122.} Id. at 1558.

^{123.} David A. Dana, *A Behavioral Economic Defense of the Precautionary Principle*, 97 NW. U. L. REV. 1315, 1340-41 (2003).

bias,¹²⁴ political decisions are in many respects aggregated individual decisions rather than group decisions. Dana points out that individual cognitive biases will affect popular opinion and the intensity of interest group involvement, both of which are likely to have some influence on political outcomes.¹²⁵ Russell Korobkin argues that the endowment effect impedes policy change because those who benefit from the status quo will value it more, and therefore will fight harder to protect it, than those who would benefit from a change.¹²⁶

Through its framing effect, a judicial determination that the government must compensate for a regulatory transition is likely to exacerbate the already strong tendency of landowners to cling to what they see as the status quo. Such a determination amounts to confirmation that the landowner, not the public, holds the contested entitlement.¹²⁷

Political theory also suggests that the regulatory status quo will be difficult to change. The public choice literature suggests that focused groups who stand to gain substantially will have an advantage in the political process over larger, more diffuse groups who each stand to gain only a small amount.¹²⁸ Because it is institutionally easier to block change than to obtain it,¹²⁹ this advantage will be particularly powerful when that identifiable minority benefits from the status quo.¹³⁰

V. DEVELOPING A DYNAMIC REGULATORY TAKINGS DOCTRINE

Requiring compensation for the economic impacts of new regulation does not, of course, preclude new regulation.¹³¹ Demands

^{124.} Guthrie, *supra* note 116, at 1118.

^{125.} Dana, *supra* note 123, at 1330-31.

^{126.} Korobkin, *supra* note 118, at 1266.

^{127.} Cf. Russell Korobkin, The Status Quo Bias and Contract Default Rules, 83 CORNELL L. REV. 608 (1998) (demonstrating that the choice of contract default rules can affect application of the endowment effect); Jeffrey J. Rachlinski, Gains, Losses, and the Psychology of Litigation, 70 S. CAL. L. REV. 113 (1996) (noting framing effects on litigation behavior); Barton H. Thompson, Jr., Tragically Difficult: The Obstacles to Governing the Commons, 30 ENVTL. L. 241, 256-57 (2000) (explaining how framing effects complicate commons problems).

^{128.} MANCUR OLSON, THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS (1965); Farber, *supra* note 80, at 289. This effect might either result from or exacerbate the status quo bias described above.

^{129.} Elizabeth Garrett, *Is the Party Over? Courts and the Political Process*, 2002 SUP. CT. REV. 95, 136 ("Legislative procedures favor the status quo.").

^{130.} KAY LEHMAN SCHLOZMAN & JOHN T. TIERNEY, ORGANIZED INTERESTS AND AMERICAN DEMOCRACY 395-96 (1986).

^{131.} Although the Court has been less than clear about the distinction between takings and substantive due process, see Ronald J. Krotoszynski, Jr., *Expropriatory Intent: Defining the Proper Boundaries of Substantive Due Process and the Takings Clause*, 80 N. CAR. L. REV. 713 (2002), landowners have been uniformly unsuccessful in seeking injunctions, rather than

for compensation, however, are often thinly disguised efforts to prevent legal transitions. In evaluating those claims, courts should be aware of the possibility that compensation requirements may impede change, both as a result of budget constraints and because the implication that government has "gone too far" is itself likely to prove a political impediment.

Courts should also focus on those factors that will most strongly indicate whether imposition of the costs of legal transitions on landowners is justified. Those factors include the reasons for legal change, the extent to which change could have been anticipated, the time frame over which it has been implemented, and the generality of its application.

A. Require Claimants to Prove a Change in the Principles of Decision

As explained earlier, a change in the legal principles governing property ownership or use ought to be the sine qua non of a regulatory takings claim.¹³² The starting point for judicial analysis of any such claim should be clear identification of a legal transition. At least one of the Court's well-known takings decisions, Kaiser Aetna v. United States,¹³³ must be criticized on that ground. Kaiser Aetna involved a dispute about access to Kuapa Pond in Hawaii. The pond was physically separated from open coastal waters, but subject to tidal influence.¹³⁴ Kaiser Aetna developed the area of the pond with a marina and residences. In order to provide access to the marina, Kaiser Aetna then sought and obtained permission from the U.S. Army Corps of Engineers to dredge a boat channel connecting the pond to the Pacific Ocean.¹³⁵ Subsequently, a dispute arose over whether Kaiser Aetna could prevent public access to the pond, which the Corps asserted had become a navigable water of the United States subject to the federal navigation servitude.¹³⁶ The Court held, over the dissent of three justices, that although the pond was now subject to federal regulatory authority, it did not follow that Kaiser Aetna must open the pond to public access without compensation.¹³⁷

It does not appear that the legal rules applicable to the pond had changed. At a minimum, the majority failed to make a sound case

compensation, for regulations alleged to amount to unconstitutional takings.

^{132.} See supra text accompanying notes 72-74.

^{133. 444} U.S. 164 (1979).

^{134.} Id. at 166.

^{135.} Id. at 167.

^{136.} Id. at 168.

^{137.} Id. at 172-73.

for the occurrence of such change. Justice Rehnquist's opinion for the majority can be read to hold that Kuapa Pond was not subject to the federal navigation servitude because it was not navigable in its natural state.¹³⁸ The Court notes that the navigation servitude need not be considered coextensive with federal regulatory power,¹³⁹ which plainly extends to at least some artificial waterways.¹⁴⁰ Although Kuapa Pond in its current state is clearly within Congress' regulatory authority,¹⁴¹ "it does not follow that the pond is also subject to a public right of access."¹⁴² Buried in another paragraph is the suggestion that the navigation servitude applies only to waters that are navigable in fact in their natural condition.¹⁴³ Finally, among the factors described as contributing to the result is the non-navigable state of Kuapa Pond prior to Kaiser-Aetna's development:

> It is clear that prior to its improvement, Kuapa Pond was incapable of being used as a continuous highway for the purpose of navigation in interstate commerce. Its maximum depth at high tide was a mere two feet, it was separated from the adjacent bay and ocean by a natural barrier beach, and its principal commercial value was limited to fishing.¹⁴⁴

^{138.} The dissent so reads the majority opinion:

A more serious parting of the ways attends the question whether the navigational servitude extends to all 'navigable waterways of the United States,' however the latter may be established. The Court holds that it does not, at least where navigability is in whole or in part the work of private hands.

Id. at 184 (Blackmun, J., dissenting).

^{139.} It must be recognized that the concept of navigability [in past decisions relied upon by the United States] was used for purposes other than to delimit the boundaries of the navigational servitude: for example, to define the scope of Congress' regulatory authority under the Interstate Commerce Clause, to determine the extent of the authority of the Corps of Engineers under the Rivers and Harbors Appropriation Act of 1899, and to establish the limits of the jurisdiction of federal courts conferred by Art. III, § 2 of the United States Constitution over admiralty and maritime cases. (citations and footnotes omitted). *Id.* at 171-72.

^{140.} See id. at 172 n.7.

^{141.} Id. at 172.

^{142.} Id. at 173.

^{143.} Id. at 175 ("The navigational servitude is an expression of the notion that the determination whether a taking has occurred must take into consideration the important public interest in the flow of interstate waters that in their natural condition are in fact capable of supporting public navigation.") (emphasis added).

^{144.} *Id.* at 178. *See also id.* n.10 ("Kuapa Pond clearly was not navigable in fact in its natural state.").

But the opinion never explicitly denied that the navigation servitude applied, nor did it discuss the historic scope of the navigation servitude, or identify any limits on the extent to which that servitude encompasses a right of free public passage.

If the decision fundamentally rested on the conclusion that the navigation servitude does not apply to, or does not require public access to, waters navigable only as a result of human intervention, one would expect some discussion of the historic underpinnings of a principled basis for that conclusion. That discussion is nowhere to be found, nor is any citation to a distinction between naturally navigable waters and waters artificially connected to navigable waters.¹⁴⁵ Instead, the opinion focused on the relationship between the navigation servitude and the Takings Clause. Distinguishing this dispute from a line of cases holding that the government need not compensate for the value of water access when it condemns fast land,¹⁴⁶ the Court emphasized Kaiser Aetna's investment of "substantial amounts of money" in its improvements, ¹⁴⁷ the distant connection between navigation improvement and the public access right demanded,¹⁴⁸ and the fact that residents of the marina development were paying a fee to Kaiser Aetna for use of the pond.¹⁴⁹

In any case, the majority's undefended conclusion that the pond could not be subject to the navigation servitude because it was not, in its natural condition, navigable puts too much emphasis on a static view of property rights. The Court does not cite any prior decision limiting the reach of the servitude to naturally navigable waters. It is not at all clear, in other words, that the rules of decision, as opposed to the facts to which those rules were applied, had changed. The United States contended that its demand for access did not purport to alter the extent of the navigation servitude; it simply asserted that servitude once Kaiser Aetna had made its marina navigable. According to the Corps' view of the case, only the facts had changed, and at the request of the landowner, so no regulatory taking claim should have been possible.

^{145.} See Eric T. Freyfogle, Regulatory Takings, Methodically, 31 ENVTL. L. REP. 10313, 10319 (2001) (describing whether the navigation servitude attaches to waters made navigable through human agency "was an issue of first impression, deserving of more careful thought"). 146. See United States v. Rands, 389 U.S. 121 (1967); United States v. Virginia Elec. & Power Co., 365 U.S. 624 (1961); United States v. Twin City Power Co., 350 U.S. 222 (1956); United States v. Willow River Co., 324 U.S. 499 (1945).

^{147. 444} U.S. 164, 176 (1979).

^{148.} Id. at 178.

^{149.} Id. at 180.

The fact that *Kaiser Aetna* may be described as a physical, rather than a regulatory, takings case¹⁵⁰ does not alter this conclusion. The United States did not dredge an opening to the Bay, nor did it demand that Kaiser Aetna do so. It simply permitted Kaiser Aetna to dredge. The changed facts that led to the claimed right of public access, therefore, were entirely within the control of the property owner rather than of the government. It may seem unfair that the United States did not warn Kaiser Aetna that dredging would lead to a public access easement,¹⁵¹ but it is standard law that the landowner bears responsibility for researching the legal rules affecting his property.¹⁵²

The distinction between changing facts and changing legal principles supports the outcome in *Hadacheck v. Sebastian*,¹⁵³ a 1915 case upholding the uncompensated prohibition of the operation of a brickvard in an area of Los Angeles which had become residential. The brickyard owner had acquired the land in 1902, when it was outside the city,¹⁵⁴ and argued that at the time he did not expect the land to be annexed.¹⁵⁵ One might well be skeptical of that claim. Even in 1902 it was apparent that cities were growing, and a brickmaker who relied on that growth for business would be expected to be acutely aware of it. But the Supreme Court did not need to evaluate the subjective truth of the brickmaker's claimed expectation. The Court correctly held that the expectation, even assuming it was sincerely held, was not entitled to protection.¹⁵⁶ Landowners simply are not entitled to assume that social, economic, and physical conditions will not change around them, or that those changes will not put them on the wrong side of applicable legal principles. When Hadacheck acquired his land, the city held the legal power to prohibit noxious uses. His use produced external impacts, such as air pollution, from the outset. That he was allowed to maintain it while limited use of the surrounding lands kept the

^{150.} *See id.* at 180 ("Imposition of the navigational servitude in this context will result in an actual physical invasion of the privately owned marina.").

^{151.} See *id.* at 167 (noting the Corps made no comment when it permitted Kaiser Aetna to dredge, other than that deepening the channel might cause erosion to the beach).

^{152.} *See, e.g.*, Hill v. Town of Chester, 771 A.2d 559, 561 (N.H. 2001) ("[L]andowners are deemed to have constructive notice of the zoning restrictions applicable to their property."); Town of Lauderdale-by-the-Sea v. Meretsky, 773 So. 2d 1245 (Fla. 4th DCA 2000) (observing that because landowner was on constructive notice of ordinance requirement, town's ultra vires approval of construction of wall encroaching on public right-of-way does not estop town from requiring removal of wall).

^{153. 239} U.S. 394 (1915).

^{154.} Id. at 408.

^{155.} Id. at 405.

^{156.} *Id.* at 410 ("A vested interest cannot be asserted against [exercise of the police power] because of conditions once obtaining. To so hold would preclude development and fix a city forever in its primitive conditions.") (citation omitted).

costs of those externalities low did not give him a right either to continue it when intensified surrounding uses increased those costs or to insist that surrounding uses could not be allowed to intensify.¹⁵⁷

The need for a change in the governing legal principles also exposes the flaw in a recent federal district court opinion holding that adverse possession by the government could support a takings claim. The issue in *Pascoag Reservoir & Dam, L.L.C. v. State of Rhode Island*¹⁵⁸ was whether the state had acquired title to portions of a reservoir through its construction, and maintenance for the prescriptive period, of a boat ramp. After the state Supreme Court held that the state had met the requirements for adverse possession of the lake bottom beneath the boat ramp and acquisition of a prescriptive easement for lake access on behalf of the public,¹⁵⁹ the federal district court held that the reservoir owner had stated a claim for compensation under either *Loretto* or *Lucas.*¹⁶⁰

That holding is wrong because the legal rules remained stable throughout the reservoir dispute, and the changed facts that transferred title to the government were within the company's control. Anyone could have adversely possessed the property through precisely the actions the government took. The company was on notice that the law would deprive it of its property if it allowed another to dispossess it for a sufficient time. The company, therefore, lost nothing through government action; it never had the right to ignore its property yet retain its full property rights. The company's property rights did change, but only because of a change in the facts that can be wholly laid at the company's door. The company could have ended the government refused to surrender possession) at any time before the prescriptive period expired. Its failure to do so cannot give rise to a regulatory takings claim.

An important doctrinal point follows from the recognition that a change in the legal rules is an essential element of a regulatory takings claim. It should be the plaintiff's burden to establish that

^{157.} See Rose, supra note 108, at 282-83 (noting that Hadacheck "confirmed a commonplace from nineteenth-century property law: A private owner could commit what would otherwise be a public nuisance so long as the surrounding areas were lightly populated and relatively undisturbed, but public authorities could bar the use when the area became more heavily populated and when the public was actually inconvenienced by such private encroachments on public rights.").

^{158. 217} F. Supp. 206 (D. R.I. 2002).

^{159.} Reitsma v. Pascoag Reservoir & Dam, L.L.C., 774 A.2d 826 (R.I. 2001).

^{160. 217} F. Supp. at 221-22. Nonetheless, the court dismissed the claim for compensation on the grounds that the plaintiff had not brought suit within two years after the state had gained title by adverse possession. *Id.* at 226-28. The court also held the claim barred by laches. *Id.* at 228-29.

element, particularly since government actions are generally entitled to a presumption of validity,¹⁶¹ and regulatory takings are understood to be the rare exception.¹⁶² Placement of the burden of demonstrating change can determine the outcome where it is unclear whether the challenged regulation simply makes explicit existing background principles of state law. Consider, for example, Tulare Lake Basin Water Storage District v. United States.¹⁶³ In that case, the Court of Claims ruled that the United States had taken irrigators' water rights by ordering reduction of water deliveries from a state water project in order to protect endangered fish. The United States sought to interpose as a defense that the public trust doctrine, a background principle of state law, already required that water be withheld from irrigators if necessary to support the aquatic ecosystem.¹⁶⁴ But the court rejected that defense because the United States could not point to a judicial or administrative decision declaring that the public trust doctrine required the reduction of deliveries that was imposed in this situation.¹⁶⁵

Essentially, the court put the burden on the government to prove that the challenged regulation did not change state law, instead of requiring that the plaintiffs prove that it did. Indeed, the court apparently would not even consider any arguments on state law other than a determinative ruling by a state court or administrative agency. That stance puts the federal government in an untenable position in circumstances like those of *Tulare Lake*, because it may not have grounds for invoking the jurisdiction of a state court or agency, much less time to do so before imposing regulations to prevent environmental harm. It also creates undesirable incentives

^{161.} William v. Zbaraz, 442 U.S. 1309, 1312 (1979); Goldblatt v. Hempstead, 369 U.S. 590, 596 (1962); Davies Warehouse Co. v. Bowles, 321 U.S. 144, 153 (1944).

^{162.} See, e.g., Tahoe-Sierra, 535 U.S. at 324 ("Land-use regulations are ubiquitous and most of them impact property values in some tangential way — often in completely unanticipated ways. Treating them all as *per se* takings would transform government regulation into a luxury few governments could afford. By contrast, physical appropriations are relatively rare, easily identified, and usually represent a greater affront to individual property rights."); *Pennsylvania Coal*, 260 U.S. at 413 ("Government hardly could go on if to some extent values incident to property could not be diminished without paying for every such change in the general law."); *Penn Central*, 438 U.S. at 124 ("[T]his court has accordingly recognized, in a wide variety of contexts, that government may execute laws or programs that adversely affect recognized economic values."). Justice Rehnquist, dissenting in *Tahoe-Sierra*, sought to reverse the presumption that most regulations will not require compensation. *Tahoe-Sierra*, 535 U.S. at 354 (Rehnquist, J., dissenting) ("[A]s is the case with most governmental action that furthers the public interest, the Constitution requires that the costs and burdens be borne by the public at large, not by a few targeted citizens.").

^{163. 49} Fed. Cl. 313 (Ct. Claims, 2001).

^{164.} Id. at 321.

^{165.} Id. at 322.

for the state government, at least where the federal government has an obligation under the Endangered Species Act to limit actions harmful to listed species. The state may find itself in a position to gain the benefits of federal regulation (protection of species) while shifting the costs of regulation from its citizens to the federal government simply by refusing to affirmatively declare that state background law supports the regulation.¹⁶⁶

B. Alternative Set of Factors for the Court to Consider

I believe the *Penn Central* test has failed to bring coherence to the Court's regulatory takings jurisprudence because it does not capture the elements that control the fairness of imposing the costs of a regulatory transition on landowners. I suggest a test that more directly tracks the transition issue. That test would encompass four factors: 1) the justification for regulatory change; 2) the extent to which change was foreseeable in advance, and the ability of the landowner to adapt to that change; 3) the abruptness of the change; and 4) the generality of its application.

1. Justifications for change

The Court's cases show an enduring intuition that the legitimacy of the regulation is important to the resolution of takings cases.¹⁶⁷ That intuition has been a source of considerable confusion because it has led the court to awkwardly intermingle the questions of whether compensation is required (the takings issue) and whether the challenged regulation is valid (the substantive due process issue).¹⁶⁸ The intuition endures, however, because it has powerful

^{166.} *Cf.* Loveladies Harbor, Inc. v. United States, 28 F.3d 1171, 1182 (concluding that because state regulatory agency had issued a permit allowing development of wetlands to resolve a lawsuit, federal government could not argue that background principles of state law precluded takings liability).

^{167.} See, e.g., Hodel v. Irving, 481 U.S. 704, 716 (1987) (finding that statute limiting the ability to pass property to one's heirs constituted a taking requiring compensation in part because it applied even in circumstances where preventing transfer would not serve the government's asserted goal of consolidating property interests); Agins, 447 U.S. at 261 (finding no taking because the challenged ordinances "substantially advance legitimate governmental goals" and do not deny all economic use); Penn Central, 438 U.S. at 138 (upholding historic preservation law against takings challenge because "[t]he restrictions imposed are substantially related to the promotion of the general welfare" and permit reasonable use of the site).

^{168.} Eric Freyfogle has fallen into the same conceptual trap. He argues that an important factor in whether or not compensation should be required is whether a new regulation represents "a legitimate shift in ownership norms." Freyfogle, *supra* note 145, at 10314. I agree. I part company from Professor Freyfogle, however, with respect to the test he suggests for the legitimacy of a transition. He would ask the substantive due process question of whether the rule is "reasonably calculated to promote the public health, safety, or general

roots. It is linked to the fear of political oppression, as well as to the desire to fairly distribute societal burdens. A new regulation that appears irrational is more likely to have been enacted with improper motives, and it always seems unfair to impose substantial costs on an individual or group through regulations that produce little or no countervailing benefit for society.

I believe these concerns can be more effectively addressed by maintaining a clear separation between the takings and substantive due process doctrines. If a new regulation is truly irrational, it is simply invalid as a matter of due process. The Takings Clause should be reserved for concerns about distribution of the costs of change. For that purpose, the relevant question is whether the government can defend the *change* in legal principles, rather than the new regulation itself. Because transitions carry both economic and psychological costs, a showing that the new regulation falls within the government's power does not necessarily justify the transition. Courts can, and should, demand a rational explanation for the departure from prior law. If the government can show a rational connection between the change and new information about externalized harms, new technology that has made possible new activities or produced new impacts, or cumulative impacts that have increased the marginal costs of development, the transition should not require compensation. If, on the other hand, the government cannot provide an explanation for the change other than a desire to redistribute wealth, or if the government concedes that it is correcting a problem of its own making,¹⁶⁹ compensation will generally be appropriate.

Requiring that the government show a reason for the change or compensate affected landowners will not discourage adaptive regulation. It will provide an additional counterweight against impulsive, unnecessary legal change, but since there are already ample barriers to frivolous change it is unlikely that compensation will frequently be required on this basis.

welfare." *Id.* When the question is whether compensation is required or not, rather than whether government has the authority to impose the rule at all, the focus should instead be on the justification for change.

^{169.} An example is *Hodel*, 481 U.S. at 704, requiring compensation for the effects of the Indian Land Consolidation Act of 1983. The Act mandated the escheat to the tribe of small fractional interests in land on the death of tribal members. It was an attempt to solve the problem of extraordinarily fractionated interests in Indian lands, which had its origin in the federal policy of holding Indian lands in trust, preventing their alienation.

2. Foreseeability and the Ability to Adapt to Change

The Court was right to invoke expectations as an important factor in *Penn Central*, but should consider the reasons for protecting expectations, and the limits of that logic, more carefully. Expectations matter because they are what make change wrenching. The stronger and the more specific the expectations, the greater the psychological hurt when they are not fulfilled. Sometimes, too, expectations are the foundation for substantial investment, and change can cause the loss of that investment. But we should be leery of protecting expectations too strongly because people frequently, but mistakenly, expect the world to remain static. Excessive protection of expectations undermines development of the resilience and flexibility needed to accommodate and adapt to change.¹⁷⁰

The foreseeability of regulatory change at the time of investment is highly relevant to whether or not expectations merit protection. Requiring that property owners look ahead to potential changes, and take whatever steps are available to make their use of the property adaptable to future changes addresses the moral hazard problem. Foreseeability is to some extent captured in the Court's repeated description of those expectations that will be protected as "reasonable."¹⁷¹ Investment-backed expectations are not reasonable, and consequently should not be protected, if at the time of investment the property owner could have foreseen the future regulatory conflict or if the challenged regulation leaves sufficient opportunity to respond.

Regulations will sometimes be foreseeable because their arrival is preceded by a period of political ferment over the issue. In *Mugler v. Kansas*,¹⁷² the Court refused to require compensation when Kansas prohibited the manufacture and sale of alcoholic liquor, substantially diminishing the value of plaintiffs' breweries.¹⁷³ According to the facts recited by the Court, Mugler had constructed the brewery "several years" before the state went dry.¹⁷⁴ Because it resolved the case on other grounds, the Court did not delve more deeply into Mugler's expectations at the time he acquired the

^{170.} See Kaplow, supra note 78, at 615; Joseph L. Sax, Property Rights and the Economy of Nature: Understanding Lucas v. South Carolina Coastal Council, 45 STAN. L. REV. 1433, 1449-50 (1993).

^{171.} *See, e.g.*, Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg'l Planning Agency, 535 U.S. 302, 315 n.10 (listing as one of the *Penn Central* factors interference with "reasonable investment-backed expectations").

^{172. 123} U.S. 623 (1887).

^{173.} Id. at 664.

^{174.} Id. at 657.

property or constructed the brewery. If the brewery was only built a few years before the state prohibited liquor manufacture, at a time when there was an active prohibition campaign in the state, Mugler would have no complaint.¹⁷⁵

It may also be foreseeable that an existing principle, whether of common law or of statutory law, will be extended to cover new circumstances. *Lucas* amply illustrates this point. Lucas bought two shorefront lots on a South Carolina barrier island in 1986.¹⁷⁶ South Carolina had imposed limitations on beachfront construction in 1977, prohibiting the construction of homes in "critical areas."¹⁷⁷ That statute established the principle that residential construction would not be allowed on sensitive coastal areas. Although Lucas' lots were not formally included within the restricted zone until after his purchase, the area was "notoriously unstable,"¹⁷⁸ suggesting that Lucas could readily have foreseen extension of the building restriction to his lots.

A related consideration is the extent to which prior government action specifically contributed to the claimant's expectations. New regulations that reverse a prior explicit authorization of activity should be subject to greater scrutiny than those that simply fill gaps (or plug loopholes) in existing regulation. No compensation should be given when existing principles, even very broad ones, are determined in light of changed circumstances or conditions to encompass new activities.

The investment-backed expectations test as originally applied in *Penn Central* was well suited to distinguishing between expectations that deserve and do not deserve protection, although it was not much explained or analyzed in that case. The *Penn Central* opinion focused on the existing use of the property as a railroad terminal with offices, which the challenged regulation allowed to continue.¹⁷⁹ The Court emphasized the importance of the fact that Penn Central could obtain a reasonable return on its investment in the terminal.¹⁸⁰ It makes sense, both from the

177. *Id.* at 1037. 178. *Id.* at 1038.

^{175.} The Court in *Mugler* did not rely on foreseeability, instead holding that a simple prohibition on use of property for purposes declared to be injurious to public health, morals, or safety could not be deemed a taking. That statement may be too broad, but in most cases prohibition of a specific use, such as alcohol production, will leave the property owner a fair amount of room to respond to the regulation. Although Mugler alleged that his buildings would be of no value if they could not be used for brewing, skepticism of that claim is warranted. The machinery might have no other use, but it is highly unlikely that the buildings and land could not be put to any other use.

^{176.} Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1038 (1992) (Blackmun, J., dissenting). 177. *Id.* at 1037.

^{179. 438} U.S. 104, 136 (1978).

^{180.} Id.

psychological perspective and from the point of view of providing a stable environment conducive to productive investment, to protect sunk costs expended in reasonable reliance on existing legal rules and not adaptable to other uses. When it prohibits an existing use, therefore, the government should bear a stronger responsibility for justifying both the change and the placement of costs of the transition on the landowner.

Not all expectations merit protection through compensation. The government should not, for example, become a guarantor of expectations dependent upon the persistence of a particular state of facts. Circumstances of all kinds change frequently. Investors should be encouraged to foresee and respond to changed circumstances, lest the law exacerbate our very human tendency to shrink from change.¹⁸¹

Property owners' expectations that they will be allowed to change the development status quo in the future also merit little protection. Those who buy and sell undeveloped real estate are typically speculating that the value of that land will change with time. They are gambling on their ability to predict, better than others, future demand for and acceptability of development. But the government need not be solicitous of that speculation or the investment it brings about. Speculative markets are apparently not inhibited by regulations that currently prohibit development,¹⁸² perhaps because land speculators believe they have the political strength to bring about regulatory change or that social changes will inevitably lead to the relaxation of restrictions. Participants in these markets are (or should be) aware of the risks, and able to take them into account. They will get the benefits of changes in the facts or regulatory climate that enhance the value of their land, and they can be expected to take the loss if they are wrong in their predictions. The cognitive psychology work that suggests that expectations do not have the same psychological power as possession¹⁸³ also supports refusal to compensate for speculative investments.

Perhaps the strongest argument against compensation based on investment in the land itself, however, rather than in improvements, is made by Nicolaus Tideman. He points out that "[f]rom an economic perspective, the purchase of land or natural

^{181.} See supra text accompanying notes 152-57.

^{182.} See Florida Rock Indus., Inc., v. United States, 18 F.3d 1560, 1566 (Fed. Cir. 1994) (noting that the "active though speculative" investment market in land subject to wetlands regulations suggests that "long term market trends in real estate values are not necessarily correlated to Government controls").

^{183.} See supra text accompanying notes 122-23.

resources does not qualify as investment."¹⁸⁴ What he means by that is that land and other natural resources are not produced by human agency. We do not, therefore, need to encourage investment in land and natural resources in order to ensure their production.¹⁸⁵

3. Abruptness

In *Palazzolo*, Justice Kennedy wrote for the majority that some regulations "are unreasonable, and do not become less so with the passage of time."¹⁸⁶ That seems inarguable for substantive due process purposes. If there never was a rational reason for enacting a regulation, the passage of time may well never bring one. But for takings claims, which depend on the fairness of imposing transition costs on landowners, the passage of time should always work in favor of the government. As more time elapses between the enactment of a new regulation and the attempt to engage in the prohibited conduct, regulated entities will have had greater opportunities to adjust their expectations and plans for the land in order to respond to the new regulatory regime. They will also have had more opportunity to get a reasonable return on their investment. Finally, the psychological demoralizing effect of the regulation should also diminish; demoralization is likely to be strongly tied to the abruptness and unexpectedness of a government about-face. Enforcement of a regulation that is decades old may disappoint but it cannot shock.

The passage of time provides a principled explanation for the very different outcomes in *Keystone* and *Pennsylvania Coal*. On their face, the two cases are difficult to reconcile. *Pennsylvania Coal* required compensation for a Pennsylvania statute adopted in 1921 which forbade the mining of anthracite coal in such a way as to cause the subsidence of a home.¹⁸⁷ *Keystone*, by contrast, upheld a 1966 Pennsylvania law also prohibiting mining that caused subsidence damage to residences or certain other buildings.¹⁸⁸ In both cases, the companies had acquired or retained mineral estates

^{184.} Tideman, supra note 100, at 1726.

^{185.} I acknowledge that lack of compensation may induce premature development. Dana, *supra* note 83. I am not aware of, and Professor Dana does not cite, much data on the extent to which lack of compensation may drive early development. In many contexts existing institutional and practical barriers, such as requirements for installation of costly infrastructure will adequately discourage development. Where such barriers do not exist or prove inadequate, it may be desirable to provide financial incentives for conservation, even if it is not constitutionally required.

^{186. 533} U.S. 606, 627 (2001).

^{187. 260} U.S. 393, 412-13 (1922).

^{188. 480} U.S. 470, 506 (1987).

separate from surface estates, and obtained waivers of damage claims resulting from mineral removal.

Despite these similarities, timing provides a key distinction.¹⁸⁹ The *Keystone* statute was adopted more than forty years after the earlier law had provided notice that the legislature regarded subsidence as an important problem. Keystone did not challenge the law until 1982; apparently it was able to mine economically for a number of years in compliance with the statute.¹⁹⁰ The surface estates had been severed from 90% of the coal the company expected to mine by 1920.¹⁹¹ The law in *Pennsylvania Coal* came as more of a surprise. It was challenged immediately upon its passage, and shortly after the company had obtained waivers of surface damage claims. Clearly, Keystone had more opportunity to adapt to the challenged regulation than did Pennsylvania Coal. While sudden transitions may well warrant compensation, a transition accomplished over a period of more than half a century is unlikely to merit payment.

Passage of title is also relevant to the takings question. Prior to *Palazzolo*, courts had leaned heavily toward the view that acquisition of property after imposition of the challenged regulation precluded a takings claims.¹⁹² The Supreme Court had waffled on the question, describing notice of the challenged regulation as determinative against the claimant in *Ruckelshaus*¹⁹³ but as irrelevant in *Nollan*.¹⁹⁴

With respect to voluntary passage of title, I think the lower courts had it close to right. Voluntary acquisition in the face of the challenged rule should weigh strongly against a regulatory takings claimant, because the buyer has the opportunity to decide whether

193. 467 U.S. 986 (1984).

^{189.} The *Keystone* Court rather unconvincingly determined that the later statute, but not the former, addressed a significant threat to the public welfare and emphasized that Keystone, unlike Pennsylvania Coal, had not shown that the challenged statute would make their business unprofitable. *Id.* at 485.

^{190.} See id. at 478.

^{191.} Id.

^{192.} See Gregory M. Stein, Who Gets the Takings Claim? Changes in Land Use Law, Pre-Enactment Owners, and Post-Enactment Buyers, 61 OHIO ST. L.J. 89, 91 n.12 (2000) (collecting state cases). Lower federal courts had also leaned in this direction. See, e.g., Good v. United States, 189 F.3d 1355, 1360-61 (Fed. Cir. 1999) ("[T]he requirement of investment-backed expectations limits recovery to owners who can demonstrate that they bought their property in reliance on the non-existence of the challenged regulation . . . it is common sense that one who buys with knowledge of a restraint assumes the risk of economic loss."). Not all courts had adopted the notice rule. See Palm Beach Isle Assoc. v. United States, 231 F.3d 1354, 1364 (Fed. Cir. 2000) ("The existence of a regulatory regime does not per se preclude all investment-backed expectations for development."); James Burling, The Latest Take on Background Principles and the States' Law of Property After Lucas and Palazzolo, 24 U. HAW. L. REV. 497, 524-25 (2002).

^{194.} Nollan v. California Coastal Comm'n, 483 U.S. 825 (1987).

or not it can adapt to the regulation before taking over the property. The main argument made against using post-regulation acquisition to limit claims is that such a rule would prevent the pre-regulation property owner from transferring a property interest.¹⁹⁵ But that is simply wrong. Once a valid regulation is in place the property owner no longer has a property right to engage in the prohibited activity. If the regulation worked a taking, the property owner would have a legal claim for compensation, but not an interest in real property. There is no obvious reason why such claims must necessarily be transferable. Indeed, well-established practice in the condemnation context takes precisely the opposite approach, reserving the compensation claim to the seller when the property is transferred after the taking.¹⁹⁶

A stronger argument in favor of allowing transfer of regulatory takings claims is that those claims can be expensive and timeconsuming to ripen, since the property owner may have to submit multiple development proposals.¹⁹⁷ But those barriers do not justify a blanket rule that takings claims must always transfer with the property. Involuntary transfers, by which I mean those which occur due to circumstances beyond the control of the new owner, such as the death of a prior owner, should not affect the availability of a takings claim.¹⁹⁸ The new owner should stand in the shoes of the old. But takings claims should only survive voluntary transfers in limited situations, where the prior owner has taken at least some steps to ripen the claim and the claim is explicitly made a part of the transaction. Even that level of protection may not be needed; prospective new owners may be able to enter into option transactions, analogous to those commonly used when a zoning change is needed to permit development, under which they obtain the option to purchase at a specific price and the opportunity to pursue the takings claim on behalf of the seller prior to actual transfer.

^{195.} See Nollan, 483 U.S. at 834 n.2 ("So long as the Commission could not have deprived the prior owners of the easement without compensating them, the prior owners must be understood to have transferred their full property rights in conveying the lot."); Palazzolo v. R.I., 533 U.S. 606, 627 (2001) ("The State's rule would work a critical alteration to the nature of property, as the newly regulated landowner is stripped of the ability to transfer the interest which was possessed prior to the regulation.").

^{196.} See Stein, supra note 192, at 105 and n.51.

^{197.} Palazzolo, 533 U.S. at 627-28.

^{198.} I would not put *Palazzolo* in this class. Prior to 1978, the parcel was owned by a company of which Palazzolo was the sole shareholder. Palazzolo became the owner by operation of law when the company's charter was revoked for failure to pay its taxes. *Id.* at 614. As the sole shareholder, Palazzolo plainly could have prevented the transfer by seeing to it that the corporation paid its taxes.

Without these sorts of limitations, allowing takings claims to transfer with land could encourage both sharp practices and unnecessary litigation. A long-time rancher who has never wanted to do anything else with her property, for example, might be perfectly willing to accept a new regulation that prohibits residential development. She might even welcome that regulation, which could hold down her property taxes and help keep a viable ranching community in the area. When she subsequently sells the ranch, perhaps to be nearer to her grown children, she is likely to assume that the land will continue in ranching, and price it with that in mind. Allowing the buyer to bring a takings claim against the limits on residential development would give that buyer a windfall, and force the government to defend a regulation that was victimless when enacted. Denying the buyer a takings claim, on the other hand, would encourage transfer of the property to a buyer willing to use it as a ranch, at a price fair to both buyer and seller. In other words, a windfall would be avoided and transfer to persons willing and able to adapt the land use to current societal preferences would be encouraged. It is difficult to see that as a bad thing. If someone is willing to ranch on the land, society will not suffer. And if ranching is truly untenable, the political process almost certainly will eventually allow the property to be put to other uses.

4. Generality

Where there are opportunities for, and especially where there is evidence of, a political majority deliberately taking advantage of a helpless minority, courts should be especially solicitous of takings claims.¹⁹⁹ In my view those cases are likely to be the very rare exception. Political "outsiders", those who own land in a jurisdiction but do not vote there, look at first glance like easy targets.²⁰⁰ In some communities, under some circumstances, they may indeed be. But outsiders often are not powerless. Property ownership is strongly correlated with wealth, which in turn is correlated with political success. Although they cannot vote, outsiders typically can contribute money to campaigns. Furthermore, in many local jurisdictions funding is heavily dependent on property tax revenues, making potential development locally attractive even if the property owners are outsiders.

^{199.} *Cf.* William Michael Treanor, *The Original Understanding of the Takings Clause and the Political Process*, 95 COLUM. L. REV. 782, 784 (1995) (arguing that courts should require compensation for government regulations "only in those classes of cases in which process failure is particularly likely").

^{200.} See FISCHEL, supra note 76.

Since I believe that oppression of outsiders (or other groups of property owners) is not likely to be common, I would require some showing of at least the opportunity for oppression in any individual case before invoking increased judicial scrutiny.²⁰¹ The most important indicator of political dysfunction in a particular case is one the Court already considers in takings cases, although it has never made it an explicit element of the regulatory takings analysis: the generality (or lack thereof) of the new regulation.²⁰² If all similarly situated properties are treated alike, there will generally be little reason to worry about political oppression.

That may not always be the case, however, particularly if the class of similarly situated properties is small. In that context, courts should be willing to consider how accurately the specific winners and losers from a particular transition could be predicted at the time of regulatory enactment. More searching review is appropriate where only a minority will bear the regulatory burden²⁰³ and there is a significant departure from Rawlsian unpredictability about where costs will fall at the time a regulation is adopted. The Endangered Species Act (ESA),²⁰⁴ one of two federal environmental laws that have given rise to the loudest property rights complaints,²⁰⁵ fares surprisingly well on this test. When the ESA was adopted, it would have been very difficult to predict precisely who it would affect, when, and to what extent. It was unclear, for example, how often or under what circumstances restrictions on habitat modification would be required to protect species.²⁰⁶ number of species were already listed as endangered under earlier, largely non-regulatory federal legislation,²⁰⁷ but it was unclear what species might be listed in the future. Probably it was predictable, if anyone had thought about it, that endangered species would be

204. 16 U.S.C. §§ 1531-1544 (2003).

^{201.} Empirical data showing that outside landowners (or other identifiable groups of property owners) in fact typically are subjected to local discrimination might justify a different assignment of the burden of proof.

^{202.} *See, e.g.*, Penn Cent. Transp. Co. v. City of New York, 438 U.S. 104, 132 (1978) (noting that although historic preservation ordinance by its very nature applies only to selected parcels, it embodied a comprehensive plan to preserve historic structures wherever found). 203. When the burden is spread widely, as by general tax legislation, there is no reason to fear majoritarian oppression. *Cf.* Thompson, *supra* note 4, at 1288-89 (noting that standard tax legislation does not raise political discrimination concerns).

^{205.} The other is section 404 of the Clean Water Act, 33 U.S.C. §§ 1344 (2003).

^{206.} See Holly Doremus, *Delisting Endangered Species: An Aspirational Goal, Not a Realistic Expectation*, 30 ENVTL. L. REP. 10434, 10442-43 (2000) (describing legislative history as characterized by two very different strands, one focusing on the need for habitat protection, the other on what could be done by controlling hunting).

^{207.} That legislation included the Endangered Species Preservation Act of 1966, Pub. L. No. 89-669, 80 Stat. 926 (1966), and the Endangered Species Conservation Act, Pub. L. No. 91-135, 83 Stat. 275 (1969).

concentrated in regions with high biodiversity, such as California, Florida, and Hawaii,²⁰⁸ but it is unlikely that in 1973 anyone would have foreseen the endangered species problems that now face major urban areas such as San Diego²⁰⁹ and Seattle.²¹⁰ Today, the impacts of the ESA spread far beyond the public lands and undeveloped private lands that probably seemed the most likely targets of regulation in 1973, affecting such things as water supplies for farmers²¹¹ and cities,²¹² and the construction of infrastructure in urban areas.²¹³ The effects of the ESA are sufficiently widespread, and were sufficiently difficult to predict in 1973, that its enactment cannot be viewed as an act of majoritarian oppression.²¹⁴ Although only a minority of parcels turns out to be affected by the presence of a listed species, the identity of those parcels seems, at least to the extent that it depends simply on the presence or absence of a listed species, far more a function of nature's lottery than of political choice.

Before wholeheartedly endorsing the ESA, however, we need to consider a different type of concern. When a new regulation is actually implemented, there may be significant opportunities for discretionary choice among a number of potential "victims". This in part explains the heightened concern in physical taking cases. Paradigmatic physical takings cases occur when public improvements, such as roads or reservoirs, are needed. In many cases there are multiple possible sites for improvements, and a

^{208.} The distribution of listed species across the United States is far from uniform, but by 1995 some 2858 counties, ranging from coast to coast and including all the major metropolitan areas, were within the range of at least one endangered species. A.P. Dobson et al., *Geographic Distribution of Endangered Species in the United States*, 275 SCIENCE 550, 550-51 (1997).

^{209.} See Bradley C. Karkkainen, Adaptive Ecosystem Management and Regulatory Penalty Defaults: Toward a Bounded Pragmatism, 87 MINN. L. REV. 943, 973-74 (2003) (describing San Diego's gnatcatcher problem as the catalyst for increased use of the ESA's incidental take permit provision); Robert L. Fischman & Jaelith Hall-Rivera, A Lesson for Conservation from Pollution Control Law: Cooperative Federalism for Recovery Under the Endangered Species Act, 27 COLUM. J. ENVTL. L. 45, 94-109 (2002) (describing the efforts of San Diego County and other Southern California jurisdictions to protect the California gnatcatcher and other dwindling species).

^{210.} See Holly Doremus, *Water, Population Growth, and Endangered Species in the West*, 72 U. COLO. L. REV. 361 (2001); Fischman and Hall-Rivera, *supra* note 209, at 109-31 (detailing efforts to protect listed salmon in Puget Sound).

^{211.} See generally Holly Doremus & A. Dan Tarlock, Fish, Farms, and the Clash of Cultures in the Klamath Basin, 30 ECOL. L. Q. 279 (2003).

^{212.} See generally Doremus, supra note 210.

^{213.} See Fischman & Hall-Rivera, supra note 209, at 125-31.

^{214.} Perhaps we should expect that kind of ambiguity to be typical of legislation that imposes substantial regulatory burdens. It should be easier to pass legislation if its benefits are clear, allowing political support to build, but who will bear its burdens is unclear, defusing potential opposition. I do not find that kind of ambiguity troubling. In my view, it helps make needed change possible while at the same time reducing the dangers of majoritarian faction.

limited need. The selection of one particular site greatly reduces the possibility that others will be selected, now or in the future. Under those circumstances, if the selection process were genuinely random, people might agree in advance to take the risk that their property, or some of it, would be selected in order to gain the potential advantages of the improvements and the substantial chance that those improvements might come entirely at the expense of others. But of course the selection process is never random. It is political, and people are quite likely to fear that their property may be selected if they, for example, oppose a particular political candidate, take a public stand on a controversial issue, do not reside in the jurisdiction, are not wealthy, or are a member of a minority group. The requirement of compensation can, at least in theory, help provide assurances that selection decisions are made as dispassionately as possible.²¹⁵

Similar opportunities to select a small class of landowners to bear a large proportion of the burdens sometimes exist in the regulatory takings context. For example, in Hunziker v. State,²¹⁶ landowners sought compensation for regulations that precluded building on a lot that was found to contain a Native American burial mound. That in itself fits well with the lottery analysis above; it should be difficult to predict in advance which lands harbor ancient remains, so adoption of a prohibition on construction that would disturb burial mounds is unlikely to result from any form of political discrimination. The problem is that the state had not imposed an absolute prohibition. Instead, state law gave the state archaeologist authority to preclude development upon a determination that the remains in question had "state and national significance from an historical or scientific standpoint."217 Because the landowners did not challenge the state archaeologist's conclusion that the remains found on their land had such significance,²¹⁸ the court rejected their takings claim without any inquiry into that process. If the question were raised, the state should have been required to show that both the finding and the process used to reach it were not arbitrary. For example, written guidelines for evaluating significance, or a showing that all remains of a certain age had in practice been deemed significant, should be sufficient to satisfy a reviewing court.²¹⁹

^{215.} Of course, requiring compensation can also increase the importance of wealth in these choices, as governments seek the least valuable land to site their improvements.

^{216. 519} N.W.2d 367 (Iowa 1994).

^{217.} Id. at 370 (quoting Iowa Code section 263B.9).

^{218.} Id.

^{219.} Cf. Penn Cent. Trans. Co. v. City of New York, 438 U.S. 104, 132 (1978) (noting that New York City's historic preservation law "embodie[d] a comprehensive plan to preserve

There are many other situations in which implementation of regulations which are not facially problematic provides the opportunity to create winners and losers among the class of potentially affected landowners. Conspicuous examples include situations in which a limited amount of development is permitted, selected from a larger area. This is where the ESA becomes more problematic. As originally enacted, the ESA precluded any "taking", a term defined very broadly, of endangered species. That soon came to seem both unnecessary and unfair in light of the more generous provision applied to federal actions.²²⁰ Accordingly, in 1982 Congress added a provision that allows the Department of Interior to authorize incidental taking so long as it does not threaten the survival and recovery of the species.²²¹ In order to obtain a permit, applicants must produce a Habitat Conservation Plan (HCP) detailing the impacts of the taking and showing that those impacts will be minimized or mitigated to the maximum extent practicable.²²² The Department of Interior encourages permit applicants to develop regional HCPs covering large areas.²²³ Typically such HCPs allow development of some part of the planning area, while other parts are preserved as habitat for the protected species. As a practical matter, preserve lands typically are purchased, using funds raised through assessment of mitigation fees on developed lands, so the takings issue has not been litigated in this context. Compensation may well be constitutionally required, even if preserve lands retain some economic value, because of the unfairness of singling out a small fraction of the undeveloped land in the area for preservation.²²⁴

To avoid a duty to compensate in a selection situation, the government should be required to show that selection was made on

structures of historic or aesthetic interest wherever they might be found in the city," and that Penn Central had not suggested that identification of its building as a landmark was arbitrary or unprincipled).

^{220.} Endangered Species Act § 7, 16 U.S.C. § 1536 (2003), requires federal agencies to ensure that their actions do not jeopardize the continued existence of the species or destroy or adversely modify critical habitat, a standard that allows some taking as long as it does not significantly reduce the likelihood of survival and recovery of the species. *See* 50 C.F.R. 402.02 (2003) (defining "jeopardize the continued existence of" and "destruction or adverse modification" of critical habitat).

^{221.} Endangered Species Act § 10(a)(2), 16 U.S.C. § 1539(a)(2).

^{222. 16} U.S.C. § 1539(a)(2)(B)(ii).

^{223.} See U.S. Fish & Wildlife Serv. & National Marine Fisheries Serv., Habitat Conservation Handbook i (1995).

^{224.} Most HCPs call for preserve assembly through voluntary transactions. That is politically attractive because there is often considerable local resistance to the use of eminent domain. But where some lands have unique habitat value it may leave the landowner in a position to hold up the purchaser, or to prevent assembly of a viable preserve. It may therefore sometimes be necessary to employ eminent domain.

the basis of neutral criteria applied in a manner that provides protection against political pressures. In the HCP context, for example, a committee of scientists might be enlisted to identify the best habitat in the area for the listed species. At Lake Tahoe, the allowable increment of development is allocated among property owners by a numerical scoring system intended to reflect suitability for development.²²⁵ If the government cannot persuade a court that it had a legitimate neutral basis for singling out burdened properties, it should be required to pay compensation.

One recurring complaint about dissimilar treatment has to do with the use of grandfathering, that is, imposing a new land use restriction only prospectively.²²⁶ Grandfathering allows some landowners to maintain a use that others cannot begin. So, for example, in the HCP context, those who developed their land before 1973 were able to do so free of the restrictions of the ESA. Yet, their development may have directly killed members of a species that is now listed, as well as contributing to the cumulative habitat destruction that often leads to listing.

Consideration of the temporal dimensions of regulation can help us understand why grandfathering is not inherently problematic. Recall that regulatory transitions are justified by changes in circumstances or changes in information. Changed circumstances may mean that the marginal social costs of later development greatly exceed those of earlier development. That difference can amply justify tighter restrictions on later development.²²⁷ New information may mean that we now understand the impacts of development that seemed benign in the past. Recognition today that past development had costs that were not recognized at the time does not necessarily justify demanding reversal of that development. Developed and undeveloped properties are never similarly situated; the costs, both financial and psychological, of being required to end an established use greatly exceed those of not being allowed to undertake a new use. Furthermore, it may as a practical matter be impossible to reverse the physical and biological effects of development; removing structures does not automatically

^{225.} See Tahoe Regional Planning Agency, Individual Parcel Evaluation System, available at http://www.trpa.org/ipes/howitworks.html (describing the point system and its application); Jordan C. Kahn, Lake Tahoe Clarity and Takings Jurisprudence: The Supreme Court Advances Planning in Tahoe-Sierra, 26 ENVIRONS 33, 38-39 (2002). TRPA expects that the lowest scoring (most sensitive) lands will gradually be purchased through various government-funded programs, allowing development of less sensitive lands.

^{226.} *See, e.g.*, Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1031 (1992) (arguing that the fact that other landowners are permitted to continue a use will undermine the claim that the use was proscribed by background principles).

^{227.} See Rose, supra note 108 and accompanying text.

restore habitat. Grandfathering, therefore, does not necessarily raise suspicions of political oppression of latecomers by early developers. So long as modification that would impose new impacts, or reconstruction after a natural disaster, are not exempted, grandfathering is not a factor that should call for compensation of regulated landowners or even heightened judicial scrutiny.²²⁸

V. CONCLUSION

Regulatory takings doctrine need not be as incoherent or unprincipled as it currently appears. Bringing the focus of takings jurisprudence more clearly onto the key element of regulatory change distinguishes takings from due process, highlights the basis for some powerful, but heretofore largely unexplained, intuitions implicit in the Court's takings jurisprudence, and explains some of the current anomalies. Adopting that focus could lead the Court to a more principled, durable takings test, one that would better separate the situations in which landowners should be expected to anticipate and respond to change without government help from those in which it would be unfair to impose the costs of change entirely on landowners.

Regulatory transitions are inevitable over the long run, and often represent socially adaptive responses to changed circumstances or increased information. They are difficult to achieve, however, because substantial psychological and political barriers stand in the way. Compensation requirements should be narrowly drawn to avoid over deterrence of regulatory change. Courts should require takings claimants to prove that they have been the victims of a change in the principles governing use or ownership of their property, to avoid playing into the human tendencies to resist change and to read vague legal principles as inapplicable to one's own activities. Finally, when a change in the legal rules does occur, the decision as to whether or not compensation is required should take into account the justifications for the change; the extent to which it could have been foreseen; the ability of the landowner to take action, before or after the change, to reduce its impacts or respond to it; the pace of the change; and the extent to which its costs have been spread to all similarly situated landowners. These factors provide a better picture of the

^{228.} The statute limiting coastal development in *Lucas*, therefore, did not warrant increased judicial scrutiny. Although it did allow existing residences to remain in unstable areas where new ones could not be built, those existing homes could not be rebuilt if they were destroyed by a storm, nor could erosion control measures be repaired or extended, and at least some owners of developed land were required to nourish the beach to counteract the effects of their structures. *Lucas*, 505 U.S. at 1074 (Stevens, J., dissenting).

fairness of imposing transition costs on landowners than the *Penn Central* factors the Court currently applies.

I do not claim that the changes I have recommended will make takings decisions easy or formulaic, nor is that my goal. There clearly are tensions in our view of change; it has both positive and negative aspects, and striking the balance will always pose a challenge. But acknowledging that fair distribution of the costs of regulatory transitions is the fundamental problem of regulatory takings cases should inject greater discipline, and greater transparency, into what currently often appears to be unprincipled decision-making.

EQUITABLE APPORTIONMENT OF ECOSYSTEM SERVICES: NEW WATER LAW FOR A NEW WATER AGE

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I. INTRODUCTION

It has been said that "[w]ater litigation is a weed that flowers in the arid West."¹ Well, the seeds have blown east. The eastern states, blessed with bountiful rain and plentiful lakes and rivers, seemed immune to battles over what water was whose, though we have certainly had our share of controversy over water quality. As a consequence, the law of interstate water allocation has been shaped largely by the states of the American West.²

^{*} Matthews & Hawkins Professor of Property, The Florida State University College of Law, Tallahassee, Florida. This Article is an edited and annotated version of remarks I delivered at The FSU College of Law's forum on *The Future of the Appalachicola-Chattahoochee-Flint River System: Legal, Policy, and Scientific Issues*, held on November 5, 2003. The Article is not intended to present a comprehensive review of the interstate water dispute involving the river system, or of the conventional law of equitable apportionment that the U.S. Supreme Court has used to resolve interstate water allocation disputes in the past. Limited references to sources providing that background are provided *infra*. Rather, my purpose is to suggest that the greater understanding we have today of the role ecological processes play in delivering tremendous economic value to human populations demands that the law recognize these important ecosystem services as a critical factor in the interstate water apportionment calculus. The dispute regarding the Appalachicola-Chattahoochee-Flint River Sytem, described *infra*, presents the perfect opportunity to press that point. I owe special thanks to my colleague Dave Markell for organizing the forum, and to Dan Tarlock for his invaluable input on the content of the presentation.

^{1.} United States v. Orr Water Ditch Co., 256 F.3d 935, 940 (9th Cir. 2001).

^{2.} See Robert Haskell Abrams, Interstate Water Allocation: A Contemporary History for

Alas, our tranquility in the East has been rocked with increasing drought frequency and a vastly increasing population and its demand for more water. The water wars have moved east, and the question is whether the East will simply import interstate water allocation law as it has been shaped in the West, or will forge a new water law for a new water age. My purpose in these comments is to suggest that we try the latter, that we mold water law to meet the ecological realities of our great river systems.

II. EAST MEETS WEST IN APALACHICOLA

Ironically, Florida has become an epicenter of the eastern version of water wars. We have, for example, the ongoing effort to "re-plumb" the Everglades.³ And there is the recent controversy over whether to pipe water from northern Florida to our thirsty southern cities.⁴ But the real ground zero is the battle over the water in the Apalachicola-Chattahoochee-Flint river basin — the ACF.⁵

The ACF is a new kind of water battle in three ways. First, it is a classic interstate water allocation fight between urban, agricultural, and rural areas of several states, something the East simply has not seen in many decades, certainly not of this magnitude. Second, and here it is unlike even the western tradition, the battle is not simply over a split of water flowing in the basin, or maintaining minimum downstream base flows. Florida's interest is in maintaining ecological quality downstream of waterhungry Georgia and into Apalachicola Bay, and that will require maintaining an ecologically-based flow regime at the mouth of the Apalachicola River. This has not been the typical claim of a downstream state in such disputes. Finally, if this matter were to get in front of the Supreme Court, which seems likely, it would be the first major interstate apportionment case the Court has

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Eastern States, 25 U. ARK. LITTLE ROCK L. REV. 155, (2002) ("To date, with a few notable exceptions, the states of the American West have made the law" of interstate water allocation.).

^{3.} See John J. Fumero, *Florida Water Law and Environmental Water Supply for Everglades Restoration*, 18 J. LAND USE & ENVT'L L. 379, 386-89 (2003).

^{4.} See Bruce Ritchie, Is there a Water Crisis?, TALLAHASSEE DEMOCRAT, Oct. 29, 2003, at 1A.

^{5.} The ACF River Basin extends from north-central Georgia to Apalachicola on the Florida Panhandle, straddling the lower half of the Alabama-Georgia border. Directly to the west of the ACF is the Alabama-Coosa-Tallapoosa river network, known as the "ACT," which extends from northwest Georgia through Alabama to Mobile. For an excellent background on the origins and history of the water disputes between the states involved in these two river basins, see C. Grady Moore, *Water Wars: Interstate Water allocation in the Southeast*, 14 NAT RESOURCES & ENV'T 5, 6-10 (origins & history) (1999); Dustin S. Stephenson, *The Tri-State Compact: Falling Waters and Fading Opportunities*, 16 J. LAND USE & ENVT'L L. 83 (2000).

entertained in the age of mature environmental statutory law. It is not at all clear how thirty years of environmental awareness and regulation may have affected the Court's demeanor when it comes to interstate water allocation.

Hence, as another commentator recently observed, it is no exaggeration to say that the ACF represents a "new and complicated issue on the horizon of water law."⁶ So, with negotiations between the states having broken down, I thought it would be useful to examine the state of the river and the state of the law of the river—in particular, how the Supreme Court would approach this controversy were it to make its way to that forum, which seems a distinct possibility.

III. THE LAW OF THE RIVER (AND WHY THE ACF HAS NONE)

States have been getting into squabbles about water allocation for centuries, and generally there are three ways they can solve them, not counting pitched battle: (1) Congress, exercising its authority over interstate commerce, can legislate a division of water; or (2) the states can enter into a Compact agreeing to a division, which would have to receive congressional approval; or (3) the states can take their dispute to the U.S. Supreme Court, which may exercise its original jurisdiction over disputes between the states to arrive at an equitable apportionment of the water.⁷ For major western rivers such as the Colorado, the states along the river have resorted to all of these forums over the decades, and the combination of outcomes — which in the case of the Colorado makes up a dozen or so different agreements and court cases — is known as "The Law of the River."⁸

The Law of the River is distinct from the law each state uses internally for allocation of water rights. For that purpose, western states are associated with the Appropriative Rights system — which is based on first in time — though many of those states have evolved into more complicated systems of adjudicated and regulated rights.⁹ The eastern states generally began under the Riparian Rights system, which afforded land adjacent to water the right of

^{6.} See Grady, supra note 5, at 67.

^{7.} For an excellent, and still timely, summary of the law of interstate water allocation, see A. Dan Tarlock, *The Law of Equitable Apportionment Revisited, Updated, and Restated,* 56 U. COLO. L. REV. 381 (1985).

^{8.} For an excellent summary of the Law of the River concept in general, and for the Colorado River in particular, see Antonio Rossman, *A New Law and the "Era of Limits" on the Colorado*, 18 NAT. RESOURCES & ENV'T 3, 3-4 (2003).

^{9.} See Steven T. Miano and Michael E. Crane, *Eastern Water Law: Historical Perspectives and Emerging Trends*, 18 NAT. RESOURCES & ENV'T 14, 14 (2003) (summarizing western water law).

reasonable use. Like the western states, however, many eastern states have modified the traditional riparian rules with permit systems and other regulations.¹⁰

The two principal disputants in the ACF situation, Georgia and Florida, have well-defined bodies of state water law, though each is taking a careful look at possible changes to meet internal needs. But the ACF itself has for all practical purposes no defined Law of the River. Georgia has been doing its thing with its share of the ACF, and Florida the same. Of course, the U.S. Army Corps of Engineers is also in the picture in a big way. Since the 1940s the Corps has been implementing Congress' mandates to tame the Chattahoochee and Apalachicola Rivers for navigation purposes. But there simply is no Law of the River in the same sense that there is for many western rivers — no resolution of water rights between the states.¹¹

After several years of negotiation under a compact, which was basically a compact to negotiate,¹² the states failed to reach a consensus on the proper allocation. Georgia wanted to retain rights sufficient to serve its vast urban and agricultural demands in times of drought, whereas Florida demanded that ecological flow regimes be retained on behalf of Apalachicola Bay.¹³ It seems unlikely that Congress will come to the rescue through federal legislation, so that leaves the matter to the Supreme Court.¹⁴ Anticipating this state of affairs, I have been thinking about how the Court might approach this situation, given some of the new twists it presents.

IV. CONVENTIONAL INTERSTATE WATER ALLOCATION LAW

The Supreme Court's law of interstate water allocation goes back almost 100 years. The Court first announced that it had the

^{10.} See id. at 15-16 (summarizing eastern water law).

^{11.} This is not unusual for eastern rivers. There has been only a handful of Supreme Court water decisions in the East, most notably in the protracted dispute between New York and downstream states of the Delaware River Basin. *See* Tarlock, *supra* note 7, at 396-98. There have also been several significant interstate water compacts, most notably the Susquehanna Basin Compact (Maryland, New York, and Pennsylvania), the Great Lakes Basin Compact (Great Lakes states and Quebec and Ontario), and the Delaware River Basin Commission Compact (Delaware, New Jersey, New York, and Pennsylvania). *See* Miano & Crane, *supra* note 9, at 17-18.

^{12.} See Grady, supra note 5, at 7 ("The heart of the ACT and ACF compacts is the agreement to negotiate an equitable apportionment of the surface waters in each basin.").

^{13.} See Letter to Editor of Tallahassee Democrat from David Struhs, Secretary, Florida Department of Environmental Protection, *Unwilling to Accept Agreement that Relied on Minimum Flow*, TALLAHASSEE DEMOCRAT, Sept. 7, 2003, at 4E ("In the end, Florida was unwilling to accept an agreement that relied on the minimum flow").

^{14.} See id. ("Florida will pursue an equitable allocation formula in the U.S. Supreme Court.").

authority, under its original jurisdiction power, to apportion interstate streams in 1907, in a dispute between Kansas and Colorado over the Arkansas River.¹⁵ That case is important because the Court rejected Colorado's argument that its territorial sovereignty gave it the right to deplete the entire flow of the river.¹⁶ Since then the Court has laid down three important foundational principles about the rights of states respective to others, as recently summarized in the 1983 case of *Idaho v. Oregon:*¹⁷

- First, a state may not preserve solely for its own inhabitants the natural resources located within its borders.
- Second, no state has inherent priority, absolute or presumptive, over another state in the use of water from an interstate stream.
- Third, all states have the affirmative duty to take reasonable steps to conserve prospective water use, and even to augment water supply, as a condition to making a successful claim to a fair share of an interstate water.

The Court had foreshadowed these principles by its early willingness to develop a federal common law of interstate nuisance, premised on the principle that no state had the right to abuse its territory to the detriment of another state.¹⁸ It was only a short step to these principles, which extended the same idea to interstate waters. The upshot is that, just because Georgia is upstream of Florida, it has no inherent right to deplete the flow of water to Florida, or take priority over Florida in use of the ACF waters, or use interstate waters within its boundaries however it sees fit.

Now, while these principles may sound good for Florida's interests, there is more to it. First, the Court has set a high standard of injury as a prerequisite to seeking relief in the form of a claim to the right to more water from an interstate stream. The complaining state must show clear and convincing evidence of a substantial injury to its interests as a result of another state's use of the resource.¹⁹ Particularly in the East, where the Riparian Rights system dominates state water law, this burden places states interested in water conservation at a disadvantage to states interested in rapid development of water resources.²⁰ Florida, for example, is interested in leaving water in the ACF to promote

^{15.} Kansas v. Colorado, 206 U.S. 46 (1907).

^{16.} *Id*.

^{17. 462} U.S. 1017, 1020-27 (1983); see generally Tarlock, supra note 7, at 400-07.

^{18.} See, e.g., Georgia v. Tennessee Copper Co., 237 U.S. 474 (1907).

^{19.} See Missouri v. Illinois, 200 U.S. 496, 521 (1906).

^{20.} See Abrams, supra note 2, at 170-71.

ecological resources, while Georgia seeks ever more water for its urban and agricultural sectors. It is difficult for a state in Florida's position, under the conventional burden of proof, to pinpoint the nature and magnitude of injury needed to open the Court's door.

If that hurdle is passed, the Court applies a rather open-ended doctrine known as "equitable apportionment" to resolve the dispute. As summarized in *Nebraska v. Wyoming*,²¹ the factors that go into this mix include, but are not limited to:

- · Established rights under state water law
- Physical and climactic conditions
- Consumptive use patterns
- Character and rate of return flows
- Extent of established uses
- Availability of water storage
- · Practical effect of wasteful uses on downstream areas
- Damage to upstream areas as compared to benefits to downstream areas if the former are limited

In other words, equitable apportionment encompasses whatever seems relevant to a fair division of the resource between the states. This means equitable apportionment is a flexible doctrine, able to incorporate new knowledge not only about water demands and uses, but also about the ecology of water in general.²² The ACF presents just such an occasion.

V. INCORPORATING ECOLOGICAL REALITY INTO THE LAW OF INTERSTATE WATER ALLOCATION

Because of the way Florida has described its interests, focusing on maintaining natural flows rather than simply minimum base flows, the ACF situation presents some unusual factors for consideration under the doctrines of substantial injury and equitable apportionment.²³ Indeed, the ACF case presents an opportunity for the Court to update its law of interstate water allocation with a dose of ecological reality.

The ACF presents a novel situation for the substantial injury test. For the most part the Court's focus in determining the presence of injury is on economic injury. That would seem to favor

^{21. 325} U.S. 589, 618 (1945). See generally Tarlock, supra note 7, at 399-401.

^{22.} Tarlock describes the doctrine as having "considerable evolutionary potential." See Tarlock, supra note 7, at 384.

^{23.} See Grady, supra note 5, at 67 ("[T]he 'natural flow regime' approach to allocation proposed by Florida elevates environmental concerns to a new level in water quantity disputes.").

Georgia, which has monstrous Atlanta and its recreational playground, Lake Lanier, to offer versus the puny, by comparison, town of Apalachicola and its oyster industry.

But what of the ecological injury Georgia's unquenchable thirst poses downstream? It is well-demonstrated that the disruption of natural flow regimes on the ACF has disastrous effects on downstream fishery resources in the river and the bay, and could seriously alter riparian habitat regimes as well.²⁴ Surely Florida will want to press the case for this kind of injury in the Court.

Yet Florida need not stop there, for increasingly today we understand that ecological injury in fact *is* economic injury, because healthy functioning ecosystems provide immensely valuable services to human populations.²⁵ Indeed, recent work on the value of such ecosystem services suggests that the Apalachicola River and its floodplain basin are as or more economically valuable than the Lake Lanier based recreational economy. The natural flow regime supports huge values in Florida in the form of flood control, nutrient regulation, food for estuary fishes, and other important services. While a graduate student here at FSU, Greg Garrett estimated the economic value of those ecosystem services to be well over \$5 billion per year.²⁶

Indeed, although most of the Court's jurisprudence focuses on water, it has made clear that in interstate disputes all natural resources are subject to its original jurisdiction. Thus, in *Idaho v*. *Oregon*, the Court apportioned salmon runs in the Columbia-Snake River system between the two states, saying that "a dispute over the water flowing through the [river] system would be resolved by the equitable apportionment doctrine; we see no reason to accord different treatment to a controversy over a similar natural resource of that system."²⁷

Like fish flowing through the river system, ecosystem services do as well, delivering true economic value in many different ways

^{24.} See Bruce Ritchie, *Florida Willing to Take River Battle to Court*, TALLAHASSEE DEMOCRAT, Aug. 27, 2003, at 3B ("Constant minimum flows will hurt oysters in Apalachicola Bay, scientists say. Farther upstream, the minimum flows will prevent the river from flowing across the floodplain and into sloughs where fish feed and reproduce.").

^{25.} For a comprehensive background on the role and value of ecosystem services, see NATURE'S SERVICES: SOCIETAL DEPENDENCE ON NATURAL ECOSYSTEMS (Gretchen Daily ed. 1997).

^{26.} See Gregory W. Garrett, *The Economic Value of the Apalachicola River and Bay* (Jan. 6, 2003) (unpublished masters degree paper). Garrett used ecological economics principles forged by noted economist Robert Costanza, who made quite a splash in 1997 with his work on the value of global ecosystem services. See Robert Costanza et al., *The Value of the World's Ecosystem Services and Natural Capital*, 387 NATURE 253 (1997).

^{27. 462} U.S. at 1024.

and locations. Injury to those economically valuable resources ought, therefore, to count in the "substantial injury" analysis.

Likewise, once those ecosystem services are recognized for both their ecologic and economic values, the Court should focus its equitable apportionment doctrine on the apportionment of resources associated with those services, which in this case is the natural flow regime of the ACF River. In other words, it is not enough to protect a minimum base flow for Florida, as Georgia has emphasized; rather, the real medium of apportionment should be the flow regime itself.

The suggestions that the Court should take injury to ecosystem services into account for purposes of its substantial injury test, and should focus on ecosystem services in the apportionment phase of the case as well, are novel propositions, but they are the logical, incremental extensions of the Court's analysis in *Idaho v. Oregon*. The salmon and trout involved in that case were the resource of interest for Idaho — they moved within the river system and were, for all practical purposes, what made the water valuable to the state.

Ecosystem services, like the salmon, are economically valuable resources that flow within the water system of the ACF and any other river. Moreover, with each year we understand more about the nature and value of ecosystem services — to leave them out of the interstate water apportionment analysis would simply be to ignore the ecological and economic realities of river systems such as the ACF.

Why would the Court bother to engage in apportionment of interstate water, and of interstate fish, but not of interstate ecosystem services? What would be the point of leaving the latter out of the calculus? To be sure, water has value of its own in the consumptive sense — we drink it and use it for irrigation and other industrial applications. But water left in the river is also immensely valuable, not as a commodity but because of the ecosystem functions it performs. You can't have salmon without some water in the river. Wetlands aren't wet without water in the river. Riparian habitat isn't riparian if there is no water in the river. These are the ecosystem functions of water left in the river, and they provide valuable services which the Court could, and should, take into account in the water apportionment calculus.

Indeed, the Court did essentially that in 1931, in the pre-Clean Water Act case of *New Jersey v. New York*,²⁸ when it ruled that New York must provide the downstream Delaware Basin states with

^{28. 283} U.S. 336, 345-48.

sufficient minimum base flow in the river to dilute New York City's waste discharges. With today's greater understanding of the role and value of ecosystem services that instream water provides, such as not only waste dilution but nutrient and temperature regulation and riparian habitat support, the Court should be more than willing to move beyond the minimum base flow criterion to one embracing the natural flow regime.

In short, a river is about more than water, thus so too must the Court's doctrine of equitable apportionment extend beyond the mere question of water quantity. Justice O'Connor recently observed that the distinction between water quantity and water quality is "artificial."²⁹ To the extent anyone suggests the Court's equitable apportionment jurisprudence is about only water quantity, therefore, they too rely on an artificiality that must cede to ecological reality. The ACF may very well become the test case for that proposition, and potentially the dawn of a new era for the doctrine of equitable apportionment.

VI. THE "NEW" LAW OF THE LAW OF RIVERS

Any discussion of interstate water allocation in modern times would be remiss not to include consideration of the influence of public law on the river system, particularly laws regulating environmental quality and natural resource conservation. Regardless of what the Supreme Court does, the ACF also is likely to experience what has transpired in the great river systems of the West. Gradually, the "Old" Law of the River throughout rivers in the West is yielding to a "New" Law of the River. Most of the interstate compacts, congressional legislation, and Supreme Court cases fixing the Law of the River for western waters predate the age of mature environmental laws. What western states are finding is that the Law of the River, once thought to be settled, is no match for the law of the Endangered Species Act (ESA), the Clean Water Act (CWA), and other modern environmental laws. The Law of the River doesn't always work well under those statutes, and court after court has said it must yield to them. And this "New" Law of the River springs not from interstate compacts and Supreme Court decisions, but from federal administrative agencies, citizen suit litigation, and the lower federal courts.

^{29.} PUD No. 1 v. Washington Dep't of Ecology, 511 U.S. 700, 701 (1994) ("Petitioners' assertion that the [Clean Water] Act is only concerned with water quality, not quantity, makes an artificial distinction, since a sufficient lowering of quantity could destroy all of a river's designated uses, and since the Act recognizes that reduced stream flow can constitute water pollution.").

This is all very disconcerting to western states used to waging their water wars on familiar grounds and with familiar foes.³⁰ While time does not permit a full exploration of how laws such as the ESA and CWA could play out in the ACF, my hunch is that the situation will remain dynamic for some time to come. In other words, don't expect the Supreme Court to settle once and for all how the ACF gets divided up. An endangered mussel here or threatened fish there, and you get a whole different set of issues and players. Indeed, particularly under the conventional law of interstate water allocation, which favors states that rapidly develop water uses over states interested in conservation, states like Florida may find strategic use of ESA and CWA litigation effective in the short run for controlling their thirsty neighbors.³¹

VII. MERGING ECOLOGY AND ECONOMICS IN A NEW WATER LAW FOR A NEW WATER AGE

All of this talk about ecosystem services and the Endangered Species Act probably has economic development interests running for the hills. But they should instead be running with the concepts all the way to the bank. This case is about far more than a small struggling oyster fishery in a sleepy southern town. It is about Florida's largest flowing river, the lifeblood of one of the most biologically diverse estuaries in the nation, and Apalachicola Bay, a major playground of the Florida Panhandle. Every banker, resort operator, marina owner, restaurant proprietor, housing developer, fishing outfitter, boat retailer — basically, anyone who depends on there being an economy in the Florida Panhandle — ought to envision what his or her livelihood and lifestyle would be like were the Apalachicola to go the way of the Colorado River, which in many years fails to reach its historical delta.³² Sure, you may say, that'll never happen here. Are you so sure of that? Do you trust Atlanta politicians, Lake Lanier party boaters, and South Georgia farmers to make sure of it?

I hesitate to make this sound like a war between Georgia and Florida, but that's what an interstate water dispute is like. Just ask anyone in Arizona how they feel about California when it comes to

^{30.} See Rossman, supra note 8, at 4-5 (covering this phenomenon and its effect on water politics and law for the Colorado River).

^{31.} *See* Abrams, *supra* note 2, at 171-72. ("Resort to non-allocational devices related to water quality and instream flow requirements offer a . . . protective strategy for states that do not make present beneficial use of the water off stream.").

^{32.} For a comprehensive review of the Colorado River's ecological conditions and legal context, see A. Dan Tarlock, *The Recovery of the Colorado River Delta Ecosystem: A Role for International Law*?, COLO. J. INTL. ENVTL. L. & POL'Y 9 (2002).

water. This isn't just hardball, it's kickboxing. And the reality is that under the Supreme Court's conventional approaches to interstate water allocation, Florida loses. If it wants to prevail, Florida *must* urge the Court to consider the full import of the underappreciated ruling in *Idaho v. Oregon* to make its equitable apportionment jurisprudence align with the real reason we care about water — its ecosystem service values. This is, in other words, no eastern version of a western water case — it is about forging a whole new water law for a new water age.

DOWNZONING, FAIRNESS AND FARMLAND PROTECTION

JESSE J. RICHARDSON, JR.*

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I. INTRODUCTION

Communities across the country continue to embark on "smart growth" efforts.¹ Smart growth aims to direct growth to already urbanized areas or other areas where growth is desired, while discouraging growth on resource lands.² Farmland protection therefore is a key goal of smart growth efforts.³

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^{1.} James E. Holloway & Donald C. Guy, *Smart Growth and Limits on Government Powers: Effecting Nature, Markets and the Quality of Life Under the Takings and Other Provisions*, 9 DICK. J. ENVTL. L. & POLY 421, 445 (2001) (citing PLANNING COMMUNITIES FOR THE 21ST CENTURY 15-24, 87, 97 (Am. Plan. Ass'n ed., 1999)) (discussing legislation enacted by four states, executive orders issued by governors of four states and active smart growth proposals in five states during 1998-1999).

^{2.} Maryland's smart growth program is centered on these principles. *See* MD. CODE ANN. NATURAL RESOURCES §§ 5-9A (2001), et seq. (establishing the procedure to designate rural legacy areas to protect farmland and open space); MD. CODE ANN. STATE FIN. & PROC. §§ 5-7B (2001), et seq. (establishing the procedure to designate priority funding areas, areas already containing infrastructure for future growth, and to target these areas for future state appropriations encouraging growth).

^{3.} See, e.g., MD. CODE ANN. NATURAL RESOURCES §§ 5-9A (2001), et seq.; MD. CODE ANN. STATE FIN. & PROC. §§ 5-7B (2001), et seq.; Jesse J. Richardson, Jr., Does Smart Growth Protect Farmland and/or Open Space, Proceedings of the 2000 Continuing Legal Education

Many communities seek to implement their smart growth vision by, in part, "downzoning" rural land to prevent dense development and, presumably, encourage agricultural activities.⁴ "Downzoning" changes the zoning classification of land to a less intensive use.⁵ Downzoning changes the "density or standards previously allowed on property . . . to further restrict the use of property."⁶ For example, a change in classification from industrial or commercial to residential, or from residential to agricultural or conservation district amounts to a downzoning.⁷ Likewise, a reduction in allowed residential density from four (4) units per acre to one (1) unit per acre constitutes a downzoning.⁸

Property affected by downzoning usually experiences a decrease in value due to the loss of potential development. Downzoning appeals to local governments, in part, because it involves no direct expenditure of funds to compensate landowners for this loss in land value. This uncompensated decrease in property values increasingly results in controversy over the "fairness" of downzoning.⁹

Impacted landowners often feel that the use of downzoning to protect farmland is not "fair" since a relatively small number of landowners bear the financial burden of providing a public good: open space and/or farmland.¹⁰ Government officials, planners, and environmentalists contend that the downzoning is "fair."¹¹ They assert that governmental "givings," reciprocal benefits, and reasonable landowner expectations, all support downzoning without compensation.¹²

Political and legal considerations prompt many local and state governments to temper downzoning efforts by including compensation plans, such as transfer of development rights or purchase of development rights programs.¹³ Also, some downzoning proposals result in minimum lot sizes and/or development rights

Symposium of the American Agricultural Law Association (on file with author).

 $^{4.} See \, {\tt DANIEL\,R.\,MANDELKER,\,LAND\,USE\,LAW\,246} \, ({\tt Lexis\,Law\,Publishing,\,4th\,ed.\,1997\,\&\,Supp.\,2001}) (discussing standard tests for downzoning).$

^{5.} *Id*.

^{6.} Walter F. Witt, Jr., *Downzoning-Balancing Public and Private Interests*, PROBATE AND PROPERTY, Nov.-Dec. 1989, at 37.

^{7.} *Id*.

^{8.} *Id*.

^{9.} Mark W. Cordes, *Takings, Fairness, and Farmland Preservation*, 60 OHIO ST. L.J. 1033, 1069-70 (1999).

^{10.} *Id*.

^{11.} See id. at 1072-81.

^{12.} *Id*.

^{13.} Id. at 1049-50, 1071.

allocations that seek to both protect farmland AND allow "fair treatment" to the landowner. $^{\rm 14}$

Downzoning efforts that, at least in the eyes of some affected landowners, fail to provide adequate compensation for loss of development potential, are increasingly subject to legal attack. This paper first summarizes the six major potential legal challenges against downzoning to protect farmland: direct challenge of the act, "spot zoning," "takings," substantive due process, equal protection, and 42 U.S.C. § 1983. This paper concludes that each of these legal causes of action attempts, often awkwardly, to address the fundamental issue of "fairness."

In addition, this paper describes and refutes the major arguments posited by those supporting the fairness of downzoning without compensation to affected landowners. Courts consistently rule in ways that contradict these arguments and therefore the arguments have no basis in law.

Finally, this paper concludes that the awkward nature of the courts' intervention in these matters results from the inherent unfairness of downzoning without compensation along with the lack of an ideal legal cause of action to address the "fairness" issues. In their quest to address these issues, the courts have been unable, at this point, to formulate any clear rules.

II. LEGAL CHALLENGES TO DOWNZONINGS

A. Direct Challenge of the Act

In most states, courts treat rezonings "as legislative acts and accord them a presumption of validity."¹⁵ The challenger holds the burden of presenting *prima facie* evidence that the challenged rezoning is arbitrary and capricious.¹⁶ Once this burden is met, the burden of proof shifts to the municipality to show that the validity of the rezoning is "fairly debatable."¹⁷ "If the validity of the legislative classification for zoning purposes be fairly debatable, the legislative judgment must be allowed to control."¹⁸ In states that apply this rule, challenges to downzonings will rarely be successful.¹⁹ Almost any ordinance is fairly debatable.

^{14.} See, e.g., id. at 1048-50.

^{15.} JULIAN CONRAD JUERGENSMEYER & THOMAS E. ROBERTS, LAND USE PLANNING AND CONTROL LAW 188 (1998).

^{16.} *Id*.

^{17.} Id. (citing Village of Euclid v. Ambler Realty, 272 U.S. 365, 388 (1926)).

^{18.} Id. (quoting Village of Euclid, 272 U.S. at 388).

^{19.} Id. at 189.

Some state courts, however, appear to feel uncomfortable granting local governments such unrestrained power.²⁰ These courts have devised several methods to examine rezoning ordinances more closely.²¹ A number of courts go so far as to classify some "rezonings as quasi-judicial in nature [and] not entitled to a presumption of validity.²²

Some states, invoking the so-called "Maryland rule," require either fraud, a change of physical circumstances, or a mistake in the original zoning ordinance, for a rezoning.²³ Virginia, Maryland, New Mexico, and Mississippi appear to apply this rule, at least in some circumstances.²⁴ Some courts require much more proof than normally called for in meeting the requirement that the zoning be in accordance with the comprehensive plan.²⁵ Under these approaches, a direct challenge to the rezoning is much more likely to succeed than under the majority rule. However, each case must be analyzed on its own facts.

The Virginia Supreme Court struck down an ordinance that downzoned approximately 3,500 acres for the stated purpose of protecting agricultural land.²⁶ Virginia applies the Maryland Rule to piecemeal downzonings.²⁷ "The entire amount of the property downzoned represented no more than two percent of the City's land area."²⁸ The Court deemed the action a piecemeal downzoning and found that no fraud, mistake, or change in circumstances existed to justify the action.²⁹

B. Spot Zoning

"Spot zoning" encapsulates another cause of action that may be utilized by landowners aggrieved by a downzoning. Much confusion exists, even in the courts, as to what constitutes a spotzoning. The Texas Court of Appeals defined spot zoning as "descriptive of the process of singling out a small parcel of land for a use classification different and inconsistent with that of the surrounding area, for the

^{20.} Id.

^{21.} Id.

^{22.} Id. See, e.g., Fasano v. Bd. of County Comm'rs, 507 P.2d 23, 26 (Or. 1973).

^{23.} JUERGENSMEYER & ROBERTS, *supra* note 15, at 187-89 (noting the "change or mistake" rule); MANDELKER, *supra* note 4, at 241.

^{24.} See, e.g., City of Va. Beach v. Va. Land Inv. Ass'n, 389 S.E.2d 312, 314 (Va. 1990); Finney v. Halle, 216 A.2d 530, 536 (Md. 1966); Davis v. City of Albuquerque, 648 P.2d 777, 778-79 (N.M. 1982); City of New Albany v. Ray, 417 So. 2d 550, 552 (Miss. 1982). See also Info. Please, Inc. v. Bd. of County Comm'rs, 600 P.2d 86, 90-91 (Colo. Ct. App. 1979).

^{25.} JUERGENSMEYER & ROBERTS, *supra* note 15, at 189.

^{26.} City of Va. Beach, 389 S.E.2d at 314.

 $^{27. \} Id.$

^{28.} Id.

^{29.} Id.

benefit of the owner of such property and to the detriment of the rights of other property owners."³⁰ Factors used by courts to determine whether an unlawful spot zoning exists include the character of surrounding area, "whether conditions in the area have changed, the present use of the property, and the property's suitability for other uses."³¹ Courts also examine the degree to which the rezoning accords with the master plan.³² The basic inquiry examines whether the rezoning promotes the public good or advances private gain.³³ Although the spot zoning label usually applies to upzonings, it may also be used to challenge a downzoning.³⁴

The inquiry into whether a spot zoning exists involves fact specific analysis. In the downzoning to protect farmland analysis, however, the rezoning presumably advances the public good. However, downzoning of particular parcels also increases the value of the adjacent parcels, so it could be seen as an advancement of the private gain of the neighbors.³⁵

In addition, spot zoning addresses many of the same concerns that surround equal protection.³⁶ In essence, a plaintiff that advances a spot zoning cause of action claims that the rezoning arbitrarily favors a single or small number of landowners.³⁷

A charge of spot zoning against a downzoning to protect agricultural land, therefore, holds intuitive appeal. However, depending on the circumstances, such a challenge is not likely to succeed.

C. Takings

1. Takings Generally

When a downzoning of property results in a significant decrease in the value of the affected property, often the first response of landowners is to claim that a taking of private property for public purposes without just compensation has occurred.

^{30.} Burkett v. City of Texarkana, 500 S.W.2d 242, 244 (Tex. Civ. App. 1973) [citations omitted].

^{31.} JUERGENSMEYER & ROBERTS, *supra* note 15, at 194 (citing Little v. Winborn, 518 N.W.2d 384 (Iowa 1994)).

^{32.} Id. at 193-94.

^{33.} *See id.* at 194; *see also* MANDELKER, *supra* note 4, at 240 (discussing the public need and public purpose tests).

^{34.} JUERGENSMEYER & ROBERTS, supra note 15, at 192-93.

^{35.} *See, e.g., Neuzil v. City of Iowa City*, where the downzoning of plaintiff's property came at the insistence of, and derived to the private benefit of, the neighboring landowners. The Iowa Supreme Court rejected the plaintiff's argument that the downzoning constituted spot zoning. 451 N.W.2d 159, 167-68 (Iowa 1990) (Schultz, J., dissenting).

^{36.} See MANDELKER, supra note 4, at 237-38.

^{37.} Id.

The Fifth Amendment of the U.S. Constitution provides that "private property [shall not] be taken for public use, without just compensation."³⁸ The United States Supreme Court has fashioned a test to determine whether a government regulation exacts a taking of private property without just compensation.³⁹ An interpretation of the test delineated in *Lucas* follows:

A. Is the purpose of the regulatory action a legitimate state interest?

1. if yes, go to B.;

2. if no, a compensable taking has occurred.

B. Does the means used to achieve the objective substantially advance the intended state purpose?

- 1. if yes, go to C.;
- 2. if no, a compensable taking has occurred.

C. Does the alleged taking compel the property owner to suffer a physical invasion of his property (or the equivalent)?

1. if yes, a compensable taking has occurred;

2. if no, go to D.

D. "No economically viable use" test:

1. Does the alleged taking deny the property owner of all economically beneficial or productive use of the land?

- i. if yes, go to 2.;
- ii. if no, go to E.

2. Does the regulation simply make explicit what already inheres in the title itself, in the restrictions that the background principles of the state's laws of nuisance already imposed on the landowner?

i. if yes, go to E.;

ii. if no, a compensable taking has occurred.

E. Apply the *Penn Central* balancing test, balancing:

- 1. the economic impact of the regulation on the landowner;
- 2. the landowner's investment backed expectations; and,
- 3. the character of the government activity.⁴⁰

^{38.} U.S. CONST. amend. V, § 1.

^{39.} See Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1031-32 (1992).

^{40.} Jesse J. Richardson, Jr. & Theodore A. Feitshans, *Nuisance Revisited After Buchanan and Bormann*, 5 DRAKE J. AGRIC. L. 121, 131-32 (2000) [citations omitted].

Several law review articles have addressed the issue of whether a downzoning is likely to rise to the level of a regulatory taking of private property without just compensation.⁴¹ None of these commentators used the same framework for analyzing a regulatory takings claim as is presented here.⁴² However, their conclusion, that downzonings will rarely constitute a taking of private property for public purposes without just compensation, generally comports with the analysis presented here.⁴³

2. Application of the Takings Test to Downzonings

Application of the regulatory takings test set out herein generally yields the conventional wisdom that a downzoning rarely constitutes a taking of private property for public purposes without just compensation. However, recent state and federal court cases raise doubt as to continued validity of the conventional wisdom. The following discussion analyzes the likelihood of a landowner prevailing on a takings claim by considering, in turn, each of the "five factors of the *Lucas* test":

(a) Is the purpose of the regulatory action a legitimate state interest?

Courts accept protection of agricultural land as a legitimate state interest.⁴⁴ However, courts increasingly tend to subject local governments' claims of "public purpose" to heightened scrutiny.⁴⁵ While courts previously deferred to the stated intent of the local governments, they seem to find the stated intent to be merely pretextual in recent cases.⁴⁶

(b) Does the means used to achieve the objective substantially advance the intended state purpose?

Downzoning to protect agricultural land generally takes the form of large-lot zoning. Large-lot zoning often fails to protect

^{41.} See, e.g., Cordes, supra note 9, at 1033; John A. Humbach, Law and A New Land Ethic, 74 MINN. L. REV. 339 (1989).

^{42.} Cordes, supra note 9, at 1051-69; Humbach, supra note 41, at 351-60.

^{43.} Cordes, supra note 9, at 1069; Humbach, supra note 41, at 369-70.

^{44.} See, e.g., Agins v. Tiburon, 447 U.S. 255, 261-62 (1980) (extolling the legitimate governmental goals advanced by the protection of open space).

^{45.} See, e.g., Daniel R. Mandelker & A. Dan Tarlock, Shifting the Presumption of Constitutionality in Land-Use Law, 24 URB. LAW. 1 (1992).

^{46.} *See, e.g.,* Dews v. Town of Sunnyvale, 109 F. Supp. 2d 526, 572-73 (N.D. Tex. 2000) (rejecting as pretextual town's stated purposes for one-acre minimum lot sizes of water and sewer and "rural character" concerns and holding that the zoning was exclusionary).

agricultural land but instead, promotes sprawl and hobby farming. The opinion in *Scot Venture, Inc. v. Hayes Township*⁴⁷ provides the leading case to recognize this principle. The Michigan Court of Appeals struck down an ordinance requiring ten-acre minimum lot sizes.⁴⁸ The court found that the township's stated purpose, to protect farmland, was better characterized as an intent to exclude new residents from the area.⁴⁹

(c) Does the alleged taking compel the property owner to suffer a physical invasion of his property (or the equivalent)?

In a traditional sense, a downzoning of property does not constitute a physical invasion. However, based on the rationale of *Bormann v. Board of Supervisors of Kossuth County, Iowa,⁵⁰* one could advance a convincing argument that downzoning indeed constitutes a physical invasion. In *Bormann*, the Iowa Supreme Court held that one Iowa Right to Farm law constituted a taking of private property from the neighbor of the farmer for public purposes without just compensation.⁵¹

Iowa law provided that a farm or farm operation located in an agricultural area did not constitute a nuisance.⁵² This classification applied regardless of the established date of operation or date of expansion of the agricultural activities of the farm or farm operation.⁵³ This immunity from nuisance suits applied with few exceptions.⁵⁴

With this background, the Court in *Bormann* addressed whether the right to farm law at issue in that case constituted an unlawful "taking."⁵⁵ In applying the *Lucas* test, the Iowa Supreme Court declared that the right to maintain a nuisance suit is an easement.⁵⁶ "An easement is an interest in land which entitles the owner of the easement to *use* or enjoy land in the possession of another."⁵⁷ A right of way for ingress or egress is a common type of easement.⁵⁸

^{47. 537} N.W.2d 610 (Mich. Ct. App. 1995).

^{48.} Id. at 611-12.

^{49.} *Id.* at 611.

^{50. 584} N.W.2d 309, 315 (Iowa 1998), cert. denied, Gires v. Bormann, 525 U.S. 1172 (1999).

^{51.} Id. at 321.

^{52.} Id. at 314 (citing IOWA CODE § 352.11(1)(a)).

^{53.} Id.

^{54.} Id. (citing IOWA CODE § 35.11(1)(b)).

^{55.} Bormann, 584 N.W.2d at 315-22.

^{56.} Id. at 315-16 (citing Churchill v. Burlington Water Co., 62 N.W. 646, 647 (1895)).

^{57.} Id. at 316 (citing RESTATEMENT OF PROP.: SERVITUDES § 451 cmt. a at 2911-12 (1944)).

^{58.} ROBERT R. WRIGHT & MORTON GITELMAN, LAND USE: CASES AND MATERIALS, 159-60 (5th ed. 1997).

The Court found that the Board's approval of the application for an agricultural area triggered the provisions of the state statute affording the applicants immunity from nuisance suits:⁵⁹

> This immunity resulted in the Board's taking of easements in the neighbors' properties for the benefit of the applicants . . . This amounts to a taking of private property for public use without the payment of just compensation in violation of the Fifth Amendment to the Federal Constitution. This also amounts to a taking of private property for public use in violation of article 1, section 18 of the Iowa Constitution.⁶⁰

By taking this easement from the neighboring landowners, the actions of the Board essentially "physically invaded" the neighbors' property.⁶¹ The state now allowed the farmer to conduct activities that constitute a nuisance, where the farmer was not allowed to conduct these activities in the past. In other words, the Iowa Supreme Court reasoned that this law took one of the sticks (the right not to be subject to unreasonable interference with the reasonable use of your land) from the bundle of sticks representing the property rights of the farmer's neighbor.⁶²

Thus, the court reasoned, step C. of the takings test set out herein had been met.⁶³ This step constitutes a "categorical" taking, meaning that no further inquiry is necessary to determine whether the action amounts to a taking of private property for public purposes without just compensation.⁶⁴

One could analogize a downzoning to a forced conservation easement. In this case, the easement is the use of the affected landowner's property by neighbors for views. If the reasoning of the *Bormann* case holds, a downzoning could amount to a taking of private property for public purposes without just compensation.

^{59.} Bormann, 584 N.W. 2d at 315.

^{60.} *Id.* at 321. Note that the language of the Iowa Supreme Court's holding also implies that a taking could be found under the first prong of the *Lucas* test. Namely, if the easement was for the "benefit of the applicant," the governmental action appears to lack a proper purpose. The Iowa Supreme Court goes on to state that the action was for "public use," however, with no explanation. *Cf.* Boomer v. Atlantic Cement Co. Inc., 257 N.E.2d 870 (N.Y. 1970) (Jasen, J., dissenting) and Nat'l Land & Inv. Co. v. Bd. of Adjustment of Easttown, 215 A.2d 597 (Pa. 1965). See discussion under substantive due process *infra* pp. 14-18. A downzoning could similarly be found to be a taking of private property for *private* purposes.

^{61.} See Bormann, 584 N.W.2d at 321.

^{62.} See id.

^{63.} See id.

^{64.} See, e.g., Lucas v. S.C. Coastal Council, 505 U.S. 1003 (1992).

(d) "No economically viable use" test:

i. Does the alleged taking deny the property owner of all economically beneficial or productive use of the land?

Downzoning rarely, if ever, deprives a landowner of *all* economically viable uses of the property. In *Agins v. Tiburon*, Tiburon downzoned a large portion of the locality, including the Agins property, to limit residential development.⁶⁵ However, Agins retained a limited right to develop the property.⁶⁶ So long as some right of development exists, a court likely will not find a taking.⁶⁷ However, if development is prohibited, as was the case in *Lucas*, the property likely retains no economically viable use, particularly if the property cannot be economically farmed.

ii. Does the regulation simply make explicit what already inheres in the title itself, the restrictions that the background principles of the state's law of nuisance already impose on the landowner?

If the property has been stripped of any economically viable uses, the nuisance exception likely would not apply. As Justice Scalia not so subtlety hinted in the majority opinion in *Lucas*, "[i]t seems unlikely that common-law principles would have prevented the erection of any habitable or productive improvements on petitioner's land; they rarely support prohibition of the 'essential use' of land."⁶⁸

(e) Apply the *Penn Central* balancing test, ⁶⁹ balancing:

- the economic impact of the regulation on the landowner;
- the landowner's investment backed expectations; and,
- the character of the government activity.

The *Penn Central* balancing test is extremely objective. The result of such a balancing depends upon the facts of the particular case. However, a downzoning would rarely amount to a taking of

^{65. 447} U.S. 255, 257 (1980).

^{66.} *Id.* at 262.

^{67.} Id.

^{68.} Lucas, 505 U.S. at 1031.

^{69.} Penn Cent. Transp. Co. v. New York City, 438 U.S. 104, 124 (1978).

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private property for public purposes under the Penn Central balancing test.⁷⁰

D. Substantive Due Process

Amendment V of the U.S. Constitution provides, in part, that "[n]o person shall be... deprived of life, liberty, or property, without due process of law."⁷¹ Amendment XIV, Section 1 of the U.S. Constitution imposes this obligation of due process upon each state ("nor shall any State deprive any person of life, liberty, or property, without due process of law").⁷² Most, if not all, state constitutions provide similar protections. Although these due process clauses include procedural and substantive requirements, this article focuses only upon substantive due process.

Courts interpret substantive due process to mean that land use controls must advance legitimate governmental interests that serve the public health, safety, morals, and general welfare.⁷³ Stated differently, "[s]ubstantive due process requires that:

- 1. [t]here be a valid public purpose for the regulation;
- 2. [t]he means adopted to achieve that purpose be substantially related to it; [and,]
- 3. [t]he impact of the regulation upon the individual not be unduly harsh."⁷⁴

Whether land use regulation serves the general welfare forms the major substantive due process question. Substantive due process overlaps other constitutional limitations on land use regulations. In takings cases, a valid public purpose must also exist for the regulation.⁷⁵ Similarly, equal protection doctrine requires an appropriate public purpose.⁷⁶

In the past, substantive due process claims rarely succeeded. Recently, this cause of action appears to have experienced

^{70.} See also Cordes, supra note 9; Agins, 447 U.S. 255 (1980).

^{71.} U.S. CONST. amend. V.

^{72.} U.S. CONST. amend. XIV, § 1.

^{73.} Village of Euclid v. Amber Realty Co., 272 U.S. 365, 395 (1926).

^{74.} C. Timothy Lindstrom, *Planning Law Basics in Virginia*, LAND USE LAW IN VIRGINIA I-7 (Va. Law Found. 1999) (citing Goldblatt v. Town of Hempstead, 369 U.S. 590, 594-95 (1962)).

^{75.} See discussion on takings, *supra* notes 38-70.

^{76.} See discussion on equal protection, infra pp. 72-75.

somewhat of a resurgence. However, courts usually construe "public purpose" very broadly to include open space regulation and even aesthetic zoning in many instances.⁷⁷

"[W]hen courts characterize a local regulation as 'arbitrary and capricious" they may be saying that the ordinance violates substantive due process.⁷⁸ According to Lindstrom, this applies since the court reasons that "the arbitrary application of a regulation cannot be substantially related to accomplishing the stated objective of the regulation, no matter how valid that objective may be."⁷⁹

Scots Ventures, Inc. v. Hayes Township involved a landowner challenge to a ten-acre minimum lot size.⁸⁰ Hayes Township, Michigan maintained that the large lot zoning protected agricultural land and the rural character of the area.⁸¹ The court set forth the test for substantive due process claims against zoning ordinances in Michigan: "[f]irst, that there is no reasonable governmental interest being advanced by the present zoning classification itself . . . or secondly, that an ordinance may be unreasonable because of the purely arbitrary, capricious and unfounded exclusion of other types of legitimate land use from the area in question."⁸² The Michigan Court of Appeals held that refusal to rezone the property to allow five-acre minimum lot sizes, instead of ten acres as required under the ordinance, violated the plaintiff's substantive due process rights:⁸³

> Even assuming that [the] plaintiff's property is aptly considered farmland, the evidence suggests that the ten-acre minimum was arbitrary and capricious. While there was [also] testimony that a five-acre minimum lot size requirement would not be sufficient to preserve farmland, there was also testimony that the ten-acre minimum lot size requirement would likewise be insufficient. Given the deficiencies of

^{77.} See, e.g., Berman v. Parker, 348 U.S. 26, 33 (1954) (declaring that "[i]t is within the power of the legislature to determine that the community should be beautiful as well as healthy, spacious as well as clean, well-balanced as well as carefully patrolled. If those who govern the District of Columbia decide that the Nation's Capital should be beautiful as well as sanitary, there is nothing in the Fifth Amendment that stands in the way.").

^{78.} Lindstrom, supra note 74, at I-7.

^{79.} Id.

^{80. 537} N.W.2d 610 (Mich. Ct. App. 1995).

^{81.} Id. at 611.

^{82.} Id. (quoting Kropf v. Sterling Heights, 215 N.W.2d 179 (Mich. 1974)).

^{83.} Id. at 611-12.

both options, the imposition of the more burdensome ten-acre requirement is unreasonable.⁸⁴

The Court continued by questioning the motives of the township.⁸⁵ In the past, courts generally accepted the municipality's stated purpose at face value. The following passage from *Scots Ventures* represents a trend whereby courts subject the stated purpose of the ordinance to more stringent scrutiny.⁸⁶

This case presents a situation in which the township's interest in preserving 'farmland' can be more accurately characterized as an interest in preventing further development of an area that is already used for recreational and residential, rather than agricultural, purposes. The real motivations behind the facade of 'public health and welfare' appear to be aesthetics, retention of 'rural character,' and a desire to exclude new homeowners from the township. We believe that [the] plaintiff has met its burden of overcoming the presumption that the restriction on its property is valid and has established that the application of the ten-acre minimum lot size requirement to its property is unreasonable. Accordingly, we reverse.⁸⁷

A line of Pennsylvania cases also strike down several local agricultural zoning schemes as violations of substantive due process.⁸⁸ National Land and Investment Company shows early judicial skepticism regarding the motives of local governments in enacting zoning to protect farmland.⁸⁹ In the early 1960's, Easttown was subject to development pressure from Philadelphia and King of Prussia-Valley Forge.⁹⁰ In response to this pressure, and to insure proper sewage disposal, maintain adequate roads and fire protection, and to preserve the "character" of the area, Easttown

^{84.} Id. at 611.

^{85.} *Id.* at 612.

^{86.} See also Dews v. Town of Sunnyvale, 109 F. Supp. 2d 526 (N.D. Tex. 2000).

^{87.} Scots Ventures, Inc. v. Hayes Township, 537 N.W.2d 610, 612 (Mich. Ct. App. 1995). 88. Nat'l Land & Inv. Co. v. Kohn, 215 A.2d 597 (Pa. 1966); Kit-Mar Builders, Inc. v. Township of Concord, 268 A.2d 765 (Pa. 1970); Hopewell Township Bd. of Supervisors v. Golla, 452 A.2d 1337 (Pa. 1982). *But see* Boundary Drive Assocs. v. Shrewsbury Township Bd. of Supervisors, 491 A.2d 86 (Pa. 1985) (upholding a sliding-scale zoning plan that limited farms of any size consisting of prime farmland to two dwellings).

^{89.} See Nat'l Land & Inv. Co., 215 A.2d 597.

^{90.} Id. at 605.

adopted a four-acre minimum lot size over much of the jurisdiction.⁹¹ The court rejected the infrastructure arguments as pretextual and opined that the desire to keep the town the same, "is purely a matter of private desire which zoning regulations may not be employed to effectuate."⁹² In a statement that has been echoed in subsequent cases, and is likely to be repeated by future courts, the court held that "[a] zoning ordinance whose primary purpose is to prevent the entrance of newcomers in order to avoid future burdens, economic and otherwise, upon the administration of public services and facilities can not be held valid."⁹³ Employing a similar rationale, the Supreme Court of Pennsylvania, in *Kit-Mar Builders, Inc. v. Township of Concord,* held that an ordinance requiring lots no less than two acres along existing roads, and no less than three acres in the interior, violated the substantive due process rights of the landowner appellant.⁹⁴

The last case, in this line of cases invalidating zoning provisions under the due process clause, is *Hopewell Township Board of Supervisors v. Golla*, which involved an ordinance designed to protect farmland.⁹⁵ In summary, the ordinance allowed the landowner to either use a parcel in the agricultural zone as an undivided tract with no more than one single-family dwelling or subdivide up to five contiguous lots with a maximum lot size of one and one-half acres.⁹⁶ The court held that the ordinance failed to use a less restrictive means to further the legitimate goal of protecting agricultural land, and thus violated the substantive due process rights of the affected landowners.⁹⁷

E. Equal Protection

Amendment XIV of the U.S. Constitution provides, in part, that "no State shall . . .deny to any person within its jurisdiction the equal protection of the laws."⁹⁸ Equal protection means that the law should treat similarly situated persons similarly.⁹⁹ Most states have statutes that extend equal protection requirements specifically to

^{91.} Id. at 608-11.

^{92.} Id. at 611.

^{93.} Id. at 612.

^{94. 268} A.2d 765, 765-66 (Pa. 1970).

^{95. 452} A.2d 1337, 1338 (Pa. 1982).

^{96.} Id. at 1338-39 (The author refers to this zoning scheme as "sliding-scale zoning with no slide.").

^{97.} Id. at 1343-44.

^{98.} U.S. CONST. amend. XIV, § 1.

^{99.} City of Cleburne v. Cleburne Living Ctr., Inc., 473 U.S. 432, 439 (1985) (citing Plyler

v. Doe, 457 U.S. 202, 216 (1982)).

zoning regulations, requiring that such regulations be uniform for each class or kind of use throughout each zoning district.¹⁰⁰

Several recent landowner court victories have relied on the equal protection clause of the Fourteenth Amendment. The United States Supreme Court upheld a "class of one" claim in a landowner challenge to a zoning action that was alleged to have vindictive motives.¹⁰¹ Likewise, the Pennsylvania Supreme Court, in *Hopewell Township Board of Supervisors v. Golla*, held that, in addition to the violation of substantive due process, the ordinance at issue violated the equal protection clause.¹⁰² This violated equal protection by treating owners of large lots less favorably than owners of smaller lots.¹⁰³

F. 42 U.S.C. Section 1983

42 U.S.C. § 1983 provides:

Every person who, under color of any statute, ordinance, regulation, custom, or usage, of any State or Territory or the District of Columbia, subjects, or causes to be subjected, any citizen of the United States or other person within the jurisdiction thereof to the deprivation of any rights, privileges, or immunities secured by the Constitution and laws, shall be liable to the party injured in an action at law, suit in equity, or other proper proceeding for redress, except that in any action brought against a judicial officer for an act or omission taken in such officer's judicial capacity, injunctive relief shall not be granted unless a declaratory decree was violated or declaratory relief was unavailable. For the purposes of this section, any Act of Congress applicable exclusively to the District of Columbia shall be

^{100.} See, e.g., VA. CODE ANN. § 15.2-2282 that states "[a]ll zoning regulations shall be uniform for each class or kind of buildings and uses throughout each district, but the regulations in one district may differ from those in other districts." The provisions in most or all states are similar to Virginia's provisions. See also Chrinko v. South Brunswick Tp. Planning Bd., 187 A.2d 221, 225 (N.J. 1963) (finding that cluster or density zoning comports with New Jersey's uniformity requirement since the practice is not compulsory and is open to all landowners with that zoning district).

^{101.} Village of Willowbrook v. Olech, 528 U.S. 562, 564 (2000).

^{102.} Hopewell Township Bd. of Supervisors, 452 A.2d at 1343-44.

^{103.} *Id.* Note, however, that the Pennsylvania Supreme Court upheld an ordinance with a sliding-scale plan for some farms, but that limited farms of any size consisting of prime farmland to two dwellings in *Boundary Drive Associates v. Shrewsbury Township Board of Supervisors*, 491 A.2d 86, 92 (Pa. 1985).

considered to be a statute of the District of Columbia.¹⁰⁴

This statute was enacted to protect civil rights but has been applied in a broad range of circumstances. Section 1983 authorizes a lawsuit based upon violation of any constitutional right, including substantive due process and the takings clause. The United States Supreme Court has ruled that § 1983 protects as a "right," property rights.¹⁰⁵ A successful plaintiff under § 1983 can recover damages and attorney's fees.¹⁰⁶

Thomas v. City of West Haven illustrates a potential use of § 1983 in a land use context.¹⁰⁷ In that case, the Supreme Court of Connecticut held that landowners could file suit under § 1983 where a zoning change was denied because of the animosity of two zoning board members.¹⁰⁸ The two board members recused themselves from the actual vote.¹⁰⁹ The court found that they were motivated by personal dislike, not by animus based on race, sex, religion, etc.¹¹⁰ However, mistreating a property owner because of personal dislike violates the Fourteenth Amendment's Equal Protection Clause.¹¹¹

Note also that the United States Supreme Court has interpreted § 1983's "custom and usage" requirement to mean that local governments are liable only for actions that are "official policy" or "visited pursuant to governmental custom."¹¹² The Court did not explain these terms. However, *Thomas*, relying on cases subsequent to *Monell*, found that "[a]lthough the defendants are correct in their assertion that a single act does not necessarily become municipal policy... when an 'authorized decisionmaker has intentionally deprived a plaintiff of a federally protected right [this] necessarily establishes that the municipality acted culpably."¹¹³

A recent pronouncement in takings jurisprudence by the United States Supreme Court occurred in the context of a § 1983 case. In *City of Monterey v. Del Monte Dunes at Monterey*, a property owner brought a § 1983 action against the City of Monterey alleging that the City's repeated rejections of the owner's proposals for development of property had violated the owner's equal protection

^{104. 42} U.S.C. § 1983.

^{105.} Lynch v. Household Finance Corp., 405 U.S. 538, 552 (1972).

^{106. 42} U.S.C. § 1988(b).

^{107. 734} A.2d 535, 548-49 (Conn. 1999).

^{108.} Id. at 549.

^{109.} See id.

^{110.} Id. at 545-46.

^{111.} Id. at 548.

^{112.} Id. at 549 (citing Monell v. Dep't of Soc. Servs., 436 U.S. 658, 690 (1978)).

^{113.} Thomas, 734 A.2d at 551.

and due process rights, and had effected a regulatory taking.¹¹⁴ The jury returned a verdict for the landowner.¹¹⁵ On appeal, the Court held that the Seventh Amendment gives the right to a jury trial on a § 1983 claim.¹¹⁶ The Court further held that issues of whether the city's repeated rejections of development proposals deprived owner of all economically viable use of the land, and whether the city's decision to reject the development plan bore a reasonable relationship to its proffered justifications, were properly submitted to a jury.¹¹⁷

Given § 1983's provision for attorneys' fees and the availability of a jury trial, its use in land use actions will increase. This cause of action may be used to present many of the "fairness" claims discussed in this article.

III. IS DOWNZONING TO PROTECT FARMLAND "FAIR"?

A. Introduction

Although a particular ordinance that downzones property to protect farmland may (or may not) survive legally, political and other considerations dictate that the fairness issue be addressed. Many commentators maintain that downzoning to protect farmland is "fair." This section discusses the major arguments in favor of the fairness of downzoning and refutes each in turn.

B. Givings

1. Generally

"Before laws were made, there was no property; take away laws, and property ceases."¹¹⁸

One of the most often-cited arguments put forth in support of downzoning to protect farmland is that the landowners did not create the increases in their property values, and hence have no right to be compensated for downzonings or regulations that reduced the value of their property.¹¹⁹ In other words, much of the development value of farmland is attributable not to the work or ingenuity of the landowner, but to the infrastructure (i.e. roads,

^{114. 526} U.S. 687, 694 (1999).

^{115.} *Id*.

^{116.} Id. at 709.

^{117.} *Id.* at 694.

^{118.} JEREMY BENTHAM, THE THEORY OF LEGISLATION 69 (Richard Hidreth trans., A.S. Pandya 5th Ed. 1979) (1877).

^{119.} See, e.g., Cordes, supra note 9, at 1074; Arthur C. Nelson & James B. Duncan, Growth Management Principles and Practices (1995).

sewer, water, etc.) paid for by the general public through tax revenues. By restricting development potential through downzoning, the value of the land is simply being reduced to levels that it would otherwise be worth if government had not gratuitously provided this infrastructure. Critics of farmland protection efforts that provide compensation for development rights (like transfer of development rights or purchase of development rights programs) assert that if farmers are paid for the loss of their development rights, the public is in effect paying twice (also known as "double dipping"): once when they pay for the infrastructure that enhances farmland values, and a second time by buying the development rights.¹²⁰

The givings argument holds some intuitive appeal until the underlying premises are more critically examined. The development value of farmland undoubtedly results in part from infrastructure and other governmental expenditures financed by taxpayers (including the farmland owner). However, the givings argument fails for at least three reasons. First, all landowners receive givings, not just owners of undeveloped rural land. Second, the givings argument proves to be a slippery slope and results in no government action rising to the level of a taking. Finally, the law simply fails to recognize givings.

The first major flaw of the givings argument stems from its failure to account for the fact that all property owes part (or all) of its value to governmental expenditures for public services. Without roads, public water and sewer, police and fire protection, and other public services, land holds little or no value. Infrastructure improvements and services that increase the value of unimproved rural or suburban land also increase the value of residential housing and businesses located in the area. Both undeveloped farmland and single-family dwellings in residential subdivisions derive much, or all, of their value from publicly provided infrastructure and services. Moreover, the fair market value of residential dwellings includes the gracious gift of a mortgage interest deduction for federal income tax purposes. All landowners, therefore, receive givings.

This insight raises two equity issues. First, if government officials choose to "recapture" these givings from some landowners and allow other landowners to retain their givings, an obvious inequity results. Second, the very action of the government in recouping its givings from certain rural landowners results in another giving to landowners located in proximate areas of the community.

^{120.} See, e.g., Cordes, supra note 9, at 1074; NELSON & DUNCAN, supra note 119.

Development restrictions on farmland provide givings to nearby landowners in two ways. First, nearby property increases in value due to the dedicated scenic views provided by "protected" land. In addition, the supply of developable land is reduced. This shift in supply further raises the value of nearby building sites and houses.¹²¹

Thus, the labeling of the recovery of the loss of value in a downzoning through a takings claim or otherwise as "doubledipping"¹²² simply fails to recognize the underlying economic reality. All property owners are the beneficiaries of "givings" ("one dip"). If the government, via a downzoning or otherwise, "takes" this value back, the landowner now holds some fraction of his original full dip. If the government compensates the landowner for the loss in value, the affected landowner is merely placed back on the same level as other landowners in the community with one "dip" or "giving." In fact, since the downzoning amounts to a "giving" to nearby landowners, it is the those landowners that are true double dippers. The following example illustrates this concept:

EXAMPLE 1:

Frances Farmer owns a 300-acre parcel in Paradise The farm is valued at \$1.5 million for County. development purposes. Assume for the purposes of this example that the government "givings" included in the fair market value amount to \$700,000. Frances' neighbor, Hilda Homeowner, owns a singlefamily dwelling and one-half acre lot valued at \$200,000. Assume that government "givings" included in this value amount to \$90,000. Paradise County, in order to "preserve farmland" downzones Frances' farm, along with other farmland in the county. Frances' farm is now valued at \$1,000,000, including \$200,000 in government "givings" value. Hilda's home and lot are now valued at \$225,000, include \$115,000 in government givings.

If the local government compensates Frances for her loss in value, Frances now has a farm worth \$1,000,000 (including \$200,000 in government

^{121.} See WINDFALLS FOR WIPEOUTS: LAND VALUE CAPTURE AND COMPENSATION 86 (Donald G. Hagman & Dean J. Misczynski, eds., 1978).

^{122.} Cordes, *supra* note 9, at 1074 (citing Edward Thompson, Jr., *The Government Giveth*, ENVTL. F., Mar.-Apr. 1994, at 22).

"givings") and \$500,000 cash (less attorneys' fees and other costs of the dispute). She is merely put back to her prior position. Hilda, however, gains an additional \$25,000 in government "givings," while losing none of her prior-held "givings." She may pay slightly more in taxes, but has effectively "doubledipped."

This example shows that compensating farmers for losses in value attributable to downzoning may be efficient from a societal standpoint. If the sum of the additional government givings incorporated in the value of nearby properties, plus the general environmental benefits and other externalities, exceed the compensation to the farmer, the taxpayers receive more in benefits than the additional taxes paid. Alternatively, one could argue that the neighboring landowners should compensate the farmer for providing the additional giving, and that the community should compensate the farmer in the amount of the full value of the benefit. This alternative proposal, while providing a windfall to the farmer, is more "fair" when viewed from the perspective of the neighboring landowners who presently receive a gratuitous giving from the downzoning.

Extending this analysis further, the second major flaw of the givings argument is that it proves too much. For a perfect market in real estate (or any other good) to exist, property rights must be well defined, exclusive, transferable, enforceable, and completely enforced.¹²³ Although perfect markets exist only in economic models, a market must exist for land to have value. In the United States, the government, through legislative or judicial action, defines and enforces property rights. In addition, governmental action provides for exclusivity and transferability.¹²⁴ Land therefore has no value without government regulations to specify and enforce property rights.¹²⁵ This fact is clearly evident in Eastern European countries attempting to transition to the free market system. In these countries, the property rights are not well defined, enforceable, or enforced. Land markets are difficult, if not impossible, to establish in these legal environments.

^{123.} See Alan Randall, Resource Economics: An Economic Approach to Natural Resource and Environmental Policy 158 (2d ed. 1987).

^{124.} *Id.* Both the police and the judicial system enforce rights. The judicial system upholds proper transfers and rejects transfers that do not comply with the governmental laws and regulations.

^{125.} The author acknowledges that this argument is inconsistent with the foregoing example. However, the numbers used in the example were for illustrative purposes only. The author asserts that land is valueless without government regulation.

If the logic of the givings argument holds, the government may therefore confiscate all property without compensation. The givings argument asserts that what the government giveth, it may take away. Such a rule results in nonexistent property rights and valueless property. No government action constitutes a taking under this regime.

Finally, the law simply fails to condone the givings argument. Amendment V of the U.S. Constitution provides, in part, that "private property [shall not] be taken for public use, without just compensation."¹²⁶ By virtue of Amendment XIV, this admonition applies to state as well as federal action.¹²⁷ All state constitutions contain a similar provision. Nowhere does the U.S. Constitution, nor any state constitution, prohibit givings. Federal and state court takings jurisprudence conspicuously lack any reference to givings. The reasoning behind the givings doctrine ignores the takings clause of the U.S. Constitution and over eighty years of legal case law.

Givings proponents recognize that federal case law fails to recognize "givings,"¹²⁸ but point hopefully to Justice Stevens' dissent in *Dolan v. City of Tigard* that explicitly discusses givings.¹²⁹ In *Dolan*, the City of Tigard imposed certain conditions upon the granting of a requested permit that would allow Dolan to expand her hardware store.¹³⁰ In his dissent, Justice Stevens argued that the Court should consider givings in its analysis:

[T]he Court ignores the state courts' willingness to consider what the property owner gains from the exchange in question. [Justice Stevens discusses several state cases] In this case, moreover, Dolan's acceptance of the permit, with its attached conditions, would provide her with benefits that may well go beyond any advantage she gets from expanding her business. As the United States pointed out at oral argument, the improvement that the city's drainage plan contemplates would widen the channel and reinforce the slopes to increase the carrying capacity during serious floods, "conferring considerable benefits on the property owners

^{126.} U.S. CONST. amend. V.

^{127.} U.S. CONST. amend. XIV, § 1.

^{128.} ROBERT MELTZ, DWIGHT H. MERRIAM & RICHARD M. FRANK, THE TAKINGS ISSUE 159-60 (1999).

^{129. 512} U.S. 374, 396-400 (1994).

^{130.} Id. at 377.

immediately adjacent to the creek." (citation omitted). 131

However, givings proponents should not place much weight on Stevens' language. First, the endorsement of a givings concept comes in a dissenting opinion, which did not coincide with that of the majority of the court. In addition, the *Dolan* case involves exactions, whereby a governmental authority imposes conditions as a prerequisite to grant some permission or right.¹³² Downzoning implicates regulatory takings, which are distinguishable from exactions. Regulatory takings do not involve the landowner asking for permission to engage in some sort of activity. Therefore, *Dolan* proves to be immaterial to the downzoning question.

2. The Special Case of Farm Subsidies

Supporters of downzoning as a vehicle to achieve agricultural zoning often point to farm subsidies as an example of extraordinary "givings" that provide an additional reason to deny compensation when downzoning rural land.¹³³ Farm subsidies fail to validate unequal treatment of farmers for at least four reasons.

First, farm subsidies are part of a "cheap food" policy that the federal government has pursued for decades. Farm subsidies keep consumer prices for food low.¹³⁴ Thus, the consumer benefits from these subsidies. Therefore, if a giving at all, farm subsidies give uncompensated benefits to consumers.

Secondly, farm subsidies, by providing profitably to the farm operation, help keep land in farming, at least in the short term, as opposed to being sold for development. Farmland neighbors, therefore, continue to enjoy the views, the environmental benefits, and other positive externalities from undeveloped farmland. The visual amenities derived from farmland increase the value of adjacent property. Subsidies give unrecompensed value to the general public and farmland neighbors by providing these public services (scenic views, environmental benefits and other benefits) without the public paying the farmer for the services.

^{131.} Id. at 399-400 (Stevens, J., dissenting).

^{132.} Id. at 395.

^{133.} See, e.g., C. Ford Runge, et. al, *Public Sector Contributions to Private Land Value: Looking at the Ledger, in* PROPERTY AND VALUES: ALTERNATIVES TO PUBLIC AND PRIVATE OWNERSHIP (Charles Geisler & Gail Daneker, eds., 2000).

^{134.} Lawrence W. Libby, *Farmland Protection Policy: An Economic Perspective*, American Farmland Trust Center for Agriculture in the Environment (1997), *at* http://www.aftersearch.org/researchresource/wp/wp07-1.html (Working Paper CAE/WP 97-1).

Thirdly, farm subsidies increase the value of the subject land FOR FARMING ONLY; farm subsidies do NOT affect the value of the land for development.¹³⁵ Farmers receive subsidies only so long as they produce the subsidized crop. The subsidy allows the farmer more profit, thereby increasing the value of the property if planted in that crop. Therefore, so long as the value of the land for development exceeds the value of the land for subsidized farming, which will almost always be the case in areas that are experiencing development pressures, farm subsidies do not "give" farmers any additional land value. In the few cases where the value of the land in agricultural pursuits (including any value added by farm subsidies) exceeds the value of the land for development, the land is more likely to stay in farming, and society in general benefits. Farm subsidies, then, may serve as a farmland protection tool.

EXAMPLE 2:

Fall, 2003]

Farmer Jones owns 300 acres on which she grows soybeans. The fair market value of the property (the highest and best use is single family dwellings) is \$1.5 million. Without subsidies, the value of the land as a soybean farm is \$600,000. With subsidies, the value of the land as a soybean farm increases to \$1.0 million. The fair market of the land, with or without the subsidies, is \$1.5 million.

Finally, distribution of farm subsidies is uneven, with some farmers receiving large amounts of money for farm subsidies and others receiving no subsidies.¹³⁶ This uneven distribution of farm subsidies, along with the benefits that flow to consumers, would exacerbate the administrative difficulty of accounting for givings.

^{135.} Since farm subsidies are received for growing a particular crop or leaving the land fallow, the subsidies do not impact the value of land for development. Farmers either receive a particular amount per bushel of crop produced or per acre of land left fallow. Value for development remains the same whether subsidies are paid or not, since that value is determined by the market for housing. If the value of land for housing is greater than the value of land for agriculture (whether subsidized or not) then a rational landowner sells the land for development or develops the land himself.

^{136.} Subsidies are generally available for grain crops like corn and soybeans, raised mainly in the midwest. On the other hand, no subsidies are available for peaches and apples, grown on the east and west coasts. A small percentage of farmers in Virginia, for example, receive subsidies since they grow apples, peaches, beef cattle, etc. . Peanut farmers in Virginia can receive subsidies. On the other hand, grain farms dominate Iowa. The vast majority of these farmers do receive subsidies.

3. Givings and Conservation Easements

Incorporating an analysis of givings into the downzoning debate also implicates other existing policies. For example, if increases in farmland value are truly created by government action, another land protection policy, the conservation easement, requires revision. Donors of conservation easements may receive federal and state income tax, federal estate and gift tax, and local real estate tax benefits as a result of the donation.¹³⁷ Tax law bases the amount of the benefit on the difference in the value of the property with and without the easement in place.¹³⁸

Some donors have received large tax benefits from donations of conservation easements through this federal program. But the logic of the givings argument negates any reason to give a tax break for a difference in land valuation that the government, not the individual, was responsible for creating in the first place. If the law begins to recognize givings, then tax benefits for donation of conservation easements must be reexamined and likely eliminated.

C. Reciprocity

Supporters of downzoning to protect agricultural land also cite the "reciprocal benefits" argument. The reciprocal benefits argument states that positive and negative impacts of government regulation tend to balance out in the long run, and that any regulation could be deemed unfair if critiqued in isolation.¹³⁹ Cordes asserts that two types of reciprocal benefits exist, specific and general.¹⁴⁰ Specific reciprocal benefits are those benefits that are received from the same regulation that also causes the hardship.¹⁴¹ As an example of specific reciprocal benefits, consider the typical zoning ordinance. The fact that a landowner may, for example, only construct a single-family dwelling on his or her property instead of a steel plant or apartment building, benefits his neighbors by maintaining and possibly increasing the value of the neighbors' property. However, since the neighbors similarly can only construct single-family dwellings on their property, the landowner benefits from the same regulation that restricts his or her rights.

General reciprocal benefits involve much more abstract reasoning, but the theory suggests that individual government

^{137.} See, e.g., Jesse J. Richardson, Jr., Tax Benefits to Farmers and Ranchers Implementing Conservation and Environmental Plans, 48 OKLA. L. REV. 449, 450-60 (1995).

^{138.} Treas. Reg. § 1.170A-14(h) (2003).

^{139.} See Cordes, supra note 9, at 1075-77.

^{140.} Id. at 1075.

^{141.} Id.

regulations should not be viewed in isolation, because any regulation appears unfair in this context.¹⁴² The theory posits that a specific regulation will have a negative effect on certain members of society, but that other governmental regulations will benefit this same group.¹⁴³ When viewed in isolation, a particular regulation may seem unfair to certain landowners, but when viewed in conjunction with the entire regulatory universe, the benefits and burdens equal out.¹⁴⁴

Cordes admits downzoning to protect agricultural land lacks specific reciprocity.¹⁴⁵ "[M]ost of the benefits from preservation go to the broader public and not to the immediate parties involved."¹⁴⁶ Instead, Cordes relies on the "general" reciprocal benefits argument to sustain his assertion that downzoning to protect agricultural land is fair.¹⁴⁷ However, the evidence used to support this argument from both a legal and equitable standpoint is on shaky ground, at best. No court case has specifically addressed specific versus general reciprocity. In fact, as a general matter, the less specific reciprocity the regulation contains, the more likely the court will strike the regulation down.

The United States Supreme Court has stated that "[t]he determination that governmental action constitutes a taking [and that compensation is due] is, in essence, a determination that the public at large, rather than a single owner, must bear the burden of an exercise of state power in the public interest."¹⁴⁸ In Agins v. *Tiburon*, the city of Tiburon downzoned a large portion of the locality, including the Agins property, to limit residential development.¹⁴⁹ The Court found it significant that:

[t]here is no indication that the appellants' 5-acre tract is the only property affected by the ordinances [in question]. Appellants therefore will share with other owners the benefits and burdens of the city's exercise of its police power. In assessing the fairness of the zoning ordinances [at issue], these benefits must be considered along with any diminution in market value that the appellants might suffer.¹⁵⁰

^{142.} Id. at 1076.

^{143.} Id. at 1075.

^{144.} See id. at 1076.

^{145.} Id. at 1075.

^{146.} *Id.* at 1044.

^{147.} Id. at 1044-45.

^{148.} Agins v. Tiburon, 447 U.S. 255, 260 (1980).

^{149.} Id. at 257.

^{150.} Id. at 262.

This language clearly contemplates a "specific" reciprocal benefits analysis. The downzoning at issue was not a taking because specific reciprocity existed.

Undoubtedly, "specific" reciprocal benefits should be taken into account. In fact, many court cases have done so in the context of takings claims. The United States Supreme Court recognized the significance of "specific" reciprocal advantage in *Pennsylvania Coal Co. v. Mahon.*¹⁵¹ In that case the court recognized that an earlier mine regulation case did not contravene the takings clause since it "secured an average reciprocity of advantage that has been recognized as a justification of various laws."¹⁵² Some regulations do not result in "specific" reciprocal benefits.¹⁵³ The majority opinion in *Pennsylvania Coal* summarized the rationale for requiring specific reciprocity by stating that:

> [i]n general it is not plain that a man's misfortunes or necessities will justify his shifting the damages to his neighbor's shoulders. We are in danger of forgetting that a strong public desire to improve the public condition is not enough to warrant achieving the desire by a shorter cut than the constitutional way of paying for the change.¹⁵⁴

The United States Supreme Court has recognized that the:

Fifth Amendment does not prevent actions that secure a "reciprocity of advantage," it is designed to prevent "the public from loading upon one individual more than his just share of the burdens of government, and says that when he surrenders to the public something more and different from that which is exacted from other members of the public, a full and just equivalent shall be returned to him." A broad exception to the operation of the Just Compensation Clause based on the exercise of multifaceted health, welfare, and safety regulations would surely allow government much greater authority than we have recognized to impose societal burdens on individual landowners, for nearly every

^{151. 260} U.S. 393 (1922).

^{152.} Id. at 415.

^{153.} *See, e.g., id.* (holding the regulation in question rose to the level of a regulatory taking in part by imposing an inordinate burden on certain landowners).

^{154.} Id. at 416.

action the government takes is intended to secure for the public an extra measure of "health, safety, and welfare."¹⁵⁵

As implied by the last statement, courts have not embraced the concept of "general" reciprocal benefits for one simple reason: if the concept of "general" reciprocal benefits applied, no governmental action would ever rise to the level of a taking. Additionally, in *Florida Rock Industries v. United States*, the Federal Court of Claims referenced specific reciprocal benefits.¹⁵⁶ "[T]here can be no question that Florida Rock has been singled out to bear a much heavier burden than its neighbors, without reciprocal advantages."¹⁵⁷

Indeed, the concept of "general" reciprocal benefits, even if validated by the courts, proves unworkable. Innumerable government policies influence land markets. Calculation of general reciprocal benefits requires quantifying the costs of benefits of each regulation or policy, and aggregating these costs and benefits to analyze each particular situation. Without these calculations, the government could justify any regulation, regardless of how inequitable or harsh its previsions, and the takings clause would be rendered impotent. "Seemingly most daunting are the questions of precisely how [the] government 'givings' would be quantified, and how monetary transfers from regulatory 'winners' to regulatory 'losers' could feasibly be effectuated."¹⁵⁸

No government policy or regulation need perfectly match the costs and benefits. Such a standard obviously means that the government could not go on. However, this circumstance fails to justify government actions that are not as fair and equitable as possible, given the constraints and complexities of the situation. In other words, total and specific reciprocity exists only in an ideal world. There could never be a perfect mix of costs and benefits to all the affected parties for a particular regulation. But it is the responsibility of government to bring these costs and benefits as close to the ideal as they possibly can. At the same time, to justify any government regulation, regardless of how inequitable it might be to a particular group, by simply stating that it will be "balanced

^{155.} Keystone Bituminous Coal Ass'n v. DeBenedictis, 480 U.S. 470, 512-13 (1987) (Rehnquist, J., dissenting) (quoting Monongahela Navigation Co. v. United States, 148 U.S. 312, 325 (1983)).

^{156. 45} Fed. Cl. 21, 37 (1999).

^{157.} Id.

^{158.} Meltz et. al., *supra* note 128, at 160.

out" by other government regulations grossly oversimplifies the issue.

D. Reasonable Expectations

The final reason used to justify uncompensated farmland preservation programs, the reasonable expectations argument, maintains that government regulation of land (i.e. downzoning or regulatory risk) is a part of economic life and should be anticipated.¹⁵⁹ Thus, the "rational" owner or purchaser of agricultural land takes the possibility/probability of downzoning or other regulatory risk into account when making business decisions.¹⁶⁰ More specifically, when contemplating buying property in areas that could possibly be downzoned, the farmer should discount this into his or her purchase price, thus capitalizing this uncertainty into a lower price for the land.¹⁶¹ But, how "reasonable" is it for a farmer to "expect" that his land may be downzoned?

Cordes claims that the validity of a regulatory risk argument hinges on how foreseeable a regulation might be.¹⁶² He points out that in some cases such as the endangered species act, regulatory risk is difficult to predict, and thus there is a more compelling reason for compensation.¹⁶³ Cordes distinguishes downzoning, however. "In contrast, restrictions on land use [such as zoning] are more readily anticipated in our society, including agricultural restrictions on existing farmland on the urban fringe."¹⁶⁴

Certainly landowners (and potential purchasers) should consider the possibility of increasingly restrictive land use regulation. However, the inquiry must focus on the likelihood of such changes. The only "data" at the disposal of current landowners and potential purchasers is past history. When you look around on the urbanrural fringe, past history manifests itself in the proliferation of suburban subdivisions interspersed with hobby farms. In this context, farmers understandably hold reasonable expectations that they, too, will be able to develop their property.

The United States Supreme Court, in *Lucas v. South Carolina Coastal Council*, recognized this reality.¹⁶⁵ The *Lucas* case failed to reach the *Penn Central* balancing test portion of the regulatory takings test, and instead was disposed of as a categorical taking

^{159.} Cordes, *supra* note 9, at 1080.

^{160.} Id. at 1080-81.

^{161.} Id. at 1081.

^{162.} Id. at 1080.

^{163.} Id.

^{164.} Id.

^{165.} See Lucas v. S.C. Coastal Council, 505 U.S. 1003 (1992).

since Lucas was deprived of all economically viable uses of his property.¹⁶⁶ However, Justice Scalia, in his opinion written for the majority, emphasized the fact that Lucas' "intention with respect to the lots was to do what the owners of the immediately adjacent parcels had already done: erect single-family residences."¹⁶⁷ Therefore, the United States Supreme Court seems to endorse the notion of "temporal equity." In simple terms, temporal equity means that if your neighbors were allowed to develop their property in the past, it is unfair that you be denied that opportunity. Temporal equity comports with reasonable expectations.

In addition, the concept of reasonable expectations appears somewhat amorphous. "Reasonbleness" implies the use of an objective standard. Indeed, use of a subjective standard would be unworkable. Given that an objective standard should be used, fair market value appears to be the best measuring stick. The fair market value of the land should reflect reasonable expectations. The proponents of downzoning as a fair means to achieve farmland protection fail to recognize fair market value as an objective measure of reasonable expectations.

Finally, to impose upon farmers the expectation of more restrictive land use regulations provides perverse incentives to those farmers. If a landowner assumes that regulations will become more restrictive, then the landowner holds an incentive to develop his property immediately before the rules change. Given this incentive, land will be prematurely developed and the aim of farmland protection frustrated.

In Board of Supervisors of Fairfax County v. Snell Construction Co., the Virginia Supreme Court addressed the reasonable expectations issue with respect to downzonings and decided to subject "piecemeal" downzonings to the stricter scrutiny of the Maryland Rule, while reviewing upzonings and comprehensive downzonings under the general rule for legislative determinations.¹⁶⁸ The court explained the formulation by stating:

> [w]hile the landowner is always faced with the possibility of comprehensive rezoning, the rule we have stated assures him that, barring mistake or fraud in the prior zoning ordinance, his legitimate profit prospects will not be reduced by a piecemeal zoning ordinance reducing permissible use of his land until circumstances substantially affecting the public

^{166.} Id. at 1018.

^{167.} Id. at 1008.

^{168. 202} S.E.2d 889 (1974). See section II. A. for a discussion of these tests.

interest have changed. Such stability and predictability in the law serve the interest of both the landowner and the public.¹⁶⁹

In connection with the reasonable expectations aspect of the fairness argument, Cordes expends much effort on elucidating the fact that private property ownership includes both private property rights and obligations to the public.¹⁷⁰ Cordes asserts that the perception that agricultural zoning is unfair "is in part predicated on the idea that private property ownership includes the right to use the property as the owner chooses."¹⁷¹ To the contrary, the notion that private property rights are unqualified is neither the predicate for the notion of the unfairness of agricultural zoning nor accepted in any legal quarter. The point of reference for a fairness determination is a comparison to others similar situated.

Cordes' argument seems to be based upon the so-called "nuisance" exception to the categorical taking rule invoked when a regulation denies a landowner all economically viable uses of his land. The foundation for this argument is therefore tenuous at best. As Justice Scalia explained while discussing the nuisance exception in *Lucas*, "[t]he fact that a particular use has long been engaged in by similarly situated owners ordinarily imports a lack of any common-law prohibition So also does the fact that other landowners, similarly situated, are permitted to continue the use denied to the claimant."¹⁷² Justice Scalia added that "[i]t seems unlikely that common-law principles would have prevented the erection of any habitable or productive improvements on petitioner's land; they rarely support prohibition of the 'essential use' of land."¹⁷³ This language informs the farmland protection debate since, as in Lucas, most consequent land use restrictions to protect agricultural land attempt to prohibit "erection of any habitable or productive improvements on . . . land."¹⁷⁴ Such activity appears to be "the 'essential use' of land."¹⁷⁵

The argument advanced by Cordes and others, that landowner profit motives must always yield to any restriction advancing the public good, again proves too much. Under this regime, governmental authorities could enact any legislation to advance the public good without fearing a takings claim. However, "[t]he

^{169.} Bd. of Supervisors of Fairfax County, 202 S.E.2d at 893.

^{170.} Cordes, supra note 9, at 1077-80.

^{171.} *Id.* at 1077.

^{172.} Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1031 (1992).

^{173.} Id. (citation omitted).

^{174.} Id.

^{175.} Id.

nuisance exception to the taking guarantee is not coterminous with the police power itself."¹⁷⁶ Also, in *Keystone Bituminous Coal Ass'n v. DeBenedictis*, then Justice Rehnquist opined in his dissenting opinion that: "the existence of . . . a public purpose is merely a necessary prerequisite to the government's exercise of its taking power."¹⁷⁷ "The nuisance exception to the taking guarantee," however, "is not coterminous with the police power itself," but is a narrow exception allowing the government to prevent "a misuse or illegal use."¹⁷⁸ It is not intended to allow "the prevention of a legal and essential use, an attribute of its ownership."¹⁷⁹

In other words, a valid public purpose provides a necessary, but not sufficient, predicate for a valid regulation. In the *Lucas* case, Mr. Lucas conceded that the Beachfront Management Act was properly and validly designed to protect South Carolina's beaches. The South Carolina Supreme Court found this concession dispositive.¹⁸⁰ However, the United States Supreme Court disagreed, setting out the takings test earlier detailed in this paper.

IV. CONCLUSION

Each day, the farmer makes a decision: continue to farm or sell for development. If governments need not compensate the owners of land that is downzoned for public benefit, then many farmers who might otherwise be undecided about developing their land might sell in an attempt to preempt regulation that would prohibit such development. Such a regime encourages premature development.

As Justice Holmes so eloquently stated with respect to takings, "the question at bottom is upon whom the loss of the changes desired should fall."¹⁸¹ "The determination that governmental action constitutes a taking is, in essence, a determination that the public at large, rather than a single owner, must bear the burden of an exercise of state power in the public interest."¹⁸² The same question forms the appropriate focus of the equity inquiry with respect to downzoning to protect farmland. Farmland protection policy yields many benefits, which are well documented in the literature. However, farmland protection also entails costs.

^{176.} Penn Cent. Transp. Co. v. New York City, 438 U.S. 104, 145 (1978) (Rehnquist, J., dissenting).

^{177. 480} U.S. 470, 511 (1987) (Rehnquist, J., dissenting).

^{178.} *Id.* at 512 (Renquist, J., dissenting) (quoting *Penn Central*, 438 U.S. at 145 and Curtin v. Benson, 222 U.S. 78, 86 (1911)).

^{179.} Id.

^{180.} Lucas, 505 U.S. at 1009-10.

^{181.} Pennsylvania Coal Co. v. Mahon, 260 U.S. 393, 416 (1922).

^{182.} Agins v. Tiburon, 447 U.S. 255, 260 (1980).

Downzoning property to maintain its use in farming places the cost of farmland protection on the restricted landowner.¹⁸³ The diminution in land value reflects this cost.¹⁸⁴

The takings inquiry, as well as the examination of the equity of various methods of farmland protection, primarily questions whether the losses should fall upon affected landowners only (no compensation is paid) or the public at large (compensation is paid). Fairness dictates that landowners be compensated when their property is downzoned to provide benefits of open space and/or farmland protection for the public at large. Courts are increasingly recognizing this concept.

^{183.} Cordes, *supra* note 9, at 1048.184. *Id*.

RECALIBRATING THE FEDERAL GOVERNMENT'S AUTHORITY TO REGULATE INTRASTATE ENDANGERED SPECIES AFTER SWANCC

JEFFREY H. WOOD* Table of Contents

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I. INTRODUCTION

[T]he powers delegated by the proposed Constitution to the federal government are few and defined. Those which are to remain in the State governments are numerous and indefinite.¹

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^{1.} James Madison, THE FEDERALIST NO. 45 (1788), *reprinted in* THE FEDERALIST PAPERS, at 292-93 (Clinton Rossiter ed., 1961). Concerning this constitutional principle, the Fifth Circuit recently stated, "No authority need be cited for [this] fundamental and well-known limitation on the power of our Federal Government." GDF Realty Investments, Ltd. v. Norton, 326 F.3d 622, 627 (5th Cir. 2003).

Over the past thirty years, the federal government has regulated activities based on endangered species regardless of the species' range or impact on interstate commerce. For example, the D.C. Circuit held that the scope of the Endangered Species Act ("ESA" or "the Act") even reached a type of fly that occurred in only one state and had no known impact on interstate commerce.² "So wide-ranging has been the application of the [Commerce] Clause as to prompt one writer to 'wonder why anyone would make the mistake of calling it the Commerce Clause instead of the 'hey-you-can-dowhatever-you-feel-like clause'."³

However, over the past decade, the Supreme Court has revived the principles of federalism and has limited the scope of Congress' Commerce Clause power.⁴ In a recent Clean Water Act decision, *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers* ("*SWANCC*"), the Supreme Court strongly implied that the federal government's regulation of isolated, intrastate ponds that provided habitat to migratory birds was unconstitutional.⁵ Many commentators believe that the Court's language will have serious implications for the federal government's authority to regulate other environmental concerns, including endangered species. Specifically, I will address whether the language in the *SWANCC* decision will affect the federal government's ability to protect intrastate, endangered or threatened species under the ESA.

In both the constitutional and practical sense, disagreement rages over whether the Supreme Court's revival of federalism in the context of environmental laws is a positive event.⁶ Many argue that an expansive reading of the *SWANCC* decision will dilute the benefits accruing to the environment from federal regulation and

^{2.} Nat'l Ass'n of Home Builders v. Babbitt, 130 F.3d 1041, 1043-45 (D.C. Cir. 1997), cert. denied, 524 U.S. 937 (1995) ("NAHB v. Babbitt").

^{3.} Id. at 1061 (Sentelle, J., dissenting). See Diane McGimsey, The Commerce Clause and Federalism after Lopez and Morrison: The Case for Closing the Jurisdictional-Element Loophole, 90 CAL. L. REV. 1675, 1724-25 (2002) (contending that, given the lower courts' expansive readings of United States v. Lopez in the area of species regulation, further reform of the Commerce Clause test is necessary).

^{4.} See United States v. Lopez, 514 U.S. 549, 551 (1995) (holding that a federal statute prohibiting gun possession in a school zone exceeded Congress' authority under the Commerce Clause); Steven G. Calabresi, *A Government of Limited and Enumerated Powers: In Defense of United States v. Lopez*, 94 MICH. L. REV. 752, 752 (1995) (applauding the revival of federalism as "revolutionary and long overdue").

^{5. 531} U.S. 159, 174 (2001) (stating that such regulation would "result in a significant impingement of the States' traditional and primary power over land and water use").

^{6.} See, e.g., Christine A. Klein, *The Environmental Commerce Clause*, 27 HARV. ENVTL. L. REV. 1, 4 (2003) (providing an extensive study of case law involving the "environmental commerce clause" and criticizing the recent revival of federalism in the environmental context).

will result in the proverbial "race-to-the-bottom."⁷ On the other hand, some argue that the recent trend will allow the environment to reap the benefits of federalism — benefits like encouraging more local involvement and allowing for a marketplace of more diverse conservation ideas.⁸ In addition, the proponents of federalism argue that Congress can use other means besides direct regulation to protect endangered species, like providing grants to states and using the tools of cooperative federalism.

Part II provides an overview of the goals and structure of the ESA, focusing on the most important provisions of the Act. Likewise, Part II briefly addresses the statutory authority for federal agencies to regulate local activities based on the existence of intrastate species — statutory authority like the "take prohibition" and the "no jeopardy or adverse modification provision." Moreover, Part II explains how the Act encompasses all types of species regardless of a species' range or impact on interstate commerce.

Part III patches together the traditional Commerce Clause framework that developed prior to the recent revival of federalism, followed by a discussion of the Supreme Court's decisions in United States v. Lopez and United States v. Morrison. After laying out the pre-SWANCC Commerce Clause framework, I also discuss two important cases applying that framework to the ESA — NAHB v. Babbitt, in which the D.C. Circuit upheld the application of the ESA to the Delhi Sands Flower-Loving Fly, and Gibbs v. Babbitt, in which the Fourth Circuit upheld the application of the ESA to red wolves.⁹

Part IV discusses the Supreme Court's decision in *SWANCC* and its possible jurisdictional effects on the ESA. More specifically, I explain the facts of the case, the statutory and constitutional issues involved, and the Court's rationale. Importantly, Part IV discusses the Commerce Clause dicta found at the end of the majority opinion and explains briefly how the dicta reflects the Court's desire to expand the revival of federalism into the environmental context. Also, this part illustrates how litigants are attempting to use the *SWANCC* dicta to challenge the constitutionality of the ESA and how courts are reluctant to accept such arguments. I explore how courts limit *SWANCC* in the ESA context but simultaneously

^{7.} See CLIFFORD RECHTSCHAFFEN & DAVID L. MARKELL, REINVENTING ENVIRONMENTAL ENFORCEMENT & THE STATE/FEDERAL RELATIONSHIP 22-25 (Environmental Law Institute 2003) (discussing the scholarly debate surrounding the "race-to-the-bottom theory" and noting that the theory is the "central underpinning" of federal environmental regulation).

^{8.} See id. at 32-35.

^{9.} See NAHB v. Babbitt, 130 F.3d 1041 (D.C. Cir. 1997); Gibbs v. Babbitt, 214 F.3d 483, 486-87 (4th Cir. 2000).

construe *SWANCC* broadly in other environmental areas. Part IV concludes by exploring two recent circuit court cases refusing to apply *SWANCC* to the ESA — one preventing a housing development based on an endangered toad and the other preventing development of a shopping center based on cave-dwelling bugs.¹⁰

Part V analyzes three arguments against limiting the ability of the federal government to regulate intrastate species. Not only do I present the federalist arguments, but I also counter common attacks such as the "proverbial race to the bottom." Specifically, Part V addresses: (A) the practicality issue of determining a species' effect on interstate commerce; (B) the externality issue fueling the race to the bottom dispute; and (C) the logicality issue of allowing federal regulation of abundant species but forbidding it when the species becomes so depleted as to be intrastate. The implications of these three arguments provide the groundwork for my proposal in Part VI.

Part VI presents my own recommendations for how the courts should handle this pivotal area. Uniquely, my proposed "intrastate species test" narrowly defines intrastate species and bars federal regulation based on such species. After laying down my rule, I discuss how *NAHB v. Babbitt* would have come out differently, and arguably better, under my rule, but also how, on the other hand, *Gibbs v. Babbitt* would have incurred the same result. As litigants continue to challenge the authority of federal agencies to regulate activities pursuant to intrastate species, and as the Supreme Court continues to hint that such action may be unconstitutional, a clear rule is needed to provide certainty in this area. Finally, I note some constitutional steps Congress and federal agencies should take in their efforts to protect intrastate species.¹¹

II. FRAMEWORK OF THE ENDANGERED SPECIES ACT

The Endangered Species Act does not distinguish between intrastate species and interstate species, and courts have consistently construed the ESA to equally protect both intrastate and interstate species. Since plant and animal species are of "esthetic, ecological, educational, historical, recreational, and scientific value," Congress purposed to protect them and their

^{10.} See Rancho Viejo, LLC v. Norton, 323 F.3d 1062 (D.C. Cir. 2003); GDF Realty Investments, Ltd. v. Norton, 326 F.3d 622 (5th Cir. 2003).

^{11.} In addition to the Commerce Clause, the federal government may protect species using the spending power, the treaty power, and the Property Clause. *See* U.S. CONST. art. I, § 8; art. II, § 2; art. IV, § 3; *see also* Sophie Akins, *Congress' Property Clause Power to Prohibit Taking Endangered Species*, 28 HASTINGS CONST. L. Q. 167 (2000). This paper focuses solely on the Commerce Clause.

ecosystems.¹² In fact, courts have recognized that Congress wanted to halt and reverse the extermination of endangered and threatened species and to protect those species *whatever the cost*.¹³ Five core provisions dominate the ESA framework: section 4's listing provisions; section 7's federal conservation duty and its jeopardy or adverse modification prohibition; section 9's take prohibition; section 10's incidental take permit provision; and section 11's enforcement and citizen suit provisions.¹⁴ These five provisions combine to extensively regulate and restrict local activities, and it is the regulatory impact of these provisions that litigants hope to avoid by objecting to the federal government's authority to protect intrastate species.¹⁵

First, section 4 provides the process for listing a species as endangered or threatened, and is considered the starting point of the ESA.¹⁶ A species may be listed for one of several reasons including "the present or threatened destruction, modification, or curtailment of its habitat or range; overutilization for commercial, recreational, scientific, or educational purposes; disease or predation; the inadequacy of existing regulatory mechanisms; or other natural or manmade factors affecting its continued existence."¹⁷ Concurrently with the listing decision, the agency must also designate critical habitat for the listed species.¹⁸ Unlike the listing decision, the agency may consider economic impact prior to designating critical habitat, in addition to the best scientific data.¹⁹ Section 4 also directs the listing agency to develop recovery plans for the "conservation and survival of the species."²⁰

After a species is listed, section 7 and section 9 protect the species — section 7 applies to federal agencies and section 9 applies

^{12. 16} U.S.C. § 1531(a)(3) (2000).

^{13.} See, e.g., Tenn. Valley Auth. v. Hill, 437 U.S. 153, 184 (1978) (emphasis added).

^{14.} See 16 U.S.C. §§ 1533-1540.

^{15.} Most federal environmental laws, such as the Clean Water Act, employ a "cooperative federalism" approach, meaning that states have the opportunity to secure primary responsibility for clean water enforcement. *See* RECHTSCHAFFEN & MARKELL, *supra* note 7, at15-16 (noting that laws using the cooperative federalism approach "reserve a prominent role for the states"). The ESA, on the other hand, is a federally administered statute which means that the federal government is the sole enforcer of its restrictions. *See id.*

^{16.} See 16 U.S.C. § 1533. Two federal agencies are delegated the responsibility to implement the ESA: the Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS). See *id.* § 1533(a). Under the authority of the Secretary of the Interior, FWS is responsible for listing terrestrial and freshwater species. Under the authority of the Secretary of Commerce, NMFS is responsible for listing marine and anadromous species. See *id.* § 1533(a)(2).

^{17.} Id. § 1533(a)(1)(A)-(E).

^{18.} See id. § 1533(a)(3)(A).

^{19.} See id. § 1533(b)(2).

^{20.} Id. § 1533(f)(1).

to everyone.²¹ Section 7 imposes two specific duties on all federal agencies.²² Section 7(a)(1) imposes a conservation duty on all federal agencies, directing them to use their power to conserve listed species.²³ Section 7(a)(2) prohibits all agencies from "jeopardizing" any listed species or from making any "adverse modifications" to the habitat for any listed species.²⁴ Importantly, the no jeopardy or adverse modification provision applies to any activity a federal agency authorizes, funds, or carries out, including permitting, development approvals, and federal grants.²⁵

Section 9 makes it unlawful for any person, including private individuals, businesses, and state and local governments, to "take" any listed species.²⁶ A "take" can occur when someone harasses, harms, pursues, hunts, shoots, wounds, kills, traps, captures, or collects, or even attempts to engage in this conduct.²⁷ FWS has defined "harm" to include "significant habitat modification or degradation where it actually kills or injures wildlife."²⁸ In fact, courts have construed section 9 broadly to include even unintentional harm to an endangered species.²⁹ That is, a person may violate the ESA by just attempting to harm an endangered species or simply engaging in an activity that might unknowingly harm an endangered species.³⁰ A federal agency may be permitted to violate section 9 by obtaining an incidental take statement.³¹ Together, section 7 and section 9 significantly impact local land use activities by preventing development that might harm a listed species — even an intrastate species with little impact on interstate commerce.

Providing some relief from sections 7 and 9, section 10 allows any person to lawfully take a listed species if he or she first obtains

29. See Babbitt v. Sweet Home Chapter of Communities, 515 U.S. 687, 696, 708 (1995) (upholding agency regulation defining "harm" to include habitat modification that results in actual injury or death).

30. See, e.g., United States v. McKittrick, 142 F.3d 1170, 1177 (9th Cir. 1998) (holding a hunter guilty of a taking where he accidentally shot a threatened species).

^{21.} See id. §§ 1536, 1538.

^{22.} See id. § 1536.

^{23.} Id. § 1536(a)(1).

^{24.} Id. § 1536(a)(2).

^{25.} See id.

^{26.} Id. § 1532(13). See id. § 1538(a)(1).

^{27.} Id. § 1532(19).

^{28. 50} C.F.R. § 17.3 (commonly referred to as "take by habitat modification"). The take by habitat modification provision is the most often used tool in the ESA arsenal to encroach on private land development rights. See Jeanine A. Scalero, *The Endangered Species Act's Application to Isolated Species: A Substantial Effect on Interstate Commerce*, 3 CHAP. L. REV. 317, 321 (2000).

^{31.} See 16 U.S.C. §1536(g).

an "incidental take permit."³² In order to obtain an incidental take permit, however, the landowner must present an acceptable habitat conservation plan that demonstrates that the modification is consistent with the long-term survival of the species.³³ FWS has wide discretion in determining whether to grant such permits.³⁴

Finally, section 11 provides the ESA's enforcement mechanisms, imposing both criminal and civil sanctions.³⁵ Specifically, a violator faces civil penalties up to \$25,000 per violation and criminal sanctions up to one year in prison and \$50,000 in fines.³⁶ Section 11 relies heavily on citizen suits to enforce the ESA.³⁷ For example, a citizen may sue to enjoin any person or governmental agency that has violated the Act or failed to carry out a mandatory duty under the Act.³⁸

The Act defines an endangered species to mean "any species which is in danger of extinction throughout all or a significant portion of its range."³⁹ Likewise, the Act defines a threatened species to mean "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."⁴⁰ As these definitions indicate, the ESA attempts to engulf all types of species under its umbrella of protection regardless of a species' range or impacts on interstate commerce. For example, FWS has prevented the operation of a dam, has impacted the location of a hospital, and has criminally prosecuted private individuals based on the presence of completely isolated species that existed only in one state.⁴¹ The rest of this article will address the constitutional authority of the federal government to regulate activities based on intrastate species. At the conclusion of my article, I will offer a constitutional definition

^{32.} Id. § 1539(a).

^{33.} See *id.* (providing that a permit will be issued if (1) the proposed taking of an endangered species will be incidental to an otherwise lawful activity; (2) the permit applicant will minimize and mitigate the impacts of the taking "to the maximum extent practicable"; (3) the applicant has insured adequate funding for its conservation plan; and (4) the taking will not appreciably reduce the likelihood of the survival of the species).

^{34.} See Friends of Endangered Species, Inc. v. Jantzen, 760 F.2d 976 (9th Cir. 1985) (holding that FWS did not act arbitrarily or capriciously in granting an incidental take permit for butterfly and snake species).

^{35.} See 16 U.S.C. § 1540.

^{36.} *Id.* § 1540(a)-(b).

^{37.} See id. § 1540(g).

^{38.} Id. § 1540(g)(1)(A)-(C).

^{39.} Id. § 1532(6).

^{40.} Id. § 1532(20).

^{41.} See Tenn. Valley Auth. v. Hill, 437 U.S. 153 (1978); NAHB v. Babbitt, 130 F.3d 1041 (D.C. Cir. 1997); Gibbs v. Babbitt, 214 F.3d 483 (4th Cir. 2000).

of "intrastate species," but at this point, assume this term refers to isolated species that occur in only one state.⁴²

III. JURISDICTION OF THE ESA

Over the Constitution's first two centuries, the power of the federal government to regulate local activities based on the Commerce Clause expanded steadily. This gradual expansion of federal authority occurred in the area of environmental regulation as well.⁴³ Part III reviews the traditional Commerce Clause framework, explains the modern understanding of the Commerce Clause in light of last decade's revival of federalism, and discusses two important pre-*SWANCC* cases applying the Commerce Clause framework to the ESA.

A. Traditional Commerce Clause Framework

Like most cases or articles written from a federalist perspective, I introduced my article with a quote from James Madison, an author of the Federalist Papers. Federalism, defined as a "system that distributes governmental authority between state and nation," was the specific design of the Framers and the impetus for passage of the Constitution.⁴⁴ The Constitution creates a Federal Government of enumerated powers that are "few and defined."⁴⁵ Among other powers like defending the nation and minting money, the Constitution grants Congress the power "[t]o regulate Commerce with foreign nations, and among the several states, and with the Indian tribes," and to make laws that are "necessary and proper" to execute that power.⁴⁶

Through a series of cases spanning two centuries, Congress' authority to regulate interstate commerce became "one of the most prolific sources of national power."⁴⁷ In 1824, the Supreme Court issued its first meaningful interpretation of the Commerce Clause, holding in *Gibbons v. Ogden* that Congress had the authority to regulate both interstate commerce and intrastate activities that

^{42.} *See* Scalero, *supra* note 28, at 318 (referring to intrastate species as those plant or animal species which are "indigenous to a specific geographic region" of only one state, and are "nonmigratory").

^{43.} See Hodel v. Va. Surface Mining & Reclamation Ass'n, 452 U.S. 264, 276-82 (1981) (reasoning that the Commerce Clause is broad enough to uphold environmental regulation). 44. GEOFFREY R. STONE, ET AL., CONSTITUTIONAL LAW 149 (3d ed., Aspen Law & Business 1996).

^{45.} See U.S. CONST. art. I, § 8; THE FEDERALIST NO. 51, at 292-93 (James Madison) (Clinton Rossiter ed., 1961).

^{46.} U.S. CONST. art. I, § 8, cl. 3, 18.

^{47.} Hughes v. Oklahoma, 441 U.S. 322, 326 n. 2 (1979).

affect interstate commerce.⁴⁸ Under this decision, Congress had the authority to regulate the persons that could conduct commerce on the nation's navigable waters.⁴⁹ The rationale in *Gibbons* prevailed throughout the rest of the nineteenth century, meaning that only the regulating of activities occurring completely within a single state that did not affect other states exceeded the Commerce Clause power.⁵⁰

A century later, in the Shreveport Rate cases, the Supreme Court held that the federal government could set rates for *intrastate* train routes.⁵¹ Introducing the substantial relation test, the Court reasoned that Congress had the authority to regulate activities that have a "close and substantial relation to interstate commerce" and could take all measures necessary to foster and protect interstate commerce.⁵²

Importantly, in *Wickard v. Filburn*, the Court issued its cumulative impact doctrine upholding Congress' authority to set

51. See Houston, East & West Texas Railway Co. v. United States, 234 U.S. 342, 355 (1914) (holding that the Interstate Commerce Commission could set rates for train routes from Dallas to Marshall, Texas even though the route was in one state).

52. Id. But, the Commerce Clause has not always been interpreted so broadly. In a series of cases over the first thirty years of the twentieth century, the Court held that only activities with a "direct effect" on interstate commerce could be subject to congressional regulation. See, e.g., United States v. E.C. Knight Co., 156 U.S. 1, 12 (1895) (holding that the Sherman Act did not reach a sugar monopoly because the Constitution did not allow Congress to regulate manufacturing); Carter v. Carter Coal Co., 298 U.S. 238, 304 (1936) (invalidating a portion of the Bituminous Coal Conservation Act that forced collective bargaining of labor because it did not have a direct effect on interstate commerce). In other words, activities that affected interstate commerce directly were within Congress' power, whereas activities that affected interstate commerce indirectly were outside Congress' power. See A.L.A. Schecter Poultry Corp. v. United States, 295 U.S. 495, 550 (1935) (striking down federal regulations that fixed the hours and wages of employees of an intrastate business because the activities being regulated only indirectly affected interstate commerce). By issuing these decisions, the Court was preventing the development of a "completely centralized government" with "virtually no limit to the federal power." Id. at 548. To accommodate President Roosevelt and his New Deal legislation, the Court departed from its direct effect test in 1937 and adopted the close and substantial relation test, stating that Congress could regulate intrastate activities that "have such a close and substantial relation to interstate commerce that their control is essential or appropriate to protect that commerce from burdens and obstructions." NLRB v. Jones & Laughlin Steel Corp., 301 U.S. 1, 37 (1937) (holding that Congress could act to prevent a labor stoppage of intrastate manufacturing activities where it had a substantial effect on interstate commerce). See also United States v. Darby, 312 U.S. 100, 118 (1941) (upholding the Fair Labor Standards Act and stating that Congress' power "extends to those activities intrastate which so affect interstate commerce or the exercise of the power of Congress over it as to make regulation of them appropriate means to the attainment of a legitimate end").

^{48. 22} U.S. (9 Wheat.) 1 (1824) (involving a case where the state of New York gave one person a monopoly to operate steamboats in New York waters, but Congress gave another person the right to navigate the same waters).

^{49.} See id.

^{50.} See id. at 186-98; Champion v. Ames, 188 U.S. 321 (1903) (upholding a federal law proscribing the transportation of lottery tickets interstate).

quotas for the amount of wheat one farmer could harvest.⁵³ Even though one farmer's personal impact on the price of wheat was minuscule, the Court reasoned that Congress could regulate his activities because the cumulative impact of all farmers in that farmer's situation was significant.⁵⁴ Based on these decisions, the Court embarked on a fifty year period of using the Commerce Clause to uphold many types of federal action if there was a rational basis for Congress to believe that an activity sufficiently affected interstate commerce.⁵⁵

Finally, in *Hodel v. Virginia Surface Mining & Reclamation Association*, the Court upheld a piece of environmental legislation as a proper exercise of the Commerce Clause power, stating that "the power conferred by the Commerce Clause [is] broad enough to permit congressional regulation of activities causing air or water pollution, or other environmental hazards that may have effects in more than one State."⁵⁶ In light of this decision, the ESA and other environmental laws have withstood many Commerce Clause challenges; however, this reality came into question last decade with the Court's revival of federalism.

B. The Lopez and Morrison Commerce Clause Framework

After fifty years of rubber-stamping congressional Commerce Clause action, the Supreme Court in 1995 finally found a limit to the extent of that power.⁵⁷ In United States v. Lopez, the Court held that the Gun Free School Zone Act exceeded congressional authority to regulate commerce because Congress failed to demonstrate that guns in a school zone had a substantial effect on interstate commerce.⁵⁸ A few years later, the Court reexpressed its desire for Congress to pay more attention to its constitutional limits.⁵⁹ In United States v. Morrison, the Court struck down the Violence Against Women Act, rejecting the "argument that Congress may regulate noneconomic, violent criminal conduct based solely on that conduct's aggregate effect on interstate commerce."⁶⁰ In these two cases, the Court was in essence reminding Congress that there are limits to its powers.

^{53. 317} U.S. 111 (1942).

^{54.} See id. at 124-26.

^{55.} See, e.g., Katzenbach v. McClung, 379 U.S. 294, 299-301 (1964); Heart of Atlanta Motel, Inc. v. United States, 379 U.S. 241, 252-53 (1964).

^{56. 452} U.S. 264, 276-82 (1981) (upholding a federal law requiring mine operators to restore the land after mining to its prior condition).

^{57.} See United States v. Lopez, 514 U.S. 549 (1995).

^{58.} Id. at 560.

^{59.} See United States v. Morrison, 529 U.S. 598 (2000).

^{60.} Id. at 617.

Lopez and *Morrison* resulted in a redesigned Commerce Clause framework. The Court identified three categories of activities that Congress could regulate under the Commerce Clause.⁶¹ Congress may regulate (1) "the use of channels of interstate commerce"; (2) "instrumentalities of interstate commerce, persons or things in interstate commerce even though the threat may only come from intrastate activities"; and (3) "activities having a substantial relation to interstate commerce."⁶²

Unlike the first two categories, the third category includes its own test for determining when an activity has a substantial relation to interstate commerce.⁶³ Specifically, the Court asks four questions: (a) whether the regulation reaches economic activity; (b) whether the link between the regulated activity and interstate commerce is direct or attenuated; (c) whether the regulation includes an express jurisdictional element; and (d) whether Congress has made findings regarding the regulated activity's effect on commerce.⁶⁴ Despite these two Supreme Court cases, other lower federal courts have been reluctant to expand the Court's reasoning to the ESA context, as explained in the next section.

C. Commerce Clause Challenges to the ESA Prior to SWANCC

Plant and animal species continued to enjoy federal protection pursuant to the Commerce Clause despite *Lopez* and *Morrison*.⁶⁵ Two federal circuit court cases, *NAHB v. Babbitt* and *Gibbs v. Babbitt*, expressly addressed Congress' authority to regulate intrastate activities based on the existence of intrastate species.⁶⁶ Whereas one case involved a rare species of fly which was clearly an intrastate species and the other case involved red wolves which were arguably an interstate species, the courts in both cases upheld the federal action.⁶⁷

1. NAHB v. Babbitt: The Fly Case

In *NAHB v. Babbitt*, the D.C. Circuit addressed whether "application of section 9 of the ESA to the Delhi Sands Flower-

^{61.} Id. at 609; Lopez, 514 U.S. at 558.

^{62.} Morrison, 529 U.S. at 609; Lopez, 514 U.S. at 558-59.

^{63.} See Morrison, 529 U.S. at 610-12.

^{64.} Id.

^{65.} See United States v. Bramble, 103 F.3d 1475 (9th Cir. 1997) (upholding the Bald Eagle Protection Act against a Commerce Clause challenge); Bldg. Indus. Ass'n of Superior Cal. v. Babbitt, 979 F. Supp. 893 (D.D.C. 1997).

 $^{66. \}hspace{0.1cm} See \hspace{0.1cm} 130 \hspace{0.1cm} \text{F.3d} \hspace{0.1cm} 1041 \hspace{0.1cm} (\text{D.C. Cir. 1998}), \hspace{0.1cm} cert. \hspace{0.1cm} denied, 524 \hspace{0.1cm} \text{U.S. 937} \hspace{0.1cm} (1998); \hspace{0.1cm} 214 \hspace{0.1cm} \text{F.3d} \hspace{0.1cm} 483 \hspace{0.1cm} (4th \hspace{0.1cm} \text{Cir. 2000}), \hspace{0.1cm} cert. \hspace{0.1cm} denied, \hspace{0.1cm} 148 \hspace{0.1cm} \text{L. Ed. 2d} \hspace{0.1cm} 957 \hspace{0.1cm} (2001).$

^{67.} See NAHB, 130 F.3d at 1043-44; Gibbs, 214 F.3d at 486.

Loving Fly ("the Fly"), which is located only in California, exceeds Congress' Commerce Clause power."⁶⁸ Eleven known colonies of the Fly exist, all within an eight mile radius encompassing two counties in California's interior.⁶⁹ Nearing extinction after ninety-seven percent of its habitat was destroyed, the Delhi Sands Flower-Loving Fly has an estimated population in the low hundreds.⁷⁰ As its name entails, the Fly is one of only a few species of fly attracted to the nectar in flowers that pollinates native plant species.⁷¹

Since being listed as endangered, the ESA prohibits any person from harming the Fly or its habitat and forbids any federal agency from approving projects that could do the same.⁷² Thus, when San Bernardino County wanted to construct a half-billion dollar hospital on Fly habitat, the FWS required modification of the plans to prevent a "take" of the Fly.⁷³ After efforts to accommodate the FWS' requests failed, the County along with the National Association of Home Builders filed a complaint seeking a declaration that section 9 of the ESA as applied exceeded Congress' power under the Commerce Clause.⁷⁴

The Fly controversy netted three "strikingly diverse explanations" regarding whether a federal agency could constitutionally require protection of the Fly habitat.⁷⁵ In the majority opinion, Judge Wald justified the regulation based on three arguments. First, she reasoned that Congress has the authority to control the uses of the channels of interstate commerce.⁷⁶ Second, she upheld the regulation because Congress is authorized "to keep the channels of interstate commerce free from immoral and injurious . . . uses."⁷⁷

Third, she believed that the intrastate activities involved were subject to federal regulation because they substantially affected

76. NAHB, 130 F.3d at 1046 (stating the takings prohibition is "necessary to enable the government to control the transport of the endangered species in interstate commerce").

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^{68.} NAHB, 130 F.3d at 1043.

^{69.} Id. at 1043-44.

^{70.} *Id.* at 1044.

^{71.} Id. at 1043-44.

^{72.} See 16 U.S.C. §§ 1536, 1538(a)(1) (2000).

^{73.} NAHB, 130 F.3d at 1044.

^{74.} Id. at 1045.

^{75.} John C. Nagle, *The Commerce Clause Meets the Delhi Sands Flower-Loving Fly*, 97 MICH. L. REV. 174 (1998) (stating that the Fly is the "only fly to divide the D.C. Circuit three ways concerning the meaning of the Commerce Clause"). In addition to Judge Wald's majority opinion, Judge Henderson agreed that the "protection of the flies regulates and substantially affects commercial development activity which is plainly intrastate." *NAHB*, 130 F.3d at 1058 (Henderson, J., concurring). On the other hand, Judge Sentelle fervently dissented, asking "by what constitutional justification does the federal government purport to regulate local activities that might disturb a local fly?" *Id.* at 1061 (Sentelle, J., dissenting).

^{77.} Id. (citing Heart of Atlanta Motel Inc. v. United States, 379 U.S. 214, 256 (1964)).

interstate commerce.⁷⁸ Important to this analysis was her assertion that the court should look to the "aggregate effect of the extinction of all similarly situated endangered species."⁷⁹ She proffered two reasons to explain why the regulation of endangered species like the Fly substantially affects interstate commerce. One, the ESA protects biodiversity and "thereby protects the current and future interstate commerce that relies upon it," including the potential medicinal benefits.⁸⁰ That is, the "biodiversity argument insists that the availability of a large number of animal and plant species has a substantial effect on interstate commerce" by improving "the probability that we will find a species that possesses the medicinal, nutritional, or other benefit that we seek."⁸¹ Two, the taking of endangered species is "destructive interstate competition," and as such should be subject to federal regulation.⁸²

2. Gibbs v. Babbitt: The Red Wolves Case

Unlike the Fly, the red wolves in *Gibbs v. Babbitt* only split the Fourth Circuit in two, not three.⁸³ Specifically, the court addressed whether the federal government could regulate the taking of red wolves on private land.⁸⁴ Red wolves are endangered species originally found living in riverine habitats throughout the southeastern United States.⁸⁵ Due to habitat destruction and hunting, the red wolf population was reduced to meager levels. As a result, the FWS initiated a captive breeding program and reintroduced forty-two wolves on to federal land in North Carolina.⁸⁶

Unfortunately, several red wolves migrated to private property in North Carolina, outraging local landowners fearing the resurgence of the red wolf would harm their livestock and bring

^{78.} Id. at 1052.

^{79.} Id. at 1046.

^{80.} Id. at 1052.

^{81.} Nagle, *supra* note 75, at 188-89.

^{82.} See NAHB, 130 F.3d at 1054. Interestingly, Judge Wald did not attempt to argue that the Fly itself actually affected interstate commerce, even though the district court found that the Fly did. See Nagle, supra note 75, at 182. The record reflected that (1) the Fly was on display in three museums outside California, (2) people outside California, on at least two occasions, bought the Fly from an insect catalog, (3) others traveled interstate to study the Fly, and (4) various scholarly articles had been written about the Fly in other states. *Id.* at 181. While these facts clearly indicate some relationship to commerce, as John C. Nagle explained, "it is hard to maintain that they are the substantial relationships needed to invoke the Commerce Clause." *Id.* at 181.

^{83.} *See* 214 F.3d 483, 486 (4th Cir. 2000). Chief Judge Wilkinson wrote the majority opinion. Judge Luttig vehemently opposed the majority opinion, arguing that the red wolf's affect on commerce can hardly be characterized as "substantial." *Id.* at 506-07.

^{84.} Id. at 486.

^{85.} See id. at 488.

^{86.} See id.

their land under federal regulation.⁸⁷ In response, two citizens and two counties filed an action in federal court seeking a declaration that the federal government did not have the constitutional authority to prohibit the taking of red wolves on private property.⁸⁸ Siding with the FWS, the district court held the prohibition of red wolf takings was proper under the Commerce Clause because red wolves were "things in interstate commerce" and they substantially affected interstate commerce.⁸⁹

Applying the rational basis test, the Fourth Circuit stated that it was "reasonable for Congress . . . to conclude that [the takings prohibition] regulates economic activity."90 Based on this assertion, the court considered the aggregate affect that the takings of many red wolves would have on interstate commerce.⁹¹ Without red wolves, the court reasoned, there would be "no red wolf related tourism, no scientific research, and no commercial trade in pelts."92 In addition, the court noted that the red wolf reintroduction program generated numerous studies and the resulting scientific research created jobs.⁹³ Like Judge Henderson in NAHB v. Babbitt, the Fourth Circuit argued that biodiversity leads to "inestimable future value" in the form of medicines and knowledge.⁹⁴ The court concluded that these factors combined to satisfy the substantial affect prong of the test laid out in Lopez.⁹⁵ However, the court rejected the district court's assertion that the red wolves were "things in interstate commerce."⁹⁶

^{87.} *Id.* at 488-89. One landowner, Richard Lee Mann, "shot a red wolf that he feared might threaten his cattle." *Id.* The federal government prosecuted him for violating a special rule promulgated to prevent the taking of red wolves. Federal actions like this angered area residents and several counties. In fact, the North Carolina legislature passed a law that made it legal "to kill a red wolf on private property if the landowner had previously requested the FWS to remove the red wolves from the property." *Id.* at 489.

^{88.} See id. at 489.

^{89.} *Id.* at 489-90. *See* Gibbs v. Babbitt, 31 F. Supp. 2d 531, 535 (E.D.N.C. 1998) (stating, "[t]he record in this case clearly demonstrates that the red wolves are 'things in interstate commerce'... tourists do cross state lines to see the red wolf, ... red wolves are to be found in several states, and that some of the red wolves ... either have crossed states lines or may cross state lines in the future [The red wolf] is more clearly a 'thing in interstate commerce' than the Delhi Sands Flower-Loving Fly").

^{90.} Gibbs, 214 F.3d at 492.

^{91.} Id. at 493.

^{92.} *Id.* at 492-93 (stating that "red wolves are part of a \$29.2 billion national wildliferelated recreational industry").

^{93.} Id. at 494.

^{94.} Id.

^{95.} Id.

^{96.} *Gibbs*, 214 F.3d at 491 (stating, "[a]lthough the Service has transported the red wolves interstate for the purposes of study and the reintroduction programs, this is not sufficient to make the red wolf a 'thing' in interstate commerce").

IV. SWANCC & ITS JURISDICTIONAL EFFECTS ON THE ESA

After the Supreme Court's decision in *Lopez*, litigants renewed their efforts to stave off federal restrictions on their activities by arguing that such regulation violated the Commerce Clause. This federalism reviving trend began with *Lopez*, gained credibility with *Morrison*, and was possibly expanded by *SWANCC*. Part IV explores the *SWANCC* case and its constitutional dicta, and will discuss its possible jurisdictional effects on the ESA. Finally, this part concludes by analyzing two recent decisions where the D.C. Circuit and the Fifth Circuit refused to apply *SWANCC* in a way that would limit federal regulation of intrastate species.

A. SWANCC

The *SWANCC* case raised the interesting question of whether the jurisdiction of the Army Corps of Engineers ("Corps") to require dredge and fill permits into navigable waters extended to isolated, abandoned sand and gravel pits with seasonal ponds which provided habitat to migratory birds.⁹⁷ In order to locate and develop a disposal site for non-hazardous solid waste, several Illinois communities united to form a consortium called the Solid Waste Agency of Northern Cook County, or SWANCC.⁹⁸ SWANCC purchased a 533-acre parcel that was last used in the 1960s as a sand and gravel pit mining operation, which left many pits scattered throughout the parcel.⁹⁹ After being abandoned, the pits evolved into a "scattering of permanent and seasonal ponds," providing habitat to several species of migratory birds.¹⁰⁰

A federal agency's ability to regulate under the Clean Water Act is limited in scope by the language of the statute. Specifically, the CWA grants the Corps the authority to issue permits for discharges into "navigable waters," which the statute defines as "waters of the United States."¹⁰¹ The Corps issued regulations defining the term "waters of the United States" broadly to include intrastate ponds or wetlands whose use or misuse "could affect interstate or foreign commerce."¹⁰² Even more expansively, the Corps operated under an informal policy, known as the Migratory Bird Rule, that considered

^{97. 531} U.S. at 162.

^{98.} Id.

^{99.} Id. at 163.

^{100.} *Id*.

^{101. 33} U.S.C. §§ 1344(a), 1362(7) (2000).

^{102. 33} C.F.R. § 328.3(a)(3) (1999).

an isolated water body to be jurisdictional if it provided habitat to migratory birds.¹⁰³

To ensure compliance with the law, SWANCC requested and was granted the necessary state and local permits to operate the landfill.¹⁰⁴ Likewise, SWANCC asked the Corps whether a federal Clean Water Act permit would be necessary.¹⁰⁵ At first, the Corps conceded that no federal permit was needed as it lacked jurisdiction over the site.¹⁰⁶ Later, however, the Corps learned that over a hundred species of migratory birds frequented the parcel, and pursuant to the Migratory Bird Rule, the Corps asserted jurisdiction.¹⁰⁷ After efforts failed to create satisfactory mitigation techniques, the Corps denied SWANCC's request for a federal permit.¹⁰⁸

In response, SWANCC filed suit in federal court challenging the Corps' jurisdiction over the site on two grounds.¹⁰⁹ First, SWANCC argued that the Corps exceeded its statutory authority by broadly interpreting the CWA to cover "nonnavigable, isolated, intrastate waters based upon the presence of migratory birds."¹¹⁰ Second, SWANCC contended, if Congress intended to cover this type of water body, such an exercise of federal authority would exceed the Commerce Clause power.¹¹¹ The Seventh Circuit disagreed with SWANCC on both grounds.¹¹² Writing for the majority, Chief Justice Rehnquist reversed the Seventh Circuit, holding that the Migratory Bird Rule exceeded the Corps statutory authority under the CWA.¹¹³ Thus, the Court agreed with SWANCC on its first argument and did not need to reach a conclusion as to the constitutional issue.¹¹⁴

The Court did, however, communicate its frustration with a federal agency trying to assert such expansive power in contravention to the statutory and constitutional limits placed on it. Even if the statute supported the Migratory Bird Rule, the Court

^{103.} *See* 51 Fed. Reg. 41217; *SWANCC*, 531 U.S. at 164, n.1 (noting, "the Corps issued the 'Migratory Bird Rule' without following the notice and comment procedures" of the APA).

^{104.} SWANCC, 531 U.S. at 163.

^{105.} *Id.*

 $^{106.\} Id.$ at 164 (stating that the Corps believed that the parcel did not qualify as a jurisdictional "wetland").

^{107.} Id.

^{108.} Id. at 164-65.

^{109.} Id. at 165.

^{110.} Id. at 165-66.

^{111.} *Id.* at 166.

^{112.} *Id*.

^{113.} *Id.* at 167 (reasoning that the CWA was written to cover navigable waters and wetlands adjacent to navigable waters).

^{114.} Id.

explained, such regulation would "push the limit of congressional authority" and "alter the federal-state framework by permitting federal encroachment upon a traditional state power."¹¹⁵ Citing *Lopez* and *Morrison*, the Court reminded the Corps that "the grant of authority to Congress under the Commerce Clause, though broad, is not unlimited."¹¹⁶ The Court concluded that permitting this sort of federal regulation "would result in a significant impingement of the States' traditional and primary power over land and water use."¹¹⁷

Importantly, the Court also addressed, without answering, the controversial issue of what "precise object or activity" receives the aggregate impact treatment for the purposes of determining if there is a substantial effect on interstate commerce.¹¹⁸ The Corps argued that the Court should consider the aggregate impact of the municipal landfill, which was "plainly of a commercial nature."¹¹⁹ In rejecting this argument, the Court intimated that the object or activity that is the focus of the statute (i.e., the regulated waters) receives the aggregate treatment.¹²⁰ In fact, the Court reasoned the Corps' argument for aggregate treatment based on the landfill being a commercial activity "is a far cry, indeed, from the 'navigable waters' and 'waters of the United States' to which the statute by its terms extends."¹²¹ As the next section addresses, much debate exists over the potential effects the constitutional dicta in *SWANCC* will have on the ESA.

B. Possible Jurisdictional Effects of SWANCC on the ESA

In general, three arguments are proffered for the impact that the *SWANCC* dicta will have on the regulation of intrastate species. First, some argue that the Court's dicta will have serious implications for federal regulation of intrastate species.¹²² Second, others argue that the Court's dicta will not impact the scope of federal regulation of intrastate species.¹²³ Finally, I argue that the

^{115.} Id. at 173.

^{116.} Id.

^{117.} Id. at 174.

^{118.} Id. at 173.

^{119.} *Id*.

^{120.} Id.

^{121.} Id.

^{122.} See Jonathan H. Adler, *The Ducks Stop Here? The Environmental Challenge to Federalism*, 9 SUP. CT. ECON. REV. 205 (2001).

^{123.} See Charles Tiefer, SWANCC: Constitutional Swan Song for Environmental Laws or No More Than a Swipe at Their Sweep, 31 ENVTL. L. REP. 11493 (2001) (arguing that SWANCC was a result of O'Connor's & Kennedy's strict statutory interpretation and not the Court foreshadowing coming constitutional limits on environmental laws); but see Hodel v. Va. Surface Mining & Reclamation Ass'n, 452 U.S. 264, 276-82 (1981) (reasoning that the

Court's dicta should, but will not, limit the ability of federal agencies to regulate activities based on intrastate species.

In his article, *The Ducks Stop Here? The Environmental Challenge to Federalism*, Jonathan Adler argues that the Court's continued "revival of federalism" in *SWANCC* will impact "other environmental statutes, such as the Endangered Species Act, which assert extremely far-reaching federal authority with far less ambiguity than the Clean Water Act."¹²⁴ Weighing the Court's rationale in the CWA context and comparing it to the ESA, Adler believes "[r]egulating activities that may harm endangered species on private land is not geographically limited in the way that Corps' regulation under [the CWA] is limited to 'waters of the United States'."¹²⁵ Thus, he argues that courts will be inclined to expand the *Lopez* and *Morrison* rationales to the ESA context more readily after *SWANCC*.

On the other hand, other commentators argue that the *SWANCC* decision reflects the Court's desire to narrowly construe statutes rather than a desire to strike down environmental legislation.¹²⁶ This view is supported by the fact that the more moderate Justice O'Connor and Justice Kennedy are less likely to rubber-stamp an opinion striking down federal regulation of intrastate species.¹²⁷ Under this view of the *SWANCC* dicta, "appellate courts... should not take *SWANCC* as any more than a light swipe, not a serious strike, at the [ESA]."¹²⁸

Finally, I argue that *SWANCC* should signal to other courts that the *Lopez* and *Morrison* framework applies with equal force to environmental and land use regulations as it does to education, crime, and other issues of traditional state concern. Several reasons explain why courts will be reluctant to use the *SWANCC* dicta to strike down regulation of an intrastate species. First, many believe that the social problems addressed in *Lopez* and *Morrison* — gun

Commerce Clause is broad enough to uphold environmental regulation).

^{124.} Adler, supra note 122, at 207-08.

^{125.} *Id.* at 241. *See* Virginia S. Albrecht & Stephen M. Nickelsburg, *Could SWANCC Be Right? A New Look at the Legislative History of the Clean Water Act*, 32 ENVTL. L. REP. 11042, 11043 (2002) (arguing that, instead of rubber-stamping federal jurisdiction under the "almost-anything-goes 'affecting commerce' theory, courts and agencies must now ask whether federal jurisdiction over a particular geographic feature was in fact intended by Congress").

^{126.} *See* Tiefer, *supra* note 123, at 11493; Rancho Viejo, LLC v. Norton, 32 ENVTL. L. REP. 20112, 20115 (D.D.C. 2001) (refusing to extend *SWANCC* to the ESA context, reasoning that *SWANCC* was resolved on narrow statutory grounds).

^{127.} *See, e.g.,* Babbitt v. Sweet Home Chapter of Communities for a Great Oregon, 515 U.S. 687 (1995) (involving a case where Justice O'Connor joined the majority upholding the ESA's implementing regulations, refusing to join Chief Justice Rehnquist, Justice Scalia, and Justice Thomas).

^{128.} Tiefer, supra note 123, at 11493.

possession and domestic violence — were not going to be solved by the federal legislation at issue in those cases, whereas the public generally feels that the federal government is a critical player in the preservation of biodiversity.¹²⁹ Likewise, as previously stated, a majority of the Court is not likely to support a broad rejection of Congress' power to protect species.¹³⁰ Third, with the vast amount of case law on point upholding the ESA under Commerce Clause challenges, courts are unlikely to strike down any regulation based on intrastate species without a clear word from the Supreme Court.¹³¹ That is, courts are more likely to cite to the rationale in NAHB v. Babbitt and Gibbs v. Babbitt than to strike down any regulation based on dicta in the SWANCC decision.¹³² However, if a case were to be certified involving a truly intrastate species (as defined in Part VI-A of this paper), the Court would confront an ideal situation for clarifying the outer limits of the Commerce Clause power in the environmental arena.¹³³

C. ESA Case Law After SWANCC

Since the Supreme Court only used dicta to address the Commerce Clause issue in *SWANCC*, Congress' authority to restrict local activities based on intrastate species is uncertain at best. One thing is clear, however, litigants are revamping their efforts to evade the ESA based on *SWANCC*.¹³⁴ For the most part, courts

^{129.} See Adler, supra note 122, at 237.

^{130.} Justice Kennedy, concurring in Lopez, stated that "the Commerce Clause grants Congress extensive power and ample discretion to determine its appropriate exercise." 514 U.S. 549, 568. He apparently had a limited view of the holding in *Lopez* as involving a case where "neither the actors nor their conduct [had] a commercial character, and neither the purposes nor the design of the statute [had] an evident commercial nexus." Id. at 580. However, Justice Kennedy also reasoned that "[w]ere the Federal Government to take over the regulation of entire areas of traditional state concern, areas having nothing to do with the regulation of commercial activities, the boundaries between the spheres of federal and state authority would blur and political responsibility would become illusory." Id. at 577 (citing FERC v. Mississippi, 456 U.S. 742, 787 (1982) (O'Connor, J., concurring in judgment in part and dissenting in part)). See Bradford C. Mank, Protecting Intrastate Threatened Species: Does the Endangered Species Act Encroach on Traditional State Authority and Exceed the Outer Limits of the Commerce Clause?, 36 GA. L. REV. 723, 794 (2002) (stating, "Justices O'Connor and Kennedy, likely the Court's swing voters, might take a more deferential approach to federal regulation of intrastate endangered species under the Commerce Clause"). 131. See, e.g., NAHB v. Babbitt, 130 F.3d 1041 (D.C. Cir. 1997).

^{132.} *See, e.g.*, Rancho Viejo, LLC v. Norton, 32 ENVTL. L. REP. 20112 (D.D.C. 2001), *aff'd*, 323 F.3d 1062 (D. C. Cir. 2003) (rejecting the argument that *SWANCC* changes the outcomes reached in earlier decisions like *NAHB v. Babbitt*).

^{133.} The Supreme Court declined to review *Gibbs v. Babbitt*, possibly showing its reluctance to address these questions. 531 U.S. 1145 (2001).

^{134.} See Shields v. Norton, 289 F.3d 832 (5th Cir. 2002), cert. denied, 154 L.Ed.2d 565, 123 S. Ct. 663 (2003); Alabama-Tombigbee River Coalition v. Norton, 2002 WL 227032 (D. Ala. Jan. 29, 2002) (involving claim that Section 4(a) of the ESA was unconstitutional as applied

have been extremely reluctant to apply the dicta in SWANCC to the ESA.¹³⁵ Part V will address this phenomenon and analyze the approaches courts have taken in the year and a half since the SWANCC decision.

1. Rancho Viejo, LLC v. Norton: The Toad Case

In Rancho Viejo, LLC v. Norton, a federal district court rejected the argument that SWANCC changes the outcomes reached in earlier decisions like NAHB v. Babbitt.¹³⁶ In Rancho Viejo, a developer was denied permits to construct a housing development because the project would damage the habitat of the endangered arroyo toad.¹³⁷ In response, the developer filed suit arguing that FWS lacked "the authority under the Commerce Clause to regulate private lands in order to protect the arroyo toads on those lands, because [the toads] live entirely within California."¹³⁸ In actuality, the record indicated that the toad's habitat stretched from coastal Southern California to Mexico.¹³⁹ Paralleling the D.C. Circuit's rationale in NAHB v. Babbitt, the court labored to explain how SWANCC "does nothing to bolster" the developer's argument.¹⁴⁰ Uncertain over whether the rational basis test or the substantial affect on interstate commerce test applied, the district court evaluated the case under both tests and concluded that under either the regulation must be upheld.¹⁴¹ The district court even went to the extent of trying to prove that the regulation of a toad itself is "economic in nature because 'extinction of [a species] would substantially affect interstate commerce by foreclosing any possibility of several types of commercial activity'."¹⁴²

to the listing of the Alabama Sturgeon because Congress exceeded its Commerce Clause power by regulating an intrastate species in which there is no commercial trade); Maine v. Norton, No. 00-250-B-C, 2003 U.S. Dist. LEXIS 6911 (D. Me. Apr. 24, 2003) (rejecting a Commerce Clause challenge to the listing of a distinct population segment of the Atlantic Salmon).

^{135.} See Bldg. Indus. Ass'n of So. Cal. v. Norton, 247 F.3d 1241, 1247 n. 8 (D.C. Cir. 2001), *cert. denied*, 534 U.S. 1108 (2002) (rejecting a Commerce Clause challenge to federal protection of a species of aquatic invertebrates known as fairy shrimp that are found in vernal pools in California).

^{136. 32} ENVTL. L. REP. 20112 (D.D.C. 2001) (finding no "valid basis upon which to conclude that the holding of [*NAHB v. Babbitt* and *Gibbs v. Babbitt*] has been undermined by recent Supreme Court jurisprudence interpreting Congress' power under the Commerce Clause"). 137. *Id.* at 20112-13.

^{138.} *Id.* at 20112.

^{139.} Id.

^{140.} Id. at 20115.

^{141.} Id. at 20114.

^{142.} *Id.* (quoting United States v. Bramble, 103 F.3d 1475, 1481 (9th Cir. 1997)). One must wonder if the court was referring to the possibility of future business in the consumption of toad legs or even a hit Disney movie about the arroyo toad. To me, saying that protecting a toad is economic in nature is strange — protecting a toad is ecological in nature, biological in

Affirming the district court, the D.C. Circuit settled on the substantial affect on interstate commerce test but remained noncommittal concerning whether the biodiversity argument or the commercial development activity created the substantial affect.¹⁴³ Believing that it was "highly unlikely" that SWANCC dictated a different outcome than that decided in NAHB, the D.C. Circuit followed once again the four-part test laid out in Lopez for determining whether an activity has a substantial relation to interstate commerce.¹⁴⁴ Most importantly, the regulated activity at issue, the court reasoned, was "Rancho Viejo's planned commercial development, not the arroyo toad that it threatens."¹⁴⁵ Since this development had a substantial impact on interstate commerce in the aggregate, the court found no constitutional violation.¹⁴⁶ Interestingly, the majority opinion failed to address how its rationale included a logical stopping point, as required by *Lopez* and Morrison.147

nature, zoological in nature, or even scientific in nature, but certainly not economic in nature. 143. Rancho Viejo, LLC v. Norton, 323 F.3d 1062, 1068 (D.C. Cir. 2003). In fact, the court appeared hesitant to criticize any rationale that would lead to the conclusion that a substantial affect on interstate commerce was involved. *Id.* (stating, "In focusing on the [commercial development rationale], we do not mean to discredit the first. Nor do we mean to discredit rationales that other circuits have relied upon in upholding endangered species legislation.").

^{144.} Id. at 1068-71.

^{145.} *Id.* at 1072 (reasoning that the "ESA regulates takings, not toads"). The D.C. Circuit seemingly adopts a broader view of the "*precise* object or activity" used to determine a substantial affect on interstate commerce than contemplated by the Supreme Court in *SWANCC*. *Id.* at 1072 (emphasis added). In *SWANCC*, the Court rejected the argument that a municipal landfill, which was "plainly of a commercial nature," received the aggregate treatment under the substantial affect test. *See SWANCC*, 531 U.S. at 173.

^{146.} Rancho Viejo, 323 F.3d at 1079-80.

^{147.} See Lopez, 514 U.S. at 564. Chief Judge Ginsburg attempted to rectify this omission in his concurrence, explaining that a "take can be regulated if — but only if — the take itself substantially affects interstate commerce." Rancho Viejo, 323 F.3d at 1080. (C.J. Ginsburg, concur) (stating that "large-scale residential development" clearly affects interstate commerce but a "homeowner who moves dirt in order to landscape his property, though he takes the toad, does not affect interstate commerce"). One possible explanation for the majority's omission of this point is the fact that the majority adopted the biodiversity argument as an alternative justification for this federal regulation. Under Chief Judge Ginsburg's rationale, the biodiversity argument fails for want of a logical stopping point because it holds that any taking of any species under any circumstances has a substantial affect on interstate commerce because of its detrimental impact on biodiversity.

2. GDF Realty Investments, Ltd. v. Norton: The Cave Bugs Case

In GDF Realty Investments, Ltd. v. Norton, the district court rejected a Commerce Clause challenge to the ESA where a federal agency used the ESA to preclude the proposed development of a shopping center, a residential subdivision, and office buildings on property containing six endangered species of cave-dwelling invertebrates.¹⁴⁸ The species, which included spiders, beetles, and pseudoscorpions, had ranges spread over just two counties within Texas.¹⁴⁹ The developers argued that the SWANCC decision required courts to focus on the object of the take prohibition, i.e., the listed species.¹⁵⁰ Even though these were clearly intrastate species, the district court rejected the developers' constitutional challenge to the regulation, holding that the planned commercial development substantially affected interstate commerce.¹⁵¹ The developers argued that SWANCC required courts to focus on the object of the take prohibition, i.e., the listed species, when determining the effect on interstate commerce.¹⁵² Rejecting this argument, the district court stated the "Solid Waste dicta cited by plaintiffs is . . . inapplicable in this case."¹⁵³ Like Rancho Viejo, the court struggled to explain how the protection of intrastate bugs had a "substantial affect on interstate commerce," even going to the extent of analyzing the case under several different tests.¹⁵⁴

Admitting that this area of constitutional jurisprudence is full of "legal uncertainty" and subject to "controversial questions [of aggregation]," the Fifth Circuit embarked on the difficult task of fitting federal regulation of cave bugs within the *Lopez* and *Morrison* Commerce Clause framework.¹⁵⁵ The Fifth Circuit, in light of *SWANCC*, rejected the district court's reliance on the development's impact on interstate commerce because that justification would "effectually obliterate' the limiting purpose of the Commerce Clause."¹⁵⁶ In addition, the Fifth Circuit reasoned

^{148. 169} F. Supp. 2d 648 (D. Tex. 2001), aff'd, 326 F.3d 622 (5th Cir. Tex. 2003).

^{149.} See id. at 651.

^{150.} *Id.* at 659.

^{151.} Id. at 658.

^{152.} See id. at 659.

^{153.} Id. at 659 n. 15.

^{154.} *See id.* at 657-58 (considering the case under the court's own version of the Morrison approach and considering the case under a "purely as-applied Commerce Clause challenge" based on the effect of the specific activity on interstate commerce).

^{155.} GDF Realty Investments, Ltd. v. Norton, 326 F.3d 622, 629-30 (5th Cir. 2003).

^{156.} *Id.* at 633-35 (stating that the district court's rationale provides "no limit to Congress' authority to regulate intrastate activities, so long as those subjected to the regulation were entities which had an otherwise substantial connection to interstate commerce"). This seemingly conflicts with the reasoning of the D.C. Circuit in *Rancho Viejo. See Rancho Viejo*, 323 F.3d 1062, 1072 (D.C. Cir. 2003) (holding that the regulated activity was the planned

that the taking of cave bugs alone did not have a substantial effect on interstate commerce.¹⁵⁷ Nonetheless, the court affirmed the district court, holding that Congress could regulate in this area because the taking of all endangered species in the aggregate had a substantial effect on interstate commerce.¹⁵⁸

These cases, like their progenitors, reflect the lengths courts must travel to fit federal regulation of intrastate species into the Commerce Clause box. Admittedly, many courts have been reluctant to use *SWANCC* as a means of restricting federal power. In fact, as of the time of this paper, no court has construed *SWANCC* to the serious detriment of federal regulation of intrastate species.¹⁵⁹ Nonetheless, several recent cases in other environmental arenas indicate that not all courts ignore *SWANCC*.¹⁶⁰ My proposal, as explained in Part VI, provides a more reasonable and comprehensible approach to determining whether species regulation

159. In June 2002, the Supreme Court issued a writ of certiorari in a case addressing the scope of activities the Corps is authorized to regulate under the CWA. *See* Borden Ranch Partnership v. Corps of Engineers, No. 01-1243 (9th Cir. June 10, 2002). This case may present the Court with an opportunity to clarify its constitutional rationale in *SWANCC*.

commercial development).

^{157.} See GDF Realty Investments, Ltd. v. Norton, 326 F.3d at 636-37 (rejecting argument that the scientific interest generated by the cave bugs and their possible future commercial benefits were sufficient to trigger congressional action).

^{158.} See id. at 638-41. The Fifth Circuit reasoned that aggregation is appropriate when dealing with intrastate species for three reasons: (1) the ESA is "directed at activity that is economic in nature;" (2) the "regulated intrastate activity [is] an 'essential' part of the economic regulatory scheme;" and (3) there is a direct link between species loss and a substantial commercial effect. *Id.* at 639-40.

^{160.} In Rice v. Harken Exploration Co., the Fifth Circuit construed SWANCC broadly stating, "[u]nder [SWANCC], it appears that a body of water is subject to regulation under the [CWA] if the body of water is actually navigable or is adjacent to an open body of navigable water." 250 F.3d 264, 269 (5th Cir. 2001), *reh'g denied*, 263 F.3d 167 (5th Cir. Tex. 2001); *see* Albrecht & Nickelsburg, *supra* note 125, at 11044 (stating that *Rice* "articulated a broad vision of the import of SWANCC for federal jurisdiction"). In *Rice*, several landowners filed suit against an oil producer alleging the company had discharged oil into "navigable waters" in violation of the Oil Pollution Act, an act analogous to the CWA. *See Rice*, 250 F.3d at 265-67. Even though the waters at issue could possibly feed into a navigable river located down gradient, the waters were, in fact, just small "seasonal creeks" that often had "no running water at all." *Id.* at 270. *Citing to SWANCC*, the court rejected the landowners' argument that a groundwater connection to navigable waters was sufficient to trigger federal regulation. *See id.*

Likewise, in United States v. Newdunn Associates, a federal district court reasoned the Corps of Engineers lacked jurisdiction over several acres of wetlands without a showing there was some actual connection to navigable waters. 195 F. Supp. 2d 751 (E.D. Va. 2002). In U.S. v. Rapanos, another federal district court explained that SWANCC establishes a "new mode of analysis" for determining the extent of federal jurisdiction. 190 F. Supp. 2d 1011, 1015 (E.D. Mich. 2002) (dismissing criminal prosecution for illegal filling of "navigable waters" because there was no evidence that the wetlands were navigable or adjacent to navigable waters). Thus, even though courts have been willing to broadly construe SWANCC in the CWA context, they have been simultaneously unwilling to expand SWANCC's constitutional rationale to the ESA context.

is constitutional. Before doing so, the next part explains the policy arguments that fuel courts' hesitation to strike down federal species protection.

V. ARGUMENTS BEHIND THE FEDERALISM & ESA DEBATE

As courts and commentators battle this issue in the federal reporters and law reviews, several arguments for and against limiting federal regulation based on intrastate species provide the battleground. A voluminous amount of literature addresses these policy issues, so I will briefly address just three issues critical to my proposal: (A) the practicality issue of determining a species' effect on interstate commerce; (B) the externality issue fueling the race to the bottom dispute; and (C) the logicality issue of allowing federal regulation of abundant species but forbidding it when the species becomes so depleted as to be intrastate. Part V will present these arguments, favor the federalist perspective, and lay the groundwork for my proposal in Part VI.

A. Practicality Issue

Most proponents of federalism in the ESA context advocate limiting federal species regulation to those species that individually have a substantial effect on interstate commerce. However, opponents of restricting federal regulation in this way argue that it would be impractical to force courts to make an individualized determination of a single species effect on interstate commerce.¹⁶¹ As the district court in *Rancho Viejo* stated, courts should accept "Congress' more general finding that the preservation of species in the aggregate is crucial to the commerce of this Nation. Given that approximately 13 to 30 million different species now exist," it would be too difficult "to make a determination as to whether each individual species 'substantially affects interstate commerce'."¹⁶²

Two responses mitigate this concern. First, the only species for which substantial affect determinations are made are listed species. Therefore, such a determination will only need to be made for around 1800 species, as litigation requires, not the tens of millions feared by the district court in *Rancho Viejo*.¹⁶³ Second, the listing process is extremely arduous with vast amounts of research compiled on each species.¹⁶⁴ This information will likely provide

^{161.} See Rancho Viejo, LLC v. Norton, 32 ENVTL. L. REP. 20112 (D.D.C. 2001).

^{162.} Id. at 20114. See also NAHB v. Babbitt, 130 F.3d 1041 (D.C. Cir. 1997).

^{163.} See 50 C.F.R. §§ 17.11, 17.12 (2003) (providing the endangered and threatened species list for animals and plants, respectively).

^{164.} See, e.g., Determination of Endangered Status for the Delhi Sands Flower-loving Fly,

most of the information needed to determine whether a particular species has a substantial effect on interstate commerce.¹⁶⁵ As discussed in Part VI, my proposal will address the substantial affect determination by removing it from the forefront of the Commerce Clause test in the ESA context.

B. Externalities Issue

As Jonathan Adler recognizes, a central "argument for broad federal power to regulate environmental matters is grounded in a concern over interstate externalities."¹⁶⁶ Externalities arise where the benefits of a particular action are disproportionately local, while many of the costs are borne by citizens living in other states.¹⁶⁷ Generally, opponents of restricting federal regulation of intrastate species make three arguments based on the idea of externalities.

First, they contend that leaving protection of intrastate species to the states will result in a "race to the bottom" as states reduce conservation efforts to attract business.¹⁶⁸ This fear is simply unfounded.¹⁶⁹ For example, many feared that the states would respond to the *SWANCC* decision by allowing wetlands to go unprotected. "But in fact, many states have responded to *SWANCC* by enacting or recommending the enactment of relatively aggressive regulatory programs to protect isolated wetlands now beyond the reach of the federal government."¹⁷⁰ The same should be expected if the federal government could no longer regulate activities based on intrastate species.

⁵⁸ Fed. Reg. 49,881 (Sept. 23, 1993) to be codified at 50 C.F.R. pt. 17 (providing extensive background information on the Fly and the process leading up to its final listing).

^{165.} *See id.* (providing the historic and current range of the species, activities affecting the species, and other relevant information important to a determination of whether the species is an "intrastate species" for the purposes of my proposal).

^{166.} See Adler, supra note 122, at 222.

^{167.} See id.

 $^{168.\} See \ id.$

^{169.} The "race to the bottom" has been challenged thoroughly and effectively by leading commentators. See id. at 223-31 (discussing extensively the "race to the bottom" and concluding that the states are unlikely to act in this way); Richard L. Revesz, *Rehabilitating Interstate Competition: Rethinking the "Race-to-the-Bottom" Rational for Federal Environmental Regulation*, 67 N.Y.U. L. REV. 1210, 1222 (1992) (arguing that "destructive interstate competition" is an insufficient justification for federal environmental regulation). 170. JOHN C. NAGLE & J.B. RUHL, THE LAW OF BIODIVERSITY AND ECOSYSTEM MANAGEMENT 583 (2002); see Agency Implementation of SWANCC Decision: Hearings Before the Subcomm. on Energy Policy, Natural Resources, & Regulatory Affairs of the House Comm. on Government Reform, 107th Cong. 8 (Sep. 19, 2002) (statement of Assistant Attorney General Thomas L. Sansonetti) (recognizing that "states, such as Wisconsin and Ohio, have enacted legislation providing new authority to fill the 'gaps' created in federal regulatory jurisdiction by SWANCC").

Second, some argue that using federal environmental regulation is necessary to prevent states from imposing "spillover" effects on other states.¹⁷¹ For instance, they argue that the extinction of one intrastate species could have a major impact on the delicate balance of the ecosystem or reduce the possibility of future scientific advancement.¹⁷² Third, they argue that intrastate species protection, if left to the states, will protect a "suboptimal amount of habitat."¹⁷³ That is, some citizens will vote for reduced species protection because they know that other states will engage in conservation efforts.

In response, the federal government cannot accomplish seemingly worthwhile goals by unconstitutional means.¹⁷⁴ Even more, the evidence is just as strong that interjurisdictional competition among the states will lead to optimal species protection plans, as states compete to draw species-related tourism income.¹⁷⁵ Moreover, one of the main justifications for a federalist form of government is that states are able to experiment with different programs, and eventually, other states will adopt the most effective program.¹⁷⁶ Also, states better understand the unique characteristics of their ecosystem and economy, and they can use this understanding to accommodate both. Finally, the federal

^{171.} See RECHTSCHAFFEN & MARKELL, *supra* note 7, at 25-27 (providing a general discussion of the debate surrounding "negative externalities" in environmental law).

^{172.} See Rancho Viejo, LLC v. Norton, 32 ENVTL. L. REP. 20112-14 (D.D.C. 2001) (reasoning that the extinction of an intrastate species of toad would "substantially affect interstate commerce by foreclosing any possibility of several types of commercial activity").

^{173.} See Adler, supra note 122, at 235.

^{174.} See David A. Linehan, Endangered Regulation: Why the Commerce Clause May No Longer Be Suitable Habitat for Endangered Species and Wetlands Regulation, 2 TEX. REV. L. & POL. 366, 396-99 (1998) (arguing that regulation of endangered species on private land may lie beyond the scope of the Commerce Clause).

^{175.} See RECHTSCHAFFEN & MARKELL, *supra* note 7, at 19 (noting that, over the past two decades, "[s]tates have made significant investments in their capacity to administer environmental and natural resource programs," so much so that, in the aggregate, states currently invest more in environmental protection than the federal government).

^{176.} See Gregory v. Ashcroft, 501 U.S. 452, 458 (1991) (explaining that the federalist structure preserves several advantages such as increasing the "opportunity for citizen involvement in democratic processes" and allowing for "more innovation and experimentation in government"); United States v. Lopez, 514 U.S. 549, 581 (1995) (Kennedy, J., concurring) (explaining that states play a "role as laboratories for experimentation to devise various solutions where the best solution is far from clear"); Robert R. Kuehn, *The Limits of Devolving Enforcement of Federal Environmental Laws*, 70 TUL. L. REV. 2373, 2375-76, 2383 (1996) (discussing federalism and the argument that states are laboratories for social and economic experiments); RECHTSCHAFFEN & MARKELL, *supra* note 7, at 33 (stating, "the existence of 50 state governments inherently provides the opportunity to experiment with a wide variety of approaches in a short time frame"); DEFENDERS OF WILDLIFE, STATE ENDANGERED SPECIES ACTS: PAST, PRESENT AND FUTURE, *available at* http://www.defenders.org/pubs/sesa01.html (last visited Oct. 21, 2002) (recognizing that states have been the "nation's principal laboratories for policy change" in many areas including conservation).

government lacks sufficient resources to effectively protect *all* endangered species.¹⁷⁷ Simply put, a one-size-fits-all approach to protecting intrastate species is bad policy because of demographic variation, localized culture, differing geography, varied economic strengths, and limited federal resources.¹⁷⁸ The federal government should allow states and localities to make these value judgments, or choose to alter their decisions by constitutional means like appropriating money to states that meet federal goals.¹⁷⁹

C. Logicality Issue

Finally, courts upholding federal regulation of intrastate species have challenged the logic behind allowing Congress to regulate species when they are abundant and spread across states lines, but disallowing it when the species are so depleted as to abide in only one state.¹⁸⁰ For instance, the district court in *Rancho Viejo* believed that it made sense to allow a federal agency to protect the arroyo toad to prevent it from becoming an intrastate species.¹⁸¹ Admittedly, even though there is little evidence that states will not adequately protect such species, if the federal government can constitutionally regulate a species at some point in the past, it should be able to do so in the future as well. Thus, under my proposal, I mitigate this concern by considering the historic range of the species when defining intrastate species.

VI. A COHERENT TEST FOR FEDERAL REGULATION OF INTRASTATE SPECIES

After establishing a new test for deciding the constitutionality of federal regulation of intrastate species, Part VI will conclude by analyzing how two different cases, *NAHB v. Babbitt* and *Gibbs v. Babbitt*, would have faired under my approach. I hope that, after reading the analysis of these two hypothetical decisions, those disfavoring the federalist perspective will realize that my approach is not so draconian after all.

^{177.} See RECHTSCHAFFEN & MARKELL, supra note 7, at 20 (pointing out the resource constraints faced by federal environmental agencies).

^{178.} See Adler, supra note 122, at 213.

^{179.} *See id.* at 235 (contending that the use of the federal spending power can effectively subsidize conservation efforts without violating the Constitution). The ESA already provides a mechanism for federal grants to states. *See* 16 U.S.C. § 1535(d) (2002).

^{180.} See Rancho Viejo, LLC v. Norton, 32 ENVTL. L. REP., 20112, 20115 (D.D.C. 2001). 181. See id.

A. The "Intrastate Species Test"

Most importantly, the Supreme Court should more effectively graft the authority of Congress to regulate intrastate species into the *Lopez* and *Morrison* framework. The *SWANCC* decision ambiguously addressed whether the Court would extend its revival of federalism into the environmental context.¹⁸² Thus, under the current regime, courts are forced to justify this sort of regulation on the laughable assertion that, among other things, a fly "substantially affects interstate commerce." Instead of forcing courts to engage in the laborious task of fitting the protection of a listed species under the substantial affect prong, the courts should decide the ESA cases under the "things in interstate commerce" prong, as advocated by the district court in *Gibbs v. Babbitt*.¹⁸³

Under my simple test, courts would ask whether the species at issue is an "intrastate species." If the species qualifies as an intrastate species, then the federal government would be unable to regulate the species and activities that affect the species. Obviously, the linchpin of the test will be the definition of intrastate species. Under my proposal, an intrastate species is a species that (1) has a current and historic range limited to one state, (2) is not susceptible to traveling across state lines, and (3) does not itself substantially affect interstate commerce.¹⁸⁴ Thus, as a "thing of interstate commerce," a court could more readily explain how a species becomes subject to federal regulation. This test also provides the all-important function of providing a logical stopping point for congressional authority to regulate species.¹⁸⁵

^{182.} See id. at 20114-15 (analyzing the constitutionality of federal regulation pursuant to the ESA under various tests); Rancho Viejo, LLC v. Norton, 323 F.3d 1062, 1070-71 (D.C. Cir. 2003) (stating that the Supreme Court's analysis in SWANCC makes it highly unlikely that it undermines previous precedent); Mank, *supra* note 130, at 751 (stating that the *SWANCC* decision suggests "the fact that a species crosses state lines does not automatically make its habitat entitled to protection under the Commerce Clause without further analysis regarding the relationship of the habitat to the species and commercial activity").

^{183.} See Gibbs v. Babbitt, 31 F. Supp. 2d 531, 535 (E.D.N.C. 1998), cert. denied, 531 U.S. 1145 (2001). However, I understand that many judges, including Judge Sentelle, do not consider species regulation to fall within the "things in interstate commerce" prong. See NAHB v. Babbitt, 130 F.3d 1041, 1062 (D.C. Cir. 1997). The issue of whether species regulation can be justified under the "things in interstate commerce" rationale has yet to be comprehensively addressed by a court.

^{184.} See Scalero, *supra* note 28, at 318 (referring to intrastate species as those plant or animal species which are "indigenous to a specific geographic region" of only one state, and are "nonmigratory"); Mank, *supra* note 130, at 735 (stating, "[m]any endangered species are located in only one state, do not cross state lines, and have insignificant commercial or recreational value").

^{185.} See United States v. Morrison, 529 U.S. 598, 610 (2000) (stating that Congress' enumerated powers must have "judicially enforceable outer limits"); GDF Realty Investments, Ltd. v. Norton, 326 F.3d 622, 634-35 (5th Cir. 2003); Nagle, *supra* note 75, at 191-92

Importantly, the elements of the definition ameliorate the concerns expressed by several courts. For example, the element contemplating the historic and current range of the species disposes of the "logicality concern," discussed in Part V-A, that it is illogical to empower Congress to regulate a species when it is abundant and spread across state lines but to disallow such regulation when the species is depleted to just one state.¹⁸⁶ Furthermore, courts can ensure that the federal government can protect species that might become interstate species in the future by excluding migratory species from the definition.¹⁸⁷ Finally, by excluding from the definition of intrastate species those species that individually substantially affect interstate commerce, the courts will provide a way for Congress to protect those species that contribute to medical advances or are involved in interstate tourism or commerce.¹⁸⁸

Therefore, if a species meets this definition, it is not subject to federal regulation. If it does not meet this definition, then it is an interstate species subject to federal regulation. Based on strictly geographic terms, about half of the listed species exist in only one state.¹⁸⁹ Under my proposal, much less than that would be free from federal regulation due to the impact of considering the historic range, migratory nature of the species, and the exception for species

⁽interpreting *Lopez* to mean that "the Commerce Clause cannot justify federal legislation of everything. I will not abandon that principle because it lies at the heart of Lopez.").

^{186.} See GDF Realty Investments, Ltd. v. Norton, 169 F. Supp. 2d 648, 659 n. 14 (W.D. Tex. 2001) (arguing that it is nonsensical to allow the federal government to regulate a species when it is "scattered plentifully across state lines" but prohibit such regulation when "that same species becomes more scarce and its population reduced to a single state"); *Rancho Viejo*, 323 F.3 d at 1073-74; *Gibbs*, 31 F. Supp. 2d at 535 (reasoning that red wolves are interstate species because they "either have crossed state lines or may cross state lines in the future"); *see also* Mank, *supra* note 130, at 752-53 (stating, "Whether a species is located in one state should be a factor, but not dispositive, in deciding whether it substantially affects interstate commerce.").

^{187.} By using the term "not susceptible to traveling across state lines," I hope to encompass species that are migratory and not isolated in the interior of a single state. Federal Clean Water Act regulations use a similar term in defining the scope of "waters of the United States." See 40 C.F.R. § 122.2 (2000) (defining "waters of the United States" to mean "[a]ll waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce").

^{188.} See NAHB v. Babbitt, 130 F.3d 1041, 1058 (D. C. Cir. 1997) (Henderson, J. concurring) (describing the Delhi Sands Flower-Loving Fly as an intrastate species because they "do not move among states either on their own or through human agency"). Thus, under my proposal, an otherwise intrastate species can be subject to federal regulation if it travels in interstate commerce through human agency if it has a substantial effect on interstate commerce. Possible examples include a species used to develop medicines or a species used for its fur in a commercial industry.

^{189.} *See id.* at 1052 (stating that approximately 521 of the 1082 listed species in the United States were found in only one state) (citing the Brief of Amici Curiae Center for Marine Conservation, Defenders of Wildlife, Environmental Defense Fund, National Audubon Society, and World Wildlife Fund at 20-21).

that substantially impact interstate commerce. Section B of this part considers how my proposal would change the courts' rationales and outcomes in *NAHB v. Babbitt* and *Gibbs v. Babbitt*.

Likewise, Congress and various agencies can take steps to improve species' protection under my proposal. As stated earlier, Congress can avoid constitutional problems by using its spending power to encourage states to take actions the federal government deems necessary to safeguard intrastate species. For example, if Congress finds it necessary to ensure that the habitat of the Delhi Sands Flower-Loving Fly is protected, it can provide federal monies to states to include the species in its own endangered species program. In addition, the FWS should focus its efforts on protecting interstate species, which will lead to a more efficient and effective use of conservation resources. It is important under my approach, however, that agencies make detailed factual findings supporting the listing of a species as interstate or intrastate, so that a court will have adequate information readily available to determine if a species is, in fact, interstate or intrastate.

B. Impact of the "Intrastate Species Test"

A brief examination of NAHB v. Babbitt and Gibbs v. Babbitt in light of my proposal will illustrate the simplicity and reasonableness of the "intrastate species test." As discussed earlier, the court in NAHB v. Babbitt upheld the FWS' regulation of a completely intrastate species of fly. If the intrastate species test had been employed by the court, the decision would have been much different — in terms of outcome and logic. Under my test, the court would have asked whether the Fly was an intrastate species under the "things in interstate commerce prong" of the Commerce Clause test. The Fly would not have been subject to federal regulation because (1) the Fly had a current and historic range that only included California, (2) the Fly was not susceptible to traveling across state lines because it was isolated and located deep within California's interior, and (3) the Fly itself did not substantially affect interstate commerce. However, the FWS could bring the Fly under its jurisdiction by making factual findings that the Fly could in the future traverse state lines or by showing that the Fly itself is medically important or has some other substantial effect on interstate commerce.

On the other hand, the outcome in *Gibbs v. Babbitt* would be the same — the court would have upheld the federal regulation of the red wolves. The court would have asked whether the red wolves were "intrastate species." Since red wolves were originally found living in riverine habitats throughout the southeastern United

States, the court would have reasoned that red wolves did not meet the definition of an intrastate specie.¹⁹⁰ Likewise, FWS could justify the regulation by relying on the migratory nature of red wolves or the fact, if proven, that the red wolves are critical to a million dollar tourism or hunting industry.¹⁹¹

VII. CONCLUSION

The Supreme Court's constitutional dicta in SWANCC should signal its intention to expand the revival of federalism into other environmental areas. However, with the weighty authority of NAHB v. Babbitt and Gibbs v. Babbitt still on the books, courts are likely to continue upholding constitutional challenges to federal regulation of intrastate species under the ESA. The "Intrastate Species Test" would significantly reduce the confusion surrounding Congress' ability to regulate flies, toads, cave bugs, red wolves, and thousands of other species. Likewise, my approach would encourage optimum species protection by reaping the benefits of federalism. In the end, it is all speculation until the Supreme Court finally addresses whether Congress may regulate intrastate species. Only then will we learn whether the powers delegated by the Constitution to the federal government are "few and defined" or whether Congress can do whatever it "feels like" under the guise of species protection.

^{190.} Id. at 488.

^{191.} Even Rancho Viejo would have made more sense under my approach. Instead of arguing that toads substantially affect interstate commerce, the court could have relied on the international character of the toad species to justify the federal regulation.

BALANCING PUBLIC WATER SUPPLY AND ADVERSE ENVIRONMENTAL IMPACTS UNDER FLORIDA WATER LAW: FROM WATER WARS TOWARDS ADAPTIVE MANAGEMENT

KEVIN E. REGAN*

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I. INTRODUCTION

According to some scholars, "Florida's water management system has been the envy of many other states for over 25 years."¹ The Florida Water Resources Act of 1972,² which was based on the Model Water Code,³ establishes an administrative system to comprehensively manage water. The drafters of the Model Water Code attempted to combine the best aspects of eastern and western water law into a legal system that balances the water needs of humans and ecosystems.⁴ However, increasing scarcity of water has intensified conflicts and made achieving this delicate balance even more difficult. This article explores one of the largest battles of the Tampa Bay region's "water war[s]."⁵ This battle, known as the fourwellfields case, culminated in major administrative litigation to determine whether permits for municipal wellfields should be renewed despite evidence that pumping was causing severe adverse environmental impacts.⁶ Although the Southwest Florida Water Management District (SWFWMD) never issued a final order, its staff prepared a draft final order that provides insight into the

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^{1.} Richard Hamann, Law and Policy in Managing Water Resources, FLORIDA WATER RESOURCES ATLAS 302, 307 (1998) [hereinafter Law and Policy in Managing Water Resources]. See also Erik Swenson, Comment: Public Trust Doctrine and Groundwater Rights, 53 U. MIAMI L. REV. 363, 378 (1999) (stating that Florida has one of the most comprehensive permit systems in the country).

^{2.} See FLA. STAT. § 373.012 et. seq. (2002).

^{3.} FRANK E. MALONEY, RICHARD C. AUSNESS, AND J. SCOTT MORRIS, A MODEL WATER CODE WITH COMMENTARY (University of Florida Water Resources Research Center 1972) [hereinafter MODEL WATER CODE]. The 1972 legislature discovered this work by Dean Frank E. Maloney and his colleagues at the University of Florida. This code became the basis for the Florida Water Resources Act of 1972. Law and Policy in Managing Water Resource Laws, supra note 1, at 306.

^{4.} Irene K. Quincey, *History of the Regulation of Consumptive Use*, in FLORIDA ENVIRONMENTAL AND LAND USE LAW 14.1-1 to 14.1-2 (The Florida Bar 2001).

^{5.} See, e.g., Martin A. Rowland, *The Evolution of Two Water Resource Management Systems: Case Studies of Tampa Bay and the Middle East*, 11 COLO. J. INT'L ENVTL. L. & POL'Y 411, 423 (2000).

^{6.} W. Coast Reg'l Water Supply Auth. v. Southwest Fla. Water Mgmt. Dist., DOAH 95-1520, Recommended Order, May 29, 1997 [hereinafter Recommended Order]. This dispute is also referred to as the "four-wellfields case." *See* Honey Rand, In the Public Interest: A Story of Conflict, Communication, and Change in Tampa Bay's Water Wars 150 (2000) (unpublished PhD Dissertation, University of South Florida) (on file with author) [hereinafter In the Public Interest].

issue.⁷ Analysis of this dispute demonstrates the importance of considering both human and ecosystem water needs under the Florida Water Resources Act. It also illustrates the tension between the Act's goals of certainty, flexibility, and fairness, and indicates the need for an adaptive management approach to water policy.

Due to problems with saltwater intrusion, the Tampa Bay area's urban coastal communities historically pumped water from rural inland areas.⁸ These inland areas contain a variety of water resources that attract residents and support a variety of species.⁹ In the early 1990s, scientific data confirmed local residents' observations that pumping groundwater for municipal water supply was damaging overlying lakes and wetlands.¹⁰ Disputes over the validity of this data resulted in intense litigation¹¹ between West Coast Regional Water Supply Authority, the coalition of municipal governments that provided public water supply, and SWFWMD, the agency with comprehensive authority to manage water in the region.¹²

^{7.} W. Coast Reg'l Water Supply Auth. v. Southwest Fla. Water Mgmt. Dist., Draft Final Order, Jan. 15, 1998 [hereinafter Draft Final Order] (on file with the author). The author obtained the Draft Final Order, which is now public record under Florida law, from the Southwest Florida Water Management District. See further discussion at note 201, *infra*. The author wishes to thank SWFWMD staff including John Parker, Water Use Regulation Manager, Pamela Gifford, Legal Assistant, and Mark Lapp, Assistant General Counsel, for their assistance in locating and obtaining the Draft Final Order. The views expressed in this article do not reflect those of SWFWMD. Any personal communications between the author and SWFWMD staff do not reflect the official position of SWFWMD or its Governing Board.

^{8.} See Rowland, supra note 5, at 418.

^{9.} See In the Public Interest, supra note 6, at 116-19.

^{10.} See id. at 147-49.

^{11.} Honey Rand, who served as Communications Director for SWFWMD during the fourwellfields dispute, explains that "by March of 1994, every local government and even some of the activists retained counsel and prepared for war. There were in-house lawyers, outside counsel, general counsel and experts on all sides — all paid for with public dollars." *See id.* at 150. She notes that an average resident of St. Petersburg was paying "for at least six lawyers on all sides of the case." *Id.*

^{12.} See generally Recommended Order, supra note 6.

An Administrative Law Judge recommended¹³ that SWFWMD renew water use permits for the wellfields, despite his findings that pumping had caused serious environmental harm to surrounding water resources.¹⁴ He ruled that adverse environmental impacts are not a valid basis for denving permits if the impacts existed when the permit was issued or previously renewed.¹⁵ Legal aspects of this decision are contrary to fundamental principles of Florida water law - that both human and ecosystem needs should be considered and that water allocation decisions should be periodically reevaluated. Because SWFWMD settled the case through participation in the formation of Tampa Bay Water,¹⁶ it did not issue a final order, which could have clarified these legal issues. However, SWFWMD staff did prepare a draft final order (hereinafter Draft Final Order). which addresses many of SWFWMD's concerns. Analysis of the legal arguments in the Draft Final Order provides a very different interpretation of the regulation of adverse environmental impacts under Chapter 373, Florida Statutes.

Part II of this article provides an overview of Florida water law, focusing on the regulation of consumptive use under the Florida Water Resources Act.¹⁷ Part III provides an overview of the water conflicts in the Tampa Bay area that resulted in litigation, discusses the Administrative Law Judge's decision, and explores legal arguments and potential solutions proposed by SWFWMD staff in response to this decision. It also briefly discusses the resolution of the dispute through the formation of Tampa Bay Water. Part IV discusses the importance of this area of Florida law for managing adverse environmental impacts and the need to achieve a delicate

^{13.} Florida's Administrative Procedure Act governs administrative hearings in the state. See generally FLA. STAT. § 120.50 et. seq. (2002). A centralized state agency, the Division of Administrative Hearings, provides an Administrative Law Judge (ALJ) who presides over the hearing. See *id.* at § 120.57(1) (procedures applicable to hearings involving disputed issues of material fact). After the hearing, parties can submit proposed recommended orders to the ALJ. *Id.* The ALJ submits to the agency and all parties a recommended order consisting of findings of fact, conclusions of law, and a recommended disposition. *Id.* at § 120.57(1)(k). Parties can file exceptions to recommended orders. *Id.* at § 120.57(1)(b). However, the agency may adopt the recommended order as the final order of the agency or it may reject or modify conclusions of law over which it has substantive jurisdiction and interpretations of administrative rules over which it has substantive jurisdiction. *Id.* at § 120.57(1)(l). The agency may not modify findings of fact unless the agency first determines from a review of the entire record that the findings of fact were not based upon competent substantial evidence. *Id.*

^{14.} See generally Recommended Order, supra note 6.

^{15.} Id. at Conclusions of Law Nos. 294-301.

^{16.} West Coast Regional Water Supply Authority was reorganized in 1999 to create Tampa Bay Water, which resulted in major structural and permitting changes in the Tampa Bay area. *See* discussion at Part III. E, *infra*.

^{17.} Part II of the Florida Water Resources Act addresses consumptive use permitting. See FLA. STAT. §§ 373.203-250 (2002).

balance between human and ecosystem needs and certainty and flexibility under the Florida Water Resources Act. It also explores the implications of the Water Model Code, other recent legal developments, and the importance of an adaptive management approach to water policy.

II. BACKGROUND ON FLORIDA WATER LAW

A. Eastern, Western, and Administrative Approaches to Water Law

Traditionally, there have been major differences between eastern and western states' laws governing the consumptive use of water. This section compares the eastern and western common law systems of water allocation and discusses some of the major advantages and disadvantages associated with each of these systems. It then discusses the general features of administrative systems of water allocation, which have been implemented in several states, including Florida.

1. Eastern Approach to Water Law

The east follows a riparian system of water allocation that evolved from the English common law governing surface watercourses.¹⁸ Under this system, the right to water is based upon ownership of property that is adjacent to a watercourse.¹⁹ Traditionally, under the natural flow doctrine, a property owner "was entitled to receive the flow of water across the land in an unaltered manner without decrease of quantity or quality."²⁰ This natural flow concept was later replaced by the reasonable use doctrine, which gives all riparian landowners the right to make reasonable use of the water and prohibits unreasonable interference with others' use.²¹ The determination of reasonableness typically requires a "balancing of social, economic, and environmental interests."²²

2) the suitability of the uses to the water course or lake;

^{18.} Frank E. Maloney et. al., *Florida's "Reasonable Beneficial" Water Use Standard: Have East and West Met?*, 31 U. FLA. L. REV. 253, 254 (1979) [hereinafter *Florida's Reasonable Beneficial Water Use Standard*].

^{19.} See id. at 255.

^{20.} Quincey, supra note 4, at 14.1.

^{21.} Id. See also Law and Policy in Managing Water Resources, supra note 1, at 303.

^{22.} Law and Policy in Managing Water Resources, supra note 1, at 303. During the boom of industrialization, the development of water supplies was often viewed as "reasonable." *Id.* Over time, judges developed a more comprehensive analysis that incorporated social concerns. *See id.* The Restatement Second of Torts has identified nine factors considered by the courts in determining reasonableness, which are as follows:

¹⁾ the purpose of the respective users;

³⁾ the economic value of the uses;

⁴⁾ the social value of the uses;

⁵⁾ the extent and amount of the harm caused;

⁶⁾ the practicality of avoiding the harm caused;

⁷⁾ the practicality of adjusting the quantity of the water used by each proprietor;

⁸⁾ the protection of existing values of land, investments and enterprises;

The reasonable use rule, which is still used in most eastern states, was previously the rule in Florida.²³ For the most part, under the riparian system, all riparian owners' rights to the use of water from a particular source were equal²⁴ with the only restraint on this use being the prohibition of "unreasonable interference with the use of other riparian owners."²⁵ Disputes over the use of a particular source were resolved in court on a case-by-case basis.²⁶ Typically, the reasonable use rule also applied to the use of groundwater.²⁷

Many scholars have criticized the common law riparian system because it restricts the use of water to riparian owners and requires that water be used only on riparian land.²⁸ These individuals argue that riparian, or non-riparian owners, may make better use of water at other places.²⁹ Perhaps the greatest criticism of the riparian "system concerns the element of uncertainty associated with the reasonable use of water."³⁰ Due to the fact that the reasonableness of each use is determined relative to the rights of other riparian landowners, changes in water entitlements can occur when others begin or enlarge uses.³¹ However, the flexibility of the eastern riparian system can also be considered one of its greatest strengths.

29. Id.

30. *Id.* at v.

and

⁹⁾ the burden of requiring the users causing the harm to bear the loss.

⁽emphasis omitted) *Florida's Reasonable Beneficial Water Use Standard, supra* note 18, at 256. *See also* discussion Part IV. A, *infra.*

^{23.} Quincey, *supra* note 4, at 14.1. This common law system has been replaced by an administrative system, discussed *infra*.

^{24.} Id.

^{25.} *Id.* at 14.1 to 14.2. *See also* Taylor v. Tampa Coal, 46 So. 2d 392, 392 (Fla. 1950) (holding that a landowner was enjoined from using water for irrigation of citrus that lowered the water level of a lake used for recreation).

^{26.} Quincey, supra note 4, at 14.1 to 14.2. See also MODEL WATER CODE, supra note 3, at v.

^{27.} Quincey, *supra* note 4, at 14.1 to 14.2. Although certain recreational values of a riparian owner may have been protected, the environmental values of a waterbody were generally not protected. *Id. See also* Koch v. Wick, 87 So. 2d 47 (Fla. 1956) (holding that "an overlying property owner could make use of the water percolating through the property provided that the use would not interfere with the use by other neighboring property owners"). Quincey, *supra* note 4, at 14.1 to 14.2. However, in most American jurisdictions, either the absolute ownership doctrine or the American rule determined consumptive rights to percolating groundwater. Richard C. Ausness, *The Influence of the Model Water Code on Water Resources Management Policy in Florida*, 3 J. LAND USE & ENVTL. L. 1, 9 (1987). These doctrines were essentially rules of capture that gave little protection to existing water users. *Id.*

^{28.} MODEL WATER CODE, *supra* note 3, at 156.

^{31.} Id. See also id. at 156 n. 2.

New uses are more easily developed and changes to water allocation can be made to adjust for unforeseen circumstances.³²

Other major criticisms of the riparian system are its lack of administrative controls and the fact that in many jurisdictions a riparian landowner's right to reasonable use can only be determined by litigation.³³ Established water use patterns may be disrupted by later competing uses, thus some industries may refuse to locate in the area.³⁴ Furthermore, most courts are not as capable of ensuring uniformity as a centralized agency "due to their lack of expertise and the inefficiency of a case-by-case approach."³⁵ Another disadvantage of the common law riparian system is that it does not adequately address groundwater and its hydrological relationship with surface water.³⁶

An important characteristic of the eastern riparian system is that it generally provides a fair amount of protection for water resources and ecosystems.³⁷ At least in theory, individuals who use water for in-stream purposes such as fishing, swimming, boating, habitat, or aesthetics are as entitled to use the water as those who pump it for irrigation or industrial use.³⁸ In addition, the transport of water outside of a basin is generally discouraged,³⁹ which can help maintain ecological integrity.

2. Western Approach to Water Law

The water law system that developed in western states, known as the prior appropriation system, is very different than the riparian system. The prior appropriation system originated from gold miners' needs for large quantities of water for their mining operations.⁴⁰ "This water was first appropriated, sometimes at gunpoint," and eventually western law came to recognize these

^{32.} See Law and Policy in Managing Water Resources, supra note 1, at 304.

^{33.} MODEL WATER CODE, supra note 3, at 156.

^{34.} *Id.* at 156-57. This concern was illustrated in the case of the Tampa Bay area. "In 1997, the Florida legislature pledged \$30 million to any computer chip manufacturer that would locate a new plant in the state." Rowland, *supra* note 5, at 440. "Representatives of I.G. Semicon visited the Tampa Bay area to consider siting a plant." *Id.* "The plant would require from 3 to 10 [million gallons per day] mgd of water, which is more than West Coast had in reserve." *Id.* "A site selection manager for the firm pointed out that no computer chip company would waste time considering a site where water availability is uncertain, as it was in the Tampa region in 1997." *Id.* "This missed economic opportunity provided an additional political push to resolve the region's water problems." *Id.*

^{35.} MODEL WATER CODE, supra note 3, at 157.

^{36.} *Id.* at vi.

^{37.} See Law and Policy in Managing Water Resources, supra note 1, at 304.

^{38.} Id.

^{39.} See id.

^{40.} MODEL WATER CODE, supra note 3, at vi.

appropriations.⁴¹ Under the beneficial use doctrine, an individual's right to appropriate water is limited to the quantity that is actually diverted and used for beneficial purposes.⁴² This doctrine was designed "to limit speculators from acquiring rights by diverting and wasting water."⁴³ The riparian system reflects a "first in time, first in right" approach, typically with perpetual and marketable water rights.⁴⁴ Because it is necessary to divert water to obtain the rights to its use,⁴⁵ "in-stream uses and the environment [can] only use water that was being transported in a watercourse to downstream users."⁴⁶

One of the most important advantages of the prior "appropriation system is that users of water are more certain of their rights" than those under the riparian system.⁴⁷ The prior appropriation system establishes priorities for use of water in times of shortage.48 Individuals who "first appropriated water by diverting it had superior rights to junior appropriators."49 During water shortages, "senior appropriators were entitled to their full allocation, while junior appropriators could be cut off completely."50 Some individuals argue that the prior appropriation "system leads to the most beneficial use of water by . . . encouraging the sound development, wise use, conservation, and protection of water."51 However, others have noted "that in many cases, the effect of prior appropriation may be to waste water that otherwise could be put to beneficial use."⁵² Once an appropriator has begun using a certain amount of water, he or she will often continue to draw that amount, even if it is more than necessary, in order to maintain entitlement to that amount.⁵³

Additionally, there are significant environmental implications associated with the prior appropriations system. Fish, wildlife, recreation, and aesthetic uses of water are suffering in many

53. Id. at vii.

^{41.} Id.

^{42.} Law and Policy in Managing Water Resources, supra note 1, at 303.

^{43.} Id.

^{44.} See id.

^{45.} This notion stands in direct contrast to the riparian system's emphasis on use inside the basin from which the water originates.

^{46.} Law and Policy in Managing Water Resources, supra note 1, at 303.

^{47.} MODEL WATER CODE, supra note 3, at vi.; see also Law and Policy in Managing Water Resources, supra note 1.

^{48.} MODEL WATER CODE, supra note 3, at vi.

^{49.} Law and Policy in Managing Water Resources, supra note 1, at 303.

^{50.} Id.

^{51.} MODEL WATER CODE, *supra* note 3, at vi.

^{52.} *Id.* For example, in order to satisfy a senior appropriator of a stream, junior upstream appropriators may have to let several times the amount of the appropriation pass by them due to factors such as evaporation and seepage. *Id.*

western states because in-stream users were not traditionally allowed to appropriate water.⁵⁴ In order to preserve or restore aquatic ecosystems, it may be necessary to purchase expensive water rights from the private sector.⁵⁵

3. Administrative Approach to Water Law

As a result of the limitations of the common law approaches, many eastern and western states have developed administrative systems for managing water resources.⁵⁶ By controlling water use and creating limited rights in the use of water through permitting, these administrative systems can offset many of the disadvantages of eastern and western systems.⁵⁷ Permit systems, in theory, have three primary advantages over common law systems.⁵⁸ First, an agency can make a decision before a dispute has escalated to litigation, whereas a court acts only after litigation has begun.⁵⁹ Second, an agency can consider all water users and the public interest, while a court is often limited to the parties before it.⁶⁰ Third, judges and jurors lack expertise in the subject area, unlike an agency board that can make decisions with "long-range plans for the wise use and conservation of water resources in mind."⁶¹

It has been noted that the ideal permit system would "strike a measure of balance" between the reasonable use and prior appropriation doctrines.⁶² Such a system would attempt to allow permit holders some certainty through their permits, yet assure some "degree of flexibility by making the permits subject to periodic expiration and review."⁶³ In addition, an effective administrative system must "monitor resource use, research operation of the hydrologic system, reserve water for environmental, recreational,

^{54.} Law and Policy in Managing Water Resources, supra note 1, at 303-04.

^{55.} See id. at 308.

^{56.} See id. at 304.

^{57.} Id.

^{58.} MODEL WATER CODE, *supra* note 3, at 78-79.

^{59.} *Id.* However, it is notable that such determinations often lead to litigation, as discussion of the four-wellfields dispute demonstrates.

^{60.} *Id.* Determining what exactly the "public interest" encompasses is problematic as is discussed *infra.* Individuals with different interests often have different conceptions of the "public interest." *See* In the Public Interest, *supra* note 6, at 13. Honey Rand notes that "all parties [involved in the four-wellfields dispute] believed they represented the 'true' public interest." *Id.*

^{61.} MODEL WATER CODE, *supra* note 3, at 78-79. However, as the four-wellfields dispute demonstrates, the expertise of such agencies is often called into question by those who disagree with their decisions.

^{62.} MODEL WATER CODE, supra note 3, at 79.

^{63.} *Id.* The drafters of the Model Water Code cited the compromise approach advocated by the Commissioners on Uniform State Laws in the Model Water Use Act, which was adopted by Iowa law. *Id. See also* IOWA CODE ANN. § 455A.20 (Supp. 1971).

and other instream uses, develop new water supplies, and promote water conservation."⁶⁴ As discussed below, Florida's water management system attempts to balance aspects of eastern and western water law as well as balance human and ecosystem water needs.

B. Florida's Administrative Water Law System: Chapter 373

The Water Resources Act of 1972 provides the legal framework for water management in Florida.⁶⁵ Despite numerous amendments, the basic structure and provisions of the Act, which were modeled after the Model Water Code, are still intact.⁶⁶ The Act delegates comprehensive authority to manage water to five regional water management districts and to the Florida Department of Environmental Protection (DEP).⁶⁷ Water management districts' boundaries follow surface hydrologic basin boundaries, as opposed to relying on political subdivisions such as counties or cities.⁶⁸ This allows the districts to have responsibility for entire watersheds, which enhances the ability of a district to address ecosystem-level problems.⁶⁹

A governing board that consists of unpaid citizens, appointed by the governor and confirmed by the senate, heads each of the water management districts.⁷⁰ This governing board is responsible for hiring an executive director and approving the district's budget, plans, acquisitions, rules, and orders.⁷¹ Although the DEP supervises and reviews the districts,⁷² "much of the regulatory authority has actually been delegated to the districts."⁷³

68. See Law and Policy in Managing Water Resources, supra note 1, at 306.

69. *Id.* For example, the watershed of the Everglades is entirely in the South Florida Water Management District. *Id.*

^{64.} See Law and Policy in Managing Water Resources, supra note 1, at 304.

^{65.} Id. at 306.

^{66.} See id. The drafters of the Model Water Code attempted to provide a model for the development of a comprehensive regulatory program in eastern states. MODEL WATER CODE, supra note 3, at vii. This model code had three primary goals: 1) to take into account the hydrologic interrelationship of all types of water resources in the state; 2) to provide greater certainty than is possible under a court-administered reasonable use approach; and 3) to retain sufficient flexibility to make possible realistic long-range plans for the conservation and wise use of water resources and the elimination of waste. *Id*.

^{67.} *Law and Policy in Managing Water Resources, supra* note 1, at 306. *See also* FLA. STAT. § 373.026 (2002) (establishing general powers and duties of the Department of Environmental Protection); FLA. STAT. § 373.069 (2002) (creating water management districts).

^{70.} Id. See also FLA. STAT. § 373.073 and § 373.079.

^{71.} See Law and Policy in Managing Water Resources, supra note 1, at 306; FLA. STAT. § 373.079 (4)(a).

^{72.} See FLA. STAT. § 373.026(7).

^{73.} Law and Policy in Managing Water Resources, supra note 1, at 306. "[M]any district decisions are subject to review by the governor and cabinet." Id.

Water management districts have broad and comprehensive authority, and consumptive use permitting is one of their most important responsibilities.⁷⁴ The districts can regulate nearly "any use of water that involves withdrawing or diverting it from its source."⁷⁵ Furthermore, this authority is exclusive to the water management districts; "local governments are prohibited from regulating consumptive use."⁷⁶

"All water management districts have adopted rules relating to the regulation of the consumptive use of water" that establish the conditions for issuance of a permit.⁷⁷ The conditions are similar, but not identical, among the different water management districts.⁷⁸ Furthermore, each of the districts has adopted specific criteria known as a "Basis of Review" that establish the technical requirements necessary for allocation decisions.⁷⁹ In discussing specific requirements for consumptive water use permitting, this article will focus on those of SWFWMD.⁸⁰

C. Consumptive Use of Water: Chapter 373, Part II

Under the Florida Water Resources Act (Act), there is a threepronged test to determine whether a proposed consumptive use of water should be allowed. To obtain a water use permit under Section 373.223(1), Florida Statutes, an applicant must establish that the proposed use of water: 1) will not interfere with any presently existing legal use of water, 2) is a reasonable beneficial use as defined in Section 373.019, Florida Statutes, and 3) is

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^{74.} Id.

^{75.} *Id. See also* Ausness, *supra* note 27, at 16; FLA. STAT. § 373.023(1). Water is broadly defined as "any and all water on or beneath the surface of the ground or in the atmosphere, including natural or artificial watercourses, lakes, ponds, or diffused surface water and water percolating, standing, or flowing beneath the surface of the ground, as well as all coastal waters within the jurisdiction of the state." FLA. STAT. § 373.019(17). This broad definition recognizes all major parts of the hydrologic cycle.

^{76.} Law and Policy in Managing Water Resources, supra note 1, at 306. See also FLA. STAT. § 373.217(2)-(3).

^{77.} Quincey, *supra* note 4, at 14.1 to 14.7. *See* FLA. STAT. § 373.219 (requiring permits generally) and § 373.113 (granting rulemaking authority to the governing board).

^{78.} Quincey, *supra* note 4, at 14.1 to 14.7.

^{79.} *Id.* The use of more specific criteria for implementing the reasonable beneficial use and public interest criteria was upheld despite the necessity of using professional judgment to interpret and apply them. Southwest Fla. Water Mgmt. Dist. v. Charlotte County, 774 So. 2d 903, 911 (Fla. 2d DCA 2001). See discussion at Part IV. B (3), *infra*.

^{80. &}quot;The [Southwest Florida Water Management] District's primary funding source is *ad* valorem taxes, though revenues also come from state and federal appropriations, permit fees, interest earnings, and other sources." Rowland, *supra* note 5, at 428. "Although the [Southwest Florida Water Management] District contains all or part of sixteen counties in west-central coast of Florida, the Tampa Bay metropolitan area represents its largest concentration of residents." *Id*.

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consistent with the public interest. These three criteria, particularly the reasonable beneficial use and public interest standards, provide legal mechanisms for balancing human and ecosystem needs for water.

The first prong, which prohibits harm to other uses, appears to have its origins the riparian system.⁸¹ In terms of its function, one author explains that "[i]f harm to an existing user is not detected until after a new use has been permitted, the permit may . . . be modified to abate the adverse impacts.⁸² While in theory this prong could be used to protect in-stream uses, such as recreational, aesthetic, or environmental uses, in practice it has only been used to protect the withdrawals of other users.⁸³

"The reasonable beneficial use standard is described as the 'most innovative part of the criteria."⁸⁴ This term is carefully crafted and should not be confused with the traditional standards of either the riparian or prior appropriation systems because it includes aspects of each.⁸⁵ "Reasonable beneficial use is defined as 'the use of water in such quantity as is necessary for economic and efficient utilization for a purpose and in a manner which is both reasonable and consistent with the public interest."⁸⁶ "This standard was designed to synthesize the positive attributes of common law riparian and prior appropriation systems as well as avoid some of their shortcomings."⁸⁷ In addition, it has been argued that this term embodies legal precedent from both riparian and prior appropriation systems.⁸⁸

In order to emphasize the importance of public interest considerations, the Act requires consistency with the public interest as the third criterion.⁸⁹ As discussed *infra*, the reasonable beneficial use and public interest standards are quite similar. What exactly the "public interest" encompasses is not easy to define, and whether

^{81.} Ronald A. Christaldi, *Sharing the CUP: A Proposal for the Allocation of Florida's Water Resources*, 23 FLA. ST. U. L. REV. 1063, 1080-81 (1996).

^{82.} Id. at 1081.

^{83.} See W. Coast Reg'l Water Supply Auth. v. Southwest Fla. Water Mgmt. Dist., 1989 Fla. Env. LEXIS 81, *1, *29-31 (Aug. 30, 1989) (Final Order) (finding that a farmer's dependence on the water table to maintain soil moisture for non-irrigated crops and the surface waters for watering cattle was not an existing use entitled to protection under the Florida Water Resources Act).

^{84.} Law and Policy in Managing Water Resources, supra note 1, at 306.

^{85.} Quincey, supra note 4, at 14.1 to 14.3.

^{86.} Christaldi, *supra* note 81, at 1080.

^{87.} Id.

^{88.} See discussion *infra* at Part IV.A.

^{89.} See Richard Hamann & Thomas T. Ankersen, Water, Wetlands, and Wildlife: The Coming Crisis in Consumptive Use, 67 FLA. BUS. J. 41, 42 (1993).

a use is consistent with the public interest is determined on a case-by-case basis. $^{\rm 90}$

Under Florida's administrative system, districts grant consumptive use permits for fixed periods of time, generally with a maximum duration of twenty years.⁹¹ However, the districts do not typically grant such long-term permits because they must reevaluate the availability of water and more efficient use techniques.⁹² Permits are freely transferable and typically accompany the land or the facilities where the water is being used.⁹³ Before a permit expires, the user must apply for a renewal, and districts may require new conditions to protect the environment or require more efficient use of water supplies.⁹⁴ Because permits can be revoked under very limited circumstances, permittees are practically guaranteed a right to use water for the duration of their permit, subject only to possible water use restrictions imposed due to drought or emergency conditions.⁹⁵

Environmental considerations are an important part of the decision whether to issue or reissue a consumptive use permit.⁹⁶ For example, a wellfield permit that would adversely impact wetlands could, in theory, be denied for failure to meet the reasonable beneficial use or public interest standards.⁹⁷ A pair of authors has noted that the public interest criterion offers the broadest authority for implementing the statutory policy of protecting natural resources, fish, and wildlife.⁹⁸ Further discussion of the four-wellfields dispute illustrates the importance of fully considering and

^{90.} Christaldi, *supra* note 81, at 1081. *See also* Friends of Fort George v. Fairfield Communities, 24 Fla. Supp. 2d 192, DOAH Case Nos. 85-3537, 85-3596, Final Order dated Dec. 9, 1986 (factors considered in finding whether a use is in the public interest include: water conservation and reuse, total amount of water allocated, lack of saltwater intrusion, lack of impact to potentiometric surface, reduction of estuarine pollution, and development of new water sources.)

^{91.} Law and Policy in Managing Water Resources, supra note 1, at 306. See also FLA. STAT. § 373.236. However, the districts may authorize a permit of duration up to fifty years in the case of a municipality or other governmental body or a public works where such a period is required to provide for the retirement of bonds for the construction of waterworks and waste disposal facilities. *Id.* at § 373.236(2).

^{92.} See Law and Policy in Managing Water Resources, supra note 1, at 306.

^{93.} Id.

^{94.} Id. See also FLA. STAT. § 373.239 (2002) (renewal of permits).

^{95.} Law and Policy in Managing Water Resources, supra note 1, at 306. See FLA. STAT. § 373.243 (governing revocation of permits); FLA. STAT. § 373.246 (declaration of water shortage or emergency). Circumstances in which permits may be revoked include giving false statements in applications, reporting, or communications with the district. *Id.* at § 373.243(1).

^{96.} Law and Policy in Managing Water Resources, supra note 1, at 306.

^{97.} *Id.* However, as discussed in Part III (C), *infra*, the administrative law judge in the four-wellfields case recommended that permits be renewed despite these concerns.

^{98.} Hamann & Ankersen, *supra* note 89, at 42.

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addressing the environmental implications of consumptive use decisions.

D. SWFWMD Rules and the Basis of Review

In order to implement the provisions of Part II, Chapter 373, Florida Statues, each of the water management districts has adopted rules that interpret the three major conditions for issuance.⁹⁹ To assist SWFWMD with permit decisions, Rule 40D-2.301, Florida Administrative Code, lists fourteen conditions that an applicant must meet in order to receive a water use permit.¹⁰⁰ An applicant must provide "reasonable assurances" that these conditions will be met on both an "individual and cumulative basis."¹⁰¹

SWFWMD's Basis of Review establishes specific criteria for, and further explanation of, the review of permit applications. The Basis of Review is incorporated by reference into Chapter 40D-2 of the Code, by way of Rule 40D-2.091 of the Code. Under SWFWMD's Basis of Review, uses that require permits include: withdrawals that are "greater than or equal to 100,000 gallons per day" on an average annual basis; wells that have "an outside diameter of 6 inches or more; and surface water withdrawals from a pipe with an

^{99.} See Quincey, supra note 4, at 14.1 to 14.6 & 14.1 to 14.7.

^{100.} FLA. ADMIN. CODE r. 40D-2.301(2003) states:

⁽¹⁾ In order to obtain a Water Use Permit, an Applicant must demonstrate that the water use is reasonable and beneficial, is in the public interest, and will not interfere with any existing legal use of water, by providing reasonable assurances, on both an individual and a cumulative basis, that the water use:

⁽a) Is necessary to fulfill a certain reasonable demand;

⁽b) Will not cause quantity or quality changes which adversely impact the water resources, including both surface and ground waters;

⁽c) Will not cause adverse environmental impacts to wetlands, lakes, streams, estuaries, fish and wildlife or other natural resources;

⁽d) Will comply with the provisions of 4.3 of the Basis of Review described in Rule 40D-2.091 F.A.C.;

⁽e) Will utilize the lowest water quality the Applicant has the ability to use;

⁽f) Will not significantly induce saline water intrusion;

⁽g) Will not cause pollution of the aquifer;

⁽h) Will not adversely impact offsite land uses existing at the time of the application;

⁽i) Will not adversely impact an existing legal withdrawal;

⁽j) Will incorporate water conservation measures;

⁽k) Will incorporate reuse measures to the greatest extent practicable;

⁽l) Will not cause water to go to waste; and

⁽m) Will not otherwise be harmful to the water resources within the District.

^{101.} *Id*.

outside diameter of four inches or greater."¹⁰² "Some uses, notably domestic consumption, are exempt from permit requirements."¹⁰³ "Proposed uses that do not meet WUP's criteria are either denied permits or modified to comply with [Southwest Florida Water Management] District permitting criteria."¹⁰⁴ Permits typically contain standard conditions, which include water quality monitoring, minimum aquifer levels, and they may require the mitigation of adverse environmental impacts.¹⁰⁵

III. TAMPA BAY WATER WARS: WEST COAST REGIONAL WATER SUPPLY AUTHORITY V. SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

The on-going disputes over water in the Tampa Bay area, commonly referred to as the "water wars," exemplify the increasing conflict over water use in the state of Florida.¹⁰⁶ They also illustrate the close relationship between groundwater withdrawals and surface natural systems, and the need to balance the water demands of humans and ecosystems. Part III first provides background on the hydrology of the Tampa Bay area and its longstanding water issues. Second, it discusses the major dispute that attempted to determine whether permits allowing withdrawals from four municipal wellfields should be renewed, despite strong evidence that the withdrawals caused severe damage to the area's lakes and wetlands. Third, it explores potential legal responses that SWFWMD staff proposed in its Draft Final Order. Fourth, it briefly discusses the resolution of the dispute through the formation of Tampa Bay Water.

^{102.} SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT, WATER USE PERMIT INFORMATION MANUAL, BASIS OF REVIEW at 2-2 (March 2003) [hereinafter BASIS OF REVIEW]. Citations to the "BASIS OF REVIEW" denote this current version, references to older versions of the Basis of Review in Part III (D), *infra*, should be clear from context.

^{103.} *See* FLA. STAT. § 373.219(1) (2002) (permits required); FLA. STAT. § 373.019(4) (2002) (defining "domestic use" as "the use of water for the individual personal household purposes of drinking, bathing, cooking, or sanitation").

^{104.} Rowland, *supra* note 5, at 428.

^{105.} BASIS OF REVIEW, supra note 102, at B6-1-B6-3.

^{106.} Some authors suggest that Florida's challenge is not a problem regarding the allocation of a finite depleting supply, but rather a geographic and temporal mismatch of supply and demand. *See, e.g.*, Christalidi, *supra* note 81, at 1065.

A. Background on Hydrology, the Tampa Bay Area, and Its Water Issues

1. Hydrology and the Tampa Bay Area

In the hydrologic cycle, rain falls to earth, flows over land as diffused surface water, and then enters a surface watercourse or percolates into the soil.¹⁰⁷ In terms of surface watercourses, water is eventually returned to the atmosphere through evaporation or transpiration.¹⁰⁸ Until relatively recently, very little was know about the processes that occur with groundwater once it percolates through the soil.¹⁰⁹

As the field of hydrogeology has developed, the understanding of groundwater and its connection to surface water has improved. Groundwater is the sub-surface water contained in the interconnected voids in geologic formations.¹¹⁰ Although it makes up less than one percent of the world's water supply, groundwater provides drinking water for approximately one half of the population of the United States.¹¹¹ Water that seeps into the soil is pulled downward by gravity until it reaches a depth where the subsurface is saturated with water.¹¹² Water in the uppermost soils also provides the sustenance for lakes and wetlands.¹¹³ The top of this saturated zone is referred to as the water table, and below this water table is the aquifer.¹¹⁴

There are essentially two types of aquifers: unconfined and confined. As the four-wellfields dispute illustrates, this distinction can have important implications for the relationship between groundwater and surface water systems. A confined aquifer is overlain by a confining layer, a geologic formation such as rock or clay that is incapable of transmitting significant quantities of

^{107.} Ausness, supra note 27, at 3.

^{108.} Id.

^{109.} As a result of this limited understanding, common law regarding groundwater is rather undeveloped. One court explained: "The secret, changeable and unknowable character of underground water in its operations is so diverse and uncertain that we cannot well subject it to the regulations of the law, nor build upon it a system of rules, as is done in the case of surface streams." *Law and Policy in Managing Water Resources, supra* note 1, at 303 (quoting Chatfield v. Wilson, 28 Vt. 49, 54 (Vt. 1856)). For a discussion of scientific and technological certainty, see also *infra* Part IV(C) (1).

^{110.} Swenson, *supra* note 1, at 372 (citing C.W. FETTER, APPLIED HYDROGEOLOGY 5, 570 (2d. ed. 1988)). Chapter 373, Florida Statutes, defines "groundwater" as "water beneath the surface of the ground, whether or not flowing through known and definite channels." FLA. STAT. § 373.019(7) (2002).

^{111.} See Swenson, supra note 1, at 372.

^{112.} Id.

^{113.} Rowland, supra note 5, at 417.

^{114.} Swenson, *supra* note 1, at 372 n.78.

water.¹¹⁵ In contrast, an unconfined aquifer is not covered by any other geologic material and extends from land surface to the base of the aquifer.¹¹⁶ Thus, the uppermost limit of an unconfined aquifer is the water table.¹¹⁷ While there is always a relationship between surface water and groundwater systems, the relationship is even more direct in the case of an unconfined aquifer. Thus, consumptive uses of water in this context can significantly affect both water quantity and quality.

In terms of quantity, "withdrawals of groundwater may reduce the base flow of a stream that is normally supplied by groundwater sources, thus making less surface water available for use downstream."¹¹⁸ As a result, such withdrawals can affect the water level in streams, lakes, and wetlands. As occurred in some parts of the northern Tampa Bay area, groundwater withdrawals are capable of entirely draining surface lakes and wetlands.¹¹⁹

Surface and groundwater connections also affect quality. For example, contamination of one often leads to degradation of the other within the same hydrologic system.¹²⁰ In addition, "[r]educed rates of flow and lowered water levels often diminish the concentration of dissolved oxygen in the watercourse, impairing its ability to assimilate organic pollutants and to support fish and other aquatic life."¹²¹ In coastal areas, groundwater withdrawals may induce saltwater intrusion, which is very difficult, if not impossible, to reverse.¹²² Furthermore, "[m]any consumptive uses of water alter the physical or chemical character of the water that is used [thus the quality of receiving waters] is inevitably affected when water is returned to the watercourse after it is used."¹²³

Id.

^{115.} Id.

^{116.} Id.

^{117.} Id.

^{118.} Ausness, supra note 27, at 4. For example, there is increasing concern about the effects of groundwater withdrawals on Florida's unique spring resources. Id.

^{119.} *See* In the Public Interest, *supra* note 6, at 124. One landowner described the impacts of withdrawals to the area of his lakefront home to SWFWMD's governing board:

I am not complaining to you today of lowered lake water levels — but the total and complete destruction of all water resources in our community. There is not a parallel in the recorded history of this area, under any drought condition that approaches the totality of this destruction. All surface water is gone. All wetlands and marshes are gone. Most wildlife has disappeared. The fish and the alligators are gone and now even the trees are dying.

^{120.} Ausness, *supra* note 27, at 4.

^{121.} Id. at 5.

^{122.} Id.

^{123.} Id.

The hydrological connections between water quantity and quality have important implications for making consumptive use decisions.¹²⁴ The drafters of the Model Water Code recognized that substantive law and administrative regulations must recognize hydrologic realities if they are to be effective.¹²⁵ Thus, it is necessary for consumptive use law to adequately address the effects of groundwater withdrawals on both surface and sub-surface systems in order to protect overall hydrologic integrity and secure the water needs of both humans and natural systems.

2. The Tampa Bay Area's Water Issues

Water issues in the Tampa Bay area epitomize those of many areas in Florida. The Tampa Bay region in west central Florida consists of Pinellas, Hillsborough, and Pasco counties. This area covers approximately 2,200 square miles and includes sixty miles of coastal beaches on the Gulf of Mexico and 100 miles of estuarine coastline around Tampa Bay.¹²⁶ The main cities are St. Petersburg, Tampa, and New Port Richey respectively, which are all located along the coast.¹²⁷ The Tampa Bay region has experienced some of the largest increases in population in the state, and it is continuing to grow.¹²⁸ The region is highly urbanized and developed, except for northern and eastern Pasco County and southern Hillsborough County.¹²⁹ These increases in population growth have resulted in corresponding increases in water demand.¹³⁰

The more rural, inland areas of eastern and central Pasco and northern Hillsborough counties have abundant, fresh groundwater supplies.¹³¹ In contrast, the groundwater of nearly all of Pinellas County and the western coast of Pasco County is contaminated with seawater.¹³² The communities in these coastal areas have established water transmission systems as long as thirty miles from these inland areas to supply their water needs.¹³³ With the

^{124.} See id.

 $^{125. \} See \ id. \ {\rm at} \ 6.$

^{126.} Rowland, supra note 5, at 416.

^{127.} Id.

^{128.} *Id.* at 418. Pasco County's population is expected to increase forty-four percent by 2010, growing from approximately 280,000 in 1990 to a projected 400,000 in 2010. *Id.* Similarly, Hillsborough County's population is expected to increase thirty-one percent by 2010, adding approximately 260,000 people to its 1.1 million in 1990. *Id.* Pinellas County's population is expected to increase seventeen percent by 2010, adding over 140,000 people to its approximate 1.0 million in 1990. *Id.*

^{129.} Id.

^{130.} See id.

^{131.} Id. at 418.

^{132.} *Id*.

^{133.} Id.

exception of the City of Tampa, which relies on the Hillsborough River as its principal source of fresh water, all other urban areas in the region rely on groundwater sources.¹³⁴ Approximately 33% of the Tampa Bay region is urban and industrial, 42% is agricultural, and the remainder is in a natural state or is rangeland.¹³⁵ These overall land use patterns determine water allocation in the Tampa Bay region. Water is apportioned for public water supply (75%), agricultural purposes (10%), recreation (6%), and industry (6%).¹³⁶

In the past, there was not a single governmental body responsible for supplying water in the Tampa Bay region.¹³⁷ As a result, several units of government in the area competed for groundwater from the Floridian aquifer beneath Pinellas, Hillsborough, and Pasco County.¹³⁸ Eventually, these governments came together to form West Coast Regional Water Supply Authority (Authority), a water supply "wholesaler."¹³⁹ The goal of the Authority was to develop, recover, store and supply water for the area.¹⁴⁰ The Authority was authorized and obligated to acquire water and water rights, store and transport water, and deliver and sell water to its member governments for public use.¹⁴¹ Each of the Authority's member governments provided officials to sit on the governing board.¹⁴²

The Authority began to expand its regional water system by developing wellfields throughout Hillsborough and Pasco counties.¹⁴³ Originally, the Authority constructed and operated all projects to serve only one or two individual members.¹⁴⁴ However, in 1991 the Authority and its member governments entered into a water supply contract that provided for a regional approach to the development, implementation, and operation of water supplies.¹⁴⁵ Under this agreement, the Authority provided potable water to its six members at cost, who in turn served the residents of the Tampa Bay region.¹⁴⁶

^{134.} Id.

^{135.} Id.

^{136.} *Id*.

^{137.} Id. at 429.

^{138.} Id.

^{139.} See In the Public Interest, supra note 6, at 12.

^{140.} Rowland, *supra* note 5, at 429.

^{141.} *Id.* These member governments included the cities of St. Petersburg and Tampa, and Pinellas, Pasco, and Hillsborough Counties. *Id.*

^{142.} *Id.* However, the official from New Port Richey of Pasco County was a non-voting member until the formation of Tampa Bay Water. *Id.*

^{143.} For more history on the development of the water supply of the Authority, see Rowland, supra note 5, at 429-32.

^{144.} Id. at 431.

^{145.} Id. This contract served the entire membership, except the City of New Port Richey. Id.

^{146.} Id. In order to finance its operations and manage its resources, the Authority had the

Between the years of 1973 and 1994, the Authority accomplished its mission of supplying water to the people of the region, a feat that most likely would have been impossible without cooperative ventures.¹⁴⁷ Around the time of the four-wellfields dispute, the Authority provided water for approximately 1.8 million people in the sixteen counties within SWFWMD's jurisdiction.¹⁴⁸ After this time period, significant disputes began to arise and the ability of the system to provide water for its users was called into question.¹⁴⁹

3. The Four Wellfields

The administrative dispute that is the focus of this article concerns the water use permits for four-wellfields located in the Tampa Bay area: 1) Cosme-Odessa Wellfield, 2) Section 21 Wellfield, 3) South Pasco Wellfield, and 4) Northwest Hillsborough Regional Wellfield. The Authority, or its member governments, established these wellfields as a part of the regional water supply system. A brief description of the location and permitting history of these wellfields and their hydrology is useful for understanding the dispute that resulted when scientific data confirmed that groundwater withdrawals were responsible for dramatically lowered lake and wetland levels.

Cosme-Odessa Wellfield is located in northwest Hillsborough County and is owned by the City of St. Petersburg, and, prior to the formation of Tampa Bay Water in 1999, it was jointly operated by the City and the Authority.¹⁵⁰ Cosme-Odessa had previously received two permits from SWFWMD; the most recent one was also in 1984.¹⁵¹ Section 21 Wellfield is located in northwest Hillsborough County, is owned by the City of St. Petersburg, and was jointly operated by the City and the Authority.¹⁵² Section 21 had also previously received two permits from SWFWMD, the most recent one in 1984.¹⁵³ South Pasco Wellfield is located in Southern Pasco County and was owned and operated by the City of St.

ability to engage in the following activities: raise funds by levying *ad valorem* taxes; acquire water and water rights; collect, treat, and recover, wastewater; exercise the power of eminent domain; issue revenue bonds; and borrow money. *Id*.

^{147.} *Id.* However, this is not to say that there was not a long history of conflict over water. *See generally id.* for a more complete history of the "battles" of the water wars leading up to the four-wellfield dispute.

^{148.} Recommended Order, supra note 6, at Finding of Fact No. 183.

^{149.} See Rowland, supra note 5, at 432.

^{150.} Recommended Order, supra note 6, at Finding of Fact No. 23.

^{151.} Id. at Findings of Fact Nos. 25, 26, 50, & 52.

^{152.} Id. at Finding of Fact No. 16.

^{153.} Id. at Finding of Fact Nos. 18, 19, 50, & 52.

Petersburg.¹⁵⁴ Like the others, this wellfield had previously received two permits, the most recent one in 1982.¹⁵⁵ Northwest Hillsborough Regional Wellfield is located in northwest Hillsborough County and was owned and operated by the Authority.¹⁵⁶ This wellfield had previously received two permits from SWFWMD, most recently in 1988.¹⁵⁷

The geology of the four-wellfields area is essentially a threelayer structure.¹⁵⁸ The top layer is the surficial aquifer¹⁵⁹ and the bottom layer is the Floridan Aquifer.¹⁶⁰ These two layers are separated by a confining layer, which is primarily made of clay. The impermeability and thickness of clay deters movement of water between the two aquifers. However, the thickness of the confining layer varies considerably, and in some areas it is thin or nonexistent.¹⁶¹ In these areas there is potential for movement of water between the two aquifers, which is commonly referred to as "leakage."¹⁶²

The level to which water will rise in a well drilled to the Floridan aquifer is known as the "potentiometric level."¹⁶³ The sum of water levels identified through multiple wells is known as the "potentiometric surface," which essentially measures the water pressure of the Floridan aquifer and can vary depending on factors including water withdrawals from the aquifer.¹⁶⁴ The reduction of potentiometric surface by water withdrawal is referred to as "drawdown."¹⁶⁵ Drawdown can result in lowering of water levels in surface lakes, streams and wetlands.

For years, citizens in Pasco and Hillsborough County had complained that pumping at the wellfields was lowering the level of water in lakes and wetlands near their homes.¹⁶⁶ SWFWMD

^{154.} Id. at Finding of Fact No. 9.

^{155.} Id. at Finding of Fact Nos. 11, 51, & 52.

^{156.} Id. at Finding of Fact No. 30.

^{157.} Id. at Finding of Fact No. 33.

^{158.} Id. at Finding of Fact No. 60.

^{159.} The surficial aquifer is primarily made of sandy, fine-grained material. *Id.* at Finding of Fact No. 62. The level of water found in wetlands and lakes is a rough approximation of the surficial aquifer water level. *Id.*

^{160.} The Floridan aquifer is a porous limestone formation with visible cavities and channels. *Id.* at Finding of Fact No. 63. The water of the Floridan aquifer permeates the limestone and flows within the limestone cavities and channels. *Id.*

^{161.} Id. at Finding of Fact No. 67.

^{162.} *Id.* at Finding of Fact Nos. 66-67. The possibility and extent of such leakage was not fully understood by SWFWMD until 1994. *See* In the Public Interest, *supra* note 6, at 144-46. 163. Recommended Order, *supra* note 6, at Finding of Fact No. 69.

^{164.} *Id*.

^{165.} *Id.* at Finding of Fact No. 79. The greatest drawdown occurs as the site of the well and becomes reduced with distance, resulting in a cone-shaped impact centered on the withdrawal area. *Id.* The impact is referred to as a cone of depression. *Id.*

^{166.} See In the Public Interest, supra note 6, at 11. Honey Rand notes: "As pumping

previously believed staff that these lower water levels were due to other factors, such as cyclical drought.¹⁶⁷ Finally, in 1994 desperate pleas from landowners to SWFWMD's governing board led to further analysis. Although there was initially technical disagreement among SWFWMD scientists, further investigation resulted in a change in SWFWMD's policy position on relationship between the adverse environmental effects in the area and groundwater withdrawals.¹⁶⁸ The result of this change in policy was a complex political dispute between SWFWMD, the Authority, and its member governments that eventually resulted in intense litigation.

B. Litigation Erupts: West Coast Regional Water Supply Authority v. SWFWMD

On February 7, 1995, SWFWMD issued a Notice of Proposed Agency Action indicating that it would grant the permits for the four-wellfields for only a one-year period.¹⁶⁹ West Coast Regional Water Supply Authority, the City of St. Petersburg, and Pinellas County (Petitioners or Applicants), challenged the proposed agency action and the matter was referred to the Division of Administrative Hearings. Hillsborough County and Pasco County were later granted leave to intervene and participate in the hearing along with SWFWMD.¹⁷⁰ On December 19, 1995, SWFWMD amended its proposed action to provide for ten-year permits with the addition of conditions including "Environmental Protection Standards."¹⁷¹ Immediately before the formal administrative hearing in July 1996, SWFWMD again revised its proposed action, changing it to denial of the four permit renewal applications.¹⁷²

increased to meet growing demand, the residents who lived near the wellfields complained of dropping lake levels and associated impacts that they claimed were caused by the wellfields. But from the early 1970s until the mid-1990s their complaints were largely ignored or refuted by government agencies." Id.

^{167.} *Id.* at 145.

^{168.} Id. at 144-48. Honey Rand explains:

In the end, the staff felt overwhelmingly that sufficient data existed to link groundwater pumping to surface impacts. The question was how strong was the evidence in this specific case and would it be sufficient to persuade a hearing officer [Administrative Law Judge] or a judge? Many District technicians had been ready for years to press this position inside and outside the agency. What they needed they finally got; a Governing Board willing to listen to their findings and act on it.

Id. at 148.

^{169.} Recommended Order, *supra* note 6, at preliminary statement.

^{170.} Id.

^{171.} Id.

^{172.} Id. This decision to deny the permits was made for strategic reasons. St. Petersburg had refused the [Southwest Florida Water Management] District's request for another

The formal administrative hearing was held over twenty-nine days in July, August, and September 1996.¹⁷³ The transcript of the hearing was filed in November of 1996 and the parties submitted proposed recommended orders.¹⁷⁴ The Administrative Law Judge (ALJ) issued his recommended order on May 29, 1997.¹⁷⁵ On June 13, 1997, the parties filed exceptions to the recommended order and agreed to extensions of time for SWFWMD to enter the final order while they engaged in settlement negotiations.¹⁷⁶

C. The Administrative Law Judge's Recommended Order

The Administrative Law Judge, William C. Quattlebaum,¹⁷⁷ framed the issue in the dispute as "whether applications filed for water use permits for the South Pasco, Section 21, Cosme-Odessa, and Northwest Hillsborough Regional wellfields met legal requirements."¹⁷⁸ These requirements included 373.223(1), Florida Statutes, and Rule 40D-2.301, Florida Administrative Code that govern issuance of water use permits.¹⁷⁹ In addition, the Authority asserted that it was entitled to a default permit for the Northwest Hillsborough Regional Wellfield.¹⁸⁰ Issues regarding the extent to which Florida water law prohibits adverse environmental impacts were integral to this dispute.

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extension of the permitting process, and thus the [Southwest Florida Water Management] District, had two choices: issue the permits or deny them. In the Public Interest, *supra* note 6, at 254. Honey Rand explains that "[i]f [SWFWMD] issued modified permits the legal burden would be on them to prove the case." *Id.* at 255. Mark Farrel, former Assistant Executive Director of SWFWMD explained in an interview: "For us ... it was better to know. Either we went to court and we won, in which case we'd done our job, or we lost, in which case we'd appeal. If we were wrong, we were wrong. We needed to know. It was better to know. We needed to bring it to a head." *Id.* at 257.

^{173.} Recommended Order, supra note 6, at introductory paragraph.

^{174.} *Id.* at preliminary statement. *See* discussion of administrative hearing under Florida's Administrative Procedure Act, *supra* note 13.

^{175.} The ALJ's findings of fact, conclusions of law, and recommendations are discussed in Part III (C), *infra*.

^{176.} All parties are entitled to submit written exceptions to the recommended order within fifteen days of the date of the recommended order. *See* FLA. STAT. § 120.57(1)(i); FLA. ADMIN. CODE § 40D-1.564. SWFWMD never issued a final order, instead SWFWMD and the Authority eventually reached settlement through the formation of Tampa Bay Water, see Part IIIE, *infra*.

^{177.} Administrative Law Judge, Division of Administrative Hearings.

^{178.} Recommended Order, *supra* note 6, at statement of issue.

^{179.} Id.

^{180.} The Authority asserted that it was entitled to a default permit for the Northwest Hillsborough Regional Wellfield due to the alleged failure of SWFWMD to take action on the permit application pursuant to the requirements of FLA. STAT. § 120.60(1). *Id.* at statement of issue.

1. Causes of Adverse Impacts

The ALJ found that the primary cause of drawdown in the Floridan aquifer in the vicinity of the four-wellfields was the withdrawal of water by the Authority.¹⁸¹ Furthermore, he found that this drawdown had resulted in a lowering of the surficial water table as water leaked through the marginal confining layer and into the Floridan Aquifer,¹⁸² which in turn caused the lowering of areas lakes and wetlands. He explained:

While other factors including reduced rainfall and increased evapotranspiration can result in lowered lake and wetland water levels, the evidence in this case establishes that the primary cause of lowered lake and wetlands water levels in the vicinity of the subject wellfields is the withdrawal of water at the wellfields.¹⁸³

The ALJ also made findings regarding the impacts of withdrawals on wetland and surface water ecosystems in the area of the wellfields. He found that wetlands "have been and continued [sic] to be impacted by reduced water levels."¹⁸⁴ The impacts included soil oxidation and subsidence, increased invasion by exotic species, increased incidence of fire, tree loss, and the loss of habitat for wetland dependent species.¹⁸⁵ His findings were partially based upon comparison between wetlands in the vicinity of the wellfields and "control" wetlands located outside the area of the wellfields.¹⁸⁶ He noted that the control wetlands exhibited longer hydroperiods¹⁸⁷ and displayed fewer signs of ecological stress than those closer to

^{181.} See *id.* at Finding of Fact No. 84. This finding was based on the testimony of SWFWMD's expert witnesses, the results of aquifer performance tests, and monitoring well hydrographs. *Id.*

^{182.} Id. at Finding of Fact No. 90.

^{183.} *Id.* at Finding of Fact No. 92. The Authority had argued that low rainfall was the primary cause for the lowered lake levels and adverse environmental impacts. *See id.* at Finding of Fact No. 128. It has also suggested that drainage projects and land development caused impacts to water features. *Id.* at Finding of Fact Nos. 137 & 139. These arguments were dismissed by the ALJ. *See id.* at Finding of Fact Nos. 137-44.

^{184.} Id. at Finding of Fact No. 120.

^{185.} Id.

^{186.} Id. at Finding of Fact No. 121.

^{187.} Water is the driving force in wetlands ecosystems. The duration of inundation in a wetland is known as the "hydroperiod." *Id.* at Finding of Fact No. 106. A decline in water table levels results in a reduction of wetland hydroperiod, which can negatively affect water-dependent wetland functions such as water storage, wildlife viability, and nutrient cycling. *Id.* Such functions are important ecosystem services that benefit humans as well as other forms of life.

the wellfields. He concluded that the environmental impacts caused by the withdrawals were "clearly adverse by any definition."¹⁸⁸

However, despite his findings regarding the negative environmental impacts caused by withdrawals, the ALJ found that "the hydrogeologic systems in the area of the wellfields have reached 'dynamic equilibrium."¹⁸⁹ He further explained, "Although clearly environmental impacts have occurred and are the result of water withdrawal, the water systems in the area of the wellfields have 'reset' and are now essentially stable at the lowered levels."¹⁹⁰ This notion stands in contrast to current understandings of complex ecosystems and ideas about how they should be managed.¹⁹¹

2. Standard for Baseline: Past Adverse Impacts Are Not Considered

Perhaps the most controversial findings made by the ALJ concern the issue of "baseline." He found that SWFWMD had adopted permitting criteria in the basis of review that established a baseline, "against which anticipated impacts may be predicted."¹⁹² He explained that this baseline provides a point against which future impacts to a resource by a permitted water withdrawal can be measured, ¹⁹³ and that this baseline also provides a standard by which the success of mitigation efforts can be measured.¹⁹⁴ The ALJ found baseline to be "those conditions, including previously permitted adverse impacts, which existed at the time of the filing of the renewal applications."¹⁹⁵ This finding has significant implications for addressing adverse environmental impacts and is inconsistent with fundamental principles of Florida water law. As

193. Id.

 $194. \ Id.$

^{188.} *Id.* at Conclusion of Law No. 303. This statement was made in response to the permitees' assertion that "adverse" was not defined in statute or rule. The ALJ noted that this assertion was correct, but immaterial. *Id.*

^{189.} *Id.* at Finding of Fact No. 123. Judge Quattlebaum found: "A major water withdrawal from the Floridan aquifer results, after a period of several years, in a shifting of hydrological systems to accommodate the lowered levels. It can take as long as ten years for the changes and restabilization process to occur." *Id.* at Finding of Fact No. 124.

^{190.} Id. at Finding of Fact No. 126.

^{191.} For example, one scientist notes: "Management has typically addressed [complex ecological] problems with equilibrium-based approaches ... and has tried to maintain these systems in some optimal state, with as little variation as possible. In some cases, this has reduced the ability of the system to respond to stresses ... and has reduced the flexibility of the agency to respond to changes in the system." Barry Johnson, *The Role of Adaptive Management as an Operational Approach for Resource Management Agencies*, 3 CONSERVATION ECOLOGY, *available at* http://www.consecol.org/vol3/iss2/art8 (last visited on Sept. 28, 2003).

^{192.} Recommended Order, supra note 6, at Finding of Fact No. 147.

^{195.} Id. at Finding of Fact No. 158.

one later commentator notes, this decision would have "allowed the petitioners to disregard any previous impacts and to start the permit renewal process with a clean slate."¹⁹⁶

In reaching his conclusions about baseline, the ALJ found that "environmental impacts related to the water withdrawals were known to the [Southwest Florida Water Management] District during earlier permit considerations."¹⁹⁷ He found that "in prior permit decisions the [Southwest Florida Water Management] District determined that the adverse environmental impacts were anticipated, and exempted the permittees from environmental standards which would likely have reduced the adverse impacts."¹⁹⁸ Later, the ALJ found that adverse environmental impacts resulting from water pumping occurred via water withdrawals permitted by SWFWMD "with knowledge that the adverse impacts would occur."¹⁹⁹

In addition, the ALJ emphasized that although SWFWMD had been authorized under previous permits to require mitigation of adverse environmental impacts, it did not take formal action to require mitigation.²⁰⁰ Thus, he deduced that the environmental conditions caused by withdrawal of water "were previously deemed acceptable and consistent with the public interest by the [Southwest Florida Water Management] District."²⁰¹ Furthermore, the ALJ found that there would be "no new adverse environmental impacts caused by the continuation of pumping." He explained that "the continuation of water pumping at current actual levels of withdrawal will continue the ecological decline already in progress, but will not result in new kinds of adverse impacts."²⁰²

These aspects of the ALJ's decision with regards to the legal effect of past permitting have drawn much criticism. One author notes that even if SWFWMD was aware of the extent of adverse impacts that would result from permitting withdrawals, "the court's

^{196.} Swenson, *supra* note 1, at 385.

^{197.} Recommended Order, *supra* note 6, at Finding of Fact No. 148. *See also* discussion of the legal effect of permitting, *infra*.

^{198.} Recommended Order, *supra* note 6, at Finding of Fact No. 149. The ALJ further found that SWFWMD's "decision to exempt permittees from meeting certain criteria related to adverse environmental impacts" was a "discretionary act." *Id.* at Finding of Fact No. 150. However, SWFWMD's rules were changed to eliminate the "exemption" before the granting of the first renewal of the wells. *Id.*

^{199.} *Id.* at Finding of Fact No. 196. The extent of this knowledge is questionable. *See* In the Public Interest, *supra* note 6, at 144-49 (discussing the internal debate within SWFWMD as to whether surface impacts resulted from groundwater withdrawals or other factors).

^{200.} Recommended Order, supra note 6, at Finding of Fact No. 156.

^{201.} Id. at Finding of Fact No. 157.

^{202.} *Id.* at Finding of Fact No. 175. The ALJ cited examples of the ecological decline already in progress, including invasion, soil oxidation, and fires. *Id.* at Finding of Fact No. 176.

decision wrongly implies that governmental mistakes can never be amended, regardless of how harmful²⁰³ and that "the ruling does not address the duty of the state to continually supervise water uses and to reconsider prior allocation decisions when they detrimentally affect other interests."²⁰⁴ As will be discussed in Part IV of this article, the idea that water allocation decisions are not permanent and should be reevaluated periodically is a fundamental principle of Florida water. The ALJ's conclusions about baseline tend to overlook this principle and are not conducive to an adaptive management approach to water policy.

3. The Need for Public Water Supply

In terms of realistic jurisprudence, perhaps the primary reason why the ALJ recommended renewing the permits and allowing the continuation of the existing level of pumping was because the water was being used for public water supply.²⁰⁵ Although SWFWMD had argued that the lack of proper permits did not necessarily mean that the wellfields would be closed, and that water could be pumped via emergency orders,²⁰⁶ the ALJ was concerned that SWFWMD had not made "any legally binding commitment to allow for water withdrawals outside the appropriate permitting process."²⁰⁷

The ALJ's concerns are partially explained by the fact that at the time of this dispute there was significant fear about the water supply for the Tampa Bay area. As a result, there was a high degree of political involvement.²⁰⁸ At one point the Mayor of Tampa, who was actively involved in efforts to secure water supply for his

^{203.} Swenson, supra note 1, at 385-86.

^{204.} Id. at 386.

^{205.} Recommended Order, *supra* note 6, at Finding of Fact No. 183. The ALJ found that "the Authority supplies water to a total population estimated at 1.8 million residents," and that "it is unlikely [that] the Authority could supply the quantities currently required without utilization of these wellfields." *Id.*

^{206.} *Id.* at Finding of Fact No. 188. Doug Manson, a water law attorney who mainly represented agricultural interests, noted that one of SWFWMD's biggest mistakes was denying the public supply permits. He explained, "Denying the permits helped me paint the [Southwest Florida Water Management] District as draconian, as unreasonable." In the Public Interest, *supra* note 6, at 285.

^{207.} Recommended Order, *supra* note 6, at Finding of Fact No. 187. Honey Rand notes: "There was no one who actually believed the [Southwest Florida Water Management] District would turn off water to St. Petersburg's utilities or anyone else's. It can't be done. According to one perspective, the hearing officer [Judge Quattlebaum] *did* believe it. According to another, the [Southwest Florida Water Management] District didn't leave him any alternative." In the Public Interest, *supra* note 6, at 286.

^{208.} See generally In the Public Interest, *supra* note 6, at 286. Honey Rand's dissertation provides an in-depth description of the complex political dimensions of the four-wellfields dispute, and she attempts to present the perspectives of all major parties that were involved. *Id.*

city, received a desperate phone call from St. Joseph's Hospital. Mayor Greco explained this incident: "They called to tell me that the water pressure was so low, they couldn't wash the babies...That is just not acceptable. Certainly not for Tampa."²⁰⁹ Given this political atmosphere, denying permits for public water supply may have been perceived as unthinkable.

It is notable that the ALJ supported only the continuation of the existing level of withdrawals, which further indicates his concern with meeting actual public water supply needs. He concluded, "The evidence establishes that the criteria are met as to the continued withdrawal of average actual daily quantities being withdrawn from the subject wellfields," yet found that the evidence failed to establish that the criteria were met as to permitting withdrawals in excess of the actual daily withdrawals.²¹⁰ While the ALJ thoroughly and accurately evaluated technical evidence about the hydrogeology of the area,²¹¹ his legal conclusions do not reflect the comprehensiveness of Florida water law. Legal analysis of the ALJ's recommended order illustrates that his decision does not reflect the complex balancing process inherent in Florida water law.

D. Potential Legal Response: Exploring the Draft Final Order

After the issuance of the ALJ's recommended order, SWFWMD and the Authority entered into extensive negotiations. The requirement that SWFWMD issue a final order within ninety days was repeatedly delayed by mutual consent. However, during this time SWFWMD staff prepared the Draft Final Order to use in the event that these settlement negotiations were unsuccessful.²¹² While the arguments and proposed conclusions of law in this Draft Final Order are not necessarily what SWFWMD would have issued

^{209.} Id. at 86.

^{210.} Recommended Order, supra note 6, at Conclusion of Law Nos. 308, 309.

^{211.} Interview with John Parker, Water Use Regulation Manager, Southwest Florida Water Management District. (Feb. 25, 2003) (notes in author's possession). Honey Rand notes:

When the Hearing Officer's decision was rendered on the four-wellfield case in 1997, it was almost anti-climactic ... Each side had tried different cases, they got the same decision from the judge, and each side read that answer differently. The [Southwest Florida Water Management] District, Hillsborough and Pasco said that the science proved the wellfields were causing widespread environmental damage while the Authority, St. Petersburg and Pinellas declared victory because the judge told the [Southwest Florida Water Management] District to issue the permits at present quantities. Everyone was hoisted on a shared petard.

In the Public Interest, *supra* note 6, at 286-87.

^{212.} The author of this article obtained a copy of this document from SWFWMD, which is now public record under Florida law. *See* Draft Final Order, *supra* note 7.

in a Final Order,²¹³ they provide a useful discussion of the law regarding adverse impacts under the Florida Water Resources Act.

In its Draft Final Order, SWFWMD addresses many of the ALJ's findings that it considered problematic.²¹⁴ Essentially, this Draft Final Order proposes to grant a ten-year default permit for the Northwest Hillsborough Regional Wellfield²¹⁵ and deny the permits for the other three wellfields due to noncompliance with permitting criteria. However, recognizing the need for public water supply, the Draft Final Order recommends that SWFWMD exercise its discretion under Section 373.171, Florida Statutes, to issue shortterm permits authorizing water use for the other three wellfields.²¹⁶ These proposed permits would have included conditions that explicitly stated that withdrawals at existing pumpage quantities would not be allowed to continue in perpetuity.²¹⁷ The Draft Final Order's disagreements with the ALJ's recommended order fell into three categories: 1) interpretation of "the baseline for evaluating adverse environmental impacts caused by water withdrawals;" 2) "the legal effect of the SWFWMD's past permitting" for the wellfields; and 3) the determination that the criteria for issuance of permits had been met.²¹⁸ The legal arguments and determinations with regard to these three areas and the proposed temporary permitting solution are discussed below.

^{213.} The Draft Final Order was prepared by district staff, and had not yet been approved by the Governing Board of the Southwest Florida Water Management District. Telephone interview with Mark Lapp, Assistant General Counsel, Southwest Florida Water Management District (Apr. 21, 2003) (notes in author's possession).

^{214.} An internal SWFWMD legal memorandum explains:

My approach to this [draft] final order was to reject as few of the ALJ's findings of fact and conclusions of law as possible, because it will create less exposure for the [Southwest Florida Water Management] District to having to pay our adversaries' attorney's fees and costs if we are found on appeal to have improperly rejected or modified findings of fact In light of this, there are several findings of fact and conclusions of law which I'm sure many people here at the [Southwest Florida Water Management] District have concerns about, that I have not recommended for rejection because I felt that they arguably were supported by competent substantial evidence.

Memorandum from Mark Lapp, Assistant General Counsel, to Edward Helvenston, General Counsel, regarding Final Order for the Four Wellfields Case (Oct. 20, 1997) (on file with author). This memorandum is public record under Florida Law.

^{215.} The ALJ found that the Authority is entitled to a default permit due to the failure of SWFWMD to properly notify the Authority of its request for an extension of the permitting deadline. Recommended Order, *supra* note 6, at Findings of Fact Nos. 269-84. The Draft Final Order does not challenge this recommendation. *See generally* Draft Final Order, *supra* note 7.

^{216.} Draft Final Order, *supra* note 7, at 21.

^{217.} Id.

^{218.} Id. at 5. A fourth category of disagreement in the Draft Final Order was "various technical errors." Id.

1. Standard for Baseline: Past Adverse Impacts Are Considered

In the Draft Final Order, SWFWMD staff expresses disagreement with the ALJ's findings regarding baseline. The Draft Final Order explains that determining what constitutes baseline under Section 4.2 of Basis of Review requires a legal interpretation.²¹⁹ It argues that baseline applies to 1) new uses and 2) renewals "where no impacts occurred in the past as a result of the withdrawals."220 The Draft Final Order concludes that the question of baseline is not legally pertinent for renewals when adverse impacts occurred in the past and are ongoing in nature.²²¹ It reasons that "if a withdrawal is causing ongoing adverse environmental impacts, it does not matter when the impacts began or to what degree of the impacts occurred prior to renewal application filing."222 This rationale relies heavily on the plain language argument that "unmitigated adverse environmental impacts are not allowed under [Southwest Florida Water Management] District rules," as well as the overall precedent that an application causing such impacts is usually denied.²²³

However, the Draft Final Order explains that "if an applicant reduces withdrawals to a level where continued impacts are not expected to occur, or proposes an acceptable mitigation plan for the ongoing adverse impacts, a permit can be issued."²²⁴ The Draft Final Order explains that "[o]ngoing adverse impacts, even if begun under previous permits, do not become part of the baseline, and the applicant is responsible for them."²²⁵ Such ongoing adverse impacts would be considered in the review of renewal applications.²²⁶ This interpretation of baseline is more consistent with the Florida Water Resources Act's emphasis on considering the needs of both human and natural systems in allocation decisions than that of the ALJ.

^{219.} Id. at 6.

^{220.} *Id.* However, the current Basis of Review Section 4.2, entitled "Environmental Impacts," states that "[t]he withdrawal of water must not cause *unacceptable* adverse impacts to environmental features." BASIS OF REVIEW, *supra* note 102, at B4.1 (emphasis added).

^{221.} Draft Final Order, *supra* note 7, at 7.

^{222.} $\ Id$ at 6-7.

^{223.} Id. at 7. The Draft Final Order notes that in most cases, uses that cause adverse impacts are denied. Id.

^{224.} Id.

^{225.} Id.

^{226.} *Id.* Thus, the Draft Final Order rejects the Recommended Order's Findings of Fact Nos. 147 and 158 and Conclusion of Law Nos. 299 and 301, to the extent that they are contrary to the Draft Final Order's position on baseline. *Id.*

2. Legal Effect of Past Permitting

The Draft Final Order strongly rejects the idea that renewal permits must be issued because adverse environmental impacts resulted from water withdrawals authorized by permits issued in the past.²²⁷ It analogizes this rationale to a finding of estoppel.²²⁸ The Draft Final Order explains that while the ALJ did not explicitly justify his decision on estoppel grounds, such a rationale is implicit throughout his order.²²⁹ The Draft Final Order describes the ALJ's analysis "as being contrary to the system of water use permitting established by the Legislature in Part II of Chapter 373, Florida Statutes."²³⁰ Although the Draft Final Order does not explicitly articulate which fundamental principles the ALJ overlooked, its analysis suggests that the ALJ's decision fails to appreciate that under the Florida Water Resources Act human and ecosystems are both given significant weight and that allocation decisions must be periodically reevaluated.²³¹

As a result, the Draft Final Order concludes as a matter of law that "even if some environmental impacts resulted from water withdrawals authorized by prior permits . . ., those withdrawals and resultant impacts are not allowed in perpetuity."²³² Although the Draft Final Order disputes that SWFWMD "permitted" or "accepted" the severity or extent of adverse environmental impacts

230. Draft Final Order, supra note 7, at 9.

^{227.} See Recommended Order, supra note 6, at Conclusions of Law Nos. 295-301.

^{228.} Draft Final Order, *supra* note 7, at 9. Edward de la Parte, an attorney who represented the Authority and later Pinellas county during the four-wellfields dispute, noted in an interview:

The whole case was not about whether the wellfields caused impacts ... The whole case from our perspective was, will the continuation of those withdrawals create impacts which are significantly different from what has occurred historically? The reason that was important was because the [Southwest Florida Water Management] District knew those impacts would take place, and they determined the impacts were not unacceptable.

In the Public Interest, supra note 6, at 284.

^{229.} See Draft Final Order, *supra* note 7, at 8. "For example, in Finding of Fact No. 188, the ALJ found that denial of permit renewal applications is not an appropriate method for remedying adverse environmental impacts which are the result of previous permitting decisions." *Id.* Furthermore, "in Findings of Fact Nos. 198, 199 and 200, the ALJ found that the impacts from continued withdrawals will not be 'beyond those previously permitted' by the [Southwest Florida Water Management] District." *Id.*

^{231.} Honey Rand notes: "The fact that permits are required to undergo periodic review suggests that the system is there to identify any unintended consequences. If the [Southwest Florida Water Management] District has no power to modify a permit, what is the point of the review?" In the Public Interest, *supra* note 6, at 286.

^{232.} Draft Final Order, supra note 7, at 8. The Draft Final Order notes that permits are for a limited duration. Id.

that occurred,²³³ it does not reject the findings of fact to this effect for strategic reasons.²³⁴ The Draft Final Order reasons that past permitting should be irrelevant to the issue of whether the applications meet permitting criteria.²³⁵

As further support for this rationale, the Draft Final Order explains that water use permits have a set duration²³⁶ and that "[t]here is no entitlement to continued use of water past the expiration date of a permit."²³⁷ It explains that applications for renewal permits must be given as complete a review as applications for initial permits,²³⁸ thus all of the conditions for issuance in Section 373.223(1), Florida Statutes, must be met in order for a permit to be issued.²³⁹

Much as in support of its conclusions regarding baseline, the Draft Final Order relies heavily on the plain language of SWFWMD rules, especially Rule 40D-2.301(c), Florida Administrative Code, which it describes as "unequivocal in not allowing adverse environmental impacts."²⁴⁰ The Draft Final Order emphasizes that the ALJ found that adverse environmental impacts had occurred²⁴¹ and would continue to occur with pumping at existing quantities.²⁴² It concludes that, "as a matter of law, even if some environmental impacts resulted from water withdrawals permitted in the past, the [Southwest Florida Water Management] District is not required to authorize such withdrawals in a renewal permit."²⁴³ Thus, while the

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^{233.} *Id.* at 9 n.6. In the past, "the wellfields were previously excepted from complying with environmental permitting criteria pursuant to Rule 40D-2.301(4), F.A.C. (1981), which allowed exceptions to be granted" Draft Final Order, *supra* note 7, at 9. "These exceptions were only valid for the term of the permits for which they were granted." *Id.* "Moreover, the exception provision was deleted in the 1989 amendments to Chapter 40-D2, F.A.C." *Id. See* Recommended Order, *supra* note 6, at Finding of Fact No. 57.

^{234.} See Memorandum, supra note 214.

^{235.} Draft Final Order, *supra* note 7, at 9 n.6. However, such reasoning may lead to unfair results. As is discussed in part IV(C) (3), *infra*, it may be necessary for water management districts to develop permitting criteria that consider economic investment and the reliance of permittees while reevaluating permitting decisions. While in some situations environmental factors may outweigh economic considerations, it may be necessary to use more equitable remedies to assure fairness.

^{236.} Draft Final Order, supra note 7, at 8. See also FLA. STAT. § 373.236 (2002) (duration of permits).

^{237.} Draft Final Order, *supra* note 7, at 8. *See also* Davey Compressor Co. v. City of Delray Beach, 613 So. 2d 60, 62 (Fla. 4th DCA 1993) (holding that there is no entitlement to continued use of water past permit expiration date).

^{238.} FLA. STAT. § 373.239(3).

^{239.} Draft Final Order, *supra* note 7, at 8. The Draft Final Order also explains that the reasonable beneficial use and public criteria conditions of § 373.223(1), Florida Statutes, were not satisfied. *Id.*

^{240.} Id. at 10.

^{241.} See Recommended Order, supra note 6, at Findings of Fact Nos. 159, 162, & 165.

^{242.} See id. at Findings of Fact Nos. 175 & 176.

^{243.} Draft Final Order, supra note 7, at 10. The ALJ found it significant that SWFWMD

Draft Final Order does not reject the factual aspect of some relevant findings of fact,²⁴⁴ it explicitly rejects the ALJ's legal implications that a right to withdraw water extends beyond the permit duration and that the issuance of past permits ensure that criteria will be met for a renewal permit.²⁴⁵

3. Compliance with Permitting Criteria

The Draft Final Order disputes the ALJ's determination that the wellfields met all pertinent permitting criteria.²⁴⁶ It rejects the ALJ's findings and conclusions regarding the applicants' compliance with the environmental conditions for issuance under Rule 40D-2.301(1)(c), Florida Administrative Code, the reasonable-beneficial use prong of Section 373.223(1)(a),Florida Statutes, and the public interest prong of Section 373.223(1)(c), Florida Statutes. The Draft Final Order concludes that whether an applicant has met the permitting criteria is a mixed question of law and fact for which SWFWMD has greater latitude to reject the ALJ's findings.²⁴⁷

The Draft Final Order concludes that pumping that causes ongoing adverse impacts, as found by the ALJ, violates SWFWMD

had not taken any enforcement action relating to the subject wellfields during the terms of the existing permits, as suggested by the Recommended Order's Findings of Fact Nos. 153-156. *Id.* The Draft Final Order concludes as a matter of law that failure of SWFWMD to take enforcement action during the prior term of a permit poses no bar, and is irrelevant to SWFWMD denying a permit renewal application, or limiting a renewed permit. *Id.* at 9-10. 244. *See* Recommended Order, *supra* note 6, at Findings of Fact Nos. 188, 198, 199, & 200. *See also* Draft Final Order, *supra* note 7, at 10.

^{245.} The Draft Final Order notes that the water use permitting rules were amended in 1989 to require permit applicants to assume responsibility for both on-site and off-site impacts related to water withdrawals, and to consider the cumulative impacts of withdrawals. Draft Final Order, *supra* note 7, at 9. The Draft Final Order explains that the applicants were subject to the amended rules for the renewal applications, and that the fact that permits were issued previously for three of the wellfields under a different set of rules and pursuant to exceptions is irrelevant to the "mixed legal and factual determination" of whether the applicants complied with the current set of rules for the permit applications. *Id.*

^{246.} The Draft Final Order notes: "Because of the ALJ's erroneous determination on the baseline issue and the related determination that because of the permitting history of these wellfields the [Southwest Florida Water Management] District was constrained to issue renewal permits, the ALJ found that the Applicants ... met all pertinent permitting criteria at the current actual withdrawal quantities." *Id.* at 10-11.

^{247.} *Id.* at 11. *See* Harloff v. City of Sarasota, 575 So. 2d 1324, 1328 (Fla. 2d DCA 1991) (finding that determining reasonable beneficial use is a mixed question of law and fact and that an agency's decision on such a mixed question is entitled to increased weight when it is infused by policy considerations for which the agency has special responsibility); Fla. Power Corp. v. State Dep't of Envtl. Regulation, 638 So. 2d 545, 561 (Fla. 1st DCA 1994) (holding that the DEP Secretary correctly rejected a hearing officer's [ALJ's] conclusion of law that mitigation was unnecessary for a proposed project); McDonald v. Dep't of Banking & Fin., 346 So. 2d 569, 579 (Fla. 1st DCA 1977) (explaining that where ultimate facts are matters infused with policy considerations for which the agency has special responsibility, a reviewing court should give correspondingly less weight to the hearing officer's findings).

rules.²⁴⁸ Although the ALJ found that the adverse environmental impacts caused by the applicants' withdrawals at the wellfields would continue with sustained pumping at current quantities,²⁴⁹ it also found that no new adverse environmental impacts would result from continued pumping.²⁵⁰ In order to understand this seeming inconsistency, the Draft Final Order interprets this finding to mean "new *kinds* of adverse environmental impacts."²⁵¹ In response, it concludes that SWFWMD rules prohibit not only "new kinds of adverse environmental impacts," "new adverse environmental impacts," or "impacts beyond those previously permitted," but rather they prohibit "*any* adverse environmental impact."²⁵² The Draft Final Order applies the Basis of Review and concludes that the applicants failed to meet permitting criteria.

In addition, the Draft Final Order concludes that applicants did not satisfy the reasonable beneficial use prong of the conditions for issuance of permits under Section 373.223(1)(a), Florida Statutes. The Draft Final Order explains that the "public interest" prong of Section 373.223(1)(c), Florida Statutes, is a component of the reasonable beneficial use prong.²⁵³ The Draft Final Order concedes that. under the reasonable beneficial use standard, the applicants' use of water was for a purpose that was both reasonable and consistent with the public interest.²⁵⁴ However, it concludes that the withdrawals were not done in a manner that was both reasonable and consistent with the public interest, because of the ongoing adverse impacts the withdrawals had caused and would continue to cause.²⁵⁵ Thus, the Draft Final Order concludes that the ALJ too narrowly construed the reasonable beneficial use prong by failing to consider the *manner* in which withdrawals are made and the resulting impact on natural resources.²⁵⁶

^{248.} Draft Final Order, supra note 7, at 13.

^{249.} See Recommended Order, supra note 6, at Findings of Fact Nos. 175 & 176.

^{250.} See id. at Findings of Fact Nos. 174, 198, 199, & 200.

^{251.} Draft Final Order, *supra* note 7, at 11. In Findings of Fact 175, the ALJ stated that continuation of pumping at current actual levels of withdrawal will continue the ecological decline already in progress, but will not result in new kinds of adverse environmental impacts. *Id.* Because the ALJ listed several specific adverse environmental impacts that would occur as a result of continued pumping in Finding of Fact No. 176, the Draft Final Order concludes that he could not have meant in Findings of Fact Nos. 174, 198, 199, & 200 that no adverse environmental impacts would occur as a result of continued pumping. *Id.* at 12.

^{252.} Id. See FLA. ADMIN. CODE r. 40D-2.301(1)(c) (2003).

^{253.} See Draft Final Order, supra note 7, at 14; see also FLA. STAT. § 373.019(13) (2002).

^{254.} Draft Final Order, supra note 7, at 14.

^{255.} Id. See also FLA. STAT. § 373.019(13) (defining reasonable beneficial use).

^{256.} Draft Final Order, *supra* note 7, at 15 n.5. As additional authority, the Draft Final Order notes that the preamble of SWFWMD's conditions for issuance of permits in Rule 40D-2.301, Florida Administrative Code, makes it clear that the environmental impacts of

Similarly, the Draft Final Order concludes that ongoing adverse environmental impacts are not consistent with the public interest prong of the conditions for issuance of permits in Section 373.223(1), Florida Statutes.²⁵⁷ The Draft Final Order explains that the public interest is a broad concept²⁵⁸ that requires the consideration of factors including, but not limited to, the applicant's need for water, the effect of the withdrawals on others, the ability of the water resource to sustain the applicant's withdrawals combined with others' withdrawals, and the effect which the applicant's withdrawals will have upon lakes, wetlands, fish, wildlife and other natural resources.²⁵⁹ The Draft Final Order emphasizes the need to balance all these factors and concludes that, due to the severity of ongoing adverse environmental impacts in the four-wellfields area, continuation of pumping at existing levels is not in the public interest.

4. SWFWMD's Proposed Temporary Permitting Solution

The Draft Final Order proposes granting a ten-year default permit for the Northwest Hillsborough Regional Wellfield and threeyear permits for the other three wellfields at existing pumpage quantities. Despite its conclusions that permitting criteria were not met for the three wellfields, the Draft Final Order recognizes the strong need for public water supply. It notes that "[d]enying these permits and immediately shutting down these wellfields for failure to meet the permitting criteria would result in harm to the public

Id. at 13 n.8. 259. *Id.* at 13.

withdrawals are considered when determining reasonable beneficial use. Id. at 14. The rule states that an applicant must demonstrate compliance with the statutory three-prong test by satisfying the fourteen criteria in the rule, which include environmental impact considerations. Id. at 14-15.

^{257.} *Id.* at 13. The Draft Final Order cites Fla. Power Corp. v. State Dep't of Envtl. Regulation, 638 So. 2d 545, 546 (Fla. 1st DCA 1994) (holding that whether an impact to a wetland was "not contrary to the public interest" was a policy matter for the agency's determination and not a question of fact to be resolved by the hearing officer [ALJ]). *Id.* 258. The Draft Final Order disagrees with the ALJ's characterization of the public interest prong:

In finding of Fact No. 182 the ALJ too narrowly construed compliance with the public interest prong. He seems to say that provision of water for public supply will always be consistent with the public interest within the context of Section 373.223(1)(c), F.S. To say that the provision of water to citizens is consistent with the public interest, while true, does not completely resolve compliance with the public interest prong of the conditions for issuance in Section 373.223(1), F.S. The public interest prong includes consideration of a host of factors, as just stated, including effects on the water resources, including environmental features. Balancing of these complex and competing interests are [sic] the province of the Governing Board.

health, safety, and welfare and the interests of the water users affected."²⁶⁰ Thus, the Draft Final Order proposes to issue permits pursuant to SWFWMD's discretional authority under Section 373.171, Florida Statutes.²⁶¹ The Draft Final Order reemphasizes that the ongoing adverse environmental impacts caused by withdrawals are unacceptable, but it states that SWFWMD has "no choice but to authorize withdrawals under its authority in Section 373.171, F.S."²⁶²

Although the Draft Final Order suggests that it would be appropriate for SWFWMD to exercise its discretion to issue permits authorizing water use, it concludes, as a matter of law, these permits should only be issued for a short duration.²⁶³ In addition, under the Draft Final Order, the proposed permits would contain explicit conditions and a clear expression of SWFWMD's intent that withdrawals at existing pumpage are not necessarily allowed to continue into perpetuity.²⁶⁴

With regard to conditions, the Draft Final Order requires that the permittees reduce withdrawals from the three wellfields in order to reduce, eliminate, or avoid adverse environmental impacts.²⁶⁵ Furthermore, it provides that reasonable present and future demands should be satisfied solely from environmentally sustainable sources of supply, thus requiring the maximization of reuse and conservation measures.²⁶⁶ The Draft Final Order requires

^{260.} Draft Final Order, supra note 7, at 21.

^{261.} Id. FLA. STAT. § 373.171 (1997) provides in relevant part:

⁽¹⁾ In order to obtain the most beneficial use of the water resources of the state and to protect the public health, safety, and welfare and the interest of the water users affected, governing boards, by action not inconsistent with the other provision of this law and without impairing property rights, may:

⁽a) Establish rules, regulations, or orders affecting the use of water, as conditions warrant...

⁽c) Make other rules, regulations, and orders necessary for the preservation of the interest of the public and of affected water users.

Id. This provision has been modified somewhat. *See, e.g.*, FLA. STAT. § 373.171(c) (2002) (stating that governing boards may "[i]ssue orders and adopt rules pursuant to ss. 120.536(1) and 120.54 to implement the provisions of this chapter"). This change may have been to avoid an invalid exercise of delegated legislative authority. *See generally* FLA. STAT. § 120.52(8). 262. Draft Final Order, *supra* note 7, at 29. The Draft Final Order warns that "this permitting situation is unique, so no member of the regulated public can or should expect a permit for situations which they consider to be similar to the subject situation." *Id.* at 30. 263. *Id.* at 27.

^{264.} *Id.* at 21. The ALJ found that "[t]o the extent the Authority was directed in prior and somewhat vague permit conditions to consider alternative sources, the evidence establishes that the Authority has complied with the minimal directives provided by the [Southwest Florida Water Management] District." Recommended Order, *supra* note 6, at Finding of Fact No. 54.

^{265.} Draft Final Order, *supra* note 7, at 21.

^{266.} The Draft Final Order specifically notes that savings from reuse and conservation

the development of alternative sources²⁶⁷ of supply in order to reduce withdrawals to meet permitting criteria.²⁶⁸ An additional proposed condition in the Draft Final Order requires the permittees to prepare a plan to reach compliance with permit conditions and to present written and oral progress reports to the Governing Board.²⁶⁹

In terms of permit durations, the Draft Final Order emphasizes that SWFWMD is not restricted to a ten-year permit.²⁷⁰ The Draft Final Order notes that the initial and renewal permits for the four wellfields varied in duration and that the permitting history shows that SWFWMD is not restricted to a ten-year permit.²⁷¹ The Draft Final Order explains that the goal was to reduce pumping from the wellfields so that permitting criteria could be met, and that short duration permits are a better tool for achieving this goal.²⁷²

The Draft Final Order interprets the ALJ's Recommended Order as allowing SWFWMD to require mitigation for past adverse environmental impacts.²⁷³ Accordingly, the Draft Final Order suggests that the permittees be required to devise and implement a plan to mitigate the adverse environmental impacts that the wellfields have caused in the past, and will continue to cause in the future.²⁷⁴ This interpretation raises issues about the treatment of adverse environmental impacts under Florida water law and the

should apply toward reductions in withdrawals from the three wellfields and not be applied toward servicing future growth. *Id.* at 22. The Draft Final Order also notes that the previously issued permits contained a condition indicating that implementing conservation measures is an ongoing obligation. *Id.* at 23.

^{267.} The Draft Final Order notes that "the requirement to explore alternative sources is not a new one." *Id.* at 23. While the Draft Final Order does not reject the ALJ's finding of fact that it takes from seven to ten years to bring new water supply facilities from the planning stage to operation, which was supported by competent substantial evidence, it suggests that it may be possible to develop new water supplies in less time. *See id.* at 29. 268. *Id.* at 22.

^{269.} The Draft Final Order explains that these requirements were similar to a condition in the existing permit for the Cosme-Odessa and Section 21 wellfields. *Id.* at 21.

^{270.} The Draft Final Order does not reject the ALJ's finding of fact that public water supply permits are typically valid for a period of ten years because it was supported by competent substantial evidence. *Id.* at 27.

^{271.} *Id.* The Cosme-Odessa and Section 21 wellfields were initially permitted for a little over four years, and were renewed for eight and a half years. *Id.* South Pasco was initially permitted for two and a half years and was renewed for ten years. *Id.* Northwest Hillsborough Regional Wellfield was initially permitted for three and a half years, and was renewed for six years. *Id.*

^{272.} Id.

^{273.} See Recommended Order, *supra* note 6, at Finding of Fact No. 201 (finding that SWFWMD has the ability to require mitigation through conditions attached to prior permits and that SWFWMD has the authority to continue to attach mitigation conditions to the permits issuing from this proceeding). The Draft Final Order also cites the wording of the Recommended Order's Findings of Fact Nos. 202 and 243 to support the conclusion that SWFWMD can require mitigation for past adverse environmental impacts. Draft Final Order, *supra* note 7, at 29-30 n.15.

^{274.} Draft Final Order, supra note 7, at 29-30 n.15.

nature of water policy in the state. As discussed *infra*, many of the legal interpretations presented in the Draft Final Order are consistent with the overall design of Chapter 373, Florida Statutes, and the intent of the drafters of the Model Water Code.

E. Resolution of the Four-Wellfields Dispute: The Formation of Tampa Bay Water

After extensive negotiations, the dispute underlying the fourwellfields case was resolved in 1999 as a part of the transformation of the Authority into a more effective regional water management institution.²⁷⁵ An inter-local agreement, known as the "water accord," created a new institutional relationship to replace the Authority as the water supply entity for the region.²⁷⁶ This transformation included a plan to compensate the Authority's member governments for installed water supply capacity, the ownership and control of which was shifted to the new water authority, Tampa Bay Water.²⁷⁷ The transformation was made possible by approximately \$273 million in SWFWMD funding, which was provided for non-groundwater supply infrastructure in an effort to reduce pumping and ameliorate adverse environmental affects in the area.²⁷⁸

The restructuring included changes to voting, membership, terms of office, responsibilities, facilities ownership and management, and the creation of a twenty-year water supply development plan.²⁷⁹ Through the agreement that formed Tampa Bay Water, all member governments relinquished the right to develop their own water supply sources and agreed to limit their opposition to future water projects.²⁸⁰ If disputes among governments and Tampa Bay Water cannot be resolved within thirty-days, a mutually acceptable neutral third party acts as a mediator.²⁸¹ The structure of the relationship between SWFWMD and Tampa Bay Water has not changed substantially in the sense

^{275.} See Rowland, supra note 5, at 440.

^{276.} Id. at 441.

^{277.} Id.

^{278.} Id. at 440.

^{279.} *Id.* at 441. Tampa Bay Water is governed by a nine member board, two members from each of the three counties involved in the four-wellfields dispute, and one member from each of the cities of Tampa, St. Petersburg, and New Port Richey. *Id.* Tampa Bay water created a uniform rate for all of its customers. *Id.* "Each board member has one vote and decisions are made according to majority rule," which is an improvement over the Authority's previous structure where every funding decision had to be unanimous and one party had the ability to prevent a project. *Id.*

^{280.} Id. at 441-42.

^{281.} Id. at 442.

that "the [Southwest Florida Water Management] District is still the regulator and the Authority is still the single largest permittee in Tampa Bay."²⁸² However, the communication practices have changed, and for the most part, "shared concern" for the development of new waters supplies has replaced the public disagreements.²⁸³

In addition, there were significant changes to the permitting structure for the area. All the public supply wellfield permits in the area were combined into one permit. This consolidated permit is structured so that there are "cutbacks" in pumping quantities over time. Thus, as new alternative water sources become available, groundwater withdrawals and environmental impacts are reduced.²⁸⁴ Furthermore, the changes to the permitting system allow more flexibility in the management of the water supply system.²⁸⁵ One author notes that as the result of regional cooperation, the Tampa Bay area "now has the institutional means to acquire the additional water supply needed to meet its projected demand, while protecting the environment against adverse impacts, and operating within state and federal law."²⁸⁶

IV. IMPLICATIONS OF WATER LAW REGARDING ADVERSE ENVIRONMENTAL IMPACTS FOR PROTECTING ECOSYSTEMS

The four-wellfields dispute illustrates the challenge of reconciling human and ecosystem water needs and balancing the goals of certainty and flexibility under the Florida Water Resources Act. This part of the article discusses relevant provisions of the Act and the writings of the drafters of the Model Water Code in an effort to further define this delicate balancing process. It also suggests that principles of adaptive management, which have gradually been

^{282.} In the Public Interest, *supra* note 6, at 16.

^{283.} Id.

^{284.} *Id.* at 338. Prior to the partnership agreement, the total annual average permitted withdraw was 192 mgd. *See* Tampa Bay Water, *Tampa Bay Water Ahead of Schedule in Reducing Wellfield Production*, at http://www.tampabaywater.org/WEB/Htm/News/news_2Januay2003.htm [sic]. Cutbacks were scheduled to total annual average permitted withdraw of 121 mgd by January 2003 and 90 mgd by January 2008. *Id.*

^{285.} Tampa Bay Water currently employs a program known as the Optimized Regional Operations Plan (OROP). See Tampa Bay Water, Optimized Regional Operations Plan, at http://www.tampabaywater.org/WEB/Htm/Ops/orop2.htm. This plan attempts to minimize adverse environmental impacts by using computer models to analyze and forecast groundwater conditions at water supply facilities. *Id.* Based on field monitoring and these forecasts, groundwater withdrawals are "rotated" or adjusted to avoid ecological harm to any one facility. *Id.* The OROP has been described as the "most comprehensive wellfield management plan in the state of Florida," and was implemented as a part of the consolidated permit for the eleven wellfields in Pasco, Pinellas, and northern Hillsborough counties. *Id.* 286. See Rowland, supra note 5, at 442.

incorporated into water management decisions in the Tampa Bay area, are useful for addressing adverse environmental impacts caused by public water supply withdrawals.

A. The Full Meaning of the Reasonable Beneficial Use Standard

As discussed above, the drafters of the Model Water Code attempted to combine the best aspects of eastern and western water law. The writings of the drafters indicate that the reasonable beneficial use standard incorporates decision-making factors that have long been part of the reasonable and beneficial use standards respectively. One of the drafters notes in a later article that when the Florida legislature adopted the term "reasonable beneficial use." its intent was to rely on the technical common law meaning of the terms "reasonable use" and "beneficial use" to guide and constitutionally limit administrative determinations.²⁸⁷ Thus, there is a strong argument that these factors are inherent in Florida's water law system.²⁸⁸ In any event, these factors are useful for considering how to balance human and ecosystem needs and the goals of certainty with that of flexibility. These factors can also aid administrative agencies in making consumptive use decisions that could potentially cause adverse environmental impacts.

"Administrative regulations establishing guidelines for consumptive use permitting in Florida should be consistent with the factors" associated with the "reasonable" and "beneficial use" standards.²⁸⁹ These factors should at least include the following: 1) the purpose of the use; 2) economic value of the use; 3) social value of the use, including the suitability of the watercourse; 4) the extent and amount of harm caused by the use; and 5) the practicality of avoiding the harm through adjusting the quantity and method of the use.²⁹⁰ These factors are useful when attempting to balance human and ecosystem needs and the goals of certainty and flexibility.

^{287.} Florida's Reasonable Beneficial Water Use Standard, supra note 18, at 276.

^{288.} The Model Water Code's commentary indicates that "reasonable beneficial use" ought to be interpreted in light of the long history of judicial determination of water uses in each system. *Id.* at 275-76. The terms reasonable use and beneficial use are "clothed with common law meaning," and "each term serves as a legal shorthand for the factors articulated and weighed by the courts determining the legality of a use." *Id.*

^{289.} Id. at 278.

^{290.} Id. These factors are very similar to those identified in the Restatement Second of Torts. See Law and Policy in Managing Water Resources, supra note 1, at 303.

B. Balancing Human and Ecosystem Needs

1. Language of the Florida Water Resources Act

Throughout the Florida Water Resources Act there are references to the importance of addressing the water needs of both human and natural systems. The Act emphasizes the need "[t]o preserve natural resources, fish and wildlife."²⁹¹ According to one set of authors: "[c]onsumptive use permitting provides one of the principal means for the districts to regulate human activities that might adversely affect [fish, wildlife, and natural] resources."²⁹²

Several significant legislative amendments that were made in 1997 further emphasize the need to comprehensively manage water by considering natural systems.²⁹³ For example, the declaration of policy section of the statute contains a new provision that the Department take into account "cumulative impacts on water resources and manage those resources in a manner to ensure their sustainability."²⁹⁴ Furthermore, the 1997 legislature declared the State's policy "to promote the conservation, replenishment, recapture, enhancement, development and proper utilization of surface and ground water."²⁹⁵ Changes that were made to Section 373.0361(1), Florida Statutes, require districts to undertake water supply planning when it determines that sources of water are not adequate "to supply water for all existing and projected reasonablebeneficial uses and to sustain the water resources and related natural systems."

Although this article focuses on Part II of Chapter 373, Florida Statutes, Part IV of Chapter 373, which governs the management and storage of surface waters, has relevancy. Part IV authorizes the districts to:

> require permits and impose such reasonable conditions as are necessary to assure that the construction or alteration of any stormwater management system, dam, impoundment, reservoir, appurtenant work, or works will comply with the provisions of this part and applicable rules

^{291.} FLA STAT. § 373.016(3)(g) (2002).

^{292.} Hamann & Ankersen, supra note 89, at 42.

^{293.} Draft Final Order, *supra* note 7, at 24. These amendments incorporated and expanded many of the tasks required of SWFWMD by Executive Order No. 96-297 that was issued on September 30, 1996. *Id.* For discussion of the 1997 amendments to the Florida Water Resources Act, see generally Frank Matthews & Gabriel Niego, *Florida Water Policy: A Twenty-Five Year Mid-Course Correction*, 25 FLA. ST. U. L. REV. 365 (1998).

^{294.} FLA. STAT. § 373.016(2).

^{295.} Id. at § 373.013(3)(b).

promulgated thereto and will not be harmful to the water resources of the district.²⁹⁶

The broad definition of terms within this provision allows the districts to regulate a number of human activities.²⁹⁷

One pair of authors notes that:

[a]lthough Part II . . . provides an adequate basis to address the environmental impacts of water use, the fact that F.S. Ch. 373 is amenable to an interpretation that places consumptive uses within the surface water management regulatory framework underscores the fundamental relationship between wetlands and water supply development."²⁹⁸

Such an interpretation is consistent with the focus of the drafters on developing a legal system that attempts to maintain overall hydrologic integrity.

2. Intent of the Drafters of the Model Water Code

"The drafters of the Model Water Code attempted to ensure that water use and water quality problems were not segregated at the regulatory level,"²⁹⁹ and this intent is embodied in the Water Resources Act. In terms of balancing human and ecosystem water needs, the drafters emphasized the importance of administrative expertise for more thorough and comprehensive analysis in allocation decisions. One drafter explains in a later article: "[t]he statutory emphasis on preservation of environmental values should be incorporated into any guidelines developed with respect to a permit program to prevent possible inadvertent omission of environmental considerations."³⁰⁰ This drafter also emphasizes that the Florida Supreme Court "has clearly recognized the need for and

^{296.} Hamann & Ankersen, supra note 89, at 44 (citing FLA. STAT. § 373.413).

^{297.} For example, "works of the district" is broadly defined as "all artificial structures, including, but not limited to ... pipes and other construction that connects to, draws water from, drains water into, or is placed in or across the waters in the state." FLA. STAT. § 373.403(5). The term "waters in the state" is comprehensively defined to include all ground and surface water. *Id.* at § 373.019(17).

^{298.} Hamann & Ankersen, *supra* note 89, at 45. They note that Part II and Part IV of Chapter 373, Florida Statutes, when read together, suggest that diversions or withdrawals that result in adverse hydrologic impacts to surficial wetlands may be subject to surface water management permitting requirements under Part IV and implementing rules. *Id.* 299. Ausness, *supra* note 27, at 17.

^{300.} See Florida's Reasonable Beneficial Water Use Standard, supra note 18, at 280.

ability of administrative agencies to make water allocation decisions without judicial approval of each decision."³⁰¹

Administrative decisions should incorporate consideration of the common law factors identified in Part IVA, *supra*. The public interest component of the Act embodies the "social value" and "suitability" factors.³⁰² "The social value factor includes considerations of public health and welfare" as well as watercourse suitability.³⁰³ In terms of the "purpose of use" factor, consumptive use decisions must provide for "the protection and procreation of fish and wildlife" as well as domestic and municipal uses.³⁰⁴ The "economic value" factor should be considered in further defining economic and efficient utilization.³⁰⁵

In addition to generally supporting deference to administrative decision-making processes, commentary to the Model Water Code lends support to specific legal conclusions suggested in the Draft The Draft Final Order explains that under the Final Order. reasonable beneficial use standard, the manner in which water is diverted must also be reasonable and consistent with the public interest. Similarly, the drafters noted in the commentary accompanying the Model Water Code: "[t]his part of the standard would apply to some aspect of the manner of operation, such as place of diversion, manner of impoundment, or method of disposal (including danger of pollution), as opposed to the purpose of the entire operation itself."³⁰⁶ Thus, as the Draft Final Order argues, a strong need for public water supply does not necessarily mean that it is a reasonable and beneficial use, especially when it causes severe environmental impacts.

Other commentary by the drafters of the Model Water Code supports the Draft Final Order's emphasis on the protection of natural systems through both the reasonable beneficial use prong and the public interest prong. The drafters specifically noted in the Code's commentary that "a proposed use, otherwise valid, which would have an unreasonably harmful effect on fish or wildlife might well be rejected as being inconsistent with the express statement of

^{301.} Id. at 276. In Village of Tequesta v. Jupiter Inlet Corp., the Florida Supreme Court considered the reasonable beneficial standard. Id. The court held: "[t]he Water Resources Act now controls the use of water and replaces the ad hoc judicial determination in water management districts where consumptive use permitting is in force." Id. (quoting Village of Tequesta, 371 So. 2d 663, 674 (Fla. 1979)). The drafters interpreted this decision as recognizing the need for administrative agencies to make water allocation decisions without judicial approval of each decision. Id. at 277.

^{302.} Id.

^{303.} Id. at 279.

^{304.} Id.

^{305.} Id. at 276.

^{306.} MODEL WATER CODE, supra note 3, at 172.

public interest in the protection of fish and wildlife found in 1.02 [of the Model Water Code]."³⁰⁷

3. The Importance of Addressing Adverse Impacts

The drafters of the Model Water Code attempted to establish a regulatory structure that would take the entire hydrologic cycle into account.³⁰⁸ The Code's permit system was designed to implement this objective at the operational level.³⁰⁹ In order for the Florida Water Resources Act to achieve the goal of hydrologically sound water management it must adequately address the adverse environmental effects that consumptive uses can have on water quantity and quality.

To better implement hydrologically sound water management, consumptive use regulation must consider the entire hydrologic cycle and the physical relationships between water use and water quality.³¹⁰ Thus, it is necessary for water management districts to regulate consumptive uses that cause adverse impacts, even those that have already occurred as a result of past permitting decisions.³¹¹ Water withdrawals that cause adverse impacts can seriously impact water quantity and quality and affect humans as well as ecosystems. For example, the owner of a lakefront home can be harmed when withdrawals cause the lake to go dry. Due to the fact that aquatic ecosystems, especially wetlands, play an important role in water purification and groundwater recharge, the overall quality of surface and groundwater may be affected by groundwater withdrawals.

While the four-wellfields dispute involved the lowering of wetland and lake levels, adverse environmental impacts resulting from consumptive use can take many forms. Saltwater intrusion is

Id. at 16.

310. Id.

^{307.} *Id.* at 179. Section 1.02 of the Model Water Code states in relevant part that "adequate provision shall be made for the protection and procreation of fish and wildlife, the maintenance of proper ecological balance and scenic beauty ... such objectives are declared to be in the public interest." *Id.* at 3.

^{308.} Ausness, supra note 27, at 13.

^{309.} Id. One drafter explains:

According to the Code, the governing board of the appropriate water management district had to authorize virtually all withdrawals, diversions or impoundments of water. The Code's definition of water included: contained surface water, diffused surface water, and groundwater. The Code's regulatory provisions extended to all forms of water, except coastal waters, and also required all water users, except domestic users, to obtain a permit.

³¹¹. As is discussed *infra*, such decisions may have fairness concerns that must be adequately addressed by the water management districts.

another potential result of withdrawals that can have devastating and irreversible consequences. Only by addressing adverse environmental impacts through prevention, minimization, and, when necessary, compensatory mitigation, can the full potential of the Florida Water Resources Act to ensure human and ecosystem water needs be realized.

Issues concerning the importance of offsetting adverse environmental impacts through compensatory mitigation are raised in a recent order of the South Florida Water Management District (SFWMD).³¹² Miami-Dade County applied for a renewal for a large wellfield that it operated in the Everglades.³¹³ The wetland functions of the area had been degraded due to the effect of groundwater withdrawals from the pumping, mining, drainage, and infestation with melaleuca, ³¹⁴ a highly invasive exotic species. The county sought a variance from the provisions of SFWMD's rules that prohibit causing adverse environmental impacts and proposed mitigation.³¹⁵ SFWMD determined that a variance was appropriate, and agreed to allow compensatory mitigation to compensate for future expected impacts.³¹⁶ Notably, SFWMD did not consider the mitigation of existing impacts.³¹⁷

In its analysis, SFWMD articulated an interpretation of its rules that may be problematic. It stated that there is a general goal of maximizing the reasonable beneficial use of water and "in maximizing the reasonable-beneficial development of water resources, harm may be permitted to a certain extent after the potential for harm has been minimized and mitigated, if the other factors considered in the balancing outweigh the impact of the harm."³¹⁸ One author has expressed concern that, under this interpretation of the statute, it is not clear that a variance, or even mitigation, would be required if the district finds that the need for

^{312.} Richard Hamann, *Consumptive Use Permitting Criteria*, FLORIDA ENVIRONMENTALAND LAND USE LAW 14.2-1, 14.2-8 & 14.2-9 (2001) [hereinafter *Consumptive Use*]. In that treatise article, Hamann explores the potential implications of a final order from the South Florida Water Management District: In re Petition for Variance for Miami-Dade County's Water Use Permit No. 13-0037-W for the Northwest Wellfield, Order No. SFWMD 99-14 DAO-WU, 99 ER F.A.L. R. 092, February 11, 1999 [hereinafter In re Petition for Variance]. The distinction between the *South* Florida Water Management District (SFWMD) and the *Southwest* Water Management District (SWFWMD) in this part of the article is noteworthy.

^{313.} Consumptive Use, supra note 312, at 14.2 to 14.8.

^{314.} Id.

^{315.} *Id.* at 14.2 to 14.8 & 14.2 to 14.9. See FLA. STAT. 120.542(2) (2002) (providing for variances). Under that section, a variance must be granted if the applicant can demonstrate application of the rules would impose a "substantial hardship" and that the purpose of the underlying statute will be achieved by other means. *Id.*

^{316.} Consumptive Use, supra note 312, at 14.2 to 14.8 & 14.2 to 14.9.

^{317.} Id.

^{318.} In re Petition for Variance, *supra* note 312, at Conclusion of Law No. 69.

water is greater than the cost of offsetting or avoiding environmental harm. $^{\rm 319}$

In addition, SFWMD is currently engaged in rulemaking, including amendments to its Basis of Review.³²⁰ Draft Section 3.3.6 of the Basis of Review is entitled "Mitigation of Harm." It notes that SFWMD "shall assess the condition of the wetland or other surface water as it exists at the time of the application submittal when determining mitigation requirements."³²¹ However, additional considerations are required for the renewals of consumptive use permits in Section 3.3.7.³²² This section reflects a cost-benefit approach by requiring consideration of the "projected impacts on . . . wetlands or other surface water from continuing the water use;"³²³ in comparison to the remaining functions of the wetlands or other surface waters. While it is laudable that this rule at least recognizes the importance of considering adverse environmental impacts resulting from consumptive use, the scope of the analysis it requires is problematic. By focusing only on "remaining functions," the rule ignores functions that do not currently exist, but

Id. at 74.

^{319.} Consumptive Use, supra note 312, at 14.2 to 14.8 & 14.2 to 14.9. However, it is notable that the wetlands were already in a highly degraded state. While some of this degradation was due to groundwater withdrawals, other factors such as draining, mining, and invasion by melaleuca had also caused adverse impacts. One interpretation of this decision as a whole is that SFWMD determined that it would not be fair to hold the county responsible for existing adverse impacts in the area. As is discussed in Part IV(B)(3), *infra*, the districts should be allowed to consider equitable concerns in making permitting decisions.

^{320.} South Florida Water Management District, Basis of Review for Water Permit Applications within the South Florida Water Management District (2003), at http://www.sfwmd.gov/org/reg/rules/wu_bor_092003.pdf.

^{321.} Id. at 73.

^{322.} Author's Note: The proposed language of Section 3.3.7 of the Basis of Review was modified after this note was submitted for publication. More recent proposed language of Section 3.3.7 states in relevant part:

[[]T]he determination of whether elimination or reduction, and mitigation, will be required for impacts to wetlands or other surface waters not identified or expressly authorized to be impacted by the previous consumptive use permit, shall be made considering the following: A. The existing wetland and surface water functions;

B. The degree to which the wetland or other surface water functions are reasonably expected to recover if the withdrawal is reduced or eliminated; C. The projected impacts on the existing functions of the wetlands or

other surface waters from continuing the water use;

SFWMD's changes have ameliorated many of the concerns about Section 3.3.7 discussed in this section of the note. Nevertheless, discussion of the previously proposed language has been retained in this note because it helps illustrate the importance of an adaptive approach to water use decisions.

^{323.} *Id.* at 74. Additional considerations include whether the wetland or surface water is connected to an Outstanding Florida Water, Aquatic Preserve, state park, or other publicly owned conservation land, and whether the wetland or surface water is used by listed species. *Id.* at 75.

which are readily restorable. For example, a wetland that is dry as a result of excessive withdrawals may no longer offer habitat or water purification functions. However, reducing withdrawals would most likely reestablish normal hydroperiods and allow these vital functions to return. Much like Judge Quattlebaum's rationale, such a rule could limit the ability of a district to reevaluate past allocation decisions in light of new scientific understanding of natural systems.³²⁴ This strictly prospective focus has been analogized to the functioning of a "ratchet."³²⁵ Thus, as is discussed, such a focus is inconsistent with the principles of adaptive management.

SFWMD's recent decision regarding the variance for Miami-Dade County and its proposed rules should be compared to the opinion of the Second District Court of Appeals in Southwest Florida Water Management District v. Charlotte County.³²⁶ As is discussed supra, SWFWMD adopted fourteen criteria in its rule implementing the three-part statutory test for issuance of a permit. The Second District Court of Appeals rejected an ALJ's ruling that the fourteen factors must always be balanced.³²⁷ It also interpreted the use of mitigation in this context, upholding rules providing for "measures ... to prevent, lessen, or rectify ... an adverse impact to each of the fourteen criteria."³²⁸ Due to the importance of addressing cumulative impacts, which "unavoidably involves site-specific considerations,"329 the court upheld the development of mitigation measures through "a site-specific, scientific determination allowing for the use of professional judgment."³³⁰ SFWMD suggests the importance in allowing water management districts to make policy judgments regarding water use decisions. It also supports the

^{324.} See infra III(C) (2).

^{325.} Richard Hamann, personal communication, February 25, 2002. Hamann's analogy holds true for both Judge Quattlebaum's recommended order in the four-wellfield case and SFWMD's proposed rule. A ratchet usually functions "to prevent reversal of motion." *See* Random House Dictionary 727 (2d. ed. 1980). Similarly, Judge Quattlebaum's rationale and the proposed rule prevent changes to past allocation decisions. As is discussed, the ability for policy to be adjusted in light of new scientific understanding is a fundamental of adaptive management.

^{326. 774} So. 2d 903 (Fla. 2d DCA 2001); *Consumptive Use, supra* note 312, at 14.2 to 14.9. 327. *Charlotte County*, 774 So. 2d at 910-11. The ALJ found that a balancing approach is required and that failure to satisfy a single criteria does not necessarily preclude issuance of a permit. The Second DCA disagreed and held: "[W]e reverse the ALJ's ruling that that portion of rule 40D-2.301(1) requiring a WUP [water use permit] applicant to satisfy each subsection of the rule is invalid." *Id.*

^{328.} Consumptive Use, supra note 312, at 14.2 to 14.9 (citing Charlotte County, 774 So. 2d at 912).

^{329.} Charlotte County, 774 So. 2d at 912.

^{330.} Consumptive Use, supra note 312, at 14.2 to 14.9 (citing Charlotte County, 774 So. 2d at 912).

legitimacy of districts requiring applicants to address adverse environmental impacts. In addition, it is consistent with the drafters' emphasis on the role of expertise in water resource decision-making. While this expertise is useful, further articulation of the considerations that influence such "professional judgment" may advance the goals of certainty, uniformity, and fairness.

C. Certainty, Flexibility, and Fairness

1. Certainty and Uncertainty in Water Law and Policy

The dispute in the northern Tampa Bay area reflects the tension between the goals of certainty and flexibility in water law. Understanding the nature of certainty in water law and management helps illustrate this tension. According to the drafters of the Model Water Code, there are three aspects of certainty in water rights: 1) legal certainty; 2) tenure certainty; and 3) physical certainty.³³¹ However, a fourth aspect of certainty not explicitly identified by the drafters — scientific and technological certainty — has important implications for addressing water disputes.

Legal certainty, which is one of the most important aspects of real property law, "is concerned with protection against the unlawful acts of others."³³² "Tenure certainty involves the protection of water rights against the lawful acts of others, as opposed to unlawful acts in the case of legal certainty."³³³ Physical certainty is an aspect of water rights that is often threatened by changing weather, drought, and other environmental uncertainties.³³⁴ Scientific and technological certainty reflects the level of understanding of natural systems necessary to make management decision and the technological means available to implement them.

A lack of scientific certainty can make it more difficult to recognize and address adverse environmental impacts associated with consumptive use. One example of this situation is the complex relationship between groundwater withdrawals and their affects on overlying lakes and wetlands. Such affects tend to be indirect and

^{331.} MODEL WATER CODE, *supra* note 3, at 158.

^{332.} *Id.* The holder of rights under the doctrine of prior appropriation generally has more legal certainty than a riparian owner. *Id.* The water user in a state that subscribes to the prior appropriations system may rely on a water master to determine priorities of use, while a user in a riparian state must seek a court action, the outcome of which is often uncertain. *Id.*

^{333.} Id.

^{334.} See *id*. Under the prior appropriation system, the physical uncertainty is greatly reduced for senior appropriators, but similarly increased for junior appropriators who may have their supply completely cut off. *Id*.

delayed,³³⁵ and in some cases they may be irreversible before they have been detected.³³⁶ Also, the geographic extent of the impacts is hard to predict since it depends on geology that is inconsistent and difficult to ascertain.³³⁷ Furthermore, historical alteration of drainage patterns and cyclical droughts can also confuse causation.³³⁸ As in the four-wellfields case, modeling issues can delay the recognition of the relationship between withdrawals and impacts.³³⁹

A lack of technological certainty can also complicate water management decisions. For example, some individuals have expressed strong opposition to the use of aquifer storage and recovery technology in Florida out of concern for unforeseen effects on aquifer structure and quality.³⁴⁰ On the other hand, new technology can facilitate the implementation of effective water management strategies. Significant technological advances in reverse-osmosis technology have greatly lowered the costs of water desalination. Due to these improvements, and increasing demand for water in the area, Tampa Bay Water has begun using the largest desalination facility in North America.³⁴¹

These are but a few of many examples of the complex role of scientific and technological certainty in water law and policy. This aspect of certainty also bears on the other aspects of certainty of water rights. For example, problems with scientific modeling or technology may negatively affect physical certainty and the ability to satisfy users' needs. Thus, it is necessary to incorporate consideration of certainty factors, especially scientific and

^{335.} Hamann & Ankersen, *supra* note 89, at 41. Diminished hydroperiod may increase fire frequency and intensity, and it may also adversely affect the distribution of species at higher trophic levels. *Id.*

^{336.} Id.

^{337.} Id.

^{338.} Id.

^{339.} See In the Public Interest, supra note 6, at 147-48.

^{340.} Debbie Salamone, Science on Trial: An Expert Says Storing Rainwater Underground Could Solve Shortages, but a Foe Warns of Risk, ORLANDO SENTINEL, Sept. 22, 2002, at A1. 341. On Monday March 18, 2003, the plant began producing 4.9 mgd of drinking water, but at full capacity the plant will provide 25 mgd, or approximately ten percent of the region's drinking water supply. See Tampa Bay Water, Tampa Bay Seawater Desalination Plant Providing Drinking Water to the Region, at http://www.tampabaywater.org/WEB/Htm/News/ news_28March2003_SeawaterDesal.htm. At this output, the plant will be the largest reverse osmosis seawater desalination facility in North America. Id. Tampa Bay Water maintains that "[n]umerous independent environmental studies predict the facility will not increase Tampa Bay's salinity beyond its normal seasonal variation or have any impact on the bay's marine life." However, this decision has not been without its critics. Concerns over the potential environmental harm associated disposal of the by-product of desalination, sometimes referred to as "brine" led to an administrative challenge. See generally Save Our Bays, Air, and Canals v. Tampa Bay Desal 2001 WL 1917270, DEP 01-0996, Final Order, November 2001 (issuing a permit for the construction of the desalination plant).

technological factors, when attempting to address adverse environmental impacts that are not entirely understood through water management decisions. As discussed, explicitly recognizing and accommodating uncertainty is an important aspect of an adaptive management approach to water policy.³⁴²

2. Flexibility, Permit Duration, and Permit Renewal

The four-wellfields dispute illustrates the various considerations that can influence the decision whether to renew a permit and the duration of such permit. Analysis of the Florida Water Resources Act and the writings of the drafters of the Model Water Code illustrate that it is necessary for water management decisions to provide flexibility in order to account for unforeseen consequences, such as in the case of the four-wellfields area.

A fundamental principle of Florida water law is that, unlike in the prior appropriations system, water allocation decisions are periodically reevaluated.³⁴³ While emphasizing the need for this aspect of Florida water law, the drafters of the Model Water Code spoke out against the idea of adopting a prior appropriations system in eastern states such as Florida:

> It would be most unfortunate for eastern legislatures to adopt a rule which would tend to freeze water rights through the creation of vested rights in the first user . . . The recognition of such vested rights in the first user has been said to "seriously impede a high level of beneficial use of a state's water resources," and to be a "serious legal barrier to wise water development."³⁴⁴

The drafters explained in the commentary accompanying the Model Water Code that adoption of the prior appropriations approach "does not lead to conservation of water resources" ³⁴⁵ nor the "interest-of-the-public principle which should be applied to this great natural resource," but rather, it supports "rugged individualist theory."³⁴⁶

Commentary in the Model Water Code indicates that the drafters specifically contemplated the duration of permits for water use during the drafting process, and they concluded that the "easiest

^{342.} See discussion in Part IV(C), infra.

^{343.} See FLA. STAT. § 373.239(3) (2002) (stating that all permit renewal applications shall be treated in the same manner as the initial permit application).

^{344.} MODEL WATER CODE, *supra* note 3, at 79.

^{345.} Id. at 80.

^{346.} See id.

way to maintain flexibility is to keep the term of permits short."³⁴⁷ However, the drafters also recognized the need for permit terms to be long enough "to allow water users to recover their investments made in water resource works."³⁴⁸ They explain that twenty years was selected as the:

maximum permit length in the belief that it would be long enough to provide reasonable security to water users and allow sufficient time to at least partially amortize capital investment, while at the same time providing for some degree of flexibility in the administration of the permit system.³⁴⁹

Furthermore, they note that "[a]lthough the normal permit period is twenty years, the governing board is authorized to grant permits for a lesser time on the basis of source of supply and type of use."³⁵⁰

Again, reference to the common law factors associated with the "reasonable" and "beneficial use" standards provides a point of reference for balancing flexibility and certainty in water law decisions.³⁵¹ The "protection of existing values" factor "is pertinent both when a permit is sought for an existing use and when application is made for permit renewal."³⁵² This factor includes the protection of the values established by the granting of a permit.³⁵³ The drafters of the Model Water Code note that "no rigid guidelines should be approved for this factor."³⁵⁴ Rather, a more experimental approach, such as that associated with an adaptive management approach, should be used.

Three of the common law factors, the "extent and amount of harm caused to others, practicality of avoiding harm, and practicality of adjusting quantity factors, do not apply to issuance of the initial permits if water supplies are adequate."³⁵⁵ However,

^{347.} *Id.* at 173. The drafters' commentary noted that there are three approaches available to avoid the undesirable effects of inflexibility in the transfer of water rights while retaining adequate certainty: 1) establish a permit of short duration, 2) grant a long-term permit but also impose a preference system, and 3) grant a perpetual permit and allow free alienability of water rights. *Id.* The drafters of the Model Water Code, after careful study, chose the first alternative. *Id.* at 175.

^{348.} Id.

^{349.} Id. at 189.

^{350.} *Id.* at 189. Some individuals have criticized the fact that shorter permit durations do not allow for economically viable returns on investments.

^{351.} See Part IV (A), infra.

^{352.} Florida's Reasonable Beneficial Water Use Standard, supra note 18, at 281. See also FLA. STAT. §§ 373.226-239 (2002).

^{353.} Florida's Reasonable Beneficial Water Use Standard, supra note 18, at 281.

^{354.} Id.

^{355.} Id. at 280.

when water supplies are low or unavailable, as in the case of the Tampa Bay area, these factors should be considered with regard to both initial and renewal applications.³⁵⁶ Such considerations contribute to a more comprehensive and equitable analysis.³⁵⁷

Perhaps the most controversial of the common law factors that affects decision-making under Florida water law is "economic value." One pair of authors notes that commentary of the drafters with regard to economic value is confusing.³⁵⁸ These authors note that terms such as "economic and efficient utilization" and "efficient economic use of water" in the commentary have no particular meaning in and of themselves in economics. However, in completing their analysis, the authors recognized that the legislature intended to employ the term "reasonable beneficial" in a technical sense that is pregnant with common law factors.³⁵⁹ Thus, these authors concluded that it was the intent of the Code and the Act to go "beyond just cost effectiveness" and to also include the "mutual gain/maximizing social benefit characteristics of riparian reasonable use doctrine."³⁶⁰

The authors' conclusions from their economic analysis suggest a three-part goal for economic efficiency under the Act: "(1) insure long-term integrity of the hydrologic system and related ecosystems . . . ; (2) induce water users not to waste water by using costeffective technology . . . ; and (3) insure that unproductive, low valued uses are discouraged in favor of higher valued, more productive uses."³⁶¹ With regard to this third part, the authors explain that "low value" and 'high value' uses are not limited to dollar representations of water's value, "but neither are monetized versions of value excluded."³⁶² Thus, consideration of common law factors and economic analysis is necessary when evaluating permit duration and the needs of certainty and flexibility. However, fairness concerns of fairness also play an important role in such a determination, and thus warrant further discussion.

 $^{356. \} Id.$

^{357.} See discussion in Part IVB (3), infra.

^{358.} See generally Phyllis P. Saarinen & Gary D. Lynne, Getting the Most Valuable Water Supply Pie: Economic Efficiency in Florida's Reasonable-Beneficial Use Standard, 8 J. LAND USE & ENVTL. L. 491, 508 (1993).

^{359.} See id. at 508 n.111.

^{360.} Id. at 508.

^{361.} Id. at 511.

^{362.} Id.

3. Fairness Concerns

There is a strong argument that the ALJ's conclusions in the four-wellfield case about the extent of permittee responsibility for adverse environmental impacts are inconsistent with fundamental principles of Florida water law. However, the ALJ's emphasis on equitable concerns indicates that it is necessary to reexamine aspects of fairness under Florida water law with regard to addressing environmental impacts.

The decision of the ALJ to renew water permits, rather than deny permits, relies heavily on the fact that there were significant economic investments in the wellfields. The ALJ found that developing and implementing alternative sources to replace the wellfields would cost approximately \$180 million. Although the Draft Final Order expresses concerns about the accuracy of these estimates,363 there is little question that the four-wellfields represent significant economic investment and reliance. In addition, when permits are renewed, users are often forced to implement more efficient methods for using water or to use alternative sources that are more expensive or less desirable.³⁶⁴ While the environmental protection goals that motivate such requirements are important, these additional requirements can impose hardships on permittees.

Although maintaining hydrological integrity is an important goal of Florida water law, so is providing certainty for water users. The four-wellfields dispute illustrates that there are economic and equitable considerations that are not articulated in permit For example, existing economic investment and evaluations. infrastructure most likely play a major role in permitting decisions, especially in public water supply contexts. Even the drafters of the Model Water Code noted in their commentary: "[t]he renewal applicant would have a strong equitable position unless changed conditions have intervened. In that event, the governing board would be completely free to allocate available water in a manner that is best suited to these new conditions."365 Explicitly recognizing equitable and economic considerations in rule criteria could contribute to a more equitable, uniform, and, transparent permitting process.

In the four-wellfields case, SWFWMD's scientific understanding of the hydrogeology of the area and the relationship between

^{363.} *See* Draft Final Order, *supra* note 7, at 29. Such predictions reflect the lack of scientific and technological certainty in this dispute.

^{364.} See Law and Policy in Managing Water Resources, supra note 1, at 308.

^{365.} MODEL WATER CODE, *supra* note 3, at 191.

groundwater withdraws and overlying water systems changed greatly as more data became available. This in turn led to significant changes in its policy stance on adverse impacts occurring in the four-wellfields area.³⁶⁶ While changes in understanding may require SWFWMD to adjust its policies, it may also require adjustment to accommodate the equitable needs of permittees.

The drafters of the Model Water Code carefully considered the issue of whether individuals whose permits are not renewed should be compensated, concluding that they should not.³⁶⁷ This decision has received increased criticism in recent years.³⁶⁸ It is notable that the drafters' rationale behind this decision failed to anticipate the magnitude of a conflict such as the four-wellfields dispute. In addition, the drafters' rationale focused on potential due process concerns associated with replacing the traditional riparian system with an administrative system. Thus, it may be useful for the districts or the legislature to reevaluate the possibility of some form of compensation or other economic or regulatory incentive.

As Florida's population and water demand grows, there will be increasing concerns about fairness. An important area of concern is the expense associated with water supply development. One author asks:

^{366.} See generally In the Public Interest, *supra* note 6. In the mid-1980s District scientists became increasingly convinced that too much water was being taken from the system. *Id.* at 84. Honey Rand notes that "[t]he District scientists didn't yet have the proof they needed to stand up in court, but they had a feeling, an uneasy feeling, that something was terribly wrong — and no one wanted to hear about it." *Id.* As more information became available to SWFWMD, a new policy position evolved. Although some activists felt that this change in position with regard to surface water levels was too slow in coming, Pete Hubbell, former SWFWMD Executive Director, noted in an interview: "Look, you don't change an agency on a dime." *See id.* at 163.

^{367.} See MODEL WATER CODE, supra note 3, at 177. The drafters of the Model Water Code examined the nature of the property rights of water rights in the east. Specifically, their analysis examined whether the establishing a water permit system, and thus altering or terminating existing water rights, would violate due process. They concluded that such alteration is constitutional under the general welfare aspects of the police power. See id. at 163-64.

 $^{368.\;}$ For example, in their economic analysis of the Florida Water Resources Act, Saarinen and Lynne explain:

[[]E]conomic efficiency, achieved through a process of mutual gain or win/win results, cannot exist in an allocation process based on relatively short duration permits, or those less than the life of the investment, with no compensation for nonrenewal of a permit. The Code commentary describes a maximum twenty-year permit as being long enough to "at least partially" amortize capital investment, ... with apparently no concern for the injustice of allowing a business only partially to recover investment and without any additional discussion of the type of facility considered by such a comment.

Saarinen & Lynne, supra note 358, at 518. Some of these fairness concerns are further discussed in part IV(C)(3), infra.

Should all users be required to pay the cost of new facilities or just those who immediately need them? Should less expensive sources be reserved for certain users, such as agriculture, that may not be able to pay higher costs? . . . Is it appropriate to place the burden of paying for new water supply sources on those who pay *ad valorem* or sales taxes, rather than the rate payers who will use the water produced? What about those who pay nothing for water, for example, self-supplied residential or agricultural users? Should a fee be assessed on those users to pay for alternative water supplies and the protection of existing water supplies? ³⁶⁹

That author further notes, "[i]ncreasingly, such inequities are being resolved by asking the water management districts and state government to finance the construction of water supply facilities."³⁷⁰ Other areas of fairness concerns have to do with the right to growth. Currently, rural areas provide water to developed areas. The ability of these rural areas to develop may be significantly limited by past water allocation decisions. This can lead to the unfair result of one area prospering at the expense of another.³⁷¹

In the resolution of the four-wellfields dispute, fairness concerns played an important role in settlement. SWFWMD cooperated significantly in terms of permitting flexibility and providing economic aid to projects associated with improving the Tampa Bay area's water supply system.³⁷² This type of cooperation between permittees and the Districts is especially important when making policy adjustments to accommodate new science or technology. Further incorporation of an adaptive management approach into Florida's water management system may encourage such cooperation and help reach a more effective balance between certainty, flexibility, and fairness under Florida water law.

D. The Need to Incorporate Adaptive Management into Water Law and Policy

1. Adaptive Management and Water Resource Decision-making

The term "adaptive management" has come to embody a number of related meanings that can be useful for water management

^{369.} Law and Policy in Managing Water Resources, supra note 1, at 308.

^{370.} Id.

^{371.} Id. at 308-09. See also In the Public Interest, supra note 6, at 395.

^{372.} See Part III (E), infra.

decision-making. One author explains that "[a]daptive management assumes that scientific knowledge is provisional and focuses on management as a learning process or continuous experiment where incorporating the results of previous actions allows managers to remain flexible."³⁷³ The notion of using "the best science available" reflects the fact that scientists and resource managers must engage in some level of reasoned guesswork to make decisions.³⁷⁴ Adaptive management also refers to a comprehensive approach to decisionmaking that recognizes the limits of scientific certainty and attempts to incorporate different perspectives.³⁷⁵

Adaptive management can be a useful decision-making approach for natural resource management agencies.³⁷⁶ While adaptive management may initially seem more expensive than some traditional decision-making approaches, it may prove less expensive in the long-run if it leads to more effective management.³⁷⁷ Due to

When confronted by uncertainty in the course of a scientific investigation, the systematic response of a scientist is suspension of judgment pending the acquisition of more data and the development of testable hypotheses. In science, "no decision" can mean just that. In legal disputes, however, "no decision" perpetuates the status quo and ordinarily promotes some interests at the expense of others. Lacking a comparable option to suspend the flow of events, legal decisionmakers must often create public policy in spite of, or in light of, the absence of reasonable scientific consensus.

Id. (citing Howard A. Latin, The "Significance" of Toxic Health Risks: An Essay on Legal Decisionmaking Under Uncertainty, 10 ECOLOGY L. Q. 339, 339 (1982)).

375. One author explains:

Adaptive management tries to incorporate the views and knowledge of all interested parties. It accepts the fact that management must proceed even if we do not have all the information we would like, or we are not sure what all the effects of management might be. It views management not only as a way to achieve objectives, but also as a process for probing to learn more about the resource or system being managed. Thus, learning is an inherent objective of adaptive management. As we learn more, we can adapt our policies to improve management success and to be more responsive to future conditions.

Johnson, supra note 191.

376. *Id.* An important dimension of this operational approach is consensus building, a process that begins by bringing affected parties together. *Id.* These parties should then discuss the management problem, the available data, and attempt to conceptualize how the system in question operates. *Id.* Next, these parties should develop a management plan to attempt to reduce critical data gaps and uncertainties. *Id.* The management plan is then implemented along with a monitoring plan, and as monitoring proceeds, new data are analyzed and management plans are revised as the understanding of how the system works improves. *Id.*

377. Id.

^{373.} R. Edward Grumbine, *What Is Ecosystem Management?*, 8 CONSERVATION BIOLOGY 27, 31 (1994).

^{374.} Thomas T. Ankersen & Richard Hamann, *Ecosystem Management and the Everglades: A Legal and Institutional Analysis*, 11 J. LAND USE & ENVTL. L. 473, 493 (1996). The authors explain:

the indirect and delayed nature of impacts resulting from groundwater withdrawals and associated political and economic concerns, an adaptive management approach may be well-suited to complex disputes such as the one that arose in the four-wellfields case.³⁷⁸ While such a comprehensive approach may not be necessary in all permitting or water management decisions, it can be especially useful in complex disputes involving adverse environmental impacts and strong public need. Through cooperation, adaptive management attempts to understand the potential trade-offs among stakeholder interests and tries to generate innovative approaches and "win-win" situations.³⁷⁹ This cooperation will become increasingly important because recent amendments to the Florida Water Resources Act require increasing available water for both human and natural systems.³⁸⁰

Judge Quattlebaum's Recommended Order in the four-wellfields case is problematic because it is inconsistent with the experimental approach underlying adaptive management. He recommended that SWFWMD issue permits, despite the occurrence of severe adverse environmental impacts. As the Draft Final Order suggests, such a rationale relies heavily on past decisions of SWFWMD. Although SWFWMD had changed its policy position, this change was due to new scientific understanding of the hydrogeology of the fourwellfields area. Water management policy should be allowed to respond to improved scientific understanding. The ALJ's rationale overlooks the important process of reevaluating previous water allocation decisions inherent in the Florida Water Resources Act. Further adoption of the rationale of the ALJ, and that of SFWMD's proposed consumptive use renewal rule, both of which imply that the right to cause adverse environmental impacts can somehow "vest," could significantly limit the ability of water management districts to engage in hydrologically sound decision-making.

The history of the permitting process for the four-wellfields area demonstrates the importance of incorporating adaptive management into permitting decisions. Arguably, the original permits and the first renewal permits for the four-wellfields did not embody an experimental approach consistent with the principles of

^{378.} In reference to large, complex systems, one author explains: "These types of problems are ecologically complex because many different components interact directly and indirectly, and socially complex because multiple user-groups often have conflicting goals that involve multiple components of the system." Id.

^{379.} Id.

^{380.} See Fla. Stat. § 373.0831(2)(a) (2002) (stating that it is the intent of the legislature that "[s]ufficient water be available for all . . . reasonable-beneficial uses and the natural systems").

adaptive management.³⁸¹ Under such an approach, SWFWMD would have required more extensive monitoring and would have explicitly conditioned permitted withdrawals on surface environmental circumstances. It was not until the second permit renewal applications, when severe environmental impacts had already taken place, that SWFWMD explicitly articulated "Environmental Protection Standards."³⁸²

Ideally, the permitting process should function much like an experiment. Permitting quantities should be based on the best available models of the area. Permittees and the districts should cooperate in monitoring the aquifer and surrounding natural systems. If subsequent field data is inconsistent with existing models, the models and permitted withdrawal amounts should be adjusted accordingly. In implementing such permitting changes, regulatory flexibility or financial assistance on the part of the districts can help ensure fairness to the permittee. This type of experimental and cooperative process is closer to the approach currently being implemented through the joint efforts of SWFWMD and Tampa Bay Water.

In addition, the experimental approach of adaptive management is now more integrated within SWFWMD's Basis of Review than it was at the time of the four-wellfields dispute. The "Conditions for Issuance" section of the Basis of Review explains that SWFWMD staff will evaluate environmental features including surface water bodies and wetlands³⁸³ and articulates "performance standards."³⁸⁴ Furthermore, the "Monitoring Requirements" section explicitly articulates the relationship between permitted withdrawals and adverse environmental impacts and requires monitoring.³⁸⁵ Standard permit conditions explicitly emphasize the importance of

^{381.} Indeed, this issue is fundamental to the dispute in the Recommended Order. The Authority argued that SWFWMD knew that the impacts would occur and granted permits anyway. In contrast, SWFWMD emphasized the conditional nature of permits and argued that it was unaware of the extent of adverse environmental impacts that would result from the permitted withdrawals.

^{382.} See Part III (B), infra.

^{383.} BASIS OF REVIEW, supra note 102, at B4.1-B4.5.

^{384.} For example, the Basis of Review states, "[w]etland hydroperiod shall not deviate from their normal range and duration to the extent that wetlands plant species composition and community zonation are adversely impacted." Id. at B4.3.

^{385.} *Id.* at B5-1. The introduction to this section of the Basis of Review states: Issuance of a Water Use Permit requires that (1) the withdrawals will not cause any unmitigated adverse impacts on the water resources and the existing legal users, and (2) the use continues to be in the public interest. To ensure that these criteria continue to be met after the permit is issued, monitoring and reporting activities may be required as conditions of the permit.

mitigation.³⁸⁶ An additional "Environmental Monitoring" condition can be used "when extensive environmental monitoring is required, such as when withdrawals potentially impact wetlands."³⁸⁷ In addition, there are "Public Supply Permit Conditions" that may require a "Water Use Interim Report."³⁸⁸

As a whole, the four-wellfields dispute demonstrates that incorporating principles of adaptive management into the water management process can help address unforeseen circumstances and scientific uncertainty. SWFWMD has been able to improve its regulatory system and develop more effective working relationships with Tampa Bay Water in order to better balance the needs for public water supply and natural systems. This dispute also illustrates that water law and policy must be allowed to evolve along with science and technology.

2. The Importance of an Evolutionary Approach to Water Law and Policy

In order to adequately address the conflicts that will continue to arise between public water supply needs and adverse environmental impacts, water law must evolve at statutory and administrative levels. Since the drafting of the Model Water Code and the passage of the Florida Water Resources Act, the DEP and water management districts have fleshed out the basic statutory framework to fit the needs of the state.³⁸⁹ As one drafter of the Model Water Code notes in a later article: "[t]he result of this process is a water management program that has adapted, and will continue to adapt, to changes in the physical environment as well as to changes in popular attitudes about economic development and the environment."³⁹⁰

The drafters of the Model Water Code emphasized the importance of establishing management entities that possess expertise to make water management decisions, as opposed to judges or legislators with little specialized knowledge or

^{386.} *See, e.g., id.* at B6-2, Condition No. 13. This section states: "The Permittee shall mitigate to the satisfaction of the [Southwest Florida Water Management] District any adverse impact to environmental features or off-site land uses as a result of withdrawals. When adverse impacts occur or are imminent, the [Southwest Florida Water Management] District shall require the Permittee to mitigate the impacts." *Id.* Example of adverse impacts include "[s]ignificant reduction in levels of flows in water bodies such as lakes, impoundments, wetlands, springs, streams, or other watercourses." *Id.*

^{387.} Id. at B6-14, Condition No. 21.

^{388.} See id. at B6-24. The Water Use Interim Report attempts to verify projections of demand versus actual demands. Id.

^{389.} See Ausness, supra note 27, at 29.

^{390.} Id.

experience.³⁹¹ The Florida Supreme Court has noted that "the very conditions which may operate to make direct legislative control impractical or ineffective may also, for the same reasons, make the drafting of detailed or specified legislation impractical or undesirable."³⁹² The Florida legislature recognized the need for flexibility in the application of the Water Resources Act, and thus directed relevant agencies to weigh the common law factors of reasonable beneficial use.³⁹³ One drafter explains in a later article: "By providing for the refinement of policy by rule-making, the legislature authorized [these agencies] to flesh out Florida's declaration of water resources policy by administrative action."³⁹⁴

Water policy in Florida must continue to evolve in terms of both planning and regulation. One drafter explains in a later article that it would be desirable for relevant regulatory entities to "act together as partners, rather than compete for exclusive control over water management decision-making,"³⁹⁵ and that "this was the approach to water management envisioned by the drafter of the Model Water Code."³⁹⁶ Tampa Bay's water wars further demonstrate the importance of cooperation between water management districts and water supply entities.³⁹⁷

Due to the distinct characteristics of Florida's many lakes and watercourses, each permit decision presents different combinations of factors to be weighed.³⁹⁸ It is necessary to confront the difficult question posed by the drafters of the Model Water Code: "[W]hat is the best use?"³⁹⁹ They emphasized the importance of an interdisciplinary approach to addressing this question, and explained that there is a need for "[a] working team of hydrologists, biologists, engineers, economists, political scientists and lawyers

^{391.} See Florida's Reasonable Beneficial Water Use Standard, supra note 18, at 277. "[I]t is impractical for the legislature to enact specific standards for the exercise of administrative discretion." *Id*.

^{392.} Id. at 277.

^{393.} Id.

^{394.} Id. at 278.

^{395.} *See* Ausness, *supra* note 27, at 30 (referring to the need for the Department of Environmental Regulation [predecessor of the Department of Environmental Protection] and water management districts to cooperate).

^{396.} Id.

^{397.} Recent legislative changes reflect this need for cooperation. See e.g. FLA. STAT. § 373.196(1) (2002) (stating that the legislature finds "that cooperative efforts between municipalities, counties, water management districts, and the Department of Environmental Protection are mandatory in order to meet the water needs of rapidly urbanizing areas in a manner which will supply adequate and dependable supplies of water where needed without resulting in adverse effects upon the areas from whence such water is withdrawn.")

^{398.} See Florida's Reasonable Beneficial Water Use Standard, supra note 18, at 277.
399. MODEL WATER CODE, supra note 3, at 80.

.....^{"400} Determination of whether, under all the facts and circumstances, a proposed use in a particular location meets the three-pronged test requires expertise and experience. This expertise will continue to evolve and improve along with scientific and technological understandings of the relationships between human activities and the hydrologic cycle. Further incorporating principles of adaptive management into Florida's water management system will help achieve the difficult balances necessary under Florida water law.

V. CONCLUSION

Water is becoming increasingly scarce, and future conflicts over how to use and manage this precious resource are certain to arise.⁴⁰¹ As increasing numbers of existing consumptive use permits become due for renewal, it will be necessary for the water management districts to reevaluate their past permitting decisions. They must continue to seek a delicate balance between the water needs of human and natural systems. In many cases it will also be necessary for the districts to evaluate adverse environmental impacts that have resulted from permitting decisions made as many as twenty, or in some cases, fifty years ago.

Florida water law, the Model Water Code, and the writings of its drafters indicate that it is necessary to require permittees to address adverse environmental impacts that result from consumptive use. Ameliorating existing adverse impacts and preventing future impacts is an important part of maintaining overall hydrological integrity. This hydrological integrity is essential for ensuring both the quantity and quality of water necessary for human and ecosystem needs. In order to fulfill this goal, administrative agencies such as DEP and the water management districts must be allowed to reevaluate past decisions and, if necessary, readjust them. New environmental conditions, or even changed understandings of hydrologic systems, may require changes in water allocation. This concept of flexibility is a fundamental principle of Florida water law and an important characteristic of an adaptive management approach to water policy.

However, it is also necessary for these agencies to consider the effects that policy changes can have on permittees who have come to rely on past decisions. Equitable concerns may warrant some type of regulatory flexibility, compensation, or other economic incentive. The Tampa Bay water wars ultimately illustrate that

^{400.} Id.

^{401.} See Law and Policy in Managing Water Resources, supra note 1, at 308.

communication and cooperation among regulatory agencies and permittees is necessary in order to achieve workable water management decisions. Further incorporation of principles of adaptive management into Florida's water management system will help ensure that the state's most precious natural resource is used in ways that are reasonable, beneficial, and consistent with the public interest.

RECENT DEVELOPMENTS

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I. INTRODUCTION

The relatively new field of land use and environmental law has grown exponentially over the past decade. New developments continue to evolve each day. Major Federal and Florida land use and environmental law cases are included in this article in an attempt to remain abreast of this amorphous subject. Additionally, major changes to Florida land use and environmental statutes are included for the benefit of those practicing in this area.

Additional information can be obtained from websites that provide current information. For example, numerous government entities maintain useful websites, including the Florida Legislature,¹ the Florida Department of Environmental Protection,² and the Florida Department of Community Affairs.³ Many private organizations also provide valuable websites concerning environmental compliance, such as The Florida Bar Environmental Land Use Law Section⁴ and Business and Legal Reports, Inc.⁵ In addition, a few law firm websites furnish recent developments in the law, namely Hopping Green & Sams.⁶

^{*} Special thanks to Tim and Kathy Kellogg.

^{1.} http://www.leg.state.fl.us.

 $^{2. \} http://www.dep.state.fl.us.$

 $^{3. \} http://www.dca.state.fl.us.$

^{4.} http://www.eluls.org.

^{5.} http://www.blr.com.

^{6.} http://www.hgss.com.

II. FEDERAL CASE LAW

Montana Wilderness Association, Inc., v. United States Forest Service, 314 F.3d 1146 (9th Cir. 2003).

Congress passed the Montana Wilderness Study Act (the "Act") in 1977 to "provide for the study of certain lands to determine their suitability for designation as wilderness."⁷ The Act requires the Secretary of Agriculture to administer, through the Forest Service, specific Wilderness Study Areas "to maintain their presently existing wilderness character and potential for inclusion in the National Wilderness Preservation System."⁸ The Wilderness Association asserts that the Forest Service failed to maintain seven Wilderness Study Areas' character and potential for wilderness classification in violation of the Act when it "allowed, encouraged, and/or failed to act to prevent motorized vehicle use of the Study Areas."⁹

The district court granted summary judgment for the Wilderness Association and found that the "Forest Service violated the act by failing to consider whether, how and to what extent its management decisions have impacted the wilderness character of the areas . . . and by failing to develop discernible criteria for assessing and maintaining the wilderness character of non-motorized use areas while conducting trail maintenance and improvement in areas of motorized use."¹⁰ The district court issued an injunction "requiring the Forest Service to comply with the Act and to take reasonable steps to restore the wilderness character of each Study Area."¹¹ The Forest Service appealed, claiming the district court did not have subject matter under the Administrative Procedure Act and should not have granted summary judgment.¹²

Under Section 706(2) of the Administrative Procedure Act, the Wilderness Association must establish subject matter jurisdiction by demonstrating that the Forest Service's continuation of services constitutes final agency action.¹³ The court found that for agency action to be final under the Administrative Procedure Act, "the action should mark the consummation of the agency's decision making process; and second, the action should . . . be one by which rights or obligations have been determined or from which legal

^{7.} Montana Wilderness Ass'n. v. U.S. Forest Service, 314 F.3d 1146, 1148 (9th Cir. 2003).

^{8.} Id.

^{9.} *Id.* at 1149.

^{10.} *Id*.

^{11.} *Id*.

^{12.} *Id*.

^{13.} Id. (citing Ecology Ctr., Inc. v. U.S. Forest Serv., 192 F.3d 922, 925 (9th Cir. 1999)).

consequences flow."¹⁴ "Trail maintenance does not mark the consummation of the Forest Service's decision making process" because the legislative history suggests that Congress intended the decision-making process to be consummated through trails allowing off-road vehicle access.¹⁵ Thus, the district court did not have subject matter jurisdiction under section 706(2) of the Administrative Procedure Act because the Wilderness Association did not identify a final agency action.¹⁶

Further, under section 706(1) of the Administrative Procedure Act, judicial review is appropriate if the Wilderness Association shows "agency recalcitrance . . . in the face of clear statutory duty or . . . of such a magnitude that it amounts to an abdication of statutory responsibility."¹⁷ The duty of the Forest Service to maintain wilderness character and potential is mandatory.¹⁸ As a non-discretionary duty, the Forest Service may be compelled to carry out the duty under section 706(1) of the Administrative Procedure Act because the Act does more than provide general guidance or a mere policy statement.¹⁹ Thus, the court found "that the district court did have subject matter jurisdiction to hear this case."20 Further, there was a genuine issue of material fact about whether the Forest Service discharged its duty to maintain the wilderness character because the Forest Service and Wilderness Association submitted conflicting evidence.²¹ Therefore, the court reversed the district court's summary judgment order, vacated the injunction, and remanded the case for trial on this issue.²²

Dittmer v. County of Suffolk, New York, 59 Fed.Appx. 375 (2nd Cir. 2003).

Plaintiffs, landowners in Suffolk County, New York, appealed a final judgment of the United States District Court for the Eastern District of New York in an action challenging the constitutionality of the Long Island Pine Barrens Maritime Reserve Act (the "Act").²³ The Act's purpose is to "allow the state and local governments to

^{14.} Id. at 1150 (quoting Bennett v. Spear, 117 S.Ct. 1154 (1997)).

^{15.} *Id*.

^{16.} *Id*.

^{17.} Id. (quoting ONRC Action v. Bureau of Land Mgmt., 150 F.3d 1132, 1137 (9th Cir. 1998)).

^{18.} Id. at 1151.

^{19.} *Id*.

^{20.} Id.

^{21.} Id. at 1152.

^{22.} Id.

^{23.} Dittmer v. County of Suffolk, New York, 59 Fed.Appx. 375, 378 (2nd Cir. 2003).

protect, preserve and properly manage the unique natural resources of the Pine Barrens-Peconic Bay system."²⁴ The district court dismissed the substantive due process claim because the plaintiffs did not "allege they had a property interest in the continued pre-Act zoning of their land," alleging little more than a "unilateral expectation in the continued zoning of their land" and because landowners do not have a vested interest in the existing classification of property under New York law.²⁵

Further, even if the plaintiffs were able to allege a protected property interest, the Act could still survive a substantive due process challenge.²⁶ The Act would be subject to a rational basis review since the Act does not infringe on fundamental rights or affect a suspect class.²⁷ The rational basis criteria would easily be met by the state's legitimate interest in protecting the state's largest natural drinking water source and preserving the unique and partially endangered ecosystem of the Pine Barrens.²⁸

Similarly, the court denied the plaintiffs' motion for summary judgment on the equal protection claim because it could not survive rational basis review.²⁹ An act will survive an equal protection challenge "if there is any plausible justification for the distinctions it draws."³⁰ The Act's distinction between land that is developed and undeveloped is rationally related to the legitimate state interests of protecting the aquifer of the Pine Barrens as well as preserving its unique ecosystem.³¹ Thus, the court found that the district court properly granted the defendant's motion for summary judgment on the equal protection claim.

Isle Royale Boaters Association v. Norton, 330 F.3d 777 (6th Cir. 2003).

Isle Royale National Park is located in the northern reaches of Lake Superior, consisting of a series of islands.³² Created as a national park in 1931, Isle Royale was designated as a national wilderness area in 1976.³³ In 1995, the National Park Service began creating the General Management Plan (GMP) that would guide

^{24.} Id.

^{25.} Id.

^{26.} *Id.*

^{27.} Id. (quoting Vance v. Bradley, 440 S.Ct. 939 (1979)).

^{28.} Id.

^{29.} Id.

^{30.} Id. (quoting Weinstein v. Albright, 261 F.3d 127, 140 (2d Cir. 2001)).

^{31.} Id. at 379.

^{32.} Isle Royale Boaters Ass'n v. Norton, 330 F.3d 777, 779 (6th Cir. 2003).

^{33.} Id.

"future use of resources and facilities, to clarify research and resource management needs and priorities, and to address changing levels of park visitation and use."³⁴ Because the wilderness area designation carries expectations of quiet solitude and because of complaints about noise levels within the park, the GMP sought to separate motorized and non-motorized uses.³⁵ Under the GMP, some docks would be eliminated and others would be relocated.

which would somewhat limit boater's access to trails and shelters.³⁶ The Isle Royal Boaters Association filed suit in federal district court alleging that the GMP violated the Wilderness Act and several other acts.³⁷ The district court held that the GMP was not arbitrary or capricious because the Wilderness Act authorized the Secretary to control boat use in wilderness areas.³⁸ The plaintiffs appealed the issue of whether the GMP is consistent with the clear intent of Congress.³⁹

While the Wilderness Act requires the Secretary to make the enjoyment of national parklands available, the statute does not require the Secretary to make docks available.⁴⁰ Removing docks is more consistent with Congress' intent because it reduces noise and facilitates the enjoyment of scenery and wildlife.⁴¹ As a wilderness area, the park must be administered "for the use and enjoyment of the American people in such a manner as will leave them unimpaired for future use and enjoyment as wilderness."⁴² Thus, the court affirmed the district court's finding that the GMP is neither arbitrary nor capricious since Congress gave the Secretary broad discretion to preserve the land.⁴³

National Park Hospitality Association v. Department of the Interior, 123 S.Ct. 2026 (2003).

Following the enactment of the National Parks Omnibus Management Act of 1998 that established a "comprehensive concession management program for national parks," the National Park Service adopted implementing regulations including the

Fall, 2003]

^{34.} Id.

^{35.} Id. at 780.

^{36.} *Id*.

^{37.} Id. at 781.

^{38.} Id.

^{39.} *Id.* at 782.

^{40.} *Id*.

^{41.} *Id*.

^{42.} Id. (quoting the Wilderness Act, 16 U.S.C. § 1131(a)(2003)).

^{43.} Id. at 782-86.

Contract Disputes Act (CDA).⁴⁴ The regulations "purport[ed] to render the CDA inapplicable to concession contracts."⁴⁵

The validity of the CDA was challenged in the District Court for the District of Columbia.⁴⁶ The court found that the CDA was ambiguous as to whether it applied to concession contracts and that the National Park Service's interpretation of the CDA was reasonable.⁴⁷ The Court of Appeals for the District of Columbia Circuit affirmed on different grounds, "recognizing that [the National Park Service] does not administer [the CDA], and thus may not have interpretive authority over its provisions."⁴⁸ However, the court agreed with the National Park Service's interpretation, finding it consistent with both the CDA and the 1998 Act.⁴⁹ The U.S. Supreme Court granted certiorari to determine whether contracts between the National Parks Service and concessioners in the national parks were subject to the CDA.⁵⁰

In order to determine whether the administrative action was ripe for judicial review, the court considered the hardship to the parties if court consideration was withheld and the fitness of the issue for judicial decision.⁵¹ The Court found that the National Park Service did not have the power to administer the CDA because that authority rested with boards of contract appeals, contracting officers, the Federal Court of Claims, the U.S. Supreme Court and the Court of Appeals for the Federal Circuit.⁵² The court further found that the CDA is "nothing more than a 'general statemen[t] of policy' designed to inform the public of [the National Park Service's] views on the proper application of the CDA.⁵³

The Court found that the action was not ripe for review because § 51.3 did not create "adverse effects of a strictly legal kind," which is required for a showing of hardship.⁵⁴ The regulation allows the "concessioner free to conduct its business as it sees fit" because it does not order anyone to do, or refrain from doing, anything; it does not withhold, modify or grant any formal legal license, authority or power; it does not subject anyone to criminal or civil liability; it creates no legal rights or obligations; and it does not affect a

^{44.} Nat'l Park Hospitality Ass'n v. Dep't of the Interior, 123 S.Ct. 2026, 2027 (2003).

^{45.} *Id*.

^{46.} Id. at 2029.

^{47.} *Id*.

^{48.} *Id.* at 2030 (quoting Amfac Resorts, L.L.C. v. Untied States Dept. of Interior, 282 F.3d 818, 834-35 (D.C.Cir. 2002)).

^{49.} Id.

^{50.} *Id*.

^{51.} Id. (quoting Abbott Lab. v. Gardner, 87 S.Ct. 1507, 1507 (1967)).

^{52.} Id. at 2031.

^{53.} Id.

^{54.} Id.

concessioner's primary actions.⁵⁵ The regulation merely announces the position the National Park Service will take in disputes arising out of concession contracts.⁵⁶ Nothing in the regulation prohibits concessioners from following the CDA's procedures after a dispute over a concession contract arises.⁵⁷

Further, the Court found that the case was not ripe because the case is not fit for review since further factual development would significantly advance the Court's ability to handle the legal issues presented.⁵⁸ Even though the question presented in this case is "a purely legal one" and the CDA constitutes "final agency action" under § 10 of the Administrative Procedure Act, the Court found that judicial resolution of this question should wait for a concrete dispute regarding a particular concession contract.⁵⁹

National Wildlife Foundation v. National Marine Fisheries Service, 254 F. Supp. 2d 1196 (D. Or. 2003).

An environmental organization alleged that the no-jeopardy determination for the Columbia River Basin salmon and steelhead was arbitrary and capricious.⁶⁰ The court found that the National Marine Fisheries Service's definition of "action area" was arbitrary and capricious since the biological opinion clearly stated that the short-term survival rates depended upon range-wide off-site mitigation actions.⁶¹ Nonetheless, the biological opinion limited the defined action areas to the immediate area impacted by the Federal Columbia River Power System operations.⁶² The court further held that the biological opinion improperly relied on federal mitigation actions that were not reasonably certain to occur.⁶³ The court found that remand to the National Marine Fisheries Service was proper because it gave the National Marine Fisheries Service an opportunity to consult with interested parties to ensure that only mitigation actions, that were reasonably certain to occur or that had undergone ESA consultation, would be considered in the nojeopardy analysis.⁶⁴

^{55.} Id.

^{56.} *Id*.

^{57.} Id.

^{58.} *Id.* (quoting Duke Power Co. v. Carolina Environmental Study Group, Inc., 98 S.Ct. 2620 (1978)).

^{59.} Id. at 2032.

 $^{60.\,}$ Nat'l Wildlife Found. v. Nat'l Marine Fisheries Serv., $254\,F.\,Supp.\,2d\,1196,1211$ (D. Or. 2003).

^{61.} Id. at 1212.

^{62.} Id. at 1212-13.

^{63.} Id. at 1214-15.

^{64.} *Id.* at 1215-16.

Center for Biological Diversity v. Badgley, 335 F.3d 1097 (9th Cir. 2003).

The Center for Biological Diversity alleged that the Secretary of Interior violated the Endangered Species Act by finding the listing of the Northern Goshawk unwarranted.⁶⁵ The court upheld the Fish and Wildlife Service's finding that the listing of the Northern Goshawk as threatened or endangered was unwarranted.⁶⁶ The court found that the decision was not arbitrary or capricious because the Fish and Wildlife Service relied on a report by a team of wildlife biologists with special expertise that conducted a status review based on a comprehensive review of all kinds of data, reports and literature.⁶⁷

Rio Grande Silvery Minnow v. Keys, 333 F.3d 1109 (10th Cir. 2003).

This case concerns a challenge to water diversion along the Middle Rio Grande — the New Mexico portion of the Rio Grande as violating Endangered Species Act.⁶⁸ The court found that the Bureau of Reclamation has discretion to reduce contract deliveries and restrict diversions to meet its duties under section 7 of the Endangered Species Act even though the contracts do not expressly permit a reduction in deliveries of water below the fixed amount.⁶⁹ The contract contained clauses that, taken together, establish that the Bureau of Reclamation retained the discretion to determine the "available water" from which allocations would be made.⁷⁰ Further, the Bureau of Reclamation could alter the water allotments for the prevention of jeopardy to endangered species.⁷¹ The clauses presume the Bureau of Reclamation's discretion in their implementation if the actual water is less than the estimated firm vield because of drought.⁷²

^{65.} Ctr. for Biological Diversity v. Badgley, 335 F.3d 1097, 1098 (9th Cir. 2003).

^{66.} Id.

^{67.} Id. at 1100-01.

^{68.} Rio Grande Silvery Minnow v. Keys, 333 F.3d 1109, 1113 (10th Cir. 2003).

^{69.} Id. at 1157.

^{70.} Id. at 1156-57.

^{71.} Id.

^{72.} Id.

American Rivers v. US Army Corps, 271 F. Supp. 2d 230 (D.D.C. 2003).

This suit claimed that the Army Corps' operation of the Missouri River's dam and reservoir system jeopardized three species protected by the Endangered Species Act.⁷³ Even though some courts have found that the priority of saving endangered species supercedes the balancing of the equities test for a preliminary injunction, this court chose to use the traditional four-part test for obtaining preliminary injunctive relief.⁷⁴ A preliminary injunction was granted because the Plaintiff showed: 1) a substantial likelihood of success on the merits; 2) that the Plaintiff would suffer irreparable harm if the injunction was not granted because the species would go extinct; 3) that the injunction would not substantially injure others; and 4) that the public interest would be served by the injunction.⁷⁵ The Flood Control Act gives the Army Corps discretion to consider its obligations to comply with the Endangered Species Act as one of the "other interests" to be balanced when making river management decisions under the Flood Control Act.⁷⁶ Compliance with the Endangered Species Act can come at the expense of other interests, including navigation and flood control, in light of congressional intent to give endangered species priority over the primary missions of federal agencies.⁷⁷

Selkirk Conservation Alliance v. Forsgren, 336 F.3d 944 (9th Cir. 2003).

Environmental groups challenged the Forest Service and the Fish and Wildlife Service's decision to grant an easement to a logging company to build a road in a national forest as violating the Endangered Species Act and the National Environmental Policy Act.⁷⁸ The court found that if an agency action is claimed to have violated the Endangered Species Act, any disagreement over issues that are primarily of fact must be resolved in favor of the agency if the agency's decision was based on a reasoned evaluation of the relevant factors, especially if the analysis required a high level of technical expertise.⁷⁹ Agencies cannot delegate the protection of the environment to public or private agreements because the agency

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^{73.} Am. Rivers v. US Army Corps, 271 F. Supp. 2d 230, 237 (D.D.C. 2003).

^{74.} Id. at 248-49

^{75.} Id.

^{76.} Id. at 239.

^{77.} Id. at 240-41.

^{78.} Selkirk Conservation Alliance v. Forsgren, 336 F.3d 944, 948-49 (9th Cir. 2003).

^{79.} Id. at 956-57.

must vigilantly and independently enforce environmental laws.⁸⁰ The Fish and Wildlife Service's biological opinion did not violate the Endangered Species Act because the Fish and Wildlife Service adequately considered the future activities of the logging company in determining that granting an easement to a logging company over national forest land would not jeopardize endangered species.⁸¹ When considering the cumulative impacts of the company's future activities, the Fish and Wildlife Service relied on a conservation agreement that was entered into by the logging company and the federal agency which had measures to mitigate the impact of the easement on the grizzly bears.⁸²

III. FLORIDA CASE LAW

Caribbean Conservation Corporation, Inc. v. Florida Fish and Wildlife Conservation Commission, 838 So.2d 492 (Fla. 2003).

This Florida Supreme Court case involved the constitutionality of a statutory delegation of authority, which may prove essential to future delegation litigation.⁸³ The case involved a 1998 amendment to the Florida Constitution known as revision 5.⁸⁴ In approving revision 5, Florida voters agreed to a provision creating the Fish and Wildlife Conservation Commission (FWCC) and abolishing the Florida Game and Fresh Water Fish Commission (Game Commission) and the Marine Fisheries Commission (Marine Commission). The Game Commission, a constitutional agency, was authorized to carry out "the regulatory and executive powers of the state with respect to wild animal life and fresh water aquatic life."85 The Marine Commission, a statutorily created agency, had jurisdiction over marine life except for "endangered species."⁸⁶ The exception did not prevent the Marine Commission from acting with reference to endangered species, but merely permitted other agencies to act with reference to endangered species as well.⁸⁷

Subsequent to the adoption of revision 5, chapter 99-245, Laws of Florida was enacted, establishing or amending the statutes that

^{80.} Id. at 957-58.

^{81.} Id. at 964.

^{82.} Id. at 965.

^{83.} Caribbean Conservation Corp., Inc. v. Florida Fish and Wildlife Conservation Comm'n, 838 So.2d 492 (Fla. 2003).

^{84.} Revision 5 is currently article IV, section 9, and article XII, section 23 of the Florida Constitution. Id. at 494.

^{85.} *Id.* at 495.

^{86.} Id.

^{87.} Id. at 496 (quoting State v. Davis, 556 So.2d 1104 (Fla. 1990)).

were challenged in the case.⁸⁸ The Caribbean Conservation Corporation, Inc. (Caribbean Conservation) challenged portions of Chapter 95-245, Laws of Florida in circuit court as violative of Article IV, Section 9, and Article XII, Section 23, of the Florida Constitution.⁸⁹ Caribbean Conservation claimed that because the constitutional provisions gave the commission "constitutional rule making authority concerning all marine life, including endangered and threatened species," the legislature cannot require the commission to comply with Chapter 120, Florida Statutes under Chapter 95-245, Laws of Florida.⁹⁰

For the most part, the circuit court agreed, adding a few qualifications and clarifications.⁹¹ The newly created FWCC was modeled after the previous Game Commission, in regards to its rule making power and authority, and was not subject to Chapter 120.⁹² Similarly, the FWCC was to have the same authority and jurisdiction over marine life as did the Marine Commission.⁹³ The circuit court found that the FWCC acted as a constitutional commission with "constitutional authority to promulgate rules with impact upon endangered or threatened species."⁹⁴ The court further found chapter 99-245 unconstitutional to the extent it required FWCC to follow the APA in exercise of its constitutional powers.⁹⁵

The FWC appealed to the First District Court of Appeal, which reversed the circuit court. The court found that the Marine Commission did not have constitutional authority to establish rules concerning endangered species.⁹⁶ Instead, the Marine Commission only had incidental regulatory authority to establish rules regarding endangered species, and that incidental authority "did not usurp or affect the statutory authority specifically assigned to other agencies."⁹⁷

Caribbean Conservation appealed and the Florida Supreme Court construed the constitutional provision based in a manner that "fulfills the intent of the people"⁹⁸ and "gives effect to each

^{88.} Id. at 498.

^{89.} Id. at 499. David Guest of the Earthjustice Legal Defense Fund represented Caribbean Conservation.

^{90.} Id.

 $^{91. \} Id.$

 $^{92. \} Id.$

^{93.} Id.

^{94.} Id. at 500.

^{95.} *Id.*

^{96.} Id.

^{97.} Id. (quoting Florida Fish & Wildlife Conservation Comm'n v. Caribbean Conservation Corp., 789 So.2d 1053, 1054-55 (Fla. 1st DCA 2001)).

^{98.} Id. at 501 (quoting Gray v. Bryant, 125 So.2d 846, 852 (Fla. 1960)).

provision."⁹⁹ Based on the history of regulatory and executive powers regarding marine life, the Court found that in regards to marine life the FWCC has some regulatory powers, but not "the" regulatory power of the state.¹⁰⁰ Further, since power to regulate endangered and threatened marine life was given to the Department of Environmental Protection, and not to the Marine Commission, the FWCC did not have the power to regulate endangered and threatened marine life.¹⁰¹ Thus, the Court held that sections 20.331(6)(c); 370.025(4); and 370.12(1)(c)(3), (1)(h), (2)(g)-(i), 2(k)-(o), 2(p)(1), and 2(q), Florida Statutes (1999), are constitutional, except for the segment of section 20.331(6)(c)(1) which references marine species that are "of special concern" because there is no statutory basis for the Department of Environmental Protection to have regulatory or executive power over marine species categorized as "of special concern."¹⁰²

Schrader v. Florida Keys Aqueduct Authority, 840 So.2d 1050 (Fla. 2003).

In 1976, the Legislature created the Florida Keys Aqueduct Authority (FKAA) by a special act for the purpose of obtaining, supplying and distributing a sufficient water supply in the Florida Keys.¹⁰³ However, a 1998 amendment broadened its power to allow for the development of a sewage system.¹⁰⁴ Pursuant to the Florida Keys Area Protection Act, the Florida Keys were listed as an "area of critical state concern" in 1979.¹⁰⁵ As an area of critical state concern, Governor Buddy MacKay required all relevant state and local agencies to cooperate with Monroe County in implementing its Comprehensive Plan, which included a countywide sewage system.¹⁰⁶ In order to institute this plan, Monroe County entered into a "Memorandum of Understanding" with the FKAA, in which the FKAA would "finance and operate the planned sewage system."¹⁰⁷

In January of 2000, Monroe County enacted a county ordinance that required mandatory connection to a central sewerage system

^{99.} Id. (quoting Advisory Opinion to the Governor — 1996 Amendment 5 (Everglades), 706 So.2d 278, 281 (Fla. 1997)).

^{100.} Id. at 502.

^{101.} Id. at 502-03.

^{102.} Id. at 504.

^{103.} Schrader v. Fla. Keys Aqueduct Auth., 840 So.2d 1050, 1051 (Fla. 2003).

^{104.} Id.

^{105.} Id. at 1051-52.

^{106.} Id. at 1052.

^{107.} Id.

within thirty days of receiving notification that an investor-owned or publicly owned sewage system was available.¹⁰⁸ Nine months later, FKAA passed a Master Resolution that authorized "the issuance of sewer revenue bonds in various series to finance projects in distinct localities as part of the larger goal of creating a countywide sewage system."¹⁰⁹ Pursuant to Chapter 75, Florida Statutes, FKAA filed a complaint in circuit court requesting validation of the bonds. The court validated the bonds, holding that "the authorization and provisions of Sections 381.0065 and 381.00655, Florida Statutes, and Monroe County Ordinance 04-2000, which [require] the owners of onsite treatment and disposal systems to connect to available publicly-owned or privately-owned sewage systems, is legal, valid and binding."¹¹⁰

An intervener in the bond validation proceedings, Keys Citizens for Responsible Government, Inc. (Citizens), appealed this judgment to the Supreme Court of Florida under its mandatory bond validation jurisdiction claiming that the circuit court's validation of the mandatory connection requirement "went beyond the scope of the bond validation proceeding.¹¹¹ The Florida Supreme Court held that "the validity of the mandatory connection ordinance was not a collateral issue," noting that the FKAA's bond resolution "included a provision requiring mandatory connection in order to secure payment on the bonds with the connection fees and service charges."¹¹²

In July of 2002, FKAA again filed a complaint in circuit court requesting validation of the second bond series and confirmation that the FKAA's service area "is wholly encompassed within the Florida Keys area of critical state concern."¹¹³ At the hearing, Schrader (appellant) did not challenge the validation, but rather the relief requested by FKAA concerning chapter 99-395 and the connection ordinances. Schrader claimed that chapter 99-395 is a special law unconstitutionally enacted as a general law since section 4 of chapter 99-395 relates only to local governments in the Florida Keys area of critical state concern.¹¹⁴ The circuit court validated the bonds and held that "the provisions of section 4 of chapter 99-395, Laws of Florida, pertain to matters of statewide concern, are

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^{108.} *Id*.

^{109.} Id. at 1053.

^{110.} *Id.* (quoting Fla. Keys Aqueduct Auth. v. State, No. CA-K-00-1525, order at 4-5 (Fla. 16th Cir. Ct. order filed Dec. 22, 2000)).

^{111.} *Id*.

^{112.} *Id.* (quoting Keys Citizens for Responsible Gov't, Inc. v. Fla. Keys Aqueduct Auth., 795 So.2d 940, 944-47 (Fla. 2001)).

^{113.} Id. at 1053-54.

^{114.} Id. at 1054.

applicable in an area of critical state concern, and were properly enacted as a general law."¹¹⁵ Schrader appealed to the Florida Supreme Court under its mandatory bond validation jurisdiction.¹¹⁶

The Florida Supreme Court has defined "special law" as one "relating to, or designed to operate upon, particular persons or things."¹¹⁷ However, the Florida Supreme Court has found that "legislation that facially appeared to affect only a limited geographic area of the state but which had a primary purpose contemplating an important and necessary state function and an actual impact far exceeding the limited geographic area" to be a general law.¹¹⁸ Section 4 of chapter 99-395 gives local governments in areas of critical state concern the authority to adopt stricter regulations concerning the treatment of wastewater in an effort to protect the vital natural state resource of the Florida Keys.¹¹⁹ Having close ties to statewide industries of tourism and seafood, the Florida Keys' actual impact goes beyond the limited geographic areas of Monroe County.¹²⁰ Thus, the Florida Supreme Court found section 4 of chapter 99-395 to be a general law not subject to a constitutional challenge.¹²¹

IV. FLORIDA STATUTES

Traditionally, Hopping Green & Sams, a Tallahassee based law firm at the forefront of land use and environmental law, provides an annual legislative overview. The following section, reviewing developments in land use and environmental law, is directly based on this 2003 legislative overview. For further information, consult the Hopping Green & Sams publication.¹²² Additionally, all recently enacted legislation is available on the Website for the Florida Department of State.¹²³

^{115.} *Id.* (quoting Fla. Keys Aqueduct Auth. v. State, No. CA-K-02-826, order at 4, 5, 7 (Fla. 16th Cir. Ct. order filed Aug. 26, 2002)).

^{116.} Id.

^{117.} Id. at 1055 (quoting State ex rel. Landis v. Harris, 163 So. 237, 240 (Fla. 1934)).

^{118.} *Id.* at 1056 (quoting Dep't of Bus. Regulation v. Classic Mile, Inc., 541 So.2d 1155, 1159 (Fla. 1989)).

 $^{119. \} Id.$

^{120.} Id.

^{121.} Id. at 1057.

^{122.} Hopping Green & Sams, *The 2003 Legislative Session, at* http://www.hgss.com/ upload_HotNews/2003%20HGS%20legislative%20summary%20-%20final%20version.pdf. 123. Florida Dep't of State, *2003 Laws of Florida, at* http://election.dos.state.fl.us/laws/03laws/Shotitle.htm.

CS/SB 626 Everglades Restoration

Amending the 1994 Everglades Forever Act (EFA), this legislation established a long-term water quality improvement planning process. The EFA now requires "the South Florida Water Management District (SFWD) to implement 'Best Available Phosphorous Reduction Technology' (BAPRT) in accordance with a Long-Term Plan." The Long Term Plan begins with a 13-year phase (2003-2016), which focuses on optimization of storm water treatment areas.

Other projects will also be implemented to "achieve water quality standards to the maximum extent practicable" during that period. Additionally, the Department of Environmental Protection rule "establishing a phosphorous criterion to include moderating provisions for discharges based upon BAPRT providing net improvement" is specifically authorized by the legislation. The rule's moderating provisions can authorize discharges into unimpacted areas if BAPRT is implemented and if DEP determines that environmental benefits outweigh potential adverse impacts. Permits issued by DEP during the initial phase must include technology-based effluent limitations and must be based on BAPRT. Projects during the subsequent ten-year phase, lasting from 2017-2027, will only be implemented with prior legislative approval.

Further, the imposition of the Everglades agricultural privilege tax of \$25 per acre is extended by the legislation through 2016. The legislation also authorizes the South Florida Water Management District to increase its use of the Okeechobee Basin tax in order to fund the initial phase. The payment of the Everglades agricultural privilege tax establishes compliance with the "Polluters Pay" provision in Article II, Section 7(b), of the Florida Constitution.

SB 2586 Office of Boating and Waterways Act

This act establishes the Office of Boating and Waterways, which was one of the major priorities for the marine industry and boating lobbyists. The Office of Boating and Waterways, which helps to coordinate navigation and boating advancements throughout the state, is expected to become a significant advocacy entity within the Florida Fish and Wildlife Conservation Commission. Activities of the Office of Boating and Waterways include: coordinating boating education, boating access, boating safety, signage and many other issues associated with boating activities.

The legislation also provides for the diversion of pre-established gas tax monies generated by motor and diesel fuel taxes that are collected from marina operations. The tax is likely to generate \$2.5 million during the 2003-2004 fiscal year, and increase to \$13.4 million during the 2007-2008 fiscal year. This money will be used to immediately hire ten additional sworn law enforcement officers. At least \$1.8 million will be used to fund equipment, expenses, training and five months of the officer's salaries and benefits. The remaining \$700,000 will be used to place uniform waterway markers; construct and maintain publicly owned boat ramps, piers and docks; implement boating safety and education programs; economic development initiatives that promote boating; and manatee technical avoidance technology efforts.

CS/HB 1123 Global Risk-Based Corrective Action

This bill takes Florida's rendition of the risk-based corrective action process, (previously used in petroleum contamination cleanup, dry-cleaning solvent contamination cleanup, and designated brownfield sites) and applies it to all sites contaminated by a release of pollutants or hazardous substances. The bill calls for the Department of Environmental Protection to create a phased risk-based corrective action process that "tailors site rehabilitation tasks and cleanup criteria to site-specific conditions and risks." The process will apply to voluntary site rehabilitation, DEP statemanaged site rehabilitation, site rehabilitation conducted according to DEP enforcement actions, as well as many other rehabilitation scenarios where liability for site rehabilitation exists under Chapter 376 or 403, Florida Statutes.

The risk-based corrective action process and associated rules that will be adopted by DEP will apply retroactively to all currently existing contaminated sites where liability for site rehabilitation exists under Chapter 376 or 403, Florida Statutes. However, a few exceptions are allowed where cleanup target levels have been approved by DEP in a current permit, technical document, or other written agreement, or where DEP has ordered "No Further Action" or Site Rehabilitation Completion. The goal of the risk-based corrective action process is to cost-effectively attain protection for the environment and for human health and safety. However, the process does not create any new legal responsibility for rehabilitation at contaminated sites. Further, the bill does not give DEP the authority to prohibit or limit the legal deposit of materials or products on land.

CS/SB 956 Drycleaning Solvent Cleanup

The Drycleaning Solvent Cleanup Program previously established a civil liability immunity provision. This bill tries to

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enlarge that provision in order to protect real property owners from property damage claims. This immunity expansion for the cleanup program may establish a foundation for similar changes to immunity provisions for petroleum contamination and brownfield site cleanup programs under the Department of Environmental Protection. In amending Section 376.301, Florida Statutes, the bill creates a new definition for the term "nearby real property owner." The bill defines the term as an "entity having ownership, dominion, or legal or rightful title to real property, onto which dry-cleaning solvent has migrated through soil or groundwater from a drycleaning or wholesale supply facility eligible for state-funded site rehabilitation or from such a facility that is approved by DEP for voluntary cleanup under Section 376.3078(11)."

In addition to expanding the statutory immunity to include this newly defined "nearby real property owner," the bill also provides that the Drycleaning Solvent Cleanup Program sites eligible for state-funded site rehabilitation will not be liable for administrative or judicial actions brought by any state or local government or agency, or by any person to force rehabilitation or pay for the rehabilitation of environmental contamination proceeding from the discharge of dry-cleaning solvents. The modified immunity applies retroactively to causes of action amassing before this bill's effective date if a lawsuit has not been filed before the bill's effective date.

CS/SB 2260 Water Management District Water Legislation

Although important legislation concerning alternative water supplies, conservation methods and reuse water failed, the water management districts successfully passed water-related legislative issues that were mainly internal to the districts' operations. Because of boundary changes and changes relating to the Surface Water Improvement and Management Act, all regulated interests dealing with water management districts should review the legislation. For example, basin boundaries inside the Southwest Florida Management District no longer are subject to legislative approval. The bill made it clear that groundwater withdrawals that occur in one county, conditional on a consumptive use from that withdrawal taking place in that same county, does not equal an interdistrict transfer of water regardless of whether the withdrawal and the use happen in two different water management districts.

Changes to the Surface Water Improvement and Management Act include removal of state funding for the program, an increase in the requirements for review, an update from three years to five years, and a cross-reference of waters named on the Surface Water Improvement Management project list to those appearing on the total maximum daily loads lists and impaired waters lists. Further, the Executive Director was granted authority to hire legal staff to manage the everyday operations of the water management district because of major dissension within the South Florida Water Management District. The loss of the authority previously belonging to the district's Governing Boards did not affect the Governing Board's ability to employ attorneys to represent the Governing Board's legal interest or position.

CS/CS/SB 554 Interdistrict Transfers of Water

This legislative revision defines interdistrict transfers to leave out the withdrawal of groundwater that is later used inside the same county, even if that county is located within two separate water management districts. For situations concerning a single county withdrawal and utilization of groundwater, the only applicable provisions are subsections (4), (11), and (13) of Section 373.2295, Florida Statutes.

CS/CS/SB's 140, 998 &1060 Water and Wastewater Utility Transfers

In response to the proposed sale of the state's biggest privatelyowned water and waste-water utility (Florida Water Services, Inc.) to a separate legal entity formed by an interlocal agreement between the towns of Gulf Breeze and Milton, this bill provides local governments a role in the authorization of the utility's acquirement and rate-setting if the local government's citizens would be served by such an entity. The separate legal entity must provide the host government with ninety days' advance written notice for any proposed acquisition of a private utility. The host government may become a member of the separate legal entity if it chooses. The host government may also approve or prohibit the acquisition. Additionally, the host government can choose to delay its decision for an added forty-five days, or it can choose to take no action. If the host government chooses to take no action, the bill provides conflicting provisions as to the effect. One provision states that taking no action is the same as denying the acquisition, while another provision states the separate legal entity may attempt to acquire the utility without further notice.

Additionally, the bill maintains that before increasing its rates, the separate legal entity must provide each host government with ninety days' notice. Each host government has authority to review and approve these rate increases or changes in financing terms that may result in increased costs to customers. In the case of a

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disagreement between the separate legal entity and the host government, the host government can seek binding arbitration. Revenues attained for providing utility services can only be transferred from the separate legal entity to the local government whose residents produced the revenues.

CS/SB 1044 Water Use Permits

This legislation states that each time a water management district receives applications for consumptive use permits, the district must inform local governments from which boundaries the withdrawal is requested to be made. The water management district is permitted to send notice of the receipt of permit applications, by regular mail or by electronic mail, to people requesting such notice. The legislation also requires water management districts to put a condition in these permits advising the permittee that they also have to be in compliance with other applicable local, state or federal laws.

CS/HB 623 Northwest Florida ERP Extension

This bill delayed the effective date of the Environmental Resource Permit program inside the bounds of the Northwest Florida Water Management District from July 1, 2003 to July 1, 2005. Until then, regulated interests within the Northwest Florida Water Management District will get their storm water permits from the Department of Environmental Protection. Thus, for at least two more years, the state will not assert isolated wetland jurisdiction and, consequently there will be no need to get an Environmental Resource Permit.

Although the Northwest Florida Water Management District and the Department of Environmental protection have not created a plan, or a draft rule to execute the Environmental Resource Permitting program throughout the Northwest Florida Water Management District, it has been estimated that the execution of the program will need between \$1 million and \$3 million a year. Because no revenue has been dedicated toward implementation of this program, the legislature was forced to delay implementation another two years. The legislature rejected efforts to attach the subsidy of this permitting program to the approval of an enlargement in the constitutional millage restrictions in the Northwest Florida Water Management District.

CS/SB 472 Recovery for Mining Explosions

In response to on-going debate in south Florida, the legislature recently established an exclusive remedy, available for real and personal property damage brought about by explosives associated with mining. The bill states that recovery must be pursued within six months of when the damage occurred. The legislation also offers a mandatory non-binding mediation and an expedited summary hearing process if settlement is not accomplished through mediation. This hearing is heard through the Division of Administrative Hearings and must be carried out within thirty days of the unsuccessful mediation. In the event that damages are found to have occurred, compensation must be provided within thirty days of the final order, unless appealed.

In circumstances where the mining company cannot pay, the petitioners may retrieve the security deposit that was put up as a prerequisite to obtaining a mining permit. The security deposit may be in the form of a letter of credit or of a bond, but may not be in an amount less than \$100,000. Regardless, the prevailing party is entitled to costs, which includes witness fees and reasonable attorney's fees.

CS/SB 1374 Department of Environmental Protection Internet Noticing

The Department of Environmental Protection is now authorized to substitute an Internet website notification in the place of its *Florida Administrative Weekly* notices. Notices that appear on the website are required to state the date that the notice was first published and the notice will only be published on the days that the *Florida Administrative Weekly* is published. However, this attempt at converting to electronic notice via the Internet will be repealed on July 1, 2004, unless the Florida Legislature reenacts the bill.

CS/SB 2388 Fish and Wildlife Conservation Commission Revisions

This bill changes various fees affecting game preserves, nonresidential turkey hunters, and vessel operators, and increases the fees charged for the exhibition of wildlife. The fee for non-Floridians to partake in hunting activities in Florida was increased to \$45, and is valid for a period of ten days. Similarly, the fee imposed on non-Floridians for the annual turkey-hunting permit was increased from \$5 to \$100. The fee for possessing or exhibiting poisonous reptiles also increased from \$5 to \$100. Fees for operating or owning a private game preserve increased from \$5 to \$50 per year.

Additionally, the definition of "take" under Section 372.001, Florida Statutes has been changed to specifically include saltwater fish and the definition of "saltwater fish" was expanded. Likewise, the licensure and permitting portion of Section 372.57, Florida Statutes was amended to include "saltwater fish," as well as the act of possessing saltwater fish.

CS/SB 1050 Fish and Wildlife Conservation Commission Fines and Fees Legislation

New fees and penalties were enacted by the bill for persons engaged in saltwater product sales. Violation of the saltwater licensure requirements is subject to a graduated scale of penalties. A first violation is a second-degree misdemeanor, while a fourth violation can be a third degree felony. Additional penalties are imposed when individuals try to buy or sell saltwater products while his or her license is suspended or revoked. Further, the threshold for reporting vessel damage, or damage to other property resulting from vessel operation, increased from \$500 to \$2,000. Damage must be reported to the Division of Law Enforcement of the Florida Fish and Wildlife Conservation Commission, to the police chief where the accident happened, or to the sheriff of the county where the accident occurred. Finally, anchorage buoy requirements for Silver Glen Springs and Silver Glen Run were repealed along with provisions concerning license and equipment previously needed in order to take or store bait shrimp on certain vessels.

CS/CS/SB 1300 Citrus Processing

Due to delays in the Department of Environmental Protections' transactions with the Environmental Protection Agency, the pilot project regarding citrus processing facilities and their air emission regulations, this legislation changes various aspects of the pilot project. Among those changes are delaying the date and definition of "new sources," and conformity with the air emissions standards until October 31, 2004. Additionally, the sulfur content for "fuel oil fired generating facilities" will not be reduced to 0.1 percent sulfur by weight until October 31, 2004.

CS/HB 1453 Non-Judicial Sale of Vessels

The provisions regulating the non-judicial sale of vessels by marinas was amended by this bill to no longer require a marina to get two independent appraisals of a vessel with a lien against it prior to auction. Further, the vessel no longer has to be sold for at least fifty percent of its appraised value. The bill also allows any vessel to be sold at a non-judicial sale if it has been held for storage charges, dockage fees, unpaid costs, or for failure to pay costs of removal due to unsanitary vessels. A marina has a possessory lien for costs such as dockage fees, storage fees, improvements, repairs, and expenses necessary for the preservation of the vessel or workrelated storage charges. This possessory lien is set from the day that the vessel is first brought to the marina or occupies rental space.

To satisfy a lien, the marina is required to provide written notice to the owner through certified mail, personal service, or posting notice at the marina and at the vessel. The notice has to state an itemized statement of the claim, a demand for payment, a description of the vessel, contact information for the marina and a conspicuous warning that the vessel is going to be advertised and sold. If, after 120 days following the notice, any amount is left unpaid, the marina can advertise the sale of the vessel. This advertisement is required to be published in a general circulation newspaper once a week for two weeks. The owner can redeem the vessel if he or she pays the remaining amount of the lien as well as any reasonable expenses incurred before the sale.

CS/SB 1644 Nitrogen and Phosphorous Fertilizers

In response to the impact of fertilizer on groundwater and surface water, the nitrate legislation was broadened to address nitrogen and phosphorous. For example, the tax of fifty cents per ton on fertilizer was extended to include products containing nitrogen and products containing phosphorous. The revenues associated with this bill are to be used for development, demonstration, research, and execution of interim measures and best management practices dealing with water quality improvement. Finally, the rule provisions addressing this act are no longer subject to review by the Legislature.

SB 174 Marine Turtle Penalties

The Marine Turtle Act was amended to increase the penalties related to possessing turtle eggs and disturbing a turtle nest. Illegally possessing eleven or fewer marine turtle eggs is a firstdegree misdemeanor for a first offense. Possessing over eleven turtle eggs, or disturbing a turtle nest is a third degree felony. Any act, by a person or corporation, prohibited by this bill is subject to a fine of \$100 per egg, in addition to any other penalty, for any egg of any marine turtle species.

In order to reflect these changes to the Marine Turtle Protection Act, the terms "properly accredited person" and "take" were amended accordingly. The Florida Fish and Wildlife Conservation Commission was given the authority to implement rules establishing conditions and restrictions for the conservation of marine turtles as provided through this legislation. The Florida Fish and Wildlife Conservation Commission was also given the authority to issue a permit to a person or corporation that allows them to possess an actual marine turtle, or a marine turtle's eggs, hatchlings or nest if it is used for educational, exhibition, conservation or scientific purposes.

CS/CS/SB 1660 Agricultural Lands and Practices Act

After a two-year endeavor, the agricultural interests succeeded in having the Agricultural Lands and Practices Act pass. The purpose of the act is to create protections at the state level for agricultural operations intended to thwart duplication and overreaching local regulation of legitimate farm operations. This act prevents counties from implementing ordinances and rules that would restrict, regulate or prohibit farming operations and activities on agricultural property when the activities are controlled by best management practices or regulations created by the Florida Department of Agriculture and Consumer Services, The Florida Protection Agency, U.S. Army Corps of Engineers, or the U.S. Department of Agriculture.

The best management practices must be adopted as a component of a state or regional regulatory program adopted under a federal regulatory program. This is the first step toward preventing local governments from regulating land uses that become unpopular when urban development sprouts up around agriculture. But this legislation does not allow farm operations to increase noise, odor, fumes or dust when located next to a home or business. This act is a supplement to the Florida Right to Farm Act in Section 823.14, Florida Statutes that protects farming activities from nuisance suits.

CS/CS/SB 1220 Real Estate Sale Disclosure Requirements

This bill modifies the disclosure summary that must be provided to a prospective purchaser of real property that is subject to a homeowner's association. This legislation also requires a specified disclosure statement to be included in the disclosure provision of a purchase and sale contract subject to a homeowner's association. The disclosure statement must state that if the disclosure summary was not given to the prospective purchaser before the execution of the purchase and sale contract, then the contract is voidable by the purchaser at or before three days of receiving the disclosure summary. Exempted from this bill are homeowner's associations regulated by the Cooperative Act, the Florida Vacation Plan and Timesharing Act, the Florida Mobile Home Act or the Condominium Act and subdividers registered under the Florida Uniform Land Sales Practices Law.

CS/CS/HB 861 Homeowners Association

This bill gives homeowner associations the right to initiate and appeal ad valorem tax protests and suits in the homeowner association's name on behalf of its members after developer turnover. The legislation also authorizes homeowner associations to maintain a claim of right or covenant or restriction. Homeowner associations would also be allowed to bring inverse condemnation actions, contest ad valorem taxes on commonly used facilities, and defend eminent domain actions. The bill prohibits amending the bylaws of the homeowner's association in a way that adversely affects the proportion of voting interests or increases the proportion of shared expenses of the homeowner's association.

SB 2164 Enterprise Zones

The purpose of this bill was to expand business operations in certain locations. However, the tax exemptions bestowed by enterprise zone status will create a loss of potential tax revenue. The legislation permits boundary amendment for the enterprise zones existing in Immokalee, St. Petersburg, and Tallahassee for expansion areas that are less than twenty-five acres and that are adjacent to the existing enterprise zones. Upon recommendation of Enterprise Florida, Inc., the boundary of existing rural enterprise zones can be amended if the land is less than twenty square miles and if the proposal is submitted prior to December 31, 2003.

ABSTRACTS

Holly Doremus, *Takings and Transitions*, 19 J. LAND USE & ENVTL. L. 1 (2003).

This article explores the inconsistent doctrines advanced by the courts in determining regulatory takings cases. Given the current nature of this area of the law, the author proposes an alternative test to apply in takings cases to provide more straight-forward treatment. That test would encompass four factors: 1) the justification for regulatory change; 2) the extent to which change was foreseeable in advance, and the ability of the landowner to adapt to that change; 3) the abruptness of the change; and 4) the generality of its application. Since regulatory takings claims are entirely about change, the author argues that the courts should begin their analysis of such claims with the knowledge that a particular type of change is essential to a viable claim. The author acknowledges that there are tensions in society's view of change, but suggests that fair distribution of the costs of regulatory transitions would introduce greater discipline into what presently seems to be unprincipled decision-making.

J. B. Ruhl, Equitable Apportionment of Ecosystem Services: New Water Law for a New Water Act, 19 J. LAND USE & ENVTL. L. 47 (2003).

This article is an edited and annotated version of remarks delivered by the author at the FSU College of Law's forum on *The Future of the Appalachicola-Chattahoochee-Flint River System: Legal, Policy, and Scientific Issues*, held on November 5, 2003. The purpose of the article is to suggest that the greater understanding we have today of the role ecological processes play in delivering tremendous economic value to human populations demands that the law recognize these important ecosystem services as a critical factor in the interstate water apportionment calculus. The author makes this point in the context of the dispute over the Appalachicola-Chattahoochee-Flint River System ("ACF").

The author explains that the "water wars" (disputes over interstate water allocation) have moved East. Will the East simply import interstate allocation law as it has been shaped in the West, or will it forge a new water law for a new water age? The author suggests the latter, proposing that the East mold water law to meet the ecological realities of its great river systems. The author concludes that for Florida to prevail in the ACF dispute, it must urge the Court to consider the full import of *Idaho v. Oregon* to make its equitable apportionment jurisprudence align with the real reason we care about water — its ecosystem service values.

Jesse J. Richardson, Jr., *Downzoning, Fairness and Farmland Protection*, 19 J. LAND USE & ENVTL. L. 59 (2003).

The author addresses the role of "downzoning" in smart growth efforts. Initially, the article summarizes the six major potential legal challenges against downzoning to protect farmland and how each of these legal causes of action attempts to address "fairness." The causes of action include: direct challenges of the act, spot zoning, takings, substantive due process, equal protection, and 42 U.S.C. 1983. Then, the article describes and refutes the major arguments posited by those supporting the fairness of downzoning without compensation to landowners. The author concludes that the awkward intervention of the court into these matters results from inherent unfairness of downzoning without compensation along with the lack of an ideal legal cause of action to address fairness issues.

Jeffrey H. Wood, *Recalibrating the Federal Government's Authority to Regulate Intrastate Endangered Species After SWANCC*, 19 J. LAND USE & ENVTL. L. 91 (2003).

The federal government has spent the last thirty years regulating activities that affect endangered species regardless of the species' impact on interstate commerce. The federal government used the Commerce Clause to justify such a wide range of activities there seemed to be no limit to the federal government power to intervene on behalf of endangered species. This scheme changed radically with the Supreme Court's decision in Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers. The holding implied that federal regulation of isolated, intrastate ponds unconstitutional.

This article outlines the framework that produced the SWANCC decision. The structure is based on the Endangered Species Act and its earlier judicial treatment. Once the foundation is laid, the article begins to consider the effects of the SWANCC decision and its treatment of the Commerce Clause. These discussions provide the basis for the proposal of an intrastate species test by the author. The test narrowly defines intrastate species and bans federal regulation based on such species.

Fall, 2003]

Kevin E. Regan, Balancing Public Water Supply and Adverse Environmental Impacts Under Florida Water Law: From Water Wars Towards Adaptive Management, 19 J. Land Use & Envtl. L. 123 (2003).

This note addresses the need to incorporate adaptive management principals into Florida's water management system. It begins with an overview of the Eastern, Western and Administrative approaches to water law. The piece continues with an in depth review of the Tampa Bay "waters wars" to examine the increasing conflict of water use in the state of Florida. The author reviews the administrative dispute concerning water use permits for four well fields located in the Tampa Bay area, and by doing so, attempts to show the need for flexibility in permit renewal that reflects reliance on scientific, economic and equitable measures to balance the needs of humans and natural resources that are reasonable, beneficial, and consistent with public use.