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The Illusion of Perpetuity and the Preservation of Privately Owned Lands

ABSTRACT

In recent years, a number of private landowners have taken steps to "preserve" their holdings. The preservation of these private lands is, as a rule, accomplished through the transfer of all or part of the owner's property rights to a government or nonprofit entity. A key motivation for reconfiguring the ownership rights associated with these lands is to frustrate any future attempt to reverse the decision to preserve. Although the idea that perpetual land preservation is a worthy goal meets with widespread acceptance, there are compelling reasons to think that a number of today's conservation measures will merit reconsideration. The costs of undoing or modifying preservation choices, policy makers should recognize, will in all likelihood vary significantly and will depend on the institutional structures set up to restrain development as well as on the anticipated changes in land use.

For centuries, the law of property has grappled with a "basic paradox" at the core of the idea that owners exert dominion over their holdings.¹ The power to control one's property includes the ability to limit the choices available to one's successors in interest (or even to oneself at a later date).² Imposing such constraints has the effect of denying later owners the full range of options enjoyed by earlier owners.

With respect to real property, a consensus has emerged that this conundrum should be resolved by disfavoring the "dead hand" of the past. Taking to heart the maxim that the earth belongs to the living,³ a

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1. Gregory S. Alexander, *The Dead Hand and the Law of Trusts in the Nineteenth Century*, 37 STAN. L. REV. 1189 (1985). See also Robert Gordon, *Paradoxical Property*, in EARLY MODERN CONCEPTIONS OF PROPERTY 96, 102-03 (John Brewer & Susan Staves eds., 1996); LEWIS SIMES, THE THOMAS M. COOLEY LECTURES: PUBLIC POLICY AND THE DEAD HAND 55-82 (1955).

2. See Gordon, *supra* note 1, at 102 ("the freedom to do anything one likes with property implies the freedom to create restraints on it, and thus to bind one's own hands or the hands of one's transferees").

3. Cf. Letter from Thomas Jefferson to James Madison (Sept. 6, 1789), reprinted in 15 THE PAPERS OF THOMAS JEFFERSON 392 (Julian P. Boyd ed., 1958) ("I set out on this ground

number of courts and commentators have embraced the notion that each generation should be free, with limited exceptions, to make its own decisions regarding the disposition and use of land. Thus, restrictions purportedly designed to limit the ability of landholders to transfer their property rights to others, commonly known as restraints on alienation, are regarded with disfavor.⁴ Similarly, American property law discourages attempts to control future land uses through the creation of estates in land that are subject to forfeiture in the event that an owner fails to abide by conditions imposed by an earlier owner.⁵ While it is true that the law of servitudes allows owners to exercise substantial influence over future uses of their properties through the imposition of easements, real covenants, and equitable servitudes,⁶ the fact that servitudes can "impose significant dead hand controls over land use"⁷ is regarded as a shortcoming of these instruments.

The suspicion generally evinced toward efforts of private owners of real property to influence the future use and disposition of their holdings rarely extends to measures aimed at "preserving" the land, however. Property holders who take steps to ensure that their lands remain undeveloped in perpetuity or for a substantial time period are widely regarded as having bestowed benefits not only upon their immediate communities and society as a whole, but also on future generations.⁸ This response is a curious one, for it means that the very

which I suppose to be self-evident, 'that the earth belongs in usufruct to the living; that the dead have neither powers nor rights over it').

4. E.g., JESSE DUKEMINIER & JAMES E. KRIER, *PROPERTY* 227–28 (5th ed. 2002).

5. See JOHN P. DWYER & PETER MENELL, *PROPERTY LAW AND POLICY: A COMPARATIVE INSTITUTIONAL PERSPECTIVE* 149–52 (1998) (detailing the law's hostility to defeasible fees, which are estates in land that are subject to forfeiture in the event their holders violate specified conditions imposed by grantors). See also *Wood v. Bd. of Comm'rs*, 759 P.2d 1250, 1252 (Wyo. 1988).

6. SHELDON F. KURTZ & HERBERT HOVENKAMP, *AMERICAN PROPERTY LAW* 585 (3d ed. 1999) (detailing the "complicated tripartite system of servitudes (easements, real covenants and equitable servitudes)" and attributing this complex legal regime to the fact that "the law has developed along three quite different paths").

7. Susan F. French, *Toward a Modern Law of Servitudes: Reweaving the Ancient Strands*, 55 S. CAL. L. REV. 1261, 1265 (1982).

8. See Julia D. Mahoney, *Perpetual Restrictions on Land and the Problem of the Future*, 88 VA. L. REV. 739, 746–49 (2002). See also LAND TRUST ALLIANCE, *MILLIONS OF ACRES CONSERVED BY VOLUNTARY ACTION: NUMBER OF NONPROFIT LAND TRUSTS AT NEW HIGH* (2001), at http://www.lta.org/newsroom/pr_091201.htm (last modified Sept. 20, 2001) (expressing approval of measures taken by private owners, together with nonprofit land trusts, to conserve "more than 6.4 million acres of open space as of Dec. 31, 2000, a 238 percent increase over the acreage protected as of 1990, creating an everlasting legacy on the land"); FLA. DEP'T OF ENVTL. PROT., *PRESERVATION 2000: FOREVER FLORIDA*, at <http://p2000.dep.state.fl.us/> (last visited Aug. 24, 2004) (stating that the acquisition of over one million acres, much of it from private owners, helps "ensure that future generations can

aspect of private land preservation that might be expected to trigger the greatest concern—to wit, its explicit goal of reducing or even extinguishing the possibility that certain choices made today will be revisited—instead forms the basis of its appeal. The individual property holder who elects to continue growing crops, declining to build a strip mall for now but making no move to foreclose this option to his successors (or to himself in the future should he change his mind about what he wants to do with the land), is almost never referred to as a *preserver* of land. He is simply a farmer who may tomorrow become a developer. Only when he changes the institutional arrangements associated with his property, typically by transferring his entire ownership interest or a conservation servitude⁹ to a governmental or nonprofit entity committed to preservation, does he garner praise for “protecting” his land.

The fact that land preservation by private holders entails more than simple inaction deserves our attention and analysis. In effect, land preservation is regarded as a mechanism by which present owners serve as a bridge between the past and the future. According to this view, those in possession of lands deemed worthy of “preservation” shoulder the awesome responsibility of ensuring that what remains of the natural world does not vanish but is instead enjoyed and passed on in an unspoiled state to those who follow.¹⁰ Because what is thought to be at stake is nothing less than making sure that the world’s last, best places

enjoy the unique and fragile ecosystems that combine to make Florida an exciting place to live”).

9. Conservation servitudes are restrictions that are designed to ensure that burdened lands manifest specific scenic or ecological values in perpetuity or, more rarely, for a limited time. By transferring a conservation servitude to a governmental or nonprofit organization, a landowner gives the donee the right to restrict or prohibit specified uses of his land, most commonly commercial and residential construction. See DWYER & MENELL, *supra* note 5, at 752. The terms and conditions of conservation servitudes vary widely. See James Boyd et al., *The Law and Economics of Habitat Conservation: Lessons from an Analysis of Easement Acquisitions*, 19 STAN. ENVTL. L.J. 209, 221–27 (2000); Leigh Raymond & Sally K. Fairfax, *The “Shift to Privatization” in Land Conservation: A Cautionary Essay*, 42 NAT. RESOURCES J. 599, 627 (2002). Conservation servitudes are also commonly referred to as “conservation easements,” “preservation restrictions,” and “land use easements.” Mahoney, *supra* note 8, at 740 n.6.

10. See, e.g., *Impact of Tax Law on Land Use, Conservation and Preservation: Hearing Before the Subcomm. on Oversight of the House Comm. on Ways and Means*, 106th Cong. (1999) (statement of Rep. Houghton) (asserting that land preservation measures such as tax deductions for conservation easements “may not sound exciting, but preserving the environment for our children and grandchildren, as everyone knows, is one of the most important challenges we face”).

do not disappear altogether,¹¹ the prospect of “dead hand” influence fails to arouse serious concern.¹² We are confident that our successors will share our preferences or, at the very least, that they ought to share them. Either way, the institutional roadblocks put in place today to frustrate future development are a cause for celebration. Land preservation, in short, is implicitly assumed to present a special case, one in which the usual worries about the lingering influence of earlier actors can be put aside.¹³

The trouble with this line of thought is that there are compelling reasons to think that those who follow us will have different ideas regarding which lands warrant preservation.¹⁴ What’s more, our successors are likely to be justified in wishing to reconsider many of today’s policy choices. Future decision makers, after all, will reap the benefits of advances in ecological understanding and technological capabilities, leading them to question the advisability of preservation decisions that today appear obviously well founded.¹⁵ In addition, changes in aesthetic tastes may severely reduce or even obliterate the amenity value of some conserved lands, thereby making development of these lands an attractive option.¹⁶ Finally, the fact that nature is not equilibrial¹⁷ means that over time many preserved lands will change, no

11. See THE NATURE CONSERVANCY, *SAVING THE LAST GREAT PLACES ON EARTH*, at www.nature.org (last visited Aug. 24, 2004); Robert H. Levin, *When Forever Proves Fleeting: The Condemnation and Conversion of Conservation Land*, 9 N.Y.U. ENVTL L.J. 592, 593, 598 (2001) (stating that today’s “conservation victories” guarantee that “future generations still enjoy a modicum of open space and parklands” and that “once land is developed, it is nearly impossible, for economic and ecological reasons, for it ever to return to its natural state”).

12. On rare occasions, reservations are expressed that land preservation might lock us into inflexible and outdated land uses. See generally THE CONSERVATION EASEMENT HANDBOOK: MANAGING LAND CONSERVATION AND HISTORIC PRESERVATION EASEMENT PROGRAMS (Janet Diehl & Thomas S. Barrett eds., 1988). The stock response to this worry is that, should circumstances warrant, restrictions will be lifted, thereby freeing the land for its desired use. *Id.* This assertion is in obvious tension with the claim that land conservation activities effectively protect land from development.

13. Cf. Carol Rose, *Servitudes, Security and Assent: Some Comments on Professors French and Reichman*, 55 S. CAL. L. REV. 1403, 1413-14 (1982) (discussing the problems caused by servitudes that “outlast their usefulness” and suggesting that, “with the possible exception of servitudes designed to assure permanently the continued duration of our natural or historic heritage, no servitude should be expected to last in perpetuity”) (emphasis added).

14. See Mahoney, *supra* note 8, at 753-69.

15. *Id.* at 757-59.

16. *Id.* at 759-63.

17. See DANIEL BOTKIN, *DISCORDANT HARMONIES: A NEW ECOLOGY FOR THE TWENTY-FIRST CENTURY* 62 (1990) (“Wherever we seek to find constancy, we discover change.... Nature undisturbed is not constant in form, structure or proportion, but changes at every

matter how vigorously human impact is curtailed. As a result, keeping lands undeveloped may no longer promote the goals that motivated their preservation in the first place.¹⁸

These insights have important ramifications for public policy. Instead of assuming that the specific land preservation choices made now will (and should) prove eternal, or at least very long-lasting, decision makers should understand that many conservation actions will in all likelihood be revisited. The costs of undoing or modifying preservation choices, those involved in crafting public policy ought to recognize, will vary significantly and will depend on the institutional structures set up to restrain development as well as the anticipated changes in land use. Whether and to what extent a choice regarding land is reversible will hinge on the particular circumstances of each case, not on whether that choice, when made, caused the land in question to be labeled "preserved" or "developed." In short, it is wrong to assume that reversing choices to conserve land will necessarily prove cheaper and easier than revisiting decisions to develop. The implication of this analysis is far reaching and, to some, no doubt disquieting: a number of today's choices to preserve privately held lands will not inure to the benefit of those who follow.

This article is organized as follows. Part I details how land preservation by private entities requires more than simple inaction. To preserve land, private owners transfer some or all of their property rights with the explicit goal of reducing or even eliminating the possibility that the land will ever be subjected to specified forms of development. In short, institutional barriers to later development are an essential component of private land preservation. Part II argues that the assumption that the erection of these institutional barriers is an unalloyed good rests on the misapprehension that present day decision makers can (and should) predict future needs and preferences. Part III examines the reversibility of preservation measures. This part argues that whether and how conservation choices can be modified or undone is a function of two kinds of costs: first, those associated with reconfiguring institutional arrangements, most notably reversing transfers of property rights; and second, those associated with physically transforming the land.

scale of time and space"); Michael E. Soule, *The Social Siege of Nature*, in REINVENTING NATURE 137-45 (Michael E. Soule & Gary Lease eds., 1995).

18. See Mahoney, *supra* note 8, at 753-57.

I. LAND PRESERVATION AS INSTITUTIONAL TRANSFORMATION

Because preservation efforts are often motivated by the conviction that a particular parcel of land ought to remain in its present condition, it is easy to assume that land preservation means doing nothing. In fact, however, land preservation is not congruent with inaction. To "preserve" land is to put in place institutional barriers designed to frustrate specified (but not uniform) human interactions with the land. For lands held by individuals or profit seeking firms, preservation generally means the transfer of all or part of the owner's property interest to a government entity or to a nonprofit organization devoted to conservation.

A. Current Owners and Lasting Choices

When making decisions about the use and disposition of their lands, property owners rarely devote much thought to whether their choices will endure. The objective of most decisions, after all, is to maximize property values, not to engage in long-term planning. Moreover, even if owners are inclined to predict whether they will continue to own their property in the years to come, or what uses they (or their successors in interest) will put the land to, it seems unlikely that their efforts will be successful. Advances in technology and shifts in societal organization often render current land uses obsolete. Today's potato field may be replanted with hybrid corn, just as a light industry building may be converted into cooperative apartments. Moreover, property owners know that, even if they retain their property, the decision whether to continue its current use will not be left entirely up to them, for over time (indeed, overnight) the legally permissible uses of their land may change. What is now a perfectly legal agricultural enterprise may be adjudged a nuisance, just as land now zoned for commercial activity may be reclassified as fit only for residential use.¹⁹ In most instances, then, individuals and institutions are content to make their own decisions and to trust the future to look after itself.

This approach is in keeping with early twenty-first century American property law, which generally discourages owners from trying to control what happens to their lands after their ownership ceases. Thus no U.S. jurisdiction recognizes the "fee tail," a form of ownership designed to keep property within a family through the creation of

19. See, e.g., *Village of Euclid v. Amber Realty Co.*, 272 U.S. 365 (1926).

successive life estates.²⁰ In addition, many states have, through court decisions or legislative action, adopted rules of construction that militate against finding that a defeasible estate exists.²¹ Even if the existence of a defeasible estate is recognized, marketable title statutes in a number of states place strict limitations on the permissible duration of the future interests in question.²² As for being able to prevent their lands from falling into undesirable hands, the capacity of owners to control the disposition of their properties by their heirs and transferees is severely limited. Courts regard restrictions on alienation with hostility, although partial restraints, restraints on alienation of life estates, restraints imposed by condominium and cooperative associations, and restraints on property held by charities are more likely to be upheld.²³ It is true that donors sometimes restrict the uses to which real property placed in a trust can be put, but there is substantial controversy concerning the extent to which courts should enforce such restrictions.²⁴

To be sure, present day owners exert some control over future land uses through the imposition of servitudes (that is, nonpossessory interests in land) that restrict permissible activities or, more rarely, obligate property owners to perform specific acts.²⁵ But the rationales for the creation of servitudes do not, as a rule, include the facilitation of "dead hand" control.²⁶ Rather, the objectives of servitudes are to promote private ordering whereby owners enter into mutually beneficial agreements that, in an ideal world, can and will be terminated when their provisions no longer prove useful.²⁷ The imperfect functioning of the legal mechanisms designed to free land from the burdens of

20. JOSEPH WILLIAM SINGER, *INTRODUCTION TO PROPERTY* 312-15 (2001).

21. See, e.g., CAL. CIV. CODE § 1442 (West 1999) (providing that a condition "involving forfeiture must be strictly interpreted"); MONT. CODE ANN. § 28-1-408; *Rowell v. Gulf, M. & O.R.R. Co.*, 28 So. 2d 209 (Ala.1946).

22. See, e.g., KY. REV. STAT. ANN. § 381.219 (Michie 2000); NEB. REV. STAT. § 76-2, 102 (2000).

23. SINGER, *supra* note 20, at 316-17.

24. RICHARD POSNER, *ECONOMIC ANALYSIS OF LAW* 555 (5th ed. 1998).

25. See generally RESTATEMENT (THIRD) OF PROPERTY (SERVITUDES) (2000). For example, prior to selling off lots, developers of subdivisions frequently burden the properties with limitations on the size, style, and color of houses to be constructed, as well as impose obligations on owners to pay money to a community organization for the upkeep of common areas. SINGER, *supra* note 20, at 218-20.

26. Stewart E. Sterk, *Freedom from Freedom of Contract: the Enduring Value of Servitude Restrictions*, 70 IOWA L. REV. 615 (1985) (defending, on economic and other grounds, the limitations the law places on the ability of landowners to bind their successors in interest through the imposition of servitudes). Conservation servitudes constitute a notable exception to this principle. See Mahoney, *supra* note 8, at 770-72.

27. See generally Richard Epstein, *Notice and Freedom of Contract in the Law of Servitudes*, 55 S. CAL. L. REV. 1353 (1982).

servitudes that later generations have come to see as obsolete or misguided is viewed as a serious danger. Outmoded preferences, after all, should not govern land use.²⁸

B. The Impulse to Save Nature

The growth of environmental consciousness over the past several decades has complicated matters. Owners of ecologically or aesthetically distinguished lands often worry that encroaching land development may one day obliterate the special qualities of their properties. In many respects their fears are understandable, for land use planning practices that tolerate, even encourage, ugly sprawl²⁹ have fueled the conversion of large quantities of agricultural lands, forests, and meadows into suburban subdivisions and strip malls.³⁰ Moreover, owners feel justified in thinking that permanent nondevelopment would not only satisfy their own preferences but also further the wider public interest. After all, the message conveyed by media accounts, environmental organizations, and public officials is that land development causes environmental harm, while land conservation guarantees that sufficient resources will be available in the future.³¹ The equation of the absence of development of special lands with the augmentation of present and future public welfare may discourage owners from grappling with the complexities of land use issues and assessing both the harms and benefits of conservation efforts.

For the landowner who objects to the idea of development, the simplest course of action to take is to retain his property and continue to operate the land as he sees fit. This method is simple and effective, as development does not occur without the owner's acquiescence (except in cases where land is condemned through the exercise of the eminent

28. RESTATEMENT (THIRD) OF PROPERTY (SERVITUDES) § 7.10 cmt. (2000) ("The potentially unlimited duration of servitudes creates substantial risks that, absent mechanisms for nonconsensual modification and termination, obsolete servitudes will interfere with desirable uses of land."). See also Robert Ellickson, *Alternatives to Zoning: Covenants, Nuisance Rules and Fines as Land Use Controls*, 40 U. CHI. L. REV. 681 (1973); Sterk, *supra* note 26, at 624-25 (describing the possibility that the existence of transaction costs will prevent removal of undesirable servitudes).

29. Jeremy Meredith, *Sprawl and the New Urbanism*, 89 VA. L. REV. 447, 474-78 (2003).

30. See NAT. RESOURCES CONSERVATION SERV., 1997 NATURAL RESOURCES INVENTORY, at <http://www.nrcs.usda.gov/technical/land/pubs/97highlights.html> (last visited Aug 24, 2004) (stating that in a 15 year period, "the largest increase in acreage by land use was for development, about 25 million acres, from 5 percent of the land area in 1982 to 6.6 percent in 1997").

31. See generally Mahoney, *supra* note 8.

domain power).³² Some owners opt to follow this path, striving to manage their lands in what they believe to be an environmentally responsible manner.

For many owners, however, simply holding onto the land and refraining from developing it is unsatisfying. First, many property holders not only feel an intense emotional connection to their lands but also derive satisfaction from the notion that when they are gone the land will endure.³³ Consequently, their own inaction fails to provide them with the crucial reassurance they crave that their lands will remain essentially the same. In addition, a number of preservation-minded landowners are motivated by an altruistic desire to benefit future generations. Merely refraining from engaging in development themselves would not, in their view, prove an effective means of conferring benefits upon those who come later. Finally, many owners are interested in ensuring that their property remains undeveloped, but only on the condition that they are compensated, in full or in part, for foregoing lucrative opportunities. These owners are unwilling to shoulder the entire burden, or sometimes *any* portion of the burden, imposed by nondevelopment.

Moreover, the simple decision to forego (for now) the potential development benefits of the land does not constitute "preservation" of the land, at least as that term is typically employed.³⁴ In order to be regarded as having preserved their properties, individuals and profit-seeking institutions must do more than simply hold onto their lands and decline to build factories, shopping centers, or townhouse complexes. Preserving their lands means taking action, which generally takes the

32. THOMAS W. MERRILL & DAVID A. DANA, *PROPERTY: TAKINGS* 3 (2002) (noting that "eminent domain is an inherent attribute of sovereignty, recognized in all fifty States and the federal government" and that while the power "is originally vested in the legislature, it is often delegated to other entities, such as municipalities, government agencies, public utility companies, and common carriers").

33. See, e.g., Katherine Baker, *Consorting with Forests: Rethinking Our Relationship to Natural Resources and How We Should Value Their Loss*, 22 *ECOL. L.Q.* 677, 693-97 (1995) (describing the strong emotional attachments that motivate owners to explore options for preventing the development of their lands).

34. Some economists use the term "preservation" to denote the simple absence of development and at times assume that land use choices involve the selection of *either* development *or* preservation. See, e.g., Robert S. Pindyck, *Irreversibility, Uncertainty, and Investment*, 29 *J. ECON. LIT.* 1110, 1110-48. This is not, however, the everyday usage employed by preservation organizations, members of Congress, most academics, and the media. In general, when land is said to have been preserved, there has been a change in the ownership interests associated with the land or, in the case of publicly owned lands, a reconfiguration of the institutional authority over the land. See, e.g., Proclamation No. 6920, 61 *Fed. Reg.* 50,223 (Sept. 18, 1996) (creating the Grand Staircase-Escalante National Monument in southern Utah with 1.9 million acres of federal land).

form of transferring some or all of their property rights to a government entity or to a nonprofit organization.³⁵ In short, private owners preserve their lands through surrendering all or part of their property rights in transactions that are structured to frustrate the land's development.³⁶ In some instances, the stated goal of the property rights transfer is not just to reduce but to extinguish altogether the possibility of future development. Thus, land trusts frequently assure property owners that granting a conservation servitude will result in perpetual land preservation.³⁷

The practice of preserving privately held land through the transfer of property rights enjoys significant support for four principal reasons. First, cordoning off significant quantities of private lands from development activities, at least in theory, can provide an optimal amount of amenities and ecological services.³⁸ Second, while it is true that changes in applicable laws and regulations can and often do achieve similar or identical objectives, land preservation through voluntary transfers of rights sidesteps the hornet's nest of regulatory takings. Third, landowners who agree to "preserve" their lands through the transfer of some or all of their property rights realize financial benefits in

35. See, e.g., MD. DEP'T OF NAT. RES., MARYLAND'S RURAL LEGACY: WHAT IS MARYLAND'S RURAL LEGACY PROGRAM?, at <http://www.dnr.state.md.us/rurallegacy/rlnews/intro2rurallegacy.html> (last visited Aug. 26, 2004) (describing a state program that "encourages local governments and private land trusts to identify Rural Legacy Area....Easements or fee estate purchases are sought from willing landowners in order to protect areas vulnerable to sprawl development"); GOLDEN GATE NAT'L PARKS CONSERVANCY, MORI POINT: CALIFORNIA STUDIES NATIONAL PARKS INTERNSHIPS, at <http://bss.sfsu.edu/calstudies/nps/moripoint.htm> (last visited Aug. 26, 2004) (stating that "for nearly twenty years, Mori Point was repeatedly threatened by development proposals....In September 2000, the fate of Mori Point was resolved once and for all when the Trust for Public Lands (TPL) successfully outbid developers and acquired the 105-acre property at a real estate auction"); Anita Huslin, *Land Deal Places Montgomery Tract into Preservation*, WASH. POST, Dec. 14, 2001, at B04 (reporting that "a 1,700-acre tract of rolling farmland and forests in northern Montgomery County will be protected from development though the largest single land preservation purchase recorded in the county").

36. See, e.g., Susan DeFord, *Preserving the Land for Future Generations: Easement Shields 69 Acres in Howard County*, WASH. POST, May 25, 2003, at C4; Joe McGee, *Wildlife Area Dedicated: State Sees Old Bog Site as Tourism Jewel*, PATRIOT LEDGER (Quincy, Mass.), Aug. 24, 2002, at 17 (stating that the purchase of 1600 acres of former cranberry bogs from Northland Cranberries, Inc. by the State of Massachusetts "is investing [the land] for future generations").

37. See, e.g., NAT'L LANDS TRUST, THE CONSERVATION EASEMENT: A FLEXIBLE TOOL FOR PRESERVING FAMILY LANDS, at <http://www.natlands.org/library/consease.html> (last visited Aug. 26, 2004) ("Easements offer permanent protection, applying to all future landowners. A land trust or government agency ensures that restrictions are followed in perpetuity.").

38. Barton H. Thompson, Jr., *Conservation Options: Toward a Greater Private Role*, 21 VA. ENVTL. L.J. 245, 248 (2002).

the form of both direct payments from governmental or nonprofit entities and federal, state, and local tax benefits.³⁹ This is in marked contrast with landowners, whose development rights are constrained by the passage of new laws or regulations, who are rarely entitled to compensation for reductions in the values of their properties. The availability of these pecuniary benefits means that private owners who agree to surrender development rights are rewarded for their willingness to promote what many consider to be the common welfare. Finally, the perception that acts of land preservation are permanent (or at the very least highly likely to endure) resonates within American society. Virtually every announcement of a private land transaction contains an assurance that, thanks to the joint efforts of the transferring owner and the recipient institution, the land is now protected forever.

The popularity of land preservation is understandable, given the perceived aesthetic and ecological benefits. Also readily comprehensible is the support for the voluntary structure of the transactions, as well as for the provision of full or partial compensation to land owners for bestowing benefits that will, at least in theory, accrue to a large number of individuals. What is puzzling, however, is the strength of the appeal of the idea of permanent preservation. One might expect the assertion that *any* land use choice made today will endure forever would incite skepticism, if not outright disbelief. Instead, many environmentalists, legal academics, public officials, and members of the popular press accept, without criticism, the claim that land use regimes can and should bring about the permanent "protection" of lands.⁴⁰

An obvious response to this point is that the rhetoric of permanence should not be taken too seriously. All sensible people, one might argue, understand that nothing is forever, in the sense that someday another asteroid may strike the earth, leading to extensive reconfiguration of the landscape (to put it mildly) along with massive extinctions of plant and animal life. What advocates of preservation must mean is that these restrictions *ought* to continue for a substantial period of time. Although an existence of eons, millennia, or even multiple centuries is probably unrealistic, surely it is reasonable to anticipate the

39. Nancy A. McLaughlin, *The Role of Land Trusts in Biodiversity Conservation of Private Lands*, 38 IDAHO L. REV. 453, 454-59 (2002) (detailing the tax consequences of land preservation activities). The availability of tax advantages is used as a marketing tool by land trusts. See, e.g., MISSISSIPPI LAND TRUST, NEWSROOM, DON'T LET ANOTHER TAX YEAR PASS WITHOUT CONSERVING YOUR LAND, at <http://misslandtrust.org/> (last visited Aug. 26, 2004) (informing potential donors of conservation servitudes that "April 15 doesn't have to be painful...Instead, it can be a day you celebrate both your tax savings and the satisfaction of permanently conserving your fish and wildlife habitat").

40. See Mahoney, *supra* note 8, at 750-52.

bulk of today's preservation choices still holding sway decades or a century or two hence.

The trouble with that reasoning is twofold. First, in many circumstances, even a few decades is a long time to expect land use choices to endure. After all, planning districts throughout the nation constantly revise their master plans.⁴¹ What justifies our confidence that preservation choices, particularly those involving lands in or adjacent to inhabited areas, will not require reconsideration at a pace similar to other land use decisions? Furthermore, even if believers in strong preservation regimes concede that the "permanent" preservation of lands is not achievable, their pervasive declarations that special lands deserve enduring protection reflect a conviction that perpetuity is at least a worthy aspiration. But to assert that perpetual preservation is a meritorious (even if not wholly achievable) goal is to accept implicitly the notion that today's preservation choices will need little or no revision. This assumption is unmerited.

II. PREDICTING FUTURE NEEDS AND PREFERENCES

To aspire to protect land in perpetuity from specified uses makes sense if we can state with confidence that future generations will share our needs and preferences. Available evidence, however, points to the opposite conclusion. Enhanced understanding of ecological processes, along with technological developments, evolving cultural values, and physical changes in the natural world itself, will compel later generations to revisit many of the preservation choices made today. Although no one can predict the future with certainty, in crafting legal regimes it is critical to understand the forces that are likely to cause future needs and preferences to differ from present day ones.

A. Advances in Ecological Understanding

Right now, we understand little about the Earth's ecological systems. The world's oceans, crucial to the survival and flourishing of virtually all flora and fauna, remain largely unexplored, and our capacity to identify and save species that are threatened or endangered is as yet

41. DUKEMINIER & KRIER, *supra* note 4, at 972-73 (describing the need for regular revision of zoning ordinances, and documenting the difficulties encountered by early twentieth century planners who assumed "that an area could be mapped, once and for all, with few changes necessary thereafter...planning professionals came to recognize what perhaps judges had already figured out: the future is too unpredictable to allow for comprehensive long-term planning").

modest. It is easy to forget the magnitude of our ignorance about the world's systems, for humans have a tendency to imagine that the era of understanding is at last at hand.⁴² However obvious the ineptitude of the land and resource management policies put in place by prior decision makers,⁴³ it is difficult to imagine that present day policies may one day appear equally misguided.

But that is precisely what is likely to happen. As understanding of the natural world increases, some of today's state-of-the-art ecological management practices will likely be revealed to be ineffectual, and perhaps even injurious. The strict limitations on residential construction in some "preserved" forests⁴⁴ may turn out to be unnecessary for the promotion of conservation goals, as researchers gain a more sophisticated comprehension of which human activities are harmful to the plants and animals we wish to protect. Moreover, the very identity of these plants and animals, and the level of protection we wish to afford them, may also change. The late twentieth century obsession with saving charismatic megafauna (such as wolves and grizzly bears) and megaflore (including coastal redwood trees) may give way to different models of preservation. In fact, to a substantial extent such a shift in preservation practices is already occurring, for many ecologists and policy makers advocate that preservation efforts focus on the maintenance of ecosystems rather than the survival of one or more selected species.

Advances in ecological understanding also may cause planners to reconsider the advisability of preserving large tracts of farmland or ranch land near sensitive waters. The adverse effects of the pollution caused by fertilizers and chemicals may, in some cases, outweigh the aesthetic benefits of a certain kind of scenic landscape. In addition, a better grasp of the impact of air pollutants may diminish enthusiasm for restricting the development of large tracts near populated areas. Restricting construction close to heavily populated areas may cause

42. Cf. DANIEL A. FARBER, *ECOPRAGMATISM: MAKING SENSIBLE ENVIRONMENTAL DECISIONS IN AN UNCERTAIN WORLD* 178 (1999) ("It is tempting to think that *now* we finally understand environmental risks and need only to find appropriate solutions. The reality is that we are faced with a high degree of uncertainty.").

43. See generally NANCY LANGSTON, *FOREST DREAMS, FOREST NIGHTMARES: THE PARADOX OF OLD GROWTH IN THE INLAND WEST* (1995) (describing how federal management policies damaged forests in the Pacific Northwest's Blue Mountains); TED STEINBERG, *DOWN TO EARTH: NATURE'S ROLE IN AMERICAN HISTORY* 142 (2002) (describing the early twentieth century forest management practices that "either failed to fully comprehend or chose to ignore...the complexity and, above all, the interdependency of the forest").

44. See, e.g., NEW ENGLAND FORESTRY FOUND., *THE PINGREE FOREST EASEMENT: A SUMMARY*, at <http://www.newenglandforestry.org/projects/pingreeeasement.asp> (last visited Aug. 27, 2004).

deteriorations in air quality, as lower salaried employees are forced by rising housing costs to commute long distances to work. The precise environmental impact will depend, as always, on a variety of factors, including the types and ages of the vehicles driven by commuters, as well as the availability and affordability of public transportation. Nevertheless, the assumption that preventing selected changes in the uses of distinctive lands necessarily improves public welfare is clearly misguided. It is reasonable to expect that greater knowledge of how the natural world functions and how surroundings are affected by human behavior will lead to continual reassessment of the advisability of earlier preservation decisions.

B. The Development of New Technologies

Many land preservation efforts are motivated by the need to furnish adequate supplies of critical resources to particular human populations. One example of this practice is that water suppliers across the nation have acquired large tracts of land near major metropolitan areas in order to provide water that meets applicable health and safety requirements.⁴⁵ Owning significant quantities of land in the watershed is not, of course, the only way to achieve an adequate water supply, for providers of water might also choose to construct filtration facilities. Not surprisingly, water suppliers choose to purchase land rather than build plants when the former option is less expensive than the latter one.⁴⁶ By reducing the cost of filtration, technological advances could cause water suppliers to prefer to construct plants rather than continue to acquire or to retain significant amounts of land. Given the quantity of U.S. land that has been preserved to ensure a safe and plentiful water supply, such changes could reduce substantially the number of preserved acres, especially those close to inhabited areas. Other technological advances have the potential to lead to similar reductions in the perceived need to conserve sizable parcels. For example, if emissions of carbon dioxide fall, interest in maintaining or increasing the world's supply of forested land may decrease also.⁴⁷

45. Barton H. Thompson, Jr., *Markets for Nature*, 25 WM. & MARY ENVTL. L. & POL'Y REV. 261, 272-85 (2000).

46. Thompson, *supra* note 38, at 256 (noting that "New York City chose to purchase and preserve land in the Catskills watershed because the federal Environmental Protection Agency would have required the city to build a filtration facility costing \$6-8 billion"). See also GRETCHEN C. DAILY & KATHERINE ELLISON, *THE NEW ECONOMY OF NATURE: THE QUEST TO MAKE CONSERVATION PROFITABLE* 2-6 (2002).

47. GEOFFREY HEAL, *NATURE AND THE MARKETPLACE: CAPTURING THE VALUE OF ECOSYSTEM SERVICES* 71-72 (2000) (noting that "forests are central to the global carbon

New technologies may also increase the value of certain natural resources, leading to recalculations of the costs and benefits of preserving the land on which they are located. Moreover, these technologies may not only augment the economic worth of materials located on, under, or near sensitive lands, but also the usefulness of these materials in promoting environmental objectives. A recent example illustrates this point. In October 2002, the *Wall Street Journal* reported on a land use controversy in scenic Danby, Vermont, where a Swiss mining company aimed to extract calcium carbonate from beneath a mountain.⁴⁸ Not surprisingly, many local residents opposed the mining company's plans to set off large amounts of explosives each week in order to conduct their operations. The twist is that calcium carbonate is used to make paper, and the adoption of a manufacturing process that substitutes this mineral for wood fiber promises to save large numbers of trees from being cut down. The question of whether to permit the mining to proceed thus pitted two competing preservation values against one another.⁴⁹

C. Shifts in Cultural Values

Although some proponents of land preservation likely imagine that their efforts will cordon off what remains of the nation's untouched lands, this vision of what preservation accomplishes is incorrect. Simply put, there remain no lands entirely free from mankind's impact, for human actions have played a critical role in the configuration of every corner of the North American landscape.⁵⁰ As wildlife biologist David Wilcove observes,

At some point after their arrival in the New World, the earliest Americans ceased being nomadic hunters (if, indeed, they ever were truly nomadic) and began

cycle...taking out of the atmosphere about 10¹⁵ grams of carbon each year, 14 percent of the total emitted by human activities").

48. Laura Johannes, *Scarce Resources: Vermont Mine Plan Pits 2 Green Goals Against Each Other: A Scenic Town Fights Drive to Dig Mineral That Lets Paper Makers Spare Trees*, WALL ST. J., Oct. 7, 2002, at A1.

49. *Id.* at A12 (reporting the statement of a Natural Resources Defense Council senior scientist: "'Traditional New England towns are fast disappearing.'...The people fighting the mine 'are doing us all a service by helping to preserve a slice of traditional culture.'").

50. See generally DANIEL B. BOTKIN, *DISCORDANT HARMONIES: A NEW ECOLOGY FOR THE TWENTY-FIRST CENTURY* 194-95 (1990); William M. Denevan, *The Pristine Myth: The Landscape of the Americas in 1492*, 82 ANNALS OF THE ASSOC. OF AM. GEOGRAPHERS 369 (1992); WILLIAM CRONON, *CHANGES IN THE LAND: INDIANS, COLONISTS AND THE ECOLOGY OF NEW ENGLAND* (1983).

modifying the land to suit their needs—using fire to create new growth for deer and quail, clearing patches of forest to grow crops, damming and diverting small streams for irrigation, and building settlements. Actions such as these, replicated through the centuries and magnified by human ingenuity and ambition, would eventually produce the contemporary American landscape, one in which every square mile has been altered by humans.⁵¹

What land preservation accomplishes, then, is the maintenance of the results of some (but by no means all) interactions between humans and nature. In many instances, the fact that the preserved land owes its contours to human industry is easy to discern. Thus, resources are devoted to preserving farms, ranches, hunting properties stocked with desirable game, and vineyards, all of which are routinely referred to as “natural” lands, notwithstanding the formidable energy humans must expend to prevent unmediated nature from reclaiming the land. The fact that these lands are viewed as worthy of preservation, while other products of human interaction with the natural world are not, is a matter of societal preferences. It comes as no surprise that early twenty-first century Americans cherish agricultural and ranching landscapes, given the emotional resonance of the images of the family farmer and the rugged cowboy.

In the case of the configuration of many preserved lands, of course, humans played a far less intense, or at any rate less evident, role.⁵² But the decisions to preserve these lands also reflect human-created cultural values, for not all wild lands are regarded as worth saving. A landscape that appears ugly and dangerous to one society may strike another as both beautiful and ecologically complex.⁵³ Even among members of the same culture, fierce disagreement may rage concerning

51. DAVID S. WILCOVE, *THE CONDOR'S SHADOW: THE LOSS AND RECOVERY OF WILDLIFE IN AMERICA* 4–5 (1999).

52. STEPHEN JAY GOULD, *LEONARDO'S MOUNTAIN OF CLAMS AND THE DIET OF WORMS: ESSAYS ON NATURAL HISTORY* 2 (1998) (observing that “almost every spot perceived with rapture as ‘virgin’ wilderness (at least here in northeastern America) really represents old farmland reclaimed by new forest”).

53. MARJORIE HOPE NICOLSON, *MOUNTAIN GLOOM AND MOUNTAIN GLORY: THE DEVELOPMENT OF THE AESTHETICS OF THE INFINITE* 3 (reprint ed. 1997).

During the first seventeen centuries of the Christian era, “Mountain Gloom” so clouded human eyes that never for a moment did poets see mountains in the full radiance to which our eyes have become accustomed. Within a century—indeed, within fifty years—all this was changed. The “Mountain Glory” dawned, then shone full splendor.

Id. See generally ROBERT MACFARLANE, *MOUNTAINS OF THE MIND: HOW DESOLATE AND FORBIDDING HEIGHTS WERE TRANSFORMED INTO EXPERIENCES OF INDOMITABLE SPIRIT* (2003).

amenity and ecological values. What is to some an old growth forest may appear to others to be a rotting wood, just as a tract of coastal land may be viewed as either an ecologically precious wetland or a mosquito-ridden bog.

D. The Instability of Nature

One key assumption that undergirds many discussions of land preservation is that, absent deleterious human interference, preserved lands will continue to exhibit their special attributes. This belief has clear implications for public policy, for it indicates that devoting resources to curtailing potentially harmful human activities is certain to yield benefits. Unfortunately, this view of what preservation measures necessarily accomplish is founded on an erroneous understanding of how the natural world functions. Contrary to the common belief that nature, left to her own devices, will persist in a state of balance, the physical world is in a state of continual disruption.⁵⁴ As a result, significant transformations in landscapes can occur over short periods of time.⁵⁵ A fire or an aggressive pathogen may destroy a treasured forest,⁵⁶ or a climate shift may spur a rare species to migrate. Alternately, a newly arrived species may change an area's ecosystem so that it comes to resemble the one that the new species left behind.⁵⁷ The effect of these changes on the beauty or ecological value of the land will vary, of course. But one thing is certain: the fact that a property manifests certain characteristics today provides no guarantee that it will retain those features.⁵⁸ Current thinking about legal regimes relating to land preservation fails, for the most part, to incorporate an understanding of

54. See Daniel B. Botkin, *The Nature of Change*, in FORCES OF CHANGE: A NEW VIEW OF NATURE 15 (2000); Jonathan Baert Wiener, *Law and the New Ecology: Evolution, Categories and Consequences*, 22 *ECOLOGY L.Q.* 325, 328 (1995).

55. PAUL SCHULLERY, *SEARCHING FOR YELLOWSTONE: ECOLOGY AND WONDER IN THE LAST WILDERNESS* 227-28 (1997) (describing the reduction in the acreage of Yellowstone National Park covered by aspen trees).

56. Kurt Kleiner, *Silent Killer Could Fell Ancient Giants of the California Forests*, 175 *NEW SCIENTIST* 9 (2002) (describing the detection of *Phytophthora ramorum*, a fungus like alga that has already killed thousands of oak trees in California's coastal forests).

57. Mark Sagoff, *Native Is as Native Does: An Analysis of the Distinction Between Indigenous and Non-Indigenous Species* (2002) (unpublished manuscript, on file with author).

58. DAVID R. FOSTER, *THOREAU'S COUNTRY: JOURNEY THROUGH A TRANSFORMED LANDSCAPE* 223 (1999) (striking the "cautionary note" that "if we set out with the expectation of protecting any landscape as it is today, we are certain to be frustrated, for it will inevitably continue to change").

nature's instability.⁵⁹ Instead, the axiom that perpetual preservation of the land's physical state is an achievable goal goes unquestioned. Accepting the disequilibrium character of nature means recognizing that lands may lose their preservation value due not only to human malfeasance or to changing human preferences, but also to nature's own processes.

In the eyes of many, human activity has endangered the natural world.⁶⁰ Restricting development on selected lands appears to offer a means of containing the damage, thereby ensuring that at least some parts of the world remain in a pristine, natural state. Because land preservation measures are equated with saving what is left of nature, it is difficult to imagine that tomorrow's preservation preferences—indeed, perhaps even tomorrow's *definition* of preservation—will differ from those of today.⁶¹ But the fact that tomorrow's decision makers will be dealing with a changed set of natural resources while employing new technologies and superior knowledge makes it highly unlikely that their judgments will *not* differ from ours. The near inevitability of significant shifts in cultural values only compounds the likelihood that future policy goals will differ from current ones.

III. REVERSING PRESERVATION DECISIONS

Notwithstanding the limited predictive skills of present-day decision makers, one might defend the construction of barriers to development on the grounds that decision makers can always reverse preservation choices. In this respect, preservation might be contrasted with development, which is generally regarded as impossible or extremely expensive to undo.⁶² According to this line of thinking, the trouble and expense of freeing land from an ill-advised ownership arrangement is sure to pale when compared to the costs of dismantling

59. Wiener, *supra* note 54; Fred P. Bosselman & Dan A. Tarlock, *The Influence of Ecological Science on American Law: An Introduction*, 69 CHI-KENT L. REV. 847 (1994) (observing that "current environmental law...rests on a simple ecological paradigm which the science has now rejected and replaced with a more complex, open-ended model").

60. See generally BJORN LOMBORG, *THE SKEPTICAL ENVIRONMENTALIST: MEASURING THE REAL STATE OF THE WORLD* (2001) (describing widespread concerns that the world's environmental well-being is in serious peril).

61. Mahoney, *supra* note 8, at 765 (suggesting that future generations are likely to have their own conceptions of which land use choices count as "development" and which represent "preservation").

62. David Farrier, *Conserving Biodiversity on Private Land: Incentives for Management or Compensation for Lost Expectations?*, 19 HARV. ENVTL. L. REV. 303, 343 (1995) (arguing that conserving land increases the set of choices available in the future because developing land leads to changes that in most cases "will be substantially irreversible").

an industrial enterprise or turning a planned unit development back into grazing land. In a similar vein, land acquired by The Nature Conservancy can always be transferred back to private ownership, but should The Nature Conservancy or a similar organization fail to acquire it, the property's ecological distinctness will probably vanish.

Although the conviction that preservation decisions are reversible, while development decisions are not, enjoys widespread acceptance, the truth is far more complicated. It is true, of course, that choices regarding the use and disposition of land are not equally reversible. The ease of reversal, however, depends upon particular facts, not on whether the decisions to be revisited caused the land to be classified as "developed" or "preserved." For example, most would agree that undoing the decision to "preserve" a tract of open space by not building a strip mall requires nothing other than the construction of another strip mall. The inevitable differences between the original unbuilt commercial facility and the one that goes up when the land is ultimately developed are unlikely to cause anyone to argue that the preservation measure was not reversible. But if the structure foregone were the Chartres Cathedral, reversing the decision to preserve would in all likelihood be viewed as impossible.⁶³

In assessing the reversibility of decisions involving land, it is helpful to bear in mind that reversibility has two separate components. First, there is the issue of whether, how, and to what degree the land itself is susceptible to physical alteration. Second, reversing decisions may also require a reconfiguration of human-created institutional arrangements, most notably private property rights or public laws and regulations. Simply put, physically altering the land will sometimes prove easier than reworking man-made institutional structures.

A. Reshaping the Physical World

Contrary to popular belief, "development" does not necessarily last forever.⁶⁴ Not only can preserved lands be developed, but developed lands can revert to what most humans would describe as a "wild" state. Sometimes land is restored to an undeveloped state through conscious human effort, as with the ongoing restoration of the Florida Everglades,⁶⁵

63. See *infra* Part III.A.

64. Pindyck, *supra* note 34, at 1110-48 (offering the paving over of a wilderness area to make a parking lot as an example of an irreversible decision).

65. COMPREHENSIVE EVERGLADES RESTORATION PLAN, RESCUING AN ENDANGERED ECOSYSTEM—THE JOURNEY TO RESTORE AMERICA'S EVERGLADES, at <http://www.evergladesplan.org/> (last visited Aug. 26, 2004) (detailing \$11 billion plan to restore the "essential characteristics" of the Everglades ecosystem).

the removal of roads in national parks,⁶⁶ and the conversion of hazardous waste disposal sites into refuges for wildlife.⁶⁷ Alternatively, the capacity and proclivity of non-human nature to extinguish the land arrangements and structures that human civilization produces can lead to tamed lands being transformed into undeveloped ones.⁶⁸ Abandoned agricultural lands are quickly overrun by the forests that generations of farmers worked to keep at bay,⁶⁹ and old industrial facilities crumble, leaving behind small piles of rubble as the only readily apparent evidence of their existence.⁷⁰

Of course, reversing anthropogenic change is not always cheap. The reclamation of properties that have suffered severe environmental contamination can cost hundreds of millions of dollars, depending on the level of remediation sought as well as the technologies available.⁷¹ In some cases, undoing the effects of human conduct is impossible. The most salient example of irrevocable change wrought by humans is the eradication of plant or animal species. Once the last specimens vanish, no expenditure of resources can bring them back. Also irreversible is the destruction of historic and prehistoric artifacts, although in many instances the portability of these items means that their continued existence and the development of the lands they are found on are not mutually exclusive.

Notwithstanding the irreversibility of a number of development decisions, many actions that are (or were at one time) labeled "irreversible" are in fact undone with surprising ease and frequency. One notable example is the removal of hundreds of dams over the past

66. See, e.g., SCHULLERY, *supra* note 55, at 182 (noting that there are "significantly fewer road miles available" to today's visitors to Yellowstone National Park than there were to visitors in 1935).

67. See, e.g., Rocky Mountain Arsenal National Wildlife Refuge Act of 1992, Pub. L. No. 102-402, 106 Stat. 1961 (providing for the operation of a 17,000 acre property located near Denver, Colorado, as a wildlife refuge until the completion of an environmental cleanup of the hazardous wastes generated by U.S. Army chemical manufacturing activities, after which the property is to become a permanent part of the U.S. National Wildlife Refuge System).

68. See generally FELIPE FERNANDEZ-ARMESTO, *CIVILIZATIONS: CULTURE, AMBITION AND THE TRANSFORMATION OF NATURE* (2001).

69. FOSTER, *supra* note 58, at 12 (describing the reforestation of the New England landscape that has occurred over the past century).

70. STEWART BRAND, *HOW BUILDINGS LEARN: WHAT HAPPENS AFTER THEY'RE BUILT* 222-23 (1995). Brand reproduces two photographs of a parcel of land near Virginia City, Nevada. In the first, taken in 1868, the landscape is dominated by the Gould & Curry Silver Mining Co. Reduction Works, then the world's largest quartz mill. The second, dated 1979, is an image of sparse vegetation and scattered stones.

71. See generally KATHERINE N. PROBST & DAVID M. KONISKY, *SUPERFUND'S FUTURE: WHAT WILL IT COST?* (2001).

decade, marking a significant shift in the management of America's rivers.⁷² As a recent book on the subject observes, as of 2002, the "rate of decommissioning dams in the United States has overtaken the rate of construction."⁷³ It is fair to state that the wide-scale destruction of dams in the early twenty-first century was not foreseen by those writing about environmental preservation only two or three decades ago, who sometimes invoked dam construction as a paradigmatic example of *irreversible* development.⁷⁴

When it comes to the choices grouped together under the rubric of preservation, the costs of undoing decisions also vary. At first blush, the idea that reversing a preservation decision might entail reshaping lands may be counterintuitive, given that land preservation is often conceived of as an *absence* of human interaction with the land in question.⁷⁵ But the supposition that preservation involves leaving the land alone is not correct. An examination of protected lands reveals that preservation measures do not, and for the most part are not intended to, end or reduce human interaction with the land. Examples abound: Owners of working farms and ranches subject to conservation servitudes encourage the presence of some plants while fiercely discouraging the presence of others, apply potent insecticides and fungicides to their properties, and take steps to repair and maintain residential dwellings. The National Park Service builds (and removes) roads, stores, nature centers, and hotels.⁷⁶ In managing National Wildlife Refuges, the U.S. Fish and Wildlife Service works hard to remove species that are currently classified as "invasive."⁷⁷ In fact, even in instances where the putative goal of preservation is to leave nature to herself, humans are

72. David D. Hart et al., *Dam Removal: Challenges and Opportunities for Ecological Research and River Restoration*, 52 *BIOSCIENCE* 669 (2002).

73. ELIZABETH GROSSMAN, *WATERSHED: THE UNDAMMING OF AMERICA* 3 (2002).

74. See, e.g., Kenneth J. Arrow & Anthony C. Fisher, *Environmental Preservation, Uncertainty and Irreversibility*, 88 *Q.J. ECON.* 312, 314 (1974).

75. Jon M. Conrad, *Wilderness: Options to Preserve, Extract, or Develop*, 22 *RESOURCE & ENERGY ECON.* 205 (2000).

76. See generally RICHARD WEST SELLARS, *PRESERVING NATURE IN THE NATIONAL PARKS: A HISTORY* (1997) (discussing the conflict "between national park management for aesthetic purposes and management for ecological purposes").

77. NAT'L WILDLIFE REFUGE ASSOC., *SILENT INVASION: A CALL TO ACTION* 3 (2002), available at <http://www.refugenet.org/new-pdf-files/Silent%20Invasion%20pdf.pdf> (last visited Aug. 26, 2004) (asserting that alien species "are reaching deep into our National Wildlife Refuge System...creating an ecological crisis in the very places we have set aside to protect native plants and pristine landscapes" and stating that "refuge managers know what to do: find partners, devise strategies and mobilize volunteers to drive out the invaders").

quick to interfere with characteristics of nature that they judge to be undesirable.⁷⁸

To reverse a preservation decision, then, sometimes requires eliminating or minimizing the impact of human activity. Converting a "preserved" golf course into a residential subdivision might require removing an irrigation system, flattening man-made hills, and filling in ponds. In cases where natural resources disappear or deteriorate, preservation might be characterized as irreversible.⁷⁹ For example, the choice to preserve a forest by refraining from logging might be impossible to revisit in the sense that the trees may burn down or fall prey to an infestation of insects.⁸⁰ Under such circumstances, the option to undertake some forms of development will vanish along with the foregone resources. Preservation may also be regarded as irreversible in cases where the choice not to build a structure deprives future generations of scenes of exceptional beauty. Imagine if the builders of the Chartres Cathedral had decided to forego construction in favor of maintaining pastureland. Given the loss of knowledge of some of the techniques employed by medieval artisans, we would be unable to create a substitute today. The fact that it may be difficult to conceive of any building erected today inspiring the emotional response in our descendants that Chartres evokes in us may reflect unfavorably on current architectural and construction practices, but it is not an inevitable consequence of the choice to build.

Finally, the fact that land has been devoted to one form of preservation does not mean that it can be quickly and easily redeployed for other preservation purposes. This is especially likely to be the case with respect to lands devoted to agriculture, which are often subject to ecological degradation that can be expensive to remedy. Converting a farm into a wildlife refuge may require just as substantial an investment

78. See, e.g., Wilderness Act of 1964, 16 U.S.C. § 1133(d)(1) (2000) (providing that "such measures can be taken as may be necessary in the control of fire, insects, and diseases, subject to such conditions as the Secretary deems desirable"); H.R. REP. NO. 95-540, at 6 (1977) (stating that section 4(d)(1) of the Wilderness Act of 1964 "permits the use of mechanized equipment, the building of fire roads, fire towers, fire breaks or fire pre-suppression facilities...In short, anything necessary for the protection of public health or safety is clearly permissible.").

79. *Kootenai Tribe of Idaho v. Veneman*, 313 F.3d 1094 (9th Cir. 2002) (Kleinfeld, J., concurring in part and dissenting in part) (arguing that "it makes no sense to assume" that the U.S. Forest Service's Roadless Rule "will 'conserve and protect' the forests," in view of the evidence submitted by plaintiffs that "roadlessness may promote forest fires, insect infestation and disease").

80. Timothy Egan, *On the Hot Trail of Tiny Killer in Alaska*, N.Y. TIMES, June 25, 2002, at F1 (reporting that nearly four million acres of white spruce trees on Alaska's Kenai Peninsula are "dead or dying from an infestation of beetles").

as establishing the refuge on the site of commercial office buildings. Indeed, decisions to engage in one form of preservation may preclude alternative preservation activities in the future. For example, the presence of one plant or animal species can render land incapable of supporting other species, thereby excluding life forms that later decision makers might regard as more ecologically or aesthetically valuable.

B. Modification of Institutional Arrangements

Although discussions of the reversibility of land use choices tend to focus on the problems associated with reconfiguring the physical world, in a number of instances institutional considerations are likely to prove the greater impediment to undoing decisions involving land. The failure of efforts to replace an ill-advised residential subdivision with a much needed nature preserve, for instance, may not spring from the practical impossibility of removing houses and stocking the property with wildlife. Rather, the preserve may never be established because of the near insurmountable obstacle of persuading every single homeowner to sell or donate her property.

By the same token, the impediment to removing strip malls to restore agricultural land may not be the logistical challenge of tearing down buildings, but instead the need to reassemble the original parcel through purchases from numerous landowners.⁸¹ The difficulty of reassembling property rights once they have been divided up is one reason that development seems so permanent. On an intuitive level, people grasp that, even when it would be logical to combine adjacent properties into a single holding, transaction costs may prevent the consummation of the deal.⁸²

This difficulty is more easily overcome, but no less real, when the government is involved. It is true that governmental entities have broad powers to reunite subdivided land interests held by private parties back into a single parcel through the exercise of the eminent domain power. So long as the acquisition of property is for "public use," a requirement that courts construe broadly,⁸³ governments can force unwilling private owners to transfer their properties in exchange for fair market value. Exercises of eminent domain have often provided an

81. Of course, the greatest obstacle to returning commercial properties to their previous incarnation as a farm is often the fact that the land is more valuable when used for businesses.

82. Michael Heller, *The Boundaries of Private Property*, 108 *YALE L.J.* 1163, 1168-72 (1999) (detailing the problems associated with reassembling fragmented property rights).

83. *Hawaii Housing v. Midkiff*, 467 U.S. 229 (1984); Thomas Merrill, *The Economics of Public Use*, 72 *CORNELL L. REV.* 61 (1986).

effective tool for governments to assemble large parcels of property that would be hard to bring together through negotiated purchases.⁸⁴ The willingness of governmental entities to make use of the eminent domain power is constrained, however, by the prospect of the fierce political opposition that condemnations of property can spark.⁸⁵

Reversing the institutional structures of preservation may also be hampered by the fact that interests in land held by government entities are, in general, not subject to condemnation by "lower" government entities.⁸⁶ Absent specific statutory authorization, municipalities cannot condemn fees simple and conservation servitudes owned by state and federal government instrumentalities, and state governments are prohibited from exercising their eminent domain powers to acquire federally held land interests.⁸⁷ As with other institutional hurdles, these obstructions are not insurmountable, but they do have the capacity to impose real costs.

When it comes to reversing decisions to preserve privately held land, institutional arrangements are likely to pose significant hurdles. For one thing, many preservation measures undertaken by private parties involve the transfer of all their rights to the property or a conservation servitude to a governmental entity. Once property interests are in public hands, there often exist strong barriers to the return of such property interests to private hands. In some instances, state constitutional provisions reduce the likelihood that lands set aside for conservation will be made available for other purposes. Florida's constitution, for example, provides that fees simple held by state entities and "designated for natural resources conservation purposes...may be disposed of only" upon the vote of two-thirds of the governing board of the entity that holds the land.⁸⁸ In the case of federally owned preserved lands, revising the institutional arrangements may require federal legislation. These changes are certainly feasible, but undeniably costly. And, as public choice scholars know all too well, the fact that a change would increase aggregate welfare does not guarantee that it will be accomplished.

In instances where full or partial property rights are transferred to nongovernmental nonprofit organizations, there is also reason for concern that ill-advised or outdated preservation decisions may not be

84. MERRILL & DANA, *supra* note 32, at 27-32.

85. *But see* Poletown Neighborhood Council v. Detroit, 304 N.W.2d 455 (Mich. 1981).

86. 1 NICHOLS ON EMINENT DOMAIN § 2.2 (Julius L. Sackman ed., Matthew Bender rev. 3d. ed. 1997).

87. *Id.*

88. FLA. CONST. art. X, § 18 (1998).

revisited. Conservation organizations, which include more than 1200 land trusts that have been established throughout the United States, serve and respond to a number of different constituencies.⁸⁹ Some, including The Nature Conservancy and The Trust for Public Lands, have a high profile, both domestically and abroad, and are therefore sensitive to public opinion (especially donors' opinions) dispersed over a broad geographical area. Others, such as the Napa Valley Land Trust and the Society for the Protection of New Hampshire Forests, focus on regional concerns.⁹⁰ It is impossible to state with confidence, however, that the interests of any of these organizations serve as a reliable proxy for the interests of the public at large. To point out that the needs and goals of conservation organizations may diverge from those of the general public is not to impugn the motives of these organizations. Indeed, the lack of identity of interest between nonprofit groups and the public is a serious issue that is in no way limited to conservation organizations.

Still, the fact remains that it is hard to predict how nonprofit firms will respond to changes. For one thing, the mandate of many organizations is to pursue particular goals, such as scenic landscape preservation or the acquisition and maintenance of habitats for endangered species, not to promote conservation in a general sense. This has important implications for conservation and other policy choices. Not only might conservation organizations be unwilling to make land available for low-income housing or child-care facilities, but it is also conceivable that organizations with narrow missions may refuse to deploy their assets to further alternative conservation goals, even those that promise to yield great social benefits.

When the property interest held by the governmental entity or nonprofit organization is a conservation servitude, rather than a fee simple, undoing preservation poses special challenges. The terms of most conservation servitudes contain provisions that are designed to frustrate efforts to reunite conservation servitudes with the fees simple they burden.⁹¹ This means that the most straightforward method of extinguishing an undesirable servitude may be unavailable. Of course, the terms and conditions of conservation servitudes can always be amended through the mutual agreement of the owner of the burdened fee and the holder of the servitude, but to date most organizations that hold conservation easements have taken the position that these instruments should be amended sparingly, if at all, and then only to

89. See generally SALLY K. FAIRFAX & DARLA GUENZLER, CONSERVATION TRUSTS 3 (2001) (surveying a "spectrum of organizations" that promote "land and resource conservation").

90. *Id.* at 169-98.

91. Mahoney, *supra* note 8, at 770-79.

further conservation goals. The policy articulated by the Pacific Forest Trust, a land trust committed to preserving the "private productive forest lands of the Pacific Northwest," is representative:

[C]onservation easements always should be implemented with the idea they will not be modified or amended. However, changed circumstances or conditions might someday justify an amendment to the easement document. Such circumstances could include the need to clarify the document's terms; or to better protect the conservation values due to natural changes or changes in technology. Amendments to easements are rare and serve to improve the protection of the property's conservation values.⁹²

In addition, the recently issued *Restatement (Third) of Property (Servitudes)* provides for special rules for the modification and termination of conservation servitudes held by governmental entities or conservation organizations, explaining that, "[b]ecause of the public interests involved, these servitudes are afforded more stringent protection" than other servitudes.⁹³ Under these rules, in the event that the preservation purpose for which the servitude was created becomes infeasible, the servitude may be modified to permit another conservation purpose in accordance with the principles of the cy pres doctrine.⁹⁴ Only if no conservation or preservation purpose whatsoever can be served by the continuance of the servitude should land burdened by conservation servitudes be released for other productive uses.⁹⁵

To date, the potential difficulty and expense of reversing or modifying the rearrangements of property rights wrought by the preservation of private lands have been ignored. Either the fact that

92. PACIFIC FOREST TRUST, CONSERVATION EASEMENT FAQs, at <http://www.pacificforest.org/services/faqs.html> (last visited Aug. 27, 2004).

93. RESTATEMENT (THIRD) OF PROPERTY (SERVITUDES) § 7.11 cmt. (2000). "Conservation Organization" is defined as "a charitable corporation, charitable association, or charitable trust whose purposes or powers include conservation or preservation purposes." *Id.* § 1.6.

94. *Id.* § 7.11(1). Under the cy pres doctrine, a court may authorize the administrators of a charitable trust to devote trust assets to an alternative, related charitable purpose in the event that the enforcement of the donor's intent becomes impossible, impracticable, or illegal. JESSE DUKEMINIER & STANLEY M. JOHANSON, WILLS, TRUSTS AND ESTATES 869-79 (6th ed. 2000). The comment on section 7.11 of the *Restatement* maintains that, "[b]ecause conservation servitudes are usually intended to be 'perpetual,' finding that the grantor's intent was broad enough to encompass a more general conservation or preservation purpose than the particular use specified in the instrument will ordinarily be justified absent a contrary provision in the document creating the servitude." RESTATEMENT (THIRD) OF PROPERTY (SERVITUDES) § 7.11 cmt. (2000).

95. *Id.*

preservation of private lands entails not inaction but shifts in the distribution of property rights goes unrecognized, or it is assumed that revisiting today's preservation choices will prove unnecessary. The failure to devote attention to the long-term consequences of transferring full or partial property rights to governmental and nonprofit institutions is unfortunate. It is true that history teaches that the institutions erected by human societies do not endure forever. However loudly today's decision makers trumpet the claim that measures to set aside lands as parks, wilderness preserves, and national monuments will be in force in perpetuity,⁹⁶ there is nothing the present generation can do to prevent those born later from reaching—and implementing—their own judgments. But the costs of revising institutional frameworks are never zero and under certain circumstances will be considerable.

CONCLUSION

Over the past several decades, a substantial number of private landowners have taken steps to “preserve” their properties. What transforms privately owned lands into preserved ones is, as a rule, a shift in ownership structure: either a conservation servitude or a fee simple is transferred to a governmental entity or to a nonprofit organization devoted to conservation purposes. One important motivation for reconfiguring the ownership structure is to make reversal of the conservation choice hard or even impossible.

In the abstract, these efforts to protect land from the perceived depredations of development are hard to oppose, for the very phrase “land preservation” evokes both reverence for the earth and responsible planning for the future. Acutely aware of their own mortality, human beings take satisfaction in the belief that lands of exceptional scenic and ecological value are eternal, and that through preservation they can pass on these properties as a natural legacy. Even those who admit that perpetual protection of lands may not be an achievable goal insist that at the very least preservation activities do our descendants the favor of expanding their options, on the grounds that preservation must be easier to undo than development.⁹⁷

96. See, e.g., Keith Rogers, *Clinton Bolsters Protected Lands*, LAS VEGAS REV.-J., Jan. 12, 2000, available at http://www.reviewjournal.com/lvrj_home/2000/Jan-12-Wed-2000/news/12735127.html (last visited Aug. 26, 2004) (“Ten (thousand) or 20,000 years from now, if the good Lord lets us all survive as a human race, no one will remember who set aside this land. But the children will still enjoy it.”).

97. See, e.g., Federico Cheever & Nancy A. McLaughlin, *Why Environmental Lawyers Should Know (and Care) About Land Trusts and Their Private Land Conservation Transactions*, 34 ENVTL. L. REP. 10,223, 10,231 (2004) (arguing that “lamentations about dead hand control in

But the notion that choices to develop are irreversible, or nearly so, while decisions to preserve will either not merit revision or will prove simple to undo, is wrong. Simply put, whether choices are labeled "preservation" or "development" serves as an inadequate proxy for reversibility or, for that matter, for social benefit. In making decisions involving land uses and institutions, policy makers should recognize that many of their decisions will merit reassessment, and that both preservation and development measures can limit future options. Such an approach would go a long way toward ensuring that land preservation measures serve the public interest.