Private property plays two opposing roles in stories about the environment. In the story favored by most environmentalists, private property is the bad guy. It balkanizes an interconnected ecosystem into artificial units of individual ownership. Owners of these finite parcels have little incentive to invest in ecosystem resources and every incentive to dump polluting wastes onto other parcels. Only by relocating control over natural resources in some central authority like the federal government, can we make integrated decisions designed to preserve the health of the entire ecosystem. For these traditional environmentalists, private property is the problem; public control is the solution.

There is a counter story, told by the proponents of what is sometimes called free market environmentalism. In this story, private property is the good guy. Environmental degradation is a problem because of incomplete property rights. If all resources were privately owned, then no one would be able to impose externalities on anyone else; potential polluters would have to purchase the right to pollute first. Similarly, if all resources—including habitats of endangered species and other ecologically sensitive resources—were privately owned, then owners would have incentives to invest in the preservation of these resources, and would use their ingenuity to get persons who care about environmental protection to pay for it. For free market environmentalists, public control of resources is the problem; private property is the solution.

Both sides in this debate are only half right. The traditional environmentalists are closer to the mark in their diagnosis of the problem. Property rights are always and inevitably incomplete, as it is costly to set up and enforce any system of private property. Because
property rights are incomplete, owners of resources that are subject to private ownership—such as parcels of land devoted to productive uses—will always have incentives to disregard the costs they impose on common resources that are not subject to private ownership. Sometimes creating new types of property rights can help the situation; more often, however, the only cost-effective solution to these sorts of spillovers is government regulation.

On the other hand, the free market environmentalists are closer to the mark in devising a solution to the problem. Missing from the traditional account is any credible theory of how we can generate collective action to protect sensitive ecosystem resources. Bursts of collective altruism do happen, but they are difficult to sustain. Witness the history of socialism, or, more pertinently the history of environmentalism. What is needed is an institutional arrangement that generates private incentives supporting collective action that will protect the environment. The best such arrangement is the widespread private ownership of land. In this sense, the free market environmentalists are closer to the mark in their prescription of a cure than are the traditional environmentalists, with their call for a bigger government.

I.

Casual empiricism strongly suggests that private property is good for the environment. Eastern Europe in the 1980s offered a kind of natural experiment about the effects of different property regimes. An iron curtain ran through Eastern Europe from the Baltic to the Mediterranean. West of the line, real property was predominately subject to private ownership. East of the line, real property was owned by the state. The results were plain for all to see: while towns and villages on the west side were typically neat and clean, with well-scrubbed streets and colorful boxes of flowers in the windows, towns and villages on the east side were drab and dirty, with plaster falling off the walls and no flowers to be seen anywhere. These paired communities were generally composed of buildings of the same vintage and style of construction and were populated by families

4. See Jon Thompson, East Europe’s Dark Dawn, NAT’L GEOGRAPHIC, June 1991, at 42-44, 52, for a discussion of environmental conditions in Eastern Europe after the fall of communism.
having the same ethnic background and cultural traditions. The only difference was that for forty years the communities in the west had been under a regime of private property, while those in the east had been under a regime of collective ownership.

Clearly, there is some kind of relationship between private property and environmental amenities. But what exactly is the causal mechanism that leads from private property to increased environmental protection?

Undoubtedly, part of the explanation has to do with what might be called the private law incentives created by a system of private property. As Harold Demsetz pointed out many years ago, private property is a powerful mechanism for internalizing externalities through private law.\(^5\) Private property does this in two ways. First, private property allows one unique owner to capture improvements in the quality of the resources that are privately owned. If there were no private property in resources, any improvements would be experienced mostly as external benefits by others, and hence improvements would be under-produced. Second, by designating one person as the owner of resources, private property makes contracting about the use of resources easier—including contracting to reduce externalities. If these resources could not be privately owned, contracting about their use would be incredibly complicated and would almost never take place.

Without denigrating the importance of these private law forces, I would stress something else: that widespread ownership of private property transforms public law as well as private law. It does so through the creation of what might be called the private property lobby. This immensely powerful lobby creates a political culture that favors the regulation of uses of private property that diminish the value of other private property.

The public law impact of private property may be more significant than the private law effect, in terms of generating significant protection for the environment. To see this, consider three effects of private property stressed by the body of literature that followed Demsetz and his thesis about the private law effects of private property.\(^6\) I will call these the “wealth effect,” the “capitalization effect,” and the “accountability effect.” In each case, the impact of these effects is weak or ambiguous insofar as it is manifested through

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6. *Id.*
private law incentives and market mechanisms. In contrast, insofar as each effect is translated into public law, it has a powerful effect on the environment.

A. The Wealth Effect

First, consider the “wealth effect.” Private property generates wealth.7 One reason for this is that private property creates vastly enhanced incentives for investing in improvements to resources. Another reason is that private property translates into longer time horizons in considering investments. A third is that private property leads to a much more efficient allocation of resources. In any event, for a given stock of natural resources, a system in which those resources are subject to private ownership and control will generate more wealth than a system in which such resources are controlled by the government or subject to open access.8

Just as private property generates more wealth, additional wealth generates more environmental protections. The relationship is not strictly linear. Data gathered by various economists suggest that increased wealth in society is initially associated with a decline in environmental quality.9 As gross national product (GNP) per capita continues to grow, however, the relationship quickly turns around and further increases in wealth become associated with increased levels of environmental protection activity. Gene Grossman and Alan Kruger, two Princeton economists, have estimated that pollution as a percentage of GNP increases with economic growth until GNP reaches about $5,000 per person;10 from then on, pollution as a percentage of GNP steadily declines as the economy continues to grow.11 Thus, after the initial hump is passed, a continuously higher percentage of social resources is dedicated to environmental protection.

Why does more wealth mean more environmental protection? Private incentives may account for some of the phenomenon. As people get richer, they devote more resources to cleaning up their own

10. EASTERBROOK, supra note 9, at 331.
11. Id.
property, either because they do not like living amidst smoke and grime or out of a sense of pride. It is also possible that as people get richer, they enter into more explicit and implicit contracts—Coasean bargains\(^{12}\)—with neighbors in order to curb polluting activities. But the wealth effect also creates incentives for private behavior less favorable to the environment. As people get richer, waste streams grow larger. If the only constraints on individuals are pride and private contractual obligations, many will be tempted to dispose of these wastes onto their neighbors’ land. Considering only private incentives and market mechanisms, the net effect of rising wealth on the environment is uncertain.

But rising wealth has another effect: stimulating higher demand for environmental protection through political mechanisms. As people get richer, they develop a stronger taste for environmental amenities.\(^{13}\) This taste translates into a demand for government action to protect the environment. Additional wealth also makes achievement of this regulatory protection more feasible. As they get richer, people become more willing to have a portion of their wealth taxed to support the regulatory and enforcement efforts necessary to sustain a program of public environmental protection. Thus, the strong correlation economists have uncovered between rising wealth and declining pollution is due, in large part, to increased regulatory activity in wealthy countries.

### B. The Capitalization Effect

A second mechanism linking private property and the environment is the “capitalization effect.” Property does not exist in splendid isolation from that which surrounds it. Instead, the value of property is profoundly affected by its environs.\(^{14}\) A small bungalow in a gritty industrial district may be worth only a few thousand dollars; the same bungalow with a beautiful view of the ocean may be worth a million or more. An economist would say that the ugliness or beauty of the surroundings is capitalized into the market value of the property. All things being equal, a clean, pleasing environment with numerous

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recreational opportunities makes property values go up. A dirty, dangerous environment without any parks or other greenery makes property values go down.

The capitalization effect, like the wealth effect, creates incentives for both private and political action. It undoubtedly creates private incentives for owners to improve their own properties, which provides external benefits to their neighbors. It also creates incentives to join with other neighbors in mutual efforts to enhance the quality of the neighborhood. This can take a number of forms, from volunteering to pick up litter in the park to entering into formal covenants to assure that property is not used in ways that might cause a decline in property values. Nevertheless, there are limits to how far the capitalization effect can drive these sorts of efforts. Each property owner has an incentive to free ride on the efforts of others who participate in the litter patrol or enter into burdensome covenants. Thus, the impact of the capitalization effect on private efforts to enhance the environment is likely to be weak.

However, the capitalization effect also creates an incentive for property owners to become involved in the political process. Professor Bill Fischel of Dartmouth calls this the “Homevoter Effect.” Homeowners are the most potent political force in the community, Fischel argues, and they use their power to pressure politicians to adopt policies—including pro-environmental ones—that will increase property values. Fischel believes that homevoter power can be seen most clearly in local politics, as homevoters lobby to keep out unwanted land uses like dumping, and demand that developers of new subdivisions create new parks. State and national environmental protection laws provide another method for voters to preserve or increase property values through legislation. For example, cleaning up Lake Michigan enhances property values along the Chicago lakefront, making such laws attractive to homeowners in that region; stricter air pollution laws enhance the value of property in Los Angeles and would appeal to wealthy Angelinos.

C. The Accountability Effect

A third effect that private property has on the environment can be called the “accountability effect.” When resources are owned by the government or held in open access commons, no single person is the

resident manager of any particular group of resources; thus, no one can be held accountable for an environmental mess. Under a private property regime things are very different. Because each patch of resources has its own owner, and hence we know whom to blame when bad things start emanating from any particular area.

The accountability effect undoubtedly provides a small but positive boost to private efforts to enhance environmental quality. Because of the accountability effect, shaming can play a role in achieving a degree of environmental protection. Members of the community will generally know who is a good neighbor, environmentally speaking, and who is not. Those who are not good neighbors can be criticized or ostracized, and this may cause them to adjust their behavior. The accountability effect also creates the precondition for Coasean bargains among neighbors that are designed to internalize externalities. There is no way to enter into a contract to limit environmental harms until people know with whom they should contract. Parcelization through private property provides this information. Again, however, there are limits as to how much environmental protection we can achieve through social norms and Coasean bargains. Undoubtedly, we can make some progress toward environmental protection efforts, and it is even very likely that we can accomplish more than most people would expect. However, free rider problems will limit how far these strategies can go.

The accountability effect also has a powerful impact on political action to protect the environment. If resources are owned by the government or are held in common, then it is possible to have collective action designed to protect these resources. Such protection takes the form of directives from upper level bureaucrats to lower level bureaucrats. There is a lot of room for slippage in such cases, a situation which is known as the principal-agent problem. Lower level bureaucrats may be more interested in pursuing their own agendas than in faithfully executing the orders from above. Once we introduce private property, however, regulation takes on much more bite. Because there is an accountable owner of each parcel, we can readily determine who is responsible if pollution or other environmental harms emanate from any particular parcel. The owner can be easily pinpointed and subjected them to civil or criminal

sanctions, which could include losing ownership of the property.

In short, because of the wealth, capitalization, and accountability effects, a system of private property provides a modest boost to private law efforts to enhance environmental quality. Additionally, these three effects exert an even more powerful force on the political system in the direction of greater environmental enforcement activity.

II.

The foregoing thesis has important implications for a number of important policy questions. For example, it suggests that public ownership of natural resources may lead to the inevitable degradation of these resources. This in turn suggests that the strong presumption against further private disposition of the public domain lands—which constitute about thirty percent of the land mass in the United States—may be misguided from an environmental protection perspective. Moreover, this thesis suggests that local regulation may be a more powerful force for environmental protection than either state or federal regulation. Thus, the strong presumption in favor of increased centralized control over resources may be misguided from an environmental protection standpoint. Let me turn to two other policy implications, which I will consider in somewhat greater detail.

A. Constitutional Shield for Private Property?

The first of these implications concerns the perennial debate over how far constitutional protections for private property should shield owners from the effects of environmental regulation. We can consider two extreme policies here, neither of which would be very satisfactory in terms of their impact on the environment.

One extreme policy would be to eliminate all constitutional protection for private property. This would greatly increase the risks of investing in private property, as the government could seize private property at any time without paying just compensation. In such a world, which has existed in many times and places, economic activity would grind to a halt. The expected return on investments in property and the level of investment would decrease and significant resources would be diverted to concealing assets or lobbying the government to take someone else’s property rather than one’s own, further depressing economic activity. The wealth effect associated with private property would be reduced, as would the capitalization effect. Because the government could seize property without paying for it, it
is plausible that the percentage of assets owned by the government would increase, reducing the accountability effect. In all likelihood, the policy of denying all constitutional protections for private property would be harmful to the environment.

Now consider the opposite policy, one that would provide full indemnity to property owners for losses in value attributable to environmental regulations. Superficially considered, this would have the opposite effect. Private property would face no risks from adverse government action, thereby increasing the wealth, capitalization, and accountability effects. It might therefore increase the return on private and voluntary efforts to improve the environment. But by making the government—and taxpayers—pay for all losses in value associated with environmental regulations, the full compensation policy would greatly reduce the return on political action seeking to protect the environment. This would almost certainly have a dampening effect on environmental cleanup efforts.

To see how this might happen, consider the following numerical example focusing on the capitalization effect. Suppose a brickyard that emits smoke and odors operates in a residential neighborhood. The pollution depresses the value of adjacent land by $1.5 million, and causes $750,000 in additional injuries to more remote property and persons who work in or pass through the neighborhood. Suppose further that the loss in value to the brickyard if it is shut down is $1 million. Finally, suppose that the cost to adjacent landowners of organizing a political campaign to enact an ordinance that would close the brickyard is $500,000. If no compensation is required for closing the brickyard, then the surrounding landowners will invest $500,000 in securing the ordinance, and will reap a profit of $1 million in the form of increased land values. This will generate a net surplus of benefits over costs in the amount of $750,000.

In contrast, suppose that the brickyard is entitled to full compensation in the amount of $1 million, and that the adjacent landowners are charged a special assessment to pay this compensation. On these assumptions, the adjacent landowners will have no incentive to lobby for a shutdown of the brickyard. Such a law will result in no change in the capitalized value of their property—the property owners’ net gain from eliminating the smoke nuisance will be eliminated by the new tax assessments. Anticipating this, the

18. I have adopted the example from Hadacheck v. Sebastian, 239 U.S. 394, 404–07 (1915), a classic takings case.
landowners will forgo any political action to shut down the brickyard. This will result in inefficient under-regulation, because the other affected owners, workers, and passersby will have to continue to suffer from the pollution.\(^{19}\)

The point of this example is not to argue that environmental regulation is economically justified or unjustified—the numbers could be manipulated to reach either result. Rather, the point is that requiring full indemnification for all losses in value caused by environmental regulations would result in a reduction in political activity to secure such regulations, provided there is any overlap at all between the beneficiaries of the regulation and the persons who must pay for the compensation. Since there is reason to believe that political action is critical in securing environmental protection, this result would be harmful to the environment.

In short, a rule of no compensation for government takings would be harmful to the environment because this would depress wealth and property values, thereby reducing incentives to engage in collective action to enhance environmental protection efforts. A rule of full indemnification for all losses associated with environmental protection regulations would also be harmful to the environment, because it would reduce the returns on collective environmental protection efforts. This suggests that the optimal compensation rule is one that strikes a balance between no compensation and full compensation. This, of course, is our current system. Property owners are compensated for government expropriations of their land, but not, except in extreme circumstances, for reductions in land value resulting from government regulations.\(^{20}\)

### B. Equality in Distribution of Environmental Benefits?

The second policy implication of this thesis concerns environmental justice or, more pungently, environmental racism.\(^{21}\) The focus here is on the distribution of environmental benefits (such as parks) and harms (such as pollution and landfills). Studies have indicated that the poor suffer from a surfeit of environmental harms

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19. I assume that because of transaction costs, there is no possibility of collective action by these diffuse beneficiaries.


and a deficit of environmental benefits. Researchers have also made disturbing findings that, adjusting for income, communities with large numbers of racial minorities are disproportionately exposed to environmental harms. One might argue that this reflects some deeply embedded institutional racism in the environmental regulatory process.

The thesis proposed here—that property ownership is a critical ingredient in producing political support for environmental regulation—suggests an alternative explanation. Historically there has been a significant gap in home ownership between white and nonwhite families, a gap which persists to this day. If members of minority groups are less likely to own real property at any given level of income than whites, one would expect to find lower levels of political activism in minority communities in support of aggressive environmental regulation. This reduced level of political activism would translate into a disproportionately high level of environmental harms and disproportionately low level of benefits in minority communities.

The thesis also suggests the direction in which a solution to this disparity might lie. The only permanent solution to the imbalanced distribution of environmental harms and benefits across different communities is to equalize the level of political clout across communities. This is true without regard to the level of government at which the distribution of harms and benefits is determined. If harms and benefits are distributed at the national level, it is important that those in the community opposed to the harms (and in favor of the benefits) have access to federal executive officials, legislative oversight committees, and courts for judicial review. On the other hand, if harms and benefits are distributed locally, it is important that the community have access to the mayor, city council, zoning board, and state courts for judicial review. This type of sustained political pressure is most likely to come from persons whose property values are most significantly affected by the presence of environmental harms and benefits in the community. This suggests that the long-term solution to problems of environmental justice is to increase the incidence of property ownership within minority communities.

22. See Lazarus, supra note 21, at 792–93.
III. CONCLUSION

Private property creates wealth, capitalizes environmental costs and benefits into property values, and makes owners accountable for the environmental harms they cause. As such, private property creates the conditions for its effective regulation. Karl Marx might say that this is evidence of the cultural contradictions of private property; it is not. There is no contradiction—only the need for a delicate balance. While private property must be sufficiently free of government regulation and taxation in order to represent a major share of household wealth, it cannot be overprotected to the point that government regulation is thwarted. Exactly where to strike the balance will always be controversial. The fact that some kind of balance is necessary in order to achieve effective environmental protection should not be.