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Book Review: Reforming the Forest Service by Randall O’Toole

by

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The history of the U.S. Forest Service has been punctuated by a succession of great controversies, often of the Service's own making. The early battles centered around its attempt to regulate private forestry practices, but recently the Service has come under increasing attack from all sides. In the 1950s, when the agency attempted to reduce harvest levels to meet multiple use management objectives, it came under pressure from the lumber industry to increase the allowable rate of timber cutting. By the 1960s, it was smarting under environmentalists' claims that its timber harvest methods caused unnecessary damage to fragile forest ecosystems. The once proud agency of green-clad foresters sporting the "white hats" of public adoration had been forced to don the "black hats" of public approbation.

By 1970 the Forest Service was "catch[ing] hell from everyone" and everything it attempted to do to correct the situation led it into an even deeper morass of public argument. The most serious controversies surrounded the Service's practice of clearcutting and ultimately led to the passage of the National Forest Management Act of 1976 (NFMA).

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2. Id.; see also H. STEEN, THE U.S. FOREST SERVICE: A HISTORY 259-71 (1976) (arguing that the debate surrounding the regulation issue was largely philosophical, not technical).
The NFMA called for integrated planning of unprecedented scope and complexity.\(^9\) Not surprisingly, however, the criticism continued unabated.\(^10\) Indeed, the criticisms became even more strident. The charge was made that the agency was doing something much more offensive to the American people than merely damaging their forests—it was emptying their pocketbooks.\(^11\) An extreme view held that the Forest Service was running at a deficit of 11 billion dollars a year with little quantitative evidence to suggest that the public was getting anything like that much in return in the form of nonpriced benefits.\(^12\)

For a time, the longstanding issues that pitted environmentalists and loggers against the Forest Service served also to pit them against one another, and heated battles ensued. This made each group a potential ally of the agency. It was commonly held that the Forest Service could play its various interest groups off against one another,\(^13\) but the strategy, if ever consciously used, failed to achieve its purpose. In particular, the
extensive public involvement required in the planning process\textsuperscript{14} tended to polarize rather than integrate the various users of the public forests. The detailed analysis required to complete the Forest Plans called for in the NFMA, however, provided the agency's critics with unprecedented access to a wealth of information.\textsuperscript{15} By an ironic twist, this mass of data provided the means for bringing together previously antagonistic interest groups in pursuit of a new environmental agenda.\textsuperscript{16}

Randall O'Toole, who received his forestry training at Oregon State University in the heartland of the Douglas fir region, reviewed more than forty National Forest plans and thousands of individual timber sales.\textsuperscript{17} Based largely on those reviews, O'Toole wrote Reforming the Forest Service, in which he analyzes the symptoms, diagnoses the problems, and prescribes major reforms as a cure for the often cited ills of the Forest Service.

O'Toole's analysis begins with a tale of three forests.\textsuperscript{18} The first stop is at a high mesa in the Santa Fe National Forest. O'Toole notes that recreation is a growing industry in New Mexico and suggests that someday the cultural ruins and artifact sites on the high forested plateaus could become a major attraction, possibly contributing far more to the economy than short-sighted timber sales do today.\textsuperscript{19} Why, he asks rhetorically, doesn't the Forest Service understand that it doesn't make any sense to lose money cutting worthless timber while at the same time damaging much more precious resources?\textsuperscript{20} In the words of one observer: "Why does the Forest Service destroy these areas if it loses money?"\textsuperscript{21}

Chapter One begins O'Toole's sometimes devastating and always polemical critique of the Forest Service by asking why an agency with some $40-50 billion in assets cannot seem to generate enough revenue to cover expenses.\textsuperscript{22} Although a substantial reduction from the earlier
claims of billions of dollars of loss,\textsuperscript{23} even O'Toole's estimates will not go unchallenged by those who argue that receipts to the U.S. Treasury are irrelevant to the agency's mandated objectives. Chapter Two is more focused, showing that many timber sales from the National Forests are money losers and are costing taxpayers hundreds of millions of dollars per year with little or nothing to offset the losses. Although the answer to his rhetorical question, "[s]houldn't Forest Service business practices be the same as those of private owners?"\textsuperscript{24} will rightfully elicit a resounding "NO!" from many readers, his many examples of unwise and unjustifiable practices should not go unheeded. O'Toole is correct when he argues that palliatives in the form of new timber sale accounting systems suggested by the Forest Service continue to miss the point.\textsuperscript{25} Why does the Forest Service continue to plan timber harvests when the multiple use objectives those harvests supposedly are designed to serve could be more cost-effectively achieved in other ways—if they are needed at all? With all of the attention paid to below-cost sales, however, the reader should not lose sight of the fact that many of O'Toole's environmental allies are "not the economic conscience of the country—[they] object to a lot of profitable timber sales, too."\textsuperscript{26}

At least one study by the Forest Service confirms extensive negative cash flows surrounding timber sales,\textsuperscript{27} particularly in the forest regions outside the Pacific Northwest and the South.\textsuperscript{28} The largely conjectural and unsubstantiated claims by the Forest Service that such timber sales are required for community stability, or for recreation, wildlife, and other multiple-use values, are unconvincing at times even to the officials

\textsuperscript{23} See supra note 12 and accompanying text.
\textsuperscript{24} R. O'TOOLE, supra note 3, at 28.
\textsuperscript{25} Id. at 35; see also Slocum, \textit{Below-Cost Sales: Tying Up the Loose Ends of the National Forest Management Act.} J. FORESTRY, Aug. 1987, at 27-28 (arguing that because allocation of common costs is purely arbitrary, any accounting system relying on cost allocation will also be arbitrary).
\textsuperscript{26} Slocum, supra note 16, at 1 (quoting Thomas Dougherty, then a regional director for the National Wildlife Federation). Whether or not a particular timber sale is profitable often depends upon the minimum management requirements (e.g., water quality and fisheries protection) imposed on the harvest. A timber sale that is below cost under one management regime may become profitable if costly restrictions on harvest methods are relaxed. Recognizing this, O'Toole's suggested reforms leave in place many of the laws that impose environmental constraints on Forest Service harvest practices. R. O'TOOLE, supra note 3, at 217-18. O'Toole, however, would amend such laws as the National Environmental Policy Act so that they would no longer apply to National Forests. Id. at 217.
\textsuperscript{27} R. O'TOOLE, supra note 3, at 33.
\textsuperscript{28} Id. at 37.
in the U.S. Department of Agriculture who oversee the agency.29

In Chapter 3, O'Toole makes an argument in favor of "bare land" investment analysis, which compares discounted costs and discounted revenues to arrive at the present value of reforested acres.30 If measured by such business standards of profitability, Forest Service investments in reforestation and other management practices are losing propositions almost everywhere in the country. This form of analysis, however, may be only marginally relevant when assessing the Forest Service's performance. Except on the most productive sites and under favorable market conditions, forestry (if by forestry one means growing a crop of trees) does not pay. Indeed, it was protection from the "cut out and get out" business response (without wasting time and money on reforestation) that was largely responsible for the creation of the forest reserves in the first place.

Although economists have long argued in favor of bare land financial analysis as a guide to private forest management, few outside the ideologically imperialistic discipline of economics have been convinced of its applicability to public land management. The obvious point is that on much of the forested land in this country, and most particularly the cut-over and marginal lands held in public ownership, the only forestry that pays is forest mining. Only legal restrictions on the rate of harvest (as contained in the sustained yield provisions of the Multiple Use Sustained Yield Act,31 and subsequent legislation, regulations, and policy directives) and requirements that the land be reclaimable to forest after harvest32 prevent such an outcome. O'Toole's proposed marketization of timber sales would lead to immediate mining if the restrictions of sustained yield were removed, and he knows it.33 Furthermore, his contention that "[r]eforestation is done to produce timber in the future" and

29. See Letter from Douglas W. MacCleery, Deputy Assistant Secretary of the Forest Service, to R. Max Peterson, Chief of the Forest Service, at 9 (July 31, 1985) (USDA decision related to the administrative appeals of certain forest plans suggesting that potentially greater community instability may accompany a relatively high level of submarginal timber sales and that there is reason to believe that continuation of a relatively high level of federal funding to support a timber program with costs greater than revenues is uncertain).
33. R. O'TOOLE, supra note 3, at 50-51. O'Toole argues that timber mining is the rational thing to do in the case of lands that have highly valued standing timber but do not have positive bare land values. Id. at 55. He suggests that such lands should go unharvested when resource values that conflict with timber sales are also high. Of course, in the absence of full implementation of his proposed reforms, markets for such benefits would not exist, and the timber would be mined. Certainly this would be the case on lands where the conflicting values are not marketable (e.g., lands with publicly imposed management restrictions designed to protect wildlife diversity and endangered species). But see Hagenstein, Binkle, Bruner, Cardellicchio & Hyde, Below-Cost Sales: Impact on Timber Prices. J. FORESTRY, Aug. 1987, at
therefore reforestation costs ought to be treated as an investment rather than a cost of current harvesting\textsuperscript{34} is questionable.

Chapter 4 provides fresh insights as it covers the old ground of Forest Service bias toward timber and other commodity outputs of the forest. No one doubts that the Forest Service continues to show a commodity-oriented bias, in part because it is consistently directed by Congress to do so.\textsuperscript{35}

Showing how Forest Service budgets can be enhanced when commodity resources are emphasized (and, in some cases, emphasized in particularly perverse ways) takes up most of Part II of Reforming the Forest Service. As O'Toole puts it, the current budget process creates "incentives" for the Forest Service—a budget maximizing agency, according to O'Toole—to harvest timber that otherwise would best be left unmanaged,\textsuperscript{36} presumably even if the public foresters did not exhibit narrow forestry training and a traditional "timber primacy" mentality. O'Toole is correct when he argues that "[e]conomic efficiency has not been a major motive for national forest planning or management."\textsuperscript{37} He neglects to explain, however, that the Forest Service is strictly precluded from having such an emphasis; instead, its guiding criterion is the more nebulous concept of maximizing net public benefits.\textsuperscript{38}

He is correct, as well, when he writes that "[t]he result is that forest plans mislead the public into believing that timber management is an

\textsuperscript{30, 32} (arguing that the impact on timber prices of economically efficient timber management programs will actually postpone rather than accelerate the harvest of certain timber).

\textsuperscript{34} R. O'TOOLE, supra note 3, at 44-45. Just as strip miners on the public lands must establish a trust fund to ensure reclamation and rehabilitation of the mine site after mining operations are completed (and, therefore, the reclamation is properly viewed as a cost of mining), so too every acre of forest harvested must be regenerated and replanted. 36 C.F.R. \S 219.27(c)(3) (1987). \textit{But see} R. O'TOOLE, supra note 3, at 49 (arguing that the law itself may be economically questionable). O'Toole is correct, however, to point out that a variety of different methods of reforestation should be considered. \textit{Id.} at 45. In fact, such consideration is required by the NFMA regulations. \textit{See} 36 C.F.R. \S 219.15 (1987).

\textsuperscript{35} \textit{See} R. O'TOOLE, supra note 3, at 19-20 (discussing the pattern of emphasizing commodity outputs in budget appropriations).

\textsuperscript{36} \textit{See id.} at 101, 104-07, 183.

\textsuperscript{37} \textit{Id.} at 69.

\textsuperscript{38} 36 C.F.R. \S 219.1 (1987); see 16 U.S.C. \S 1604 (1982). Net public benefit is: [an] expression used to signify the overall long-term value to the nation of all outputs and positive effects (benefits) less all associated inputs and negative effects (costs) whether they can be quantitatively valued or not. Net public benefits are measured by both quantitative and qualitative criteria rather than by a single measure or index. The maximization of net public benefits to be derived from management of units of the National Forest System is consistent with the principles of multiple-use and sustained yield.

36 C.F.R. \S 219.3 (1987). O'Toole implies that net public benefits are analogous to net present values. R. O'TOOLE, supra note 3, at 42-43, 58. This allows him to apply neoclassical economic efficiency analysis and to avoid muddying the waters with social, political, and distributional concerns. This approach distorts the mandate of the agency (which, of course, he opposes anyway). Had Congress intended net public benefits to fit neatly into a net present value economic model, it certainly could have done so.
efficient use of the national forests when, in most cases, it is extremely wasteful.” The Forest Service does not deny this point, claiming instead that it must use timber management to provide other benefits, such as dispersed recreation, primitive recreation, wilderness, and habitat management for wildlife and endangered species.

Chapter 5, the last in Part I, challenges this Forest Service claim. O'Toole concedes that, in exceptional cases, spill-over benefits to forest protection goals, recreation, wildlife, and watersheds may be generated by timber management practices, but he argues that these sporadic and often illusory benefits alone cannot justify “money-losing timber sales.” O'Toole is hardly convincing when he suggests that below-cost sales occur primarily because these other values are nebulous and unquantified. Each timber sale under his proposed reforms would be designed to produce the highest net income. Below-cost timber sales would be avoided, he argues, because they would reduce the potential income to the Forest Service from other uses of forest resources. Because fees would be charged for the use of these other resources, their use would directly compete against timber harvesting as a source of income.

O'Toole recognizes that the use of economic analysis to determine which sales are appropriate presents a problem for environmentalists in the Pacific Northwest, where old-growth timber is highly valued for wood. As O'Toole notes, “[p]rotection of large expanses of old-growth as habitat for species such as the spotted owl may be difficult to justify on a strictly economic basis.” He argues that the question should not be “how much valuable old-growth timber should be withdrawn from management to protect rare species of wildlife, but rather why forest plans with money-losing sales claim that such sales are needed to enhance wildlife habitat.” O'Toole recognizes, however, that without the legislative restrictions and protections imposed by the strictly noneconomic provisions contained in such legislation as the Endangered Species Act,

39. R. O'TOOLE, supra note 3, at 69.
40. See id. at 72-73 (citing The Role of 'Below-Cost' Timber Sales in National Forest Management (Aug. 16, 1984) (unpublished paper on file at the Forest Service, Washington, D.C.); see also id. at 89 (citing BENSON & NICCOLOCCI, COSTS OF MANAGING NONTIMBER RESOURCES WHEN HARVESTING TIMBER IN THE NORTHERN ROCKIES (Forest Serv., U.S. Dep't of Agric., Gen. Tech. Rep. INT 351. 1985)); SCHUSTER & JONES, BELOW-COST TIMBER SALES: ANALYSIS OF A FOREST POLICY ISSUE (Forest Serv., U.S. Dep't of Agric., Gen. Tech. Rep. INT-183, 1985) (arguing that the net values of timber in roadless areas may, under a widely accepted—but not unchallenged—set of assumptions, be sufficient to justify road construction, especially when benefits to other resources are considered in the analysis). But see R. O'TOOLE, supra note 3, at 68 (arguing that the use of price trends in the models generates questionable results).
41. R. O'TOOLE, supra note 3, at 92.
42. Id. at 230.
43. Id. at 213, 230-33.
44. Id. at 78.
45. Id.
the Clean Water Act, and the Clean Air Act, his entire proposal would be rejected out of hand. He wants to have it both ways: economic analysis where it serves his purpose and religion of another sort when it does not. One might legitimately ask: if rare species of plants and wildlife—which may have little market value—are exempt from his scheme, why not other resources as well?

After dismissing the Forest Service’s multiple use benefits justification on the basis of inadequately documented evidence, O’Toole proceeds to test his hypothesis that budget maximization is the actual goal of the agency. After five chapters, in which he evaluates various policies and practices that lack substantial justification or explanation, O’Toole concludes that, “although the evidence is circumstantial, budget maximization appears to be confirmed by the fact that no other theory explains all of these policies.”

The evidence (some of which is convincing, much of which is not) concerning the budget maximization hypothesis generally supports the fundamental assumption on which that hypothesis is built: decisionmakers are strongly influenced by incentives. As O’Toole puts it: “Change the incentives, and the decisions change. Change the people but not the incentives, and in the long run the decisions remain pretty much the same.”

It is on this premise, together with the principles of marketization, that O’Toole builds his platform of suggested reforms. He proposes the following principles of marketization:

1. All activities are funded out of a percent share of the net returns from user fees. 2. Forest Service appropriations from Congress are reduced to zero. 3. Managers are allowed to charge fair market value for

46. See id. at 217-18.
47. Id. at 217.
48. Id. at 98-107.
49. Id. at 169.
50. O’Toole provides many insightful critiques of “cross-subsidization,” the abuses of the Knutson-Vandenbengt trust fund, and the crazy but seemingly impenetrable notion held by the Forest Service that roads and their associated purchaser road credits are benefits rather than costs of timber management. See, e.g., id. at 4. Similarly, his contention that the Forest Service “loses so much money on timber that each of the few timber-related jobs costs taxpayers tens of thousands of dollars per year” is convincing. See id. at 138. Cf. id. at 216-17, 226 (arguing that the workers and the public would be better served if below-cost timber sales were discontinued and the financial savings were given to the affected workers in the form of direct payments to support education and relocation). Independent of the implementation of his scheme of reforms, many timber-dependent communities stand to lose substantial employment through improved technology, increased productivity, and a shift toward pulverization of wood products. O’Toole’s concern for displaced workers should be taken seriously even by those who dismiss his formula for reducing timber harvests.
51. See supra note 36 and accompanying text.
52. R. O’TOOLE, supra note 3, at 101.
all resources. 4. The National Forest System and other Forest Service programs are decentralized.53

"Ideally," he states, "budgets would increase if managers are satisfying public demands, and budgets would decline if managers are working counter to public demands."54 O'Toole proposes to create markets where none exist, e.g., for amenities such as dispersed and developed recreation, primitive recreation, and fish and wildlife.55

In general, the proposal to collect user fees is a reasonable one. The Land and Water Conservation Act56 sets a precedent—albeit one with perverse incentives built in to insure that the Forest Service will ignore it.57 The Forest Service seems hell-bent on trying to increase the supply of recreational opportunities to meet what inevitably will be ever rising demand at the going price of zero. The imposition of user fees provides a useful and much needed alternative approach on the demand side. When prices are zero, people demand outputs and amenities from the forest up to the point that their marginal utility has fallen to zero. Implementation of user fees will limit the quantity demanded to levels commensurable with other marketed goods and services.

But the call for marketization of all forest resources requires the willingness to let utilitarian values override all other ethical values attached to the forest. Acceptance of this proposal would amount to ideological and ethical suicide58 for those who argue that the ideology of individualism and utilitarianism are the problem rather than the solution to modern ecological crises.59

Return for a moment to the question that set the stage for O'Toole's analysis. Why, he asks the reader, does the Forest Service insist on destroying priceless cultural resources by harvesting timber, which is not a

53. Id. at 198.
54. Id. at 197.
55. See id. at 229-33; see also id. at 188-91 (providing the New Resource Economists' rationale for marketization and private transferable property rights). But see Binkley & Hagenstein, Economic Analysis of the 1985 RPA Program. J. FORESTRY, Nov. 1987, at 25 (arguing that desired increases in efficiency can be achieved within the existing budget by reducing the budget for the less efficient range and timber programs and transferring the funds to major noncommodity programs within the Forest Service).
57. See R. O'TOOLE, supra note 3, at 168, 201.
58. See generally R. ALSTON, THE INDIVIDUAL VS. THE PUBLIC INTEREST (1983) (arguing that a fundamental schism exists, and ought to exist, between the ideological adherents to individualism—which argues that only people and their tastes and preferences matter—and those who hold to a holistic land ethic—which suggests that human values provide only one, and not necessarily the best, measure of the proper relationship between man and the environment).
59. See Wolke, An Eclectic Approach to Reforming the Forest Service. FOREST WATCH, Apr. 1988, at 9 (embracing the Earth First! position that O'Toole's proposals would protect the wrong kinds of habitats and would encourage the notion that wilderness areas are recreation sites rather than refuges to protect ecosystems, species, and genetic diversity from human actions).
valuable resource? O'Toole's answer provides the first hint of the fatal flaw in his analysis.

Timber, O'Toole argues, ought to be priced in the marketplace along with recreation, water, grazing rights, and most other forest resources, where people's collective willingness to pay can be assessed and used as a guide to its worth to the public treasury. But timber is already priced in markets—of a sort. Why, then, does O'Toole spend so much time explaining why the current pricing system is faulty? The answer is obvious—prices matter, and distorted prices get weighed right along with all the others. Getting the "right" price is critical. But economics is of no use here. It simply explains how market-clearing prices are established. This explanation, however, does not discriminate between prices for "goods" and "bads." The market cannot discriminate between the actions of people willing to pay a fortune to go to the woods to drive their four-wheel drive vehicles up and down the hillside, and the gentle footsteps of a birdwatcher. Indeed, the former, according to the market, is worth more than the latter (the vehicle being worth more than the pair of binoculars). The real issue is not what people are willing to pay to use the public forests, but which uses will be permitted—and at what user fees.

From a planning perspective, O'Toole's most biting criticism of the current pricing policy is the agency's tendency to predict substantial increases in timber values and to use predictions of longterm upward trends in timber prices to justify its actions. O'Toole, however, does not apply the same critical analysis to his example of cultural resources and historic ruins or to endangered species with little or no market value. Why, one must ask in return, are the cultural resources of the New Mexico plateau, primitive recreation values, and endangered species exempt from a similar analysis? O'Toole's answer is disingenuous and obfuscates political reality.

O'Toole would like the reader to believe, as many experts do, that it makes a difference that certain activities are biologically reversible whereas others, such as road building and mining, are not. O'Toole argues that because we can expect rapid growth in primitive recreational use of roadless areas, such use should, therefore, become much more valu-

60. R. O'TOOLE, supra note 3, at 1.
61. Willingness to pay is the measure of how consumers value various goods and services. Theoretically, willingness to pay can be measured as the area under a market demand curve up to the quantity that just clears the market at an equilibrium price. O'Toole provides an extremely abbreviated explanation of the term and its use. See id. at 101-02.
62. Id. at 112-14.
63. Id. at 59-64.
65. R. O'TOOLE, supra note 3, at 64.
uable. "Thus, it would be appropriate to use a trend for primitive recreation values to ensure that opportunities are not foreclosed that one day will produce high returns . . . ."66

The same analysis, O'Toole argues, does not apply to timber because "the decision to postpone timber sales is generally reversible."67 The problem, of course, is that what is seen as reversible by one group of people appears irreconcilably committed to a specific use—and thus foreclosed—to other groups. Timber operators, loggers, and public land timber purchasers feel that, with recent history as a guide, they must prevent the erosion of the potential suitable timber base now. If, as O'Toole would have it, the timber base were kept to the minimum necessary level to meet all current demands,68 people with an interest in future harvests would have every reason to believe that the minimum floor of today would become the maximum ceiling of tomorrow. The decision is political, not biological.69 A political decision today to postpone road building into roadless areas is seen by commodity users of the forest to be just as irreversible as the road building itself, albeit in a political rather than a biological sense.

His argument that the "market" ought to guide only certain resource allocation decisions, leaving other resources to the protective custody of regulations and laws such as the Endangered Species Act,70 is equally disingenuous. Either the market is the legitimate measure of value or it is not. That the market is convenient for some purposes but not for others does not, by itself, suggest which goods and services of the environment ought to come under its sway. It is not sufficient simply to assert that certain resources or environmental sites are "priceless" and, by implication, above the grubby determination of value indicated by willingness to pay. Nor is it sufficient to argue that endangered species should avoid the "protection" provided by the market.71 As becomes clear throughout O'Toole's discussion, there is no epistemological basis for deciding that "individualism" (and its inherent claim that there is no "public good," "environmental good," or any other collective or biocentric good beyond the summation of individual utilitarian estimates of value) shall apply to market resources, but a biocentric and holistic ap-

66. Id. This "primitive recreation is different" argument is effectively countered by replacing the term "primitive recreation" with "water" or other favorite examples of things considered "priceless" by the American mind. See, e.g., Kelso, The Water-is-Different Syndrome or What is Wrong with the Water Industry, 1967 AM. WATER RESOURCES ASSN'N PROC. (arguing that resources ought to be traded in markets without special designations of relative need or qualities of essentialness).
67. R. O'TOOLE, supra note 3, at 64.
68. See id.
69. See Wolke, supra note 59, at 11.
70. R. O'TOOLE, supra note 3, at 194.
71. Id.
proach shall apply to other resources. O'Toole's attempt to enlist a coalition of archaeologists, Native Americans, and environmentalists of Save the Jemez,72 along with Deep Ecologists,73 in a utilitarian approach to value must fail on ideological grounds, despite the short-run political attractiveness of the proposals.

This book is an enigma. There are relatively few substantive points made by O'Toole with which one can take exception when taken independently and in small doses. Yet taken collectively and combined into a list of reforms, they make less sense. Extreme a priori deductive logic, in which the truth of a proposition can be tested only by looking at its logical structure and internal coherence, is combined with ultra-empiricism, in which the measure of truth is its correspondence with reality. Both approaches are spread throughout the book, along with occasional reliance on logical positivism and pragmatism as alternative tests of truth. Each is selectively chosen as O'Toole believes the situation dictates.

For example, O'Toole's test of the budget maximization hypothesis is largely conjectural and positivistic. Would the budget maximization hypothesis hold if the incentives were different? If not—and that is the likely case—then the proposals are self-defeating, and reforms aimed at eliciting a particular response are just as likely to generate counterintuitive results. To pick another case, the faith O'Toole exhibits in market allocation is purely deductive; he presents no evidence that market-driven decisions actually result in better forest management. A look at the private forestry sector provides little support for the hypothesis that marketization will lead to desirable allocations of resources, even though such allocations may be efficient. Perhaps that is the greatest problem with Reforming the Forest Service. It will tend to make people focus on the minutiae of the separate proposals when the focal point ought to be the underlying ideology about people and their collective relationship with the environment.

Good ideas often come in weird packages. In this case, however, the good ideas presented by O'Toole (and they outweigh the bad) are likely to fall prey to adversaries who will pick off the reforms one at a time, thereby missing the more important messages contained throughout the book. One does not need economic analysis to prove what should be obvious in the first place: some policies are just plain stupid. One does not need to embrace O'Toole's reforms to share his desire to stop mindless waste of public resources. All readers should reflect on his diagnosis of the role incentives play in generating such outcomes.

Perhaps the weakest aspect of the book is the blind faith O'Toole exhibits in market solutions to complex allocation problems. The people

72. Id. at 2.
73. Id. at 191-94.
of the United States have appropriately chosen not to put all of their environmental eggs in the same basket. Approximately one-third of the nation's forest land is held and managed by small, nonindustrial private owners. No one who examined the evidence would argue that owners of small woodlots employ good forest management practices. Their management objectives are not characterized by the desire to maximize timber receipts, and they respond only feebly to market signals concerning how others want them to manage their private land, e.g., to others' willingness to pay. When, in the long run, they finally do respond by selling off the timber and converting the land to yet another suburban development, it requires unlimited faith in the propriety of the market solution to see how the public interest is thereby served.

Another third of the nation's forest land is held by relatively large industrial forest concerns. Again, O'Toole does not believe that some overriding public interest (through the invisible hand of the market) drives such landowners toward socially optimal management. This explains why, unlike previous privatization proposals, his marketization proposal would maintain the national forests in public ownership. As he puts it, "[t]his retains maximum flexibility[,] . . . makes it possible to adjust for unforeseen circumstances . . . [and] leaves open the option to use the political process."75

The remainder of our forests, those on the public lands, come with their own—but different—set of illogical and inefficient management practices, subject to all of the evils of interest group politics. Arguing that society somehow would be served if publicly owned forest lands were managed as if they were private lands and, thus, according to the principles of neoclassical economic theory—which denies the very existence of a public good beyond the summation of individual interests—seems ludicrous. Worshipping at the altar of individualism, efficiency, and utilitarianism, as proposed by the New Resource Economists76 and presented by O'Toole in a palatable environmental dress, is not the solution to the problems of managing lands entrusted to public ownership. Efficient resource allocation is, of course, one among many criteria that should be used to guide public decisionmaking. But efficiency is a means, not an end in itself. O'Toole knows that there are many different ways to manage the public forests and to meet the criterion of efficiency.77

74. O'Toole claims, without foundation, that in the absence of competition from the Forest Service in timber markets, private woodlot owners would be more likely to manage their lands efficiently. See id. at 201, 227. If markets work, however, those private owners must be managing their lands efficiently now. O'Toole is probably correct, though, to assert that private woodlot owners would harvest more timber absent competition from the Forest Service.

75. Id. at 198-99.

76. Id. at 188, 193.

77. "Without knowing the value of nontimber resources relative to timber prices, it is impossible to determine the efficient point . . . ." Id. at 65. Although O'Toole implies that
knows as well that neoclassical theory provides no insight into how to choose among competing efficient alternatives.\textsuperscript{78} The real issue is which efficient alternative, if any, is the proper choice.

Writing in 1936, on the eve of a new era of government planning and active participation in the economy, John Maynard Keynes concluded that, given enough time, new ideas would overcome vested interests, and progress would be possible in the management of government affairs.\textsuperscript{79} If Keynes were correct, one could expect that a half-century after the Great Depression new ideas would have crept into the debate about the nature of our economic system: what propels it, what are its flaws, and what are appropriate policies to guide it between the peaks and troughs of economic activity. Alas, the debates surrounding the nature of modern capitalism in the 1980s are only superficially different from those of fifty years ago.\textsuperscript{80} Those familiar with the aimless debates and confused searching for simplistic solutions must be experiencing \textit{déjà vu}. Keynes, it seems, underestimated his own warning that it would be difficult to escape from the debilitating effects of outmoded ideas.\textsuperscript{81}

Such will be the problems confronting a reasonable hearing of the issues presented in \textit{Reforming the Forest Service}. This is a delightful, provocative, insightful, and challenging book. It should be read by everyone who is interested in national forest management. Despite the foregoing critical comments, it should be clear that this book is worth reading, digesting, and rereading. Laments that there is nothing new in either the analysis or the proposals should be taken as an admission that the speaker did not read the book. More importantly, those who would ig-

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\textsuperscript{78} R. O'Toole, supra note 3, at 65; \textit{see also} \textit{Guide to Planning}, supra note 2, at 8 (arguing that the determination of which alternative is the most efficient depends upon which starting point is used, and advocating the use of "current direction" rather than some "pie-in-the-sky" unconstrained benchmark of maximum net present value).

\textsuperscript{79} Keynes reflected an unwarranted optimism when he stated that: [T]he power of vested interests is vastly exaggerated compared with the gradual encroachment of ideas. Not, indeed, immediately, but after a certain interval; for in the field of economic and political philosophy . . . the ideas which civil servants and politicians and even agitators apply to current events are not likely to be the newest. But, soon or late, it is ideas, not vested interests, which are dangerous for good or evil.


\textsuperscript{80} \textit{See generally} T. Rosenof, \textit{Dogma, Depression, and the New Deal} (1975).

\textsuperscript{81} "The difficulty lies, not in the new ideas, but in escaping from the old ones, which ramify . . . into every corner of our minds." J. Keynes, supra note 79, at viii.

The idea of using criminal liability to deter corporate and business misbehavior had its genesis nearly a century ago. In 1890, Congress passed the Sherman Antitrust Act, incorporating the threat of criminal prosecution as a necessary and proper response to monopolistic business practices. Since then, Congress has included criminal provisions in several other federal laws, including the Food, Drug, and Cosmetic Act, each of the seven major statutes that constitutes federal securities law, and more recently, the Foreign Corrupt Practices Act and the Racketeer Influenced and Corrupt Organizations Act (RICO).

Although laws allowing for the imposition of criminal sanctions against businesses and their executives have existed for decades, courts historically have employed such measures infrequently either to supple-