

The Fair Market Value of Public Resources

Bruce R. Huber*

Government agencies and officials are regularly criticized for selling public assets at a loss. Such criticisms arise in a host of contexts, ranging from sales of real estate and natural resources to sales involving intangibles, such as the right to broadcast over the airwaves or to operate a toll road or a set of parking meters. Underpriced resource sales prompt concerns that a small set of private entities are unjustly enriched by transactions that should properly benefit the public as a whole.

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* Associate Professor of Law, Notre Dame Law School; J.D., University of California, Berkeley, School of Law; Ph.D. Political Science, University of California, Berkeley. For helpful comments, I thank Fred Cheever, Eric Freyfogle, Nicole Garnett, Lisa Heinzerling, John Nagle, Justin Pidot, John Robinson, Bill Rodgers, Arden Rowell, and commenters and participants at the 2014 Annual Meeting of the Association for Law, Property, and Society, the 2014 General Meeting of the Law and Society Association, the Young Environmental Scholars Workshop at the University of Washington School of Law, the Legal Scholars Conference at the Sandra Day O'Connor College of Law at Arizona State University, the Junior Faculty Workshop at Washington University, the Denver University Environmental Law Workshop, and presentations to the law faculties at the University of Illinois, Washington University, and Notre Dame. Law librarian Christopher O'Byrne lent pivotal support, and I also thank Ryan Granholm, Steven Melzer, and Alex Prasad for outstanding research assistance.

This Article explores the problem of public resource sales with particular reference to natural resources managed by the federal government. Lands owned by the United States hold trillions of dollars' worth of natural resources. Federal agencies earn billions in annual revenue from resource sales, yet critics assert that billions more could be reaped if resources were sold for a fair price. Although federal law has increasingly required that agencies price resources at fair market value, this requirement is surprisingly difficult to interpret and even more difficult to implement and enforce. This Article analyzes the various forces that bear on public resource transactions and details the problems that continue to plague these transactions, explaining why federal institutions are commonly unable to satisfy the fair market value standard. It argues that natural resource law should invoke procedural safeguards to protect against the undue influence of incumbent resource users and assure the public a fair return on resource sales. In so doing, it sheds light on how public institutions deal in the marketplace and how public ownership affects the value of property.

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INTRODUCTION

The movement toward privatization is undoubtedly one of the most important shifts in American governance in recent decades.¹ Debates about

1. For general analyses of privatization in the United States, see generally JOHN D. DONAHUE & RICHARD J. ZECKHAUSER, *COLLABORATIVE GOVERNANCE: PRIVATE ROLES FOR PUBLIC GOALS IN TURBULENT TIMES* (2012); PAUL R. VERKUIL, *OUTSOURCING SOVEREIGNTY: WHY PRIVATIZATION OF GOVERNMENT FUNCTIONS THREATENS DEMOCRACY AND WHAT WE CAN DO ABOUT IT* (2007); Laura A. Dickinson, *Privatization and Accountability*, 7 ANN. REV. L. & SOC. SCI. 101 (2011). Useful discussions of the global phenomenon are collected in *PRIVATIZATION:*

privatization typically emphasize the “buy side” of the movement: the contractual arrangements whereby governments outsource various functions to private firms.² The “sell side,” the sale or lease of public assets to private actors, is less frequently discussed but every bit as important—and every bit as problematic.³ Governments sell physical assets, like land and buildings; intangibles, like emissions credits and spectrum bandwidth; and even revenue streams, like the right to collect tolls from roads or parking meters.⁴ Such sales place a price on public assets—a price that is frequently too low.

It is not uncommon to learn that particular public assets have been badly underpriced;⁵ indeed, entire programs have underpriced public resources on a systematic and repeated basis.⁶ In countless instances, sales of federal realty

SUCCESSSES AND FAILURES (Gérard Roland ed., 2008); *see also* Manuel Tirard, *Privatization and Public Law Values: A View from France*, 15 *IND. J. GLOBAL LEGAL STUD.* 285 (2008).

2. Outsourcing of formerly public functions has expanded dramatically in recent years into such domains as education, national defense and intelligence, infrastructure development, and corrections and prison management. *See generally* GOVERNMENT BY CONTRACT: OUTSOURCING AND AMERICAN DEMOCRACY (Jody Freeman & Martha Minow eds., 2009); Jon D. Michaels, *Privatization's Progeny*, 101 *GEO. L.J.* 1023 (2013) (identifying government service contracting as the first and most common instrument of privatization).

3. *See generally State-Owned Assets: Setting Out the Store*, *ECONOMIST* (Jan. 11, 2014), <http://www.economist.com/news/briefing/21593458-advanced-countries-have-been-slow-sell-or-make-better-use-their-assets-they-are-missing> (describing global trends in governmental privatization, nationalization, and investment). Prior to the recent flurry of government outsourcing, asset sales were the quintessential identifier of privatization. Daphne Barak-Erez, *Three Questions of Privatization*, in *COMPARATIVE ADMINISTRATIVE LAW* 493, 494 (Susan Rose-Ackerman & Peter Lindseth eds., 2010) (noting that “[t]raditionally, privatization has been identified by the transfer of government assets . . . to private hands”).

4. *See generally* Julie A. Roin, *Privatization and the Sale of Tax Revenues*, 95 *MINN. L. REV.* 1965 (2011); Matthew Titolo, *Leasing Sovereignty: On State Infrastructure Contracts*, 47 *U. RICH. L. REV.* 631 (2013). Although in such instances governments are not selling assets per se, they are selling the contractual right to receive streams of future revenue attributable to operations historically undertaken by the government. Requests for bids from private entities can thus look very similar to sales of public assets. More generally, please note that throughout this Article I use the term “sale” to include less-than-fee relinquishments of public rights, including, for example, leases and contractual rights. Where the distinction is analytically important, I use more specific language.

5. *See, e.g.*, Lynne Bama, *Wheeling and Dealing*, *HIGH COUNTRY NEWS* (Mar. 29, 1999), <http://www.hcn.org/issues/151/4889> (describing, inter alia, a \$763,000 sale of seventy acres of public land near Lake Tahoe to a private developer, who resold the land on the very same day for \$4.6 million); Wes Martin, *Study: Indiana Toll Road to Cost Hoosiers In Long Term*, *IND. PUB. MEDIA* (Dec. 11, 2012), <http://indianapublicmedia.org/news/study-shows-indiana-toll-road-cost-hoosiers-long-term-41532>.

6. *See, e.g.*, OFFICE OF THE INSPECTOR GEN., DEP'T OF THE INTERIOR, REP. NO. CR-EV-BLM-0001-2012, COAL MANAGEMENT PROGRAM, U.S. DEPARTMENT OF THE INTERIOR (2013) [hereinafter INSPECTOR GEN. 2013 REPORT]; TOM SANZILLO, INST. FOR ENERGY ECON. & FIN. ANALYSIS, THE GREAT GIVEAWAY: AN ANALYSIS OF THE UNITED STATES' LONG-TERM TREND OF SELLING FEDERALLY OWNED COAL FOR LESS THAN FAIR MARKET VALUE (2012); U.S. GOV'T ACCOUNTABILITY OFFICE, GAO/RCED-97-16, U.S. FOREST SERVICE: FEES FOR RECREATION SPECIAL-USE PERMITS DO NOT REFLECT FAIR MARKET VALUE (1996). The problem is far from unique to American government. *See, e.g.*, Nancy Birdsall & John Nellis, *Winners and Losers: Assessing the Distributional Impact of Privatization*, 31 *WORLD DEV.* 1617, 1629 n.9 (2003) (noting that underpricing of state assets is a common means of ensuring “that the sale will go forward”); William L. Megginson & Jeffrey M. Netter, *From State to Market: A Survey of Empirical Studies on*

have been faulted for bargain-basement prices.⁷ In other cases, realty is transferred into private hands via complicated transactions that obscure whether public agents have received a fair value.⁸ State and local governments, for example, often use nonstandard real estate deals to attract development and business enterprise such as professional sports franchises.⁹ Numerous economists have concluded that such transactions produce substantial net losses to taxpayers in the long run.¹⁰ Finally, “sales” of long-term concessions, which have become a regular part of modern political life, are also often panned as poorly negotiated deals that inadequately protect the integrity of

Privatization, 39 J. ECON. LIT. 321 (2001) (reporting widespread underpricing in sales of state-owned enterprises as evidenced by large share price increases in the first days after the sale).

7. A recent flap involving a spate of sales of defunct federal post offices is illustrative. Critics alleged that the federal government was selling off historic landmarks, including old and elegant post offices in the Bronx, New York, and Berkeley, California, for far less than a fair price. Concerns were exacerbated when it was learned that the Postal Service retained a real estate firm whose board chairman is the husband of a U.S. Senator. See Anna Hiatt, *Congress Wants Delay in Selling of Historic Post Offices Until Federal Report Is Completed*, WASH. POST (Jan. 20, 2014), http://www.washingtonpost.com/politics/congress-wants-delay-in-selling-of-historic-post-offices-until-federal-report-is-completed/2014/01/20/52c5c50c-7f07-11e3-93c1-0e888170b723_story.html.

It is worth noting, however, that the federal government is also criticized for retaining unused facilities for too long. See Devin Dwyer, *Cleaning House: White House Eyes Sale of 14,000 Unused Federal Buildings*, ABC NEWS.COM (Mar. 3, 2011), <http://abcnews.go.com/Politics/white-house-eyes-sale-14000-unused-federal-properties/story?id=13041776> (noting claims that maintaining vacant and underused federal facilities costs taxpayers over \$1 billion per year). Selling federal assets can be procedurally burdensome. Thus, at times federal agencies seem stuck in a damned-if-you-do, damned-if-you-don't situation. See U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-11-370T, FEDERAL REAL PROPERTY: THE GOVERNMENT FACES CHALLENGES TO DISPOSING OF UNNEEDED BUILDINGS 6 (2011) (noting that the federal government's "ability to effectively dispose of its unneeded property can also be hampered by its lengthy disposal process, which is legislatively mandated").

8. Olga Kaganova, *Government Property Assets in the Wake of the Dual Crisis in Public Finance and Real Estate: An Opportunity to Do Better Going Forward?*, 35 REAL EST. ISSUES 31, 33 (2011) (noting that when governments offer land for private uses without an arms-length sales transaction, the "full costs to taxpayers often remain unknown").

9. Efforts to lure or retain sports teams can feature a complicated mix of tax benefits, eminent domain actions on behalf of the franchise, donated or below-cost public real estate, and public financing of construction and operational costs. See, e.g., Erin A. Stanton, *Home Team Advantage?: The Taking of Private Property for Sports Stadiums*, 9 N.Y. CITY L. REV. 93 (2005) (analyzing the legal issues that arise when government employs its power of eminent domain to provide real estate to sports teams); Joe Guillen, *Detroit Red Wings' New Stadium Land Transfer Approved by City Council*, DETROIT FREE PRESS (Feb. 4, 2014), <http://archive.freep.com/article/20140204/NEWS01/302040074> (documenting that the city of Detroit sold public land with an assessed value of \$2.9 million for just \$1 to incentivize the construction of a new hockey arena); Aaron Kuriloff & Darrell Preston, *In Stadium Building Spree, U.S. Taxpayers Lose \$4 Billion*, BLOOMBERG (Sept. 5, 2012, 9:01 PM), <http://www.bloomberg.com/news/articles/2012-09-05/in-stadium-building-spree-u-s-taxpayers-lose-4-billion>.

10. See generally Reed Albergotti & Cameron McWhirter, *A Stadium's Costly Legacy Throws Taxpayers for a Loss*, WALL ST. J. (July 12, 2011), <http://www.wsj.com/articles/SB10001424052748704461304576216330349497852>; Gregg Easterbrook, *How the NFL Fleeces Taxpayers*, ATLANTIC MONTHLY (Oct. 2013), <http://www.theatlantic.com/magazine/archive/2013/10/how-the-nfl-fleeces-taxpayers/309448>.

public services.¹¹ These transactions are likely to come at a severe discount because the government has a tendency to “borrow against tomorrow” by selling off revenue streams at discount rates that are less favorable, albeit more politically palatable, than traditional debt arrangements.¹²

The broader concern here, of course, is that the government is mishandling public assets and satisfying its short-term need for revenue by selling assets that either should remain in public hands or should fetch a greater return. In essence, the common element in these circumstances is the charge that the dollar value obtained does not capture the asset’s true value to the public. Thus, while the conventional discourse on privatization emphasizes the proper degree of government intervention into private affairs,¹³ underpriced sales of public assets raise almost the opposite concern: the possibility that a small set of private entities are unjustly enriched by public transactions.¹⁴ The existing laws that govern resource transactions, it would seem, may be ineffectively guarding the public interest.

This Article explores the federal government’s ability to reap a fair market price for public natural resources. The United States owns nearly seven hundred million acres of land, upon which are trillions of dollars of natural resource wealth: enormous quantities of coal, oil, and natural gas; vast stands of timber; untold deposits of minerals and metals; and much else. Every year, federal agencies sell billions of dollars’ worth of these resources to private entities.¹⁵ These agencies, and the laws and regulations by which they operate, are regularly criticized for selling these resources short.¹⁶ In some instances,

11. See, e.g., John B. Gilmour, *The Indiana Toll Road Lease as an Intergenerational Cash Transfer*, 72 PUB. ADMIN. REV. 856 (2012).

12. “The upfront payments received by jurisdictions entering into privatization agreements . . . are, at best, the present value of what would have been future tax (fee) revenue. Rather than true privatization transactions, it is more accurate to describe these deals as loans repayable out of future governmental revenues. . . . Debt masquerading as privatization costs governments more than conventional debt [because] governments are unlikely to borrow at rates as favorable as the rates they would obtain when issuing conventional debt.” Roin, *supra* note 4, at 1968–69 (internal citations omitted).

13. Barak-Erez, *supra* note 3, at 494 (noting that “generally speaking, privatization aims to reduce government intervention in social and economic life”). But note that in regard to privatization as a global movement, the literature’s principal frame is generally that of economic development. See Birdsall & Nellis, *supra* note 6, at 1619 (“We take it that the main or ultimate objective of privatization everywhere has been, or should be, to secure efficiency gains for the economy as a whole.”).

14. Therefore, such transactions implicate not only issues of privatization, but also of rent-seeking and public choice. See, e.g., Arye L. Hillman, *Rent Seeking*, in THE ELGAR COMPANION TO PUBLIC CHOICE 307 (Michael Reksulak et al. eds., 2d ed. 2010) (noting that rent seeking persists even after socialist economies shift towards liberalization and privatization).

15. See generally U.S. DEP’T OF THE INTERIOR, ECONOMIC REPORT FY 2012 (2013), http://www.doi.gov/ppa/economic_analysis/economic-report.cfm.

16. For example, sales of federal land are routinely faulted for lining the pockets of local real estate developers. See, e.g., Jesse McKinley & Griffin Palmer, *Nevada Learns to Cash In on Sales of Federal Land*, N.Y. TIMES (Dec. 3, 2007), <http://www.nytimes.com/2007/12/03/us/03lands.html> (noting criticism from lawmakers and taxpayers who take the view that “the government gave too much”). By way of another example, it is often claimed that federal timber sales do not cover their

these criticisms amount to a legal argument that resource sales do not conform to a fair market value standard imposed by law.¹⁷ In other instances, the law itself is faulted for inadequately protecting public resources from commercial exploitation. In any event, the variety of natural resource transactions, and the various issues they implicate, make this domain an important locus for the study of governmental resource sales.¹⁸ By examining federal agencies' natural resource transactions, this Article explains why public agents are handicapped in market transactions and what the law might do about it.¹⁹

The natural resource contexts reveal that, despite the law's frequent invocation of a fair market value standard, publicly owned natural resources are unlikely to produce a full market return for a number of reasons. Most obviously, there are many areas in which Congress itself has simply chosen to accept below-market prices, providing resource users with an implicit subsidy.²⁰ There are various justifications for such subsidies, but as this Article

costs. See ROSS GORTE, CONG. RESEARCH SERV., RL32485, BELOW-COST TIMBER SALES: AN OVERVIEW (2004); see also *supra* note 6.

17. See, e.g., U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-14-140, COAL LEASING: BLM COULD ENHANCE APPRAISAL PROCESS, MORE EXPLICITLY CONSIDER COAL EXPORTS, AND PROVIDE MORE PUBLIC INFORMATION (2013) [hereinafter GAO 2013 REPORT] (detailing possible legal defects in the Bureau of Land Management's coal leasing process).

18. The prices at which the United States sells its natural resources are important for a number of reasons. They affect federal revenue, an obvious and perennial concern. They have environmental repercussions to the extent that low prices encourage additional resource extraction and consumption. And given the enormous extent of federal resource ownership, federal sales can shape the entire market in a particular resource. For example, nonfederal owners of fossil fuels, whether private parties or state or local governments, often find their market prospects shaped substantially by federal decisions to sell (or withhold from sale) coal, gas, or oil, or to permit renewable energy development on federal land. Additionally, simply offering a large quantity of an energy resource for sale or lease may tilt national energy policy toward that fuel and away from others. Some analysts claim, for example, that the perpetual availability of low-cost coal on western federal lands established coal as the fuel of choice for energy generation during the 1970s and 1980s, a policy that continues to shape energy production today. See SANZILLO, *supra* note 6, at 8.

19. This Article builds on the assumption that free market activity and government regulation are not antithetical or zero-sum but, in many instances, symbiotic. See Steven Vogel, *Why Freer Markets Need More Rules*, in CREATING COMPETITIVE MARKETS: THE POLITICS OF REGULATORY REFORM 25, 28 (Marc K. Landy et al. eds., 2007) ("The government-versus-market dichotomy that animates most debates about economic policy is [] misleading . . . not simply because competition requires regulation . . . but because market competition is not incompatible with a substantial government role . . . beyond that of a referee.").

20. See *infra* Part II.C. Please note that this Article does not suggest that selling assets at a price below their market value is uniformly undesirable. Historically, there have been numerous instances in which government entities have deliberately sold assets below their market value for purposes of public policy. Sometimes the objective was the promotion of settlement or development. The most obvious examples here would be the Homestead Act and the mining rights granted by the General Mining Law of 1872. See *infra* notes 117–18. Sometimes the goal was the protection of certain industries. Forest Service timber policy, for example, was long concerned with sustaining communities that had developed around timber harvesting and processing. Achieving this goal entailed protecting such communities not only from boom-and-bust domestic markets but also from international competition, especially from Canada. See generally DAVID A. CLARY, TIMBER AND THE FOREST SERVICE 147–68 (1986). Thus the mere fact that private parties benefit from below-cost purchases of public assets does not mean that the public is being cheated to benefit private actors. Even

explores, it is also the case that incumbent resource users tend to wield an outsized political influence. This influence, in turn, offers a clue to understanding the operation of resource sales even in those contexts in which Congress has demanded fair market value. Incumbents stand in a strong position vis-à-vis resource management agencies on account of those agencies' task environment and institutional structure. The federal land management agencies—principally the U.S. Forest Service and the U.S. Department of the Interior's Bureau of Land Management (BLM)²¹—oversee a vast amount of land, and they do so at staffing and budget levels that make it difficult to fulfill their legal mandates. Furthermore, federal law requires these agencies to balance numerous public objectives and to sell resources only pursuant to onerous procedural requirements that are not replicated in the private marketplace. Lacking readily available comparables, government agents often have little on which to base a presale estimate or asking price. In other cases, federal ownership of a resource is so extensive that it virtually comprises the entire market.²² To speak of, much less to legislate, a fair market value standard in this context verges on incoherence.

In these conditions, incumbents thrive.²³ This does not mean that the American public is doomed to an inadequate return on its natural resources; nor does it mean that asset sales programs should cease. The principal lessons of this Article are that the law of public natural resources should better account for the power of incumbent resource users by clarifying the goals of resource management; when maximizing revenue is an important objective, the law should rely on specified sales procedures rather than on abstract legal formulae, such as “fair market value,” which have little substantive or justiciable content.

This Article will proceed as follows. Part I begins with a short case study of federal coal sales to provide an example of a mature federal resource program that benefits incumbent resource users. Part II provides an overview of the federal government's natural resource policies, reviewing both the

today, some argue that renewable energy companies should receive free or below-fair market value access to public lands. And “giveaways” of public lands for sports stadiums and the like are, of course, intentional; though the valuation of such lands may be contested, public actors generally engage in such transactions with their eyes wide open as to the value of the land at stake.

21. These two agencies together are responsible for managing nearly 450 million of the 633 million acres under federal ownership. The Fish and Wildlife Service and the National Park Service are next on the list, each managing over 80 million acres. See GEORGE C. COGGINS ET AL., *FEDERAL PUBLIC LAND AND RESOURCES LAW* 32 (7th ed. 2014).

22. One of the giants of natural resources law, George Coggins, once noted: “Fair market value seems largely a meaningless abstraction in the absence of a fair market. Where one owner has half of the land, market forces, such as they are, will not operate freely.” George Cameron Coggins & Margaret Lindeberg-Johnson, *The Law of Public Rangeland Management II: The Commons and the Taylor Act*, 13 ENVTL. L. 1, 75 (1982).

23. Throughout this Article, I use the term incumbents to refer to entities with long-term transactional relationships with federal resource managers. Purchasers of natural resource rights tend to be firms—such as mining companies, ranches, and timber harvesters—that are involved in repeated purchases of rights from federal agencies rather than one-off transactions.

historical development of and current reliance on the fair market value standard. This overview reveals that the federal government has always had difficulty pricing its public resources, suggesting that today's problems are systemic rather than circumstantial. Part III argues that the federal government's pricing problems stem from the difficulties faced by limited administrative institutions in managing enormous resource supplies in a context in which longstanding private interests are well established in law, geography, and local politics. This Part further argues that, although the influence of incumbent interests is inevitable, carefully tailored sales procedures can improve the quality of resource transactions. Finally, the Article closes by outlining some implications of this analysis for theories of public property.

I.

THE CASE OF FEDERAL COAL LEASING

The United States is the record owner of enormous coal deposits in the Powder River Basin, one of the richest coal basins in the world.²⁴ Coal has been mined from this region of Wyoming and Montana for decades, but demand increased exponentially in the 1980s and 1990s. Not only is Powder River Basin coal close to the surface, making it relatively inexpensive to access, but it also tends to be comparatively low in sulfur content, enhancing its appeal to power generators required by law to reduce sulfur emissions.²⁵ Federal law tasks the BLM with holding competitive sales for coal tracts and requires it to reject any bid below fair market value.²⁶ Yet the Inspector General of the Interior Department recently concluded that federal coal sales are leaving millions of dollars on the table.²⁷ A parallel analysis by an independent organization puts the shortfall into the tens of billions.²⁸

24. See T.T. Taber & S.A. Kinney, U.S. Geological Survey, *Land Use and Ownership, Powder River Basin*, in 1999 RESOURCE ASSESSMENT OF SELECTED TERTIARY COAL BEDS AND ZONES IN THE NORTHERN ROCKY MOUNTAINS AND GREAT PLAINS REGION Fig.PM-2 (U.S. Geological Survey Professional Paper 1625-A, 1999), <http://pubs.usgs.gov/pp/p1625a>. The figure displays mineral ownership throughout the basin and demonstrates that the federal government owns the overwhelming majority of coal in the region. See also JAMES A. LUPPENS ET AL., U.S. GEOLOGICAL SURVEY, ASSESSMENT OF COAL GEOLOGY, RESOURCES, AND RESERVES IN THE GILLETTE COALFIELD, POWDER RIVER BASIN, WYOMING I (2008) (noting that coalbeds within the Basin “contain[] the largest deposits of low-sulfur subbituminous coal in the world”).

25. See BARBARA FREESE, *COAL: A HUMAN HISTORY* 178–79 (2003).

26. 30 U.S.C. § 201(a)(1) (2012).

27. See INSPECTOR GEN. 2013 REPORT, *supra* note 6.

28. See SANZILLO, *supra* note 6. See generally JEREMY NICHOLS, *WILDEARTH GUARDIANS, UNDERMINING THE CLIMATE: THE POWDER RIVER BASIN OF THE WEST: KEY TO SOLVING GLOBAL WARMING* (2009); TAXPAYERS FOR COMMON SENSE, *FEDERAL COAL LEASING: FAIR MARKET VALUE AND A FAIR RETURN FOR THE AMERICAN TAXPAYER* (2013); Mark Squillace, *The Tragic Story of the Federal Coal Leasing Program*, 27 NAT. RESOURCES & ENV'T. 29 (2013).

Let us begin by examining the process of federal coal leasing.²⁹ As noted, the law requires the BLM to reject any bid below fair market value.³⁰ The determination of fair market value, however, is committed to the discretion of the Secretary of the Interior.³¹ Although the Secretary is required to solicit public comments, he or she is not required to make public the assessed fair market value.³² Accepted bids are made public, however, and occasionally so are bids that are not accepted.³³ On the basis of this information, outside observers can draw some inferences about the Interior Department's internal calculations of fair market value.

The Department's valuations—both the inferred fair value and the process used to derive it—have come under heavy fire in recent years. An environmental group released a report in 2009 that described the federal coal-leasing program as a “sham.”³⁴ This was followed by several more detailed reports by other nonprofit entities from across the political spectrum.³⁵ These reports, all sharply critical of the Interior Department's fair market value determinations for coal, received substantial press coverage,³⁶ attracted congressional attention,³⁷ triggered several federal investigations,³⁸ and sparked

29. A coal “lease” is not a lease in the way that property law generally uses the term. Instead, a lease conveys a contractual right to remove coal from a base property according to the terms of the lease agreement. *See generally* 4 GEORGE CAMERON COGGINS & ROBERT L. GLICKSMAN, PUBLIC NATURAL RESOURCES Law § 38 (2d ed. 2013) (describing coal leasing practices before and after adoption of the Federal Coal Leasing Amendments Act).

30. 30 U.S.C. § 201(a)(1).

31. *Id.*; *see also* David A. Gulley, *The Fair Market Value of Federal Coal*, 86 W. VA. L. REV. 741, 754 (1984).

32. 30 U.S.C. § 201(a)(1).

33. *See, e.g.*, Manuel Quiñones, *BLM Rejects Wyo. Bid Deemed Below Fair Market Value*, GREENWIRE (Sept. 19, 2013), <http://www.eenews.net/greenwire/2013/09/19/stories/1059987536>.

34. NICHOLS, *supra* note 28, at 16.

35. For white papers that describe in detail the lease by application process and its negative effects on market competition, *see* SANZILLO, *supra* note 6; TAXPAYERS FOR COMMON SENSE, *supra* note 28.

36. *See, e.g.*, John Broder, *Undervalued Coal Leases Seen as Costing Taxpayers*, N.Y. TIMES (June 11, 2013), <http://www.nytimes.com/2013/06/12/us/us-coal-leases-undervalued-costing-taxpayers-millions-report-says.html>; Manuel Quiñones, *Coal Leasing Program Missed Out on Almost \$30B—Report*, GREENWIRE, June 25, 2012; Manuel Quiñones, *Taxpayer Group Slams Interior Leasing Program*, E&E NEWS PM (Sept. 18, 2013), <http://www.eenews.net/eenewspm/stories/1059987470>; *Report Endorses Markey Low Coal Bid Charge*, 37 PUBLIC LANDS NEWS 1, 10 (June 29, 2012).

37. The House Natural Resources Committee, for example, held an oversight hearing in July 2013 concerning the western coal mining industry and raised issues related to the sale price of federal coal. *See Mining in America: Powder River Basin Coal Mining—The Benefits and Challenges: Hearing Before the Subcomm. on Energy and Min. Resources of the H. Comm. on Nat. Resources*, 113th Cong. (2013).

38. The U.S. Government Accountability Office and the Inspector General of the Department of the Interior conducted the investigations. *See* INSPECTOR GEN. 2013 REPORT, *supra* note 6; GAO 2013 REPORT, *supra* note 17.

numerous calls for reform.³⁹ As a result, the House Natural Resources Committee requested a report from the Government Accountability Office examining coal-leasing practices, and the Interior Department ordered its own investigation by its Inspector General.⁴⁰ Both of these investigations yielded reports released in the latter half of 2013.⁴¹ The remainder of this Part describes the criticisms contained in these reports and explains why many observers argue that the coal-leasing process does not result in fair market value payments to the federal government.

The central criticism is simply that the coal-leasing process does not create genuine competition. As a matter of law, leasing must take place by competitive bidding.⁴² A competitive auction is intended to yield fair market value by definition, but there are several ways that auctions can fail to produce this result, such as an insufficient number of bidders, inadequate information, and collusion among bidders. There have been no charges of collusion in recent years; instead, the current problem is structural in that the coal-leasing program creates, as a consequence of its design, a shortage of participants in the bidding process. For example, the overwhelming majority of coal lease sales in the Powder River Basin in recent years have involved only one bidder.⁴³ In such circumstances, the lone bidder will be awarded the lease as long as the bid exceeds the Interior Secretary's fair market value determination.

Why has there been only one bidder? The answer is in the details of the leasing process. There are two ways that the BLM may initiate coal lease sales. First, the BLM may designate a region as a "coal-producing region"; in such a region, lease sales take place on tracts designated by the BLM and selected for their marketability.⁴⁴ Inexplicably, the BLM does not currently designate any region of the United States, let alone the abundant Powder River Basin, as a coal-producing region.⁴⁵ Instead, the BLM relies entirely on the second

39. See, e.g., Mark Squillace & Tom Sanzillo, *High Time To Reform the Federal Coal Lease Program*, IIEFA.ORG (Sept. 3, 2013), <http://ieefa.org/high-time-to-reform-the-federal-coal-lease-program>.

40. See Letter from Edward J. Markey, Ranking Member, H. Comm. on Nat. Resources, to Gene Dodaro, Comptroller Gen., U.S. Gov't Accountability Office (Apr. 24, 2012) (on file with author) (requesting that the GAO create a report on federal coal leasing practices and providing further background).

41. See INSPECTOR GEN. 2013 REPORT, *supra* note 6; GAO 2013 REPORT, *supra* note 17.

42. 30 U.S.C. § 201(a)(1) (2012). The only exception contemplated by the statute addresses coal removal pursuant to rights-of-way granted under the Federal Land Policy and Management Act of 1976, 43 U.S.C. §§ 1761–1771 (2012).

43. About 90 percent of BLM leases since 1990 have drawn only a single bidder. GAO 2013 REPORT, *supra* note 17, at 15. The remaining leases have only had two bidders. See INSPECTOR GEN. 2013 REPORT, *supra* note 6, at 8; Squillace, *supra* note 28, at 35 (noting that twenty-two of the last twenty-seven lease sales in the Powder River Basin have attracted only one bidder).

44. 43 C.F.R. § 3400.5 (2012).

45. Squillace, *supra* note 28, at 35 (noting that "all of the historic federal coal production regions in the country have been decertified"). In theory, the coal production region process would govern lease sales in coal-rich areas and allow the BLM to design sales on terms favorable to the federal landlord. The process was abandoned by the BLM in 1990, however, for reasons that remain

allowable means of initiating coal lease sales—a process known in the industry as “lease by application.” In this process, coal firms nominate tracts of land that they would like to develop to the BLM.⁴⁶ Over the years, these firms have learned how to select tracts that are exceedingly unlikely to attract competition.⁴⁷ The most basic strategy is to propose tracts that are immediately adjacent to a firm’s existing mines.⁴⁸ The firm incurs no additional startup costs in developing such tracts and is at an advantage vis-à-vis a firm that would have to initiate a new mining operation. Bidders can also manipulate the size of the proposed tract. Usually, the bidder either keeps the tract small enough to avoid attracting the interest of other firms⁴⁹ or fits the tract within an exception to the competitive-bid requirement for lease modifications.⁵⁰ Using these tactics, coal firms can virtually guarantee their success in securing a proposed lease.

To defend against such tactics, the Interior Secretary could simply set the fair market value at a higher point. As the recent Interior Department Inspector General’s report suggests, however, there are several shortcomings in the fair market value determination process. First, coal companies’ own evaluations of mining tracts serve as the basis for the Secretary’s determination of fair market value. This information is rarely verified by the Interior Department or an independent party.⁵¹

Even assuming that the information provided by coal firms is accurate, the BLM’s method of calculating fair market value is problematic. The BLM relies on internal appraisers rather than the Interior Department’s appraisal office, which has greater expertise in mineral valuation and less exposure to direct industry pressure.⁵² As the Inspector General’s report points out, this is a violation of department rules.⁵³ More importantly, BLM disregards export potential in calculating value,⁵⁴ despite rising demand for coal exports.⁵⁵ It also

unclear. The lease by application process, described *infra* notes 46–47, has been used exclusively since then. *Id.*

46. See 43 C.F.R. § 3425 (2012); see also Squillace, *supra* note 28, at 30–35. In either case, BLM can place a tract up for auction only after completing market and environmental analyses.

47. *Peabody Beats Alpha to Win PRB Coal Lease in Wyoming*, PLATTS (July 13, 2011), <http://www.platts.com/latest-news/coal/washington/peabody-beats-alpha-to-win-prb-coal-lease-in-6275925> (quoting Mark Squillace as saying, “These are bids that are being made on lease tracts that were designed by an individual coal operator with a strong interest in avoiding competition”).

48. Squillace, *supra* note 28, at 35.

49. See *Peabody Beats Alpha*, *supra* note 47 (quoting Mark Squillace as noting that sometimes firms are “greedy and they want to take a little bit more than maybe they should” and thus “end up getting a second bidder”).

50. INSPECTOR GEN. 2013 REPORT, *supra* note 6, at 13.

51. *Id.* at 12.

52. *Id.* at 6–7.

53. *Id.* at 6 (noting that BLM’s procedure “does not comply with Secretarial Order No. 3300” which was “intended to foster independence by taking responsibility for the valuation process from the bureaus and placing it with [the Interior Department’s Office of Valuation Services]”).

54. *Id.* at 7.

relies heavily on bidding results from previous sales,⁵⁶ even though such sales were themselves generally devoid of true competition. This method creates a self-sustaining cycle of low bid values. In some instances, local BLM offices even lower their fair market value determinations after the coal firm justifies its original bid.⁵⁷

Structural problems plague royalty collection as well. By law, the federal government is to receive a royalty on any coal produced on federal land.⁵⁸ The law requires a minimum royalty rate of 12.5 percent.⁵⁹ Yet, by consistently setting the royalty at this point, BLM treats the rate as a maximum.⁶⁰ Moreover, firms can employ numerous payment structures to reduce the royalty valuation base.⁶¹ Finally, site inspections are conducted by inspectors who “do not presently have effective enforcement tools,” according to the Inspector General, and who often are assigned to the same mine for many years.⁶²

These problems suggest that the current system of coal leasing is structurally deficient: the leasing program’s design and implementation result in below-market yields on publicly owned coal. Although federal law requires fair market value, the BLM has allowed coal-mining firms to minimize competition, and the Bureau is almost entirely dependent on the same coal firms for the information on which it bases its valuations. The situation is virtually tailor-made for agency capture.⁶³ Exacerbating these concerns, the judiciary has displayed no inclination to second-guess the Secretary’s fair market value determination, nor has any court questioned the BLM’s decision to rely wholly on the “lease by application” process rather than the regional

55. *Asian Power Demand to Drive Up Coal Prices*, REUTERS (Nov. 20, 2013), <http://www.reuters.com/article/2013/11/20/energy-coal-glencore-idUSL5N0J51TE20131120>.

56. INSPECTOR GEN. 2013 REPORT, *supra* note 6, at 7.

57. *Id.* at 10.

58. 30 U.S.C. § 207(a) (2012); 43 C.F.R. § 3473.3-2(a)(1) (2012).

59. 30 U.S.C. § 207(a). The regulations establishing the minimum royalty rate for surface mining and underground mining authorize BLM to reduce this rate when doing so will encourage the greatest ultimate recovery of federal coal, conserve federal coal, and promote development, or when the lease cannot operate successfully under its current terms. *See* 43 C.F.R. § 3473.3-2(a)(1)–(2). In no situation, however, can BLM reduce the royalty on a producing federal lease to zero. Moreover, critics have charged that royalties, just as lease bids, would be higher if BLM took Asian demand for coal into account. *See, e.g.*, Patrick Rucker, *Prices Of Coal Exports To Asia Not Reflected In Royalty Payments*, REUTERS (Dec. 5, 2012), http://www.denverpost.com/ci_22125541/prices-coal-exports-asia-not-reflected-royalty-payments.

60. 4 COGGINS & GLICKSMAN, *supra* note 29, § 38:27.

61. *See* Isaiah T. Peterson, *Devaluing Coal: Reasons for Restructuring How Federal Coal Is Valued*, 13 GEO. J.L. & PUB. POL’Y 165, 169–73 (2015) (describing take-or-pay contracts and other mechanisms that allow lessees of federal coal to avoid royalty payments).

62. INSPECTOR GEN. 2013 REPORT, *supra* note 6, at 16.

63. The theory of agency capture “refers to cases in which a regulated industry is able to control decisions made about that industry by regulators and/or performances by regulators related to the industry.” Barry M. Mitnick, *Capturing “Capture”*: *Definition and Mechanisms*, in HANDBOOK ON THE POLITICS OF REGULATION 34–39, 35 (David Levi-Faur ed., 2011) (emphasis removed).

approach more consistent with the letter and spirit of the law.⁶⁴ The fair market value standard encoded in the law, without more, gives courts very little basis on which to scrutinize agency judgments, especially when the determination of fair market value is committed by law to the Secretary's discretion. And as some have noted, the market price of coal is itself influenced by the volume of coal made available by the federal government, especially given the extent of federal coal ownership. In such an environment, the concept of fair market value, whether to courts or administrators, is of limited utility.

These problems are not unique to coal leasing or to the present era. Since the Louisiana Purchase, the federal government has had difficulty alienating coal reserves on terms satisfactory to both buyer and seller.⁶⁵ For much of the 1800s, the federal government simply transferred coal-rich lands to settlers on the same terms as other lands. While a windfall for fortunate or savvy settlers, many lawmakers perceived this as a grievous mistake.⁶⁶ As the fuel's importance to industrial and commercial development became clear, Congress raised the price of coal lands but had difficulty ascertaining an appropriate price.⁶⁷ In the early 1900s, federal policy shifted, and the government moved to retain the remaining coal deposits. In 1920, Congress passed the Mineral Leasing Act, which established the modern leasing system whereby private entities could purchase mining rights to coal, rather than fee ownership of coal lands.⁶⁸ But this policy too was abused. Through the 1960s, speculators stockpiled coal reserves in the western United States as a hedge against rising oil prices.⁶⁹ As a result, actual development occurred only haltingly; petroleum prices remained low enough to make serious coal development on federal land

64. See, e.g., *WildEarth Guardians v. Jewell*, 738 F.3d 298 (D.C. Cir. 2013) (rejecting a challenge to the adequacy of an environmental impact statement evaluating a coal lease sale); *WildEarth Guardians v. Bureau of Land Mgmt.*, 8 F. Supp. 3d 17 (D.D.C. 2014); *WildEarth Guardians v. Salazar*, 880 F. Supp. 2d 77 (D.D.C. 2012) (finding that an environmental group did not have standing to challenge a coal lease sale and demand that the Powder River Basin be recertified as a coal production region). The only recent successful challenge to a coal lease sale dealt with a deficient cost-benefit analysis for a mining exploration project. See *High Country Conservation Advocates v. U.S. Forest Serv.*, 52 F. Supp. 3d 1174 (D. Colo. 2014).

65. Here we can only glance at a long and fascinating history. See generally BENJAMIN HORACE HIBBARD, *A HISTORY OF THE PUBLIC LAND POLICIES* 512–28 (2d ed. 1965). Further historical context will be provided *infra* Part II.

66. See HIBBARD, *supra* note 65, at 496–501 (describing Congress's increasing sense that public lands required classification to safeguard supplies of timber, coal, and other resources).

67. *Id.* at 518–19.

68. Act of Feb. 25, 1920, 41 Stat. 437 (codified at 30 U.S.C. § 181 (2012)).

69. See FRED BOSSELMAN ET AL., *ENERGY, ECONOMICS, AND THE ENVIRONMENT* 200 (3d ed. 2010).

unnecessary.⁷⁰ Thus, as the energy crisis of the 1970s loomed, only a small minority of outstanding federal coal leases were in actual production.⁷¹

Concerned by the gross disproportion between acreage leased and coal produced, the Interior Department commenced an informal moratorium on new coal leases in 1971. Congress eventually formalized the moratorium through the Federal Coal Leasing Amendments Act (FCLAA) in 1976.⁷² Congress intended the FCLAA to end speculation in coal reserves by requiring that firms diligently develop coal leases and that BLM price coal at fair market value.⁷³ However, the first substantial coal lease following the FCLAA—and the largest coal lease sale in history to that point—led to an embarrassing scandal. Prior to the sale, the Interior Department leaked its market value determination to coal companies and then lowered the valuation in response to industry complaints.⁷⁴ Federal courts refused to overturn the Interior Department's revised fair market value determination, despite numerous investigations concluding that the sale yielded \$100 million less than the coal's true value.⁷⁵ This episode signaled the courts' unwillingness to play an active role in policing the fair market value requirement. Judicial quiescence in the intervening years has made clear that this signal was quite accurate.

Federal coal-leasing law has changed only slightly since the 1980s.⁷⁶ The circumstances that caused serious problems at that time and in the previous century are still very much intact. This brief look at coal leasing suggests that certain difficulties inhere in the disposition of large-scale public resources or, at the very least, originate from a source deeper than any particular provision of the federal coal laws. Thus, the next Part examines the broader context of public resource sales, in both history and the present day.

II.

FAIR MARKET VALUE IN NATURAL RESOURCE LAW

One rationale for selling or leasing public assets is obvious: sales produce instant revenue. Prior to the imposition of the federal income tax, sales of

70. See 4 COGGINS & GLICKSMAN, *supra* note 29, §§ 38:1, 38:9 (noting that energy companies held reserves “as hedges against petroleum depletion”). Additionally, the authors noted that total federal acreage under lease soared in the 1950s and 1960s while actual production on federal land declined. *Id.* § 38:7.

71. In 1976, only about sixty of 533 outstanding coal leases on federal land were in production. *Id.* § 38:12 n.20 (citing Solicitor's Opinion, M-36951 (1985)).

72. Pub. L. No. 94-377 (1976) (codified at 30 U.S.C. §§ 181–287 (2012)).

73. See 4 COGGINS & GLICKSMAN, *supra* note 29, § 38:50–51.

74. See *id.* § 38:20; Gulley, *supra* note 31, at 745.

75. See 4 COGGINS & GLICKSMAN, *supra* note 29, § 38:26.

76. Minor changes were made by, for example, the inaptly named Coal Market Competition Act of 2000, Pub. L. No. 106-463 (2000) (increasing the maximum coal lease acreage that any single coal producer could hold within a single state).

public lands were an important source of revenue for the federal government.⁷⁷ During the twentieth century, sales of coal, oil, and natural gas netted federal and state governments billions of dollars that were crucial in funding important initiatives. In recent years, budget difficulties at every level of government have raised the profile of asset sales again.⁷⁸

Given the soaring federal debt, one might expect lawmakers of all stripes to prioritize the goal of maximizing federal revenue from resource sales. But longstanding strands of federal resource law cut in the opposite direction. For a lengthy period in our nation's history, federal policy made land available to settlers and resource users at little or no cost.⁷⁹ Sometimes this "policy" was simply the tacit acknowledgment that the federal government lacked the manpower, administrative capacity, and political support to police the settlement, use, and abuse of the public domain, let alone to demand greater sums.⁸⁰ But there were also philosophical reasons. Lawmakers in the Jeffersonian tradition sought to sow in the West the seeds of republicanism and agrarianism, imagining a society built around small family farms.⁸¹ Giving away land and resources encouraged westward expansion, settlement, and development. Many regarded public lands not as protected reserves, as they are often considered today, but as lands open to all for almost any conceivable use.⁸² Even today, though attitudes toward public lands have shifted toward conservation (and the remaining public lands have long since been closed to settlement), there remain plausible arguments for selling or providing access to certain federal resources at below-market prices.

This Part explores these arguments by offering a look at several chapters in the development of American natural resource policies, with particular

77. Gary M. Anderson & Dolores T. Martin, *The Public Domain and Nineteenth Century Transfer Policy*, 6 CATO J. 905, 905 (1987) (noting that proceeds from the sale of public lands constituted a major revenue source for the federal government until at least the Civil War).

78. Ellen Damm, *Crumbling Infrastructure, Crumbling Democracy: Infrastructure Privatization Contracts and Their Effects on State and Local Governance*, 6 NW. J.L. & SOC. POL'Y 47, 51 (2011).

79. See generally PAUL WALLACE GATES, *HISTORY OF PUBLIC LAND LAW DEVELOPMENT 219-47* (1968); MALCOLM ROHRBOUGH, *THE LAND OFFICE BUSINESS: THE SETTLEMENT AND ADMINISTRATION OF AMERICAN PUBLIC LANDS, 1789-1837* (1968).

80. For a creative, theoretical treatment addressing the legal effects of federal impotence against "intentional lawbreaking" in the settlement of public lands, see Eduardo Peñalver & Sonia K. Katyal, *Property Outlaws*, 155 U. PA. L. REV. 1095, 1105-13 (2006) (describing the political context of squatting on public lands during the nineteenth century).

81. GATES, *supra* note 79, at 62 (noting President Jefferson's devotion to "agrarian democracy" and quoting Jefferson's famous statement that "[t]he small land holders are the most precious part of a state"). As to republicanism, see Carol Rose, *Claiming While Complaining on the Federal Public Lands: A Problem for Public Property or a Special Case?—A Comment on Bruce Huber*, *The Durability of Private Claims to Public Property*, GEO. L.J. ONLINE (forthcoming 2015) (noting that "small-r republican" impulses propelled the disposal of public lands). Electoral politics and the politics of slavery indisputably shaped frontier policy as well.

82. See Bruce R. Huber, *The Durability of Private Claims to Public Property*, 102 GEO. L.J. 991, 997 (2014) (describing the "open access" model of natural resource management).

attention to the price sought by federal officials in resource transactions, the laws governing public resource sales, and the context in which these laws were enacted and implemented.⁸³

A. *Early Public Land and Resource Transfers*

For a number of decades, the federal government's natural resource policy consisted almost entirely in the transfer of public land into private ownership. The United States had acquired a great deal of land via cessions from the former colonies and purchases from foreign powers, such as the Louisiana Purchase.⁸⁴ Land transfers served two principal goals. The first was fiscal: the central government was mired in debt following the Revolutionary War and

83. Private entities misprice assets too, of course, but when government does so, public resources are at stake and public interests are implicated. Voluminous literatures in disciplines ranging from economics to sociology analyze in rich detail the establishment and attributes of prices in various contexts within modern market economies. While these literatures tend to be highly specialized, useful overviews may be found in *ASKING ABOUT PRICES: A NEW APPROACH TO UNDERSTANDING PRICE STICKINESS* (Alan S. Blinder et al. eds., 1998); JACK HIRSHLEIFER, AMIHAI GLAZER & DAVID HIRSHLEIFER, *PRICE THEORY AND APPLICATIONS: DECISIONS, MARKETS, AND INFORMATION* (7th ed. 2005).

Although the discussion thus far has focused on the government as a seller, it is worth noting that government may scarcely fare better as a buyer. For example, volume purchases often bestow agencies with propitious bargaining power, but procurement rules can impair officials' ability to negotiate on price. Legislation creating Medicare Part D, a federal prescription drug benefit, famously prohibits the federal government from intervening in negotiations between subsidized health insurers and pharmaceutical manufacturers. Robert Pear, *Power Shift in Congress Revives Health Care Debate*, N.Y. TIMES (Jan. 2, 2007), <http://www.nytimes.com/2007/01/02/washington/02health.html>. Other rules, such as domestic purchase requirements, also may impact purchase price. See, e.g., Laura Petrecca, *U.S. Flags at Military Bases Must be 100% American-Made*, USA TODAY (Feb. 22, 2014), <http://www.usatoday.com/story/news/nation/2014/02/22/american-made-flags-military/5725165> (reporting new Department of Defense purchase rules requiring that "flags purchased by the military must be wholly sourced from the U.S. [sic]"). Furthermore, tax benefits, such as those granted for conservation easements, raise the same general question: Are taxpayers getting their money's worth? In the case of conservation easements, landowners, in return for a commitment to conserve land, receive tax credits that have been criticized as gratuitous and regressive insofar as they benefit wealthy owners who had no intention to develop their property. See I.R.C. § 170(h) (2015); Treas. Reg. § 1.170A-14 (2009); Roger Colinvaux, *The Conservation Easement Tax Expenditure: In Search of Conservation Value*, 37 COLUM. J. ENVTL. L. 1, 15–18 (2012) (detailing criticisms of conservation easement tax incentives); Jeff Pidot, *Conservation Easement Reform: As Maine Goes Should the Nation Follow?*, 74 LAW & CONTEMP. PROBS. 1, 4 (2011) (noting that "the public is rightfully interested in knowing that its financial stake yields durable public benefits," and proceeding to evaluate recent easement reform legislation in Maine).

On the other hand, in the eminent domain context, there is reason to believe that governments actually pay *above-market* prices during pre-condemnation proceedings to avoid the expense associated with formal litigation. Nicole Stelle Garnett, *The Neglected Political Economy of Eminent Domain*, 105 MICH. L. REV. 101, 126–36 (2006).

84. See generally GATES, *supra* note 79, at 49–57, 75–86 (1968) (providing a historical account of cessions and other federal land acquisitions). The Louisiana Purchase is the most well known of these acquisitions. These transactions, of course, disregarded entirely the indigenous occupants of the purchased land. In the seminal case of *Johnson v. M'Intosh*, 21 U.S. (8 Wheat.) 543 (1823), one of the disputants traced his land title to a purchase from a Native American tribe; the Court deemed this title inferior to a land patent issued later by the federal government.

had few reliable sources of revenue.⁸⁵ The second was the settlement of the frontier.⁸⁶ The combination of these objectives posed several questions. How should land sales be conducted, and at what price? Should the federal government extend credit to purchasers? Should the mode of sale favor bulk sales to speculators as intermediaries, or piecemeal sales to settlers? The young government's efforts to address these questions reveal difficulties in resource management and disposition that remain quite relevant today.

In the early stages of the transfer process, the federal aim was to maximize short-term revenue.⁸⁷ Federal lawmakers faced a debt crisis: the national debt was over a quarter of the gross domestic product, a level it would not reach again until the Civil War.⁸⁸ Indebtedness exerted a strong pull in early debates over public land policy. Even Thomas Jefferson, otherwise an earnest supporter of giving frontier land away to settlers, came to see federal land as an important source of revenue.⁸⁹ The predominance of the revenue objective is unmistakable in the template for formal public land transactions established by early land laws, including the Ordinance of 1785,⁹⁰ the great Northwest Ordinance of 1787,⁹¹ and the Land Acts of 1796 and 1800.⁹² These statutes established that land parcels would be sold by auction with a minimum price fixed by legislation. The government first set the minimum price at two dollars per acre, a price several multiples above the sale price in several recent

85. Indeed, it was hoped by some that public land sales could be the cornerstone of early government fiscal policy. *See, e.g.*, DANIEL WALKER HOWE, WHAT HATH GOD WROUGHT: THE TRANSFORMATION OF AMERICA, 1815–1848, at 252 (2007) (noting John Quincy Adams's hope that public land sales would "eventually generate enough money for the federal government to run all its programs . . . without having to take anything from the people in taxes").

86. *See* HIBBARD, *supra* note 65, at 1–6 (describing the interplay between the objectives of revenue and settlement). Settlement was pursued not only in the interest of national expansion but also in the interest of national defense. The nineteenth-century frontier was rife with conflict with Native Americans, and settlement was regarded as a natural defense against attack.

87. *Id.*

88. *See* Matt Phillips, *The Long Story of U.S. Debt, from 1790 to 2011, in 1 Little Chart*, ATLANTIC (Nov. 13, 2012), <http://www.theatlantic.com/business/archive/2012/11/the-long-story-of-us-debt-from-1790-to-2011-in-1-little-chart/265185>. U.S. public debt was 29.6 percent of GDP in 1790 and was quickly reduced to below 10 percent, where it remained until the 1860s.

89. Of the strategy of charging a relatively high price for land in sales to settlers, Jefferson had once said, "By selling land you will disgust [settlers] and cause an avulsion of them from the common union. They will settle the lands in spite of everybody." HIBBARD, *supra* note 65, at 4.

90. *An Ordinance for Ascertaining the Mode of Disposing of Lands in the Western Territory (May 20, 1785)*, 28 J. CON'T L CONG. 375, 378 (1933).

91. An Ordinance for the Government of the Territory of the United States, North-West of the River Ohio, ch. 8, 1 Stat. 50, 51 (1787) (reaffirmed Aug. 7, 1798) (also known as the Freedom Ordinance or the Ordinance of 1787).

92. *Id.* at ch. 29, 1 Stat. 464; 2 Stat. 73–78.

sales.⁹³ The high price and the auction mechanism, it was assumed, would serve to maximize federal revenue.⁹⁴

Some legislators also endorsed a high per-acre price as a discouragement to speculators, who were widely regarded as opportunists standing in the way of settlement.⁹⁵ By interposing themselves in the process of land transfer, speculators not only skimmed away what would otherwise be public revenue, but also delayed actual settlement by postponing sales until prices rose.⁹⁶ Thus Congress sought to structure public land sales so as to discourage speculation. Beyond the two-dollar-per-acre price,⁹⁷ the size of tracts offered for sale was the principal deterrent. In general, Congress chose to auction small, 160-acre tracts of land—a size appealing to settlers—rather than quarter-township tracts that settlers could not easily afford.⁹⁸

The decision to subdivide land into 160-acre tracts, however, fed into a growing administrative crisis. Land could not be sold until it was surveyed.⁹⁹ The federal survey process, laborious and expensive under the best of circumstances, would now need to create a grid of accurate lines, spaced half a mile apart, across the entire frontier.¹⁰⁰ Larger tract sizes would have required many fewer lines and thus a fraction of the effort. In addition, Congress economized by opening only a small number of regional land offices, which compelled many prospective buyers to travel long distances to purchase land.¹⁰¹ This inconvenience, aggravated by the exceedingly slow pace of the

93. HIBBARD, *supra* note 65, at 64. The two-dollar price was for land purchased on credit; full cash payment at the time of purchase resulted in an 8 percent discount, subsequently increased to 16 percent.

94. See ROHRBOUGH, *supra* note 79, at 46 (noting that these elements were designed so that “the highest possible profit would go to the government”).

95. See RICHARD WHITE, “IT’S YOUR MISFORTUNE AND NONE OF MY OWN”: A NEW HISTORY OF THE AMERICAN WEST 140–42 (1991).

96. *Id.*

97. HIBBARD, *supra* note 65, at 64 (“Speculation, always a subject of apprehension, it was held, could not thrive at this particular time in Ohio, since land was already selling at four to six dollars, a price too high to be attractive to the land jobber.”); see also ROHRBOUGH, *supra* note 79, at 18 (noting that the purchase price was “substantial for the small purchaser”).

98. HIBBARD, *supra* note 65, at 61 (describing the belief that only settlers would be interested in small tracts). Throughout the period of westward expansion, restrictions on tract size were used to discourage speculation. See, e.g., GATES, *supra* note 79, at 187 (noting the acreage limitations that appeared in a great deal of public lands legislation). Survey townships are square in shape and six miles to a side; a quarter township is thus three miles to a side or nine square miles, an area of 5,760 acres. GATES, *supra* note 79, at 44; HIBBARD, *supra* note 65, at 36–37.

99. Only in 1880 did Congress relax the requirement that only surveyed land could be legally settled. WHITE, *supra* note 95, at 143.

100. See ROHRBOUGH, *supra* note 79, at 34–45 (describing the numerous difficulties associated with the survey process); see also Vernon Carstensen, *Patterns on the American Land*, 18 *PUBLIUS* 31 (1988) (describing some of the social and economic consequences of the rectangular land survey).

101. Albert Gallatin, the Secretary of the Treasury and the official charged with superintending the public lands in the very early 1800s, “intended that the land business should be conducted in accordance with strict Republican principles of administration—that is to say, with a minimum of staff and the smallest expense possible.” ROHRBOUGH, *supra* note 79, at 38.

land survey, led thousands of settlers, many of whom were already frustrated by the high price of federal land, to settle land ahead of the advancing survey.¹⁰² Before long, the large number of squatters made an ameliorative policy a political necessity. Congress, lacking both the political will and the official personnel to evict squatters, had no choice but to ratify their occupation. Congress did this via various preemption laws that gave squatters the right to purchase, at the minimum price set by Congress, land that they had improved and resided on for a short period.¹⁰³

In theory, public auctions would harness competition among settlers and assure the federal government a maximum return. In practice, at a floor price of two dollars an acre, much land simply went unsold or sold at minimum price. According to eminent public lands historian Paul Wallace Gates:

These early auction sales . . . , it was thought, might . . . bring to the government substantially more than the minimum price of \$2 an acre. They did no such thing in these early years. The land sold for the minimum price and, except for a few exciting auctions at a later date, this was generally true throughout the history of the public domain.¹⁰⁴

Furthermore, many settlers who did purchase land did so on credit from the United States and later defaulted on their loans.¹⁰⁵ By 1820, defaults had become so problematic that Congress disallowed credit sales entirely and lowered the base price of land to \$1.25 per acre.¹⁰⁶ Even at this price, however, settlers found ways to avoid competition. Competition among themselves, they quickly realized, would only send their hard-earned money to Washington and away from the frontier economy. It did not take a great deal of sophistication to outwit the federal land office. The following tactic is illustrative:

If, upon comparing numbers, it appears that two [settlers] are after the same tract of land, one asks the other what he will take to not bid against him. If neither will consent to be bought off, they then retire, and cast lots, and the lucky one enters the tract at Congress' price—\$1.25 per acre—and the other enters the second choice on his list.¹⁰⁷

Moreover, the slow pace and inflexibility of the public land sale process encouraged not only trespass but also resource theft. Timberlands in Wisconsin, Illinois, Michigan, and other northern states were denuded at an

102. *Id.* at 14–16; HIBBARD, *supra* note 65, at 57; GATES, *supra* note 79, at 219–21.

103. ROHRBOUGH, *supra* note 79, at 200–20. Federal land records do not distinguish between land sold at auction and land acquired by preemption, so we cannot know the extent of the squatting problem, but it is clear that it was sizeable. What statistics exist can be found in GATES, *supra* note 79, at 222–47.

104. GATES, *supra* note 79, at 133.

105. *Id.* at 134–36.

106. *Id.* at 141 (describing the Act of April 24, 1820, 3 Stat. 566).

107. *Id.* at 152 (quoting SANDFORD C. COX, RECOLLECTIONS OF THE EARLY SETTLEMENT OF THE WABASH VALLEY 17–18 (1860)).

alarming pace in clear violation of federal law.¹⁰⁸ Unlike land in and south of the Ohio Valley, which often had to be cleared of timber to be made suitable for agriculture,¹⁰⁹ many of the northern timberlands had little residual agricultural value after timber was cleared.¹¹⁰ Thus timber theft left the land office with parcels that were difficult to sell.¹¹¹ The scale of the timber theft problem was occasionally brought to Congress's attention, but legislators either regarded the federal government as functionally impotent to solve the problem or were persuaded by northerners not to invest in expanded enforcement efforts.¹¹²

In the same way, private individuals freely removed minerals from federal land without paying any form of compensation to the government. The California Gold Rush took place on federal land, and federal officials decided early on not to collect a royalty on gold or other valuable minerals.¹¹³ Needless to say, in the case of both timber and gold, the value of the resources vastly exceeded the \$1.25-per-acre asking price. Even a law-abiding claimant, then, could obtain good title to abundant resources for a trifle, and many corporations took advantage of this expedient to acquire substantial resource holdings.¹¹⁴ In spite of this, not until the late 1800s did Congress make an effort

108. A brief and sobering account of federal ineffectiveness in the face of timber depredations can be found in Lucile Kane, *Federal Protection of Public Timber in the Upper Great Lake States*, in THE PUBLIC LANDS: STUDIES IN THE HISTORY OF THE PUBLIC DOMAIN 439–48 (Vernon Carstensen ed., 1962). Hibbard described the enforcement of timber laws as “pitifully inadequate due to lack of a sufficient staff and funds.” HIBBARD, *supra* note 65, at 460; *see also* GATES, *supra* note 79, at 534–52.

109. *See* HIBBARD, *supra* note 65, at 457 (noting that “forests were a liability rather than an asset to the early pioneer agricultural settlers”).

110. As Richard White colorfully puts it, “In Michigan, Wisconsin, and Minnesota awesome pine forests grew on lands that, once put under the plow, only yielded crops of misery.” WHITE, *supra* note 95, at 148; *see also* JAMES WILLARD HURST, LAW AND ECONOMIC GROWTH: THE LEGAL HISTORY OF THE LUMBER INDUSTRY IN WISCONSIN, 1836–1915, at 13 (1964).

111. “Once cut for their most valuable timber, [the Lake States forest lands] were usually allowed to revert to the government for unpaid taxes. Thus, the practical though uncalculated outcome was as if the United States had leased or licensed the land for logging without any of the stipulations a prudent lessor might fix to preserve the long-term productivity of the forest. . . . [T]his history attested the momentum of official and popular favor for giving large rein to private will in using land.” JAMES WILLARD HURST, LAW AND MARKETS IN UNITED STATES HISTORY: DIFFERENT MODES OF BARGAINING AMONG INTERESTS 26 (1982).

112. HIBBARD, *supra* note 65, at 457–63; GATES, *supra* note 79, at 538–39. Not until 1878 did an Interior Secretary make it a federal priority to reduce timber theft by way of a more aggressive enforcement campaign. *Id.* at 545–50.

113. The Army Colonel nearest the gold fields, tasked with evaluating how the federal government might assert its rights, wisely declared: “[U]pon considering the large extent of the country, the character of the people engaged, and the small scattered force at my command, I resolved not to interfere.” COGGINS ET AL., *supra* note 21, at 112. Many of the Colonel’s troops simply deserted to join the gold hunt themselves.

114. Legal historian James Willard Hurst writes: “Throughout most of the [nineteenth] century the national and state governments sold their land with no adequate regard to the special resources in soils, minerals, or timber which might make particular tracts of extraordinary value . . . [f]rom this source arose an important new branch of *rentier* wealth for investment in industry as well as agriculture.” JAMES WILLARD HURST, LAW AND THE CONDITIONS OF FREEDOM IN THE NINETEENTH

to classify lands by the resources they held and to set their prices accordingly.¹¹⁵

Notice, then, how difficult it was for the federal government to derive revenue from resource sales. The law did not yet require a market value return, and revenues were far below expectations. By mid-century, officials no longer regarded public land and resources as a principal basis of federal revenue. Resource policy was characterized by the inability of federal law to organize effectively the processes of settlement and resource exploitation.¹¹⁶ First and foremost, the young federal government lacked the administrative and enforcement apparatus to keep pace with developments on the frontier. Pricing was crude and administrative capacity was severely limited. Genuine competitive bidding on land parcels was uncommon, and land auctions failed to generate the expected revenue. Trespass and resource theft were rampant, reflecting the reality that, at the level of any individual parcel, the local resource user—whether acting alone or in conspiracy with others—was a deft and shrewd counterparty to the clumsy federal landowner.

In the abstract, one might assume that federal lawmakers could have simply reformed the administration of public lands to deal with these problems. But such a notion is risible in light of the government's actual bureaucratic capabilities at the time. The administrative state as we think of it today was a century away. However fervent the hope that land sales would yield substantial federal revenue, that hope proved unattainable amidst the land scramble taking place across the continent.

B. Changes of the Progressive Era

As the nineteenth century progressed, lawmakers scaled back their revenue aspirations and sought principally to facilitate peaceful settlement of the public domain. Federal law moved to further enable the private acquisition of federal land and resources. The signal development was the Homestead Act of 1862, which transferred millions of acres into the hands of settlers in return for, in essence, the sweat of their brow.¹¹⁷ The General Mining Law of 1872 granted the discoverer royalty-free title to minerals on federal land.¹¹⁸ These laws and many others were marked by a striking disregard for the effects of

CENTURY UNITED STATES 79 (1956); *see also* WHITE, *supra* note 95, at 148 (describing the aggregation of wealth in timber companies).

115. *See, e.g.*, Timber and Stone Act of 1878, 45th Cong., Sess. 2, ch. 151, 20 Stat. 89. Several earlier land laws did apply to specific classes of land, such as land containing salt deposits, but these did not approach general attempts at land classification.

116. In fact, most public land histories focus on the extralegal disposition of public land rather than on legal processes, because they more accurately capture the realities of frontier land acquisition. *See, e.g.*, GATES, *supra* note 79, at 161–65, 219–21; WHITE, *supra* note 95, at 148.

117. Pub. L. No. 37-64 (May 20, 1862), 12 Stat. 392. For a history of the Homestead Act, *see* GATES, *supra* note 79, at 387–434.

118. Act of May 10, 1872, 17 Stat. 91 (codified at 30 U.S.C. § 22 (2012)).

resource disposal on the public fisc. The dominant idea concerning the public lands was that they ought be dispensed in the service of the people on the frontier.¹¹⁹

This laissez-faire approach to land disposition added fuel to the run on public resources. As a result, some have referred to this late-century era as “The Great Barbecue”—a period in which public lands and natural resources were exploited and wasted in unprecedented fashion.¹²⁰ As a consequence of this period, the twentieth century began with new concerns about scarcity in certain natural resources. Some spoke of “timber famine”¹²¹ and “coal famine,”¹²² terms that would have been almost unimaginable decades earlier.

Against this backdrop, the Progressive Era brought about something of a revolution in natural resource policy. Facing a depleted resource base, the federal government began to retain and manage its land and resources, rather than dispose of them.¹²³ Active management of millions of acres of land required enormous new administrative institutions, and the establishment of such institutions, then as now, was not without conflict.¹²⁴ The mid-1900s cemented a sweeping federal role in land management. The legal regimes that took shape during this period, though highly variant across the principal public resources, tended to allow or even require land agencies to charge a higher

119. The principal resistance to this idea came from the eastern states, which felt that their resources were being given away for very little in return. But this opposition did not materialize into anything like a fair market value policy. *See generally* GATES, *supra* note 79, at 1–32.

120. Historian Vernon Parrington coined the phrase. It referred not only to wanton resource exploitation, but also to the inequality of the Gilded Age. VERNON LOUIS PARRINGTON, *MAIN CURRENTS IN AMERICAN THOUGHT: AN INTERPRETATION OF AMERICAN LITERATURE FROM THE BEGINNINGS TO 1920*, at 23 (1927). Parrington used the image of the barbecue but noted that not all were invited to the feast. “[I]nconspicuous persons, those who were at home on the farm or at work in the mills and offices were overlooked; a good many indeed out of the total number of the American people. But all the important persons, leading bankers and promoters and business men, received invitations. There wasn’t room for everybody and these were presumed to represent the whole.” *Id.*

121. CLARY, *supra* note 20, at 12; WILLIAM G. ROBBINS, *AMERICAN FORESTRY: A HISTORY OF NATIONAL, STATE, & PRIVATE COOPERATION I* (1985); *see also* United States v. New Mexico, 438 U.S. 696, 705 (1978) (noting that “[i]n the mid and late 1800’s, many of the forests on the public domain were ravaged and the fear arose that the forest lands might soon disappear, leaving the United States with a shortage both of timber and of watersheds with which to encourage stream flows while preventing floods”).

122. *Amoco Prod. Co. v. S. Ute Indian Tribe*, 526 U.S. 865, 868 (1999).

123. *See generally* SAMUEL P. HAYS, *CONSERVATION AND THE GOSPEL OF EFFICIENCY: THE PROGRESSIVE CONSERVATION MOVEMENT, 1890–1920* (2d ed. 1999). The idea of a shift in policy away from land disposal and toward retention, as presented by, for example, ROY M. ROBBINS, *OUR LANDED HERITAGE: THE PUBLIC DOMAIN 1776–1936* (1942), masks substantial variation among the resource laws of the time. An important corrective is found in Leigh Raymond & Sally K. Fairfax, *Fragmentation of Public Domain Law & Policy: An Alternative to the “Shift-to-Retention” Thesis*, 39 NAT. RESOURCES J. 649 (1999) (focusing instead on the fragmentation of federal land policies).

124. The United States Forest Service, for example, was formally launched in 1905; the National Park Service in 1916; and the Bureau of Fisheries (now the Fish and Wildlife Service) in 1903. Stories about the political battles early in the Park Service’s history are recounted in HORACE M. ALBRIGHT & MARIAN ALBRIGHT SCHENK, *CREATING THE NATIONAL PARK SERVICE: THE MISSING YEARS* (1999); *see also* HAYS, *supra* note 123.

price for resource use than previously expected.¹²⁵ Although the pursuit of revenue was not the primary impetus for these changes, there was a clear shift in federal policy away from the relatively unfettered disposal practices of the late 1800s. Yet despite a broad reordering in the law of and public sentiment toward public lands, there remained great difficulties in converting resource abundance into federal revenue.

Two factors drove the renewed effort to secure revenue from resource sales. First, the federal government needed additional revenue to finance improved resource management. Conservationists, an important part of the Progressive constituency, urged federal lawmakers to implement managerial practices that would preserve and protect the fast-disappearing base of public natural resources.¹²⁶ Active resource management, however, required funding to build and staff organizations capable of overseeing enormous federal landholdings. Lawmakers thus sought to impose fee requirements even for activities that had long been unrestricted on federal lands, such as livestock grazing.¹²⁷ The goal was cost recovery: fee requirements were not intended to raise general revenue but merely to recoup expenditures made for resource management programs.¹²⁸ Slowly, the elements of a new model of resource policy crystallized. The federal government retained land ownership in most circumstances, granting use rights according to a permit system and requiring users to promptly develop any resources they purchased or leased. These users owed the federal government “a fee approximately equal to that paid to owners of private lands.”¹²⁹

This last requirement points to the second factor: federal resource transactions increasingly involved commodities for which a comparable private market existed.¹³⁰ As long as the West was awash in open land, there was no private counterpart to the public domain. There were private land sales, of course, but it is more accurate to say that federal land law shaped the private

125. *E.g.*, Act of June 4, 1897 (authorizing federal regulations on forest lands, including higher timber fees); *see also* HAYS, *supra* note 123, at 46.

126. *See generally* HAYS, *supra* note 123.

127. *Id.* at 45. Besides grazing, other targets for revenue included timber and hydropower companies. Some lawmakers wished to use revenue secured from fees for rights-of-way granted to water power companies to pay for other multiple-purpose resource development programs, but dam owners and many of their congressional representatives disfavored this cross-subsidization. *See id.* at 79–81, 114–15, 119–20.

128. New and increased fees nonetheless stirred up considerable hostility. Graziers in particular were entrenched in their opposition and held sway with legislators well-placed to stave off adverse developments. *See id.* at 49–65; *see also* E. LOUISE PEFFER, *THE CLOSING OF THE PUBLIC DOMAIN 184–90* (1942).

129. HAYS, *supra* note 123, at 71. Hays wrote of the Teddy Roosevelt administration that “the administration applied [three] basic conditions—a limited permit, prompt use, and a user fee—to all resources on the public lands.” *Id.*

130. Land, coal, and timber, for example, were widely available on private markets. For a general account of private markets as against legal modes of distribution, *see generally* HURST, *supra* note 111.

market than vice versa.¹³¹ But as commodity values rose, and buyers valued land according to the commodities it held, it became plausible for lawmakers to require market values for commodity sales. Indeed, it became odd for lawmakers to seek anything *less* than market value. Timber on federal lands, for example, was indistinguishable from timber on private lands, for which there was an established market. Teddy Roosevelt's first Interior Secretary, Ethan Hitchcock, remarked:

If the fast disappearing timber of the country is worth \$100 at the stump, why let it go at \$2.50 per acre, under the Timber and Stone Act? Why should the best possible land for agricultural purposes, which is none too abundant, be sold under the Homestead Law for \$1.25 per acre, while the same land, under competitive "sealed-bid" bidding can and has been made to bring over \$12.00 per acre . . . ?¹³²

The existence of private markets enabled critics and policy makers to argue for greater returns for taxpayers on asset sales. Roosevelt's administration, in particular, frequently articulated the idea that public resources deserved market returns.¹³³

Importantly, commercial resource users in many cases favored reform efforts and the growth of federal management, even if they entailed new fees and higher resource prices. Regulated resource access brought fees, but with those fees came stabilized access to public land, new barriers to competition, and elevated profit margins.¹³⁴ Richard White notes that the "majority of large stock raisers welcomed the chance to end unregulated competition for land and to gain some legally defensible rights."¹³⁵ Large timber companies appreciated that the Forest Service, "by restricting previously open access to public timber, seemed to offer an opportunity to overcome the industry's problem of chronic

131. *Id.* at 16–20.

132. Hon. Ethan A. Hitchcock, Former Sec'y of the Interior, *Fraud Stimulated by Land Laws, Address Before the Commercial Club of Chicago* (Dec. 14, 1907), in 9 MAXWELL'S TALISMAN 8 (1908). Hitchcock's remedy? "I would urge the immediate repeal of the Timber and Stone Act, the Desert Land Act and especially the eighth section of the homestead law, by resorting to all of which the grossest frauds have been, and are being perpetrated, as was shown by my last annual report for the fiscal year ending June 30th, 1906 . . ." *Id.*

133. HAYS, *supra* note 123, at 82–83 (noting the administration's efforts to sell publicly owned coal at market prices), 184 (describing the argument of Gifford Pinchot, Roosevelt's chief forester, that private companies "should pay for what they get" from public lands).

134. These concerns were particularly dominant in the case of the timber industry, which had long suffered from boom-and-bust cycles associated with timber depletion in discrete forests. Local sawmills and dependent populations suffered the consequences of this structural industry homelessness. As odd as it seems from today's vantage point, organized timber interests made common cause with conservation advocates in the early 1900s. WHITE, *supra* note 95, at 406–09. Generations later, economists refined the "economic theory of regulation," which held as its central premise, contra the conventional view of regulation as publicly oriented, that industries often seek regulation to dull competitive forces. See George J. Stigler, *The Theory of Economic Regulation*, 2 BELL J. ECON. & MGMT. SCI. 3 (1971).

135. WHITE, *supra* note 95, at 408.

overproduction.”¹³⁶ The emerging conservation movement did not seek to forbid the commercial use of public resources, as we might assume of conservationists today in many contexts. Instead, early proponents of conservation sought to minimize waste and promote orderly and sustainable development—aims that could, in the long run, assist extractive industries rather than harm them.¹³⁷

At the same time, incumbent resource users exerted sufficient influence to guarantee that fees and resource prices would remain advantageous. Cattle ranchers, for example, succeeded not only in securing long-term grazing rights that dislocated nomadic sheepherders with whom they had long competed; they also succeeded in keeping grazing fees quite low, as compared to commercial rates.¹³⁸ Ranchers and their home-state politicians kept their federal overseers powerful enough to be of help against competitors, but too weak to increase fees or restrict their resource usage.¹³⁹ Public land histories attest to the difficulty that land agencies had in the early- to mid-1900s in policing the new legal restrictions on resource access on the public lands. Gates notes that by the late 1940s, “Grazing supervision and trespass control were ‘limited’ As a result of a staff inadequate to enforce [grazing] regulations some stockmen ‘willfully grazed excess numbers’ of cattle or sheep, knowing that they were safe in so doing.”¹⁴⁰

In the main, even a substantial shift in the direction of public land law did not seriously disrupt the power of incumbent resource users. Established resource economies rapidly accommodated themselves to new federal controls and used them to their advantage. When Congress wrote new resource law, it reflected the disproportionate influence of legislators from the western states.¹⁴¹ And although the general trend was toward higher prices for public resources—the government cancelled several resource sales because the price was too

136. *Id.* at 409.

137. HAYS, *supra* note 123. The entire Hays volume develops this premise against the conventional notion that conservation was generally in opposition to extractive enterprise. *See* WILLIAM G. ROBBINS, *supra* note 121, at 25 (noting that “the lumber industry provides the classic example of industrial influence in shaping conservation policy”).

138. GATES, *supra* note 79, at 615, 617 (noting the various grazing fees, as well as the allocation of grazing rights). For a detailed account of the allocation of grazing rights, see LEIGH RAYMOND, PRIVATE RIGHTS IN PUBLIC RESOURCES: EQUITY AND PROPERTY ALLOCATION IN MARKET-BASED ENVIRONMENTAL POLICY 109–52 (2003).

139. *See* GATES, *supra* note 79, at 617–22.

140. *Id.* at 622.

141. One indicator of western state leverage is the degree to which resource fees paid to federal agencies are returned to the states. Legislation in 1920 regarding oil leasing and water power sites allocated half of fee receipts to the federal reclamation fund, which was used to finance water projects principally in the arid sections of the West, and three-fourths of the remainder directly to states containing the leased lands. The general treasury received only one-eighth of those fees. Mineral Lands Leasing Act of Feb. 25, 1920 § 35 (codified at 30 U.S.C. § 191 (2012)).

low¹⁴²—legislators and administrators encountered great difficulty in adjusting the on-the-ground practices of federal resource agents. Resource sale programs were plagued by administrative difficulties and undercut by political opposition. For the most part, these programs remained out of public view and therefore reform efforts were absent from the congressional agenda. Many resource users succeeded in retaining relatively unfettered, and relatively costless, access to the public domain.

C. *The Fair Market Value Requirement Today*

The land management problems characteristic of the early 1800s and early 1900s were, to some degree, a product of their times. But they also point to the difficulties inherent in the very task of large-scale resource management. The American experience during these periods demonstrates that converting natural resource reserves into cash is a substantial administrative challenge, plagued continually by the advantage enjoyed by existing resource interests. Even though government today is much larger, much more technically sophisticated, and better equipped to deal with administrative complications, the problems of the past are helpful in focusing our attention today.

To be sure, natural resource law today is a far cry from its precursors in the 1800s or 1900s. A staggering set of reforms—some procedural, some substantive—have fundamentally changed the way federal land management agencies conduct their business. Most obviously, the project of land disposal is decisively over. It is federal policy to retain the remaining public lands.¹⁴³ But, more importantly, Congress has redirected the major resource agencies in important ways. Sweeping changes in federal environmental law, highlighted by major enactments during the 1970s, have had substantial implications for public land management.¹⁴⁴ Agencies now manage the vast federal public lands under a complex statutory framework that essentially zones the public lands for

142. Gulley, *supra* note 31, at 743 (noting President Theodore Roosevelt's suspension of several coal lease sales for this reason).

143. The formal right of entry offered by the Homestead Act was officially terminated by the Federal Land Policy and Management Act of 1976, which declared an official federal policy that "the public lands be retained in Federal ownership." 43 U.S.C. § 1701(a)(1) (2012). Over 630 million acres—some 27 percent of the land area of the United States—remains in federal ownership; in addition, the federal government manages another fifty-eight million acres of mineral estate beneath non-federal surface lands. *See generally* KRISTINA ALEXANDER & ROSS W. GORTE, CONG. RESEARCH SERV., RL34267, FEDERAL LAND OWNERSHIP: CONSTITUTIONAL AUTHORITY AND THE HISTORY OF ACQUISITION, DISPOSAL, AND RETENTION (2007); ROSS W. GORTE ET AL., CONG. RESEARCH SERV., R42346, FEDERAL LAND OWNERSHIP: OVERVIEW AND DATA (2012). Land swaps and sales still occur on a regular basis, but the aggregate acreage is relatively small. *See* GORTE ET AL., *supra*, at 15–16 (noting that, excluding Alaska, federal land ownership actually increased by some 93,000 acres in the eleven western states between 1990 and 2010).

144. *See generally* RICHARD J. LAZARUS, THE MAKING OF ENVIRONMENTAL LAW (2004) (describing the comprehensive history of the development of environmental law, particularly how the resilience of the environmental community has prevented retrenchment of key environmental policies).

various uses; some lands are preserved as wilderness or parks, while others are devoted to multiple uses.¹⁴⁵ Agencies are tasked with comprehensive new planning requirements,¹⁴⁶ overhauled environmental review processes,¹⁴⁷ and new substantive mandates requiring protection of endangered species, air, and water.¹⁴⁸ Agency processes are increasingly open to public scrutiny and involvement. New administrative law doctrines have created opportunities for outsiders to goad courts into policing the administration of public resources, and in so doing have brought increasing judicial oversight to bear on agency decision making.¹⁴⁹ Although these reforms were generally tangent to the pricing of federally owned natural resources, resource prices have nonetheless been a focal point of concern.¹⁵⁰

This Section examines the arena of federal land and resource policy as it stands today, with an eye toward the pricing of land and resources offered for sale or lease to private parties.¹⁵¹ In the first place, natural resource law does not always require agencies to obtain market value in resource sales—far from it.¹⁵² The following paragraphs survey some of these cases. For example, statutory grazing fees on public lands are a fraction of those charged for their

145. The Wilderness Act, for example, created a process whereby Congress may designate wilderness areas with tight constraints on land use. 16 U.S.C. § 1131 (2012). Other statutes created national parks, monuments, and so forth, each with various use limitations. *See* 16 U.S.C. §§ 21–460zzz (2012). The national forests and lands managed by the Bureau of Land Management are subject to “multiple-use” mandates that require the corresponding agencies to manage these lands for a mix of uses. *See, e.g.*, 43 U.S.C. §§ 1702(c), 1712(a) (2012). Some analysts argue that, in effect, the multiple-use mandate results in a zoning process “with particular areas being managed for some dominant uses.” COGGINS ET AL., *supra* note 21, at 658 n.4.

146. Comprehensive management plans are required of every federal land management agency. Planning processes are generally dictated by agency-specific legislation such as the National Forest Management Act, whose planning provisions are at 16 U.S.C. § 1604 (2012).

147. Environmental review requirements stem primarily from the National Environmental Policy Act, 42 U.S.C. §§ 4321–61 (2012), which requires a relatively transparent, publicly oriented process and public dissemination of final documents.

148. *See, e.g.*, Endangered Species Act, 16 U.S.C. §§ 1531–1544 (2012); Clean Air Act, 42 U.S.C. §§ 7401–7431 (2012); Clean Water Act, 33 U.S.C. §§ 1251–1274 (2012).

149. *See, e.g.*, *Sierra Club v. Morton*, 405 U.S. 727 (1972) (expanding traditional standing doctrine); *Citizens to Pres. Overton Park, Inc. v. Volpe*, 401 U.S. 402 (1971) (giving rise to the so-called “hard look” doctrine of judicial review).

150. For example, resource pricing was a principal focus of reforms to the coal leasing process enacted in the Federal Coal Leasing Amendments Act, Pub. L. No. 94–377, 90 Stat. 1083, Aug. 4, 1976.

151. Of greatest policy significance are the vast resources contained on federal land—coal, oil, natural gas, timber, and various metals and minerals—that are regularly sold by federal agencies. Comprehensive statistics about sales of many of these resources can be found at the website of the Office of Natural Resource Revenue. OFFICE OF NAT. RES. REVENUE, DEP’T OF INTERIOR (Oct. 6, 2015), www.onrr.gov.

152. *See* 1 COGGINS & GLICKSMAN, *supra* note 29, § 1:23 (describing a trend “in the direction of a fair market value standard for sales or grants of commodity public natural resources,” but noting that the trend is “in its relative infancy, competing with contrary, long-term federal subsidization programs and policies”).

equivalent on private land.¹⁵³ Moreover, mining companies, even foreign ones, can acquire gold, copper, and other exceedingly valuable commodities on federal land, royalty-free.¹⁵⁴ The subsequent paragraphs explore several cases in which federal law explicitly requires fair market value, yet agencies have difficulty carrying out this mandate.

1. *Cases In Which Federal Law Does Not Require Fair Market Value*

The federal law of public lands took a major turn in 1976 with the passage of the Federal Land Policy and Management Act (FLPMA).¹⁵⁵ Reform had been in the air for some time: the same spirit that animated Earth Day, and the wave of environmental legislation that followed, also catalyzed a hard look at Congress's natural resource policies.¹⁵⁶ In a marked departure from early public land law, FLPMA declared it "the policy of the United States [to] . . . receive fair market value of the use of the public lands and their resources unless otherwise provided for by statute."¹⁵⁷ The word "unless" has proven weighty, for Congress has left substantial areas of natural resource law untouched by the fair market value policy.

Some of these areas are obvious. "Use" of public lands, as defined by FLPMA,¹⁵⁸ includes a rafting trip on the Klamath River in California, a hike through the Grand Staircase in Utah, or a bike ride on the Potomac Heritage National Scenic Trail in Maryland. For many recreational uses of public lands, Congress has simply allowed open access. For many other uses, use fees are collected, but in these instances, there is little inquiry into "market" value.¹⁵⁹ Selecting the appropriate user fee is a contentious issue that has much more to

153. See CAROL HARDY VINCENT, CONG. RESEARCH SERV., RS21232, *GRAZING FEES: OVERVIEW AND ISSUES 1* (2012).

154. A 2004 study concluded that six of the top ten mining claimants operating on public lands are foreign-owned. Allison Freeman, *Multinational Firms Hold Title to 1.2M Acres of U.S. Public Lands – Report*, GREENWIRE (May 11, 2004), <http://www.eenews.net/greenwire/stories/21267> (referencing a report by the Environmental Working Group entitled, *Who Owns the West?*, that aggregated data regarding the ownership of mining claims on public lands).

155. Pub. L. No. 94-579 (codified at 43 U.S.C. §§ 1701–1787 (2012)).

156. Often used to date the birth of the modern environmental movement, the first Earth Day was held on April 22, 1970. LAZARUS, *supra* note 144, at 44–54. Public land law reform was spurred in part by the creation of the Public Land Law Review Commission in 1964, which produced PUB. LAND L. REV. COMM'N, *ONE THIRD OF THE NATION'S LAND: A REPORT TO THE PRESIDENT AND TO THE CONGRESS BY THE PUBLIC LAND LAW REVIEW COMMISSION* (1970).

157. 43 U.S.C. § 1701(a)(9) (2012).

158. The statutory definition of "public lands" includes only lands managed by the BLM and further excludes the outer continental shelf and tribal reservations. 43 U.S.C. § 1702(e).

159. Agencies charge use fees for various activities on public lands, ranging from camping fees and entrance fees to fees for long-term land uses, including rights-of-way. See, e.g., CAROL HARDY VINCENT, CONG. RESEARCH SERVICE, RL33730, *RECREATION FEES UNDER THE FEDERAL LANDS RECREATION ENHANCEMENT ACT* (2010); Randal O'Toole, *Improving Incentives for Federal Land Managers: The Case for Recreation Fees*, CATO INST. (June 18, 2013), <http://www.cato.org/publications/policy-analysis/improving-incentives-federal-land-managers-case-recreation-fees>.

do with philosophical issues of access and practical concerns about cost recovery than with market dynamics.¹⁶⁰

Fair market value is also irrelevant for some commodities. Hardrock minerals provide the most notable and economically significant example.¹⁶¹ For well over a century, federal mining law has allowed mineral prospectors to acquire property rights in minerals on public lands simply by discovering them.¹⁶² When the federal government implemented this regime in the mid-1800s, the principal beneficiaries were small, independent miners who took on long odds to challenge the western frontier. In this respect, the mining law resembles other nineteenth-century resource laws benefiting settlers.¹⁶³ Today, however, large mining entities, including many foreign firms, extract far more minerals from federal lands than small miners.¹⁶⁴ The law permits these firms to acquire enormous mineral deposits royalty-free, in stark contrast to the arrangements that one would find on private land, state-owned land, or other countries.¹⁶⁵ Many have charged Congress with perpetuating a “giveaway” of public resources,¹⁶⁶ but lawmakers have stubbornly resisted periodic attempts

160. See COGGINS ET AL., *supra* note 21, at 957–59.

161. Hardrock minerals include gold, silver, copper, zinc, and lead, in contrast to softer minerals such as coal or salt. For a brief discussion of the absence of a fair market value requirement, see MARC HUMPHRIES, CONG. RESEARCH SERV., RL33908, MINING ON FEDERAL LANDS: HARDROCK MINERALS 6–7 (2008).

162. The General Mining Law of 1872 (codified at 30 U.S.C. § 11 (2012)). “Discovery” is a term of art under the statute with a substantial and complicated interpretive history. See JOHN D. LESHY, *THE MINING LAW: A STUDY IN PERPETUAL MOTION* 119–67 (1987).

163. The Mining Law essentially relies on the principle of prior appropriation to allocate property rights, as did, for example, the Homestead Act and the water law of many western states. In addition, both the Mining Law and the Homestead Act required the claimant to do more than simply assert rights. The law required some additional labor, demonstrative of commitment to the land. *Id.* at 16, 56.

164. Regarding the rights of foreign entities to U.S. public lands, see Kari Lydersen, *Pacific Rim and Beyond: Global Mining, Global Resistance and International Law*, 23 *COLO. J. INT’L ENVTL. L. & POL’Y* 367, 378 (2012) (noting that foreign firms obtain the same “right to mine” as any U.S. citizen merely by forming U.S. subsidiaries).

165. Private mineral owners and U.S. states commonly require mining entities to pay a hefty royalty for the right to mine. See generally AARON M. FLYNN, CONG. RESEARCH SERV., RL32813, *HARDROCK MINING: STATE REGULATION* (2005) (noting that many states require royalties and rental payments for hardrock minerals removed from state lands). For example, Montana law requires a royalty of no less than 5 percent of returns from metalliferous minerals or gems; California law requires a 10 percent royalty. *Id.* at 8, 31; see also Lydersen, *supra* note 164, at 378 (noting that the General Mining Law “could be considered more subservient to mining companies than the [mining] laws of many developing countries”).

166. In its 1997 report to Congress, President Clinton’s Council of Economic Advisers wrote that federal mining policy amounts to a giveaway of publicly owned resources, bestowing “a large subsidy on private mining companies. . . . Between May 1994 and September 1996, the Federal Government was forced by the General Mining Law to give away over \$15.3 billion worth of minerals in return for which taxpayers received only \$19,190.” U.S. GOV’T PRINTING OFFICE, *ECONOMIC REPORT OF THE PRESIDENT* 217 (1997), <http://www.gpo.gov/fdsys/pkg/ERP-1997/pdf/ERP-1997.pdf>.

to restructure federal mineral policy to require royalty payments or otherwise change the mining law.¹⁶⁷

Hardrock mining, though important commercially, involves a relatively small portion of public lands. By acreage, livestock grazing constitutes the single largest use of the federal public domain.¹⁶⁸ Federal grazing law authorizes private users to forage on public lands for fees substantially below their fair market value.¹⁶⁹ On lands managed by the Forest Service and the BLM, which include the vast majority of federal lands available for grazing, the relevant federal fee formula sets the grazing fee at roughly \$1.35 per animal unit month (AUM).¹⁷⁰ By contrast, a recent federal report found that the average monthly grazing fee on private lands in western states was \$16.80 per head, over ten times the prevailing federal fee.¹⁷¹

As with mining royalties, reformers have argued for decades that federal grazing fees should be raised.¹⁷² A study commissioned by Congress during the 1970s formally recommended that grazing fees should collect fair market value, consistent with the 1976 mandate mentioned above.¹⁷³ But grazing fees have been described as the third rail of western politics; ranchers have staunchly opposed fees from their initial imposition to the present.¹⁷⁴ Attempts

167. See, e.g., LESHY, *supra* note 162, at 287–312.

168. Livestock grazing occurs on over 250 million acres, an area nearly ten times the size of Pennsylvania. See COGGINS ET AL., *supra* note 21, at 731.

169. Grazing fees are established by the Taylor Grazing Act of 1934 (codified at 43 U.S.C. § 1751ff (2012)).

170. VINCENT, *supra* note 153, at 1. An AUM is a month's use and occupancy of the range by one "animal unit": one yearling, one horse, one cow and her calf, or five sheep or goats. *Id.*

171. *Id.* at 2 (citing NAT'L AGRIC. STATISTICS SERV., U.S. DEP'T OF AGRIC., CHARTS AND MAPS, GRAZING FEES: PER HEAD FEE, 17 STATES (2015), http://www.nass.usda.gov/Charts_and_Maps/Grazing_Fees/gf_hm.asp).

172. See, e.g., Karl N. Arruda & Christopher Watson, *The Rise and Fall of Grazing Reform*, 32 LAND & WATER L. REV. 413 (1997); Timothy K. Borchers, *Reforming Federal Grazing Law: Will Congress Pass Needed Legislation before the Cows Come Home?*, 13 J. LEGIS. 216 (1986); Michelle M. Campana, *Public Lands Grazing Fee Reform: Welfare Cowboys and Rolex Ranchers Wrangling With the New West*, 10 N.Y.U. ENVTL. L.J. 403 (2002). Some have gone further and called for an end to public land grazing altogether. See DEBRA L. DONAHUE, *THE WESTERN RANGE REVISITED: REMOVING LIVESTOCK FROM PUBLIC LANDS TO CONSERVE NATIVE BIODIVERSITY* (1999).

173. See *supra* note 159 and accompanying text; see also COGGINS ET AL., *supra* note 21, at 752.

174. Eric Pianin, *Why Grazing Fees Are the Third Rail of Western Politics*, FISCAL TIMES (May 8, 2014), <http://www.thefiscaltimes.com/Articles/2014/05/08/Why-Grazing-Fees-Are-Third-Rail-Western-Politics>. Early battles over the Taylor Grazing Act and the imposition of permit and fee requirements on the public domain are well chronicled in PEPPER, *supra* note 128, at 184–90; PHILLIP O. FOSS, *POLITICS AND GRASS: THE ADMINISTRATION OF GRAZING ON THE PUBLIC DOMAIN 171–93* (1960). More recently, opposition to grazing fees was a prominent issue in the recent dispute concerning Nevada rancher Cliven Bundy. Bundy received widespread coverage in the national media in April 2014 when his refusal to pay federal grazing fees led to a standoff with federal officials. See Adam Nagourney, *A Defiant Rancher Savors the Audience That Rallied to His Side*, N.Y. TIMES (Apr. 23, 2014), <http://www.nytimes.com/2014/04/24/us/politics/rancher-proudly-breaks-the-law-becoming-a-hero-in-the-west.html>.

to bring federal fees into alignment with state and private rates have consistently failed.¹⁷⁵

Critics argue that subsidies for grazing and hardrock mining, products of an earlier era in public land law, have long outlived their social utility.¹⁷⁶ Political scientists, legal scholars, and others interested in public lands have long puzzled over the longevity of these regimes.¹⁷⁷ Although there are some plausible, publicly oriented rationales behind these policies, the most comprehensive accounts attribute their staying power to the disproportionate influence of rural and western interests in the American political system.¹⁷⁸ This influence, in turn, is often leveraged to defend traditional extractive industries against reformist campaigns. But at the end of the day, grazing fees and hardrock royalties are settled matters of longstanding federal legislation, properly adopted through the legislative process. Many have argued for reform, but Congress has not (yet) seen fit to change the rules.

2. Cases In Which Federal Law Requires Fair Market Value

Grazing and hardrock mining are two major resource uses on federal lands. There are other major uses in which federal resource law, in contrast to the previous examples, makes explicit reference to market value. One noteworthy case can be found in the law governing federal timber sales. The federal public lands supply roughly one-fifth of all domestically harvested timber on an annual basis.¹⁷⁹ The timber sales process is complex: federal law permits timber harvests only as part of a comprehensive forest management

175. See VINCENT, *supra* note 153, at 4–7.

176. See CHARLES WILKINSON, CROSSING THE NEXT MERIDIAN: LAND, WATER, AND THE FUTURE OF THE WEST 18–21 (1993) (identifying the “lords of yesterday” or tenets of nineteenth-century resource law that continue to dominate western resource management despite their incongruity with contemporary norms).

177. *Id.*; see also WESLEY CALEF, PRIVATE GRAZING AND PUBLIC LANDS: STUDIES OF THE LOCAL MANAGEMENT OF THE TAYLOR GRAZING ACT (1960); PAUL J. CULHANE, PUBLIC LAND POLITICS: INTEREST GROUP INFLUENCE ON THE FOREST SERVICE AND THE BUREAU OF LAND MANAGEMENT (1981); FOSS, *supra* note 174; MIKE HUDAK, WESTERN TURF WARS: THE POLITICS OF PUBLIC LANDS RANCHING (2007); LESHY, *supra* note 162; CHRISTOPHER MCGRORY KLYZA, WHO CONTROLS PUBLIC LANDS? MINING, FORESTRY, AND GRAZING POLICIES, 1870–1990 (1996); KAREN R. MERRILL, PUBLIC LANDS AND POLITICAL MEANING: RANCHERS, THE GOVERNMENT, AND THE PROPERTY BETWEEN THEM (2002); Michael C. Blumm, *Public Choice Theory and the Public Lands: Why “Multiple Use” Failed*, 18 HARV. ENVTL. L. REV. 405 (1994).

178. See, e.g., FOSS, *supra* note 174, at 198–204; Blumm, *supra* note 177, at 415–29. A numerically small but vocal group of objectors would argue instead that appropriate public policy considerations drive the price of federal grazing rights and the extent of federal land ownership necessarily entails pricing considerations that cannot be meaningfully compared with external markets. These arguments are summarized well in VINCENT, *supra* note 153, at 2, 6–7.

179. This figure varies substantially from year to year. As recently as 1990, federal public lands yielded over twelve billion board feet (bbf) of timber annually. This figure has dropped precipitously over the last two decades because of endangered species protections, enhanced planning requirements, and increased imports, especially from Canada. See generally SOC’Y OF AM. FORESTERS, THE STATE OF AMERICA’S FORESTS (2007).

plan and only after a thorough environmental review.¹⁸⁰ The sale price for timber must be “not less than appraised value,” which the Forest Service interprets as a fair market value standard;¹⁸¹ sales must be advertised publicly,¹⁸² and bidding methods must “insure open and fair competition.”¹⁸³ The requirements aim to maintain a competitive sales process with as many participants as reasonably possible and with a reserve price that insures that the government receives a fair return. Yet a scratch beneath the surface reveals crucial differences between the federal sales process and comparable private sales. Perhaps most strikingly, sales of timber on federal land allow the purchaser to deduct the cost of building permanent roads on the theory that such roads remain in public ownership and benefit the public after timber harvesting is complete.¹⁸⁴ The convention in private timber sales, however, is for purchasers to bear all road construction costs.¹⁸⁵ Thus a more accurate fair market price for public timber would include road construction costs, which can be substantial.¹⁸⁶

Furthermore, although the law requires a competitive sales process, the degree of competition is limited in practice. In the words of former BLM chief Marion Clawson:

[S]omething quite different than classic economic competition exists for federal timber. The number of bidders is often small At the most there will be several bidders, but not the large number that economic theory postulates for pure competition Collusion among potential buyers has often been suspected and has been proved in a few cases—although it is typically very difficult to prove. When one processor repeatedly bids for timber in one federal area but not in an adjacent one, and his possible rival repeatedly bids for timber in a second area but not in the first, suspicions of collusion naturally arise. But there may not be outright collusion in the legal sense; there may simply be an “understanding”—that is, if you’ll keep out of my area,

180. See 3 COGGINS & GLICKMAN, *supra* note 29, § 34:22 (2007).

181. 16 U.S.C. § 472a(a) (2012); *see also* 36 C.F.R. § 223.60 (2012) (“The objective of Forest Service timber appraisals is to determine fair market value.”).

182. 16 U.S.C. § 472a(d).

183. 16 U.S.C. § 472a(e)(1)(a).

184. 36 C.F.R. § 223.62 (2012) (authorizing a “purchaser credit” for road construction when “such construction is accomplished by purchaser”). Critics contend that the Forest Service has exaggerated the public benefits arising from roads built for timber harvesting. *See generally* Marc C. Phares, *Below-Cost Timber Sales: Perspective Based on Thirty Years of Environmental Legislation*, 12 PUB. LAND L. REV. 59, 66 (1991).

185. *See, e.g.*, Barbara Daniels, Darren McAvoy & Michael Kuhns, *Preparing a Timber Sale Contract*, UTAH FOREST FACTS (May 2012), http://extension.usu.edu/files/publications/publication/NR_FF_013.pdf (containing a sample, commonly used contract that places the costs of locating, restoring, and closing roads on the timber purchaser).

186. *See* Phares, *supra* note 184, at 63 (noting that road construction costs are not only a substantial portion of timber sales but a substantial portion of the Forest Service’s budget overall).

I'll keep out of yours.¹⁸⁷

Clawson also recognized that the federal government's timber reserves are so extensive that, for all intents and purposes, its timber sales policy establishes the market price. "Far more important than deficiencies in the competitive process," he wrote, is the fact that the price of federal timber "is a function of the volume of timber offered."¹⁸⁸

Another set of examples involves Forest Service leases of public land to commercial ski resorts. Over 130 ski resorts, including many of the nation's largest and busiest, are at least partially situated on public lands.¹⁸⁹ Under the National Forest Ski Area Permit Act of 1986, these resorts must pay a fee "based on fair market value in accordance with applicable law."¹⁹⁰ Much easier said than done: for many years prior to 1986, and in many of the years since, ski resort permit fees have been criticized as falling far below fair market value. When federal investigators concluded in 1993 that the Forest Service was giving away its land at a steep discount,¹⁹¹ the Service responded with a lengthy exploration of options for fee assessment.¹⁹² As a result, in 1996 Congress enacted a complicated formula that was intended to yield an approximation of the fair market value of the public lands at issue.¹⁹³ But in

187. MARION CLAWSON, *THE FEDERAL LANDS REVISITED* 81 (1983). Surprising as it may seem, little has changed since the publication of Clawson's comments. The structure of the timber sales process is virtually unchanged; if anything, competition is even less intense today due to expanded environmental responsibilities for timber buyers.

188. *Id.* at 81-82.

189. Ski Area Permit Fee System, 60 Fed. Reg. 36,097 (proposed July 13, 1995) (noting that over 120 ski areas are located within the 155 national forests). These resorts account for nearly 60 percent of the skiing done in the United States. Mike Soraghan, *Report Rips Ski-Resort Fees: Leases on Public Land Too Cheap, Critics Say*, DENVER POST, Jan. 20, 2003, at A1. For an engaging account of some of the political battles that arise in connection with ski resorts' use of public lands, see MICHAEL W. CHILDERS, *COLORADO POWDER KEG: SKI RESORTS AND THE ENVIRONMENTAL MOVEMENT* (2012); see also James Briggs, *Ski Resorts and the National Forests: Rethinking Forest Service Management Practices for Recreational Use*, 28 B.C. ENVTL. AFF. L. REV. 79 (2000).

190. The National Forest Ski Area Permit Act of 1986, Pub. L. No. 99-522 (Oct. 22, 1986) (codified at 16 U.S.C. § 497b (2012)). The quoted provision is 16 U.S.C. § 497b(b)(8).

191. See U.S. GOV'T ACCOUNTING OFFICE, GAO/RCED-93-107, *FOREST SERVICE: LITTLE ASSURANCE THAT FAIR MARKET VALUE FEES ARE COLLECTED FROM SKI AREAS* (1993). For a subsequent report of greater breadth, see U.S. GOV'T ACCOUNTING OFFICE, GAO/RCED-97-16, *U.S. FOREST SERVICE: FEES FOR RECREATION SPECIAL-USE PERMITS DO NOT REFLECT FAIR MARKET VALUE* (1996).

192. See USDA FOREST SERV., *SKI US, YOUR NATIONAL FORESTS: FAIR MARKET VALUE OF THE USE OF NATIONAL FOREST SYSTEM LANDS BY SKI AREAS 2-5* (2002) (recounting the efforts made by the Forest Service following the 1986 Act and the 1993 GAO report to develop a new method for determining ski resort permit fees).

193. This formula was contained in Section 701 of the Omnibus Parks and Public Lands Management Act of 1996, Pub. L. No. 104-333 (Nov. 12, 1996). The statute provides that:

The ski area permit rental charge (SAPRC) shall be calculated by adding the permittee's gross revenues from lift ticket/year-round ski area use pass sales plus revenue from ski school operations (LT SS) and multiplying such total by the slope transport feet percentage (STFP) on National Forest System land. That amount shall be increased by the gross year-round revenue from ancillary facilities (GRAF) physically located on national forest land,

2002 the Forest Service concluded that the results of the 1996 revision were inconclusive at best, and the change had likely decreased federal receipts.¹⁹⁴ Critics continue to blast the Forest Service for its fee structure.¹⁹⁵ The principal criticism (aside from the general complaint that receipts are too low) is that the fee structure, presently calculated on the basis of various resort revenue streams, fails to account for other revenue streams that are augmented by the use of public lands.¹⁹⁶ Real estate development adjacent to ski resorts, for example, is an enormous moneymaker.¹⁹⁷ At present, however, revenue from home and condominium sales, resort hotels, and restaurants is not included in the Forest Service's fee assessment.

But critics would do well to pause before casting stones.¹⁹⁸ A more sympathetic assessment of the Forest Service's efforts to collect fair market value would recognize the nearly insuperable difficulties that arise when trying to calculate appropriate fees. To begin, it is nigh impossible to determine what fraction of a resort's revenues is attributable to its operations on public lands. Moreover, the public lands used by ski resorts are, in many respects, one of a kind.¹⁹⁹ Few, if any, private landowners hold parcels in desirable mountainous

including all permittee or subpermittee lodging, food service, rental shops, parking and other ancillary operations, to determine the adjusted gross revenue (AGR) subject to the permit rental charge. The final rental charge shall be calculated by multiplying the AGR by the following percentages for each revenue bracket and adding the total for each revenue bracket:

- (A) 1.5 percent of all adjusted gross revenue below \$3,000,000;
- (B) 2.5 percent for adjusted gross revenue between \$3,000,000 and \$15,000,000;
- (C) 2.75 percent for adjusted gross revenue between \$15,000,000 and \$50,000,000;
- and
- (D) 4.0 percent for the amount of adjusted gross revenue that exceeds \$50,000,000.

Utilizing the abbreviations indicated in this subsection the ski area permit fee (SAPF) formula can be simply illustrated as:

$$\text{SAPF} = ((\text{LT SS}) \text{STFP}) \text{GRAF} = \text{AGR} \% \text{BRACKETS}$$

16 U.S.C. § 497c(b)(1) (2012).

194. USDA FOREST SERV., *supra* note 192, at 10–13; *see also* Soraghan, *supra* note 189 (“A report released this month by the Forest Service says the congressional ‘fix’ made more than six years ago to address the [fair market value] problem actually made it worse.”).

195. *See, e.g.*, Scott Condon, *Public Lands Provide Big Benefits to Skico, Skiers*, ASPEN TIMES, (Dec. 5, 2011), <http://www.aspentimes.com/article/20111205/NEWS/111209935>; Paul Rogers, *Forest Service to Review Rents Paid By Ski Resorts*, TRIBUNE BUS. NEWS (Jan. 10, 2003), <http://www.highbeam.com/doc/1G1-96323120.html>; Paul Rogers, *Cold Cash: Ski Resorts Profit on Cheap U.S. Land*, SAN JOSE MERCURY NEWS (Apr. 8, 2002), <http://www.highbeam.com/doc/1G1-120472260.html>. *But see* SE GROUP, REPORT TO THE NATIONAL SKI AREAS ASSOCIATION (2002) (presenting an analysis concluding that “the 1996 Ski Area Permit Fee System is providing a fair market value rental to the United States”).

196. *See* Condon, *supra* note 195 (noting that the statutory formula incorporates revenues from facilities on national forest land, but it “doesn’t take into account the benefits that a ski area operator reaps on private lands from use of adjacent public lands”).

197. *Id.*

198. *See* Soraghan, *supra* note 189 (“Although auditors have regularly scolded the Forest Service for not establishing fair market value, they haven’t suggested what it should be.”).

199. *See* USDA FOREST SERV., *supra* note 192, at 5–6 (noting the difficulties of identifying comparable private lands and transactions).

terrain with the size and topography required to sustain a ski resort.²⁰⁰ Thus, the lack of a pre-existing market in ski resort terrain makes valuation difficult, as nearly every valuation technique requires comparable transactions.²⁰¹ Furthermore, a permit to operate a ski resort on public lands is not a complete fee interest in a property; it is more akin to a lease.²⁰² The United States reserves many rights and the permit is revocable under certain conditions.²⁰³ The property right at issue, therefore, is not comparable to outright ownership. Difficulties of this sort recur in many different public resource situations.

A final example: federal land management agencies are authorized, in certain circumstances, to buy and sell land or swap federal land for private or state-owned land.²⁰⁴ There are many reasons why this authority is desirable and useful for land managers. Real estate transactions may help consolidate federal landholdings, eliminate awkward private inholdings, raise revenue, facilitate prudent municipal development, enhance natural or scenic values, or accomplish other managerial objectives. In particular, land ownership adjustment is a constant matter of concern where federal lands are intermingled with nonfederal lands. This is the case across millions of acres in the American West, most obviously where early disposal patterns granted land to railroads and states in a checkerboard pattern.²⁰⁵

Under current federal law, land management agencies may sell or swap lands only (a) when doing so is in the public interest, (b) after appraisal, and (c) for fair market value.²⁰⁶ Yet despite these legal requirements, federal land transactions are routinely criticized for undervaluing federal lands and enriching private entities at the expense of the general public.²⁰⁷ Land

200. *Id.*

201. *Id.* at 5–7. This Forest Service report identifies three basic methodologies that could be employed to determine the market value of public lands used for ski resorts: the sales comparison method, ground rent capitalization method, and land residual value method. All three methods rely heavily on comparable sales. The report notes at several points that these methods are “less useful when sales of comparable properties are scarce.”

202. See SE GROUP, *supra* note 195, at ii (“The rights of a ski area operator utilizing National Forest System lands . . . differ significantly from those of a ski area operator utilizing lease lands.”).

203. *Id.*; see also GEORGE H. SIEHL, CONG. RESEARCH SERV., U.S. FOREST SERVICE PERMITS FOR OPERATION OF SKI AREAS ON NATIONAL FORESTS (1985) (discussing, *inter alia*, the types of conditions imposed on special-use permits of the sort utilized by ski resorts).

204. See generally 2 COGGINS & GLICKSMAN, *supra* note 29, § 13.

205. See generally SUSAN CULP & JOE MARLOW, LINCOLN INST. OF LAND POLICY, A FAIR TRADE: OBSERVATIONS AND RECOMMENDATIONS FOR IMPROVING THE LAND TENURE ADJUSTMENT PROCESS BETWEEN STATE AND FEDERAL AGENCIES IN THE WEST (2012).

206. 43 U.S.C. § 1713(d); 2 COGGINS & GLICKSMAN, *supra* note 29, § 13:23. The Forest Service has other statutory exchange authority as well, including the Weeks Act of 1911, ch. 186, § 7, 36 Stat. 962 (1911) (codified as amended at 16 U.S.C. § 516), and the General Exchange Act of 1922, ch. 105, § 1, 42 Stat. 465 (1922) (codified as amended at 16 U.S.C. § 485). Each of these provisions authorizes the Service to exchange public land for private land or timber.

207. See, e.g., GEORGE DRAFFAN & JANINE BLAELOCH, WESTERN LAND EXCHANGE PROJECT, COMMONS OR COMMODITY? THE DILEMMA OF FEDERAL LAND EXCHANGES (2000); Deborah Nelson et al., *Government Land Trades Leave Questions About How Public Fared*, SEATTLE TIMES (Sept. 27, 1998, 12:57 PM), http://old.seattletimes.com/special/landswap/part1/1corp_092

transactions are the subject of numerous investigations, reviews, and audits.²⁰⁸ In one particularly egregious case, a federal inquiry revealed that a private party purchased a parcel of federal land appraised at \$763,000 and sold it on the very same day for \$4.6 million.²⁰⁹

Of course, when development bumps up against federally owned lands, there is no reason that the federal government should refuse to consider divestiture. Public land development may be more sensible in many cases than development into other areas. The point is not that federal land transactions should not benefit private developers; the point, rather, is that law requires such transactions to reflect the fair market value of the land, yet the government's procedures to achieve this end are often inadequate.²¹⁰

Though federal land deals are sometimes corrupted by fraud, collusion, or self-dealing,²¹¹ these problems are not unique to land management agencies. More relevant to this Article is the structure of the land sale and exchange process and the administration of the land deal "agenda." The nuts and bolts of the land sale and exchange processes give the distinct impression that the agencies are acting at the behest of private interests, rather than in the public interest.

On the face of the law, the BLM's authority to sell its land is limited; the Bureau is to retain land unless the planning process determines that selling the land "will serve the national interest."²¹² Yet although the law contemplates that federal agencies will initiate federal land transactions in furtherance of the agency's mission, private real estate developers have instigated many recent

798.html (noting a number of instances in which the public "came up short" in federal land exchanges).

208. For a summary of investigations relating to land exchanges in particular, see Appendix II, in U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-09-611, *FEDERAL LAND MANAGEMENT: BLM AND THE FOREST SERVICE HAVE IMPROVED OVERSIGHT OF THE LAND EXCHANGE PROCESS, BUT ADDITIONAL ACTIONS ARE NEEDED* 74-75 (2009) [hereinafter GAO 2009 REPORT].

209. U.S. GOV'T ACCOUNTABILITY OFFICE, GAO/RCED-00-73, *BLM AND THE FOREST SERVICE: LAND EXCHANGES NEED TO REFLECT APPROPRIATE VALUE AND SERVE THE PUBLIC INTEREST* 19 (2000) [hereinafter GAO 2000 REPORT]. This GAO report contains a number of eyebrow-raising vignettes. *See, e.g., id.* at 16-27.

210. *Id.* at 4 (concluding that the federal land management agencies, during the period of the GAO's investigation, "did not ensure that the land being exchanged was appropriately valued" and "have given more than fair market value for nonfederal land they acquired and accepted less than fair market value for federal land they conveyed").

211. *See, e.g.,* Dennis Wagner, *Arizona's Ex-Rep. Rick Renzi Gets 3-Year Prison Term*, USA TODAY (Oct. 28, 2013), <http://www.usatoday.com/story/news/politics/2013/10/28/rick-renzi-arizona-prison-sentence/3288937> (former member of Congress sentenced on numerous counts, including extortion, in connection with a federal land swap conducted in collusion with a business partner). There is a long and storied history of legislators self-dealing in public lands. *See* Fletcher v. Peck, 10 U.S. 87 (1810) (dealing with the infamous Yazoo land fraud, in which Georgia legislators accepted bribes and agreed to sell state land to speculators at low prices).

212. 43 U.S.C. § 1701(a)(1) (2012).

transfers.²¹³ Thus, many transactions involving the public lands are proposed initially not by the federal government as the result of a forward-looking management program, but by external, private land interests.²¹⁴ Because land management agencies are cash-strapped, they have limited capacity to process proposed exchanges correctly.²¹⁵ Motivated third-party facilitators, who may have a speculative interest in affected lands, steer the land transfer agenda to a substantial degree.²¹⁶ Lacking a national strategy, land management agencies are more likely to be drawn to an agenda created and nurtured by private interests.

Even when outsiders initiate land sales proposals, land management agencies have tools that could assure the public a fair return. A suitable auction, for example, would, in the real estate context, probably yield a more accurate fair market value determination than an appraisal.²¹⁷ But despite the default requirement that agencies conduct sales by competitive bidding, the BLM has decided to use formal competitive bidding procedures only when property is “urbanizing.”²¹⁸ Furthermore, Congress can evade its own general prophylactic provisions by legislating transactions directly, creating *sui generis* provisions for any given exchange.²¹⁹ One analysis concluded that recent land exchanges “bespeak a renewed commitment to commercial development. They are almost nothing like [earlier] transactions that cleaned up boundaries or eliminated inholder problems. Instead, they are . . . driven as much by the desire to free land for development as by conservation.”²²⁰

213. DRAFFAN & BLAELOCH, *supra* note 207, at 20–35. Some have noted that another, less direct form of transfer occurs when private entities purchase land on the wildland-urban interface from the U.S. Forest Service and then rely on the Forest Service to provide fire protection for their homes. Forest Service land sales and exchanges often involve lands in the wildland-urban interface, where forest fires are common. Federal firefighting expenses have grown dramatically in recent years, in part due to the increased expenditures associated with protecting development on former National Forest land. See Scott K. Miller, *Missing the Forest and the Trees: Lost Opportunities for Federal Land Exchanges*, 38 COLUM. J. ENVTL. L. 197 (2013).

214. See DRAFFAN & BLAELOCH, *supra* note 207, at 15–22.

215. The BLM has recently and aptly described itself as “very stretched.” Phil Taylor, ‘Very Stretched’ BLM Pleads with Appropriators to Approve Inspection Fees, E&E NEWS (June 20, 2014), <http://www.eenews.net/eedaily/stories/1060001659/print>.

216. See GAO 2000 REPORT, *supra* note 209, at 20–25.

217. The appraisal process has been roundly criticized by federal investigators. *Id.* at 16–19.

218. 43 C.F.R. § 2710.0-6(c)(3)(i) (2012).

219. Twenty of the 250 land exchanges processed by the BLM and the USFS between October 1, 2004, and June 30, 2008, were specifically legislated by Congress. GAO 2009 REPORT, *supra* note 208, at 22. The particularized legislation that authorizes these transactions often includes directives strikingly different from the default procedures outlined in federal law. *Id.* at 28.

220. SALLY K. FAIRFAX ET AL., BUYING NATURE: THE LIMITS OF LAND ACQUISITION AS A CONSERVATION STRATEGY, 1780–2004, at 211 (2005).

III. ANALYSIS

Part II confirms that the difficulties plaguing federal coal leasing are not limited to coal. Seldom have federal resource managers sold resources into private markets for a full market price. Although it is difficult to generalize, several strands bind these accounts together. Above all, incumbent resource users hold a strong position in the American political and legal system relative to federal land managers. Agencies are constrained by their task environment, including the enormity of their landholdings, the diversity of their legal mandates, and chronic shortfalls in funding. The law's reference to "fair market value" has proven insufficient to compel judicial intervention. To the extent that establishing stable, market-based revenue from resource sales is a principal objective of natural resource law, a better way forward is required. An improved approach would specify resource sales procedures that enhance competition when maximizing revenue is the goal.

A. *Oddities of the Public Resource Marketplace*

Resource sales are more likely to yield fair market value if there is an active private market for assets substantially similar to those being sold by a government.²²¹ A parallel private market facilitates a fair return for government managers in several ways. First, it allows government managers to discern the market value of the goods at issue with relative ease. Their estimates may draw on a larger set of "comps"—values from completed, comparable transactions—than would otherwise be available.²²² Moreover, an external market makes it more likely not only that there exists a sufficiently numerous pool of potential buyers for government assets, but also that managers will know how to go about identifying that pool and providing notice of upcoming sales. Finally, by providing a transparent flow of pricing information, an adjacent market enables supervisors and outsiders to hold government agents accountable for obtaining fair value.

But for many public resources, an external market reference point is a chimera. As previously noted, many of the resources sold by government actors (whether in the context of natural resources or not) are *sui generis* and therefore no comparable external market exists.²²³ The extent of federal land ownership

221. In a trivial sense, this statement verges on tautology, for only an existing market could produce a market value. But there is a market for unique goods and assets, however limited. Securing a fair return, as this Section will explain, generally involves opening or "priming" that market as much as reasonably possible.

222. Reliance on comparables is typical in numerous contexts, including home sales. *See, e.g.*, Jay Romano, *Your Home; Market vs. Appraisal: What the Real Value?*, N.Y. TIMES (Aug. 8, 2004), <http://www.nytimes.com/2004/08/08/realestate/your-home-market-vs-appraisal-what-s-the-real-value.html>.

223. To say that assets are unique is not to say that there is no market for them, only that particularized goods rather than say, commodities, define the market. Although commodity markets

is such that, for many resources, public supplies virtually constitute the market; there is no externally determined market price.²²⁴ This was true, for example, of land, coal, and timber for much of the 1800s. Today, the natural resources that remain in public ownership are often unique not only in their extent but in their substance and physical attributes, as well as in the applicability of various legal restrictions. Sales of natural resources often have regulatory strings attached. There may be environmental review obligations or reclamation commitments that must be certified prior to the sale of these goods.²²⁵ Such processes often mean that the actual transfer of ownership may take much longer, and may ultimately be less certain, than in comparable private transactions.²²⁶ These features make valuation extraordinarily complex.²²⁷ The absence of a parallel trade of similar assets in private ownership makes the value determination far more difficult.²²⁸

When public resource managers are bound to a fair market value standard by law, yet lack a parallel private market from which to readily derive values,

can be monitored instantaneously, the valuation of unique goods is profoundly challenging. *See generally* LUCIEN KARPIK, *VALUING THE UNIQUE: THE ECONOMICS OF SINGULARITIES* (2010). Difficulties inhere even for sellers not committed to maximizing revenue, as may be the case with federal agencies; simply getting a price in the ballpark may itself be a difficult task. For purposes of my argument, it suffices merely to point out that, in such instances, there is no external market referent for government managers to consult for “off-the-shelf” pricing information.

224. In such markets, price is inextricably tied to the government’s decision to sell a resource in a particular quantity. For example, commentators have noted that federal decisions to lease en masse offshore tracts for oil and gas drilling virtually guaranteed that “much oil and gas will go essentially for free.” George Cameron Coggins, *The Public Interest in Public Land Law: A Commentary on the Policies of Secretary Watt*, 4 *PUB. LAND L. REV.* 1, 5 n.38 (1983). Coggins also noted a similar phenomenon in the case of federally owned coal: because massive quantities were sold “into a soft market” in the early 1980s, coal was “virtually [sic] being given away for a few cents a ton.” *Id.*

225. Federal asset sales are commonly subject to the environmental review procedures mandated by the National Environmental Policy Act, 42 U.S.C. § 4321 (2012). Reclamation is required for, inter alia, sales of surface coal. *See* the Surface Mining Control and Reclamation Act, 30 U.S.C. § 1201 (2012).

226. A recent report by the Inspector General of the Department of the Interior, for example, found that processing times for onshore oil and gas drilling permits on federal lands were excessive. *See* OFFICE OF THE INSPECTOR GEN., U.S. DEP’T OF THE INTERIOR, CR-EV-MOA-0003-2013, *ONSHORE OIL AND GAS PERMITTING*, U.S. DEPARTMENT OF THE INTERIOR (2014).

227. There is an enormous literature, spanning multiple disciplines, that deals with problems of valuation. For an overarching and largely sociological account, see KARPIK, *supra* note 223. A collection of more technical discussions may be found in *THE WORTH OF GOODS: VALUATION AND PRICING IN THE ECONOMY* (Jens Beckert & Patrik Asperse eds., 2011).

228. At the same time, the mere fact that a comparable private market exists does not guarantee that federal law will require fair market value for resource sales of that kind. In some instances, lawmakers have elected to offer public resources for sale at a substantial discount for political or public policy reasons. Many would place federal grazing rights into this category: an external market exists in that private landowners (as well as state and local governments) offer grazing rights to local ranchers at prices far in excess of federal grazing fees, yet lawmakers have steadfastly refused to raise those fees, evidently for private political or public policy reasons. *See supra* Part II.C.1; *see also* ECONOMIC REPORT OF THE PRESIDENT, *supra* note 166, at 217 (“Public grazing fees are almost always below private fees and may not even cover the government’s cost of administering the grazing program.”).

regulators generally have two approaches to solve this problem. The first approach is to create or simulate a market environment by stimulating competition for the resource; this is generally accomplished by way of an auction. The second approach is informed appraisal. In these instances, federal officials rely on valuation experts who gather information about the asset to be sold and sales of analogous assets elsewhere to discern a reasonable asking price.²²⁹ These two approaches are sometimes combined.²³⁰

Both methods are associated with significant difficulties. The examples furnished in this Article suggest that several related problems are likely to arise. Part II.A demonstrated that auctions and similar competitive sales processes might result in questionable outcomes if competition is inadequate. Incumbent users of public resources tend to succeed in tailoring the resource acquisition process to suit their interests. Coal and timber buyers, for example, not unlike colluding land buyers in the nineteenth century, know how to suppress competitive pressures. Without the disciplining function of a parallel market, public resource managers, whether intentionally or not, may fail to resist attempts by incumbents to structure the terms and procedures of resource sales according to their private benefit.²³¹

Appraisal processes are plagued with difficulties as well, due to both the unique nature of many federal resources and the limited scope of agencies' valuation processes.²³² Public land managers stand at an informational disadvantage relative to private claimants. Whether because resource buyers are the sole source of underlying resource data (as in the coal-leasing example) or because buyers have better knowledge of the true commercial value of the resource (as in the land sale and swap example), those "on the ground" often possess information that federal agencies lack. Driven by a profit-oriented business plan, resource buyers understand the monetary value of public resources in ways that public entities often neglect. Public officials, by contrast, can only guess at private business models and thus at the true economic value of the resources involved. Consequently, there is often a substantial informational asymmetry between the government seller and the private buyer.²³³

229. Law requires appraisals in the context of land sales and swaps. *See supra* note 206 and accompanying text.

230. Coal leasing, as we have seen, relies on a competitive bidding process backstopped by the Interior Secretary's determination of the coal's fair market value. *See supra* Part I.

231. This does not necessarily imply wrongdoing on the part of the agency. Theories of agency capture highlight cases in which, over time, regulators come to occupy the same ideational space as the regulated industry. Without pushback afforded by competitors or detractors, there may be little to stop this process.

232. Recall the BLM's failure to incorporate export potential in its valuation of coal resources, the Forest Service's inability to consider ski resorts' full revenue, and both agencies' difficulties incorporating the real estate development possibilities of public lands in land swaps and sales.

233. Informational asymmetry is commonplace in market transactions of many sorts. *See, e.g.,* Mark J. Garmaise & Tobias J. Moskowitz, *Confronting Information Asymmetries: Evidence from Real*

Thus, in the absence of a comparable private market, the likelihood that agencies will obtain fair market value for public resources diminishes. These problems stem largely from the task environment inhabited by public land and resource managers relative to resource claimants and beneficiaries. As a practical matter, public resource managers are situated very differently from both the buyers with whom they transact and the private sellers of similar resources. Public land managers, for example, oversee enormous landholdings and do so subject to legal mandates that emphasize public values. Generally, they must balance a set of competing objectives; little in their vocational setting disciplines them toward maximizing returns from resource sales. They may very well lack sufficient resources to conduct an appropriate valuation. In such circumstances, officials may be susceptible to external manipulation. Even in the absence of deliberate wrongdoing, buyers' interests are likely to shape transactions because managers often lack the incentive or information to push back against buyers' claims. Recall the case of coal leases: public land managers rely on buyers' representations about the extent of coal deposits, the condition of the market, and the operational necessity of tract development. There is scant incentive for public officials to contest these representations, and there is precious little in the law that requires them to do so.²³⁴

B. Administrative Possibilities and Political Realities

In the setting described above, holding agencies to a fair market value standard, without more, accomplishes little. Although the standard evokes purity of process, the premise on which it rests—the existence of a pure market for the commodity—is in many cases inaccurate.

If Congress systematically seeks to enhance resource revenue while preserving agencies' traditional land management authority, lawmakers would do well to abandon reliance on the abstract fair market standard. Congress should instead specify a set of resource sale procedures and make certain that agencies have sufficient resources to carry them out. Although operational details would vary across resource programs,²³⁵ the reforms should reflect the political and practical realities of the natural resource context. Most importantly, procedural reform ought to account for incumbent resource users who have an incentive to restrain competition to the best of their ability, and agencies, given their task environment, that may tend to use flexibility in their

Estate Markets, 17 REV. FIN. STUDS. 405 (2004) (describing the strategies employed to confront informational asymmetry in the commercial real estate context).

234. In a sales transaction between private entities, both parties typically have a direct personal stake in the terms of the deal. In the sale of a public resource, the public agent has less "skin in the game" and less reason to push back against a buyer. The dynamic is similar to a transaction described earlier, in which private claims to public resources may exceed their legal parameters because land managers find it difficult and costly to resist claim expansion. See Huber, *supra* note 82, at 1034–35.

235. Leading commentators have noted that "[l]egal mechanisms for allocating public natural resources are bewilderingly diverse." See 1 COGGINS & GLICKSMAN, *supra* note 29, § 1:23.

legal mandate to benefit entrenched incumbents.²³⁶ Genuine, unmanipulated competition enhances returns in resource sales, reduces the likelihood of capture, increases accountability, and diminishes the possibility of favoritism.²³⁷

In structuring resource programs according to these realities, Congress would be wise to cabin agency discretion in regards to variables that affect competition. Maintaining competitive pressure in asset sales requires more than simply a competitive process; both the coal and timber sales programs currently purport to require competitive sales and yet frequently suffer from inadequate competition.²³⁸ Thus lawmakers may need to move beyond general declarations and consider aspects of resource sales programs that have previously been the domain of agency specialists. For example, lawmakers may have to consider the scale of resource development at which competition is likely to be the most robust. We have seen that the degree of competition in any particular sales process is often determined at the local level: even given a vibrant national timber or coal market, only one or two actors may be capable of bidding on a remote resource asset. Agencies conducting resource sales can expect pressure from buyers to select a scale at which competition is at its minimum, just as coal firms commonly propose lease tracts that will be of interest only to themselves.²³⁹ If Congress wishes to prevent agencies from succumbing to such pressure, it may dictate a different scale. In the specific case of coal, Congress could eliminate or restrict the “lease by application” process and require that lease sales involve tracts selected by the BLM within designated coal production regions.

If Congress increases the procedural burdens on land management agencies to enhance competition, it should also see to it that those agencies receive appropriations sufficient to carry out such procedures with accuracy and professionalism. Again, the example of coal sales is instructive. A switch to the “coal producing region” process would require the BLM to thoroughly assess the coal reserves in its jurisdiction and to understand both domestic and international markets for federal coal. Competent implementation of this process would likely necessitate a substantial infusion of human resources within the relevant offices of the BLM. There is some reason for concern: political scientists have shown that, regrettably, members of Congress sometimes place demands on bureaucrats with little intention of empowering

236. Consider the Interior Department’s abandonment of regional coal leasing processes and willingness to prioritize land sales and swaps proposed by real estate development interests.

237. In the case of coal leasing, for example, the participation of even a second bidder produced somewhat higher bids than single-bidder auctions. See INSPECTOR GEN. 2013 REPORT, *supra* note 6, at 8; GAO 2013 REPORT, *supra* note 17, at 16–19.

238. As to coal, see 30 U.S.C. § 201(a)(1) (2012) (authorizing the Interior Secretary to award leases by “competitive bidding”). As to timber, see 16 U.S.C. § 472a(e)(1)(a) (2012) (bidding processes are to “insure open and fair competition”).

239. See *supra* note 45 and accompanying text.

them to meet those demands.²⁴⁰ This enables members of Congress to claim credit with their constituents for policy changes now, while reaping further electoral benefits later by blaming agencies for their failure to carry out new policies. For resource sales, one would hope that Congress would see the wisdom of investing in agency programs with direct revenue implications. Ultimately, the objective would be to create a task environment for agency officials in which their own analytical capacities moderate the endemic bargaining advantage typically enjoyed by private actors in their negotiations with resource management agencies.

Obviously, agencies could implement many helpful procedural changes without congressional intervention. The history of public resource administration, however, suggests why agencies are unlikely to engage in reform on their own motion. First, it is worth underscoring that public land managers are not merely or primarily salespeople. The responsibilities of the Forest Service and BLM extend far beyond asset sales. These agencies must develop and maintain expertise in a wide range of areas to fulfill their mandates regarding ecosystem protection, wildlife monitoring, and wilderness preservation, among many other areas. Given this, it is not entirely surprising that agencies seem outmatched in sales transactions against sophisticated business actors. And it is unlikely that they would suddenly devote scarce agency resources to resource sales to the detriment of other objectives.²⁴¹ Secondly, the land management agencies have historically been somewhat beholden to extractive industry interests: the Forest Service to the timber industry, for example, and the BLM to the grazing and mining industries.²⁴² Although there have been important reforms in recent years, these agencies are seldom willing to stake out positions in clear opposition to these industries.²⁴³

Of course, neither does the history of public lands lawmaking (let alone the current state of congressional relations) provide much hope that Congress

240. See MORRIS FIORINA, *CONGRESS: KEYSTONE OF THE WASHINGTON ESTABLISHMENT* ch. 5 (2d ed. 1989) (describing the federal bureaucracy as little more than the “whipping boy” of Congress).

241. In fact, the diversity of the legal mandates that govern the land management agencies is an interesting point of focus in considering the options for improving resource sales. Federal law gives these agencies little guidance on how to prioritize various objectives. Resource sales programs constitute but one category amidst a wide array of management activities, and the law seldom dictates an overarching objective that might guide agency managers in establishing a management agenda. Managers are under no command, for example, to manage land so as to maximize revenue from resource sales.

242. Although such a statement smacks of cynicism, a great deal of careful scholarship by political scientists, historians, and legal scholars has come to that conclusion. For a generation of scholars, in fact, these agencies were among those used most commonly as examples of “capture” or the “iron triangle.” See, e.g., FOSS, *supra* note 174, at 198–204; KLYZA, *supra* note 177, at 6, 140, 145; Blumm, *supra* note 177, at 415–22.

243. See generally CLARY, *supra* note 20, at 195–99; JAMES R. SKILLEN, *THE NATION’S LARGEST LANDLORD: THE BUREAU OF LAND MANAGEMENT IN THE AMERICAN WEST 190–93* (2009) (providing a comprehensive history of the BLM).

will soon take up the task of reforming resource sales procedures. As many have commented, Congress has done little of note in the realm of natural resources law in the last several decades.²⁴⁴ Even setting aside its current malaise, Congress has demonstrated negligible interest in bearing down on the traditional resource interests of the American West.²⁴⁵ The stasis in the law of mining and grazing, as described earlier, well illustrates the present rough equilibrium, which has held for many decades now, where lawmakers tinker at the edges of these policy areas but leave untouched the central elements of the resource disposition process.

CONCLUSION

Although the law and policy behind the sale of federal natural resources has changed considerably over time, and even today varies significantly across different resources, there are several constants. The administration of the nation's sizable public domain has never been easy—not when the federal government was young and weak, and not now with a massive federal land management apparatus. Overseeing hundreds of millions of acres of land, upholding varied and variable public interests in these lands, and developing policies that balance general objectives with local circumstances are difficult goals to achieve under any circumstances. They are even more difficult to achieve when the government adopts, as it has in recent decades, a proprietary approach to public resources.²⁴⁶ This approach is difficult in part because private users of public lands, those actually “on the ground,” have always had substantial leverage against federal land managers.²⁴⁷ To the extent that agencies have not sought or received fair market value in public resource transactions, it is largely due to the difficulty of administering a vast public domain in the presence of numerous, entrenched, and incumbent private claimants.

In a pathbreaking 1931 article, economist Harold Hotelling published a mathematical model explaining how the owner of a nonrenewable resource could maximize the value of that resource.²⁴⁸ The model, among the most famous in the field of resource economics, helps to explain how much of the resource the owner should store and sell in a given year. In other words, Hotelling's work provided a mathematical answer to the quandary that selling

244. See generally CHRISTOPHER MCGRORY KLYZA & DAVID J. SOUSA, *AMERICAN ENVIRONMENTAL POLICY, 1990–2006: BEYOND GRIDLOCK* 285–96 (rev. ed. 2013).

245. See generally WILKINSON, *supra* note 176.

246. I have argued previously that federal public lands law and administration has shifted from an “open access” model to a “proprietary” model, in which the land management agencies serve as trustees for the public interest, which is, often as not, given effect by securing a fair return from resource assets. See Huber, *supra* note 82, at 1031–32 (describing the proprietary model).

247. See *id.* (describing the durability of private claims to public lands as a historical matter).

248. Harold Hotelling, *The Economics of Exhaustible Resources*, 39 J. POL. ECON. 137 (1931).

too little of a resource would yield too little revenue and selling too much could devalue the resource or deplete it too early.

If only it were so simple. In public resource management, it is seldom the case that managers are tasked straightforwardly with the goal of maximizing the monetary value of a given resource. Instead, federal agencies must manage public lands for multiple and sometimes conflicting purposes. Public land policies often represent an odd amalgamation of public and private interests. Although this multiplicity is broadly consistent with democratic governance (and indeed, it describes almost all public policy), it renders public ownership distinctly at odds with the models of owner behavior commonly assumed in theories of property, which generally feature a single-minded, value-maximizing owner.²⁴⁹ It is just these sorts of owners, in fact, that agencies encounter across the table in resource transactions.

It is not surprising that public land managers behave differently than private landowners. More interesting, and more important from a theoretical standpoint, is the recurrent failure of government institutions to secure fair market value in the sale or lease of public assets and the corresponding success of incumbent resource interests in leveraging and extending their transactional advantage. Apparently, public ownership is far more suited to private benefit than is commonly understood. This provides a clue to the durability of widespread public land ownership in the United States, a somewhat unusual phenomenon in light of the well-known American aversion to state ownership. Private resource users have more than accommodated themselves to public ownership regimes; they have, in various ways across our institutional history, tilted those regimes to suit their particular needs.

249. More generally, property theory has somewhat neglected public property or the property of the state. See Dean Lueck & Thomas J. Miceli, *Property Law*, in 1 HANDBOOK OF LAW AND ECONOMICS 183, 196–98 (A. Mitchell Polinsky & Steven Shavell eds., 2007) (noting, inter alia, that state property has not been “systematically analyzed” and describing the applicable literature as “limited”). Harold Demsetz, regarded as a pioneer for his work on the origins of property rights, also largely ignored state property. See, e.g., Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 354 (1967) (“I shall not examine in detail the alternative of state ownership.”).

