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An Agricultural Law Research Article

**Prescriptive Laws, Uncertain Science, and
Political Stories: Forest Management
in the Sierra Nevada**

by

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Originally 29-4 ECOLOGY L.Q. 747 (2002)

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INTRODUCTION

From Lake Tahoe north to Mt. Lassen, California's Sierra Nevada are blanketed in a largely unbroken band of national forests. The west side of the range, doused each winter by Pacific storms, supports dense

woodlands of Douglas fir and other mixed conifers. On the drier east side, open pine and white fir forests predominate. Throughout the range, years of logging and fire suppression have damaged the forests, leaving the region with an uncertain ecological and economic future. Old growth forests are almost gone.¹ Populations of many animal species dependent upon old growth habitats are dwindling. In many areas, young trees grow in profuse density, providing an overabundance of kindling and threatening to escalate small, routine fires into catastrophic conflagrations. As the timber supply has declined and environmental restrictions have tightened, the local timber economy has suffered.

During the past ten years, efforts to address these problems have emerged onto the national stage. Following the Pacific Northwest's battles over old-growth logging and northern spotted owls, both the Forest Service and a local community group sought better ways to protect forests, preserve local economies, and avoid litigious decisionmaking.² Their chosen methods have created intense and ongoing conflict.

In the early 1990s, in response to local administrative appeals and litigation and the looming shadow of the Pacific Northwest's spotted owl controversy, local officials, timber company representatives, and environmentalists in the town of Quincy initiated a community-based planning process for three northern Sierra Nevada national forests. This group soon evolved into the Quincy Library Group ("QLG"), a name taken from the local library where members regularly met. Congress eventually passed the recommendations in the QLG's plan as the Herger-Feinstein Quincy Library Group Forest Recovery Act,³ and the plan ostensibly still dictates, subject to some limitations, the management scheme for the national forests surrounding Quincy. The Quincy Library Group has been eulogized and demonized, and has served as perhaps the country's most visible example of a resurgent trend towards community-based resource management planning.

1. Old growth forests are typically defined as forests that have remained undisturbed for a long period of time and thus have reached a mature or late successional stage. See Jerry F. Franklin & Jo Ann Fites Kaufman, *Assessment of Late Successional Forests in the Sierra Nevada*, in SIERRA NEVADA ECOSYSTEM PROJECT, FINAL REPORT TO CONGRESS 627-28 (1996), available at http://ceres.ca.gov/snep/pubs/web/PDF/VII_C21.PDF (last visited November 13, 2002). Old growth forests provide numerous benefits, including creating wildlife habitat, promoting carbon sequestration, protecting water quality, and providing inspiration to human visitors. *Id.*

2. In the late 1980s and early 1990s, litigation over the fate of the northern spotted owl led to judicial injunctions mandating drastic reductions in levels of timber harvesting, generating intense political controversy. For a definitive account of the Northwest's timber wars, see STEVEN YAFFEE, *THE WISDOM OF THE SPOTTED OWL* (1994).

3. Herger-Feinstein Quincy Library Group Forest Recovery Act, Pub. L. No. 105-277(A), § 101(e) (Title IV, § 401), 112 Stat. 2681-305 (codified at 16 U.S.C. § 2104 (1998)) [hereinafter "HFQLG Act" or "the Act"].

In January 2001, in accordance with its obligations under the National Forest Management Act (“NFMA”)⁴ and the National Environmental Policy Act (“NEPA”),⁵ the Forest Service released its Final Environmental Impact Statement and Record of Decision for forest plan amendments (the “Framework”⁶) covering the next ten years of forest planning in the entire Sierra Nevada.⁷ The Framework was the culmination of a ten-year planning process, much of which took place at the same time the QLG was developing its recommendations and seeking passage and then implementation of the HFQLG Act. In its regional scope, emphasis upon scientific research, and focus on environmental preservation and restoration, the Framework embodies a new direction in federal land use planning.

Both the Framework and the HFQLG Act represent cutting-edge trends in public lands management, and perhaps in an ideal world both could be given the chance to succeed. In the Sierra Nevada, however, the two create different substantive management schemes for the same forests, with the HFQLG Act calling for much more logging.⁸ Both the Framework and the HFQLG Act require implementation by the Forest Service, which faces the difficult task of reconciling and integrating the two schemes.

The task is further complicated by political controversy and scientific uncertainty. The QLG tells a sympathetic David-against-Goliath story of concerned citizens battling against intransigent bureaucracies, and promotes a decentralized decisionmaking model consistent with the sympathies of the Bush Administration. The Framework’s supporters, by contrast, tell a compelling tale of environmental reform and ecological protection, and warn of the dangers of exploitive logging. Many of the scientific issues involved are extremely complicated, and current knowledge provides little certainty and offers minimal hope of a clear justification for either approach.

4. 16 U.S.C. § 1604(f) (1994) (requiring the Forest Service to update plans for the National Forests every fifteen years).

5. 42 U.S.C. §§ 4321–70 (1994). NEPA requires preparation of an environmental impact statement for any major federal action significantly affecting the environment. *Id.* § 4332(C).

6. The Forest Service named the project “The Sierra Nevada Framework for Collaboration and Conservation.” In practice, most involved parties just call it the Framework. The Framework document represents an effort to simultaneously satisfy the obligations of both NFMA and NEPA; the various planning options become the various alternatives considered within the environmental impact statement, and the selected alternative becomes the management scheme.

7. UNITED STATES FOREST SERVICE, FINAL ENVIRONMENTAL IMPACT STATEMENT, SIERRA NEVADA FOREST PLAN AMENDMENT (2001) [hereinafter “Framework” or “Framework EIS”]; United States Forest Service, Record of Decision: Sierra Nevada Forest Plan Amendment Environmental Impact Statement (2001) [hereinafter “Framework ROD”].

8. The Framework addresses extensive areas not included within the HFQLG Pilot Project area, but the entire Pilot Project area is addressed by the Framework.

Perhaps not surprisingly, the Bush-appointed Forest Service leadership appears to be shying away from the difficult scientific questions and instead to be deciding outcomes based on more accessible questions of values. Such decisions, however, are less likely to result in effective and legally tenable environmental policies, for applicable laws demand that decisions be grounded in science. Avoiding the scientific questions, while perhaps more politically palatable, ultimately only increases the risk that policies will run afoul of the laws.

After analyzing the Sierra Nevada conflicts and the Forest Service's dilemma, this article offers a model for improved resource policy decisionmaking. An agency ought to consider both science and values, but where the applicable laws demand a scientific foundation for a decision, the inquiry should begin by determining the range of options consistent with current scientific knowledge.⁹ Only after making such an inquiry should the agency allow non-scientific values to play a decisive role.

I. THE SETTING

- A. *The Town of Quincy and the Local Economy*

Quincy is located in the heart of the northern Sierra Nevada and is almost entirely surrounded by the Plumas National Forest. The Tahoe National Forest is located south of the Plumas, and the Lassen National Forest lies to the north. The area is at lower elevation and is less rugged than the classic Sierran topography of the Yosemite and Kings Canyon national parks further south, and as a result supports a higher percentage of forest.

The local economy depends heavily upon those forests, and in recent years that economy has not fared well.¹⁰ Three active timber mills are located within the area managed under the HFQLG Act.¹¹ Two of these mills, including one in Quincy itself, are owned and operated by Sierra Pacific Industries. While these mills are heavily dependent upon local

9. This article focuses on the decisionmaking process, and does not address the fundamental question of which side has better scientific arguments.

10. TIMOTHY P. DUANE, SHAPING THE SIERRA 95 (1999) ("The Northern Sierra stands out among the various subregions (of the Sierra Nevada) with its greater unemployment and poverty, and its lower levels of education, economic diversification, and population turnover, as well as its heavier dependence on government.").

11. UNITED STATES FOREST SERVICE, HERGER-FEINSTEIN QUINCY LIBRARY GROUP FINAL ENVIRONMENTAL IMPACT STATEMENT, Section 3: Socioeconomic Environment, August 20, 1999, available at http://www.r5.fs.fed.us/hfqlg/archives/feis/Chapters/chap3/3_3.htm [hereinafter HFQLG FEIS]; e-mail from Linda Blum to author, July 18, 2002 (updating the information in the HFQLG FEIS. According to Blum, the Collins Pine Co. mill is currently closed, but the closure is temporary).

output of timber, a decreasing percentage of their timber supply comes from surrounding federal land, and declines in timber output from federal lands over the past ten years have contributed to the closure of six other mills in the area.¹² Much of the local manufacturing sector also involves wood products, and some local businesses are directly or indirectly dependent upon the logging economy.¹³ County revenues also depend upon income derived from Forest Service timber sales.¹⁴

The local economy is not exclusively extraction-based. The area's national forests attract many recreational users.¹⁵ Retirees and other "urban escapees," who make up an increasing proportion of the population,¹⁶ often derive their income from investments. Despite these benefits, unemployment in the area is several percentage points above the state average.¹⁷ The area's population is aging, largely because of the retirees' influx and an exodus of younger workers seeking better economic opportunities.¹⁸

The national forests provide economic benefits to the local community and state apart from lumber. Many immigrants to the area are attracted by natural beauty in addition to low costs of living and relatively safe communities.¹⁹ Biomass, a byproduct of wood processing, generates power.²⁰ The forests are also used for grazing,²¹ and, perhaps most importantly, local runoff feeds into river systems that provide power, irrigation, and domestic water supplies for almost the entire state of California. The rivers also support diverse wildlife, including runs of

12. See HFQLG FEIS, Section 3: Socioeconomic Environment, *supra* note 11; Blum e-mail, *supra* note 11.

13. See *id.*; DUANE, *supra* note 10, at 97. In the Sierra Nevada region as a whole, remanufacturing businesses, which do not necessarily depend upon logs coming from the Sierra Nevada, have become an increasingly large part of the economy. William C. Stewart, *Economic Assessment of the Ecosystem* 51–53, in SIERRA NEVADA ECOSYSTEM PROJECT, FINAL REPORT TO CONGRESS (1996), available at http://ceres.ca.gov/snep/pubs/web/PDF/VIII_C23.PDF. The development of this business has occurred primarily at the fringes of the Central Valley, however, and in the northern Sierra Nevada such business has declined significantly rather than grown. *Id.* at 54.

14. Stewart, *supra* note 13, at 79–80 ("Lassen, Plumas, and Sierra counties are very different from the rest of the Sierra Nevada and have a much greater dependence on federal revenue sharing for county and school revenues. The fiscal impact of overall declines in revenue from reduced federal timber harvesting will be concentrated in these counties.")

15. See HFQLG FEIS, *supra* note 11, § 3: Socioeconomic Environment; Stewart, *supra* note 13, at 18.

16. DUANE, *supra* note 10, at 97.

17. HFQLG FEIS, *supra* note 11, § 3: Socioeconomic Environment.

18. See *id.*

19. The environmental values are also important to many long-time residents. QLG co-founder Bill Coates, for example, stressed that living in the Quincy area had always implied a choice for environmental benefits over high wages. Telephone Interview with Bill Coates, February 8, 2002 [hereinafter Coates Interview].

20. See HFQLG FEIS, *supra* note 11, § 3: Socioeconomic Environment.

21. See *id.*

endangered chinook salmon.²² All of these benefits raise the stakes for forest management decisions, which will have impacts far beyond forest boundaries.

B. *The Ecological Environment*

While the forests continue to provide benefits to the local economy, a history of human use and impact has substantially altered their condition. The Forest Service estimates that between 50% and 90% of Sierra Nevada old growth habitat has been lost.²³ Sedimentation and grazing have impacted riparian areas, reducing water quality.²⁴ Invasive species are an increasing problem.²⁵

The danger of catastrophic wildfire is potentially the most significant problem. Fire is a normal part of the Sierra Nevada ecosystem, and foresters and scientists generally agree that historically smaller-scale fires regularly cleared lower level vegetation without seriously affecting larger, older trees.²⁶ However, a combination of logging and years of fire suppression have partially displaced some fire-resistant species and led to a younger, denser forest.²⁷ As a result, fires now have far greater potential to travel from the ground upward to the crowns of trees, catastrophically burning entire areas of forest and placing both wildlife habitat and human communities at risk.²⁸ Prescriptions for remedying this problem diverge widely, but both the QLG and the Forest Service agree that prevention of

22. See *id.* § 2: Biological Environment, Table 3.53; Stewart, *supra* note 13, at 21 (“Estimates of economic values of water diverted for irrigation, municipal, and hydropower, suggest that water diversions represent the largest single commodity produced from the Sierra Nevada ecosystem.”). Stewart notes that the value is primarily from use outside the region, but that within-region recreational uses also occur and are dependent upon in-stream flows and water quality. The Feather River, which drains from the area addressed by the HFQLG Act, has the largest flow of any of the rivers draining the Sierra, accounting for approximately one quarter of the total flow and producing the largest amount of hydropower. *Id.* at 22, 40–41.

23. Framework ROD, *supra* note 7, at 39; see Framework EIS, *supra* note 7, at Part 2.3.3.2 p. 149.

24. See Framework EIS, *supra* note 7, at Part 2.3.3.4 p. 194.

25. See *id.* at Volume 1, Summary p. 5.

26. See, e.g., *id.* at Part 2.2.3.2, p. 121.

27. For an excellent pictorial depiction of these changes, see GEORGE E. GRUELL, FIRE IN SIERRA NEVADA FORESTS: A PHOTOGRAPHIC INTERPRETATION OF ECOLOGICAL CHANGE SINCE 1849 (2001) (juxtaposing late nineteenth century photographs of the Sierra Nevada against modern photographs taken at the same locations).

28. See Framework EIS, *supra* note 7, at Part 2.2.3.2, pp. 121–22. These pages include an illustration of ladder fuels endangering an older tree. Ladder fuels are trees of intermediate height that allow flames to climb from the ground level to the canopy. Prior to aggressive fire suppression and even-aged logging techniques, such small and intermediate-sized trees were relatively rare, forests were more open, and large, old trees were more abundant. Fires, though frequent, are thought to have rarely burned with high intensity, and would have cleared fuels from the ground surface without often damaging the larger trees.

high intensity fires is a necessary component of any forest management strategy.

The forests surrounding Quincy are home to several threatened, endangered, or sensitive animal and plant species. The peregrine falcon²⁹ and California red-legged frog³⁰ are currently listed as endangered, and the bald eagle is currently listed as threatened.³¹ Additionally, a group of sensitive species primarily dependent upon old growth ecosystems exerts great influence over the planning process. The Pacific fisher, wolverine,³² American marten, Sierra Nevada red fox, goshawk, northern spotted owl, and perhaps most importantly, California spotted owl all have habitat within the northern Sierra Nevada, and all appear to favor old-growth forests.³³

Concerns about the California spotted owl's viability have been at the forefront of resource planning since the early 1990s.³⁴ Although the owl is not yet listed as endangered or threatened, reductions in the extent and connectivity of old growth forests may be threatening its survival. The rate of decline is uncertain, but recent studies suggest that owl populations throughout the Sierra Nevada are decreasing,³⁵ and on April 12, 2000, a coalition of environmental groups petitioned the Fish and Wildlife Service to list the California spotted owl as endangered.³⁶ The California spotted owl's northern cousin was the catalyst of a process that

29. HFQLG FEIS, *supra* note 11, at Table 3.41.

30. Framework EIS, *supra* note 7, at Part 3.3.4.3, p. 11.

31. HFQLG FEIS, *supra* note 11.

32. Neither the Pacific fisher nor the wolverine is currently known to be present in the QLG study area. Pacific fishers are currently found in the Sierra Nevada only south of Yosemite, Framework FEIS, *supra* note 7, at Part 3.3.4.4 pp. 4-5, and, while probable sightings periodically occur, wolverines are not conclusively known to be present anywhere in the Sierra. *Id.*, Part 3.3.4.4, p. 45.

33. Because of similarities in the preferred habitats of these species, the Forest Service argues that management that benefits the owl will likely benefit the full suite of old growth-dependent predators. Framework ROD, *supra* note 7, at 37.

Because the California spotted owl is one of the broadest ranging species at risk and is associated with the old forest ecosystem, development of this owl strategy, in combination with the old forest emphasis areas, represents a coarse filter landscape scale conservation strategy for all old forest associated species. It is anticipated that management prescriptions developed for the owls and the old forest ecosystem will contribute to the extent, productivity and resiliency of the old forest ecosystem . . .

Id.

34. See Lawrence Ruth, *Conservation on the Cusp: The Reformation of National Forest Policy in the Sierra Nevada*, 18 U.C.L.A. J. ENV'T L. & POL'Y. 1, 48-58 (1999/2000).

35. UNITED STATES FISH AND WILDLIFE SERVICE, FORMAL ENDANGERED SPECIES CONSULTATION AND CONFERENCE ON THE BIOLOGICAL ASSESSMENT FOR THE SIERRA NEVADA FOREST PLAN AMENDMENT FINAL ENVIRONMENTAL IMPACT STATEMENT 70-71 (2001) [hereinafter FRAMEWORK BIOLOGICAL OPINION].

36. *Id.* at 69. The Fish and Wildlife Service ("FWS") found substantial evidence that listing might be warranted, but a funding-based moratorium on non-court mandated listings has stalled the process.

turned forest management in the Pacific Northwest upside down.³⁷ With listing of the California spotted owl a very real possibility, the specter of the Northwest's timber wars continues to loom over all planning efforts.

II. THE LEGAL CONTEXT

The Framework and the HFQLG Act both developed within the complicated legal system that controls management of the national forests. Numerous environmental laws influence forest management, but the primary legal catalysts for the Sierra Nevada planning process are the National Forest Management Act ("NFMA"), the Endangered Species Act ("ESA"), and the National Environmental Policy Act ("NEPA").³⁸

A. *The National Forest Management Act*

The Framework was developed in accordance with NFMA, which requires the Forest Service to develop land management plans for all the units it manages and to update those plans at least every fifteen years.³⁹ NFMA's provisions mandated the Sierra Nevada forest plan amendments, and those amendments in turn triggered NEPA and led to the development of the Framework EIS. NFMA also establishes substantive requirements for the content of forest plans, and contains provisions requiring some biodiversity protection. After echoing the sustainable use mandate of the Multiple-Use Sustained Yield Act,⁴⁰ NFMA requires that the plans "provide for diversity of plant and animal communities."⁴¹ The Forest Service's 1982 regulations, under which the Framework EIS was developed, clarify that diversity requires the maintenance of "viable populations" of animal species.⁴² Thus, NFMA can act to defend a species not yet listed under the Endangered Species Act, and thereby can exercise a broader, though perhaps less proscriptive, protective power than the ESA.

37. *See supra* note 2.

38. The HFQLG Act also played an important role in the development of the Framework, though whether that role was important enough is subject to dispute. *See infra* Part III.C.3; *infra* note 174 and accompanying text.

39. 16 U.S.C. § 1604(f) (1994).

40. 16 U.S.C. §§ 528-31 (1994) (requiring the Forest Service to balance multiple competing uses in its forest management, but not providing any more specific guidance about how such balancing should take place).

41. 16 U.S.C. § 1604(g)(3)(B) (1994).

42. 36 C.F.R. § 219.19 (1982). The Forest Service has updated these regulations, but implementing language for the new regulations allowed the Forest Service to prepare the FEIS in accordance with the older regulations. Framework ROD, *supra* note 7, at 35. The reasoning behind the regulations is that protection of biodiversity requires that individual species not be lost. *Seattle Audubon Soc. v. Lyons*, 871 F. Supp. 1291, 1315 (W.D. Wash. 1994) ("Diversity, of course, can exist only if individual species survive.").

B. *The National Environmental Policy Act*

The Framework EIS also follows NEPA's requirements. NEPA requires a federal agency to assess the likely impacts of any major actions significantly affecting the quality of the human environment by preparing a detailed statement on the environmental consequences of the proposed action, and it requires the agency to discuss in detail potential alternatives to the proposed course of action.⁴³ While NEPA imposes no specific substantive requirements, its procedural requirements are intended to ensure careful consideration of environmental effects⁴⁴ and to create a transparent process through which the public can influence and critique agency decisions.⁴⁵ Although NEPA's procedural requirements are extensive, and litigation on NEPA claims is common, courts generally defer to agencies when their compliance with NEPA is challenged.⁴⁶

C. *The Endangered Species Act*

Unlike NEPA, the Endangered Species Act ("ESA") imposes clear substantive as well as procedural obligations upon federal agencies. Once a species is listed as endangered or threatened, no federal agency may take any action likely to jeopardize its survival.⁴⁷ Courts have been unequivocal that this requirement binds agencies regardless of cost, and the ESA has extraordinary power to force federal agencies to change their policies.⁴⁸ Prior to the filing of a petition for listing, however, the ESA imposes no procedural or substantive requirements, and a species can teeter on the brink of threatened status without receiving any protection from the ESA.⁴⁹ Thus, a listing can drastically change the legal landscape almost overnight. The ESA functions as a sort of disaster-control statute; although it creates strong incentives to avoid harm to sensitive species, it does not create a legal framework for keeping those species off the list.

43. 42 U.S.C. § 4332(C) (1994).

44. 42 U.S.C. §§ 4331-32 (1994).

45. 40 C.F.R. § 1500.1(b) (2001) ("NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency documents, and public scrutiny are essential to implementing NEPA.").

46. *See, e.g., Vermont Yankee Nuclear Power Corp. v. Natural Res. Def. Council*, 435 U.S. 519 (1978); *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332 (1989).

47. 16 U.S.C. § 1536(a)(2) (1994).

48. *See, e.g., Tennessee Valley Auth. v. Hill*, 437 U.S. 153 (1978) (holding that Congress intended listed species to be protected regardless of economic cost).

49. As of this writing, this is exactly the situation in the Sierra Nevada. None of the species at the heart of the forest management controversies is currently listed, but listing is considered by all parties to be a very real possibility.

In combination, these three laws create a powerful set of procedural and substantive conservation requirements. The ESA's power is well known, and of the three acts it may receive the most press and be the most frequent lightning rod for popular resentment, but both NEPA and NFMA have their teeth as well. For example, Judge Dwyer issued the original injunction halting logging in Pacific Northwest national forests containing spotted owl habitat because of violations of NFMA and NEPA.⁵⁰ As the complexity of the Framework EIS indicates, compliance with NEPA can require huge expenditures of time and effort, demand substantial amounts of study, and allow for public review of questionable choices or potential legal problems. NFMA's diversity requirement may allow for balancing of environmental and economic interests,⁵¹ but it too has played a key role in major shifts in Forest Service policy. In combination, the three acts leave the Forest Service little ability to maneuver when the survival of species is clearly at risk.

III.

DEVELOPMENT OF THE HFQLG ACT AND THE FOREST SERVICE'S FRAMEWORK

Within this socioeconomic, ecological, and legal context, the QLG's management scheme and the Framework evolved contemporaneously as different means to address similar underlying problems. The HFQLG Act began as a recommendation from a community group. When the group was unable to persuade the Forest Service to integrate its recommendations into the normal NFMA planning process, it went outside that process, imposing a different substantive outcome through Congressional legislation. The NFMA planning process continued, however, ultimately culminating in the Framework, which both incorporated and altered the HFQLG Act's policies. This section traces the evolution of each management scheme, describes the substantive outcome of each, and discusses in more detail the complicated interrelationships between the two schemes.

50. See *Seattle Audubon Society v. Evans*, 771 F. Supp. 1081 (W.D.Wash. 1991). The Framework would likely be immune to such a legal challenge under NFMA. Under *Ohio Forestry Association, Inc. v. Sierra Club*, challenges to the management scheme will not be ripe until the Framework is put into place in management plans for specific forests. See 523 U.S. 726 (1998). The Forest Service typically uses a tiered planning process, in which it produces generalized forest management plans to cover large areas and then, in accordance with those broad plans, produces more detailed plans governing specific management actions for smaller areas. In *Ohio Forestry Association*, the Supreme Court held that a broad forest plan was not yet ripe for judicial review. *Id.* The Framework is this type of broad plan and probably could not yet be challenged under NFMA. Nevertheless, if the Framework fails to comply with NFMA, a more specific local plan developed in accordance with its dictates would have difficulty surviving legal challenge.

51. See *Seattle Audubon Soc. v. Lyons*, 871 F. Supp. 1291, 1315 (W.D.Wash. 1994) ("planning for species diversity occurs with multiple use principles in mind").

A. Development of the HFQLG Act

In the early 1990s, Quincy was a divided town. The logging industry was suffering. A series of administrative appeals and lawsuits, many brought by local attorney Michael Jackson and activist Linda Blum, were effectively stopping clearcutting, and resentment was intense.⁵² Vandalism and threats were common;⁵³ in one oft-repeated story, Jackson was thrown headfirst through a barroom door after bragging about a litigation victory.⁵⁴

1. Formation of the QLG

The Quincy Library Group formed in the winter of 1992-1993, when Tom Nelson, a local official with Sierra Pacific Industries, and Bill Coates, a Plumas County Supervisor, approached Michael Jackson to see if they could find some common ground.⁵⁵ The group of three rapidly expanded, took the name Quincy Library Group, and soon stabilized with a steering committee of about thirty members.⁵⁶ Meetings were open to the public, though executive committee meetings were sometimes closed, and the group's relative geographic isolation may have helped to keep involvement at a manageable scale.⁵⁷ To avoid subjecting the group to the requirements of the Federal Advisory Committee Act,⁵⁸ the Forest Service did not formally participate in the group, but Forest Service personnel attended meetings and offered advice to group members.⁵⁹

Over time, and through some difficult negotiation, the group hammered out a set of compromise recommendations, largely based on a

52. Jon Christensen, *Everyone Helps a California Forest, Except the Forest Service*, HIGH COUNTRY NEWS, May 13, 1996, available at http://www.hcn.org/servlets/hcn.URLRemapper/1996/may13/dir/Feature_Everyone_h.html.

53. Ed Marston, *The Timber Wars Evolve into a Divisive Attempt at Peace*, HIGH COUNTRY NEWS, September 29, 1997, available at http://www.hcn.org/servlets/hcn.URLRemapper/1997/sep29/dir/Feature_The_timber.html ("Jackson and his allies gave as good as they got during the timber wars. 'We blamed and ridiculed our neighbors. There was sugar in the tanks of logging equipment. And they responded in the normal way, including gunshot wounds to windows.'").

54. Edwin Kiester, Jr., *Smithsonian Magazine*, *A Town Buries the Axe*, July 1999, available at <http://www.smithsonianmag.si.edu/smithsonian/issues99/jul99/logging.html>; Christensen, *supra* note 52.

55. George Terhune & Pat Terhune, *QLG Case Study* (October 1998), at <http://www.qlg.org/pub/miscdoc/terhuncasestudy.htm> (last visited November 13, 2002).

56. See Quincy Library Group, *Quincy Library Group Background*, at <http://www.qlg.org/pub/contents/overview.htm> (last visited November 13, 2002).

57. Terhune & Terhune, *supra* note 55.

58. 5 U.S.C. App. 2 §§ 1-15 (1994). The Federal Advisory Committee Act regulates the role advisory committees—usually bodies composed partly of private citizens and partly of government employees—may play in rulemaking and other administrative processes.

59. *Id.* ("almost every QLG meeting is attended by Forest Service officials who make valuable contributions to the discussion; but they are not members, and they do not participate in QLG decisions").

forest management plan drafted by local environmentalists in the late 1980s,⁶⁰ for the management of the Plumas, Lassen, and part of the Tahoe national forests.⁶¹ When the Forest Service rebuffed the group's request to have its recommendations incorporated into the forest management scheme, the QLG sought political assistance. Initially, members journeyed to Washington, D.C., to seek Congressional and higher-level Forest Service support for inclusion of their recommendations in the Forest Service's plan.⁶² When the QLG continued to find its efforts frustrated by the local and regional Forest Service, the group turned to the legislative process, and succeeded in attaching its recommendations as a rider to an appropriations bill. Despite opposition from national environmental groups, President Clinton signed the HFQLG Act into law in October 1998.⁶³

2. *The Act*

The HFQLG Act requires the Forest Service to incorporate the QLG's recommendations into the management of the Plumas and Lassen national forests and the Sierraville District of the Tahoe National Forest.⁶⁴ The recommendations are to be implemented over a five-year period, or until the Forest Service updates the land and resource management plans for the forests addressed by the Act.⁶⁵ The implementation is intended to "demonstrate the effectiveness of the resource management activities described" in the QLG's plan, which, because of its experimental nature, is often referred to as the "Pilot Project." The Forest Service must submit annual reports on the progress of the project⁶⁶ and a final report when the project is completed.⁶⁷

Consistent with its mixed environmental/industry constituency, the HFQLG Act represents a classic multiple-use orientation toward the national forests. The Act provides some environmental protections that were, at the time QLG discussions began, rather progressive.⁶⁸

60. Friends of Plumas Wilderness et al., *The Conservationist Alternative to the Plumas National Forest Land Management Plan* (February 1986), at <http://www.qlg.org/pub/archive/archivemisc/fpwconalt.htm> (last visited November 13, 2002).

61. QLG Background, *supra* note 56.

62. See Terhune & Terhune, *supra* note 55.

63. *Id.*

64. HFQLG Act § 401(b)(1)–(b)(2) (1998).

65. *Id.* § 401(g).

66. *Id.* § 401(j).

67. *Id.* § 401(k).

68. For example, streams are to be protected by buffer zones, HFQLG Act § 401(c)(2), old growth areas and zones surrounding spotted owl nesting sites are to be set aside and protected, *id.* § 401(c)(1), and in accordance with 1992 Spotted Owl Protection (CASPO) Guidelines, trees over thirty inches in diameter are not to be cut. *Id.* § 401(c)(3); UNITED STATES FOREST SERVICE, THE CALIFORNIA SPOTTED OWL: A TECHNICAL ASSESSMENT OF ITS CURRENT STATUS 21 (1992).

Nevertheless, the Act seeks to retain logging as a major use of the forests, allowing some clearcutting and using timber removal as the primary means of fire management.⁶⁹ In total, timber harvests would approximate 1990 levels and be almost double the levels of the mid-90s.⁷⁰

While the Act's requirements are specific, it also contains language allowing the Forest Service substantial flexibility in implementation. Most significantly, amendments added in the Senate specifically state that the resource management activities of Section (d) of the Act must be carried out in compliance with any other provision of federal law and current spotted owl management guidelines. The Act's amendments also require that any updated owl protection guidelines be incorporated into the HFQLG management scheme.⁷¹

The flexibility created by this language assured that the HFQLG Act would not be implemented rigidly regardless of environmental consequences. According to one QLG member, these amendments simply made explicit assumptions underlying the group's planning.⁷² Nevertheless, by subordinating the HFQLG Act to the existing legal scheme and mandating the incorporation of updated owl management guidelines, the Act clarified that the Pilot Project was to be implemented only to the extent that it would not compromise the owl's survival. The QLG probably never anticipated that this exception would come to swallow its law, but with the release of the Framework this language has taken on crucial significance.⁷³

69. Fire protection would be accomplished primarily through developing a system of Defensible Fuel Profile Zones (DFPZs), linear zones in which trees will be selectively mechanically thinned. HFQLG Act § 401(d)(1). Selective mechanical thinning means that some, but not all, trees within an area will be removed using human-operated machinery. This approach is an alternative to clearing undergrowth and smaller trees with controlled fire, an approach more favored by environmentalists, and group selection (one-to two-acre clearcutting). The mechanical thinning of DFPZs will also provide an important source of timber—each year between 40,000 and 60,000 acres are to be treated. *Id.* Forests outside of the deferred areas will be available for group selection, with approximately 0.57% of the available forest to be clearcut each year. *Id.* § 401(d)(2).

70. HFQLG EIS, *supra* note 11, Section 3: Socioeconomic Environment.

71. HFQLG Act § 401(c)(3) (1998); Terhune & Terhune, *supra* note 55. In addition, the HFQLG plan was not to be implemented until after the completion of an Environmental Impact Statement, HFQLG Act § 401(b)(1) (1998), and the Forest Service could truncate the duration of the project by preparing updated forest plans for the included forests. Although the Act specifically requires that the QLG's recommendations must be considered as one option for these forest management plans, it does not prevent the Forest Service from selecting another management scheme. *Id.* § 401(g), (i).

72. Interview with Linda Blum, Quincy Library Group Member, in Quincy, Cal. (April 5, 2001) [hereinafter Blum interview].

73. See *infra* Section V.

3. *Implementation of the Act*

Even prior to the release of the Framework, the QLG was frustrated with the Forest Service's implementation of the Act. In its EIS, the Forest Service determined that full implementation could jeopardize the spotted owl's viability and potentially violate the National Forest Management Act.⁷⁴ As a result, it called for harvest levels lower than provided for in the Act.⁷⁵ In practice, timber harvesting has not reached the cut levels called for in the Act,⁷⁶ and the QLG argues that the limitations imposed upon the Pilot Project by the Framework prevented implemented cuts from generating profits.⁷⁷

The QLG has been actively involved in the implementation that has taken place, monitoring the progress of the Forest Service's work, continuing to lobby Congress in Washington, and offering educational tours to national lawmakers upon their returns to California.⁷⁸ The QLG also appealed the Framework EIS,⁷⁹ and it is currently planning to sue the Forest Service over what the QLG views as the Service's illegal obstruction of the HFQLG Act's implementation.⁸⁰

74. UNITED STATES FOREST SERVICE, HERGER-FEINSTEIN QUINCY LIBRARY GROUP FOREST PROTECTION ACT, FINAL ENVIRONMENTAL IMPACT STATEMENT: RECORD OF DECISION 11 (1999) [hereinafter HFQLG ROD].

75. The Forest Service required that, pending the development of updated owl protection guidelines, all DFPZ and group selection activity would avoid any suitable spotted owl habitat. *Id.* at 6. For the initial years of the project, the Forest Service expected that enough timber would still be available to meet project goals. *Id.* at 8. Nevertheless, 29% of the land designated by QLG for DFPZ treatment would be off-limits, and the amount of land available for group selection (small-scale clearcutting) reduced. *Id.* at 7.

76. Pacific Southwest Region, Forest Service, HFQLG Implementation Plan, available at http://www.r5.fs.fed.us/hfqlg/archives/implementation/implementation_plan_01_02_files/imp_plan_toc.htm (last visited November 13, 2002). The amount of group selection has been consistently less than the 8,000 acres called for by the Act, and the acreage of DFPZs cut did not reach the Act's desired levels until 2001.

77. Quincy Library Group, Economic Effects of the Sierra Nevada Framework on the Herger-Feinstein Quincy Library Group Forest Recovery Act, at <http://www.qlg.org/pub/act/impacts.htm> (last visited November 13, 2002). In response, the QLG's critics note that the Pilot Project area is still receiving far more funds than the rest of the Sierra Nevada, and that more cutting will take place in the HFQLG Act area than at any other Sierra location. Telephone Interview with Jay Watson, Regional Director, The Wilderness Society (Jan. 8, 2002) [hereinafter Watson interview]. Nevertheless, implementation of the project clearly has not reached the numeric goals originally stated in the Act.

78. This statement is based on observation of a QLG meeting, April 5, 2001. Several members described their ongoing monitoring efforts.

79. QLG APPEAL OF THE SNFPA DECISION, April 16, 2001, available at <http://www.qlg.org/pub/miscdoc/appeal/printable.htm>.

80. Coates Interview, *supra* note 19.

4. *Reactions to the QLG*

To date, the Quincy Library Group, and with it the town, has achieved a high degree of cohesion, but it has also aroused its share of controversy. Michael Jackson asserts that “Quincy is much more of a community since the advent of the QLG; people are much more candid.”⁸¹ Such unity may have evolved, however, through demonization of outsiders. One observer asserts that QLG has bonded through common resentment of the Forest Service and a shared “belief that imperialist patterns of capital investment and exploitation had made the region a mere colony of urban interests.”⁸² Regardless of whether this understanding of power dynamics is accurate, the group has developed impressive sophistication—discussions move quickly from owl science to legal requirements to political processes, and defy any stereotypes about rural ignorance and lack of political savvy.⁸³

Mainstream environmental groups have almost unanimously opposed the group’s efforts.⁸⁴ The Forest Service has been less than cooperative. From the QLG’s point of view, this opposition boils down to questions of turf.⁸⁵ But environmental groups and independent commentators question the right of a local community to take the lead in

81. Michael Jackson, E-mail to author, sent April 9, 2001; see Coates Interview, *supra* note 19; Telephone Interview with Michael Jackson, (January 3, 2002) [hereinafter Jackson Interview]. Elsewhere, Jackson has made similar points with a bit more color. See Marston, *supra* note 53 (quoting Jackson on his interaction with his neighbors: “these days, when people wave at me, they use all five fingers”).

82. See Timothy P. Duane, *Community Participation in Ecosystem Management*, 24 *ECOLOGY L.Q.* 771, 789–91 (1997); The Wilderness Society, *Quincy Library Bill No Solution* (1998), at <http://wilderness.org/ccf/california.quincy.htm> (last visited September 26, 2002) (“the conflict is less resolved than merely relocated. We found the group to be intolerant of anyone who questions the legislation or the process that conceived it. We, and others like us, were dismissed as ‘big-city environmentalists’ and as ‘the paid conflict industry’ that would rather fight than switch.”). Jackson similarly acknowledges that the group may maintain its unity partly through its ability to blame outsiders. Jackson Interview, *supra* note 81. Bill Coates’ comments evinced similar blame of outsiders, albeit with substantially different spin. When asked how the condition of the forests surrounding Quincy could have deteriorated if, as he claimed, Quincy residents had always been committed to the natural environment, he stressed that the most environmentally harmful decisions—promoting clearcutting, most notably—had been made by the Forest Service, possibly with influence from higher level officials within timber companies. Coates stated that Quincy-based loggers had been uneasy about working on clearcutting projects, both because of the environmental effects and because they received less pay. Coates Interview, *supra* note 19.

83. This statement is based on personal observation of a QLG meeting, April 5, 2001.

84. See, e.g., Michael McCloskey, *Local Communities and the Management of Public Forests*, 25 *ECOLOGY L.Q.* 624 (1999) (discussing problems with Quincy’s approach); Delbert Williams, *Local Control a Smokescreen for Logging*, *THE PLANET*, November, 1997, available at <http://www.sierraclub.org/planet/199711/delbert.asp>; The Wilderness Society, *supra* note 82 (“It is destructive in environmental terms; enormously harmful in procedural terms; and extremely dangerous in political and public policy terms.”).

85. Terhune & Terhune, *supra* note 55.

planning for nationally owned public lands, noting that geography and economic dependence give locals a greater stake in exploitation of those lands without any corresponding increase in legal ownership.⁸⁶ Closely related to this fear is a concern that local groups have less incentive to consider cumulative effects, and that localized management of national lands will create a tragedy-of-the-commons effect precluding the effective safeguarding of resources, such as endangered species, that depend upon regional-scale protection.⁸⁷ These critics note that a small, local group is likely to exclude representation of at least some of the stakeholders who should be involved in decisionmaking.⁸⁸ Additionally, critics argue that a consensus-based process can give extractive industries an effective veto over group decisions, limiting the range of options that may be considered.⁸⁹

B. Development of the Framework

During the 1990s, the Forest Service's management methods in the Sierra Nevada shifted. This shift appears to have culminated with the release of the Framework EIS. In the 1980s and early 1990s, local levels of the Forest Service made most of the agency's management decisions, and the Forest Service's underlying purpose often appeared to be boosting the allowable timber sale quantity in order to cut as much

86. See, e.g., McCloskey, *supra* note 84; Michael Axline, *Federal Lands and Invisible Hands*, 25 *ECOLOGY L.Q.* 611 (1999) (arguing that localized decisionmaking is sought primarily by resource extractors seeking a more favorable forum); Duane, *supra* note 82. This concern ought to be somewhat alleviated when the group's recommendations are subjected to a national legislative political process (though, here, national environmental groups question the legitimacy of legislation passed as a rider). Advocates of the "devolved collaboration" model do not generally suggest that all local planning should be subject to national legislative approval, and thus even if this criticism seems weaker when applied to the HFQLG, the functioning of the QLG may still exemplify the political forces that will likely be brought to bear in other community-based planning processes.

87. Axline, *supra* note 86, at 619.

88. For example, various outsiders have alleged that the QLG has undervalued or ignored the interests of downstream water users, recreational visitors, cattle ranchers, and others. *Id.* at 619-20 (noting that decisions made by groups tied to local forests can neglect the interests of downstream water users); McCloskey, *supra* note 84, at 627; David Ridenour, *The Quincy Library Group: So-Called "Consensus" Forest Plan Lacks Consensus, Violates Rights* (June 1998), available at <http://www.nationalcenter.org/NPA200.html> (arguing that the interests of cattle ranchers were not considered in the decisionmaking process). QLG members have vehemently attacked accusations of exclusivity. See, e.g., Linda Blum's Response to Mr. Blumberg's Testimony, May 23, 1997, available at <http://www.qlg.org/pub/bill/blum052397.htm>.

No evidence is presented to support the contention that "the full range of stakeholders is not represented in the QLG process or its outcome." The QLG process has consistently been open to anyone at any stage in the process. It is not true that "the Forest Service and both national and regional environmental groups were purposefully excluded initially."

Id.

89. McCloskey, *supra* note 84, at 626.

timber as possible.⁹⁰ Over the course of the 1990s, both legal challenges from environmental groups and the shifting priorities of a new administration led to major changes in Forest Service policy, and nationally and regionally mandated changes led to a far more environmentally protective regime.⁹¹ In the Sierra Nevada, guidelines based on spotted owl protection led to steep reductions in logging.⁹² Nationally, Clinton initiatives like the roadless area protection policy symbolized an approach to public lands management based far less upon extraction. The Framework EIS, with its overt focus on ecological values, may represent the cutting edge of this trend.⁹³ Today, with a new administration in power, the continuation of this trend seems doubtful.

1. *Spotted Owls and Unsuccessful Planning: the Origins of the Framework*

The Framework's roots lie in the same conflicts between extraction and species preservation that spawned the Quincy Library Group. In the 1980s, timber harvest levels in the Sierra Nevada exceeded 300 million board feet per year, and environmental groups grew concerned that the heavy logging was placing the California spotted owl in danger.⁹⁴ In 1991, the Natural Resources Defense Council appealed Forest Service timber sales in the Sierra Nevada, and the Forest Service concluded that the challenge had enough merit to justify a change in policy.⁹⁵ Since that time, owl protection has been at the core of the planning process for the Sierra Nevada forests, and the threat of litigation has repeatedly forced the Forest Service to reassess its planning.

Between 1991 and 1998, the Forest Service made repeated attempts at drafting workable, legally tenable forest plans for the Sierra Nevada region. Initially, as an interim strategy, the Forest Service adopted the recommended guidelines of the 1992 California spotted owl study.⁹⁶ This strategy resulted in a major reduction of harvesting levels; by the mid-1990s, cut levels were only a fraction of the levels of the late eighties and

90. See Ruth, *supra* note 34, at 40–42.

91. See generally HIGH COUNTRY NEWS, *Restoring the Range of Light*, August 27, 2001, at http://www.hcn.org/servlets/hcn.Issue?issue_id=209 (providing links to numerous articles about the Framework).

92. See Stewart, *supra* note 13, at 55–57.

93. See Ruth, *supra* note 34, at 67–70 (describing how citizen activism and NFMA litigation have brought ecosystem management and conservation to the forefront of the Forest Service's concerns).

94. *Id.* at 50. Ruth's article also provides a more detailed account of the history of forest management in the Sierra Nevada.

95. *Id.*

96. U.S. Dep't Agric., U.S. Forest Service, Pacific Southwest Region, Decision Notice and Finding of No Significant Impact for California Spotted Owl Sierran Province Interim Guidelines, DN-13–15 (Jan. 1993).

early nineties.⁹⁷ In 1993, Congress also appropriated money for the Sierra Nevada Ecosystem Project (SNEP), a major interdisciplinary study of trends in the Sierra.⁹⁸ SNEP's work was intended to provide a scientific and technical basis for management schemes,⁹⁹ and it played a major role in the ultimate development of the Framework. In 1995 and again in 1996, the Forest Service released draft environmental impact statements (DEISs) for new management plans for the Sierra Nevada, but swift and critical scientific and public reactions led to the quick demise of both plans.¹⁰⁰ In the wake of the failure of each of these DEISs, a Federal Advisory Committee reviewing the Forest Service's policymaking process concluded that the agency had failed to adequately consider available science and focused too narrowly upon the spotted owl, inadequately considering other species and forest values.¹⁰¹ In response to these concerns, the Forest Service began the process of developing the Framework EIS. The Forest Service initiated the EIS process in January, 1998,¹⁰² and released the Final EIS and Record of Decision (ROD) on January 12, 2001.¹⁰³

The process of developing the Framework EIS was, in the Forest Service's view, uncommonly open.¹⁰⁴ The Forest Service received thousands of comments and, in a dramatic step, accepted for consideration one alternative partly drafted by environmental organizations.¹⁰⁵ Nevertheless, the Framework EIS met with intense criticism. The complaints of environmental groups were generally muted or couched in complimentary language,¹⁰⁶ with typical reactions referring

97. See HFQLG EIS, *supra* note 11, § 3: Socioeconomic Environment.

98. SUMMARY OF THE SIERRA NEVADA ECOSYSTEM PROJECT REPORT 1 (June 1996), available at http://ceres.ca.gov/snep/pubs/web/PDF/exec_sum.pdf.

99. See *id.*

100. Ruth, *supra* note 34, at 63–64.

101. *Id.* at 65.

102. Sierra Nevada Framework for Collaboration and Conservation, Overview, at <http://www.fs.fed.us/r5/snfpa/library/current-info/overview.htm> (last visited November 13, 2002).

103. *Id.*

104. As required by NEPA, the Forest Service received and responded to public comments—according to the Service, 47,000 people submitted comments on the project. *Id.* Prior to initiating the planning process, the Forest Service spent several months meeting with potentially interested groups. These meetings directly influenced the development of alternatives and the scoping of the project. *Id.* QLG activists disagree with the notion that the process was open, and suggest that a failure to consider a truly broad range of management options made the openness something of a sham. Jackson Interview, *supra* note 81.

105. The Wilderness Society, *Sierra Nevada Framework—plan affects 11 National Forests*, at <http://www.wilderness.org/ccc/california/framework.htm#five> (last visited November 13, 2002).

106. See Natural Resource Defense Council (NRDC), *Victories in the Balance*, THE AMICUS JOURNAL, Spring 2001, at 43 (“A dozen years of advocacy by NRDC and other environmental groups have preserved a plan that aims to preserve the integrity of some 11 million acres of national forest lands in California’s Sierra Nevada”); Ed Marston, *Restoring the Range of Light*, HIGH COUNTRY NEWS, August 27, 2001, available at http://www.hcn.org/servlets/hcn.Article?article_id=10669.

to the plan as a “victory”¹⁰⁷ or at least as a highly positive compromise.¹⁰⁸ The *High Country News* was effusive in its praises, heralding the plan as potentially indicating the dawning of a new period in national forest management.¹⁰⁹ Some local groups, industry, and motorized recreation groups, among others, were less receptive to the final report. These critics argue that the plan devalues fire protection, does needless economic damage, and unnecessarily imposes a one-size-fits-all management scheme.¹¹⁰ The QLG is equally hostile, viewing the Framework as misguided in its strategies and destructive to both the economy and the environment in its results.¹¹¹ Two hundred and eighty-one individuals and groups, including the Quincy Library Group, appealed the decision.¹¹²

2. *The Bush Administration and Appeals of the Framework*

Regional Forester Brad Powell released the Framework EIS during the period of confusion following the 2000 presidential election. Rather than wait for the new administration to take power and indicate its preferences for the Sierra Nevada’s management scheme, Powell chose to act in something of a political vacuum, without the Clinton administration pushing for a particular outcome or a new administration-elect in position to indicate what its preferences would be.¹¹³ Consideration of the administrative appeals by QLG and others took place entirely under the Bush administration. Forest Service Chief Mike Dombeck had resigned and been replaced by Dale Bosworth, Powell had been replaced by Jack Blackwell,¹¹⁴ and former timber industry lobbyist Mark Rey had become the Department of Agriculture’s Undersecretary for Natural Resources and Environment.¹¹⁵

107. NRDC, *supra* note 106.

108. See Glen Martin, *Cattlemen Prod Forest Service: Federal Land Use Policies Come Under Review, Again*, SAN FRANCISCO CHRONICLE, July 5, 2002, at A3.

109. Marston, *supra* note 106.

110. See, e.g., Martin, *supra* note 108; Stewart Leavenworth, *USDA Upholds Sierra Logging Limits*, SACRAMENTO BEE, December 28, 2001, available at <http://www.sacbee.com/content/politics/story/1385958p-1459980c.html>.

111. See QLG APPEAL OF THE SNFPA DECISION, *supra* note 79, Jane Braxton Little, *Frustrated, Quincy Forest Coalition to Regroup*, SACRAMENTO BEE, November 28, 2001, available at <http://www.sacbee.com/content/news/story/1237238p-1305715c.html>.

112. Sierra Nevada Forest Plan Amendments Appeal Decision Appendix A, available at <http://www.fs.fed.us/forum/nepa/sierraappendixa.pdf> (2001) (last visited November 13, 2002).

113. Marston, *supra* note 106.

114. *Id.*

115. Larisa Epatko, *USDA: Rey Explains Roadless Stance, Potential Bill on Northwest Forest Plan*, GREENWIRE, October 15, 2001.

a. *The Forest Service Appeals Decision*

Despite the change in administrations, Bosworth affirmed Regional Forester Powell's decision to approve the Framework. Bosworth's appeals decision rejected every charge of scientific or legal inadequacy lodged against the Framework, and it purported to uphold the overall approach put forth in the Framework EIS.¹¹⁶ Nevertheless, the decision summary asserted that the Forest Service saw the possibility of revising the management scheme slightly in order to be more consistent with "current agency policy" and contained a discussion of the primary importance of working effectively with local groups.¹¹⁷ Following this discussion, the appellate decision requested two potentially major changes to the Framework. First, Bosworth directed the Regional Forester to examine the management scheme to consider whether it could be made more consistent with the Forest Service's National Fire Plan.¹¹⁸ In effect, this directive is a call for considering more extensive and aggressive mechanical treatment, potentially leading to more widespread timber removal. Second, Bosworth asked the Regional Forester to consider whether the underlying purposes of the HFQLG Act could be more effectively reconciled with the basic goals of the Framework.¹¹⁹

b. *The Under Secretary of Natural Resources and Environment's Discretionary Review*

Immediately following the release of Bosworth's decision, appellants petitioned Under Secretary Rey to further consider the appeal. In a short statement just a month later, Rey affirmed Bosworth's decision and

116. See DALE N. BOSWORTH, DECISION FOR APPEALS OF THE RECORD OF DECISION FOR THE SIERRA NEVADA FOREST PLAN AMENDMENT AND ITS FINAL ENVIRONMENTAL IMPACT STATEMENT, Executive Summary, November 16, 2001, available at <http://www.fs.fed.us/forum/nepa/sierranevada.pdf>.

117. *Id.* The Appeals Decision Summary includes the following language:

As I see it, the Forest Service's mission is to work with local individuals and communities to protect and restore the health of the land. Partly, that means finding intelligent, far sighted ways of using some of our natural resources. Partly, it means working together to diversify economies while putting people to work for the health of the land. We need to accomplish our land stewardship goals by looking for creative new ways to get needed work done on the land, get products from it, and build communities together.

Our central mission is to sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations. Over the last several years we have sought to accomplish this goal by building large-scale, and sometimes overly prescriptive, management direction. I believe local decisionmakers acting in collaboration with interested and affected parties can develop flexible solutions that fit specific needs, rather than one-size-fits-all solutions.

118. *Id.*

119. *Id.*

declined to undertake a discretionary appeal.¹²⁰ Rey praised the “hard work” by the Forest Service employees and others involved in the preparation of the Framework, but also noted his confidence “that the regional forester will put forth an aggressive plan to respond to the chief’s decision . . . (and) that the regional forester’s action plan will address a number of issues raised in the appeals that [Rey] reviewed.”¹²¹

Following the release of Bosworth’s decision and Rey’s statement, environmentalists reacted with cautious approval. The Wilderness Society, for example, noted that “the decision . . . lays bare the inescapable truth that there is no love lost for the Sierra Framework in the halls of the Department of Agriculture,” and predicted administrative efforts to weaken the result.¹²² Nevertheless, it noted approvingly that the decision left the Framework at least temporarily intact.¹²³ The logging industry’s response was not nearly so mixed. California Forestry Association President David Bischel characterized the result as “the worst possible decision” to address issues of fire prevention.¹²⁴ The QLG’s reaction was even more emphatic. In frustration, the group suspended regular meetings with the Forest Service. Michael Jackson asserted that “the Sierra Nevada Framework has killed the Quincy Library Group,” and Bill Coates explained that the group was ceasing to meet to “blow the whistle on a process with no end and no results.”¹²⁵

c. *The Forest Service’s Implementation Plan*

Within a very short time, however, fortunes seemed to reverse. On December 31, just four days after Rey released his statement, the new Regional Forester, Jack Blackwell, released a plan detailing his approach to implementing Rey and Bosworth’s recommendations.¹²⁶ Despite the administrative affirmation of the Framework, Blackwell proposed a broad reexamination of the Framework, indicating that the Forest Service would review the entire administrative record and would reconsider the selection of options in addition to analyzing whether the National Fire Plan and HFQLG proposal could be more effectively

120. Mark Rey, *USDA Statement: Sierra Nevada Forest Plan Amendment Appeals*, December 27, 2001, available at <http://www.usda.gov/news/releases/2001/12/0274.htm>.

121. *Id.*

122. The Wilderness Society, *Press Release: Sierra Nevada Forest Management Plan Upheld . . . For Now*, November 16, 2001, available at <http://www.wilderness.org/newsroom/rls111601.htm>.

123. *Id.*

124. Leavenworth, *supra* note 110.

125. Little, *supra* note 111.

126. The short lag time between Rey’s decision and the release of the implementation plan strongly suggests that development of the plan was concurrent with the appeals decision.

integrated into the Framework.¹²⁷ In the interim, the Framework remains in force as Bosworth affirmed it, but the new review opens the possibility of a wholesale reexamination. At the time of this writing, what will happen next is anyone's guess.¹²⁸ The only things that seem clear are that the Bush-era Forest Service leadership is unwilling to overturn the Framework but also reluctant to retain it and that litigation is now inevitable.

C. *Conflicts Between the HFQLG Act and the Framework*

The Framework focuses on five major problem areas—old growth ecosystem protection, fire and fuels management, riparian system protection, lower westside hardwood ecosystem protection, and noxious weed management.¹²⁹ Summarizing the treatment of all these areas is beyond the scope of this paper, and instead I focus on old growth, fire and fuels, and the portions of the Framework that directly address the HFQLG Act. In these areas, overlap and conflict with the QLG management scheme is most pronounced.¹³⁰

1. *Old Growth, Fire and Fuels*

The most salient disagreements between the HFQLG Act and the Framework concern how aggressively the Forest Service should seek to

127. Jack Blackwell, *Letter to Forest Service Chief Dale Bosworth re: Sierra Nevada Forest Plan Amendment Appeal Decision*, December 31, 2001, at

http://www.off-road.com/land/blackwell_letter.html; Jack Blackwell, *Implementation of the Appeals Decision, Sierra Nevada Forest Plan Amendment*, December 31, 2001, at http://www.off-road.com/land/blackwell_letter.html [hereinafter BLACKWELL, ACTION PLAN].

128. Michael Jackson indicated that reaction from the QLG was mixed; some believed that the new administration would now chart a course far friendlier to QLG goals, while others, Jackson himself included, were pessimistic that the Forest Service would succeed in doing anything other than alienating everyone involved in the process. Jackson does believe, however, that this decision marks the end for the Framework as approved by Powell. Jackson Interview, *supra* note 81. Environmental activists were, unsurprisingly, also wary of the Forest Service's new direction. Jay Watson of the Wilderness Society calls the new action plan "a direct threat to the Framework," Watson Interview, *supra* note 77, and Craig Thomas of the Sierra Nevada Forest Protection Campaign predicted that the administration would "do as much damage (to the Framework) as they can possibly do and not get shut down." Telephone Interview with Craig Thomas, Conservation Director, Sierra Nevada Forest Protection Campaign, January 8, 2002 [hereinafter Thomas Interview]. Neither Watson nor Thomas, however, expected that substantial changes to the Framework would survive legal challenges. Thomas Interview, *supra*; Watson Interview, *supra* note 77.

129. FRAMEWORK EIS, *supra* note 7, Volume 1, Summary, p. 1. Maintaining timber harvests, or any other kind of extractive or recreational use, is notably absent from the Framework's stated priority areas. The Framework EIS considers human uses, but their absence from the stated priorities is revealing of the FEIS's underlying philosophy.

130. The QLG had little to say about hardwoods or noxious weeds, and, within the HFQLG project area, the Framework adopted the QLG's riparian area protection scheme without reservation. See Framework ROD, *supra* note 7, at 50.

prevent fire by mechanically removing trees. Like the HFQLG Act, the Framework treats fire as a serious threat to the forests. Concern for the protection of old forests from human interference is also a major theme of the Framework,¹³¹ however, and the Forest Service considered logging to be a major threat to sensitive wildlife. Unlike the HFQLG Act, which seeks to sustain a partly logging-based economy, the Framework puts primary emphasis on reducing human activity within the forests.¹³² Both plans call for some mechanical thinning, but where the QLG's plan uses mechanical thinning as a possible ongoing management strategy, the FEIS treats it as a temporary measure. The FEIS employs mechanical thinning in order to reduce fuels enough to allow the reintroduction of wildfire and controlled burns, which will then be the dominant method of thinning undergrowth.¹³³ In addition, the Framework aims at retention of

131. In the years since the initial Pacific Northwest spotted owl litigation, the owl has been joined by a host of other species with potential to be legal catalysts for old forest protection. The wolverine, pacific fisher, American marten, Sierra Nevada red fox, and goshawk are all at least partly dependent upon old growth forests, and all are at some risk. See Framework EIS, *supra* note 7, §§ 4.4.1.1 (Pacific fisher), 4.4.1.2 (American marten), 4.4.1.3 (Sierra Nevada red fox), 4.4.1.4 (wolverine), 4.4.2.2 (northern goshawk). The value of old growth to watershed protection has similarly emerged as a public concern—battles over salmon protection have increased awareness of the effects of forestry practices upon water quality and quantity. See, e.g., JOSEPH E. TAYLOR III, MAKING SALMON 179 (1999) (discussing the impact of logging practices upon salmon habitat); JIM LICHATOWICH, SALMON WITHOUT RIVERS 60–66 (1999) (discussing historic and current impacts of industrial logging upon salmon habitat); Pacific Coast Federation of Fishermen's Ass'n, Inc. v. National Marine Fisheries Service, 265 F.3d 1028 (9th Cir. 2001) (enjoining timber sales because the National Marine Fisheries Service failed to support its conclusion that those sales would not adversely impact salmon habitat). Perhaps most importantly, years of citizen activism have turned old forests into environmental symbols, and the mere words "old growth" now carry potent rhetorical power.

132. FRAMEWORK EIS, *supra* note 7, Part 1.2.2.4.4, p. 165 ("Modified Alternative 8 responds to concerns that impacts from vegetation and fuels management activities may pose greater risks to habitat, particularly in the short term, than the risk posed by potential wildland fires"). Much of this caution derives from recent research into the California spotted owl that has underscored the importance of old forest protection. Studies released in the late 1990s found continued declines in spotted owl populations. FRAMEWORK BIOLOGICAL OPINION, *supra* note 35, at 70–71. While the extent of these declines is uncertain, they still suggest that the current mix of habitats in the Sierra may not be suitable to sustain the species. Scientists agree that continued protection of older, larger trees is merited. See *id.* at 67. In addition, researchers warn that protecting canopy closure, increasing the amount of old growth habitats, and increasing connectivity between those habitats all may be necessary to ensure the owl's survival. See *id.* All of these recommendations are incompatible with heavy logging, and the Fish and Wildlife Service has noted the near absence of spotted owls on more heavily managed private lands as compelling evidence that even selective logging may be incompatible with owl protection. *Id.* at 72.

133. Both the QLG and the FEIS agree that an overaccumulation of underbrush and smaller trees (referred to as ladder fuels, because they allow fires to climb from undergrowth to the crowns of older trees) creates a great risk of catastrophic wildfires. The revised emphasis derives both from a desire to restore the natural processes of a fire-adapted ecosystem and a fear that widespread mechanical treatments will have negative effects on forest-dependent species. See Framework ROD, *supra* note 7, at 50. As a result, clearcutting, even of small tracts, is entirely absent except within the QLG area, and plantation-type even-aged stands are to be

a denser forest¹³⁴ and restoration of more extensive old-growth habitat.¹³⁵ The Framework thus treats timber harvesting as a means toward the end of ecological sustainability rather than an end in itself, and as a means its use is to be limited.

2. *The Framework's Treatment of the HFQLG Pilot Project*

If not for potential impacts to sensitive species, the Framework EIS's fire management strategy would not supersede that of the HFQLG Act, and the Forest Service would just continue to employ a different fire prevention scheme on Pilot Project lands.¹³⁶ Throughout the QLG Pilot Project area, however, species protection places constraints on fire management, and thus the treatment approach envisioned by the QLG will be compromised.

Integration of the Framework and the Pilot Project has resulted in substantial changes to the Pilot Project.¹³⁷ Powell's ROD stated the Forest Service's commitment to implement "as much of the Pilot Project as possible."¹³⁸ If Powell's version of the Framework is implemented, Pilot Project area lands will be managed differently from other Sierra national forests; the focus on mechanical thinning will be retained, and the Pilot Project area will provide much of the timber harvested from public lands in the Sierra.¹³⁹ Nevertheless, the HFQLG Act specifically provided that updated owl management guidelines would govern the implementation of the Act, and in the Framework the Forest Service developed such

managed with the goal of restoring mixed-age conditions. Framework EIS, *supra* note 7, Part 1.2.2.4.4, pp. 167–68. The total cut would be kept at a low level, with average annual harvests of approximately 72 million board feet per year. *Id.* at Appendix Q.

134. The targeted goals of fire treatment vary widely—while Quincy aimed at canopy closures (referring to the density of the forest canopy) of around 30%–40% in the DFPZs, the FEIS envisions reductions to only around 70% closure within spotted owl habitat areas, and further restricts both closure reductions and the size of trees available for cutting in areas outside owl habitat. Framework ROD, *supra* note 7, at 10, 50; FRAMEWORK EIS, *supra* note 7, Volume 4, Appendix D1 at 30–34 (providing specific guidelines for mechanical fuels treatments).

135. Most importantly, areas of potential spotted owl habitat are given protection similar to actual habitat, significantly expanding the scope of protection. FRAMEWORK EIS, *supra* note 7, 1.2.2.4.4, p. 167.

136. SPLATS, for example, will be constructed throughout the rest of the Sierra, but the Framework EIS specifically acknowledges that in the QLG project area DFPZs will remain the primary method of treatment.

137. Importantly, the Framework EIS clearly does *not* purport to be the further planning mandated by Section 401(i) of the Act. FRAMEWORK EIS, *supra* note 7, Part 1.1.3.1, p. 4. The Forest Service notes that it began developing the FEIS prior to passage of the Act, that the FEIS has different focus areas than the planning mandated by the Act, and that the FEIS did not fulfill Section 401(i)'s requirement that further planning take place that explicitly includes the Act's management scheme as a planning option. *Id.*

138. Framework ROD, *supra* note 7, at 50.

139. U.S. Forest Service, *F.S. Acts to Reduce Sierran Fire Risk, Protect Wildlife and Water*, January 12, 2001, available at <http://www.r5.fs.fed.us/news/2001/sierra-nevada-rod0101.html>.

guidelines.¹⁴⁰ Since owl protection guidelines impact so much of the forest management scheme, the resulting changes will be substantial, and logging levels will be below those called for in the HFQLG Act.¹⁴¹

The appeals decisions and action plan may change this relationship between the Pilot Project and the Framework, but exactly how is far from clear. Although the language of Bosworth's Decision Summary clearly indicates an inclination toward implementing more of the QLG's recommendations, Bosworth left the details of reconciling this implementation with the Framework's goals to the Regional Forester. Moreover, he did not question the scientific and legal conclusions that led to the original Framework decision. While Bosworth praised the QLG's overall goals, he rejected its specific attacks on the Forest Service's interpretation of spotted owl science, fire management science, economic analysis, and legal analysis.¹⁴² In short, the national office of the Forest Service may have remanded to the regional office an insoluble quandary, providing a policy direction while affirming empirical conclusions that the regional Forest Service had previously found inconsistent with that direction.

IV.

ANALYZING THE DECISIONMAKING PROCESS

The Forest Service faces a difficult decision. Assessing which approach best meets the letter and spirit of the law requires navigating through complicated webs of conflicting stories and evolving scientific knowledge. Despite the rhetoric of activists on both sides, clear, certain answers are unlikely to appear. Each side of the controversy can tell a powerful story, and these compelling narratives may supply an easier basis for decision than uncertain science. Where ideology and narrative weigh so heavily upon the interpretation of every level of information, the result may turn on who is better able to tell a politically appealing story. That result will be tested against a legal scheme that demands consistency with scientific knowledge, however, and even if it survives initial legal challenges, a decision based primarily on values may not last long.

This section examines the relationship between the legal framework and the scientific uncertainties of the Sierra Nevada ecosystem. It then discusses the compelling narratives on each side of the story and

140. Framework ROD, *supra* note 7, at 51.

141. Ninety percent of the DFPZs may still be developed, but more trees will be included in the large tree class for which cutting is prohibited, and canopies will remain substantially more closed. Group selection may continue, but it will be heavily curtailed outside of eastside pine forests. The QLG's favored approach of substantial group selection, zones of concentrated and intensive thinning, protection of actual rather than potential owl habitat, and absolute protection only of trees over 30" in diameter would be largely abandoned. *Id.* at 51.

142. Bosworth, *supra* note 116, § VI.

addresses how the current administration may use those political stories to avoid grappling with the scientific ambiguities. It concludes that such avoidance is potentially highly problematic and offers a vision for a more useful telling of the stories and a better decisionmaking process.

A. *Scientific Uncertainty and a Prescriptive Legal Framework*

1. *The Science-Determines-Law Model*

Laws applicable to the management of biodiversity seem to suggest that legal outcomes could be generated from a somewhat simple process, in which scientific conclusions would be fed into a legal black box and specific outcomes spat out.¹⁴³ A person well versed in law but ignorant of science might assume that courts would find evaluation of biodiversity protections quite straightforward.

The Endangered Species Act exemplifies this model. It envisions the development of a robust set of scientific facts, and it anticipates that these facts will determine the nature of legal requirements.¹⁴⁴ It is almost dogmatic in ESA cases that delicate balancing of policy concerns is not permitted; very little room for discretion between scientific conclusions and agency actions ought to exist.¹⁴⁵ Science, once understood, ought to direct law. Flexibility and discretion ought to be minimal.

While NFMA's substantive mandate is not so clear, its diversity requirement also suggests a regime in which scientific data define the scope of an agency's options.¹⁴⁶ NFMA is not, like the ESA, a statute that generally excludes balancing. Courts have noted that the diversity

143. NFMA, the ESA, and NEPA are not, of course, the only substantive laws applicable to the conflict between the QLG and the Framework. The Organic Act, the Multiple Use Sustained Yield Act, the HFQLG Act, the Clean Air Act, and the Clean Water Act, among others, all may have some bearing upon the legality of the selected alternative. Nevertheless, the biodiversity requirements of the ESA and NFMA have been crucial to the planning process, and create perhaps the most difficult legal hurdles for any management scheme to clear.

144. See 16 U.S.C. § 1533(b)(1)(A) (1994) ("The Secretary shall make [listing] determinations . . . solely on the basis of the best scientific and commercial data available"); *id.* § 1536(a)(2) ("In fulfilling [consultation] requirements . . . each agency shall use the best scientific and commercial data available"); *id.* § 1536(c) (requiring FWS to conduct biological assessments if endangered species are determined to be present in a proposed project area). Commercial data are to be considered for determining risk to the species, and not in order to assess the economic impact of listing or changing the agency's proposed course of action. The critical habitat designation provisions of 16 U.S.C. § 1533(b)(2) do permit balancing economic interests, but they are relatively unique within the ESA.

145. See, e.g., *Tennessee Valley Auth. v. Hill*, 437 U.S. 153 (1978) (enjoining completion of a nearly-finished dam in order to protect the snail darter).

146. NFMA requires the Forest Service's management plans to develop guidelines for "provid[ing] for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives." 16 U.S.C. § 1604(g)(3)(B) (1994).

requirement exists in a context emphasizing sustainable use, and that therefore efforts to protect diversity must be balanced against other concerns.¹⁴⁷ Nevertheless, the language does not allow diversity to be neglected,¹⁴⁸ and regulations translating this requirement into a prohibition on endangering species' viability¹⁴⁹ suggest that a backstop requirement exists. Judge Dwyer's northern spotted owl ruling made clear that this requirement has teeth.¹⁵⁰

These teeth ought to be especially sharp where a species hovers on the brink of ESA listing. The possibility of listing, and the attendant imposition of the ESA's stringent protections, implies a threat to all the other uses NFMA attempts to balance. If the ESA applies, balancing timber harvests against habitat protection may not be possible, and thus keeping a species off the list will benefit multiple use.¹⁵¹ Moreover, a species' near-threatened status suggests that its viability may also be in doubt. Therefore, if a species hovers on the verge of threatened status, NFMA's language suggests that a science-dictates-law model of policymaking should still apply.

Unlike the ESA and NFMA, NEPA lacks a substantive mandate.¹⁵² Nevertheless, it plays a complementary role in the process of translating science into law. By laying bare both an agency's rationale and the consequences of its decision, NEPA makes the scientific and legal decisionmaking process more transparent. Additionally, by providing provisions for public participation, NEPA allows the public to engage in the scientific debate. NEPA thus both acts to ensure that agencies

147. See *Seattle Audubon Soc. v. Lyons*, 871 F. Supp. 1291, 1315 (W.D. Wash. 1994) (noting that several provisions in NFMA "make clear that planning for species diversity occurs with multiple use principles in mind"); *Seattle Audubon Soc. v. Moseley*, 80 F.3d 1401, 1404 (9th Cir. 1996) (holding that a policy that would create a 20% chance of extinction was permissible because more protective schemes would preclude balancing with other uses).

148. *Lyons*, 871 F. Supp. at 1315 ("Diversity, of course, can exist only if individual species survive.").

149. 36 C.F.R. § 219.19 (1982) ("Fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area"). These regulations have since been updated, but the Framework was developed under the older regulations.

150. *Seattle Audubon Soc. v. Evans*, 771 F. Supp. 1081 (W.D. Wash. 1991) (halting logging on Forest Service lands in the Pacific Northwest until the Forest Service complied with NFMA).

151. See *Lyons*, 871 F. Supp. at 1314 ("A forward-looking land management policy would require that federal lands be managed in a way to minimize the need to list species under the ESA. Additional species listings could have the effect of further limiting the O&C Lands Act's goal of achieving and maintaining permanent forest production. This would contribute to the economic instability of local communities and industries, in contravention of a primary objective of Congress in enacting the O&C Lands Act.") (citing the record of decision (ROD) of April 13, 1994, at 50).

152. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 348-52 (1989) (holding that NEPA's requirements are solely procedural).

conform to their legal mandate to consider science and provides the public a mechanism to inform agencies' scientific judgment.

2. *Uncertainty and the Science-Determines-Law Model*

The addition of some uncertainty need not upend this regime, for uncertainty can be factored into scientific analysis. The concept of jeopardy in the ESA does not imply certainty with regard to result, and it easily encompasses situations in which only the likelihood that a species may go extinct is identified. Likewise, NFMA's viability standard allows uncertainty to be met with some caution. The science-dictates-policy model of both statutes would still operate effectively if discrete, bounded zones of uncertainty could be identified and taken into account. The workings of the black box churning out legal results would still be relatively easy to understand.

In the actual world, however, uncertainty is rarely so bounded. Uncertainty about a species' current population and distribution can combine with poor data about population trends, leaving researchers disagreeing upon a species' current status. Even if agreement exists that certain trends are occurring, the web of variables that impacts a species' population can be poorly understood. These indeterminacies will further multiply when researchers try to predict the effects of a new management scheme, especially if that scheme is innovative and relatively untested. When that management regime's effects on multiple species must be considered, especially if those multiple species have some mutual interdependence or are in competition, the legal regime's assumption of a clear scientific mandate will be far removed from reality. Because these uncertainties exist against a backdrop of skepticism about the political motivations of the scientists and policymakers, and of the critics of those scientists and policymakers, the entire decisionmaking process begins to lose any resemblance to the process suggested by resource management laws.¹⁵³

This complexity does not imply that a simple science-determines-law model is never useful. Even the most confounding data set will likely suggest some outer limits; almost no one disputes that dams harm salmon or that spotted owls like big, old trees. This basic, undisputed information sometimes will be sufficient for evaluating and rejecting policy options. Similarly, scientists often are capable of drawing far more detailed conclusions, and may be able to use sophisticated information to develop a more complete understanding of boundary conditions. Between the

153. For a discussion of such uncertainty in the northern spotted owl controversy, see YAFFEE, *supra* note 2. While the political players in California are different, Yaffee describes a scientific, legal, and ecological situation in many ways parallel to that currently occurring in the Sierra Nevada.

zones where scientific knowledge leads to comfortably certain conclusions, however, there are still likely to be extensive areas where conflicting results point to any of several interpretations.

If the uncertainty is merely about where on a continuum between harmlessness and jeopardy an action will fall, scientific information may still provide a clear mandate, leading the agency to take a cautious course of action until understanding improves. In many ESA cases, for example, ecologically risk-free options are available, and the public controversy is about the proper balance of ecological risk against economic cost.¹⁵⁴ If, however, all available options entail uncertain ecological risks, an agency will not have the luxury of caution. Instead, it will have to wade into the zone of uncertainty and seek the best available result. Conflicting data are likely to point in multiple directions, and the agency may have no choice but to make its ultimate decision based on complicated analyses of poorly understood data, modeled predictions, informed hunches, and flat-out guesswork. In this situation, even the wisest, most reasonable decision will appear fuzzy and difficult to understand.

Amid this fuzziness, it becomes difficult to decide which policy prescription is best. Any selection arising out of such a mess of inadequate understanding is vulnerable to criticisms that it creates unjustified regulation or shows inadequate caution.¹⁵⁵ Where, as in the Sierra Nevada, no option is free of risks or costs, policies will be vulnerable to all of the above criticisms. It is easy, when faced with such a mess, to declare the whole process to be fundamentally political and give up all hope of achieving a scientifically "correct" result.

3. *Uncertain Science and Judicial Review of Policymaking*

If it is difficult for a policymaker to find the correct course of action, it is even more difficult for a judge to determine that the selected course of action was legally wrong. Courts review claims of agency wrongdoing against deferential standards, and so long as an agency meets its procedural requirements, acts somewhat reasonably, and supports its decision, it is almost a platitude that a court will respect the agency's

154. In both the snail darter and spotted owl controversies, for example, it was possible to minimize risk to the species by not acting. Ceasing logging or not closing a dam may have had immense social costs, but these were not situations in which it was difficult to identify a course of action that minimized risk to the species. In the Sierra Nevada, by contrast, the Forest Service must choose between risks posed by fire (in the absence of human activity), and risks posed by fuel treatment and logging (human activity)—there may be no safe course of action (or inaction).

155. See YAFFEE, *supra* note 2, at 174 (noting that, in the Northern spotted owl controversy, "inherent and apparent uncertainties left policymakers without a firm basis to offset the strong economic and political arguments at play").

choice.¹⁵⁶ This is especially likely to be true where the agency's decision is based primarily on predictions of effects. Additionally, legally analyzing the prospective effect of a decision on the scale of the Framework would be extremely complicated even if the science were clear; the sheer volume of factual information would be a judge's nightmare. If the complicated data set does not lend itself to any clear interpretation, the court may be able to check only exceedingly bad choices. Thus, despite the apparently stringent mandates of NFMA, NEPA, and the ESA, any court analyzing a highly complicated resource management decision will perform extremely deferential review and probably will uphold the agency's decision.

This may not seem troublesome. Lawyers may find the inability of courts to resolve these questions frustrating, but non-legal policymakers may find the freedom from judicial oversight a relief. Moreover, the deferential review system is predicated on the belief that agencies, not courts, hold the expertise, and appropriately should use their discretion to select the best option.¹⁵⁷

Nevertheless, this discretion poses two problems. The first is that judicially acceptable management options may fail to uphold the substantive goals of the applicable statutes. Faced with so much uncertainty, a court may uphold a policy choice that will eventually prove detrimental to threatened species—in other words, it may accept as legal a solution that later proves to violate the law.

Additionally, agency discretion may provide cover if the agency selects an option that even it doubts will meet its statutory mandate. If an agency gives up on sorting out the scientific uncertainties and complexities and instead elects to make a decision in which politics displace, rather than supplement, scientific knowledge, there may be nothing a court can do to stop it until the damage is done. Only when the policy is in place, and hypothetical threats turn into empirically verifiable harm to a resource, will the court be able to enjoin the agency's action.

156. See Administrative Procedures Act, 5 U.S.C. § 706 (1994) (setting standards for judicial review. In general, the APA's judicial review provisions focus on procedural or jurisdictional improprieties, but the APA also allows the court to overturn agency actions if those actions are "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law."); *Sierra Club v. Glickman*, 67 F.3d 90, 95–96 (5th Cir. 1995) (holding that the standard of review applicable to an ESA challenge to a Timber Management Plan was the APA's arbitrary and capricious standard); *Inland Empire Public Lands Council v. U.S. Forest Service*, 88 F.3d 754, 760 (9th Cir. 1996) ("In deference to an agency's expertise, we review its interpretation of its own regulations solely to see whether that interpretation is arbitrary and capricious. This is especially true when questions of scientific methodology are involved." (citing *Oregon Natural Resources Council v. Marsh*, 52 F.3d 1485, 1488 (9th Cir. 1995) and *Inland Empire Public Lands Council v. Schultz*, 992 F.2d 977, 981 (9th Cir. 1993)).

157. See *Inland Empire*, 88 F.3d at 760.

At that point the damage will have been done and the remedy, in all likelihood, will be drastic and blunt.¹⁵⁸

B. Uncertainty and the Sierra Nevada—Applying the Science-Determines-Law Model

The Sierra Nevada forests present a paradigm case of scientific uncertainty. As a result, the Forest Service is highly unlikely to select a management scheme with better than fuzzy and hedged justifications. Although such potentially unconvincing justifications may open its decisions to intense criticism, that same uncertainty may allow a reviewing court to find legal justifications for any selected alternative. Thus the current battle over management options will likely be won or lost through the administrative process, and in the short term, litigation will not have much effect. More scientific certainty may develop, however, especially if the selected alternative proves detrimental to owls or other sensitive species. If this occurs, a plan's survival of an initial legal challenge does not guarantee its longevity.

1. The Scope of Uncertainty

The California spotted owl, the catalyst of change for so much of the Sierra Nevada forest planning, is a poorly understood bird.¹⁵⁹ Historic

158. Such damage may not occur, of course. An agency may reach the right result despite ignoring what appears to be the best available scientific advice. I am making the assumption, however, that scientific advice counts for something, and that an agency making a decision in defiance of scientific guidance, even if that guidance is fuzzy, is more likely to select a policy choice that harms the relevant resource.

Other resource management crises provide ample warnings of the sad consequences of risking such blunt remedies. In the past twenty years, for example, overharvesting has all but destroyed New England's fishing industry, leading to fisheries collapses and draconian limits on fishing. See Peter Shelley, *There's No Gray Area Here: The Cod Fishing has to Stop*, BOSTON HERALD, December 13, 1998, at 27; Beth Daley, *After Restrictions, a Fishing Family has Seen its Limits*, BOSTON GLOBE, May 12, 2002, at A1 (describing the devastating economic effects of judicial restrictions on fisheries, including a recent ruling further limiting cod fishing).

159. The Framework's management scheme obviously encompasses more than just owls. Nevertheless, while owls alone do not explain the Service's initial decision, they play the starring role. Applicable NFMA regulations required the Forest Service to meet its diversity requirements by identifying and maintaining the viability of certain keystone species. Those regulations state:

(1) In order to estimate the effects of each alternative on fish and wildlife populations, certain vertebrate and/or invertebrate species present in the area shall be identified and selected as management indicator species. . . (2) Planning alternatives shall be stated and evaluated in terms of both amount and quality of habitat and of animal population trends of the management indicator species.

36 C.F.R. § 219.19(a) (1982). These regulations have since changed, but provisions in the new rule permitted the Framework planning process to be grandfathered under the older regulations. Framework ROD, *supra* note 7, at 35.

data on its population and distribution are scant or unavailable, and without a baseline for comparison, determining the meaning of current population trends is difficult.¹⁶⁰ Although owl biologists and other scientists generally agree that populations are in decline, they do not know the pace of that decline.¹⁶¹ Nor do they fully understand its causes, or all of the management changes necessary to facilitate owl viability.¹⁶²

Uncertainty in the Sierra is not limited to the owl. Indeed, it is a running theme throughout the Framework EIS.¹⁶³ Nevertheless, no one suggests that the Forest Service has the luxury of doing nothing while certainty builds. There is consensus that owl populations are declining and that the buildup of fuels presents a threat to which some response is

Since many of the threatened species were considered to be dependent upon old growth, the Forest Service treats the owl as such a keystone species, and owl management is thus the driver for much of the management scheme for old forests. See Framework ROD, *supra* note 7, at 37.

It is anticipated that management prescriptions developed for the owls and the old forest ecosystem will contribute to the extent, productivity and resiliency of the old forest ecosystem within the Sierra Nevada and move this system in a direction that will return it to within its range of historical variability and sustain all associated components of this system.

Id. More importantly, most of the divergences between the QLG recommendations and the Framework's selected methodology are justified specifically in terms of the needs of the owl. See *id.* at 50–51.

160. FRAMEWORK EIS, *supra* note 7, Part 3.3.4.4, p. 69.

161. *Id.* at 70–71 (discussing reasons for potential inaccuracy in owl demographic studies, but concluding that “the declines are sufficiently severe to warrant concern, even in light of uncertainties in the magnitude of the declines”).

162. The affinity of owls for old-growth nesting sites is relatively well agreed upon, and the Framework EIS cites several studies finding preferences for high canopy closure in both foraging and nesting areas, but researchers are less knowledgeable about the owl's preferences for landscape-scale forest attributes. *Id.* at 72–76. Likewise, researchers' predictions of the owl's reactions to human activity, whether involving chainsaws or drip torches, are uncertain. See *id.* at 77 (noting that uneven-aged management in the Sierra resulted in greater habitat diversity than in the northern spotted owl's often clearcut habitat, increasing the difficulty of assessing which habitats benefited the owl. The Framework EIS also notes that the owl's affinity for the more open, park-like forests that preceded fire suppression is unknown, and that one scientist has even hypothesized that there may be more owls now than 100 years ago); *id.* at 80 (noting that, while declines in specific habitat are difficult to determine, historic management activities have likely reduced habitat quality by altering species composition, disturbing duff and topsoil layers, and reducing the abundance of snags, fallen logs, and large old trees); *id.* at 85 (“no studies have been conducted that address the effects of fuels treatments upon California spotted owl occupancy, survival, and reproduction in PACs”). Finally, the relative importance of habitat modifications, weather patterns, and human disturbance is not well known. See *id.* at 80–81.

163. The word “uncertainty” appears repeatedly throughout the document, and adaptive management is described as a basic theme of the Framework EIS. See *id.*, Volume 1 at 5 (“Scientific thinking is varied and public expectations are not definitive for any of these problem areas, so a policy of adaptive management is integral to the proposed action.”). It is also a basic theme of the selected option; the FEIS notes that “uncertainty about the possible effects of management activities on wildlife habitat is a dominant concern in Modified Alternative 8.” *Id.* at Part 1.2.2.4.1, p. 65.

essential.¹⁶⁴ Thus the Forest Service had no choice but to wade into the realms of uncertainty and select an option.

2. *Deciding Amid Uncertainty—The Forest Service's Initial Choice*

Among the numerous alternative management schemes available, the Forest Service, in initially approving the Framework, decided to emphasize short-term retention of owl habitat, to restore fire as the primary means of controlling fuels buildup, and to eschew intensive mechanical removal of lumber.¹⁶⁵ Although ample evidence in the record supports this decision, other evidence could have provided different alternatives with sufficient justification to at least survive judicial review, and thus the Forest Service now has the flexibility, at least in the short term, to change its course and choose a different management scheme.

Despite acknowledged uncertainty, there is ample documentation in the record to support the selected option. In recent years, both the Forest Service and the Fish and Wildlife Service ("FWS") repeatedly have expressed concerns about the effects of logging upon the owl. The Forest Service initially raised these questions in the HFQLG Act Record of Decision, where it noted that implementing the QLG's program without mitigation would lead to a seven percent reduction in available owl habitat.¹⁶⁶ Similarly, the FWS's Framework Biological Opinion contains extensive support for a management approach involving minimal timber harvesting.¹⁶⁷ The Framework EIS and ROD also clearly reflect these concerns. After stressing the need for increased canopy closure, habitat retention and regrowth, and habitat connectivity, the Forest Service notes

164. See *id.* at Part 2.3.3.5, pp. 238–39; QLG Appeal of SNFPA Decision, *supra* note 79, at 31–42 (criticizing the methodology of fuel reduction employed by the Framework, but clearly agreeing that fuel reduction is a vital part of the management strategy).

165. See Framework ROD, *supra* note 7, at 21; FRAMEWORK EIS, *supra* note 7, Summary pp. 24–27.

166. HFQLG ROD, *supra* note 74, at 7. While it did not attribute the decline in owl populations to habitat modifications, the ROD noted that further reduction of available habitat could exacerbate problems faced by the owl, and mandated specific mitigations to minimize the project's impact upon the owl. *Id.* at 6–8.

167. The opinion notes that retention of old trees and high canopy closure are of prime importance to the owl. FRAMEWORK BIOLOGICAL OPINION, *supra* note 35, at 69. It compares larger populations of spotted owls on federal lands to the relative absence of owls on more heavily managed private lands, and concludes that management and owls may be incompatible. *Id.* at 72. It notes that DFPZs are likely to cause more habitat fragmentation than SPLATs. *Id.* at 131. It discusses various methods of fuels reduction upon owl habitat, and it concludes that fire is likely to retain the most habitat benefits, while aggressive selective thinning and group selection are likely to be most destructive. *Id.* at 125. Noting that the owl's population is currently in decline and that threats are imminent, the opinion stresses the importance of emphasizing short-term retention of valuable habitat attributes, and thus addressed arguments that the long-term benefits of the different framework options were relatively similar. *Id.* at 126. Finally, in unambiguous terms, the opinion concludes that the QLG's recommended approach would increase fragmentation, reduce habitat, and likely harm the owl. *Id.* at 139.

that full implementation of the QLG scheme would, by reducing available habitat, connectivity, and canopy closure, place the owl at excessive risk.¹⁶⁸

Although the record contains ample documentation justifying the Framework's result, it also contains information supportive of other options. The QLG's appeal of the Framework decision is replete with citations to the record, all of which the QLG believes demonstrate that the Forest Service chose the incorrect management scheme.¹⁶⁹ Many of the QLG's criticisms allege that the science was too uncertain to mandate the Forest Service's chosen scheme.¹⁷⁰ The appeal claims that the science behind both the owl protection and fire management schemes was thin at best, involving experimental schemes and hypotheses without empirical verification, and claims that the results selected by the Forest Service were not nearly as mandatory as they seem.¹⁷¹ Other criticisms go even further, arguing that the record mandates a different result, and that the Forest Service has selected a scheme that, by failing to adequately address fire risk, will endanger both the ecosystem and the regional economy.¹⁷²

168. Framework ROD, *supra* note 7, at 51.

169. See QLG Appeal of the SNFPA Decision, *supra* note 79.

170. See, e.g., *id.* at 6–7 (discussing the inadequate scientific basis for the California spotted owl management strategy).

171. See *id.* at 7–9, 31–42. The appeal prominently stresses several graphs within the Framework that predict active management will produce more old trees and late serial stage forests than will Modified Alternative 8. *Id.* at 21 (discussing graphs contained in the Framework FEIS at Volume 2, Chapter 3, pp. 89–90). Environmental activists have criticized these graphs as the eleventh-hour product of poor modeling. Thomas Interview, *supra* note 128.

172. QLG Appeal of the SNFPA Decision, *supra* note 79, at 7–9 (arguing that scientific and economic information about fire management mandates a different strategy than the SPLAT-based system selected by the Forest Service). The QLG appeal suggests that the Framework may severely underestimate the risks posed by wildfire, and it finds support in the record for its position that active mechanical treatment will be the most effective means to reduce this risk. The appeal also notes that the fuels reduction approach recommended by the Forest Service is untested. *Id.* at 8. The QLG alleges that the linear firebreak system recommended by the QLG has a much higher chance of success. *Id.* at 33–42. In addition, the appeal claims that the Forest Service's methods will be economically wasteful. *Id.* at 40–42 (“A viable timber industry is also an *ecological* necessity. There is no other way to remove enough material from the forests to accomplish the required fuel reduction, and do the job within a reasonable time, with adequate safety, and without converting a huge amount of biomass to health-threatening atmospheric pollution by open burning.”) (emphasis in original).

This position is not far from that taken by the Forest Service in other contexts. The Forest Service recently released a National Fire Plan, which calls for greater emphasis upon mechanical treatment than does the Framework. U.S. Forest Service, *National Fire Plan*, available at <http://www.fireplan.gov/> (last visited November 13, 2002). The HFQLG EIS also called for a different balancing of fire and logging risks. HFQLG EIS Alternative 5 closely tracks the management scheme later offered by the Forest Service in the Framework, emphasizing old growth preservation and fire restoration. See HFQLG ROD, *supra* note 166, at 12. This alternative was not considered the environmentally preferable alternative, however, for the Forest Service found it would insufficiently reduce fuels. See QLG Appeal at 5 (“Alternatives 4

The QLG's criticisms are not limited to science. Under NFMA, ecological concerns are to be considered within a larger context of multiple uses, and the QLG argues that the economic impacts of the selected alternative fail to honor this directive.¹⁷³ The QLG also argues that the Framework approach violates the HFQLG Act by arbitrarily thwarting the Act's implementation.¹⁷⁴ It asserts that its members have put tremendous, good faith effort into their experiment in collaborative government and local planning and have won almost unanimous congressional support for these efforts, and that this experiment should not be shunted aside on the basis of a scientifically questionable agenda.¹⁷⁵

The Forest Service could make counterarguments to the scientific claims of the QLG and other appellants who support alternative management schemes.¹⁷⁶ Likewise, the QLG's opponents can counter the QLG's non-scientific arguments. Framework proponents will suggest that efforts to keep species off the endangered species list are the only hope of preserving multiple use.¹⁷⁷ In response to arguments that the Framework undermined Congressional intent, its proponents note that it is continuing to allow much of the Pilot Project to be put in place.¹⁷⁸ Where it has overruled the project, it has done so in accordance with provisions

and 5 provide equal or greater protection for such resources, but fail to significantly reduce the threat of catastrophic fire.”).

173. QLG Appeal of the SNFPA Decision, *supra* note 79, at 5.

174. *Id.*

175. *Id.* at 1–2.

176. The FWS Biological Opinion is unequivocal in its assertion that the management scheme supported by the QLG will harm sensitive species. FRAMEWORK BIOLOGICAL OPINION, *supra* note 35, at 139. Graphs showing long-term accumulation of large trees and late serial stage forests do not speak to short term impacts from treatment, and the ROD clearly indicates that short-term concerns with canopy closure and habitat connectivity motivated the decision. Framework ROD, *supra* note 7, at 22, 38–39. Moreover, graphs that address the quantity of trees do not indicate the placement of those trees, and the Framework argues that Modified Alternative 8 will better accumulate old forest habitats in the areas that most need them. *Id.* at 22. The ROD also notes that Mod. 8 will better accumulate habitat in the short term, *id.*, which may help the owl weather its current population decline. Finally, while both owl and fire science are uncertain, the approaches selected were intended to account for that uncertainty. *See F.S. Acts to Reduce Sierran Fire Risk, Protect Wildlife & Water*, *supra* note 139 (quoting Regional Forester Brad Powell as saying, “In general, my decision reflects a cautious approach that recognizes we don’t fully understand the effects of thinning on areas that are important for wildlife.”).

177. *See Seattle Audubon Soc. v. Lyons*, 871 F. Supp. 1291, 1314 (W.D. Wash. 1994) (“A forward-looking land management policy would require that federal lands be managed in a way to minimize the need to list species under the ESA. Additional species listings could have the effect of further limiting the O&C Lands Act’s goal of achieving and maintaining permanent forest production. This would contribute to the economic instability of local communities and industries, in contravention of a primary objective of Congress in enacting the O&C Lands Act.”) (citing the record of decision (ROD) of April 13, 1994, at 50).

178. *See Framework ROD*, *supra* note 7, at 50 (“Within the constraints of the new direction adopted by this decision, I intend to carry out as much of the pilot project as possible.”).

of the HFQLG Act specifically granting primacy to new management schemes.¹⁷⁹ The drafters of that language may not have envisioned such a stark conflict between the Act and those subsequent schemes, but the Forest Service can nevertheless argue that the clear language of the statute leaves no doubt about how such a conflict must be resolved.

All these counterarguments, however, do not eliminate the possibility of offering a coherent justification for an alternative management scheme. The Service's initial decision may have been wise, and the regional decisionmakers may have believed the law mandated their selected option. If, however, the Forest Service now decides that the law requires, or even just allows, a different decision, it could find information in the record to provide a basis for that choice.

3. *Judicial Review of the Forest Service's Initial Choice—A Range of Options*

Each of the Forest Service's options appears capable of being coherently, even if not necessarily convincingly, justified. Before a judge with authority to invalidate only an arbitrary or capricious decision, those coherent justifications would be sufficient. With a record so full of complexity and uncertainty, and without the rigid substantive requirements of the ESA yet in effect, judicial review would be likely to leave open a wide range of options. Since the choices were largely based upon somewhat untested predictions, invalidating the Forest Service's choice would be even more difficult than challenging an empirically tested scheme. Thus, based on the record in this decision, both the QLG's approach and the original Framework decision probably were within a judicially acceptable range.

This does not mean that all selections would have been equally valid. The fact that the judiciary lacks the institutional competence to undo the Forest Service's initial choice does not, and should not, give the agency carte blanche to choose however it pleases. It simply means that if the Forest Service decides in the future to choose a different course, even if it does so for reasons that seem questionable or unwise, the judiciary, at least initially, may be ineffective at stopping it.

C. *The Political Stories*

Although the science and legalities of the QLG-Framework controversy are nebulous and defy efforts to develop straightforward decisional criteria, the politics and ideologies embodied in the QLG's history are not. It is the interpretation of these compelling political stories that may ultimately determine policy. Depending on how the history is

179. See HFQLG Act § 401(c)(3) (1998).

told, the QLG's saga can be a reflection of what we wish a political community to be or a cautionary fable about the continued perils we face when balancing environmental and economic concerns. The ultimate outcome may turn on which side of this story the Bush Administration and upper echelons of the Forest Service choose to believe.

If preliminary indications are any guide, this battle of the myths may indeed prove decisive. The Bush Administration-era Forest Service's eagerness to re-examine the Framework's result without questioning its underlying scientific and legal basis suggests that something other than scientific knowledge and legal conclusions is driving its decisionmaking. Bosworth's rhetoric emphasizing the importance of working with local communities indicates that the key factor may very well be the political power of the QLG story.¹⁸⁰ The Forest Service appears to be well on its way toward divorcing the decisionmaking process from its underlying scientific basis, implicitly declaring the process to be about political values and running the risk of debacle if courts disagree.

1. *The QLG Story—Local Environmentalism and Grassroots Democracy*

The QLG's history can be told as an inspiring tale. It begins with a community, deeply and almost violently divided and on the verge of economic collapse, embroiled in a regional conflict so intense that it confounded the efforts of a succession of presidential administrations to find a solution. It is populated by appealing characters—civically minded local boosters and an attorney so pugnacious that, in a moment that would have made Edward Abbey proud, he succeeded in getting himself thrown headfirst from a bar after bragging of an anti-logging legal victory.¹⁸¹ From these divisive beginnings, reconciliation emerged, a creative solution reached through dialogue, patience, and respect, and a community found through its political efforts a common bond, fame, and undying controversy.

The story has an almost cinematic quality, affirming the ability of people with widely divergent viewpoints to bury the hatchet and change the world,¹⁸² of local people from a downtrodden region to take control of the destiny of their community. At every level, it can be told as a story of people learning to sort out differences, to resolve seemingly intractable

180. See *supra* note 117.

181. Smithsonian Magazine, *A Town Buries the Axe*, *supra* note 54; Christensen, *supra* note 52.

182. "Change the world" may sound overblown, and my intent here is to sketch the myth and not necessarily the reality. Nevertheless, the QLG's following extends beyond the Sierra Nevada and even Washington—at the April 5th, 2001, meeting, one of the attendees recounted a recent visit with Russian foresters interested in learning about community-based planning.

conflicts and find common ground. At the local level, the QLG managed to create harmony between staunch environmentalists and loggers.¹⁸³ At the national level, it managed to unite both Democrats and Republicans. There is also an element of the triumph of the traditional; the group's story calls to mind a Tocquevillian New England small town meeting triumphing over the bureaucrats and elites of the modern urban world. The QLG's success can be told as nothing less than an affirmation of participatory democracy.

The QLG's vision of itself affirms environmental as well as political ideals. For years, environmentalists have emphasized the importance of living in the environment, of relating to the land as a home, of committing to communities in which we live.¹⁸⁴ To some, the QLG is the embodiment of this community-based ideal.¹⁸⁵ Likewise, in recent years environmentalists have chafed at the suggestion that environmental protection necessarily causes economic harm, and have suggested that more realistic accounting and better management could make many environment-economy conflicts seem illusory.¹⁸⁶ The QLG purports to affirm both of these ideals. It is, its members claim, the story of local people taking the lead in protecting the local environment and using a level of understanding and commitment outsiders could not match.¹⁸⁷ The QLG seems to have found ways to avoid conflicts between protection and profit, to get out among the trees to ensure that the right things are done, and to affirm connections between people and the land. It is, if told correctly, a story of an idealized ecological community.

183. See e-mail from Michael Jackson to author, April 9, 2001 ("Quincy is much more of a community since the advent of the QLG; people are much more can-do"); Jane Braxton Little, *A Quiet Victory in Quincy*, HIGH COUNTRY NEWS, November 9, 1998 ("The common ground Coates and Jackson found in Quincy in 1993 allowed Herger and Feinstein to work together in Washington. The image of old foes cooperating to solve mutual problems has made the group a fabled example of collaboration."); Coates Interview, *supra* note 19 (stating that Quincy "was really blessed" with a strong local environmental community willing to take strong stands).

184. See, e.g., HENRY DAVID THOREAU, *WALDEN* (1854), ANNIE DILLARD, *PILGRIM AT TINKER CREEK* (1974), ALDO LEOPOLD, *A SAND COUNTY ALMANAC* (1949); Wendell Berry, *For Love of the Land*, SIERRA, May/June 2002, at 50 ("I decided not long ago that I would not endorse any more wilderness-preservation projects that do not seek also to improve the health of the surrounding economic landscapes and human communities.").

185. See, e.g., Randal O'Toole, *The New Conservationists*, at <http://www.qlg.org/pub/Perspectives/newconservationists.htm#RTFToC9> (last visited November 13, 2002); Coates Interview, *supra* note 19 (stating that people chose to live in Quincy because they loved the mountains and valued the environment).

186. See, e.g., NATURE'S SERVICES: SOCIETAL DEPENDENCE ON NATURAL ECOSYSTEMS (Gretchen C. Daily ed., 1997).

187. See Duane, *supra* note 82, at 795 (quoting Michael Jackson).

2. *Criticism of the QLG Story*

Although the story is immensely appealing, the criticism nevertheless has been intense. The QLG's opponents have challenged every level of the group's political history. Michael Jackson and Linda Blum's pre-QLG record as effective environmentalists may not be disputed, but critics allege that the QLG's work reflects the agenda of the timber industry.¹⁸⁸ A quick review of the membership of the QLG steering committee indicates one source of this criticism—much of the membership works within the industry, while other than Blum and Jackson, only a few members' biographical information suggests identification with the environmental movement.¹⁸⁹ Sheer numbers may not reflect influence, especially in a group that makes decisions by consensus,¹⁹⁰ and the QLG's members would likely dispute the assumption that timber industry affiliation precludes pro-environmental leanings,¹⁹¹ but this slate of membership nevertheless bears little resemblance to the QLG's self-image as a group presenting a balance between environmental and economic concerns.

The QLG's critics also object to the notion that the QLG represents an ideal of local involvement. Their argument is rather simple—they note that the QLG was not attempting to manage its own backyard, but was

188. See NRDC, *The Damage Done—A Review of Enacted Legislation* (1998), at <http://www.nrdc.org/legislation/damage/chap3.asp> (last visited September 24, 2002) (“Developed by a small group of local residents, and opposed by 140 state local and national environmental organizations, [the HFQLG Act] is a sweetheart deal for California’s largest logging company.”); Klamath Forest Alliance, *Quincy Library Group a Scam for Big Timber Dominance*, at <http://www.sisqtel.net/~klamath/qlg.html> (last visited September 25, 2002) (“The Quincy Library Group (QLG) proposal for management of the Lassen, Plumas and part of the Tahoe National Forests is not a local initiative. Rather, it was born in the board room of Sierra Pacific Industries (SPI), the largest timber company in California and the second largest landowner in the US.”). This critique came from within the Forest Service as well. See Marston, *supra* note 53 (stating that former Forest Service Chief Jack Ward Thomas “disliked almost everything about the Quincy Library Group, especially the fact that Sierra Pacific Industry was involved.” Marston quotes Thomas as saying: “(Red) Emmerson, who owns Sierra Pacific, is involved in the Quincy Library Group, which is patently illegal . . . I like co-operation, but I don’t like Emmerson; who the hell turned over my national forests to him?”).

189. See The Quincy Library Group Members, at <http://www.qlg.org/pub/miscdoc/qlgmembers.htm> (last visited September 24, 2002) (Michael Yost is a member of the Friends of Plumas Wilderness).

190. In his critique of devolved collaboration, Michael McCloskey makes exactly the opposite argument, suggesting that consensus-based processes give too much power to extractive interests. McCloskey, *supra* note 84, at 626. If those interests already hold a numeric majority, however, it is difficult to see how a consensus-based process would actually increase their influence.

191. Bill Coates, for example, suggested that the community did not support many of the environmentally destructive decisions that led to the current poor state of forest health—that the Forest Service, and perhaps logging interests outside of the community, made the decisions to promote clearcutting in spite of the reservations of local loggers. Coates Interview, *supra* note 19.

instead seeking to mandate a management scheme for a federally owned area “the size of Austria.”¹⁹² Moreover, they claim the QLG was unreceptive to outside input in this process.¹⁹³ Local control, they argue, is far less desirable when the locals seek to control land they do not own. It should be especially questionable when the locals attempt to exclude the participation of outsiders, especially when these outsiders share both the benefits and ownership of the resource.¹⁹⁴ Moreover, the critics note that localized decisionmaking is especially prone to excluding consideration of regional or cumulative effects that national legislation was created to address.¹⁹⁵

The QLG’s critics rarely attack the idea of local involvement in environmental decisions. They note that, in certain circumstances, local monitoring is essential for ensuring enforcement of environmental laws, and that local activism can play a vital role in developing environmental protections.¹⁹⁶ When local activism works toward favoring business interests, however, they argue that the process is inherently suspect.¹⁹⁷ Regardless of the purpose of local political involvement, they argue that it cannot exclude outside involvement without thwarting the basic purposes of environmental protection and democratic participation.¹⁹⁸ Thus, critics view the QLG as an environmental Trojan Horse.¹⁹⁹ They see it as little more than a sophisticated grab at resources, another creative attempt by industry to ensure continued exploitation at the expense of the national public interest.

192. Watson Interview, *supra* note 77.

193. The Wilderness Society, *supra* note 82; Klamath Forest Alliance, *supra* note 188 (“Not only did members of the QLG deny meaningful involvement by national environmental groups, they failed to include or involve critical local stakeholders which are based on the forests in which they want to implement their Plan.”).

194. George Coggins, *Regulating Federal Natural Resources: A Summary Case Against Devolved Collaboration*, 25 *ECOLOGY L.Q.* 602, 603 (1999).

195. See Axline, *supra* note 86.

196. *Id.*; The Wilderness Society, *supra* note 82.

We must say at the outset that The Wilderness Society believes in consensus building, in efforts to restore a civility all but lost in today’s decision making. We cannot but benefit from opportunities to share our vision and to understand competing ones. We are involved in efforts to do that, in one form or fashion, with our grassroots partners all the time and all over the country.

Id.

197. See Axline, *supra* note 86.

198. See, e.g., McCloskey, *supra* note 84, at 626.

199. See Terhune & Terhune, *supra* note 55 (environmental organizations “published two full page ads in the national edition of the New York Times, one with a cartoon showing Senators Feinstein and Boxer helping Vice President Gore push a wooden horse labeled ‘QLG’ up the steps of the Capitol”).

3. *The Forest Service and the Framework—An Environmental Awakening?*

The history of the Framework lacks some of the drama of the Quincy Library Group's saga. It is more a story of large players—environmental groups and major bureaucracies.²⁰⁰ Nevertheless, it too could be told as a compelling story of evolving government, in which an agency once vilified as the accomplice of environmental pillagers reinvented itself as environmental protector, and in which values that for years environmentalists alleged were ignored finally came to the forefront of forest planning. For many environmentalists it was, until recently, a story of government beginning to work, and of an agency learning to appreciate the interconnectedness, fragility, and value of ecosystems.²⁰¹

In the seventies, eighties, and early nineties, environmentalists portrayed the Forest Service as an environmental arch-villain.²⁰² They accused it of placing timber harvests above all other priorities, clearcutting habitats, filling riparian areas with sediment, and forsaking its multiple-use mandate by abdicating its responsibility to preserve resources.²⁰³ Species protection, recreation, and preservation of water resources all, in this view, were given short shrift.²⁰⁴ To make matters worse, critics noted that it was often doing all of this at a financial loss—the costs of road construction and other management activities often

200. The major bureaucracy did, however, hear from lots of people over the course of the planning process—approximately 47,000 during the comment period for the Draft EIS, according to the Forest Service. See *F.S. Acts to Reduce Sierran Fire Risk, Protect Wildlife & Water*, *supra* note 139.

201. Local environmentalists in Quincy, of course, take a somewhat different view, seeing the result as a combination of turf battles and a foolish intoxication with the use of drip torches. Likewise, some in the environmental community feel the Framework does not go far enough, and wish to have logging altogether removed from public lands. Nevertheless, if the reaction of NRDC is an accurate indicator, the environmental community appears generally pleased with the outcome. See NRDC, *supra* note 106.

202. See, e.g., RANDAL O'TOOLE, *REFORMING THE FOREST SERVICE* (1988). The critiques were echoed by Congress, see, e.g., Charles F. Wilkinson & H. Michael Anderson, *Land and Resource Planning in the National Forests*, 64 OR. L. REV. 1, 69–70 (1985) (discussing Hubert Humphrey's critique of the Forest Service), and even by a Supreme Court Justice. See *Sierra Club v. Morton*, 405 U.S. 727, 748 n.7 (Douglas, J. dissenting) (“The Forest Service—one of the federal agencies behind the scheme to despoil Mineral King—has been notorious for its alignment with lumber companies, although its mandate from Congress directs it to consider the various aspects of multiple use in its supervision of the national forests.” In footnote seven, Douglas provided a lengthy discussion of the environmental consequences of the Forest Service's policies and the critiques that had been leveled against those policies).

203. See GEORGE CAMERON COGGINS ET AL., *FEDERAL PUBLIC LANDS AND RESOURCES LAW* 664–65 (4th ed. 2001); *Sierra Club v. Morton*, 405 U.S. at 748 n.7 (“The Forest Service, influenced by powerful logging interests, has, however, paid only lip service to its multiple-use mandate and has auctioned away millions of timberland acres without considering environmental or conservation interests.”).

204. *Sierra Club v. Morton*, 405 U.S. at 748 n.7; O'TOOLE, *supra* note 202, at 72–92.

exceeded the revenues from timber sales.²⁰⁵ The Forest Service stood accused of subsidizing, at taxpayer expense, wanton environmental destruction.²⁰⁶

In recent years that image has begun a dramatic shift. Beginning with the court orders of the early 1990s, the Forest Service, particularly in the Pacific Southwest region, began to reassess its management goals.²⁰⁷ In the Sierra Nevada, timber harvests dropped to a fraction of former levels.²⁰⁸ This shift reflected a reordering of priorities, as the Forest Service began to consider more carefully the effects of management upon other natural resources, and in particular to give greater consideration to impacts upon sensitive, threatened, and endangered species.²⁰⁹ The Clinton Administration's roadless ban provided perhaps the sharpest evidence of this transformation.²¹⁰ By effectively removing substantial areas from timber production, the Forest Service acknowledged the wasteful practices of the past, effectively expanded wilderness protection, and indicated that the priority to be given to timber harvesting had dropped and was, in some areas, nonexistent.²¹¹

The Framework may have been a culmination of this shift. Both the scale and tone of the document evince the Forest Service's intent to present itself as ecologically sensitive and well informed.²¹² The protective requirements suggest a revised system of priorities—timber harvesting is not one of the five priority areas, and the tone of the document suggests that such harvests are to be subordinated to other uses.²¹³ The Framework's underlying philosophy seems to be that forests provide an overwhelming range of benefits, many of them incompatible with heavy human activity, and that the proper mission of the Forest Service is to maintain these benefits.

This shift may have been anathema to timber companies, but it has the potential to play well in public opinion. Clearcuts are politically

205. See O'TOOLE, *supra* note 202 (providing a comprehensive discussion of the economic and environmental costs of logging).

206. See *id.*

207. See Ruth, *supra* note 34, at 7–8 (discussing the Forest Service's new emphasis on ecosystem management); Marston, *supra* note 106 (discussing the Framework as an attempt to regain credibility by implementing a more conservation-oriented, and therefore less legally vulnerable, management plan).

208. Ruth, *supra* note 34, at 62 (noting that timber harvests in California were reduced by two thirds following the implementation of the CASPO interim guidelines).

209. See *id.* at 7–8.

210. 66 Fed. Reg. 3,244–01 (2001).

211. See *id.* (discussing economic and ecological reasons for instituting the roadless area protection policy).

212. See Framework ROD, *supra* note 7, at 2 (describing Powell's insistence "that the proposed amendments be scientifically credible, legally sufficient strategies for sustaining national forest ecosystems").

213. See, e.g., *id.* at 1.

distasteful; environmental protection is not.²¹⁴ Likewise, acting in close association with the logging industry inflames public fears about co-opted agencies and bought government. By casting itself as the protector of owls and trees, the Forest Service gives itself the opportunity to play the more politically agreeable role of the Lorax.²¹⁵ This may alienate extractive industry and rural communities, but it can play well in regions of the country that do not depend upon or sympathize with public lands logging.

In a less inspiring but perhaps more important way, the Framework's history also relies on the myth of the bureaucratic expert. Traditional models of administrative government held that technical administrative decisions were best left to experts who could apply their specialized knowledge while safely insulated from the political process.²¹⁶ While the controversies of the past thirty years have done severe damage to the Forest Service's self-image as an agency governed by expertise,²¹⁷ this ideal still seems to resonate with staff within the technical bureaucracies.²¹⁸ Furthermore, respect for the wisdom of scientific experts forms the philosophical underpinning for both the decisions made in the Framework and the laws and scientific studies upon which those decisions were based.²¹⁹ To the extent that we believe in the scientific expert, we are likely to believe in the Framework. Its strongest justification may be the word of many scientists asserting that, based on their years of accumulated experience and wisdom, they have chosen what they believe to be the best possible course of action.

214. See YAFFEE, *supra* note 2, at 287–91 (discussing polling data showing the popularity of environmental protection).

215. DR. SEUSS, *THE LORAX* (1971) (the Lorax “speak(s) for the trees, for the trees have no tongues”).

216. See Woodrow Wilson, *The Study of Administration*, 2 POLITICAL SCIENCE Q. 197, 210 (1887) (“Although politics sets the tasks for administration, it should not be suffered to manipulate its offices.”); Holly Doremus, *Listing Decisions Under The Endangered Species Act: Why Better Science Isn't Always Better Policy*, 75 WASH. U.L.Q. 1031 (1997) (arguing that the sections of the ESA emphasizing the exclusion of all non-scientific decisionmaking criteria reflect the public's respect for and lack of understanding of science).

217. See YAFFEE, *supra* note 2, at 256–82 (contrasting the Forest Service's original image as the ultimate can-do expert agency with its tendencies to marginalize its own biologists and obscure a non-technical agenda beneath a veneer of technical justifications). These same biologists played a much larger role in the development of the Framework, and thus believing in the Framework to some degree involves preferring a different set of agency experts. See Thomas Interview, *supra* note 128 (arguing that the recent Forest Service decisions are flawed in part because they transfer power from the biologists back to the foresters). This suggests that even if we believe in experts, we still may need to choose which experts to believe.

218. This statement is based on interactions with scientists; while lawyers and law students seem cynical about professionalism in both their profession and others, many of the scientists I have met still aspire to this ideal.

219. See Doremus, *supra* note 216 (discussing the intended role of technical expertise in the ESA).

4. Criticisms of the Framework Story

While the Framework's evolution can be described in politically compelling terms, it too is vulnerable to criticism. Its critics directly attack the bureaucratic myth, arguing that political and personal considerations, rather than expertise, provided the underlying motivations for its decision.²²⁰ They argue that an alternative bureaucratic model based on self-preservation, intransigence, and the accumulation of power better explains the Forest Service's decision. This model also has its resonance; simply by referring to Forest Service employees as bureaucrats, the QLG can substitute the imagery of *The Trial*²²¹ for that of *The Lorax*.

On top of this criticism, the QLG adds charges of urban elitism. The idea that people in one place would presume to tell others how to manage the lands in which they live will sit uncomfortably with anyone who values the decentralization of power. QLG members note that many of the environmental advocates opposing them are based in San Francisco.²²² They argue that these advocates are reluctant to travel to Quincy and participate in the process, and are generally concerned with ensuring that decisionmaking authority stays within the urban areas where they hold greater influence.²²³ This motivation, they argue, is coupled with a desire to reap the fundraising benefits generated by conflict rather than to seek real solutions.²²⁴ Thus, the QLG's story of the Framework is one of urban elitists manipulating a bureaucracy to their advantage, with the unfortunate result that the interests of those who actually understand and live with the resources are trampled.

D. *The Decision Ahead: Integrating Politics, Science, and Policy*

Although the propaganda battles are ongoing, the QLG appears to enjoy the sympathies of the new administration.²²⁵ Bosworth's appeals

220. See QLG Appeal of the SNFPA Decision, *supra* note 79, at 5 ("Professional and scientific integrity were not insured, but were instead sacrificed to other agendas and motives."). Michael Jackson asserts that a common thread throughout all of the Forest Service decisions is a desire to retain discretion and exclude outsiders from decisionmaking, and that bureaucratic power dynamics, rather than power shifts between loggers and environmentalists or Republicans and Democrats, best explain the Forest Service's actions. Jackson Interview, *supra* note 81.

221. FRANZ KAFKA, *THE TRIAL* (1951) (describing a bewildered man's journey through a bureaucratic hell).

222. Jackson Interview, *supra* note 81; Coates Interview, *supra* note 19.

223. Jackson Interview, *supra* note 81; Coates Interview, *supra* note 19.

224. See Coates Interview, *supra* note 19; see also Wilderness Society, *supra* note 82 (responding to this criticism).

225. Bosworth and Blackwell are both Forest Service employees and technically are not part of the Bush Administration. Both were appointed to their current positions following the change in administrations, however, and the developing policy shifts in the Sierra Nevada appear to closely track the extractive orientation of the Bush Administration. Moreover, the apparently

decision contains a resounding endorsement of local involvement. He states:

[a]s I see it, the Forest Service's mission is to work with local individuals and communities to protect and restore the health of the land. Partly, that means finding intelligent, far sighted ways of using some of our natural resources. Partly, it means working together to diversify economies while putting people to work for the health of the land. We need to accomplish our land stewardship goals by looking for creative new ways to get needed work done on the land, get products from it, and build communities together.²²⁶

More importantly, Blackwell's action plan, which explicitly asks the Regional Forester to consider whether the Framework can be reconciled with the QLG Act, indicates that reinvigorating the QLG proposal is now a high priority.²²⁷

The QLG's victory, however, could prove highly problematic, for the Forest Service has made no attempt to offer any scientific or legal justification for its reconsideration of the Framework. In affirming the Framework, Bosworth's appeals decision appeared to state that the scientific and legal conclusions underlying the Framework were valid. It rejected every single objection to the original document, including all of the QLG's criticisms. Bosworth cursorily dismissed claims that the Framework would leave forests too dense and would preclude economically feasible methods of accomplishing fire protection goals.²²⁸ Similarly, he rejected every criticism of the Forest Service's owl science.²²⁹ Responding to criticisms, based on the graphs repeatedly cited by the QLG and other appellants, that the selection of Modified Alternative 8 was arbitrary, Bosworth concluded "that the Regional Forester selected the most appropriate alternative."²³⁰ Perhaps most puzzlingly, Bosworth unequivocally rejected the QLG's arguments that the Framework inadequately considered the QLG's proposal as an alternative and that the Forest Service had insufficiently addressed local concerns.²³¹ In short, despite Bosworth's obvious reservations about the result, the administrative appeals process left the foundations of the Framework decision entirely intact.

The Forest Service did not say why it was threatening to tinker with the result even as it affirmed its basis, but the implications are, to some

close coordination between Rey and Blackwell's statements suggests a close working relationship between the Bush Administration and the upper echelons of the Forest Service.

226. BOSWORTH, *supra* note 116.

227. See Blackwell, Letter to Chief Bosworth, *supra* note 127; BLACKWELL, ACTION PLAN, *supra* note 127.

228. BOSWORTH, *supra* note 116, § VI, pp. A5-A6, A37.

229. *Id.* § VI, pp. C59-C67.

230. *Id.* § VI, p E7.

231. *Id.* § VI, p E33.

observers, fairly obvious. Sierra Nevada Forest Protection Campaign's Conservation Director Craig Thomas asserts that the "direct contradiction" between the tinkering and the affirmation results from the Bush Administration's desire to alter the Framework without taking the more politically exposed step of remanding.²³² The Wilderness Society's Watson suggests that the administration is stuck between science and policy, caught in a bind between scientific results it could not refute and a policy it could not abide, and that it was struggling for a way out.²³³ Jackson, while unsurprisingly more skeptical of the Framework's science, found it "frustrating to spend all the years and then read the responses," and asserted that, whatever result the Forest Service intended to reach, the appeals decision was an absurd exercise in concealment.²³⁴ In short, the Forest Service's reexamination of the Framework appears to be deeply politicized, and stands in paradoxical tension with the rejection of all of the Framework appeals.

The Bush administration and Forest Service conceivably could revise the Framework without divorcing policy from science and law. In a document the scale of the Framework, scientific or legal misjudgments are all but inevitable, and there may well have been valid criticisms of the choices made in the original Framework.²³⁵ In affirming the Framework, however, the administration missed the opportunity to credit those criticisms, reducing the likelihood that it can explain any subsequent revisions to the Framework in terms of questions about the Framework's scientific or legal foundations. The indications that the Forest Service will substantially revise the Framework are preliminary, of course, and the administration may retain the original Framework or reexamine the foundational scientific and legal conclusions upon which the original Framework was based. Bosworth, Rey, and Blackwell's decisions, however, suggest no such effort to reconcile science and law with policy.

This course of action could prove disastrous. By divorcing its policies from their scientific and legal foundations, and from the public participation process in which those foundations properly are debated, the Forest Service will leave those policies vulnerable to substantive legal challenges. In the context of so much uncertainty, the Forest Service could legally rationalize any of a number of management options.²³⁶ In order to survive legal challenge, however, the Forest Service must make

232. Thomas Interview, *supra* note 128.

233. Watson Interview, *supra* note 77 ("They're in a political box . . . stuck between politics and reality.").

234. Jackson Interview, *supra* note 81. Jackson thought it particularly absurd that every single criticism, regardless of the appellant's perspective, could be dismissed as wrong.

235. See *supra* Part IV.B.3.

236. See *supra* Part IV.A.3 (discussing how difficult it will be for any plaintiff to convince a judge that an as-yet untested management approach will fail).

some attempt at rationalization; its arguments for deference will crumble if it fails to address the concerns of its own experts.²³⁷ By opting for more timber harvesting without attempting to reconcile such timber harvesting with its own scientific and legal conclusions, the Forest Service will leave itself wide open to litigation, and its new policy approaches may be short-lived.

Should it select a revised, more logging-friendly management approach, the Forest Service probably will be careful to cover its tracks and seek alternative justifications within the administrative record. Nevertheless, seeking post-hoc rationalizations may place the Forest Service in an even more problematic situation. Initial legal challenges probably will fail. In the absence of empirical data, the cases will likely evolve into clashes between experts' predictions, and agency deference may carry the day.²³⁸ As the management scheme is put in place, however, and real effects upon owls begin to be ascertained, decision space will shrink rapidly. The biological experts may be wrong; more extractive management may succeed. But, if scientific expertise is worth something, common sense suggests they are likely to be right. If the Forest Service ignores its own science in favor of making a politically appealing decision, the owl may suffer, and the Forest Service may soon find itself on the losing end of either a broad ESA suit or narrower, but nearly as damaging, NFMA-based injunctions against individual forest plans. At that point, the result may be more drastic than any restriction imposed by the Framework. All of the planning efforts of both the Forest Service and the Quincy Library Group will be for naught, and the lessons of the Pacific Northwest's battles will have been wasted.²³⁹

237. See YAFFEE, *supra* note 2, at 112–13 (noting that the Reagan-era Forest Service's legal positions in the northern spotted owl dispute became tenuous partly because the Service went against the views of its own biologists).

The fact that few of the agency biologists supported the Chief's choice was a major concern within the agency, particularly having seen what happened to the [Fish and Wildlife Service] [which was politically burned after ignoring the views of its own biologists on listing the northern spotted owl]. Agency lawyers must have laid awake at night worrying about what would happen to their case if they got into court.

Id.

238. See *id.*

239. See Leavenworth, *supra* note 110 (“[The tree cutting restrictions] are the foundations of this decision, and that is what they may try to pull out from underneath us,” said Craig Thomas of the Sierra Nevada Forest Protection Campaign. “If they do that, the roof will fall in on them quicker than I can say ‘injunction.’”). *Id.*: Thomas Interview, *supra* note 128 (expressing his willingness to seek a range-wide injunction, but also noting that he would prefer not to have such a blunt solution, which would preclude some environmentally beneficial logging).

V.

TOWARD A BETTER RESOLUTION OF THE FRAMEWORK/QLG CONTROVERSY

Although the Forest Service has started down an uncertain road potentially leading toward an unpleasant ending, it need not continue; there are better ways to resolve this type of planning dilemma. There is no magic solution. Clashing agendas and inadequate knowledge preclude any result from appearing objectively unassailable. Nevertheless, by reemphasizing respect for the conclusions of scientists, deemphasizing the power of political myths, and taking a less ideological view of the nature of this planning process, the administration will have a much better chance of achieving a lasting, effective policy.

A first step towards achieving a better policy process is to step away from politically potent but incomplete stories. We might determine the fate of the forests by weighing the relative value of competing myths—by deciding whether we find rampaging loggers more frightful than an unholy alliance between elitist environmentalists and a self-protecting bureaucracy—but in so doing we would be unlikely to reach any solution that transcends mere political shifts or, more importantly, responds to all the nuances of the actual course of events. Any narrative told with the desire to persuade is likely to be oversimplified, and the stories told by the opposing sides of the QLG-Framework clash are no exceptions. A more accurate narrative may be less exciting, but it may also lead to better criteria for decisions.

A. Retelling the QLG Story

The QLG's opponents allege that the group is simply a creature of the timber industry. This account misses much of what even skeptics ought to acknowledge the group has accomplished. Throughout much of the modern history of the timber wars, the logging industry has appeared inflexible and unrepentant, pushing for continued clearcutting, attacking the very existence of the ESA, and casting environmentalists as ecological misanthropes bent on putting workers out of business.²⁴⁰ The debates, not surprisingly, have been strikingly polarized. Steven Yaffee, in a series of compelling examples, quotes a staffer from an Oregon environmental organization describing loggers as little better than Neanderthals,²⁴¹ and recounts stories of logging communities, perhaps bent on conforming to this stereotype, seeking to ban *The Lorax* from schools.²⁴² Within such a polarized environment, suspicion is the norm, the trust necessary for

240. See YAFFEE, *supra* note 2.

241. *Id.* at 180 (“I think that we need to find some forms of job retraining, and perhaps ways to educate them. Bring them up so that they can spell, talk, and get along like the rest of us.”)

242. *Id.* at 198.

seeking creative solutions is highly improbable, and bloody political battles are all but guaranteed.

The QLG took huge steps toward finding an alternate way of solving problems. It included environmentalists within its ranks and gained industry support for a proposal originally drafted by environmentalists.²⁴³ Rather than calling for the abolition of environmental controls, it engaged both sides in debates that assumed the validity of the underlying legal constraints and instead focused upon the manner in which legal obligations and economic needs could be reconciled.²⁴⁴ Finally, even if QLG was exclusive of outside interests and participation, it did manage to create at least one small area of understanding in what has been an overwhelmingly contentious battle. In short, dismissing the QLG as a creature of the logging industry leaves out much of its importance and value.

The QLG's version of events leads to a similarly incomplete view of the circumstances. After reading the QLG's self-told history, it is difficult not to view the group as an irresistible underdog, and it seems almost heartless to suggest that, despite all of its efforts, it should not achieve its goals. It is tempting, upon hearing this narrative, to suggest that the applicable rules ought to be bent, if necessary, in order to accommodate all of the QLG's hard work.

To give in to this temptation, however, would be to ignore the fact that existing legal limitations were always an understood constraint upon the QLG's efforts. The applicable legal regime predated the QLG's formation, and the HFQLG Act itself, while clearly reflecting Congressional intent that the Pilot Project take place, is explicit that the

243. See Terhune & Terhune, *supra* note 55; Friends of Plumas Wilderness et al., *The Conservationist Alternative to the Plumas Forest Land Management Plan* (1986), available at <http://www.qlg.org/pub/archive/archivemisc/fpwconalt.htm> (last visited September 26, 2002).

244. Gripes about the legal framework are notably absent from almost all of the newspaper coverage of the QLG, and the QLG's self-told history, *see* Terhune & Terhune, *supra* note 55, conveys no sense that the QLG wished to avoid compliance with the applicable legal framework. The QLG has intense disagreements with the Forest Service and environmentalists about what ought to be done to comply with those laws. *See, e.g.*, QLG Appeal of the SNFPA Decision, *supra* note 79. Nevertheless, the debate in Quincy has been notably without "I Like Spotted Owls—Fried" bumper stickers or other messages implying rejection of environmental laws and values. *Cf.* YAFFEE, *supra* note 2, at xi.

The difference, despite allegations to the contrary from environmental groups, does not appear to be merely rhetorical. The QLG has demonstrated some willingness to work within the framework of the environmental legal structure. First, in 1995, after the Salvage Logging Rider passed (exempting some logging from environmental controls), the Forest Service sought bids on a salvage timber sale in environmentally sensitive habitat in the QLG area. None of the logging companies with QLG representation offered bids, and ultimately the Forest Service bowed to QLG pressure and withdrew the sale. *See* Terhune & Terhune, *supra* note 55; Christenson, *supra* note 52. More importantly, the HFQLG Act did not follow the example of the salvage logging rider and exempt its project from other environmental controls. *See* HFQLG Act § 401(c)(3) (1998).

project would not escape restrictions imposed by other environmental laws.²⁴⁵ Similarly, the Act specifies that updated management guidelines for owls and other sensitive species will displace the guidelines used in the Act.²⁴⁶ Thus, no matter how sympathetic the QLG's story may be, the underlying legal fact has always been that the QLG plan would only be viable if it could be reconciled with current scientific knowledge. No matter how justified the QLG's criticisms of the Forest Service's actions may be, if the Framework's science is accurate, outrage at bureaucratic bullying and intransigence is somewhat beside the point. Similarly, if the QLG's efforts failed to produce a scheme that comports with current scientific understanding, the QLG's frustrations, while understandable, are better directed at past mismanagement, and perhaps at the current legal regime, than at the agency making decisions in accordance with that regime's requirements.

At a deeper level, the creative role of conflict is missing from much of the QLG narrative. The story the QLG tells is one of symbiosis. In the QLG's win-win version of events, the logging industry will become an ecologically beneficial actor, selecting mostly smaller trees, promoting habitat re-growth, and reducing fire danger, all at a profit.²⁴⁷ The story of the community is similarly symbiotic; the days when Jackson could be forcibly expelled from a bar seem long since past, and one of the group's most striking qualities continues to be its unity.²⁴⁸ The group seems to stand for the principle that if both sides could just sit down for a long time and talk quietly, far more common ground could be found. The Forest Service's current efforts to promote the QLG project, without addressing the scientific and legal conclusions that led the Forest Service to modify it, suggest a belief that because of such symbiosis the group's proposal deserves a better shot at surviving and, perhaps, should be incorporated even if it cannot be reconciled with current scientific knowledge.

This story overlooks the possibility that the symbiosis is a product of the same harsh scientific/legal constraints the Forest Service now may be ignoring. The Quincy Library Group was born out of intense conflict between loggers and environmentalists, and only when Jackson and Blum had effectively stopped clearcutting did industry advocates come to support a proposal they had previously rejected.²⁴⁹ While consensus may

245. HFQLG Act § 401(c)(3) (1998).

246. *Id.*

247. *See, e.g.,* Terhune & Terhune, *supra* note 55 (“[The QLG proposal] attempts to reflect the fact that a healthy forest and a stable community are interdependent; we cannot have one without the other.”).

248. *See* Michael Jackson, e-mail to author, April 9, 2001 (“Quincy is much more of a community since the advent of the QLG; people are much more can-do.”); Jackson Interview, *supra* note 81 (stressing that, despite the QLG's recent decision to suspend regular meetings, the group was still unified).

249. *See* Christenson, *supra* note 52.

have replaced conflict within the group, the ever-present opposition of outside environmental groups, including the threat of litigation, maintained pressure upon the QLG, providing a constant reminder that the Pilot Project would need to provide genuine protections if it were to survive.²⁵⁰ The symbiosis, cooperation, and unity within the group may have been real, but it is counterintuitive at best to suggest that the largely logging-aligned slate of membership would have retained as much concern for the fate of spotted owls if powerful outside forces had not continually commanded attention. If it attempts to insulate the group's proposal from those forces by elevating the QLG plan in spite of contrary legal and scientific conclusions, the Forest Service may provide the group a temporary reprieve as a reward for its efforts, but it will undermine the same political forces that created the balance of power partly responsible for the group's successes.

B. *Retelling the Framework Story*

The Framework's story could also use some re-telling. The real Forest Service is probably neither the Kafka-esque villain of the QLG's narrative nor the ecologically sensitive expert presented on the face of the Framework. Instead, it is a large and complicated agency beset with internal tensions, burdened by the ecological consequences and credibility problems created by past mismanagement, and facing difficult scientific decisions, all in the context of an unforgivingly complex legal regime. Under such circumstances, a healthy skepticism toward the Service's work is requisite, and the presence of vocal, articulate critics from all sides of the political spectrum is highly desirable. Moreover, as the Forest Service continues to experiment with relatively new concepts like ecosystem protection, adaptive management, and proactive protection of species, the presence of a public forum in which to evaluate and debate the wisdom of its chosen policies will remain essential. Thus, just as the ever-present threat of environmental litigation may actually have helped the QLG to develop more environmentally progressive

250. QLG members have acknowledged the role of conflict in initiating the process. The Terhunes' paper, for example, notes that

any QLG member's list of key elements [to the group's early success] would probably include . . . a shared sense of desperation at the beginning. It was generally felt that if this effort failed, all parties would suffer great losses, and the remnants of that feeling still provide strong motivation within the group.

Terhune & Terhune, *supra* note 55. Similarly, Bill Coates noted the importance of having outspoken environmentalists within the group, and stated that many other community groups with whom he had spoken seemed hamstrung by an absence of vocal and local environmental involvement. Coates Interview, *supra* note 19. Neither of these accounts, however, contains any hint that outside pressures might have contributed to the group's ability to maintain unity around more moderate positions than it otherwise might have selected.

solutions, the constant criticism from both the QLG and environmental groups will likely continue to help an imperfect Forest Service become a better manager.

Nevertheless, ultimately the Forest Service is the manager designated by law, and it does hold an impressive amount of expertise, despite its admitted gaps in knowledge. Moreover, it exercises that expertise pursuant to a legal process that, while unwieldy and costly, has the benefit of provisions designed to ensure careful consideration and create transparency. Accordingly, while debate and criticism are essential to the Forest Service's decisionmaking process, the Service's flaws do not merit an abdication of its decisionmaking power. Likewise, when the Forest Service attempts to exercise its power in accordance with that decisionmaking process, frustration with the result merits further debate, ongoing criticism, and possibly even litigation. It does not merit a subsequent top-down revision of the decision through a process hidden from public view.

This alternative view of the history of the QLG and the Framework is less dramatic but is also less likely to lead policymakers astray. In this view, the QLG made an innovative and courageous attempt to address a previously intransigent problem. Its project faced long odds throughout, for the group's task—reconciling the needs of a damaged environment with those of the logging economy—could succeed only to the extent that the plan satisfied a strict legal regime's environmental protection requirements. Ultimately, scientific research compiled by the Forest Service arguably suggested that a significantly different management choice would better meet those ecological needs, and, entirely in accordance with the HFQLG Act, the Framework imposed a partly new scheme. In this version of the story, it is those scientific and legal conclusions, and not the human drama, that would define the boundaries of permissible options, and upon which a decisionmaker should base its policy decisions.

C. An Alternate Model

The resource management dilemmas of the Sierra Nevada will likely recur elsewhere in the coming years, as conflicts between federal laws and local needs and between environmental and extractive interests continue. The dispute between the QLG and the Framework's advocates ought to offer guidance for the decisionmakers involved in those future situations. Based on the QLG/Framework story, this Section suggests an alternative model for deciding such conflicts, one in which prescriptive laws, science, political stories and values, and community groups all can play important roles.

1. *Integrating Science, Stories, and Law into Decisionmaking*

This analysis has suggested that policymakers court disaster by placing too much emphasis on politics when making what applicable laws require to be a science-based decision. The agency may find its decision successfully challenged in the short term, especially if its own experts become witnesses against it.²⁵¹ If current scientific knowledge is uncertain, however, the agency's decision probably will survive short-term challenge but will be less likely to succeed when put into practice. This failure may result in damage to resources and successful legal challenges that change policy through the blunt instrument of judicial intervention.

The alternative is for agencies, community groups, and any other policymaking body involved in such resource decisions to do the hard and often frustrating work of trying to understand what decision space current scientific knowledge permits. These questions almost always will be difficult to answer;²⁵² the Framework's incessant use of the word "uncertainty" captures the difficulty agencies may face in trying to determine the range of scientifically permissible courses of action. Nevertheless, by answering these questions, decisionmakers will maximize their chances of selecting legally tenable management options. By keeping management out of the courts, decisionmakers will ultimately increase their own discretion, flexibility, and adaptability.

By identifying the range of permissible options, policymakers will also determine the appropriate role of questions of politics and values in the policymaking process. If the scientific/legal framework leaves open a wide range of options, a primarily political decision may be entirely appropriate. Even if the options left open by the scientific/legal framework are somewhat narrow, our political values can and should play a vital role in deciding which of several similar options we will select. If, however, the scientific/legal framework suggests that only a limited range of options, or even one option, has a good chance of succeeding, decisionmakers should not ignore those constraints and select an alternative scheme. If they do, the result is unlikely to uphold the values embodied within that scientific/legal framework, and, if legally challenged, may wind up doing more harm than good to the values the decisionmakers initially hoped to promote.

251. See YAFFEE, *supra* note 2, at 112–13.

252. The literature on the difficulty of making these science-based decisions is ample. See, e.g., Doremus, *supra* note 216 (discussing the problems with calls for better science as the basis for better Endangered Species Act decisionmaking). In some situations, however, the value we place upon species or ecosystems will require us to push the limits of our scientific understanding, and to translate that nascent scientific understanding into law. In those situations, a policymaker that wishes to remain true to the goals of the law will have little choice but to wade into the uncertainty and do its flawed best.

2. *The Role of Community Groups in This Decisionmaking Model*

Within this process of science-first decisionmaking, community groups still could play an important role. Local knowledge ought to help inform scientific awareness, in turn aiding policymakers in identifying the scope of acceptable management options. Similarly, when decisions do turn on values, local input can play a major role in determining policy choices. Additionally, if local groups are constrained by watchful outside forces and a protective legal framework, both of which can guard against an overly extractive focus, involvement beyond public participation in the normal NEPA/NFMA administrative process could be helpful.

Commentators often describe the interplay of federal environmental laws and local decisionmaking in terms of conflict. Local groups are seen as desiring extraction at the expense of the values those laws seek to uphold,²⁵³ and the laws are often portrayed as insensitive to local economic needs.²⁵⁴ Similarly, the relationship between the Quincy Library Group and outside environmental groups is described on all sides as adversarial.²⁵⁵ Nevertheless, out of all this tension a mechanism for effective local decisionmaking may already have begun to emerge.

The common critique leveled against local decisionmaking bodies is that they are not representative. Critics charge that they will favor local, extractive concerns at the expense of national interests and without regard to cumulative effects.²⁵⁶ Similarly, critics charge that the absence of effective environmental opposition within the groups necessarily compromises their decisionmaking, removing a vital perspective from the process.²⁵⁷ In some situations, however, whether the group realizes it or not, those environmental interests have a seat at the table. The existence of strong federal environmental laws, combined with the presence and awareness of environmental groups willing and able to sue, can provide a constraint upon local decisionmaking processes even if the room is entirely occupied by miners or loggers. Even a local group dominated by pro-extraction forces would be wise not to ignore those constraints.

This description sounds myopic. The local group may not understand the constraints imposed by environmental law, and it may make its choices in ignorance of their potential legal consequences.²⁵⁸ More likely,

253. See, e.g., Axline, *supra* note 86; McCloskey, *supra* note 84.

254. See, e.g., Coates Interview, *supra* note 19 (lamenting that the laws constraining forest management seemed to prevent the locals who wanted to help the forests from getting anything done).

255. See, e.g., Wilderness Society, *supra* note 82; Marston, *supra* note 53.

256. See, e.g., Axline, *supra* note 86.

257. See, e.g., Axline, *supra* note 86; McCloskey, *supra* note 84.

258. The presence of Jackson and Blum helped the QLG better understand the applicable scientific/legal regime, and the presence of vocal environmentalists within any group certainly is likely to promote some understanding of environmentalists' perspectives. See Coates Interview,

the local group may find those laws objectionable, and choose simply to ignore them. The Pacific Northwest's experience, however, suggests that a local group ignores those laws at its own peril. Ultimately even powerful, politically well-connected actors, let alone community groups, may be forced by lawsuits to chart a course toward legal compliance.²⁵⁹

The experience of the Quincy Library Group suggests that another outcome is at least possible. The QLG has engaged the scientific and legal debate, and it explicitly included within its Act a provision ensuring compliance with other environmental laws.²⁶⁰ It has disagreed, vehemently at times, with the conclusions of both the Forest Service and establishment environmentalists on the proper application of those laws.²⁶¹ But these disagreements are of a different sort than those feared by most critics of local decisionmaking, for they involved loud, vocal, public, and thus fundamentally democratic debate rather than hidden attempts at avoidance and circumvention.

For this model of local involvement to work, several ingredients are necessary. The first is a legal regime providing strong constraints. The second is the presence of forces, public or private, willing and able to enforce that regime. The third is a local group willing to engage the debate. The fourth is a decisionmaker with a thorough respect for both the value of participation and the limitations imposed by the legal regime. The local group often will be in some tension with the legal regime and its

supra note 19. Nevertheless, although the legal/scientific regime can be extremely complicated, the sophistication of debate at QLG meetings and the political savvy of the group as a whole both suggest that Jackson and Blum are not the sole sources of such understanding, and that other community groups might, through determined effort, achieve a similarly impressive understanding of the limitations imposed by the applicable legal regime.

259. See YAFFEE, *supra* note 2, at 134–35 (summarizing judicial and Congressional criticism of the Reagan and Bush administrations' failures to find legally tenable northern spotted owl protection policies).

Congressman Bruce Vento (D-MN) argued that "We are losing jobs because the past two administrations have refused to allow the Forest Service and the Bureau of Land Management to follow the environmental laws." Jim McDermott (D-WA) claimed that "The administration has been willing to systematically violate the law to lose one court decision after another, rather than help find solutions."

Id. (citations omitted). Shortly after Blackwell released his implementation plan, Michael Jackson expressed a related concern. He suggested that the Framework, with strategies that he views as unwise in their emphasis upon preservation and their distrust of logging, represented overreaching by the environmental establishment during a period when it was at the height of its power. Now, with those groups on the defensive and extractive industry again influential, Jackson expressed concern that the pendulum would swing too far the other way, and that overly aggressive extraction and insufficient protection might become the new policy. He cautioned that the life cycle of forests far outlasts political swings, and that groups would do far better to seek a lasting policy acceptable to both sides than to fully exploit their ephemeral power, only to lose their gains and the possibility of continuous policy when their political influence diminishes. Jackson Interview, *supra* note 81.

260. See *supra* note 244 and accompanying text.

261. See QLG Appeal of the SNFPA Decision, *supra* note 79.

potential enforcers, and political forces may be tempted to upset the balance of power to favor one side or the other. This may be especially true in the current political climate, where conservative sympathy for political decentralization often tracks with distaste for strong environmental regulation. Nevertheless, if the powers that be can forgo the temptation to alter the political balance, they may preserve a situation in which local groups can make valuable contributions to resource management decisions.

CONCLUSION

In deciding on a management scheme for the Sierra Nevada, the Forest Service faces a difficult choice. Upon review, it may find that the scientific/legal regime permits a broad range of possible policy outcomes. In that case, it may be entirely appropriate to decide policy partly based on non-scientific values—the battle of the stories appropriately could, within that more limited range, prove determinative. The problem, however, is that the battle of the stories is exceedingly accessible. Any political decisionmaker, regardless of his or her knowledge of the Sierra Nevada, is likely to have general predispositions about which of these stories he or she is inclined to believe, and it is these strong opinions, rather than an intensive review of the scientific record, that may drive the ultimate decision. But to use those stories to attempt to extend the boundaries of what is scientifically/legally permissible is to invite a legal disaster.

There is some legitimacy to making decisions based upon the political appeal of competing stories. Those stories raise fundamental questions about the proper balance of local, regional, and national control, and implicate deep philosophical questions about our proper relationship with the land. All of these questions are of vital importance and are appropriately debated at every level of the political process. The problem occurs when this debate obscures the fact that buried within the complicated web of scientific probabilities and predictions and uncertainties there is legally crucial information. The complexities of the underlying facts may tempt policymakers to resort to ideology as the ultimate decisionmaking tool. No matter how appealing they may be in the abstract, however, policies based solely on philosophical leanings are likely to fail where the legal regime demands scientific justification.

Instead of resorting to the battle of the stories, the Sierra Nevada decisionmakers should consider management strategies using a more complicated process. A model in which science and law determine policy may be overly simplistic, although the agency should take a long, hard look at the science and law before so concluding. A black box containing science, law, and, where those factors allow it, flexibility based on philosophy and political values, however, would be an appropriate tool

for resolving the issue. Such an approach would be complex, challenging, and difficult to evaluate. Nevertheless, ecosystems and economies are complicated, and in order to live with them we may have no choice but to employ complicated decisionmaking processes.

By attempting to use this decisionmaking process now, we may avoid a situation in which a species hovers nearer extinction or a forest goes entirely up in smoke. Such a crisis might simplify the decisionmaking process—the starkest need would trump all others—and might save the difficulty of deciding between so many possible interests. Nevertheless, crisis-based decisionmaking will do little to maintain the range of uses and values the forests provide, and will thwart the higher goal of proactive planning, to which both the QLG and the Forest Service swear devotion. To truly maximize the benefits of our forests, we have little choice but to deal with the complicated interplay of science, policy, law, and stories, and search for an option that best sustains the basic ecological and human values we seek to uphold.