WILDERNESS POLICY

The Wilderness Act of 1964 and the Wilderness Preservation Policy Network

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The U.S. Wilderness Act of 1964 is viewed as the result of pluralist politics, with a coalition of environmental groups taking the political lead in the formation and enactment of this legislation. The Wilderness Society and its executive secretary, Howard Zahniser, are particularly credited with formulating the Wilderness Act and cultivating the political coalition among environmental groups that led to the passage of this legislation.

The Wilderness Act of 1964 codified a policy of classifying certain federal lands as "wilderness areas" In these lands, roads and other permanent artificial structures are prohibited, and timber harvesting and motorized vehicles are forbidden. Mining activity is also restricted and if permitted is meant to be closely regulated. Thus, the Wilderness Act is the legal foundation for a policy that withdraws tracts of federal land from aspects of the modern economy (e.g., automobile driving and timber harvesting) and seeks to limit potentially profitable mining.

Despite the anti-modern and anti-profit provisions of the Wilderness Act and the wilderness policy that flows from this legislation, the formulation and enactment of the Wilderness Act is an example of elite economic theory in action. This legislation was the product of an economic elite-led wilderness preservation policy network. Laurance S. Rockefeller was a salient figure in this network and in the passage of the Wilderness Act. The Wilderness Society and Zahniser were within the Rockefeller policy network. This network had a significant interface with the Save-the-Redwoods League, an economic elite-led wilderness preservation.

The dominant role of economic elites in the shaping and enactment of the Wilderness Act explains why it and the policy it spawned are flawed instruments for protecting the environment. As a result of economic elite dominance, the ideas underlying the creation of the Wilderness Act of 1964 were firstly, a notion of wilderness as recreational opportunity, and secondly, a conception of wildlife protection that emphasized the preservation of wilderness that has special scientific or aesthetic qualities. This ideation contrasts with scientific concepts of wilderness preservation that stress the protection of ecosystems and biodiversity. U.S. wilderness preservation policy is flawed because protected wilderness is bureaucratically and ecologically fragmented. Moreover, U.S. wilderness protection policy is not intended to protect biodiversity.

Economic Elite Theory

According to the economic elite perspective, an economic elite exists within the United States that is composed of decision-makers within large corporations and of other persons of substantial wealth. These actors are integrated into a cohesive elite through social clubs, interlocking directorates (of both private and public organizations), policy discussion groups, and inter-marriage. Altogether, the economic elite compose roughly 0.5 to 1 percent of the total U.S. population.

According to this theory, the economic elite is the most important factor in the development of public policy. The economic elite can participate more effectively in the policy-making process than other groups, because the most important political resources are wealth and income, which can be readily converted into other important political resources, such as social status, deference, prestige, organization, campaign finance, lobbying, political access, legal expertise, and scientific expertise.

Members of the economic elite often produce political change through the operation of policy networks, which are composed of members of the economic elite, "like-minded" intellectuals, high-level civil servants, and scientists. These networks will often have significant intersections and overlap with policy discussion groups in the form of shared members, consultants, professional staff, and research grants that are "mission oriented." Contemporary examples of policy discussion groups are the Business Roundtable, the Council on Foreign Relations, and the Save-the-Redwoods League. Such discussion groups offer venues through which members of the economic elite can develop specific policy ideas that are technically sound and compatible with existing state capacities. They are also venues through which policy networks can disseminate their policy ideas among the economic elite, and hence, develop a policy consensus.

According to economic elite theory, economic elite-led policy networks have key points of access to the policy-making process within the state. Members of the economic elite, for instance, will often directly lobby Congress and the executive bureaucracy on behalf of ideas developed within their respective network. The most direct means that the corporate community and policy networks have of impacting the public policy-making process is through the governmental appointment process, whereby members of economic elite-led policy networks get appointed to policy-making positions within government.

The Early Wilderness Society

The Wilderness Society was founded in 1934 for the express purpose of protecting pristine wilderness. The individual most responsible for establishing the Society was Bob Marshall. While a number of wilderness advocates supported its founding, it was Marshall who provided the money to sustain the Society. A forester by training and employee of the U.S. Forest Service, Marshall had access to his father's fortune. (Marshall's father, Louis B. Marshall, was a corporate and constitutional lawyer.) Bob Marshall covered the Society's initial expenses, and upon his untimely death in 1939, at 38, he endowed the Robert Marshall Wilderness Trust. Throughout the 1940s, 1950s and into the early 1960s, the bulk of the Trust's income went to the Society. This allowed the Society to have a full-time staff—most importantly an executive secretary, a position Zahniser held from 1945 to 1964.

The Society's first executive secretary was Robert Sterling Yard, who by the 1920s was part of an economic elite-led policy network. Yard began his career in wilderness politics as a public relations specialist in the National Park Service. When the Park Service was

created in 1916, Stephen Mather, who had made millions mining and processing borax, was appointed as its head. Mather paid Yard's salary himself and brought him into the Service to publicize the national parks and generate enthusiasm and tourists for them.

In 1919 Yard became head of the National Parks Association, which was created by Mather. (This organization's current name is the National Parks Conservation Association). The arrangement under which Mather paid Yard's salary as an employee of the National Park Service was prohibited by a 1918 federal law. So after an initial monetary gift from Mather, the National Parks Association was created with Yard as its executive secretary. One of the organization's original vice-presidents was California millionaire William Kent, and the Association's founding treasurer was Washington, D.C. businessperson Charles J. Bell. (As outlined below, economic elites in significant numbers have historically vacationed in wilderness areas, and taken leading and active roles in wilderness preservation efforts).

While the National Parks Association's initial purpose was the promotion of the national park system, it soon became a self-proclaimed protector of this system. It sought to protect the national park system from both putatively inferior additions and excessive development. Yard, himself, became very vocal on these issues.

On the issue of development of the national parks, numerous wilderness advocates, including those in The Wilderness Society, were united. By the 1920s various critics started to assail the National Park Service for its pro-tourist policies. When the service was created, Director Mather sought to maximize tourist traffic to the national parks. He did so in conjunction with the railroads and the local economic interests that served the national parks. With the declining cost of the automobile and the public's growing confidence in it during the 1910s and 1920s, larger and larger numbers of national park visitors used their vehicles to travel to the national parks. The National Park Service responded by rendering areas throughout the national parks automobile accessible. According to a historian of The Wilderness Society, the expansion of roads into heretofore remote regions of the country spawned the wilderness movement in the U.S.

There are two different main objections to the introduction of automobiles to wilderness areas throughout the country. One set of wilderness proponents view pristine wilderness as a recreational opportunity and object to roads and automobiles in wilderness areas because they undermine the recreational value of these areas. The second objection is rooted in scientific rationale. Historically, there have been two putatively scientific bases to pursuing wilderness preservation (see Table 1).

Traditional Wilderness Preservation	Modern Ecosystem Science
Public Policy Prescriptions	Public Policy Prescriptions
Protection of Wilderness Areas with Recreational and/or Aesthetic Values, as well	Protection of biodiversity through the preservation of diverse, coherent ecosystems.

Table 1Approaches to Wilderness Protection

as those flora and fauna deemed of aesthetic and/or scientific importance.	
Institutional Support Most prominently the Save-the-Redwoods League.	Institutional Support Universities, research centers, certain environmental groups (e.g., modern Sierra Club).

The earliest approach emphasized the protection of specific species of wildlife deemed to have important aesthetic or scientific value. The second, and more modern, approach is centered on ecosystem, or ecological, science. These different scientific conceptions of wilderness preservation have led to sharp political divisions, a division that became most evident in the fight to create the Redwood National Park in the 1960s.

Wilderness as Recreational Venue

With urban centers throughout the late 19th and early 20th centuries highly congested and frequently polluted, wilderness excursions were used to escape urban environs. Early wilderness clubs, such as the Boone and Crockett Club, were formed in significant part to help its members enjoy the wilderness experience. Many of these wilderness connoisseurs opposed the automobile in otherwise pristine areas because roads and traffic undermined the wilderness experience.

Many perceived spending extended periods of time in pristine wilderness as an opportunity to live as true "individuals," as well as for men to cultivate their manliness and for women to enhance and demonstrate their womanly skills (i.e., cooking, cleaning, keeping "house") in primitive conditions. Along these lines, the idea developed that expanses of pristine wilderness served as a basis for a virtuous, well-ordered republican society. Throughout its history, The Wilderness Society has promoted not only the recreational values but also the social and national benefits of pristine wilderness.

A significant number of pristine wilderness enthusiasts have historically had upperand upper middle-class backgrounds. For example, between the Hetch Hetchy controversy of the 1910s and the Echo Park battle of the 1950s, the prime function of the Sierra Club was arranging wilderness excursions for its membership, much of which was drawn from the San Francisco business community.

Paul Robbins and April Luginbuhl point out that today hunters are a large component of wilderness connoisseurs in the U.S. West, a significant segment of which is composed of "wealthy out-of-state hunters." Political scientist Timothy Luke argues that the National Wilderness Federation, a prominent pro-wilderness lobbying group, serves as representative for those firms that profit from hunting and fishing excursions. Luke asserts that the Federation's agenda is "tied to . . . the corporate interests that benefit from supplying, transporting, and supporting hunters and fishers in the wild."

Wilderness Science and Wilderness Preservation Politics

Traditional Wilderness Conservation

Yard and other pro-wilderness advocates promoted the idea that only areas with special scientific or scenic qualities should be permanently set aside as national parks, a view of wilderness preservation best typified by the Save-the-Redwoods League. The League, founded in 1917 by three scientists, has historically sought to preserve portions of the coastal redwood forest that runs along the northern California coast, from the Bay Area to the Oregon border.

Historian Susan Schrepfer outlines how the League throughout its history has drawn its leaders from the corporate community and the upper class. It has a council which is responsible for choosing its board of directors. Between 1920 and 1939, the League had 79 councillors. Schrepfer analyzed the background of each one. Ten were female, of which one was an easterner and the rest were wealthy residents of Los Angeles and San Francisco. They were all active in women's civic organizations such as the Garden Club of America and the California Federation of Women's Clubs, both of which contributed to the League. The 69 male councillors during this period were prominent professionals or businessmen from industries such as banking and manufacturing. Schrepfer describes the businessmen as "prosperous pillars of the community—university regents, college controllers, and corporate directors."

Because the council is responsible for reelecting its members and choosing replacements when there is a vacancy, the League has been able to maintain a high level of economic elite participation on its council throughout its history. Schrepfer argues that "as intended by its founders, the organization's closed internal governance . . . provided stability." She goes on to assert that "this stability made for moderation, as did the tendency for the council and board to be increasingly dominated by businessmen and patricians, while fewer academics were drawn into the organization's leadership in the 1950s and 1960s."

Today, economic elites such as Richard Goldman, president of the Richard and Rhoda Goldman Foundation, which has an endowment of \$400 million, are League Councillors. Richard C. Otter, another League Councillor and chairman of the League's Board of Directors, is senior vice-president of the banking behemoth Citi Smith Barney. Another economic notable currently on the League Council is Dale Didion, founder of the Didion Group and former senior vice-president of the major marketing firm Fleishman-Hillard, as well as a former senior managing director of Hill & Knowlton, a highly influential legal, lobbying, and public relations firm with a long list of major corporate clients, including the commercial airline manufacturer and military contractor, Boeing; the American Petroleum Institute, the oil and natural gas industries' main trade association and lobby group; the chemical giant, DuPont; and Weyerhauser, one of the world's largest pulp and paper companies. Also on the League council is Stephen McPherson, president of ABC Entertainment, part of the Disney multimedia conglomerate. League Councillor Robert E. Mellor is CEO and President of Building Materials Holding Corporation, a chain of building materials outlets, and director of Ryland Group, Inc., a Forbes 400 "Best Big Companies" home building firm. League Councillor Bruce A. Westphal is president of Balco Properties, a California real estate firm, and from 1999 to 2008 served as director of Central Garden & Pet, a leading producer of garden and pet supplies.

The-Save-Redwoods League also maintains ties to the wilderness preservation community through its Board of Councillors. Terry Garcia, an executive vice-president of National Geographic, is a councillor, as is Joe Engbeck, who also sits on the board the Claremont Canyon Conservancy.

Contemporary Wilderness Science

By 1935 a different scientific view of wilderness protection began to emerge. Significantly, one of The Wilderness Society's founding members and charter signatories, Aldo Leopold, helped pioneer this new approach to protecting wilderness and wildlife. This view emphasizes ecosystem protection. Leopold, however, entered wilderness politics as a high-profile proponent of the recreational value of pristine wilderness.

In the 1910s and 1920s Leopold became one of the most prominent advocates of exempting significant tracts of wilderness from any type of development for the purpose of allowing a "total" wilderness experience. As an employee of the U.S. Forest Service during this time, Leopold spearheaded the service's policy of proscribing road building (or any form of development) from vast areas of the national forests. In a series of articles promoting and defending the forest service's wilderness protection policies, he acknowledged that those who desired long periods of time in pristine wilderness free from the vestiges of modernity were a small minority. Nonetheless, he argued that there was enough wilderness in the U.S. that the desires of this minority could and should be met.

At the time, the forest service policy of setting aside large tracts of wilderness could be pursued without significant political controversy. The national timber market was glutted, and the forest service limited timber harvesting in the national forest throughout the first half of the 20th century, a policy that continued until after World War II. Historian Paul Sutter explains that the forest service leadership was concerned in the 1920s that if more and more of the national forests were turned over to automobile-spawned recreation, the focus of the service and the national forests would increasingly shift away from forestry and toward recreation.

In 1933, after Leopold left the forest service, he took up a professorial position at the University of Wisconsin in the field of game management, the first such position in the U.S. That year he published a seminal work in this field, *Game Management*. Here Leopold argues that in order to adequately protect wildlife, public regulations and management practices must go beyond public lands and apply to private lands.

In the maiden issue (published in 1935) of *The Living Wilderness*, the magazine of The Wilderness Society, Leopold authored an article entitled "Why The Wilderness Society?" where he eschews any specific discussion of recreation: "the recreational value of wilderness has been set forth so ably by . . . others that it hardly needs elaboration at this time." Instead, he argues that the "scientific values" of wilderness "are still scantily appreciated, even by members of the Society," and that while "these scientific values have been set forth in print," thus far "only in the studiously 'cold potato' language of the ecological scientist."

Leopold stresses that the need to gain a scientific, or ecological, understanding of nature is "both urgent and dramatic." He proposes a holistic and systemic comprehension of nature and humanity's treatment of it:

The long and the short of the matter is that all land-use technologies—agriculture, forestry, watersheds, erosion, game, and range management—are encouraging unexpected and baffling obstacles which show clearly that despite superficial advances in techniques, *we do not yet understand and cannot yet control* the long-time interrelations of animals, plants, and mother earth.

Leopold concludes his article by asserting that the creation of The Wilderness Society is a political statement on the need to protect the environment in the U.S. from deleterious treatment. He reasons that the society "is, philosophically, a disclaimer of the biotic arrogance of *homo americanus*. It is one of the focal points of a new attitude—an intelligent humility toward man's place in nature."

In *A Sand County Almanac*, his best known work, published in 1949, the year after his death, Leopold conceptualized natural environments as highly interactive and integrated ecosystems that require a certain amount of space to operate and remain viable. In virtually every ecosystem, all species have key and specialized roles. Therefore, all plants and animals have ecological importance regardless of whether they draw specific aesthetic or scientific attention.

Science historian Sharon Kingsland notes in her book, *The Evolution of American Ecology, 1890-2000*, that by the 1950s ecology was an established scientific "discipline" in the U.S, and "ecosystem ecology" during this period was "funded largely by government agencies." Another historian of science, Frank Golley, explains in his volume, *A History of the Ecosystem Concept in Ecology*, that in the U.S. during the post-World War II period, "the ecosystem concept appeared to be modern and up to date" and that thinking of nature as a system "dominated the immediate postwar years." Historian Donald Worster, in *Nature's Economy: A History of Ecological Ideas*, concurs, pointing out that "ecology achieved intellectual sophistication, academic prominence, and financial security in the postwar years." Worster explains that the "subfields" of ecology included "ecosystematists," "theoretical modelers," "forest and range managers," and "biogeographers."

Ecological Science and the Sierra Club

Under the leadership of David Brower, the Sierra Club during the 1950s and 1960s came to adopt Leopold's conception of nature and wilderness protection. Brower became executive director of the Club in 1952, the Club's first. As a result of the Echo Park battle, Brower gained national stature, and the Club became a mass-based organization with a significantly expanded membership. The Club's board of directors also significantly changed. Unlike the Save-the-Redwoods League, the Sierra Club's board members are chosen by the general membership, and Brower succeeded in having many individuals nominated and elected to the board.

These new board members embraced an ecological approach to wilderness protection. Schrepfer points out that many of the Club's board members by the 1960s had significantly weaker ties to the corporate community than did the former board members. The new group of Club board members was generally younger, and none had the strong, professional business ties that old guard board members Richard Leonard, Bestor Robinson, or Alex Hildebrand had.

When the fight to create a national park in the coastal redwood forest came to a head in the mid-1960s, the club put forward a park proposal designed to maximize ecosystem protection. In contrast, the Save-the-Redwoods League was motivated by traditional conservation principles. The League's proposed national park would round out the Jedediah Smith Redwoods State Park and the Del Norte Coast Redwoods State Park; a proposal that would convert the entire 42,000 acre Mill Creek watershed into a national park, much of which was already state park land.

Building upon a Park Service plan for a national redwood park, the Sierra Club proposed a much more ambitious park plan. In 1964, the Park Service proposed a 56,000 acre park that would run along the Redwood Creek and encompass the Prairie Creek Redwoods State Park. The Park Service rejected the League's smaller Mill Creek proposal in part because the planned rebuilding of the freeways in the area undermined its park "worthiness." The Club gravitated quickly toward the Park Service proposal, but called for an even larger park in the Redwood Creek area, arguing that the entire Redwood Creek watershed should be preserved and encompassed within a 90,000-acre national park.

The different proposals made by the League and the Club reflected their decidedly different concepts of wilderness and its preservation. The League argued that the Mill Creek watershed contained a high-quality redwood forest, much of it already publicly owned. The League also disapproved of the Park Service's proposed park because it alleged that it contained redwood trees of inferior quality and that other species of trees were mixed in with them. In contrast, the large park idea put forth by the Club was designed to ensure biological diversity and the unencumbered operation of ecosystems, not simply preserve just the giant redwood trees. Also, unlike the League, which prioritized technological progress and economic development, by the 1960s many of the Club's leaders began to argue that ecosystems and biological diversity should be treated as more important than technological progress and economic development.

Laurance Rockefeller and U.S. Wilderness Preservation

Laurance S. Rockefeller was prominent both in the creation of the Redwood National Park in 1968 and in the passage of the Wilderness Act of 1964. The Rockefeller family's involvement in wilderness preservation began with Laurance's father, John D. Rockefeller, Jr. Throughout much of John D. Rockefeller, Jr.'s, life he actively and generously contributed to parks throughout the country, giving approximately \$40 million to state and national parks between 1924 and 1960. Some of John D., Jr.'s, most substantial gifts went toward the creation, expansion and/or development of Acadia, the Great Smoky Mountains, Shenandoah, Yosemite, and Grand Teton national parks. In addition, he gave \$2 million toward the expansion of the California state redwood parks.

Laurance (1910-2004) took up his father's wilderness conservation interests, and in addition to philanthropy, assumed a prominent role in a number of conservation and wilderness organizations: the American Committee for International Wildlife Protection, the

American Conservation Association, the Conservation Foundation, the Izaak Walton League, Jackson Hole Preserve, Inc., the National Audubon Society, the National Recreation and Parks Association, and Resources for the Future.

Laurance also maintained relationships with other conservation organizations through associates. Prominent among these associates was Horace Albright, who served as director of the National Park Service from 1929 to 1933. Laurance's biographer, Robin Winks, points out that when Laurance "took over the national park mantle from his father, Albright guided him." Joseph W. Ernst, Director Emeritus of the Rockefeller Archive Center, points out that "until his death [in 1987], Albright served as a conservation advisor to Laurance S. Rockefeller."

Albright was prominently involved in several wilderness groups. He was a board member of the National Association of Audubon Societies, was on the advisory board of the American Game Association, the Conservation Committee of the Camp Fire Club of America, and was an active member of the Boone and Crockett Club and the Sierra Club, and was vice-president of the American Pioneer Trails Association. Albright also served on the Save-the-Redwoods League's Board of Councillors.

It was through the Save-the-Redwoods League that The Wilderness Society came into Laurance Rockefeller's network. Richard Leonard, long-time member and president of the League, had been a council member of The Wilderness Society since the late 1940s.

The Rockefeller family had a longstanding relationship with the League. According to Rockefeller biographers Collier and Horowitz, since the 1920s Newton Drury, executive secretary of the League, was a member of the Rockefellers' "outer circle." As noted earlier, John D. Rockefeller, Jr., contributed \$2 million to help the League preserve the redwoods. Another close wilderness conservation associate of Laurance's was Fairfield Osborn. Osborn's father was a League founder. Laurance's biographer notes that "over the years Osborn and [Laurance Rockefeller] worked together on many projects, from the goals of the Save-the-Redwoods to the development of the Bronx Zoo into a Wildlife Conservation Society." In the effort to create a redwood national park, Laurance "did not agree with the confrontational tactics of the Sierra Club, preferring to work with Richard M. Leonard, the president of the Save-the-Redwoods League, as earlier his father had worked with Newton B. Drury when he was secretary of the League."

During the mid-1950s, Howard Zahniser was a member of the Council of Conservationists, as a leader of The Wilderness Society. M. Frederik Smith led the Council. Smith was also a Laurance Rockefeller wilderness conservation associate. Laurance's biographer described Smith as Laurance's "most trusted advisor on park matters."

As the post-World War II economic boom placed great pressure on the country's forests and wildlife, Zahniser did not adopt a critical stance toward extractive companies. His biographer notes that "Zahniser had no desire to alienate potential supporters by adopting bold positions against . . . natural-resource industries." This position went along with Zahniser's contention that "protection of wilderness could be achieved without restricting economic growth."

The forest service initiated a policy in the post-War period of aggressively harvesting timber throughout the national forests, including in areas formerly classified as wilderness. In response to this policy and the "Mission 66" program, which allowed more intense development in the national parks, Zahniser and The Wilderness Society sought legislative protection for pristine wilderness. Despite Zahniser's challenge to Forest Service policy, he maintained an opinion of "Forest Service officials as dedicated and hardworking; in contrast to many environmentalists of later generations, he had high regard for the agency."

The Outdoor Recreation Resources Review Commission and the Wilderness Act of 1964

During the Eisenhower Administration, in 1958 a Presidential commission, the Outdoor Recreation Resource Review Commission (ORRRC), was formed to assess and predict the U.S.'s outdoor recreation wants and needs and determine how to adequately meet them. The concern underlying the creation of the ORRRC was that the country's population growth was overwhelming the outdoor recreation facilities of the U.S.

Laurance Rockefeller chaired ORRRC, which completed its work by 1962. In his biography of Laurance, Winks reports that Laurance actively shaped the composition of the Presidential Commission and its Advisory Council. M. Frederik Smith was on the six-person Commission, along with Bernard L. Orell, vice-president of the major timber company, Weyerhaeuser. Horace Albright was on the commission's Advisory Council, as was the President of The Wilderness Society, Harvey Broome.

Even though ORRRC was not officially formed until 1959, its operation began in 1958. As Winks notes:

Congress took a year to appropriate funds for the commission's work; rather than wait, [Laurance Rockefeller] drew upon his own funds and brokered effectively with foundations to put a staff into place. He called for an immediate meeting and projected his sense of urgency. He established a liaison in the office of each state governor.

Winks further reports that:

When the commission report was finished three-and-a-half years after the bill creating it, [Laurance]—by then well aware of how Congress could bury any document it did not care to grapple with—created an action group to follow up on [ORRRC's] recommendations, using only foundation money to support it.

ORRRC endorsed The Wilderness Society's idea of setting aside and granting federal regulatory protection for pristine wilderness. The Commission laid out a classification system for outdoor recreation resources. "Class V" lands (out of a total of six classifications) were labeled "Primitive Areas" and defined as "undisturbed roadless areas characterized by natural, wild conditions, including 'wilderness areas."" ORRRC's Recommendation 8-6 avers that: "Congress should enact legislation providing for the establishment and management of certain primitive areas (Class V) as 'wilderness areas.""

ORRRC justified its recommendation for federal protection of primitive areas by emphasizing the recreational qualities of these lands and the value of scientifically unique wilderness:

Primitive areas satisfy a deep-seated human need occasionally to get far away from the works of man. Prompt and effective action to preserve their unique inspirational, scientific, and cultural values on an adequate scale is essential, since once destroyed they can never be restored.

But ORRRC proposed that the "wilderness area" designation only be applied to lands under federal control: "There is widespread feeling, which the Commission shares, that the Congress should take action to assure the permanent reservation of these areas [currently administered as 'wilderness areas'] and similar suitable areas in national forests, national parks, wildlife refuges, and other lands in Federal ownership."

ORRRC went to some length to stress that the legislating of primitive areas does not necessitate the creation of a new agency whose sole purpose would be wilderness protection. ORRRC rejected the idea of an organization that could have overseen the selection and management of protected wilderness—instead leaving it to existing public land management agencies to determine which areas receive the designation of "primitive areas." (Zahniser had at one point proposed a National Wilderness Council to select wilderness areas and to oversee their management.) In a subsection following Recommendation 8-6, entitled CONTINUATION OF PRESENT JURISDICTION (capitalization in original), the authors of ORRRC's summary report explained that:

It should be emphasized that while implementation of the classification system may result in some changes in management policies and practices, *it need not result in changes of present jurisdictional responsibilities among Federal agencies.* The agency charged with the administration of a unit of land would continue, in accordance with the governing legislation, to perform whatever management functions are appropriate to the various recreation classes identified.

To avoid any confusion an example is provided to demonstrate what is meant here: "Thus, when the Forest Service classifies a certain portion of a national forest as a unique natural area (Class IV), it would remain under the control of the Forest Service, even though managed according to the same standards as a comparable area in a national park or monument." The ORRRC concludes this subsection by making an approving reference to the legislation proposed by Zahniser and The Wilderness Society: "This concept is incorporated in pending legislation which provides that wilderness areas will be managed by different Federal bureaus."

ORRRC's endorsement of Zahniser's wilderness legislation was key to its passage. Zahniser's biographer notes that "time and again, interest groups and lawmakers called for delaying the wilderness legislation until the ORRRC completed its work." Senator Clinton Anderson, who chaired the Interior and Insular Affairs Committee and was a leading supporter of the wilderness bill kept it in the Interior Committee until ORRRC came out with its final report in 1961. Wayne Aspinall, chair of the House Interior Committee, also suspended consideration of the wilderness bill until the ORRRC report was released. Secretary of the Interior, Stewart Udall, assented to this action. As part of a broader lobbying effort to bring ORRRC's proposals to fruition, Laurance Rockefeller "spoke out on behalf of primitive areas." The Wilderness Act followed in 1964.

The Implementation of the Wilderness Act

Timber harvesting, roads, and the use of motorized equipment are prohibited in areas designated as wilderness. Under the Wilderness Act, only members of Congress can designate an area as wilderness, which then puts it into the National Wilderness Preservation System, and once an area is admitted into the National Wilderness Preservation System, it can only be withdrawn through an Act of Congress. However, areas designated under the Wilderness Act of 1964 have been bureaucratically and ecologically fragmented. Moreover, the National Wilderness Preservation System does not comprehensively protect biodiversity in the U.S.

Political scientist Craig W. Allin notes that the management techniques applied to wilderness areas are "far from uniform" and that wilderness managers and management agencies have "substantial administrative discretion." Empirical studies of how different federal land management agencies operate confirm Allin's assessment. Some managers, for instance, allow camping within wilderness areas, while others do not. Some managers seek to regulate visitor behavior, and others do not. Many managers try to educate visitors on the environmental impacts of their behavior within wilderness areas, though others do not.

The Selection of Wilderness Areas

Wilderness historian Alfred Runte explains that wilderness preservation in the U.S. has historically been guided by the principle of preserving only those lands that have little economic value in terms of resource extraction. National forest historian Paul Hirt points out, for instance, that the 9 million acres of national forest set aside as wilderness under the Wilderness Act "contained very little commercial timber."

In Alaska, which has the most extensive areas of designated wilderness—some 56 million acres out of a total of 109 million in the National Wilderness Preservation System—Runte found that the historic principle guiding federal preservation policy of protecting only economically marginal lands persists. The cornerstone of federal wilderness preservation in Alaska is the Alaska Lands Act of 1980. Runte reports that in those areas placed under federal protection by the Act, "critical wildlife habitat had either been fragmented to accommodate resource extraction or excluded entirely." Additionally, the most economically viable areas of the state, particularly coastal areas and the forests of the southeastern panhandle, were left open to economic development.

The result of only including economically marginal lands in the National Wilderness Preservation System is that the system does not comprehensively protect ecosystems nor biodiversity. Veteran wilderness geographer Thomas Vale explains that the National Wilderness Preservation System is "no more coherent than the National Park System, and arguably less so." National Parks are selected primarily for their aesthetic qualities. Writing in their textbook on U.S. wilderness, *Wilderness Management*, John C. Hendee and Chad P. Dawson explain that: Ecological diversity has never been an explicit criterion driving the wilderness designation process. As a result, the diversity contained within the [National Wilderness Preservation] System is largely accidental; little systematic effort has been made toward broadening the [National Wilderness Preservation System's] ecological coverage.

Hendee and Dawson add that "even with wilderness additions during 1990 and 2000 ... many ecosystems are not represented in the [National Wilderness Preservation System]."

Conclusion

The formulation and enactment of the Wilderness Act of 1964 is consistent with economic elite theory. Proponents of this theory hold that economic elites are central to the formation of public policy, and that they often bring about political change through policy networks.

Within the wilderness preservation community, one concept of wilderness/wildlife protection has historically been narrowly construed. This approach emphasizes recreation and a scientific view that focuses on specific species rather than whole ecosystems. (Increased resource extraction during the post-World War II period, coupled with extensive road building nationally, ostensibly threatened pristine wilderness throughout the U.S.) As indicated by the cases of the Save-the-Redwoods League and the Sierra Club, as well as the Club's transformation in the 1950s and 1960s, this wilderness preservation outlook/strategy can be associated with economic elites and their relationship with wilderness groups. This narrow notion of wilderness preservation was codified in the formulation of the Wilderness Act of 1964.

Laurance S. Rockefeller, a member of one of the most economically powerful families in the United States, was the lead member of the policy network that fostered the passage of this legislation. Laurance was a prominent member in the wilderness preservation community and had connections to The Wilderness Society through the Save-the-Redwoods League and close associates, like M. Frederik Smith. Laurance became chair of ORRRC and actively worked to shape its membership. ORRRC endorsed the wilderness protection idea previously championed by The Wilderness Society. ORRRC's endorsement led directly to the passage of the Wilderness Act of 1964, with Laurance lobbying for it.

In supporting the notion that wilderness should be permanently withdrawn as "primitive areas," ORRRC emphasized pristine wilderness as a recreational opportunity and otherwise supported protecting those areas that possessed "unique inspirational, scientific, and cultural values." Additionally, ORRRC went out of its way to advise against the advent of a wilderness protection agency to select and oversee legislatively protected "wilderness areas."

In embracing this recreational view of wilderness as well as an approach to wilderness protection that emphasized "unique" scientific values, ORRRC eschewed an ecological conception of nature, which Aldo Leopold, beginning in the 1930s, helped popularize. The ecological, or ecosystem, notion of wilderness was established (if not dominant) in the scientific community by the 1950s and received significant U.S. government funding. Moreover, it was increasingly embraced during this period by the leadership of the Sierra Club, which used ecological science to shape its proposal in the 1960s for a national park in the California redwood forest. Ecological science calls for the protection of ecosystems and biodiversity through comprehensive regulations.

While the Wilderness Act of 1964 does prohibit automobiles, roads, and timber harvesting in officially designated "wilderness" areas (as well as restricts mining in them), the policy derived from the Wilderness Act has not resulted in a comprehensive program to protect land and wildlife. Agencies that have other and often directly competing priorities, such as forestry and tourism, are in charge of selecting and managing "primitive areas," and wilderness regulations vary significantly between and within land management agencies. There is no federal agency whose specific and prime mission is to protect pristine wilderness in the U.S. Such an agency could embrace ecological science as a rationale to manage and expand the "wilderness" system, and hence, promote biodiversity protection in the U.S. The National Wilderness Preservation System lacks ecological coherency and is not intended to protect biodiversity in the U.S.

For ecosocialists and other reform-minded individuals, the Wilderness Act and federal wilderness policy indicate that environmental public policies in the current social order will be shaped to the political outlook and profit motive of the politically hegemonic economic elite. Thus far, this has resulted in minimal, and in some cases no environmental protection.