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U.S. State-Based Wilderness Law: An Evaluation

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U.S. State-Based Wilderness Law: An Evaluation

Miranda Holeton and David Takacs***

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INTRODUCTION

In this article, we survey the state of U.S. *State* (as opposed to Federal) wilderness. The task proves more challenging than it may initially appear.

All of us—human and nonhuman—need more wilderness, and we need it now more than ever. The U.S. Endangered Species Act currently lists 718 domestic animals and 938 domestic plants as endangered or threatened, with many candidates in the wings.¹ Our chances of preserving the fully functioning ecosystems these species require diminish as the human population grows and spreads. Protected wilderness serves as refuge for these species and for the functioning ecosystems upon which these species depend. Of course, wilderness has intrinsic value, that is to say, some wilderness advocates assert that we have the responsibility to leave some corners of the Earth relatively unspoiled for the processes of evolution to continue to unfurl relatively intact. Protected wilderness also provides both those who study nature and those who simply enjoy it with baselines for how functioning ecosystems appear and behave.

Even before the COVID-19 pandemic, children (and their parents) were spending increasing amounts of hours online and diminishing time outdoors;² scientists and experts worry about the health impacts of “Nature Deficit Disorder.”³ The U.S. Census Bureau predicts that our population, now at just over 330 million,⁴ will exceed 400 million by 2060, increasing the urgency of setting aside some areas that remain as refuges for, and from, us.⁵

Wilderness, for some, is a far-off landscape full of solitude, peace, and natural wonder—a place to recreate without leaving a trace. This wilderness was wildlife biologist and environmental philosopher Aldo Leopold’s dream. In 1921, he began urging the federal government to preserve land because “[i]t will be much easier to keep wilderness areas than to

1. *FWS-Listed U.S. Species by Taxonomic*, U.S. FISH & WILDLIFE SERV., <https://perma.cc/F9XQ-WVFT>.

2. Linda Geddes & Sarah Marsh, *Concerns Grow for Children’s Health as Screen Times Soar During Covid Crisis*, GUARDIAN (Jan. 22, 2021, 7:34 AM), <https://perma.cc/MD9J-FUFM>; Maura Fox, *Americans Are Spending Less Time Outside*, OUTSIDE (Jan. 30, 2020), <https://perma.cc/L3TK-H5SX>.

3. Meg St.-Esprit McKivigan, *‘Nature Deficit Disorder’ Is Really a Thing*, N.Y. TIMES (June 23, 2020), <https://perma.cc/5BVW-VL25>.

4. As of Nov. 15, 2021, 332,929,520, U.S. CENSUS BUREAU, U.S. AND WORLD POPULATION CLOCK, <https://perma.cc/J3QA-5H2W>.

5. JONATHAN VESPA ET AL., U.S. CENSUS BUREAU, DEMOGRAPHIC TURNING POINTS FOR THE UNITED STATES: POPULATION PROJECTIONS FOR 2020 TO 2060 (Feb. 2020), <https://perma.cc/W8XN-M35X>.

create them.”⁶ He defined wilderness as “a continuous stretch of country preserved in its natural state, open to lawful hunting and fishing, big enough to absorb a two weeks’ pack trip, and kept devoid of roads, artificial trails, cottages and other works of man.”⁷

For others, wilderness is an idea, a state of mind, or a quality, someplace to which we can retreat, albeit temporarily, to renew ourselves. Author Terry Tempest Williams writes, “To be whole. To be complete. Wilderness reminds us what it means to be human, what we are connected to rather than what we are separate from . . . [W]e need wilderness to be more complete human beings.”⁸ A similar conception of wilderness also appears in Edward Abbey’s *The Monkey Wrench Gang*: “To the question: Wilderness, who needs it? Doc would say: Because we like the taste of freedom, comrades. Because we like the smell of danger.”⁹ In *Desert Solitaire*, Abbey expands on wilderness-as-idea: “The love of wilderness is more than a hunger for what is always beyond reach; it is also an expression of loyalty to the earth, the earth which bore us and sustains us, the only paradise we shall ever know, the only paradise we ever need, if only we had the eyes to see.”¹⁰

Whatever values we cherish in wilderness—and the authors cherish all of these values—we face diminishing opportunities to protect wilderness itself.

LEGALLY DESIGNATED WILDERNESS

Wilderness is not just a place, an idea, or a quality—it is also a legal designation. As the environmental law adage suggests, “[p]rior to 1964, only God could make wilderness but [after 1964,] only the U.S. Congress can.”¹¹ Under the 1964 Wilderness Act, wilderness is defined as “an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain.”¹² Strict criteria, which can

6. Char Miller, *Aldo Leopold (1921) The Wilderness and its Place in Forest Recreation Policy*, *Journal of Forestry* 19(7): 718-721, 104 J. OF FORESTRY 51, 51 (2006) (internal quotations omitted).

7. *Id.*

8. TERRY TEMPEST WILLIAMS, *RED: PASSION AND PATIENCE IN THE DESERT* 75, 186 (Vintage Books 2002) (2001).

9. EDWARD ABBEY, *THE MONKEY WRENCH GANG* 261 (Harper Perennial Modern Classics 2006) (1975).

10. EDWARD ABBEY, *DESERT SOLITAIRE: A SEASON IN THE WILDERNESS* 167 (Touchstone 1990) (1968).

11. MARVIN HENBERG, *WILDERNESS, MYTH, AND AMERICAN CHARACTER* (1994), reprinted in *THE GREAT NEW WILDERNESS DEBATE: AN EXPANSIVE COLLECTION OF WRITINGS DEFINING WILDERNESS, FROM JOHN MUIR TO GARY SNYDER* 500 (J. Baird Callicott & Michael P. Nelson eds., 1998).

12. Wilderness Act of 1964, 16 U.S.C. § 1131(c) (2018).

be traced directly back to Aldo Leopold's 1921 definition, must be met for an area to be legally designated as federal wilderness.¹³ Once designated, wilderness areas enjoy the highest level of protection for federal public lands¹⁴—just as Leopold envisioned.

Federal wilderness areas are legislatively designated under the National Wilderness Preservation System (“NWPS”). This robust program now includes over 111 million acres.¹⁵ The National Park Service, the U.S. Forest Service, the Bureau of Land Management, and the U.S. Fish and Wildlife Service all oversee the NWPS.¹⁶ However, private and tribal areas are managed as wilderness as well, e.g., the Grandfather Mountain area in North Carolina and the Mission Mountains Tribal Wilderness in Montana.¹⁷

At the state level, “wilderness” is a murkier concept. Many states have wilderness-like programs or areas that resemble the NWPS—but these state iterations are idiosyncratic. For example, Maryland's Wildlands Preservation System and Wisconsin's Wild Resources Management Areas resemble the NWPS, but do not use the term “wilderness.” Within state wilderness programs, accounting is not as standardized as the NWPS: in some cases, our research resulted in rough estimates or discrepancies in total acreage of designated wilderness. Some states also have parks with wilderness in the name, like Michigan's Wilderness State Park, which nonetheless do not meet recognized criteria for designated wilderness. These state idiosyncrasies create confusion as visitors navigate park brochures or marketing materials for nature-based vacations that may invoke any one of the many connotations of wilderness—wilderness as a place, an idea, a quality, or a legal designation.¹⁸

Critiques of the concept of “wilderness” are many and largely fall outside of the scope of this paper. Critics rightfully point out that with climate change, widespread biocides, and plastic pollution (to note just a few), the

13. Wilderness Act of 1964, 16 U.S.C. §§ 1131–1133 (2018); *See also* Miller, *supra* note 6, at 51 (noting that the Gila Wilderness was “the first of many to gain [its] intellectual justification from Leopold's bold 1921 article in the *Journal of Forestry*.”).

14. Peter A. Appel, *Wilderness and the Courts*, 29 STAN. ENV'T. L.J. 62, 110–11 (2010).

15. U.S. NAT'L PARK SERV., OTHER FEDERAL WILDERNESS LANDS, <https://perma.cc/Z8QA-MS3C> (last updated Mar. 24, 2020).

16. *Id.*

17. Blake M. Propst & Chad P. Dawson, *State-Designated Wilderness in the United States: A National Review*, 14 INT'L J. OF WILDERNESS 19, 19 (2008).

18. *See, e.g., Water Fall House on Lewis Creek 12 mi. to Yosemite*, AIRBNB, https://www.airbnb.com/rooms/25732480/location?s=67&c=.pi115.pk0_9&a4ptk=2743_0_9_57252&af=115&source_impression_id=p3_1615015656_mplYrqR5hqu5fUod (last visited Sept. 12, 2021) (Description of location: “Wilderness adventure away from crowd at Nelder Grove (6 mi.) and Fresno Dome (13 mi.)” The host is invoking wilderness as a quality of seclusion rather than a legal designation).

human footprint spreads to every corner of the Earth, and no place remains “pristine.” Furthermore, many of the lands the law now classifies as “pristine” have been, in fact, intensively managed by indigenous peoples, so what appears “untouched” results from centuries of cultivation.¹⁹ Nonetheless, we believe that the multitude of values that wilderness provides justifies a preservation and expansion of wilderness in the law.

And we believe that states can and should play a greater role in wilderness preservation. This paper updates Blake Propst and Charles Dawson’s 2008 survey, “*State-Designated Wilderness in the United States: A National Review* (hereinafter “Propst & Dawson”),”²⁰ which was itself an update to four previous surveys of state-designated wilderness.²¹ These reports assessed “state-designated wilderness areas and related programs (e.g., wild areas, wildlands, etc.) in the United States and provide[d] a summary of the wilderness or wilderness-type programs that included state-owned lands that were legislatively or administratively designated and are similar in concept to the national legislative definition of *wilderness*.”²²

Our survey of state-designated wilderness uses the findings from Propst & Dawson as a starting point. Propst & Dawson identified seven states with wilderness programs similar to the NWPS and five states with wilderness areas but no formal program. We contacted via phone and email the land management agencies in each of these twelve states to discover any updates or changes to these wilderness programs and areas. We determined that Minnesota’s wilderness program no longer meets the criteria identified by Propst & Dawson and earlier surveys. In the remaining eleven states, we found that most had either added wilderness areas to their programs, increased the size of existing wilderness areas, or both.

This paper will first lay out the criteria Propst & Dawson developed to determine whether state-designated wilderness programs are comparable to the NWPS. Next, we will describe the eleven states with programs or wilderness areas meeting these criteria, providing relevant legislative, administrative, and acreage updates.

19. For a few particularly trenchant and oft-cited critiques, see Ramachandra Guha, *Radical American Environmentalism and Wilderness Preservation: A Third World Critique*, 11 ENV’T ETHICS 71 (1989); WILLIAM CRONON, *The Trouble With Wilderness; or, Getting Back to the Wrong Nature*, in UNCOMMON GROUND: RETHINKING THE HUMAN PLACE IN NATURE 69 (William Cronon, ed. 1995).

20. Propst & Dawson, *supra* note 17.

21. M. RUPERT CUTLER, *Preserving Wilderness Through State Legislation*, in ACTION FOR WILDERNESS 104–12 (Elizabeth R. Gillette ed., 1972) (a collection of papers from the Sierra Club’s 12th Biennial Wilderness Conference, Sept. 25, 1971); George H. Stankey, *Wilderness Preservation Activity at the State Level: A National Review*, 4 NAT. AREAS J. 20 (1984); Mark R. Peterson, *Wilderness by State Mandate: A Survey of State-Designated Wilderness Areas*, 16 NAT. AREAS J. 192 (1996); Chad P. Dawson & Pauline Thorndike, *State-Designated Wilderness Programs in the United States*, 8 INT’L J. OF WILDERNESS 21 (2002).

22. Propst & Dawson, *supra* note 17, at 20.

Additionally, we include a discussion of “natural area” programs. These programs do not meet the wilderness criteria identified by Propst & Dawson and earlier surveys—still, we consider these programs significant because they are, in some ways, even more protective of public lands than wilderness programs. Natural areas generally allow only limited recreation, if any at all, and they are managed primarily for their inherent ecological value. At least twenty-seven states have some form of a natural areas program.

We conclude our paper by calling for states to consider briskly adding more formally designated wilderness areas while such areas still exist.

CRITERIA FOR STATE WILDERNESS PROGRAMS

The 1964 Wilderness Act uses specific criteria to define wilderness:

An area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements for human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.²³

Based on these Wilderness Act criteria, Stankey and Propst & Dawson developed six criteria to determine whether state-designated wilderness programs are comparable to their federal counterpart. We used these same criteria for our recent survey:

1. Formal designation of state-owned lands by state statutory or administrative authority;
2. Objectives for designation are to protect and preserve natural conditions and ecological processes *and* to provide primitive recreation opportunities (e.g., nonmotorized access, minimal development of facilities);
3. Prohibition of resource development of all types, such as timber harvesting, road building, and mining;

23. 16 U.S.C. § 1131(c).

4. Size guidelines for establishment of an area and to support the protection and stewardship objectives for the area;
5. Recognition of other values of the area that are consistent with management of the area as wilderness, such as historic, cultural, scenic, or scientific values; and
6. Development of management plans to formally define area objectives and to guide managers in activities and decision making that fosters those objectives.²⁴

STATE WILDERNESS PROGRAMS

While the number of states with wilderness programs has declined over the last forty years, the number of individual wilderness areas in the remaining programs, as well as the total acreage of those areas, has grown steadily.²⁵

In 1983, nine states hosted wilderness programs, which included forty-eight wilderness areas and a total of 1.7 million acres.²⁶ While only eight states still had operating wilderness programs by 1994, the number of areas increased to fifty-eight and the total acreage in those areas may have also increased.²⁷ Dawson & Thorndike (2002) noted that while Peterson (1996) reported 3.1 million total acres in these fifty-eight areas, it was difficult to resolve the discrepancies among the 1983, 1994, and 2002 studies because of various legal and administrative changes to the size and number of these areas over that period.²⁸ In 2002, Dawson & Thorndike identified seven remaining state wilderness programs with seventy-four areas and a total of 2.7 million acres.²⁹ By 2007, those seven state wilderness programs included eighty-four areas with over 2.95 million acres.³⁰

Our recent survey identified state wilderness programs in Alaska, California, Maryland, Michigan, Missouri, New York, and Wisconsin. We agree with Propst & Dawson that “[t]he seven state wilderness programs that met the six criteria did so with variable success and in diverse ways, so there is no common legal or programmatic approach to report.”³¹

24. Propst & Dawson, *supra* note 17, at 20; Stankey *supra* note 21, at 22.

25. See Stankey, *supra* note 21; Peterson, *supra* note 21; Dawson & Thorndike, *supra* note 21; Propst & Dawson, *supra* note 17.

26. Stankey, *supra* note 21, at 25.

27. Peterson, *supra* note 21, at 193.

28. Dawson & Thorndike, *supra* note 21, at 23.

29. Dawson & Thorndike, *supra* note 21, at 23.

30. Propst & Dawson, *supra* note 17, at 23–24.

31. *Id.* at 20.

ALASKA

Alaska's Kachemak Bay State Wilderness Park ("KBSWP")³² was legislatively designated in 1972 under Alaska State Statute 41.21.140. This park remains Alaska's only state wilderness park.³³ The definition of "state wilderness park" in AS 41.21.140 does not contain any size criteria; KBSWP contains 198,408 acres.³⁴ The statute singles out the park's "unique and exceptional wilderness value,"³⁵ without defining what comprises that value.

Alaska also contains administratively designated "wilderness zones" within some of its state parks. KBSWP is zoned entirely as wilderness, and wilderness zones also exist in Kachemak Bay State Park, Chugach State Park, Wood-Tikchik State Park, and Denali State Park.³⁶ The 1982 Alaska State Park System and Statewide Framework requires that wilderness zones are "of such size as to maintain the area's wilderness character."³⁷

Alaska's wilderness program stands out because of the state's size and remoteness. As such, many areas are considered "de facto wilderness" even if they are not legislatively or administratively designated. For example, while only certain portions of Wood-Tikchik State Park are designated wilderness, "[t]he management philosophy [for the entire park] is one of non-development and protection of the area's wilderness character,"³⁸ and "[l]arge portions . . . are de facto wilderness, experiencing very little visitation and offering few, if any, man-made comforts."³⁹

The Division of Parks and Outdoor Recreation manages Alaska's state parks and wilderness areas within the Division of Natural Resources, and management plans are available for KBSWP and each of the state parks with wilderness zones. Total acreage is available for KBSWP and the wilderness zone within Chugach State Park, but acreage data were unavailable for wilderness zones within Kachemak Bay State Park, Wood-Tikchik

32. Hereinafter, all acronyms apply only to their respective state subsections within this paper.

33. ALASKA DEP'T OF NAT. RES., DIV. OF PARKS & OUTDOOR RECREATION, KACHEMAK BAY STATE PARK AND KACHEMAK BAY STATE WILDERNESS PARK MANAGEMENT PLAN INTENT TO ADOPT 24 (Nov. 2020), <https://perma.cc/66TA-PCYK>.

34. *Id.*

35. ALASKA STAT. § 41.21.140(a) (2021).

36. E-mail exchange with Dan Beutel, Nat. Res. Specialist III, Alaska Div. of Parks and Outdoor Recreation (Feb. 5, 2021, 15:31 PST) (on file with authors).

37. ALASKA DEP'T OF NAT. RES., DIV. OF PARKS, ALASKA STATE PARK SYSTEM: STATEWIDE FRAMEWORK 19 (1982), <https://perma.cc/A2W5-WQAL>.

38. ALASKA DEP'T OF NAT. RES., DIV. OF PARKS & OUTDOOR RECREATION, WOOD-TIKCHIK STATE PARK, <https://perma.cc/W7CP-Y256>.

39. ALASKA DEP'T OF NAT. RES., DIV. OF PARKS & OUTDOOR RECREATION, WOOD-TIKCHIK STATE PARK MANAGEMENT PLAN ch. 5 at 9 (2002), <https://perma.cc/9GL6-PZ3U>.

State Park, and Denali State Park.⁴⁰ Relative to Alaska’s sheer size, as well as its fifty-four million acres of *federally* designated wilderness, Alaska has less officially designated state wilderness than one might expect.

CALIFORNIA

California’s Wilderness Preservation System (“CWPS”) was legislatively designated in 1974 by the California Wilderness Act.⁴¹ Wilderness can be added to the program either legislatively or administratively:

“Legislatively established areas are called ‘wilderness areas’ and are fully protected by law. By provision of the California Wilderness Act and in a companion law (California Public Resources Code section 5019.68), ‘state wildernesses’ can be administratively classified on lands in the state park system by the California Park and Recreation Commission.”⁴²

The CWPS is modeled off of the NWPS, and its wilderness definition includes a minimum size requirement of 5,000 acres in addition to other important wilderness criteria.⁴³ The CWPS includes twelve wilderness areas—up from the eleven areas identified in Propst & Dawson’s 2008 survey. Sinkyone Wilderness State Park is “the only stand-alone component of the system. The other components of the CWPS are zones within other state parks called ‘classified internal units.’”⁴⁴

State agencies with jurisdiction over legislatively designated wilderness areas are responsible for management; Division 5 of the Public Resources Code contains the management guidelines for administratively designated state wilderness.⁴⁵ Additionally, “[s]pecific management guidelines for individual wilderness units can be found in the statutes that designate those areas or in the general management plan for the state park within which the wilderness is located.”⁴⁶

Due to significant discrepancies in acreage calculations for the CWPS, it is unclear whether the program’s total acreage has increased or decreased. A 2019 Planning Milestones document indicates that there are 472,338 acres included in the CWPS⁴⁷—a lower number than the 475,725

40. E-mail exchange with Dan Beutel, *supra* note 36 (Feb. 5, 2021, 15:31 PST) (on file with authors).

41. CAL. PUB. RES. CODE § 5093.33(a) (2012).

42. *Id.* at § 5019.68 (2021); James M. Trumbly & Kenneth L. Gray, *The California Wilderness Preservation System*, 4 NAT. AREAS J. 29, 29 (1984).

43. CAL. PUB. RES. CODE § 5093.33(c) (2012).

44. Propst & Dawson, *supra* note 17, at 21.

45. CAL. PUB. RES. CODE § 5093.36 (2019).

46. Propst & Dawson, *supra* note 17, at 21.

47. CAL. STATE PARKS, STRATEGIC PLAN. & RECREATION SERVICES DIV., PLANNING MILESTONES FOR THE PARK UNITS AND MAJOR PROPERTIES ASSOCIATED WITH THE CALIFORNIA STATE PARK SYSTEM, at “List 3 – Classified Internal Units” (2019), <https://perma.cc/TGY3-Z6ZL>.

acres identified in Propst & Dawson's 2008 survey. The Planning Milestones number should, presumably, be even lower, because it does not reflect the 2014 acreage reduction in the Cuyamaca Mountains State Wilderness.⁴⁸ A map provided by GIS specialist Alan Kilgore on January 22, 2021, however, shows the total acreage for the CWPS as 547,500 acres—and this calculation does reflect the acreage reduction in the Cuyamaca Mountains State Wilderness.⁴⁹ When we asked Kilgore about these discrepancies, he noted that these figures are approximate and that they were reported for background reference only.⁵⁰ He also provided the following response:

State wilderness boundaries are not surveyed in a manner as other land parcels. Wilderness boundaries may be defined by ridge lines, streams and other natural features. The state wilderness areas in the GIS are derived from planning maps drawn on topographic maps, then digitized into the GIS. The acreage figures in the GIS should be considered approximate. Because of the approximate nature of the boundaries there may be some minor variations with figures reported in other documents.⁵¹

Certainly, in California as elsewhere, determining what exactly comprises “wilderness” both within a state and between states remains a challenge, as does providing exact figures on how much of it exists.

MARYLAND

Maryland's Wildlands Preservation System (“MWPS”) was legislatively established by the 1971 Maryland Wildlands Act and serves as the state's equivalent to the NWPS.⁵² Wildlands can be designated only by an act of the General Assembly.⁵³ As noted in Propst & Dawson's 2008

48. *Cuyamaca Rancho State Park General Plan*, CAL. STATE PARKS, <https://perma.cc/8YAZ-PCJD> (“Adjustments to the boundaries of the Cuyamaca Mountains State Wilderness, reducing the overall acreage from 13,301-acres to 12,504-acres.”), Even here there are discrepancies—this site says the original size of Cuyamaca was 13,301 acres, but the Planning Milestones document lists it at 13,201 acres. These small discrepancies were common for all the wilderness areas in the CWPS.

49. E-mail exchange with Alan Kilgore, GIS Specialist, Cal. State Parks (Jan. 22, 2021) (on file with authors); Map provided by Alan Kilgore, GIS Specialist, Cal. State Parks (Jan. 22, 2021, 16:31 PST) (on file with authors).

50. E-mail exchange with Alan Kilgore, GIS Specialist, Cal. State Parks (May 4, 2021, 13:31 PST) (on file with authors).

51. E-mail exchange with Alan Kilgore, GIS Specialist, Cal. State Parks (May 4, 2021, 13:31 PST) (on file with authors).

52. *Land Acquisition and Planning*, MD. DEP'T OF NAT. RES., <https://perma.cc/54GL-D8KQ>; Propst & Dawson, *supra* note 17, at 21.

53. MD. DEP'T OF NAT. RES., *supra* note 52.

survey, Maryland’s wildlands are wholly internal units within the state’s larger parks, forests, and wildlife management areas. Thus, the Maryland Park Service, Forest Service, and Wildlife and Heritage Services, which all fall within the Maryland Department of Natural Resources (“MDNR”), manage the wildlands.⁵⁴ Title 5 of the Natural Resources Article in Maryland’s Annotated Code includes general management guidelines for all wildland areas.⁵⁵ Additionally, each department within MDNR has its own management objectives for wildlands under its control—but these specific objectives are “not outlined in any statutory requirements.”⁵⁶ There are no minimum size requirements for Maryland’s wildlands, which is unsurprising given the limited size of the state.

In 2014, the Maryland General Assembly passed State Bill 336 and House Bill 296 which expanded the MWPS by fifty percent.⁵⁷ This legislation “created 9 new State-designated Wildlands and expanded 14 of the existing 29 Wildlands,” adding almost 22,000 acres to the MWPS.⁵⁸

Some minor acreage discrepancies exist in Maryland’s program, and while they are not as dramatic as the discrepancies in California, they make exact calculations difficult. Propst & Dawson identified 43,733 total acres in the MWPS in 2008.⁵⁹ Maryland’s 2014 legislation added 21,887 acres to the program,⁶⁰ which would presumably put the current total at 65,620 acres. The Maryland Department of Natural Resources, however, lists the current total at 65,956 acres.⁶¹

Another discrepancy exists in the number of individual wildlands. While Propst & Dawson identified thirty wildlands in 2008, the Maryland Department of Natural Resources claims that there were only twenty-nine wildlands up until the 2014 legislation, when nine wildlands were added for a new total of thirty-eight wildlands.⁶² When we asked Department staff about these acreage and wildland area discrepancies, their answer was

54. See MD. DEP’T OF NAT. RES., *supra* note 52.; E-mail exchange with Andrew Mengel, Land Acquisition and Plan. Dep’t, Md. Dep’t of Nat. Res. (Apr. 28, 2021, 05:27 PST) (on file with authors).

55. MD. CODE ANN., NAT. RES. §§ 5-1203 to 5-1218 (West 2021).

56. Mengel, *supra* note 54.

57. MD. DEP’T. OF NAT. RES., 2014 SESSION LEGISLATIVE REPORT 2 (2014), <https://perma.cc/P5Y2-YWCE>.

58. *Id.*

59. Propst & Dawson, *supra* note 17, at 24; *MD General Assembly Passes Bill to Permanently Preserve 22,000 Acres of Maryland Wild Areas*, CHESAPEAKE CONSERVANCY (Apr. 1, 2014), <https://perma.cc/UAY2-MWVT> (The Chesapeake Conservancy lists the pre-2014 total acreage at 43,779 acres rather than the 43,733 identified by Propst & Dawson).

60. MD. DEP’T. OF NAT. RES., *supra* note 52.

61. MD. DEP’T. OF NAT. RES., *supra* note 52.

62. MD. DEP’T. OF NAT. RES., *supra* note 57.

similar to that from California: land acquisition is a fluid process and a moving target, which makes accounting difficult.⁶³

MICHIGAN

Since 1994, wilderness designations in Michigan have been based on Public Act 451, Part 351.⁶⁴ The definition of “wilderness area” has a minimum size requirement of 3,000 acres (or an island of any size) and includes similar language to the U.S. Wilderness Act.⁶⁵ The director of the Department of Natural Resources (“DNR”) must approve wilderness area nominations.⁶⁶ Once approved, wilderness areas are considered “proposed for dedication.”⁶⁷ The Joint Committee on Administrative Rules must promulgate a rule accepting or denying the proposed dedication within ninety days, and the state must manage the proposed area as official wilderness during this period.⁶⁸

Our research again identified some discrepancies between current wilderness designations and those identified by Propst & Dawson in 2008. Propst & Dawson identified four wilderness areas for a total of 57,733 acres.⁶⁹ The 2019 Draft General Management Plan for Porcupine Mountains Wilderness State Park, however, notes that this park is “the only [state park] to have a Wilderness designation, which protects over 41,200 acres in a primitive state.”⁷⁰ DNR staff also confirmed that this is the only state-designated wilderness area in Michigan.⁷¹ In a February 1, 2021 email exchange, Parks and Recreation Division GIS Analyst Jessica Orlando posited that “[i]t is possible that some of the . . . areas referenced in the [Propst & Dawson 2008] study were included if they had wilderness characteristics but were protected with natural area designations, pending proposals, or similar.”⁷²

63. Telephone interview with department staff, Md. Dep’t. of Nat. Res. (Apr. 7, 2021).

64. Propst & Dawson, *supra* note 17, at 21; MICH. COMP. LAWS ANN. § 324.35101 (West 1996).

65. MICH. COMP. LAWS ANN. § 324.35101 (West).

66. E-mail from Debbie Jensen, Park Mgmt. Plan Adm’rix., Mich. Dep’t. of Nat. Res., Parks and Recreation Div. (May 19, 2021, 10:34 PST) (on file with authors) (explaining that the Wilderness and Natural Areas Advisory Board, referenced in Propst & Dawson, was actually disbanded during Governor Engler’s administration (1991-2002), and that the director of DNR must now approve wilderness nominations).

67. E-mail from Debbie Jensen, Park Mgmt. Plan Adm’rix., Mich. Dep’t. of Nat. Res., Parks and Recreation Div. (May 19, 2021, 11:35 PST) (on file with authors).

68. MICH. COMP. LAWS ANN. § 324.35103 (West 2006); Jensen, *supra* note 67.

69. Propst & Dawson, *supra* note 17, at 24.

70. MICH. DEP’T. OF NAT. RES., PORCUPINE MOUNTAINS WILDERNESS STATE PARK GENERAL MANAGEMENT PLAN DRAFT 1 (2019), <https://perma.cc/YQA3-6TMT>.

71. Jensen, *supra* note 66.

72. E-mail from Jessica Orlando, GIS Analyst, Mich. Parks and Recreation Div. (Feb. 1, 2021, 08:14 PST) (on file with authors).

Additionally, because candidate wilderness must be managed as wilderness in Michigan, it is possible that both Propst & Dawson and our survey undercounted state wilderness. Wilderness State Park, for example, has 4,492 acres of proposed wilderness that has been pending for several years.⁷³ And while the DNR’s Draft Public Land Strategy includes a strategic initiative to “[r]eview existing proposed nominations, as required by statute, to dedicate areas of DNR-managed public lands as a wilderness area, wild area or a natural area,”⁷⁴ Park Management Plan Administrator Debbie Jensen explained that “this initiative may require an investment of dedicated resources from funding to personnel to accomplish.”⁷⁵

In sum, it is not clear how much legally designated wilderness, or areas that fit the characteristics of wilderness but lack legal designation, exist in Michigan.

MISSOURI

Missouri’s version of the NWPS is the Wild Area Program, which was administratively designated in 1977 by the Missouri Department of Natural Resources.⁷⁶ The Missouri State Parks Department establishes and manages wild areas because each of these areas is a unit within a state park.⁷⁷ The definition of a wild area is: “An undeveloped tract of land normally greater than 1000 acres in size which generally meets the [federal] definition of wilderness.”⁷⁸ As in other state-level definitions, “normally” and “generally” give some flexibility to what precisely will count as “wilderness.”

One additional wild area has been designated in Missouri since Propst & Dawson’s 2008 survey, and existing wild areas have increased in size.⁷⁹ Propst & Dawson identified eleven wild areas with a total of 22,993 acres.⁸⁰

73. *Wilderness State Park*, MICH. DEP’T. OF NAT. RES., <https://perma.cc/7B8Q-NLDX>; E-mail from Debbie Jensen, Park Mgmt. Plan Adm’rix., Mich. Dep’t. of Nat. Res., Parks and Recreation Div. (May 19, 2021, 11:35 PST) (on file with authors).

74. *DNR Strategic Initiatives*, MICH. DEP’T OF NAT. RES., <https://perma.cc/5T5Q-TGQS>.

75. Jensen, *supra* note 66.

76. *Missouri State Park Designated Wild Areas*, MO. STATE PARKS, <https://perma.cc/R8UZ-CPPW>.

77. E-mail from Ken McCarty, Nat. Res. Mgmt. Program Dir., Mo. State Parks (Mar. 8, 2021, 13:20 PST) (on file with authors); MO. DEP’T OF NAT. RES., POLICY N-06 WILD AREAS (revised Dec. 12, 2003) (on file with authors).

78. McCarty, *supra* note 77; MO. DEP’T OF NAT. RES., POLICY N-06 WILD AREAS (revised Dec. 12, 2003) (on file with authors).

79. *Missouri State Parks Designates New Wild Area*, MO. DEP’T. OF NAT. RES. (Aug. 12, 2016), <https://perma.cc/WMQ6-RQ7G>; MO. DEP’T. OF NAT. RES., WILD AREA ADDITION 1 (2016), <https://perma.cc/3Z2S-6FAT> (describing size increase for Goggins Mountain Wild Area).

80. Propst & Dawson, *supra* note 17, at 24.

According to Ken McCarty, Natural Resource Management Program Director at Missouri State Parks, twelve wild areas in ten state parks now total 25,230 acres.⁸¹ In 2016, Missouri added the Elk River Hills Wild Area in Big Sugar Creek State Park, the first wild area designation since 1995.⁸² Additionally, the Department of Natural Resources is considering adding 800 acres to the Goggins Mountain Wild Area in Johnson's Shut-Ins State Park, but has not officially done so yet.⁸³ This addition would create a "seamless wilderness landscape of over 15,000 acres" by connecting Goggins Mountain Wild Area to the federally designated Bell Mountain Wilderness in the Mark Twain National Forest.⁸⁴

NEW YORK

New York's Adirondack Park and Catskill Park each include designated wilderness within their borders. At 6 million acres, Adirondack Park is the largest park of any kind in the lower-48.⁸⁵ Over half the park is privately-owned and "[t]he remaining 45 percent of the Park is publicly-owned Forest Preserve, protected as 'Forever Wild' by the New York State Constitution since 1894. These lands are one of only two constitutionally protected landscapes in the world."⁸⁶ The Adirondack Park Agency has legislatively designated approximately one million acres of the Forest Preserve as wilderness.⁸⁷

South of the Adirondack Park, and an easy drive from New York City, is the only other constitutionally protected landscape in the world: Catskill Park. Much of Catskill Park is also Forest Preserve, and wilderness areas in the Preserve are administratively designated by the New York Department of Environmental Conservation ("DEC").⁸⁸ These relatively untouched, legally-designated Catskills wilderness areas also serve as one of the world's leading examples of ecological infrastructure, i.e. the wilderness protects the sources of New York City's world-renowned clean drinking water, and for a fraction of the price it would cost for mechanized

81. McCarty, *supra* note 77; Mo. State Parks, *supra* note 76 (The Missouri State Parks website says there are twelve wild areas with a total of 24,192 acres, so this website is likely outdated.)

82. *Missouri State Parks Designates New Wild Area*, MO. DEP'T. OF NAT. RES., *supra* note 79; McCarty, *supra* note 77.

83. MO. DEP'T. OF NAT. RES., WILD AREA ADDITION, *supra* note 79.

84. *Id.*

85. *About the Adirondack Council*, ADIRONDACK COUNCIL, <https://perma.cc/PR8R-WXAA>.

86. *Id.*

87. *Id.*; Propst & Dawson, *supra* note 17, at 22.

88. Propst & Dawson, *supra* note 17, at 22; *New York's Forest Preserve*, N.Y. STATE DEP'T. OF ENV'T. CONSERVATION, <https://perma.cc/UE59-SRV5>.

purification.⁸⁹ DEC’s wilderness definition is the same for both the Adirondacks and Catskills and closely resembles the Wilderness Act definition.⁹⁰ One difference is that DEC requires a minimum of 10,000 acres for wilderness areas.⁹¹ DEC manages the wilderness areas according to specific management guidelines in the Adirondack Park State Land Master Plan and the Catskill Park State Land Master Plan.⁹²

Propst & Dawson identified twenty-two wilderness areas in the Adirondacks and Catskills with a total of 1,214,217 acres.⁹³ Our research identified twenty-six areas—twenty-one in the Adirondacks and five in the Catskills—with a total of 1,358,343 acres.⁹⁴ The four wilderness areas added since Propst & Dawson’s 2008 survey are Hudson Gorge Wilderness (2014), Little Moose Mountain Wilderness (2010), and Hurricane Mountain Wilderness (2010) in the Adirondacks; and Windham-Blackhead Range Wilderness (2008) in the Catskills.⁹⁵

WISCONSIN

Wisconsin established its first wilderness area in 1973. In 2001, the state formalized their land classification policies for properties the Wisconsin Department of Natural Resources (“WDNR”) manages.⁹⁶ Wild Resources Management Areas (“WRMA”) are classified in Chapter 44(10) of the Wisconsin Administrative Code.⁹⁷ WDNR’s WRMA definition closely resembles the definition of wilderness in the U.S. Wilderness Act, except WRMA does not have a minimum size requirement—wilderness lakes, however, a type of WRMA, must cover at least five acres.⁹⁸ Both Chapter 44 as well as the master plans for each of the state lands that include a WRMA prescribe management guidelines.⁹⁹

89. See, e.g., *New York City Water Supply*, N.Y. STATE DEP’T. OF ENV’T. CONSERVATION, <https://perma.cc/DEP5-6SVT>.

90. *State Land Classifications*, N.Y. STATE DEP’T. OF ENV’T. CONSERVATION, <https://perma.cc/Q838-ARNY>; Propst & Dawson, *supra* note 17, at 22.

91. N.Y. STATE DEP’T. OF ENV’T. CONSERVATION, *supra* note 90.

92. Propst & Dawson, *supra* note 17, at 22.

93. *Id.* at 24.

94. E-mail from Josh Clague, Staff, N.Y. Dep’t. of Env. Conservation (Feb. 11, 2021, 10:00 PST) (on file with authors); see also *Forest Preserve Unit Descriptions*, N.Y. STATE DEP’T. OF ENV’T. CONSERVATION, <https://perma.cc/PP9H-TQ5G>.

95. Clague, *supra* note 94.

96. Propst & Dawson, *supra* note 17, at 22.

97. WIS. ADMIN. CODE NR § 44.06(10) (2019).

98. *Id.*; Propst & Dawson, *supra* note 17, at 22.

99. WIS. ADMIN. CODE NR § 44.06(10) (2019); Propst & Dawson, *supra* note 17, at 22; see, e.g., WIS. DEP’T. OF NAT. RES., NORTHERN HIGHLAND AMERICAN LEGION STATE FOREST 120 (Oct. 2005), <https://perma.cc/KP9G-JSZZ>.

Propst & Dawson identified one WRMA, the Manitowish WRMA, which then had 5,939 acres.¹⁰⁰ Our research identified a significant expansion of the WRMA program: Manitowish WRMA increased in size from 5,939 to 6,143 acres, and nine more areas were added for a total of ten WRMAs and 14,458 total acres.¹⁰¹ Additionally, according to Phil Rynish, Property Planning Section Chief at Wisconsin DNR, “these numbers may change as we complete additional master plans for DNR properties.”¹⁰² Rynish added that while there has not been a specific push to add more WRMAs to the program, there *has* been a push to “bring more DNR lands under master plans that are compliant with Chapter NR 44 of the Wisconsin Administrative Code. As this planning has progressed, additional WRMAs have been created.”¹⁰³

STATES WITH WILDERNESS AREAS NOT QUALIFYING AS A FORMALLY DESIGNATED WILDERNESS PROGRAM

In addition to the seven states with established wilderness programs, several states contain one or two wilderness areas which “make important contributions to the state and national wilderness preservation efforts.”¹⁰⁴ Propst & Dawson identified five such states, but our research revealed that only four states still have actively managed, state-owned wilderness. We removed Minnesota from Propst & Dawson’s list for several reasons, discussed in more detail below.

HAWAII

Kaua’i’s Alaka’i Wilderness Preserve, also known as Alaka’i Swamp, was administratively designated in 1981.¹⁰⁵ No definition for wilderness is included in Title 13 of the Department of Land and Natural Resources Code that established Alaka’i Wilderness Preserve, but some management guidelines are included.¹⁰⁶ The Preserve was approximately 9,939 acres when it

100. Propst & Dawson, *supra* note 17, at 24.

101. E-mail from Phil Rynish, Prop. Plan. Section Chief, Wis. Dep’t. of Nat. Res. (Jan. 29, 2021, 13:26 PST) (on file with authors); *Wild Resources Management Areas on Wisconsin DNR Lands* (on file with authors).

102. Rynish, *supra* note 101.

103. E-mail from Phil Rynish, Prop. Plan. Section Chief, Wis. Dep’t. of Nat. Res. (May. 07, 2021, 09:30 PST) (on file with authors).

104. Propst & Dawson, *supra* note 17, at 22-23.

105. HAW. CODE R. 13-3-2 (LexisNexis 1981).

106. *Id.*; Propst & Dawson, *supra* note 17, at 23.

was established,¹⁰⁷ and our research was inconclusive regarding whether it has grown.

The Big Island's South Kona Wilderness Area was designated in 2003 by the Hawaii legislature under Chapter 6 of the Hawaii Revised Statutes, but this designation was repealed on December 31, 2007 pursuant to a sunset provision.¹⁰⁸ In 2011, the South Kona Wilderness Area was again established, without a sunset provision, in Chapter 6 of the Hawaii Revised Statutes.¹⁰⁹ Chapter 6 provides management guidelines but does not include a wilderness definition.¹¹⁰

MAINE

Two wilderness areas exist in Maine. Baxter State Park was established by Chapter 211 in Title 12 of the Maine Revised Statutes Annotated ("MRSA") in 1962.¹¹¹ This park is administered separately from the rest of the state park system and is self-funded through an endowment.¹¹² The park is managed by the Baxter State Park Authority, "a three-person authority consisting of the Attorney General, the Director of the Maine Forest Service and the Commissioner of Inland Fisheries and Wildlife," which "has full power in the control and management of the Park and in the exercise of all Trust obligations."¹¹³

Although the MRSA contains no wilderness definition, Baxter State Park "is managed to be forever kept wild and remain in a natural wild state."¹¹⁴ Interestingly, Baxter State Park's management motto is "Wilderness first, Recreation second."¹¹⁵ The park is managed first and foremost "[t]o protect the natural resources of the Park for their intrinsic value" and secondarily "for the enjoyment of present and future generations."¹¹⁶ This arrangement was Maine Governor Percival Baxter's vision in 1931, and it differs from Aldo Leopold's emphasis on recreation.

Maine's second wilderness area is the Allagash Wilderness Waterway, established by Chapter 220 in Title 12 of MRSA in 1966.¹¹⁷ While Propst & Dawson note that the MRSA contains no formal wilderness definition, the restricted zone along the waterway "is defined to protect and

107. HAW. CODE R. 13-3-2 (LexisNexis 1981).

108. HAW. REV. STAT. § 6E-81 (2011); S.B. 1154, 26th Leg. (Haw. 2011).

109. HAW. REV. STAT. § 6E-81 (2011).

110. *Id.*

111. Propst & Dawson, *supra* note 17, at 23.

112. BAXTER STATE PARK, <https://perma.cc/42B3-Q4K6>.

113. *Organization*, BAXTER STATE PARK, <https://perma.cc/R7ZH-2APZ>.

114. Propst & Dawson, *supra* note 17, at 23.

115. BAXTER STATE PARK, *supra* note 112.

116. *History*, BAXTER STATE PARK, <https://perma.cc/S9GH-F3SG>.

117. Propst & Dawson, *supra* note 17, at 23.

develop the maximum wilderness character of the watercourse.”¹¹⁸ A new management plan for the Allagash Wilderness Waterway was completed in 2012, however, defining wilderness in the restricted zone as equivalent to the 1964 Wilderness Act definition, which “can generally be applied to the Allagash’s Restricted Zone (e.g., preserving natural conditions, providing opportunities for solitude, setting aside more than 5,000 acres of land, and containing valuable natural and cultural features).”¹¹⁹ Maine emphasizes that citizens should use the wilderness, and thus, the Allagash Wilderness allows large motor boats, float planes, snowmobiling, and new construction (beyond ¼ mile of the river) and timber harvesting (beyond one mile of the river) nearby. Additionally, Maine’s two wilderness areas have grown from the 204,733 acres identified by Propst to 232,524 acres.¹²⁰

OHIO

Ohio has one wilderness area, the Shawnee Wilderness Area, within the Shawnee State Forest.¹²¹ This area was established in 1988 by Chapter 1503 in Title 15 of the Ohio Revised Code, which includes a wilderness definition that resembles the U.S. Wilderness Act and includes a minimum size requirement.¹²² The Department of Natural Resources manages the Shawnee Wilderness Area, which remains Ohio’s only wilderness area.¹²³ Shawnee Wilderness Area also appears to have remained the same size since Propst & Dawson’s 2008 survey.¹²⁴

OKLAHOMA

Oklahoma also has one wilderness area, the McCurtain County Wilderness Area, which is a stand-alone park with just over 14,000 acres containing the “largest virgin, Shortleaf pine/hardwood forest remaining in the nation.”¹²⁵ The McCurtain County Wilderness Area was designated in 1918 by Title 29 of the Oklahoma Wildlife Conservation Code,¹²⁶ making the area the oldest Wildlife Department area in Oklahoma. The area contains no developed facilities, and hiking and backpacking is allowed with permits

118. Propst & Dawson, *supra* note 17, at 23.

119. ME. DEP’T OF AGRIC., CONSERVATION, & FORESTRY, DIV. OF PARKS & PUB. LANDS, ALLAGASH WILDERNESS WATERWAY MANAGEMENT PLAN (Dec. 2012), <https://perma.cc/F8RJ-YSWJ>.

120. *Id.* at 10; *see also* BAXTER STATE PARK, *supra* note 112.

121. Propst & Dawson, *supra* note 17, at 23.

122. XV OHIO REV. CODE ANN. § 1503.43 (2012).

123. *Shawnee State Forest*, OHIO DEP’T OF NAT. RES., <https://perma.cc/L7Y5-NBWZ>.

124. *Id.*

125. *McCurtain County Wilderness Area*, OKLA. DEP’T OF WILDLIFE CONSERVATION, <https://perma.cc/77AK-BHSS>.

126. OKLA. STAT. ANN. tit. 29, § 7-701 (West 1974).

only.¹²⁷ While Propst & Dawson noted that this area is “not used for recreational purposes,” the Oklahoma Department of Wildlife Conservation website indicates that the area is “open only to controlled deer and turkey hunts.”¹²⁸ Additionally, “[t]he statute does not give a wilderness definition or provide for future designations but it does list prohibited uses. It is managed by the Oklahoma Department of Wildlife Conservation.”¹²⁹

MINNESOTA

As Propst & Dawson noted, Minnesota legislatively-designated 18,000 acres of state land inside the federally-designated Boundary Waters Canoe Area Wilderness (“BWCAW”) as state wilderness in 2003.¹³⁰ The state wilderness classification in the Minnesota Outdoor Recreation Area Act is similar to the U.S. Wilderness Act but does not include a minimum size requirement.¹³¹ This state wilderness designation, however, is just one small piece of a larger story of controversy over land management in the BWCAW.

The story begins with Minnesota’s “school trust lands,” which are lands set aside through acts of Congress in the mid-nineteenth century to support schools.¹³² The citizens of Minnesota voted to accept these lands in 1857 and then provided for their long-term protection in the state’s constitution when Minnesota entered the union.¹³³ When Congress passed the 1964 Wilderness Act and then the 1978 BWCA Act, 83,000 acres of state-owned school trust lands were “confined” within the federal wilderness area.¹³⁴ School trust lands generate revenue through activities—like mineral leasing and timber harvesting—which are inconsistent with wilderness management.¹³⁵ Thus, the BWCAW has been mired in land management conflicts between state and federal stakeholders for decades.

In 2009, however, Minnesota began the process of transferring ownership of its school trust lands within the BWCAW (including the 18,000 acres of state wilderness) to the federal government.¹³⁶ Eventually, one-

127. OKLA. DEP’T OF WILDLIFE CONSERVATION, *supra* note 125.

128. *Id.*

129. Propst & Dawson, *supra* note 17, at 23.

130. *Id.*; MINN. STAT. ANN. § 86A.05, Subd. 6 (West 1975).

131. MINN. STAT. ANN. § 86A.05, Subd. 6 (West 1975).

132. *Overview*, MINN. OFF. OF SCH. TRUST LANDS, <https://perma.cc/B9CZ-WZQ6>.

133. *Id.*

134. *Boundary Waters Land Sale & Exchange*, MINN. OFF. OF SCH. TRUST LANDS, <https://perma.cc/2MNJ-Z68T>.

135. *School Trust Lands—Management and Revenue Generation*, MINN. DEP’T OF NAT. RES., <https://perma.cc/4Y4E-GBW7>.

136. MINN. DEP’T OF NAT. RES., *supra* note 134; *Solution To Resolve Decades-Old Dispute in Boundary Waters Canoe Area Wilderness Launches*, CONSERVATION FUND (Apr. 18, 2018), <https://perma.cc/D7MQ-Q9GP>.

third of the school trust lands will be exchanged for productive timberland outside the BWCAW, and the remaining two-thirds will be purchased by the Conservation Fund and then transferred to the federal government to manage as wilderness with the rest of the BWCAW.¹³⁷

While it will retain its wilderness character, because Minnesota's only state wilderness area will soon be incorporated into a federal wilderness area, we no longer believe that this state meets the state-based criteria identified by Propst & Dawson and earlier surveys.

NATURAL AREAS PROGRAMS

Natural areas programs do not meet the wilderness criteria identified by Propst & Dawson and earlier studies, but they protect the same multitude of values that "wilderness" protects, including robust protection to state flora and fauna. Common among most natural areas programs is, as Louisiana's program describes it, the desire to "locate the best examples of what's left of our natural areas and work with landowners to restore and protect them."¹³⁸

While wilderness programs protect only public lands, natural areas programs generally include private lands as well—whether through management agreements, conservation easements, or both. In some states, like Mississippi, natural areas are solely on private lands.¹³⁹ Natural areas programs also de-emphasize recreation and primarily protect land for its inherent ecological value, whereas the stated rationales for wilderness areas may preserve land for both reasons. These programs are very common: at least twenty-seven states have some form of natural areas program.¹⁴⁰ We discuss two states in particular, Minnesota and Hawaii, to demonstrate how natural areas programs operate.

137. MINN. DEP'T OF NAT. RES, *supra* note 134.

138. *Natural Areas Registry*, LA. DEP'T OF WILDLIFE & FISHERIES, <https://perma.cc/A5YR-YHK2>.

139. *Natural Areas Registry*, MISS. DEP'T OF WILDLIFE, FISHERIES, & PARKS, <https://perma.cc/G769-BG84>.

140. Our research identified natural areas programs or nature preserves programs in 27 states: Arizona, Arkansas, Colorado, Connecticut, Delaware, Hawaii, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts (forest reserves program), Minnesota, Mississippi, Missouri, New Jersey, North Carolina, Ohio, Oregon, Pennsylvania, Tennessee, Vermont, Virginia, Washington, and Wisconsin.

MINNESOTA

While Minnesota will soon lose its only state wilderness area, it has a robust Scientific and Natural Areas Program (“SNAP”).¹⁴¹ State-administered Scientific and Natural Areas (“SNA”) are designated by the Commissioner of the Department of Natural Resources (“DNR”) under the authority of Minnesota Statute 84.033.¹⁴² These areas must “embrace[] natural features of exceptional scientific and educational value,” and “embrace[] an area large enough to permit effective research or educational functions and to preserve the inherent natural values of the area.”¹⁴³ DNR manages state-administered SNAs using the guidelines in Minnesota Administrative Code 6136.0100-6136.0600.¹⁴⁴ Compared to wilderness areas, recreation is severely limited in SNAs: the only allowable uses are birdwatching, hiking, photography, snowshoeing, and cross-country skiing.¹⁴⁵ Camping, hunting, swimming, and group activities, among other activities, are prohibited unless DNR issues a special permit.¹⁴⁶ Each SNA also has its own specific management plan.¹⁴⁷ Minnesota has over 160 SNAs.

Private landowners also play a major role in SNAP. The legislature created the Native Prairie Tax Exemption in 1980, which “exempts eligible lands from property taxes and is administered by . . . [DNR] in cooperation with local County Tax Assessors.”¹⁴⁸ These prairies are managed by private landowners.¹⁴⁹ Alternatively, landowners with native prairie can enroll in the Native Prairie Bank—under this program, the landowner grants a conservation easement to DNR in exchange for a one-time payment.¹⁵⁰ The landowner must manage the prairie consistent with the terms of the

141. *Minnesota Scientific and Natural Areas Program*, MINN. DEP’T OF NAT. RES., <https://perma.cc/G739-DF2X> (Minnesota was also one of the first states to establish this type of natural areas program).

142. MINN. STAT. ANN. § 84.033 (West 1969).

143. MINN. STAT. ANN. § 86A.05, Subd. 6 (West 1975).

144. MINN. R. 6136.0100-6136.0600 (West 2021).

145. *Minnesota Scientific and Natural Areas Things To Do and Rules*, MINN. DEP’T OF NAT. RES., <https://perma.cc/4E8J-FRKF>; *see also* MINN. R. 6136.0550 (West 2021).

146. MINN. R. 6136.0550 (West 2021).

147. *Minnesota Scientific and Natural Areas Program Management*, MINN. DEP’T OF NAT. RES., <https://perma.cc/N2WY-V35E>.

148. *Native Prairie Tax Exemption*, MINN. DEP’T OF NAT. RES., <https://perma.cc/D43T-EM9M>.

149. *See* Rebecca Kilde, *Going Native: A Prairie Restoration Handbook for Minnesota Landowners*, MINN. DEP’T OF NAT. RES., SECTION OF ECO. SERVS., SCIENTIFIC AND NATURAL AREAS PROGRAM, <https://perma.cc/J2HM-EUTR>.

150. *Minnesota Native Prairie Bank*, MINN. DEP’T OF NAT. RES., <https://perma.cc/5UZ6-AJ7Q>; MINN. STAT. ANN. § 84.96 (West 1987).

conservation easement.¹⁵¹ Minnesota has over 120 Native Prairie Bank easements.¹⁵²

Finally, public lands not officially designated as SNAs can still be protected under the Natural Area Registry: “The Registry is a way to recognize natural features of statewide ecological and geological significance on any public land in Minnesota. This voluntary agreement protects areas containing native plant communities, rare species and other outstanding natural features.”¹⁵³ Landowners must provide updates to DNR every other year regarding site conditions and management plans.¹⁵⁴

HAWAII

Hawaii legislatively established its Natural Area Reserve System (“NARS”) in 1970 under Chapter 195 of Hawaii’s Revised Statutes.¹⁵⁵ The Department of Land and Natural Resources manages Natural Area Reserves (“NAR”) using the guidelines in Chapter 209 of Title 13 of Hawaii’s Administrative Rules.¹⁵⁶ These management guidelines are more stringent than typical wilderness programs, and they have become stricter since Propst & Dawson’s 2008 survey—for example, whereas overnight camping used to be permitted by bedroll only (no tents), current guidelines prohibit all camping activities.¹⁵⁷ The guidelines prohibit twenty-one activities in all, including hiking with a group of more than ten people and “enter[ing] into, plac[ing] any vessel or material in or on, or otherwise disturb[ing] a lake or pond.”¹⁵⁸

The NARS prioritizes the protection of “the natural flora and fauna, as well as geological sites, of Hawai’i,”¹⁵⁹ and does not place emphasis on recreational opportunities. Presumably, these areas preserve Hawaii’s lands for their inherent value rather than for their value to humans. Hawaii has twenty-one NARs with a total of 123,810 acres, and this number appears to be actively growing.¹⁶⁰ Because Hawaii has an established program for

151. MINN. STAT. ANN. § 84.96 (West 1987).

152. *Minnesota Scientific and Natural Areas Program*, MINN. DEP’T OF NAT. RES., <https://perma.cc/HV9X-5UMN>.

153. *Minnesota Scientific and Natural Areas Program Natural Area Registry*, MINN. DEP’T OF NAT. RES., <https://perma.cc/3EAK-VNS6>.

154. *Id.*

155. HAW. REV. STAT. ANN. § 195-3 (West 1970); Propst & Dawson, *supra* note 17, at 23.

156. 13 HAW. ADMIN. R. § 13-209-1 (West 2021); 12 HAW. ADMIN. R. § 195-4 (West 2021).

157. 13 HAW. ADMIN. R. § 13-209-4 (West 2021).

158. *Id.*

159. *Natural Area Reserves System*, HAW. DIV. OF FORESTRY & WILDLIFE, <https://perma.cc/KWQ3-LXEN>.

160. *Id.*

NARs, and because it has so many more NARs than wilderness areas, Hawaii appears to be prioritizing this type of strict management of lands that resemble “wilderness,” even if not formally designated as such.

CONCLUSION

In their 2008 article, Propst & Dawson note that while state wilderness areas have grown over the years, that growth has been limited in both number and acreage of wilderness areas and has trailed far behind the growth of the National Wilderness Preservation System.¹⁶¹ Our updated survey suggests that this trend persists. While some states have added acreage or new areas, those gains have been modest.

While in the federal system, “wilderness” has a set, legal definition, states vary in what they call “wilderness.” Thus, it is possible we undercount—or overcount—state wilderness. It is also possible that some states are investing more effort into getting wilderness designated and protected under federal law. Congresswoman Diana DeGette of Colorado’s 1st District, for example, has introduced a bill to expand the state’s federal wilderness designations in every congressional session since 1999.¹⁶² Her most recent wilderness bill is currently awaiting Senate approval.¹⁶³

At their core, federal and state wilderness programs are both anthropocentric and ecocentric—they protect public lands for “us” and for their inherent ecological value. These ideas are intertwined, and perhaps even indistinguishable. When we protect land for its inherent value, we preserve biodiversity, maintain a natural carbon sink, and allow nature to just be. Does that not also benefit humankind? When we protect land for “us,” we preserve biodiversity, maintain a natural carbon sink, and allow for light recreational opportunities. Does that not also benefit the inherent value of the land?

Time is wasting, and growing human populations will increasingly need the multiple values that wilderness protects. Designating and affording legal protection to wilderness serves so many purposes: wilderness preserves biodiversity, sustains functioning ecosystems, and safeguards refuges for human recreation and contemplation. President Biden has committed to conserving at least 30% of the United States’ lands and waters by 2030; this provides an ambitious target, considering currently only about 12% of our lands have formal, permanent protection.¹⁶⁴ States could and

161. Propst & Dawson, *supra* note 17, at 23.

162. *Breaking: The Colorado Wilderness Act Was Just Reintroduced to Congress!*, COLO. WILDERNESS ACT, <https://perma.cc/85KW-VFFV>.

163. *Protecting Colorado’s Wilderness*, CONGRESSWOMAN DIANA DEGETTE, <https://perma.cc/VM5F-SR5K>.

164. Exec. Order No. 14008, 86 Fed. Reg. 7619 (Jan. 27, 2021); Hannah Chinn, *‘America, Send Us Your Ideas’: Biden Pledges To Protect 30% of US Lands by 2030*, GUARDIAN (Feb. 17, 2021), <https://perma.cc/HE38-XLK2>.

should contribute to this goal. States still have ample time, and many states still have ample places, to set aside and protect wilderness for present and future generations of humans and nonhumans.
