Mapping Agency Authority in Environmental Law Post-Loper Bright

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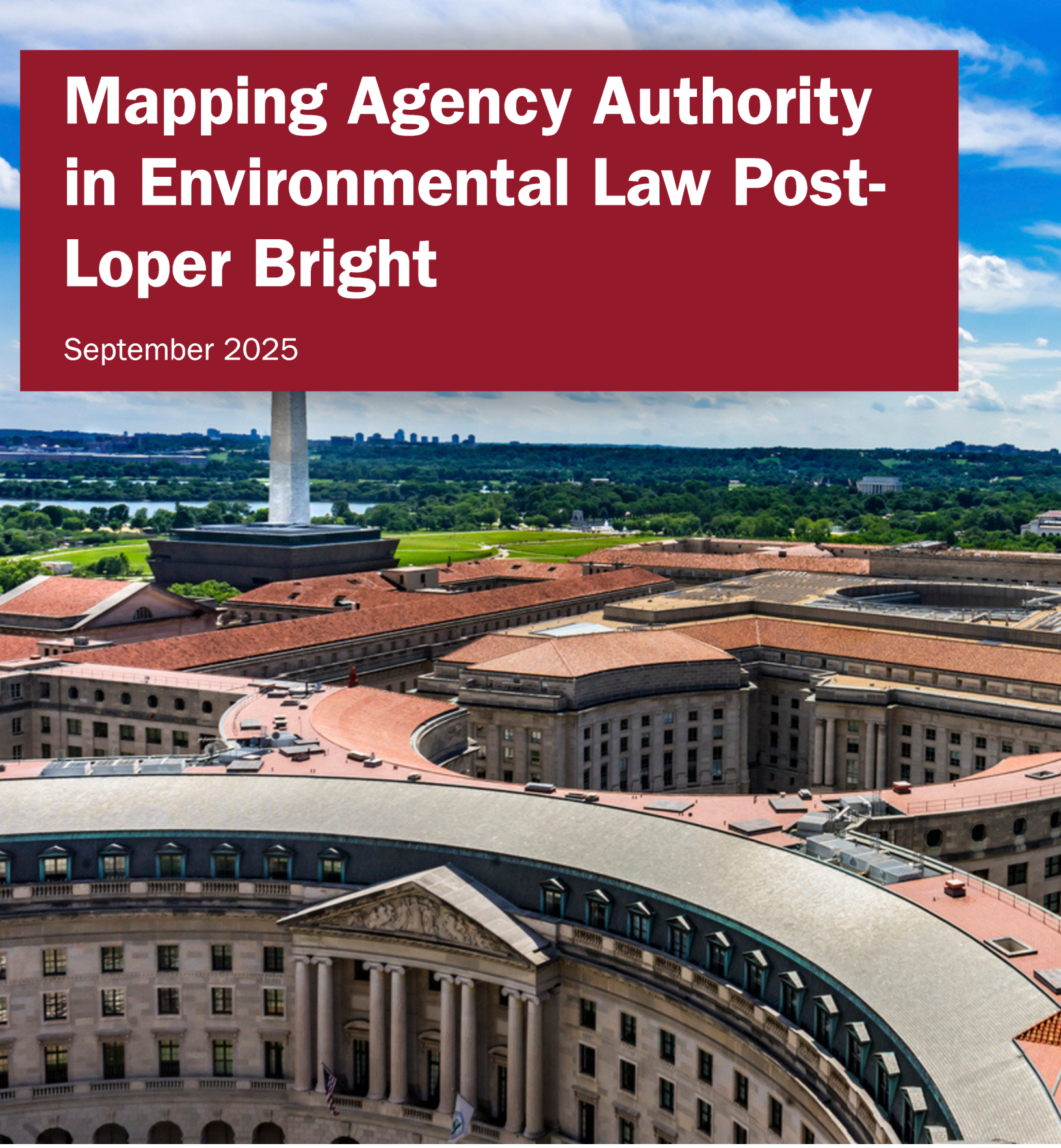

ENVIRONMENTAL & ENERGY LAW PROGRAM
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ABSTRACT

In *Loper Bright v. Raimondo*, the Supreme Court overruled Chevron deference and explained that courts should determine the best reading of a statute, noting that in some instances the best reading is that Congress "delegated discretionary authority to an agency." To understand the implications of this decision for environmental law, we surveyed nine major environmental and natural resources statutes and catalogued each instance of delegation to a federal agency. Our research identified extensive delegation granting agencies discretion throughout the statutes surveyed, which, under *Loper Bright*, courts should review using the deferential arbitrary and capricious standard.

I. INTRODUCTION

In *Loper Bright v. Raimondo*, the Supreme Court articulated a new standard for reviewing federal agency decisions.[1] The Supreme Court replaced Chevron deference with a standard that vests courts with the responsibility to use "independent judgment"[2] to determine the "best reading"[3] of the statute. However, the Court acknowledged that in some instances the "best reading of a statute is that it delegated discretionary authority to an agency."[4] The Court offered three examples that provide a foundation for understanding agency discretion post-*Loper Bright*. Here we describe these three examples of delegated authority as (1) defining a term, (2) implementing a regulatory scheme, and (3) regulatory flexibility.

To understand the implications of *Loper Bright* for the scope of delegation to agencies in environmental law, we created a database of nine major environmental and natural resources statutes that catalogues each instance of delegation to a federal agency in those statutes. By documenting congressional directives to agencies across these laws, the database is a tool for analyzing and comparing the scope of agency authority in environmental and natural resources law.[5]

The database shows how Congress consistently delegates discretion to agencies and defines the scope of the delegated authority in a wide range of contexts — from standard-setting to permitting to enforcement. Here we define "delegation" as a grant of authority to an agency and "discretion" as the degree of independent judgment Congress empowers an agency to exercise within the delegated language.[6]

Using the database, we identified statutory provisions that align with the three categories of agency discretion delineated by the Court in *Loper Bright*. We found compelling evidence that statutes frequently "delegate[] discretionary authority" within the three categories

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[1] *Loper Bright Enters. v. Raimondo*, 603 U.S. 369 (2024).
[2] *Id.* at 412.
[3] *Id*. at 400.
[4] *Id*. at 395. Rich scholarship is developing on the scope of agency and judicial authority following *Loper Bright*. *See, e.g.,* Donald R. Goodson, *Discretion Is Not (Chevron) Deference.* 62 HARV. J. LEGIS. 12 (2024); Thomas Merrill, *The Demise of Deference — And the Rise of Delegation to Interpret?* 138 HARV. L. REV. 227 (2024); Cary Coglianese & Daniel E Walters, *The Great Unsettling: Administrative Governance After* Loper Bright, ADMIN. L. REV. 1 (Winter 2025); Kristin Hickman & Amy Wildermuth, *Harmonizing Delegation and Deference After* Loper Bright, 100 NYU L. Rev. (forthcoming 2025); Cass R. Sunstein, *Our* Marbury*?* Loper Bright *and the Administrative State*, 74 DUKE L.J. 1893 (2025); Jack M. Beermann, Chevron *Deference Is Dead, Long Live Deference*, 2024 CATO SUP. CT. REV. 31 (2024); Mila Sohoni, Chevron*'s Legacy*, 138 HARV. L. REV. F. 66 (2025); Adam Crews, *Navigating the New* Loper Bright *Regime*, 34 WIDENER COMMONWEALTH L. REV. 43 (2025); Abbe R. Gluck, *Overruling* Chevron *Without a Coherent Theory of Statutory Interpretation and the Court-Congress Relationship*, 2024 HARV. J. LEGIS. ONLINE 20 (2024); Sapna Kumar, *Scientific and Technical Expertise After* Loper Bright, 74 DUKE L.J. 1749 (2025); Matthew C. Stephenson, *The* Gray *Area: Finding Implicit Delegation to Agencies after* Loper Bright (June 28, 2025); Cary Coglianese & David Froomkin, Loper Bright's *Disingenuity*, U. PENN. L. REV. (forthcoming 2025).
[5] For the purposes of the database, we compiled the plain text of the statutes without considering how courts have interpreted specific provisions. We focused on the statutory text, not implementing regulations.
[6] Donald R. Goodson, *Discretion Is Not (Chevron) Deference.* 62 HARV. J. LEGIS. 12 (2024).

articulated in *Loper Bright*, which, following the Court's decision, lower courts generally should review using the deferential arbitrary and capricious standard.

This paper explains the database and how we used it to understand the impact of *Loper Bright* on agency administration of the major environmental and natural resources laws. Section II of this paper describes the database we constructed, including how we categorized different types of language delegating authority to federal agencies and the initial insights that emerged from those categories. Section III identifies provisions in each statute where the "best reading" of the statute likely provides discretion to the agency under *Loper Bright.*

II. CONSTRUCTING AN ENVIRONMENTAL AND NATURAL RESOURCES LAW DATABASE

OVERVIEW OF THE DATABASE

To assemble our database, we examined nine environmental and natural resources statutes: Clean Air Act (CAA) Titles I and II, Clean Water Act (CWA) Titles I through VI, the Resource Recovery and Conservation Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Endangered Species Act (ESA), the Federal Land Policy and Management Act (FLPMA), Wilderness Act, the National Forest Management Act (NFMA), and the Mining Act of 1872. We selected these nine statutes[7] because they reflect the breadth and complexity of environmental and natural resources laws, regulating air, water, wildlife, and land and using a range of policy levers to do so. We compiled over 1,500 provisions delegating authority to federal agencies.

Environmental laws seek to address complex problems with attenuated cause-and-effect, long time horizons, and diffuse impacts, as well as benefits and burdens spread apart in time and space.[8] These unique challenges mean the statutes reflect central questions of agency power and discretion[9] and are rich for exploring the post-*Loper Bright* administrative law landscape.

[7] We did not include NEPA because it is a procedural statute.
[8] Richard J. Lazarus, *The Making of Environmental Law* (2d. ed., 2023).
[9] *See Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc*., 467 U.S. 837 (1984); *Massachusetts v. Environmental Protection Agency*, 549 U.S. 497 (2007); *Michigan v. Environmental Protection Agency*, 576 U.S. 743 (2015); *Whitman v. American Trucking Associations, Inc.,* 531 U.S. 457 (2001); *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council*, 435 U.S. 519 (1978); *Sackett v. Environmental Protection Agency*, 598 U.S. 651 (2023); *West Virginia v. Environmental Protection Agency*, 597 U.S. 697 (2022); *Ohio v. EPA*, 603 U.S. 279 (2024); *Loper Bright Enterprises v. Raimondo*, 603 U.S. 369 (2024).

For each statute, we identified and categorized instances of congressional delegation to a federal agency using the method described below.

Type of agency action. We classified statutory delegations by the type of action Congress directed the agency to undertake, for example promulgate a rule, set a standard, report to Congress, or conduct factfinding. Congress delegates a broad scope of responsibilities to environmental and natural resource agencies, which our categorization helps to organize.[10]

Type of question. We classified each provision as a question of law, policy, or fact, or as a mix. While the boundaries between these different categories are not always clear, for the purposes of the database we used the following approach. These categories helped us consider the approach a reviewing court might take under *Loper Bright*, as the decision directed courts to make their own judgment as to the best meaning of questions of law while leaving room for more deferential review of questions of policy and fact.[11]

- *Law*. We defined a question of law as one that requires an agency to interpret statutory language, such as defining an ambiguous term. For example, "[t]he term "motor fuel distribution system" as used in this clause shall be defined by the Administrator through rulemaking."[12]
- *Policy*. For the purposes of our analysis, we classified provisions that asked the agency to weigh factors or competing interests, such as economic or national security considerations, as questions of policy. For example, "[t]he Administrator shall develop, promulgate, and revise as may be appropriate, regulations designating as hazardous substances [...] such elements and compounds which, when discharged in any quantity present an imminent and substantial danger to the public health or welfare, including, but not limited to, fish, shellfish, wildlife, shorelines, and beaches."[13]
- *Fact*. When Congress directs an agency to conduct research or make a determination based on data, we classified the provision as a question of fact. For example: "the Administrator shall conduct research on, and survey the results of other scientific studies on, the harmful effects on the health or welfare of persons caused by pollutants."[14]
- *Mixed questions*. We designated questions that require agencies to consider some combination of law, policy, and fact as mixed questions. These statutes tell agencies to apply a legal standard to a particular set of facts or to make a factual determination based on data while also taking into consideration factors such as economic impact or national security. For example, the Clean Air Act directs the EPA

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[10] While the statutes also direct states and other entities to carry out policy, we focused on congressional directives to federal agencies.
[11] *See, e.g.,* Lisa Schultz Bressman, *The Ordinary Questions Doctrine*, 92 GEO. WASH. L. REV. 985 (2024). Note that while judicial decisions interpreting statutory provisions can further complicate these categories, for the purposes of this paper we analyzed the plain text only. How courts inform this inquiry is beyond the scope of the database.
[12] CAA, 42 U.S.C. § 7545(c)(4)(C)(iii)(V).
[13] CWA, 33 U.S.C. § 1321(b)(2)(A).
[14] CWA, 33 U.S.C. § 1254(c).

administrator to "by regulation prescribe [...] standards applicable to the emission of any air pollutant [...] which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare."[15] It requires EPA to take into account time to allow "the development and application of the requisite technology," as well as "appropriate consideration to the cost of compliance within such period."[16] In this instance, the agency is applying the definition of "air pollutant" as defined by the Clean Air Act (and subsequent caselaw) while also considering technological developments and economic considerations.

Specific factors and weight. From the delegation language, we identified specific parameters or guidance Congress offered the agency in implementation, including for example, whether the agency should consider cost, how it should use scientific data, or whether it can make judgments based on what it considers necessary and appropriate. These factors can create narrow parameters for agencies that offer little discretion, or they can provide general guidance that allows for broad discretion.

Within the Clean Air Act, for example, Congress sometimes directs the EPA administrator to set standards for different categories of emissions sources with specific technical considerations, providing the agency with significant guardrails within which to regulate. One such provision directs the administrator to promulgate standards for solid waste incineration units that consider cost, non-air quality health and environmental impacts, and energy requirements. The standards for existing units "may be less stringent" than those for new units but "shall not be less stringent than the average emissions limitation achieved by the best performing 12 percent of units in the category."[17]

Elsewhere, the Clean Air Act offers broad delegation directing the administrator to use his or her judgment. For example, the administrator "may postpone certification" for a "new power source or propulsion system" for motor vehicles, until the administrator "has prescribed standards for any air pollutants emitted by such vehicle or engine which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger the public health or welfare but for which standards have not been prescribed under subsection (a)."[18] These different degrees of discretion for agency decision making should inform judicial review of agency actions.

We created two additional filters to aid in our interpretation of the database.

Delegation language. For each provision, we included an excerpt of the delegation language to enable us to search for keywords and compare language across statutes.

Delegation key words. We identified key action words in the delegation language that Congress used to direct the agency such as "shall determine," "shall establish," "shall develop and implement," "shall conduct," or "is authorized." We also included words that

[15] CAA, 42 U.S.C. § 7521 (a)(1).
[16] CAA, 42 U.S.C. § 7521 (a)(2).
[17] CAA, 42 U.S.C. § 7429(a)(2).
[18] CAA, 42 U.S.C. § 7521(e).

guide agency decision making, such as “appropriate” and “necessary.”

CONGRESSIONAL DELEGATION TO AGENCIES: WHAT, HOW, AND HOW MUCH DISCRETION

For an initial analysis, we used the database to identify patterns or divergences in the way Congress delegates to agencies and the flexibility it grants within and across the statutes we examined. In each statute, we identified what Congress asks an agency to do, how it asks the agency to do it, and the degree of discretion granted to the agency.

CONGRESS DIRECTS AGENCIES TO ACT

Our database delineates the types of actions Congress directs agencies to take, which include:

- Promulgate and implement regulations (unsurprisingly the most common category since it is a core function of environmental agencies).[19]
- Establish a regulatory standard, for example directing the agency to set a water quality standard under the Clean Water Act[20] or approving a state’s water standard.[21]
- Ensure compliance and conduct enforcement of statutes as well as the regulations implementing them.[22]
- Conduct scientific studies, collect or assess data, or undertake other information gathering to inform agency decision making.[23]
- Manage and distribute grants for certain activities.[24]

[19] For example, “The Secretary shall establish, and publish in the Federal Register, agency guidelines to insure that the purposes of this section are achieved efficiently and effectively.” ESA, 16 U.S.C. § 1533 (h).
[20] For example, “There shall be achieved: Any more stringent limitation, including those necessary to meet water quality standards, treatment standards, or schedule of compliance established pursuant to any State law regulations or any other Federal law or regulation, or required to implement any applicable water quality standard established.” CWA, 33 U.S. Code § 1311(b).
[21] For example, “Whenever the State revises or adopts a new standard, such revised or new standard shall be submitted to the Administrator.” CWA, 33 U.S.C. § 1313 (c)(2)(A).
[22] For example, “In the case of an eligible response site at which there is a release or threatened release of a hazardous substance, pollutant, or contaminant and for which the Administrator intends to carry out an action that may be barred under subparagraph (A), the Administrator shall–(I) notify the State of the action the Administrator intends to take; and (II)(aa) wait 48 hours for a reply from the State under clause (ii); or (bb) if the State fails to reply to the notification or if the Administrator makes a determination under clause (iii), take immediate action under that clause.” CERCLA, 42 U.S.C. § 9628(b)(1)(D)(i).
[23] For example, the Secretary may conduct investigations, studies, and experiments, on his own initiative or in cooperation with others, involving the management, protection, development, acquisition, and conveying of the public lands.” FLPMA, 43 U.S.C. § 1737(a).
[24] “The Administrator shall make available grants equal to 5 percent of the purchase price of tire shredders […] to those eligible applicants best meeting criteria promulgated […] Criteria for receiving grants shall be promulgated […]” RCRA, 42 U.S.C. § 6914.

- Create and manage plans, programs, or guidelines, for example creating recruitment plan[25] or establishing guidelines for site cleanup.[26]
- Manage public lands, including disposal, acquisition, and other activities.[27]
- Other activities, including permitting,[28] coordinating with other agencies or states,[29] reporting periodically to Congress,[30] defining a term or phrase,[31] entering contracts,[32]

[25] For example, "The Secretary may recruit, without regard to the civil service classification laws, rules, or regulations, the services of individuals contributed without compensation as volunteers for aiding in or facilitating the activities administered by the Secretary through the Bureau of Land Management." FLPMA, 43 U.S.C. § 1737(d).

[26] For example, "Within one hundred and eighty days after December 11, 1980, the Administrator of the Environmental Protection Agency shall, after consultation with the Attorney General, establish and publish guidelines for using the imminent hazard, enforcement, and emergency response authorities of this section and other existing statutes administered by the Administrator of the Environmental Protection Agency to effectuate the responsibilities and powers created by this chapter. Such guidelines shall to the extent practicable be consistent with the national hazardous substance response plan, and shall include, at a minimum, the assignment of responsibility for coordinating response actions with the issuance of administrative orders, enforcement of standards and permits, the gathering of information, and other imminent hazard and emergency powers authorized by (1) sections 1321(c)(2),[1] 1318, 1319, and 1364(a) of title 33, (2) sections 6927, 6928, 6934, and 6973 of this title, (3) sections 300j–4 and 300i of this title, (4) sections 7413, 7414, and 7603 of this title, and (5) section 2606 of title 15.42 U.S.C. § 9606(c). CERCLA, 42 U.S.C. § 9606(c).

[27] For example, "The Secretary shall, with public involvement and consistent with the terms and conditions of this Act, develop, maintain, and, when appropriate, revise land use plans which provide by tracts or areas for the use of the public lands. Land use plans shall be developed for the public lands regardless of whether such lands previously have been classified, withdrawn, set aside, or otherwise designated for one or more uses." FLPMA, 43 U.S.C. § 1712(a).

[28] For example, "The Administrator shall prescribe conditions for such permits to assure compliance with the requirements of paragraph (1) of this subsection, including conditions on data and information collection, reporting, and such other requirements as he deems appropriate." CWA, 33 U.S.C § 1342(a)(2).

[29] For example, the Administrator is authorized to make recommendations to the Secretary of Transportation respecting regulations of hazardous waste under the Hazardous Materials Transportation Act and for addition of materials to be covered." RCRA, 42 U.S.C. § 6923(b).

[30] For example, "The Administrator shall transmit to the Congress and the President, not later than ninety days after the end of each fiscal year, a comprehensive and detailed report on all activities of the Office during the preceding fiscal year." RCRA, 42 U.S.C. § 6915.

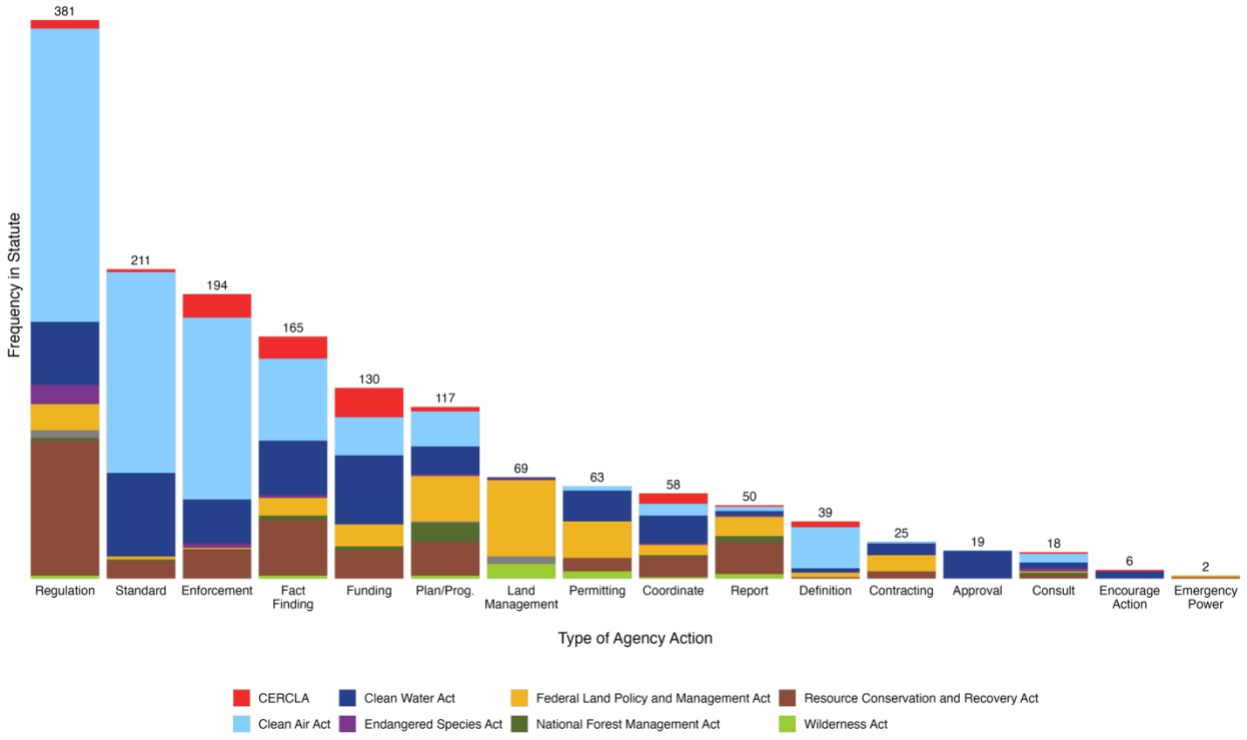
[31] For example, "(5) Definitions: As used in this chapter: (A) Fiduciary: The term "fiduciary"-- (i) means a person acting for the benefit of another party as a bona fide– (XI) representative in any other capacity that the Administrator, after providing public notice, determines to be similar to the capacities described in subclauses (I) through (X)." CERCLA, 42 U.S.C. § 9607(n)(5).

[32] For example, "In carrying out this paragraph, the Administrator may enter into one or more contracts with nongovernmental entities such as– (i) the national energy laboratories; and (ii) institutions of higher education (as defined in section 1001 of Title 20)." CAA, 42 U.S.C. § 7545(b)(4)(B).

approving actions or plans,[33] consulting with other stakeholders,[34] encouraging certain actions or policy goals,[35] and using emergency authority.[36]

Figure 1 shows the frequency of types of actions that Congress directs agencies to undertake across the statutes, with each statute depicted in a different color.

Figure 1. Frequency of actions delegated to agencies



[33] For example, "Each State may develop and submit to the Administrator procedures under State law for inspection, monitoring, and entry with respect to point sources located in such State. If the Administrator finds that the procedures and the law of any State relating to inspection, monitoring, and entry are applicable to at least the same extent as those required by this section, such State is authorized to apply and enforce its procedures for inspection, monitoring, and entry with respect to point sources located in such State (except with respect to point sources owned or operated by the United States)." CWA 33 U.S.C. § 1318(c).

[34] For example, "In carrying out the program authorized by this chapter, the Secretary shall cooperate to the maximum extent practicable with the States. Such cooperation shall include consultation with the States concerned before acquiring any land or water, or interest therein, for the purpose of conserving any endangered species or threatened species." ESA 16 U.S.C. § 1535(a).

[35] For example, "the Administrator shall encourage waste treatment management which results in the construction of revenue producing facilities providing for (1) the recycling of potential sewage pollutants; (2) the confined and contained disposal; (3) the reclamation of wastewater; (4) the ultimate disposal of sludge." CWA, 33 U.S. Code § 1281(d).

[36] For example, "Emergency procurement powers. Notwithstanding any provision in law, the Administrator may authorize the use of emergency procurement powers as he deems necessary." RCRA, 42 U.S.C. § 6991b(h)(8).

Within these agency actions, the statutes delegate a range of discretionary authority. On one end, Congress may provide a general grant of authority without additional parameters to guide the agency action, signaling a grant of broad discretion.[37] For example, Congress can set out a policy goals and direct the agency to develop a regulatory scheme to implement it, providing the agency authority to develop and enforce the particulars of a regulatory scheme. For example, RCRA states that the EPA administrator shall "in cooperation with appropriate Federal, State, municipal, and intermunicipal agencies, develop and publish suggested guidelines for solid waste management."[38] Alternatively, Congress can explicitly cabin the agency's scope of authority by directing more specific, discrete actions the agency must take. In CERCLA, for example, Congress directs EPA to undertake a specific set of steps for the management of Love Canal: "The Administrator shall conduct or cause to be conducted a habitability and land-use study. The study shall-- (1) assess the risks associated with inhabiting of the Love Canal Emergency Declaration Area; (2) compare the level of hazardous waste contamination in that Area to that present in other comparable communities; and (3) assess the potential uses of the land within the Emergency Declaration Area, including but not limited to residential, industrial, commercial and recreational, and the risks associated with such potential uses."[39]

In our database, we most often found delegations that grant agencies significant authority to make a decision while also requiring them to consider specific factors.[40] This type of delegation allows Congress to leverage agency expertise while also setting guardrails for the agency action. For example, in the Endangered Species Act Congress directs the Secretary of the Interior to make determinations about whether species are threatened or endangered based on specific technical factors.[41]

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[37] "Whenever any species is listed as a threatened species pursuant to subsection (c) of this section, the Secretary shall issue such regulations as he deems necessary and advisable to provide for the conservation of such species." 16 U.S.C. § 1533(d); "The Administrator may compromise, modify, or remit, with or without conditions, any administrative penalty which may be imposed under this subsection." ESA, 42 U.S.C. § 7413(d)(2)(B).

[38] 42 U.S.C. § 6907(a).

[39] 42 U.S.C. § 9661(e). Another example is directing the agency to set a pollution standard following a particular method, for example, "[e]mission standards promulgated under this subsection for existing sources in a category or subcategory may be less stringent than standards for new sources in the same category or subcategory but shall not be less stringent, and may be more stringent than — (A) the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emissions information)" CAA, 42 U.S.C. § 7412(d)(3).

[40] For example, "The Administrator may promulgate regulations under subsection (a)(1) revising any standard prescribed or previously revised under this subsection, as needed to protect public health or welfare, taking costs, energy, and safety into account." CAA, 42 U.S.C. § 7521(b)(1)(C).

[41] "(1) The Secretary shall by regulation promulgated in accordance with subsection (b) determine whether any species is an endangered species or a threatened species because of any of the following factors: (A) the present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence." ESA, 16 U.S.C. § 1533(a).

Finally, in some instances Congress deliberately limits the agency's authority to act in a particular way or in a particular policy area by explicitly saying the administrator does not have authority.[42]

CONGRESS DIRECTS HOW AGENCIES SHOULD ACT

Congress often directs how an agency should undertake the action it has assigned. From open-ended directives[43] to specific assignments,[44] the database categorizes the types of language Congress uses to direct how the agency should undertake its work.

Statutes granting agencies the discretion to make judgments and then act upon those judgments often include phrases such as "in the judgment of the administrator," "which the administrator determines," "administrator deems appropriate" and "may deem necessary," "acceptable," or "practicable." This phrasing directs the agency to determine when and what agency actions are appropriate and demonstrates Congress's intent to rely on agency discretion.

Congress repeatedly uses directive or permissive language to tell the agency how to act. The administrator "shall promulgate" in some instances; for example, in FLPMA "[t]he Secretary, with respect to the public lands, shall promulgate rules and regulations to carry out the purposes of this Act and of other laws applicable to the public lands, and the Secretary of Agriculture, with respect to lands within the National Forest System, shall promulgate rules and regulations to carry out the purposes of this Act."[45]

In other provisions, Congress states that the agency "may promulgate," for example in RCRA, where if the agency conducts a public hearing, "the Administrator may issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents, and may promulgate rules for discovery procedures."[46] Permissive statutory language can expressly delegate authority without commanding action, for example when the statute states the agency or administrator "is authorized" or "has the authority" to undertake action. Statutes may also designate certain responsibilities as

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[42] For example, "The Administrator shall have no authority under this part to mandate the production of clean-fuel vehicles except as provided in the California pilot test program or to specify as applicable the models, lines, or types of, or marketing or price practices, policies, or strategies for, vehicles subject to this part. Nothing in this part shall be construed to give the Administrator authority to mandate marketing or pricing practices, policies, or strategies for fuels." CAA, 42 U.S.C. § 7590(b).
[43] For example, "Whenever the Administrator determines after public hearing that a State is not administering and enforcing a program authorized under this subchapter in accordance with the provisions of this section, he shall so notify the State. If appropriate action is not taken within a reasonable time, not to exceed one hundred and twenty days after such notification, the Administrator shall withdraw approval of such program and reestablish the Federal program pursuant to this subchapter." RCRA, 42 U.S.C. § 6991c(e).
[44] For example, "The Administrator shall establish, equip and maintain field laboratory and research facilities [...] for the conduct of research, investigations, experiments, field demonstrations and studies, and training relating to the prevention, reduction and elimination of pollution." CWA, 33 U.S.C. § 1254 (e).
[45] 43 U.S.C. § 1740.
[46] 42 U.S.C. § 6928(b).

"nondiscretionary duties" to clearly articulate the agency's responsibility and lack of discretion about whether and how to act.[47]

Congress may also direct an agency to affirm or encourage certain activities, giving a directive but providing the agency less authority with which to act.[48] For example, in the Clean Water Act Congress directs EPA to "encourage waste treatment management which combines 'open space' and recreational considerations with such management."[49] This contrasts with statutory directives giving the agency greater power to develop and administer comprehensive programming. For example in the Clean Water Act, "[t]he Administrator shall, after careful investigation, and in cooperation with other Federal agencies, State water pollution control agencies, interstate agencies, and the municipalities and industries involved, prepare or develop comprehensive programs for preventing, reducing, or eliminating the pollution of the navigable waters and ground waters and improving the sanitary condition of surface and underground waters."[50] This sliding scale of authority to encourage, ratify, or execute actions occurs throughout the statutes in our database.[51]

III. MAPPING AGENCY AUTHORITY POST-*LOPER BRIGHT*

Using the database, we analyzed statutory delegation of discretionary authority to agencies in light of *Loper Bright v. Raimondo.* In *Loper Bright*, the Court overturned the longstanding *Chevron* doctrine under which courts deferred to an agency's reasonable interpretation of its own statute when the statutory language was ambiguous.[52] The Court held that the Administrative Procedure Act (APA) requires courts to determine independently whether

[47] 42 U.S.C. § 7521 (i)(3)(D).
[48] For example, "The Administrator shall encourage waste treatment management which combines "open space" and recreational considerations with such management." CWA, 33 U.S.C. § 1281(f). In our dataset, "agency approval," "consult," and "encouraging action," are sortable agency actions that might provide examples of this type of delegation.
[49] 33 U.S.C. § 1251(f).
[50] 33 U.S.C. § 1252.
[51] For example, "Small business participation. The Administrator shall ensure, to the maximum extent practicable, an adequate opportunity for small business participation in the program established by subsection (b)." Compare to another provision, "[t]he Administrator shall promulgate and revise as may be appropriate, regulations designating as hazardous substances, in addition to those referred to in section 9601(14) of this title, such elements, compounds, mixtures, solutions, and substances which, when released into the environment may present substantial danger to the public health or welfare or the environment, and shall promulgate regulations establishing that quantity of any hazardous substance the release of which shall be reported pursuant to section 9603 of this title." CERCLA, 42 U.S.C. § 9660(g); § 9602(a).
[52] *Loper Bright*, 603 U.S. at 379. For discussion of how courts may make decisions after *Loper*, *see, e.g.,* Cass R. Sunstein, *Our* Marbury*?* Loper Bright *and the Administrative State*, 74 DUKE L.J. 1893 (2025); Cary Coglianese & Daniel E. Walters, *The Great Unsettling: Administrative Governance After* Loper Bright, 77 ADMIN. L. REV. 1 (2025); Gary Lawson, *'Then What?': A Framework for Life After* Chevron, 60 WAKE FOREST L. REV. 57 (2025); Renee Farmer & Daniel G. Aaron, Loper Bright*'s Deregulatory Synergies*, 55 SETON HALL L. REV. 1697 (2025); Eric R. Bolinder, *Litigating* Loper Bright*: Interpretive Challenges and Solutions for the Post-*Chevron *Era*, 128 W. VA. L. REV. (forthcoming 2025).

agency actions are within the bounds of the agency's statutory authority.[53] When a statute is ambiguous, "courts use every tool at their disposal to determine the best reading of the statute and resolve the ambiguity."[54]

The Supreme Court held that courts will now decide questions of statutory interpretation but sometimes the best reading of a statute is that it provides agencies with some authority: "[i]n a case involving an agency, of course, the statute's meaning may well be that the agency is authorized to exercise a degree of discretion. Congress has often enacted such statutes."[55] In that case, so long as the "particular statute delegates authority to an agency consistent with constitutional limits, courts must respect the delegation, while ensuring that the agency acts within it."[56] When Congress has delegated "discretionary authority" to an agency, the agency's "reasoned decision making" warrants deferential judicial review.[57]

The Court identified three examples where statutes grant agency discretion that ought to invite deferential arbitrary and capricious review under the APA: statutes that (1) "'expressly delegate[ ]' to an agency the authority to give meaning to a particular statutory term; (2) "empower an agency to prescribe rules to "fill up the details" of a statutory scheme"; and (3) "regulate subject to the limits imposed by a term or phrase that 'leaves agencies with flexibility,' [...] such as 'appropriate' or 'reasonable.'"[58] Notably, the Court cited examples from the Clean Water Act and the Clean Air Act to illustrate this third category.[59] In subsequent caselaw, courts have begun to grapple with the contours of this discretion.[60]

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[53] *Loper Bright*, 603 U.S. at 400, 404.
[54] *Id.* at 400.
[55] *Id.* at 394.
[56] *Id.* at 413.
[57] *Id.* at 371.
[58] *Id.* at 394–95.
[59] The Court notes the following statutes empower agency discretion: "See, e.g., 33 U. S. C. §1312(a) (requiring establishment of effluent limitations "[w]henever, in the judgment of the [Environmental Protection Agency (EPA)] Administrator [...], discharges of pollutants from a point source or group of point sources [...] would interfere with the attainment or maintenance of that water quality [...] which shall assure" various outcomes, such as the "protection of public health" and "public water supplies"); 42 U. S. C. §7412(n)(1)(A) (directing EPA to regulate power plants "if the Administrator finds such regulation is appropriate and necessary")." *Id.* 395, fn. 6.
[60] *See, e.g.*, *Schaffner v. Monsanto Corp.*, 113 F.4th 364 (3d Cir. 2024) ("As the Court explained in *Loper Bright*, while courts alone must ascertain a statute's meaning, 'the statute's meaning may well be that the agency is authorized to exercise a degree of discretion.' [...] And one way for statutes to express that meaning is when they 'empower an agency to prescribe rules to 'fill up the details' of a statutory scheme.' [...] FIFRA [the Federal Insecticide, Fungicide, and Rodenticide Act] is such a statute: it expressly authorizes EPA administrator "to prescribe regulations to carry out the provisions" of the statute."; *Moctezuma-Reyes v. Garland*, 124 F.4th 416 (6th Cir. 2024) ("The Supreme Court has instructed us that occasionally the best reading of a particular statute will reveal that Congress expressly and explicitly delegated discretion to the agency — and that we must defer to the agency's exercise of its discretion. [...] For example, Congress may say that the agency can regulate in accordance with broad, flexible standards like "appropriate" and "reasonable" only when the agency "finds" those standards have been met or if in its "judgment" those standards have been satisfied. [...] This sort of express language conferring discretion on the agency is critical: If broad language alone triggered deference, we'd unwittingly return to construing less than precise words as implicit delegations to the agency that warrant deference."); *see also* Robin Kundis Craig, *The Impact of* Loper-Bright v. Raimondo*: An Empirical Evaluation of the First Six Months*, MINN. L. REV. (2024).

The database allowed us to identify and catalogue possible instances of congressional delegation to agencies within these categories to clarify the scope of "delegated discretionary authority" after *Loper Bright.*[61]

CATEGORY 1: DEFINING A TERM

Loper Bright explained "some statutes 'expressly delegate[]' to an agency the authority to give meaning to a particular statutory term."[62] The majority's examples include express delegations of authority for an agency to define terms, using statutory language including: "as…defined and delimited by regulations of the Secretary" or "as defined by regulations which the Commission shall promulgate."[63]

The database reveals additional express delegations to define a term. Although Congress defines many terms throughout these environmental statues, which are highly technical, we nevertheless identified nearly 40 times where Congress empowered agencies to give meaning to a term, particularly in the Clean Air Act and Clean Water Act. As an example, in the Clean Air Act, the statute states a "motor fuel distribution system […] shall be defined by the Administrator through rulemaking."[64] In the Clean Water Act, "[e]ffluent limitations for point sources […] shall require the application of the best practicable control technology currently available as defined by the Administrator pursuant to section 304(b) of this Act."[65]

CATEGORY 2: IMPLEMENTING REGULATORY SCHEME

The *Loper Bright* majority recognized that Congress may grant agency discretion by "empower[ing] an agency to prescribe rules to 'fill up the details' of a statutory scheme."[66] The Court cites *Wayman v. Southard*, a 1825 case, stating that Congress could "delegate to others[] powers which the legislature may rightfully exercise."[67] Though the Court does not

[61] Note that scholars have worked to define the *Loper Bright* exemptions. Our paper focuses on their application to environmental and natural resources law. *See, e.g.*, Kristin Hickman and Amy Wildermuth, *Harmonizing Delegation and Deference After Loper Bright*, New York University Law Review (forthcoming 2025).
[62] *Loper Bright*, 603 U.S. at 395. (quoting *Batterton v. Francis*, 432 U. S. 416, 425 (1977)).
[63] Examples from *Loper Bright*: "29 U. S. C. §213(a)(15) (exempting from provisions of the Fair Labor Standards Act "any employee employed on a casual basis in domestic service employment to provide companionship services for individuals who (because of age or infirmity) are unable to care for themselves (as such terms are defined and delimited by regulations of the Secretary)" (emphasis added)); 42 U. S. C. §5846(a)(2) (requiring notification to Nuclear Regulatory Commission when a facility or activity licensed or regulated pursuant to the Atomic Energy Act "contains a defect which could create a substantial safety hazard, as defined by regulations which the Commission shall promulgate" (emphasis added))." *Loper Bright*,603 U.S. at 395 n.5.
[64] 42 U.S.C. § 1311(b)(1)(A)
[65] 33 U.S.C. § 301(b)(1)(A).
[66] *Loper Bright*, 603 U.S. at 395. (quoting *Wayman v. Southard*, 23 U.S. 1, 10 (1825)).
[67] *Id.*

provide specific examples for this category, this category appears to encompass situations where Congress sets policy objectives and then empowers agencies to determine how to achieve them.

Although Congress employs this structure across the statutes we reviewed, we identified two types of agency action in the database that exemplified this regulatory structure: instances where Congress directs an agency to (1) establish and manage a plan or program and (2) set or approve a standard.

First, we identified approximately 120 examples where Congress charges an agency with establishing or managing a plan or program. In these cases, Congress articulates its desired approach to effectuate policy and directs the agency to implement it. For example, the Endangered Species Act sets out the plan to protect species and then empowers the Secretary of the Interior to publish a list of endangered and threatened species and implement programs, including recovery plans ("The Secretary shall develop and implement plans [...] for the conservation and survival of endangered species and threatened species listed pursuant to this section"), monitoring ("The Secretary shall implement a system in cooperation with the States to monitor"), and establish and implement agency guidelines for the program.[68]

Second, we identified over 210 provisions in which Congress directs agencies to set or approve standards. These include instances where statutes specify what outcome to achieve or general procedures to follow, but direct agencies to determine the specific numerical thresholds, technical requirements, or methodological details. For example, in RCRA, Congress established a framework for setting standards on underground storage tanks, requiring standards for new tanks to "include, but need not be limited to, design, construction, installation, release detection, and compatibility standards."[69] Congress described the regulatory structure of the standard and provided the agency discretion to "fill up the details."

CATEGORY 3: REGULATORY FLEXIBILITY

The Court also recognized that Congress can empower agencies "to regulate subject to the limits imposed by a term or phrase that 'leaves agencies with flexibility,' such as 'appropriate' or 'reasonable.'"[70] As examples, the Court cited the Clean Water Act's water quality related effluent limitations, which direct the administrator to use his or her "judgment," and the Clean Air Act hazardous air pollutant provision directing the

[68] 16 U.S.C. § 1533.
[69] 42 U.S.C. § 6991b(e)
[70] *Loper Bright*, 603 U.S. at 395.

administrator to regulate power plants under that section when it is "appropriate and necessary."[71]

Our database shows frequent use of this and similar language that provides agencies with some flexibility. In the context of agency decision making, the term "reasonable" appeared approximately 100 times and "appropriate" appeared approximately 130 times in the nine statutes we reviewed. For example, in RCRA Congress authorizes the EPA administrator to require testing from the operator of a site or conduct testing or analysis by EPA, based on what the administrator "deems reasonable to ascertain the nature and extent of the hazard."[72] In the Wilderness Act, the Secretary of Agriculture may allow or restrict certain activities in certain areas based on what the Secretary "deems desirable" and "subject to such reasonable regulations as are deemed necessary by the Secretary."[73]

Figure 2. The Three *Loper Bright* Categories in Statute

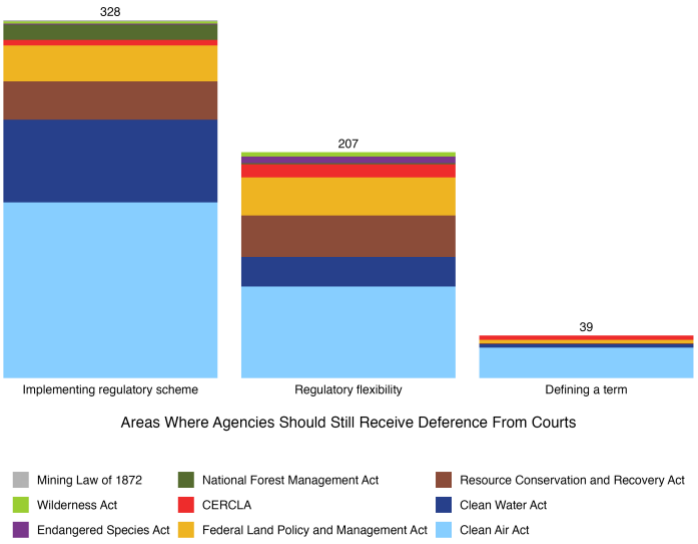

Figure 2 shows where these three categories appear in the statutes we reviewed. While there are likely additional provisions that would fall into these three categories, we applied a conservative filter to provide a comparative illustration of the frequency of the different categories.

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[71] *Id.* at 395 n. 6 ("33 U.S.C. §1312(a) (requiring establishment of effluent limitations "[w]henever, in the judgment of the [Environmental Protection Agency (EPA)] Administrator [...], discharges of pollutants from a point source or group of point sources [...] would interfere with the attainment or maintenance of that water quality [...] which shall assure" various outcomes, such as the "protection of public health" and "public water supplies"); 42 U. S. C. §7412(n)(1)(A) (directing EPA to regulate power plants "if the Administrator finds such regulation is appropriate and necessary").")

[72] 42 U.S.C. § 6934(c).

[73] 16 U.S.C. § 1133(d)(4).

OTHER POSSIBLE CATEGORIES

Using the three categories of agency discretion identified in *Loper Bright* as a guide, we can identify other statutory delegations that would appear to align with the Court's vision of appropriate agency authority. These examples, like the those provided by the Court, explicitly empower the agency to act and, in some instances, grant the agency a high degree of discretion.[74] Examples include:

- Use of the terms "in the discretion" of the administrator or secretary, "in the judgment" of the administrator or secretary, and as the administrator or secretary "deems necessary" explicitly delegating to the administrator and relying on his or her expertise.
- Use of other "open-ended" terms[75] like "to the extent practicable,"[76] or "authorized to provide"[77] that specifically call on the discretion of the agency.
- Requiring the agency to undertaking fact finding, collect data, or conduct scientific analysis, drawing explicitly on the specific expertise and technical capabilities of the agency.[78]

Post-*Loper Bright*, courts are producing decisions that reflect varied interpretations of the decision.[79] While the Supreme Court has not yet provided additional clarity on *Loper Bright*'s exemptions,[80] our database suggests that agencies have significant discretion in the nine statutes we evaluated.

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[74] Brett M. Kavanaugh, *Fixing Statutory Interpretation*, 129 HARV. L. REV. 2118, 2143 (2016); Donald R. Goodson, *Discretion Is Not (Chevron) Deference.* 62 HARV. J. LEGIS. 12 (2024).
[75] Brett M. Kavanaugh, *Fixing Statutory Interpretation*, 129 HARV. L. REV. 2118, 2143 (2016); *Kisor v. Wilkie*, 588 U.S. 558, 631–33 (2019) (Kavanaugh, J., concurring).

[76] For example, "State cooperation In carrying out the program authorized by this chapter, the Secretary shall cooperate to the maximum extent practicable with the States." 16 U.S.C. § 1535(a); "The Administrator shall ensure, to the maximum extent practicable, an adequate opportunity for small business participation in the program established by subsection (b)." 42 U.S.C. § 9660(g); "Emergency procurement powers. Notwithstanding any provision in law, the Administrator may authorize the use of emergency procurement powers as he deems necessary." 42 U.S.C. § 6991b(h)(8).

[77] For example, "The Administrator is authorized to provide technical, financial and management assistance for operation and maintenance of the demonstration projects constructed under this section, until such time as the recommendations of subsection (e) are implemented." CWA, 33 U.S.C. § 1263(f).
[78] For example, "Investigations, studies, and experiments. The Secretary may conduct investigations, studies, and experiments, on his own initiative or in cooperation with others, involving the management, protection, development, acquisition, and conveying of the public lands." FLPMA, 43 U.S.C. § 1737(a).
[79] *See, e.g.*, Robin Kundis Craig, *The Impact of* Loper-Bright v. Raimondo*: An Empirical Evaluation of the First Six Months*, MINN. L. REV. (2024); Eric R. Bolinder, *Litigating* Loper Bright*: Interpretive Challenges and Solutions for the Post-*Chevron *Era*, 128 W. VA. L. REV. (forthcoming 2025).
[80] The Court has cited *Loper Bright* on occasion since the decision was issued; however, it has not provided further robust analysis as to the scope of discretion granted to agencies. *See* e.g., *Bondi v. VanDerStok*, 145 S. Ct. 857 (2025); *Seven Cnty. Infrastructure Coal. v. Eagle Cnty., Colorado*, 145 S. Ct. 1497 (2025).

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About EELP

The Environmental & Energy Law Program (EELP) at Harvard Law School develops legal and policy solutions to protect public health and the environment, support the clean energy transition, and address the challenges of climate change. Through rigorous legal analysis, convening diverse stakeholders, and training the next generation of lawyers, EELP works to strengthen the legal framework needed for effective environmental protection and a sustainable future.