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Shifting Science, Considered Costs, and Static Statutes: The Interpretation of Expansive Environmental Legislation

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ARTICLE

SHIFTING SCIENCE, CONSIDERED COSTS, AND STATIC STATUTES: THE INTERPRETATION OF EXPANSIVE ENVIRONMENTAL LEGISLATION

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Congress often passes expansive legislation, frequently environmental and public health regulatory statutes, where both the definition of those items being regulated and the mandate have significant breadth. How should these provisions be construed? While it is difficult to establish a model which determines whether to broadly or narrowly construe an expansive statutory provision, factors that impact this choice include the existence of express limitations on the mandate, understandings of congressional intent, the need to avoid regulation that might do more harm than good, the nature of the regulated item, and intervening circumstances such as new understandings in law, policy, or science. This Article sets out to establish how, why, and when courts should broadly interpret expansive environmental and public health legislation. Absent express limitations requiring cost-benefit analysis or technological feasibility, courts should broadly construe expansive environmental legislation. Why? Courts are equipped to interpret the textual mandate, the costs of a failure to regulate, even in an interim period, are potentially great, and Congress, in recognition of changed circumstances, was aware of the breadth of the textual language; whereas courts should allow administrative agencies to narrowly or broadly construe statutory provisions with such limitations subject to Chevron deference.

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I. INTRODUCTION

Expansive definitions and mandates fill federal environmental and public health statutes—administrative agencies must create standards for "air pollutant emissions" that "endanger public health or welfare,"[1] keep workplaces free from "hazards" that "are likely to cause death or serious physical harm,"[2] and develop "drinking water regulation" for any contaminant that "may have an adverse effect on the health of persons."[3] In evaluating the action or inaction of administrative agencies pursuant to these provisions, judges must often choose between broad or narrow construction. Statutes are often narrowly construed, as a result of lawful and unlawful agency action,[4] but frequently statutes contain provisions that limit any attempt at broad construction (e.g., requiring that costs be considered).[5] Nevertheless, courts and agencies become anxious when interpreting expansive environmental statutory mandates, and this nervousness leads to narrowness of, ironically, textually broad statutory language. It is difficult to establish a model to determine whether to broadly or narrowly construe an expansive federal statutory provision that delegates authority to an administrative agency to protect environmental and public health. However, factors that impact this choice include the existence of express limitations on the mandate, understandings of

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[1] Clean Air Act (CAA) § 108(1), 42 U.S.C. § 7408(1) (2000).

[2] Occupational Safety and Health Act (OSHA) § 5, 29 U.S.C. § 654 (2004).

[3] Safe Drinking Water Act (SDWA), 42 U.S.C. § 300g-1 (2000).

[4] *See, e.g.*, Am. Water Works Ass'n v. EPA, 40 F.3d 1266, 1271 (D.C. Cir. 1994) (upholding EPA's decision not to regulate lead at the water tap). *See also* Jason J. Czarnezki & Adrianne K. Zahner, *The Utility of Non-Use Values in Natural Resource Damage Assessments*, 32 B.C. ENVTL. AFF. L. REV. 509 (2005) (critiquing the Department of Interior regulations, promulgated pursuant to CERCLA, that narrowly construe non-use values); Jason J. Czarnezki, Comment, *Defining the Project Purpose under NEPA: Promoting Consideration of Viable EIS Alternatives*, 70 U. CHI. L. REV. 599 (2003) (addressing whether agencies can narrowly or broadly construe a project purpose when considering alternatives under the National Environmental Policy Act's environmental impact statement requirement).

[5] *See infra* Part II.A.

congressional intent, the need to avoid regulation that might do more harm than good, the nature of the regulated item or substance, and intervening circumstances such as new understandings in law, policy, or science.

The choice between broad versus narrow construction not only affects the singular provision at issue, but also implicitly affects the institutional relationships between Congress, administrative agencies, and the judiciary in the environmental context.[6] Absent express limitations requiring cost-benefit analysis or technological feasibility, courts should broadly construe expansive environmental legislation. Why? Courts are equipped to interpret the textual mandate, the costs of a failure to regulate, even in an interim period, are potentially great, and Congress, in recognition of changed circumstances, was aware of the breadth of the textual language; whereas courts should allow administrative agencies to narrowly or broadly construe statutory provisions with such limitations subject to *Chevron* deference.[7] As a result, the judiciary will not create irreparable environmental and public health harm due to insufficient regulation. Moreover, Congress can still choose not to regulate, through later statutory action, and agencies, through standard-setting, can create appropriate, even if minimal, standards. Thus, broad interpretation of expansive legislation without limitations makes good sense where Congress has delegated authority to an administrative agency to protect public health and the environment, and significant harm might accrue between the time of narrow judicial interpretation and any legislative or administrative agency action.

This Article, limited to the environmental law context, sets out to establish how, why, and when courts should broadly interpret

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[6] *See generally* E. Donald Elliott, *Chevron Matters: How the Chevron Doctrine Redefined the Roles of Congress, Courts, and Agencies in Environmental Law*, 16 VILL. ENVTL. L.J. 1 (2005); Cynthia R. Farina, *Statutory Interpretation and the Balance of Power in the Administrative State*, 89 COLUM. L. REV. 452 (1989); Cass R. Sunstein & Adrian Vermeule, *Interpretation and Institutions*, 101 MICH. L. REV. 885, 927 (2003).

[7] Chevron, U.S.A. v. Natural Res. Def. Council, 467 U.S. 837, 843–44 (1984) (requiring courts to give deference to an agency's statutory interpretations when the statute is ambiguous and the agency's interpretation is reasonable). It would also be reasonable to characterize the suggested level of deference as not subject to *Chevron* step two, but instead as a judicial interpretation of a clear statute under *Chevron* step one authorizing an expert agency to balance a variety of considerations (i.e., limitations), subject to hard look review. *See* Administrative Procedure Act, Pub. L. No. 404, § 10(e), 60 Stat. 237, 243 (1947) (codified at 5 U.S.C. § 706(2)(A) (2005)); Citizens to Preserve Overton Park v. Volpe, 401 U.S. 402, 416 (1971). In either case, balancing is left to the agency as prescribed by Congress, and courts only evaluate the reasonableness of the choice under *Chevron* or the hard look doctrine.

expansive environmental and public health legislation, focusing on whether broad statutory construction should be an interpretive principle in at least some instances. Part II of this Article recognizes Congress's affinity for broad statutory provisions in environmental law, analyzes statutes containing expansive definitions and mandates, and suggests what characteristics are required to broadly construe expansive legislation in changing scientific circumstances. Part III confronts the conflict between scientific advances and the law, argues that expansive legislation, when directed at environmental or public health, must be broadly construed, and evaluates the institutional consequences for such a view of statutory interpretation. Part IV suggests judicial limitations when broadly interpreting expansive statutory provisions. The Article concludes by evaluating the consequences of a broad, yet text-based, interpretive approach to environmental legislation.

II. Interpreting Expansive Legislation

Congress often passes expansive legislation, frequently regulatory environmental and public health statutes, where both the definition of the items being regulated and the mandate have significant breadth.[8] How should these provisions be construed when the statute contains no specific listing of what can be subject to the regulation or what factors should be considered in meeting the statutory mandate?

While Congress could create a discrete list of substances to regulate and circumstances under which to regulate, it rarely does the former[9] and does not do the latter as frequently as it could. This is not a criticism, for Congress likely is aware that new scientific discoveries will often alter any regulatory scheme. Legislative inefficiency would result if statutes required amendment every time, for example, a new pollutant was discovered. Thus, the judiciary and administrative agencies have the balance of power in interpreting expansive legislation.[10] Focusing on examples in the environmen-

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[8] *See* Richard J. Lazarus, *Congressional Descent: The Demise of Deliberative Democracy in Environmental Law*, 94 Geo. L. J. 619, 622 (2006) (stating that Congresses have passed sweeping and demanding environmental laws).

[9] Congress often creates an initial list of pollutants, but this list can be revised. *See, e.g.*, CAA §§ 112(b)(1)–(2), 42 U.S.C. § 7412(b) (2000) (initial list of hazardous air pollutants which must be periodically revised).

[10] *Cf.* Farina, *supra* note 6, at 452–53 ("For those who study the interaction of courts and agencies, one of the most persistently intriguing puzzles has been to define the appropriate judicial and administrative roles in the interpretation of regulatory statutes."). *Compare Chevron*, 467 U.S. at 843-44 (giving deference to an agency's statutory interpretations

tal law context, this Part discusses, first, expansive legislation that contains guidance limiting broad interpretation and, second, expansive provisions without any such limitations.

A. Expansive Statutes with Limitations

Expansive statutes are synonymous with public and environmental health legislation seeking to mitigate the imposition of negative externalities on human welfare. In light of their scope, Congress often limits broad interpretation of the statutory mandates by including provisions that restrict how the statutory mandate must be implemented. Thus, while a statute authorizes agency regulation of a substance that endangers human health, that substance may only be regulated after costs are considered, using existing technology, or if feasible.

Two environmental and public health statutes, the Safe Drinking Water Act[11] ("SDWA") and the Federal Insecticide, Fungicide, and Rodenticide Act[12] ("FIFRA"), are illustrative. The SDWA protects public health by regulating naturally-occurring and man-made contaminants in the nation's drinking water supply.[13] The SDWA requires promulgation of standards including maximum contaminant level goals ("MCLGs") and maximum contaminant levels ("MCLs").[14] As the term "goal" would suggest, the MCLGs are aspirational, and are set at levels "at which no known or anticipated adverse effects on the health of persons occur which allows for an adequate margin of safety."[15] The MCLs are set as close to the MCLG as "feasible."[16] In addition to this expansive mandate (i.e., to regulate known or anticipated adverse effects on human health), what constitutes a "contaminant" is equally expansive—"any physical, chemical, biological, or radiological substance or matter in water."[17]

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when Congress expressly or implicitly delegates exclusive interpretative authority over that statute to an agency) with *Marbury v. Madison*, 5 U.S. 137, 177 (1803) ("It is emphatically the province and duty of the judicial department to say what the law is.").

[11] 42 U.S.C. §§ 300f *et seq.* (1996).

[12] 7 U.S.C. §§ 136 *et seq.* (1996).

[13] EPA, *Understanding the Safe Drinking Water Act* 1 (2004), http://www.epa.gov/safewater/sdwa/30th/factsheets/pdfs/fs_30ann_sdwa_web.pdf (last visited Apr. 18, 2006).

[14] 42 U.S.C. § 300g-1(b)(4) (1996).

[15] *Id.* § 300g-1(b)(4)(A).

[16] *Id.* § 300g-1(b)(4)(B).

[17] *Id.* § 300f(6).

Yet, this does not mean that the United States Environmental Protection Agency ("EPA")[18] is required to regulate all substances that might enter public water systems and could conceivably cause harm. The EPA must only set a MCL if "it is economically and technologically feasible" to measure the contamination level in public water systems,[19] and must only set the MCL as close to the MCLG as the benefits outweigh the costs[20] and "as is feasible"[21]—defined as using the "best technology, treatment techniques, and other means . . . available (taking cost into consideration)."[22] Thus, for example, the D.C. Circuit concluded that the EPA was not required to set an MCL for lead because lead contamination results from pipe corrosion in homes and distribution systems.[23] According to the D.C. Circuit in *American Water Works*, Congress "contemplated that an MCL would be a standard by which both the quality of the drinking water and the public water system's efforts to reduce the contaminant could be measured."[24] "[A]n MCL for lead would be neither" because regulation would not be feasible in light of where the contamination arose, and because compliance with a lead MCL might increase other contaminant levels as a result of adding anti-corrosion chemicals to the water supply.[25] Hence, the SDWA is a statute which specifies limitations, cost-benefit analysis (allowed) and feasibility (required), on the aggressive statutory mandate. These limitations require expert balancing by the administrative agency, and courts do, and should, defer to agency interpretations of statutory provisions requiring cost-benefit analysis, feasibility, or reasonableness. The D.C. Circuit upheld the EPA's definition of "feasible" in *American Water Works* under the *Chevron* doctrine.[26]

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[18] The EPA administers the SDWA pursuant to 42 U.S.C. § 300f(7)–(8) (1996).

[19] 42 U.S.C. § 300f(1)(C)(i) (1996).

[20] 42 U.S.C. § 300g-1(b)(3)(C)(i) (1996) (EPA must analyze "[q]uantifiable and non-quantifiable" costs and benefits); *Id.* § 300g-1(b)(6) (The EPA may have a more lenient MCL if the "benefits of the MCL . . . would not justify the costs of complying with the level.").

[21] *Id.* § 300g-1(b)(4)(B).

[22] *Id.* § 300g-1(b)(5).

[23] Am. Water Works Ass'n v. EPA, 40 F.3d 1266, 1271 (D.C. Cir. 1994).

[24] *Id.*

[25] *Id.*

[26] *Id. See also* Chevron U.S.A. v. Natural Res. Def. Council, 467 U.S. 837, 842–43 (1984) ("When a court reviews an agency's construction of the statute which it administers, it is confronted with two questions. First, always, is the question whether Congress has directly spoken to the precise question at issue. If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress. If, however, the court determines Congress has not

Similar to the statutory mandate in the SDWA, FIFRA regulates pesticides "to the extent necessary to prevent unreasonable adverse effects on the environment,"[27] where "environment" includes "water, air, land, and all plants and man and other animals living therein and the interrelationships which exist among these."[28] Because it is hard to imagine that a pesticide would not have some "adverse effect" on the ecosystem, the effect must be "unreasonable"—a word usually connoting that some sort of balancing must commence. Under FIFRA, the EPA must "tak[e] into account the economic, social, and environmental costs and benefits of the use of the pesticide."[29] No doubt that, in many instances, a zero pollutant or contaminant goal is both unattainable and unwise because negative externalities accompany nearly all beneficial products or consumer goods. But in some cases, a maximum pollutant level is absolutely necessary regardless of costs or available technology—if a safe level is unattainable, sometimes a complete ban may even be necessary. Statutes can inform the administrative agencies whether to balance interests, like FIFRA or SDWA, or can inform the courts to broadly interpret statutory mandates without such limitations.[30]

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directly addressed the precise question at issue, the court does not simply impose its own construction on the statute, as would be necessary in the absence of an administrative interpretation. Rather, if the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency's answer is based on a permissible construction of the statute."). However, courts should be reluctant, absent such limitations, to narrowly construe statutory provisions or defer to the regulating agency. For further discussion of the role of courts versus agencies in interpreting expansive environmental legislation, see *infra* Part III.

[27] FIFRA § 3(a), 7 U.S.C. § 136(a) (1996).

[28] FIFRA § 2(j), 7 U.S.C. § 136(j) (1996).

[29] FIFRA § 2(bb), 7 U.S.C. § 136(bb) (1996).

[30] This is not to say that courts have not exerted their authority to define the steps of the decision-making process under the relevant statute. *See generally* Indus. Union Dept. v. Am. Petroleum Inst. (*The Benzene Case*), 448 U.S. 607 (1980); Corrosion Proof Fittings v. EPA, 947 F.2d 1201 (5th Cir. 1991) (interpreting TSCA). Nevertheless, agencies may be in a better position to determine how to best engage in complex analyses, while courts must ensure that such steps are consistent with the statutory text and recognize that agency deference is appropriate where the steps are subject to a number of reasonable interpretations. *See infra* note 88. Due to the complexity of these cost-benefit calculations and feasibility limitations, it is not unreasonable to support a cautious judicial role, combined with agency deference. *See, e.g.*, United States v. Riverside Bayview Homes, 474 U.S. 121 (1985); *contra The Benzene Case*. I note that in any event courts often construe statutes to have their broadest meaning consistent with the overall statutory purpose. *See, e.g.*, Babbitt v. Sweet Home Chapter of Cmtys. for a Greater Or., 515 U.S. 687 (1995); Maura D. Corrigan & J. Michael Thomas, *"Dice Loading" Rules of Statutory Interpretation*, 59 N.Y.U. ANN. SURV. AM. L. 231, 232 (2003) (noting the canon that remedial statutes should be broadly construed).

B. Expansive Statutes without Limitations

In construing expansive legislation without express limitations,[31] the judiciary must determine (1) whether the statute allows for consideration of certain criteria when regulating, and (2) whether the statute requires or allows a federal agency to assert its jurisdiction at all.

The voluminous Clean Air Act ("CAA") is a prime example of expansive legislation raising the first issue. While containing numerous ambitious mandates, Congress chose, in some instances, not to include express limitations on how to achieve the CAA's goals. Under section 108 of the CAA, the EPA, for the purpose of creating national ambient air quality standards ("NAAQS") under section 109,[32] must list air pollutant emissions "which may reasonably be anticipated to endanger public health or welfare."[33] In a parallel provision, the EPA must regulate air pollutants from new motor vehicles meeting the same criteria.[34] Like most regulatory statutes, the CAA broadly defined the harm (air pollutants)—any "substance or matter which is emitted into or otherwise enters the ambient air."[35]

Unlike the CAA's new source performance standards[36] and hazardous air pollutant standards,[37] the NAAQS and motor vehicle emission standards contain no express implementation limitations, such as requiring cost-benefit analysis or technological feasibility considerations. The Supreme Court, in *American Trucking Associ-*

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[31] In the environmental law context, such statutes might be said to contain only pure health-based standards.

[32] CAA § 109(b)(1), 42 U.S.C. § 7409(b)(1) (2000) (standards must be "based on such criteria and allowing an adequate margin of safety. . . requisite to protect the public health.").

[33] CAA § 108(a)(1)(A), 42 U.S.C. § 7408(a)(1)(A) (2000).

[34] CAA § 302(a)(1), 42 U.S.C. § 7602(a)(1) (2000).

[35] CAA § 302(g), 42 U.S.C. § 7602(g) (2000).

[36] CAA § 111(a)(1), 42 U.S.C. § 7411(a)(1) (2000) (creating an emissions standard "which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.").

[37] CAA § 112(d)(2), 42 U.S.C. § 7412(d)(2) (2000) ("Emissions standards promulgated under this subsection and applicable to new or existing sources of hazardous air pollutants shall require the maximum degree of reduction in emissions of the hazardous air pollutants subject to this section (including a prohibition on such emissions, where achievable) that the Administrator, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable.").

ation v. Whitman,[38] upheld the D.C. Circuit's conclusion that "economic considerations [may] play no part in the promulgation of ambient air quality standards"[39] because "[n]owhere are the costs of achieving such a standard made part of that initial calculation."[40] The CAA's mandate is a blank check to create NAAQS "allowing an adequate margin of safety"[41] so long as the standard "accurately reflect[s] the latest scientific knowledge" in determining the effects on public health.[42]

In addition to determining what an agency must consider when regulating, it is the quintessential judicial function to determine if the agency has the jurisdiction to regulate or must regulate at all. For example, in *Riverside Bayview Homes* and *SWANCC*, the Supreme Court questioned whether the United States Army Corps of Engineers maintained jurisdiction to regulate the discharge of fill in certain types of wetlands under the Clean Water Act.[43] In defining the scope of protection of the nation's waterways, courts have looked at the statutory text,[44] determining whether wetlands are "waters of the United States."[45] Science often permeates these jurisdictional decisions—Is the wetland connected to a traditionally navigable waterway? Is the connection direct, or via indirect or

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[38] Am. Trucking Ass'n v. Whitman (*ATA v. Whitman*), 531 U.S. 457 (2001).

[39] *Id.* at 465–66 (affirming Lead Indus. Ass'n v. EPA, 647 F.2d 1130, 1148 (D.C. Cir. 1980)).

[40] *Id.*

[41] CAA § 109(b)(1), 42 U.S.C. § 7409(b)(1) (2000).

[42] CAA § 108(a)(2), 42 U.S.C. § 7408(a)(2) (2000). Here is a circumstance where the agency has deference to the proper standard for a pollutant, but it does not have deference to determine if a pollutant should be regulated at all. *See infra* Part III.

[43] CWA § 404, 33 U.S.C. § 1344 (2000); United States v. Riverside Bayview Homes, 474 U.S. 121 (1985); Solid Waste Agency of Cook County v. U.S. Army Corps of Eng'rs (*SWANCC*), 531 U.S. 159 (2001). The U.S. Supreme Court has granted certiorari in a consolidated case to further determine the scope of federal jurisdiction over wetlands under the Clean Water Act and the Commerce Clause. *See* Rapanos v. United States, 126 U.S. 414 (2005); Carabell v. Army Corps of Eng'rs, 126 U.S. 415 (2005).

[44] *Compare SWANCC*, 531 U.S. at 172 (asserting that the definition of "navigable waters" is clear under *Chevron* step one), *with Riverside Bayview Homes*, 474 U.S. at 132 (asserting that "navigable waters" is ambiguous). Under a broad interpretive principle, *SWANCC* would be correct to the extent that the statutory text is unambiguous under *Chevron* step one, but *SWANCC* construes the statutory text too narrowly. *See SWANCC*, 531 U.S. at 181 (Stevens, J., dissenting) (stating that Congress intended navigable waters to have the broadest possible meaning (citing S. Conf. Rep. No. 92-1236, at 144 (1972))). Admittedly, this leaves an unresolved question as to whether stare decisis regarding the ambiguity of the text should trump the broad interpretive principle. Though in this case, either would result in the same outcome considering the broad construction of navigable waters by the Corps and the holding of *Riverside Bayview Homes*.

[45] CWA § 502(7), 33 U.S.C. § 1362(7) (2000) (defining "navigable waters" as "waters of the United States").

seasonal water flow? Does the wetland flow to a river through an underwater hydrological connection?

Expansive regulatory legislation designed to protect the public health and the environment must rely on scientific expertise in order to know what to regulate now and what to regulate in the future, including pollutants and areas of protection not contemplated at the time of the enactment. For example, air quality criteria existed for only six pollutants in 1971, and while "some uncertainty about health effects of air pollution is inevitable," the EPA properly added lead as a seventh criteria air pollutant.[46] Also, advances in scientific knowledge might suggest that discharges into isolated wetlands connected to traditionally navigable waterways through underground hydrologic channels have a far greater impact on water quality than previously envisioned.[47] Similarly, scientific and medical knowledge about the dangers of tobacco and nicotine has grown over the past fifty years.[48] As a result, science must play an unusual role in expansive legislation without express limitations that determine the scope of agency jurisdiction because the baseline scientific findings may be disputed. As science progresses, the chances decrease that Congress would have contemplated regulation of the harmful substance at issue (e.g., tobacco or greenhouse gases or wetlands fill).

In interpreting expansive legislation, the choice is between a static[49] (what was contemplated at the time of enactment) or dynamic interpretation[50] (interpretation in light of changed circum-

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[46] *See* Lead Indus. Ass'n v. EPA, 647 F.2d 1130, 1154, 1184 (1980). Sulfur oxides, particulates, carbon monoxide, hydrocarbons, and photochemical oxidants were regulated at the time the CAA was enacted. Nitrogen oxides were added in 1971. ROBERT V. PERCIVAL ET AL., ENVIRONMENTAL REGULATION: LAW, SCIENCE, AND POLICY 502 (4th ed. 2003).

[47] *Cf. Rapanos*, *supra* note 43. Hydrological connection to navigable waterways may be a sufficient basis for the Corps to assert jurisdiction over a wetland.

[48] *Cf.* FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 188 (2000) (Breyer, J., dissenting). The FDA certainly had more information about the dangers of tobacco in 1996 (when it attempted to assert its jurisdiction over tobacco) than Congress had in 1938 (when the Food, Drug and Cosmetics Act was enacted). For further discussion of *Brown & Williamson*, see *infra* Part IV.A.

[49] *See* ANTONIN SCALIA, A MATTER OF INTERPRETATION (Amy Gutmann ed., 1997) (advocating his philosophy of textualism, an approach that focuses on the original meaning of the text to be interpreted); Jason J. Czarnezki & William K. Ford, *The Phantom Philosophy? An Empirical Investigation of Legal Interpretation*, 65 MD. L. REV. 841, 852 (2006) (citing KEITH E. WHITTINGTON, CONSTITUTIONAL INTERPRETATION 35 (1999); ROBERT BORK, THE TEMPTING OF AMERICA (1997)).

[50] WILLIAM N. ESKRIDGE, JR., DYNAMIC STATUTORY INTERPRETATION 50 (1994) ("Especially over time, the circumstances will not be ones that the statute or the drafters contemplated, and any application of the statute will be dynamic in a weak sense, going

stances such as new law or new scientific understanding and discovery).[51] The choice is not difficult when lower courts must simply follow an intervening ruling of the Supreme Court.[52] Often, however, the choice is not so clear, for example, when despite the understanding at the time of enactment, horizontal persuasive precedent has developed[53] or when scientific understanding has shifted to the point where the statutory meaning would not have conformed with the expectations of the original drafters and legislators who passed the statute.[54] But absent textual limitations, how broadly should judges interpret expansive environmental legislation, especially in those instances when intervening scientific knowledge might favor a broader construction?

We can assess this query by way of a more detailed example—did Congress know that greenhouse gases, like carbon dioxide, might be regulated under the CAA? Perhaps so; perhaps not—"the legislative history contains a few stray references to human-forced climate change."[55] But fact-specific legislative intent is not

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beyond the drafters' expectations."); Peter Strauss, *Statutes that are not Static–The Case of the APA*, http://lsr.nellco.org/columbia/pllt/papers/0584 (arguing that the meaning of the Administrative Procedure Act (APA) can be shaped by events after enactment) (last visited Apr. 12, 2006); Cass R. Sunstein, *Interpreting Statutes in the Regulatory State*, 103 HARV. L. REV. 405, 493–97 (1989) (discussing statutory interpretation in light of changed circumstances or obsolescence).

[51] Admittedly, this is a false dichotomy when Congress envisioned at the time of enactment that the statute's regulatory scope would increase over time.

[52] *Cf.* Strauss, *supra* note 50, at 1 (questioning whether textual meaning can be shaped by subsequent events such as "intervening judicial decisions").

[53] By horizontal persuasive precedent, I refer to a common understanding and meaning established by the legal profession and lower courts. *See id.* at 2 (arguing that, in the context of the APA, the Supreme Court "should accord substantial weight to contemporary consensus the profession and lower courts have been able to develop in interpreting law").

[54] Pursuant to section 202(1) of the CAA, part of the 1990 Amendments, the Act requires the EPA to set standards to control hazardous air pollutants from motor vehicles. In 2001, EPA listed MBTE as a mobile source hazardous air pollutant. Control of Emissions of Hazardous Air Pollutants from Mobile Sources, 66 Fed. Reg. 17,229, 17,235 (Mar. 29, 2001) (codified at 40 C.F.R. pts. 80, 86). (MTBE has also been banned by a number of states based on the concern that it enters underground drinking water supplies.) However, MBTE had been used since 1979 as an octane enhancer, and used, beginning in 1992, at higher concentrations in some gasoline to fulfill the Act's oxygenate requirements. Thus, Congress might not have "expected" MBTE, at the time of passage or in 2001, to be regulated as a hazardous air pollutant.

[55] Massachusetts v. EPA, 415 F.3d 50, 68 (D.C. Cir. 2005) (citing 111 CONG. REC. 25,061 (daily ed. Sept. 24, 1965); 116 CONG. REC. 32,914 (daily ed. Sept. 21, 1970)). State petitioners' request for rehearing and rehearing en banc was denied. *See* Massachusetts. v. EPA, 433 F.3d 66, 67 (D.C. Cir. 2005); Massachusetts. v. EPA, No. 03-1361, 2005 U.S. App. LEXIS 26560 (D.C. Cir. Dec. 2, 2005). The Supreme Court subsequently granted certiorari. Massachusetts v. EPA, 126 S. Ct. 2960 (2006) (mem.).

relevant where Congress seeks to mitigate public harm via expansive statutes that intrinsically provide for the addition of items to be regulated, as is the case here.[56] "The fact that a statute can be applied in situations not expressly anticipated by Congress does not demonstrate ambiguity. It demonstrates breadth."[57] Thus, courts should rely on the statutory text (i.e., permit jurisdiction and mandate regulation under the plain meaning of the text pursuant to *Chevron* step one).

In the greenhouse gas context, the issue is not only whether the agency has the jurisdiction to regulate,[58] but also whether the agency is required to do so. The federal government has not mitigated carbon dioxide emissions[59] under the Clean Air Act despite the ambitious plain language of the text. In *Massachusetts v. EPA*, the D.C. Circuit upheld the EPA's decision that the agency should not regulate greenhouse gas emissions from motor vehicles under the CAA.[60] In dissent, D.C. Circuit Judge Tatel argued that greenhouse gases "plainly fall within the meaning" of air pollutants to be regulated under the Act.[61] Tatel continued, stating that if the EPA administrator finds that the gases contribute to air pollution that puts the public's health in danger, "then EPA has authority—

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[56] While fact-specific intent may not be relevant (i.e., intent as to whether to regulate a specific item), intent may be relevant to the extent that Congress was unsure what science will show in the future, but nevertheless wanted to delegate authority to regulate. *See, e.g.*, CAA § 169A(a)(1), 42 U.S.C. § 7491(a)(1) (2000) ("Congress hereby declares as a national goal the prevention of *any future*, and the remedying of any existing, impairment of visibility in mandatory class I Federal areas which impairment results from manmade air pollution.") (emphasis added); COMM. ON ENVIRONMENT AND PUBLIC WORKS, U.S. SENATE, 103D CONG., LEGISLATIVE HISTORY OF THE CLEAN AIR ACT AMENDMENTS OF 1990, at 980 (1993) (Senator Baucus introducing report entitled *Clean Air Act Amendment Costs and Economic Effects: A Review of Published Studies*) ("It is appropriate, particularly in a wealthy society, that the public be protected from the unseen and unknown hazards which can result from exposure to certain air pollutants."); *Id.* at 2898. (quoting Representative Wolpe) ("There are some toxic pollutants whose true risks are still unknown. We must ensure that as future risks become known they are properly regulated. These air toxics provisions will help give us these assurances.").

[57] PGA Tour v. Martin, 532 U.S. 661, 689 (2001) (quoting Pa. Dept. of Corrections v. Yeskey, 524 U.S. 206, 212 (1952)).

[58] In the wetlands cases, for example, the Corps was asserting its jurisdiction. *See* cases cited in *supra* note 43.

[59] Other greenhouse gases include methane, nitrous oxide, and hydrofluorocarbons.

[60] Massachusetts v. EPA, 415 F.3d 50, 58 (D.C. Cir. 2005) (upholding the EPA's decision that it should not regulate carbon dioxide as a proper exercise of discretion), *cert. granted* 126 S. Ct. 2960 (2006). *See also* Control of Emissions from New Highway Vehicles and Engines, 68 Fed. Reg. 52,922, 52,925 (Sept. 8, 2003) (EPA also concluding that it cannot regulate greenhouse gases relying on the Supreme Court's decision in *Brown & Williamson* cautioning against regulation of "unusually significant economic and political issues.").

[61] Massachusetts v. EPA, 415 F.3d at 73 (Tatel, J., dissenting).

indeed, the obligation—to regulate their emissions from motor vehicles."[62]

Finding breadth, as Judge Tatel did, in interpreting expansive legislation without limitations is appropriate especially in those circumstances where new scientific understanding will lead to increased regulation (because more and more human-created substances will be found to endanger human health). But what about concerns of political accountability and institutional capacity? The elected members of Congress have chosen expansive language, and judges certainly are able to evaluate baseline science such as whether an emission may "reasonably be anticipated to endanger public health and welfare." Here, the adverse effects of global climate change are well documented.[63] Thus, where there is an expansive statutory mandate, judges must determine if something should be regulated under the text of the statute (e.g., do greenhouses gases contribute to global climate change?).[64] A finding of

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[62] *Id.* A parallel argument was successfully made by plaintiffs in *Lead Industries Ass'n v. EPA*, 647 F.2d 1130 (1980), where the D.C. Circuit held that, if the EPA found lead emissions to endanger health and welfare, a nondiscretionary duty to list it as a criteria air pollutant arose. Thus, this argument might prove persuasive in both section 202 and 108 suits under the Clean Air Act. *See* Robert B. McKinstry, Jr., *Laboratories for Local Solutions for Global Problems: State, Local and Private Leadership in Developing Strategies to Mitigate the Causes and Effects of Climate Change*, 12 PENN ST. ENVTL. L. REV. 15, 75–78 (2004). But the EPA, relying on *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120 (2000), concluded that "in light of the enormous economic and political consequences of regulating greenhouse gas emissions, Congress would have been far more specific if it had intended to authorize EPA to regulate the subject under § 202(a)(1) of the Clean Air Act." *Massachusetts v. EPA*, 415 F.3d at 56 n.1.

[63] Intergovernmental Panel on Climate Change, *A Report of Working Group II of the Intergovernmental Panel on Climate Change, Summary for Policymakers,* http://www.grida.no/climate/ipcc_tar/wg2/005.htm (last visited Apr. 18, 2006).

[64] In other words, the court need not find the statute to be ambiguous under *Chevron* step one. This is the case despite the "in his judgment language" of section 202 of the CAA. *Compare* Ethyl Corp. v. EPA, 541 F.2d 1 (D.C. Cir. 1976), *with* Judge Tatel's dissent in *Massachusetts v. EPA*, 415 F.3d at 79–80 ("The statutory standard, moreover, is precautionary. At the time we decided *Ethyl,* section 202(a)(1) and similar CAA provisions either authorized or required the Administrator to act on finding that emissions led to 'air pollution *which endangers* the public health or welfare.' After *Ethyl* found that 'the statutes and common sense *demand* regulatory action to prevent harm, even if the regulator is less than certain that harm is otherwise inevitable,' the 1977 Congress not only approved of this conclusion, but also wrote it into the CAA. Section 202(a)(1) (along with other provisions) now requires regulation to precede certainty. It requires regulation where, in the Administrator's judgment, emissions 'contribute to air pollution *which may reasonably be anticipated to endanger* public health or welfare.' As the House Report explained: 'In order to emphasize the precautionary or preventative purpose of the act (and, therefore, the Administrator's *duty* to assess risks rather than wait for proof of actual harm), the committee not only retained the concept of endangerment to health; the committee also added the words 'may reasonably be anticipated to.'") (internal citations omitted). *See also* Sunstein, *supra* note 50, at 465 (arguing that such words allow "discretion to decide on the tolerance

definite harm is not required, only a finding that endangerment can be reasonably anticipated.[65] As a result, courts should interpret the language broadly, permitting and requiring regulation, regardless of whether an agency has made the decision to regulate (e.g., wetlands fill or tobacco) or has decided not to (e.g., greenhouse gases). Agencies should decide whether a substance should be regulated only if textual limitations exist requiring sophisticated cost-benefit balancing or cost considerations or technological feasibility, and agencies should receive deference and must face political realities when deciding where, not if (absent express limitations), to put the level or standard of regulation (e.g., what level is "requisite to protect the public health" "allowing for an adequate margin of safety").[66]

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level but do not confer on him discretion not to promulgate regulations at all."). Broad construction of statutory provisions where the purpose is to prevent harm to human health may also apply beyond environmental statutes, *see, e.g.*, OSHA § 5, 29 U.S.C. § 654 (2000), and outside the context of administrative agencies where changed scientific circumstances may play less of a role. I encourage other scholars to assess the appropriateness of this Article's broad interpretive principle to other areas of law, especially where a statute is remedial in nature and seeks to avert harm to human welfare (e.g., health law, employment discrimination). For example, the Emergency Medical Treatment and Active Labor Act ("EMTALA") requires that hospitals with an open emergency room provide assessment and treatment to stabilize a person who presents themselves there, regardless of payment sources. 42 U.S.C. §§ 1395dd(a), (h) (2000). While science and technology clearly improve over time in the medical profession, hospitals are under no obligation to employ new technology to comply with EMTALA. Hospitals must only do the best they can with available resources. If someone arrives at an emergency room who is so ill or traumatized that he or she cannot be stabilized, the hospital is left with the cost using the resources available. *Id.* § 1395dd(b)(1). Judicial interpretation of EMTALA has been broad without allowing for cost consideration, *see, e.g.*, In the Matter of Baby K, 832 F.Supp 1022, 1027 (E.D. Va. 1993), *aff'd* 16 F.3d 590 (4th Cir. 1994), resulting in emergency room closures and strict liability for hospitals. *See* Nathanael J. Scheer, *Keeping the Promise: Financing EMTALA's Guarantee of Emergency Medical Care for Undocumented Aliens in Arizona*, 35 ARIZ. ST. L.J. 1413, 1415 (2003); Mark J. Garwin, *Immunity in the Absence of Charity: EMTALA and the Eleventh Amendment*, 23 S. ILL. U. L.J. 1, 4 (1998). Despite its consequences, broad interpretation of EMTALA may be appropriate because there is a broad statutory mandate without limitations that seeks to stop a public harm, in this case "patient dumping" or death and injury due to transport when not medically stabilized.

[65] *Cf.* Lead Industries Ass'n v. EPA, 647 F.2d 1130, 1153–54 (discussing the precautionary nature of the CAA); *Ethyl Corp*, 541 F.2d at 25 ("Awaiting certainty will often allow for only reactive, not preventive, regulation.").

[66] Agencies are likely in the best position to determine "how safe is safe." *See* Michael S. Baram, *Use of Comparative Risk Methods in Regulatory and Common Law*, 13 COLUM. J. ENVTL. L. 1, 3 (1987) (determining that the appropriate risk limit is within the province of agency judgment and judicial review).

III. A Broad Interpretive Principle

Law and science have had a troubled marriage. Good science can generate consensus in a discipline, but science is rarely dispositive.[67] Yet, while the law seeks certainty,[68] Congress must pass expansive legislation to account for changes over time.[69] Courts may be able to evaluate scientific consensus (e.g., does global warming exist?), but administrative agencies might be better left with the details (e.g., what are the proper regulatory standards and requirements for compliance in order to mitigate greenhouse gas production?). Even so, difficult science makes for difficulty in creating law.[70] It is difficult for a judge to be a "faithful servant"[71] when faced with expansive legislation, especially in light of new scientific discoveries. However, for those environmental statutes with expansive mandates seeking to prevent public harms (without any limitations on how the harm should be regulated), judges are being faithful servants by broadly construing the mandates and requiring regulation by the prescribed agency.

Proper interpretation of expansive environmental legislation requires confidence that such an interpretation conforms with the appropriate institutional relationships that Congress (and the Constitution) envisioned between the judiciary and administrative agencies.[72] On the one hand, "[t]o determine 'what the law is' in the context of an actual controversy that turns on a question of statutory meaning is the quintessential judicial function. At the same time, however, such questions are so bound up with successful administration of the regulatory scheme that it may seem only sensible to give principal interpretive responsibility to the 'expert' agency that lives with the statute constantly."[73] A model where courts broadly interpret expansive environmental legislation without limitations, and agencies are left to construe other statutes,

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67 *See* Oliver Houck, *Tales from a Troubled Marriage: Science and Law in Environmental Policy*, 302 Sci. 1926 (2003).

68 *Id.*

69 *Lead Industries*, 647 F.2d at 1152 ("Rather, as scientific knowledge expands and analytical techniques are improved, new information is uncovered which indicates that pollution levels that were once considered harmless are not in fact harmless.").

70 *Cf.* Houck, *supra* note 67.

71 *Cf.* Strauss, *supra* note 50, at 8.

72 In addition, "solid evidence of what, if anything, Congress 'typically' intends with respect to statutory interpretation is hard to come by." Farina, *supra* note 6, at 471.

73 *Id.* at 452–53. *See also id.* at 468 ("Alternatively, Congress may recognize that its words will require interpretation and assume that the court will resolve questions of statutory meaning in the normal course of appropriate litigation."); cases cited *supra* note 10 (comparing *Chevron* and *Marbury*).

broadly or narrowly, subject to *Chevron* deference strikes the proper balance. Rarely should courts narrowly construe expansive provisions that contain no express limitations,[74] but the scope of this broad interpretive principle is not infinite as discussed in *infra* Part IV.

Chevron deference is appropriate where agency expertise is required.[75] In some instances, "Congress both perceives the need for future interpretation and formulates an intent that it be accomplished by the agency."[76] However, "in *Chevron* itself the Supreme Court faced a question of how – and not whether – the CAA applied to certain sources of air emissions."[77] Thus courts decide "whether" regulation is required, not "how." Agencies can only construe "whether" when explicit limitations exist, and otherwise determine "how." Instances appropriate for agency construction are evidenced by express limitations requiring cost-benefit balancing or deciding technological feasibility. In other words, Congress has expressed an explicit textual desire for additional expert con-

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[74] Arguably, narrow construction of expansive legislation might be perceived as a sort of information-forcing default where Congress will be forced to act if it chooses to regulate. *Cf.* Ian Ayres & Robert Gertner, *Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules*, 99 YALE L.J. 87, 127–28 (1989) ("When parties fail to contract because they want to shift the ex ante transaction cost to a subsidized ex post court determination, a penalty default of non-enforcement may be appropriate. When strategic considerations cause a more knowledgeable party not to raise issues that could improve contractual efficiency, a default that penalizes the more informed party may encourage the revelation of information."). *See also infra* Part IV.A. However, broad interpretation means that the judiciary will not create irreparable harm due to insufficient regulation, and Congress and agencies can later remedy any perceived judicial error through legislation or notice and comment rulemaking Thus, broad interpretation in some circumstances makes good sense where Congress has delegated authority to an administrative agency to protect public health and the environment, and significant harm might accrue between the time of narrow judicial interpretation and any legislative or administrative agency action. *See, e.g.*, PERCIVAL, *supra* note 46, at 379 ("What OSHA left unsaid was that, due to judicial intervention [by narrowly construing the Occupational Safety and Health Act in *The Benzene Case*], it had taken ten years to lower the benzene [permissible exposure limit] to the very levels the Agency had sought to adopt on an emergency basis in May 1977."). In addition, broad construction can also act as an information forcing device to promote political accountability and Congressional action. For example, the Food Quality Protection Act, 21 U.S.C. § 321, was passed following the Ninth Circuit's expansive interpretation of the Delaney Clause in *Les v. Reilly*, 968 F.2d 985 (9th Cir. 1992).

[75] *See, e.g.*, Steven P. Croley & John H. Jackson, *WTO Dispute Procedures, Standard of Review, and Deference to National Governments*, 90 AM. J. INT'L L. 193, 207 (1996); Karin P. Sheldon, *"It's Not My Job To Care": Understanding Justice Scalia's Method of Statutory Interpretation Through* Sweet Home *and* Chevron, 24 B.C. ENVTL. AFF. L. REV. 487, 493 (1997) (both noting that agency expertise is a justification for *Chevron* deference).

[76] Farina, *supra* note 6, at 468.

[77] Richard A. Merrill, *The FDA May Not Regulate Tobacco Products as "Drugs" or as "Medical Devices,"* 47 DUKE L.J. 1071, 1090 (1998).

siderations in order to determine the scope of the statutory mandate. Absent such an expression, judges, not bureaucrats or technocrats, must define the scope of the expansive statutory provision.

To allow deference to agencies for all types of expansive legislation would weaken judicial control over administrative agencies in derogation of Congress's "meta-intent" and the judiciary's responsibility to determine the lawful limits of government action.[78] If Congress desires administrative deference, it must provide the agencies with principles and considerations (which this Article calls "limitations") by which to construe an otherwise expansive statutory mandate.[79] Such limitations may be worthwhile because, for example, "the economic cost of implementing a very stringent standard might produce health losses sufficient to offset the health gains achieved in cleaning the air—for example, by closing down whole industries and thereby impoverishing workers and consumers dependent upon those industries."[80] This conclusion does not subvert the advantage of political accountability in *Chevron* deference;[81] for policy considerations inevitably play a role in setting any health-based standard. Initially, a broad interpretive principle by the judiciary prevents courts and agencies from prohibiting any regulation of an item which falls under the expansive textual mandate; such prohibition might have great costs if harms occur in the time between judicial decision and any subsequent curative congressional or administrative action. Following an initial broad judicial interpretation, agencies would be forced to engage in deliberative and technocratic processes (e.g., notice and comment rulemaking) to determine the proper scope of environmental regulation.

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[78] Cass R. Sunstein, *Factions, Self-Interest, and the APA: Four Lessons Since 1946*, 72 VA. L. REV. 271, 287–92 (1986); *Judicial Review of Administrative Action in a Conservative Era*, 39 ADMIN. L. REV. 353, 367–71 (1987).

[79] *Cf.* Am. Trucking Ass'n v. Whitman (*ATA v. Whitman*), 531 U.S. 457, 472 (2001) (requiring Congress, when conferring decision-making authority upon agencies, to provide by legislative act an intelligible principle).

[80] *Id.* at 466.

[81] Chevron U.S.A. v. Natural Res. Def. Council, 467 U.S. 837, 865–66 (1984) ("In contrast, an agency to which Congress has delegated policymaking responsibilities may, within the limits of that delegation, properly rely upon the incumbent administration's views of wise policy to inform its judgments. While agencies are not directly accountable to the people, the Chief Executive is, and it is entirely appropriate for this political branch of the Government to make such policy choices—resolving the competing interests which Congress itself either inadvertently did not resolve, or intentionally left to be resolved by the agency charged with the administration of the statute in light of everyday realities.").

Absent express limitations, courts should only be concerned with expanding what should be regulated in light of changed circumstances. Thus, courts should also take great care not to fashion implicit default rules, such as allowing cost considerations not explicitly required by Congress, when agencies implement statutory provisions.[82] In *Michigan v. EPA*,[83] the D.C. Circuit addressed whether the statutory meaning of "contribute significantly" under the State Implementation Plan ("SIP") provision of the CAA allowed for cost considerations.[84] A SIP must contain a program that prevents "emissions activity within the State from emitting any air pollutant in amounts which will contribute significantly to nonattainment in . . . any other state" with respect to the NAAQS.[85] The "contribute significantly" language in the SIP provision is similar to "protect public health,"[86] a phrase which seems "to refer to environmental damage, not to environmental damage measured in light of cost."[87]

When faced with this expansive provision, the court evaluated whether to allow cost considerations or to enforce an expansive precautionary mandate.[88] Here the court decided that there is

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[82] *See* Ethyl Corp. v. EPA, 51 F.3d 1053, 1058 (1995) ("The plain language of a provision makes it clear that . . . decisions are to be based on one criterion;" the EPA cannot base its decision on other criteria.). *See also Whitman v. ATA*, 531 U.S. at 468 (2001) ("Congress, we have held, does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions—it does not, one might say, hide elephants in mouseholes." (citing *MCI Telcomms. Corp. v. AT&T*, 512 U.S. 218, 231 (1994))).

[83] 213 F.3d 663 (D.C. Cir. 2000).

[84] *Id.* at 677 ("In some contexts, 'significant' begs a consideration of costs."). *See also* STEPHEN G. BREYER, RICHARD B. STEWART, CASS R. SUNSTEIN & MATTHEW L. SPITZER, ADMINISTRATIVE LAW AND REGULATORY POLICY 71 (5th ed. 2000) ("[C]an an agency sensibly decide whether a risk is 'significant' without also examining the cost of eliminating it?").

[85] CAA § 110(a)(2)(D)(i)(I), 42 U.S.C. § 7410(a)(2)(D)(i)(I) (2000).

[86] *Michigan v. EPA*, 213 F.3d at 677 ("The fundamental dispute is over the clarity of the phrase 'contribute significantly.' Must EPA simply pick some flat 'amount' of contribution, based exclusively on health concerns, such that any excess would put a state in the forbidden zone of 'significance'? Or was it permissible for EPA to consider differences in cutback costs, so that, after reduction of all that could be cost-effectively eliminated, any remaining 'contribution' would not be considered 'significant'? In deciding on the permissible ceiling, EPA used 'significant' in the second way.").

[87] Cass R. Sunstein, *Cost-Benefit Default Principles*, 99 MICH. L. REV. 1651, 1678 (2001).

[88] Enforcing an expansive precautionary mandate, absent judicially-created default rules, is, in my view, the only way to interpret these statutes consistently across cases and consistently with the statutory text. *Contra The Benzene Case*, 448 U.S. at 608 (upholding the "significant risk" requirement before regulating a toxic substance); Sunstein, *supra* note 50, at 491 ("The 'significant risk' requirement has no textual basis . . . But the conclusion in the case was nonetheless sound."). For a discussion of the difficulty in harmonizing *The Benzene Case* and *Michigan v. EPA*, see Sunstein, *supra* note 87, at 1678. But cost considerations in *Michigan v. EPA* should not be allowed on the same grounds as in *Amer-*

"nothing in the text, structure, or history of § 110(a)(2)(D) [of the CAA] that bars EPA from considering cost in its application,"[89] relying on D.C. Circuit precedent holding that "only where there is 'clear congressional intent to preclude consideration of cost' that we find agencies barred from considering costs."[90] However, between cost-benefit analysis and a precautionary mandate, the preference should be a legislative choice, and courts should hold Congress to their expansive and precautionary text.[91] Arguably this view is consistent with the view of both D.C. Circuit Judges Sentelle and Tatel. Sentelle, dissenting in *Michigan v. EPA*, and Tatel, dissenting in *Massachusetts v. EPA*, each assert that the respective expansive mandate at issue is clear under *Chevron* step one.[92] Thus, there was no reason to resort to D.C. Circuit precedent allowing cost consideration in the *Michigan* case,[93] and perhaps Judge Sentelle, had he not ruled on procedural standing grounds in the *Massachusetts* case, might agree with the substantive rationale in Tatel's dissent.

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ican Water Works Ass'n v. EPA, 40 F.3d 1266 (D.C. Cir. 1994), because in the latter case, it might have lead to more harm. *Contra* Sunstein, *supra* note 87, at 1679. *See also infra* Part IV.

[89] *Michigan v. EPA*, 213 F.3d at 679.

[90] *Id.* at 678 (citing Natural Res. Def. Council v. EPA, 824 F.2d 1146, 1163 (D.C. Cir. 1987) (en banc); George E. Warren Corp. v. EPA, 159 F.3d 616, 622-24 (D.C. Cir. 1998), *reh'g granted*, 164 F.3d 676 (D.C. Cir. 1999)). *See also* ATA v. Whitman, 531 U.S. 457, 469 n.1 (2001) ("None of the sections of the CAA in which the District of Columbia Circuit has found authority for the EPA to consider costs shares § 109(b)(1)'s prominence in the overall statutory scheme.").

[91] *Contra* Sunstein, *supra* note 87, at 1716 (arguing that in the face of silences or ambiguities we should permit cost-benefit balancing). *But see id.* at 1679 ("It is not clear whether the Supreme Court would approve the lower court's rejection of textualism . . .").

[92] *Michigan v. EPA*, 213 F.3d at 697 (Sentelle, J., dissenting) ("I see nothing in [*Chevron*] that either compels or counsels the majority's result. EPA argues that Congress did not define significant contribution. True, it did not. Neither did it define amount. But neither EPA nor the majority have offered any reasonable interpretation of those words which makes them depend upon or even relate to the cost effectiveness of alleviation . . . . Because the majority's deference to EPA's unreasonable statutory interpretation as couched in the agency's scurrilous 'second-step' cost effectiveness analysis ventures off track, as I said, I am getting off at the first stop."); *Massachusetts v. EPA*, 415 F.3d at 67 (Tatel, J., dissenting) ("'If a court, employing traditional tools of statutory construction, ascertains that Congress had an intention on the precise question at issue, that intention is the law and must be given effect.' . . . This language [of CAA § 202(a)(1)] plainly authorizes regulation of (1) any air pollutants emitted from motor vehicles that (2) in the Administrator's judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." (quoting *Chevron*, 467 U.S. at 843 n.9)).

[93] *Michigan v. EPA*, 213 F.3d at 695–97 (Sentelle, J., dissenting); Ethyl Corp. v. EPA, 51 F.3d 1053, 1060 (1995).

While cost-benefit analyses in environmental statutes, as a matter of policy, may be preferable to expansive mandates,[94] Congress must make this intent clear like it did in FIFRA. Some goods, like pesticides, may be a net benefit, despite environmental harms, and agencies are left to consider costs and engage in this calculus. At the same time, there may be advantages to expansive mandates without limitations. If we are deeply concerned with the risk of some public health dangers or aware that a substance can cause substantial harm but are uncertain of the probability of the harm occurring, no limitations may be appropriate regardless of costs. Expansive mandates without limitations and, in turn broad interpretation, also help to prevent public and environmental health policy choices from being co-opted by administrative agencies who might limit public protection possibly due to industrial lobbying or executive branch politics.

Thus, the proposed model this Article suggests may please both pragmatists (and other proponents of legislative history) and textualists. Justice Antonin Scalia, a self-proclaimed textualist,[95] should be pleased with great reliance on the text of the broad mandate,[96] while preserving much of the institutional balance of the *Chevron* doctrine[97] and the legal authority of judicial review.[98] Justice Stephen Breyer, a pragmatist[99] and proponent of legislative history,[100]

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[94] In some ways this mirrors the debate between using cost-benefit analysis or the precautionary principle. *See, e.g.*, Robert W. Hahn and Cass R. Sunstein, *The Precautionary Principle as a Basis for Decision Making*, 2 THE ECONOMISTS' VOICE 1 (2005), *available at* http://www.bepress.com/ev/vol2/iss2/art8 (last visited Apr. 8, 2006).

[95] *See generally* SCALIA, *supra* note 49. Perhaps textualism, when faced with expansive statutory mandates, will not erode environmental regulation and result in manipulation of the *Chevron* doctrine. *Contra* Albert C. Lin, *Erosive Interpretation of Environmental Law in the Supreme Court's 2003–04 Term*, 42 HOUS. L. REV. 565, 572–605 (2005). While some may disagree, I would argue that even originalists can embrace a broad interpretive principle because, absent express contrary statements, when Congress uses expansive language it may do so purposefully and with the knowledge that changing circumstances may affect regulatory expectations.

[96] Justice Scalia wrote the majority opinion in *ATA v. Whitman*, 531 U.S. 457 (2001).

[97] *See* Gregory E. Maggs, *Reconciling Textualism and the Chevron Doctrine: In Defense of Justice Scalia*, 28 CONN. L. REV. 393, 395 (1996).

[98] *See* Coll. Sav. Bank v. Fla. Prepaid Postsecondary Educ. Expense Bd., 527 U.S. 666, 688 (1999) (opinion by Scalia, J.) ("The arguments recited in these sources have been soundly refuted, and the position for which they have been marshaled has been rejected by constitutional tradition and precedent as clear and conclusive, and almost as venerable, as that which consigns debate over whether *Marbury v. Madison* was wrongly decided to forums more other-worldly than ours.").

[99] *See* Richard J. Pierce, Jr., *Justice Breyer: Intentionalist, Pragmatist, and Empiricist*, 8 ADMIN. L.J. AM. U. 747, 749 (1995) ("Justice Breyer is a dedicated pragmatist.").

[100] *See* Stephen Breyer, *On the Uses of Legislative History in Interpreting Statutes*, 65 S. CAL. L. REV. 845, 847 (1994).

should be pleased with deferring to administrative agencies where technocratic expertise is required.[101]

To summarize, judges should broadly interpret expansive environmental and public health legislation that seeks to limit public harms, without consideration of other factors.[102] Judges have the capacity to understand emerging science and have the constitutional responsibility to determine what harms should be regulated under statutory mandates. In other words, for expansive environmental legislation, courts should liberally construe *Chevron* step one[103] (i.e., expansive mandates should not be considered ambiguous, and instead courts should determine whether the potentially regulated harm meets the textual requirements for a standard to be issued).[104] To do otherwise may result in agency inaction (i.e., a failure to regulate), and agencies should not have control over global intent of the law.[105] If the statute specifies other factors to be considered against the mandate, however, this determination can be left to the administrative agencies subject to scrutiny under *Chevron* step two. Agencies may balance explicit considerations, but should not decide if and what to balance.[106]

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[101] STEPHEN BREYER, BREAKING THE VICIOUS CIRCLE: TOWARD EFFECTIVE RISK REGULATION 61 (1993) (calling for creation of a health and environmental administrative agency that would be "mission oriented, seeking to bring a degree of uniformity and rationality to decision making in highly technical areas, with broad authority, somewhat independent, and with significant prestige").

[102] I recognize that there are substantial policy consequences to embracing the broad interpretive principle suggested. For example, in the health case system, emergency rooms are already closing, often in the poorest neighborhoods; arguably expedited by broad EMTALA interpretations. Similarly, OSHA regulations may lead to fewer jobs, business losses, and loss of health care benefits. However, if Congress is concerned with these issues, the statutes should indicate whether these costs should be taken into consideration, allowing an agency to determine the proper scope of regulation. In other words, Congress should explicitly require cost-benefit analysis that focuses on the negative effect of the regulation (not the regulated harm itself) on public welfare.

[103] *See* Chevron U.S.A. v. Natural Res. Def. Council, 467 U.S. 837, 843 n.9 (1984) ("If a court, employing traditional tools of statutory construction, ascertains that Congress had an intention on the precise question at issue, that intention is the law and must be given effect."); Massachusetts v. EPA, 415 F.3d 50, 73 (D.C. Cir. 2005) (Tatel, J., dissenting) (arguing that, under *Chevron* step one, EPA clearly has the textual authority to regulate greenhouse gases), *cert. granted*, 126 S. Ct. 2960 (2006).

[104] *See* Sunstein, *supra* note 50, at 445 ("An ambiguity is simply not a delegation of law-interpreting power. *Chevron* confuses the two."); *id.* at 494 ("At the very least, courts should answer in the affirmative when a statute contains an open-ended term like 'public policy' . . . that invites interpretations that change over time . . . ").

[105] *Cf.* Sunstein, *supra* note 78, at 289–90.

[106] *Cf.* Sunstein, *supra* note 50, at 446 ("Those who are limited by a legal restriction should not be permitted to determine the nature of the limitation, or to decide its scope.").

IV. The Scope of a Broad Interpretive Principle

There are at least three circumstances in which expansive environmental legislation without limitations should not necessarily be read broadly. The first circumstance is where regulation was clearly not the intent of Congress at the time of the statute's enactment. This decision not to regulate must be clearly manifested by Congress, or the regulation must be so obviously outside the scope of what Congress likely envisioned, that no argument could be made that Congress would have approved its regulation at the time of enactment. The second circumstance is where broad construction would lead to an absurd result. Absurdity would have to be more than an unbalanced cost-benefit analysis, but instead a situation where regulating the harm at issue in the relevant statute would lead directly to the use of more harmful substances. The third circumstance is where the proposed interpretive principle that expansive legislation without express limitations should be broadly interpreted is limited to environmental and public health statutes regulating negative externalities.

First, when interpreting expansive textual language, what if a broad interpretation conflicts with congressional intent or long-standing practice?[107] In order to overrule this interpretive principle—that expansive legislation without express limitation be broadly interpreted by the courts—there must be clear congressional intent to do otherwise. The most noteworthy case addressing the issue of whether legislative action trumps the statutory text is *FDA v. Brown & Williamson Tobacco Corporation.*[108] In 1996, the Food and Drug Administration ("FDA") attempted to regulate tobacco products, which contain nicotine, as "drugs" and "drug delivery devices" under the Food, Drug, and Cosmetics Act ("FDCA").[109] The court held that the FDCA, read in conjunction with Congress' subsequent tobacco-related legislation, did not give

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[107] For a general post-*Chevron* analysis of interpreting statutory text, see Alfred C. Aman, Jr. & William T. Mayton, Administrative Law 481–491 (2d ed. 2001).

[108] FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 131–32 (2000).

[109] *Id.* at 127. The FDCA permits the FDA to regulate "drugs" ("articles (other than food) intended to affect the structure or any function of the body"), "device" ("an instrument, apparatus, implement, machine, contrivance . . . or other similar or related article, including any component, part, or accessory, which is . . . intended to affect the structure or any function of the body"), and "combination products" ("a combination of a drug, device, or biological product"). 21 U.S.C. §§ 321(g)(1)(C), 321(h), 353(g)(1) (2004). "The FDA has construed this provision as giving it the discretion to regulate combination products as drugs, as devices, or as both." *Brown & Williamson*, 529 U.S. at 130 (citing 61 Fed. Reg. 44,400 (Aug. 28, 1996)).

the FDA the authority to regulate tobacco products as customarily marketed in the United States.[110] Despite the Court's holding, the expansive regulatory and definitional scope of the statute can be read to include tobacco, and, as previously stated, the expansive, yet clear, text should control in most circumstances,[111] unless Congress, *at the time of enactment*, made clear an *explicit* intention not to give the FDA the power to regulate tobacco products.[112]

While "Congress enacted general words," Professor Sunstein argues that "its beliefs about particular applications of those general words, and Congress's unenacted beliefs about those applications need not control."[113] Sunstein goes on to state that "[e]ven if . . . there were an express statement to this effect [that the FDA was not authorized to regulate tobacco] in the legislative history, it would not be controlling."[114] This conclusion can result in inconsistency—in the tobacco case, judges should look only at the statutory text, but yet, in other cases, judges must look beyond the text where changed circumstances might result in "perverse" regulation.[115] Statutory interpretation cannot depend on the resulting

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[110] *Brown & Williamson*, 529 U.S. at 126.

[111] In my view, the actual language (not taking into account the legislative history) is not ambiguous, and can be read to include tobacco products. *Accord id.* at 161 (Breyer, J., dissenting) (stating that "tobacco products fit within this statutory language"); Cass R. Sunstein, *Is Tobacco a Drug? Administrative Agencies as Common Law Courts*, 47 DUKE L.J. 1013, 1028 (1998) (stating that "the text of the definition of 'drug' plainly includes tobacco").

[112] *Cf.* Hagen v. Utah, 510 U.S. 399, 400 (1994) ("subsequent history is less illuminating than contemporaneous evidence"); Sullivan v. Finkelstein, 496 U.S. 617, 632 (1990) (Scalia, J., concurring) ("Arguments based on subsequent legislative history . . . should not be taken seriously, not even in a footnote.").

[113] Sunstein, *supra* note 111, at 1029.

[114] *Id.* at 1031–32.

[115] *Compare* Cass R. Sunstein, *Law and Administration After* Chevron, 90 COLUM. L. REV. 2071, 2099 (1990) (" . . . Congress would be unlikely to want agencies to have the authority to decide on the extent of their own powers. To accord such power to agencies would be to allow them to be judges in their own cause, in which they are of course susceptible to bias."), *and* Sunstein, *supra* note 111, at 1028 (stating that tobacco clearly falls within the statutory definition of a drug), *with* Sunstein, *supra* note 50, at 496 ("Indeed the [Delaney] clause, read literally, appeared quite perverse in many of its applications because it banned substances that posed no real risk to health."), *and* Sunstein, *supra* note 87, at 1716 (arguing that in the face of silences or ambiguities we should permit cost-benefit balancing). While textual inconsistency may result, Sunstein's recent response is that interpretive consistency does exist when substantial deference is given to the executive branch. *See* Cass R. Sunstein, *Beyond* Marbury: *The Executive's Power To Say What the Law Is*, 115 YALE L.J. 2580 (2006). This view may be correct, in part. Sunstein argues that we should "vindicate the law-interpreting authority of the executive branch." *Id.* at 3. Thus, *Massachusetts v. EPA* was correctly decided, but *Brown & Williamson* was not. *Id.* However, the judiciary itself or through deference to an administrative agency should not subvert the broad goals of expansive Congressional legislation. Sunstein's vision of judicial action ver-

regulation, and expansive statutory language must be read broadly except in a few circumstances including when legislative statements make a statute unambiguously narrow under *Chevron* step one. While *Chevron* recognizes that the resolution of ambiguities is a policy judgment left to administrative agencies with democratic accountability and technical expertise,[116] clear congressional intent is not an ambiguity. In *Brown & Williamson*, scholars (and the Court's majority[117]) agree that, despite the plain language, the term "drug" in the FDCA was not understood to include tobacco.[118]

This is not to say *Brown & Williamson* was properly decided. First, none of the legislative history cited by the Court's majority in *Brown & Williamson*, nor scholars, is from the time of enactment of the FDCA. Instead, the Court's majority cites to post-enactment legislative action.[119] Thus, Justice Breyer's dissent correctly asserts that the majority's conclusion "is based on legislative silence."[120] Breyer states, "Congress itself has addressed expressly the issue of the FDA's tobacco-related authority only once—and, as I have said, its statement was that the statute was *not* to 'be construed to affect the question of whether the [FDA] has any authority to regulate any tobacco product.'"[121] Second, there is no reason to view well-explained regulation with suspicion simply when it will result in a major policy change as the Court has implicitly recognized that Congress cannot keep up with all the scientific

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sus my own is a choice between (1) a preference for deference in all cases to the executive which may (e.g., *Brown & Williamson)* or may not (e.g., *Massachusetts v. EPA*) regulate expansively versus (2) a preference for the judiciary to uphold or mandate regulatory action in some cases (those without express limitations) based on expansive textual mandates (compare *ATA v. Whitman* with *Massachusetts v. EPA*). There is likely substantial agreement in defining the interpretive principle governing statutes that contain express limitations because executive deference is appropriate.

116 Sunstein, *supra* note 111, at 1058. It is not clear that Chevron deference should be accorded an agency's interpretation of its own jurisdiction. Merrill, *supra* note 77, at 1089. *See also* Sunstein, *Beyond* Marbury, *supra* note 115, at 25–26.

117 *Brown & Williamson*, 529 U.S. at 143–159.

118 Sunstein, *supra* note 111, at 1029; Merrill, *supra* note 77, at 1080–82. This argument gains momentum if jurisdiction over tobacco by the FDA would likely result in the end of its sale. *Id.* at 1076 (citing *Public Health Cigarette Amendments of 1971: Hearings Before the Commerce Subcomm. on S. 1454*, 92d Cong. 239 (1972); *Brown & Williamson,* 529 U.S. at 139 ("A ban of tobacco products by the FDA would therefore plainly contradict congressional policy.")).

119 *Brown & Williamson,* 529 U.S. at 143–159.

120 *Id.* at 186 (Breyer, J., dissenting).

121 *Id.* (citing the note following 21 U.S.C. § 321 (1994 Supp. III)).

and technological progress.[122] It is unconvincing that courts should hesitate to allow regulation in extraordinary cases[123] as scientific discoveries may often require major policy changes.[124] In other words, supposed reliance interests alone should not justify continuing (or, at a minimum, failing to regulate) a public health threat.

So the question properly phrased is whether Congress understood at the time of enactment that the FDCA did not allow the regulation of tobacco products regardless of the health effects. This question is a difficult one, and, maybe, as *Brown & Williamson* suggests, Congress would have said something if it wanted to allow tobacco regulation; but this is speculation. There must be an explicit statement that Congress does not want to regulate in light of an expansive statutory mandate and the possibility of changed circumstances. This conclusion forces reasoned Congressional action (i.e., Congress can insert limitations) and allows for broad mandates to protect public health and welfare.

Second, changed circumstances and science can cut both ways when statutory interpretation is seen as impacting the balancing of interests in making policy choices, especially in those attempts to improve the environment and public health—in some instances the text's scope arguably should be more limited (e.g., the Delaney Clause example discussed below) and in other cases should arguably be read more expansively (e.g., regulating tobacco products under the FDCA). In addition to clear congressional intent, another limitation on expanding definitional scope is that of absurdity. This absurdity exception should be defined narrowly—where the result would be regulation that directly causes substantially more direct harm to human health than would otherwise be prevented.

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122 Nat'l Cable & Telecomm. Ass'n v. Brand X Internet Servs, 125 U.S. 2688, 2699 (2005) (stating that unexplained inconsistency can be challenged under the Administrative Procedure Act, but not the *Chevron* doctrine).

123 *Contra Brown & Williamson*, 529 U.S. at 159 (citing Stephen Breyer, *Judicial Review of Questions of Law and Policy*, 30 ADMIN. L. REV. 363, 370 (1986)) ("In extraordinary cases, however, there may be reason to hesitate before concluding that Congress has intended such an implicit delegation.").

124 It is likely that Congress cannot anticipate most regulation. *See supra* note 54. But, some may argue that if scientific understanding changes considerably that we should want these things to go back to Congress to increase accountability (i.e., narrowly construe the statute and wait for legislation). However, in most cases, Congress will not act to regulate a singular item, and such frequent Congressional action would be inefficient. If a big regulatory change results from use of the broad interpretive principle, and Congress does not want such regulation, then it can and should act. *See supra* text accompanying note 74.

A prime example is the Delaney Clause which prohibits food additives that "induce" cancer.[125] The Clause was passed before carcinogens were easily detected and those able to be detected were very dangerous. If, and only if, the Clause, as-applied to a specific additive, increases health risks by forcing companies to resort to substantially more dangerous but non-carcinogenic food additives would it meet the absurdity canon, as regulation should not create more harm.[126] This exception, however, is not about limiting the scope of the text and allowing de minimis exceptions. While de minimis exceptions may be better policy,[127] Congress should be left with its arguably poor policy choice.[128] The absurdity canon should only survive to the extent that regulation would create substantially more harm (if in fact that is the case) through a result in direct conflict with the purpose of any public health or environmental statute.

Finally, the proposed interpretive principle that expansive legislation without express limitations should be broadly interpreted is limited to environmental and public health statutes regulating negative externalities such as air pollution, water pollution, and toxic substances.[129] While these externalities sometimes arise as a result of beneficial action such as industrial growth, the externalities

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[125] 21 U.S.C. § 348(c)(3)(A) (2000). *See also* Les v. Reilly, 968 F.2d 985 (9th Cir. 1992), decided prior to passage of the Food Quality Protection Act which created a new health-based standard for pesticide residue on food. 21 U.S.C. § 321(s) (2000).

[126] *Cf.* Sunstein, *supra* note 50, at 497.

[127] *See* BREYER, *supra* note 101, at 41 (stating that, applied literally, the Delaney clause seems "unreasonably and pointlessly strict").

[128] *See* Pub. Citizen v. Young, 831 F.2d 1108 (D.C. Cir. 1987). *Contra* Sunstein, *supra* note 50, at 488–89, 496–97. *See generally* Richard A. Merrill, *FDA's Implementation of the Delaney Clause: Repudiation of Congressional Choice or Reasoned Adaptation to Scientific Progress?*, 5 YALE J. ON REG. 1, 3 (1988) (depicting the FDA's de minimis policy as an effort "to reconcile Congress's language with circumstances Congress may not have foreseen and for which it surely did not provide").

[129] Some goods have a wide range of both benefits and hazards in consumers' distributional curves. *See* Richard A. Epstein, *Regulatory Paternalism in the Market for Drugs: Lessons from Vioxx and Celebrex*, 5 YALE J. HEALTH POL'Y L. & ETHICS 741 (2005) (arguing that drugs offer benefits to a heterogeneous population, and thus, at various points upstream and downstream in the distributional curve, may be more helpful to some and more harmful to others). *See also* Rodgers v. Elliot, 146 Mass. 349, 15 N.E. 768 (1888) (where the harms (e.g., noise or plaintiff's convulsions), and benefits (e.g., notice of time of day and start of church service) of the operation of defendant's church bell are variable along geographic, wind, tolerance, and medical sensitivity distributional curves). Thus, in regulating some consumer goods, Congress often enacts both screening and cost-benefit statutes where agencies can take into consideration the scope of the regulation (e.g., standard-setting or use limitations); though at times the curve may be grossly disproportionate. For example, consumer use of tobacco products (e.g. cigarettes) is unlike that of prescription drugs because the resulting effects of tobacco lack health benefits.

themselves have little or no beneficial value, and the costs of a failure to regulate are potentially high because significant harm may accrue in the time between narrow judicial construction of statutory provisions and any future congressional or administrative action.

V. CONCLUSION

Courts are both expected to say what the law is and to defer policy choices to better positioned administrative agencies. Yet too often, depending on the individual policy outcome, the interpretation of expansive environmental legislation is often inconsistent—sometimes wanting textual strength; sometimes judicial policymaking.[130] Strong textual commitments, absent other interpretive tools, can lead to both over- and under-inclusive environmental regulation. Even so, courts should be wary of circumventing expansive statutory mandates. Instead courts should hold Congress to their expansive goals and only allow agency limitation of these goals when expressly provided by Congress.

Under this more consistent interpretive principle, greenhouse gases would be regulated under the Clean Air Act, wetlands fill would be subject to broad federal jurisdiction, and tobacco[131] would be subject to FDA regulation (unless timely legislative history is found), all under appropriate standards determined by agency expertise. At the same time, cancer-inducing food additives would be prohibited unless the substitutes would do substantially more harm, and judicially created cost-benefit default rules would disappear to be replaced by Congressional ones. At his confirmation hearing, Chief Justice John Roberts stated,

> I depart from some views of original intent in the sense that those folks, some people view it as meaning just the conditions at the time, just the particular problem. I think you need to *look at the words they used, and if the words adopt a broader principle, it applies more broadly.*[132]

Thus, courts should broadly construe expansive environmental and public health legislation because (1) judges are equipped to interpret the statutory mandate, (2) Congress, in recognition of

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130 *See supra* note 115 and accompanying text.

131 *See supra* note 129.

132 *Hearing on the Nomination of John G. Roberts, Jr. to be Chief Justice of the United States Before the S. Comm. on the Judiciary*, 109th Cong. (2005).

changed circumstances, is aware of the breadth of their textual language, and (3) the public and environment cannot afford the potential costs of narrow interpretation.