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Cite to this Journal as: 17 VT. J. ENVTL. L. ___(2016).

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THE CARROTS AND STICKS OF SUSTAINABLE FARMING IN CANADA

Nathalie J. Chalifour, PhD and Heather McLeod-Kilmurray, PhD

“If we don’t change our direction, we’re likely to end up where we’re headed.”

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1. The authors wish to acknowledge research assistance received from several University of Ottawa law students, including Andrew Mason, Mark James, Luka Kovacek, Carla Sbert, Tenille Brown, Alexandre Lillo, Briane Paulin and Kathleen Selkirk. We are also grateful for the financial support of the Social Sciences and Humanities Research Council and Sustainable Prosperity.
INTRODUCTION

Concerns about the way in which we grow, distribute, and consume food around the world have grown in recent years. From the environmental impacts of farming practices (exacerbated by the industrialization of agriculture) and greenhouse gas ("GHG") emissions from agriculture, to the viability of farming communities and health concerns about concentrated livestock operations, the issues are numerous, often overlapping, and sometimes underpinned by different values and/or preoccupations. For instance, issues may be framed as ones of ecological integrity, food security and the right to food, social justice, animal welfare, ...
or even concern about the impacts of emerging technologies such as genetically modified organisms ("GMOs").

Concerns relating to food and farming are intensified when set against the backdrop of expanding global population, which the Food and Agriculture Organization (FAO) estimates will require an increase of 60% in global agricultural production to satisfy food needs and diets that are increasingly high in both caloric and meat consumption. The issues are also exacerbated by climate change, which is predicted to have serious implications for food security. The agricultural sector is dependent not only on healthy ecosystems, but also on favorable climate conditions. As such, it is a sector that is highly susceptible to the increased frequency and severity of droughts and extreme precipitation. Agriculture is in turn a major source of methane, an important contributor to climate change.

Regardless of how the issues are framed, there is widespread agreement that the current agricultural food system around the world is unsustainable and in need of a systemic transformation toward sustainable agriculture. There is no single widely-accepted definition of sustainable agriculture. It is understood to be based on a system of farming that does not harm the ecological goods and services upon which it is dependent, and which provides healthy food and agricultural goods for all, along with viable livelihoods for farmers and other agricultural workers. As such, it captures many (though certainly not all) of the concerns identified earlier. Ultimately, however it is defined, the concept of sustainable agriculture can function as a filter through which to screen decision-making to facilitate the transition to a more sustainable way of producing food. Perhaps most

9. See COMM’N ON SUSTAINABLE AGRIC. & CLIMATE CHANGE, ACHIEVING FOOD SECURITY IN THE FACE OF CLIMATE CHANGE (2015), http://cgspace.cgiar.org/rest/bitstreams/15409/retrieve [https://perma.cc/396E-DCKQ] (showing that without a global commitment to GHG emissions from all sectors, no amount of agricultural adaptation will be sufficient to stabilize the climate of the future).
11. SIMONS, supra note 2, at 5; see also Guy M. Robinson, Canada’s Environmental Farm Plans: Transatlantic Perspectives on Agri-Environmental Schemes, 172 GEOGRAPHIC J. 206, 206–07 (2006) (noting that agriculture in North America has remained primarily a model of food production, with mitigation of environmental impacts on the side, while the E.U. has seen a shift toward agricultural multi-functionality, rural development, and environmental stewardship); see also infra section I.A. (describing unsustainable agriculture as a “wicked problem”).
importantly, it is a doorway into a critical conversation about the future of food and the role of public policy in shaping that future.\textsuperscript{12}

This paper evaluates Canada’s federal\textsuperscript{13} agricultural policy framework to determine whether it enables sustainable agricultural food production.\textsuperscript{14} In particular, this paper assess whether the current policy framework: (1) creates a high level vision and set of objectives which support sustainable food production; and (2) provides the kind of incentive structure needed by farmers to facilitate the transition to sustainable food production. Specifically, following the work of Iles and Marsh\textsuperscript{15} on Diversified Food Systems (“DFS”), this paper considers the extent to which federal agricultural policies: (1) support farmer capacity on ecologically sustainable farming practices; (2) create incentives for conservation on farm lands; (3) pay farmers to provide ecosystem services; and (4) support market access for sustainable farmers. This paper conducts its evaluation through the lens of change theory. This emphasizes the importance of creating a clear set of objectives at the federal level to guide change, rewarding the right behaviors and creating disincentives for undesirable behaviors in eliciting systemic change.\textsuperscript{16} This paper also relies upon Lessig’s four modalities of regulation to inform the discussion of policy instruments.\textsuperscript{17}

Based on a review of relevant literature and policies, the paper concludes that the government’s central agricultural policy framework fails to establish the enabling vision and incentive structure needed to influence a systemic change in the sector toward sustainable farming. The policy framework is primarily geared toward helping the sector become more competitive, and gaining and maintaining market shares, through innovation, for instance. While there are some policies aimed at supporting environmentally sustainable farming practices (e.g., Environmental Farm Plans), there is no clear definition of sustainable agriculture in the Canadian context, nor are there high-level objectives aimed specifically at supporting a transition to sustainable agricultural food production in this country. As such, it is no surprise that the sector is not moving in that direction, except in small pockets of the country where there are motivated farmers and/or

\begin{itemize}
\item \textsuperscript{12} Sam Kalen, \textit{Agriculture, Food, and Environmental Policy}, 26 NAT. RESOURCES \& ENV’T 3, 3 (2011).
\item \textsuperscript{13} While it is also important to evaluate whether there is a supportive legal and regulatory framework at all relevant levels of government, that is not the focus of this paper.
\item \textsuperscript{14} This paper focuses on sustainable farming for food production only.
\item \textsuperscript{16} SIMONS, supra note 2, at 60–61.
\item \textsuperscript{17} See infra note 29 and accompanying text.
\end{itemize}
niche markets to access (such as organic foods and/or local food movements).

The paper is structured as follows. Section I provides background and context, including: (a) an introduction to the theoretical framework applied; (b) a brief overview of agriculture in Canada, including its economic role and governance; and (c) a discussion of how sustainable agriculture is defined. This paper identifies DFS as the approach that best describes the normative vision for sustainable food production in Canada, and against which the paper evaluates Canada’s agricultural policy framework. Section II includes: (a) a summary of the analytical framework (based on DFS) applied to evaluate the extent to which Canada’s federal agricultural policy framework enables sustainable food production; (b) an examination of the extent to which the policy defines sustainable agriculture and identifies a high-level vision and set of objectives for achieving it; and (c) an evaluation of whether the policy framework includes measures to encourage farmers to shift to ecologically supportive farming practices, especially those that help farmers deal with additional costs associated with DFS. In Section III, this paper flags and discusses some examples of existing policies in Canada outside the current agricultural policy framework that could be reformed to support a shift to sustainable agriculture, and also incentive policies that have been used in other jurisdictions and/or analyzed in the literature. These policies could be further considered as potential measures to support the shift to sustainable agriculture in the Canadian context.

Before proceeding, the authors wish to acknowledge that this is a vast topic and there are many aspects of sustainable farming and agriculture that the paper does not cover. First, agriculture is a matter of shared federal and provincial/territorial jurisdiction in Canada, meaning that each sub-national jurisdiction has its own regulations and policies respecting farming. The paper does not cover these in any detail, nor does it address agriculture and food-related actions at the municipal level, but rather focuses on the role of the federal government. The reason for this is not only practical, but also because federal government policy sets the overall tone for agricultural policy in the country and invests considerable resources in agriculture every year. In addition, the central policy studied in this paper reflects provincial priorities and approaches since it is the product of federal-provincial negotiations. Second, while the paper does not focus on particular farming practices, it uses examples from land-based agricultural production. While much of the discussion is relevant to aquaculture, that subject merits its own treatment and is not adequately covered here. Third, while the paper does engage with some of the social aspects of sustainable farming in the first section, it focuses predominantly on the ecological aspects of sustainable farming. This is not to discount the importance of social
sustainability of farming, but rather a deliberate choice to provide a point of focus for the research. Fourth, the international dimension (particularly the nexus between global trade, investment rules, and agricultural policy) is important but not central to this paper’s analysis. Finally, this paper focuses on the role of incentives in influencing sustainable farming rather than the broader regulatory framework. The authors justify this choice based on the historical role of agricultural support in the Organisation for Economic Co-operation and Development (“OECD”) nations and the critical role of funding in influencing the shape of farming in a given jurisdiction.

I. BACKGROUND AND CONTEXT

A. The “Wicked Problem” of Unsustainable Agriculture

Many sustainability challenges have been characterized as “wicked problems” because they defy resolution due to the many interdependencies, uncertainties, circularities, and conflicting stakeholder interests engaged in finding solutions. While climate change, with its fundamental links to energy policy and virtually every part of the economy, may be the quintessential “wicked problem,” unsustainable agriculture in our view merits the moniker as well.

Part of what makes agriculture a “wicked problem” is that many of the environmental and social costs of farming are externalized, meaning that farmers (and ultimately the consumers of the food they produce) need not take these costs into account in their decisions. The challenge of...
externalized costs is one of the characteristics of many “wicked” environmental problems. To the extent that society desires a shift toward sustainable farming, those costs must either be internalized by farmers (a serious challenge given the already low average incomes of many farmers), paid by consumers (through prices or taxation, for instance), or incentives must be granted to farmers to encourage them to reduce their ecological footprints. While some might balk at the idea of devoting public resources to such incentives, research shows that doing this generates a number of co-benefits, such as reduced healthcare spending, and is ultimately cost-effective for governments. Incentives to encourage the internalization of environmental costs also serve to counteract other government incentive structures, which work against a shift toward sustainability (such as subsidies not linked to sustainability criteria).

Creating effective policies to treat “wicked problems” is no simple task since there is no single formula and the problems are linked to other issues at different scales (temporal and geographical). For instance, agricultural issues are linked to economic development, rural development, labor markets, health and safety, trade and export policies, technology, and more. Compounding factors might include the rapid rate of change (for instance, in technology or markets), the engagement of multiple actors at different levels, and the juxtaposition of short-term economic or political gains over long-term objectives. While not the sole or necessarily even the key factor for change, public policy choices play an important role in shifting behavior in a particular direction.

How to influence behavior, and the role of public policy in doing so, is an age-old question that is increasingly relevant in the context of “wicked problems.” This question generates much debate in the literature from different fields and schools of thought. One of the debates (within law and

economics) focuses on the choice of policy instrument, particularly the relative importance of law versus market-based approaches.\textsuperscript{27} This has been partly driven by the interest in the notion of externalities. Within this debate, economists from the “Old Chicago School” of thought have critiqued traditional legal instruments, such as “command and control” style laws, as being inefficient as compared to economic instruments, such as taxes or cap-and-trade systems.\textsuperscript{28} In contrast, Lawrence Lessig posits that behavior is influenced by four types of constraints that together regulate behavior: law, social norms, markets, and architecture.\textsuperscript{29} Described as the “New Chicago School,” Lessig argues that all four modalities influence behavior, but that law plays a central role not only by regulating behavior directly, but also by regulating the other three modalities.\textsuperscript{30}

Lessig argues that modern regulations are a mix of direct and indirect regulation by law, which implicate the other modalities.\textsuperscript{31} Consider the example of smoking: the law can be used directly to ban certain behaviors (e.g., smoking bans in particular areas), but the law can also regulate the market (e.g., introducing taxes on cigarettes), social norms (e.g., by funding public ad campaigns targeting smoking), and the architecture of cigarettes (e.g., regulating levels of nicotine in cigarettes).\textsuperscript{32}

Regardless of whether policies are influencing behavior directly, they are central to any process of transformative change because once locked-in, they can, \textit{inter alia}, create path dependencies, administrative bias, and self-reinforcing incentives.\textsuperscript{33} Especially in the case of “wicked problems,” social and economic networks develop around particular approaches, entrenching the status quo.\textsuperscript{34} In addition, policy makers tend to rely upon familiar,

\begin{itemize}
\item \textsuperscript{27} See William M. Lands, \textit{The Empirical Side of Law and Economics}, 70 U. CHIC. L. REV. 167, 167 (2003) (describing the importance of economics in law); see also U.N. ENVTL. PROGRAMME, GUIDELINES ON THE USE OF MARKET-BASED INSTRUMENT TO ADDRESS THE PROBLEM OF MARINE LITTER 7 (2009).
\item \textsuperscript{28} See, e.g., A. Lans Bovenberg & Lawrence H. Goulder, \textit{Environmental Taxation and Regulation}, in \textit{HANDBOOK OF PUBLIC ECONOMICS} 1471, 1475–76, 1513, 1524 (Alan J. Auerbach & Martin Feldstein, eds., 2002) (discussing how taxes can be used to achieve the goals of environmental protection).
\item \textsuperscript{29} Lawrence Lessig, \textit{The New Chicago School}, 27 J. LEGAL STUD. 661, 662 (1998).
\item \textsuperscript{30} Id.
\item \textsuperscript{31} Id. at 667.
\item \textsuperscript{33} Paul Pierson, \textit{When Effect Becomes Cause: Policy Feedback and Political Change}, 45 WORLD POL. 595, 609–11 (1993) (describing that path dependency refers to the phenomenon that occurs when decisions (by government, for instance) set a system on a particular path, which limits future options); LEVIN, supra note 25.
\item \textsuperscript{34} Pierson, supra note 33.
\end{itemize}
existing approaches, creating an additional hurdle for more innovative, alternative policies.\textsuperscript{35}

High-level policies such as the Federal-Provincial-Territorial Multilateral Framework Agreement on agriculture known as “Growing Forward 2” ("GF2") are central in shaping the policy direction for the agricultural sector. The approach taken in GF2 (discussed in detail in section II) was undoubtedly shaped by its predecessor, Growing Forward 1.\textsuperscript{36} However, each new intergovernmental negotiation and subsequent agreement offers an opportunity to shift the policy framework and influence behavior. The paper returns to this policy and analyzes its role in supporting the transition to sustainable agriculture in Section II. However, the paper first provides an overview of the agricultural sector in Canada.

\textbf{B. A Brief Overview of Agriculture in Canada}

Since colonization,\textsuperscript{37} agriculture has been an essential element of the Canadian identity, not to mention its economy. Canada used agriculture to attract workers and farmers to lands\textsuperscript{38} that had yet to be commercially exploited, as a key to Western expansion.\textsuperscript{39} The interest of the Canadian government in supporting agriculture as a key element of the Canadian economy persists, as evidenced by the market-driven and growth-oriented focus of the current agricultural policies of the federal government. In fact, the goals of competitiveness, efficiency, and growth have been at the heart of Canadian agricultural policy for many decades.\textsuperscript{40} Many have criticized
this trajectory toward industrialization, arguing that it moves Canadian agriculture in the opposite direction from sustainability.\footnote{41}

The Canadian agriculture and agri-food system\footnote{42} (“AAFS”) is described by the federal government as “a modern, complex, integrated, competitive supply chain [important] to the Canadian economy.”\footnote{43} In 2013, the AAFS generated $106.9 billion, accounting for 6.7% of Canada’s GDP and employing 2.2 million people (providing one in eight jobs in Canada).\footnote{44} The sector’s contribution to GDP has increased every year since 2007 (with the exception of the recessionary 2009).\footnote{45} Canada also has a central role in international agriculture, as the sixth-largest agricultural importer and the fifth-largest agriculture exporter in 2013.\footnote{46} In fact, half of the value of primary agricultural production in Canada is exported.\footnote{47} While Canadian farmers produce a variety of products, grains and oilseeds represented 40% of the value of all farm receipts in 2013.\footnote{48} Indeed, Canada is the largest global producer of flaxseed, canola, pulses, and durum wheat.\footnote{49} In 2011, 41.6% of the farms in Canada were livestock-based farms, as compared to 58.4% which were crop-based.\footnote{50}

Agricultural production in Canada is also becoming more concentrated. The number of farms in Canada has decreased over the last few decades, with 280,043 farms in 1991 as compared to 205,730 in 2011.\footnote{51} During the same period, the average farm size has increased (from 598 in 1991 to 778

\begin{footnotesize}
\begin{enumerate}
\item\footnote{43} Id.
\item\footnote{44} Id.
\item\footnote{45} Id.
\item\footnote{46} Id.
\item\footnote{47} Id.
\item\footnote{48} Id.
\item\footnote{49} Id.
\item\footnote{50} Snapshot of Canadian Agriculture, \textit{STATISTICS CAN.} (2012), \url{http://www.statcan.gc.ca/pub/95-640-x/2011001/p1/p1-01-eng.htm#II} [https://perma.cc/3F7L-NL52].
\item\footnote{51} Similarly, the number of farm operators decreased from 390,875 to 293,925 in 2011. Id.
\end{enumerate}
\end{footnotesize}
This concentration has not led to lower operating costs, as agricultural operating costs increased by 40% over the 2003–2013 period.\footnote{Id.}

Interestingly, the federal government measures the contribution of AAFS to the Canadian economy “by its share of gross domestic product and employment” plus “government expenditures in support of” the system. It does not yet take a sustainability approach of measuring the full costs and benefits—economic, environmental and social (and also interlinking costs and benefits)—of this sector of activity. Doing so would likely yield a very different picture of the sector.

1. Federal Governance of Agriculture

Federal responsibility for agriculture is located in the department of Agriculture and Agri-food,\footnote{Department of Agriculture and Agri-Food Act, R.S.C. 1985, c A-9.} and governed by numerous policies, acts and regulations,\footnote{See, e.g., Agricultural Products Marketing Act, R.S.C. 1985, c A-6 (providing for the marketing of agricultural products in interprovincial and export trade); Animal Pedigree Act, R.S.C. 1985, c 8 (4th Supp.) (respecting animal pedigrees associations); Canada Grain Act, R.S.C. 1985, c G-10 (respecting grain); Canadian Agricultural Loans Act, R.S.C. 1985, c 25 (3rd Supp.) (increasing the availability of loans for the purpose of the establishment, improvement, and development of farms and the processing, distribution, or marketing of the products of farming by cooperative associations); Experimental Farm Stations Act, R.S.C. 1985, c E-16 (respecting experimental farm stations); Farm Debt Mediation Act, S.C 1997, c 21 (Can.) (providing for mediation between insolvent farmers and their creditors); Farm Income Protection Act, S.C 1991, c 22 (Can.) (authorizing agreements between the government of Canada and the provinces to provide for protection for the income of producers of agricultural products and to enable the government of Canada to take additional measures for that purpose); Farm Improvement Loans Act, R.S.C. 1985, c F-3 (encouraging the provision of intermediate term and short term credit to farmers for the improvement and development of farms and for the improvement and living conditions thereon); Marketing Freedom for Grain Farmers Act, S.C. 2011, c 25 (Can.) (reorganizing the Canadian Wheat Board and making consequential and related amendments to certain Acts); Prairie Farm Rehabilitation Act, R.S.C. 1985, c P-17 (providing for the rehabilitation of drought and soil drifting areas in the Provinces of Manitoba, Saskatchewan, and Alberta); Agricultural Growth Act Bill C-18 (arising from the Growing forward policies 1 and 2, amending certain Acts relating to agriculture and agri-food).} and linked institutions, such as the Canadian Food Inspection Agency,\footnote{Canadian Food Inspection Agency Act S.C. 1997, c. 6. (which is responsible for another suite of legislation); Agriculture and Agri-Food Administrative Monetary Penalties Act, S.C. 1995, c. 10; Canada Agricultural Products Act, R.S.C. 1985, c. 20 (4th Supp); Consumer Packaging and Labelling Act, R.S.C. 1985, c. C-38; Feeds Act, R.S.C. 1985, c. F-9; Fertilizers Act, R.S.C. 1985, c. F-10; Fish Inspection Act, R.S.C. 1985, c. F-12; Food and Drugs Act, R.S.C. 1985, c. F-27; Health of Animals Act, S.C. 1990, c. 21; Meat Inspection Act, R.S.C. 1985, c. 25 (1st Supp); Pest Control Products Act, S.C. 2002, c. 28; Plant Breeders’ Rights Act, S.C. 1990, c. 20; Plant Protection Act, S.C. 1990, c. 22; Safe Food for Canadians Act, S.C. 2012, c. 24; Seeds Act, R.S.C. 1985, c. S-8.} the Canadian Dairy Commission,\footnote{Id.} and the Canadian Wheat
Board, among others. A plethora of similar institutions exist at the provincial and territorial level, and there are also relevant actors at the municipal level. There has been criticism that this dispersal of responsibility among so many institutions and jurisdictions, and the related challenge of effective coordination among so many players, presents a significant challenge to a sustainable food policy in Canada.

Included among the various tasks assigned to these federal AAFS institutions is the regulation and governance of genetically modified (“GM”) organisms, a key element in agriculture domestically and controversial in terms of exporting Canadian agricultural products abroad. The federal government strongly supports and actively advocates in favor of GM crops, as clearly demonstrated in the WTO dispute between the U.S. and the E.U., in which Canada and Argentina support the U.S. stance in favor of GMOs. The role of GM crops in sustainable agriculture remains subject to debate.

C. What Is Sustainable Agriculture?

1. Why Sustainable Agriculture?

The impetus to define and create policy in favor of sustainable agriculture comes, of course, from the fact that conventional agriculture has become unsustainable. For instance, farming practices can have significant environmental impacts, creating a major source of water pollution and

59. Canadian Wheat Board (Interim Operations) Act, S.C. 2011, c 25, S-14 (Can.); see also the Canada Agricultural Review Tribunal (created by Canada Agricultural Act 1983); the Canadian Grain Commission (created by Canada Grain Act, R.S.C. 1985, c G-10), the Farm Products Council of Canada (created by Farm Products Agencies Act, R.S.C. 1985, c F-4) and Farm Credit Canada (created by Farm Credit Canada Act, S.C. 1993, c 14 (Can.)).
64. Agriculture is the most important single contributor to water pollution in the United States. Christopher B Connard, Sustaining Agriculture: An Examination of Current Legislation
contributing to soil erosion, reduced soil quality, biodiversity loss through habitat fragmentation and degradation, and emissions of GHGs. Sustainable farming practices aim to reduce these impacts by taking steps such as reducing the use of pesticides, herbicides and/or fertilizers, limiting soil erosion and water runoff, and improving soil quality, among other things.

In recent decades, agriculture has become increasingly industrialized and globalized. Indeed, Weis states that

[a]gricultural systems in the [U.S.] and Canada are the most industrialized in the world. Defining characteristics of this system of industrial agriculture include massive machinery, heavy use of inputs, the predominance of monocultures, large populations of intensively reared livestock, exceptionally high levels of per farmer productivity, the disarticulation of agriculture from local communities, the control of agricultural inputs and outputs by large transnational corporations (TNCs), and the illusion of diversity in supermarkets and other retail outlets.

Parsons notes that this agricultural industrialization or agricultural restructuring began in Canada (and other countries) after the Second World War. She observes that the increasingly global nature of the food system has involved an increase in agribusinesses, which are international in scale, and this has led to specialization and intensiveness of agriculture, which forces out small farmers and increases concentration in these large businesses. For example, in 1991, there were 55.1% fewer farms in Canada than in 1951, and 79.3% fewer farm people, while the average farm size in the three prairie provinces, for example, grew 93% in that same period. “With the restructuring of the post-war period, agriculture has


65. See generally J.B. Ruhl, Farms, Their Environmental Harms, and Environmental Law, 27 ECOLOGY L.Q. 263 (2000) (arguing that environmental law has given farmers the license to create substantial environmental harms).

66. See Nathaniel D. Mueller et al., Closing Yield Gaps Through Nutrient and Water Management, 490 NATURE 254, 254–55 (2012) (suggesting that reducing nutrient overuse offers a significant opportunity to reduce the environmental impact of agriculture while still slowing some increase in production).

67. Tony Weis, Breadbasket Contradictions: The Unstable Bounty of Industrial Agriculture in the US and Canada, in FOOD SECURITY, NUTRITION AND SUSTAINABILITY 27 (Geoffrey Lawrence et al. eds., 2010).

68. Parsons, supra note 39, at 343.

69. Id. at 343–44.

70. Id. at 350–51.
changed from a way of life and a part of the community to a large-scale, specialized, intensive business undertaking.”

The emphasis of industrial agriculture is on increasing yield at lower cost on less land, translating into larger operations, less crop diversity and greater use of chemical inputs and GM varieties. As such, the environmental impact of industrial agriculture is significant, and includes water pollution, destruction of biodiversity, soil degradation, human health impacts via toxic exposures to pesticides and herbicides, and increased disease outbreaks. These environmental impacts take an economic toll. One study estimates that pesticide use in the U.S. caused up to $10 billion of damage to humans and ecosystems. Socially, industrialized monocultures have made it difficult for small family farms to remain competitive. Weis argues that agrisubsidies have played an important role in increasing concentration of farm power and the resulting changes toward unsustainable practices.

2. Definitions

What, then, is sustainable agriculture? There is no single, simple definition, and care must be taken to appreciate its many nuances and not to romanticize the concept. Any definition of “sustainable agriculture” will depend on the scope of the definition and the kinds of practices that are determined to be sustainable. For instance, regarding practices, some argue that local food production is more sustainable because it supports local farming communities and reduces GHGs and other impacts of transporting food over long distances. Others argue that conventionally produced local produce is often less sustainable than organically farmed produce from

72. See Heather McLeod-Kilmurray, Vegetarianism and Food Governance: Sustainability and Ecological Justice, in GLOBALIZATION AND ECOLOGICAL INTEGRITY IN SCIENCE AND INTERNATIONAL LAW 57 (Laura Westra et al. eds., 2011).
73. Industrial agriculture has led to an eight-fold increase in nitrogen use, a three-fold increase in phosphorus use, and an eleven-fold increase in the production of pesticides. David Tilman et al., Forecasting Agriculturally Driven Global Environmental Change, 292 SCI. 281, 284–85 (2001).
75. ERIC HOLT-GIMÉNEZ, CAMPESINO A CAMPESINO: VOICES FROM LATIN AMERICA’S FARMER TO FARMER MOVEMENT FOR SUSTAINABLE AGRICULTURE (2006); see also Weis, supra note 67, at 33 (“Only 2 percent of economically active people in the US and Canada are now employed in agriculture.”).
76. Weis, supra note 67, at 33.
further afield. With respect to scope, “sustainable agriculture” can be defined to include both food production (on-farm practices) and harvesting, which includes wild food harvesting, production of fiber (e.g., timber or cotton), and bioenergy crops. It can also extend to the processing and distribution of food and other agriculture products. The scope of sustainable agriculture could even extend to consumption practices, thereby linking to issues of waste, nutrition, and human health.

There has been much written about the conceptualization of sustainable agriculture that reflects diverse views and approaches. Jason Czarnezki gathers several defined terms that are useful in conceptualizing what can be meant by sustainable agriculture and food production, with each term offering a different point of focus.

“Civic agriculture,” for instance, “embodies a commitment to developing and strengthening an economically, environmentally, and socially sustainable system of agriculture and food production that relies on local resources and serves local markets and consumers.” An “alternative food system” refers to a system that incorporates organic foods, eco-labeled foods, direct marketing, fair trade, local foods, farmers markets, and buying clubs. A third is “new agriculture,” which aims to keep families on farms, create new farms, implement initiatives to make environmentally friendly farms more profitable, create jobs, and support local foods and local food systems.

Each of these concepts emphasizes a different element of sustainable agriculture, yet the common thread is that sustainable agriculture is aimed at ensuring that agricultural practices are environmentally, socially, and economically sustainable.

There is no explicit federal definition of “sustainable agriculture” in Canada. None of the legislation administered by Agriculture and Agri-Food Canada (“AAFC”) refers to or offers a definition of “sustainable agriculture.” Perhaps this is not surprising, given that (as will be shown in Section II) AAFC’s dominant focus is on income stabilization and

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79. Id.
80. There is a related discussion about the definition of a sustainable food policy, which we explore in related research. Feibauer et al., Sustainable Food Consumption and Production in a Resource-Constrained World, 3rd SCAR Foresight Exercise 1, 9–10 (2011).
82. The Fight Over Food: Producers, Consumers, and Activists Challenge the Global Food System 5–6 (Wynne Wright & Geral Middendorf eds., 2008).
83. Czarnezki, supra note 81, at 265.
84. Id. at 265–66.
competitiveness. As discussed below, the majority of the department’s resources are allocated to business risk management programs and commercialization projects.\textsuperscript{85}

In contrast, “sustainable agriculture” is defined in legislation in the U.S. “Sustainable agriculture” means an integrated system of plant and animal production practices having a site-specific application that will over the long-term:

- satisfy human food and fiber needs;
- enhance environmental quality and the natural resource base upon which the agriculture economy depends;
- make the most efficient use of non-renewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls;
- sustain the economic viability of farm operations; and
- enhance the quality of life for farmers and society as a whole.\textsuperscript{86}

While the definition remains high-level and aspirational, it includes the environmental, social, and economic elements of sustainability.\textsuperscript{87}

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\textsuperscript{85} In the 2011-2012 fiscal year, business risk management programs cost $1.412 billion, an estimated 36% of total federal government expenditures in the sector. Research and inspection programs were estimated to be 20% of total expenditures. Programs directly focused on environmental sustainability received $84 million or 3.4% of departmental spending.\textsuperscript{318} \textsuperscript{86} \textsuperscript{85} \textsuperscript{86} \textsuperscript{86} \textsuperscript{86}

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John Ikerd offers a similar tripartite definition of “sustainable agriculture” and adds that “these three dimensions of sustainability are inseparable, and thus, are equally critical to long run sustainability.” While this three-pronged approach is arguably the most common way in which “sustainability” is described, others take a different view. Klaus Bosselmann and others have eloquently argued that sustainability organizes hierarchically, with ecological integrity at the heart of sustainability. The argument is that ecological integrity underpins economic activity and social well-being, and as such we should avoid balancing exercises between economic, social, and environmental goals. Rather, economic and social well-being are the output of a healthy biosphere and priority should be accorded to maintaining the biosphere. In the context of sustainable agriculture, this would entail a focus on maintaining healthy soils, water cycles, and biodiversity on agricultural lands, which would in turn support a vibrant agricultural economy and rural livelihoods.

While we accept that there is no consensus within the literature on how “sustainability” should be defined and implemented (this is a much larger discussion than permitted by the scope of this paper), and that there is merit in considering ecological, social, and economic dimensions of sustainability in an integrated fashion, we agree with Bosselmann and others that ecological integrity is not only an essential element of sustainability, but a pre-condition. In the context of agriculture, an emphasis on ecological integrity is warranted in order to ensure the long-term social and economic viability of farming.

Focusing on the ecological component of sustainable agriculture means inquiring into production that maintains—ideally even enhances—the quality of the land, air, and water. Such practices conserve, protect and regenerate resources so that they are resilient to unpredictable climate and other conditions. Some of the key on-farm practices that are widely

89. For more on sustainability theory, see JOHN C. DERNBACH, ACTING AS IF TOMORROW MATTERS: ACCELERATING THE TRANSITION TO SUSTAINABILITY (2012) and Bill Hopwood et al., Sustainable Development: Mapping Different Approaches, 13 SUST. DEV. 38 (2005), among many others.
91. Id. at 75.
92. Id. at 75–76.
94. Connard, supra note 64, at 136.
considered to contribute to maintaining ecological integrity in crop farming include rotating crops and using cover crops, applying integrated pest management, modifying tillage practices, using riparian buffer zones, improving efficiency of water use for irrigation, rotational grazing, effective nutrient management, and improved soil fertility.95

The emphasis on ecological integrity in sustainable farming is reflected in the approach of DFS, described by Kremen et al. as “a systems-based alternative to modern industrial agriculture designed according to agroecological principles.”96 DFS emphasizes “local production, local and agroecological knowledge and whole systems approaches” in order to reduce environmental impacts and decrease the social costs associated with industrial agriculture.97 While DFS shares many of the features of sustainable agriculture, it emphasizes farming practices that support functional biodiversity across spatial and temporal scales.98 As such, DFS supplies the necessary ecosystem properties needed to provide critical inputs to agriculture (such as the ecosystem services of nutrient cycling and pollination).99

We find the concept of DFS (with its emphasis on whole systems and the ecological conditions required to support farming over the long-term) to be most closely aligned with Bosselmann’s approach. Thus, we used it as the lens through which to analyze the Canadian agricultural policy framework. While the social and economic elements of sustainable agriculture are also vital, and highly interrelated with ecological aspects, in this paper we have evaluated the extent to which the Canadian policy framework encourages ecological integrity in farming practices. We recognize this is only a first step, and encourage future research on defining an effective policy framework for transitioning to ecological, social, and economically sustainable farming practices. For ease of writing, we have continued to use the terms “sustainable agriculture” and “sustainable farming practices” in this paper.

II. ANALYSIS OF THE CANADIAN AGRICULTURAL POLICY FRAMEWORK

95 Id. (citing James S. Carpenter, Farm Chemicals, Soil Erosion, and Sustainable Agriculture, 13 STAN. ENVTL. L.J. 190 (1994)).
97 Id. at 44–45.
98 Id.
99 Id. at 48 (explaining how DFS differs not only from sustainable agriculture, but also eco-agriculture and organic agriculture).
As noted earlier, overarching government policy has an enormous influence on the shape and face of agriculture in Canada. A transition to sustainable agriculture first and foremost requires a clear policy objective in support of sustainable agriculture and a set of policies aimed at facilitating the transition. For instance, while some farmers employ sustainable farming techniques, they need to be supported in order to remain competitive with industrial agricultural producers. Because many of the social (including environmental) costs of conventional farming are externalized, farmers who voluntarily internalize those costs may not be able to remain competitive. While some of these farmers may be able to access niche markets, such as those for organic produce or locally-produced goods, the returns may still be insufficient. The result is an uneven playing field that disadvantages the early movers and those who are reducing social costs. In addition, conventional farmers need incentives and interim support to shift their practices. This points to the need for a policy framework that encourages the internalization of social costs, and/or rewards behaviors that are aligned with sustainable farming.

In this section, we examine the key policies governing agriculture nationally to determine whether they establish a vision and set of objectives needed to support a transformation to sustainable farming. We then consider some of these policies to determine whether they create the incentives needed to enable farmers to change their practices to be more sustainable. We develop our analytical framework based upon a review of the literature identifying key public policy drivers needed to support a transition to DFS.

A. Analytical Framework

In order to analyze whether the agricultural policy framework supports a transition to sustainable agriculture, we will first examine how the framework understands sustainable agriculture, and then examine the high level vision it creates. Next, we will consider the extent to which current federal agricultural policies in Canada support a transition to sustainable agriculture. In order to frame our discussion, we draw upon the work of Iles and Marsh, who identify four sets of policies that could support a large-scale transition from industrial agriculture to DFS. These include:

100. Id. at 52.
101. See id. at 49 (explaining that if most farmers are externalizing costs, those who do not will have a hard time competing).
102. Id.
103. Iles and Marsh, supra note 15.
(1) increasing farmer knowledge capacity for DFS through investments in the public agricultural research and extension system, encouraging peer-to-peer training and farmer experimentation, and recruiting new farmers to sustainable agriculture as part of green job policies; (2) creating incentives for biodiversity conservation on agricultural lands; (3) paying farmers for the provision of ecosystem services on their lands and at a landscape level; and (4) connecting sustainable farmers with diverse markets, such as by supporting the infrastructure needed for small and mid-size producers to access markets.104

In the following section, we will consider the extent to which current federal agricultural policies in Canada measure up to these four policy objectives. Specifically, we will consider the extent to which they (1) support farmer capacity on ecologically sustainable farming practices; (2) create incentives for conservation on farm lands; (3) pay farmers to provide ecosystem services; and (4) support market access for sustainable farmers. These are not the only viable goals for supporting sustainable agriculture, but they represent some of the key types of initiatives needed to support farmers in a transition to DFS.

B. Sustainability in the Current Framework: Does the Federal Agricultural Policy Framework Define Sustainable Agriculture and Provide a High-Level Vision and Objectives for Achieving It?

There are three main policy instruments that govern the Canadian government’s obligations on sustainable agriculture. The first is the Federal Sustainable Development Act (“FDSA”), which applies to all parts of the federal government.105 The second is the overarching agricultural policy framework negotiated with the provinces and the territories, GF2.106 The third is AAFC’s annual report on Plans and Priorities, which details the Department’s spending priorities as guided by GF2 and the Departmental Sustainable Development Strategy (“DSDS”).107 We examine each in turn to determine the extent to which each establishes a high-level vision and set of objectives for sustainable agriculture in Canada.

104. Id.
1. Federal Sustainable Development Strategy for Agriculture

Under FSDA, the federal government is required to produce a Federal Sustainable Development Strategy (“FSDS”). The FSDA then requires government ministries, including AAFC, to prepare and table in the House of Commons a sustainable development strategy “containing objectives and plans for the department or agency that complies with and contributes to the FSDS, appropriate to the department or agency’s mandate.” Each Minister is required to update and table their FSDS in the House of Commons at least once every three years.

The FSDA defines “sustainability” as “the capacity of a thing, action, activity, or process to be maintained indefinitely” and defines “sustainable development” as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” Within that broad definition, the FSDS identified four key priority environmental themes:

(i.) Addressing Climate Change and Air Quality;
(ii.) Maintaining Water Quality and Availability;
(iii.) Protecting Nature and Canadians; and
(iv.) Shrinking the Environmental Footprint—Beginning with Government.

The most recent DSDS tabled by AAFC identifies sustainability and innovation as core features of the agricultural sector. The Departmental Strategy is organized around the same four themes as the Federal Strategy. For instance, AAFC has identified a water quality goal (protecting and

109. FSDA, supra note 105, at s. 11(1).
110. Id. at s. 11(2).
111. Id. at s. 2.
enhancing water) with a specific metric.\textsuperscript{114} Regarding biodiversity, the DSDS specifies a goal of using biological resources efficiently, specifically with respect to encouraging wildlife habitat and environmental farm planning on agricultural land.\textsuperscript{115}

AAFC then develops an implementation strategy to assist in achieving these goals.\textsuperscript{116} The first theme of the implementation strategy includes enhancing knowledge. Specific targets with relevance to sustainable agriculture include conducting research to increase knowledge of climate change relative to agriculture, research on the effects of agricultural production on air, and reporting on the collective environmental and economic impacts of the adoption of sustainable agriculture practices by Canadian farmers.\textsuperscript{117} It also includes increasing the adoption of sustainable agriculture practices by increasing the number of farms involved in the GF2 programs.\textsuperscript{118}

The second theme of the implementation strategy is enabling capacity. With respect to sustainable agriculture, this target includes: (1) supporting Canada’s participation in multilateral fora outside the UNFCCC and ensuring that Canada’s international climate change objectives are advanced in international meetings; and (2) providing cost-shared funding to assist farmers in assessing priority environmental risks, planning effective mitigation, and increasing the adoption of sustainable agricultural practices at farm and landscape levels.\textsuperscript{119}

Evaluating AAFC’s DSDS against the criteria identified above, we find that it contributes primarily to the first of the four goals, namely supporting farmer capacity. For instance, the targets relating to research and enabling capacity both contribute to supporting farmers’ ability to reduce their ecological footprints and adapt to climate change. However, while there is much to commend in the AAFC’s DSDS, including the goals of “developing resilience to a changing climate, and maintaining ecosystem

\begin{footnotesize}
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\item For example, they have a goal of achieving a value between eighty-one to one hundred on each of the Water Quality and Soil Quality Agri-Environmental Performance Metrics by March 31, 2030, 2014–2015 DEPARTMENTAL PERFORMANCE REPORT, supra note 113.
\item The target for Goal 5 is to have agricultural working landscapes provide a stable or improved level of biodiversity and habitat capacity by 2020. Id.
\item Id.
\item Id.
\item Id.
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health,” the strategy’s vision clearly demonstrates a focus on economic success:

The Department’s commitment to sustainable development flows from its mandate of helping the agriculture, agri-food and agri-based products industries compete in domestic and international markets, deriving economic returns to the sector and the Canadian economy as a whole. Sustainable management of natural resources is a core requirement for an economically successful agricultural sector.120

In order to truly achieve sustainable agriculture in Canada, it is important for sustainability to be the driver, rather than simply another means of achieving economic growth.

2. Growing Forward 2

While the AAFC’s Sustainable Development Strategy is important in terms of understanding the vision and goals of the Ministry, GF2 is the key policy framework for Canada’s agricultural and agri-food sector as a whole.121 Officially launched on April 1, 2013, as a second phase of Growing Forward, it is an agreement setting out a $3 billion investment by federal, provincial, and territorial governments, created in consultation with industry, and spread over five years (2013–2018).122 GF2 consists of three federally funded programs: the AgriInnovation Program,123 the AgriMarketing Program,124 and the AgriCompetitiveness Program.125 GF2

122. Growing Forward 2, supra note 106.
124. “The AgriMarketing Program helps farmers and food processors compete in markets at home and abroad. It supports the agriculture industry by creating and maintaining access to markets and taking advantage of market opportunities.” AgriMarketing Program, AGRIC. & AGRI-FOOD CAN.,

Sustainability and adaptability of the agriculture and agri-food sector is one of two broad outcomes agreed upon:

The intent [of the framework] is to achieve a profitable, sustainable, competitive and innovative agriculture, agri-food and agri-products industry that is market-responsive, and that anticipates and adapts to changing circumstances and is a major contributor to the well-being of Canadians.\(^{126}\)

The second outcome is competitiveness in domestic and international markets. The policy identifies innovation and infrastructure (physical, institutional, and human resource) as the two key drivers for achieving its objectives.

Although the words “sustainable” and “sustainability” are used throughout the GF2 framework, neither term is defined. When employed, the terms seem to be used in the broad sense of persisting over time. For example, the policy objective of “Adaptability and Sustainability for the sector” is a sector that maintains and improves its productive capacity by:

- making effective use of appropriate skills and knowledge;
- managing human, natural, and financial resources;
- attracting young farmers and new investors to the sector;
- anticipating and adapting to changing external circumstances;
- managing risks effectively;
- contributing to key food policy objectives such as health or food safety; and
- recognizing and responding to society's demands.\(^{127}\)

\(^{125}\) This is a program “comprising a combination of government initiatives and contribution funding for industry-led projects. The AgriCompetitiveness Program will make directed investments that will help the sector adapt to rapidly changing and emerging global and domestic opportunities and issues, respond to market trends and enhance business and entrepreneurial capacity.” AgriCompetitiveness Program, AGRIC. & AGRI-FOOD CAN., http://www.agr.gc.ca/eng/?id=1359338007173 [https://perma.cc/RS5B-VWNE] (last updated Feb. 14, 2014).

\(^{126}\) GF2 AGREEMENT, supra note 121, ¶ 3.

\(^{127}\) Id. ¶ 5–5.3.2.
The National Farmers Union (“NFU”) has critiqued GF2 through “the lenses of food sovereignty and fair trade.” 128 It argues that GF2 is “a powerful policy instrument that will increase the market power of global agribusiness corporations, help the few largest-scale farms expand, and increasingly marginalize the majority small and medium-sized family farms.” 129 NFU argues that the focus on competitiveness favors large corporations, which in fact reduces competition and concentrates power in very few corporate hands. 130 It argues that GF2 connects with regulatory reform in Canada and free trade agreements such as the Comprehensive Economic and Free Trade Agreement with the E.U. (“CETA”) and the Trans-Pacific Partnership (“TPP”), resulting in entrenching multinational corporate interests within the rules and laws that govern agriculture in Canada. 131 NFU argues that this not only runs directly counter to environmental sustainability goals in agriculture, but creates a system which also results in economic and social injustice in Canada and internationally. 132

More specifically, for example, NFU highlights that the GF2’s AgriInnovation plan seems to support high-end technologies such as “biotechnology, computer/satellite controlled machinery, herbicides, fungicides, veterinary drugs, etc.,” which the large industrial agriculture corporations require, rather than focusing “on solving the practical agronomic problems of farmers, or helping inventive farmers share their knowledge, ideas and processes with other farmers . . . [e.g.,] improving crop rotations, harnessing synergistic relationships among plants, insects and micro-organisms, new ways of organizing work, more effective decision-making tools, and the like.” 133 The GF2 also focuses on the increased linking between public funding and public research institutions with private corporations, affecting the direction of research and development in agriculture. NFU proposes as an alternative that the federal government turn its support to organizations such as the International Assessment of Agricultural Knowledge, Science and Technology for Development (“IAASTD”), whose “multi-thematic approach . . . embraces nutritional security, livelihoods, human health and environmental

129. Id. at 1.
130. Id. at 3.
131. Id. at 4–5.
132. Id. at 5.
133. Id. at 7.
sustainability; integration of local and institutional knowledge; and assessment of policies and institutional arrangements, as well as knowledge, science and technology.”

While the NFU clearly has a particular perspective, this contrasting approach highlights some of the policy choices and the priorities competing with the goals of sustainability in Canadian agriculture. Indeed, while sustainability is mentioned in the objectives and within different sections of GF2, the emphasis is on developing a robust industry rather than promoting sustainable agriculture. This priority is reflected in the policy’s byline: “Positioning Canada’s Agriculture and AgriFood Sector for Growth and Prosperity.” Further, the objectives defined for this outcome make no mention of environmental management, but emphasize maintaining productive capacity, managing risks, and contributing to key food policy objectives such as health or food safety. While funding through AgriInnovation may result in innovations that enhance environmental sustainability, this is not its main objective. While AgriMarketing and AgriCompetitiveness may enhancing market access, it is not designed to target the goal of enhance market access for sustainable farmers. However, these funding mechanisms could be redesigned with the goal of environmental sustainability in mind, and applications to the programs could be evaluated with environmental sustainability criteria. As it currently stands, however, GF2 does not satisfy the goals for achieving the DFS outlined above.

3. AFC’s Annual Report on Plans and Priorities:

Like other federal government departments, AAFC produces an annual Report on Plans and Priorities (“RPP”), which outlines the department’s goals. The 2015-2016 AAFC RPP begins by introducing the Department’s goal, which is to place agriculture, agri-food, and agri-based product industries in a position to realize their full potential by seizing new opportunities in the growing domestic and global marketplace. The RPP also lists two main Strategic Outcomes drawn from GF2: (1) achieving a competitive and market-oriented agriculture; and (2) developing an

134. Id. at 10.
136. Id.
138. Id.
innovative and sustainable agriculture.\textsuperscript{139} Both have a number of programs and sub-programs tied to those elaborated in GF2.

While there is some emphasis on sustainable agriculture in the RPP, it is not a major point of focus. Strategic Outcome 1, for which the majority of the funding is allocated, is focused on “sustainable” marketing and business management (sustainable farming practices are not part of Outcome 1).\textsuperscript{140} Sustainable agriculture is addressed in Strategic Outcome 2 under the Science, Innovation, Adoption and Sustainability Program.\textsuperscript{141} The emphasis of this program is on four “cross-cutting” strategic objectives: increasing agricultural productivity; improving environmental sustainability; enhancing attributes for food and non-food uses; and addressing threats to the agriculture and agri-food value chain.\textsuperscript{142} It seems significant that the Science, Innovation, Adoption and Sustainability Program in its entirety has a budget of $538 million for the 2015-2016 year, as compared to the $1.3 billion allocated to the Business Risk Management Program under Strategic Outcome 1.\textsuperscript{143}

Research Accelerating Innovation is a sub-program of the Science, Innovation, Adoption and Sustainability Program. It has the objectives of: understanding the key environmental sustainability challenges facing Canadian farmers; encouraging the transformation of scientific knowledge into agricultural practices that improve the environmental sustainability and profitability of farming operations; and supporting scientific measurement and analysis of the environmental sustainability performance of the agricultural sector that will facilitate competitiveness.\textsuperscript{144} The allocated 2015-2016 budget for this sub-program is $96 million.\textsuperscript{145}

In sum, the emphasis of AAFC’s policy framework (captured within the combination of GF2, the DSDS, and the RPP) appears to be on maintaining and enhancing the competitiveness of the sector to ensure it is “sustainable” in the long-term. There are indicators that remaining profitable and competitive will require proper management of resources and addressing key environmental issues. There are also a number of programs that support environmental practices (described in more detail in the next section). However, there is no high-level vision of sustainable agriculture nor goal put in place to guide agricultural producers in this direction. As such, it is

\textsuperscript{139} Id. at 5–6.
\textsuperscript{140} Id.
\textsuperscript{141} Id. at 43.
\textsuperscript{142} Id. at 44.
\textsuperscript{143} Id. at 11.
\textsuperscript{144} Id. at 47.
\textsuperscript{145} Id.
expected that the sector will continue on its current track of industrialized agriculture with an emphasis on productivity and market access.

C. The Incentive Structure: Does the Policy Framework Include Measures to Encourage Farmers to Shift to Ecologically Supportive Farming Practices, Especially Those that Help Farmers Deal with the Additional Costs Associated with DFS?

The government should revise existing policies to ensure that those creating barriers to sustainable agriculture are eliminated and a new (or updated) set of policies to encourage sustainable agriculture are implemented. At the very least, the policy framework should not create an uneven playing field between sustainable and conventional or industrial agriculture.

In this section, we examine two of the programs supported by the Canadian federal government under GF2, which have the potential to support sustainable agriculture: Environmental Farm Plans (“EFPs”) and Agricultural subsidies. We also examine a third program, the Canadian Agricultural Adaptation Program (“CAAP”), which while funded outside of GF2, has important potential to support a transition to sustainable agriculture. Our analysis shows that EFPs are a positive initiative, but have the potential to be much more transformative with some reforms. The CAAP also has the potential to support a transition to sustainable agriculture, if the funding is appropriately targeted. Currently, the subsidies programs do not support a transition to sustainable agriculture, but have great potential to do so if modified.

1. Environmental Farm Plans

EFPs have been a feature of Canadian agricultural policy since the early 1990s. An EFP is essentially a voluntary planning tool that helps farmers identify areas in which they can improve environmental performance, and which may unlock some financial support. Although there are variations among different EFP programs, in general farmers begin by conducting voluntary and confidential self-assessments (an audit of sorts), which allow them to identify potential environmental issues in their operations and to


develop action plans to address these issues.\textsuperscript{148} Facilitators, drawn from local farming organizations, may invite farmers to participate in workshops.\textsuperscript{149} Environmental cost-sharing programs are then sometimes available to assist farmers in implementing their projects.\textsuperscript{150} In earlier years, the federal government established national guidelines to guide the direction of environmental farm plans. Under GF2, this practice was eliminated and provinces have since been left to establish their own priorities and guidelines for EFPs.\textsuperscript{151}

Programs such as EFPs have the potential to create change in farming practices in a number of ways. Not only do farmers gain access to tools and organizations that can build their capacity for mitigating environmental impacts, but their participation may lead to some financial reward. In addition, implementing the changes identified in EFPs may enable farmers to seek certification, such as organic certification or comply with national or international standards that are well respected in the industry and by consumers.

While the potential for EFPs to enable change is significant, research suggests that they have yet transform Canadian farming practices.\textsuperscript{152} One of the challenges is that the participation rates are not very high and there is considerable variation in terms of participation by farm type and location.\textsuperscript{153} This is partly because the EFP is very much a bottom-up style of policy, which is one of the features most appreciated by participants who are wary of top-down policies. However this has not translated into high levels of participation.

In addition, the amount of financial incentives offered is insufficient. In the first six years of the Ontario EFP, for example, farmers implementing an EFP received an average of CAD $1,279.\textsuperscript{154} Yet, the government estimates that the farmers spent an additional CAD $5 to $6 on environmental actions taken under the EFP for every dollar received under the scheme.\textsuperscript{155}

The EFP tool has the potential to be strengthened, both by modifying worksheets to guide farmers toward specific practices, such as those aligned with DFS, and by strengthening its capacity-building elements (whether

\textsuperscript{148} Id.
\textsuperscript{149} Id.
\textsuperscript{150} Canada-Ontario Environmental Farm Plan, supra note 146.
\textsuperscript{151} Id.
\textsuperscript{152} Id.
\textsuperscript{153} Id. at 209. For instance, in the first decade of Ontario’s EFP, only 20% of farmers attended the initial workshop, and 38% of these proceeded no further. Id.
\textsuperscript{154} Id. at 210.
\textsuperscript{155} Id.
through extension services which offer capacity-building to farmers, or other avenues. In addition, the financial incentives offered under the EFPs should be at least equal to the additional investments farmers are making to transition to sustainable farming. This would level the playing field between conventional and sustainable farmers, and help the latter remain competitive.

In our view, EFPs are an important tool that deepen the farmers’ understanding of their environmental impacts, and create opportunities for them to reduce their ecological footprints while also creating opportunities for accessing markets where sustainability has become a precondition. This paper recommends two key changes. First, the federal government could return to establishing national principles for sustainable agriculture to guide the direction of EFPs. The federal government’s withdrawal from the establishment of national principles is a lost opportunity to provide high-level guidance on key priorities for sustainable agriculture (aligned, for instance, with AAFC’s Sustainable Development Strategy) and to encourage specific practices aligned with DFS through targeted funding and capacity-building. Second, the amount of funding farmers receive for creating an action plan based on an EFP should be considerably increased to offset the costs of farmers internalizing environmental costs, ensuring those farmers can remain competitive.

2. Reform of Agriculture Support

The Canadian government’s support of the agricultural sector is not currently tailored to encourage sustainability, which means this support is likely contributing to the over-use and/or over-exploitation of agricultural resources. Canada’s key agricultural subsidies fall into three categories: AgriInvest (crop insurance); AgriStability (income insurance); and AgriRecovery (which covers major disasters). These subsidy programs have been criticized as being unstrategic. It is also clear that these income-related subsidies do little or nothing to encourage sustainable agricultural practices. While they are important for supporting farmers’ income, they are unlikely to be helpful in facilitating a transition to sustainable agriculture.

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One of the goals of GF2 was to “reduce government farm income support,” thereby reducing farming subsidies, focusing instead on innovation and competitiveness. However, AgriStability continues to be a program aimed primarily at protecting producers from large declines in farm income. Under the program, farmers receive payment when their income drops by more than thirty percent below their historical reference margin. This is less support than farmers received under Growing Forward 1. To support a transition to sustainable agriculture, policymakers could limit income support (or offer a higher proportion of such support) to farmers who are making investments to reduce their environmental footprints. Relatedly, subsidies aimed at innovation could be geared toward initiatives that promote environmental sustainability.

AgriInvest is essentially a savings program for agricultural producers, which allows them to deposit up to 1.5% of their Allowable Net Sales (“ANS”) each year into an AgriInvest account and receive a matching government contribution. While producers can deposit up to 100% of their ANS annually (to an annual maximum of $1,500,000), the government matches up to the first 1.5% or up to $22,500 a year. While encouraging savings is commendable, the government could target these funds to offer greater support to farmers meeting certain pre-determined sustainability objectives.

AgriRecovery is a framework intended to help producers recover from natural disasters. The AAFC website suggests AgriRecovery funds were...
used to help British Columbia poultry farmers deal with an avian flu outbreak and strawberry producers affected by a plant virus in Nova Scotia. One could expect the fund to be helpful in cases of climate-related weather events such as droughts, wildfires, and floods. Because sustainable farming practices will often be more resistant to weather extremes, recovery funds could be conditional upon farmers demonstrating that they have taken measures to reduce their ecological footprints, including GHG emissions, and rendering their crops more resistant, such as by using native species in complimentary plantings.

3. Canadian Agricultural Adaptation Program

Government can have a significant influence on the shape of a sector through the provision of grants. This subsection highlights the CAAP, which is funded under GF2. Section III discusses another program (“SDTC”) funded outside of GF2. CAAP is a federal program that provides funding “for industry-led projects that help the agriculture, agri-food, and agri-based products sector to adapt and remain competitive.” The first iteration of CAAP provided $163 million of federal government funding over five years, ending in 2014. It was renewed at $50.3 million for a further five year term (2014–2019).

CAAP’s objective is to help the agriculture-, agri-food-, and agri-based-products sector seize opportunities, respond to new and/or emerging issues,
and pathfind or pilot solutions to new or ongoing issues.\textsuperscript{168} While the program identifies sector adaptation as a goal, there is no mention of climate change or other sustainability issues in the current round of CAAP funding.

Projects targeting agricultural sustainability were funded under the first round of CAAP funding. For instance, Biofour, Inc., was granted $126,422 for a project entitled “Testing of green technology for reducing greenhouse gas emissions and recovery of energy from biomass and agricultural and agri-food residual materials (CAAP052).”\textsuperscript{169} To date, under the 2014–2019 round, three grants have been awarded. The first was in the amount of $950,000 to the Canadian International Grains Institute to investigate advancing pulse flour processing and applications.\textsuperscript{170} The second was $3,000,000 to the Dairy Farmers of Ontario for research on a range of dairy institutions.\textsuperscript{171} The third was $1,500,000 to the PEI Potato Board to develop and implement a strategy to address the foreign material detection issue.\textsuperscript{172} None of the projects in the second round of funding have a sustainability component. A simple change in the policy requiring applicants to identify how their project will contribute to sustainable farming practices before funding will be provided, combined with clear evaluation criteria and an appropriate monitoring mechanism, which would be a powerful way to shift the incentive structure in the direction of sustainable agriculture.

Overall, therefore, programs such as Environmental Farm Plans, CAAP and various financial supports under the GF2 Business Risk Management plan have made some positive contributions toward environmental

\textsuperscript{168} Id.

\textsuperscript{169} Approved National CAAP Projects, AGRIC. & AGRI-FOOD CAN., http://www.agr.gc.ca/eng/?id=1307113589948 [https://perma.cc/7P85-X2HK] (last updated Dec. 18, 2013). The project is described as follows: “Testing a boiler-incinerator that burns biomasses other than those coming from forest products in order to determine the efficiency and profitability of the Biofour for agricultural and agri-food use.” Id.


\textsuperscript{172} E-Mail from CAAP / PCAA (AFC/AAAC), to author (Sept. 21, 2015, 3:30 PM) (on file with the Vermont Journal of Environmental Law).
sustainability. However, they could significantly increase this potential with some focused changes in how they operate.

III. STRENGTHENING EXISTING INITIATIVES AND EXPLORING NEW ONES

In addition to the DSDS, GF2, and other policies specifically targeted at the agriculture and agri-food sector, there are federal policies and tools aimed at a wider range of sectors but that have a significant impact on agriculture and can affect its environmental sustainability.

A. Sustainable Development Technology Canada (“SDTC”)

Sustainable Development Technology Canada (“SDTC”) is a federal government program that funds Canadian cleantech projects, with the aim of creating “jobs, growth, and export opportunities” for Canadian companies and providing “economic, environmental, and health benefits” for Canadians. SDTC’s main objective is to help bring innovative cleantech projects to market. With a budget of $915 million, allocated by the Government of Canada, the Sustainable Development Tech Fund has four priorities, one of which is “next generation technologies,” which has a focus on energy conversion technologies, sustainable agriculture and food security, and biodiversity protection and enhancement. This priority has clear relevance for sustainable agriculture. In fact, SDTC that states it will assist in the development of technology that reduces water use, increases crop yield, and improves the ability of agricultural crops to resist drought.

Since its inception in 2001, SDTC has provided over $40 million in funding to some twenty projects in the agricultural sector. One such

175. Id.
176. See SD Tech Fund: Priority Areas. Sustainable Development Technology Canada, https://www.sdtc.ca/en/app/apply/sd-tech/sd-tech-fund-priority-areas [https://perma.cc/N576-QHCV] (last visited Feb. 6, 2016) (providing the three remaining Sustainable Development Tech Fund priorities: (1) responsible natural resource development (focused on improving the “exploration, development, and value-added processing of unconventional oil and gas, metals and minerals”); (2) northern and remote community utility systems focused on the development of renewable energy technology for remote Arctic communities; and (3) energy efficiency for industry and communities (focused on resource efficiency in industrial processes and on heavy-duty vehicle transportation)).
177. Id.
project, which is still ongoing and receiving $4.9 million in funding from SDTC, is focused on an “area-wide demonstration of automated and integrated pest management system.” The largest completed agricultural project, which received $3.6 million in funding and was completed in 2006, was for a “floating solid wall containment system” run by the Middle Bay Sustainable Aquaculture Institute.

While we have not found any research evaluating the effectiveness of SDTC funding in meeting its objectives, several of the projects supported by SDTC could be considered supportive of sustainable agriculture. If the federal government had an overarching objective relating to sustainable agriculture, defined as practice aligned with DFS, and wanted to encourage a faster transition, it could: (a) encourage SDTC to make funding conditional upon meeting criteria for sustainable farming; and (b) broaden the funding envelope for such projects.

**B. Tax Incentives**

The federal government provides many different kinds of financial incentives through tax measures. While none are targeted specifically at promoting sustainable agriculture, some are specific to agriculture and others have the potential to influence the direction of agriculture in the country. We discuss three programs here, with an analysis of their relationship to sustainable agriculture, and make proposals on how they could be used to support a transition to sustainable agriculture.

1. **Canadian Renewable and Conservation Expense (“CRCE”)**

The Canadian Renewable & Conservation Expense (“CRCE”) is a tax deduction for investments in capital equipment for renewable energy. In

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180. *Id.*

181. *These include: Development & Demonstration of Neem-based Biopesticide; Optimizing Nutrient Flows; Low Temperature Anaerobic Digestion and Co-Generation System for Hog Manure Management; Indoor Urban Farm; Namgis Land-Based Atlantic Salmon Recirculating Aquaculture System Pilot Project; and Bio-Glycol Pre-Commercial Plant. Projects, supra note 178. (keyword search for “Sustainable Agriculture”).*

2013, the category of assets included in Class 43.2 of depreciable assets was extended to include equipment used to produce electricity from agricultural waste.\textsuperscript{183} The rationale was to encourage the development of technologies that may reduce GHG emissions and assist the government in meeting its FSDS targets.\textsuperscript{184} While this tax incentive will contribute positively to GHG reductions from the agricultural sector, similar measures could be used to encourage sustainable farming practices. For instance, sustainable farming practices may require capital investments for new equipment. Tax rules could be modified to allow accelerated depreciation of capital equipment required for sustainable farming practices. Because those initial investments may be significant, and many farmers are struggling financially, such tax measures can reduce this barrier to shifting to more sustainable farming practices.

2. Scientific Research and Experimental Development Credit ("SR&ED")

Another tax credit that has the potential to be modified to better support the transition to sustainable agriculture is the "scientific research and experimental development" ("SR&ED") tax credit. This credit supports basic and applied research aimed at advancing scientific knowledge, including experimental design.\textsuperscript{185} As it currently exists, the SR&ED credit could be used by applicants seeking support for research relating to sustainable farming practices. Once again, however, the federal government could more explicitly encourage a shift to sustainable farming practices by establishing criteria requiring proponents to demonstrate how their research will contribute to sustainable agriculture.

In sum, our analysis shows that the current Canadian agricultural policy framework, captured within GF2, the DSDS, and RPP, does not support sustainable agriculture in that it fails to set out a high-level vision for sustainability and the policies created under it are insufficient to encourage the transition to sustainable farming practices. In fact, the policy creates obstacles to embracing sustainable farming practices by encouraging the industrialization and corporatization of agriculture, with an emphasis on

\textsuperscript{183} Id.; see also Shannon, supra note 182 (showing that there are next generation energy projects which may decrease GHG emissions, such as wind, solar, run-of-river, cogeneration, and biofuels).


yield. 186 Agricultural supports aimed at growing the sector have encouraged specialization and intensification with the result that certain crops, such as corn, wheat, canola, and soy, and industrially-produced meat, have come to dominate—and indeed swamp—the market.187 Whether at a large or small scale, producers who are attempting to internalize environmental costs are doing so at a competitive disadvantage. Without deliberate supports to build capacity, incentivize conservation and provision of ecosystem services, and facilitate market access for sustainable agricultural goods, the Canadian agricultural sector will not be environmentally sustainable.

IV. THE WAY FORWARD

As noted earlier, overarching government policy has an enormous influence on the shape and face of agriculture in Canada. A transition to sustainable agriculture requires a clear vision and concomitant policy objectives in support of sustainable agriculture. Policies that create barriers to sustainable agriculture should be phased out and a new (or updated) set of policies to encourage sustainable agriculture should be put in place. At minimum, the policy framework should create a level playing field between sustainable and conventional (including industrialized/GMO) agriculture. We have already discussed some existing programs, such as Environmental Farm Plans and CAAP, which could be strengthened and/or modified to include sustainability criteria in order to ensure they shift behavior in the direction of sustainability. In this section, we highlight and discuss three additional areas for reform. First, we discuss the current state of agricultural subsidies and note how these could be redirected to encourage sustainable farming. Second, we identify some examples of other tax incentives which could be used to encourage the transition. Third, we discuss some measures targeting consumers, since the market demands of consumers are key to stimulating changes by producers. This is not a systemic or comprehensive review of possible measures, but rather a set of illustrative examples inspired by experience in other jurisdictions and/or explored in the literature.

A. Redirecting Behavior Through Tax Incentives

186. Iles & March, supra note 15, at 43.
187. Id.; Weis, supra note 67, at 33.
Captured in the simple adage of “tax bads, not goods,” taxation is widely understood to be an important tool for shifting behavior. Behavior modification will vary depending on the particular goods and services involved but can be affected through the reduction of existing taxes and/or the addition of new tax burdens. The following are a few examples of how tax measures have been used to shift behavior in the agricultural sector in different jurisdictions.

1. Fertilizer and Pesticide Taxes

Adding or increasing taxes on fertilizers or pesticides is one way to discourage their use because the taxes add costs to those inputs. Such taxes have been used, to date, primarily in Europe. Research on the effectiveness of fertilizer and pesticide taxes is mixed. Research on the Norwegian fertilizer and pesticide taxes showed that they had little impact on fertilizer and pesticide use.188 In contrast, the experience in Austria, Denmark, and Sweden has been more positive, with research suggesting that the taxes have been effective in reducing the use of pesticides and fertilizers.189

2. Food Conversion Efficiency Tax

Canadians are familiar with tobacco taxes used to raise the costs of smoking and thereby discourage the behavior.190 Economist Robert Goodland has proposed the use of a “food conversion efficiency tax” to shift consumption toward animal protein foods with lower ecological

footprints. Regarding GHG emissions, the livestock sector is by far the single largest anthropogenic land user and is responsible for nine percent of anthropogenic CO2 emissions. The impact of methane on climate change is much greater than CO2, and there have been suggestions that the amount of methane emitted may be greater than previous estimates. Within the agricultural sector, livestock is responsible for almost eighty percent of all emissions. Many have recommended policies that would discourage consumption of meat, including an environmental tax on meat and a diversion of subsidies from livestock production to organic, plant-based agriculture.

Under Goodland’s proposed food conversion efficiency tax, a government would apply the highest taxes to the least efficient producers (e.g., pork and beef), moderate taxes on more efficient producers (e.g., poultry, eggs, and dairy), and the lowest taxes for the most efficient converters (e.g., ocean fish). Grains for human food would be exempt from taxes, and non-food, non-fiber agriculture (e.g., tobacco and alcohol grains) would be highly taxed. This type of a sliding scale of taxes for agricultural products could be used not only for conversion efficiency, but also for other factors, such as GHG emissions and ecological and biodiversity impacts.

3. GHG Emissions
In Canada in 2005, agriculture was responsible for twelve percent of the country’s GHG emissions. Research has shown that the GHG emissions per unit of produce are less in organic farming than conventional farming. In fact, one study suggests that global adoption of organic agriculture has the potential to sequester up to the equivalent of thirty-two percent of all human-caused GHG emissions. As such, tax incentives (in the form of credits for organic farming or additional taxes for non-organic farming, for instance) could be used to encourage a transition to organic farming.

Organic farming is not, of course, the only way to reduce GHG emissions from agriculture. Scherr & Shapit suggest five strategies which can be used to reduce and sequester terrestrial GHG emissions from agriculture, forestry, and other land uses, including the enrichment of soil carbon, farming with perennials, climate-friendly livestock production, protecting natural habitat, and restoring degraded watersheds and rangelands. Tax incentives could be used to encourage these behaviors in the same way they can be used to impact other behavioral choices—by raising taxes on undesirable behaviors and lowering taxes or offering credits for desirable behaviors.

B. Influencing Farming Practices Through Incentives Aimed at Consumers

A powerful way to influence the practices of farm producers is by altering the decisions of consumers. There are many consumer behaviors that could be encouraged in order to increase agricultural sustainability. These might include, for example, choosing foods grown in season in the country of origin, reducing food waste, increasing consumption of fruit and vegetables and reducing consumption of red meat, and growing one’s own food. It might also mean enacting laws that support consumers’ right to know about the economic, environmental, and social impacts of the production and distribution of their food. Some jurisdictions, for instance,


have discussed the use of “fat taxes” and other similar initiatives aimed at consumers’ food choices.\(^{203}\)

It is also worth noting that food choices are largely “determined by what is available, accessible and affordable”\(^{204}\), thus, an important point of influence is the supermarket.\(^{205}\) Research has shown that providing information about environmental impacts to consumers is not enough in itself, because “price, quality and offers are top choice criteria.”\(^{206}\) Perhaps, not surprisingly, health issues have more traction with supermarket consumers than environmental concerns.\(^{207}\) As such, incentives would need to be carefully designed to ensure that they are targeting the desired behavioral change.

One final note is that demand for food is not, in general, very elastic because we all need food to subsist. However, research has shown that there is some variation in elasticity among foods, with some foods (such as soft drinks and juice) being more elastic.\(^{208}\) This means that policies that change price signals on these foods could be most effective in changing behavior, especially relative to less elastic goods such as dairy, grains, and meat.

**CONCLUSION**

Canada’s federal agricultural policy framework is not currently designed to, and therefore has not yet succeeded in, providing the vision and incentives required to achieve environmentally sustainable agriculture. The DSDS, GF2, and the Annual Report on Plans and Priorities are all primarily aimed at competitiveness, innovation, and growth of the industry. There are some promising tools that could be improved to enhance the move to sustainable farming, such as EFPs, CAAP, and the GF2 Business Risk Management plan tools. The policy framework outside the agricultural sector could also help by making better use of things such as SDTC and incentives for producers and consumers such as through tax policy.


\(^{206}\) DEFRA, supra note 204.

\(^{207}\) *Id.*

\(^{208}\) Tatiana Andreyeva et al., *The Impact of Food Prices on Consumption: A Systematic Review of Research on the Price Elasticity of Demand for Food*, 100 AM. J. PUB. HEALTH 216, 219 (2010) (reviewing 160 studies on food elasticity and identifies those most responsive to price changes).
Agriculture is a big part of Canada’s past, present, and future. It is a way of living for many families, the source of our sustenance, and a significant part of the economy. The Canadian government has been very influential in shaping the direction of agriculture and this will continue for the foreseeable future. This means we have important choices to make because the types of carrots dangled and sticks wielded in the form of government policies will determine the future of agricultural production. Governments can choose to actively support a transition to sustainable agriculture, or they can let global market forces make that choice for us and strengthen the current trend of large, highly industrialized farming, which is unsustainable. We need to be cognizant of the fact that this is a political choice and one that will have long-term consequences for people and the planet.
SECURING ACCESS TO JUSTICE THROUGH ENVIRONMENTAL COURTS AND TRIBUNALS: A CASE IN DIVERSITY

J. Michael Angstadt*

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INTRODUCTION

Domestic courts throughout the world share the common challenge of developing procedures and institutional mechanisms that maximize access to justice. Access to justice, which emphasizes the “means for achieving acceptable . . . results rather than the content of the final decisions,” was historically viewed as a primarily procedural concern. As such, scholarly attention to substantive human rights and environmental issues has often overshadowed the realities of the legal system that affect the “ability, in practice, of a party to recognize [their] legal rights and to defend them adequately.”

Recently, however, scholars have highlighted access to justice as an important standalone right. Additionally, many have emphasized access to justice as an important mechanism for promoting fuller realization of other rights, and for facilitating their extension to historically disenfranchised populations. As a result, it is valuable to consider how various legal institutions and actors may enhance access to justice.

Accordingly, this paper examines one class of domestic judicial institutions that aims to enhance access to justice and efficacy in the disposition of legal disputes: specialized environmental courts and tribunals. Its analysis examines the following question: how effectively do specialized courts provide access to justice to historically disadvantaged classes? Accordingly, it first briefly introduces indigenous rights and environmental justice—two issues that states have sought to address by enhancing access to justice. Second, it introduces the phenomenon of

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judicial specialization, and surveys the comparative courts and judicial politics literature to characterize the establishment of specialized courts and tribunals. In doing so, it emphasizes establishment of specialized environmental courts and tribunals (“ECTs”) as an important development within the broader trend of judicial specialization.

Having laid this analytical foundation, the paper next presents the research design, which employs a comparative-courts lens to survey the provision of access to justice among specialized courts. In so doing, it identifies the two cases that will support analysis: the National Green Tribunal of India and New Zealand’s Environment Court. Next, it evaluates the ways these courts address indigenous populations in the context of two components of access to justice: (1) the initial standing determination, when the right to bring a claim to court is granted; and (2) the outcomes that manifest in judicial opinions.

Through this analysis, the paper argues that ECTs can provide access to justice that differs demonstrably from justice afforded by more traditional courts. Specifically, it urges that specialized ECTs are of interest to comparative environmental governance scholars for two reasons: (1) they provide a potential mechanism for translating international environmental norms into discrete policy questions at the national or substate level; and (2) their emphasis on equity between diverse classes of litigants affords a framework for better considering intergenerational equity.

I. ACCESS TO JUSTICE AND PRESSING SOCIETAL ISSUES

As noted, access to justice is important both as a standalone right and as a mechanism for securing additional rights.\(^7\) For example, the United Nations notes that “access to justice is . . . closely linked to poverty reduction,” and argues that “[l]ack of access to justice limits the effectiveness of poverty reduction and democratic governance programmes by limiting participation, transparency and accountability.”\(^8\) Access to justice is also closely linked to environmental concerns, and to the sustainability of livelihoods and lifeways that depend on environmental health.\(^9\)

Despite this flourishing theoretical interest, access to justice remains uneven in practice. Even in developed countries with robust judicial systems, access to justice is a widely violated legal principle. Within the

\(^7\) Supra INTRODUCTION, ¶ 2.
\(^8\) UNDP, supra note 4, at 3.
United States, for example, roughly “four-fifths of the civil legal needs of the low-income . . . remain unmet.”\textsuperscript{10} Similarly, even those citizens living “above poverty thresholds are . . . priced out of the civil legal process for the vast majority of their legal concerns.”\textsuperscript{11}

The challenges associated with securing access to justice are further magnified in developing countries. There, access to justice can fulfill an important rights-based role, helping “people to seek and obtain a remedy through formal or informal institutions of justice, and in conformity with human rights standards.” \textsuperscript{12} Highlighting access to justice can also emphasize important systemic issues and raise considerations of inclusivity, showing how “disadvantaged groups are marginalized or stigmatized by the law when it does not recognize their legal status or [traditional] practices,” including “indigenous peoples’ usage of land and natural resources.”\textsuperscript{13}

An access to justice paradigm “search[es] for . . . ways to overcome . . . difficulties or obstacles which make civil and political liberties non-accessible to so many people” by considering context-specific barriers to uniform protection of rights.\textsuperscript{14} While many obstacles may hinder access to justice, structural aspects of domestic judicial institutions can present particularly potent barriers.\textsuperscript{15} Accordingly, international organizations (“IOs”)—including the World Bank—emphasize the importance of structural changes. They underscore the need to “eliminat[e] laws with a distinctly anti-poor component”; afford “greater access for individuals and NGOs acting in the public interest”; and offer “judicial training and support.”\textsuperscript{16} All judicial institutions may be structured in ways that enhance access to justice. However, some domestic legal institutions explicitly seek to do so, including the ECTs evaluated in this article.

While access to justice is a pressing issue in its own right, it interacts synergistically with other social issues. Access to justice can help to address those issues when robust, and can hinder their resolution when constrained. Accordingly, this paper briefly introduces indigenous rights and

\begin{thebibliography}{99}
\bibitem{11} Connecting Principles to Practice, supra note 10, at 373.
\bibitem{12} U.N. DEV. PROGRAMME, PROGRAMMING FOR JUSTICE: ACCESS FOR ALL; A PRACTITIONER’S GUIDE TO A HUMAN RIGHTS-BASED APPROACH TO ACCESS TO JUSTICE 5 (2005).
\bibitem{13} Id. at 39.
\bibitem{16} MICHAEL R. ANDERSON, \textit{ACCESS TO JUSTICE AND LEGAL PROCESS: MAKING LEGAL INSTITUTIONS RESPONSIVE TO POOR PEOPLE IN LDCs} 25–26 (1999).
\end{thebibliography}
environmental justice, two issues which are directly affected by access to justice.

A. Indigenous Rights

Within national and international legal systems, traditional indigenous rights approaches have transitioned toward increasingly nuanced and multifaceted regimes. These shifts have moved courts toward recognizing and acknowledging “the need to protect [indigenous] groups’ right to autonomy.” The effort to preserve indigenous populations’ autonomy has been defined to encompass their rights to distinct nationalities, self-government, and self-determination. Additionally, recent emphases have shifted toward linking indigenous interests to environmental sustainability, thus highlighting the complex and interactive challenge of securing indigenous rights.

B. Environmental Justice

Mirroring the enhanced global attention accorded to indigenous rights, legal practitioners and scholars have focused extensive scholarship upon the concern of recognizing and securing environmental justice (“EJ”). EJ acknowledges that “environmental hazards are closely linked to race and poverty.” Accordingly, it emphasizes not only the “distribution of risks and hazards, but also the struggle for recognition of those subject to hazards.” The foundation of the EJ paradigm was laid in the United States during the 1980s and 1990s, where toxic contamination issues unmasked environmental inequities on a domestic scale. However, with time, the concept has adopted an international dimension and come to focus upon the interaction between environmental justice and the concerns of

enfranchised populations. In so doing, the emphasis on equitable distribution of environmental harms has highlighted North-South tensions and effects upon developing countries and poor populations.

II. SPECIALIZED COURTS: AN INSTITUTIONAL MECHANISM FOR ENHANCING ACCESS TO JUSTICE?

In an attempt to address substantive issues including indigenous rights and environmental justice more comprehensively, expeditiously, and accurately, nations have increasingly embraced an institutional solution: the establishment of specialized courts. While judicial specialization may refer to bounding the geographic scope of a court’s jurisdiction, more commonly it refers to narrowing the scope of issues that a court or its individual judges will hear. Historically, judicial specialization has been advocated in various instances, including cases in which “the subject matter [is] complex due to the difficulty of the underlying law,” or complex due to “the technical nature of the facts.” Specialized courts have also been advocated due to their potential for relieving “caseload pressures on existing courts,” “develop[ing] judicial expertise,” and providing “uniformity in the interpretation of the law.”

Despite these many strengths, researchers have highlighted several potential pitfalls of judicial specialization. For instance, the insights of specialized judicial institutions may be dampened by their “loss of the generalist perspective.” Likewise, in some issue areas, specialized justice might diminish a court’s prestige if opinions are meted out through an “assembly line” approach. Moreover, the prestige and status of the courts may help to determine the success they enjoy, as “many of the successful ECTs enjoy a more comprehensive jurisdiction than their unsuccessful


30. Id.
countersparts.” Likewise, some have suggested that judicial specialization more meaningfully supports improved outcomes at lower levels of the judiciary, since it is the locus of technical fact-finding. Accordingly, scholars have urged careful examination of the effects of specialization.

The environmental realm presents one issue area where further study of the implications of judicial specialization is particularly valuable. There, scholars have noted a proliferation of ECTs, with more than 350 ECTs authorized by 2009, and a further increase to more than 500 ECTs authorized by 2012. This expansion appears to mirror the “justice cascade” phenomenon Lutz, Sikkink, and others describe, whereby individuals “engaged in a common policy enterprise with recognized expertise and competence in the particular domain” transmit common norms within that realm. With regard to ECTs, a number of international organizations affiliated with the United Nations have appeared to foster this diffusion, advocating establishment of environmental judiciaries in developing regions such as Southeast Asia and Africa.

This geographically expansive diffusion of a norm favoring ECTs has yielded tremendous institutional diversity; ECTs exist across a range of countries and at all decisional levels. Across this diversity of institutions, however, scholars have observed that ECTs are united by the promise of the benefits they can provide. Those benefits include access to justice for vulnerable populations such as indigenous groups, and improved recognition of human rights and their interconnection with environmental issues. Nevertheless, scholars have also noted that despite abundant information on individual ECTs, there is a surprising lack of “comparative

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32. See Arti K. Rai, Specialized Trial Courts: Concentrating Expertise on Fact, 17 BERKELEY TECH. L.J. 877, 878 (2002) (stating that specialization is better suited to the trial court level); Revesz, supra note 27, at 1166 (noting the fact-finding role of trial courts, not appellate courts, as justification for judicial specialization).
33. Baum, supra note 26, at 1667, 1683–84.
36. Sheila Abed de Zavala et al., An Institute for Enhancing Effective Environmental Adjudication, 3 J. CT. INNOVATION 1, 3–5 (2010).
38. Id. at 2; see Nicholas A. Robinson, Ensuring Access to Justice Through Environmental Courts, 29 PACE ENVTL. L. REV. 363, 372–73 (2012) (arguing that countries have an expectation to protect human rights due to the interconnectedness of the biosphere and that environmental courts are a means to achieve this).
analysis of the different ‘models’ of ECTs now existing.”

Accordingly, this paper advocates a comparative approach, and represents an initial effort at comparatively analyzing ECTs.

III. METHOD AND CASES

To analyze how ECTs may bear upon the access to justice afforded to sensitive populations, this paper employs a comparative analytical method. Comparative environmental politics seeks to “resist [a] facile holism . . . yet provide a medium for meaningful comparison of . . . complexities.” Moreover, a comparative analysis permits consideration of domestic institutions as they address global issues. Finally, comparative analysis of environmental governance situates issues and institutions within a global context. The study of multiscale governance “includes governing bodies and institutions at various levels of government.”

To heighten explanatory power, the comparative method seeks to hold as many factors constant as possible while observing the resulting variation. Accordingly, to explore variation in the access to justice that ECTs afford, this analysis constrains examination to two cases, both representing national-level ECTs. By doing so, it explores the differing approaches to indigenous rights and access-to-justice issues that a developed and a developing country ECT have pursued.

A. India

As a developing country, India is experiencing the pressures that result from the interaction of environmental and population growth pressures. India’s population surpassed 1 billion in 1999 and, with a forecast population growth of 1.2 percent, reached 1.23 billion by 2012. Along

40. Paul F. Steinberg & Stacy D. VanDeveer, Comparative Environmental Politics in a Global World, in COMPARATIVE ENVIRONMENTAL POLITICS: THEORY, PRACTICE, AND PROSPECTS 3, 7 (Paul F. Steinberg & Stacy D. VanDeveer eds., 2012).
41. Id. at 13–15.
42. Henrik Selin & Stacy D. VanDeveer, Federalism, Multilevel Governance, and Climate Change Politics Across the Atlantic, in COMPARATIVE ENVIRONMENTAL POLITICS, supra note 40, at 348.
with India’s rapid population growth, the country has witnessed extensive urbanization, with a nearly five-fold expansion of its urban population during the past thirty years. The number of Indian megacities is also projected to double between 2008 and 2021.

India’s rapid growth has introduced new environmental challenges to the Indian regulatory landscape. In particular, increasing industrial and vehicular activity has increased air pollution, toxic releases, and associated challenges. These urban environmental issues have added to existing challenges found in India’s rural regions. In those rural regions, air pollution and deforestation resulting from biomass combustion, and declining soil fertility and freshwater availability due to unsustainable agricultural practices, have threatened health and welfare.

In addition to India’s diverse spectrum of environmental threats, a diversity of distinct groups and populations that demand consideration complicate the ability to regulate the environment. In India, “461 ethnic groups are recognized as [s]cheduled [t]ribes” or indigenous peoples. Collectively, these people comprise 8.2% of the total population and suffer from a variety of land and environment challenges beyond those experienced by non-indigenous citizens; these include land alienation and challenges in gaining the necessary recognition to share the benefits from natural resources.

Because of this diversity of challenges, and also the associated "pressures on equity and ecosystems,” the Indian state sought institutional approaches to bolster environmental governance. In 1996, India’s Supreme Court acknowledged the limitations of its existing judicial system


46. Id.
51. Id.; U.N. DEVELOPMENT PROGRAMME, ENVIRONMENTAL JUSTICE: COMPARATIVE EXPERIENCES IN LEGAL EMPOWERMENT I3 (June 2014).
52. U.N. DEVELOPMENT PROGRAMME, supra note 51.
and “abuse of the process of law,” and advocated establishment of dedicated green benches. The Court cited the “work-load” of lower courts, the lack of “proper appreciation of the significance of the environment [sic] matters,” and concluded that, “[a]ll this points to the need for creating environment courts which alone should be empowered to deal with all matters, civil and criminal, relating to environment.” For India’s common law system, these shortcomings represented a challenge to the effective disposition of individual cases, to India’s judicial emphasis on “social welfare,” and to “empower[ing] the weakest members of the society.”

Accordingly, in 2010, India’s Parliament passed the “National Green Tribunal Act,” which authorized establishment of a national-level green court. Structurally, India’s National Green Tribunal (“NGT”) is vested with broad authority, possessing discretion over “all civil cases where a substantial question relating to environment . . . is involved.” Moreover, the enabling legislation granted it appellate jurisdiction over environmental matters, with immediate appeal from the NGT to India’s Supreme Court.

Compositationally and procedurally, the NGT is also unique. In a divergence from more traditional legal systems, NGT panels are not composed solely of traditional justices; instead, they also include “Expert Members,” who are evaluated not on their legal credentials, but rather their possession of considerable scientific training and practical experience. Additionally, in order to provide more case-appropriate and expansive access to justice, the NGT is “not . . . bound by the Code of Civil Procedure” or “the rules of evidence,” and instead possesses the “power to regulate its own procedure,” “guided by the principles of natural justice.” Under this extraordinary grant of discretion, the NGT has rendered hundreds of judgments to date. Moreover, the NGT has laid the

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54. Id. at [6].
57. Id. § 14(1).
58. Id. §§ 16, 22.
59. Id. § 5(2).
60. Id. § 19(1)-(3).
Securing Access to Justice

framework for “the world’s largest network of local environmental tribunals, expected to increase citizen access to environmental justice.”

B. New Zealand

As demonstrated above, India represents a large developing country. Its rapid population growth and expanding array of environmental challenges spurred the relatively recent establishment of an ECT with a broad grant of jurisdictional and discretionary powers. In contrast, New Zealand, which also established a national ECT, represents a small, highly developed country. In 2013, its Human Development Index (“HDI”) rating placed its population of roughly 4.5 million “in the very high human development category”—sixth out of 187 countries and territories.

While New Zealand differs from India in many core structural and compositional respects, it also demonstrates some key similarities. For instance, the impact of urbanization in New Zealand has been profound. Approximately eighty-five percent of New Zealand’s population is concentrated in urban areas, making the nation “one of the most highly urbanised countries in the world.” While the development of “peri-urban” areas has blurred the distinction between urban and rural regions in New Zealand, like India, New Zealand’s population largely remains divided between urban and rural areas. New Zealand’s rural populations contribute substantially to the country’s economy through traditional agriculture, fishing, and forestry.

Also, like in India, the presence of New Zealand’s indigenous populations contributes additional tension to the urban-rural dichotomy. As of 2013, approximately 14.9 percent of New Zealand’s population identified as Māori. Impressively, research has suggested that HDI rankings of the Māori population have increased more rapidly than the general population, “closing the gap in human development.”

65. Id.
66. Id.
67. Id.
68. Martin Cooke et al., Indigenous Well-Being in Four Countries: An Application of the UNDP’s Human Development Index to Indigenous Peoples in Australia, Canada, New Zealand, and the
Nevertheless, like other indigenous populations, the Māori “economy is disproportionately invested in climate-sensitive primary industries . . .” and the Māori are “disproportionately exposed to adverse social and economic conditions.”

In addition to issues of indigenous equity, New Zealand faces a variety of environmental challenges. For instance, in New Zealand’s urban areas, including Christchurch, air pollution raises environmental justice considerations, with different levels of ambient air pollution leading to “higher exposure . . . among groups of lower social status.” Like India, New Zealand also faces pressing environmental challenges in its rural areas, including loss of biodiversity.

Ultimately, like in India, these various pressures led New Zealand to seek institutional responses to its environmental and development challenges. Like India, New Zealand is a common law state, and resolving environmental law disputes requires the ability to apply expertise to individual disputes. Accordingly, nineteen years before the passage of India’s NGT Act, New Zealand adopted the Resource Management Act of 1991 (“RMA”). The RMA sought to “promote the sustainable management of natural and physical resources.” It embraced an expansive conception of resource management, acknowledging “social, economic, and cultural well-being,” recognizing the diverse communities within New Zealand, and emphasizing the need to consider “the reasonably foreseeable needs of future generations.”

Additionally, the RMA provided for establishment of New Zealand’s Environment Court, which replaced the preexisting Planning Tribunal, and granted the Environment Court authority over “virtually every important mechanism for environmental management . . . including regional policy statements, regional and district plans, resource consents and water...
To equip the Court for this range of matters, the body is composed of two classes of individuals: environment judges and environment commissioners. Eligibility in the first class is determined on the basis of traditional judicial qualifications, while the latter seeks to ensure that the “court possesses a mix of knowledge and experience in matters coming before the court,” including economics, planning, surveying, and indigenous concerns.

In conducting its activities, the court diverges from more traditional common law courts in important ways. While its authority to render judgments is clearly constrained by the enabling statute, the Environment Court is also empowered to render policy declarations, even on “abstract issues or issues not adequately framed by specific facts and argument.” In this fashion, the institution is uniquely empowered to adjudicate in advancement of New Zealand’s sustainable management. Through this expansive grant of authority, the Environment Court in New Zealand has addressed hundreds of environmental disputes, receiving 392 new registrations during the twelve most recent months for which such statistics are available.

IV. ANALYSIS

As the foregoing sections demonstrate, India and New Zealand present vastly different political and cultural settings in which the issues of access to justice, indigenous rights, and environmental justice have manifested. Nevertheless, in both instances, governments have elected to authorize and establish ECTs in response to these multiple challenges. Accordingly, in this section, this article undertakes a comparative analysis of the performance these countries’ ECTs provide in practice, aiming to highlight variation between the two cases. First, this section presents a characterization of the procedural access to justice that each court has provided in practice, giving special attention to their treatment of historically disenfranchised and indigenous populations. Second, this section examines the judicial outcomes that these institutions have yielded.

75. Id. at pt 11, s 247; Bret C. Birdsong, Adjudicating Sustainability: New Zealand’s Environmental Court, 29 Ecology L.Q 1, 28 (2002) (outlining scope of competence of New Zealand Environment Court).
77. Id. at pt 11, ss 249(1)–(2), 253(a)–(e).
78. Birdsong, supra note 75, at 29.
79. See Resource Management Act 1991, pt 12, s 310(a)–(d) (giving the Environmental Court the authority to make declarations on proposed plans and whether those plans are contrary to the Act as a whole).
A. Standing

In any judicial system, securing access to justice requires broad recognition of standing, or the right to “make a legal claim or seek judicial enforcement of a duty or right.” Establishing standing, or showing that a plaintiff “has a sufficient stake in an otherwise justiciable controversy,” is a gatekeeping task in environmental litigation, and one that is particularly amorphous. The notion of standing is differentially interpreted across courts; as a result, courts can either expand access to the judicial system or constrain it through their grants of standing.

In both India’s NGT and New Zealand’s Environment Court, legislation was constructed to expand standing. In India, for instance, the NGT was established with an eye toward the nation’s broader trend of “relaxation of requirements of standing,” and was granted cognizance over an array of classes and causes. Accordingly, this paper next examines whether the aspirations of broadly granting standing have manifested in practice.

1. India National Green Tribunal

Turning first to India, the NGT has often demonstrated a liberal construction of standing when interpreting individual cases; this has manifested in several ways.

a. India: Public Interest Claims

First, the court has readily accepted public interest claims brought by individuals on behalf of broader classes of the Indian population. For instance, in Himanshu R. Barot v. State of Gujarat & Others, the applicant was a journalist who explicitly stated that “he has no personal interest in the litigation.” Instead, the applicant expressed concern for residents of a
region allegedly affected by a maize processing facility and sought “protection of the environment.”

Granting standing to public interest claims is particularly valuable in India, where expansive land area and a tendency towards administrative centralization challenge unified enforcement of environmental statutes and regulations. In *Rohit Choudhury v. Union of India and Others*, a citizen plaintiff sought protection of Kaziranga National Park. The park is a designated UNESCO World Heritage Site and home to species including the tiger, Indian rhino, and Asian elephant. Through the case, Choudhury was able to highlight illegal, “unregulated quarrying and mining” that imperiled the Park’s existence, to emphasize the duty of India’s Ministry of Environment and Forests to provide oversight in the National Park, and to secure a judgment requiring cessation of illegal industrial activities.

Public interest claims have been employed in multiple other instances. Individuals have brought claims on behalf of entire villages seeking environmental protections. Likewise, plaintiffs have received standing to represent communities reliant on a shared resource, such as fishermen when development threatens their waters. Through these actions, citizens have been able to secure recognition of environmental claims on behalf of their neighbors and fellow villagers.

b. India: Standing to Permit Consideration of Nonhuman Entities

Second, the court has, in certain narrow instances, appeared to grant standing that enables it to consider the plight of living organisms. Such cases are unique, and in them, the NGT does not explicitly grant standing to a nonhuman entity. Instead, the NGT has minimized its initial consideration of standing so that it can resolve a matter deemed compelling. For instance, in a 2014 opinion, the court addressed the claim that the Bhopal municipal government “had cut three old/big trees... and also three big Ashoka
trees.\textsuperscript{95} The NGT opinion sidestepped consideration of standing and tree ownership and instead moved directly into resolving the substance of the dispute.\textsuperscript{96} It has repeated this approach elsewhere.\textsuperscript{97} Though such efforts have been limited to date, they reflect an approach for empowering the court to consider the substantive interests of trees and other natural objects. If so, this move would reflect an initial step toward an institutional approach debated by environmental lawyers since the birth of the modern environmental movement: enabling nonhuman entities to “seek redress in their own behalf”.\textsuperscript{98}

c. India: Self-Generated/\textit{Sua Sponte} Actions

Third, the NGT has demonstrated willingness, when it deems such action necessary, to initiate legal action on its own behalf and in the absence of claims from outside parties. Such \textit{su\ motu}, or \textit{sui generis}, actions permit the Tribunal to engage in a degree of agenda-setting not commonly associated with courts. In 2013, the Tribunal convened such an action in response to a newspaper article published in the \textit{Times of India} that argued that mining activities were imperiling a tiger corridor.\textsuperscript{99} On this basis, the Tribunal summoned nineteen respondents to ascertain the “particulars of Mining Leases . . . mentioned in the news item.”\textsuperscript{100} By doing so, the NGT was able to systematically review claims set forth in the newspaper article and to identify potential violations of mining and resource protection laws for further scrutiny.\textsuperscript{101}

2. New Zealand Environment Court

Like India’s NGT, New Zealand’s Environment Court has favored inclusivity in order to address environmental questions. Its approach to standing is made explicit through RMA section 274.\textsuperscript{102} The statute

\textsuperscript{96} Id. at *1–*3.
\textsuperscript{98} \textsc{Christopher Stone, Should Trees Have Standing? Law, Morality, and the Environment} 8 (3d ed. 2010).
\textsuperscript{99} Tribunal at its Own Motion v. The Sec’y, Ministry of Env’t & Forests & Others, Unreported Judgments 2013, 4 (India).
\textsuperscript{100} Id. at 5.
\textsuperscript{101} Id. at 23.
\textsuperscript{102} See Resource Management Act 1991, pt 11, s 274(1)(a)–(f) (describing the many circumstances where a person can become a party to a proceeding in front of the Environmental Court).
articulates those classes of actors who may pursue an environmental claim.\textsuperscript{103} In addition to provisions authorizing certain governmental officials to bring suits as a matter of right, the statute broadly confers standing to citizens and authorizes participation by any “person who has an interest in the proceedings that is greater than the interest that the general public has.”\textsuperscript{104} However, as Pring and Pring note, the discretion justices possess in implementing procedural and statutory provisions can also greatly impact and shape environmental outcomes.\textsuperscript{105} Accordingly, it is important to examine how New Zealand has employed standing provisions in practice.

a. More Formal Standing Analysis

First, the cases resolved by the Environment Court demonstrate that it construes standing more rigidly than India’s NGT. Whereas the NGT often undertakes limited formal consideration of standing, it receives frequent and explicit consideration in many Environment Court opinions. For example, the Court often parses its statutory requirement that litigants demonstrate more interest in the proceedings than that held by the general public. Such consideration emerges in two ways. The first is, when a party raises the issue of standing to the court.\textsuperscript{106} This suggests that parties in New Zealand may be more likely than those in India to employ procedural, rather than purely substantive, claims in support of their positions. Second, the Court can raise standing as an issue on its own accord. In these instances, the discussion of standing generally appears to be more pro forma and quickly resolved in favor of permitting the claims to move forward.\textsuperscript{107} Accordingly, while the Environment Court’s more rigid construction of standing could outwardly appear problematic to less sophisticated litigants, in practice, the justices seem to embrace their policy mandate of fostering inclusivity.

\textsuperscript{103} Id.
\textsuperscript{104} Id. at pt 11, s 274(1)(d)–(da).
\textsuperscript{105} GREENING JUSTICE, supra note 37, at 111.
b. More Inclusive Standing Statute

Moreover, despite the Environment Court’s comparatively more formal consideration of standing, it rarely emerges as a bar to litigation since the underlying statute specifying standing is so broadly constructed. In many instances, simply filing an appeal or objection with a permitting agency is sufficient to confer standing.\textsuperscript{108} Likewise, submitting an application is viewed as sufficient to demonstrate a “right in property directly affected, and not remote.”\textsuperscript{109} Accordingly, just as the Environment Court’s more formalistic consideration of standing rarely bars access, the underlying statute favors inclusiveness.

c. Flexible Construction of Standing

Finally, judges of the New Zealand Environment Court have demonstrated a willingness to construe statutory language and facts flexibly to favor inclusivity and equity. This flexibility has manifested in several forms.

First, many traditional courts address standing before reaching substantive claims, thus permitting standing to function as a bar to litigation. In contrast, the Environment Court has repeatedly demonstrated its willingness to evaluate the merits of a claim, even when standing is questioned or lacking.\textsuperscript{110} Likewise, the Court elsewhere has simply rendered substantive opinions, permitting standing to be addressed later “if it remains an outstanding issue to be determined.”\textsuperscript{111}

Second, when the Court finds standing problematic, it readily invokes other grounds to reach substantive issues. For example, if one party lacks standing, the Court will seek others with standing to permit litigation and dispute resolution to continue.\textsuperscript{112} Likewise, the court will seek ways to promote equity and prevent procedural defects from barring litigation. Examples have included considering overall ecosystem health, even though “neither [specific] trees nor animals have standing,”\textsuperscript{113} and permitting the intervention of iwi (native populations) in a dispute, even though their

\textsuperscript{110} Elwell-Sutton v. W. Coast Reg’l Council, supra note 107.
\textsuperscript{111} Trs. of the Ngati Tamaoho Tr. v. Auckland Council [2014] NZEnvC 012 at 6 per Harland J.
\textsuperscript{113} Robinson v. Waitakere City Council [2010] NZEnvC 314 at [23].
attorney technically missed a filing deadline. As the Court itself notes, the “objective of any proceeding before the court is ultimately to promote that purpose of sustainably managing natural and physical resources while, although this is implicit, following the principles of natural justice.”

Third, the Court has exhibited, in limited instances, its willingness to consider equity on its own accord. Its enabling statute, the RMA, deems “the protection of historic heritage from inappropriate subdivision, use, and development” and “the relationship of Maori and their culture and traditions with their ancestral [environments]” to be matters of national importance. Accordingly, in at least one case where Maori were not officially parties, the Court considered the need to “suitably recognize . . . and provide . . . for” native populations, the land claims of various iwi groups, and the significance of various ecosystem components.

In sum, this section has demonstrated that the structure and practice of India and New Zealand’s ECTs lead to relatively expansive conceptions of standing. These enhance procedural equity on the input side, enabling a broader slate of parties and issues to gain a toehold in the legal process. However, securing initial access to the judicial process is only one portion of the equation.

B. Judicial Outcomes

In their 2009 evaluation of ECTs, Pring and Pring note that access to justice can be parsed into three distinct phases: access to the ECT; access to “fair, efficient, and affordable” proceedings; and issuance of orders that “provide measurable outcomes . . . [to] prevent . . . or remedy . . . environmental harm.” While it is difficult to measure “substantive environmental outcomes” resulting from judicial decisions, an important prefatory step is to examine the judgments that courts issue. Doing so moves closer to defining how court structures can shape who gains access to justice, as well as what form that justice may take. Due to the difficulty in generalizing across the facts of individual cases, comparing judgments

118. GREENING JUSTICE, supra note 37, at xiii.
across courts challenges comparative environmental law scholars, yet holds
value in characterizing institutional efficacy.\footnote{119}

1. India

India’s NGT statute offers little specific guidance regarding particular
remedies and instead grants broad discretion to NGT panel members. The
statute authorizes the NGT to render “relief and compensation to the
victims of pollution and other environmental damages . . . ,” restitution for
property damage, and restitution of the environment “as the Tribunal may
think fit.”\footnote{120} Likewise, rather than prescribing specific environmental
statutes that the Tribunal must consider the enabling legislation directs that
the Tribunal “shall . . . apply the principles of sustainable development, the
precautionary principle, and the polluter pays principle.”\footnote{121}

In practice, it appears that the Tribunal crafts its opinions with an eye
toward broad environmental principles. For example, when addressing
pollution in economically significant fishing grounds, the NGT embraced a
“multipronged approach” and noted that the precautionary principle,
polluter pays, and various valuation techniques should guide its opinion.\footnote{122}
Likewise, when considering the environmental degradation of the Rohtang
Pass, a highly trafficked route through the Himalayas in Himachal Pradesh
province, the NGT went well beyond a simple consideration of the
pollution. Instead, the Tribunal undertook lengthy examination of the
region’s biodiversity, impacts to the local ecosystem from partially unburnt
hydrocarbons (“black carbon”), and the status of the Pass as “one of the
most significant gifts of nature to mankind . . . .”\footnote{123} On this basis, the
Tribunal cited the “Polluter Pays Principle” to justify imposing a tax on
motor vehicles to help mitigate the effects of environmental degradation in
the region.\footnote{124}

Elsewhere, the NGT demonstrates its willingness to consider linkages
between human, economic, and environmental ramifications of disputes.
The NGT generally appears amenable to permitting economic activity to

\footnotesize{119. Helle Tegner Anger et al., \textit{The Role of Courts in Environmental Law--A Nordic
Comparative Study}, 1 NORDIC ENVTL. L.J. 1, 9, 10 (2009).}
\footnotesize{120. \textit{INDIA CODE}, § 15(1).}
\footnotesize{121. \textit{Id.} § 20.}
\footnotesize{122. Bhungase v. Ganga Sugar & Energy Ltd. & Others, Unreported Judgments 2013, 18
(India).}
\footnotesize{123. Court on Its Own Motion v. State of Himachal Pradesh, Unreported Judgments 2014, 3
(India).}
\footnotesize{124. \textit{Id.} at 24.}
continue, provided that environmental effects are fully understood \(^{125}\) and that there are no countervailing cultural considerations.

However, when indigenous groups and religious groups are involved, the Court exhibited sympathy toward those interests. For example, in one case, the Tribunal was called upon to examine the sufficiency of environmental impact review for an airport development that threatened both an ecologically productive river and a “declared heritage site” of great cultural importance to the Kerala people. \(^ {126}\) Ultimately, the Tribunal acknowledged awareness that “a balance has to be struck between ecology and development” but barred the project given its troubling environmental and cultural implications. \(^ {127}\)

However, the NGT does not uniformly favor traditional interests over industry. Elsewhere, the NGT has permitted industrial development despite disruption to centuries-old pastoralist grazing claims. \(^ {128}\) Likewise, it has ordered the modification of traditional manufacture processes of Hindu idols to mitigate water pollution, though it devoted extensive discussion to the need to maintain “sanctity and due respect” of the idols and not “diminish obeisance for the Gods/Goddesses.” \(^ {129}\) In brief, the NGT’s struggle to balance modernization, environmental preservation, and cultural considerations appears emblematic of the challenges facing India’s broader industrial transition.

2. New Zealand

A comparison of the two ECTs’ enabling legislation emphasizes that, while different, both grant expansive authority to the courts. As noted above, the RMA requires that the Environment Court take actions to preserve the natural environment, including the coastal environment, from “inappropriate subdivision, use, and development.” \(^ {130}\) At the same time, the statute requires consideration of sensitive populations, deeming “the relationship of Maori and their culture and traditions with their ancestral

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127. Id. at *218–19; see also Saldhana v. Union of India, (2014) NGT Application No. 6/2013 (SZ) (India) (concluding that the project must take environmental concerns into account and allow villagers access to agricultural lands).
128. Thervoy Gramam Munnetra Nala Sangam v. Union of India & Others, Unreported Judgments 2012, 12 (India).
lands” and “the protection of protected customary rights” matters of national importance.\(^{131}\)

In practice, the Court has repeatedly demonstrated its willingness to consider such matters. In an early opinion, it grappled extensively with how to incorporate Māori claims into the Environment Court.\(^{132}\) After expansive legal analysis, it ultimately rendered a 249-page opinion; moreover, the Court did not merely seek a cursory examination of Māori interests, but rather “to give genuine and meaningful consideration to Maori concerns . . . considering how Maori saw [their landscape] in the context of their customary and cultural values.”\(^{133}\)

Even the more customary opinions reflect this desire to protect the interests of indigenous populations. In several summary opinions, the Court noted that consent decrees between litigants do not “prejudice . . . any claim of tangata whenua [people of the land] to customary ownership.”\(^{134}\) Likewise, the Court appears to believe firmly that the legal system can resolve native claims. Accordingly, it has repeatedly refused to dismiss claims involving indigenous interests because doing so would constrain its ability to review indigenous claims.\(^{135}\)

The actions of New Zealand’s Environment Court to preserve native interests are further bolstered by a complementary institution: the Māori Land Court. The institution expressly “endeavours to assist Māori landowners to promote the retention, use, development, and control of Māori land” through assistance with registration, land claims, and “provision of proactive advisory services and initiatives.”\(^{136}\) While examining the Māori Land Court is beyond the scope of this paper, its presence suggests that indigenous interests may receive more favorable treatment than this isolated examination of the Environment Court would suggest, given the overlapping institutional safeguards. In sum, New Zealand and its Environment Court demonstrate that developed countries, notwithstanding their highly bureaucratized legal systems, can provide institutional mechanisms to support indigenous populations.

\(^{131}\). Id. at pt 2, s 6(e)–(f).


\(^{133}\). Id. at 25.


V. DISCUSSION

The foregoing analyses demonstrate that ECTs’ specialized structures can be observed through their approaches to standing and judicial orders—attributes that contribute to access to justice. As India’s NGT illustrates, countries can structure ECTs to broadly grant standing to public interest claims, permit consideration of the interests of nonhuman entities, and undertake environmental inquiry on its own motions. Further, New Zealand’s Environment Court demonstrates that even among ECTs with highly formalized standing analysis, an inclusive standing statute, and judges’ flexible construction of that statute, can promote broad access to justice.

Moreover, the preceding case analyses demonstrate that expanded access to justice can engender tangibly different treatment for vulnerable ecosystems and indigenous populations. They illustrate the capacity of ECTs to craft orders that are sensitive to broader environmental debates and to afford detailed consideration to interrelated environmental and indigenous interests.

While such observations are noteworthy on their own, ECTs merit further scrutiny due to their close alignment with matters of theoretical interest to comparative and environmental governance scholars. This section briefly identifies two such issues and explores each in turn: (1) the ability of ECTs to serve as conduits, effectively translating international environmental law norms into actionable on-the-ground policy; and (2) the ability of ECTs to increase equity.

A. Conduits for Translating International Norms

First, the two ECTs examined demonstrate that specialized judicial institutions may present a mechanism for actualizing environmental norms enunciated at the international level. While international legal scholars and diplomats applaud the adoption of international environmental agreements and principles, grounding these soft norms in “hard” legal frameworks has proven challenging, particularly domestically. Nevertheless, both ECTs surveyed demonstrate promising examples of how to accomplish this objective.

137. See, e.g., Jon Birger Skjærseth et al., Soft Law, Hard Law, and Effective Implementation of International Environmental Norms, 6 GLOBAL ENVTL. POLS. 104, 104–05 (2006) (proposing that implementing soft law norms may increase international acceptance as opposed to hard law, in part because domestic ratification is not necessary).
As outlined above, India and New Zealand enshrined international environmental norms and ideals in the enabling legislation of their respective environmental courts. India’s National Green Tribunal Act of 2010 requires justices to consider the principles of “sustainable development, the precautionary principle, and the polluter pays principle” in their opinions.138 These derive directly from the Rio Declaration, adopted in 1992.139 Likewise, New Zealand’s RMA requires that the Environment Court “promote the sustainable management of natural and physical resources” and ensure that natural and physical resources “meet the reasonably foreseeable needs of future generations,” again echoing major international soft-law norms.140

In practice, both institutions have sought to comply with these obligations. As noted above, India’s National Green Tribunal, concerned with black carbon deposition in the Himalaya, ordered the imposition of a vehicular emission tax under the polluter pays principle and regulated riparian pollution from industrial activities under the precautionary principle.141 As a result, far from the rarefied meetings where such principles were first negotiated, the norms of international environmental law are given effect in discrete instances of environmental management. In doing so, ECTs move such norms closer to benefiting the vulnerable populations that their drafters envisioned.

B. Mechanisms for Enhancing Equity

Second, ECTs expressly seek to enhance equity among individuals. The institutions move beyond an “equal footing” conception of citizens and toward recognition that some classes of persons have historically experienced difficulty in using the legal system. As noted previously, both the enabling legislation and resulting judicial opinions in the two ECTs acknowledge the need for special consideration of indigenous and other historically disenfranchised populations.

Such an approach is significant in two respects. First, by seeking to protect the most vulnerable populations, ECTs can exploit the link between

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138. INDIA CODE, § 20.
140. Resource Management Act 1991, pt 2, s 5(1), 5(2)(a); Rio Declaration, supra note 139.
141. Court on Its Own Motion v. State of Himachal Pradesh (2014), Application No. 237 (THC)/2013 at [38](1) (regulating black carbon through the polluter pays principle); Bhungase v. Gangakhed Sugar & Energy Ltd. & Others, Unreported Judgement 2013 (India) (applying the precautionary principle).
indigenous populations and the environment. By considering indigenous welfare, ECTs can indirectly protect the landscapes upon which those populations rely. Second, through their attention to intragenerational equity, ECTs lay the foundation for fuller consideration of intergenerational equity, something that environmental policymakers have long identified as crucial to durable sustainability.

CONCLUSION

This article has examined the concept of access to justice as it is effectuated by select environmental courts and tribunals and as it bears upon indigenous and other historically disadvantaged populations. To do so, it outlined the multiple facets of access to justice, noting that the concept implies not only initial access to a court, but also access to procedures that are equitable. It also outlined the ability to receive judicial orders that meaningfully improve outcomes. On this foundation, the article subsequently demonstrated that access to justice affects the nature of justice provided, not simply on its own, but also through the other rights that it can facilitate or bar, including indigenous rights and environmental justice.

Having defined the contours of access to justice and noted its bearing upon other human rights, this article outlined judicial specialization as an institutional approach that nations increasingly invoke in the effort to enhance access to justice and improve legal outcomes. Focusing on ECTs in particular, this article initially examined the variation such institutions provide. Using the comparative courts perspective to address the effect of access to justice on indigenous populations, it surveyed two cases: India’s NGT and New Zealand’s Environment Court.

Within the context of access afforded by the courts’ standing provisions, the article began by surveying the notion of standing. Turning first to India’s National Green Tribunal, an exemplar of a developing country’s tribunal, it found that the NGT’s opinions have eschewed rigid consideration of procedural standing requirements in favor of the underlying substantive claims. It further noted the court’s willingness to rule in cases concerning living organisms, even when no direct impacts to


humans are cited. Finally and significantly, it observed the NGT’s willingness to act on its own volition to conduct hearings on matters deemed environmentally significant, even if no parties had raised those issues yet. Turning to New Zealand’s Environment Court, the paper presented an instance of a developed country’s ECT with a similarly broad conception of standing. Despite more formalistic standing analysis, this paper concluded that the Environment Court’s enabling statute was sufficiently broad to afford standing as a matter of course to most interested parties. Moreover, it demonstrated that Environment Court justices, conscious of their mandate to advance environmental equity, frequently grant standing or sidestep its strictest interpretation when less sophisticated parties are at risk of exclusion from the legal process. Collectively, it found that the two cases underscore the promising ways ECTs can foster an inclusive legal environment.

However, the paper noted that standing in and of itself is insufficient to remedy environmental harms, and thus examined the tangible outcomes ECTs afford to sensitive populations. Within the context of India, the paper noted that the NGT has: provided a conduit for international environmental law principles, including the precautionary and polluter pays principles; issued judgments that enshrine these often amorphous concepts; and sought to reconcile development pressures with cultural and environmental preservation. Likewise, in New Zealand, the Environment Court has exhibited an ability to undertake detailed, rather than perfunctory, consideration of indigenous/Māori rights, yielding judgments uniquely sensitive to the claims of environmentalists. Collectively, both courts demonstrate that ECTs, through their expansive statutory grants of discretion and justices’ eagerness to pursue environmental equity, proactively seek environmental protection.

Together, the two cases demonstrate that much of the promise perceived in ECTs may indeed exist. This includes their ability to “deal with environmental cases and make the access to justice easier for citizens, NGOs, and disadvantaged groups” and to serve as a “better forum for the adjudication of environmental, land use, and climate change claims than courts or tribunals of general jurisdiction.”

Nevertheless, further analyses are still required. While scholarly efforts, including this paper, have demonstrated that ECTs can support inclusive standing and environmental judicial orders, research has yet to systematically examine implementation and its subsequent effects to

144. Domenico Amirante, Environmental Courts in Comparative Perspective: Preliminary Reflections on the National Green Tribunal of India, 29 PACE ENVTL. L. REV. 441, 441 (2012); GREENING JUSTICE, supra note 37.
ecosystems and livelihoods. While some scholars have challenged the feasibility of such analyses, noting the subjective nature of evaluating the “goodness” of an environmental outcome, efforts to empirically evaluate implementation are warranted. Specifically, researchers may wish to employ case study research of the outcomes resulting from specific ECT orders as a first, exploratory step towards more empirically robust analysis.\textsuperscript{145}

Ultimately, this paper demonstrates a tangible link between judicial specialization and access to justice. ECTs offer a mechanism for lessening the inequities in environmental protections between developed and developing countries and between privileged and indigenous/traditionally disenfranchised populations within countries. Moreover, by connecting the sometimes atmospheric principles of international environmental law to discrete, on-the-ground issues, ECTs serve as important linkage institutions in transnational environmental governance. As development and environmental pressures intensify, these attributes will only increase in value to the nations where ECTs exist.

\textsuperscript{145} E.g., ROBERT K. YIN, CASE STUDY RESEARCH: DESIGN AND METHODS (3d ed. 2013).
INTRODUCTION

As the epicenter of the Marcellus gas region, Pennsylvania has seen a “boom in exploration” since 2008.1 While the hydro-fracturing industry continues to grow, its environmental effects remain in question. The infrastructure required, including well pads, access roads, pipelines and other structures, raises a number of environmental concerns. Constructing

these requires clearing areas of trees, thereby dividing the forest landscape. This leads to forest fragmentation, defined as “the process of breaking up large patches of forest into smaller pieces.” If Pennsylvania continues to develop this industry without fully assessing the impacts, it risks lasting damage to its forests. Though all Marcellus infrastructure impacts the forest, state regulation subjects pipelines in particular to relaxed standards. Moving forward, Pennsylvania needs a thorough pipeline siting process, which adequately addresses forest fragmentation.

I. PENNSYLVANIA’S MARCELLUS SHALE DEPOSIT AND ITS DEVELOPMENT

Pennsylvania has a history favoring natural resource extraction. The Marcellus development continues this tradition. The Commonwealth has already seen Drake Well, which launched the modern petroleum industry, and an expansive coal industry. Coal’s legacy in Pennsylvania shows the importance of fully understanding environmental impacts before expansive development. Since Pennsylvania lacked “the technology or knowledge to anticipate the lasting environmental impact,” it has invested nearly 500 million dollars in remediating the damage caused by the coal industry, including polluting 2,400 miles of streams. These costs have only continued to grow since 1967. In February 2014, Pennsylvania received 52 million dollars to clean abandoned mine sites and possibly address mine fires. The coal industry has created dangerous conditions for the environment and citizens. This not only includes the polluted streams, but also underground mine fires and open shafts. Pennsylvania should avoid...
making similar mistakes with the Marcellus shale industry, which continues to expand.

The Marcellus shale region, “the largest known shale deposit in the world,” encompasses a number of states.9 It runs from New York to Virginia and from Pennsylvania to Ohio10 and contains an estimated 489 trillion cubic feet of natural gas.11 In New York and Pennsylvania, the oil and gas industry discovered this deposit in the 1930s.12 However, the industry only recently developed the necessary technology to efficiently reach the Marcellus layer.13 This layer sits about 5,000 to 8,500 feet, or about a mile to a mile and a half, below the ground.14 In addition, the market demand for natural gas has increased and Pennsylvania’s deposit now is worth an estimated 500 billion dollars.15 Given its newfound appeal, in 2003 a Texas company, Range Resources, extracted the first Marcellus natural gas from Pennsylvania’s Washington County.16 Since then, the industry continued expanding, eventually reaching its boom in 2008. Pennsylvania has seen development both on private and public land, including the state forest system.

Each year since 2009, the Pennsylvania Department of Environmental Protection (“DEP”) has issued a report of the number of wells permitted and drilled. In the last two years, both numbers far exceeded over a thousand new wells. In 2014, Pennsylvania permitted 3,204 wells and the natural gas companies drilled 1,374.17 According to a DEP database,
between January 2000 and December 2014, 8,816 wells were drilled in the state.  

Additionally, the Commonwealth has agreed to a number of leases, including some in state forests. These leases span about 369,914 acres and the Department of Conservation and Natural Resources (“DCNR”) reports that the state has leased 138,866 acres of state forestlands. This expansive production has made Pennsylvania one of the nation’s leading natural gas producers.

The U.S. Energy Information Administration’s (“EIA”) reports for the years 2011 and 2012 shows the likelihood that Pennsylvania will continue to extract natural gas for a number of years. The EIA reported that Pennsylvania production levels rose by 72 percent from 2011 to 2012, making it the third-highest producer among the states and likely to become the second-highest once 2012 through 2013 figures are released. The production growth will likely continue as natural gas demand continues to rise. The EIA predicts that by 2040 natural gas will be a leading source of electricity in the United States. Given this prediction and the rising production levels, it seems that Pennsylvania will only continue to develop, leasing new lands and granting new well permits. For this reason, the Commonwealth must seriously address the potential environmental impacts of the Marcellus development, including forest fragmentation.

II. FOREST FRAGMENTATION

Forest fragmentation is just one of the many environmental criticisms the Marcellus shale industry has faced. The United States Geological Survey (“USGS”) defines fragmentation as occurring “when large areas of natural landscapes are intersected and subdivided by other, usually

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20. Id.
22. Id.
anthropogenic, land uses leaving smaller patches to serve as habitat for various species." 24 Fragmentation of eastern forests has accelerated a decline in forest habitat that began in the seventeenth century. 25 Today about forty percent of eastern deciduous forests consists “of small, isolated woodlots in suburbia and farmlands.” 26 Fragmentation can occur in a number of ways. Although agriculture is a prime contributor in Pennsylvania, roads, pipelines, and other developments also lead to fragmentation. 27

Fragmentation divides the forest into different sections: the interior, or core forest, and the edge forest. Edge forest is the 300 feet or 100 meters from the border, often “interfacing with fields or suburban uses.” 28 Core or interior forest includes all of the remaining forest, at least 300 feet or 100 meters from any forest edge. 29 By changing the character of large forest segments, forest fragmentation affects the environment through habitat loss, edge effects, invasive plants, and loss of connectivity.

Natural gas development in the Marcellus region can disrupt the forest habitat because it requires infrastructure such as well pads, access roads, water impoundments, and pipelines. This disrupts forest habitat and creates significantly more edge habitat. Pennsylvania should consider the potential environmental impacts of pipelines before further developing the region without law and regulations that address forest fragmentation.

A. Environmental Effects

1. Habitat Loss and Edge Effects

Adding a road, well pad, pipeline, or other structure reduces habitat for species that rely on core forest. In dividing the forest, human development increases the ratio of edge to core forest, 30 leading to “edge effects.” For example, a road requires clear cutting trees, creating a forest border on each

26. Id.
28. Id. at 103.
29. Id.
side of the road. This creates edge forest along the entire road, extending 300 feet from each border. Edge and core forests are different habitats that serve different purposes and support different species. Additionally, an edge exposes the forest to a number of different elements, including “light, wind, humidity, and exposure to predators.” Beyond new predators, edge effects also allow for weeds to invade and affect the plant species distribution. These changes create a different environment with new species and “microclimatic conditions,” like light and wind. This alters the “habitat structure,” possibly the most important aspect of any habitat.

Development also affects the size of the core forest. As seen, a road or pipeline will create a new border and edge forest. As the edge forest expands, many square feet of core forest are lost. This loss of core forest affects the number and diversity of species. Certain “forest-interior species” only thrive in core forests. They face a loss of habitat and increased competition as their density increases. For these reasons, edge effects can have a lasting, negative impact on a large portion of forest habitat. Studies have shown that forest size affects the population and number of species present. Some studies have found that a smaller island habitat usually supported a smaller number of species than a larger island. Smaller islands also supported smaller populations, therefore making a species more susceptible to decline and extinction.

Though islands and landlocked forests have different environments, similar effects have been seen in forested environments. For example, in Pennsylvania, the size of the forest relates to the number of bird species present during spring migration. A larger core forest will have a greater variety of species. Thus, the size of a core forest has significant impacts for the species that depend on it. In decreasing core forest, forest fragmentation can lead to fewer species with lower populations.

31. YAHNER, supra note 25, at 103.
32. SLOECKER ET AL., supra note 24, at 10.
34. Id.
35. Fred L. Bunnel, What Habitat is an Island?, in FOREST FRAGMENTATION: WILDLIFE AND MANAGEMENT IMPLICATIONS 1, 22 (James A. Rochelle et al. eds., 1999).
37. Id.
38. Id.
39. Id. at 104.
40. Id. at 110–11.
2. Invasive Species

Another threat caused by forest fragmentation is the introduction of invasive species. Since fragmentation affects the quality and conditions of habitat, it also allows for different species to survive in the edge forest.  This includes “pioneer or early-successional species.”  Pioneer species create the foundation of new ecosystems when new habitats form.  For this reason, invasive species can significantly alter the forest habitat and negatively impact the native species.  They often compete and hybridize with native species, threatening biodiversity.  This presents one of Pennsylvania’s greatest challenges to both forest health and regeneration.

A National Parks Service study found that invasive species have thrived in certain Pennsylvanian forests. Gettysburg National Military Park contains twenty-two percent “exotic plant species” and Valley Forge National Historic Park contains thirty-four percent.  This includes only plant species, but edge effects also open forests to other wildlife.  Forest fragmentation gives invasive species the opportunity to alter the forest ecosystem as it creates new edge forest.

3. Loss of Connectivity

When a road or well pad disrupts forest habitat, it does more than just change the habitat of that area. It also affects the connectivity between different forest habitats. Forest “[c]onnectivity exists when organisms can move freely among separate patches of habitat.”  Fragmentation prevents connectivity for some species. For example, certain species will not cross roads.  This limits their movement, especially for smaller species like amphibians.  However, it can also limit some larger mammals who need a large forest-interior habitat. This includes animals like the black bear and

41. YAHNER, supra note 25, at 103.
42. Id.
44. YAHNER, supra note 25, at 117.
45. Id.
46. GOODRICH ET AL., supra note 27, at 92.
47. YAHNER, supra note 25, at 104.
49. Bunnel, supra note 36, at 17.
50. YAHNER, supra note 25, at 91.
eastern wood rat. Though Pennsylvania has an increasing black bear population, the wood rat’s range has continued to decrease. These species may also limit their movements to save energy. Because moving between different types of habitats may not provide enough benefit to justify the energy expended, the lack of connection between different habitats can prevent mammals and smaller species from moving throughout the Commonwealth’s forests, creating smaller isolated populations.

B. Marcellus Shale Development Causes Fragmentation

A number of different activities or types of development can cause forest fragmentation. A recent USGS study described the effect Marcellus shale drilling can have on forests:

Although many human and natural activities result in habitat fragmentation, gas exploration and development activity can be extreme in their effect on the landscape. Numerous secondary roads and pipeline networks crisscross and subdivide habitat structure. Landscape disturbance associated with shale-gas development infrastructure directly alters habitat through loss, fragmentation, and edge effects . . .

However, since Marcellus development only took off in 2008, a detailed understanding of its environmental effects in Pennsylvania remains unknown. Fragmentation affects different species in different ways. But Pennsylvania has seen negative impacts from fragmentation in other areas already. Additionally, fragmentation effects are difficult to quantify because “ecological science . . . is often emerging, changing, or simply nonexistent.” For these reasons, few studies exist on the fragmentation effects of gas drilling in Pennsylvania. However, there is little doubt that the more general effects of fragmentation, as discussed above, will apply to the required roads, well pads, and pipelines for shale development.

Marcellus development uses a number of different infrastructures. The companies extract the gas, transport it through pipelines, store water

\[52. \text{GOODRICH ET AL., supra note 27, at 94.}\]
\[53. \text{Id.}\]
\[54. \text{Kurt H. Ritters et al., Fragmentation of Continental United States Forests, 5 Ecosystems 815, 816 (2002).}\]
\[55. \text{SLONECKER ET AL., supra note 24, at 9–10.}\]
\[56. \text{Id. at 10.}\]
\[57. \text{GOODRICH ET AL., supra note 27, at 7.}\]
\[58. \text{SMALL & LEWIS, supra note 49, at 25.}\]
necessary for production nearby, and transport employees and supplies. Each natural gas well requires a well pad, water impoundments, access roads, and pipelines.\textsuperscript{59} All of these create new forest borders and edge forest.

This presents a significant threat to Pennsylvania’s wildlife. Along with habitat loss, forest fragmentation poses “the number one threat to wildlife in the state.”\textsuperscript{60} Since only certain species can thrive in edge forests, the dynamic of species has changed. Even though the state remains largely forested, less than half of this area is “core” or interior forest cover.\textsuperscript{61} The Marcellus shale development is occurring as habitat continues to disappear. The Commonwealth loses approximately 300 acres of wildlife habitat daily.\textsuperscript{62} This has placed twenty percent of the Commonwealth’s species on the “special concerns lists,”\textsuperscript{63} including “forest-interior nesting birds,” such as the wood thrush and barred owl,\textsuperscript{64} and also certain mammals, such as bobcats and fishers.\textsuperscript{65}

Even with restoration efforts at the end of a well’s production, there will likely be long-term consequences. Marcellus wells will produce for an estimated forty-five to sixty years.\textsuperscript{66} For this reason, companies use pipelines designed to last over fifty years.\textsuperscript{67} Even after the abandonment of a well, the Federal Energy Regulation Commission (“FERC”) regulations allow the pipeline to remain in the ground, with certain maintenance requirements.\textsuperscript{68} Pipelines may continue to contribute to forest fragmentation for years to come. Pipeline corridors will continue to divide forests, despite the fact the natural gas companies no longer use them. Restoration also faces particular challenges in Pennsylvania because of the white-tail deer population. These animals feed on shrubs and young trees, limiting the forests’ ability to regrow.\textsuperscript{69} They classify as a “keystone species” because

\begin{itemize}
\item \textsuperscript{59} SLONECKER ET AL., supra note 24, at 19.
\item \textsuperscript{60} GOODRICH ET AL., supra note 27, at 7.
\item \textsuperscript{61} Id. at 102.
\item \textsuperscript{62} Id. at 12.
\item \textsuperscript{63} Id. at 8.
\item \textsuperscript{64} Id. at 92.
\item \textsuperscript{65} Id.
\item \textsuperscript{66} STEPHANIE LEACH, ENVIRONMENT, ENERGY AND ECONOMY: IMPACTS OF NATURAL GAS PIPELINES IN 9 WATERSHEDS OF NORTH-CENTRAL PENNSYLVANIA 15 (2012), http://repository.upenn.edu/mes_capstones/55/ [https://perma.cc/B5CF-QD8L].
\item \textsuperscript{67} Id.
\item \textsuperscript{68} See S. M. FOLGA, NATURAL GAS PIPELINE TECHNOLOGY OVERVIEW 49 (2007), http://corridoreis.anl.gov/documents/docs/technical/APT_61034_EVS_TM_08_5.pdf [https://perma.cc/H6JJ-6KSW] (“FERC typically allows a buried pipeline that has reached the end of its service life to be internally cleaned, purged of natural gas, isolated from interconnections with other pipelines, and sealed without removing the pipe from underground.”).
\item \textsuperscript{69} GOODRICH ET AL., supra note 27, at 8.
\end{itemize}
they have “a dominating influence on the composition of a community.” Deer in particular can “cripple a forest ecosystem,” by feeding on young growth. For this reason, Marcellus development could cause extended damage to the forests of Pennsylvania.

III. PIPELINE SITING

A. Regulatory Framework

Regulations for pipeline permitting and siting in Pennsylvania involve both federal and state regulations. For interstate pipelines, which run through Pennsylvania, FERC and the Department of Transportation Pipeline and Hazardous Materials Safety Administration (“PHMSA”) have authority. At the state level, the Pennsylvania Public Utility Commission (“PUC”) has jurisdiction over intrastate pipelines. Both federal and state agencies are also subject to environmental statutes. However, neither the federal nor state system truly addresses the issue of forest fragmentation.

1. Federal Regulations

Pennsylvania does have a number of interstate pipelines running through the state. These pipelines fall under federal regulations, which pertain mostly to safety and provide little environmental protection. Safety regulations fall under both FERC and PHMSA authority. PHMSA has authority over the transportation of hazardous materials. This includes “flammable, toxic, or corrosive natural gas,” including “liquefied natural gas.” PHMSA regulations focus on the safety of pipelines. FERC also

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71. Id.
74. See National Environmental Policy Act, 42 U.S.C. §§ 4331, 4332, 4334, 4335 (2014) (noting that NEPA does not affect other statutory obligations an agency may have under another environmental statute).
places the emphasis on safe transportation and handles the siting process for interstate pipelines. Regulations require all pipelines to apply to FERC, giving detailed project information before any construction. While FERC must consider some environmental effects during this process, its review does not really address forest fragmentation. Federal regulations focus on safety and therefore ignore fragmentation.

A pipeline permit given by either PHMSA or FERC does have environmental limitations under other statutes. First, the National Environmental Policy Act ("NEPA") requires an environmental review for certain federal projects. Most interstate pipelines will fall under NEPA, requiring an environmental impact statement for a "major Federal action significantly affecting the quality of the human environment." This requires FERC to at least consider the environmental consequences against the costs and consider alternatives, but only provides a procedural protection. This would require the agency to find that the benefit of preventing forest fragmentation outweighs the costs, and courts will give deference on these issues. NEPA will require FERC to prevent forest fragmentation only when the agency finds that the solution is cost-efficient.

An interstate pipeline can also face environmental protection from other federal statutes. NEPA still requires projects to comply with other environmental statutes, most notably the Clean Water Act ("CWA") and the Endangered Species Act ("ESA"). The CWA provides little, if any protection for forests. While the ESA could protect important forest habitat for certain species, the government has listed relatively few species. Department of Interior ("DOI") regulations promulgated under the ESA require all "Federal agencies to confer with the Secretary on any action that is likely to jeopardize the continued existence of proposed species or result in a material adverse effect on the species or its critical habitat" (emphasis added).

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78. Natural Gas Pipelines, supra note 78.
80. Id. § 157.9.
82. Id.
83. See Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 414 (1971) (explaining that courts should give deference to agency decisions that are not “arbitrary” and “capricious” under NEPA).
85. See 33 U.S.C. § 1251 (defining the purpose of the act as protecting "the chemical, physical and biological integrity" of U.S. waters); see HENDERSON, supra note 74, at 15 (explaining that Pennsylvania focuses on erosion and sediment pollution when implementing the CWA).
in the destruction or adverse modification of proposed critical habitat.\footnote{50 C.F.R. § 402.01 (2014).} Though this requires DOI to consider the effect of a natural gas pipeline on certain habitat, it only protects species with an already declining population. DOI must first list a species as endangered or threatened before any of the protections apply.\footnote{16 U.S.C. § 1533.} The statute works retroactively, meaning many species may receive protection after a large portion of core forest disappears. The federal government only recognized fourteen endangered or threatened species in Pennsylvania despite a number of species with declining populations.\footnote{See PNHP Species List, PA. NATURAL HERITAGE PROGRAM, http://www.naturalheritage.state.pa.us/species.aspx (last visited Feb. 5, 2016) (considering those species which cause "conservation concern"); Environmental Conservation Online System: Listed Species Believed to or Known to Occur in Pennsylvania, U.S. FISH & WILDLIFE SERV., http://ecos.fws.gov/tess_public/pub/stateListingAndOccurrenceIndividual.jsp?state=PA&s8fid=112761032792&s8fid=112762573902 (last visited Feb. 21, 2016); see GOODRICH ET AL., supra note 27, at 8 (stating that nearly twenty percent of Pennsylvania’s species are on "special concerns lists").} Though the ESA could protect important forest habitats, DOI has only offered protection to a limited group of species within Pennsylvania.

The environmental protections offered under federal statutes provide little prevention against the negative impacts of forest fragmentation. For this reason, the State of Pennsylvania must look to its own regulations. Unfortunately, these also fail to provide adequate protection for forest habitats.

2. Pennsylvania Regulations

Before 2012, Pennsylvania and Alaska were the only two natural gas-producing states without an agency designated to monitor intrastate pipelines.\footnote{LEACH, supra note 67, at 7.} With Act 13 of 2012, Pennsylvania made the first substantial changes to its Oil and Gas Act since 1984.\footnote{HENDERSON, supra note 74, at 5.} Along with Act 127 of 2011, Act 13 finally gave Pennsylvania a governing body for certain pipelines used with "unconventional wells.\footnote{2012 Pa. Laws 87.} The act gave certain powers to PUC, however this only applied to a limited number of pipelines and only for safety purposes.\footnote{58 PA. CONS. STAT. § 3218.5 (2012).}
Governor Tom Corbett signed Act 127 in December of 2011. This act allowed PUC to implement federal safety requirements on intrastate pipelines. Just two months later in February of 2012 he signed Act 13 into law, which attempted to provide better protection for the natural environment, particularly in relation to Marcellus development. The act added “unconventional development” to PUC’s authority. The statute defines unconventional wells as “a bore hole drilled or being drilled for the purpose of or to be used for the production of natural gas from an unconventional formation.” Therefore, the key to the statute’s coverage is “unconventional formations,” defined as:

A geological shale formation existing below the base of the Elk Sandstone or its geologic equivalent stratigraphic interval where natural gas generally cannot be produced at economic flow rates or in economic volumes except by vertical or horizontal well bores stimulated by hydraulic fracture treatments or by using multilateral well bores or other techniques to expose more of the formation to the well bore.

While some have questioned the use of the Elk Sandstone in the definition, it covers most of the Marcellus shale region. In relation to these unconventional wells, the act provided some regulation of pipelines. Act 13 gave PUC certain powers over gathering lines for unconventional drilling. The statute defines gathering lines as “a pipeline used to transport natural gas from a production facility to a transmission line.” This definition only gives PUC authority over one type of pipeline, and does not include longer transmission lines. Even if it included all of

94. Id.
95. HENDERSON, supra note 74, at 5.
96. 58 PA. CONS. STAT. § 3203 (2012).
97. Id.
98. Id.
100. 58 PA. CONS. STAT. § 3203 (2012).
the pipelines required in Marcellus development, Act 127 still only gave PUC the right to regulate safety. The only state agency who has express authority over pipeline siting fails to consider environmental issues such as fragmentation.

The Commonwealth’s environmental statutes that apply to all projects, including pipelines, offer limited protections, which do not address forest fragmentation. For example, a pipeline will likely fall under the Clean Streams Law during construction phase. Regulations under the law cover “Earth disturbance associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities.” Another statute, the Dam Safety and Encroachment Acts, provides certain regulations for “water obstructions and encroachments other than dams located in, along or across, or projecting into a watercourse, floodway or body of water, whether temporary or permanent.” These statutes deal with preventing “erosion and sediment pollution” and protecting “waterflow.” This does not provide any protection for Pennsylvania forests during the siting process.

The only way the state can really affect the location of a pipeline is through the Pennsylvania Natural Heritage Program (“PNHP”), which protects threatened and endangered species. During the permitting process for a pipeline, the PNHP uses the Pennsylvania Natural Diversity Inventory (“PNDI”) Environmental Review Tool. If the pipeline passes through important habitat, then the project may have to avoid the area or at least mitigate the impacts. Though this provides some protection for important habitat, it really serves to inform the permit process. Though it does include “species with unique or specific habitat needs or declining populations,” the tool waits until others are “rare, threatened or endangered” on either federal or Pennsylvania lists. Like the federal program, this protection applies largely after a problem already exists. These major environmental laws that apply to natural gas pipelines do not address the siting process. Without a sufficient siting process, the Commonwealth has little control over the environmental impacts of the

102. HENDERSON, supra note 74, at 14–15.
103. 25 PA. CODE § 102.1 (2010).
105. HENDERSON, supra note 74, at 14.
106. Id. at 14–15; 25 PA. CODE § 102.1 (1972).
107. HENDERSON, supra note 74, at 14–15.
108. Id.
110. PNHP Species Lists, supra note 89.
pipeline route, including forest fragmentation. The Commonwealth must consider both its ability and obligation to prevent further forest fragmentation through better pipeline siting requirements.

3. Pennsylvania’s Ability and Obligation to Prevent Fragmentation

Pennsylvania needs an efficient system of pipeline siting that limits forest fragmentation effects caused by Marcellus shale development. Before the Marcellus boom, Pennsylvania already had 8,600 miles of pipelines.111 This number will only continue to expand.112 Depending on how quickly the industry grows, Pennsylvania could see an additional 10,000 to 25,000 miles.113 The Commonwealth must carefully consider where it allows for pipeline expansion. This raises a question of whether the Commonwealth has any obligation to protect the environment. Although the Commonwealth currently has no adequate pipeline regulations, a recent case interpreted the Pennsylvania Constitution to require the state government to offer better environmental protection for the benefit of all citizens.114

In Robinson Township v. Commonwealth, a group of citizens challenged the constitutionality of the recent changes to the Oil and Gas Act under Act 13 of 2012.115 The case implicates Article 1, Section 27 of the Pennsylvania Constitution or the Environmental Rights Amendment.116 The amendment provides:

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania’s public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.117

113. EXCERPT FROM REPORT 2, supra note 112, at 4.
115. Id. at 915.
116. Id. at 913.
117. PA. CONST. art. I, § 27.
Among a number of issues, citizens used this amendment to challenge a provision that required “uniformity among local zoning ordinances.”\textsuperscript{118} This provision did not allow individual municipalities to decide land use appropriate to their region, because it would need to match a statewide plan.\textsuperscript{119} If a township wished to keep Marcellus development away from historical or important ecological areas, it no longer could.\textsuperscript{120} The court considered this issue to decide whether the Commonwealth had the authority to limit local land use rights.

The case revolved around the Equal Rights Amendment and the duty it imposes on DEP. The Commonwealth argued that the question involved policy, which only the General Assembly could decide “as trustee of Pennsylvania’s public natural resources.”\textsuperscript{121} The citizens countered that the Environmental Rights Amendment protects individual rights and imposes duties throughout the different levels of government.\textsuperscript{122} The court ultimately sided with the citizens for a number of reasons, but most importantly, the court discussed the amendment’s importance in relation to other public concerns.\textsuperscript{123}

Looking back at Pennsylvania’s history, the court noted the reasoning behind the Environmental Rights Amendment. The legislators created it to stop Pennsylvania’s “notable history of . . . shortsighted exploitation of its bounteous environment.”\textsuperscript{124} The court noted that Act 13 served to “provide a maximally favorable environment for industry,” as a way to promote the general welfare.\textsuperscript{125} However, the opinion shows that the Commonwealth’s interest in the general welfare does not outweigh the interest in protecting the environment.\textsuperscript{126} Instead, the constitution created these as “corresponding duties.”\textsuperscript{127} The legislators and regulators may not ignore the environment to promote industry. Though the General Assembly may have wanted to bring jobs and lower energy prices to the Commonwealth,\textsuperscript{128} they had to acknowledge the negatives as well.

\textsuperscript{118} Robinson Twp., 83 A.3d at 915.
\textsuperscript{119} Id. at 979.
\textsuperscript{120} Id.
\textsuperscript{121} Id. at 974.
\textsuperscript{122} Id.
\textsuperscript{123} Id.
\textsuperscript{124} Id. at 976.
\textsuperscript{125} Id. at 975.
\textsuperscript{126} Id.
\textsuperscript{127} Id.
The court also recognized the citizens’ right to bring a lawsuit under the amendment.\textsuperscript{129} Pennsylvania’s Environmental Rights Amendment provides similar protections of the long-standing public trust doctrine, which represents an inherent right.\textsuperscript{130} The constitution “preserved rather than created” the rights found in Article I, also called the Declaration of Rights.\textsuperscript{131} This creates “a right in the people to seek to enforce the obligations.”\textsuperscript{132} Going forward, the case allows citizens to bring such suits on two theories. First, citizens argue that the government has interfered with individual rights.\textsuperscript{133} Second, they may simply assert that the government has acted improperly as trustee.\textsuperscript{134} Pennsylvania’s government must act to protect the environment for future generations.\textsuperscript{135} All of this should encourage the General Assembly, DEP, and DCNR to implement a pipeline siting program.

The Robinson Township case included a “constitutional challenge . . . unprecedented in Pennsylvania history.”\textsuperscript{136} It recognizes that Pennsylvania’s Environmental Rights Amendment does more than just inform the General Assembly’s policy decisions. It requires that they consider the environment and allows citizens to bring suit if they fail to preserve the environment for future generations. The Pennsylvania Supreme Court’s opinion strongly suggests that the government provide better environmental protection, which potentially includes protecting forests from fragmentation. For this reason, they should look to other states and create a pipeline siting process that recognizes the rights given to individual citizens through Article I, Section 27.

\textbf{B. Guidance from Other States}

Though Pennsylvania has a unique position because of its large natural gas reserve, other states can provide examples of more efficient regulations. In some states, the Department of Environmental Protection, or its equivalent, have a much larger role in the siting process.\textsuperscript{137} In some cases,
the agency has direct control over the process and makes the final decision. Other states provide incentives to limit the number of pipeline corridors necessary. This means providing incentives to use existing rights-of-way. Pennsylvania should consider these programs as suggestions for its own pipeline siting process.

1. Involvement of Department of Environmental Protection

Pennsylvania currently gives PUC pipeline siting powers, but only over gathering lines. DEP only has jurisdiction in a limited number of situations. In some states, the Department of Environmental Protection, or its equivalent, has a much larger role in the pipeline siting process. Montana and Florida provide two examples of this. In Montana, the Department of Environmental Quality (“DEQ”) has control over the siting process and makes the final decision. In Florida, the Department of Environmental Protection (“FLDEP”) coordinates the process and makes the recommendation to a siting board who makes the final decision. These processes provide a much more thorough review than Pennsylvania, showing greater consideration of the environmental impacts.

Both Montana and Florida require a similar process when companies apply for certification. Unlike Pennsylvania, where PUC only has siting authority in relation to safety, both require environmental review. In Montana, a developer must first submit an application which includes the impact of the project and alternative routes. DEQ then must make a “completeness” determination to make sure the process may move forward. The next stage includes public notice and hearings, as well as input from other state agencies. During this time, DEQ performs an environmental impact study and issues any necessary permits for the project. The entire process can take over nine months, and must consider the “nature of the probable environmental impact.” Before

101–72-20-1205 (giving the Department of Environmental Quality authority to grant certifications for pipelines).
138. MONT. CODE ANN. § 75-20-201.
139. See N.Y. PUB. SERV. Law § 122(5)(a) (Consol. 2015) (requiring a lesser application fee for certain pipelines in an existing right-of-way).
140. MONT. CODE ANN. § 75-20-301.
141. FLA. STAT. § 403.9404.
142. MONT. CODE ANN. § 75-20-211.
143. Id. § 75-20-216(1).
144. Id. § 75-20-216(2)–(3).
145. Id. § 75-20-216(4).
146. Id.
147. Id. § 75-20-301(b).
approval, the department must “find . . . that the facility minimizes adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives.” The process provides an in depth review, which must include minimizing environmental effects.

Florida has a very similar process to Montana, but differs in who makes the decision and how they evaluate the environmental impacts. Again, there is an application and completeness ruling. The review process also includes a series of hearings and public notices. Despite these similarities, FLDEP does not have decision-making authority like DEQ. Instead, the agency uses an administrative law judge, who gives a ruling that the siting board uses for final approval. This administrative law judge only has to balance the environmental impacts against the public need. For this reason, Montana’s model provides better environmental protection because it requires minimal effects in light of the need and allows DEQ to make the final decision. Regardless, both states have a thorough review process for pipeline siting.

In addition to more in depth environmental review, both state’s agencies also have some oversight once the siting process has ended. First, both can provide certification with certain conditions to better protect the environment. In Montana, this “may require the applicant to post performance bonds to guarantee successful reclamation and revegetation of the project area.” After granting certification, DEQ has the responsibility of monitoring the project and “preventing noncompliance.” In Florida, the statute gives FLDEP express authority to enforce the permit and conditions. After a thorough review process considering the environmental impacts, both agencies may ensure that the developers actually protect Montana and Florida’s environment.

Pennsylvania should consider the benefits of having an environmental agency lead the pipeline siting process. With no real siting process in place, the legislature should provide some direction. This could include both DEP and DCNR, especially since Marcellus development still has a number of unknown environmental effects. DEP who aims to “prevent pollution and

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148. Id.
150. Id. § 403.9411.
151. Id. § 403.9406.
152. Id. § 403.9415.
155. Id. § 75-20-402.
restore . . . natural resources,”157 and DCNR with the “mission . . . to conserve and sustain Pennsylvania’s natural resources for present and future generations’ enjoyment,” 158 are well suited to address forest fragmentation during the pipeline siting process. Addressing the issue through a more thorough review would allow DEP, and possibly DCNR, to carry out its mission statement while better protecting citizens’ constitutional rights under the Environmental Rights Amendment.

2. Utilizing Current Rights-of-way

Pennsylvania may also address forest fragmentation by encouraging siting where other structures have already transformed forestland. Some states offer incentives to natural gas companies who use existing rights-of-way. This could help Pennsylvania coordinate the large number of pipelines required as Marcellus development continues. In New York, companies who use these rights-of-way have a monetary incentive and sometimes an exemption from the siting process altogether.

Certain pipelines require a “certificate of environmental compatibility and public need.” 159 Potential pipeline developers must submit an application if the project meets the statute’s definition of a “major utility transmission facility.” This includes “fuel gas” pipelines over a thousand feet which meet a certain pressure requirement. 160 More importantly though, it creates an exception for pipelines using certain rights-of-way including a “state, county or town highway or village street.”161 Though only a limited exception, it still provides some incentive. The application process requires a time investment from the agency and delays the developer’s plans. Both can save time on the review process if developers use certain rights-of-way.

The statute and regulations also require a fee as part the of application materials. For pipelines over ten miles, the developers have incentive to use existing rights-of-way in certain circumstances. The regulations require a fee to fund the application review process and developers can lower expenses by using existing rights-of-way.162 Unfortunately, the incentive

159. N.Y. PUB. SERV. § 121.
160. Id. § 120.
161. Id.
only applies to the shortest pipelines, running from ten to fifty miles. Creating a new transmission right-of-way doubles the fee. A ten- to fifty-mile long pipeline that uses new rights-of-way requires 100,000 dollars. If the pipeline can use existing rights-of-way for ninety percent of the project, regulations require 50,000 dollars. Companies can save a significant amount of money in the application phase. Since the applicants must provide the fee with the initial application, it presents up-front costs to developers. The lower fee increases the incentive to save money before the company has even started to construct or to benefit from the project.

New York’s system presents both practical and environmental advantages. It benefits both the state agency and the developer. It allows the state to save time on the review process by adding pipelines to already approved rights-of-way. It also allows developers to save on initial costs. While this solution will not work in all areas, specifically those lacking a large number of existing rights-of-way, it can help address the issue of forest fragmentation. Pennsylvania, through a similar system, can limit the effects by preventing “pipeline networks [that] crisscross and subdivide habitat structure.”

Since any deforestation creates edge forest and changes the habitat for 300 feet along the pipeline route, use of existing rights-of-way could protect important core forests. Pennsylvania needs to encourage pipeline developers through both financial and time incentives to better coordinate their projects. Where possible, companies would have little reason to create new rights-of-way and would therefore need to clear less forest. If the state gives DEP, and possibly DCNR, control over the siting process, they could promulgate regulations similar to New York’s. Pennsylvania could pass on the costs to developers through application fees and save time on siting review. Pennsylvania would benefit from this system by protecting its forests, with limited additional expenses for the agencies.

CONCLUSION

Pennsylvania needs an adequate pipeline siting process to address the issue of forest fragmentation in light of the recent Marcellus shale development. Forest fragmentation affects both the amount and quality of forest habitat in the state. It divides the forests into smaller and smaller core forest segments, which isolates and endangers certain species.

163. Id.
164. Id.
165. Id.
166. SLONECKER ET AL., supra note 24, at 9.
Fragmentation negatively affects the already declining forestland in Pennsylvania. With its roads, well pads, water impoundments, and pipelines, Marcellus shale development will further reduce forest habitat. As the industry continues to expand, Pennsylvania must address forest fragmentation.

The Commonwealth’s current law and regulations provide almost no environmental protection related to pipeline siting. The only real review, by PUC, considers safety. Without any meaningful environmental review, Pennsylvania should look to other states for guidance. Some states (those that involve state environmental agencies in the siting process) also consider environmental issues during a thorough review process. Other states provide incentives for companies to use existing rights-of-way, saving both time and money. A combination of these two approaches could address the issue of forest fragmentation in Pennsylvania. DEP should consider forest fragmentation as just one element of environmental impact. They should also encourage companies to use existing rights-of-way, which would limit the amount of forestland cleared. Pennsylvania needs to address forest fragmentation during pipeline siting review and therefore, the state legislature should give DEP authority by following the example of other states.
COMPELLED COSTS UNDER CERCLA: INCOMPATIBLE REMEDIES, JOINT AND SEVERAL LIABILITY, AND TORT LAW

By Luis Inaraja Vera*

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INTRODUCTION

Applying the current Supreme Court test, if Company A is seeking to recover, under Comprehensive Environmental Response Compensation and Liability Act ("CERCLA"), costs associated with the cleanup of a property, it could find itself in one of two very uncomfortable situations. First, Company A may have been held liable for 100% of the costs and not be able to recover a fair share from some of the other parties involved. If Company A could be in the even more troubling scenario in which it has no cause of action under the statute to recover part of its costs.

The original version of CERCLA included a provision—section 107(a)—allowing for the recovery of certain cleanup costs. In 1986, Congress passed the Superfund Amendments and Reauthorization Act ("SARA") to solve the multiple problems concerning the Act itself and its implementation by the Environmental Protection Agency ("EPA"). One of the main changes was the incorporation of section 113(f), which recognized the right to seek contribution from other potentially responsible parties under certain conditions. The existence of two different sections in the statute under which a party could recover its cleanup costs created diverging interpretations that were later addressed by the United States Supreme Court.

However, several years after the Supreme Court adopted a comprehensive test to clarify the interplay between the two causes of action in Atlantic Research, situations where uncertainty still remains are still generating litigation, as recent cases such as Hobart Corp. v. Waste

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1. See infra Part IV.B.
2. Id.
7. Cooper Indus., Inc. v. Aviall Serv., Inc., 543 U.S. 157 (2004); see also United States v. Atl. Research Corp., 551 U.S. 128, 131–32 (2007) (providing a case in which the Supreme Court of the United States recognized that “Courts have frequently grappled with whether and how PRPs may recoup CERCLA-related costs from other PRPs”).
Management of Ohio and LWD PRP Group v. Alcan Corp. show. This article argues that the complications that federal courts are having to deal with when deciding these issues are a result of significant flaws in the test laid out by the Supreme Court in Atlantic Research, and suggests an alternative test that would avoid these problems. Part I explains how courts have defined the interplay of both causes of action since the enactment of the SARA amendments. Part II addresses the shortcomings of the framework adopted by the Supreme Court. Part III suggests an alternative approach to these issues. Part IV analyzes why the arguments advanced by the Supreme Court in Atlantic Research do not support the current test.

I. FROM THE ORIGINS OF CERCLA TO THE CURRENT FRAMEWORK ADOPTED BY THE SUPREME COURT

A. The Basic Principles of CERCLA

CERCLA was enacted by Congress in 1980, shortly after President Carter’s electoral defeat. The statute’s legislative process has been characterized as “peculiar” due to, among other things, the lack of mark-up sessions or hearings. To reach a complicated compromise, most of the negotiations occurred behind closed doors and therefore never became part of the legislative history. As a result, the version of the statute that was
finally enacted contained numerous ambiguities and inconsistencies. Some members of Congress later addressed this situation by attempting to incorporate a series of post hoc statements to the legislative history.

CERCLA was enacted with the double purpose of ensuring the cleanup of hazardous waste sites while placing the economic cost of such cleanup on the so-called Potentially Responsible Parties (“PRPs”), pursuant to the polluter pays principle. Section 107(a) provides that the following persons may be held liable under the act:

(1) the owner and operator of a vessel or a facility, (2) any person who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of, (3) any person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of hazardous substances . . . and (4) any person who accepts or accepted any hazardous substances for transport to disposal or treatment facilities, incineration vessels or sites selected by such person, from which there is a release, or a threatened release which causes the incurrence of response costs, of a hazardous substance.

A mere reading of subsections (a)(1) and (a)(2) of the Act reveals that the current owner of a facility is a PRP even if he did not own the property at the time of the release of hazardous substances. On the other hand, a previous owner will only be deemed a PRP if she owned the property at that particular point in time. Some authors have criticized the harsh results this regime can lead to, especially in light of the courts’ interpretation that the statute allowed the imposition of joint and several liability on PRPs.

16. Id. at 202 (quoting a statement of Representative Harsha, who indicated that “we are establishing civil liability and criminal penalties in this legislation, and numerous questions have been raised as to what we are doing to common law with this new statute. These are not spurious issues. They are going to be litigated and the courts are going to have a field day in ridiculing the Congress on passing laws that are vague, internally inconsistent, and using tools such as superseding laws which are in conflict without any further guidance. This bill is not a superfund bill--it is a welfare and relief act for lawyers.” 126 Cong. Rec. 31,970 (1980)).
17. Id. at 204.
21. Id. at 123 (citing Alan J. Topol & Rebecca Snow, SUPERFUND LAW AND PROCEDURE § 1:1 (2008–2009 ed.)). As some authors have noted, CERCLA allows for joint and several liability, but
Under the original version of the statute, this framework had the potential of leading to two troubling situations: (i) a party could find itself in the position of having to pay the costs for the remediation of an entire site, even if it only contributed a small part of the waste, and (ii) a landowner who purchased the site without knowing it was contaminated could be required to incur the full cost of the remediation.

B. The SARA Amendments

In 1986, CERCLA was amended to fill several gaps, the most relevant for the purposes of this paper being: (i) establishing a right to contribution and (ii) incorporating a statute of limitations. The right to contribution is contemplated in section 113(f)(1), which provides:

Any person may seek contribution from any other person who is liable or potentially liable under section 9607(a) [section 107(a) of the Act] of this title, during or following any civil action under section 9606 [section 106 of the Act] of this title or under section 9607(a) of this title . . . Nothing in this subsection shall diminish the right of any person to bring an action for contribution in the absence of a civil action under section 9606 of this title or section 9607 of this title.

Related to this, subsection (f)(2) incorporates the so-called “settlement bar,” which makes parties who have reached an “administrative or judicially approved settlement” with the United States or a State immune from contribution claims concerning the matters dealt with in such agreement. However, any person meeting the requirements in 113(f)

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22. Gershonowitz, supra note 20, at 123.
25. See 42 U.S.C. § 9606(a). (authorizing governmental abatement actions). It provides that “In addition to any other action taken by a State or local government, when the President determines that there may be an imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous substance from a facility, he may require the Attorney General of the United States to secure such relief as may be necessary to abate such danger or threat.” Id.
26. Id. § 9613(f)(1).
27. Id. § 9613(f)(2).
(regardless of whether she has settled her liability) may bring a contribution claim against a party who has not resolved its liability in an approved settlement.\textsuperscript{28}

The amendments also added a statute of limitations for both liability and contribution claims. Pursuant to section 113(g), an action under section 107 for the recovery of remedial costs must be commenced (with some exceptions) within six years after the physical remediation is initiated.\textsuperscript{29} On the other hand, actions for contribution under section 113(f) may not be initiated three years after the date of the judgment, administrative order, or judicially approved settlement pertaining to the recovery of response costs or damages.\textsuperscript{30}

As for the two problematic situations described in the last paragraph of Part I.A supra, SARA tempered their harshness. With regard to the first scenario—where a party could be compelled to pay all the costs of the entire remediation, even though it only contributed to part of the contamination—the express recognition of the right to contribution made theretofore easier for PRPs in these situations to recover part of the costs from other PRPs.\textsuperscript{31} The consequences of the second troubling situation—in which a landowner could be required to pay remediation costs for a site that he bought without knowing it was contaminated—have also been minimized through the introduction of the innocent-land-owner defense.\textsuperscript{32} This defense\textsuperscript{33} shields the landowner from liability if he exercised due care and took appropriate precautions and “[a]t the time the defendant acquired the facility the defendant did not know and had no reason to know that any hazardous substance which is the subject of the release or threatened release was disposed of on, in, or at the facility.”\textsuperscript{34}

In short, these amendments substantially modified CERCLA’s initial framework, and minimized some of its malfunctions through the introduction of the innocent-land-owner defense and the right of

\begin{footnotes}
\item[28] Id. § 9613(f)(3)(A)-(B).
\item[29] Id. § 9613(g)(2)(B). But see § 9613(g)(2)(A) (creating a three-year statute of limitations for an action to recover costs from removal.).
\item[30] Id. § 9613(g)(3).
\item[31] Light, supra note 15, at 208 (citing United States v. Conservation Chem. Co., 619 F. Supp. 162, 227 (W.D. Mo. 1985)). (Before SARA, however, some courts recognized the right to contribution. In 1985, a U.S. District Court had concluded that the contribution rights were “particularly appropriate, given the nature of the CERCLA legislative scheme” because “[t]he broad character of the remedial scheme fashioned by Congress strongly evidence[d] an intent not to foreclose the right of contribution”).
\item[32] 42 U.S.C. §§ 9601(35), 9607(b)(3).
\item[33] It has been pointed out that referring to it as a “defense” is a misnomer because § 9601(35) did not create a new defense but merely specified the meaning that should be given to the term “contractual liability” in § 9607(b)(3). RÉVÉSZ, supra note 23, at 735.
\item[34] Id. § 9601(35)(A)(i) (2012).
\end{footnotes}
contribution. As noted earlier, some of the complications that have followed the addition of the right of contribution—a right that had been implied by some courts from section 107(a)—to the statute constitute the main focus of this paper. At this point, it is important to stress that this cause of action—contribution—was given certain features that made it different from the existing liability claim, i.e. a shorter statute of limitations and a restriction through the settlement bar of the potential defendants at which it could be directed. Two of the questions that the introduction of the right of contribution begged were: (i) whether there were any relevant limitations to the right of a PRP to bring a contribution claim under section 113(f); and (ii) whether PRPs could, after the incorporation of section 113(f) to the Act, still bring an action against another PRP under section 107(a).

C. The First Part of the Current Test: The Aviall Decision

The two questions noted above became critical issues in Cooper Industries, Inc. v. Aviall Services, a case decided by the United States Supreme Court in 2004. Aviall Services acquired four aircraft maintenance sites in Texas from Cooper Industries. When it discovered that the site was contaminated, Aviall cleaned it up and brought suit against Cooper Industries under sections 107(a) and 113(f) of CERCLA.

The main issue was whether Aviall was entitled to bring a claim for contribution against Cooper Industries under section 113(f)(1), given that it had not been sued under sections 106 or 107. The District Court concluded that Aviall was barred from doing so in light of the language of section 113(f)(1) that provides “[a]ny person may seek contribution from any other person who is liable or potentially liable under section 9607(a) of this title, during or following any civil action under section 9606 of this title or under section 9607(a) of this title.” The Court of Appeals for the Fifth Circuit ultimately reversed the District Court’s decision, basing its conclusion on the last sentence of section 113(f)(1), which reads: “[n]othing in this subsection shall diminish the right of any person to bring an action for contribution in the absence of a civil action under section 9606 of this title or section 9607 of this title.”

37. Id. at 164.
38. Id. at 165.
39. Id. at 160–61.
40. Id.
41. Id. at 166.
The Supreme Court, however, held that contribution under section 113(f) could only be sought “during or following a specified civil action” and provided several reasons in support of its conclusion. First, the Court noted that, if a party could bring a contribution claim regardless of the existence of a civil action, this condition included in the statute would be rendered superfluous. Second, the majority interpreted the saving clause in the last sentence of section 113(f) as meaning that “[section] 113(f)(1) does nothing to ‘diminish’ any causes(s) of action for contribution that may exist independently of [section] 113(f)(1).” Last, the Court pointed out that section 113(g)(3), which establishes the statute of limitations for contribution claims, only contemplates situations in which there is a judgment or a settlement. The argument was that such a claim could not be brought under section 113(f) given the absence of a point in time from which the statute of limitations would start running in a scenario where, as the one in the case before it, there had been a voluntary cleanup.

The next logical question was whether Aviall could recover at all by bringing a 107(a) suit instead. The majority refused to address this issue, reasoning that the lower courts had not considered it. The dissenting justices, on the other hand, explained that the court had already agreed, in Key Tronic Corp. v. United States, that section 107 enabled a PRP to bring a claim for reimbursement of cleanup costs against another PRP.

D. The Second Part of the Current Test: Atlantic Research

Atlantic Research Corp., a company that retrofitted rocket motors for the United States, caused soil and groundwater contamination of a site operated by the Department of Defense. After cleaning up the site, Atlantic Research sued the United States to recover part of its costs under sections 107(a) and 113(f). In light of the decision in Aviall, Atlantic Research amended its original complaint to exclude section 113(f) as grounds for relief. The District Court held that a PRP was not entitled to recover costs from another PRP under section 107(a) and dismissed the

42. _Id._ at 168.
43. _Id._ at 167.
44. _Id._ at 166.
45. _Id._ at 167.
46. _Id._
47. _Id._ at 168.
48. _Id._ at 172.
49. _Atlantic Research_, 551 U.S. at 134.
50. _Id._
plaintiff’s complaint. The Court of Appeals for the Eight Circuit reversed the District Court’s decision and held that, given that relief under 113(f) was not available to Atlantic Research, it could instead bring a 107(a) claim against the United States. The Supreme Court affirmed the Eight Circuit’s judgment.

The dispute hinged upon the interpretation of section 107(a)(4), which provides in its relevant part that a PRP “shall be liable for . . . (A) all costs of removal or remedial action incurred by the United States Government or a State or an Indian tribe . . . (B) any other necessary costs of response incurred by any other person.” In other words, the issue was whether the expression “any other person” in section 107(a)(4)(B) included other PRPs. The Supreme Court concluded that “any other person” meant any person not mentioned in the previous subparagraph—which refers to the United States, a State, or an Indian tribe. Therefore, a PRP or any other private party may bring cost-recovery actions under 107(a)(4)(B). The Court also clarified the interplay between sections 107(a) and 113(f) and addressed the Government’s arguments in detail.

1. The Current Test for Determining Which Remedy is Available

Citing Aviall, the Court noted that sections 107(a) and 113(f) provide distinct remedies, i.e., the “right to cost recovery in certain circumstances, [section]107(a), and separate rights to contribution in other circumstances, [sections] 113(f)(1), 113(f)(3)(B).” Interestingly, the majority started its explanation of the right of contribution under section 113(f) by citing the definition in Black’s Law Dictionary, which describes the traditional notion of contribution as: “a tortfeasor’s right to collect from others responsible for the same tort after the tortfeasor has paid more than his or her proportionate share, the shares being determined as a percentage of fault.” It then concluded that Congress could not have intended to use this term in a manner inconsistent with its traditional sense and noted that under section 113(f) the right to contribution is also premised on an inequitable

51. Id. at 135.
52. Id.
53. Id. at 142.
55. Atlantic Research, 551 U.S. at 135–36.
56. Id. at 136.
57. Id. at 137.
58. Id. at 139–42.
59. Id. at 139 (emphasis omitted).
60. Id. (quoting Contribution, BLACK’S LAW DICTIONARY (8th ed. 2004)).
distribution of liability. However, the Court did not provide a full explanation of why allowing a PRP to sue under section 113(f) in the absence of a suit or an approved settlement would be inherently inconsistent with Black’s Dictionary’s definition of “contribution.”

According to the Court, in cases in which a PRP has not been held liable to a third party, it may seek recovery under section 107(a) as long as it has incurred cleanup costs. If this party makes a payment pursuant to a settlement agreement or to satisfy a court judgment, it is considered to be reimbursing other parties, and therefore section 107(a) is not available. The Court indicated, as a distinctive feature of section 107(a), that it applies to a party who has itself incurred cleanup costs. This interpretation is consistent with the wording of the statute, which reads: “shall be liable for . . . any other necessary costs of response incurred by any other person.” It is important to note that, while the Court claims that sections 107(a) and 113(a) provide different remedies, the majority added a caveat in footnote six, which reads:

We do not suggest that [sections] 107(a)(4)(B) and 113(f) have no overlap at all. For instance, we recognize that a PRP may sustain expenses pursuant to a consent decree following a suit under [section] 106 or [section] 107(a). In such a case, the PRP does not incur costs voluntarily but does not reimburse the costs of another party. We do not decide whether these compelled costs of response are recoverable under [section] 113(f), [section] 107(a), or both. For our purposes, it suffices to demonstrate that costs incurred voluntarily are recoverable only by way of [section] 107(a)(4)(B), and costs of reimbursement to another person pursuant to a legal judgment or settlement are recoverable only under [section] 113(f). Thus, at a minimum, neither remedy swallows the other, contrary to the Government’s argument.

Three main conclusions on use of the remedies in sections 107(a)(4)(B) and 113(f) may be drawn from the preceding passage and the other

61. Id. at 138–39.
62. Id. at 140.
63. Id.
64. Id.
66. Atlantic Research, 551 U.S. at 140 n.6 (emphasis omitted) (internal citations omitted).
principles laid out in the opinion. First, the triggers for each section are the following: section 107(a) may be used when the plaintiff has incurred costs, 67 and a section 113(f) contribution claim is available during or following a suit 68 or after a PRP has entered into an administratively or judicially approved settlement with the United States or a State. 69 Second, there are certain situations in which—even if the triggers for both section 107(a) and section 113(f) have been met—the plaintiff may only bring suit under one particular section. Section 107(a) is the only avenue that can be used for recovery of costs voluntarily incurred, 70 and contribution under section 113(f) is the sole cause of action if the resulting amounts sought are for reimbursement to third parties. 71 Third, the Court concedes that this differentiation may allow for certain situations—when the PRP incurs “compelled costs”—to fit into both categories. 72 Therefore, regardless of how these scenarios are treated in the future, this framework is not comprehensive and leaves loose ends.

2. The Court’s Position on the Government’s Arguments

The United States argued that if Atlantic Research’s interpretation of 107(a)(4)(B) were adopted, a PRP could (i) avoid the shorter statute of limitations in 113(f), (ii) “eschew equitable apportionment under [section] 113(f) in favor of joint and several liability under [section] 107(a),” and (iii) circumvent the settlement bar in section 113(f)(2). 73 The majority addressed these three concerns 74 and responded by providing a series of arguments of questionable persuasiveness.

In response to the first argument, the Court pointed out that the structure explained in Part I.D.1 would prevent, “at least in the case of reimbursement,” a PRP who has a recognized right to contribution under section 113(f) from taking advantage of the longer statute of limitations provided for cost-recovery actions under section 107(a). 75 As for the second argument, the Court noted that, by the same token, a party may not avoid

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67. Id. at 140.
69. Id. § 113(f)(3).
70. But see Gaba, supra note 12, at 146 (internal citations omitted) (noting that “the Supreme Court never relied on the voluntary/involuntary distinction as the basis of allocation”; however, the language in note six of Atlantic Research definitely takes this factor into account to determine if section 107(a) is the only available remedy).
71. Id. at 148.
72. Atlantic Research, 551 U.S. at 140 n.6 (internal citations omitted).
73. Id. at 138–39.
74. Id. at 139–41.
75. Id. at 139.
reimbursement costs under section 113(f) by imposing joint and several liability on a different party under section 107(a).\(^{76}\) The Court insisted that “[a] choice of remedies simply does not exist.”\(^{77}\) The majority conceded that there could be cases in which a PRP could in fact institute a section 107(a) claim against another PRP. Nonetheless, the Court concluded that any inequitable distribution of expenses that may result could be neutralized if defendant PRP filed a counterclaim under section 113(f).\(^{78}\) This counterargument, however, is not completely satisfactory if there are orphan shares in play, i.e., those that correspond to “contributors to the contamination who are not before the court because they could not be located or they are out of business.”\(^{79}\)

Last, the Court addressed the Government’s argument that permitting PRPs to recover under section 107(a) would eviscerate the settlement bar in section 113(f)(2).\(^{80}\) Section 113(f)(2) provides that those who have resolved their liability either to the United States or to a State are immune from contribution claims.\(^{81}\) Therefore, allowing a PRP to sue another PRP under section 107(a) would enable the plaintiff to seek cost recovery from a party against which it could not have brought a section 113(f) claim. In response to this argument, the Court first pointed out that a defendant PRP who has been sued in circumvention of the settlement bar could always seek equitable apportionment through a section 113(f) counterclaim.\(^{82}\) In that case, as explained in the preceding paragraph, the defendant PRP could have to pay a higher total sum than the one initially contemplated in the settlement agreement with the government if, for example, there were orphan shares.\(^{83}\) The Court provided two other reasons in support of the conclusion that the settlement bar cannot be circumvented in a substantial way by permitting PRPs to sue other PRPs under section 107(a): (i) that the

\(^{76}\) Id. at 140.

\(^{77}\) Id.

\(^{78}\) Id.

\(^{79}\) Gershonowitz, supra note 20, at 147–50. If PRP A brings a section 107(a) successful suit against PRPs B and C, the defendants could have to bear the cost of the entire remediation, i.e., the costs attributable to the plaintiff, the defendants, and any orphan share. This results from the fact that a section 107(a) would allow PRP A to impose joint and several liability upon PRPs B and C. Supra note 21 and accompanying text. The subsequent contribution counterclaim under section 113(f), however, would only allow PRPs B and C to recover from PRP A the costs that the latter was responsible for—there is no joint and several liability in claims under section 113(f). Thus, if there were an orphan share, its associated cost would only be borne by PRPs B and C. Gershonowitz, supra note 20, at 147–50; see Gaba, supra note 12, at 145 (noting that in cases where PRP A is a settling party, the settlement bar would also prevent PRPs B and C from bringing a counterclaim against PRP A).

\(^{80}\) Atlantic Research, 551 U.S. at 140–41.

\(^{81}\) 42 U.S.C. § 9613(f)(2).

\(^{82}\) Atlantic Research, 551 U.S. at 140–41.

\(^{83}\) Supra note 79 and accompanying text.
settlement bar still provides significant protection in cases where section 113(f) is the only available remedy, and (ii) that it continues to have the advantage of resolving the liability with the United States or the State.\textsuperscript{34}

These counterarguments provided by the Court, however, merely explain why the settlement bar is not completely circumvented. They do not deny, however, that the problem will still exist in many instances. The Court’s failure to address this problem ultimately reflects that these claims brought by a PRP under section 107(a) do not fit neatly in the structure of CERCLA as the Court conceives it.

II. THE CURRENT PROBLEMS WITH THE SUPREME COURT’S TEST

A. Two-Remedy or No-Remedy Situations

As explained earlier, the test that the Supreme Court adopted in Aviall and Atlantic Research left some important loose ends.\textsuperscript{85} The main difficulty stems from the fact that applying the rules provided in these two decisions leads to unsatisfactory results. There are two problematic situations that can arise.

First, a party that has reimbursed costs to another party may have no available action under section 107(a) or section 113(f). For example, what CERCLA claim would PRP B bring if PRP A cleans a site voluntarily, then PRP A enters a private agreement with PRP B for the reimbursement of part of these costs and PRP B then intends to sue PRP C? Applying the test in Atlantic Research, PRP B would need to have incurred cleaning costs by itself to be able to file a claim under section 107(a), which is not the case. Further, PRP B may only bring a claim under section 113(f) if it has been sued under section 106 or section 107, or if it has entered into an administrative or judicially approved settlement.\textsuperscript{86} This condition is not met either—this is a mere “private settlement.” Thus, PRP B would not be able to sue under either section 107(a) or section 113(f). Another variation of this problem would arise when governmental entity A reimburses the costs incurred by governmental entity B and then seeks to bring an action against a PRP.\textsuperscript{87} Again, governmental entity A cannot bring a claim under section

\textsuperscript{34} Atlantic Research, 551 U.S. at 142.

\textsuperscript{85} Supra Part I.D.1.

\textsuperscript{86} See Gaba, supra note 12, at 166. (explaining that one court has considered that the potential plaintiff should be able to bring an action under section 107(a), adopting a non-obvious interpretation of the word “incurred.” For the reasons noted below, however, channeling these lawsuits through section 113 would be more appropriate.)

\textsuperscript{87} Gershonowitz, supra note 20, at 148–49.
107(a)—because it has not incurred costs—or section 113(f)—because there has not been a previous suit or approved settlement. 88

Second, a PRP that incurs costs after a section 106 or section 107 suit, or an administrative or judicially approved settlement, has two potential causes of action. The PRP may bring a claim under section 107(a) because it “incurred” costs. The PRP may also bring a claim under 113(f) due to the suit or approved settlement. 89 This scenario involving the so-called “compelled costs” was briefly mentioned in a footnote in Atlantic Research, but the Court did not clarify what the appropriate remedy or remedies in that case would be. 90 As explained above, the Court responded to the main arguments raised by the government by insisting that there was generally no overlapping between section 107(a) and section 113(f). The Court nonetheless conceded that the compelled-costs scenario would create this duplicity of remedies. The next subsection analyzes this particular situation, which has arisen in various cases, most recently in Hobart v. Waste Management of Ohio 91 and LWD PRP Group v. Alcan Corp. 92

B. A Closer Look at the Two-Remedy Problem: Compelled Costs

Several courts have been faced with the challenge of dealing with situations where the plaintiff has incurred costs after either being sued or after entering an administrative or judicially approved settlement, 93 which applying the general Atlantic Research test, would allow the plaintiff to bring an action under both sections 107(a) and 113(f). However, the majority of circuits concluded that section 113(f) provides the only available remedy. 94 The Court of Appeals for the Sixth Circuit has recently

88. Id. at 153; see also Town of Windsor v. Tesa Tuck, Inc., 935 F. Supp. 317 (S.D.N.Y. 1996) (deeming that the governmental entity in question had incurred response costs by reimbursing the other governmental entity). As an author points out, given the test set out in Atlantic Research, the case would now be decided differently. Gaba, supra note 12.
89. Atlantic Research, 551 U.S. at 140 n.6.
90. Id.
91. See Hobart Corp. v. Waste Mgmt. of Ohio, Inc., 758 F.3d 757 (6th Cir. 2014) (illustrating the situation where a party could potentially sue under section 107 and section 113), cert. denied, 135 S. Ct. 1161 (2015).
92. LWD PRP Gp. v. Alcan Corp., 600 F. App’x 357 (6th Cir. 2015).
93. See, e.g., Niagara Mohawk Power Corp. v. Chevron U.S.A., Inc., 596 F.3d 112, 128 (2d Cir. 2010); Agere Sys., Inc. v. Advanced Envtl. Tech. Corp., 602 F.3d 204, 227–29 (3d Cir. 2010); AVX Corp. v. United States, 518 F. App’x 130, 135 & n.3 (4th Cir. 2013); see Hobart Corp., 758 F.3d at 767 (providing an example of a case in which the plaintiff incurred costs after entering an administrative settlement); Bernstein v. Bankert, 733 F.3d 190, 204–05 (7th Cir. 2012); Morrison Enters., LLC v. Dravo Corp., 638 F.3d 594, 603–04 (8th Cir. 2011); Solutia, Inc. v. McWane, Inc., 672 F.3d 1230 (11th Cir. 2012), cert. denied, 133 S. Ct. 427 (2012).
examined two cases on compelled costs, which shows that this issue is still unresolved and is still giving rise to litigation.

In Hobart, Hobart Corp. and others ("Appellants") were PRPs with respect to the South Dayton Dump and Landfill Site. In Hobart, 758 F.3d at 764. Although they were never sued by EPA, they entered into an administrative settlement contemplated in section 113(f)(2). Having incurred response costs that they claimed exceeded their equitable share, Appellants filed a suit against other PRPs under both CERCLA sections 107 and 113(f)(3)(B). The defendants filed a motion to dismiss arguing that the three-year statute of limitations applicable to section 113(f)(3)(B) had passed, and that section 107(a) was not available to Appellants because sections 113(f) and 107(a) provide mutually exclusive recovery avenues. The District Court agreed and granted the motion to dismiss.

The Court of Appeals for the Sixth Circuit recognized that, under the existing precedent, Appellants would be able to file their claim under both section 107(a) and section 113(f). The majority reasoned that Appellants had incurred costs, which permitted them to sue under section 107(a) and had entered into an administrative settlement, thus enabling them to bring a contribution claim under section 113(f)(3). Nevertheless, the court ultimately held that "if section 113(f)'s enabling language is to have bite, though, it must also mean that a PRP, eligible to bring a contribution action, can bring only a contribution action." This conclusion was based on the premise that sections 107(a) and 113(f) provide mutually exclusive causes of action.

In January of 2015, in LWD PRP Group, the Sixth Circuit was asked to reconsider Hobart's holding on the compelled-costs issue. In the context of a dispute over when the three-year statute of limitations started running—at the time of the settlement or of the completion of a removal action—the court noted that footnote six in Atlantic Research "merely reserves the question of whether the remedies overlap or not." Moreover, the court pointed out that the conclusion reached in Hobart was still valid and that a PRP can only recover costs incurred as a result of an

95. Hobart, 758 F.3d at 764.  
96. Id.  
97. Id. at 765.  
98. Id. at 766.  
99. Id.  
100. Id. at 768.  
101. Id.  
102. Id.  
103. Id. at 769.  
104. LWD PRP Grp., 600 F. App’x. at 364–65.  
105. Id. at 365.
administrative settlement by way of section 113(f).\textsuperscript{106} The Supreme Court in Atlantic Research, however, made it clear that this was the kind of situation where an overlap would be possible and laid out a test that strongly suggests that both causes of action would be available to a plaintiff.\textsuperscript{107}

The main complications associated with this second situation—availability of two similar but distinct remedies—were pointed out by the United States in Atlantic Research. The issue in these cases is not the choice itself, but the consequences that derive from allowing a PRP to sue another PRP under section 107(a). The PRP with the two possible causes of action would choose the most favorable, i.e., section 107(a), because it would allow it to benefit from the longer statute of limitations; to circumvent, if necessary, the settlement bar in section 113(g); and to potentially impose joint and several liability upon another PRP. The problem with allowing a PRP to impose joint and several liability on another PRP, as explained in more detail in Part IV.B, is that it may lead to an inequitable allocation of costs. As the preceding cases show, while some courts have ruled on how to address these choice-of-remedy situations, this issue is still spurring litigation eight years after Atlantic Research, and some circuits have not yet tackled it, which strongly suggests that the uncertainty will persist, especially in light of the Supreme Court’s reluctance to accept for review cases like Hobart.

III. THE PROPOSAL: CONTRIBUTION ACTION UNDER SECTION 113(f) FOR ALL PRPs

Many of the problems that have arisen with the Aviall/Atlantic Research test result from the possibility that a PRP institute a section 107(a) suit against another PRP. The framework that allows this situation to occur also creates the potential for scenarios, fraught with uncertainty, in which PRPs would be entitled to file a suit under both sections 107(a) and 113(f) or under neither of these sections. This article proposes adopting the rule that PRPs may only bring suits under CERCLA through the contribution cause of action in section 113(f).\textsuperscript{108} Permitting those parties to do so in the absence of a civil action or approved settlement would prevent many of the problems identified above. It is worth pointing out that, given the Supreme

\textsuperscript{106} Id.

\textsuperscript{107} Atlantic Research, 551 U.S. at 140; Gershonowitz, supra note 20, at 143 n.6.

\textsuperscript{108} It is worth noting, however, that allowing non-liable PRPs—e.g., innocent landowners—to sue liable PRPs under section 107(a) may not be excessively problematic because it does not create some of the problems explained infra in Part IV.A, B.
Court’s position on the issue and the extreme unlikelihood that the Court will overrule the Aviall and Atlantic Research decisions, the suggested modification would have to be adopted through a legislative amendment. Meanwhile, or in absence of such statutory amendment, courts have the option of construing the Supreme Court’s framework in a way that avoids the negative consequences of giving the plaintiff a choice of remedy in the compelled-costs scenario.\(^{109}\)

**A. The Legislative Amendment Alternative**

While the proposed framework is arguably supported by the current version of statute, its full implementation would require a legislative amendment in light of the Supreme Court’s interpretation of section 113(f).\(^{110}\) As explained earlier, one of the central issues in Aviall related to the proper construction of the saving clause in the last sentence of section 113(f)(1),\(^{111}\) which provides that nothing in that subsection “shall diminish the right of any person to bring an action for contribution in the absence of a civil action under section[s]9606 . . . [and] 9607.”\(^{112}\) Although the Supreme Court finally interpreted this provision as referring to “any cause[s] of action for contribution that may exist independently of section 113(f)(1),”\(^{113}\) this clause would certainly support, read literally, that PRPs may sue for contribution absent a previous suit or approved settlement, as the Court of Appeals held in this same litigation.\(^{114}\) Amending the first sentence of section 113(f)(1) to remove the reference to civil actions under sections 106 and 107(a) would resolve any potential ambiguity in this regard.

One of the other issues that must be addressed is that section 113(g)(3) does not currently prescribe when the three-year statute of limitation would start running in cases in which two PRPs enter into a private agreement or where the cleaning is voluntary. Using this section for all PRPs, therefore, would require extending the scope of section 113(g)(3) to include these situations. If the PRPs have signed a private agreement, the date of signature could be used as the beginning of the three-year period. If the cleanup has been voluntary, the provisions in 113(g)(2)—which regulate

\(^{109}\) *Infra* Part III.B.

\(^{110}\) *Supra* Part I.C, D.

\(^{111}\) *Aviall*, 543 U.S. at 166.


\(^{113}\) *Aviall*, 543 U.S. at 166, 167.
the timeframe for the initiation of recovery costs under section 107(a)\textsuperscript{114}—
could be either formally adopted or applied analogically.

These modifications, coupled with an amendment of section 107(a)(4)(B) to prevent PRPs from suing for cost recovery under section 107, would eliminate the situations in which a PRP has two potential causes of action—i.e., compelled costs—or no cause of action at all. In the case in which a PRP incurs costs after a settlement agreement following a section 106 or section 107 claim, the double remedy would be eliminated, leaving the PRP with only a section 113 cause of action. Thus, fact patterns such as the one in \textit{Hobart}, in which a PRP seeks reimbursement after a consent decree,\textsuperscript{115} would allow the PRP to file a section 113(f) claim without a potential overlapping section 107(a) cause of action. Courts could achieve a similar result, i.e., where only one cause of action would exist, by channeling these claims through section 107(a).\textsuperscript{116} However, PRPs would still be able to circumvent the settlement bar or impose joint and several liability upon other PRPs. Further, by adopting the section 113(f) avenue for all PRPs, in scenarios when the PRP is reimbursing costs to another party pursuant to a private agreement—a potentially no-remedy situation under the Supreme Court test—the plaintiff would be able to seek recovery under section 113(f). More generally, this approach would also avoid the advantage that some PRPs have in factual patterns such as that in \textit{Aviall}, where, despite not having a choice of causes of action, they can nonetheless sue another PRP under section 107, potentially imposing joint and several liability on the defendant and circumventing the settlement bar.

\textbf{B. Alternative Option for Federal Courts: Limiting PRPs' Suits Under Section 107(a) Through Judicial Interpretation}

Although the full implementation of the proposal described above would eliminate both the no-remedy and the two-remedy situations, courts

\textsuperscript{114} See Superfund Amendments and Reauthorization Act of 1986 § 113(g)(2) ("[A]n initial action for recovery of the costs referred to in section 9607 of this title must be commenced—(A) for a removal action, within 3 years after completion of the removal action, except that such cost recovery action must be brought within 6 years after a determination to grant a waiver under Section 9604(c)(1)(C) of this title for continued response action; and (B) for a remedial action, within 6 years after initiation of physical on-site construction of the remedial action, except that, if the remedial action is initiated within 3 years after the completion of the removal action, costs incurred in the removal action may be recovered in the cost recovery action brought under the subparagraph.").

\textsuperscript{115} \textit{Hobart}, 758 F.3d at 764.

\textsuperscript{116} Gershonowitz, \textit{supra} note 20, at 143 (opining that the costs incurred by the plaintiff after a settlement should be recoverable under section 107).
can still—as some have been doing—interpret the Supreme Court’s test in a way that adequately deals with the complications derived from the compelled-cost scenario. To such end, courts should only allow PRPs to sue under section 113 in cases in which the Supreme Court’s test suggests that there may be a possible choice of remedy.

As explained in footnote six of the Atlantic Research decision, the Supreme Court left unanswered the question of whether a PRP may sue under section 107, 113, or both, in a compelled-cost situation. Therefore, the Court left the door open for courts to choose any of these three options. Given the latitude that courts have in this area, channeling all actions between PRPs through section 113(f), as this article suggests, is not only permitted by the Supreme Court’s current framework, but also conforms to the general principles of tort law. Additionally, this framework would prevent the circumvention of the settlement bar by PRPs, and avoid the imposition, by a PRP, of joint and several liability on another PRP.

The traditional notion of contribution is characterized by the relationship between the parties—two or more tortfeasors that seek to recover any costs exceeding their share of fault. Therefore, as will be explained in Part IV, forcing PRPs to use section 113(f) instead of section 107(a) to recover costs from other PRPs would mimic the way contribution operates in tort law. As for the settlement bar, while some commentators have pointed out that the idea of plaintiff’s having the choice between the two possible remedies in the context of “compelled costs” has its supporters, establishing an exclusive cause of action in these cases under 113(f) would prevent plaintiffs from dodging the settlement bar. As noted earlier, the avoidance of the settlement bar may occur in the cases where PRPs are able to sue other PRPs under section 107(a). If PRPs brought these suits under section 113(f), the settlement bar provision would apply and, therefore, this protection for settling parties would not be circumvented. Last, having the contribution action in section 113(f) as the only avenue for recovery in compelled cost situations prevents PRPs from

117. See, e.g., Hobart, 758 F.3d 757; Niagara Mohawk Power Corp., 596 F.3d at 128; Agere Sys., 602 F.3d at 227–29; AVX Corp., 518 F. App’x at135, n.3; Bernstein, 733 F.3d at 204–05; Morrison Enters., 638 F.3d at 603-04; Solutia, Inc., 672 F.3d 1230.

118. Atlantic Research, 551 U.S. at 140 n.6.


120. The argument is based on the fact that there is no language in the statute providing that both remedies are mutually exclusive. See Thomas, supra note 94, at 551.

121. See, e.g., Solutia Inc., 672 F.3d at 1230 (example of courts interpreting the Supreme Court’s test).
imposing joint and several liability on other PRPs to escape part—or all—of their liability.  

IV. ADDITIONAL ADVANTAGES OF THE PROPOSED TEST IN LIGHT OF THE ARGUMENTS ADVANCED BY THE SUPREME COURT

The issue of the potential overlapping of remedies (or the inverse situation in which no cause of action is available) is a consequence of the Aviall and Atlantic Research decisions, in which the Court concluded that a PRP that has incurred costs, but has not been sued and has not entered into a settlement with the government, may sue under section 107(a), but not under section 113(f). Because that enabled some PRPs to potentially use both sections, the Court had to create a test that would limit the ability of PRPs to bring a suit under section 107(a). Otherwise PRPs would systematically choose section 107(a) over the less favorable section 113(f), rendering the latter useless and potentially creating situations of inequitable allocation of cleanup costs. In order to explain why that would not be a real issue, the majority in Atlantic Research advanced a series of arguments that further uncover the weaknesses of the test that the Court finally adopted. Moreover, it is also worth noticing that the legislative history also allows an interpretation of sections 107 and 113 that is different from that endorsed by the Supreme Court and consistent with the proposal suggested in this article.

A. Contribution Under Section 113(f) and the Principles of Tort Law

As noted earlier, the Supreme Court pointed out in Atlantic Research that “[n]othing in [section] 113(f) suggests that Congress used the term ‘contribution’ in anything other” than its traditional sense. The principles of contribution in tort law, however, do not necessarily support this conclusion.

The Court cited Black’s Dictionary to support its view that PRPs who have not been sued under sections 106 or 107, or have not entered into a settlement contemplated in section 113(f)(3), are not eligible to bring a contribution claim under section 113. However, under the Court’s interpretation, PRPs may—if they have incurred costs—sue another PRP

122. See infra Part IV.B.
123. As explained in Part I.B., the statute of limitations for section 113(f) claims is shorter than that generally applicable to section 107(a) causes of action.
124. Atlantic Research, 551 U.S. at 139. For a discussion of this argument by the Supreme Court, see Gaba supra note 12, at 139–40.
for cost recovery under section 107(a). Black’s Dictionary defines “contribution” as: “a tortfeasor’s right to collect from others responsible for the same tort after the tortfeasor has paid more than his or her proportionate share, the shares being determined as a percentage of fault.” The argument follows from this definition that the claim by which a PRP seeks to recover costs from another PRP after the first one has paid an amount in excess of its fair share would have to be brought under section 113(f), i.e., CERCLA’s contribution remedy. Some commentators have explained that the fundamental trait of this right at common law is that “contribution is a cause of action based on the relationships existing between tortfeasors; it has nothing to do intrinsically with the plaintiff.” By the same token, it is reasonable, in the context of CERCLA, to base the choice of who can bring a section 113(f) contribution claim on the status of a party as a PRP, instead of making it hinge upon whether that PRP has been previously sued by a plaintiff or entered into a particular kind of agreement with the government. One of the requirements of the modern system of contribution is common liability, which means that “a tortfeasor seeking contribution must prove both his own liability and that of the other alleged tortfeasor where those liabilities have not been established by a judgment.” Therefore, the emphasis is again placed on the status of a party as a tortfeasor.

An interpretation of CERCLA consistent with this principle of tort law supports allowing PRPs to bring section 113(f) claims against other PRPs, regardless of whether there has been a previous suit or an approved settlement. The Supreme Court read the statute as requiring that PRPs suing other PRPs for contribution under section 113(f) have been previously sued or have entered into a particular type of settlement with the State or the United States. Leaving private settlements—and also other settlements that do not meet the requisites of section 113(f)(3)(B)—outside the scope of section 113(f) is also inconsistent with the principles of tort law. As Prosser, Wade, and Schwartz note, the general rule is that a tortfeasor who has settled with an injured party may sue for contribution, with the most relevant limitation simply being that the settlement be reasonable.

125. Id. at 139 (quoting Contribution, BLACK’S LAW DICTIONARY).
129. Luria, supra note 18, at 333.
The Court assumed that the legislature intended courts to interpret the statute in accordance with general tort law. Nevertheless, for the reasons stated above, the doctrine adopted by the Supreme Court in *Aviall* and *Atlantic Research*—which does not permit PRPs that have not been sued or that have not entered into a particular type of settlement to bring a contribution action—is not consistent with the principles of tort law.

**B. The Problems Derived from PRPs Imposing Joint and Several Liability on Other PRPs**

The proposal advanced in this article would also prevent PRPs from imposing joint and several liability upon other PRPs. This could happen both in the *Aviall/Atlantic Research* scenario, in which PRPs can only sue under section 107(a), or in compelled-cost situations, where a PRP, despite being able to bring a suit under section 113(f), may nevertheless choose to do so under section 107(a). If the harm is indivisible, PRP A, who has incurred cleanup costs, could sue PRP B and impose joint and several liability upon it. This could allow PRP A to obtain a judgment that entitles it to 100% of the cleanup costs, even though PRP A has caused part of the harm. The Supreme Court noted that PRP B could solve this problem by simply filing a counterclaim under section 113(f), and obtaining contribution from PRP A. However, there are at least two potential complications that the Court did not explicitly address. First, if there is a third PRP, which is insolvent, PRP B may have to pay the costs associated with this orphan share. Since PRP B is jointly and severally liable it may not be able to obtain reimbursement, through its contribution counterclaim against PRP A, for the costs associated with the orphan share. Second, as the Third Circuit explained, there is an even more problematic situation. If PRP A enters into a judicially approved settlement with EPA, cleans up the site, and then brings a 107 suit against PRP B, the settlement bar provision in section 113(f)(2) would prevent PRP B from bringing a

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133. While the argument can be made that a court may take this into account in the contribution action and spread the costs of the orphan share between the two other PRPs, the factors that courts generally rely on to allocate costs between PRPs do not contemplate such possibility. See Halliburton Energy Servs., Inc. v. NL Indus., 648 F. Supp. 2d 840, 862 (S.D. Tex. 2009) (enumerating the so-called “Gore factors,” while also noting that this is not necessarily an exhaustive list, especially after *Atlantic Research*). In any event, as some authors have explained, this issue was not directly addressed in *Atlantic Research* and therefore remains an open question. Gershonowitz, supra note 20, at 148–49.

134. *Agere Sys.*, 602 F. 3d at 229.
counterclaim at all.\textsuperscript{135} In a case like this, PRP B would not be able to recover any costs from PRP A.

\textit{C. The Legislative History of the SARA and the Settlement Bar}

The legislative history of the SARA points in two different directions. While the analysis of section 113(f)(1) seems to support the interpretation of the statute adopted by the Supreme Court, some of the more general language included in the House Report No. 99-253(I) ("House Report"), as well as the comments relating to the settlement bar, permit a different reading of the amendments.\textsuperscript{136}

While it is true that the Committee on Energy and Commerce focused, when analyzing section 113(f), on situations where the plaintiff is "alleged or held to be liable under section[s] 106 or 107 of CERCLA,"\textsuperscript{137} this same committee also defined "contribution" generally as a cause of action between PRPs. It explained the following: "CONTRIBUTION ACTIONS: The bill would give potentially responsible parties the explicit right to sue other liable or potentially liable parties who also may be responsible for the hazardous waste site."\textsuperscript{138} The Judiciary Committee also understood the contribution action as the avenue conceived for PRPs, stating that the amendment to the new section 113(g) of CERCLA confirms, as did the Energy and Commerce Committee version, "that potentially responsible parties have a right of contribution under CERCLA."\textsuperscript{139} Moreover, the Committee on Energy and Commerce stressed the importance of the settlement bar to contribution actions in section 113(f)(3) noting that "[i]n addition to encouraging settlement, the section will help bring an increased measure of finality to settlements."\textsuperscript{140} This finality, however, is undermined when PRPs bring a claim against other PRPs under section 107(a).

\textbf{CONCLUSION}

The 1986 amendments to CERCLA created a complex framework that left uncertain whether PRPs could continue using section 107(a) to bring a claim against other PRPs—as some courts had permitted—or if section 113(f) had become their only available remedy. The answer provided by the Supreme Court in \textit{Aviall} and \textit{Atlantic Research} created various problems,

\begin{itemize}
\item \textsuperscript{135} \textit{Id.} at 228.
\item \textsuperscript{137} H.R. Rep. No. 99-253, pt. 1, at 79.
\item \textsuperscript{138} \textit{Id.} at 59.
\item \textsuperscript{139} H.R. Rep. No. 99-253, pt. 3, at 19.
\item \textsuperscript{140} H.R. Rep. No. 99-253, pt. 1, at 80.
\end{itemize}
namely overlapping of causes of action with different statute of limitations, existence of situations when no remedy is available, the possibility that PRPs impose joint and several liability on other PRPs under section 107(a), and the potential circumvention of the statutory protection for settling parties. The issue of compelled costs, in particular, is still generating abundant litigation, as the decisions in Hobart and LWD PRP Group show.

To address these problems, this article proposes an alternative approach under which PRPs would only be able to bring a contribution claim against other PRPs under section 113(f). In light of the latest Supreme Court decisions on this issue, this framework would have to be implemented either by legislative amendment or, in a more limited form, through judicial interpretation. With the first option, the issues that the current model creates would be eliminated: PRPs would have one cause of action—not two or none—sounding in contribution, and consequently, PRPs would not be able circumvent the settlement bar or impose joint and several liability on other PRPs. The second option achieves a similar goal but involves courts using the leeway provided by the Supreme Court’s decision in Atlantic Research to prevent—as some U.S. Courts of Appeals have already done—PRPs from suing other PRPs under section 107 in the compelled-costs scenario.
CONVENIENT TEXTUALISM: JUSTICE SCALIA’S LEGACY IN ENVIRONMENTAL LAW

Rachel Kenigsberg

“No matter how important the underlying policy issues at stake, this Court has no business substituting its own desired outcome for the reasoned judgment of the responsible agency.” – Justice Scalia

Introduction

I. Background
   A. Textualism Overview
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Conclusion

INTRODUCTION

Justice Antonin Scalia’s sudden passing on February 13th, 2016, has ignited a political debate over his replacement. However, few in the legal world will contest the staggering influence Justice Scalia wielded over the Court’s approach to statutory interpretation. Throughout his three decades on the Court, he has consistently and persuasively promoted textualism as

1. J.D. Candidate, Harvard Law School, Class of 2016. The author would like to thank Professor Richard Lazarus for all of his advice.
the best method of statutory interpretation. He believed that in most cases, a decision should be made based on the plain meaning of the text as derived from the ordinary definitions of the individual words and the overall structure of the language. This led Justice Scalia to frequently criticize other Justices for looking beyond the text itself to find meaning, such as relying on legislative history to determine congressional intent. Many scholars view Justice Scalia’s appointment to the Supreme Court in 1986 as key to the rise in the use of textualism in the judicial system. The statistics back them up, as the Supreme Court “cited dictionaries four times as often in 2010 compared to 1985.”

Justice Scalia verbally committed to following the text of a statute “even if [he] think[s] some other approach might ‘accord[d] with good policy’” in a given case. Nevertheless, he did not always follow a textualist approach when actually deciding cases. Specifically when writing opinions in environmental cases, Justice Scalia became increasingly willing to rely on legislative history, economic principles, and other non-text factors. Overall, in environmental law cases, Justice Scalia seemed to progressively abandon his textualist ideals in order to reach outcomes he found preferable.

This paper is organized into five sections, including this introduction. Part I gives a brief overview of the general principles of textualism and then discusses Justice Scalia’s use of textualism while on the Supreme Court. Part II discusses Justice Scalia’s jurisprudence in environmental cases from 1990 to 2000. During this time, Justice Scalia seemed more willing to maintain his textualist principles in environmental cases. Part III of this paper discusses Justice Scalia’s jurisprudence in environmental cases from 2001 to the end of his career. It demonstrates that Justice Scalia increasingly abandoned textualism when handling environmental matters. This paper concludes by arguing that Justice Scalia’s real aim became

5. Id.
limiting environmental regulation, instead of actually following his own textualist principles.

I. BACKGROUND

A. Textualism Overview

Textualism is the principle that judges should make decisions based on the actual text of the Constitution or a given statute. It is based on the idea that judges “must seek and abide by the public meaning of the enacted text, [as] understood in context,” and should “choose the letter of the statutory text over its spirit.” Textualists believe that this approach is the only way to guarantee the preservation of democratic principles and the separation of powers, because only the exact words of a statute are voted on by Congress and signed by the president. A judge that goes beyond the given words is seen by strict textualists as, at best, “disrespect[ing] the legislative process by relying upon unenacted legislative intentions or purposes to alter the meaning of a duly enacted text,” and, at worse, as attempting to seize legislative power.

Pure textualists abhor a judge’s use of legislative history and legislative purpose when making judicial decisions. Textualists argue that legislative history should not be used because “it subverts the requirements of bicameralism and presentment through which Congress must express its intent.” Judge Easterbrook has argued that it “would demean the constitutionally prescribed method of legislating to suppose that its elaborate apparatus for deliberation on, amending, and approving a text is just a way to create some evidence about the law, [if] the real source of legal rules is the mental processes of legislators.” Furthermore, a statute is generally passed after extensive compromise. Accordingly, a committee report or a sponsor’s statement does not represent the view of Congress as a whole, but instead just the view of the given legislator or group of

10. Manning, supra note 7, at 420.
11. Id.
16. In re Sinclair, 870 F.2d 1340, 1344 (7th Cir. 1989).
legislators. Thus, textualists argue that legislative history generally should not be used when deciding a case.

Textualists are also against basing a decision on the purpose of a statute. Legislation is based on elaborate, and often chaotic, compromises in which hundreds of lawmakers vote on legislation “for complicated reasons that may have little or nothing to do with the content of the legislation itself.” This process makes it doubtful that Congress as whole could have a singular intention for passing a statute. Furthermore, these compromises often purposefully leave some issues unresolved, so the Court should be “especially cautious about reading statutes to reflect an underlying consensus on policy goals that extend beyond the statutes’ terms.” Hence, textualists believe in following the letter of the text over the uncertain spirit of the law.

B. Scalia’s Textualism

Throughout Justice Scalia’s time on the Court, he repeatedly emphasized the superiority of textualism over other approaches to statutory interpretation. Within one year of his confirmation, Justice Scalia made clear that he saw his task as a Justice as “giv[ing] a fair and reasonable meaning to the text of the United States Code,” instead of trying “to enter the minds of the Members of Congress.” This language expresses Justice Scalia’s stated belief that “[j]udges interpret laws rather than reconstruct legislators’ intentions,” or worse, attempt to implement their own policy choices.

17. Manning, supra note 7, at 675 (“[T]extualist judges argue that a 535-member legislature has no ‘genuine’ collective intent with respect to matters left ambiguous by the statute itself.”).
19. Id.
20. Id. at 1908 (citing Frank H. Easterbrook, Statutes’ Domains, 50 U. Chi. L. Rev. 533, 548 (1983)).
22. See, e.g., Conroy v. Aniskoff, 507 U.S. 511, 519 (1993) (Scalia J., concurring) (“We are governed by laws, not by the intentions of legislators.”); Blanchard, 489 U.S. at 98–100 (discussing how committee reports and floor statements can be manipulated); Edwards v. Aguillard, 482 U.S. 578, 636 (1987) (Scalia, J., dissenting) (“[D]iscerning the subjective motivation of those enacting the statute is, to be honest, almost always an impossible task.”).
25. Massachusetts, 549 U.S. at 560.
Justice Scalia also viewed textualism as a way of getting politics and personal beliefs out of judicial decisions. A judge’s job is “not to determine what seems like good policy at the present time, but to ascertain the meaning of the text.” In fact, Justice Scalia often concurred in cases just so he could disagree with the majority’s use of legislative history. For example, in *Jett v. Dallas Independent School District*, he “join[ed] Parts I and IV of the Court’s opinion, and Part III except insofar as it relies upon legislative history.” Again, in *Octane Fitness*, Justice Scalia concurred just to note that he disagreed with footnotes one through three, which discussed how the legislative history supported the majority’s holding. These concurrences demonstrate how strongly Justice Scalia believed in following textualism because he has repeatedly spent the time to write his own opinions just so he was not agreeing to support non-textualist arguments. Overall, Justice Scalia believed that deciding cases “begins and ends with what the text says and fairly implies.”

### II. Justice Scalia’s Opinions Between 1990–2000

In 2000, Justice Scalia was given the lowest score on environmental protection of all the then-Justices, based on his votes in environmental law cases. Even then, many legal scholars saw him as apathetic, or even hostile, to environmental concerns. However, the following section demonstrates that during this period, Justice Scalia seemed both more willing to occasionally side with the environmental interest, and more likely to rely upon his textualist principles when siding against the environmental interest. The following cases demonstrate how Justice Scalia attempted to

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31. Scalia & Garner, supra note 26, at 375.
maintain his textualist principles even when handling environmental law cases during this period.

A. Majority in City of Chicago v. Environmental Defense Fund

In *City of Chicago v. Environmental Defense Fund* ("EDF"), the Supreme Court assessed whether Chicago was violating the Resource Conservation and Recovery Act ("RCRA").\(^{34}\) RCRA grants EPA the power to regulate both hazardous waste, under Subtitle C, and non-hazardous waste, under Subtitle D.\(^{35}\) The requirements within Subtitle C are much more rigorous and require EPA to regulate the management of hazardous waste from creation to disposal.\(^{36}\) In 1980, EPA defined hazardous waste to exclude household waste, facilities used to incinerate household waste, and ash produced by the process of incinerating household waste.\(^{37}\) In 1984, Congress passed the “Clarification of Household Waste Exclusion,” which, *inter alia*, stated that a “resource recovery facility . . . shall not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purposes of [Subtitle C] regulation.”\(^{38}\) This amendment was largely seen as Congress trying to ratify EPA’s definition of hazardous waste.\(^{39}\)

EDF sued the City of Chicago for allegedly violating RCRA by allowing the disposal of ash from resource recovery incinerators, which burned household waste in landfills not licensed to accept hazardous waste.\(^{40}\) The City of Chicago argued that this was allowed since household waste disposal was specifically exempted from RCRA in the Clarification of Household Waste Exclusion.\(^{41}\) However, Justice Scalia, writing for the majority, held that RCRA does not exempt this type of ash and thus it must be regulated as a hazardous waste under RCRA.\(^{42}\)

In coming to this decision, Justice Scalia relied solely on the text of the statute. Specifically he looked at section 3001(i), which exempts a facility “that treats, stores, disposes of, or manages hazardous waste.”\(^{43}\) Justice Scalia determined that the absence of the word “generating” in this section

\(^{35}\) Id. at 331–32.
\(^{37}\) § 6921(i).
\(^{38}\) EDF, 511 U.S. at 333–34 (citing 42 U.S.C. § 6921(i)).
\(^{40}\) EDF, 511 U.S. at 330.
\(^{41}\) Id. at 335.
\(^{42}\) Id. at 334–35.
meant that RCRA only excluded the waste these facilities receive, not the waste that these facilities produce. Thus, the text of this exception does not cover ash produced by resource recovery facilities. Overall, Justice Scalia held that the “carefully constructed text of section 3001(i)” made clear that a “resource recovery facility’s management activities are excluded from Subtitle C regulation, [while] its generation of toxic ash is not.”

Justice Scalia confirmed his interpretation by comparing section 3001(i) to the Superfund Amendments and Reauthorization Act of 1986. In that amendment, the Court specifically included the generation of hazardous or liquid wastes in its list of exempted activities. Textualists “generally presume[] that Congress acts intentionally and purposely” when it “includes particular language in one section of a statute but omits it in another.” Thus, Justice Scalia used the Superfund Amendment to demonstrate that Congress specifically chose not to include the generation of waste when passing the Clarification of Household Waste Exclusion.

Furthermore, in coming to this decision, Justice Scalia chose to reject both legislative history and legislative purpose arguments. The City of Chicago argued that the RCRA Amendment, “Clarification of Household Waste Exclusion,” indicated that Congress intended to codify the EPA rule exempting such ash from the definition of hazardous waste. However, Justice Scalia rejected this argument by looking at the specific text of the amendment. He argued that this purpose argument was irrelevant because the plain meaning of the statute “clearly does not contain any exclusion for the ash itself.” The City of Chicago also pointed to a Senate Committee Report that made clear that the exception was supposed to cover “[a]ll waste management activities of such a facility, including the generation . . . of waste.” Scalia rejected this argument by arguing that the statute “is the [only] authoritative expression of the law, and the statute prominently omits reference to generation.” He simply did not believe the Court should rely

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45.  *Id. at 337.
46.  *Id. at 337–38.
47.  *Superfund Amendments and Reauthorization Act of 1986, Pub.L. No. 99-499, § 124(b), 100 Stat. 1689 (“[O]wner and operator of equipment used to recover methane from a landfill shall not be deemed to be managing, generating, transporting, treating, storing, or disposing of hazardous or liquid wastes within the meaning [of Subtitle C].”) (emphasis added).
52.  *EDF*, 511 U.S. at 337.
“upon a single word in a committee report that did not result in legislation.” The legislative history and purpose arguments were irrelevant because the plain meaning of the text clearly did not create an exemption for this type of ash.

City of Chicago demonstrates Justice Scalia following his textualist principles even though it resulted in a major victory for the environmentalists. In this case, he made his decision by analyzing the actual text of the statute and by comparing its language to other similar statutes. He also explicitly rejected the usage of legislative history and legislative purpose in arguing his position. Thus, this case is a striking example of Justice Scalia adhering to his textualist principles and demonstrates how early on in Justice Scalia’s judicial career he was willing to follow these principles even if it meant an environmental victory.

B. Dissent in PUD No. 1 v. Washington Department of Ecology

In PUD No. 1 of Jefferson County, the Supreme Court assessed whether a state could impose additional requirements to obtain a permit under the Clean Water Act (“CWA”). In this case, the State of Washington added a minimum stream flow requirement as part of the necessary certifications for building a hydroelectric power plant under the CWA. The Supreme Court held that a state could, pursuant to § 401 of the CWA, condition certification of a project with a minimum stream flow requirement. Justice Scalia signed on to Justice Thomas’ dissent in this case.

The dissent based most of its argument on two portions of CWA section 401. First, section 401(a)(1) mandates that

[a]ny applicant for a Federal license or permit to conduct any activity . . . which may result in any discharge into the navigable waters, shall provide the licensing or permitting

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53. Id.
54. Id. ("[I]t is the statute, and not the Committee Report, which is the authoritative expression of the law, and the statute prominently omits reference to generation.").
55. See Richard J. Lazarus & Claudia M. Newman, City of Chicago v. Environmental Defense Fund: Searching for Plain Meaning in Unambiguous Ambiguity, 4 N.Y.U. ENVT. L. J. 1, 2–3, 19 (1995) (discussing Scalia’s use of textualism in the case, which led to a victory for Environmental Defense Fund and ruled the “municipal waste combustion” was not exempt under RCRA); Thirty Years of Environmental Protection Law, supra note 33, at 63.
58. Id.
59. Id. at 723.
agency a certification from the State in which the
discharge originates . . . that any such discharge will
comply with . . . applicable provisions of [the CWA].

Second, section 401(d) of the CWA allows a state to place conditions
on the permit including “effluent limitations and other limitations, and
monitoring requirements” that may be necessary to ensure compliance with
various provisions of the CWA and with “any other appropriate
requirement of State law.” The dissenters argued that these two statutes
must be read in harmony. They believed that since section 401(a)(1) was
limited to pollutants, section 401(d) should be similarly read to be limited
to state laws related to discharges of pollutants. This led to the dissenters
arguing, “a State may impose . . . only those conditions that are related to
discharges.” Thus, Justices Scalia and Thomas would have ruled against
Washington’s mandatory stream flow requirement because it was unrelated
to pollutant discharge.

Interpreting the text in relation to other sections of a statute is a
common statutory technique used by textualists. However, the dissenters
gave another reason for their opinion based on the majority’s lack of
“consideration to the fact that its interpretation of section 401 will
significantly disrupt the carefully crafted federal-state balance embodied in
the Federal Power Act.” This argument seems to have led Justice Stevens
to concur simply to chide the dissent for hypocritically departing from the
plain meaning of the text. He stated that he found it surprising that
textualist judges would go beyond the statutory text when “[n]ot a single
sentence, phrase, or word in the Clean Water Act purports to place any
constraint on a State’s power to regulate the quality of its own waters more
stringently than federal law might require.” His argument seems to
suggest that Justices Thomas and Scalia allowed their own opinions on
federalism to trump the apparent plain meaning of the CWA.

Furthermore, Justice Scalia typically started with a “presumption
against federal preemption of state law” in all settings, which can only be

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61. Id. § 1341(d).
62. PUD No. 1, 511 U.S. at 727 (Thomas, J., dissenting).
63. Id. at 728.
64. Id. at 724.
65. See, e.g., Karkkainen, supra note 4, at 407–08 (discussing how Justice Scalia believes
statutory terms must be understood in context).
66. PUD No. 1, 511 U.S. at 724.
67. Id. at 723 (Stevens, J., concurring).
68. Id.
69. Id.
overcome by a clear statement in the given statute.  

For instance, in *American Insurance Association v. Garamendi*, Justice Scalia joined the dissent to argue that the Court incorrectly held that a California law designed to help California Holocaust survivors collect on unpaid insurance claims from German insurance companies was preempted by federal law. Justice Scalia felt that “[c]ourts step out of their proper role when they rely on no legislative or even executive text, but only on inference and implication, to preempt state laws.” Justice Scalia’s argument in this case—that the federal law preempts the state law—is thus somewhat unusual for him. However, this argument is not necessarily contradictory to Justice Scalia’s judicial philosophy, because a clear statement in the text on preemption can overturn his previously stated starting presumption.

It is impossible to know whether the actual text or the federal-state balancing issue was the deciding factor for Justice Scalia. It does seem like the dissenters were skeptical of the regulation from the start since they wrote that “FERC must balance the Nation’s power needs together with the need for energy conservation, irrigation, flood control, fish and wildlife protection, and recreation,” while the “State environmental agencies, by contrast, need only consider parochial environmental interests.” This demeaning language indicates an inherent initial bias against this type of environmental regulation. However, a large portion of their argument seems to be based on the actual text of the CWA. Overall, this case indicates that Justice Scalia, despite possible prejudice against strong environmental protection, still largely adhered to textualism in deciding environmental law cases.

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72. Id. at 443.

73. *PUD No. 1*, 511 U.S. at 735 (Thomas, J., dissenting).

C. Majority in Babbit v. Sweet Home

*Sweet Home* represents another case in which Justice Scalia tried to use textualism to explain his argument but appears to have been actually swayed by background policy rationales. In this case, the Supreme Court looked at whether the Department of Interior (“DOI”) had authority under the Endangered Species Act (“ESA”) to prohibit logging activities in the natural habitat of two endangered species. The ESA makes it illegal for any person to “take” an endangered or threatened species. The ESA defines take as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” DOI promulgated a rule further defining harm to include “significant habitat modification or degradation where it actually kills or injures wildlife.” Thus, whether the DOI had the authority to restrict the timber harvest depended on if the Court upheld its interpretation of “harm.”

The majority held that “harm” was ambiguous and thus the agency was given *Chevron* deference to make a reasonable interpretation. The Court further found that defining “harm,” as including “significant habitat modification or degradation that actually kills or injures wildlife” was reasonable. Thus, the Court upheld EPA’s regulation. Justice Scalia dissented from this opinion.

Justice Scalia began his dissent by arguing that the majority’s ruling “imposes unfairness to the point of financial ruin.” This opening, “which is entirely unsupported in the record,” indicates that Justice Scalia disagreed with the decision to protect an endangered species over the economic interest of the timber industry. This value judgment goes against how Justice Scalia defined the function of the Court in *Burrage*. Specifically, he argued in that case that the “the role of this Court is to apply the statute as it is written—even if [it] think[s] some other approach might ‘accor[d] with good policy.’” According to Justice Scalia’s own words, his judgment that the government should protect financial interest

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75. Babbitt v. Sweet Home Chapter of Cmty’s For A Great Or., 515 U.S. 687 (1995). The two species in question are the red-cockaded woodpecker and the spotted owl. *Id.* at 696.
77. *Id.* § 1532(19).
78. 50 C.F.R. § 17.3 (2012).
80. *Id.*
81. *Id.* at 714 (Scalia, J., dissenting).
over the interest of endangered species should not play any role in his
decision-making.

After this introduction, Justice Scalia goes on to explain why harm does
not include habitat modification or degradation using traditional textualist
approaches. He used multiple dictionaries to explain how the phrase “to
take” when referring to wild animals, “means to reduce those animals, by
killing or capturing, to human control.”

He explained how the ESA’s definition of take expands the word slightly but just to make clear that the
statute covers “not just a completed taking, but the process of taking, and
all of the acts that are customarily identified with or accompany that
process.” Furthermore, he argued that the word “harm” must be read in
light of the other nine words in the definition, which all deal with
“affirmative conduct intentionally directed against a particular animal or
animals.” Prohibiting habitat destruction does not fall within the category
of direct conduct. Noscitur a sociis, the principle of defining a word in a list
based on its shared attributes with the other words on the list, is a common
technique of textualism. Thus, these arguments seem to fit within Justice
Scalia’s typical textualist approach.

However, these textualist arguments are not the only rationale Justice
Scalia relied upon in his opinion. He also argued that “no legislature could
reasonably be thought to have intended” activities like farming and road
building to be subject to strict liability penalties under the ESA. However,
he did not cite any evidence for this proposition. Conversely, in past
decisions the Court has stated that Congress’s intention when passing the
ESA was to “halt and reverse the trend toward species extinction—
whatever the cost.” This indicates that it would be reasonable to believe
that Congress intended these activities to be covered by the ESA.
Furthermore, Justice Scalia’s attempt to “enter the minds of Members of
Congress,” when he said that a legislator passing this bill could not have
intended this result, shows him using a statutory technique he has
previously vehemently opposed. He also seems to be making a value
judgment on what the government should do to protect endangered species.
Justice Scalia has repeatedly and adamantly written against judges deciding

84. Sweet Home, 515 U.S. at 718–19.
85. Id. at 718.
86. The other words defining “to take” are “to harass . . . pursue, hunt, shoot, wound, kill,
trap, capture, or collect, or to attempt to engage in any such conduct.” 16 U.S.C. § 1532(19).
87. Sweet Home, 515 U.S. at 720.
89. Sweet Home, 515 U.S. at 721.
cases based on judicial policy judgments. This suggests that Justice Scalia is willing to rely on both legislative intent and economic arguments when he thinks it strengthens his argument.

Overall, this opinion is an example of Justice Scalia relying on both textualist arguments and his own policy judgments. He refers to the statutory text, structure, legislative intent, and economic principles in determining whether FWS reasonably construed the term “harm” in the ESA. However, he seems to be more influenced by the economic implications of the majority’s ruling than the actual text of the statute. His view against “excessive government regulation” is starting to trump his stated textualist judicial principles. Overall, Justice Scalia seems to have been greatly influenced by his own economic and policy ideas, but still relies heavily on the actual text in making his arguments.

III. JUSTICE SCALIA’S OPINIONS BETWEEN 2001–2016

In the new century, Justice Scalia has increasingly expressed his disdain towards the very concept of environmental regulation. In one opinion, he referred to greenhouse gases (“GHGs”) as the substances that “[EPA] believes contribute to ‘global climate change,’” suggesting that this is merely EPA’s belief instead of an actual phenomenon. In another opinion, he described the U.S. Army Corps of Engineers as “an enlightened despot” that tried to stretch the phrase “waters of the United States” “beyond parody.” This disdain has led him to relax his textualist principles when deciding environmental law cases. The following opinions demonstrate how Justice Scalia started to more selectively use textualist canons and instead rely more heavily on legislative purpose and history when writing opinions in environmental law cases. His desire for less strenuous environmental regulations seemed to overcome his interpretive principles.

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92. See SCALIA & GARNER, supra note 26, at 29 (“In the interpretation of legislation, we aspire to be ‘a nation of laws, not of men.’ This means (1) giving effect to the text that lawmakers have adopted and that the people are entitled to rely on, and (2) giving no effect to lawmakers’ unenacted desires.”); Obergefell v. Hodges, 135 S. Ct. 2584, 2629 (2015) (Scalia, J., dissenting) (“A system of government that makes the People subordinate to a committee of nine unelected lawyers does not deserve to be called a democracy.”).
A. Majority in Entergy Corp. v. Riverkeeper, Inc.

The issue in Entergy was whether EPA could permit power plants to abstain from using the most environmentally safe “cooling water intake structures” on the grounds that the costs of these structures greatly exceeded their environmental benefits. The relevant statutory language of the CWA requires that point sources use “the best technology available for minimizing adverse environmental impact” when deciding the “location, design, construction, and capacity of cooling water intake structures.” EPA chose to perform cost-benefit analyses when determining the best available technology (“BAT”). Justice Scalia, writing for the majority, upheld this use of cost-benefit analyses.

In his opinion, Justice Scalia argued that BAT could mean either the technology that produces the “greatest reduction in adverse environmental impacts at a cost that can be reasonably borne by the industry,” or the technology that “produces a good at the lowest per-unit cost, even if it produces a lesser quantity of that good than other available technologies.”

Justice Scalia continued by arguing that this ambiguity means that EPA should be given deference to determine the meaning of BAT. Justice Scalia’s argument seems to distort several key textualist counter arguments. The definition of BAT seems to turn on the word “minimize.” The Merriam-Webster Dictionary defines “minimize” as “to reduce or keep to a minimum” and defines “minimum” as “the least quantity assignable, admissible, or possible.” Taken together, “minimize” means to reduce or keep to the least quantity admissible or possible. However, Justice Scalia does not follow this definition, but instead proposed a new definition for minimize. He argued that Congress’ use of the modifier “drastic” in front of “minimize” in another part of the CWA demonstrates that “minimize” is not used in its full sense. He asserted that if minimize really meant to reduce “to the smallest amount possible,” then putting drastic before minimize would be superfluous. According to Scalia,

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97. Id. at 213 (citing 33 U.S.C § 1326).
98. Id. at 217–18.
99. Id. at 226.
100. Id. at 218.
101. Id. at 220–26.
104. Id. at 218–19.
105. Id.
because minimize cannot be defined as “the smallest amount possible” in that section of the CWA, it cannot mean “the smallest amount possible” in the disputed section of the CWA.  

After making this elaborate argument that statutes should be read uniformly, he ignored the fact that other provisions of the CWA explicitly mandate that EPA compare costs and benefits when defining the “best” technology that industry must adopt.  

Adopting Justice Scalia’s interpretive method, the absence in section 1326(b) of any reference to cost would seem to signal that Congress wanted cost to be considered in other parts of the CWA but not in this section. It seems disingenuous to define “minimize” by reference to the rest of the CWA, while ignoring other sections of the CWA that explicitly mandate the use of cost-benefit analyses. Justice Scalia used the rule against surplusage where it helped him, but rejected that canon when it was harmful to his ultimate policy goal.

Later on, Justice Scalia resorted to rhetoric by arguing that a cost-benefit analysis is necessary because otherwise EPA would have to require “industry [to] spend[] billions to save one more fish.” This exaggerated example appears to be based on Justice Scalia’s personal opinion of how much value Congress should have put on clean water and healthy ecosystems. Overall, Justice Scalia seems to be willing to pick and choose when he follows certain textualist canons in order to reach his economic goals.

B. Dissent in EPA v. EME Homer

In 2014, the Court reviewed EPA’s Transport Rule, which required cost-effective allocation of emission reductions among upwind states to improve air quality in polluted downwind areas under the Good Neighbor Provision of the Clean Air Act (“CAA”). The CAA requires EPA to set National Ambient Air Quality Standards (“NAAQS”) at levels “requisite to protect the public health.” States have to create a State Implementation Plan (“SIP”), which is a federally enforceable plan for reducing in-state emissions to those levels. The CAA recognizes that pollutants cross state lines and thus contains the Good Neighbor Provision, which requires states’
SIPs to prohibit in-state sources “from emitting any air pollutant in amounts which will . . . contribute significantly to nonattainment in . . . any other State.” To make this manageable for the states, “EPA employed a ‘two-step approach’ to determine when upwind States ‘contribute[d] significantly to nonattainment.’” In step one, EPA excluded any upwind states that contributed less than one percent of the NAAQS emission to any downwind state. In step two, EPA created a cost-effective allocation of emission reduction among the remaining upwind states. Thus, EPA allocates pollution reduction based on cost-effectiveness rather than on the state’s contribution to downwind nonattainment.

A majority of the court upheld this regulation under Chevron deference. The majority determined that the Good Neighbor Provision did not specify how responsibility for a downwind state’s excess pollution should be allocated among contributing upwind states and that EPA reasonably filled in that gap. Justice Scalia dissented from this opinion. He argued that the plain text of the CAA only allows EPA to consider pollution contribution when deciding reduction amounts. Since the text is clear, Chevron deference should not be given and cost effectiveness should not be considered. Justice Scalia argued that if this proportionality approach is unworkable then the Good Neighbor Provision is simply inoperative.

After making this textualist argument, Justice Scalia went on to argue that the “statute’s history demonstrates that ‘significantly’ is not code for ‘feel free to consider compliance costs.” Specifically, he explained that “the previous version of the Good Neighbor Provision required each State to prohibit emissions that would prevent attainment or maintenance by any other state of any [NAAQS]. This was later changed to only require states to prevent air pollutants that “contribute significantly to nonattainment.” Justice Scalia argued that this change demonstrates that “significant” simply means, “to eliminate any implication that the polluting State had to be a but-for rather than merely a contributing cause of the downwind nonattainment or maintenance problem.”

112. Id. at 1593 (citing 42 U.S.C § 7410(a)(2)(D)(i)).
113. Id. at 1596.
114. Id.
115. Id.
116. Id. at 1593.
117. Id. at 1603.
118. Id. at 1610 (Scalia, J., dissenting).
119. Id. at 1613.
120. Id. at 1612.
121. Id.
122. Id.
123. Id.
Scalia relied on the legislative history of the statute to explain why “significant” does not allow EPA to consider cost. In making this argument, Scalia had to guess why the word significantly was added to the statute. Scalia has made very clear “the quest for the ‘genuine’ legislative intent is probably a wild-goose chase.” Despite this belief, Justice Scalia went on a wild-goose chase to defend his definition of “significant” in this opinion.

At first glance, Justice Scalia’s position may seem to be positive for environmentalists because he appeared to advocate that EPA should regulate without considering the cost. However, in reality this would likely lead to no regulation at all. The majority argued that the proportional-reduction approach that Justice Scalia advocated for “appears to work neither mathematically nor in practical application.” Justice Scalia refuted this claim but also stated that if his interpretation is actually unworkable the “statute would [simply] be inoperative.” Thus, Justice Scalia’s position would have, at best, delayed EPA’s ability to regulate air pollution under the Good Neighbor Provision and would, at worst, make it impossible for EPA to ever regulate under this provision.

Overall, Justice Scalia’s dissent in *EME Homer* demonstrates his willingness to explore legislative history in environmental cases. His decision to deviate from a textualist approach seems to be based on his personal objections to the regulation. Justice Scalia was explicitly critical of EPA’s motive and states, “this is not the first time EPA has sought to convert the Clean Air Act into a mandate for cost-effective regulation.” This argument was used to bolster his claim that “too many important decisions of the Federal Government are made nowadays by unelected agency officials exercising broad lawmaking authority, rather than by the people’s representatives in Congress.” However, Justice Scalia incorrectly remembered EPA’s past arguments, because in *Whitman*, EPA actually argued the exact opposite of what Justice Scalia’s dissent claimed. The error indicates that in Justice Scalia’s rush to prove that EPA has nefarious intentions, he failed to cite-check his own opinion. Justice Scalia seemed more concerned with criticizing EPA than with the actual legal argument he was making. This uncharacteristic mistake suggests that Justice Scalia has an inherent bias against EPA and the environmental regulations it promulgates.

124. Scalia, *supra* note 6, at 517.
126. *Id.* at 1613 (Scalia, J., dissenting).
129. *Supreme Court Opinions*, *supra* note 131, at 604–05.
C. Majority in Utility Air Regulatory Group v. EPA

The Supreme Court limited the issue in Utility Air Regulatory Group ("UARG") to "whether EPA permissibly determined that its regulation of GHG emissions from new motor vehicles triggered permitting requirements under the CAA for stationary sources that emit GHGs." In deciding this question, the Court first had to understand the complicated legislative and judicial framework surrounding the CAA. In 2007, the Supreme Court held that GHGs were within the definition of "any air pollution," which meant that EPA had the authority to regulate GHGs from new motor vehicles if the agency found that GHGs “may reasonably be anticipated to endanger public health or welfare.” In 2009, EPA made this endangerment determination, leading it to promulgate a regulation for GHGs emitted from new motor vehicles, known as the Tailpipe Rule. EPA argued that this Tailpipe Rule caused GHGs to become a pollutant “subject to regulation” which triggered the Prevention of Significant Deterioration ("PSD") and Title V permitting requirements in the CAA. The PSD permit requires all major emitting facilities, defined “as any stationary source with the potential to emit 250 tons per year of ‘any air pollutant’ (or 100 tons per year for certain types of sources),” to implement the “best available control technology” for “each pollutant subject to regulation under [the CAA]." Title V requires a “comprehensive operating permit” for stationary source with the “potential to emit 100 tons per year of ‘any air pollutant.’”

These triggering requirements created a problem for EPA because GHGs are emitted at a much greater level than other applicable pollutants, such as sulfur dioxide. Applying the regulation to those quantities of GHGs would require EPA to regulate small entities, such as schools and churches, which would place overwhelming costs on both those entities and EPA itself. EPA’s solution to this problem was to promulgate the Tailoring Rule, a three-step approach to focus permitting efforts on the worst GHG emitters. First, EPA would only require permits from sources that would

131. Massachusetts, 549 U.S. at 528–30 (citing 42 U.S.C. § 7521(a)(1)).
134. Id. at 2435 (citing 42 U.S.C.A. §§ 7475(a)(4), 7479(1)).
135. Id. at 2431, 2436 (“Title V of the Act makes it unlawful to operate any ‘major source,’ wherever located, without a permit. A ‘major source’ is a stationary source with the potential to emit 100 tons per year of ‘any air pollutant.’”)(internal citations omitted).
136. Id. at 2446.
137. Id. at 2437–38.
need permits for other air pollutants anyway (“anyway sources”). Second, EPA would require permits for other sources capable of emitting at least 100,000 tons per year of CO2-equivalent GHG emissions (“carbon dioxide only sources”). Third, EPA said it would consider whether to further reduce the permitting thresholds, established in the second step.

Justice Scalia, writing for the majority, upheld step one but rejected steps two and three of this approach. In effect, the regulation could still be applied to GHG emissions from sources that were already being regulated for other air pollutants, but not to sources that would only be regulated based on their GHG emissions. This holding had very little impact on the rule itself since EPA is still able to regulate eighty-three percent of all GHG emissions emitted from stationary sources, compared with the eighty-six percent it could have under EPA’s original interpretation. Justice Scalia asserted that this decision gave EPA “almost everything it wanted in this case.” While UARG may have had a limited impact on EPA’s rule, it does illuminate Justice Scalia’s inconsistent decision-making in environmental law cases.

Justice Scialia’s decision to vote with the majority was unexpected. Given his rhetoric in Massachusetts v. EPA, it was surprising that he did not sign on to Justice Alito’s opinion denouncing the use of the CAA to regulate GHGs at all. Some scholars have suggested that Justice Scalia, who votes after the Chief Justice, voted with the majority after he realized that EPA would win a majority on the issue of whether BACT applied to GHG emissions from stationary sources already subject to regulation for other pollutants. Justice Scalia may have chosen to vote this way in order to try to write the opinion in a way that would erode the pro-environmentalist decision in Massachusetts v. EPA. This is exactly what

138. Id. at 2437.
139. Id.
140. Id. at 2437–38.
141. Id. at 2449.
142. Id. at 2448–49.
144. Massachusetts, 549 U.S. at 560 (Scalia, J., dissenting) (“[T]he term air pollution as used in the regulatory provisions cannot be interpreted to encompass global climate change. Once again, the Court utterly fails to explain why this interpretation is incorrect, let alone so unreasonable as to be unworthy of Chevron deference.” (internal citations omitted)).
146. See id. at 39. (explaining how Justice Ginsburg used her authoring power to “expansively reaffirm[] environmental plaintiffs’ prior win in Massachusetts v. EPA” when writing a unanimous opinion in American Electric Power Co. v. Connecticut).
Justice Scalia did with this opinion. In *Massachusetts v. EPA*, the Court made clear that the term “any air pollutant” in the CAA covered GHGs.\textsuperscript{147} However, in *UARG*, Justice Scalia stated that the Court only decided that GHGs are within the definition of “air pollutants” in CAA for motor vehicle emissions,\textsuperscript{148} deftly narrowing where the term “any air pollutant” must include GHG emissions.\textsuperscript{149}

After determining that this phrase is ambiguous in the PSD and Title V permitting sections, Justice Scalia held that EPA’s interpretation of “any air pollutant” was unreasonable using a *Chevron* Step-Two analysis.\textsuperscript{150} Justice Scalia argued that EPA’s interpretation is “unreasonable because it would bring about an enormous and transformative expansion in EPA’s regulatory authority without clear congressional authorization.” \textsuperscript{151} The idea of requiring a “clear statutory authorization” for an agency to act seems contrary to the long-standing principle of *Chevron* deference.\textsuperscript{152} The Supreme Court has previously made clear that agencies cannot alter the fundamental details of a regulatory scheme based on vague statutory terms because, as Justice Scalia famously said, Congress does not “hide elephants in mouseholes.”\textsuperscript{153} For instance, in *Whitman*, Justice Scalia examined section 109(b)(1) of the CAA, which instructs EPA to set standards, “which . . . are requisite to protect the public health” with “an adequate margin of safety,” and found that the phrases “adequate margin” and “requisite” did not authorize EPA to consider cost when setting safety standards.\textsuperscript{154} This argument is based on the idea that Congress would not have hidden an elephant (cost consideration) within a mouse hole (the phrases “adequate margin” and “requisite”).\textsuperscript{155}

However, in *UARG*, Justice Scalia seems to be arguing that an agency cannot interpret a broad term to include anything that has a “vast ‘economic and political significance.’”\textsuperscript{156} Unlike in *Whitman*, the phrase at issue in this

\begin{itemize}
  \item \textsuperscript{147} *Massachusetts*, 549 U.S. at 528–29.
  \item \textsuperscript{148} *Util. Air Regulatory Grp.*, 134 S. Ct. at 2431.
  \item \textsuperscript{149} *Id.*; *The Opinion Assignment Power*, supra note 150, at 46.
  \item \textsuperscript{150} *Util. Air Regulatory Grp.*, 134 S. Ct. at 2442–46.
  \item \textsuperscript{151} *Id.* at 2444.
  \item \textsuperscript{152} Christine Kexel Chabot, *Selling Chevron*, 67 ADMIN. L. REV. 481, 506 (2015). This case differs from *Brown-Williamson*, because in that case the Court ruled under *Chevron* Step-One that Congress had not delegated to FDA the power to regulate tobacco products, but this case was decided in *Chevron* Step-Two. See Amanda C. Leiter, Utility Air Regulatory Group v. EPA: A Shot Across the Bow of the Administrative State, 10 DUKE J. CONST. L. & PUB. POL’Y 59, 79 (2014) (Scalia and other justices refused to grant straight deference as is normally the standard for the *Chevron* two-step analysis).
  \item \textsuperscript{153} *Whitman v. Am. Trucking Ass’ns*, 531 U.S. 457, 468 (2001).
  \item \textsuperscript{154} *Id.* at 464 (citing 42 U.S.C. § 7409(b)(1)).
  \item \textsuperscript{155} *Id.* at 464, 468.
  \item \textsuperscript{156} *Util. Air Regulatory Grp.*, 134 S. Ct. at 2444.
\end{itemize}
case is broad by definition and, on its face, covers the contested interpretation. However, Justice Scalia found a reason to narrow the application of “any air pollutant” to not cover anything with “vast economic and political significance.” Following his previous analogy, Justice Scalia seems to have suggested that Congress could not have meant to hide an elephant (regulation of GHG emissions) in a zoo (the phrase “any air pollutant”). However, this decision to essentially narrow an agency’s powers, because the Court believes that Congress misguided granted it too broadly, goes against Justice Scalia’s traditional judicial philosophy. In fact, Justice Scalia has repeatedly made clear that if “Congress has made a mistake” with the language of a statute, it is Congress, not the Court, that has to correct it.

Overall, Justice Scalia’s opinion in UARG shows the length that he is willing to go in order to narrow previous environmental victories in the Court. It also demonstrates that he is willing to limit what falls within Chevron deference if it helps him get the result he wants to reach in an environmental case. More specifically, Justice Scalia gave himself the power to “correct” Congress’ overly broad delegation of power to an agency.

D. Majority in Michigan v. EPA

The most recent environmental case decided by the Supreme Court, Michigan v. EPA, represents Justice Scalia’s clearest departure from textualism. This case dealt with whether EPA had to consider cost when deciding to regulate hazardous air pollutants emitted by electric utilities. CAA section 7412 requires EPA to determine whether it is “appropriate and necessary,” to regulate hazardous air pollutants from power plants. Based on several studies, EPA concluded that it was appropriate and necessary to regulate coal- and oil-fired plants. EPA did not consider the cost of

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157. See Massachusetts, 549 U.S. at 528–29 (holding that “any air pollutant” unambiguously includes GHG emissions).
158. Conroy v. Aniskoff, 507 U.S. 511, 528 (1993) (Scalia, J., concurring); see also King v. Burwell, 135 S. Ct. 2480, 2504 (2015) (Scalia, J., dissenting) (“This Court, however, has no free-floating power ‘to rescue Congress from its drafting errors.’”).
160. Id. at 2704–05
161. Id. EPA determined that regulating was “‘appropriate’ because (1) power plants’ emissions of mercury and other hazardous air pollutants posed risks to human health and the environment and (2) controls were available to reduce these emissions. It found regulation ‘necessary’ because the imposition of the Act’s other requirements did not eliminate these risks.” Id. at 2705.
regulation during this first stage, but did consider cost at the second stage, when determining the actual emission standard.\footnote{\textsuperscript{162}}

Justice Scalia, writing for the majority, held that EPA acted unreasonably by not considering cost in the first stage.\footnote{\textsuperscript{163}} Justice Scalia came to this conclusion by applying the \textit{Chevron} doctrine.\footnote{\textsuperscript{164}} Under \textit{Chevron} step-one, the Court looks to whether the text of the statute, in this case the word “appropriate,” is ambiguous.\footnote{\textsuperscript{165}} In most cases, Justice Scalia started his analysis of a word by turning to dictionaries.\footnote{\textsuperscript{166}} However, in this case, Justice Scalia stated, “one does not need to open up a dictionary” in order to determine the meaning of “appropriate.”\footnote{\textsuperscript{167}} Instead, he simply asserted that the word appropriate is a “classic broad and all-encompassing term.”\footnote{\textsuperscript{168}}

It was quite uncommon for Justice Scalia to find that a statute is ambiguous under the \textit{Chevron} framework.\footnote{\textsuperscript{169}} Textualism is based on the idea that there is a specific meaning to every word of a statute. Thus, it is unusual for textualists, like Justice Scalia, to find the “requisite ambiguity in the statutory text necessary to bring the \textit{Chevron} principle into play.”\footnote{\textsuperscript{170}} In fact, Justice Scalia himself stated that it is “relatively rare that \textit{Chevron} will require [him] to accept an interpretation which, though reasonable, [he] would not personally adopt.”\footnote{\textsuperscript{171}} Thus, it was atypical for Justice Scalia to find a statute ambiguous and even more unusual for him to determine that so quickly and without analyzing any dictionary definitions.

After breezing by \textit{Chevron} step one, Justice Scalia focused on step two, which is whether EPA’s interpretation was reasonable.\footnote{\textsuperscript{172}} He argued that “appropriate” must require at least some attention to cost in the present context.\footnote{\textsuperscript{173}} He does not cite anything to support this assertion, but instead argued that it would not be rational “to impose billions of dollars in

\footnotesize
\begin{itemize}
\item \textsuperscript{162} Id. at 2714–15 (Kagan, J., dissenting).
\item \textsuperscript{163} Id. at 2711–12.
\item \textsuperscript{164} Id. at 2706–07.
\item \textsuperscript{166} See Jeffrey L. Kirchmeier & Samuel A. Thumma, \textit{Scaling the Lexicon Fortress: The United States Supreme Court’s Use of Dictionaries in the Twenty-First Century}, 94 MARQ. L. REV. 77, 87 (2010) (showing that Justice Scalia cited a dictionary as a source in forty opinions from 2000 to 2010); see, e.g., MCI Telecomms. Corp. v. AT&T Co., 512 U.S. 218, 225–26 (1994) (citing several dictionaries in his \textit{Chevron} analysis); Johnson v. United States, 529 U.S. 694, 715–16 (2000) (Scalia J., dissenting) (citing dictionaries to define “revoke”).
\item \textsuperscript{167} Michigan, 135 S. Ct. at 2707.
\item \textsuperscript{168} Id.
\item \textsuperscript{169} See Karkkainen, supra note 4, at 460 (explaining how Justice Scalia’s record shows that he is not very likely to find ambiguity under \textit{Chevron}).
\item \textsuperscript{170} Id.
\item \textsuperscript{171} Scalia, supra note 6, at 521.
\item \textsuperscript{172} Michigan, 135 S. Ct. at 2707.
\item \textsuperscript{173} Id.
\end{itemize}
economical costs in return for a few dollars in health or environmental benefits.” 174 Justice Scalia simply disagreed with EPA’s regulatory decision. This type of decision-making directly contravenes his stated position that “no matter how important the underlying policy issues at stake, the Court has no business substituting its own desired outcomes for the reasoned judgment of the responsible agency.” 175 It seems quite at odds with both textualism and Chevron jurisprudence to hold that “appropriate” is ambiguous but still requires EPA to consider cost. 176

Justice Scalia went on to concede “there are undoubtedly settings in which the phrase ‘appropriate and necessary’ does not encompass cost.” 177 However, he argued that in this particular situation, “[a]gencies have long treated cost as a “centrally relevant factor when deciding whether to regulate.” 178 This argument seems counter to Scalia’s traditional approach in two ways. First, Justice Scalia has repeatedly found that agencies can change their minds in how they interpret their own regulations. 179 This regularly happens because priorities and approaches drastically change with different administrations. Thus, it seems atypical for Justice Scalia to use the fact that an agency has considered cost important in the past as a reason it must consider cost in the present.

Second, this idea is inconsistent with Scalia’s majority opinion in Whitman. In that case, Scalia made clear that Congress must make a textual commitment for cost consideration to be mandatory. 180 Justice Scalia indirectly admitted to a lack of textual commitment in Michigan by deciding this case on the second step of Chevron because that means the statute was ambiguous about cost. Thus, Justice Scalia ironically finds that Congress hid an elephant (cost consideration) in a mouse hole (the word “appropriate”). 181 Furthermore, the language at issue in Michigan is very similar to the language at issue in Whitman. It seems disingenuous to argue that EPA cannot consider cost when setting NAAQS “requisite to protect

174. Id.
175. Massachusetts, 549 U.S. at 560.
177. Michigan, 135 S. Ct. at 2707.
178. Id.
180. Whitman, 531 U.S. at 468.
181. See id. at 468 (“Congress . . . 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.”).
public health,” but that EPA must consider cost when deciding if it is “appropriate and necessary” to regulate after considering the results of public health studies. In both provisions, Congress was explicitly concerned with the health impacts of air pollution and makes no mention of considering cost. It is unreasonable to simultaneously argue that one standard requires EPA to consider cost while the other bans the consideration of cost.

In general, Justice Scalia sharply departed from his regular textualist practices and his own past jurisprudence in *Michigan v. EPA*. Instead of using dictionaries and the actual text, he relied on context and his own economic principles and political ideas. Justice Scalia ended his career on the Court seemingly more concerned with ensuring that environmental regulations are not overly burdensome than with following his textualist ideals.

**CONCLUSION**

In death, Justice Scalia has been described as one of the “most influential jurists in American history,” 182 in part for the textualist principles he brought to the Court. 183 Justice Kagan believes that “[h]is views on interpreting texts have changed the way [the Court] think[s] and talk[s] about the law.” 184 There really is no disputing the influence his strong presence and quick wit had on both statutory interpretation and the law generally. However, Justice Scalia did not always apply the textualist principles that he so strongly advocated for during his three decades on the Court.

Over time, Justice Scalia increasingly shifted away from textualism in environmental law cases. He instead began to rely on both legislative intent and economic arguments. For instance, in *Entergy*, he highlighted the absurdity of spending a “billion to save one more fish” as a rationale for finding the word “minimize” ambiguous. Again, in his opinion in *Michigan*, Justice Scalia used financial rationales to argue that “appropriate” requires EPA to consider cost. These cases demonstrate how Justice Scalia started to use his own beliefs about the worth of environmental statutes to decide cases. Instead of defining the words of the

183. See e.g., Feldman, supra note 3.
statute to determine how an agency can act, Justice Scalia began by selecting his own desired outcome, and then defining the disputed statutory terms to dictate that outcome.

Justice Scalia’s desire to limit environmental regulation became more apparent in his rhetoric as well. He often seemed incredulous of the goals of environmental regulations, and indignant about their financial implications. Justice Scalia became more concerned about the policy implications of “overly burdensome” environmental regulation than about evenhandedly applying his strict textualism to statutory interpretation of environmental statutes. By the end of his career, Justice Scalia appeared to be more focused on outcomes than statutory principles in environmental cases, in violation of his own famous maxim that “[n]o matter how important the underlying policy issues at stake, this Court has no business substituting its own desired outcome for the reasoned judgment of the responsible agency.”185

185. Massachusetts, 549 U.S. at 560.
MIND THE GAP: HOW TO PROMOTE RACIAL DIVERSITY AMONG NATIONAL PARK VISITORS

Emily Mott

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Since Glenn Nelson of the New York Times posed the question, “Why are our parks so white?” in July of 2015, individuals and mass media outlets alike began to ponder the question. It is a fundamental query: why are people of color, majoritively African Americans and Hispanics, not visiting America’s national parks? While this issue may seem novel to some, the National Park Service (“NPS”) has been aware of the social problem for years, producing its first report based on surveys in 2000 and revisiting the issue with a comprehensive survey performed in 2008. The results of this national survey confirmed that the majority of national park visitors, roughly seventy-eight percent are white. Thus, although minorities make up over thirty-seven percent of the general population, they consist of only twenty-two percent of park visitors. The large disparity between current societal demographics and park visitation forms a unique and problematic issue.

1. Glen Nelson, Why Are Our Parks So White, N.Y. TIMES (July 10, 2015), http://www.nytimes.com/2015/07/12/opinion/sunday/diversify-our-national-parks.html[https://perma.cc/6U78-772S]. The lack of diversity in national park visitors has likewise been explored and reported by USA Today, the Seattle Times, Scientific American, the Baltimore Sun, Al Jazeera, High Country News, the National Park Service, NBC News, Int’l Business Times, PBS, Newsweek, the Huffington Post, and several law review journals, including the Natural Resources Journal and the George Wright Forum. Please note, these sources’ attributions to the subject will later be discussed in this paper.

2. See PATRICIA A. TAYLOR ET AL., NATIONAL PARK SERVICE COMPREHENSIVE SURVEY OF THE AMERICAN PUBLIC, 2008–2009: RACIAL AND ETHNIC DIVERSITY OF NATIONAL PARK SYSTEM VISITORS AND NON-VISITORS 1 (2011) (detailing the statistical difference in visitation among racial groups and compiling data from interviewees as to the reasons why minorities do not visit national parks). A brief note on methodology: NPS survey was conducted by trained staff and the resulting information was obtained through phone calls to adults residing in all fifty states and the District of Columbia. The survey was conducted in either English or Spanish as needed, and included calls to landlines and cell phones. The surveys obtained 7,618 completed results, creating a large pool from which to form relevant statistics.

3. Id. at 10. Note that this percentage can change according to different surveys and studies. For example, some reports allege that over ninety percent of visitors to national parks are white. See Sarah J. Morath, A Park for Everyone: The National Park Service in Urban America 12 (unpublished manuscript) (on file with the Vermont Journal of Environmental Law) (citing a 1999 study which determined ninety percent of national park visitors to be of Caucasian decent.). However, research performed into this subject has not produced any results showing less than seventy-eight percent white visitors.

4. TAYLOR ET AL., supra note 2, at 10; Nelson, supra note 1.

5. Please note, this paper will largely be focusing on the lack of African American visitation in the national parks. This is because more surveys and studies have been performed regarding African Americans as opposed to other racial minority groups so far. However, information and statistics regarding other racial groups will be included when it is relevant and available.
irrelevant. If NPS does not begin to entice a younger generation of more racially diverse individuals to visit the parks, the preserved national and historical lands the government has intentionally set aside for future generations will go unappreciated and potentially underfunded. National Park Director Jonathan Jarvis has confirmed, “If [the parks] were a business and [white, aging individuals were] our clientele, then over the long term, [the parks] would probably be out of business.”

It is the job of the American public to keep national parks running; the first order of business being the inclusivity of all races. If a successful campaign can be launched that orders racial inclusivity and minority outreach, parks will ultimately become more accessible and attractive to a wider range of citizens. This ensures the parks’ successful continuance for future generations.

With the passing of the last several decades, “diversity” has become a buzzword. The United States has become increasingly diverse and will continue to change in both culture and racial composition as time progresses. People want more diversity in colleges in order to make them more attractive to incoming students and to provide them with well-rounded

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11. Id.

12. See PENN STATE COLL. OF AGRIC. SCI., AN OVERVIEW OF DIVERSITY AWARENESS 5–6 (2001) (highlighting the importance of racial diversity and the social advancements made in the last several decades).

13. Id. at 6. By conservative accounts, it has been projected that minorities will make up at least half of the American population by as early as 2043. Mark Johanson, Missing in US National Parks: Minorities, INT’L BUS. TIMES (Sept. 9, 2013), http://www.ibtimes.com/missing-us-national-parks-minorities-1403613 [https://perma.cc/FT96-DJX6].
experiences. 14 People want to see more diversity in the nation’s political leaders in order to fully represent the views and opinions of all constituents.15 People want more diversity in the workplace in order to accurately represent the demographics of the general population and geographic area.16 But, why is racial diversity really important? Diversity has the possibility to expand one’s worldliness, enhance social development, prepare individuals to work in a global society, increase knowledge, promote creative thinking, enhance self-awareness, and enrich the nation with multiple perspectives.17 Without striving for diversity and racial inclusivity, America could once again become a segregated society.18 Cultural acceptance is not something that comes easily to a nation of over 300 million individuals.19

The United States has long been called the melting pot of race, religion, and nationality.20 However, throughout America’s tumultuous past, racial diversity has not always been a priority.21 For example, while white students will graduate from public high schools at a rate of 83%, only


18. Please note, this paper is not furthering the idea that America will become racially segregated of personal accord or conscious choosing, but more as the result of subconscious choices, unwelcoming environments, and implicit racial bias. According to the Mumford study, “segregation has increased in almost every large suburban area from 1990 to 2000,” with whites retreating to the suburban lifestyle and racial minority populations finding the majority of government subsidized housing in metropolitan areas. This instance of so-called “voluntary” segregation is merely one aspect of the increasingly worrisome isolation of racial groups. See Where Race Lives- Go Deeper, PUB. BROAD. SERV., http://www.pbs.org/race/000_About/002_04-background-03-08.htm [https://perma.cc/B8VP-XHRP] (last visited Feb. 4, 2016).


21. See Frey, supra note 19 (highlighting the fact that in the years after World War II, segregation was advanced with such phrases as “invasion,” “blockbusting,” and “white flight”).
66.1% of their African American counterparts will graduate; likewise, the median income for whites is over 55,000 dollars, whereas the median income of African Americans is a little over 32,000 dollars. Additionally, the poverty rate for whites hovers at around 9.8% compared to the 27.6% of African Americans. These statistics show that even with the implementation of diversity initiatives regarding education planning, diversity work programs, and government assistance programs, the large racial disparity in these important fields persists, forming a large problem in American society. The previously stated statistics are important and relevant to a national park’s visitation analysis. The trend, as shown, is lesser minority participation in beneficial activities like education and higher income. This parallel to a lack of minority participation and visitation in national parks will be analyzed further in this paper. As shown through the prior statistics and the national parks’ survey, there is a lack of consistency between national race demographics and minority visitation. The diversity problem facing national parks runs deeper than race; it is arguably based on a long standing trend of marginalization, lack of access to the parks by minorities, and possibly, racial discrimination.

23. Id. The rate of poverty among Hispanics is 25.3%, as compared to whites 9.8%. Id.
25. Compare TAYLOR ET AL., supra note 2, at 10 (analyzing park visitation demographics according to race and finding minorities to be underrepresented and whites to be “overrepresented”), and Budig, supra note 22 (analyzing racial disparity in education levels and income via statistics), with U.S. CENSUS BUREAU, supra note 24 (providing current race demographics for the United States).
26. See generally Myron F. Floyd, Managing National Parks in a Multicultural Society: Searching for Common Ground, 18 MANAGING RECREATIONAL USE 41 (2001) (detailing social science theories in an attempt to explain the history and potential cause and effect of racial disparity in national
While the previous statistics are upsetting and perhaps alarming, the United States government has taken action to promote racial diversity. During the 20th century, laws and federal regulations were enacted to prohibit discrimination and provide equal opportunities for all citizens, regardless of race. These federal acts have been largely successful. Highlighting the importance of diversity in the workplace, Congress passed Title VII of the Civil Rights Act, prohibiting discrimination based on race. Any violations are to be reported to the Equal Opportunity Commission, a government entity created for the purposes of maintaining diversity and preventing discrimination in the workplace. Similar regulations apply to diversity in the national education system and take the form of affirmative action programs. The United States government, along with state and local participation, affirms the importance of diversity by providing opportunities to racial minorities where there once were none. While a historic view of racial diversity in action is helpful to understand the importance of the subject, this paper will focus on attempts to optimize racial diversity in national parks.

This paper seeks to address the lack of diversity among visitors of national parks through a thoughtful analysis of the subject and creative problem solving on a national and local level. Part I attempts to identify why racial diversity is crucial to NPS in particular. Part II further elucidates the problem regarding minority visitation through the use of recent statistics and national surveys. Part III details the reasons why a large disparity exists with reference to the racial diversity of park visitors, analyzing such factors as: cost, transportation, distance, racial bias, and knowledge. Part IV


29. See Berrien, supra note 27 (emphasizing the anti-discrimination law’s success and its purposes of justice and equality).

30. Id. Title VII also prohibits discrimination against individuals based on color, religion, gender, and national origin. Id. This paper will focus on race.

31. EEOC, supra note 28.

32. See, e.g., Scott D. Gerber, Affirmative Action and the Crisis in Higher Education, HUFFINGTON POST (Oct. 13, 2014), http://www.huffingtonpost.com/scott-d-gerber/affirmative-action-and-th_b_5675128.html [https://perma.cc/C2FA-MDGZ] (providing the historic and political context for affirmative action programs and the impact these racially motivated programs have had on the nation’s higher education system).
describes new initiatives undertaken by NPS and state agencies meant to encourage park visitation by minorities and stem the racial gap. Lastly, part V seeks to set forth additional avenues for racial inclusivity, hoping to make the parks more accessible and attractive to a wider range of citizens.

I. IT IS IMPERATIVE TO ATTAIN DIVERSITY IN NATIONAL PARK VISITORS.

To understand one reason why racial minorities may not be visiting the National Park System, in addition to the surveyed reasons to be discussed later in this paper, one must first consider the following social experience. Thirty-three academics, all female, were invited to Yosemite National Park for a scholarly event. Of the eight females, four were white or Hispanic and four were African American. The scholars were told their entrance fee to the park was waived because they were simply visiting the research station. Upon each white or Hispanic scholar’s arrival, the individual was welcomed into the park without charge; each African American scholar gave the gate agents the same information as their counterparts. However, instead of automatically being let into the park by the agents, all four African American individuals were required to fill out a form and were questioned extensively as to their intentions in coming to the park. The ranger made sure to check with research center staff before allowing their admittance. One of the African American professors was further questioned about topics unrelated to her entrance to the park, including her college degrees, her research project title, her university affiliation, and was required to give her faculty identification card to the inspecting ranger. “The agents appeared incapable of imagining that a black woman could hold a Ph.D. and visit a research station for a scholarly event.” It is unfortunate and unacceptable that this instance of racial profiling and the resulting mistreatment of minorities in the park system occurred. While the previous report forms only one instance of racial mistreatment, this type of

33. See Tanya Golash-Boza et al., Why America’s National Parks Are So White, Al Jazeera AM. (July 23, 2015), http://america.aljazeera.com/opinions/2015/7/heres-why-americas-national-parks-are-so-white.html [https://perma.cc/WA2L-WC7V] (detailing the unfortunate experience from narratives collected by the event invitees). This was not a planned and conducted social experiment, but rather, the real experience of drastic differences in treatment racial minorities encountered in the park.
34. Id.
35. Id.
36. Id.
37. Id.
38. Id.
39. Id.
40. Id.
41. Id.
conduct could operate to make racial minorities feel unwelcome, and provide one reason why national parks are predominantly white.

The conduct by employees trained by NPS in the preceding paragraph cannot be tolerated because visiting national parks is supposed to be an opportunity to learn and be involved in the history of our great nation.42 Experiencing the parks and the cultural significance they hold is not something that should be limited to one group of people.43 Rather, visitation should be representative of the population because national parks are meant for everyone.44 As will be explicated later in this paper, the parks’ history is founded upon tenets of diversity; some of the parks would not be able to exist without the efforts of African Americans and other minority groups forging the path and cultivating these wild areas.45 The national parks have the ability to present a sense of unity and togetherness in nature that is not found elsewhere. A first-time African American visitor to Acadia National Park in Maine explained the experience as such: “I was so overwhelmed by the beauty, it was transformative. It was like I’d been living in a mansion, but had only seen the kitchen. Now I’d stumbled into the grand living room.”46 In addition to national parks being an important facet of American history, racial minorities should visit national parks more often because of the potential health benefits and the resulting cultural appreciation that is found in visitation.

42. Signed into law in 1916, the Organic Act established NPS “to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” Casey N. Cep, Why We Should All Go to National Parks, PAC. STANDARD (Mar. 12, 2014), http://www.psmag.com/nature-and-technology/go-national-parks-76369 [https://perma.cc/FS3H-MYXF]; History, NAT’L PARK SERV., http://www.nps.gov/aboutus/history.htm [https://perma.cc/VU8T-FJLX] (last updated Feb. 1, 2016).

43. See NAT’L PARK SERV., supra note 10 (declaring the parks to be an integral function of recreation, and stating that the national parks are meant to be enjoyed “at state, regional, and local levels, [by] people of all ages, races, and backgrounds,” who can then engage in the broad range of activities offered by the parks system).

44. See id. (stating that a national park workforce that is representative of the population will attract more representative visitors).

45. See The National Parks: America’s Best Idea: This Is America (PBS 2009), http://www.pbs.org/nationalparks/about/this-is-america/ [https://perma.cc/2QNA-8YAQ] (telling the story of the history of America’s national parks and emphasizing NPS’s efforts to sustain and maintain these areas with the help of diverse individuals dedicated to preservation).

A. Spending Time in Nature Provides Potential Health Benefits

NPS promotes park visitation as being able to “improve people’s physical health and intellectual vigor,” enabling individuals to experience self-renewal.47 After all, Thoreau must have had a reason for intentionally getting lost in the woods during his periods of self-discovery and reflection.48 In addition to the togetherness and historical significance promoted by NPS, the sociological impact of the enjoyment of outdoor space as a cultural experience has been proven.49 John Muir, one of the national parks’ first advocates, described the visitation experience as such: “Thousands of tired, nerve-shaken, over-civilized people are beginning to find out that going to the mountains is going home; that wildness is a necessity; and that mountain parks and reservations are useful not only as fountains of timber and irrigating rivers, but as fountains of life.”50 Muir was later proven correct in his assessment, as evidence suggests that there are physical and mental benefits to spending time in outdoor natural environments, such as the parks.51 For instance, exposure to natural environments has been “associated with lower levels of stress and reduced symptomology for depression and anxiety.”52 Additionally, a Stanford research study performed in 2015 comparing the mental health benefits of an urban environment versus a natural one confirms these positive effects, noting natural outdoor activity decreases an individual’s likelihood of depression and lessens anxiety.53 Empirical research also shows that

47. NAT’L PARK SERV., supra note 10.
48. “I went to the woods because I wished to live deliberately, to front only the essential facts of life, and see if I could not learn what it had to teach, and not, when I came to die, discover that I had not lived.” HENRY DAVID THOREAU, WALDEN: OR, LIFE IN THE WOODS 68 (1854).
49. After a three year study performed on English secondary school students, it was found that the students who learned via an outdoor education [learning primarily outdoors], demonstrated such visible benefits as “increased self-confidence, decision-making skills, and collaboration.” There is a direct correlation between one’s experience in outdoor spaces and one’s psychological well-being, both socially and emotionally. Emilia Fagerstam, Space and Place: Perspective on Outdoor Teaching and Learning, 167 DEPT. LINKÖPING STUD. IN BEHAV. SCI 8 (2012).
52. Id. at 1.
interactions with nature “can improve cognition for children with attention deficits.”

Unfortunately, these studies also point out that with increased urbanization many individuals are spending less time in and near to natural environments, such as national parks. Excerpting from these confirmed theories, racial minorities who lack access to the parks and outdoor spaces or those who lack a desire to visit the parks, bear potential health disadvantages. This is exacerbated by the fact that minority populations are largely located in urban environments; roughly seventy percent of African Americans and Hispanics live in urban areas, metropolitan cities, or the inner-ring suburbs. Therefore, these groups are more likely not to have access to parks and suffer from the aforementioned urban environment side effects. In conclusion, national parks are an important resource for all individuals to connect with nature and gain the mental and physical benefits that accompany visitation.

**B. The Parks Are of Historical Significance and Promote Cultural Appreciation.**

When asked why he chose to visit the Grand Canyon with his family, Mr. Griffin, an African American father, replied, “We have to be here. Otherwise, we’re cut out of an opportunity to learn about and be part of our history and our country.” The national parks are an amazing glimpse into the past, a vision of what the world used to be and an honest look at history. However, one needs a connection to history in order to feel involved. If minority groups feel their role in history is not being represented fully or accurately, there is the potential for a resulting lack of cultural attachment;

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55. Id. at 3.
56. See TAYLOR ET AL., supra note 2, at 18 (concluding that there is a higher lack of desire to visit national parks among racial minorities due to a multitude of reasons, to be set out below).
57. See Jordan, supra note 53 (detailing further that increased urbanization is causally linked with increased rates of mental illness).
58. PUB. BROAD. SERV., supra note 18.
59. See Pearson & Craig, supra note 51, at 3 (stating urbanization has “potentially very serious implications for health if exposure to natural environments is causal to short-term recovery from stress or mental fatigue, and to overall long-term improvements in health and well-being”).
60. See id. (recommending an increase in "accessibility to well-maintained greenspace and instigating behavior change programs that encourage greater interaction with nature could deliver substantial short and long-term benefits to mental health")
in turn, minority groups may not feel the need or desire to visit the parks.\textsuperscript{62} Likewise, NPS notes that successful park programming is low “if participants do not feel as though their history and culture are part of the park’s interpretive story.”\textsuperscript{63} An inclusive interpretation of history is advanced by NPS, emphasizing America’s diversity and the role these diverse communities have had on the relevant parks.\textsuperscript{64} Emphasizing national parks’ diverse histories and cultural backgrounds is done by NPS in an attempt to modernize the parks, making them more attractive for a younger and more racially diverse generation.\textsuperscript{65}

Like the rest of the nation, NPS celebrates African American history month.\textsuperscript{66} Yet, as will be shown, some believe the African American connection to history in the parks is not well marketed, understood, or announced.\textsuperscript{67} Robert Stanton, the first and only African American Director of NPS, realized the racial divergence present in park visitation and undertook to establish the African American Experience Fund (“AAEF”).\textsuperscript{68} AAEF raises funds to increase awareness of the parks, gather support, and emphasize the connection minority groups have to the parks.\textsuperscript{69} Previously, these connections went largely unrealized, but now NPS’s website specifically advances African American history and spotlights parks with racial historical significance.\textsuperscript{70}

Some popular national park units affirming the important contributions of racial minorities to this great nation include the Buffalo Soldiers
National Monument and the African American Civil War Memorial.  
Further, there are currently thirty-six national park units with an African-American heritage theme and connection.  
These sites should be highlighted in an attempt to underscore the connection racial minorities have to the history of the parks and the aforementioned memorials. Former Director Stanton believes this outreach, community engagement, and sense of inclusion will assist in making sure “all Americans are connected to the richness and diversity of the African American experience.” Attempting to increase racial diversity in national parks’ visitors is crucially important because understanding one’s history provides a sense of consciousness and understanding as to who we are and how we came to be.

II. THE STATISTICAL RACE DISPARITY AND RECOGNIZING THERE IS A PROBLEM

The race disproportion in national park visitors is a problem. In 2009, NPS conducted its second nationwide comprehensive survey in order to ascertain racial and ethnic groups’ visitation behaviors and opinions about the park system. In this survey, NPS reports that the visitors for the reported time period were disproportionately white. Unfortunately, these results mirrored those of the first NPS survey conducted in 2000. Nothing much had changed over those nine years. According to the NPS survey, whites account for seventy-eight percent of the nation’s park visitors, with Hispanics making up nine percent, African Americans forming seven percent, and Asian Americans constituting merely three percent. When comparing these statistics to national demographics, African Americans and Hispanics form the most underrepresented visitor groups.

Historically, to be viewed as non-white in America has had large implications for access to society’s important institutions, including

73. Q & A, supra note 68.
74. TAYLOR ET AL., supra note 2, at v.
75. Id.
76. Id. at 9.
77. Id. at 17.
78. In reference to the visitation time period of 2008 to 2009.
79. TAYLOR ET AL., supra note 2, at 10.
80. See U.S. CENSUS BUREAU, supra note 24 (providing that as of 2014, whites account for 77.4% of the United States population, African Americans total 13.2%, and Hispanics form 17.4%).
government (and national parks). Research comparing whites with African Americans, Asian Americans, or Mexican Americans has shown that racial and ethnic differences exist in outdoor recreational behavior. In particular, many people of color, especially African Americans, tend to participate less frequently than whites in visiting national parks and in a range of other outdoor recreational activities.  

The racial disparity problem in park visitation is thus established through statistical evidence and affirmed by NPS’s own independent research. Unfortunately, the statistical discrepancy is sometimes accompanied by the explanation that “Blacks don’t do nature.” This prejudicial view forms an incorrect assumption that could not be farther from the truth. Rue Mapp, a young African American woman who embodies an adventurous spirit, founded an organization called Outdoor Afro. The group brings together individuals of color across the country who wish to spend time outdoors and in national parks who may otherwise feel isolated in their communities. Outdoor Afro, via the use of social media and arranged outdoor recreational activities, seeks to change the way some individuals view African Americans and the outdoors. Mapp believes that “getting people outside and enjoying the fresh air is the first and most important step in reconnecting people of color to those bigger outdoor spaces, and in helping them realize that those places are, in fact, for everyone.”

Additionally, it is important to note that without African American involvement in nature, it is unlikely the Sequoia National Park in California would exist at all; this breathtaking park was formed by an African American Army Captain and his company, segregated from their white counterparts, and tasked with crosscutting the dense forest. The parks exist today due to the hard work of individuals of all races. Yet, minorities have been isolated through a process of feeling unwanted, uncomfortable,

81. TAYLOR ET AL., supra note 2, at 3.
84. Id.
85. Id.
86. Id.
87. See Latour, supra note 82 (providing examples of African Americans contributions to the parks system and referencing their important role in the history of national parks).
or disconnected to the true history of the parks. To further understand the disconnect between racial minorities and national parks, it becomes necessary to detail the reasons why many of these individuals do not visit.

III. ANALYZING THE REASONS WHY A LARGE DISPARITY EXISTS IN THE RACIAL COMPOSITION OF PARK VISITORS.

It is easy to dismiss the problem; analyzing racial disparities and potential inequality makes people uncomfortable. The dismissal of the idea that there are any real obstacles facing minorities visiting the parks can be seen firsthand through researching the subject. Consider the comments to any of the online articles cited in this paper and one will find those who espouse the view that African Americans are not found in the parks because they are just not comfortable outdoors. However, the previously stated contention, blaming the non-visitor, merely minimizes the issue and overshadows the real problem. While it is true many African Americans make the conscious choice not to visit the parks, the motivation behind this decision is not so clear. As an African American travel author states, “We possess an unsubstantiated belief that we just don’t belong. And so we stay away. But the barriers blocking us from nature are not real things.” There is no fence keeping minorities out or racist segregation laws to contend with today. Yet, this subconscious feeling of not belonging lingers. NPS undertook its comprehensive survey in order to understand the multi-faceted nature of this feeling. First, this paper will detail the most often cited obstacles to visitation, with the next section attempting to provide solutions. The obstacles most cited by racial minorities in response to why they do not visit national parks include cost, lack of knowledge, park concerns and poor service, lack of access to the parks, and disparate treatment.

88. This statement will be qualified and further analyzed in the following section.
90. Mills, supra note 61.
91. TAYLOR ET AL., supra note 2, at vi.
92. Id. at 11–13.
A. Cost

When responding to questions regarding lack of visitation, an often cited reason for not going to national parks was the high cost.\(^{93}\) This cost can be attributed to food, lodging, camping gear, and/or transportation.\(^{94}\) However, cost as a concern can be somewhat ameliorated by use of day parks and parks located in more urban and metropolitan areas.\(^{95}\) As an avid hiker and camper denotes, “a backpack, tent, and the necessary gear [could] run you at least $1,000.”\(^{96}\) This operates as a barrier to visitation, more often being referenced by African American and Hispanic interviewees.\(^{97}\) According to the Outdoor Foundation report, forty percent of individuals who participate in outdoor activities have household incomes of $75,000 or more.\(^{98}\) However, NPS reports that negative cost reviews are given more often by individuals who have never visited the park.\(^{99}\) Therefore, NPS maintains that once people actually go, they may find the costs are not as high as they previously believed.\(^{100}\) If this is the case, cost should be accurately represented and promoted in order to properly inform the public via the viral marketing and advertising campaign directed towards racial minorities that has already been undertaken by NPS.\(^{101}\) If NPS is correct in asserting that the cost of visiting national parks is not as high as minority groups perceive, then racial minority’s lack of knowledge on the subject must be addressed.

\(^{93}\) Id. at 13.
\(^{94}\) Id. at 11–13.
\(^{97}\) Taylor et al., supra note 2, at 11–13. This is not to say that the potential high costs of visiting parks are not felt by white individuals, but simply that they are more often cited by minorities.
\(^{98}\) Kearney, supra note 96.
\(^{99}\) Taylor et al., supra note 2, at 11–13.
\(^{100}\) Id. at 12.
B. Lack of Knowledge

The most often cited reason for non-visitation by minority groups was that they “just don’t know that much about National Park System units.” Lack of knowledge can manifest itself in a variety of ways, including individuals’ lack of imagery, identity, and/or familiarity with national parks. For example, Mr. Cheatham, an African American man who grew up in the shadow of Mount Rainier, states that he has “never been, and never thought about going.” Mr. Cheatham furthers that he cannot envision himself in a national park, even one an hour away, because “he doesn’t even know what to expect. As far as [he knows], it’s a big field of grass.” The fact that some minority individuals live so close to national parks, yet do not know what the parks are like or what they are about is a sad representation of NPS’s prior communication and marketing efforts to minorities. NPS explicitly realizes that a lack of outreach and a shortage of information about the parks being advertised to minorities is a serious problem. If minorities do not know much about the parks, the history, or the programs that have been implemented to include racial minorities, these individuals likely will not visit.

For example, the Baltimore Sun recently reported that while studying public perceptions of the parks, park officials determined many individuals believe national parks are mainly located in the western United States. This is untrue, as there are currently “408 park units covering more than 84 million acres in every state . . . .” Additionally, there exists the false perception that one needs experience to visit the parks; visitation does not require overnight stays, sleeping in tents, or vigorous hiking. Rather, the parks are flexible as to individual need, able to simply be walked, enjoyed, and experienced. NPS acknowledges that an individual’s lack of knowledge regarding what they could do “once inside a park is within the
ability of the NPS to correct.” The lack of communication regarding the location, details, and potential uses of national parks can be addressed via NPS’s media campaign directed toward garnering racial minorities’ attention and ultimately, visitation.

C. Park Concerns and Poor Service

Roughly a quarter of all racial minorities surveyed by NPS found national parks to be unsafe or unpleasant. This view was not shared by the white individuals surveyed. One potential reason for the “unpleasant or unsafe” response may be due to racial minorities’ feeling of unwelcomeness. Historically, this was the case. For example, Mrs. Saxton-Ross, an African American woman, remembers when her grandmother would take her to Swope Park in Kansas. Unfortunately, Mrs. Saxton-Ross’ grandmother would only ever take her to Swope Park because it was the only park African Americans were allowed to visit. She notes that even after desegregation occurred, her “grandmother wouldn’t take her to other parts of the park . . . for fear that something bad might happen.” This fear that the parks may be unsafe for racial minorities still exists to some extent, as represented by the NPS survey.

D. Lack of Access

Even if NPS provides pleasant experiences in the parks and promotes the parks specifically to minorities, it will not be enough if parks cannot be accessed. About half of all non- visitors responding to NPS’s survey responded that they do not visit the parks because it takes too long to get there from their homes. This does not take into account issues other than

111. Solop, supra note 95.
112. TAYLOR ET AL., supra note 2, at 18.
113. Id.
115. See Meraji, supra note 83 (describing the uneasiness Mrs. Saxton-Ross’ grandmother felt in parks, and explaining that that uneasiness furthered the view that outdoor recreation is “white”).
116. Id.
117. Id.
118. Further, the aforementioned “unwelcome” atmosphere may be felt more sharply by Hispanic individuals who do not speak English. There can be a lack of communication or understanding between park employees and Hispanic Americans who do not speak English, possibly exacerbated by the fact that eighty percent of park service employees are white. See Jodi Peterson, Parks For All?, HIGH COUNTRY NEWS (May 19, 2014), http://www.hcn.org/issues/46.8/parks-for-all [https://perma.cc/M43A-85PB] (explaining that park ranger demographics are similar to visitation demographics, with administration personnel being roughly eight-five percent white).
119. TAYLOR ET AL., supra note 2, at 18.
time, including distance and modes of transportation, although these elements also tend to contribute to the problem; as NPS stated in its 2000 survey, “Many studies cite the lack of public or personal transportation as a barrier to more frequent park use by African Americans.”

Social scientist Myron Floyd’s paper addresses the question, “Who has access to the parks, and why?” Floyd offers several social theories, which may be useful for comprehending the long-standing issue of access. First, the marginality hypothesis theorizes that minority groups do not participate in park visitation due to limited socioeconomic circumstances as a consequence of historical patterns of discrimination. This theory is supported by the perceived cost of visiting the parks discussed in part A. The other important theory in a lack of access analysis is called the discrimination hypothesis, whereby it is believed that park visitation is strongly impacted by institutional discrimination, whether that discrimination is perceived or actual.

E. Disparate Treatment and Implicit Racial Bias

“Among academics and park managers, discrimination is often cited as a barrier to greater minority participation in outdoor recreation.” This involves the prior detailed sense of racial minorities’ feeling of unwelcomeness in the park system. To illustrate, a study of African Americans in St. Louis reported the reason they did not camp was because they felt vulnerable to “racial intimidation.” In fact, Al Jazeera reports that “many prospective visitors worry about disparate treatment by and implicit racial bias of park staffers.” Implicit bias in this context refers to “the attitudes or stereotypes that affect our understanding, actions, and decisions in an unconscious manner.” Therefore, not every instance of

120. Solop, supra note 95.
121. Floyd, supra note 26, at 41–50.
122. Please note this is a historic issue stemming from barriers in education and labor opportunities, which has since been rectified via the passing of federal legislation mentioned earlier in this paper. However, the long term effects of historical discrimination persist. Id. at 43.
123. Myron F. Floyd, Race, Ethnicity and Use of the National Park System, 1 SOC. SCI. RES. REV. 1, 4–6 (1999).
124. Id.
126. Golash-Boza et al., supra note 33.
perceived disparate treatment will be intentional or even the result of consciously made decisions. As social science proves, racial groups “tend to hold implicit biases that favor our own groups.” As mentioned previously, park rangers and administrative personnel consist of eight to eight-five percent white individuals. Therefore, it is possible park personnel could unconsciously hold implicit racial biases, lending credence to minorities’ sense of unwelcomeness in the parks. For example, a Detroit-based study found that African Americans’ low rates of visitation to national parks were influenced through negative racial interactions with white park rangers. These negative interactions, when not stymied or resolved, can potentially lead minorities to not desire to visit national parks.

The implicit racial bias is also understood as not being comfortable in park visitation. Cliff Spencer, a superintendent of Colorado’s Mesa Verde National Park, described the sense as one of “being an outsider,” due to the lack of other African Americans visiting the parks and working for the park system. The social experience detailed at the beginning of this paper also shows how disparate treatment based on race, whether perceived or actual, still exists today and can serve to mar racial minorities’ perception of the parks.

F. Admission Fees

Under the marginality hypothesis regarding socioeconomic impacts, some argue reducing the cost barrier to entry would likely increase access to parks and visitation. This paper began operating under the assumption that park fees were a barrier to entrance. However, upon research, this paper has concluded that park entrance fees are a necessary evil; without admission fees, the parks would likely not be able to provide essential

128. Id.
129. Peterson, supra note 118.
130. See P.C. West, Urban Region Parks and Black Minorities: Subculture, Marginality, and Interracial Relations in Park Use in the Detroit Metropolitan Area, 11 LEISURE SCI. 11 (1989) (explaining the role of marginality in the “under-participation” of African Americans in national and regional parks).
131. See Nelson, supra note 6 (explaining that when asked about why her friends do not accompany her to national parks, the author’s African-American neighbor responded by humming the banjo riff from “Deliverance”).
132. Mills, supra note 61.
133. Golash-Boza et al., supra note 33.
services. Over eighty percent of the fees obtained by NPS are reinvested back into the parks for maintenance and upkeep. Also, only around one-third of all national park units actually charge an admission fee. While NPS is provided with congressional funding, additional monetary resources are needed to preserve the parks for future generations. Thus, the remainder of this paper will be devoted to providing possible responses and efforts to break down the barriers to entry cited most often by racial minorities.

IV. INITIATIVES TO PROMOTE RACIAL DIVERSITY AND INCLUSION IN THE NATIONAL PARK SYSTEM.

The purpose of this paper is not to criticize NPS. The contention is not that NPS is a discriminatory institution, but rather that the national parks visitation disparity should be addressed. The resolution is to clarify a longstanding racial problem in the parks system, offer potential solutions, and highlight the good work and ideas already being implemented.

A main aim of NPS is attempting to raise awareness of the parks in a younger and more diverse demographic. The “Urban Agenda,” which was released by NPS in 2015, hopes that urban national parks can become “places where young people, many from diverse and often underserved communities, can experience close-to-home outdoor recreation and nature.” By focusing on parks located near and in urban areas, NPS is essentially eliminating the cited barrier of lack of access. Further, NPS is attempting to eliminate some of the cost of visiting national parks by


138. Id. This is due to the fact that it is unlikely NPS will receive additional congressional funding in the near future. According to the National Parks Conservation Association, “there has been more than 7% or $178 million reduction in the account to operate national parks and more than a 12% or $370 million reduction in the total budget for the NPS over the last five years in today’s dollars.” Id.

139. REBECCA STANFIELD MCCOWN ET AL., BEYOND OUTREACH HANDBOOK: A GUIDE TO DESIGNING EFFECTIVE PROGRAMS TO ENGAGE DIVERSE COMMUNITIES 1 (2011).

140. 2016 NATIONAL PARK SERVICE CENTENNIAL, URBAN AGENDA CALL TO ACTION INITIATIVE 3 (2015).
promising “all fourth grade students and their families will get free admission to national parks during the next school year.”141 Hopefully, by engaging kids at a younger age and creating a sense of personal interest in the parks, NPS will be able to cultivate a broader base of younger and more diverse visitors. Regarding the NPS initiatives involving younger and diverse demographics, NPS Director Jarvis states, “We know that if we can get them here, it can be transformative.”142

Granted, NPS, as one entity, can only do so much. The agency’s budget is already lacking, operating under an $11 billion maintenance delay due to budget challenges.143 This want of adequate funding is why coordination with outside organizations on the state and local levels is crucial; collaboration with outside entities on local levels can operate to reach target populations NPS may not have been able to reach otherwise due to budget constraints.144 NPS, as a government-funded entity, should cooperate with regional institutions in an attempt to engage the interest of all people of color in the parks. The Parks Service in California has already begun to implement local involvement initiatives.145 For example, the Yosemite Institute has begun a program, which brings inner-city high school kids from Oakland and Stockton to the great outdoors.146 The students get to go on a five-day wilderness adventure in Yosemite, with most experiencing the parks for the first time.147 This program was started in the hopes that it would spark a desire in students to visit national parks more often, who would perhaps in turn tell their friends. Likewise, Hispanic families in Colorado are getting the chance to go hiking for the first time in Rocky Mountain National Park through the Camp Moreno Project.148 This is how it begins; local involvement, group advocacy, weekend trips, and nonprofit programs will work to include racial minorities in the national parks, helping to stem the race disparity currently seen in visitation.

141. Zongker, supra note 8.
142. Johnson, supra note 101.
144. See Rebecca Stanfield McCown et al., Engaging New and Diverse Audience in the National Parks: An Exploratory Study of Current Knowledge and Learning Needs, 29 GEORGE WRIGHT FORUM 272, 276 (2012) (explicating local community involvement with the NPS efforts in an attempt to attain diversity of visitation. Also providing mechanisms for the engagement of diverse communities).
145. Lovitt, supra note 46.
146. Id.
147. Id.
148. Id.
V. POLICY CHANGES AND LOCAL INITIATIVES CAN HELP MAKE NATIONAL PARKS MORE ACCESSIBLE AND ATTRACTION TO A MORE DIVERSE GROUP OF CITIZENS.

NPS must maximize awareness of the national parks in an attempt to increase visits by racial minorities and create a welcoming atmosphere for a diverse community. NPS can increase exposure to the parks through a campaign of publicity and education using media serving different ethnic and racial communities. This marketing and advertisement campaign has been endorsed by First Lady Michelle Obama and calls on individuals to “Find Your Park.” The campaign furthered by NPS seeks to garner minority attention via culturally geared marketing, including local community papers, culturally diverse radio programs, multiple language publications . . . and new communication techniques, involving iPods, cell phones, and online networking sites.

A. Celebrity Endorsements Draw National Attention

In 2010, Oprah Winfrey visited Yosemite National Park, televising the experience to her audience of millions, showing the public that national parks are meant for everyone, and proving an African American woman could enjoy camping with her friend. Many individuals were surprised that Oprah would overnight camp and “rough it” due to her economic situation and celebrity status. The perception that visiting our national parks always has to include “rouging it” is simply incorrect. Many larger parks have reserved campgrounds, hotels nearby, and restaurants; there are also usually guided tours, indoor museum exhibits, and bus trips to take tourists to and from hotels. Celebrity visits and the national exposure that follows

149. See Zongker, supra note 8 (elucidating the “Find Your Park” campaign).
150. Id.
152. Oprah and Gayle Go to Yosemite, OPRAH WINFREY SHOW, http://www.oprah.com/oprahshow/Oprah-and-Gayles-Camping-Adventure-in-Yosemite [https://perma.cc/6SMD-S8BW] (last visited Nov. 6, 2015). Oprah decided to make the trip to Yosemite after receiving a letter from an African American Ranger, who wrote, “My entire career I have been bothered by the lack of African-Americans visiting national parks. It has bothered me when I look out and I meet people from Germany, from Spain, from Africa. And yet, I can’t find an African-American from Chicago or from Boston or from Detroit. Oprah, I need your help spreading the word that the national parks really are America’s best idea, and that this beauty belongs to every American, including African-Americans.” Id.
have the ability to change people’s perceptions. For example, Felicia Richard, a 53-year old African American school teacher, decided to visit the parks for the first time after Oprah’s televised stay. She says, “I saw Oprah went to Yosemite. And if Oprah can do it, so can I.”

Oprah’s visit operates to draw attention to the national parks. She encourages others to visit, providing African American women with a role model, and inspires people to experience nature and the country’s history. Thus, celebrity endorsements promote a heightened awareness of national parks in an attempt to increase visits and create a welcoming atmosphere for an increasingly diverse community.

The “Find Your Park” campaign is set to highlight other celebrity endorsements of the national parks system as well. In particular, Bill Nye the Science Guy, actress Bella Thorne, and singer Mary Lambert are in support of millennials’ increased use of the parks. Additionally, NPS is coordinating with corporate sponsors (such as American Express, REI, and Humana) to promote diverse usage of the parks.

B. Further Amelioration of Lack of Access

As shown in part IV, NPS has implemented initiatives in an attempt to break down the barrier of lack of access to the parks. The “Find Your Park” campaign furthers this goal. Any individual can now go online to findyourpark.com and search the parks nearest them. The browser will search from the user’s current location and return results specific to the individual. This feature also operates to easily inform all individuals, regardless of race, of the parks system. Thus, in effect, the advertising campaign is attempting to address minorities’ prior complaint of lack of knowledge of the parks.

Another possible avenue to be undertaken on a more local level that could help with minorities’ access to the parks is the provision of transportation assistance. Some national parks have already begun coordination efforts with local urban schools, providing field trips and
student outings to the park.\textsuperscript{159} For example, Saguaro National Park employs a ranger to coordinate with local schools and be in charge of student liaisons to the park.\textsuperscript{160} If more parks were able to implement this kind of program, either on an employee or volunteer basis, more racially diverse inner city schools would be able to partake in the visitation of national parks.

While raising awareness is a crucially important goal, awareness will not increase visitation if lack of reasonable access is still a high barrier to entry.\textsuperscript{161} To this end, parks should attempt to coordinate with “environmental groups, school districts, community-based organizations, and local governments to provide transportation assistance for those who cannot reach parks on their own.”\textsuperscript{162} NPS believes this collaboration will help attain the desired success while attempting to attract and serve underrepresented minority populations.\textsuperscript{163}

\textit{C. Attempt to Designate More Racially Inclusive National Monuments}

Less than one-fourth of all monuments in national parks emphasize people of color, women, or other traditionally underrepresented groups.\textsuperscript{164} Some believe the parks tend to exhibit the American story; yet a wide range of people cannot self-identify with the typical American history lesson.\textsuperscript{165} As Shelton Johnson, an African American Park Ranger, states, “If you don’t know you have cultural roots in the parks, then you’re not going to feel a sense of ownership in them.”\textsuperscript{166} This lack of ownership in the parks and the resulting lack of visitation by minorities, can attempt to be resolved via the use of the Antiquities Act of 1906.\textsuperscript{167} This act has been used more than 100 times by sitting Presidents to designate both national parks and


\hspace{1cm}\textsuperscript{160}. Id.

\hspace{1cm}\textsuperscript{161}. TAYLOR ET AL., supra note 2, at 17.

\hspace{1cm}\textsuperscript{162}. See id. at 18 (explaining how the park system is attempting to break down barriers to entrance for racial minorities living further away from park units).

\hspace{1cm}\textsuperscript{163}. Id.


\hspace{1cm}\textsuperscript{165}. See Lovitt, supra note 46 (detailing how the parks system, “America’s best idea,” operates to exclude people of other races who feel as if they cannot relate).

\hspace{1cm}\textsuperscript{166}. Id.

\hspace{1cm}\textsuperscript{167}. For a more detailed analysis of the use of the Antiquities Act in NPS, see Morath, supra note 3.
monuments.\textsuperscript{168} Potentially, the current or future President could use this act to nominate additional monuments meant to represent racial minority groups. Future monuments or parks should attempt to focus on the historical significance of minorities and minority contributions to society and the national park system as a whole. President Obama has already given NPS a good start by personally declaring 19 new national monuments,\textsuperscript{169} some of which spotlight minority history.\textsuperscript{170} Arguably, the more our national parks incorporate and value minority history, the more minorities will actually want to visit the parks.

\textbf{D. Implement Preferred Programs Intended to Meet the Needs of Different Racial Groups}

NPS should implement preferred programs intended to meet the needs of different racial groups. This solution is as simple as figuring out which outdoor activities racial minorities would like to participate in and then marketing the park as offering those activities.\textsuperscript{171} An example of this type of interpretive programming would include celebrating special events including racial minorities, such as Black History Month. Usually these events would underscore the achievements of racial groups, such as events held at the Martin Luther King Jr. National Historic Site.

However, not everyone goes to the parks to look at monuments or walk around a cottage built in the 1800s. NPS should also market the physical outdoor activities available. In its research, NPS cites a recent national survey of active outdoor recreation, which found that “only 3% of African Americans and 8% of Hispanic Americans participated in hiking, an iconic national park pursuit.”\textsuperscript{172} Rather, the minorities who were surveyed reported their favorite outdoor activities to be running/jogging/trail running, closely followed by road biking/mountain biking/BMX, and fishing.\textsuperscript{173} Therefore, NPS should aim its current marketing and advertising campaign towards these physical outdoor activities in an attempt to increase minority park visitation.

\begin{itemize}
\item \textsuperscript{168} Thakar et al., supra note 164.
\item \textsuperscript{169} Christy Goldfuss, President Obama Designates 3 New National Monuments, Protecting Over 1 Million Acres of Public Land, WHITE HOUSE (July 10, 2015), https://www.whitehouse.gov/blog/2015/07/10/president-obama-designates-3-new-national-monuments-protecting-more-1-million-acres- [https://perma.cc/FDK4-92NC].
\item \textsuperscript{170} Morath supra note 3, at 22–25.
\item \textsuperscript{171} Id. at 18.
\item \textsuperscript{172} Id. (explaining that fifteen percent of African Americans and nineteen of Hispanics most preferred running/jogging/trail running).
\item \textsuperscript{173} Id. at 18.
\end{itemize}
E. Employee Re-Training Regarding Diversity Initiatives and Workforce Demographic Goals

When park concerns regarding racial profiling and safety are cited as reasons for non-visitation, employee training becomes necessary to discourage any racial bias (whether implicit or explicit). Likewise, NPS should analyze its hiring practices and determine why its work force is not statistically representative of minorities. It has been recommended to NPS that the agency should attempt to implement a pipeline program.\(^{174}\) NPS believes that this pipeline program would be “a very important element for ensuring the creation of a diverse workforce.”\(^ {175}\) Directly related to this notion of a diverse workforce is community involvement, which NPS has undertaken to attain via the methods previously expounded. Already, NPS is attempting to employ more minorities in the parks in an effort to provide good role models for minority youths, who may then consider future employment with the park system.\(^{176}\)

**CONCLUSION**

The new initiatives being implemented by NPS are a great start in attempting to eradicate the race disparity in national park visitation statistics. Sometimes the hardest part of change is convincing others there is a problem; this paper hopes to have elucidated the race dilemma currently facing the national parks. In summation, there are several key aspects that NPS should focus on in an attempt to increase the diversity of America’s national park visitors. In order for NPS to truly begin a campaign of acceptance and diversity, it needs to promote encouragement, information, and positive exposure by the right role models. NPS should likewise be urged to market its “Find Your Park” campaign to historically underrepresented minority groups, focusing on the closest parks to metropolitan and urban areas, as those parks have the lowest barrier to access. NPS should also attempt to lower the overall cost of park visitation by urging minorities to visit day parks or become involved in local free wilderness programs. Additionally, NPS needs to further coordinate with other environmental preservation organizations; collaboration should be attempted as a means to reach diverse and underserved populations NPS may not have been able to reach on its own. As described above, NPS has

\(^{174}\) MCCOWN & LAVEN, supra note 62, at 14 (evaluating methods of attaining workforce diversity).

\(^{175}\) Id.

\(^{176}\) Peterson, supra note 118.
made great strides in undertaking to implement diversity initiatives. As NPS furthers the aforementioned measures, the American public, knowing that the parks are meant to be enjoyed by everyone, waits and hopes for increased racial diversity in the visitation of national parks.