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The Rise of U.S. Food Sustainability Litigation

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THE RISE OF U.S. FOOD SUSTAINABILITY LITIGATION

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I. THE INGREDIENTS OF A DEVELOPING MOVEMENT

For many of us, food is a very personal issue. We eat for
sustenance, but we also use food for visceral pleasures,

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article. Finally, this article is dedicated to my deceased pet chicken Miss Jane
Marple, who have made me appreciate some of the more visceral pleasures (and
challenges) of food production.
experiences of history, celebrations of culture, and expressions of personal identity. We use food to comfort ourselves, to create romantic settings, to nurture friends and family, and to mark festive occasions. As chef James Beard wrote, “Food is our common ground, a universal experience.”

But food systems can extend beyond human experience. Indeed, bestsellers such as The Omnivore’s Dilemma and Animal, Vegetable, Miracle: A Year of Food Life have recently brought greater public attention to the broader environmental and public health impacts of modern systems of food production and consumption. Critics of industrialized agriculture raise such concerns as pollution arising from fertilizer and pesticide-intensive agriculture and confined animal feeding operations; health impacts from the use of additives and preservatives and even

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3 BARBARA KINGSOVER, ANIMAL, VEGETABLE, MIRACLE: A YEAR OF FOOD LIFE (2007).
4 See, e.g., Mary Jane Angelo, Corn, Carbon, And Conservation: Rethinking U.S. Agricultural Policy In A Changing Global Environment, 17 GEO. MASON L. REV. 593, 593-94 (2010) (describing the “American public's recent renewed interest in ensuring that the food it eats is healthy and is grown in ways that are environmentally and economically sustainable”). This is not to say that food activism is new. Indeed, food movements, from organic food movements to vegetarian movements, to local food movements, to food safety movements have existed in various forms for quite some time. See, e.g., Richard R. Harwood, A HISTORY OF SUSTAINABLE AGRICULTURE, in CLIVE A. EDWARDS ET AL., EDS., SUSTAINABLE AGRICULTURAL SYSTEMS 3-18 (EDS CLIVE A. EDWARDS ET AL.) (1990) (describing organic food and sustainable agriculture movements); COLIN SPENCER, THE HERETIC’S FEAST: A HISTORY OF VEGETARIANISM (1995) (describing the history of veganism); Marne Coit, Jumping on the Next Bandwagon: An Overview of the Policy and Legal Aspects of the Local Food Movement, 4 J. FOOD L. & POL’Y 45 (2008); SUSANNE FRIEDBERG, FRESH: A PERISHABLE HISTORY 9-10 (2009) (describing local food movements as having earlier appearances in the British “food re-localization” movement); but cf. FRIEDBERG, supra at 17 (contextualizing modern day food movements such as the raw milk movement as reliant to some extent on the modern food system).
broader limitations on food choices; political and community disruptions from centralized, industrial agriculture; and energy expenditures from the number of miles that food can travel from farm to fork. These concerns, in turn, have engendered a number of interrelated food movements, from the organic movement, focused on agricultural production without the use of synthetic chemicals; to the local food movement, focused on consuming food grown and produced in close proximity to the consumer; to the slow food movement, focused on ideals of pleasure deriving from sustainably grown, produced, and prepared food; and to what some call the “new American” food movement, centered around ideals of “fresh, local, seasonal, and organic cuisine.”

The drivers of these movements are varied, with some focusing on “the perceived failure of conventional food systems to provide safe, quality food” and others focusing on concerns of “social

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10 See Coit, supra note 4; see also Derrick Braaten & Marne Coit, Legal Issues in Local Food Systems, 15 Drake J. of Agric. L. 9, 10-11 (2010) (describing the local food movement as “not hav[ing] a set meaning,” but nevertheless focused on “obtain[ing] food that was fresher, as well as to reduce the carbon footprint of food”).
13 See Linnekin, supra note 12, at 362.
justice and community empowerment.” Political scientists have nevertheless observed that these movements revolve around a common axis: “a vision of a more socially and environmentally just food system.” This article, therefore, refers to all of these movements using an umbrella term, as “the sustainable food movement.”

The greater public attention to the food system has manifested itself in a number of ways, including litigation. In particular, activists have used lawsuits to challenge a number of food and agricultural projects they find objectionable, from confined/concentrated animal feeding operations (CAFOs) to the application of hormones in dairy production to the use of genetically modified organisms in the food system. While these lawsuits are not always successful, their rise highlights new avenues through which food activists are attempting to pursue goals of legal and policy reform.

This article provides one of the first critical looks at the interface between the values of the sustainable food movement and its rising use of litigation. In particular, it focuses on two growing areas of food sustainability litigation: challenges to

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14 Noah Zerbe, Moving From Bread and Water to Milk and Honey: Framing the Emergent Alternative Food Systems, 33 ½ HUMBOLT J. OF SOCIAL RELATIONS 4, 6 (2010); see also Louise Hanavan et al., And Now for the Main Discourse: A Critique of the Popular Food and Farm Literature, 33 ½ HUMBOLT J. OF SOCIAL RELATIONS 166, 167-68 (2010).
15 Id.
16 This term is used merely as a shorthand for the diversity of values captured by the various individual food movements, as will be explained later in this paper. As food scholar Marion Nestle has pointed out, “Although we saw little evidence of an organized movement in the traditional sense of those for civil rights, women’s rights, or environmental protection, we were impressed by the number and range of mini-movements aimed at improving specific aspects of the health of the people, farm animals and the environment.” Marion Nestle, Writing the Food Studies Movement, 13 FOOD, CULTURE, & SOCIETY 160, 164 (2010); but see W. Alex McIntosh, Introduction, 13 FOOD, CULTURE, & SOCIETY 169, 175 (2010) (stating his belief that “the Slow Food Movement and the Sustainable Food Movement are full social movements” and that while “[e]ach likely contains mini-movements made up of people, organizations, goals and values that differ in specifics but share perhaps more overarching goals and values”).
17 Although this article attempts to tie together different sectors of sustainable food litigation under a broader umbrella, a number of articles and notes have explored various aspects of food sustainability litigation, including ones explored in this article. See, e.g., Claire Althouse, Note, “Farming Out” Regulatory Responsibility: Private Parties in the Biotechnology Age, 23 GEO. INT’L ENV’T’L. L. REV. 421 (2011).
CAFOs and challenges to the use of genetically modified organisms (GMOs) in the food system. These areas were chosen because they involve growing sectors of U.S. agriculture over which members of the sustainable food movement have raised significant concerns.\footnote{See infra Part II.}

The article begins by describing the sustainable food movement, including how the movement fits in with factors that sociologists use to characterize social movements, as well as the values seemingly held by the sustainable food movement. The article next provides a brief introduction into CAFOs and GMOs. In doing so, the article explores the types of concerns expressed by the sustainable food movement regarding these issues by examining some popular literature coming out of the sustainable food movement. The article then analyzes CAFO and GMO litigation in the United States arising from the sustainable food movement. In examining this litigation, the article observes how these challenges relate to some of the purported goals of the various sustainable food movements, yet may not fully succeed in advancing some of the broader visions of the movements. The article then explains that the inadequacy of these legal efforts result from particular ways in which existing legal avenues fail to mesh with the values of the food sustainability movements. This article concludes by drawing from studies of other historical movements and argues that the food sustainability movement, if it is to succeed in transforming the U.S. food system, must seek reform not only through substantive changes to agricultural and food policy, but also through the creation of additional legal avenues for its values to be meaningfully expressed.

II. THE MIXING OF CONCERNS

A. THE MODERN SUSTAINABLE FOOD MOVEMENT AND ITS VALUES

A number of newspapers have been reporting a growing interest within the United States regarding the sustainability of food.\footnote{See, e.g., Andrew Martin, \textit{Is a Food Revolution Now in Season?}, NY Times (Mar. 22, 2009); Washington Post, Archive, \textit{All We Can Eat}, located at http://voices.washingtonpost.com/all-we-can-eat/sustainable_food/ (providing an archive devoted to articles regarding sustainable food).} This interest is reflected by an increase in popular
literature regarding the sustainability of food.20 Such literature includes consumer-oriented books about how to attain a “sustainable” diet, information-oriented books regarding the U.S. food system as a whole, and policy-oriented books regarding potential reforms to the U.S. food system for sustainability.

This rising interest, in turn, appears to form part of a burgeoning social movement advocating sustainable food.21 Sociologists provide a number of descriptions of social movements. One is Charles Tilly’s argument that social movements are a result of three elements: the use of campaigns; the use of organizational tools such as coalitions, public meetings, and media statements; and participants’ belief in the worthiness, unity, numbers and commitments of the movement’s goals.22 Another sociologist, Sidney Tarrow, describes movements as “collective challenges with common purposes and group solidarity in constant contact with opponents and authorities.”23 Yet another scholar, legal academic Edward Rubin, describes social movements as groups of individuals “within civil society who are linked together by ideology, beliefs, or collective identities.”24

The interest in sustainable food appears to fulfill all of these descriptions of social movements. A number of campaigns exist regarding sustainable food, from Sierra Club’s Sustainable Consumption Mission (organized to increase environmental awareness regarding food)25 to the Real Food Challenge (organized to support sustainable food purchasing on college campuses)26 to the Center for Food Safety’s True Food Network (organized to advocate for a “socially just food system”).27 These campaigns, in

20 See, e.g., search on Amazon.com on “books” and “sustainable food” demonstrating a marked rise of publications in this area since 2000.
23 See Riegelman, supra note 21, at 526 (describing Tarrow’s work).
26 See Real Food Challenge, About, located at http://realfoodchallenge.org/about.
turn, often have political, public outreach, and legal components. Moreover, these groups use all the organizational tools described above—meetings, media statements, etc.—to attempt to further their goals. And the individuals comprising the movement appear to believe in the worthiness of reforming the food system to be more sustainable. Those concerned with sustainable food also appear to exhibit a sort of group solidarity indicative of a social movement, as indicated by the number of national and state groups dedicated to reforming the food system for sustainability. Finally, there appears to be a linkage in terms of collective identities within the sustainable food movement, as described later in this paper.

But what is the sustainable food movement? The modern sustainable food movement in the United States takes a number of forms. But in general, the movement draws much of its force from opposition to the “perceived failure of the mainstream food system” to provide safe food in a socially and environmentally just context. Indeed, much of the growing body of literature on food sustainability describes the struggle for sustainable food production in terms of combat, with references to the “fight” or “battle” or “crisis” regarding sustainable food.

28 See Center for Food Safety, What We Do, located at http://www.centerforfoodsafety.org/what-we-do/ (describing legal and policy work, including “[p]rovid[ing] technical assistance to numerous legislative initiatives championed by other non-profit organizations around the country,” and “[p]ublic outreach and advocacy”).


30 See, e.g., Slow Food USA, located at http://www.slowfoodusa.org/.

31 See, e.g., The Vivid Picture Project, located at http://www.vividpicture.net/ (a sustainable food group advocating for reforms in California); Community Food Advocates, located at http://www.communityfoodadvocates.org/ (a sustainable food group advocating for reforms in Tennessee).

32 See Zerbe, supra note 14, at 20; Laura Hughes, Conceptualizing Just Food in Alternative Agrifood Initiatives, 33 ½ HUMBOLDT J. OF SOCIAL RELATIONS 30, 31 (2010); Jack Kloppenburg et al., Tasting Food, Tasting Sustainability: Defining the Attributes of an Alternative Food System with Competent, Ordinary People, 59 HUMAN ORGANIZATION 177, 178 (2000) (describing “[t]hose interested in establishing or strengthening local food systems” as “reacting to processes of globalization”).

Although those identified with the sustainable food movement has occasionally raised hunger relief as relevant to its concerns, the movement has evolved to prioritize environmental and farm security concerns, to the extent that “concerns regarding farm security often trump those of food security.” This is not to say that hunger is ignored within the movement; indeed, hunger and sustainable food movements have often allied themselves to address agricultural and food policy to address international hunger issues through reform of U.S. agricultural policies that advocates argue subsidize cheap commodities and undercut local production in other countries.

Despite the reactionary aspect of the modern sustainable food movement, it also has some positive focal points. These include concerns regarding the effects of food production on the environment and on social justice. These concerns, in turn, can manifest as attention to different aspects of food production and consumption, from reduction in pesticide and fertilizer use, to advocacy for local food systems, to general attention to the pleasures of contextualizing the experience of food.

see also Neil Hamilton, Food Democracy: Revolution or Restoration?, 1 J. Food L. & Pol’y 13, 40 (2005) (“Fair trade food, eco-labels, heirloom vegetables, heritage livestock breeds, sustainable agriculture, organic farming, buy local campaigns, and the Slow Food movement all find their origins and motivations in the perceived misdeeds of Big Food and industrial eating, as well as in the desire of farmers and eaters to find a better way.”).

See Hughes, supra note 32, at 31 (describing studies conducted with farmers’ markets and community supported agriculture managers).

See id. at 33-34; see also id. at 44-45 (criticizing some food sustainability movements—called alternative food movements in the article—as sometimes devaluing justice concerns by ignoring hunger issues, thereby “reify[ing] systems of inequality”): id. at 46-60 (describing how those in the alternative food movements may ignore class and gender issues as well).

See Zerbe, supra note 14, at 6; see also Kloppenburg, supra note 32, at 179 (describing the “‘alternative’ agricultural sustainability movement” as finding “its origins in farm environmental issues”); id. (“Study and activism around food issues have generally come now to encompass the larger concerns of social justice and environmental interests in addition to traditional agricultural problematics”).


See Coit, supra note 4; see also Derrick Braaten & Marne Coit, Legal Issues in Local Food Systems, 15 Drake J. of Agric. L. 9, 10-11 (2010) (describing the local food movement as “not hav[ing] a set meaning,” but
Advocates of organic food production, for example, promote the production of food “based on understanding and working with natural systems rather than attempting to control them.” The idea is to minimize environmental effects by moving away from chemical and energy intensive agriculture towards agricultural techniques that emphasize local knowledge of landscape heterogeneity. These values are partially captured by the Organic Foods Production Act, which created an organic food labeling and certification system for the United States and establish guidelines for methods and materials that can be used by producers of foods allowed to be labeled as organic. A number of critics from the movement, however, argue that the Act’s reductionist approach fails to fully capture the holistic worldview of organic agriculture. Thus organic food advocates are varied in their support of legal labeling systems for such production. Moreover, advocates of organic food differ in why they value organic food production; while the emphasis of the movement is on sustainable agricultural processes through the minimization of inputs, many advocates of organic food also believe food produced in this manner to be safer for human consumption as well.

Local food advocates, in contrast, focus more on reducing the distance traveled by food, from production to consumption.

nevertheless focused on “obtain[ing] food that was fresher, as well as to reduce the carbon footprint of food”.


Id.


See Coit, supra note 4.
The environmental aspect of this movement arises from concern regarding the energy intensiveness of globally sourced food, both through packaging and transportation.\textsuperscript{47} Often raised by members of this movement is the statistic that processed food will, on average, travel a distance of 1,300 miles to reach the consumer, and produce will, on average, travel a distance of 1,500 miles.\textsuperscript{48} But again, environmental matters are not the sole concerns of those in the local food movement. Advocates also raise desires for improving connections between consumers and agricultural producers,\textsuperscript{49} enhanced product quality through freshness,\textsuperscript{50} and providing social and political support for local farmers.\textsuperscript{51}

Finally, slow food advocates and the “new American food movement” focus more on the enjoying visceral pleasures of food, arguing that sustainably grown food, and awareness of the production methods of that food, makes eating simply more gratifying.\textsuperscript{52} The slow food movement’s principles of “good, clean, and fair” food emphasize qualities of flavor, naturalness, and social justice.\textsuperscript{53} But the movement also focuses on aspects of food less emphasized by other movements, such as use of traditional methods of food preparation\textsuperscript{54} and taking delight in the cultural and community aspects of food consumption.\textsuperscript{55}

All of these movements are somewhat distinct, yet overlapping.\textsuperscript{56} Professor Alex McIntosh describes them as “mini-movements made up of people, organizations, goals and values that differ in specifics but share perhaps more overarching goals

\begin{itemize}
\item \textsuperscript{47} See id. at 51-53.
\item \textsuperscript{49} See id. at 48-50.
\item \textsuperscript{50} See id. at 50-51.
\item \textsuperscript{51} See id. at 55.
\item \textsuperscript{52} See Reynolds, supra note 11, at 142.
\item \textsuperscript{53} See id.
\item \textsuperscript{55} See Slow Food USA, From Plate to Planet, located at http://www.slowfoodusa.org/index.php/slow_food/from_plate_to_planet/ (describing one of the memberships’ activities as “[p]romoting the celebration of food as a cornerstone of pleasure, culture and community”).
\item \textsuperscript{56} See Nestle, supra note 16, at 164 (providing a chart of various food movements and describing how these movements fit into a “long tradition of American grassroots democracy—of the people, by the people, for the people).
and values. Yet these specifics can make a difference in terms of whether various legal challenges arising from these movements can be considered successful, either in the outcomes of the legal challenges or even in the ability of the challenges to express the values of the challengers. Thus a deeper inquiry into the values embodied in this movement is useful for greater legal analysis.

One exploration of the values shared by those identified with the sustainable food movement was conducted by community and environmental sociologist Jack Kloppenburg. His study recognized that “sustainability” marked a focal point of many food activists, but also observed that the term has a sort of “semantic plasticity.” This plasticity manifests itself in a number of ways, most notably through its availability for use by seemingly opposed members of debates concerning food production, from Monsanto to the Madison (Wisconsin) Area Community Supported Agriculture Coalition.

Thus Kloppenburg’s research team assessed the values of 125 persons representing a broad cross section of the alternative

57 McIntosh, supra note 16, at 175.
58 See Paul B. Stephan, Export/Import: American Civil Justice in a Global Context: A Becoming Modesty--U.S. Litigation in the Mirror of International Law, 52 DEPAUL L. REV. 627, 644 (2002) (describing how litigation can function in an expressive manner to articulate moral values and create social meaning for parties not before the court); Geraldine Scott Moohr, Opting in or Opting Out: The New Legal Process or Arbitration, WASH. U. L.Q. 1087, 1096 (1999) (“Public litigation gives public values meaning and expression by providing concrete applications of those principles.”); cf. Owen Fiss, Against Settlement, 93 YALE L.J. 1073, 1085-87 (1984) (pointing out the role of lawsuits may play in expressing constitutional values); but see Stephan N. Subrin, On Thinking About a Description of a Country’s Civil Procedure, 7 TUL. J. OF INT’L L & COMP. L. 139, 140 (1999) (recognizing that “while parties may express their values in the decisions they make during litigation, these decisions may not be the optimal decisions for society.”)
59 Cf. Jack Kloppenburg, Jr., et al., Tasting Food, Tasting Sustainability: Defining the Attributes of an Alternative Food System with Competent, Ordinary People, 59 HUMAN ORG. 177, 178 (2000) (discussing how research into the values embodied by the term “sustainable food” provides a “critical perspective . . . because it helps us move beyond the rhetoric provided by both sides in the debate about industrial agriculture and its alternatives and move closer to realizing how these forces work at the community level and how alternative movements can be viable”).
60 See id.
61 See id. at 179 (“Those working for the transformation of the food sector now commonly frame their ambitions not in terms of sustainable agriculture per se, but as the realization of a sustainable food system”).
62 Id. at 178.
63 Id. 178-79.
food community to determine what food activists are contemplating when they discuss food sustainability.\(^{64}\) Through panel discussions and iterative exercises, the team elicited some common attributes in participants’ visions of sustainable food systems.\(^{65}\) These aspirational features were quite numerous, including ecological sustainability of the food system, availability of knowledge regarding the food systems, proximity of the food system to the consumer, economic sustainability of the food system for producers and consumers, participatoriness of the food system, justness of the food system, regulation of the food system for environmental and socially conscious values, “sacredness” of the food system for honoring and nurturing cultural and spiritual well-being, healthfulness of the food system, and expressiveness of the food system for cultural contexts.\(^{66}\)

While the authors recognize these elicited attributes should not be taken as authoritative in the sense of defining the sustainable food movement agenda, they also explain that their study “highlight[s] the multiple dimensions of motivation and intent that people bring to the transformative project.”\(^{67}\) They argue for recognition of these values for two primary reasons: (1) that some of these values—knowledge, spirituality, and culture—have been inadequately explored by scholarly analysis of contemporary food politics debates,\(^{68}\) and (2) that understanding the full range of values embodied by the term “sustainability” may help distinguish between competing uses of that term.\(^{69}\)

Along the same vein, this article draws from these values—not to provide definitions to the food movement, but to explore the ways in which these values may be reflected (or not) in the strains of litigation that arise out of the movement. In doing so, scholars can better understand the complementarities and tensions within the existing legal system for the sustainable food movement.

**B. TWO ILLUSTRATIVE CONCERNS OF THE MODERN SUSTAINABLE FOOD MOVEMENT**

This article explores litigation involving two current concerns raised the U.S. sustainable food movement: the use of

\(^{64}\) *Id.* at 180-81.

\(^{65}\) *Id.* at 181-82.

\(^{66}\) *Id.* at 182-84.

\(^{67}\) *Id.* at 185.

\(^{68}\) *Id.* at 184.

\(^{69}\) *Id.* at 185.
confined animal feeding operation (CAFOs) for meat and dairy production, and the use of genetically modified organisms (GMOs) in food production. These two types of litigation were chosen out of a range of possible issues due to two important features: the rapid growth of these sectors of U.S. agriculture, and the intensity with which many in the sustainable food movement oppose these types of farming. This section presents a brief overview of each food production industry and highlights some of the concerns raised by the members of the sustainable food movement against such means of food production to provide context for this article’s later analysis of litigation in these areas.

1. CONCENTRATED ANIMAL FEEDING OPERATIONS (CAFOs)

Concentrated Animal Feeding Operations, or CAFOs, are a growing presence in the landscape of the United States. But their growth is not without controversy, especially within members of the sustainable food movement.70 As such, lawsuits against CAFOs present a window into the greater debate about the interface between the sustainable food movement’s values and the ability of litigation to interject these values into legal decisions. This section provides context for this article’s examination of these disputes by first examining the sustainability concerns raised by CAFOs, focusing particularly on the scientific complications involved with evaluating these concerns, and then describing how these concerns intersect with values shared by those in the sustainable food movement through an examination of the movement’s popular literature on the subject.

A. CONTEXT: SCIENTIFIC COMPLICATIONS AND REGULATORY BACKGROUND

The U.S. food supply has been moving from the Jeffersonian farm, with its combination of crops and livestock towards a more industrial-style agriculture. Driven in large part by the availability of animal feed well below the cost of production, CAFOs are part of this trend.71 CAFOs are large-scale animal

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operations, defined by the Environmental Protection Agency (EPA) as those with over a certain number of animals in certain conditions. The size of these operations is much larger than traditional farms. Under EPA definitions, large CAFOs include operations with “700 mature dairy cows, whether milked or dry,” “2,500 swine each weighing 55 pounds or more,” and “30,000 laying hens or broilers, if the AFO uses a liquid manure handling system.” Moreover, the containment structures for these operations often “resemble industrial buildings more than they do a traditional barn.” These animals are housed in large, enclosed structures in which conditions are

In at least some sectors, the number of CAFOs has been growing rapidly since the 1980s. One major study of CAFOs by the U.S. General Accounting Office (GAO) completed in 2008, Concentrated Animal Feeding Operations: EPA Needs More Information and a Clearly Defined Strategy to Protect Air and Water Quality from Pollutants of Concern, estimated that hog and egg-laying chicken CAFOs increased by 37 percent between 1982 and 2002. CAFOs of all animal types, however, have been increasing, although some at slower rates. The percentage of U.S. animals raised in CAFOs has been increasing as well—from 22 percent of all animals raised in farms in 1982 to 43 percent of animals raised on farms in 2002. Indeed, in some sectors—beef cattle, hogs, and layers—a large majority of the animals involved in food production are currently raised in CAFOs.

But differences between CAFOs and traditional farming are not limited to a matter of numbers. Because of their intensive focus on raising animals, CAFOs often generate more waste than the nutrient capacity of the land on which they operate.

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72. 40 C.F.R. §122.23(b)(2), (4)-(6).
73. 40 C.F.R. §122.23(b)(4)(i).
74. 40 C.F.R. §122.23(b)(4)(iv).
75. 40 C.F.R. §122.23(b)(4)(ix).
76. See PEW CHARITABLE TRUSTS, supra note 71, at vii.
78. See id. at 16.
79. See id.
80. See id. at 16-17.
traditional “diversified, independent, family-owned farms of 40 years ago that produced a variety of crops and a few animals,” the manure generated by livestock was generally used as fertilizer on the cropland. A small-scale farmer of chickens and vegetables, for example, could collect the waste generated by her chickens and utilize all of it in composting and subsequently fertilizing her spinach, tomatoes, and okra. CAFOs, in contrast, often generate far larger amounts of waste than the nearby fields can absorb. Thus CAFO waste raises a greater possibility of additional run-off washing into nearby rivers and streams. Moreover, CAFO storage methods such as lagoons may be subject to spills and overflows—again leading to contamination of nearby waterbodies.

This excess waste, in turn, may present a number of issues for both human health and the environment. Such problems include groundwater and surface water contamination by manure pathogens; nutrient loading of waterbodies (leading to eutrophication and potentially fish kills); emissions of ammonia, hydrogen sulfide, and volatile organic compounds; and foul odors.

But creating a comprehensive scientific evaluation of these effects can be complicated and contested. The meta-analysis contained in the 2008 GAO CAFO Report illustrates these difficulties. In assessing the 68 government-sponsored and peer-reviewed studies that have been completed on air and water pollutants from CAFOs, the GAO pointed out the wide variety of results contained in those studies. It stated:

Of these 68 studies, 15 have directly linked pollutants from animal waste generated by these operations to specific health or environmental

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82 PEW CHARITABLE TRUSTS, supra note 71, at 5.
84 See C.M. Williams, CAFOs: Issues and Development of New Waste Treatment Technology, 10 PENN ST. ENVTL. L. REV. 217, 220 (2002); see also PEW CHARITABLE TRUSTS, supra note 71, at 47.
85 See Stokstad, supra note 83, at 231.
86 See id.
87 See Williams, supra note 84, at 218-19, 232-33.
88 See id. at 220-21.
89 See id. at 221-29.
90 See id. at 229-32.
impacts, 7 have found no impacts, and 12 have made indirect linkages between these pollutants and health and environmental impacts. In addition, 34 of the studies have focused on measuring the amount of certain pollutants emitted by animal feeding operations that are known to cause human health or environmental impacts at certain concentrations.91

The GAO explained some of these variations as the resulting from a number of study-specific factors, including climate, animal type, feed choice, and manure management system involved.92

Another example of complications in the scientific evaluation of CAFO effects includes the evaluation of the types of non-site-specific overall assessment of CAFO effects necessary for the promulgation of general federal regulations for permitting CAFOs under the Clean Water Act (CWA). In 2002, when the EPA promulgated draft regulations for regulating CAFOs as a “Feedlots Point Source Category” under the CWA, Professor Terence Centner provided a comprehensive assessment of the basis for these rules, and listed a number of concerns.93 These included EPA’s failure to compare waste generated by CAFOs with wasted generated by other similar sources, such as suburban developments,94 and its failure to fully consider the effects of existing individual state regulations of CAFOs.95 According to Professor Centner, these concerns raised “significant questions [are raised] about whether wastewater treatment plants, urban runoff, storm sewers, construction sites, over-fertilized suburban lawns, and golf courses are being treated in a similar manner [to CAFOs.]”96 Although these concerns with the data were not found by the Second Circuit to be insufficient to support the overall federal regulation of CAFOs as point sources,97 their existence points to some of the scientific difficulties in evaluating the effects of CAFOs as a class of pollution-generating businesses.

91 Id. at 23.
92 Id. at 27.
93 See generally Centner, supra note 81 (recommending that the excess nitrogen and phosphorous runoff from CAFOs should be regulated as part of a more comprehensive regulatory package regarding nitrogen and phosphorus pollution from all point sources, rather than on the basis of business category).
94 See id. at 139-40.
95 See id. at 140-41.
96 Id. at 145-46.
97 Waterkeeper Alliance v. EPA, 399 F.3d 486 (2d Cir. 2005).
Complicated also is the assessment of the effects of an individual CAFO or CAFO operation plan. Scientific uncertainties can be raised in terms of drawing direct causal connections between particular environmental results, such as increased nitrogen levels in neighboring waters, or even more subsequent effects such as fish kills, to an individual CAFO. This is made even more difficult when the siting of a CAFO is part of larger land-use development processes that include additional smaller-scale farmland and development, or even other nearby CAFOs.

Nevertheless, faced with growing awareness and public controversy over the environmental and health problems associated with CAFOs, federal and state agencies are beginning to regulate the operations of CAFOs in order to manage these associated problems. One of the key tools for this oversight is the permitting process (and litigation involving the permitting process). Under the federal CWA regulations, “all owners or operators of a CAFO that discharge[] or propose[] to discharge pollutants must apply for a [National Pollutant Discharge Elimination System (NPDES)] permit.” Such permits may be issued by the EPA, or by individual states authorized to implement the NPDES program. These permits, in turn, can create limitations on the pollutants that a CAFO can release.

State agencies, too, have begun to engage in additional oversight over CAFOs through their regulatory and permitting programs. But these programs are far from uniform. As a recent survey by the National Conference of State Legislatures states:

Many requirements in state programs go beyond federal NPDES standards. Oregon, for instance, regulates a larger number of facilities than is required by federal rules. In addition, some states that have adopted federal requirements rely on separate state permitting programs to regulate CAFOs. Virginia, for example, permits facilities under a state pollution abatement program rather than under the state-adopted NPDES authority. Even in states such as Oklahoma, where EPA has

98 40 C.F.R. § 122.23(d)(1).
retained NPDES permitting authority, CAFOs are subject to separate state regulations that are enforced in addition to NPDES requirements.100

These structural differences in the permitting programs can lead to differences in permitting-related legal challenges. While the permitting of a CAFO may have a technical component, involving scientific assessments of the likely health and environmental results of a proposed CAFO and its operation plan, it also involves normative judgments about the nature of risks that the public is willing to accept either on their face, or as a result of a commitment to a process perceived as legitimate.101 Indeed, the sorts of information assessed by agencies or introduced by stakeholders as part of the permitting process can be seen as “trans-science,” i.e., judgments that involve science but cannot be solely resolved by science.102 As such the ability of members of the sustainable food movement to interject their values in the process of CAFO litigation can vary considerably depending upon the structure of the permitting process.

B. CONTROVERSY WITHIN THE SUSTAINABLE FOOD MOVEMENT

Along with potential environmental and public health concerns, CAFOs often create significant concerns within the sustainable food movement. One group, the Sustainable Table, which “celebrates local sustainable food, educates consumers on food-related issues and works to build community through food,”103 emphasizes on concerns such as excessive size, disregard for animal welfare, misuse of pharmaceuticals, misuse of waste, and socially irresponsible corporate ownership.104 Other groups, such as the Midwest Environmental Advocates,105 more focused on

100 Id. at 2.
105 This organization describes its mission as “provid[ing] high quality legal services that support a multicultural, grassroots social movement; build local leadership; and implement innovative solutions to environmental problems.” Midwest Environmental Advocates, Our Story,
the more environmental impacts of CAFOs but nevertheless drawn into addressing CAFOs through some of the broader perspectives of the sustainable food movement, describe CAFOs as threatening the environment and public health “[b]y concentrating too much manure on too little land, factory farms often cause water and air pollution which threatens drinking water supply and impacts the surrounding community’s quality of life.”

In these situations, the distinction between the movement’s values and its “knowledge” is rarely absolute. This section highlights some of representative values that members of the sustainable food movement have presented about CAFOs. In doing so, this section examines some of the popular literature regarding CAFOs that are based on the perspectives of the sustainable food movement as described earlier. The caveat, however, is that what this article describes as “the sustainable food movement” is actually quite varied; thus, any discussion here will be a simplification of all the various members’ views. Moreover, this section is not intended to be comprehensive survey of values held by members of the sustainable food movement, but instead simply to illustrate how the values held by the sustainable food movement intersect with concerns regarding CAFOs.

A number of popular books that can be described as arising out of the sustainable food movement have been recently published regarding CAFOs: David Kirby’s Animal Factory: The Looming Threat of Industrial Pig, Dairy, and Poultry to Humans and the Environment; Jonathan Safran Foer’s Eating Animals; and Daniel Imhoff’s CAFO: The Tragedy of Industrial Animal

http://www.midwestadvocates.org/story/index.html (last visited Aug. 25, 2011). The author is a member of the Board of Directors of this organization.


108 JONATHAN SAFRAN FOER, EATING ANIMALS (2010).
Factories. Their emphasis on food sustainability are expressed within their introductions and their text, with statements about expressing the importance of “know[ing] where our food comes from, and what import its production has on the environment and public health, before we take it home and fry it up in a pan,” revealing the “economic, social, and environmental effects of eating animals,” and letting the public know about the state of “food animal factories.” In tackling the issue of CAFOs from a food sustainability perspective, the books provide similar themes, but with somewhat different approaches, a survey of which can help understand the perspective and values of the sustainable food movement.

Kirby, for example, provides an expose-like account of the journey of three individuals who become activists opposing CAFOs: Helen Reddout, a teacher from Washington; Karen Hudson, the wife of a farmer in Illinois; and Rick Dove, a veteran and fisherman from North Carolina. In providing these narrative threads of the journeys of these individuals, the book recounts a number of issues encountered by these activists related to CAFOs, including odor, to negative animal living conditions, to fish kills, public health impacts, to detrimental impacts on the economy of small-scale farmers, to harmful impacts on local communities. The overall effect is to provide a large number of arguments against CAFOs, but using the lens of journalistic narrative rather than policy-based arguments.

Jonathan Safran Foer provides the most literary of these approaches, presenting a personal exploration of the impacts of CAFOs in a partially philosophical, partially memoir-like fashion. He begins his book discussing his relationship with

111 See KIRBY, supra note 108, at xvii.
112 FOER, supra note 109, at 13.
113 See Douglas Thompkins, Foreword, in IMHOFF, supra note 110.
114 See KIRBY, supra note 108, at 31.
116 See, e.g., id. at 2-3.
119 See, e.g., id. at 69-70, 73-75, 128-31, 154-58, 192, 196-98, 341-42.
120 See, e.g., FOER, supra note 109.
dogs, and how he came to regard himself as a “dog person.”\textsuperscript{121} Then he juxtaposes the concept of eating dogs, providing examples of other cultures that do, although they avoid eating other animals that they love.\textsuperscript{122} As he puts it “Eating animals has an invisible quality. Thinking about dogs, and their relationship to the animals we eat, is one way of looking askance and making something invisible visible.”\textsuperscript{123} Again, using the approach of the memoir, he describes his visits to a number of CAFOs, while interspersing various facts he discovered about changing relationship between humans and animals through the advent of the factory farm.\textsuperscript{124} He also provides a vivid account of how factory chicken farms process their poultry, as well as the negative conditions faced by these birds during their lifetimes.\textsuperscript{125} In doing so, he uses words of strong expressive impact, such as “sadism”\textsuperscript{126} and “pathos.”\textsuperscript{127} Although the book is permeated with such ethical discourse, Foer also presents some arguments against CAFOs on the basis of environmental effects,\textsuperscript{128} health effects,\textsuperscript{129} and reduction of dietary choices.\textsuperscript{130} Ultimately, however, he rests his (personal) conclusions on more emotional grounds: “To accept the factory farm feels inhuman.”\textsuperscript{131}

Finally, editor Daniel Imhoff presents a number of essays by writers coming from the sustainable food movement on the negative impacts of CAFOs. Each one of these essays presents a different focus using different perspectives, reflecting the range of concerns within the sustainable food movement. Authors include public interest attorneys,\textsuperscript{132} ecologists,\textsuperscript{133} journalists,\textsuperscript{134} and sustainable food advocates.\textsuperscript{135} Their essays, in turn, range from

\begin{flushleft}
\textsuperscript{121} See id. at 21-24.
\textsuperscript{122} See id. at 25-28 (presenting examples of Indians and dogs).
\textsuperscript{123} Id. at 29.
\textsuperscript{124} See id. at 108-09.
\textsuperscript{125} See id. at 129-37. He provides similar accounts of pig, fish, and cattle farms as well. See id. at 181-88, 189-93, 229-30.
\textsuperscript{126} Id. at 181.
\textsuperscript{127} Id. at 195.
\textsuperscript{128} Id. at 58-59, 73, 173, 195.
\textsuperscript{129} Id. at 139, 142-43, 180, 188.
\textsuperscript{130} Id. at 73, 261-64.
\textsuperscript{131} Id. at 267 (emphasis added).
\textsuperscript{132} See, e.g., Andrew Kimbrell, executive director of the Center for Food Safety.
\textsuperscript{133} See, e.g., George Wuerthner, ecologist and professional photographer.
\textsuperscript{134} See, e.g., Eric Schlosser, author of Fast Food Nation.
\textsuperscript{135} See, e.g., Anna Lappe, author and founder of the Small Planet Institute.
\end{flushleft}
critiques of industrialization brought about by CAFOs,\textsuperscript{136} expressions of concern about the effect of CAFOs in biodiversity both among animal breeds\textsuperscript{137} and within the overall environment;\textsuperscript{138} detrimental impacts on food safety through reliance on crowded conditions and antibiotics;\textsuperscript{139} negative impacts on climate change through the mass production of meat;\textsuperscript{140} concerns regarding a “technological takeover”;\textsuperscript{141} reduction of deliciousness of food;\textsuperscript{142} and even harmful impacts on citizen involvement with food.\textsuperscript{143} Because of the nature of the book as an essay collection, it presents a pluralistic account of how various individuals coming from the sustainable food perspective regard CAFOs with concern.

This examination of popular literature highlights the range of concerns raised within the sustainable food movement regarding CAFOs. While environmental concerns are presented, and scientific and economic studies are cited, those opposed to CAFOs reach their conclusions through a more complex array of paths than simple risk-benefit calculations. This perhaps reflects the developing state of the sustainable food movement in terms of experimentation with arguments and focuses to reach a more


\textsuperscript{137} See, e.g., Donald E. Bixby, Old MacDonald Had Diversity: The Role of Traditional Breeds in a Dynamic Agricultural Future in \textit{IMHOFF}, supra note 110.

\textsuperscript{138} See, e.g., George Wuerthner, Assault on Nature: CAFOs and Biodiversity Loss, in \textit{IMHOFF}, supra note 110.

\textsuperscript{139} See, e.g., Eric Schlosser, \textit{Bad Meat: Deregulation Makes Eating a High-Risk Behavior} in \textit{IMHOFF}, supra note 110.

\textsuperscript{140} See, e.g., Anna Lappé, \textit{Diet for a Hot Planet: Livestock and Climate Change} in \textit{IMHOFF}, supra note 110.


\textsuperscript{142} See, e.g., Peter Kaminsky, \textit{The Good Farmer: An Agrarian Approach to Animal Agriculture} in \textit{IMHOFF}, supra note 110.

collective identity. It perhaps also reflects the complexity of food, with its roles as a produced commodity, a cultural indicator, and a source of sustenance.

2. Genetically Modified Organisms (GMOs)

Members of the sustainable food movement also raise concerns about the prevalence of genetically modified organisms, or GMOs, in the United States food supply, including migration of transgenes into other organisms, increased creation of pesticide-resistant weeds and pests, potential adulteration of food, impacts on non-target species, and damage to biodiversity. Along these lines, members have initiated a number of different types of lawsuits to oppose the use of GMOs. As with the case of CAFO litigation, GMO-related lawsuits also present a window into the interface between the sustainable food movement’s values and the ability of litigation to interject these values into legal decisions. To further provide background for exploring this interface, this section provides a brief examination of the sustainability concerns raised by the use of GMOs, again focusing on the scientific complications involved with evaluating these concerns, and then describes how these concerns intersect with values shared by those in the sustainable food movement.

A. Context: Scientific Complications and Regulatory Background

Another trend in United States food production is the growing use of GMO crops. GMO crop production involves the use of plants with altered genes generally created through

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144 See Owen Wooley, Collective Identity, Blackwell Encyclopedia of Sociology (defining collective identity as “the shared definition of a group that derives from its members’ common interests, experiences, and solidarities”); cf. Tyler Wry et al., Legitimating Collective Identities: Coordinating Cultural Entrepreneurship, 22 ORGANIZATIONAL SCIENCE 449-63 (2011) (attempting to analyze how nascent collective identities become legitimizied).
146 See, e.g., Food as Culture, in ECHOLS, id. at 13-92.
147 See, e.g., Food as Commerce, in ECHOLS, id. at 26-28.
recombinant DNA technology, whereby laboratory methods are used to bring together genetic material from multiple sources. As one comprehensive U.S. Department of Agriculture study on GMO describes, ‘Farmers’ expectations of higher yields, savings in management time, and lower pesticide costs have driven a rapid increase in the adoption of [genetically modified] crop varieties in the United States and several other countries.” With genetically modified soybeans, for example, the acreage share of soybeans has risen from zero percent in 1996 to 87 percent in 2005. Indeed, at this point, the United States leads the world in terms of production and export of GMOs.

The drivers behind the increased use of GMOs involve a number of factors. These currently include farmers’ expectations of increased yields through improved pest control (expected to be brought about through crops genetically modified to incorporate either disease-resistant or pesticide/herbicide-resistant genes); savings in management time, and reduction in pesticide costs. However, a number of other factors are involved with driving the marketing of genetically modified seeds, including the potential of biotechnology companies to use sterile seed technology for additional control over their marketed seeds. Finally, the use of GMOs provides the potential for incorporation of other types of beneficial genes that may increase salinity or drought tolerance, or incorporate additional nutritive value into the crops.


152 See USDA Economic Research Service, supra note 150, at 8-10.


But the use of GMOs may also create risks for human health and the environment. The World Health Organization (WHO), in a study produced in 2005, identified a number of possible human health risks, such as the potential toxicity of GMO food, potential allergenicity of such food, potential instability of the inserted gene, and potential detrimental nutritional impact. The study also identified a number of environmental risks, including “unintended effects on non-target organisms, ecosystems, and biodiversity;” increased use of herbicides due to crop herbicide resistance, and unintended outcrossing of genes into the environment.

As with CAFOs, the actual effects of GMO use are complicated and contested, vary by context, and are subject to change over time due to evolving farming practices and adapting environments. With regards to environmental, economic, and social effects, for example, a 2010 report by a National Academy of Sciences (NAS) panel attempted to summarize the current state of scientific literature and provided some tentatively optimistic conclusions. According to the NAS report, genetically engineered crops are currently exhibiting fewer environmental effects than conventional crops, although along some metrics, the situation might change. Most successful has been the pairing of GMO crops with conservation tillage practices (allowing 30 percent of the previous crop residue to remain on the field).

156 Id. at 20.
157 See id. at 21.
158 See id.
159 See, e.g., Scott D. Deatherage, SCIENTIFIC UNCERTAINTY IN REGULATING DELIBERATE RELEASE OF GENETICALLY ENGINEERED ORGANISMS: SUBSTANTIVE JUDICIAL REVIEW AND INSTITUTIONAL ALTERNATIVES, 11 HARV. ENVTL. L. REV. 203, 210-11 (describing how the complexity of ecosystems create difficulties for evaluating the effects of GMOs prior to their release into the environment).
160 See WHO STUDY, supra note 155, at 24 (“The potential risks associated with GMOs and GM foods should be assessed on a case-by-case basis, taking into account the characteristics of the GMO or the GM food and possible differences of the receiving environments. In the field of potential risks derived from outcrossing or contamination from GM crops, relevant consequences need to be investigated for specific crops, and strategies for risk management need to be explored.”).
161 National Academy of Sciences, IMPACT OF GENETICALLY ENGINEERED CROPS ON FARM SUSTAINABILITY IN THE UNITED STATES, at 3 (2010).
162 Id. at 1.
improving soil quality and water infiltration) due to the substitution of glyphosate application ((the herbicide for which most GMO crops are engineered to be resistant)) for tillage operations that would have been used as a weed management strategy.\textsuperscript{163} Other environmental factors are more mixed, however. For example, the NAS found that currently, use of GMO crops has led to less toxic herbicide application due to farmer substitution of the less toxic herbicide glyphosate for other more toxic herbicides.\textsuperscript{164} But this situation might change, as weeds are evolving glyphosate resistance as a result of farmers’ ongoing use of the herbicide.\textsuperscript{165} Similarly, while evolving pest resistance to GMO crops and gene flow from GMO crops to wild or weedy relatives have been limited thus far, the potential risks of such occurrences still remain.\textsuperscript{166}

The NAS evaluation of economic and social effects were even more uncertain. The report found that farmers who adopted GMO crops have received production cost, yield, and worker safety benefits from their use,\textsuperscript{167} but that product pricing effects and economic effects on non GMO growers are not adequately understood.\textsuperscript{168} Moreover, social impacts on certain categories of farmers (that is, those with less access through economics or social reasons to GMO technologies) and on intellectual property are also in need of further research.\textsuperscript{169} All in all, the NAS report cautions that “A full sustainability assessment of GE crops remains an ongoing task because of information gaps on certain environmental, economic, and social impacts.”\textsuperscript{170}

An earlier panel of the NAS also attempted to address the safety of genetically engineered foods in a report published in 2004.\textsuperscript{171} The panel was not charged with actually conducting assessments of GMO food safety, however, but instead to “outline science-based approaches to assess or predict unintended health effects of GE foods in order to assist in their evaluation prior to

\begin{itemize}
\item \textsuperscript{163} Id. at 5-6.
\item \textsuperscript{164} Id. at 3-4.
\item \textsuperscript{165} Id. at 4.
\item \textsuperscript{166} Id. at 6-9.
\item \textsuperscript{167} Id. at 9-10.
\item \textsuperscript{168} Id. at 10-12.
\item \textsuperscript{169} Id. at 12-13.
\item \textsuperscript{170} Id. at 3.
\end{itemize}
commercialization” and “discuss whether certain safety issues are specific to GE foods.” According to the panel, both conventional and biotechnological breeding methods may create unintended compositional changes to food that may lead to negative health effects. Rather than treating one type of breeding method as “safe” and another as “unsafe,” it instead categorized breeding methods—ranging from “selection from a homogeneous population” to “biologic transfer of rDNA from closely related species” to “biologic transfer of rDNA from distantly related species” to “mutation breeding, chemical mutagenesis, ionizing radiation”—into a continuum of methods “less likely” and “more likely” to lead to unintended health effects. It ultimately recommends that all compositional changes to food—regardless of the method of reaching such compositional changes—be subject to appropriate safety assessments, taking into account the likelihood continuum of unintended changes. These include various tools for assessing safety prior to commercialization and providing continued postmarket evaluation.

In addressing these concerns, three agencies—the U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS), the Food and Drug Administration (FDA), and the Environmental Protection Agency (EPA)—are charged with different aspects overseeing GMO production in the United States. APHIS acts under the Plant Protection Act (PPA), which authorizes the agency to promulgate and administer regulations concerning “plant pests.” APHIS interprets this statute as allowing it to oversee the approval of any new GMO, for commercial or field trial use. Under this approach, APHIS treats all GMOs as “plant pests” unless shown otherwise.

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172 Id. at 2.
173 Id. at 3.
174 Id. at 4.
175 Id. at 8.
176 Id. at 8-13.
179 See 7 U.S.C. § 7711; § 7702 (describing a plant pest as “any living organism “that can directly or indirectly injure, cause damage to, or cause disease in any plant or plant product.”).
180 See 7 C.F.R. § 340.1; see also Wendy Thai, Transgenic Crops: The Good, the Bad, and the Laws, 6 MINN. J. L. SCI. & TECH. 877, 888 (2005).
and thereby regulates all field trials for GMO plants and licenses their growth and sale.\textsuperscript{181} In doing so, it often produces some sort of environmental evaluation under the National Environmental Policy Act (NEPA)\textsuperscript{182} for its evaluations to examine the possible environmental impacts of the submitted GMO.\textsuperscript{183}

The FDA also has general jurisdiction over GMO foods under its requirement under the Federal Food, Drug, and Cosmetic Act to prohibit foods or food additives from being adulterated with “any poisonous or deleterious substance which may render it injurious to health,”\textsuperscript{184} including those produced from genetically modified components.\textsuperscript{185} Along these lines, the FDA treats genetically engineered substances added to food as a food additive if it differs significantly in structure, function or amount from that currently found in food.\textsuperscript{186} The FDA also requires testing and labeling for products—including genetically engineered substances—that significantly alters the nutritional value of the food product, or contains material known to cause allergic reactions.\textsuperscript{187}

Finally, the EPA exercises authority over GMOs when they either involve toxic substances under Toxic Substances Control

\textsuperscript{182} 42 U.S.C. §§ 4321-4370f.
\textsuperscript{183} See Althouse, supra note 17, at 432.
\textsuperscript{184} See 21 U.S.C. § 342(a)(1).
Act\textsuperscript{188} or pesticide production under the Federal Insecticide, Fungicide, and Rodenticide Act\textsuperscript{189} for regulating pesticidal substances (including that produced through biotechnology), and also pesticide-resistant plants.\textsuperscript{190} Thus the EPA works with APHIS during the field trials for GMO plants, and with FDA on the safety to humans of the plants or their products.\textsuperscript{191} Under this approach, EPA assesses the risks to human safety and the fate of the substance in the environment, including effects on “non-target” species.\textsuperscript{192} EPA also sets “safe” environmental exposure levels and allowable food residue tolerance levels for any novel pesticides.\textsuperscript{193}

B. CONTROVERSY WITHIN THE SUSTAINABLE FOOD MOVEMENT

At least from the popular literature, GMOs seem to trigger almost universal objections from members of the sustainable food movement. The Center for Food Safety, a group established “for the purpose of challenging harmful food production technologies and promoting sustainable alternatives,”\textsuperscript{194} describes its use “as one of the greatest and most intractable environmental challenges of the 21st Century.”\textsuperscript{195} Another group, described earlier, the Sustainable Table, focuses on the uncertainties of risks from genetically engineered foods as one of their issues.\textsuperscript{196} Yet another

\textsuperscript{188} 15 U.S.C. §§ 2601-2692.
\textsuperscript{189} See 40 C.F.R. § 152.1.
\textsuperscript{190} See 40 C.F.R. § 174.1.
\textsuperscript{192} See Taylor et al., supra note 191, at 50.
\textsuperscript{193} See id.
\textsuperscript{194} See Center for Food Safety, About Us, at http://www.centerforfoodsafety.org/about/ (last visited Aug. 25, 2011).
group described earlier, Slow Food USA, describe GMOs as “present[ing] a threat to the precautionary principle.”

The widespread nature of this objection to GMOs from those associated with the sustainable food movement has left some scholarly observers “puzzled.” One scholar has described the narrative as a sort of “Frankenstein” narrative, where the “unnaturalness” of GMOs are emphasized. Others, at least in addressing the European objection to GMOs, describe these fears as stemming from cultural memories with famines, pride in food quality and culinary heritage, and resistance towards American products. Indeed, some proponents of the use of GMOs describe the fears held by the sustainable food movement as “based less on science than emotion.”

This section does not intend to take any particular normative approach to these beliefs, but instead describe how some of the popular literature from the sustainable food movement expresses its values regarding GMOs. Again, the description is not intended to be a comprehensive survey of values held by members of the sustainable food movement, but instead to illustrate how the

199 Id. at 213. According to Professor Applegate, the analogy may extend beyond the superficial level of “unnaturalness” emphasized by many opponents of GMOs. Instead, the novel Frankenstein could also be relevant in the sense of suggesting that research into and application of such matters involves a sort of hubristic knowledge.
202 The caveat, though, is that this article recognizes that to some extent, it is impossible in such a policy-making context to fully separate judgments of fact from judgments of value. See generally JOHN W. KINGDON, AGENDAS, ALTERNATIVES, AND PUBLIC POLICIES (2d ed. 2003); see also Committee on the Institutional Means for Assessment of Risks to Public Health, National Research Council, Risk Assessment in the Federal Government: Managing the Process 76 (1983) (describing the difficulty of separating risk assessment—the more fact-related task of evaluating risks—from risk management—the more normative task of developing approaches towards addressing risks. Nevertheless, this section attempts to describe in as objective a fashion as possible the beliefs expressed about GMOs in the current popular sustainable food literature, difficult as that might be.
values held by the sustainable food movement intersect with the other concerns highlighted earlier regarding GMOs.

As with CAFOs, a number of popular books that can be described as arising out of the sustainable food movement have recently been published regarding GMOs:

203 Marie-Monique Robin’s The World According to Monsanto, 204 Kathleen Hart’s Eating in the Dark: America’s Experiment with Genetically Engineered Foods, 205 and Bill Lambrecht’s Dinner at the New Gene Café. 206 Again, their perspective of food sustainability is evident in the books’ introductions and their texts, with expressions of concern regarding “the health and environmental effects of GMOs, as well as their consequences for the conditions of farmers,” 207 “FDA’s prevent[ion of] Americans from making an informed choice about the foods we eat and feed our families,” 208 and “the formation of a new global politics of food.” 209 As with the surveyed books on CAFOs, these books express a range of concerns, and provide these concerns in different manners. As such, they can provide an illustration of the types of values expressed by the sustainable food movement regarding the use of GMOs in our food system.

Marie-Monique Robin’s book is distinct from the others by focusing mainly on one company: Monsanto. This concern is not

203 The books explored in this article are but a few chosen as illustration. However, since the 2000s, a number of other books have been published on this GMOs. See, e.g., WILLIAM ENGAHL, SEEDS OF DESTRUCTION: THE HIDDEN AGENDA OF GENETIC MANIPULATION (2007); ROBIN CUMMINS, GENETICALLY ENGINEERED FOODS: A SELF-DEFENSE GUIDE FOR CONSUMERS (2004); JEFFREY M. SMITH, SEEDS OF DECEPTION: EXPOSING INDUSTRY AND GOVERNMENT LIES ABOUT THE SAFETY OF THE GENETICALLY ENGINEERED FOODS YOU’RE EATING (2003); DANIEL CHARLES, LORDS OF THE HARVEST (2002); STEPHEN NOTTINGHAM, EAT YOUR GENES: HOW GENETICALLY MODIFIED FOOD IS ENTERING YOUR DIET (2003). The ones chosen for presentation in this article are those intended to cover the broadest range of values expressed by members of the sustainable food movement, rather than to present duplicative descriptions.

204 MARIE-MONIQUE ROBIN, THE WORLD ACCORDING TO MONSANTO (2010). Note to editors: My confession for these three books is that I’m actually using the Kindle version of the books, for easier cutting and pasting. So if the Kindle version is different from the text version in pagination, these page numbers might be off. I really apologize for this.

205 KATHLEEN HART, EATING IN THE DARK: AMERICA’S EXPERIMENT WITH GENETICALLY ENGINEERED FOODS (2002).

206 BILL LAMBRECHT, DINNER AT THE NEW GENE CAFÉ (2002).

207 ROBIN, supra note 204, at vi.

208 HART, supra note 205, at 8.

209 LAMBRECHT, supra note 206, at iv.
unusual; Monsanto has been a target of much opposition from the sustainable food movement due to its large market share in the production of GMOs. In describing concerns about Monsanto, the book presents its material in an expose-like fashion, covering not only Monsanto’s involvement with producing and marketing GMOs, but also various other products. While it presents materials on the potential human health and environmental effects of GMOs, the book appears to emphasize more the activities of Monsanto in getting approval for and marketing its products. In particular, the book discusses various issues, such as FDA’s approval of various GMO plants on the basis of “substantial equivalence” to conventional varieties as a “trick”; Monsanto’s forays into suppressing or at least influencing agency science; its use of patents as a weapon against non-GMO farmers; and its exertion of control over the agricultural


211 See, generally, ROBIN, supra note 204.

212 ROBIN, supra note 204, at 149-52 (describing public health experiences with a disease possibly caused by GMOs), 232-34 (describing contamination of traditional corn products with StarLink, a GMO corn variety banned for human consumption), 265-68 (arguing that a public health problem attributed to overconsumption to soy products is actually due to the consumption of GMO varieties of soy).

213 ROBIN, supra note 204, at 216-221 (describing effects of “superweeds” and overuse of herbicides), 228-31 (describing harm to the Monarch butterfly from Bt plants), 236-39 (describing contamination of organic canola with GMO canola).

214 ROBIN, supra note 204, at 129 (describing Monsanto’s GMO activities as “The Great Conspiracy”).

215 ROBIN, supra note 204, at 146-49.

216 ROBIN, supra note 204, at 152-77.

217 ROBIN, supra note 204, at 201-04
process. It also discusses more socioeconomic aspects of Monsanto’s promotion of its products, including potential economic harm to farmers and interference with the economies of developing countries.

The book also alternates between two portrayals of Monsanto: either as an almost supernatural force, or as a Machiavellian institution. For example, it uses words like “sorcerer’s apprentices” to refer to Monsanto’s researchers, and “Cassandras” to refer to those predicting dangerous outcomes during the human digestive process. It also presents the approval process for transgenic crops in terms of political machinations, describing “maneuvers” and “political regulation made to order.”

Eating in the Dark presents the concerns with GMOs in a less intentional light, as an experiment gone awry. Like The World According to Monsanto, this book also presents claims that the use of GMOs results in negative health, environmental, and social consequences. But it presents these consequences as unintended side effects about which consumers should be concerned. Expert advisors, likewise, are presented in a less

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218 ROBIN, supra note 204, at 204-13
219 ROBIN, supra note 204, at 222-24.
220 ROBIN, supra note 204, at 241-305.
221 ROBIN, supra note 204, at 137.
222 Id.; see also id. at 269 (describing the GMO seeds as “magic”).
223 Id. at 141.
224 Id. at 144.
225 See HART, supra note 205, at 3 (describing StarLink corn as a “food experiment”).
226 See , e.g., HART, supra note 205, at 85 (describing Congressional testimony that a certain breed of GMO spinach as presenting a possible health risk); 156 (describing how one pediatric neurologist expressed concerns about GMOs on the development of the young, ill, or elderly).
227 See, e.g., HART, supra note 205, at 106 (describing problems with Bt genes and Monarch butterflies); 171 (describing possible problems with Bt toxins on honeybee larvae).
228 See, e.g., HART, supra note 205, at 136 (describing impacts of patent restrictions on “impoverished Indian farmers”), 203 (describing market loss of Canadian farmers because of “genetic pollution” with GMO grains).
229 See, e.g., HART, supra note 205, at 57 (describing how a “minor genetic change could turn a gene from a fungus that attacks alfalfa into a gene that causes cancer in people”).
conspiratorial light, and more as making mistakes that are later shown to involve incorrect assumptions.\textsuperscript{230}

The tone of this book also presents a contrast to The World According to Monsanto. Its coverage of the topic is framed in a much more balanced manner, alternating between interviews with industry representatives and representatives with environmental, health, and consumer advocates. But it concludes with a warning note about the unknowns of the U.S. food supply, stating, “Imagine learning that the cereal you ate, or fed your child, for breakfast this morning was spiked with a dose of pig diarrhea vaccine, or with someone else’s prescription drug.”\textsuperscript{231} Indeed, the final quotation, from a Friends of the Earth advocate, is “Chances are someone has already eaten a biopharmaceutical food.”\textsuperscript{232} This concern with the unknown is illustrative of one of the values of the sustainable food movement—that of knowledge about one’s food.\textsuperscript{233}

Finally, Dinner at the New Gene Café covers the topic less as a factual or even argumentative synthesis and more from a narrative perspective.\textsuperscript{234} Like Eating Animals, its information regarding GMOs is presented as a voyage of discovery, where the reader is brought with the author as he conducts his research regarding the history, politics, and effects of GMOs.\textsuperscript{235} While he still covers potential health,\textsuperscript{236} environmental,\textsuperscript{237} social effects\textsuperscript{238} of the use of GMOs, he explores this as a journey with various interview waypoints, encountering, among others, different characters in the conflict over approval of GMOs, including former FDA commissioner Dan Glickman;\textsuperscript{239} activist Jeremy Rifkin;\textsuperscript{240}

\textsuperscript{230} See, e.g., HART, supra note 205, at 77 (describing how a later National Academy of Sciences report on GMOs expressed greater concern than an earlier report described as “simplistic”.)
\textsuperscript{231} HART, supra note 205, at 281.
\textsuperscript{232} HART, supra note 205, at 282.
\textsuperscript{233} See Kloppenburg, supra note 59, at 182-84.
\textsuperscript{234} See LAMBRECHT, supra note 206, at Location 143 (describing the author’s travels to thirteen countries in the course of researching his book).
\textsuperscript{235} See LAMBRECHT, supra note 206, at Location 143.
\textsuperscript{236} See, e.g., LAMBRECHT, supra note 206, at Location 1711-77, 2722, 4211.
\textsuperscript{237} See, e.g., LAMBRECHT, supra note 206, at Location 1647-1743, pp. 102-03, Location 6687.
\textsuperscript{238} See, e.g., LAMBRECHT, supra note 206, at pp. 102-03, Location 341-42, 1823-24, 2146.
\textsuperscript{239} See LAMBRECHT, supra note 206, at Location 2619-84.
\textsuperscript{240} See LAMBRECHT, supra note 206, at Location 1526-40
scholar Margaret Mellon; Monsanto executive Robert Shapiro; and environmental feminist Vandana Shiva.

Lambrecht’s conclusion is presented on a much more mixed note than in the other books. He leaves the reader with a sense of temporary détente, with the United States and Europe disagreeing on the marketability of GMOs. But Lambrecht emphasizes the transience of that stasis, predicting that “passions would become inflamed again.” And rather than providing his own take on the use of GMOs, he leaves the reader with a sense of uncertainty, stating that it is the next generation of consumers that decides their fate.

III. The Rising of Sustainable Food Movement Litigation

As seen earlier, the values expressed by the sustainable food movement are varied, and extend beyond those explored in depth by scientists, economists, or even sociologists. Whether these values actually fit in with the actual litigation brought about, or at least supported, by members of the sustainable food movement has yet to be fully examined. Thus, this section explores lawsuits arising in both the CAFO and GMO contexts involving plaintiffs (or amici) that can be traced in some manner to the sustainable food movement, either through a connection to a public interest group that expresses support for sustainability in food production, or individual plaintiffs that have publicly expressed in some manner their desire for food sustainability. In doing so, this section examines the outcomes of these lawsuits and how they fit (or do not fit) in with the values expressed by the sustainable food movement.

A. CAFO Litigation

Lawsuits opposing CAFOs arises in a number of contexts, from federal regulatory challenges (under the Clean Water Act (CWA)); the Clean Air Act (CAA); and the Comprehensive Environmental Response, Compensation and Liability Act

\[241\] See LAMBRECHT, supra note 206, at Location 1698-1810.
\[242\] See LAMBRECHT, supra note 206, at Location 4790-4843.
\[243\] See LAMBRECHT, supra note 206, at Location 5276-5474.
\[244\] See LAMBRECHT, supra note 206, at Location 6893-6906.
\[245\] See LAMBRECHT, supra note 206, at Location 6911-12.
\[246\] See LAMBRECHT, supra note 206, at Location 6920.
\[247\] 33 U.S.C. Section 1251 et seq.
\[248\] 42 U.S.C. Section 7401 et seq.
(CERCLA), and the Emergency Planning and Community Right-to-Know Act (EPCRA); to state regulatory challenges, to various common law challenges. This section of the article will describe these lawsuits by primarily examining their results, and will group the discussion in terms of statutory mechanisms because, as will be discussed, the relevant statutes create certain constraints for the plaintiffs in terms of advancing their overarching goals. Plaintiffs have had varying degrees of success in opposing CAFOs through each of these avenues, but while that will be discussed here, it is not the focus of this article. Instead, what this article will emphasize is how the outcomes of these lawsuits may be situated (or not) within the expressed goals of the sustainable food movement.

1. **Clean Water Act**

Two main types of challenges predominate CWA lawsuits against CAFOs: programmatic challenges (either to federal rules regarding CAFOs under the CWA, or to state programs authorized by the CWA) and specific permit challenges to individual CAFOs. While many of the plaintiffs’ programmatic challenges have been successful, the results of their lawsuits against individual permits have been far more mixed. What is similar in all of these challenges is the ways in which certain values expressed by the sustainable food movement (in particular, ecological sustainability, knowledge of and participatoriness of the system, and regulatory direction towards environmental values) are highlighted while others are not, and—as this article will explain—cannot be under the available litigation constraints.

In terms of programmatic challenges, the key sustainability challenge under the CWA to the federal programmatic regulation of CAFOs is *Waterkeeper Alliance v. EPA.* In this case, a number of environmental groups, led by Waterkeeper Alliance, challenged a regulation issued by the EPA to regulate the emission of water pollutants from CAFOs under the NPDES permit system described earlier. Among other things, the rule

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249 42 U.S.C. Section 9601 *et seq.*
250 42 U.S.C. Section 11001 *et seq.*
251 399 F.3d 486 (2d Cir. 2005).
253 399 F.3d at 490.
254 See Part II.B.1.a.
required that each CAFO must develop and submit a nutrient management plan (with certain listed requirements) in order to address the water pollution from their operations in its NPDES permit application\textsuperscript{255} and created certain effluent limitation guidelines for manure applied to land (described as “land application discharges”) and to the “production area” of CAFOs.\textsuperscript{256}

The plaintiffs objected to the rule on four major grounds: (1) that the rule illegally allowed permit-issuing agencies to grant permits to large CAFOs without providing the required meaningful review of the nutrient management plans submitted by the CAFOs, (2) that the rule failed to require that the issued NPDES permits include the terms of the nutrient management plans as set forth under the CWA,\textsuperscript{257} (3) that the rule violated the CWA public participation requirement by failing to provide the public with a meaningful role in the permitting process,\textsuperscript{258} and (4) that the actual effluent limitations of the rule were flawed.\textsuperscript{259}

The Second Circuit found the first three challenges to be valid, but rejected most of the fourth challenge. In particular, it held that under the CWA, the EPA was compelled to issue a rule that required the permitting authority to actually review the submitted nutrient management plan and incorporate that plan into the issued permit.\textsuperscript{260} Moreover, the Court also held\textsuperscript{261} that the rule failed to incorporate the CWA requirement that there be an opportunity for a public hearing before any permitting agency issues a permit,\textsuperscript{262} that a copy of the permit application be available to the public,\textsuperscript{263} and that any citizen may bring a civil suit for violations of the CWA.\textsuperscript{264} The Court rejected, however, the environmental plaintiffs’ challenges to the actual effluent limitations contained in the EPA CAFO rule, determining that the EPA did not arbitrarily and capriciously balance the economic and technological information available to it in establishing those guidelines,\textsuperscript{265} but it did hold that the EPA failed to justify its decision for failing to promulgate water quality-based effluent

\textsuperscript{255} 40 C.F.R. § 122.42(e)(1)(i)-(ix).
\textsuperscript{256} 40 C.F.R. § 122.23(b)(8).
\textsuperscript{257} 399 F.3d at 498.
\textsuperscript{258} 399 F.3d at 503.
\textsuperscript{259} 399 F.3d at 511.
\textsuperscript{260} 399 F.3d at 499-503.
\textsuperscript{261} 399 F.3d at 503.
\textsuperscript{262} 33 U.S.C. § 1342(a), 1342(b)(3).
\textsuperscript{263} 33 U.S.C. § 1342(j).
\textsuperscript{264} 33 U.S.C. § 1354(a).
\textsuperscript{265} 399 F.3d at 515, 518, 519, 521,
limitations (an available limitation created by the CWA\textsuperscript{266}) and was ambiguous in its rule about whether states could do so in lieu of the EPA\textsuperscript{267}.

While this case might be regarded as a success for environmental plaintiffs, when compared to the overall goals of the sustainable food movement\textsuperscript{268}, its success is far less evident. The outcome emphasizes several of the movement’s values—for example, the goals of environmental sustainability (and the structuring of regulation for those purposes), as well as public participation\textsuperscript{269}—but fails to incorporate many of the other general values held by the sustainable food movement, such as economic sustainability for producers and consumer, justness, “sacredness,” healthfulness, and expressiveness of the food system for cultural contexts\textsuperscript{270}. This is due to the avenue of litigation used by the plaintiffs—that is, the CWA NPDES program, which provides for certain environmental and public participation requirements, but little else of the values supported by the sustainable food movement. Nor does the outcome of the case advance many of the particular concerns of the sustainable food movement with CAFOs—for example, the negative living conditions of the animals, the detrimental impacts of CAFOs on small-scale farmers, or the reduction of dietary choices\textsuperscript{271}. Indeed, with one of the concerns expressed regarding CAFOs—that is, that the use of CAFOs engender a “technological takeover” of the food system, the lawsuit is arguably counterproductive, in that the Court required and validated the use of nutrient management plans to handle the pollution generated by CAFOs.

The other CWA lawsuits against CAFO regulatory programs consist of challenges to different types of state programs regulating CAFOs in some manner. Many of these challenges have been successful, but again, as with Waterkeeper, their focus is on either environmental protection grounds or the availability of public participation, rather than on the umbrella of goals urged by the sustainable food movement, or even on the particularized objections of the sustainable food movement to CAFOs, as described above\textsuperscript{272}.

\textsuperscript{266} 33 U.S.C. § 1312(a), 1314(1).
\textsuperscript{267} 399 F.3d. at 523.
\textsuperscript{268} See Parts II.A., II.B.1.b.
\textsuperscript{269} See Part II.A.
\textsuperscript{270} Id.
\textsuperscript{271} See Part II.B.1.b.
\textsuperscript{272} See Part II.B.1.b.
These challenges take a number of forms, but they all
general involve either challenges to EPA’s approval of state
programs under the CWA, or direct challenges to the state
programs themselves. One early success was *Save the Valley, Inc. v. EPA*, where an environmental group, Save the Valley,
challenged the EPA’s failure to require Indiana to create an
NPDES permitting requirement for its CAFOs. This was prior to
the EPA rule issued in *Waterkeeper Alliance*. While the district
court rejected the plaintiffs’ request that it require the EPA to take
over the Indiana NPDES program, the district court did require
the Indiana Department of Environmental Management to engage
in specified actions to make its NPDES program comply with the
CWA requirements for state-delegated permitting agencies. In
doing so, the court found compelling the substantial environmental
pollution generated by CAFOs, the high bacteria concentrations
of Indiana waters, as well as the trends towards fewer but larger
livestock operations. Another success for environmental
plaintiffs was *Minnesota Center for Environmental Advocacy v. EPA*, where, in the course of the litigation, the EPA concluded
that it erroneously omitted considering pollution from CAFOs in
its analysis of Minnesota’s wasteload allocation in evaluating for
approval Minnesota’s Maximum Daily Load Evaluation of Fecal
Coliform Bacteria Impairments under the CWA state water quality
standards.

These environmental challenges to state programs also
included some losses. For example in *Kentucky Waterways
Alliance v. Johnson*, a Kentucky environmental group
challenged EPA’s approval of Kentucky’s antidegradation rules
adopted pursuant to the CWA. Examining the administrative
record, which included EPA’s evaluation of the effects of various
discharge limitations, the court held that the EPA’s approval of

274 Id. at 1013-15.
275 Id. at 1015.
276 Id. at 1003-04.
277 Id. at 1005.
278 Id. at 1004-05.
280 Id. at *6.
283 Id. at 616; 40 C.F.R. § 131.12(a)(2).
284 429 F.Supp.3d at 624.
Kentucky’s antidegradation rules was not arbitrary and capricious.\(^{285}\)

The direct challenges to state CWA plans for CAFOs have all involved arguments that the state plans failed to provide either adequate public disclosure or adequate public participation under the relevant legal standards. For example, after the Second Circuit Waterkeeper decision, Idaho adopted the Beef Cattle Environmental Control Act to require beef cattle feedlot operators to provide nutrient management plans for their facilities as required by the EPA CAFO regulation.\(^{286}\) Pursuant to an environmental group challenge, the Idaho Supreme Court held that a number of nutrient management plans filed under the Beef Cattle Environmental Control Act were subject to state public disclosure requirements.\(^{287}\) Similarly, a Michigan Court of Appeals held that the Michigan Department of Environmental Quality, in promulgating a rule excepting a number of CAFOs from its permitting process (through a process known as issuing a “general permit”), failed to provide the requisite public participation under the CWA.\(^{288}\)

As with Waterkeeper, these challenges—even when successful—were only able to achieve those goals of the sustainable food movement that were embodied in the available statutory requirements of either the CWA or the state public records laws. A closer read of some of the opinions suggests, however, that the plaintiffs did attempt to bring some of their larger concerns before courts. The discussion of the environmental effects of CAFOs by the Indiana district court in Save the Valley, for example, described some of the unsanitary conditions under which the animals in CAFOs are housed,\(^{289}\) alluding to some of the animal rights concerns expressed by some members of the sustainable food movement. Nevertheless, the incompleteness of the fit between the litigation outcomes and the broader aims of the sustainable food movement highlights the inadequacies of existing litigation structures for reaching these aims, as will be explained later in this article.

\(^{285}\) 429 F.Supp.3d at 634.
\(^{286}\) I.C. § 22-4901 to 4910.
\(^{289}\) 223 F.Supp.3d 997, at 1004-05
CWA challenges to CAFOs have also taken the form of challenges to specific permits issued to individual CAFOs. While the substantive crux of these cases generally revolved around the scientific bases determining whether a challenged CAFO did indeed violate the terms of its permit, and thus in a sense remained restricted to the aim of environmental improvement, the overall process of the litigation occasionally managed to reach a broader range of the concerns set forth by members of the sustainable food movement. One example that stands out is *Humane Society v. HVFC, LLC*, where the Humane Society, a group concerned with the treatment of animals, challenged a goose CAFO for alleged violations of the CWA. This challenge arose under the citizens suit provision of the CWA, which allows a citizen to challenge violations of federal or state NPDES permits after giving 60 days notice to the EPA, the state, and the alleged violator. During the course of this litigation, the goose CAFO argued that the Humane Society lacked standing to raise its CWA challenge, because the suit (which raised environmental concerns) was not “sufficiently germane to [the Humane Society’s] organizational purpose.” The district court held that, even though the Humane Society’s mission statement contains no

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290 See, e.g., *Humane Society v. HVFC, LLC*, 2010 WL 1837785 (S.D. NY 2010) (issuing an injunction to a goose CAFO on the basis that it surpassed the discharge limits contained in its NPDES permit); *Coon v. Willet Dairy*, 536 F.3d 171 (2d Cir. 2008) (rejecting a CWA citizen suit against a dairy CAFO brought by a group of neighbors associated with the sustainable food movement on the grounds that the dairy complied with the terms of its NPDES permit); *Johnson County Citizen Committee for Clean Air and Water v. EPA*, 2005 WL 2204953 (rejecting lawsuit by environmental group to compel the EPA to revoke a specific NPDES permit on the grounds that the CWA does not create a mandatory duty for the EPA to investigate complaints, hold hearings, or make findings of violations under the circumstances of the case); *Community Association for Restoration of the Environment v. Henry Bosma Dairy*, 305 F.3d 943 (9th Cir. 2003) (agreeing with the environmental group that the challenged dairy operation did indeed violate the terms of its NPDES permit); *Collins v. Texas Natural Resource Conservation Commission*, 94 S.W.3d 876 (Ct. App. Tx. 2002) (rejecting attempt by organic farmer to request a contested case hearing to oppose an application by a poultry CAFO to change from a dry to wet nutrient management system); *Adams v. State of Wisconsin Livestock Facilities Siting Review Board*, 327 Wis.3d 676 (Ct. App. Wisc. 2010) (holding that individual plaintiffs connected to the sustainable food movement had no grounds challenge a town’s decision not to impose conditions on the approval of a livestock facility citing).

291 See Humane Society, About Us, at http://www.humanesociety.org/about/.


293 2010 WL 1837785 at *4.
reference to environmental concerns, and even though it describes itself as an “animal protection organization” that the Humane Society passed the relevant legal test for germaneness with regard to standing, which was only whether the suit would “reasonably tend to further the general interests that the individual members sought to vindicate in joining the association and whether the lawsuit bears a reasonable connection to the association’s knowledge and experience.” Such a holding reaches broadly to a number of food sustainability plaintiffs, who might have greater concerns about CAFOs beyond their environmental effects—including humane animal treatment, but also including the socioeconomic concerns of small-scale farmers as well as the availability of diverse food sources.

But the type of case raised also affects even the availability of lawsuits where the plaintiffs main concerns are tangent to the environmental considerations outlined in the permitting process. Collins v. Texas Natural Resource Conservation Commission presents such a contrasting example. In that case, Robert Collins, a nearby organic farmer near to a poultry CAFO sought a contested case hearing to challenge the CAFO’s application to change from a dry to wet nutrient management system. No citizen suit was available, as no violations could be found because the permit had not yet been granted by the Texas Natural Resource Conservation Commission. Instead, the organic farmer sought to challenge the permit application through a state administrative procedure known as a contested case hearing, under which “affected persons” could challenge the Texas Natural Resource Conservation Commission’s grants of permit applications. The court affirmed the Texas Natural Resource Conservation Commission’s decision that the organic farmer was not sufficiently adjacent to the poultry farm to be an affected person. Nevertheless, this case might not be considered a total loss for those in the sustainable food movement. Rather than focusing on the plaintiff’s place in the sustainable food community and rejecting those concerns as incompatible with providing contested case hearings, the court simply evaluated the

294 See supra note 291.
295 2010 WL 1837785 at *4.
296 2010 WL 1837785 at *4 (citing Downtown Dev., 448 F.3d at 149).
298 Id. at 876.
299 Id. at 882; 30 Tex. Admin. Code § 55.27 (describing contested case hearing); 30 Tex. Admin. Code § 55.29(a) (describing an “affected person” that can raise a contested case hearing).
300 94 S.W.3d at 883.
direct effects of the CAFO on the plaintiff, leaving open the possibility that an organic farmer situated nearer to a CAFO would be able to raise a contested case hearing.\textsuperscript{301}

\section*{2. Clean Air Act}

Clean Air Act challenges to CAFOs are relatively recent as compared with Clean Water Act lawsuits, perhaps because statutory exemptions create certain limits for the application of CAA permitting programs to agricultural activities.\textsuperscript{302} Nor has the EPA given much encouragement for such lawsuits; as one observer has stated, “Because EPA's claims have been hampered by the difficulty in measuring emissions from CAFOs and a lack of knowledge about how to accurately estimate them, in 2005 the agency offered integrators and contract growers a generic settlement of Clean Air Act violations, exchanging conditional covenants not to sue for the payment of fairly small penalties.”\textsuperscript{303}

Such barriers were evident in \textit{Sierra Club v. Mississippi Environmental Quality Board},\textsuperscript{304} where the Supreme Court of Mississippi rejected a challenge brought by an environmental group against the Mississippi environmental permitting agency for issuing an air permit to a Mississippi swine CAFO. The Sierra Club requested monitoring of the odor and placement of controls such as the construction of a windbreak wall behind the exhaust fans of each CAFO housing unit and argued as well that the permit failed to adequately require the CAFO to monitor the odor arising from the CAFO.\textsuperscript{305} The Court rejected these arguments, holding that the controls already contained in the permit issued by the Mississippi Environmental Quality Board were not arbitrary and capricious due to the “credible, albeit conflicting, evidence”\textsuperscript{306} and


\textsuperscript{304} 943 So.2d 673 (S.Ct. Miss. 2006).

\textsuperscript{305} \textit{Id.} at 676.

\textsuperscript{306} \textit{Id.} at 680.
that refusal to require a monitoring scheme for odor was reasonable in light of the difficulties in quantifying odor.\footnote{Id. at 682.}

Later cases brought by activists have been more successful. The Association of Irritated Residents successfully challenged a rule issued by the San Joaquin Unified Air Pollution Control District establishing a permit process for CAFOs.\footnote{See Association of Irritated Residents v. San Joaquin Valley Unified Air Pollution Control District, 168 Cal.App.4th 535 (Ct. App. 5th D.Cal. 2008).} The District had adopted this rule under the California State Implementation Plan for the Clean Air Act.\footnote{See Association of Irritated Residents v. San Joaquin Valley Unified Air Pollution Control District, 168 Cal.App.4th 535, 543 n.2 (Ct. App. 5D.Cal. 2008).} According to the plaintiffs, though, the district failed to perform a required health-effects analysis before adopting the rule,\footnote{Id. at 542.} and the court of appeals agreed.\footnote{Id. at 548-49.} The same group of plaintiffs also successfully fought a motion to dismiss their challenge to a dairy CAFO for violating the Clean Air Act.\footnote{Association of Irritated Residents v. Fred Schakel Dairy, 2008 WL 850136 (E.D. Cal. 2008).} The plaintiffs argued that the dairy violated the Clean Air Act by constructing a major source of Hazardous Air Pollutants and failing to obtain the required Maximum Available Control Technology determination for methanol emissions prior to the construction.\footnote{Id. at *1 (E.D. Cal. 2008).} In refusing to dismiss the case, the district court pointed out that the plaintiffs provided a 2006 study which stated that the dairy had the potential to emit ten tons per year of methanol,\footnote{Id. at *6.} even though the dairy argued that its own analysis demonstrate that the dairy emitted less than that amount.\footnote{Id. at *5.}

As with the individual water permit challenges, the majority of discussion in these CAA cases emphasize only one of the concerns of the sustainable food movement: the negative environmental effects of the CAFOs. However, one of the cases...
also reaches beyond this and touches some other concerns. In the Association of Irritated Residents challenge to the San Joaquin Unified Air Pollution Control District’s rule, the court specifically addressed how in promulgating the rule, the district failed to adequately consider its potential public health impacts. In doing so, the court emphasized a number of the broader concerns of the sustainable food movement. The court also pointed out that “the prejudice [of adopting the rule without the required public health impacts] is not that the rule was adopted, but that it was adopted without informed and transparent decisionmaking.” Moreover, it discussed how such transparent decisionmaking is necessary in light of the “delicate balancing of competing policies and interests [that] must occur” within an agency, such interests as “the need for jobs, economic viability in the valley, a consistent high-quality food source, plentiful clean water, and many other interests.” Thus, even though the result of the case turned upon the agency’s methodology, the litigation also had the broader effect of allowing the court to publicly articulate these other concerns of the sustainable food movement, concerns such as knowledge regarding the food system, the justness of the food system, regulation of the food system for environmental and socially conscious values, and healthfulness of the food system.

3. COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT; AND EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT

When plaintiffs associated with the sustainable food movement have challenged CAFOs under CERCLA and EPCRA, they have generally argued that the ammonia emissions arising out of the challenged CAFO’s waste management system constitute a hazardous waste subject to CERCLA and EPCRA reporting requirements, and that the CAFO failed to follow such requirements. Under these types of lawsuits, plaintiffs have had

316 Association of Irritated Residents v. San Joaquin Valley Unified Air Pollution Control District, 168 Cal.App.4th at 548.
317 Id. at 547.
318 Id.
319 42 U.S.C. § 9603(a) (CERLCA hazardous waste reporting requirements).
320 See, e.g., Sierra Club v. Seaboard Farms, 387 F.3d 1167 (10th Cir. 2004) (arguing that a swine CAFO failed to follow the CERCLA reporting requirements for ammonia); Sierra Club v. Tyson Foods, 299 F.Supp.2d 693 (W.D. Ky. 2003) (arguing that a poultry CAFO failed to follow the CERCLA reporting requirements for ammonia).
to demonstrate that the release of ammonia by these CAFOs surpassed the threshold necessary to trigger these reporting requirements.\(^{321}\) Such suits, therefore, are related to the values of environmental protection held by members of the sustainable food movement.

Some aspects of these suits extend beyond the environmental protection goals, however. One of the criticisms made by members of the sustainable food movement against CAFOs have been their industrialization of agriculture.\(^{322}\) From that perspective, by getting courts to apply CERCLA—a statute passed “in response to the serious environmental and health risks posted by industrial pollution”\(^{323}\)—the sustainable food movement has emphasized how the structure of such operations act more as modern industries, rather than traditional farms.\(^{324}\) This distinction between CAFOs and traditional agriculture was advanced even more in *Sierra Club v. Tyson Foods*, where the district court rejected Tyson Foods’s argument that certain EPCRA reporting requirements fell under an exemption for regulated substances “used in routine agricultural operations.”\(^{325}\) According to the court, these were not routine agricultural uses; instead, the defendants were “try[ing] to get rid [of the gaseous ammonia] because it is harmful to the chickens.”\(^{326}\) Finally, by emphasizing the reporting requirements,\(^{327}\) such suits also help advance the sustainable food movement’s general values of increasing public knowledge about the food system.

4. **General State Permitting Requirements**

Challenges to CAFOs made by members of the sustainable food movement under state permitting requirements have been less

\(^{321}\) *Id.*

\(^{322}\) See, e.g., Kimbrell, *supra* note 136.


\(^{324}\) See, e.g., *Sierra Club v. Seaboard Farms*, 387 F.3d at 1173 (refusing to limit the application of CERCLA to the narrow definition of “facilities” argued for by Seaboard Farms).

\(^{325}\) *Sierra Club v. Tyson Foods*, 299 F.Supp.2d at 713 (citing 42 U.S.C. § 11021(e)(5)).

\(^{326}\) *Id.* at 714.

\(^{327}\) Indeed, in these cases, the plaintiffs argued that the challenged CAFO was subject to additional reporting requirements under the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. § 11049(4), which “provide[s] citizens with accurate information [regarding] all releases of toxic chemicals at a site for informational purposes.” See, e.g., *Sierra Club v. Seaboard Farms*, 387 F.3d at 1173 (citing plaintiff’s brief) (emphasis in original).
successful than their federal challenges. Examples of losses in state permitting challenges brought by those associated with the sustainable food movement include an environmentalist challenge brought by a nonprofit “organized to critically examine and oppose activities that adversely influence the use and value of property and the quality of health and the environment” against a landowner seeking to operate a hog CAFO on his property. The crux of the dispute revolved around whether the hog CAFO would be classified as a “new facility” that fell under state permitting requirements under the Illinois regulations concerning the health and safety impact of livestock-management facilities or an expansion of an existing facility, which did not. If the hog CAFO did fall under the category of “new facility,” it would have to comply with certain setback requirements, public notice requirements, and siting restrictions. Although the expansion would involve a dramatic increase from 56 animal units to 1500 animal units, the court held that, under the language of the Illinois Livestock Management Facilities Act, this constituted an expansion, rather than a new facility.

Another example of a loss by plaintiffs associated with the sustainable food movement is a case brought by a group of concerned neighbors called Save the Valley challenging the issuance of an Indiana permit for a confined feeding operation in Jefferson County, Indiana. The plaintiffs sought declaratory and

328 See, e.g., Rochester Buckhart Action Group v. Young, 279 Ill.App.3d 1030 (App. Ct. Ill 4th D. 2008) (holding against an environmentalist group’s challenge to a CAFO on the basis because the challenged farm didn’t fall under the Illinois Livestock Management Facilities Act category of “new livestock management facility”); Save the Valley v. Ferguson, 896 N.E.2d 1205 (Ct. App. Ind. 2008) (holding against a citizen’s group challenge because the challenge was found to have not been made appropriately under the state permit challenge procedure).


332 510 ILCS 77.35(c); 510 ILCS 77.12; 510 ILCS 77.13(b).

333 Id. at 1040.

334 But see id. at 1040 (“Given that the legislature was mindful of the tendency toward increased concentration of animal units and the resulting harm to the environment when it enacted the Act, it seems unreasonable that defendant could change the nature and character of his operation from a de minimus operation housing only 56 animals to a very large operation housing 1,500 animal units without engaging in any of the notice, processing, and siting requirements . . . ) (J. Cook, dissenting).

335 Save the Valley v. Ferguson, 896 N.E.2d 1205 (Ct. App. Ind. 2008).
injunctive relief, but not monetary relief. According to the court, the lack of inclusion of a request for monetary relief brought the challenge outside of the bounds defined by the legislature for review of such permitting decisions. Thus, the court of appeals affirmed the trial court’s earlier dismissal of the challenge.

This is not, however, to say that there have been no successful challenges to CAFOs under state permitting requirements. Indeed, several neighbors of CAFOs with few discernable ties to the sustainable food movement have won lawsuits against CAFOs made under state permitting requirements. A full attempt to explain this apparent disparity is beyond the scope of this paper, but the overall difficulty of such challenges (from within and outside the sustainable food movement) may arise from the political contexts surrounding state regulation of CAFOs, leaving relatively constrained opportunities for successful challenges by plaintiffs as compared to federal challenges.

Another explanation may be related to the nature of state permit challenges, and difficulties with raising such claims. Plaintiffs—both inside and outside of the sustainable food movement—in such contexts may lack knowledge, public participation opportunities, and even means for legal participation. For example, states differ in how much notice their agencies are

\[336 \text{Id. at 1206.}\]

\[337 \text{Id. at 1207.}\]

\[338 \text{Id.}\]

\[339 \text{See, e.g., Hanchera v. Board of Adjustment, 694 N.W.2d 641 (holding that a neighboring landowner who challenged the erection and operation of a CAFO demonstrated that the builder failed to establish follow zoning requirements); Kirschenman v. Hutchinson County Board of Commissioners, 656 N.W.2d 330 (S.Ct. S.Dakota 2002) (holding that the challenging citizens were entitled to a writ of mandamus to compel county to hold a referendum on the grant of a CAFO permit).}\]


\[341 \text{Douglas R. Williams, When Voluntary, Incentive-Based Controls Fail: Structuring a Regulatory Response To Agricultural Nonpoint Source Water Pollution, 9 WASH. U. J.L. & POL’Y 21, 55 (2002).}\]
required to give the public regarding CAFO permit applications as well as the amount of information made available to the public during various stages of the permitting process. Notice requirements can have significant impacts on the opportunity that residents have to engage effectively in the permitting process, given that if residents cannot even begin to participate if they are unaware that a permitting action is about to proceed. Similarly, if residents lack access to the information considered relevant to a permit application, they will be less able to frame adequate responses, should disagreements arise.

Moreover, such notice may come at a later date than that most effective for residents wishing to provide agencies with relevant comments. Draft permits may be highly technical, containing terms and conditions for construction and operation; lay members of the public may therefore be less able to engage with such documents through an assessment of their technical validity than through earlier discussions of relevant knowledge and opinions about the filing of a permit application itself.

Members of the sustainable food movement, as well as neighbors unconnected to this movement, may also face hurdles in framing their values in a manner that state agencies can consider under their state permit requirements. Most state CAFO permitting regulations include specific factors that the state permitting agency must consider in deciding whether to grant, modify, or deny a permit application. Some of these factors, such as distance from occupied dwellings, churches, schools, hospitals, and parks, are ones in which local residents can more easily provide relevant input. Other factors, such as degree to which facility is located in a site with direct hydrologic connection to groundwater may present greater difficulties for residents, who may need to transform experiential observations about site connections into scientific demonstrations of hydrological connections. Yet other factors, such as meeting certain technical standards and guidelines in waste control facilities, may present even higher hurdles to effective local participation even where such participation would be helpful to the agency in reaching its decision, given the technical nature of such evaluations. Yet for all of these factors, local residents may have knowledge or fears that, if communicated, would be relevant to the permitting agency’s underlying decisionmaking requirements.

For example, under the Illinois Environmental Protection Act, CAFOs must be set back certain specified distances from the nearest occupied residence and the nearest occupied area,
depending on the size of the CAFO.\textsuperscript{342} Owners of nearby residences may also submit waivers that allow such setback distances to be decreased.\textsuperscript{343} Such concrete setback requirements present areas in which CAFO neighbors can provide information, perhaps simply by surveying distances between their occupations and the proposed CAFO facility. Receiving information from residents on this issue can be helpful to agencies as well, especially in locations where the occupation status of nearby buildings may be unknown.

Moreover, certain types of technical design considerations may require specialized training to fully understand—training that local residents may understandably lack—yet raise issues that could generate reactions among the residents if fully understood. Such design considerations include whether standards for livestock waste handling facilities meet the strength and load factors in the Midwaste Plan Service’s Concrete Manure Storage Handbook;\textsuperscript{344} whether footings and underlying structure support has been incorporated into the design standards of non-lagoon structures in accordance to professional guidelines,\textsuperscript{345} and whether earthen livestock waste lagoons will be constructed in accordance with certain national guidelines.\textsuperscript{346} These are considerations to which neighbors of CAFOs may have little pertinent knowledge of their own to contribute. Yet if they were made aware of the basis behind these design specifications, they may still have opinions regarding the importance of whether these considerations are met. To the extent that public support or opposition to a CAFO project is relevant to the decisionmaking process, soliciting such opinions from local residents during the CAFO permitting process could help agencies reach a more considered decision.

Finally, the high expense of state permit challenges may create a barrier for successful challenges in this context. While such hourly rates may vary a great deal, as well as by locality, some perspective on the scale of such rates may be gleaned from attorney’s fees actions. In \textit{Community Ass’n for Restoration of Environment v. Henry Bosma Dairy},\textsuperscript{347} a landmark case for opponents of CAFOs, a district court held as reasonable the following set of expert expenses:

\begin{itemize}
\item See 510 I.L.C.S. 77/35(2)-5).
\item See 510 I.L.C.S. 77/35(g).
\item 510 I.L.C.S. 77/13(a)(1), (3)-(5).
\item 510 I.L.C.S. 77/13(b)(3).
\item 510 I.L.C.S. 77/15(a).
\item \textit{See} 2001 WL 174240 (E.D. Wash. 2001).
\end{itemize}
For the total expert witness expenses requested of $65,576.89, CARE has submitted the following expense detail: (1) Mr. Mason, economic evaluation, $22,400.00 in fees based on an hourly rate of $120.00 per hour for non-court time, and $175.00 for trial and deposition time, plus $1,168.00 in costs for a total of $23,23,568.00; (2) Mr. Gay of TechCon, Inc., a registered civil engineer, $11,150.00 in fees based on an hourly rate of $75.00 per hour, plus $1,800.00 for costs; (3) Mr. Monk, a hydrogeologist, $7,164.00 for fees based on an hourly rate of $60.00 per hour, plus $962.21 for costs for a total of $8,126.21; (4) Jones & Roth, accountants, $777.50 in fees; (5) Dr. Mark Powell, an aquatic biologist, $19,875.00 for fees based on an hourly rate of $125.00 per hour; and (6) Dr. Stephanie Harris, a veterinary officer with the U.S. Public Health Service, who charged no fee, and only incurred travel expenses of $279.00.348

This amounts to a total witness fee of $65,576.40. Although ultimately the court awarded such fees and costs to the plaintiffs, this would not be the case prior to successful litigation, especially when local residents are not yet contemplating legal action but simply trying to provide their own input into the permitting decision. Although the number of hours needed for an expert to aid in commenting would be far fewer than necessary for litigation, even a fraction of such expenses could be cost-prohibitive for local residents.

Moreover, the Henry Bosma case was brought under the Clean Water Act, and therefore the community’s expert resources were focused on civil water engineering and water quality. But, as described earlier, the primary concerns of local residents often pertain more to odor and air quality. Thus hiring air quality experts to provide assessments of both the likely air pollution effects of a CAFO, as well as the best management practices most

348 Id. at *20. In similar actions, courts have upheld as reasonable hourly rates of $250-$300 for chemical engineering experts in pollution actions. See New York v. Solvent Chemical Co., Inc., 210 F.R.D. 462, 468-469 (W.D.N.Y. 202).
likely to address such air pollution, can also add to the expense of participation.\textsuperscript{349}

Costs rise again if local residents feel the need to engage the services of attorneys to help them interact more effectively with the permitting process by explaining the relevance and procedures of certain statutory considerations. Reasonable rates for environmental attorneys working on such matters can range from $150 to $225.\textsuperscript{350} Again, residents may be unwilling or even unable to engage the services of legal experts to aid in their public participation. Such expenditures, too, could be lessened through public liaison programs with technically competent agencies charged with aiding local residents in framing their concerns in a more legal or scientific fashion relevant to agencies’ decisionmaking processes. Such programs would come, however, at the taxpayers’ expense, and thus require making deliberate decisions regarding the parties that will foot the bill for such research and assessment.

Even if these lawsuits were successful, however, the ability of plaintiffs from the sustainable food movement to pursue all of the goals of the movement was somewhat limited. What all of the plaintiffs in these individual cases sought were to either stop or create delay for the challenged CAFOs,\textsuperscript{351} rather than to change the overall nature of the food system. This could be due to the constrained nature of state and local permitting challenges, where the types of claims allowable to plaintiffs is often limited to debates about the scientifically demonstrable direct environmental impacts of CAFO pollution and technical compatibility with acceptable design practices.\textsuperscript{353} Or it could be due to the greater familiarity of national groups associated with the sustainable food movement with federal environmental laws rather than state

\textsuperscript{350} See, e.g., Sierra Club v. U.S. E.P.A., 2007 WL 3070996, at *2-3 (N.D. Cal. 2007) (finding, in an action for attorney’s fees under the Clean Air Act, that an hourly rate of $450 for two experienced environmental lawyers to be reasonable.)
\textsuperscript{351} See supra note 328.
\textsuperscript{352} A further unexplored area is the tension between local zoning laws and state regulation of CAFOs. Cf. Clayton P. Gillette, The Exercise of Trumps by Decentralized Governments, 83 Va. L. Rev. 1347, 1351-52 (1997) (arguing that legal scholarship often conflates distinctions between state and local regulation).
\textsuperscript{353} See supra Part III.A.4.
permitting laws. Either way, the ability of these groups—self-described to be focused on local action—to pursue state CAFO permitting challenges in the context of litigation has seemed to be limited.

5. COMMON LAW CLAIMS

As with the challenges to CAFOs brought under state permitting laws, a number of the common law claims brought by plaintiffs have been brought by neighbors of CAFOs, rather than specifically plaintiffs who were associated in some manner to the sustainable food movement. The nuisance suits brought by those connected with the sustainable food movement, however, have been more effective than the state permit challenges and have even been somewhat successful in achieving more of the goals of the sustainable food movement.

One successful nuisance challenge was brought by a group of property owners along with amici from environmental groups. The plaintiffs alleged that odors arising from a neighboring hog CAFO constituted trespass, negligence, and nuisance, and sought injunctive and compensatory relief. Although the court of appeals rejected the trespass claim, stating that “odors do not interfere with the exclusive possession of land,” it did hold that the odors could support a claim for nuisance if they “rise to the level of nuisance harm and are caused by a condition intentionally maintained by the defendant.” Moreover, the court held that the district court erred in determining that compliance with generally acceptable agricultural practices was sufficient to defeat the plaintiffs’ negligence claim; according to the court of appeals, generally acceptable agricultural practices (as defined by Minnesota statute) were a baseline for precaution, but their use

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357 Id. at 549.

358 Id. at 554.

359 Id. at 554.

360 Minn. Stat. § 561.19 subd.2.
“did not necessarily preclude a finding that the actor was negligent in failing to take additional precautions.” Finally, the court held that the hog farmers were agents of a larger pork processing operation such that the operation could be held accountable for the damages caused by the individual CAFO. Thus the court of appeals remanded the case to the district court for reconsideration of the nuisance and negligence claims.

Beyond the environmental protection values of the sustainable food movement, the lawsuit may have also advanced the movement’s desire to distinguish CAFOs from traditional farming practices, and perhaps even of preserving traditional farming practices. By achieving a holding that generally acceptable agricultural practices did not act as a shield against negligence claim, the plaintiffs and amici were able to receive a judicial ruling that CAFOs can be held accountable for their effects apart from their status as farms. In addition, by achieving a holding that industrial pork processors could be held liable for the nuisances and negligence caused by their contracting hog farmers, the plaintiffs and amici were able receive a judicial connection between the hog farmers and the pork processors, solidifying their depiction of the industrialization of agriculture as seen in their literature.

In another nuisance suit—one brought by the Sierra Club against a hog CAFO in Iowa—the environmental group was able to reach a mediated settlement with the CAFO to create a buffer between the operation consisting of prairie grass, to maximize soil retention and water filtration. The settlement also limited the land application of hog manure to a few specified parcels of land. Although some of the terms of the settlement were later challenged by the owner of the CAFO, the Iowa Supreme Court

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361 *Wendinger v. Forst Farms*, 662 N.W.2d at 554 (quotations and citations omitted).
362 *Id.* at 554.
363 *Id.* at 555.
364 See *FOER*, supra note 109, at 108-09.
365 See Donald E. Bixby, *Old MacDonald Had Diversity: The Role of Traditional Breeds in a Dynamic Agricultural Future* in *IMHOFF*, supra note 110.
366 see also Brief for Amici Land Stewardship Project, available at http://www.flaginc.org/topics/news/amicus/20021204_WendingerAmicus.pdf (briefing only on the issue of whether the hog farmers were agents of the larger pork processors at 1).
368 *Id.*
affirmed the Sierra Club’s interpretation of the agreement.\textsuperscript{369} The effect of this settlement advanced one of the goals of the sustainable food movement—that of increased environmental protection from pollution due to CAFOs. The settlement, however, did not contain a number of terms that might have advanced some of the broader goals of the sustainable food movement; for example, public participation terms have been used in other settlements of environmental challenges.\textsuperscript{370} Nor did the settlement address any of the other concerns raised by critics of CAFOs, such as humaneness of animal treatment, diversity of the food supply, or detrimental impacts on public health, even though such opportunities were arguably available, given the range of options in settlements.\textsuperscript{371} This is not to say that such options were not advanced by the plaintiffs during the mediation, but simply that the ultimate settlement agreement failed to capture these values expressed by the sustainable food movement.

Hurdles nevertheless remain for these plaintiffs. In a nuisance against hog CAFOs in North Carolina, a number of river associations challenged a corporate pork processor for their handling of hog waste, based on theories of negligence, trespass, strict liability, public nuisance, unfair and deceptive trade practices, private nuisance, and the public trust doctrine.\textsuperscript{372} The court of appeals ruled against these plaintiffs on the grounds that they failed to establish standing for their injuries.\textsuperscript{373} The problem, according to the court, was that the plaintiffs failed to seek individualized forms of relief.\textsuperscript{374} According to the court, “the state is the sole party able to seek non-individualized, or public, remedies for alleged harm to public waters.”\textsuperscript{375} Because the CAFO’s lagoon waste management systems existed pursuant to

\textsuperscript{369} Id. at 704.
\textsuperscript{370} See, e.g., Emily L. Dawson, Lessons Learned from Flint, Michigan: Managing Multiple Source Pollution in Urban Communities, 26 WM. & MARY ENVTL. L. & POL’Y REV. 367, 400-01 (2001) (describing how the terms of a settlement against a power station included reducing environmental impacts and increasing public participation, but criticizing the settlement’s lack of concrete benefits for the community).
\textsuperscript{371} See, e.g., Michael Moffitt, Three To Be Against, (“Settlement” Not Included), 78 FORDHAM L. REV. 1203, 1212 (2009) (describing how “settlement offers the prospect of value creation”).
\textsuperscript{373} Id. at 118-19.
\textsuperscript{374} Id. at 53.
\textsuperscript{375} Id. at 54.
legislative authority, the court held that the plaintiffs were unable to challenge the CAFO under theories of public nuisance.\footnote{\textit{Id.} at 54.}

Again, a full evaluation of the causes of this disparity is beyond the scope of this paper. Complicating the analysis of this disparity is how the case selection process involved with representation in such challenges may shape the prioritization of certain cases (e.g., those deemed more likely to either be successful or have higher legal impact) over others.\footnote{\textit{Cf.} Reyna Ramolete Hayashi, \textit{Empowering Domestic Workers Through Law And Organizing Initiatives}, 9 SEATTLE J. FOR SOC. JUST. 487, 503 (2010) (describing how, in the case selection process for impact litigation, “attorneys look for cases that fit a particular legally recognizable claim and prefer those clients who precisely fit each of a claim’s statutory elements in order to best posture the case for success”); \textit{see also} Ann E. Carlson, \textit{Standing for the Environment}, 45 UCLA L. REV. 931, 962 (1998) (“In many environmental cases . . . not only is the litigation generated by attorneys as opposed to clients, but the issue of harm to the individual is at best a tangential question in the litigation. That is why environmental cases frequently raise difficult standing questions and employment discrimination and contracts cases in federal court do not. Even in other types of cases initiated by lawyers instead of by clients--large impact litigation, for example, or class actions--the injury at issue in the litigation is typically a central part of the case even when the injured parties play a relatively small role.”).}

But one possible explanation for the relative success of sustainable food movement challenges brought under common law theories as compared to state CAFO permitting laws may be the somewhat greater openness of the common law for introduction of various values in the context of CAFOs as opposed to the context of the more constrained state CAFO permitting requirements.\footnote{\textit{This is not to say that common law challenges are always available in the CAFO context. As a number of observers have pointed out, state Right-to-Farm laws have shielded a number of agricultural operations from common law challenges in different ways. \textit{See, e.g.}, Terence J. Centner, \textit{Nuisances From Animal Feeding Operations: Reconciling Agricultural Production and Neighboring Property Rights}, 11 DRAKE J. AGRICULT. L. 5, 6 (2006); Alexander A. Reinert, Note, \textit{The Right to Farm: Hog-Tied and Nuisance-Bound}, 73 N.Y.U. L. REV. 1694, 1695 (1998). But state permitting requirements may be even more constrained; as other scholars have observed, both the state permitting requirements and even federal permit requirements often focus on “inputs, not outcomes, and neither kept track of cumulative effects.” Bruce Yandle, \textit{Creative Destruction and Environmental Law}, 10 PENN STATE ENVTL. L. REV. 155, 170 (2002). Moreover, even in the absence of state Right-to-Farm Laws, common law challenges may be inadequate to address the concerns of the sustainable food movement, given the limitations of judicial evaluation of such concerns. \textit{Cf.} Robert V. Percival, \textit{The Clean Water Act and the Demise of the Federal Common Law of Interstate Nuisance}, 55 ALA. L. REV. 717 (2004) (discussing}}
Another factor may be the reluctance of those with valid claims against CAFOs to enter into the state permitting process in the first place, and thus avail themselves of related judicial challenges. Concerns over the permitting process itself can often be part of the public controversy associated with CAFOs.\textsuperscript{379} As some sociologists have documented, local controversies over CAFOs extend beyond fears presented by the CAFOs themselves, to fears generated by the permitting process.\textsuperscript{380} Under the permitting process, plaintiffs may fear uncertainties regarding whether their rights—procedural and substantive—will be protected under the permitting law,\textsuperscript{381} perceive unfairness in the process as well as threats to their own identity,\textsuperscript{382} and be subject to feelings of mistrust over the other stakeholders involved.\textsuperscript{383}

Indeed, when the U.S. Department of Agriculture documented the effects of large-scale farming and its impact on the community quality of life, they found that residents of communities where large, absentee-owned nonfamily farms were more numerous than smaller farms had less control over democratic decisionmaking, either through their own lack of empowerment or because the nonfamily farms had far greater resources with which to exert political control.\textsuperscript{384} Thus local plaintiffs associated with the sustainable food movement may have pursued lawsuits under common law theories of negligence and nuisance as their only remaining options for challenges against CAFOs, and been subject to the case selection constraints described earlier.

Regardless of the explanation, the success of some lawsuits against CAFOs brought under common law theories demonstrate their potential to reach a broader range of values emphasized by the sustainable food movement. Such lawsuits may allow plaintiffs to more strongly emphasize the distinctions between traditional agriculture and CAFOs than they could under state or some of the drawbacks of sole reliance on common law to address environmental harms).


\textsuperscript{380} See generally Welsh & Gray, supra note 379 (citing Charles Abdalla et al., Alternative Conflict Resolution Strategies for Addressing Community Conflicts over Intensive Livestock Operations: Final Report for Pennsylvania Department of Agriculture Contract # ME 448432).

\textsuperscript{381} See id. at 298-300.

\textsuperscript{382} See id. at 301.

\textsuperscript{383} See id. at 301-02.

\textsuperscript{384} Pew Charitable Trusts, supra note 71, at 43.
federal legislation. Moreover, the opportunity for settlements without the constraints of state or federal agency requirements may allow for plaintiffs to craft creative agreements that incorporate more of the movement’s values than those set forth under federal or state environmental laws.

B. GMO Litigation

The main type of lawsuit raised by those associated with the sustainable food movement against GMO-related activities are challenges to approvals by APHIS of some form of use of GMOs, although other challenges that do not fit that category also exist. These challenges, in turn, generally raise a central claim that APHIS failed to comply with the National Environmental Policy Act (NEPA), under which agencies must prepare an environmental impact statement (EIS) for “major federal actions significantly affecting the quality of the human environment.” Even the single challenge that was not challenge against an APHIS decision was still a challenge involving the compliance of the Food and Drug Administration (FDA) with NEPA. Most of these NEPA challenges, in turn, have been generally successful, perhaps because NEPA provides a somewhat broader opportunity for challenge than the narrower statutes discussed earlier.

In one of its earlier challenges to an APHIS approval, the Center for Food Safety challenged APHIS’s issuance of permits to ProdiGene, Monsanto, HARC, and Garst Seed for the open-air testing of crops in Hawaii engineered to produce pharmaceuticals. Prior to the lawsuit, APHIS had extended permits to various companies to grow crops in Hawaii to produce biologically active drugs, hormones, vaccines, and industrial chemicals. According to the plaintiffs, APHIS violated both NEPA and the Endangered Species Act (ESA) in issuing the

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387 Michael Herz, Parallel Universes: NEPA Lessons for the New Property, 93 COLUM. L. REV. 1668, 1677 (1993) (“Among modern environmental statutes, NEPA is unique in its brevity, its scope, and its virtually exclusive emphasis on procedures and broad values rather than standards and narrow requirements.”).
389 Id. at 1205.
390 42 U.S.C. § 4331 et seq.
permits. In addition, the plaintiffs argued that in order to approve this crop experiment, APHIS needed to produce either an environmental impact statement (EIS) or at least a less-burdensome environmental assessment (EA) of the environmental effects of allowing the growth of these crops. According to the plaintiffs, APHIS needed to specifically evaluate two risks: that the experimental crops would contaminate existing crops, and that animals that fed on the crops would become accidental carriers of pharmaceutical product, and to assess these risks as part of a broader program that needed to be analyzed as part of APHIS’s duty under NEPA. Finally, the plaintiffs argued that APHIS violated the Plant Protection Act by failing to respond to their petition for APHIS promulgate regulatory prohibitions on the broad use of food crops to produce genetically engineered biopharmaceuticals and create a publicly available field test violations database.

In terms of legal rulings, the challenge was a general success for the plaintiffs. The Ninth Circuit agreed that APHIS had failed to perform a systematic determination of the effects of the permits on endangered species, emphasizing Hawaii’s “extensive number of threatened and endangered species.” The Court also agreed that some type of environmental evaluation—either an EIS or an EA—needed to be conducted under NEPA, rejecting APHIS’s argument that the project automatically fell under one of the regulatory categorical exclusions to NEPA. But the Court refused to extend its NEPA ruling to require APHIS to assess the effects of the permit as part of a broader program of allowing genetically engineered plants into the environment, limiting the assessment to that proposed in the four permit applications.

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391 16 U.S.C. § 1531 et seq.
392 An environmental impacts statement is in-depth analyses used to comply with NEPA’s mandate to assess the impacts of “major federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4231(2)(c); 40 C.F.R. § 1508.11 (2010).
393 Id. § 1508.9.
395 Id. at 1170-71.
396 Id. at 1171.
397 7 U.S.C. § 7701 et seq.
398 Center for Food Safety v. Johanns, 451 F.Supp.2d at 1181.
399 Id. at 1181-83.
400 Id. at 1181.
401 Id. at 1183-86.
402 Id. at 1189.
Some aspects of the plaintiffs’ challenges were rejected, however. The Court disagreed with the plaintiffs’ argument that APHIS’s inadequate response to the plaintiffs’ petition warranted an injunction. Instead, the Court held that this claim was not justiciable under the Administrative Procedure Act (APA) because APHIS’s decision to avoid promulgating additional regulations or creating a public database was not the type of “discrete agency action” that fell under the APA provisions allowing plaintiffs to challenge agency decisions in court. Finally, the planned field tests were already conducted by the time the case was decided. Thus, the court could only issue declaratory, and not injunctive relief.

The Center for Food Safety treated this case as a landmark. The holding did indeed accomplish some of the aims of the sustainable food movement, such as requiring enhanced public information about the environmental impacts of agriculture. In addition, it may have encouraged the regulation of the food system for environmentally and socially conscious food values, as the case arguably prompted interagency discussions that led APHIS to take a harder look at its regulations for such GMOs. Moreover, because NEPA also requires public comment opportunities for EISes, the holding enhanced the participatoriness of the public in such decisions. Indeed, because NEPA allows for expression of a broader range of values than those presented in the CWA, CAA, and CERCLA, the case may

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403 See id. 1192-96.
404 See id. at 1194-95 (citing Norton v. Southern Utah Wilderness Alliance, 542 U.S. 55, 64 (2004)).
405 Id. at 1195-96.
406 Id.
408 See Part II.A.
409 Id.
411 40 C.F.R. § 1503.
412 Michael Herz, Parallel Universes: NEPA Lessons for the New Property, 93 COLUM. L. REV. 1668, 1677 (1993) (“Among modern environmental statutes, NEPA is unique in its brevity, its scope, and its virtually exclusive emphasis on procedures and broad values rather than standards and narrow requirements.”).
have also enhanced sustainable food movement’s aim of creating a food system that can honor spiritual and cultural well-being, by allowing such values to be expressed and considered during the comment process.

Those associated with the sustainable food movement achieved a similar victory in a challenge against APHIS’s decisions regarding GMO bentgrass—a type of grass grown for turf.\footnote{International Center for Technology Assessment v. Johanns, 473 F.Supp.2d 9 (D.D.C. 2007).} The Scotts Miracle-Gro Company had applied to APHIS for a series permits to test genetically engineered glyphosate-resistant bentgrass in an open-air environment, and APHIS had granted such approval.\footnote{Id. at 13.} A number of plaintiff organizations subsequently petitioned APHIS to place the GMO bentgrass on the Federal Noxious Weed List\footnote{7 U.S.C. § 7712(f)(1), (f)(2).} under the Plant Protection Act.\footnote{7 U.S.C. § 7701 et seq.} These petitions, however, were denied,\footnote{473 F.Supp.2d at 14.} and the plaintiffs subsequently filed a lawsuit alleging that the allowance of the field tests without conducting at least an EA violated NEPA, and that APHIS arbitrarily and capriciously rejected their Federal Noxious Weed List petition.

As with the Hawaii biopharmaceuticals challenge, the court held that APHIS had erroneously exempted the GMO bentgrass from NEPA requirements.\footnote{Id. at 29-30.} According to the district court, even though the bentgrass testing permits did appear to fall under APHIS’s regulatory exception to producing an EA (known as a “categorical exclusion”\footnote{7 C.F.R. § 372.5(c).}), an exception to the exception could still apply; in situations where the “categorically excluded action may have the potential to affect ‘significantly’ the quality of the human environment,’ . . . an environmental assessment or environmental impact statement will be prepared.”\footnote{473 F.Supp.2d at 29 (citing 7 C.F.R. § 372.5(d)).} The agency’s failure to analyze whether the field testing of bentgrass posed such a potential to significantly affect the quality of the human environment, in turn, was an arbitrary and capricious action constituting a violation of NEPA.\footnote{Id. at 29-30.}

Unlike the Hawaii biopharmaceuticals challenge, the plaintiffs were also successful in achieving review of their earlier challenges.
petition, in that they succeeded in getting the court to overturn APHIS’s denial of their petition for APHIS to list the GMO bentgrass as a Federally Noxious Weed, although the court did not accept all of the reasons presented by the plaintiffs as causes for overturning the agency’s decision. In particular, the court determined that the agency erroneously limited the scope of the noxious weed provisions of the Plant Protection Act by importing in definitional limitations from inapplicable international agreements. Thus, the court remanded the decision to the agency for reconsideration of whether the bentgrass could be considered a noxious weed without those inapplicable limitations. The court rejected, however, the plaintiffs’ argument that APHIS’s decision to reject their listing petition was based on unsound science, holding that the PPA specifically contemplated the methodology used by APHIS.

Another aspect of the GMO bentgrass lawsuit extended beyond the Hawaii biopharmaceuticals lawsuit; the court in the bentgrass lawsuit specifically considered the standing of the plaintiffs to raise their challenges. In doing so, the court determined that the organizational plaintiffs’ stated interest in viewing native fauna, and demonstrable potential injury to that interest, was sufficient to establish standing for the plaintiffs to raise their challenges.

This case, too, was treated as a landmark by the Center for Food Safety, and accomplished many of the same goals as described earlier in the Hawaii biopharmaceuticals challenge. The additional decision regarding standing, however, may have also furthered some of the cultural values held by those in the sustainable food movement, by specifically emphasizing the injurious nature of the potential threat posed by the GMO bentgrass to an aesthetic environment.

Subsequent lawsuits based on similar challenges have also managed to further even more values of the sustainable food movement. In another NEPA challenge against APHIS—this time

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422 Id. at 25.
423 Id. at 26.
424 Id. at 14.
425 Id. at 21-22.
427 473 F.Supp.2d at 22.
when APHIS had actually prepared an EA for its decision to deregulate a variety of genetically engineered sugar beets—plaintiffs associated with the sustainable food movement successfully challenge that EA for inadequately assessing the effects of the GMO sugar beet on the environment.\textsuperscript{428} In evaluating this challenge, the court not only rejected the agency’s evaluation of problems of cross-contamination (described by the court as “conclusory”\textsuperscript{429}), but also held that the plaintiffs could raise the concern of “consumer choice” as one of the issues inadequately addressed by the EA.\textsuperscript{430} As seen earlier, this concern of consumer choice—that is, that deregulation of the GMO sugar beet and potential cross-contamination into the conventional sugar beet supply could negatively impact consumers who choose not to eat genetically engineered foods—is central to some of the literature from the sustainable movement regarding the use of GMOs in agriculture.\textsuperscript{431} Thus this decision could be considered as furthering as advancing the movement’s ability to express these key concerns in shaping agency decisions affecting the food supply.

Even in the one significant defeat by the plaintiffs in this kind of challenge, the plaintiffs achieved a few victories. In \textit{Monsanto v. Geertson Seed Farms}, a case heard by the U.S. Supreme Court in 2010,\textsuperscript{432} plaintiffs from the organic farming industry challenged APHIS’s decision to deregulate alfalfa genetically modified to withstand Roundup, a pesticide, without first completing an EIS (rather than the completed EA) to evaluate in detail the environmental consequences of that decision.\textsuperscript{433} The issue before the Supreme Court was not the substance of the lower courts’ decisions regarding whether an EIS needed to be prepared;
that part of the lower courts’ decisions was not on appeal. Instead, the two issues before the Supreme Court were whether the plaintiffs had standing to raise their NEPA challenge, and whether the injunctive relief granted by the district court and affirmed by the Ninth Circuit was appropriate.

The Supreme Court held that the district court erred in applying the standards for injunctive relief in the district court’s decision. The district court had given the plaintiffs two forms of injunctive relief: first, it enjoined APHIS from partially deregulating the Roundup-ready alfalfa during the period that the agency would be complying with the district court’s decision to reconsider the alfalfa EA in light of the court’s holding; and, second, it issued a nationwide injunction against the planting of the modified alfalfa. According to the Supreme Court, the injunction against partial deregulation was flawed because even if any partial deregulation were sought by APHIS, that partial deregulation could be challenged in a subsequent NEPA lawsuit; moreover, if the scope of the partial deregulation were constructed appropriately, it need not cause any irreparable harm to the plaintiffs sufficient to warrant injunctive relief. The nationwide injunction against the planting of modified alfalfa, in turn, was erroneous for the same reasons that the injunction against partial deregulation was flawed: a nationwide injunction in violation of NEPA could be addressed by a subsequent lawsuit, and a narrower planting of GMO alfalfa may not cause irreparable harm.

Although this holding on injunctive relief could be regarded as a loss, those associated with the sustainable food movement nevertheless have cause to treat this case as a partial success. In deciding the issue of standing, the Supreme Court held that the risk of gene flow could cause injury sufficient to establish standing. In particular, the Court pointed to the unique nature of the organic market, citing documents from the record stating that “there is zero tolerance for organic seed in the organic market.”

434 Id. at 2750.
435 Id. at 2752.
437 130 S.Ct. at 2756.
438 Id. at 2757-62.
439 Id. at 2760.
440 Id. at 2760-61.
441 Id. at 2761.
442 Id. at 2754-55.
443 Id. at 2755.
Moreover, the Court rejected Monsanto’s arguments that the petitioners suffered merely economic injuries that fell outside of the zone of interests of NEPA, holding instead that “[Geertson Seed Farms’s] injury has an environmental as well as an economic component.”

Thus this case ultimately advances a number of values put forth by the sustainable food movement, beyond that of ecological sustainability. By considering relevant such factors as participation in the organic market as a part of its standing analysis, the Supreme Court gave weight to values such as consumer choice and expressiveness, as well as economic sustainability of the food system for producers and consumers (including those in the organic community). The litigation as a whole also contributed towards availability of knowledge regarding the food system, given that APHIS, on remand, was required to conduct a more thorough analysis of the environmental effects of GMO alfalfa.

The major NEPA challenge raised by the sustainable food movement against the FDA, however, was far less successful than the challenges against APHIS. In *Alliance for Bio-Integrity v. Shalala*, a “coalition of groups and individuals . . . concerned about genetically altered foods” raised multiple challenges under NEPA against the FDA’s policy on foods containing genetically modified components. The focus of their challenge was an FDA policy detailing how the agency would presume that foods produced through a genetic engineering process involving recombinant deoxyribonucleic acid (rDNA) technology would be “generally recognized as safe” (GRAS) under the Federal Food, Drug, and Cosmetic Act, and thus not subject to further regulation as food additives.

The district court rejected these challenges, on two general bases. First, the district court held that this policy statement was not an agency action challengeable under either the Administrative Procedure Act or NEPA. Moreover, the court found the policy statement to be not inconsistent with statutory requirements, given the mixture of positions given by scientists on the record. The

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444 Id. at 2756.
446 Id.
449 Id. at 172-75.
450 Id. at 175-78.
court also rejected the plaintiffs’ argument that the FDA’s failure to require labeling of genetically engineered foods was arbitrary and capricious for failing to consider consumer interest in having such foods labeled.\textsuperscript{451} According to the court, the imposition of such labeling requirements were beyond the power of the FDA unless it could determine that the genetically modified foods constituted a “material change” from traditional foods, and such a material change was not demonstrably present.\textsuperscript{452} Finally, the court rejected the plaintiffs’ claim that the FDA’s policy statement violated the Religious Freedom Restoration Act\textsuperscript{453} by burdening a person’s exercise of free religion to avoid genetically engineered foods; instead, the court determined that the policy statement does not place a “substantial pressure” on any of the plaintiffs or force them to abandon their religious beliefs or practices.\textsuperscript{454}

In terms of the values of the sustainable food movement, this case was a setback. The movement failed in advancing their goals of enhancing knowledge regarding food systems, given that the court rejected their argument that the Federal Food, Drug, and Cosmetic Act required labeling of foods with components altered through rDNA technology. Moreover, the movement’s goals of enhancing the expressiveness of food for cultural (and religious) contexts were eroded by the court’s holding that such foods did not constitute a substantial pressure on religious practices.

Despite the setbacks, the litigation involving those associated with the sustainable food movement and GMOs could be regarded as, on the whole, relatively victorious, with many of the cases furthering multiple goals of the food movement (beyond that of environmental protection). Indeed, many of the cases appear to lay the groundwork for additional impact litigation opportunities of impact litigation. These broader impacts can be perhaps attributed to the nature of NEPA as a statute focusing on “procedures and broad values rather than standards and narrow requirements.”\textsuperscript{455}

\textsuperscript{451} Id. at 178.
\textsuperscript{452} Id. at 178-79.
\textsuperscript{453} 42 U.S.C. § 2000 et seq.
\textsuperscript{454} Alliance for Bio-Integrity v. Shalala, 116 F.Supp.2d at 181.
\textsuperscript{455} See Calvert Cliffs Coordinating Comm., Inc. v. U.S. Atomic Energy Comm’n, 449 F.2d 1109, 1111, 1119, 1129 (D.C. Cir. 1971). (describing NEPA as the broadest of recent environmental statutes); see also Herz, supra note 387, at 1677; Robert W. Adler, In Defense of NEPA: The Case of the Legacy Parkway, 26 J. LAND RESOURCES & ENVTL. L. 297, 309 (2006) (describing the “consider[ation of] a broader range of ideas and values” as “the very thing NEPA is designed to do”).
sets forth no numerical standards, may allow for greater interjection of these competing values with which the sustainable food movement is concerned.  

IV. THE SHAPING OF LEGAL ACTIONS

This examination of the rise of litigation coming out of the sustainable food movement illustrates some of the impacts that a social movement can achieve through litigation, as well as the barriers that it can encounter in the course of pursuing its goals through lawsuits. As seen earlier, even when successful, the particular constraints of various statutes (particularly the pollution-based environmental statutes as well as federal and state permitting regimes) may create barriers towards the full expression of the sustainable food movement’s values. But the use of more open-ended types of challenges, such as common law or NEPA, may create opportunities for the movement to express more of its values in the context of litigation.

This is not to say that the sustainable food movement achieves little by frequently using more narrow statutes to litigate its ends; as one scholar, Professor Mary Ziegler, has observed, social movements may engage in cause litigation for more reasons than those presented in the lawsuits themselves. According to Professor Ziegler, “judicial decisions sometimes change the social meaning of movement causes.” This may be the case here, where

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458 See Ziegler, supra note 457, at 279.
even negative decisions regarding agricultural practices opposed by the sustainable food movement may affect the general social understanding of the U.S. food system, by drawing attention to alternative practices (more desired by the movement) affected by those legal decisions. \(^{459}\) Professor Ziegler also argues that litigation, because it allows alternative theories to be presented to courts, may “allow movement members to offer a rich range of competing or complementary frames,” \(^{460}\) thus exposing the public to a greater range of concerns shared by the movement. Even in the cases described above in which the court ruled on narrower grounds, such as the violation of particular quantitative environmental standards or the omission of public participation requirements, the above analysis demonstrated that the movement attempted to present to the court their broader concerns regarding the sustainability of the U.S. food system.

Finally, Professor Ziegler argues that litigation may present a lowered-cost method of presenting certain frames of the public by attracting media attention. \(^{461}\) Although it is beyond the scope of this paper to measure the relative costs of food sustainability advocacy when associated and not associated with litigation, the media coverage of the various court cases presented in this paper suggests that at least some additional media attention regarding sustainable food practices may be drawn through the movement’s participation in impact litigation.

This is not to argue that litigation is the most effective means for the sustainable food movement to pursue its visions for the U.S. food system. Other scholars have also pointed to possible drawbacks of litigation as a strategy for social movements; these include the opportunity costs of expending resources on litigation.

\(^{459}\) See, e.g., Center for Food Safety, Update on Supreme Court Decision (June 21, 2010), located at http://www.centerforfoodsafety.org/2010/06/21/update-on-supreme-court-decision/ (describing the legal loss by the organic farmers in *Monsanto v. Geertson* as nevertheless a victory, because the Court upheld the illegality of planting GMO alfalfa without regulatory consent, and because the Court recognized that genetic contamination may present an environmental and economic threat); cf. also Doug NeJaime, *Winning Through Losing*, 96 Iowa L. Rev. 941, 969-1002 (2011) (describing how even litigation losses can have positive functions for social movements, including constructing and contextualizing organizational identity, mobilizing constituents, building resolve, fundraising, and appealing to other actors such as different branches of government and the general public).


\(^{461}\) See Ziegler, *supra* note 457, at 282-83.
versus other strategies, discoursing political action, and mobilizing opposing parties. Moreover, litigation may have more subtle costs for social movements by deradicalizing and shaping social movements in ways that support the status quo.

These drawbacks, too, may apply with respect to the sustainable food movement. The most legally oriented group associated with the sustainable food movement—the Center for Food Safety—must balance its staff between policy work and litigation, demonstrating some of the potential opportunity costs that may be involved. In addition, a number of the corporations involved as defendants have formed “astroturf” organizations—organizations that seemingly represent grassroots movements but are in large part funded by major corporations—dedicated to opposing various efforts of sustainable food movement: for example, the Center for Consumer Freedom (“devoted to promoting personal responsibility and protecting consumer choices” and funded in large part by affected members of the food industry) and American Farmers for the Advancement and Conservation of Technology (dedicated to “conserving existing safe management practices and supporting the advancement of new technologies with collaborative ties to all commodity segments and allied industries” and “closely tied” to Monsanto). And although it is difficult to currently gauge the “deradicalization” effect of litigation tactics on the sustainable food movement,

463 See id. at 6.
465 See Albiston, supra note 457, at 61-62.
466 See Center for Food Safety, Staff Bios, located at http://www.centerforfoodsafety.org/about/staff-bios/ (describing many of the attorneys as dedicated to both litigation, legislative, and policy work, with only one member of the staff, the True Food Network Director, devoted to grassroots organizing).
468 See Center for Consumer Freedom, About Us, located at http://www.consumerfreedom.com/about.cfm.
469 See Melanie Warner, Striking Back at the Food Police, NY TIMES (June 12, 2005).
470 American Farmers for the Advancement and Conservation of Technology, About Us, located at http://itisafact.org/about-us/.
471 See Andrew Martin, Fighting a Battlefield the Size of a Milk Label, NY TIMES (Mar. 8, 2008).
internal critiques of the use of federal standards for organic foods suggests at least a concern about the deradicalizing effects of legalization.  

What is evident from the previous Part, however, is that the sustainable food movement is appearing to use litigation, in addition to other methods of advocacy, to effect the types of changes advocated by those associated with the movement. These uses may not reach the level of coordination seen in other movements, nor may it be the predominant strategy of the sustainable food movement, given the smaller number of such cases compared to social movements such as the environmental movement and the civil rights movement. But the use of litigation signals what some scholars deem to be a later “stage” of social movements—that of the movement’s use of structured mechanisms to increase pressures for systematic reform.

What the analysis of Part III means, however, is that the sustainable food movement—if it wants to achieve effective reform—may need to examine the history of other social movements in pursuing various combinations of litigation, public awareness, and political strategies. This may entail adopting general strategies suggested by legal scholars of social movements. One possibility is that the sustainable food movement may want to deliberately use the litigation in which it engages to shape the meanings of the movement for the public and regulators such that additional policy options arise. In the context of food sustainability, this could entail framing litigation losses as losses for public participation and consumer choice, rather than focusing on the narrower legal bases (often compliance or noncompliance

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472 See, e.g., Stewart Lockie et al., Going Organic: Mobilizing Networks for Environmentally Responsible Food Production, at 28 (2006) (describing one argument that the mainstream codification of organic requirements actually allowed conventional agriculture to continue through the loss of focus on agricultural sustainability).

473 Compare Part III with Cummings, supra note 457, at 1247-81 (describing the coordinated method of advocates for marriage equality); Riegelman, supra note 21, at 530-40 (describing the strategic efforts of the environmental movement through the 1970s).

474 See Riegelman, supra note 21, at 530-40.


477 See Ziegler, supra note 457, at 309.
with standards as demonstrated by scientific measurements) upon
which the courts have relied. This reframing could be coupled
with political campaigns to encourage the adoption of legislation
both increasing opportunities for public participation and creating
requirements or opportunities for decisionmakers to consider the
effect of their actions on the future availability of sustainable food
alternatives, or even non standard-based factors such as cultural
and dietary effects. Such legislative and policy work, coupled with
litigation efforts, would have the additional effect of allowing the
sustainable food movement to express more of its self-described
values in future litigation efforts.\footnote{See supra Part II.}

Another strategy may be for the sustainable food movement
to work with the framing of litigation such that future partnership
opportunities are created for coalitions with other organizations.\footnote{See Ziegler, supra note 457, at 309.}
As this study of food sustainability litigation demonstrates, the
groups involved with such litigation are predominately groups
identified as either environmental or food sustainability. But
additional litigation focus on the values already expressed by the
sustainable food movement—including healthfulness and
culture\footnote{See supra Part II.}—may allow the movement to partner with more diverse
groups, including public health organizations and groups with
culturally based diets.

Yet another strategy may be to leverage resources in order
to take advantage of collaborative funding initiatives. As public
interest law scholars have observed, “[o]ne notable failure of
current organizational structures is their inability to realize the full
potential of pro bono support.”\footnote{See Scott L. Cummings & Deborah L. Rhode, Public Interest Litigation:}
\footnote{Insights from Theory and Practice, 36 FORDHAM URB. L.J. 603 (2009).}
This may be the case with the sustainable food movement, at least in terms of the cases surveyed
in this article. Almost all of the cases were lawyered by staff from
either environmental or food-related organizations, as compared to
pro bono attorneys representing plaintiffs associated with members
of the movement. But a number of surveys demonstrate significant
interest in food sustainability within the general public (of which
attorneys are a part).\footnote{See, e.g., Iris Vermeir & Wim Verbeke, Sustainable Food Consumption:
Exploring the Consumer “Attitude – Behavioral Intention” Gap, 19 J. AGRIC. &
ENVTL ETHICS 169 (2006) (describing general public concerns regarding the
sustainability of food but seeing mismatches in actual behavior); see also National Restaurant Association, What’s Hot in 2011 Press Release, located at
attorneys may present a way for those in the sustainable food movement to leverage scarce resources in order to engage in litigation strategies.

V. BAKING THE FUTURE OF THE MOVEMENT

Although this article has presented a critical look at the dissonance between the values of the sustainable food movement and the outcomes of its litigation, it nevertheless ends on an optimistic note. The movement, while still in the process of developing its advocacy strategies, appears to be vibrant and energetic. And, as the article began, the very roots of the movement in one of the most personal of our human activities—eating—may provide the foundation for further growth of the movement, in both legal and political spheres.

As food writer M.F.K. Fischer once wrote, “No yoga exercise, no meditation in a chapel filled with music will rid you of your blues better than the humble task of making your own bread.”483 Perhaps that is the most critical aspect of the continuation of the movement, notwithstanding its various concerns with the U.S. food system; that food, for all of those involved in the movement, continues to be a source of joy and optimism despite legal setbacks.

http://www.restaurant.org/pressroom/social-media-releases/release/?page=social_media_whats_hot_2011.cfm (describing “sustainability as a menu theme” to be one of the top menu trends for next year).