

---

---

# THE RISE OF U.S. FOOD SUSTAINABILITY LITIGATION

STEPHANIE TAI\*

## ABSTRACT

*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 Concentrated Animal Feeding Operations (“CAFOs”) and challenges to the use of genetically modified organisms (“GMOs”) in the food system—chosen because they involve growing sectors of U.S. agriculture over which members of the sustainable food movement have raised significant concerns.*

*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. This Article observes how these challenges relate to some of the purported goals of the sustainable food movement, yet recognizes that such litigation might not*

---

\* Assistant Professor of Law, University of Wisconsin Law School; J.D. Georgetown University Law Center; Ph.D. Tufts University; S.B. Massachusetts Institute of Technology. This Article was presented earlier at the American Association of Law Schools Open Source Program on Food, Law, and Values, at which I received valuable comments from Professors Bret Birdsong, Susan Schneider, and Jim Chen. Thanks also go to Professor Vicki Arroyo for arranging and participating in the Georgetown University workshop on “Environmental Law: Legal and Policy Challenges in the 21st Century,” at which I received a number of insightful comments and suggestions for this Article. Finally, this Article is dedicated to my deceased pet chicken Miss Jane Marple, who has made me appreciate some of the more visceral pleasures (and challenges) of food production. Here’s to you, sweetheart and explorer.

*fully succeed in advancing some of the broader visions of the movement. The Article then explains that the inadequacy of these legal efforts results from the particular ways in which existing legal avenues fail to mesh with the values of the sustainable food movement. This Article concludes by drawing from studies of other historical movements and argues that if the sustainable food movement is to succeed in transforming the U.S. food system, it 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.*

#### TABLE OF CONTENTS

|  |      |
|--|------|
| I. THE INGREDIENTS OF A DEVELOPING MOVEMENT.....   | 1071 |
| II. THE MIXING OF CONCERNS.....  | 1074 |
| A. THE MODERN SUSTAINABLE FOOD MOVEMENT AND ITS<br>VALUES.....   | 1074 |
| B. TWO ILLUSTRATIVE CONCERNS OF THE MODERN<br>SUSTAINABLE FOOD MOVEMENT.....   | 1080 |
| 1. Concentrated Animal Feeding Operations.....   | 1080 |
| a. Context: Scientific Complications and Regulatory<br>Background.....   | 1081 |
| b. CAFOs and the Sustainable Food Movement.....  | 1085 |
| 2. Genetically Modified Organisms.....   | 1089 |
| a. Context: Scientific Complications and Regulatory<br>Background.....   | 1090 |
| b. GMOs and the Sustainable Food Movement.....   | 1095 |
| III. THE RISE OF SUSTAINABLE FOOD MOVEMENT<br>LITIGATION.....  | 1100 |
| A. CAFO LITIGATION.....  | 1101 |
| 1. The Clean Water Act.....  | 1101 |
| 2. The Clean Air Act.....  | 1108 |
| 3. The Comprehensive Environmental Response,<br>Compensation, and Liability Act (“CERCLA”) and the<br>Emergency Planning and Community Right-to-Know<br>Act (“EPCRA”)..... | 1110 |
| 4. General State Permitting Requirements.....  | 1111 |
| 5. Common Law Claims.....  | 1117 |
| B. GMO LITIGATION.....   | 1122 |
| IV. THE SHAPING OF LEGAL ACTIONS.....  | 1130 |
| V. BAKING THE FUTURE OF THE MOVEMENT.....  | 1135 |

## 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, 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.”<sup>1</sup>

But food systems<sup>2</sup> can extend beyond human experience. Indeed, bestsellers, such as *The Omnivore’s Dilemma*<sup>3</sup> and *Animal, Vegetable, Miracle: A Year of Food Life*,<sup>4</sup> have recently brought greater public attention to the broader environmental and public health impacts of modern systems of food production and consumption.<sup>5</sup> Critics of industrialized agriculture raise such concerns as pollution arising from fertilizer and pesticide-intensive agriculture and confined animal feeding operations;<sup>6</sup>

---

1. JAMES BEARD, BEARD ON FOOD: THE BEST RECIPES AND KITCHEN WISDOM FROM THE DEAN OF AMERICAN COOKING, at xi (Bloomsbury USA 2007) (1974).

2. A broad definition of food systems includes “the interactions between and within biogeophysical and human environments, which determine a set of activities; the activities themselves (from production through to consumption); [and] outcomes of the activities (contributions to food security, environmental security, and social welfare).” Polly J. Ericksen, *Conceptualizing Food Systems for Global Environmental Change Research*, 18 GLOBAL ENVTL. CHANGE 234, 234 (2008).

3. MICHAEL POLLAN, THE OMNIVORE’S DILEMMA: A NATURAL HISTORY OF FOUR MEALS (2006).

4. BARBARA KINGSOLVER WITH STEVEN L. HOPP & CAMILLE KINGSOLVER, ANIMAL, VEGETABLE, MIRACLE: A YEAR OF FOOD LIFE (2007).

5. 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—including organic food movements, vegetarian movements, local food movements, and food safety movements—have existed in various forms for quite some time. See, e.g., SUSANNE FREIDBERG, FRESH: A PERISHABLE HISTORY 9–10 (2009) (describing local food movements as having earlier appearances in the British “food re-localization” movement); COLIN SPENCER, THE HERETIC’S FEAST: A HISTORY OF VEGETARIANISM (1995) (describing the history of vegetarianism); Richard R. Harwood, *A History of Sustainable Agriculture*, in SUSTAINABLE AGRICULTURAL SYSTEMS 3 (Clive A. Edwards et al. eds., 1990) (describing organic food and sustainable agriculture movements); 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, 50–54 (2008) (describing the motivations of the local food movement, including product quality and the environmental impacts of industrialized agriculture). But cf. FREIDBERG, *supra*, at 17 (contextualizing modern-day food movements, such as the raw milk movement, as reliant to some extent on the modern food system).

6. Michael J. Brewer & Marcia Ishii-Eiteman, *Integrated Pest Management, Sustainability, and Risk: Linking Principles, Policy, and Practice*, in 1 CRITICAL FOOD ISSUES: PROBLEMS AND STATE-OF-THE-ART SOLUTIONS WORLDWIDE 33, 33–43 (Laurel E. Phoenix ed., 2009) (describing environmental

health impacts from the use of additives and preservatives and even broader limitations on food choices;<sup>7</sup> political and community disruptions from centralized, industrial agriculture;<sup>8</sup> and energy expenditures from the number of miles that food can travel from farm to fork.<sup>9</sup> These concerns, in turn, have engendered a number of interrelated food movements, including the organic movement, focused on agricultural production without the use of synthetic chemicals;<sup>10</sup> the local food movement, focused on consuming food grown and produced in close proximity to the consumer;<sup>11</sup> the slow food movement, focused on ideals of pleasure deriving from sustainably grown, produced, and prepared food;<sup>12</sup> and what some call the “new American” food movement,<sup>13</sup> focused on “ideals of fresh, local, seasonal, and organic cuisine.”<sup>14</sup> The drivers of these movements are varied, with some focusing on “the perceived failure of conventional food systems to

---

problems as a result of industrialized agriculture including water pollution, soil degradation, and pesticide contamination); Robert W. Adler, *Water Quality And Agriculture: Assessing Alternative Futures*, 25 ENVIRONS: ENVTL. L. & POL’Y J. 77, 77–83 (2002) (describing effects of agricultural runoff, fertilizers, and pesticides on water quality).

7. See William S. Eubanks II, *A Rotten System: Subsidizing Environmental Degradation and Poor Public Health with Our Nation’s Tax Dollars*, 28 STAN. ENVTL. L.J. 213, 275–95 (2009) (describing commercial agriculture’s effects on public health, including the impact of federal subsidies on food choice).

8. THOMAS A. LYSON, CIVIC AGRICULTURE: RECONNECTING FARM, FOOD, AND COMMUNITY 75–78 (2004); RICHARD MANNING, AGAINST THE GRAIN: HOW AGRICULTURE HAS HIJACKED CIVILIZATION 123–48 (2004).

9. KINGSOLVER WITH HOPP & KINGSOLVER, *supra* note 4, at 4–5; ALISA SMITH & J.B. MACKINNON, THE 100-MILE DIET: A YEAR OF LOCAL EATING 3 (2007).

10. J. Heckman, *A History of Organic Farming: Transitions from Sir Albert Howard’s War in the Soil to USDA National Organic Program*, 21 RENEWABLE AGRIC. & FOOD SYS. 143, 144–46 (2006) (describing the roots of the organic movement in concepts of soil fertility and interrelationships). See also MATTHEW REED, REBELS FOR THE SOIL: THE RISE OF THE GLOBAL ORGANIC FOOD AND FARMING MOVEMENT 91–128 (2010) (considering the roots of organic food movements and the fight against genetically modified crops).

11. Coit, *supra* note 5, at 47–55. See also Derrick Braaten & Marne Coit, *Legal Issues in Local Food Systems*, 15 DRAKE J. AGRIC. L. 9, 10–11 (2010) (describing the local food movement as “not hav[ing] a set meaning,” but nevertheless having a focus to “obtain food that was fresher, as well as to reduce the carbon footprint of food”).

12. Emily Reynolds, Book Review, 5 J. FOOD L. & POL’Y 141, 142 (2009) (reviewing GEOFF ANDREW, THE SLOW FOOD STORY: POLITICS AND PLEASURE (2008)) (describing the slow food movement ideals of “‘eco-gastronomy,’ which combines the pleasures associated with producing, preparing and consuming food with a concern for the environment”).

13. JEREMIAH TOWER, CALIFORNIA DISH: WHAT I SAW (AND COOKED) AT THE AMERICAN CULINARY REVOLUTION 219 (2003) (describing “New American” cooking as a change in cuisine led by people who are “inspired by their own regions”). See also Baylen J. Linnekin, *The “California Effect” & the Future of American Food: How California’s Growing Crackdown on Food & Agriculture Harms the State & the Nation*, 13 CHAP. L. REV. 357, 363–72 (2010) (criticizing aspects of this movement as burdening agriculture and dining).

14. Linnekin, *supra* note 13, at 362.

provide safe, quality food” and others focusing on “concerns of social justice and community empowerment.”<sup>15</sup> Political scientists have nevertheless observed that these movements revolve around a common axis: “a common vision of a more socially and environmentally just food system.”<sup>16</sup> This Article, therefore, uses the umbrella term the “sustainable food movement”<sup>17</sup> to refer to and encompass all of these movements.

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 Concentrated Animal Feeding Operations (“CAFOs”), to the application of hormones in dairy production, to the use of genetically modified organisms (“GMOs”) 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.<sup>18</sup> In particular, it focuses on two growing areas of food sustainability litigation: challenges to CAFOs and challenges to the use of GMOs in the food system. These areas were chosen because they involve growing sectors of U.S. agriculture over which members of the sustainable

---

15. Noah Zerbe, *Moving from Bread and Water to Milk and Honey: Framing the Emergent Alternative Food Systems*, 33 HUMBOLT J. SOC. REL. (SPECIAL ISSUE) 4, 6 (2010). See also Louise Hanavan, Chloe Kennedy & Greg Cameron, *And Now for the Main Discourse: A Critique of the Popular Food and Farm Literature*, 33 HUMBOLT J. OF SOC. REL. (SPECIAL ISSUE) 166, 167–68 (2010) (describing shifts in food system discourse).

16. Zerbe, *supra* note 15, at 6.

17. This term is used merely as 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 with W. Alex Mcintosh, *Writing the Food Studies Movement: With a Response by W. Alex Mcintosh of Texas A&M University*, 13 FOOD, CULTURE, & SOC’Y 160, 164 (2010). But see Nestle with Mcintosh, *supra* at 175 (stating his belief in response to Nestle, Mcintosh says that “the Slow Food Movement and the Sustainable Food Movement are full social movements” and that “[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”).

18. 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 ENVTL. L. REV. 421 (2011) (discussing litigation concerning regulatory compliance in the use of GMOs in crop production, including public or private nuisance, products liability, actions under the National Environmental Policy Act, and actions in international adjudicatory bodies).

food movement have raised significant concerns.<sup>19</sup>

## II. THE MIXING OF CONCERNS

### A. THE MODERN SUSTAINABLE FOOD MOVEMENT AND ITS VALUES

A number of newspapers have been reporting a growing interest in the United States regarding the sustainability of food.<sup>20</sup> This interest is reflected by an increase in popular literature regarding the sustainability of food.<sup>21</sup> 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.<sup>22</sup> Sociologists provide a number of descriptions of social movements. One such sociologist, Charles Tilly, argues that social movements are a result of three elements: (1) the use of campaigns; (2) the use of organizational tools such as coalitions, public meetings, and media statements; and (3) the participants’ belief in the worthiness, unity, numbers, and commitments of a movement’s goals.<sup>23</sup> Other sociologists describe movements as “collective challenges by people with common purposes and group solidarity in constant contact with opponents and authorities.”<sup>24</sup> 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.”<sup>25</sup>

---

19. See *infra* Part II.

20. Andrew Martin, *Is a Food Revolution Now in Season?*, N.Y. TIMES, Mar. 21, 2009, available at <http://www.nytimes.com/2009/03/22/business/22food.html?pagewanted=all>; *All We Can Eat Archive: Sustainable Food*, WASHINGTONPOST.COM, [http://voices.washingtonpost.com/all-we-can-eat/sustainable\\_food/](http://voices.washingtonpost.com/all-we-can-eat/sustainable_food/) (last visited Apr. 7, 2012) (providing an archive devoted to articles regarding sustainable food).

21. See, e.g., Search Results for Books on Sustainable Food, AMAZON, <http://www.amazon.com> (last visited Apr. 7, 2012) (enter “sustainable food” in “Search Books”) (demonstrating a marked rise of publications in this area since 2000).

22. Cf. Claire Riegelman, *Environmentalism: A Symbiotic Relationship Between a Social Movement and U.S. Law?*, 16 MO. ENVTL. L. & POL’Y REV. 522 (2009) (applying sociological theories of social movements to environmentalism).

23. CHARLES TILLY, *SOCIAL MOVEMENTS*, 1768–2004, at 12–14 (2004).

24. See Riegelman, *supra* note 22, at 526–27 (citing SIDNEY TARROW, *POWER IN MOVEMENT: COLLECTIVE ACTION, SOCIAL MOVEMENTS AND POLITICS* [sic] (1994)).

25. Edward L. Rubin, *Passing Through the Door: Social Movement Literature and Legal Scholarship*, 150 U. PA. L. REV. 1, 4 (2001).

The interest in sustainable food appears to fulfill all of these descriptions of social movements. A number of sustainable food campaigns exist, including the Sierra Club's Sustainable Consumption Mission (organized to increase environmental awareness regarding food),<sup>26</sup> the Real Food Challenge (organized to support sustainable food purchasing on college campuses),<sup>27</sup> and the Center for Food Safety's True Food Network (organized to advocate for a "socially just, democratic, and sustainable food system").<sup>28</sup> These campaigns, in turn, often have political, public outreach, and legal components.<sup>29</sup> Moreover, these groups use all the organizational tools described above—meetings, media statements, and so forth—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.<sup>30</sup> 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 state and national groups dedicated to reforming the food system for sustainability.<sup>31</sup> Finally, there appears to be a linkage of collective identities within the sustainable food movement, as described later in this paper.<sup>32</sup>

But what is the sustainable food movement? The modern sustainable food movement in the United States takes a number of forms. 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

---

26. *The True Cost of Food*, THE SIERRA CLUB, <http://www.sierraclub.org/truecostoffood/> (last visited Apr. 7, 2012).

27. *Real Food Challenge*, CTR. FOR FOOD SAFETY, <http://realfoodchallenge.org/about> (last visited Apr. 7, 2012).

28. *True Food Network*, CTR. FOR FOOD SAFETY, <http://truefoodnow.org/about/> (last visited Apr. 7, 2012).

29. *What We Do*, CTR. FOR FOOD SAFETY, <http://www.centerforfoodsafety.org/what-we-do/> (last visited Apr. 7, 2012) (describing legal and policy work, including "provid[ing] technical assistance to numerous legislative initiatives championed by other non-profit organizations around the country," and "[p]ublic outreach and advocacy").

30. See generally Neva Hassanein, *Practicing Food Democracy: A Pragmatic Politics of Transformation*, 19 J. RURAL STUD. 77 (2003) (considering the tensions within the movement, strategies for change, and pragmatic effects of forming coalitions between diverse groups to create a "food democracy").

31. See, e.g., SLOW FOOD USA, <http://www.slowfoodusa.org/> (last visited Apr. 7, 2012) (a nationwide group dedicated to enjoying the pleasures of food while maintaining a commitment to the environment and community); THE VIVID PICTURE PROJECT, <http://www.vividpicture.net/> (last visited Apr. 7, 2012) (a sustainable food group advocating for reforms in California); COMMUNITY FOOD ADVOCATES, <http://www.communityfoodadvocates.org/> (last visited Apr. 7, 2012) (a sustainable food group advocating for reforms in Tennessee).

32. See *infra* text accompanying note 141.

and environmentally just context.<sup>33</sup> 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,” “battle,” or “crisis” regarding sustainable food.<sup>34</sup>

Although those identified with the sustainable food movement have occasionally raised hunger relief as relevant concerns, the movement has evolved to prioritize environmental and farm security concerns, which “often trump those of food security.”<sup>35</sup> This is not to say that hunger is ignored within the movement. Indeed, hunger and sustainable food movements have often allied to address international hunger issues through reform of U.S. agricultural policies, which advocates argue subsidize cheap commodities and undercut local production in other countries.<sup>36</sup>

Despite these reactionary aspects of the modern sustainable food movement, it also has some nonreactionary focal points. These include concerns regarding the effects of food production on the environment and on social justice.<sup>37</sup> Such 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.<sup>38</sup>

---

33. Zerbe, *supra* note 15, at 20; Laura Hughes, *Conceptualizing Just Food in Alternative Agrifood Initiatives*, 33 HUMBOLT J. OF SOC. REL. (SPECIAL ISSUE) 30, 31 (2010); Jack Kloppenburg, Jr. et al., *Tasting Food, Tasting Sustainability: Defining the Attributes of an Alternative Food System with Competent, Ordinary People*, 59 HUM. ORG. 177, 178 (2000) (describing “[t]hose interested in establishing or strengthening local food systems” as “reacting to processes of globalization”).

34. Hanavan, Kennedy & Cameron, *supra* note 15, at 168 (citing SHARON ASTYK & AARON NEWTON, *A NATION OF FARMERS: DEFEATING THE FOOD CRISIS ON AMERICAN SOIL* (2009); THOMAS PAWLICK, *THE WAR IN THE COUNTRY: HOW THE FIGHT TO SAVE RURAL LIFE WILL SHAPE OUR FUTURE* (2009); TONY WEIS, *THE GLOBAL FOOD ECONOMY: THE BATTLE FOR THE FUTURE OF FARMING* (2007)). See also Neil D. Hamilton, *Food Democracy II: 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.”).

35. Hughes, *supra* note 33, at 31 (describing interviews conducted with farmers’ markets and community supported agriculture managers).

36. *Id.* at 33–34. Hughes criticizes some food sustainability movements—called alternative food movements in the article—as sometimes devaluing justice concerns by ignoring hunger issues, thereby causing a “reification of systems of inequality.” *Id.* at 44–45. Hughes also describes how those in the alternative food movements may ignore class and gender issues as well. *Id.* at 45–60.

37. Zerbe, *supra* note 15, at 6. See also Kloppenburg et al., *supra* note 33, at 179 (describing the alternative agricultural sustainability movement as originating in farm environmental issues). “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.” *Id.*

38. See Coit, *supra* note 5, at 70 (“The local food movement is important because it provides



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.”<sup>39</sup> The idea is to minimize environmental effects by moving away from “chemical- and energy-intensive systems” of agriculture<sup>40</sup> and toward agricultural techniques that emphasize local knowledge of landscape heterogeneity.<sup>41</sup> These values are partially captured by the Organic Foods Production Act (“OFPA”).<sup>42</sup> The OFPA created an organic food labeling and certification system for the United States and established guidelines for methods and materials that can be used by producers of foods labeled as organic.<sup>43</sup> A number of critics from the movement, however, argue that the OFPA’s reductionist approach fails to fully capture the holistic worldview of organic agriculture.<sup>44</sup> Thus, organic food advocates are varied in their support of legal labeling systems. Moreover, advocates of organic food differ in why they value organic food production. Although the emphasis of the movement is on sustainable agricultural processes through the minimization of inputs, many advocates of organic food also believe that sustainably produced food is safer for human consumption.<sup>45</sup>

Local food advocates, in contrast, focus more on reducing the distance traveled by food from production to consumption.<sup>46</sup> The environmental aspect of this movement arises from concern regarding the energy intensiveness of globally sourced food, both through packaging and transportation.<sup>47</sup> Members of this movement often point out that, before reaching the consumer, processed food will travel a distance of 1300 miles on average, while produce will travel an average of 1500 miles.<sup>48</sup> But

---

benefits to producers, consumers, and the communities in which they live.”); *supra* notes 9–12 and accompanying text.

39. Karen Klonsky & Laura Tourte, *Organic Agricultural Production in the United States: Debates and Directions*, 80 AM. J. AGRIC. ECON. 1119, 1119 (1998).

40. *Id.*

41. Timothy Vos, *Visions of the Middle Landscape: Organic Farming and the Politics of Nature*, 17 AGRIC. HUM. VALUES 245, 251 (2000).

42. Organic Foods Production Act (OFPA) of 1990, 7 U.S.C. §§ 6501–6522 (2006).

43. *Id.*

44. Vos, *supra* note 41, at 251. See also A. Christine Green, *The Cost of Low-Price Organics: How Corporate Organics Have Weakened Organic Food Production Standards*, 59 ALA. L. REV. 799 (2008); Kimberly Ong, *A New Standard: Finding a Way to Go Beyond Organic*, 17 N.Y.U. ENVTL. L.J. 883 (2008); Michelle T. Friedland, *You Call That Organic?—The USDA’s Misleading Food Regulations*, 13 N.Y.U. ENVTL. L.J. 379 (2005).

45. Pamela R. D. Williams & James K. Hammitt, *Perceived Risks of Conventional and Organic Produce: Pesticides, Pathogens, and Natural Toxins*, 21 RISK ANALYSIS 319, 319 (2001).

46. Coit, *supra* note 5, 45–60.

47. *Id.* at 51–54.

48. HOLLY HILL, NAT’L SUSTAINABLE AGRIC. INFO. SERV., FOOD MILES: BACKGROUND AND

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,<sup>49</sup> enhancing product quality through freshness,<sup>50</sup> and providing social and political support for local farmers.<sup>51</sup>

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

All of these movements are somewhat distinct, yet overlapping.<sup>56</sup> Such movements have been described by commentator Alex McIntosh as “mini-movements made up of people, organizations, goals and values that differ in specifics but share perhaps more overarching goals and values.”<sup>57</sup> 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.<sup>58</sup> Thus, a deeper inquiry

---

MARKETING 1 (2008), available at <http://kirikiva.com/PDF/Foodmiles.pdf>.

49. Coit, *supra* note 5, at 48–50.

50. *Id.* at 50–51.

51. *Id.* at 55.

52. See Reynolds, *supra* note 12, at 142.

53. *Id.*

54. Neil D. Hamilton, *Putting a Face on Our Food: How State and Local Food Policies Can Promote the New Agriculture*, 7 *DRAKE J. AGRIC. L.* 407, 412 n.19 (2002) (describing the slow food movement as focusing on traditional foods and methods of production and preparation).

55. See *From Plate to Planet*, SLOW FOOD USA, [http://www.slowfoodusa.org/index.php/slow\\_food/from\\_plate\\_to\\_planet/](http://www.slowfoodusa.org/index.php/slow_food/from_plate_to_planet/) (last visited Apr. 7, 2012) (describing one of the memberships’ activities as “[p]romoting the celebration of food as a cornerstone of pleasure, culture and community”).

56. Nestle with McIntosh, *supra* note 17, 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”).

57. Nestle with McIntosh, *supra* note 17, at 175.

58. Paul B. Stephan, *A Becoming Modesty—U.S. Litigation in the Mirror of International Law*, 52 *DEPAUL L. REV.* 627, 644–45 (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 Szott Moohr, *Opting in or Opting Out: The New Legal Process or Arbitration*, 77 *WASH. U. L.Q.* 1087, 1096 (1999) (“Public litigation gives public values meaning and expression by providing concrete

into the values embodied in this movement is useful for a more insightful legal analysis.<sup>59</sup>

Community and environmental sociologist Jack Kloppenburg conducted an exploration of the values shared by those identified with the sustainable food movement.<sup>60</sup> His study recognized that “sustainability” marked a focal point of many food activists,<sup>61</sup> but also observed that the term has a sort of “semantic plasticity.”<sup>62</sup> 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.<sup>63</sup>

Kloppenburg’s research team assessed the values of 125 persons representing a broad cross section of the alternative food community to determine what food activists are contemplating when they discuss food sustainability.<sup>64</sup> Through panel discussions and iterative exercises, the team elicited some common attributes in participants’ visions of sustainable food systems.<sup>65</sup> These aspirational features were quite numerous, and included 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

---

applications of those principles.”) Cf. Owen M. Fiss, *Against Settlement*, 93 YALE L.J. 1073, 1085–87 (1984) (pointing out the role 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. INT’L & COMP. L. 139, 141 (1999) (“[W]hile parties may express their values in the decisions they make during litigation, these decisions may not be the optimal decisions for society.”).

59. Kloppenburg et al., *supra* note 33, at 178 (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. *Id.*

61. *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.* at 178–79.

64. *Id.* at 180–81.

65. *Id.* at 181–82.

of the food system for cultural contexts.<sup>66</sup>

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

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

This Article explores litigation involving confined animal feeding operation for meat and dairy production, and the use of genetically modified organisms in food production. These two types of litigation were chosen because of two important features: their rapid growth in 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. This overview will help to provide context for this Article’s later analysis of litigation in these areas.

### 1. Concentrated Animal Feeding Operations

CAFOs are a growing presence in the United States. But their growth is not without controversy, especially with members of the sustainable food movement.<sup>70</sup> 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

---

66. *Id.* at 182–84.

67. *Id.* at 185.

68. *Id.* at 184.

69. *Id.* at 185.

70. Robyn Mallon, *The Deplorable Standard of Living Faced by Farmed Animals in America’s Meat Industry and How to Improve Conditions by Eliminating the Corporate Farm*, 9 MICH. ST. U. J. MED. & L. 389, 395–96 (2005) (describing the benefits of family farms and the drawbacks of CAFOs).

CAFOs, focusing particularly on the scientific complications involved with evaluating these concerns. This section then describes how these concerns intersect with values shared by members of 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, toward 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.<sup>71</sup> CAFOs are large-scale animal operations defined as “a Large CAFO or as a Medium CAFO” by the Environmental Protection Agency (“EPA”) designated by the number of animals contained in certain conditions.<sup>72</sup> 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,”<sup>73</sup> “2,500 swine each weighing 55 pounds or more,”<sup>74</sup> and “30,000 laying hens or broilers, if the AFO uses a liquid manure handling system.”<sup>75</sup> Moreover, the containment structures for these operations often “resemble industrial buildings more than they do a traditional barn.”<sup>76</sup>

In at least some sectors of animal production, the number of CAFOs has been growing rapidly since the 1980s. One major 2008 study of CAFOs by the U.S. General Accounting Office (“GAO”) estimated that hog CAFOs and egg-laying-chicken CAFOs increased by 37 percent between 1982 and 2002.<sup>77</sup> CAFOs of all animal types, however, have been increasing, although some at slower rates.<sup>78</sup> The percentage of U.S. animals raised in CAFOs has generally 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.<sup>79</sup> Indeed, in some sectors—beef cattle, hogs, and layers—a large majority of the animals involved in food production are currently raised in

---

71. PEW CHARITABLE TRUSTS, PUTTING MEAT ON THE TABLE: INDUSTRIAL FARM ANIMAL PRODUCTION IN AMERICA 6 (2008), available at [http://www.ncifap.org/\\_images/PCIFAPFin.pdf](http://www.ncifap.org/_images/PCIFAPFin.pdf).

72. 40 C.F.R. § 122.23(b)(2), (4)–(6) (2011).

73. *Id.* § 122.23(b)(4)(i).

74. *Id.* § 122.23(b)(4)(iv).

75. *Id.* § 122.23(b)(4)(ix).

76. PEW CHARITABLE TRUSTS, *supra* note 71, at vii.

77. U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-08-944, CONCENTRATED ANIMAL FEEDING OPERATIONS: EPA NEEDS MORE INFORMATION AND A CLEARLY DEFINED STRATEGY TO PROTECT AIR AND WATER QUALITY FROM POLLUTANTS OF CONCERN 15 tbl.2 (2008), available at <http://www.gao.gov/new.items/d08944.pdf>.

78. *Id.* at 14 tbl.1.

79. *Id.* at 16 tbl.3.

CAFOs.<sup>80</sup>

Differences between CAFOs and traditional farming are not limited to 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.<sup>81</sup> By contrast, traditional “diversified, independent, family-owned farms of 40 years ago that produced a variety of crops and a few animals”<sup>82</sup> generated livestock manure that was generally used as fertilizer on the cropland.<sup>83</sup> 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 greater amounts of waste than the nearby fields can absorb.<sup>84</sup> Thus, CAFO waste raises a greater possibility of additional runoff washing into nearby rivers and streams.<sup>85</sup> Moreover, CAFO storage methods, such as lagoons, may be subject to spills and overflows—again leading to contamination of nearby waterbodies.<sup>86</sup>

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;<sup>87</sup> nutrient loading of waterbodies (leading to eutrophication and potentially fish kills);<sup>88</sup> emissions of ammonia, hydrogen sulfide, and volatile organic compounds;<sup>89</sup> and foul odors.<sup>90</sup>

But creating a comprehensive scientific evaluation of these effects can be complicated and contested. The meta-analysis contained in the GAO’s 2008 CAFO Report illustrates these difficulties. In assessing the sixty-eight government-sponsored and peer-reviewed studies that have been completed

---

80. *Id.* at 16–17.

81. See Terence J. Centner, *Establishing a Rational Basis for Regulating Animal Feeding Operations: A View of the Evidence*, 27 VT. L. REV. 115, 117–18 (2002) (citing Paul J.A. Withers & S.C. Jarvis, *Mitigation Options for Diffuse Phosphorus Loss to Water*, 14 SOIL USE & MGMT. 186, 187 (1988)).

82. PEW CHARITABLE TRUSTS, *supra* note 71, at 5.

83. Paul Stokstad, *Enforcing Environmental Law in an Unequal Market: The Case of Concentrated Animal Feeding Operations*, 15 MO. ENVTL. L. & POL’Y REV. 229, 231 (2008).

84. 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. *Id.*

87. Williams, *supra* note 84, at 218–19, 232–33.

88. *Id.* at 220–21.

89. *Id.* at 221–29.

90. *Id.* at 229–32.

on air and water pollutants from CAFOs, the GAO pointed out the wide variety of results contained in those studies.

Of these 68 studies, 15 have directly linked pollutants from animal waste generated by these operations to specific health or environmental 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.<sup>91</sup>

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

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,<sup>93</sup> Terence Centner provided a comprehensive assessment of the basis for these rules, and listed a number of concerns.<sup>94</sup> These included the EPA’s failure to compare waste generated by CAFOs with waste generated by other similar sources, such as suburban developments,<sup>95</sup> and its failure to fully consider the effects of existing individual state regulations of CAFOs.<sup>96</sup> According to Centner, these concerns raised “significant questions 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.<sup>97</sup> 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,<sup>98</sup> the data complications point to some of the scientific difficulties

---

91. U.S. GOV’T ACCOUNTABILITY OFFICE, *supra* note 77, at 23.

92. *Id.* at 27.

93. *See* Centner, *supra* note 81, at 122.

94. *See id.* at 144–47 (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).

95. *Id.* at 139–40.

96. *Id.* at 140–41.

97. *Id.* at 145–46.

98. *Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d 486, 524 (2d Cir. 2005). *See also* 33 U.S.C. § 1362(14) (2006) (defining point sources as “any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container,

in evaluating the effects of CAFOs as a class of pollution-generating businesses.

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—and 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, “[t]he owner or operator of a CAFO must seek coverage under an NPDES [National Pollutant Discharge Elimination System] permit if the CAFO discharges or proposes to discharge.”<sup>99</sup> Such permits may be issued by the EPA, or by individual states authorized to implement the NPDES program.<sup>100</sup> 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 of CAFOs through their regulatory and permitting programs. But these programs are far from uniform. A survey reported in 2008 by the National Conference of State Legislatures notes this lack of uniformity:

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

---

rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged”); *id.* §§ 1342, 1362(12)(A) (establishing permitting program for point sources).

99. 40 C.F.R. § 122.23(d)(1) (2008), *partially invalidated by* Nat’l Pork Producers Council v. EPA, 635 F.3d 738 (5th Cir. 2011).

100. National Pollutant Discharge Elimination System—Concentrated Animal Feeding Operations, 68 Fed. Reg. 7175, 7185 (Feb. 12, 2003) (to be codified at 40 C.F.R. pts. 9, 122, 123 & 412). “As of January 2008, 44 states have permitting authority for CAFOs” under the NPDES program. SCOTT HENDRICK & DOUG FARQUHAR, CONCENTRATED ANIMAL FEEDING OPERATIONS: A SURVEY OF STATE POLICIES, *in* NAT’L CONFERENCE OF STATE LEGISLATURES 1, 1–2 (2008).



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 retained NPDES permitting authority, CAFOs are subject to separate state regulations that are enforced in addition to NPDES requirements.<sup>101</sup>

These structural differences in the permitting programs can lead to differences in permit-related legal challenges, which in turn affect how and to what degree members of the sustainable food movement can interject their values into CAFO litigation. For example, CAFO permitting may require both technical and normative judgments. Indeed, CAFO permitting often not only involves scientific assessments of the likely health and environmental results of a proposed CAFO and its operation plan, but also 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.<sup>102</sup> Indeed, the sorts of information assessed by agencies or introduced by stakeholders as part of the permitting process can be seen as “trans-science,” that is, judgments that involve science but cannot be resolved solely by science.<sup>103</sup>

#### b. CAFOs and the Sustainable Food Movement

Along with potential environmental and public health concerns, CAFOs often create significant concerns within the sustainable food movement. This section highlights some of the 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, the distinction between the movement’s values and its knowledge is rarely absolute. Finally, this section is not intended to be a 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.<sup>104</sup>

---

101. HENDRICK & FARQUHAR, *supra* note 100, at 2.

102. See FRANK FISCHER, *CITIZENS, EXPERTS, AND THE ENVIRONMENT: THE POLITICS OF LOCAL KNOWLEDGE* 43 (2000) (describing how the decisionmaking process requires normative judgments which cannot be replaced by, but can be complemented by, technological knowledge).

103. Alvin M. Weinberg, *Science and Trans-Science*, 10 *MINERVA* 209, 209 (1972).

104. In conducting this review of popular nonfiction, I am drawing from an approach taken by a number of scholars of food and society to examine alternative food movements. See, e.g., Hanavan,

One group, the Sustainable Table, which “celebrates local sustainable food, educates consumers on food-related issues and works to build community through food,”<sup>105</sup> emphasizes concerns such as excessive size, disregard for animal welfare, misuse of pharmaceuticals, mismanagement of waste, and socially irresponsible corporate ownership.<sup>106</sup> Other groups, such as the Midwest Environmental Advocates,<sup>107</sup> describe CAFOs as threatening the environment and public health. “By 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.”<sup>108</sup>

A number of popular books that reflect sustainable food movement values 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*;<sup>109</sup> Jonathan Safran Foer’s *Eating Animals*;<sup>110</sup> and *The CAFO Reader: The Tragedy of Industrial Animal Factories*, edited by Daniel Imhoff.<sup>111</sup> Their emphases on food sustainability are expressed in their texts. Their statements express the importance of “know[ing] where our food comes from, and what impact its production has on the environment and public health, before we take it

---

*supra* note 15, at 168; Nestle with McIntosh, *supra* note 17, at 172–74. Cf. Stacey A. Tovino, *Incorporating Literature into a Health Law Curriculum*, 9 MICH. ST. U. J. MED. & L. 213, 250–54 (2005) (describing the use of popular nonfiction to teach health law); Philip N. Meyer, *Convicts, Criminals, Prisoners, and Outlaws: A Course in Popular Storytelling*, 42 J. LEGAL EDUC. 129, 129–30 (1992) (describing how portrayals of the law in popular nonfiction can provide students with a sense of broader narratives about the law).

105. See *About Us: Introduction*, SUSTAINABLE TABLE, <http://www.sustainabletable.org/about/> (last visited Apr. 8, 2012).

106. *Issues: Factory Farming*, SUSTAINABLE TABLE, <http://www.sustainabletable.org/issues/factoryfarming/> (last visited Apr. 8, 2012).

107. 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.” *Our Story*, MIDWEST ENVTL. ADVOCATES, <http://www.midwestadvocates.org/story/index.html> (last visited Apr. 8, 2012). While Midwest Environmental Advocates is more focused on the environmental impacts of CAFOs, it is nevertheless drawn into addressing CAFOs through some of the broader perspectives of the sustainable food movement. The author is a member of the Board of Directors of this organization.

108. *Factory Farm Campaign*, MIDWEST ENVTL. ADVOCATES, <http://www.midwestadvocates.org/advocacy/factories/index.html> (last visited Apr. 8, 2012).

109. DAVID KIRBY, *ANIMAL FACTORY: THE LOOMING THREAT OF INDUSTRIAL PIG, DAIRY, AND POULTRY TO HUMANS AND THE ENVIRONMENT* (2010).

110. JONATHAN SAFRAN FOER, *EATING ANIMALS* (2009).

111. *THE CAFO READER: THE TRAGEDY OF INDUSTRIAL ANIMAL FACTORIES* (Daniel Imhoff ed., 2010) [hereinafter *THE CAFO READER*].

home and fry it up in a pan”;<sup>112</sup> revealing the “economic, social, and environmental effects of eating animals”;<sup>113</sup> and letting the public know about the state of “food animal factories.”<sup>114</sup> In tackling the issue of CAFOs from a food sustainability perspective, these books provide similar themes, but with somewhat different approaches. A survey of these books can help explain the perspectives and values of the sustainable food movement.

Kirby, for example, provides an exposé-like account of the journey of three individuals who become anti-CAFO activists: 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.<sup>115</sup> 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. These include odor,<sup>116</sup> negative animal living conditions,<sup>117</sup> fish kills,<sup>118</sup> public health impacts,<sup>119</sup> detrimental impacts on the economy for small-scale farmers,<sup>120</sup> and harmful impacts on local communities.<sup>121</sup> The overall effect is to provide a large number of arguments against CAFOs using journalistic narratives rather than policy-based arguments.

Jonathan Safran Foer provides the most literary approach, presenting a personal exploration of the impacts of CAFOs in a partially philosophical, partially memoir-like fashion.<sup>122</sup> He begins his book by discussing his relationship with dogs and how he came to regard himself as a “dog person.”<sup>123</sup> Then he juxtaposes the concept of eating dogs by providing examples of other cultures that do, although they avoid eating other animals that they love.<sup>124</sup> As he puts it, “[e]ating 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.”<sup>125</sup>

---

112. KIRBY, *supra* note 109, at xvii.

113. FOER, *supra* note 110, at 12.

114. Douglas Tompkins, *Foreword to THE CAFO READER*, *supra* note 111, at xi.

115. KIRBY, *supra* note 109, at 1–11.

116. *Id.* at 31.

117. *See id.* at 25, 33, 37–38, 189–90, 224–25, 236–38, 269–70, 330–32, 407–08, 409–11.

118. *Id.* at 2–3.

119. *Id.* at 216–18, 306, 318–19, 336–38, 395, 398–99, 406, 422–29, 434, 435–38, 450.

120. *See id.* at 27–28, 68, 74, 84–89, 128, 159, 187, 190–91, 202–03, 226–27, 342–44, 373–74, 393–95.

121. *See id.* at 69–70, 73–75, 128–31, 154–58, 192, 196–98, 341–42.

122. *See* FOER, *supra* note 110.

123. *Id.* at 21–24.

124. *Id.* at 25–28 (presenting examples of Indians and dogs).

125. *Id.* at 29.

Using this memoir-like approach, Foer describes his visits to a number of CAFOs, interspersing various facts he discovered about the changing relationship between humans and animals through the advent of the factory farm.<sup>126</sup> 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.<sup>127</sup> In doing so, he uses words of strong expressive impact, such as “sadism”<sup>128</sup> and “pathos.”<sup>129</sup> Although the book is permeated with such ethical discourse, Foer also presents some arguments against CAFOs on the basis of environmental<sup>130</sup> and health effects.<sup>131</sup> Ultimately, however, he rests his conclusions on emotional grounds: “To accept the factory farm *feels* inhuman.”<sup>132</sup>

Finally, editor Daniel Imhoff presents a number of essays on the negative impacts of CAFOs written by those involved in the sustainable food movement. Each 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, ecologists, journalists, and sustainable food advocates. Their essays, in turn, range from critiques of industrialization brought about by CAFOs;<sup>133</sup> expressions of concern about the effect of CAFOs in biodiversity both among animal breeds<sup>134</sup> and within the overall environment;<sup>135</sup> detrimental impacts on food safety through reliance on crowded conditions and antibiotics;<sup>136</sup> negative impacts on climate change through the mass production of meat;<sup>137</sup> concerns regarding the “misuse of antibiotics . . . *inherent* in industrial food animal production” as well as a

---

126. *Id.* at 108–09.

127. *Id.* at 129–37. Foer provides similar accounts of pig, fish, and cattle farms as well. *Id.* at 181–88, 189–93, 229–30.

128. *Id.* at 181.

129. *Id.* at 195.

130. *Id.* at 58–59, 73–74, 173.

131. *Id.* at 139, 142–43, 180, 188.

132. *Id.* at 267 (emphasis added).

133. See Andrew Kimbrell, *Cold Evil: The Ideologies of Industrialism*, in THE CAFO READER, *supra* note 111, at 29; Wendell Berry, *Renewing Husbandry: The Mechanization of Agriculture Is Fast Coming to an End*, in THE CAFO READER, *supra* note 111, at 44, 44–51.

134. See Donald E. Bixby, *Old MacDonald Had Diversity: The Role of Traditional Breeds in a Dynamic Agricultural Future*, in THE CAFO READER, *supra* note 111, at 164, 206–09.

135. See George Wuerthner, *Assault on Nature: CAFOs and Biodiversity Loss*, in THE CAFO READER, *supra* note 111, at 182.

136. See Eric Schlosser, *Bad Meat: Deregulation Makes Eating a High-Risk Behavior*, in THE CAFO READER, *supra* note 111, at 206, 206–09.

137. See Anna Lappé, *Diet for a Hot Planet: Livestock and Climate Change*, in THE CAFO READER, *supra* note 111, at 240, 240–45.

technological takeover generally;<sup>138</sup> reduction of the deliciousness of food;<sup>139</sup> and harmful impacts on citizen involvement with food production and how citizens can help reduce the negative impacts of CAFOs.<sup>140</sup> Because the book is an essay collection, it presents a pluralistic account of how various individuals with varied sustainable food perspectives each 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 complex array of paths beyond 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 collective identity.<sup>141</sup> It also reflects the complexity of food, with its roles as a produced commodity,<sup>142</sup> a cultural indicator,<sup>143</sup> and a source of sustenance.<sup>144</sup>

## 2. Genetically Modified Organisms

Members of the sustainable food movement also raise concerns about the prevalence of GMOs in the United States food supply. Such concerns include migration of transgenes into other organisms, increased creation of

---

138. Leo Horrigan, Jay Graham & Shawn McKenzie, *Antibiotic Drug Abuse: CAFOs Are Squandering Vital Human Medicines*, in THE CAFO READER, *supra* note 111, at 254, 261. *See also* Rebecca Spector, *Franken Food: Livestock Cloning and the Quest for Industrial Perfection*, in THE CAFO READER, *supra* note 111, at 262, 262 (describing the genetic cloning of animals and its risks relating to human consumption); Wenonah Hauter, *Nuclear Meat: Using Radiation and Chemicals to Make Food "Safe,"* in THE CAFO READER, *supra* note 111, at 287 (considering the effects of using chemicals in food to make it safe for human consumption).

139. *See* Peter Kaminsky, *The Good Farmer: An Agrarian Approach to Animal Agriculture*, in THE CAFO READER, *supra* note 111, at 308, 309.

140. *See* Joel Salatin, *Healing: Restoring Health, Wealth, and Respect to Food and Farming*, in THE CAFO READER, *supra* note 111, at 355, 355–57, 359–64; Daniel Imhoff, *Vote with Your Fork: It's Time for Citizens to Take Back the Food System*, in THE CAFO READER, *supra* note 111, at 366, 366, 372–73.

141. *See* Owen Whooley, *Collective Identity*, in 2 THE BLACKWELL ENCYCLOPEDIA OF SOCIOLOGY 586, 586 (George Ritzer ed., 2007) (defining collective identity as “the shared definition of a group that derives from its members’ common interests, experiences, and solidarities”). *Cf.* Tyler Wry, Michael Lounsbury & Mary Ann Glynn, *Legitimizing Nascent Collective Identities: Coordinating Cultural Entrepreneurship*, 22 ORG. SCI. 449, 449–63 (2011) (attempting to analyze how nascent collective identities become legitimized).

142. *See* MARSHA A. ECHOLS, *FOOD SAFETY AND THE WTO: THE INTERPLAY OF CULTURE, SCIENCE AND TECHNOLOGY* 41–52 (2001).

143. *See id.* at 13–28.

144. *See id.* at 26–28.

pesticide-resistant pests and weeds, potential food adulteration, impacts on nontarget species, and damage to biodiversity.<sup>145</sup> Along these lines, members have initiated a number of different types of lawsuits to oppose the use of GMOs. As with 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. This section then describes how these concerns intersect with values shared by those in the sustainable food movement.

a. Context: Scientific Complications and Regulatory Background

GMO crop production involves the use of plants with altered genes generally created through recombinant DNA technology whereby laboratory methods are used to bring together genetic material from multiple sources.<sup>146</sup> As one comprehensive U.S. Department of Agriculture study on GMOs describes, “[f]armers’ expectations of higher yields, savings in management time, and lower pesticide costs have driven a rapid increase in the adoption of GE [genetically engineered] crop varieties in the United States and several other countries.”<sup>147</sup> With genetically modified soybeans, for example, the acreage share of GMO soybeans has risen from under 10 percent in 1996 to 87 percent in 2005.<sup>148</sup> Indeed, at this point, the United States leads the world in terms of the production and exportation of GMOs.<sup>149</sup>

A number of factors are responsible for the increased use of GMOs. These currently include farmers’ expectations of increased yields through improved pest control (expected to be brought about through crops

---

145. George Van Cleve, *Regulating Environmental and Safety Hazards of Agricultural Biotechnology for a Sustainable World*, 9 WASH. U. J.L. & POL’Y 245, 259–67 (2002) (describing concerns raised by the use of GMOs in agriculture).

146. Debra M. Strauss, *Defying Nature: The Ethical Implications of Genetically Modified Plants*, 3 J. FOOD L. & POL’Y 1, 2 (2007); Gregory N. Mandel, *Gaps, Inexperience, Inconsistencies, and Overlaps: Crisis in the Regulation of Genetically Modified Plants and Animals*, 45 WM. & MARY L. REV. 2167, 2175 (2004).

147. JORGE FERNANDEZ-CORNEJO & MARGRIET CASWELL, U.S. DEP’T AGRIC., *THE FIRST DECADE OF GENETICALLY ENGINEERED CROPS IN THE UNITED STATES* 8 (2006), <http://www.ers.usda.gov/publications/eib11/eib11.pdf>.

148. *Id.* at 8 fig.6.

149. Alison Peck, *Leveling the Playing Field in GMO Risk Assessment: Importers, Exporters and the Limits of Science*, 28 B.U. INT’L L.J. 241, 244 (2010).

genetically modified to incorporate either disease-resistant or pesticide/herbicide-resistant genes), savings in management time, and reduction in pesticide costs.<sup>150</sup> 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.<sup>151</sup> 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.<sup>152</sup>

The use of GMOs may also create risks for human health and the environment. A 2005 World Health Organization study 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.<sup>153</sup> The study also identified a number of environmental risks, including “unintended effects on non-target organisms, ecosystems and biodiversity,”<sup>154</sup> increased use of herbicides due to crop herbicide resistance,<sup>155</sup> and unintended outcrossing of genes into the environment.<sup>156</sup>

As with CAFOs, the actual effects of GMO use are complicated and contested,<sup>157</sup> vary by context,<sup>158</sup> and are subject to change over time due to

---

150. FERNANDEZ-CORNEJO & CASWELL, *supra* note 147, at 9–10, 10 fig.7.

151. See generally Richard Caplan, Note, *The Ongoing Debate over Terminator Technology*, 19 GEO. INT’L ENVTL. L. REV. 751 (2007) (discussing attempts to commercialize the use of sterile seed technology).

152. Elizabeth Burleson & Winslow Burleson, *Innovation Cooperation: Energy Biosciences and Law*, 2011 U. ILL. L. REV. 651, 674–75; Michael Faure & Andri Wibisana, *Liability for Damage Caused by GMOs: An Economic Perspective*, 23 GEO. INT’L ENVTL. L. REV. 1, 2–3 (2010); Ed Wallis, *Fish Genes into Tomatoes: How the World Regulates Genetically Modified Foods*, 80 N.D. L. REV. 421, 424 (2004).

153. WORLD HEALTH ORG., MODERN FOOD BIOTECHNOLOGY, HUMAN HEALTH AND DEVELOPMENT: AN EVIDENCE-BASED STUDY 12–19 (2005) [hereinafter WHO STUDY], [http://www.who.int/foodsafety/publications/biotech/biotech\\_en.pdf](http://www.who.int/foodsafety/publications/biotech/biotech_en.pdf).

154. *Id.* at 20.

155. *Id.* at 21.

156. *Id.*

157. 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 (1987) (describing how the complexity of ecosystems creates difficulties for evaluating the effects of GMOs prior to their release into the environment).

158. See WHO STUDY, *supra* note 153, 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.”).

evolving farming practices and adapting environments.<sup>159</sup> With regards to environmental, economic, and social effects, for example, a 2010 report by a National Academy of Sciences' ("NAS's") panel attempted to summarize the current state of scientific literature and provided some tentatively optimistic conclusions.<sup>160</sup> According to the NAS report, genetically engineered crops are currently exhibiting fewer negative environmental effects than conventional crops, in part due to how there is relatively little gene flow between existing genetically engineered species and wild species.<sup>161</sup> However, environmental effects related to gene flow may change if farmers begin to use genetically engineered varieties of plants—such as canola, alfalfa, and sunflower—that exhibit greater gene flow with wild species.<sup>162</sup> The pairing of GMO crops with conservation tillage practices has been most successful, leaving “30 percent of the previous crop’s residue on the field, which improves soil quality and water infiltration.”<sup>163</sup> This pairing facilitates the substitution of glyphosate application—the herbicide for which most GMO crops are engineered to be resistant to—for tillage operations that would have been used as a weed management strategy.<sup>164</sup>

Other environmental effects, however, are more mixed. 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.<sup>165</sup> But this situation might change, as weeds are evolving glyphosate resistance as a result of farmers’ ongoing use of the herbicide.<sup>166</sup> 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.<sup>167</sup>

The NAS evaluation of economic and social effects was even more uncertain. The report found that farmers who adopted GMO crops have

---

159. COMM. ON THE IMPACT OF BIOTECHNOLOGY ON FARM-LEVEL ECON. AND SUSTAINABILITY, NAT’L ACAD. OF SCIENCES, THE IMPACT OF GENETICALLY ENGINEERED CROPS ON FARM SUSTAINABILITY IN THE UNITED STATES 3 (2010).

160. *Id.* at 1–3.

161. *Id.* at 3.

162. *See id.*

163. *Id.* at 5.

164. *Id.* at 5–6.

165. *Id.* at 3–4.

166. *Id.* at 4.

167. *Id.* at 6–9.



reduced production costs, increased yield, and improved worker safety.<sup>168</sup> However, product pricing effects and economic effects on non-GMO growers are not adequately understood.<sup>169</sup> Moreover, social impacts on certain categories of farmers—that is, those with less access to GMO technology because of economic or social reasons—and on intellectual property are also in need of further research.<sup>170</sup> Ultimately, 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.”<sup>171</sup>

An earlier panel of the NAS also attempted to address the safety of genetically engineered foods in a report published in 2004.<sup>172</sup> 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 commercialization” and “discuss whether certain safety issues are specific to GE foods.”<sup>173</sup> According to the panel, both conventional and biotechnological breeding methods may create unintended compositional changes to food that may lead to negative health effects.<sup>174</sup> The panel did not categorize breeding methods<sup>175</sup> as “safe” or “unsafe.” Instead, it categorized breeding methods into a continuum of methods “less likely” and “more likely” to lead to unintended health effects.<sup>176</sup> It ultimately recommended 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.<sup>177</sup> These assessments include various tools for assessing safety prior to commercialization and providing continued post-market evaluation.<sup>178</sup>

---

168. *Id.* at 9–10.

169. *Id.* at 10–12.

170. *Id.* at 12–13.

171. *Id.* at 3.

172. COMM. ON IDENTIFYING AND ASSESSING UNINTENDED EFFECTS OF GENETICALLY ENGINEERED FOODS ON HUMAN HEALTH, NAT’L ACAD. OF SCIENCES, SAFETY OF GENETICALLY ENGINEERED FOODS: APPROACHES TO ASSESSING UNINTENDED HEALTH EFFECTS (2004).

173. *Id.* at 2.

174. *Id.* at 3.

175. The breeding methods ranged from “[s]election from a homogeneous population” to “[b]iologic transfer of rDNA from closely related species” to “[b]iologic transfer of rDNA from distantly related species” to “[m]utation breeding, chemical mutagenesis, ionizing radiation.” *Id.* at 4.

176. *Id.* at 4.

177. *Id.* at 8.

178. *Id.* at 8–13.

In addressing these concerns, three agencies—the U.S. Department of Agriculture’s Animal and Plant Health Inspection Service (“APHIS”), the Food and Drug Administration (“FDA”), and the Environmental Protection Agency (“EPA”)—are charged with different aspects of overseeing GMO production in the United States.<sup>179</sup> APHIS acts under the Plant Protection Act (“PPA”),<sup>180</sup> which authorizes the agency to promulgate and administer regulations concerning “plant pests.”<sup>181</sup> 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,<sup>182</sup> and thereby regulates all field trials for GMO plants and licenses their growth and sale.<sup>183</sup> In doing so, it often produces some sort of environmental evaluation under the National Environmental Policy Act (“NEPA”) <sup>184</sup> to examine the possible environmental impacts of the submitted GMO.<sup>185</sup>

The FDA also has general jurisdiction over GMO foods to prohibit foods or food additives from being adulterated with “any poisonous or deleterious substance which may render it injurious to health,”<sup>186</sup> including those produced from genetically modified components.<sup>187</sup> The FDA thus treats genetically engineered substances added to food as food additives if they differ significantly in structure, function, or amount from that currently found in food.<sup>188</sup> The FDA also requires testing and labeling for products—including genetically engineered substances—that significantly alter the nutritional value of the food product or contain material known to

---

179. Jillian S. Hishaw, “Show-Me” No Rice Pharming: An Overview of the Introduction of and Opposition to Genetically Engineered Pharmaceutical Crops in the United States, 3 J. FOOD. L. & POL’Y 209, 210–11 (2007).

180. 7 U.S.C. §§ 7701–7786 (2006).

181. *Id.* § 7711; *id.* § 7702(14) (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”).

182. 7 C.F.R. § 340.1 (2011); Wendy Thai, *Transgenic Crops: The Good, the Bad, and the Laws*, 6 MINN. J. L. SCI. & TECH. 877, 888 (2005) (“A transgenic plant is assumed to be a plant pest until proven otherwise.”).

183. 7 C.F.R. § 340.0. *See also* Joshua B. Cannon, Note, *Statutory Stones and Regulatory Mortar: Using Negligence Per Se to Mend the Wall Between Farmers Growing Genetically Engineered Crops and Their Neighbors*, 67 WASH. & LEE L. REV. 653, 665–67 (2010) (describing process of testing and permitting).

184. 42 U.S.C. §§ 4321–4370f (2006).

185. *See* Althouse, *supra* note 18, at 432.

186. 21 U.S.C. § 342(a)(1) (2006).

187. *See* Mandel, *supra* note 146, at 2218.

188. Statement of Policy: Foods Derived from New Plant Varieties, 57 Fed. Reg. 22,984, 22,990 (May 29, 1992). *See also* Lars Noah, *Managing Biotechnology’s [R]evolution: Has Guarded Enthusiasm Become Benign Neglect?*, 11 VA. J.L. & TECH. 1, 33–35 (2006).

cause allergic reactions.<sup>189</sup>

Finally, the EPA can exercise authority over GMOs if they exhibit properties that can be treated as either toxic substances under the Toxic Substances Control Act<sup>190</sup> or pesticide production under the Federal Insecticide, Fungicide, and Rodenticide Act<sup>191</sup> for regulating pesticidal substances (including those produced through biotechnology) and pesticide-resistant plants.<sup>192</sup> Thus, the EPA works with APHIS during the field trials for GMO plants, and with the FDA on the safety of the plants or their products to humans.<sup>193</sup> Under this approach, the EPA assesses the risks to human safety and the fate of the substance in the environment, including effects on nontarget species.<sup>194</sup> The EPA also sets “safe” environmental exposure levels and allowable food residue tolerance levels for any novel pesticides.<sup>195</sup>

#### b. GMOs and the Sustainable Food Movement

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,”<sup>196</sup> describes the use of GMOs “as one of the greatest and most intractable environmental challenges of the 21st Century.”<sup>197</sup> Sustainable Table focuses on the

---

189. U.S. DEP’T OF HEALTH AND HUMAN SERVS., FDA, CTR. FOR FOOD SAFETY & APPLIED NUTRITION, DRAFT GUIDANCE FOR INDUSTRY: VOLUNTARY LABELING INDICATING WHETHER FOODS HAVE OR HAVE NOT BEEN DEVELOPED USING BIOENGINEERING 2–4 (2001), <http://www.fda.gov/OHRMS/DOCKETS/98fr/001598gd.pdf> [hereinafter INDUSTRY GUIDANCE]. *But see* Sheryl Lawrence, Comment, *What Would You Do with a Fluorescent Green Pig?: How Novel Transgenic Products Reveal Flaws in the Foundational Assumptions for the Regulation of Biotechnology*, 34 *ECOLOGY L.Q.* 201, 270–71 (2007) (criticizing the FDA’s lack of coherent protocol for allergenicity testing of genetically engineered plant-made pharmaceuticals).

190. 15 U.S.C. §§ 2601–2692 (2006).

191. 7 U.S.C. §§ 136–136y (2006); 40 C.F.R. § 152.1 (2011).

192. 40 C.F.R. § 174.1.

193. *Id.* § 152.20. *See also* MICHAEL R. TAYLOR, JODY S. TICK & DIANE M. SHERMAN, PEW INITIATIVE ON FOOD AND BIOTECHNOLOGY, *TENDING THE FIELDS: STATE & FEDERAL ROLES IN THE OVERSIGHT OF GENETICALLY MODIFIED CROPS* 15 (2004), available at [http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Food\\_and\\_Biotechnology/Tending\\_Fields\\_Biotech1204.pdf](http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Food_and_Biotechnology/Tending_Fields_Biotech1204.pdf). *But see* Mary Jane Angelo, *Regulating Evolution for Sale: An Evolutionary Biology Model for Regulating the Unnatural Selection of Genetically Modified Organisms*, 42 *WAKE FOREST L. REV.* 93, 124–27 (2007) (criticizing the EPA’s approach for evaluating genetically modified plants with pesticides—or “plant incorporated protectants”).

194. TAYLOR, TICK & SHERMAN, *supra* note 193, at 50.

195. *Id.*

196. *About Us*, CTR. FOR FOOD SAFETY, <http://www.centerforfoodsafety.org/about/> (last visited Apr. 10, 2012).

197. *Genetically Engineered Crops*, CTR. FOR FOOD SAFETY, <http://www.centerforfoodsafety.org/>

uncertainties of risks from genetically engineered foods as one of their issues.<sup>198</sup> Yet another group described earlier, Slow Food USA, describes GMOs as “present[ing] a threat to the precautionary principle.”<sup>199</sup>

The widespread objections to GMOs from those associated with the sustainable food movement have left some scholarly observers “puzzled.”<sup>200</sup> One scholar has described the narrative as a sort of “Frankenstein” narrative, where the “unnaturalness” of GMOs is emphasized.<sup>201</sup> Others, at least in addressing European objections to GMOs, describe these fears as stemming from cultural memories of famines, “pride in food quality and culinary heritage,” and resistance toward American products.<sup>202</sup> Indeed, some proponents of GMO use describe the fears held by the sustainable food movement as “based less on science than emotion.”<sup>203</sup>

While this section does not intend to express support or disfavor regarding these beliefs,<sup>204</sup> it does 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

---

campaign/genetically-engineered-food/crops/ (last visited Apr. 10, 2012).

198. *The Issues: Genetic Engineering*, SUSTAINABLE TABLE, <http://www.sustainabletable.org/issues/ge/> (last visited Apr. 10, 2012).

199. *GMOs*, SLOW FOOD USA, <http://www.slowfood.com/international/22/gmos> (last visited Apr. 10, 2012).

200. John S. Applegate, *The Prometheus Principle: Using the Precautionary Principle to Harmonize the Regulation of Genetically Modified Organisms*, 9 *IND. J. GLOBAL LEGAL STUD.* 207, 209 (2001).

201. *Id.* at 212–13. According to 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 involve a sort of hubristic knowledge. *Id.*

202. Marguerite A. Hutchinson, Comment, *Moving Beyond the WTO: A Proposal to Adjudicate GMO Disputes in an International Environmental Court*, 10 *SAN DIEGO INT’L L.J.* 229, 239–40 (2008).

203. Stan Benda, *It’s All About Elmer Gantry . . . There Is No Frankenstein!!!*, 16 *INTELL. PROP. J.* 221, 266 (2003).

204. 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) (discussing the process by which policy decisions are made including how decisionmakers are influenced). *See also* COMM. ON THE INSTITUTIONAL MEANS FOR ASSESSMENT OF RISKS TO PUB. HEALTH, NAT’L RESEARCH COUNCIL, *RISK ASSESSMENT IN THE FEDERAL GOVERNMENT: MANAGING THE PROCESS* 76–77 (1983) (describing the difficulty of separating the more fact-related task of risk assessment from risk management, the more normative task of developing approaches toward 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.

movement. Rather, it illustrates how the values held by the sustainable food movement intersect with the other concerns highlighted earlier regarding GMOs.

As with CAFOs, a number of popular books arising out of the sustainable food movement have recently been published regarding GMOs.<sup>205</sup> These include Marie-Monique Robin's *The World According to Monsanto*,<sup>206</sup> Kathleen Hart's *Eating in the Dark*,<sup>207</sup> and Bill Lambrecht's *Dinner at the New Gene Café*.<sup>208</sup> Again, their perspective of food sustainability is evident in the books' introductions and texts, with expressions of concern regarding "the health and environmental effects of GMOs, as well as their consequences for the conditions of farmers,"<sup>209</sup> the FDA "ha[ving] prevented Americans from making an informed choice about the foods we eat and feed our families,"<sup>210</sup> and "the formation of a new global politics of food."<sup>211</sup> 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 because it focuses mainly on one company, Monsanto. This concern is not 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.<sup>212</sup> The

---

205. 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 GMOs. *E.g.*, DANIEL CHARLES, LORDS OF THE HARVEST: BIOTECH, BIG MONEY, AND THE FUTURE OF FOOD (2001); RONNIE CUMMINS & BEN LILLISTON, GENETICALLY ENGINEERED FOOD: A SELF-DEFENSE GUIDE FOR CONSUMERS (2d ed. 2004); F. WILLIAM ENGDAHL, SEEDS OF DESTRUCTION: THE HIDDEN AGENDA OF GENETIC MANIPULATION (2007); STEPHEN NOTTINGHAM, EAT YOUR GENES: HOW GENETICALLY MODIFIED FOOD IS ENTERING OUR DIET (2d ed. 2003); JEFFREY M. SMITH, SEEDS OF DECEPTION: EXPOSING INDUSTRY AND GOVERNMENT LIES ABOUT THE SAFETY OF THE GENETICALLY ENGINEERED FOODS YOU'RE EATING (2003). The selections 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.

206. MARIE-MONIQUE ROBIN, THE WORLD ACCORDING TO MONSANTO: POLLUTION, CORRUPTION, AND THE CONTROL OF OUR FOOD SUPPLY (George Holoch trans., The New Press 2010) (2008).

207. KATHLEEN HART, EATING IN THE DARK: AMERICA'S EXPERIMENT WITH GENETICALLY ENGINEERED FOOD (First Vintage Books 2003) (2002).

208. BILL LAMBRECHT, DINNER AT THE NEW GENE CAFÉ: HOW GENETIC ENGINEERING IS CHANGING WHAT WE EAT, HOW WE LIVE, AND THE GLOBAL POLITICS OF FOOD (2002).

209. Nicolas Hulot, *A Book for Public Health*, Preface to ROBIN, *supra* note 206, at ix, xi.

210. HART, *supra* note 207, at 9.

211. LAMBRECHT, *supra* note 208, at x.

212. *See, e.g.*, Alberto R. Salazar V., *NAFTA Chapter 11, Regulatory Expropriation, & Domestic*

book presents its material in an exposé-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<sup>213</sup> and environmental effects<sup>214</sup> of GMOs, the book appears to emphasize more the activities of Monsanto in getting approval for and marketing its products.<sup>215</sup> In particular, the book discusses the FDA's approval of various GMO plants on the basis of "substantial equivalence" to conventional varieties as a "[t]rick";<sup>216</sup> Monsanto's forays into suppressing or at least influencing agency science;<sup>217</sup> its use of patents as a weapon against non-GMO farmers;<sup>218</sup> and its exertion of control over the agricultural process.<sup>219</sup> The book also discusses more socioeconomic aspects of Monsanto's promotion of its products, including potential economic harm to farmers<sup>220</sup> and interference with the economies of developing countries.<sup>221</sup>

The book alternates between two portrayals of Monsanto: Monsanto as an almost supernatural force, and Monsanto as a Machiavellian institution. For example, it uses words like "sorcerer's apprentices"<sup>222</sup> to

---

*Counter-Advertising Law*, 27 ARIZ. J. INT'L & COMP. L. 31, 78 (2010) ("[I]n 2001 a coalition of actors including farm, consumer, health, environmental, and industry organizations announced its opposition to Monsanto's attempts to commercialize genetically modified wheat in Canada."); Timothy E. Wirth, *Disinfectants, Nudes, and Other Adventures*, 13 COLO. J. INT'L ENVTL. L. & POL'Y 15, 25–26 (2002) (describing focus of various environmental groups against Monsanto over GMOs); David Daniel, Note, *Seeds of Hope: How New Genetic Technologies May Increase Value to Farmers, Seed Companies, and the Developing World*, 36 RUTGERS COMPUTER & TECH. L.J. 250, 263–64 (2010) (describing various activists' opposition to Monsanto's place in the food production industry). Cf. Samuel Blaustein, *Splitting Genes: The Future of Genetically Modified Organisms in the Wake of the WTO/Cartagena Standoff*, 16 PENN ST. ENVTL. L. REV. 367, 374–75 (2008) (describing Monsanto, among others, as the target of various advocacy groups opposed to GMOs).

213. ROBIN, *supra* note 206, at 150–52 (describing public health experiences with a disease possibly caused by GMOs). Robin also describes the contamination of traditional corn products with StarLink, a GMO corn variety banned for human consumption. *Id.* at 232–34. She also argues that a public health problem attributed to overconsumption of soy products is actually due to the consumption of GMO varieties of soy. *Id.* at 265–68.

214. *Id.* at 216–21 (describing effects of "[s]uperweeds" and overuse of herbicides); *id.* at 228–31 (describing harm to the Monarch butterfly from Bt plants); *id.* at 236–39 (describing contamination of organic canola with GMO canola).

215. *Id.* at 129 (describing Monsanto's GMO activities as "The Great Conspiracy").

216. *Id.* at 146–49.

217. *Id.* at 152–77.

218. *Id.* at 201–04.

219. *Id.* at 204–13.

220. *Id.* at 222–24.

221. *Id.* at 241–306.

222. *Id.* at 137.

refer to Monsanto's researchers and "Cassandras"<sup>223</sup> 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"<sup>224</sup> and "Political Regulation Made to Order."<sup>225</sup>

*Eating in the Dark* presents the concerns with GMOs in a less intentional light, as an experiment gone awry.<sup>226</sup> Like *The World According to Monsanto*, this book presents claims that the use of GMOs results in negative health,<sup>227</sup> environmental,<sup>228</sup> and social consequences.<sup>229</sup> But it presents these consequences as unintended side effects about which consumers should be concerned.<sup>230</sup> Expert advisors, likewise, are presented in a less conspiratorial light and more as making mistakes that are later shown to involve incorrect assumptions.<sup>231</sup>

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 of environmental, health, and consumer advocates. But it concludes with a warning note about the unknowns of the U.S. food supply: "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."<sup>232</sup> Indeed, the final quotation, from a Friends of the Earth advocate, is "[c]hances are someone has already eaten a biopharmaceutical food."<sup>233</sup> This concern with the unknown is illustrative of one of the values of the sustainable food movement—that of

---

223. *Id.* Robin also describes the GMO seeds as "Magic Seeds." *Id.* at 259.

224. *Id.* at 141.

225. *Id.* at 144.

226. HART, *supra* note 207, at 3 (describing StarLink corn as a "Food Experiment").

227. *Id.* at 85 (describing congressional testimony that a certain breed of GMO spinach has presented a possible health risk); *id.* at 156 (describing how one pediatric neurologist expressed concerns about GMOs on the development of the young, ill, and elderly).

228. *Id.* at 106 (describing Monsanto's attempts to convince the USDA that Bt genes would be safe for wildlife, including butterflies); *id.* at 171 (describing possible problems with Bt toxins on honeybee larvae).

229. *Id.* at 136 (describing impacts of patent restrictions on "impoverished Indian farmers"); *id.* at 203–04 (describing market loss of Canadian farmers because of "genetic pollution" with GMO grains).

230. *Id.* at 58 (describing a study that found "that only a minor genetic change was needed to turn a gene from a fungus that attacks alfalfa into an oncogene—a gene that causes cancer in people").

231. *Id.* at 76–77 (describing how a later National Academy of Sciences report on GMOs expressed greater concern than an earlier report that Hart described as "overly simplistic").

232. *Id.* at 283.

233. *Id.* at 288.

knowledge about one's food.<sup>234</sup>

Finally, *Dinner at the New Gene Café* covers the topic less as a factual or even argumentative synthesis and more from a narrative perspective.<sup>235</sup> 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.<sup>236</sup> While he still covers potential health,<sup>237</sup> environmental,<sup>238</sup> and social effects<sup>239</sup> of the use of GMOs, he explores this as a journey with various interview waypoints, including interviews with former FDA commissioner Dan Glickman,<sup>240</sup> activist Jeremy Rifkin,<sup>241</sup> scholar Margaret Mellon,<sup>242</sup> Monsanto executive Robert Shapiro,<sup>243</sup> and environmental feminist Vandana Shiva.<sup>244</sup>

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.<sup>245</sup> But Lambrecht emphasizes the transience of that stasis, predicting that "passions would become inflamed again."<sup>246</sup> Additionally, 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.<sup>247</sup>

### III. THE RISE 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

---

234. See Kloppenburg et al., *supra* note 33, at 182.

235. LAMBRECHT, *supra* note 208, at x (describing the author's travels to thirteen countries in the course of researching his book).

236. *Id.*

237. *Id.* at 43–55.

238. *Id.* at 102–03.

239. *Id.*

240. *Id.* at 132–39.

241. *Id.* at 73–76.

242. *Id.* at 84–90.

243. *Id.* at 243–46.

244. *Id.* at 282–85, 300–01.

245. See *id.* at 347–53.

246. *Id.* at 375.

247. See *id.* at 367–69.



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 whether and how they fit in with the values expressed by the sustainable food movement.

#### A. CAFO LITIGATION

Lawsuits opposing CAFOs arise in a number of contexts. Such suits arise by way of federal regulatory challenges under the Clean Water Act (“CWA”);<sup>248</sup> the Clean Air Act (“CAA”);<sup>249</sup> the Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”);<sup>250</sup> and the Emergency Planning and Community Right-to-Know Act (“EPCRA”).<sup>251</sup> Litigation also arises through state regulatory challenges and various common law challenges. This section 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. This Article will explore, however, how the outcomes of these lawsuits may or may not be situated within the expressed goals of the sustainable food movement.

##### 1. The 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 plaintiffs’ programmatic challenges have been successful, the results of their lawsuits against individual permits have been mixed. In all of these challenges, certain values expressed by the sustainable food movement are highlighted; particularly ecological sustainability, knowledge of and participatoriness of the system, and regulatory direction toward environmental values. Others,

---

248. 33 U.S.C. §§ 1251–1387 (2006).

249. 42 U.S.C. §§ 7401–7671q (2006).

250. *Id.* §§ 9601–9675.

251. *Id.* §§ 11001–11050.

however, are not and indeed cannot be highlighted under the available litigation constraints.

*Waterkeeper Alliance v. EPA*<sup>252</sup> is the key sustainability challenge under the CWA to the federal programmatic regulation of CAFOs. Waterkeeper Alliance challenged a regulation issued by the EPA<sup>253</sup> to regulate the emission of water pollutants from CAFOs<sup>254</sup> under the NPDES permit system described earlier.<sup>255</sup> Among other things, the rule required that each CAFO must develop and submit a nutrient management plan with certain listed requirements in its NPDES permit application<sup>256</sup> in order to address the water pollution from operations. The rule also created certain effluent limitation guidelines for manure applied to land and to the “production area” of CAFOs.<sup>257</sup>

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;<sup>258</sup> (3) that the rule violated the CWA public participation requirement by failing to provide the public with a meaningful role in the permitting process;<sup>259</sup> and (4) that the actual effluent limitations of the rule were flawed.<sup>260</sup>

The Second Circuit found the first three challenges to be valid, but rejected most of the fourth challenge. The Second Circuit 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.<sup>261</sup> Moreover, the court also held that the rule failed to incorporate the CWA requirement that there be an opportunity for a public hearing before any permitting agency issues

---

252. *Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d 486 (2d Cir. 2005).

253. National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations (CAFOs), 68 Fed. Reg. 7176 (Feb. 12, 2003) (codified at 40 C.F.R. §§ 9, 122–23, 412).

254. *Waterkeeper Alliance*, 399 F.3d at 490.

255. *See supra* Part II.B.1.a.

256. 40 C.F.R. § 122.42(e)(1)(i)–(ix) (2011).

257. *Id.* § 122.23(b)(8).

258. *Waterkeeper Alliance*, 399 F.3d at 498.

259. *Id.* at 503.

260. *Id.* at 511.

261. *Id.* at 499–503.

a permit, that a copy of the permit application and a copy of each issued permit be available to the public, and that any citizen may bring a civil suit for violations of the CWA.<sup>262</sup> The court rejected, however, the environmental plaintiffs' challenges to the actual effluent limitations contained in the EPA's CAFO rule, determining that the EPA did not arbitrarily and capriciously balance the economic and technological information available to it in establishing those guidelines.<sup>263</sup> However, the court held that the EPA failed to justify its decision not to promulgate water quality-based effluent limitations<sup>264</sup> and was ambiguous in ruling whether states could do so in lieu of the EPA.<sup>265</sup>

While this case might be regarded as a success for environmental plaintiffs when compared to the overall goals of the sustainable food movement,<sup>266</sup> its success is far less evident. The outcome supports several of the movement's values, such as the goals of environmental sustainability, the structuring of regulation for those purposes, and public participation.<sup>267</sup> Yet, it fails to incorporate many of the other general values held by the sustainable food movement, such as economic sustainability for producers and consumers, justness, sacredness, healthfulness, and expressiveness of the food system for cultural contexts.<sup>268</sup> 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 not for many other values supported by the sustainable food movement. Also, the outcome of the case does not advance many of the particular concerns of the sustainable food movement with CAFOs, like the harsh living conditions of the animals, the detrimental impacts of CAFOs on small-scale farmers, or the reduction of dietary choices.<sup>269</sup> Indeed, with one of the concerns expressed regarding CAFOs—that the use of CAFOs engender a “technological takeover” of the food system—the lawsuit is arguably counterproductive, since 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

---

262. *Id.* at 503.

263. *Id.* at 515, 518–19, 521.

264. *Id.* at 521–24. The imposition of these additional limitations is authorized by 33 U.S.C. §§ 1312(a), 1314(1) (2006).

265. *Waterkeeper Alliance*, 399 F.3d at 523.

266. *See supra* Parts II.A., II.B.1.b.

267. *See supra* Part II.A.

268. *See supra* Part II.A.

269. *See supra* Part II.B.1.b.

of challenges to different types of state programs regulating CAFOs. Many of these challenges have been successful, but as with *Waterkeeper Alliance*, their focus is on either environmental protection 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.<sup>270</sup>

These challenges take a number of forms, but they all generally 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*, in which an environmental group challenged the EPA's failure to require Indiana to create an NPDES permitting requirement for its CAFOs.<sup>271</sup> This was prior to the EPA rule issued in *Waterkeeper Alliance*. While the court rejected the plaintiffs' request that it require the EPA to take over the Indiana NPDES program,<sup>272</sup> the 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.<sup>273</sup> In doing so, the court found compelling the substantial environmental pollution generated by CAFOs,<sup>274</sup> the high bacteria concentrations of Indiana waters,<sup>275</sup> and the trends toward fewer but larger livestock operations.<sup>276</sup> Another success for environmental plaintiffs was *Minnesota Center for Environmental Advocacy v. EPA*.<sup>277</sup> In the course of this litigation, the EPA concluded that it erroneously omitted considering pollution from CAFOs in its analysis of Minnesota's wasteload allocation<sup>278</sup> in evaluating for approval Minnesota's Maximum Regional Daily Load Evaluation of Fecal Coliform Bacteria Impairments under the CWA state water quality standards.<sup>279</sup>

Environmental challenges to state programs have not always been successful. For example, in *Kentucky Waterways Alliance v. Johnson*,<sup>280</sup> a

---

270. See *supra* Part II.B.1.b.

271. *Save the Valley, Inc. v. EPA*, 223 F. Supp. 2d 997, 999 (S.D. Ind. 2002).

272. *Id.* at 1013–15.

273. *Id.*

274. *Id.* at 1003–04.

275. *Id.* at 1005.

276. *Id.* at 1004–05.

277. *Minn. Ctr. for Env'tl. Advocacy v. EPA*, No. CIV03-5450 (DWF/SRN), 2005 WL 1490331, at \*1 (D. Minn. June 23, 2005).

278. *Id.* at \*6.

279. Pursuant to 33 U.S.C. § 1313(d) (2006).

280. *Ky. Waterways Alliance v. Johnson*, 429 F. Supp. 2d 612 (W.D. Ky. 2006), *aff'd in part*,

Kentucky environmental group challenged the EPA's approval of Kentucky's antidegradation rules adopted pursuant to the CWA.<sup>281</sup> Finding that the EPA had evaluated the effects of various discharge limitations,<sup>282</sup> the court held that the EPA's approval of Kentucky's antidegradation rules was not arbitrary and capricious.<sup>283</sup>

Direct challenges to state CWA plans for CAFOs have all included 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 Alliance* decision, Idaho adopted the Beef Cattle Environmental Control Act,<sup>284</sup> requiring beef cattle feedlot operators to provide nutrient management plans for their facilities as mandated by the EPA's CAFO regulation.<sup>285</sup> 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.<sup>286</sup> Similarly, a Michigan appellate court held that the Michigan Department of Environmental Quality, in promulgating a rule exempting 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.<sup>287</sup>

As with *Waterkeeper Alliance*, 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 the courts. The discussion of the environmental effects of CAFOs by an Indiana district court in *Save the Valley*, for example, described the unsanitary conditions under which the animals in CAFOs are housed,<sup>288</sup> alluding to some of the animal rights concerns expressed by some members of the sustainable food movement.

---

*rev'd in part*, 540 F.3d 466 (6th Cir. 2008).

281. *Id.* at 616. Such approval is required under 40 C.F.R. § 131.12(a)(2) (2011).

282. *Ky. Waterways Alliance*, 429 F. Supp. 2d at 624.

283. *Id.* at 634.

284. IDAHO CODE ANN. §§ 22-4901 to 22-4910.

285. *See id.* § 22-4902.

286. *Idaho Conservation League, Inc. v. Idaho State Dep't of Agric.*, 146 P.3d 632, 635–37 (Idaho 2006).

287. *Sierra Club Mackinac Chapter v. Dep't of Env'tl. Quality*, 747 N.W.2d 321, 334–35 (Mich. Ct. App. 2008).

288. *Save the Valley, Inc. v. EPA*, 223 F. Supp. 2d 997, 1003–05 (S.D. Ind. 2002).

Nevertheless, discrepancies between the litigation outcomes and the broader aims of the sustainable food movement highlight the inadequacies of existing litigation structures for reaching these aims.<sup>289</sup>

CWA challenges to CAFOs have also taken the form of challenges to specific permits issued to individual CAFOs. 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.<sup>290</sup> And although they remained restricted to the aim of environmental improvement, the overall processes 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. HVFG*,<sup>291</sup> in which the Humane Society, a group concerned with the treatment of animals,<sup>292</sup> 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 sixty days' notice to the EPA, the state, and the alleged violator.<sup>293</sup> 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

---

289. See *infra* Part IV.

290. See, e.g., *Coon ex rel. Coon v. Willet Dairy, LP*, 536 F.3d 171 (2d Cir. 2008) (per curiam) (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); *Cnty Ass'n for Restoration of the Env't v. Henry Bosma Dairy*, 305 F.3d 943 (9th Cir. 2002) (agreeing with the environmental group that the challenged dairy operation did indeed violate the terms of its NPDES permit); *Humane Soc'y v. HVFG, LLC*, No. 06 CV 6829(HB), 2010 WL 1837785, at \*1 (S.D.N.Y. May 18, 2010) (issuing an injunction to a goose CAFO on the basis that it surpassed the discharge limits contained in its NPDES permit); *Johnson Cnty. Citizen Comm. for Clean Air & Water v. EPA*, No. 3:05-0222, 2005 WL 2204953, at \*1 (M.D. Tenn. Sept. 9, 2005) (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); *Collins v. Tex. Natural Res. Conservation Comm'n*, 94 S.W.3d 876 (Tex. App. 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 waste-management system); *Adams v. State of Wis. Livestock Facilities Siting Review Bd.*, 787 N.W.2d 941 (Wis. Ct. App. 2010) (holding that individual plaintiffs connected to the sustainable food movement had no grounds to challenge a town board's decision not to impose conditions on the approval of a livestock facility permit).

291. *HVFG, LLC*, 2010 WL 1837785, at \*1.

292. See *About Us*, HUMANE SOC'Y, <http://www.humane-society.org/about/> (last visited Apr. 12, 2012).

293. *HVFG, LLC*, 2010 WL 1837785, at \*2 (citing 33 U.S.C. § 1365(b) (2006)).

purpose.”<sup>294</sup> The district court held that the Humane Society passed the relevant legal test for germaneness with regard to standing, namely whether the suit would “reasonably tend to further the general interests that individual members sought to vindicate in joining the association and whether the lawsuit bears a reasonable connection to the association’s knowledge and experience.”<sup>295</sup> Such a holding reaches broadly to a number of food sustainability plaintiffs who might have concerns about CAFOs beyond their environmental effects, including humane animal treatment and the socioeconomic concerns of small-scale farmers as well as the availability of diverse food sources.

Even when plaintiffs’ main concerns are not specifically environmental, particular procedural hurdles can affect the availability of lawsuits. *Collins v. Texas Natural Resource Conservation Commission*<sup>296</sup> presents such a contrasting example. In that case, Robert Collins, an organic farmer whose land was near a poultry CAFO, sought a “contested case hearing” to challenge the CAFO’s application to change from a dry to wet nutrient management system.<sup>297</sup> 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.<sup>298</sup> Instead, Collins sought to challenge the permit application through a state administrative procedure known as a contested case hearing, under which “affected persons” may challenge the Texas Natural Resource Conservation Commission’s grants of permit applications.<sup>299</sup> The court affirmed the Commission’s decision that the organic farmer was not sufficiently adjacent to the poultry farm to be an affected person.<sup>300</sup> 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 direct effects of the CAFO on the plaintiff, leaving open the possibility that an organic farmer situated nearer to a CAFO could prevail in a contested case hearing.<sup>301</sup>

---

294. *Id.* at \*4.

295. *Id.* at \*4 (quoting Bldg. & Constr. Trades Council of Buffalo, N.Y. & Vicinity v. Downtown Dev., Inc., 448 F.3d 138, 149 (2d Cir. 2006)).

296. *Collins v. Tex. Natural Res. Conservation Comm’n*, 94 S.W.3d 876 (Tex. App. 2002).

297. *Id.* at 879.

298. *See id.*

299. *Id.* at 882 (citing 30 TEX. ADMIN. CODE §§ 55.27, 55.29(a) (2002)).

300. *Collins*, 94 S.W.3d at 882–83.

301. *Cf. De Anna Hill, Combating Animal Cruelty with Environmental Law Tactics*, 4 J. ANIMAL L. 19, 19 (2008) (discussing the uses of environmental statutes to combat animal cruelty).

## 2. The Clean Air Act

Clean Air Act challenges to CAFOs are relatively recent compared to Clean Water Act lawsuits, perhaps because statutory exemptions create certain limits for the application of CAA permitting programs to agricultural activities.<sup>302</sup> Nor has the EPA given much encouragement for such lawsuits. One observer has noted these difficulties under the CAA:

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.<sup>303</sup>

Such barriers were evident in *Sierra Club v. Mississippi Environmental Quality Permit Board*,<sup>304</sup> in which the Supreme Court of Mississippi rejected a challenge brought by an environmental group against the Mississippi environmental permitting agency for issuing an air pollution control permit to a Mississippi swine CAFO. The Sierra Club alleged that odor monitoring and placement of controls (such as the erection of a windbreak wall behind the exhaust fans of every CAFO housing unit) was required under the permitting scheme, and argued that the permit failed to adequately require the CAFO to monitor the odor arising from the CAFO.<sup>305</sup> 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, and that refusal to require a monitoring scheme for odor was reasonable in light of the difficulties in quantifying odor.<sup>306</sup>

Later cases brought by activists have been more successful. The Association of Irrigated Residents successfully challenged a rule issued by the San Joaquin Valley Unified Air Pollution Control District establishing a permit process for CAFOs.<sup>307</sup> The district had adopted this rule under the

---

302. Tarah Heinzen, Student Essay, *Stopping the Campaign to Deregulate Factory Farm Air Pollution*, 17 N.Y.U. ENVTL. L.J. 1482, 1497 (2009) (citing Sarah C. Wilson, Comment, *Hogwash! Why Industrial Animal Agriculture Is Not Beyond the Scope of CAA Regulation*, 24 PACE ENVTL. L. REV. 439, 448-52 (2007)).

303. Stokstad, *supra* note 83, at 245 (citing Animal Feeding Operations Consent Agreement and Final Order, 70 Fed. Reg. 4958-77 (Jan. 31, 2005)).

304. *Sierra Club v. Miss. Env'tl. Quality Permit Bd.*, 943 So. 2d 673 (Miss. 2006).

305. *Id.* at 676.

306. *Id.* at 682.

307. *Ass'n of Irrigated Residents v. San Joaquin Valley Unified Air Pollution Control Dist.*, 85



California State Implementation Plan for the Clean Air Act.<sup>308</sup> According to the plaintiffs, the district had, among other things, failed to perform a required health-effects analysis before adopting the rule.<sup>309</sup> The court of appeals agreed.<sup>310</sup> The same group of plaintiffs also defeated a motion to dismiss their challenge to a dairy CAFO for violating the CAA.<sup>311</sup> The plaintiffs argued that the dairy violated the CAA by constructing a major source of Hazardous Air Pollutants and by failing to obtain the required Maximum Available Control Technology determination for methanol emissions prior to the construction.<sup>312</sup> 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 of methanol per year,<sup>313</sup> notwithstanding the district's own analysis, which demonstrated that the dairy emitted less than that amount.<sup>314</sup>

As with the individual water permit challenges, the majority of discussion in these CAA cases emphasizes 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 Irrigated Residents' challenge to the San Joaquin Unified Air Pollution Control District's rule, the court specifically addressed how in promulgating the rule, the district had failed to adequately consider its potential public health impacts.<sup>315</sup> In doing so, the court emphasized a number of the broader concerns of the sustainable food movement.<sup>316</sup> The court also pointed out that by adopting the rule without the required assessment of public health impacts, "[t]he prejudice is not that the rule was adopted, but that it was adopted without informed and transparent decisionmaking."<sup>317</sup> Moreover, it discussed how such transparent decisionmaking is necessary in light of the "delicate balancing

---

Cal. Rptr. 3d 590, 594 (Ct. App. 2008).

308. *Id.* at 594 n.2 ("The Clean Air Act requires that each state adopt a state implementation plan to address air pollution problems and identify how the state will achieve and maintain national air quality standards for identified pollutants. The state in turn has created air quality control districts to address regional air quality problems stemming from sources other than motor vehicles, of which the district [San Joaquin Valley Unified Air Pollution Control District] is one." (citations omitted)).

309. *Id.* at 595–96.

310. *Id.* at 600–01.

311. *Ass'n of Irrigated Residents v. Fred Schakel Dairy*, No. 1:05-CV-00707 OWW SMS, 2008 WL 850136 (E.D. Cal. Mar. 28, 2008), at \*1, \*16.

312. *Id.* at \*1.

313. *Id.* at \*6.

314. *Id.* at \*5.

315. *San Joaquin Valley*, 85 Cal. Rptr. 3d at 595–96.

316. *Id.* at 600.

317. *Id.*

of competing policies and interests [that] must occur”<sup>318</sup> within an agency, such as “the need for jobs, economic viability in the valley, a consistent high-quality food source, plentiful clean water, and many other interests.”<sup>319</sup> 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 other concerns of the sustainable food movement, 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.<sup>320</sup>

### 3. The Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”) and the Emergency Planning and Community Right-to-Know Act (“EPCRA”)

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,<sup>321</sup> and that the CAFO failed to follow such requirements.<sup>322</sup> Under these types of lawsuits, plaintiffs have had to demonstrate that the release of ammonia by these CAFOs surpassed the threshold necessary to trigger these reporting requirements.<sup>323</sup> 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 has been their industrialization of agriculture.<sup>324</sup> To convince courts to apply CERCLA—a statute passed “in response to the serious environmental and health risks posed by

---

318. *Id.*

319. *Id.*

320. *Id.*

321. 42 U.S.C. § 9603(a) (2006) (CERCLA hazardous waste reporting requirements); *id.* §§ 11021–23 (EPCRA reporting requirements).

322. *See, e.g.,* *Sierra Club v. Seaboard Farms, Inc.*, 387 F.3d 1167, 1168 (10th Cir. 2004) (arguing that ammonia emissions exceed CERCLA’s “reportable quantity”); *Sierra Club, Inc. v. Tyson Foods, Inc.*, 299 F. Supp. 2d 693, 699 (W.D. Ky. 2003) (arguing that a poultry CAFO failed to follow the CERCLA reporting requirements for ammonia).

323. *See Seaboard Farms*, 387 F.3d at 1168–69; *Tyson Foods*, 299 F. Supp. 2d at 707.

324. *E.g.,* Kimbrell, *supra* note 133, at 29.

industrial pollution”<sup>325</sup>—plaintiffs have emphasized how the structure of such operations act more as modern industries rather than traditional farms.<sup>326</sup> This distinction between CAFOs and traditional agriculture was advanced even more in *Sierra Club v. Tyson Foods*, in which the district court rejected Tyson Foods’ argument that certain EPCRA reporting requirements fell under an exemption for regulated substances “used in routine agricultural operations.”<sup>327</sup> According to the court, these were not routine agricultural uses; instead, the defendants were “try[ing] to get rid of it [the gaseous ammonia] because it is harmful to the chickens.”<sup>328</sup> Finally, by emphasizing the reporting requirements,<sup>329</sup> 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 under state permitting requirements have been less successful than federal challenges.<sup>330</sup> An example of one such loss in state permitting challenges involved 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.<sup>331</sup> The crux of the dispute was whether the hog CAFO would be classified as a “new facility” that fell under state permitting requirements concerning the health and safety impact of livestock-management facilities,<sup>332</sup> or as an expansion of an existing facility that was not subject to these requirements.<sup>333</sup> If the hog CAFO did fall under the

---

325. *United States v. Bestfoods*, 524 U.S. 51, 55 (1998) (citation omitted).

326. *See, e.g., Seaboard Farms*, 387 F.3d at 1172–73 (refusing to limit the application of CERCLA to the narrow definition of “facility” argued for by Seaboard Farms).

327. *Tyson Foods*, 299 F. Supp. 2d at 713–14 (quoting 42 U.S.C. § 11021(e)(5)(2006)).

328. *Id.* at 714.

329. 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) (2006), which “provide[s] citizens with accurate information [regarding] *all releases* of toxic chemicals at a site for informational purposes.” *Seaboard Farms*, 387 F.3d at 1173 (second alteration in original) (quoting plaintiff’s brief).

330. *See, e.g., Rochester Buckhart Action Grp. v. Young*, 379 Ill. App. 3d 1030, 1032, 1036 (App. Ct. 2008) (holding against an environmentalist group’s challenge to a CAFO on the basis that the challenged farm did not fall under the Illinois Livestock Management Facilities Act category of “new livestock management facility”); *Save the Valley, Inc. v. Ferguson*, 896 N.E.2d 1205, 1206–07 (Ind. Ct. App. 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).

331. *See Young*, 379 Ill. App. 3d at 1031.

332. *See id.* at 1038 (citing ILL. ADMIN. CODE tit. 35, § 501.102(e) (1991)).

333. *Id.* at 1032–33.

category of “new facility,” it would have to comply with certain setback requirements, public notice requirements, and siting restrictions.<sup>334</sup> Although the expansion involved a dramatic increase from fifty-six animal units to 1500 animal units,<sup>335</sup> the court held that, under the language of the Illinois Livestock Management Facilities Act, this constituted an expansion rather than a new facility.<sup>336</sup>

Another example of a loss by plaintiffs associated with the sustainable food movement is a case brought by Save the Valley challenging the issuance of an Indiana permit for a confined feeding operation in Jefferson County, Indiana.<sup>337</sup> The plaintiffs sought “declaratory and injunctive relief, but not monetary relief.”<sup>338</sup> 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.<sup>339</sup> Thus, the court of appeals affirmed the trial court’s earlier dismissal of the challenge.<sup>340</sup>

This is not to say, however, 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.<sup>341</sup> Explaining why these challengers prevailed 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,<sup>342</sup> leaving

---

334. 510 ILL. COMP. STAT. ANN. 77 / 35(c) (West 2004); *id.* 77 / 12; *id.* 77 / 13(b).

335. *Young*, 279 Ill. App. 3d at 1040 (Cook, J., dissenting).

336. *Id.* at 1036. *But see id.* at 1040 (Cook, J., dissenting) (“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 animal units to a very large operation housing 1,500 animal units without engaging in any of the notice, processing, and siting requirements . . .”).

337. *Save the Valley, Inc. v. Ferguson*, 896 N.E.2d 1205, 1206 (Ind. Ct. App. 2008).

338. *Id.*

339. *Id.* at 1207.

340. *Id.*

341. *See, e.g., Hanchera v. Bd. of Adjustment*, 694 N.W.2d 641 (Neb. 2005) (holding that a neighboring landowner who challenged the erection and operation of a CAFO demonstrated that the builder failed to follow established zoning requirements); *Kirschenman v. Hutchinson Cnty. Bd. of Comm’rs*, 2003 SD 4, 656 N.W.2d 330 (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), *overruled by Bechen v. Moody Cnty. Bd of Comm’rs*, 2005 SD 93, 703 N.W.2d 662.

342. *See Stokstad, supra* note 83, at 256–58 (discussing the effect of different constituencies on the development of environmental law); Danielle J. Diamond, Comment, *Illinois’ Failure to Regulate*

relatively constrained opportunities for successful state 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.<sup>343</sup> Plaintiffs—both inside and outside of the sustainable food movement—may lack knowledge, public participation opportunities, and even the means for legal participation. For example, states differ in how much notice their agencies are 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.<sup>344</sup> Notice requirements can have significant impacts on the opportunity that residents have to effectively engage in the permitting process given that 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.

Moreover, legally timely 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

---

*Concentrated Animal Feeding Operations in Accordance with the Federal Clean Water Act*, 11 DRAKE J. AGRIC. L. 185, 187–88 (2006) (analyzing the shortcoming of the Illinois EPA in regulating CAFO water pollution); Warren A. Braunig, Note, *Reflexive Law Solutions for Factory Farm Pollution*, 80 N.Y.U. L. REV. 1505, 1513 (2005) (describing public choice breakdowns that lead to public opposition to CAFOs still failing to result in effective regulation); Terence J. Centner, *Enforcing Environmental Regulations: Concentrated Animal Feeding Operations*, 69 MO. L. REV. 697, 712–13 (2004) (describing the balancing of costs and regulations in federal environmental laws).

343. 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).

344. Terence J. Centner, *Courts and the EPA Interpret NPDES General Permit Requirements for CAFOs*, 38 ENVTL. L. 1215, 1228–29 (2008) (describing the public participation requirement during the permitting process which has essentially been delegated to the states).

as distance from occupied dwellings, churches, schools, hospitals, and parks,<sup>345</sup> are ones in which local residents can more easily provide relevant input. Other factors may present greater difficulties for the residents by requiring them to transform their experiential observations into more scientifically defined analyses. For example, one requirement of the Illinois CAFO permitting process is that in karst areas—areas of irregular limestone that are especially porous—certain types of waste-handling facilities must be constructed to prevent seepage of waste into the groundwater.<sup>346</sup> Members of the public may have information relevant to whether a CAFO triggers this additional waste-handling requirement through their own experiential observations regarding the porosity of the local landscape and perhaps even the presence of limestone. But they may be so unfamiliar with the geological specifications of karst that they either fail to recognize the relevance of their own observations or are unable to convey their observations in a scientifically adequate manner.

Yet other factors, such as meeting certain technical standards and guidelines in waste control facilities, may present even higher hurdles to effective local participation. This is so 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.<sup>347</sup> Owners of nearby residences may also submit waivers that allow such setback distances to be decreased.<sup>348</sup> 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

---

345. See Jody M. Endres & Margaret Rosso Grossman, *Air Emissions from Animal Feeding Operations: Can State Rules Help?*, 13 PENN ST. ENVTL. L. REV. 1, 13–43 (2004) (describing various state setback requirements distancing CAFOs from public facilities).

346. See 510 ILL. COMP. STAT. ANN. 77 / 13(b)(2) (West 2004); *id.* 77 / 15(a-5)(2).

347. *Id.* 77 / 35(c)(2)–(5).

348. *Id.* 77 / 35(g).

require specialized training to fully understand—training which 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 Midwest Plan Service’s Concrete Manure Storage Handbook,<sup>349</sup> whether footings and underlying structure support have been incorporated into the design standards of non-lagoon structures in accordance to professional guidelines,<sup>350</sup> and whether earthen livestock waste lagoons will be constructed in accordance with certain national guidelines.<sup>351</sup> 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 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. While costs may vary a great deal, some perspective on the scale of such rates may be gleaned from attorney’s fees actions. In *Community Ass’n for Restoration of the Environment v. Henry Bosma Dairy*,<sup>352</sup> a landmark case for CAFO opponents, a district court held as reasonable a large amount of expert expenses:

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 [sic]; (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.

---

349. *Id.* 77 / 13(a)(1), (3)–(5).

350. *Id.* 77 / 13(b)(3).

351. *Id.* 77 / 15(a).

352. *See* Cmty. Ass’n for Restoration of the Env’t v. Henry Bosma Dairy, No. CY-98-3011, 2001 WL 1704240, at \*1 (E.D. Wash. Feb. 27, 2001), *aff’d*, 305 F.3d 943 (9th Cir. 2002).

Public Health Service, who charged no fee, and only incurred travel expenses of \$279.00.<sup>353</sup>

This amounts to a total witness fee of \$65,576.40. Although the court ultimately awarded these fees and costs to the plaintiffs, they would not have been awarded 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. Yet, as described earlier, the primary concerns of local residents often pertain more to odor and air quality.<sup>354</sup> 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 likely to address such air pollution, can also add to the expense of participation.<sup>355</sup>

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.<sup>356</sup> Again, residents may be unwilling or even unable to engage the services of legal experts to aid in their public participation. Such expenditures 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, requiring deliberate decisionmaking regarding the parties that will foot the bill for such research

---

353. *Id.* at \*20. In similar actions, courts have upheld as reasonable hourly rates of \$250 to \$300 for chemical engineering experts in pollution actions. *See* *New York v. Solvent Chem. Co.*, 210 F.R.D. 462, 468–69 (W.D.N.Y. 2002).

354. *See supra* text accompanying notes 304–06.

355. *See* Andrew C. Hanson, *Concentrated Animal Feeding Operations and the Common Law: Fixing Wrongs Committed Under the Right-to-Farm*, in *CREATIVE COMMON LAW STRATEGIES FOR PROTECTING THE ENVIRONMENT* 287, 309 (Clifford Rechtschaffen & Denise Antolini eds., 2007).

356. *See, e.g.*, *Sierra Club v. EPA*, 625 F. Supp. 2d 863, 867 (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 was reasonable).



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 is limited. The plaintiffs in these individual cases sought to either stop or delay the challenged CAFOs<sup>357</sup> rather than to change the overall nature of the food system. This could be due to the constrained nature of state and local<sup>358</sup> permitting challenges, where the types of claims allowable to plaintiffs are often limited to debates about the scientifically demonstrable direct environmental impacts of CAFO pollution and technical compatibility with acceptable design practices.<sup>359</sup> It could also be due to the greater familiarity of national groups associated with the sustainable food movement with federal environmental laws rather than state permitting laws.<sup>360</sup> Either way, the ability of these groups (self-described to be focused on local action)<sup>361</sup> 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.<sup>362</sup> These nuisance suits, which share some of the values of the sustainable food movement, 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.<sup>363</sup> The plaintiffs alleged that odors arising from a neighboring hog CAFO constituted

---

357. See *supra* text accompanying notes 330–40.

358. 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).

359. See *supra* text accompanying notes 350–56.

360. Cf. Stephanie Tai, *Three Asymmetries of Informed Environmental Decisionmaking*, 78 TEMP. L. REV. 659, 691–92 (2005) (describing focus of national environmental groups on issues deemed to be of national importance).

361. See, e.g., *supra* text accompanying note 105.

362. See, e.g., *Lindsey v. DeGroot*, 898 N.E.2d 1251, 1255 (Ind. Ct. App. 2009) (neighbors of dairy farm); *Simpson v. Kollasch*, 749 N.W.2d 671, 672 (Iowa 2008) (neighbors of two proposed hog confinement facilities); *Gacke v. Pork Xtra, LLC*, 684 N.W.2d 168, 170–71 (Iowa 2004) (neighbors of hog confinement facilities); *Johnson v. Knox Cnty. P'ship*, 728 N.W.2d 101, 104 (Neb. 2007) (neighbors of cattle confinement facility); *Barrera v. Hondo Creek Cattle Co.*, 132 S.W.3d 544 (Tex. App. 2004) (neighbors of cattle feedlot).

363. *Wendinger v. Forst Farms, Inc.*, 662 N.W.2d 546, 549 (Minn. Ct. App. 2003).

trespass, negligence, and nuisance, and sought injunctive and compensatory relief.<sup>364</sup> 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.”<sup>365</sup> 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.<sup>366</sup> Indeed, while generally acceptable agricultural practices, as defined by Minnesota statute,<sup>367</sup> were a baseline for precaution, their use “does not necessarily preclude a finding that the actor was negligent in failing to take additional precautions.”<sup>368</sup> Finally, the court remanded to the lower court to determine whether 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.<sup>369</sup> Thus, the court of appeals remanded the case to the district court for reconsideration of the nuisance and negligence claims.<sup>370</sup>

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,<sup>371</sup> and perhaps even of preserving traditional farming practices.<sup>372</sup> By achieving a holding that generally acceptable agricultural practices did not act as a shield against a negligence claim, the plaintiffs and amici won 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 of hog farmers, the plaintiffs and amici were able receive a judicial connection between the hog farmers and the pork processors, solidifying

---

364. *Id.*

365. *Id.* at 554.

366. *Id.* at 555.

367. MINN. STAT. ANN. § 561.19(2) (2011).

368. *Wendinger*, 662 N.W.2d at 554 (quoting *Blasing v. P. R. L. Hardenbergh Co.*, 226 N.W.2d 110, 115 (Minn. 1975)).

369. *Id.*

370. *Id.* at 554–55.

371. See FOER, *supra* note 110, at 108–09 (describing the transformation of pastures and barns to barren security buffers, multitiered intensive confinement systems, and genetically engineered animals viewed as machines).

372. See Bixby, *supra* note 134, at 172 (arguing that modern high-input livestock production systems may destroy the genetic diversity present in traditional livestock agriculture).

their depiction of the industrialization of agriculture as seen in their literature.<sup>373</sup>

In another nuisance suit 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.<sup>374</sup> The settlement also limited the land application of hog manure to a few specified parcels of land.<sup>375</sup> Although some of the terms of the settlement were later challenged by the owner of the CAFO, the Iowa Supreme Court affirmed the Sierra Club's interpretation of the agreement.<sup>376</sup> 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, the settlement excluded public participation terms that have been used in other settlements of environmental challenges.<sup>377</sup> 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.<sup>378</sup> 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 suit against hog CAFOs in North Carolina, a number of river associations challenged a corporate pork processor for their handling of hog waste based

---

373. See Brief and Appendix of *Amicus Curiae* Land Stewardship Project at 1, *Wendinger v. Forest Farms, Inc.*, 662 N.W.2d 546 (Minn. Ct. App. 2003) (No. CX-02-1603), available at [http://www.flaginc.org/topics/news/amicus/20021204\\_WendingerAmicus.pdf](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).

374. *Sierra Club v. Wayne Weber LLC*, 689 N.W.2d 696, 699 (Iowa 2004).

375. *Id.*

376. *Id.* at 704.

377. 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).

378. See, e.g., Michael Moffitt, *Three Things to Be Against ("Settlement" Not Included)*, 78 FORDHAM L. REV. 1203, 1212 (2009) (describing how "settlement offers the prospect of value creation").

on theories of negligence, trespass, strict liability, public nuisance, unfair and deceptive trade practices, private nuisance, and the public trust doctrine.<sup>379</sup> The court of appeals ruled against these plaintiffs on the grounds that they failed to establish standing for their injuries.<sup>380</sup> The problem, according to the court, was that the plaintiffs failed to seek individualized forms of relief.<sup>381</sup> According to the court, “the state is the sole party able to seek nonindividualized, or public, remedies for alleged harm to public waters.”<sup>382</sup> Because the CAFO’s lagoon waste management systems existed pursuant to legislative authority, the court held that the plaintiffs were unable to challenge the CAFO under theories of public nuisance.<sup>383</sup>

Complicating the analysis of the disparity of plaintiffs’ success with common law claims as opposed to individual permit challenges<sup>384</sup> is how the case selection process involved with representation in such challenges may shape the prioritization of certain cases over others. For example, those deemed more likely to either be successful or have higher legal impact are prioritized over others.<sup>385</sup> One possible explanation for the relative success of common law challenges compared to those brought under state CAFO permitting laws may be the somewhat greater openness of the common law for introduction of broader concerns regarding residents’ quality of life and industrialization of meat production as opposed to the context of the more constrained state CAFO permitting requirements.<sup>386</sup>

---

379. See *Neuse River Found. v. Smithfield Foods, Inc.*, 574 S.E.2d 48, 50–51 (N.C. Ct. App. 2002).

380. *Id.* at 54–55.

381. *Id.* at 53–54.

382. *Id.* at 54.

383. *Id.* at 54–55.

384. A full evaluation of the causes of this disparity is beyond the scope of this paper.

385. Reyna Ramolette Hayashi, *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”). See also Ann E. Carlson, *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.”).

386. 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

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.<sup>387</sup> As some sociologists have documented, local controversies over CAFOs extend beyond fears presented by the CAFOs themselves to fears generated by the permitting process.<sup>388</sup> Under the permitting process, plaintiffs may fear uncertainties regarding whether their procedural and substantive rights will be protected under the permitting law, perceive unfairness in the process as well as threats to their own identity, and be subject to feelings of mistrust over the other stakeholders involved.<sup>389</sup> Indeed, when the U.S. Department of Agriculture documented the effects of large-scale farming and its impact on community quality of life, it found that in communities where “large, absentee-owned nonfamily farms” were more numerous than smaller farms, residents had less control over democratic decisionmaking.<sup>390</sup> This was a result of either their own lack of empowerment or because the nonfamily farms had far greater resources with which to exert political control.<sup>391</sup> 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, thereby subjecting them to the case selection constraints described earlier.<sup>392</sup>

---

agricultural operations from common law challenges in different ways. *See, e.g.*, Terence J. Centner, *Nuisances from Animal Feeding Operations: Reconciling Agricultural Production and Neighboring Property Rights*, 11 *DRAKE J. AGRIC. L.* 5, 6 (2006); Alexander A. Reinert, Note, *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, *Creative Destruction and Environmental Law*, 10 *PENN ST. 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. *Cf.* Robert V. Percival, *The Clean Water Act and the Demise of the Federal Common Law of Interstate Nuisance*, 55 *ALA. L. REV.* 717, 768–74 (2004) (discussing some of the drawbacks of sole reliance on common law to address environmental harms).

387. Nancy A. Welsh & Barbara Gray, *Searching for a Sense of Control: The Challenge Presented by Community Conflicts Over Concentrated Animal Feeding Operations*, 10 *PENN ST. ENVTL. L. REV.* 295, 301–02 (2002).

388. *Id.* at 296 (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*).

389. *Id.* at 298–302.

390. PEW CHARITABLE TRUSTS, *supra* note 71, at 42–43.

391. *Id.*

392. *See supra* text accompanying notes 384–85.

Regardless of the explanation, the success of some lawsuits against CAFOS brought under common law theories demonstrates 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 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 types of lawsuit against GMO-related activities involve challenges to agency approvals of some form of use of GMOs. All of these challenges generally raise a central claim that either APHIS or the FDA failed to comply with the National Environmental Policy Act, under which agencies must prepare an environmental impact statement ("EIS") for "major federal actions significantly affecting the quality of the human environment."<sup>393</sup> 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.<sup>394</sup>

In one early challenge to an APHIS approval, the Center for Food Safety challenged APHIS's issuance of permits to ProdiGene, Monsanto, H.A.R.C., and Garst Seed for the open-air testing of crops in Hawaii engineered to produce pharmaceuticals.<sup>395</sup> 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.<sup>396</sup> According to the plaintiffs, APHIS violated both NEPA<sup>397</sup> and the Endangered Species Act<sup>398</sup> in issuing the permits. In addition, the plaintiffs argued that in order to approve this crop experiment, APHIS needed to

---

393. 42 U.S.C. § 4332(2)(C) (2006).

394. 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.").

395. *Ctr. for Food Safety v. Johanns*, 451 F. Supp. 2d 1165, 1170–71 (D. Haw. 2006); *Ctr. for Food Safety v. Veneman*, 364 F. Supp. 2d 1202, 1205–06 (D. Haw. 2005).

396. *Veneman*, 364 F. Supp. 2d at 1205.

397. Pursuant to NEPA, 42 U.S.C. § 4331–4375 (2006).

398. Pursuant to Endangered Species Act of 1973, 16 U.S.C. §§ 1531–1544 (2006).

produce either an EIS or at least a less-burdensome environmental assessment (“EA”) of the environmental effects of allowing the growth of these crops.<sup>399</sup>

According to the plaintiffs, APHIS needed to specifically evaluate two risks: whether the experimental crops would contaminate existing crops, and whether animals that fed on the crops would become accidental carriers of pharmaceutical products.<sup>400</sup> The plaintiffs also argued that NEPA required APHIS to assess these risks as part of a broader program.<sup>401</sup> Finally, the plaintiffs argued that APHIS violated the Plant Protection Act by failing to respond to their petition for APHIS to promulgate regulatory prohibitions on the broad use of food crops to produce genetically engineered biopharmaceuticals and create a publicly available field test violations database.<sup>402</sup>

Legally, 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,<sup>403</sup> emphasizing “Hawaii’s extensive number of threatened and endangered species.”<sup>404</sup> The court also agreed that some type of environmental evaluation—either an EIS or an EA—was required under NEPA, rejecting APHIS’s argument that the project automatically fell under one of the regulatory categorical exclusions to NEPA.<sup>405</sup> Some aspects of the plaintiffs’ challenges were rejected, however. 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.<sup>406</sup> The court also disagreed with the plaintiffs’ argument that APHIS’s inadequate response to the plaintiffs’ petition warranted an injunction.<sup>407</sup> 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

---

399. *Johanns*, 451 F. Supp. 2d at 1171, 1183.

400. *Id.* at 1170–71.

401. *Id.* at 1171.

402. *Id.* at 1181, 1191.

403. *Id.* at 1181–83.

404. *Id.* at 1181.

405. *Id.* at 1183–86.

406. *Id.* at 1189.

407. *See id.* at 1192–96.

court.<sup>408</sup> Finally, the planned field tests were already conducted by the time the case was decided.<sup>409</sup> Thus, the court could only issue declaratory relief rather than injunctive relief.<sup>410</sup>

The Center for Food Safety treated this case as a landmark.<sup>411</sup> The holding accomplished some of the aims of the sustainable food movement, such as requiring enhanced public information about the environmental impacts of agriculture.<sup>412</sup> In addition, it may have encouraged the regulation of the food system for environmentally and socially conscious food values,<sup>413</sup> as the case arguably prompted interagency discussions that led APHIS to take a harder look at its regulations for such GMOs.<sup>414</sup> Moreover, because NEPA also requires public comment opportunities for environmental impact statements,<sup>415</sup> the holding encouraged public participation in such decisions. Indeed, because NEPA allows for expression of a broader range of values than the CWA, CAA, and CERCLA,<sup>416</sup> the case may have also enhanced the 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.

Different plaintiffs achieved a similar victory in a challenge against APHIS's decisions regarding GMO bentgrass—a type of grass grown for turf.<sup>417</sup> The Scotts Miracle-Gro Company had applied to APHIS for a series of permits to test genetically engineered glyphosate-resistant bentgrass in an open-air environment, which APHIS had approved.<sup>418</sup> A number of plaintiff organizations subsequently petitioned APHIS to place the GMO bentgrass on the Federal Noxious Weed List under the Plant Protection

---

408. *Id.* at 1194–95 (quoting *Norton v. S. Utah Wilderness Alliance*, 542 U.S. 55, 64 (2004)).

409. *Id.* at 1195–96.

410. *Id.*

411. See CTR. FOR FOOD SAFETY, GAINING GROUND IN THE COURTS: THE CENTER FOR FOOD SAFETY'S RECENT VICTORIES IN THE BATTLE OVER GENETICALLY ENGINEERED CROPS 3 [hereinafter GAINING GROUND], available at <http://www.centerforfoodsafety.org/pubs/Three%20Case%20Victory%20Summary%2020-20-07.pdf> (last visited Apr. 15, 2012).

412. See *supra* Part II.A.

413. See *supra* Part II.A.

414. See Margaret Rosso Grossman, *Anticipatory Nuisance and the Prevention of Environmental Harm and Economic Loss from GMOs in the United States*, 18 J. ENVTL. L. & PRAC. 107, 150 n.265 (2008).

415. 40 C.F.R. § 1503.1 (2011).

416. Herz, *supra* note 394, at 1677. See also text accompanying note 394.

417. *Int'l Ctr. for Tech. Assessment v. Johanns*, 473 F. Supp. 2d 9, 12–13 (D.D.C. 2007).

418. *Id.* at 13.



Act.<sup>419</sup> These petitions, however, were denied,<sup>420</sup> and the plaintiffs subsequently filed a lawsuit alleging that allowing the field tests without conducting at least an EA violated NEPA,<sup>421</sup> and that APHIS arbitrarily and capriciously rejected their Federal Noxious Weed List petition.<sup>422</sup>

As with the Hawaii biopharmaceuticals challenge,<sup>423</sup> the court held that APHIS had erroneously exempted the GMO bentgrass from NEPA requirements.<sup>424</sup> 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"<sup>425</sup>), an exception to the exception could still apply; in situations in which "a categorically excluded action may have the potential to affect 'significantly' the quality of the human environment, . . . an environmental assessment or an environmental impact statement will be prepared."<sup>426</sup> The agency's failure to analyze whether the field testing of bentgrass posed the potential to significantly affect the quality of the human environment, in turn, was an arbitrary and capricious action constituting a violation of NEPA.<sup>427</sup>

Unlike the Hawaii biopharmaceuticals challenge, the plaintiffs were also successful in achieving review of their earlier petition. 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,<sup>428</sup> 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 definitional limitations from inapplicable international agreements.<sup>429</sup> Thus, the court remanded the decision to the agency for reconsideration of whether the bentgrass could be considered a noxious weed without those limitations.<sup>430</sup> The court rejected, however, the plaintiffs' argument that APHIS's decision to reject their listing petition was based on unsound science, noting that the PPA granted broad discretion as to the methodology to be used by APHIS to

---

419. *Id.* at 14.

420. *Id.*

421. *Id.* at 12.

422. *Id.* at 29–30.

423. *See supra* text accompanying notes 395–402.

424. *Int'l Ctr. for Tech. Assessment*, 473 F. Supp. 2d at 29–30.

425. 7 C.F.R. § 372.5(c) (2011).

426. *Int'l Ctr. for Tech. Assessment*, 473 F. Supp. 2d at 29 (quoting 7 C.F.R. § 372.5(d)).

427. *Id.* at 29–30.

428. *Id.* at 26.

429. *Id.* at 25.

430. *Id.* at 26.

determine “which noxious weeds present the greatest prospective threats.”<sup>431</sup>

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.<sup>432</sup> In doing so, the court determined that the organizational plaintiffs’ stated interest in viewing native fauna, and a demonstrable potential injury to that interest, was sufficient to establish standing.<sup>433</sup>

This case, too, was treated as a landmark by the Center for Food Safety,<sup>434</sup> and accomplished many of the same goals described earlier in the Hawaii biopharmaceuticals challenge. The standing decision, 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.<sup>435</sup>

Subsequent lawsuits based on similar challenges have furthered additional values of the sustainable food movement. In another NEPA challenge against APHIS—this time 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 challenged the EA for inadequately assessing the effects of GMO sugar beets on the environment.<sup>436</sup> In evaluating this challenge, the court rejected the agency’s evaluation of problems of cross-contamination, describing them as “conclusory.”<sup>437</sup> The court also held that the plaintiffs could raise the concern of “consumer choice” as one of the issues inadequately addressed by the EA.<sup>438</sup> 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

---

431. *Id.*

432. *Id.* at 14.

433. *Id.* at 21–22.

434. See GAINING GROUND, *supra* note 411, at 2.

435. *Int’l Ctr. for Tech. Assessment*, 473 F. Supp. 2d at 22.

436. *Ctr. for Food Safety v. Vilsack*, No. C 08-00484 JSW, 2009 WL 3047227, at \*9 (N.D. Cal. Sept. 21, 2009). *But see* *Ctr. for Food Safety v. Vilsack*, 734 F. Supp. 2d 948, 954–55 (N.D. Cal. 2010) (holding that the injunction issued by the district court in 2009 could not be sustained in light of the Supreme Court’s decision in *Monsanto v. Geertson Seed Farms*, 130 S. Ct. 2743 (2010)).

437. *Vilsack*, 2009 WL 3047227, at \*8.

438. *Id.* at \*6.

foods—is central to some of the literature from the sustainable food movement regarding the use of GMOs in agriculture.<sup>439</sup> Thus, this decision furthers 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 *Monsanto v. Geertson Seed Farms*, a case heard by the U.S. Supreme Court in 2010,<sup>440</sup> 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.<sup>441</sup> 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.<sup>442</sup> 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.<sup>443</sup>

The Supreme Court held that the district court erred in applying the standards for injunctive relief.<sup>444</sup> 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. Second, it issued a nationwide injunction against the planting of the modified alfalfa.<sup>445</sup> 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.<sup>446</sup> 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.<sup>447</sup> The nationwide injunction against

---

439. See *supra* Part II.B.2.

440. *Monsanto*, 130 S. Ct. at 2743. The author co-represented amici representing a coalition of members of the organic industry, as growers of organic produce, organic livestock owners, sellers of organic produce, and organizations dedicated to the integrity of the organic label. See Brief of Amici Curiae Cropp Coop. et al., *Monsanto*, 130 S. Ct. at 2743 (No. 09-475), 2010 WL 1393442.

441. *Monsanto*, 130 S. Ct. at 2751.

442. *Id.* at 2756.

443. *Id.* at 2752–56.

444. *Id.* at 2757.

445. *Id.* at 2757–62.

446. *Id.* at 2760.

447. *Id.* at 2760–61.

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 might not cause irreparable harm.<sup>448</sup>

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.<sup>449</sup> In particular, the Court pointed to the unique nature of the organic market, citing documents from the record stating that “[t]here is zero tolerance for contaminated seed in the organic market.”<sup>450</sup> 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’ “injury has an environmental as well as an economic component.”<sup>451</sup>

Thus, this case ultimately advances a number of values put forth by the sustainable food movement. By considering relevant such factors as participation in the organic market as a part of its standing analysis,<sup>452</sup> 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 toward availability of knowledge regarding the system through which food is produced. By achieving a requirement that APHIS, on remand, must conduct a more thorough analysis of the environmental effects of GMO alfalfa, the litigants were able to compel the production of a study that would further inform the public about the effects of a particular type of food production system (GMO alfalfa) on the environment.<sup>453</sup>

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”

---

448. *Id.* at 2761.

449. *Id.* at 2754–55.

450. *Id.* at 2755 (citation omitted).

451. *Id.* at 2756.

452. *Id.* at 2752–56.

453. *Id.* at 2759–62.

raised multiple challenges under NEPA against the FDA's policy on foods containing genetically modified components.<sup>454</sup> 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" under the Federal Food, Drug, and Cosmetic Act, and thus not subject to further regulation as food additives.<sup>455</sup>

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.<sup>456</sup> Moreover, the court found that the policy statement was not inconsistent with statutory requirements given the mixture of positions asserted by scientists on the record.<sup>457</sup> The 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.<sup>458</sup> According to the court, the imposition of such labeling requirements was 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.<sup>459</sup> Finally, the court rejected the plaintiffs' claim that the FDA's policy statement violated the Religious Freedom Restoration Act by burdening a person's exercise of free religion to avoid genetically engineered foods.<sup>460</sup> Instead, the court determined that the policy statement did not place a substantial burden on any of the plaintiffs or force them to abandon their religious beliefs or practices.<sup>461</sup>

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.<sup>462</sup> Moreover, the movement's goals of enhancing the expressiveness of food for cultural

---

454. *Alliance for Bio-Integrity v. Shalala*, 116 F. Supp. 2d 166, 170 (D.C. Cir. 2000).

455. *Id.* (citing Statement of Policy: Food Derived from New Plant Varieties, 57 Fed. Reg. 22984, 22989-91 (May 29, 1992)).

456. *Id.* at 172-75.

457. *Id.* at 175-78.

458. *Id.* at 178-79.

459. *Id.* (citing 21 U.S.C. § 321 (2000)).

460. *Id.* at 180-81.

461. *Id.* at 181.

462. *See id.* at 178-79.

and religious contexts were eroded by the court's holding that such foods did not constitute a "substantial pressure" on religious practices.<sup>463</sup>

Despite the setbacks, the litigation involving those associated with the sustainable food movement and GMOs could be regarded on the whole as relatively victorious, with many of the cases furthering multiple goals of the food movement beyond that of just environmental protection. Indeed, many of the cases appear to lay the groundwork for additional impact litigation. These broader impacts can perhaps be attributed to the nature of NEPA as a statute focusing on "procedures and broad values rather than standards and narrow requirements."<sup>464</sup> The more expansive drafting of NEPA, which sets forth no numerical standards, may allow for greater interjection of these competing values with which the sustainable food movement is concerned.<sup>465</sup>

#### 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.<sup>466</sup> As seen earlier, even when

---

463. See *id.* at 181 (citing *Branch Ministries, Inc. v. Rossotti*, 40 F. Supp. 2d 15 (D.D.C. 1999)).

464. Herz, *supra* note 394, at 1677. See also *Calvert Cliffs' Coordinating Comm., Inc. v. U.S. Atomic Energy Comm'n*, 449 F.2d 1109, 1111, 1122 (D.C. Cir. 1971) (describing NEPA as the broadest of recent environmental statutes); 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").

465. See *Natural Res. Def. Council, Inc. v. EPA*, 859 F.2d 156, 169 (D.C. Cir. 1988) (agreeing that "NEPA authorizes the agency to make decisions based on environmental factors not expressly identified in the agency's underlying statute"); Robert B. Keiter, *Preserving Nature In The National Parks: Law, Policy, And Science In A Dynamic Environment*, 74 DENV. U. L. REV. 649, 681 (1997) (describing how NEPA "provides the public with an opportunity to inject its values and concerns into the decision process"). Cf. Douglas A. Kysar & Thomas O. McGarity, *Did NEPA Drown New Orleans? The Levees, the Blame Game, and the Hazards of Hindsight*, 56 DUKE L.J. 179, 211 (2006) (describing how the point of NEPA is the ability to interject information helpful for agencies to balance competing values).

466. See JOEL F. HANDLER, *SOCIAL MOVEMENTS AND THE LEGAL SYSTEM: A THEORY OF LAW REFORM AND SOCIAL CHANGE* 1-41 (1978) (describing how various social movements relied on litigation to effect social change). Indeed, there is much debate about the efficacy of the use of litigation for social movements. Compare Catherine Albiston, *The Dark Side of Litigation as a Social Movement Strategy*, 96 IOWA L. REV. BULL. 61 (2011) (considering the potential positive and negative effects of litigation strategies as an impetus to social change), with Scott L. Cummings & Douglas NeJaime, *Lawyering for Marriage Equality*, 57 UCLA L. REV. 1235 (2010) (noting the positive effects of reform through litigation efforts in response to backlash theorists who claim that attempts to create social change in the context of same-sex marriage through the judiciary harm the movement), and Mary Ziegler, *Framing Change: Cause Lawyering, Constitutional Decisions, and Social Change*, 94 MARQ.

successful, the particular constraints of various statutes—particularly the pollution-based environmental statutes as well as federal and state permitting regimes—may create barriers toward 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, Mary Ziegler, has observed, social movements may engage in cause litigation for more reasons than those presented in the lawsuits themselves.<sup>467</sup> According to Ziegler, “judicial decisions sometimes change the social meaning of movement causes.”<sup>468</sup> This may be the case here, where 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.<sup>469</sup> 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,”<sup>470</sup> thereby 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, this analysis demonstrates that the movement attempted to present to the court their broader concerns regarding the sustainability of the U.S. food system.

Finally, Ziegler argues that litigation may present a lower-cost method of presenting certain frames to the public by attracting media attention.<sup>471</sup>

---

L. REV. 263 (2010) (considering the positive effects of framing social movements through litigation and judicial decisions even despite losing efforts).

467. See Ziegler, *supra* note 466, at 279.

468. *Id.* at 281.

469. See, e.g., Press Release, Ctr. for Food Safety, Update on Supreme Court Decision (June 21, 2010), <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. Douglas 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).

470. Ziegler, *supra* note 466, at 307.

471. *Id.* at 283–84.

Although measuring the relative costs of food sustainability advocacy when associated and not associated with litigation is beyond the scope of this Article, the media coverage of the various court cases presented here 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. Such drawbacks include the opportunity costs of expending resources on litigation for the sake of convenience versus other strategies,<sup>472</sup> discouraging political action,<sup>473</sup> and mobilizing opposing parties.<sup>474</sup> Moreover, litigation may have more subtle costs for social movements by deradicalizing and shaping social movements in ways that support the status quo.<sup>475</sup>

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.<sup>476</sup> 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 the sustainable food movement.<sup>477</sup> For example, the Center for Consumer Freedom is “devoted to promoting personal responsibility and protecting consumer choices”<sup>478</sup> and funded in

---

472. STUART A. SCHEINGOLD, *THE POLITICS OF RIGHTS: LAWYERS, PUBLIC POLICY, AND POLITICAL CHANGE* 49–53 (The Univ. of Mich. Press 2d ed. 2004) (1974).

473. *Id.* at 6–7.

474. Michael J. Klarman, *Brown and Lawrence (and Goodridge)*, 104 MICH. L. REV. 431, 452–82 (2005).

475. Albiston, *supra* note 466, at 61–62.

476. *Staff Bios*, CTR. FOR FOOD SAFETY, <http://www.centerforfoodsafety.org/about/staff-bios/> (last visited Apr. 15, 2012) (describing many of the attorneys as dedicated to litigation, legislative, and policy work, with only one member of the staff, the True Food Network Director, devoted to grassroots organizing).

477. See, e.g., Jonathan C. Zellner, Note, *Artificial Grassroots Advocacy and the Constitutionality of Legislative Identification and Control Measures*, 43 CONN. L. REV. 357, 362 (2010).

478. *About Us*, CTR. FOR CONSUMER FREEDOM, <http://www.consumerfreedom.com/about.cfm> (last visited Apr. 15, 2012).



large part by affected members of the food industry.<sup>479</sup> Additionally, American Farmers for the Advancement and Conservation of Technology is “dedicated to conserving existing safe management practices and supporting the advancement of new technologies with collaborative ties to all commodity segments and allied industries,”<sup>480</sup> and is “closely tied to Monsanto.”<sup>481</sup> Moreover, although it is difficult to currently gauge the “deradicalization” effect of litigation tactics on the sustainable food movement, internal critiques of the use of federal standards for organic foods suggests at least a concern about the deradicalizing effects of legalization.<sup>482</sup>

What is evident from Part III, however, is that the sustainable food movement is using litigation, in addition to other methods of advocacy, to affect the types of changes advocated by those associated with the movement. These uses may not reach the level of coordination seen in other movements,<sup>483</sup> 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<sup>484</sup> and the civil rights movement.<sup>485</sup> Yet, 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.<sup>486</sup>

What the analysis of Part III means, however, is that if the sustainable food movement wants to achieve effective reform, it may need to examine the history of other social movements in pursuing various combinations of litigation, public awareness, and political strategies. This may entail

---

479. Melanie Warner, *Striking Back at the Food Police*, N.Y. TIMES, June 12, 2005, at B1.

480. AM. FARMERS FOR THE ADVANCEMENT AND CONSERVATION OF TECH., About Us, <http://itisafact.org/about-us/> (last visited Apr. 15, 2012).

481. Andrew Martin, *Fighting on a Battlefield the Size of a Milk Label*, N.Y. TIMES, Mar. 9, 2008, at BU7.

482. STEWART LOCKIE ET AL., GOING ORGANIC: MOBILIZING NETWORKS FOR ENVIRONMENTALLY RESPONSIBLE FOOD PRODUCTION 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).

483. Compare *supra* Part III, with Cummings & NeJaime, *supra* note 466, at 1247–81 (describing the coordinated method of advocates for marriage equality), and Riegelman, *supra* note 22, at 530–40 (describing the strategic efforts of the environmental movement through the 1970s).

484. See Riegelman, *supra* note 22, at 530–40.

485. Stephen C. Yeazell, *Brown, the Civil Rights Movement, and the Silent Litigation Revolution*, 57 VAND. L. REV. 1975, 1975–77 (2004).

486. See Jerry L. Anderson, *Protection for the Powerless: Political Economy History Lessons for the Animal Welfare Movement*, 4 STAN. J. ANIMAL L. & POL’Y 1, 8–9, 55–57 (2011) (comparing the rise of the animal welfare movement to the rise of the anti-child labor movement).

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.<sup>487</sup> 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 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 nonstandard-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.<sup>488</sup>

Another strategy may be for the sustainable food movement to work with the framing of litigation such that future partnership opportunities are created by coalitions with other organizations.<sup>489</sup> As this study of food sustainability litigation demonstrates, the groups involved with such litigation are predominately groups identified as either environmental or food sustainability advocates. But additional litigation focused on the values already expressed by the sustainable food movement—including healthfulness and culture<sup>490</sup>—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.”<sup>491</sup> 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

---

487. See Ziegler, *supra* note 466, at 267.

488. See *supra* Part II.

489. See Ziegler, *supra* note 466, at 309.

490. See *supra* Part II.

491. See Scott L. Cummings & Deborah L. Rhode, *Public Interest Litigation: Insights from Theory and Practice*, 36 *FORDHAM URB. L.J.* 603, 651 (2009).

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.<sup>492</sup> The identification of potential pro bono 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. Also, as the Article began, the very roots of the movement in eating, one of the most personal of our human activities, may provide the foundation for further growth of the movement in both legal and political spheres.

As food writer M.F.K. Fisher once wrote, “no yoga exercise, no hour of meditation in a music-throbbing chapel . . . will leave you emptier of bad thoughts than this homely ceremony of making bread.”<sup>493</sup> 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.

---

492. 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); *What’s Hot in 2011 Social Media Release*, NAT’L REST. ASS’N, [http://www.restaurant.org/pressroom/social-mediareleases/release/?page=social\\_media\\_whats\\_hot\\_2011.cfm](http://www.restaurant.org/pressroom/social-mediareleases/release/?page=social_media_whats_hot_2011.cfm) (last visited Apr. 17, 2012) (describing “sustainability as a culinary theme” to be one of the top menu trends for next year).

493. M.F.K. FISHER, *HOW TO COOK A WOLF* (1942), reprinted in FISHER: THE ART OF EATING, 187, 247 (1990).

