

WILD RICE: THE MINNESOTA LEGISLATURE, A DISTINCTIVE CROP, GMOS, AND OJIBWE PERSPECTIVES

*Rachel Durkee Walker and Jill Doerfler**

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I. INTRODUCTION

I am proud to represent Monsanto. We have a billion acres of GMO crops and there has not been a single adverse incident in ten years. Monsanto has never thought about

* Rachel Durkee Walker, Water Resources Environmental Scientist, Barr Engineering Company; Ph.D., University of Minnesota-Twin Cities, Water Resources Science (July 2008); M.A. Cornell University; B.A. Swarthmore College. Please reach the corresponding author at rwalker@barr.com.

Jill Doerfler, Assistant Professor, American Indian Studies, University of Minnesota-Duluth, Fall 2008; Ph.D., American Studies, University of Minnesota, (Sept. 2007); B.A. University of Minnesota-Morris.

engineering wild rice. It is a unique product and so it makes no economic sense [to genetically engineer it]. We have federal and state regulations. How much more process can you get? Minnesota has spent a ton of time and money to nurture the biotechnology industry. If this legislation passes, make no mistake, the national organic websites will have its results up all over the country¹

A. Genetically Engineering Wild Rice

Genetically engineered seeds and crops abound in United States agriculture.² Proponents of this technology cite the promise of genetic engineering to feed a hungry world, reduce pesticide use, and provide crop-based energy alternatives.³ Opponents cite concerns regarding the impact of these technologies on both humans and the environment, as well as the capability of federal regulatory agencies to keep genetically and non-genetically engineered crops separated.⁴ A few critics are concerned about

¹ *Hearings on H.F. 3915 Before the H. Comm. of Agriculture and Rural Development*, 84th Leg., Reg. Sess. (Minn. 2006) (statement of Sarah Janacek, Lobbyist, Monsanto Company) [hereinafter *Janecek Statement on H.F. 3915*] (on file with author).

² For the purposes of this paper, we use interchangeably the terms “genetically engineered foods” and “genetically modified organisms” (“GMOs”), as is often done in the media. We recognize that these terms are technically different, but follow the terms’ usage as understood by laypersons. We also distinguish between traditional or conventional breeding practices and genetic engineering as defined in molecular biology texts: “Traditionally plants have been improved through selection during many crop cycles (which can take many generations). Traditional breeding normally involves only individuals of the same species. Genetic engineering is technology that facilitates the successful transfer and expression of genes from one species into another.” LEANDRO PEÑA, *TRANSGENIC PLANTS: METHODS AND PROTOCOLS* 286 (2005); see also MICHAEL T. MADIGAN & JOHN M. MARTINKO, *BROCK BIOLOGY OF MICROORGANISMS* (11th ed. 2006):

[Genetic engineering] is the artificial manipulation of genes and their products. Genes from any source can be manipulated and modified using microorganisms and their enzymes as molecular tools. Now, using genomic techniques, one can search hundreds of genetic blueprints for genes encoding proteins of interest, clone the genes into a suitable host, and then produce the proteins commercially.

³ See PEÑA, *supra* note 2; see also MADIGAN & MARTINKO, *supra* note 2.

⁴ David Quist & Ignacio H. Chapela, *Transgenic DNA Introgressed into Traditional Maize Landraces in Oaxaca, Mexico*, 414 *LETTERS TO NATURE* 541, 541-43 (2001). See generally ENVIRONMENTAL RISK ASSESSMENT OF GENETICALLY MODIFIED ORGANISMS: A CASE STUDY OF BT MAIZE IN KENYA (A.R. Kapuscinski & P.J. Schei, eds., 2004); DON S. DOERING, *DESIGNING GENES: AIMING FOR SAFETY AND SUSTAINABILITY IN U.S. AGRICULTURE AND BIOTECHNOLOGY*, WORLD RESOURCES INSTITUTE (2004), available at http://pdf.wri.org/designing_genes.pdf; COMMITTEE ON ENVIRONMENTAL IMPACTS ASSOCIATED WITH COMMERCIALIZATION OF TRANSGENIC PLANTS, NATURAL RESEARCH COUNCIL, ENVIRONMENTAL EFFECTS OF TRANSGENIC PLANTS: THE SCOPE AND ADEQUACY OF REGULATION (2002); PEW INITIATIVE ON FOOD AND BIOTECHNOLOGY, HAVE TRANSGENES, WILL TRAVEL: ISSUES RAISED BY GENE FLOW FROM GE CROPS (2003); ENVIRONMENTAL RISK ASSESSMENT OF GENETICALLY MODIFIED ORGANISMS: METHODOLOGIES FOR ASSESSING BT

the respect of indigenous populations for whom particular food resources are culturally sacred and protected by treaty.⁵ The Minnesota Legislature weighed in on this debate, passing legislation in 2007 described, in part, as “an act modifying provisions for regulating genetically engineered organisms.”⁶ The legislation is noteworthy because it specifically addresses concerns regarding some *potential* impacts of genetically engineering a crop sacred to indigenous bands.⁷ Second, the legislation mandates that a state-level regulatory body, the Environmental Quality Board (“EQB”), adopt rules requiring an environmental impact statement (“EIS”) in the case of a permit for the release of genetically engineered wild rice.⁸ Finally, the legislation is unique in requiring that the Minnesota Department of Natural Resources (“DNR”) carry out a study on potential threats to natural stand wild rice, including those from genetically engineered strains.⁹

Opponents of the Minnesota legislation claimed that it “sends a chill through many communities in the state [W]e [in Minnesota] are circumscribing the ability for people to work in genetic engineering on agricultural crops . . . and . . . we [in Minnesota] are opening a door we will be sorry we opened.”¹⁰

This article lays out the arguments for and against this legislation and its subsequent changes between the first hearing in 2005 and its passage in 2007, as part of S.F. No. 2096. Part I reviews the history of wild rice legislation in Minnesota and the legislation meant to protect wild rice. Part II examines some treaty history, a 1999 United States Supreme Court decision regarding hunting and gathering rights, and some history of the relationship between Ojibwe and wild rice as context for several legislative arguments. Part III examines the effects of changes in the political landscape of crop biotechnology, particularly questions of regulatory oversight, on legislative debate and on the passage of S.F. No. 2096.

Minnesota’s case is unique because it concerns a plant sacred to sovereign American Indian Nations (Ojibwe)¹¹ governed by treaty rights

COTTON IN BRAZIL (A.R. Kapuscinski & P.J. Schei, eds., 2006); JEFFREY M. SMITH, SEEDS OF DECEPTION (2003).

⁵ Interviews with Paul Schultz & Joseph LaGarde, Tribal Elders, White Earth Reservation, at White Earth Reservation (2006-2008) (on file with author); Interviews in-person and by telephone with John Persell, Tribal Biologist, Leech Lake Reservation, in St. Paul, Minn. (2006-2008) (on file with author).

⁶ Janecek Statement on *H.F. 3915*, *supra* note 1.

⁷ Interviews with Schultz & LaGarde, *supra* note 5; Interviews with Persell, *supra* note 5.

⁸ *Hearings on S.F. 2096*, 85th Leg., Reg. Sess. (Minn. 2007) (on file with author).

⁹ *Id.*

¹⁰ *Id.*

¹¹ Anishinaabe(g), Ojibwe, Ojibway, Ojibwa, and Chippewa are all names for the same group of people. This can cause confusion. According to several scholars, the use of Ojibwe or Anishinaabe(g) is one of personal preference. We use Ojibwe in this paper.

specific to wild rice.¹² The legislation is also unique because European Americans in Minnesota also claim wild rice as part of their identity (e.g., Minnesota state grain).¹³ Wild rice is considered unique to northern North America.¹⁴ Minnesota's situation, however, is not unique to the extent that it shares in common with other states' discussions stemming from larger debates over the regulation of crop biotechnology. States such as Hawaii and Vermont, for example, have had discussions within and outside their state legislatures regarding crop biotechnology.¹⁵

II. WILD RICE LEGISLATION IN MINNESOTA

A. History of Wild Rice Legislation in Minnesota

In the 2005 legislative session, the Minnesota Senate tabled S.F. 1566, a version of the "wild rice bill" that prohibited the release and sale of genetically engineered wild rice in Minnesota.¹⁶ The 2006 bill, H.F. 3915, emerged, in part, after discussions between interested parties.¹⁷ H.F. 3915, titled, "A Bill for an Act Relating to Agriculture; Providing for a Wild Rice Study," was heard in the House Agriculture, Rural Economies, and Veterans Affairs Committee; the bill passed through the House, but it did not reach the Senate.¹⁸ In 2007, Senate File 2096, an Omnibus Environment, Natural

Quotations, however, will not be changed. Generally, Anishinaabe(g) is used by the people themselves. Chippewa is the official name recognized by the federal government.

¹² Treaty with the Chippewa, U.S.-Chippewa Nation, art. 5, 1837, <http://www.airpi.org/pubs/1837.html>.

¹³ See Minnesota Secretary of State, <http://www.sos.state.mn.us/student/grain.html> (last visited Feb. 8, 2009).

¹⁴ See generally ERVIN OELKE, *SAGA OF THE GRAIN* (2007).

¹⁵ Cherie Yamane, *Two Taro Bills Pass Senate*, HAW. GMO LEGIS. (Island Breath, Kauai, Haw.), Feb. 8, 2007, <http://homepage.mac.com/juanwilson/islandbreath/%20Year%202007/01-farming/0701-04GMOBills2007.html>; Liability Resulting from the Use of Genetically Modified Seeds Plant Parts, S. 0018, 2005-2006 Leg., Reg. Sess. (Vt. 2006), <http://www.leg.state.vt.us/database/status/summary.cfm?Bill=S%2E0018&Session=2006>.

¹⁶ *A Person May Not Release, Plant, Cultivate, Harvest, Sell, or Offer for Sale in Minnesota a Genetically Engineered Organism Containing or Related to Wild Rice: Hearing on S.F. 1566 Before Agric., Veterans & Gaming Comm.*, 84th Leg., Reg. Sess. (Minn. 2005) (statement of Sen. Becky Lourey, Member, Minn. Senate) (on file with author) [hereinafter Lourey Statement on S.F. 1566].

¹⁷ Stakeholders including members of several Minnesota Ojibwe bands, members from the Minnesota Cultivated Wild Rice Council, the Department of Natural Resources, academics, and interested citizens met in Bemidji, Minnesota on January 17, 2006 to discuss stakeholder concerns regarding revised legislation for Legislative Session 2006. The forum was convened by Paul Swenson, Department of Natural Resources ("DNR"). The forum included discussion but no firm consensus regarding these groups' or individuals' abilities to work together on matters relating to wild rice legislation.

¹⁸ *A Bill for an Act Relating to Agriculture; Providing for a Wild Rice Study: Hearings on H.F. 3915 Before the H. Comm. of Agriculture & Rural Development & Veterans Affairs Comm.*, 84th Leg., Reg. Sess. (Minn. 2006) (statement of Rep. Frank Moe, Member,

Resources, and Energy Appropriations bill, contained language regulating the release of genetically engineered wild rice; the bill passed the House and Senate and was signed by Governor Pawlenty on May 8, 2007.¹⁹

This legislation, pertaining to genetically engineered organisms and wild rice, underwent much negotiation over three years.²⁰ The process by which legislation with little support in 2005 became law in 2007 warrants consideration. The evolution of this bill—its language, the discussions in and outside committees, and its outcome—was likely influenced by procedural, economic, and political events. For the first time, it is possible to see a series of related discussions over several years on crop biotechnology in a state legislative context.

B. Minnesota Legislation to Protect Wild Rice

One can argue that Minnesota's case is unique because of the combination of cultural, political, and economic circumstances that led to inclusion of language pertaining to wild rice and genetic engineering in S.F. 2096. Other states have passed, or are on the cusp of passing, similar legislation reflecting broader changes in national and international

Minn. House of Reps.) (on file with author) [hereinafter Moe Statement on *H.F. 3915*].
Principal author: Frank Moe. *H.F. 3915 Wild Rice Study*:

The commissioner of agriculture, in cooperation with the commissioner of natural resources shall review the need for a study of strains of wild rice that are indigenous to Minnesota, sacred to the Ojibwe people, and important both historically and economically to this state. These specific strains are *zizania aquatica* and *zizania palustris*. The study would include: (1) evidence of population decline in Minnesota lakes, rivers, and streams and, if such decline is found, an explanation of possible contributing factors; (2) arguments for and against the economic, agronomic, cultural and historical importance of maintaining the integrity of these strains; (3) evaluation of methods available for maintaining the integrity of these strains in Minnesota lakes, rivers, and streams, including scientific, regulatory, and any other reasonable methods the commissioners may identify; and (f) recommendations that address the findings in clauses (1) to (3). Subd. 2 Deadlines

Id.

¹⁹ *Environment, Energy, and Natural Resources Finance Act, S.F. No. 2096*, 85th Leg., Reg. Sess. §§ 140-142, 163 (Minn. 2007), available at http://www.senate.leg.state.mn.us/departments/scr/billsumm/summary_display.php?ls=85&session=regular&body=Senate&billtype=SF&billnumber=2096&ss_year=2007 [hereinafter *S.F. No. 2096*]. For the bill's status in the House and Senate in 2007, see https://www.revisor.leg.state.mn.us/revisor/pages/search_status/status_detail.php?b=House&f=SF2096&ssn=0&y=2007. In summary, the bill makes the state EQB responsible for coordinating state and federal regulatory activities relating to genetically engineered organisms within Minnesota. *S.F. No. 2096*, § 140. The board must adopt rules requiring an EIS in the event of a permit application for genetically engineered wild rice. *Id.* § 141. The bill also requires a study by early 2008 estimating, among other factors, potential threats to natural stands, including those from genetically engineered strains. *Id.* § 163.

²⁰ See Lourey Statement on *S.F. 1566*, *supra* note 16; Moe Statement on *H.F. 3915*, *supra* note 18.

discussions.²¹ First, we examine some reasons why this legislation may be unique to Minnesota.²² Second, we discuss the broader context of crop biotechnology and indigenous rights also of interest to other states and jurisdictions.²³ The following statements from Chairman Goggleye, Jr., Leech Lake Band of Ojibwe, from the 2007 legislative hearings are representative and summarize the concerns expressed by all six Ojibwe bands in Minnesota regarding the protection of wild rice:

I remember when my grandfather harvested wild rice. I remember climbing a tree when I was too young [to directly participate]. [Harvesting wild rice] is something I've participated in my whole life. I have first hand knowledge [of this practice], the harvesting, hand-parching, and finishing. [This practice] was passed onto me by my [grandparents and parents] and now I am passing it on to my children The Creator has given us many things. Every time we try to change [what we are given], it messes things up. I'm afraid this will happen to our wild rice beds. To [genetically engineer] wild rice would be disrespectful to the First People who inhabited this land It would be morally wrong.²⁴

Although the Minnesota legislature heard proposals for legislation on this issue in 2005, 2006, and 2007,²⁵ for approximately a decade prior to these hearings, members from all six bands of Ojibwe in Minnesota expressed views similar to those expressed by Chairman Goggleye in 2007.²⁶

²¹ *An Act Relating to Production of Biopharmaceutical Crops in Oregon*, S.B. 234, 74th Leg., Reg. Sess. (Or. 2007) (creating new provisions and amending OR. REV. STAT. § 561.144 (2008)), <http://www.leg.state.or.us/07orlaws/sess0500.dir/0577.htm>; see Environmental Commons, 2007 Local Food Legislation Tracker, <http://environmentalcommons.org/tracker2007.html> (last visited Feb. 8, 2009).

²² See *infra* notes 25-33, 84-93 and accompanying text for the general discussion of this topic.

²³ See *infra* notes 34-83 and accompanying text for the general discussion of this topic.

²⁴ *House Environment & Natural Resources: Hearing on H.F. 1662 & 1663 (precursors to S.F. 2096)*, 85th Leg., Reg. Sess. (Minn. 2007) (statement of George Goggleye Jr., Chairman, Leech Lake Band of Ojibwe) (on file with author) [hereinafter Chairman Goggleye Statement on H.F. 1662 & 1663]. The word for wild rice in the Ojibwe language is *manoomin*, often translated as "good berry." See THOMAS VENNUM JR., *WILD RICE AND THE OJIBWAY PEOPLE* 5 (1988). Referring to wild rice as *manoomin* recognizes that this food is traditionally and originally associated with Ojibwe. *Id.* Wild rice is the English name given *manoomin*. *Id.* Ojibwe language includes a number of dialects resulting in non-uniform spelling of the word. *Id.* at 6. There are additional challenges with spelling because while the double vowel system is gaining popularity, there is no single standardized orthography for the language. See John David Nichols & Earl Nyholm, *CONCISE DICTIONARY OF MINNESOTA OJIBWE* (1995).

²⁵ See *supra* notes 20, 24.

²⁶ Lourey Statement on *S.F. 1566*, *supra* note 16; Moe Statement on *H.F. 3915*, *supra* note 18.

In 2006, all Minnesota bands passed resolutions in support of state legislation.²⁷ Ojibwe from Wisconsin, Michigan, and parts of Canada also expressed similar concerns during the decade preceding the introduction of Minnesota's legislation.²⁸ While Ojibwe bands in and outside Minnesota are distinct sovereign nations with views differing on many subjects, they unanimously supported various iterations of this bill.²⁹

Throughout the course of three years, members opposing or voicing concerns about this legislation have made the following comments:

Is there a problem with wild rice? Did a sportsmen's group come to you or is it one or more of the Sovereigns from up North? Do you have knowledge of what the Sovereigns are doing to address this concern among themselves?³⁰

Is the interest in this study about economic benefits just for tribal folks in your area? I was just wondering if it was becoming a "we" vs. "them" sort of debate. Seemed like it was starting to go that way.³¹

[This bill] is about politics, emotion, guilt and pride. We've had only one instance of white rice being a problem . . .³²

This legislation was all political . . . It was completely politically driven. This is a Native American plant . . . The whole process was pushed by Leanna (sic) LaDuke for the purpose of raising the profile of culturalists on Native American reservations. The guilt comes from people feeling guilty about how they treated Native Americans. There is

²⁷ See Lourey Statement on *S.F. 1566*, *supra* note 16; Moe Statement on *H.F. 3915*, *supra* note 18. Minnesota Ojibwe bands include: Bois Forte, Grand Portage, Fond du Lac, Leech Lake, Mille Lacs, White Earth.

²⁸ Interviews with Schultz & LaGarde, *supra* note 5; Interviews with Peter David, Great Lakes Indian Fish and Wildlife Commission, in St. Paul & Brainerd, Minn. (2006-2008); Interviews with Patrick Robinson, Ph.D. candidate, University of Wisconsin, Green Bay, on White Earth Reservation, Minn. (2006-2008); Interviews with Andrea Hanks, Wild Rice Legislative Coordinator, White Earth Land Recovery Project, at the Minnesota Legislature (2006-2008).

²⁹ See *supra* note 27 (listing the Minnesota Ojibwe bands that unanimously supported the bill).

³⁰ *Hearing on S.F. 2096 Before the Bioscience and Workforce Development Policy and Oversight Division Comm.*, 85th Leg., Reg. Sess. (Minn. 2007) (testimony by Rep. Tom Emmer, Member, Minn. House of Reps., addressing Rep. Moe, the bill's author) (on file with author).

³¹ *Id.* (testimony of Rep. Karen Klinzing, Member, Minn. House of Reps., addressing Rep. Moe, the bill's author) [hereinafter Testimony of Rep. Klinzing].

³² *Id.* (testimony of Rep. Tim Mahoney, Chairman, Bioscience and Workforce Development Policy and Oversight Division Comm., addressing Rep. Moe, the bill's author).

pride that the Native Americans now feel they have a more equal footing”³³

III. PROVIDING CONTEXT FOR WILD RICE LEGISLATION

A. Treaty History and Wild Rice

In light of these remarks, it seems critical to clarify specific constitutional, sovereign, and treaty rights held by American Indians in this country. Such clarifications were not made during legislative testimony. Ojibwe perspective on wild rice is not just “one more” among other “equally valid” perspectives in Minnesota. Ojibwe belong to federally recognized sovereign nations, the existence of which are guaranteed by a series of Supreme Court judgments from the 1820s and 1830s.³⁴ Tribal governments voluntarily negotiate with states regarding matters of tribal jurisdiction and resource management—matters guaranteed to tribal governments through negotiated treaties.³⁵

In this case, a matter regarding natural stand wild rice growing in large quantities on American Indian Reservations is not a question of “us vs. them”; rather, it is one of considering justly the rights guaranteed to Ojibwe in treaty making. It is also a matter of rendering due consideration to the lengthy history and integrity of indigenous environmental law and management that precedes and succeeds settlement. Borrows and Kidwell have recognized, from somewhat different angles, that indigenous or tribal peoples of the world regulate rights and obligations crucial for maintaining harmony with nature and environmental awareness characteristic of the traditional way of life.³⁶

Indigenous legal and management approaches to natural resources, broadly speaking, take into consideration the pre-eminence of “natural cycles.”³⁷

The cycles of the natural environment oriented native people to the repetition of events Native

³³ Telephone Interview with Rep. Tim Mahoney, Member, Minn. House of Reps., in St. Paul, Minn. (May 23, 2007) [hereinafter Interview with Rep. Mahoney] (on file with author).

³⁴ The question of the tribes' status as sovereign nations was ultimately decided by the Supreme Court's decision in *Cherokee Nation v. Georgia*, 30 U.S. 1 (1831). In 1832, in *Worcester v. Georgia*, 31 U.S. 515 (1832), the Supreme Court (under Chief Justice Marshall) established the doctrine that only the national government of the United States—and not the individual states—had authority in Indian affairs. See generally T.R. BERGER, A LONG, TERRIBLE SHADOW: WHITE VALUES, NATIVE RIGHTS IN THE AMERICAS, 1492-1992 (1992) (1991); SATZ, RON, CHIPPEWA TREATY RIGHTS (2d ed. 1996).

³⁵ See sources cited *supra* note 33.

³⁶ JOHN BORROWS, RECOVERING CANADA: THE RESURGENCE OF INDIGENOUS LAW 32 (2002); see also C.S. Kidwell, *Native American Systems of Knowledge*, in A COMPANION TO AMERICAN INDIAN HISTORY 91 (P.J. DELORIA & N. SALISBURY eds., 2002).

³⁷ Kidwell, *supra* note 36, at 91.

worldviews were more often concerned with events that repeated themselves on a regular basis—the growth and harvest of crops, the mating and migration of animals, the movements of stars and planets Recognition of . . . [cycles] . . . depends on accumulation of data over extended periods of time, usually greater than those of the lifetime of a single observer, and requires some form of record-keeping.³⁸

For thousands of years, many indigenous communities, including the Mayans, Aztecs, and Incans, had sophisticated record keeping.³⁹ Indigenous communities today continue these traditions.

Kidwell points out: “Native systems of knowledge are difficult to describe, for while they often reflect familiar Western processes—observation, deduction, hypothesis, experimentation—they also rest upon fundamentally different understandings of the world”⁴⁰ As the Brundtland Commission noted, “[some Indigenous people] have enjoyed substantial and long-term environmental successes.”⁴¹ Borrows continues, “Indigenous inclusion . . . in existing [legal and government] institutions . . . facilitates sustainability by suggesting important reconstructions of biological relationships within ecosystems.”⁴² Finally, “Indigenous legal principles form a system of ‘empirical observations and pragmatic knowledge’ that has value both in itself and as a tool to demonstrate how people structure information.”⁴³

Wild rice has enjoyed an indigenous management history that is unique and precedes modern times.⁴⁴ Such management is distinct and more developed than other indigenous resource management (management for deer, for example). Tribal elders and resource managers have historically monitored and managed water levels as part of wild rice management.⁴⁵ For example, if a particular beaver appeared to be building a dam that might affect water levels and negatively impact wild rice growth, that beaver “ended up in the pot.”⁴⁶ In Nett Lake, Bois Forte Band of Chippewa, a boulder the size of a small car protrudes out of the water in front of Spirit Island. Historically, tribal elders determined the time of rice harvest, in part, by gauging when water levels reached a particular point on that rock.⁴⁷

³⁸ *Id.*

³⁹ *Id.*

⁴⁰ *Id.* at 87.

⁴¹ BORROWS, *supra* note 36, at 33.

⁴² *Id.* at 34.

⁴³ *Id.* at 35.

⁴⁴ Interviews with Schultz & LaGarde, *supra* note 5; Interviews with Persell, *supra* note 5.

⁴⁵ Interviews with Persell, *supra* note 5.

⁴⁶ *Id.*

⁴⁷ *Id.*

While Ojibwe have well-developed wild rice management traditions, elders appreciate both the fragility and resilience of this resource.⁴⁸ Historically, if a crop was not robust or was damaged by storms or straight-line winds, communities traveled to other lakes for harvesting.⁴⁹ Ojibwe wild rice managers have acknowledged the complexity of biological relationships and ecosystems.⁵⁰

In their remarks at the legislature in 2007, legislators failed to acknowledge critical historical and legal precedents. Although Minnesota became a state in 1885, statehood did not reduce the sovereign status of American Indian nations, their rights to manage resources on reservations and ceded territories, nor did it impact federal treaty obligations.⁵¹ It also did not eliminate the “Federal Government’s obligation to protect tribal trust resources: land, water, hunting and fishing rights, and that sovereign immunity is integral to protection of those resources”⁵²

B. Minnesota v. Mille Lacs Band of Chippewa Indians

In 1837, the United States entered into a treaty with several Bands of Chippewa Indians guaranteeing certain hunting, fishing, and gathering rights—among them wild rice—on ceded land.⁵³ This treaty did not specify that Ojibwe “owned” wild rice, but guaranteed the protection of Ojibwe to harvest and manage native stands.⁵⁴ The rights guaranteed in that treaty were recently recognized again in a 1999 Supreme Court decision: *Minnesota v. Mille Lacs Band of Chippewa Indians*.⁵⁵ This case was filed in August 1990, by members of the Mille Lacs band of Ojibwe against the State of Minnesota for interfering with the hunting, fishing and gathering rights that had been guaranteed them in the 1837 treaty with the United States.⁵⁶

Serious consideration of Ojibwe views regarding wild rice is not a matter of considering “another view.” It is not an option to overlook the ways treaty rights confer specific responsibilities to American Indians over particular natural resources. In discussions about science, biotechnology, and management of natural stand wild rice, it is potentially unlawful for states to ignore treaty-based claims.⁵⁷ Legislators need to consider constitutional and

⁴⁸ Interviews with Schultz & LaGarde, *supra* note 5; Interviews with Persell, *supra* note 5.

⁴⁹ Interviews with Schultz & LaGarde, *supra* note 5; Interviews with Persell, *supra* note 5.

⁵⁰ Interviews with Persell, *supra* note 5.

⁵¹ See generally J.M. McCLURKEN ET AL., FISH IN THE LAKES, WILD RICE, AND GAME IN ABUNDANCE Chapter 5 (2000).

⁵² D.E. WILKINS & K. TSIANINA LOMAWAIMA, UNEVEN GROUND 299 (2001).

⁵³ McCLURKEN, *supra* note 51, at 11.

⁵⁴ *Id.*

⁵⁵ *Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172 (1999).

⁵⁶ *Id.* at 1189.

⁵⁷ *Id.*

Supreme Court mandates; abdication of these responsibilities is tantamount to ignoring the rule of law.

C. Ojibwe and Wild Rice

Over three years of legislative discussion, proponents argued that wild rice is spiritually and culturally sacred to Ojibwe.⁵⁸ Little, if any, discussion clarified that relationship. We take time to include discussion, while not presenting an exhaustive analysis.

In signing the treaty of 1837, Ojibwe band members asserted their right to gather wild rice in ceded territories based on reasons of livelihood and spiritual tradition; wild rice is central to Ojibwe survival and identity.⁵⁹ The Ojibwe migration story tells of a time when they lived in the East and were instructed by the Creator⁶⁰ to follow the *miigis*⁶¹ (cowrie shell) on a westward journey that would end when they reached “the place where the food grows on water.”⁶² Wild rice is this food. Natural stands of wild rice have grown for centuries, if not longer, in the lakes and rivers of Minnesota, Wisconsin, Michigan, and Canada, where Ojibwe nations reside.⁶³ Associated with origin stories, wild rice is central to notions of being Ojibwe; managing wild rice in its natural state is a moral obligation.⁶⁴

For Ojibwe, wild rice has medicinal and nutritional value derived from its spiritual significance—a belief reflected in the use of wild rice to promote recovery from sickness as well as for ceremonial feasts.⁶⁵ Wild rice is served at spiritual ceremonies, pow-wows, family gatherings, other special events, and as a regular part of family meals.⁶⁶

Ojibwe understand their relationship to wild rice through stories known to many from childhood.⁶⁷ These legends explain the origin of wild rice, depicting the advent of specific “heroes” and their connection to

⁵⁸ See *supra* text accompanying notes 23, 44.

⁵⁹ VENNUM, *supra* note 24, at 58; *id.* at 58-90 (discussing of several stories that delineate the importance of wild rice). There are many versions of the migration story. We extrapolate from what we believe to be one of the most widely recognized among Ojibwe.

⁶⁰ The Creator is also commonly called the Great Spirit or Gichi Manitou and is generally understood as the maker and designer of everything. EDWARD BENTON-BANAI, *THE MISHOMIS BOOK: THE VOICE OF THE OJIBWAY* 2 (1988).

⁶¹ A *miigis* is a type of shell that is small, light in color (cream, beige or ecru), oval shaped and has a long, narrow opening on one side. It is known as a cowry (also spelled cowrie) shell in English. *Id.* at 4.

⁶² *Id.* at 101-102; GORDON REGGUINTI, *THE SACRED HARVEST: OJIBWAY WILD RICE GATHERING* 17 (1992).

⁶³ See *supra* note 43; VENNUM, *supra* note 24, at 28-29 (noting that palynological research indicates that wild rice was present about 500 B.C. while archeological evidence shows existence of wild rice habitat as early as 7000 B.C.).

⁶⁴ See Chairman Gogley Statement on H.F. 1662 & 1663, *supra* note 24; see VENNUM, *supra* note 24, at 58.

⁶⁵ VENNUM, *supra* note 24, at 62.

⁶⁶ REGGUINTI, *supra* note 62, at 17, 44; VENNUM, *supra* note 24, at 41, 58.

⁶⁷ BASIL JOHNSTON, *OJIBWAY HERITAGE* 7 (1976).

humans, animals, and plants.⁶⁸ One story describes how Wenabozhoo, the main Ojibwe “culture hero,” was introduced to wild rice.⁶⁹

One evening [Wenabozhoo] returned from hunting but had no game As he came towards his fire, there was a duck sitting on the edge of his kettle of boiling water. After the duck flew away, he looked into the kettle and found wild rice floating upon the water, but he did not know what it was. He ate his supper from the kettle, and it was the best soup he had ever tasted. Later, he followed in the direction the duck had taken, and came to a lake full of manoomin. He saw all kinds of ducks, geese, mud hens, and all the other water birds eating the grain. After that, when [Wenabozhoo] did not kill a deer, he knew where to find food to eat⁷⁰

Other stories tell how wild rice was a gift to Ojibwe from the Creator to end famine during the late winter when supplies of food often ran low and game was difficult to secure:

Only the old ones speak of how the people suffered during the hungry-time. It occurred in the late winter or early spring . . . when snow covered the ground and the supply of stored food dwindled. Babies cried desperately for food. Mothers wept in despair, and fathers turned their backs to hide their tears Soon people found rice growing in many shallow lakes and rivers. The hungry times ended.⁷¹

Oral tradition has been one of the primary means that tribal elders and families communicate traditional knowledge, including cosmological and spiritual stories and traditions from generation to generation.⁷² Considered perfect in its natural state as depicted in oral tradition, the process of harvesting wild rice is also central to the relationship between Ojibwe and this sacred resource.⁷³ Many offer a prayer and gift of tobacco before beginning the harvest.⁷⁴ Owing to its cultural, spiritual, and nutritional sustenance, Ojibwe appropriately honor the rice and its Creator.⁷⁵

⁶⁸ *Id.* at 59-62.

⁶⁹ A culture hero is the most important legendary figure of a specific people and is often involved in the creation of the world. Chairman Goggeye Statement on H.F. 1662 & 1663, *supra* note 24. A culture hero often discovers significant things like fire, or, as in this case, wild rice. Different Ojibwe communities use a variety of names for the culture hero due to dialect differences in the Ojibwe language. *Id.* His names include Nanaboozhoo, Nanabush, Nanapush, and Manaboozhoo. *See generally* Johnston, *supra* note 67.

⁷⁰ Winona LaDuke, *The Wild Rice Moon*, WHOLE EARTH, Winter 1999, at 78.

⁷¹ Anne M. Dunn, *The Gift of Mahnomen*, in WHEN BEAVER WAS VERY GREAT: STORIES TO LIVE BY 26 (1st ed. 1995).

⁷² FIKRET BERKES, OUR COMMON FUTURE 114-15 (1987).

⁷³ Interviews with Schultz & LaGarde, *supra* note 5; Interviews with Persell, *supra* note 5.

⁷⁴ *Id.*

⁷⁵ *Id.* A prayer of thanks is offered and then a small amount of tobacco is placed near the shoreline or in the water near the wild rice. *Id.* Many Ojibwe believe that tobacco is a

Harvesting is most often done in teams of two—one person using a forked pole to propel the canoe, and the other using knocking sticks to gently knock the rice into the canoe and water.⁷⁶ The grains that land in the water help to ensure harvests for the coming years. It would be nearly impossible for one person to harvest rice using a canoe and knocking sticks; cooperation between the paddler and harvester is essential.⁷⁷ Acts of cooperation remind harvesters of their relationship with rice and keep the community strong.⁷⁸

Ojibwe understand themselves, their history, and their relationship to the natural world through these stories.⁷⁹ The first story emphasizes the importance of learning from animal siblings. The second illustrates how food is directly connected to survival. Neither story asserts that humans are superior to wild rice; rather, they explain that culture heroes, the Creator, animals, and plants possess significance that humans cannot fully know. Accordingly, from these stories, Ojibwe glean their mandate to protect and maintain this sacred resource.⁸⁰

Throughout the course of Minnesota's legislative hearings, it is unclear whether the spiritual and cultural significance of wild rice to Ojibwe affected the outcomes. In previous years, the bill failed despite testimony similar to that of Chairman Goggeye in 2007.⁸¹ It is possible, however, that the consistency of these arguments, the increased participation by Ojibwe tribal leaders, along with other arguments, helped to pass "wild rice language" in S.F. 2096.⁸² Whatever the reason, it is inaccurate to claim this legislation was mainly about European Americans "feeling guilty" or "American Indians having Native Pride" and exercising political muscle.⁸³ These explanations discount the legal realities of American Indian sovereignty and treaty-secured resource management, as well as the significance of the rights of sovereign nations to preserve Ojibwe identity and livelihood.

special plant that feasts spirits so in this case tobacco is offered to both thank and feast the spirit of the rice. *Id.*

⁷⁶ For an excellent modern-day account of the wild rice harvesting process, see Regguinti, *supra* note 62 and VENNUM, *supra* note 24.

⁷⁷ VENNUM, *supra* note 24, at 90-110 (describing the knocking process in detail).

⁷⁸ *Id.* at 188-97.

⁷⁹ See Johnston, *supra* note 67, at 7.

⁸⁰ While these conclusions are based on our close readings of these stories it is important to note that, as Anishinaabe scholar Basil Johnston has observed, "Because each Ojibway story may embody several themes and meanings, time and deliberation are required for adequate appreciation. There is no instantaneous understanding." Johnston, *supra* note 67, at 8. There is no single, correct interpretation.

⁸¹ See Lourey Statement on S.F. 1566, *supra* note 16; Moe Statement on H.F. 3915, *supra* note 18.

⁸² See *supra* note 25 and accompanying text.

⁸³ *Contra supra* text accompanying note 33.

D. Wild Rice and Minnesotan Identity

From the time European trappers and settlers began coming to Minnesota, largely between the seventeenth and nineteenth centuries, they observed and learned to harvest wild rice from Indians.⁸⁴ From approximately the 1950s, with the introduction of cultivated wild rice and an increase in national and international market sales, some non-Indians grew increasingly interested in participating in wild rice cultivation and harvest.⁸⁵ Prior to the 1980s, wild rice was mainly grown and produced in Minnesota, and was named the Minnesota state grain in 1977.⁸⁶ The following quotations from legislators during legislative hearings in 2006 and 2007 and from cultivated wild rice marketing companies capture some of the sentiments that non-Indian Minnesotans have with respect to both cultivating and eating wild rice:

I am supporting this legislation because it is about wild rice and wild rice alone. It is a very unique crop.⁸⁷

I have frequented for a long time a lake home of my parents near wild rice beds. We have also harvested it. We eat a lot of wild rice It is an important part of our heritage in Minnesota. It's important to our [Minnesotan] heritage to maintain a pure wild rice strain⁸⁸

Wild Rice, Minnesota's State Grain, is almost as old as history itself.⁸⁹

We offer you the essence of Northern Minnesota in our products (wild rice).⁹⁰

Many legislators, Democrat and Republican, supported this legislation because, as they stated, "wild rice is unique to Minnesota" and Minnesotan identity.⁹¹ They wanted to clarify that, while perhaps important to American Indians, wild rice was important to European Americans as

⁸⁴ Albert E. Jenks, *The Wild Rice Gatherers of the Upper Lakes* (1900) (unpublished Ph.D. dissertation, University of Wisconsin) (on file with author).

⁸⁵ *Id.* at 13.

⁸⁶ *Id.* at 12.

⁸⁷ *Hearing on H.F. 3815 Before the H. Comm. on Agriculture & Rural Development*, 84th Leg., Reg. Sess. (Minn. 2008) (testimony of Rep. Al Juhnke, Member, Minn. House of Reps.) (on file with author) [hereinafter Juhnke Statement on *H.F. 3815*].

⁸⁸ Testimony of Rep. Klinzing, *supra* note 31.

⁸⁹ C&G Enterprises, *Wild Rice Production Process*, <http://www.mnwildrice.com/riceinfo.htm> (last visited Mar. 26, 2009).

⁹⁰ GRV Gibbs Wild Rice Co., Inc., <http://www.gibbswildrice.com> (last visited June 3, 2009).

⁹¹ See Testimony of Rep. Klinzing, *supra* note 31 (discussing the significance of wild rice for the Ojibwe).

well.⁹² Precisely what is “Minnesotan” about wild rice? Answers may vary greatly from person to person. In any case, while such views may have played a significant role in this bill’s passage, this article looks at concrete legislative procedures and political realities that likely came into play. In sum, according to its chief author, the most important reasons for this bill’s passage in 2007 were: a Democratic House and Senate majority with sufficient partisan loyalty on some issues and supportive chairs in both the House and Senate Environment Policy and Finance Committees.⁹³

IV. CHANGES IN THE POLITICAL LANDSCAPE OF CROP BIOTECHNOLOGY

A. *Legislative Factors Contributing to Passage of S.F. 2096*

When brought to the House Floor, this bill passed as part of an Omnibus Environment bill: 88 to 44.⁹⁴ This vote represents a dramatic shift for legislation, which in previous years did not make it past the first committee hearing. This section considers the political make-up of the Minnesota House and Senate, lobbying tactics, and the role of outside support in 2007.

In 2006, some of the bill’s opponents described it as purely an “Indian bill,” meaning that bands, band-affiliated, or “American Indian” non-government organizations comprised its primary support.⁹⁵ The bill was in fact heavily supported by band members: all six Ojibwe bands from Minnesota passed their own resolutions in support of this legislation.⁹⁶ The Leech Lake Band of Ojibway and Red Lake Nation showed strong support, as did the White Earth Land Recovery Project (“WELRP”).⁹⁷ The bill, however, was also supported by the Izaak Walton League of America and closely watched by the Minnesota Center for Environmental Advocacy, Sierra Club, League of Conservation Voters, Audubon Society, Farmers Union, Institute of Agriculture and Trade Policy (“IATP”), and the Land Stewardship Project.⁹⁸

In 2007, the number of organizations officially supporting the legislation jumped to approximately 51, and also included six mayors, two city councils, and one county board.⁹⁹ Among the diverse range of new

⁹² See *supra* text accompanying note 80.

⁹³ Interview with Frank Moe, State Rep., Minn. House of Reps., in St. Paul, Minn. (June 22, 2007) [hereinafter Interview with Rep. Moe] (on file with author).

⁹⁴ See S.F. No. 2096, *supra* note 19.

⁹⁵ See Interview with Rep. Mahoney, *supra* note 33.

⁹⁶ *Supra* text accompanying note 27.

⁹⁷ Interview with Allen Richardson, Wild Rice Coordinator, White Earth Land Recovery Project, in Duluth, Minn. (May 2006) (on file with author).

⁹⁸ Interview with Rep. Moe, *supra* note 93.

⁹⁹ See *supra* text accompanying note 90. The following individuals, organizations, governments, and companies supported the bill: Joint Religious Legislative

organizations supporting the bill were the Joint Religious Legislative Coalition and the Minnesota Association of Conservation Professionals, which wrote formal letters to leaders of key committees at the start of 2007.¹⁰⁰ While impossible to determine the influence of particular organizations, the sizeable jump in support and its widespread political and geographic base are noteworthy.

It is also important to take into account some changes in the tactics of opponents. In 2006, those publicly testifying against the bill included a Monsanto lobbyist; representatives from biotechnology trade organizations including Minnesota Bioscience Council (“MNBIO”) and Medical Alley; Paul Strandberg, representative from the Minnesota Department of Agriculture (“MNDOA”); Bev Durgan, Dean of Extension, College of Food and Agricultural Science, University of Minnesota; and Beth Nelson, President of the Minnesota Cultivated Wild Rice Association.¹⁰¹ The DNR took a neutral stance.¹⁰² In both 2006 and 2007, opponents lobbied legislators off the Capitol and committee floors.¹⁰³ In 2007, however, the number of public testimonies against the bill shrank.¹⁰⁴ The DNR supported the legislation, but did not play an active role in its support.¹⁰⁵ Several of the same biotechnology trade organizations from the 2006 session testified in

Coalition; Minnesota Farmers Union; IATP; Land Stewardship Project, Minnesota Association of Conservation Professionals; Isaak Walton League Minnesota Division, Mankato Area Environmentalists; NE Minnesotans for Wilderness; League of Women Voters—Minnesota, Sustainable Farming Association of Minnesota; National Environmental Trust; The Alliance for Sustainability; EAGLE (Environmental Association for Great Lakes Education); Kids for Saving Earth; Renewing the Countryside; MN COACT (Citizens Organized Acting Together); Sweetwater Alliance; Institute for a Sustainable Future; Institute for Local Self Reliance; The Wild Institute; Friends of the Boundary Waters Wilderness; Minnesota River Valley Audubon Chapter; Duluth Audubon Society; Saint Paul Audubon Society; American P.I.E. (Public Information on the Environment); Lake Superior Sustainable Farming Association; Round River Farm; Park United Methodist Church; Brainerd Aveda Corporation; The Lutsen Resort; Gunflint Lodge; Chef Lucia Walker; GRV Gibbs Wild Rice; Northern Waters Smokehaus; Fitgers Brewhouse; Bennett’s on the Lake; Blue Heron Trading Company; Chester Creek Café; Linden Hills Co-op; Whole Foods Co-op (Duluth); W-Trek Outfitters; Midnight Sun Adventure Company; Duluth Pack, Wilderness Family Naturals; Mississippi Corridor Neighborhood Coalition; North American Water Office; Harbor Friends of Grand Marais; Environmental Justice Advocates of Minnesota; Clean Water Action Alliance of Minnesota; Voyageurs National Park Association; 1000 Friends of Minnesota; Mayor R.T. Rybak (Minneapolis); Mayor Chris Coleman (St. Paul), Mayor Herb Bergson (Duluth); Mayor James Wallin (Brainerd); Mayor Elaine Flemming (Cass Lake); Mayor Larry Buboltz (Detroit Lakes); Mayor Bill Eck (Waubon); Park Rapids City Council; Duluth City Council; St Louis County Board.

¹⁰⁰ See *supra* text accompanying note 90.

¹⁰¹ *Hearings on S.F. 2096*, *supra* note 8.

¹⁰² *A Bill for an Act Relating to Agriculture; Providing for a Wild Rice Study: Hearing on H.R. 3915 Before the H. Comm. on Agriculture and Rural Development*, 84th Leg., Reg. Sess. (Minn. 2006) (statement from MN DNR).

¹⁰³ See *Hearings on S.F. 2096*, *supra* note 8.

¹⁰⁴ *House Environment & Natural Resources: Hearing on H.F. 1662 & 1663 (precursors to S.F. 2096)*, 85th Leg., Reg. Sess. (Minn. 2007) (on file with author).

¹⁰⁵ See *supra* note 102 and accompanying text.

2007, however, Monsanto, the MNDOA, and the Minnesota Cultivated Wild Rice Council did not.¹⁰⁶ The University of Minnesota took a neutral position.¹⁰⁷

Concurrent with changes in political support for and against this bill were changes in political leadership in the legislature. In 2006, the Republicans controlled the House and Governor's seat, but in 2007, the Democrats took control of the House and maintained control of the Senate. While not necessarily a partisan issue—in fact, many in favor of the bill were Republican and many opposed were Democrat—votes tended to divide along partisan lines.¹⁰⁸ The vote in the House was not close: 88 to 44. House proponents voted in favor of wild rice language and funding in S.F. 2096; House opponents proposed amendments to remove this language on the House Floor, but the amendments were defeated.¹⁰⁹

The bill's main author, Representative Frank Moe, attributed success to several important factors. First, several representatives played particularly active roles. Representative Kent Eken, co-author, was an especially strong supporter throughout the session. Representative Phyllis Kahn's support in the Government Operations Committee was pivotal in keeping the bill moving. Finally, Chair Jean Wagenius, was adamant that this bill not be removed from the Environment Omnibus bill. She met with Speaker Ellen Anderson and Senate Finance Chair Lyndon Carlson to make clear her position.¹¹⁰

In addition to the work of particular representatives, other factors played important roles. Prior to committee hearings, Representative Moe met with Senator Rod Skoe, a seasoned legislator who served two terms in the House and is currently in his second term in the Senate.¹¹¹ Senator Skoe is a paddy wild rice farmer who represents many constituents from White Earth and Red Lake Bands, and is also a member of the Minnesota Cultivated Wild Rice Council.¹¹² Representative Moe consulted Senator Skoe and worked with him to draft mutually agreeable language. In 2006, Senator Skoe's public position on the bill was unclear; he did not openly oppose the bill as it traveled through committee to the House floor.¹¹³ At one point during a House Agriculture, Rural Economies, and Veterans Affairs Committee hearing, the Minnesota Cultivated Wild Rice Council claimed its members

¹⁰⁶ *House Floor Testimony*, 85th Leg., Reg. Sess. (Minn. 2007) (record of testimony on wild rice) (on file with author).

¹⁰⁷ *Hearings on S.F. 2096*, *supra* note 8.

¹⁰⁸ See Moe Statement on *H.F. 3915*, *supra* note 18.

¹⁰⁹ See *supra* note 106 and accompanying text (record of proposed amendments and testimony on wild rice).

¹¹⁰ See Interview with Rep. Moe, *supra* note 93.

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ *Id.*

opposed this legislation.¹¹⁴ This claim, however, failed to acknowledge that Council members, Senator Skoe and the Red Lake Nation, did not actively join the bill's opposition.¹¹⁵ In 2007, understanding that Democrats held the majority in the House and that the "wild rice issue" was not going away, it is possible Senator Skoe consented to work on mutually agreeable language with the bill's authors.¹¹⁶

Prior to the 2007 session, as well as during ongoing hearings, Representative Moe and lobbyists met with legislators who may not have made up their minds regarding the bill. In comparison to 2006, Representative Moe noted proponents simply had more people on the ground. It is also possible that lobbying in 2007 was more effective due to increased tribal leader testimony. Complementing such testimony was the work of lobbyists in 2007, Andrea Hanks and Allen Richardson from WELRP, Jamie Edwards of Mille Lacs Band, Henry Erdman and Bob Johnson (former legislators) of Bois Forte Band, Steve Smith of Minnesota Chippewa Tribe, and tribal attorney, Wayne Bohn of Leech Lake Band. Craig Hassel, Professor of Food and Nutrition, University of Minnesota, spoke on behalf of the legislation at several committee hearings as a private citizen.

Lobbyists in 2007 were better informed and more strategic, having benefited in part from their experiences in 2005 and 2006.¹¹⁷ Prior to the 2007 session, resolutions for "wild rice" were introduced and passed at the DFL precinct caucuses.¹¹⁸ These resolutions then went to the county and finally state DFL Conferences.¹¹⁹ Such resolutions may or may not be taken seriously depending on the legislator. It is worth mentioning the "wild rice" resolution was the only one in the "agriculture" category that made it to the DFL's action agenda for the 2007 session.¹²⁰ Perhaps few constituents realize how few items actually become a part of a party's "action agenda," and yet without that level of support, legislation may be weaker.¹²¹ Lobbyists may be effective in many ways. The energy, strategic planning, and competence of some of the most active lobbyists was apparent in the 2007 bill's first hearing in the House Environment and Natural Resources Finance Division Committee. Representative Dennis Ozment, serving for almost 24 years,

¹¹⁴ *Hearing on H.F. 3915 Before the H. Comm. of Agriculture, Rural Economic, and Veterans Affairs*, 84th Leg., Reg. Sess. (Minn. 2006). (Statement of Beth Nelson, President, Minnesota Cultivated Wild Rice Council) (on file with author) [hereinafter Nelson Statement on *H.F. 3915*].

¹¹⁵ See Interview with Rep. Moe, *supra* note 93.

¹¹⁶ *Id.*

¹¹⁷ Lobbying efforts were led largely by Winona LaDuke and Sarah Alexander of WELRP.

¹¹⁸ Telephone Interview with Allen Richardson, Wild Rice Coordinator, White Earth Land Recovery Project, in Duluth, Minn. (June 28, 2007).

¹¹⁹ *Id.*

¹²⁰ See *supra* note 106 and accompanying text.

¹²¹ See Interview with Rep. Moe, *supra* note 93.

singled out Richardson saying that during all his time in the legislature he had never been as well-briefed on a single issue as he was by Allen Richardson of WELRP.¹²²

Finally, the Environment and Natural Resource Committees in the House and Senate, critical to the bill's passage, were controlled by sympathetic chairs, Representative Jean Wagenius and Senator Sautveer Chaudhary, who were willing to hear the bill and supported it throughout the session.¹²³ While the bill had the votes needed to pass the House and Senate, getting through committee is not an insignificant hurdle. The importance of "procedure" can be pivotal, as is seen in the following example.

On March 27, 2007, the House Government Operations, Reform, Technology and Elections Committee heard the bill.¹²⁴ After testimony and discussion, most of its members were in favor of sending it to the House Finance Committee.¹²⁵ House Government Operations Chair, Gene Pelowski, however, had received a request to hear the bill from Tim Mahoney, Chair of the House Biosciences and Emerging Technology Committee.¹²⁶ Chair Mahoney and many of the Biosciences Committee members adamantly opposed the bill.¹²⁷ Sending the bill to Biosciences would most likely have led to its demise. Representative Pelowski, however, desired to follow procedural precedent and respect another chair's request to hear the bill.¹²⁸ Representative Pelowski moved to send the bill to Biosciences.¹²⁹ In an effort to save it, Representative Phyllis Kahn motioned for an amendment to send the bill to the Finance Committee.¹³⁰ Representative Moe and others rallied committee members to their seats.¹³¹ When a quorum was met, Representative Pelowski called for a vote.¹³² He voted against sending it to the House Finance Committee.¹³³ His committee members, however, overruled him, and the bill was sent to the Finance Committee and not to the Biosciences Committee.¹³⁴

While this bill had critical support outside the legislature and sufficient votes to pass the House and Senate, all bills follow committee protocol. The controlling caucus and committee chairs play powerful roles in a bill's fate. While legislative procedure is not unique to Minnesota, the

¹²² *Hearing on H.F. 2096 Before the H. Environment and Natural Resources Finance Development Comm.*, 85th Leg. Reg. Sess. (Minn. 2007) (Statement of Rep. Dennis Ozment, Member, Minn. House of Reps.) (on file with author).

¹²³ See Interview with Rep. Moe, *supra* note 93.

¹²⁴ *Id.*

¹²⁵ *Id.*

¹²⁶ *Id.*

¹²⁷ *Id.*

¹²⁸ *Id.*

¹²⁹ See Interview with Rep. Moe, *supra* note 93.

¹³⁰ *Id.*

¹³¹ *Id.*

¹³² *Id.*

¹³³ *Id.*

¹³⁴ *Id.*

“wild rice bill” relied on legislative process for success. Wild rice, unique in terms of its relationship to indigenous communities, unique as the state’s official grain, was in no way unique when it came to enduring legislative process. No matter how hard its proponents worked, including the bill’s authors, without majorities in the House and Senate and without the support of critical committee chairs, this bill would likely not have passed in 2007.¹³⁵

In terms of garnering the Governor’s support, proponents arranged for every tribal chair to call the Governor asking that he not “line item-out” funding for wild rice in S.F. 2096.¹³⁶ The Minnesota Chippewa Tribe passed a resolution and sent it directly to the Governor.¹³⁷ The Governor may not have supported this legislation per se, but it is possible that he needed to prioritize his vetoes during the 2007 session, in which he vetoed a large number of Democrat-authored legislation.¹³⁸

Impossible as it may be to decipher exactly which factors facilitated passage of wild rice language in S.F. 2096, it is likely that increased levels of constituent support, proponent strategy, and economic factors outside the state, played a role. At this point, we look briefly at the political and economic context of crop biotechnology in 2007 as it relates to this legislation.

B. Federal Oversight: Are the Regulators Regulating?

Lobbyist Janacek for Monsanto declared in 2006, “We have federal and state regulations. How much more process can you get?”¹³⁹ Paul Strandberg, representative from the Agricultural Marketing Services of the MNDOA, declared in 2006, “The [GM] germplasm won’t escape into natural stands.”¹⁴⁰ Then came escaping genetically engineered Liberty Link white rice from Arkansas and escaping bentgrass from Oregon in the summer of 2006.¹⁴¹ Suddenly “adequate federal process” seemed hard to come by, and “inescapable germplasm” somehow capable of escaping.

Warnings about federal oversight and the possibility of genetically engineered strains ending up in undesired locations were longstanding.¹⁴² At

¹³⁵ See Interview with Rep. Moe, *supra* note 93.

¹³⁶ *Id.*

¹³⁷ Telephone Interview with Allen Richardson, Wild Rice Coordinator, White Earth Land Recovery Project, in Duluth, Minn. (May 2007).

¹³⁸ See Interview with Rep. Moe, *supra* note 93.

¹³⁹ See Janacek Statement on H.F. 3915, *supra* note 1.

¹⁴⁰ *Hearing on H.F. 3915 Before the H. Agriculture and Rural Development Comm.*, 84th Leg., Reg. Sess. (Minn. 2006) (statement of Paul Strandberg, Project Manager, Minn. Department of Agriculture) (on file with author). Strandberg does not cite evidence that germplasm will not escape into natural stands. *Id.*

¹⁴¹ Rick Weiss, *Gene-altered Profit-killer: A Slight Taint of Biotech Rice Puts Farmers’ Overseas Sales in Peril*, WASH. POST, Sept. 21, 2006, at D01; Andrew Pollack, *Grass Created in Lab is Found in the Wild*, N.Y. TIMES, Aug. 16, 2006, at 13.

¹⁴² See sources cited *supra* note 4.

the 2006 Minnesota Legislature, Dennis Olson, IATP, presented information from the Inspector General of the United States Department of Agriculture (“USDA”).¹⁴³ Olson drew attention to an audit that found the Animal and Plant Health Inspection Service (“APHIS”), the USDA branch responsible for regulating GM crops, “failed to properly oversee field trials of GE plants.”¹⁴⁴ According to the report, APHIS, “lacks basic information about the field-test sites it approves and is responsible for monitoring, including where and how the crops are being grown, and what becomes of them at the end of the field test.”¹⁴⁵ The audit cited regulatory weaknesses in the internal management controls, “increase[ing] the risk that regulated genetically engineered organisms (GEO) will inadvertently persist in the environment before they are deemed safe.”¹⁴⁶ It seemed all but a prediction of the August 2006 events.

Whether the Monsanto lobbyist’s claim from 2006 testimony that “in a billion acres of [Monsanto] GMO crops, there has not been a single adverse incident in ten years,”¹⁴⁷ was accurate for that company, such claim was false for the industry as a whole after August 2006.¹⁴⁸ It is also important to pay attention to several less-publicized cases of escaped GE germplasm. Scientists in Canada reported an instance in which genetically herbicide-resistant canola appeared to have spread to a wild relative.¹⁴⁹ In Japan, transgenic canola was found growing near some ports and roadsides.¹⁵⁰ Since the crop is not grown commercially in Japan, scientists hypothesized that imported seeds had escaped during transportation to oil-processing facilities.¹⁵¹ Representative Mahoney argued that the Arkansas case was “just one problem” involving white rice.¹⁵² Unfortunately, it was not “just one,”

¹⁴³ *Hearing on H.F. 3915 Before the H. Comm. of Agriculture and Rural Development*, 84th Leg., Reg. Sess. (Minn. 2006) (statement of Dennis Olson, Senior Policy Analyst, Institute for Agriculture and Trade) (on file with author).

¹⁴⁴ OFFICE OF INSPECTOR GENERAL: SOUTHWEST REGION, ANIMAL AND PLANT HEALTH INSPECTION SERVICE CONTROLS OVER ISSUANCE OF GENETICALLY ENGINEERED ORGANISM RELEASE PERMITS 3 (2005), available at <http://www.usda.gov/oig/webdocs/50601-08-TE.pdf>. The abbreviation GM means genetically modified, while GE means genetically engineered.

¹⁴⁵ *Id.* at i.

¹⁴⁶ *Id.*

¹⁴⁷ See Janecek Statement on *H.F. 3915*, *supra* note 1.

¹⁴⁸ *Id.*

¹⁴⁹ Martin Philipson, *Agricultural Law: Containing the GM Revolution*, 48 BIOTECHNOLOGY & DEV. MONITOR 2 (Dec. 2001).

¹⁵⁰ CropChoice News, *Japan Shuns Corn over GE Issue*, ORGANIC CONSUMERS ASSOCIATION, Apr. 2001, available at <http://www.purefood.org/gefood/japanshuns.cfm>.

¹⁵¹ Andrew Pollack, *Grass Created in Lab is Found in the Wild*, N.Y. TIMES, Aug. 16, 2006, available at <http://www.nytimes.com/2006/08/16/science/16grass.html>.

¹⁵² Interview with Rep. Mahoney, *supra* note 33.

and that incident alone is estimated to have cost the United States long grain rice industry \$1.5 billion.¹⁵³

C. Implications for Wild Rice

It seems incumbent on legislators to take seriously warnings from relevant testimony. Mary Hanks, with the MNDOA, answered legislators' questions in 2006 regarding possible contamination of wild rice by a genetically engineered variety.¹⁵⁴ Hanks works with APHIS and oversees all applications for plot approvals in Minnesota. When asked, "Is wild rice adequately protected?" she said,

I am not too familiar with wild rice aside from eating it. I would need to [have information] regarding the biology and agronomy of [wild rice]. Such a study would not take two years. But, honestly, I do not know how long it would take . . . I would need to know about the movement of pollen and seed from research sites to lakes. It is likely that [some kind of] containment of research sites [would be necessary]. As Winona LaDuke pointed out, birds carry seed. [So I can imagine], bird netting might be necessary . . . I would need to know how far pollen moves.¹⁵⁵

In fact, Joanna Cregan, a Master's student at the University of Minnesota, wrote her 2004 thesis, in part, on the travel of wild rice pollen.¹⁵⁶ After a four-year study, Cregan concluded that "the percent pollination observed at various distances are higher than those in corn pollen studies . . . small amounts of wild rice pollen can travel and remain viable for at least two miles. . . . The release of wild rice pollen follows patterns similar to those observed for other wild-pollinated species."¹⁵⁷

Cregan's study was out well before the 2006 hearings. While it is a single study and not published in a peer-reviewed journal, its results are supported by similar studies on other crops.¹⁵⁸ These findings, taken together with the distribution of water basins with *Zizania sp.* across Minnesota, make

¹⁵³ SCHMIDT & CLARK, RICE GROWERS LAWSUIT RESOURCE, <http://www.schmidtandclark.com/Rice-Growers-Liberty-Link-Lawsuit/> (last visited May 25, 2009).

¹⁵⁴ *Hearing on H.F. 3915*, 2006 Leg., 84th Sess. (Minn. 2006) (statement of Mary Hanks, Ph.D., Director of Sustainable Agriculture and Integrated Pest Management) (on file with author).

¹⁵⁵ *Id.*

¹⁵⁶ Joanna Cregan, *Aspects of Seed Storage, Pollen Travel and Population Dynamics of Wild Rice* (2004) (unpublished Master's Thesis, University of Minnesota) (on file with author).

¹⁵⁷ *Id.* at 48.

¹⁵⁸ Norman C. Ellstrand, *When Transgenes Wander, Should We Worry?*, 125 *PLANT PHYSIOLOGY*, Apr., 1543, 1543-45 (2001).

clear that viable genetically engineered wild rice test plots (ones that would not contaminate native stands) would be nearly, if not impossible, to locate.¹⁵⁹ The farms on which such test plots would be established are nearly, if not all, too close to native stands.¹⁶⁰

Specific information regarding pollen travel and wild rice, in conjunction with information regarding other crops, pens undeniable warnings. Although such research and warnings were not heeded in 2006, the cases in Arkansas and Oregon have dramatically affected national attitudes toward federal regulatory capability.¹⁶¹

D. Lost Opportunities in Biotechnology?

One lobbyist during the 2006 hearings stated: “[T]his bill ignores the positive side of GM crops, that a potato resistant to a particular pest may prove critical to agriculture or alleviate chronic malnutrition. There is a dramatic promise for meeting the greatest challenges of the twenty-first century.”¹⁶² A Monsanto biologist, in a different setting and speaking to an author writing about genetically engineered crops, said, “You know we need genetic engineering . . . to feed the world.”¹⁶³

Finally, opponents of legislation in 2007 stated:

We [Minnesotans] are not going to be the cheapest box stackers and screw turners This [legislation] sends a deleterious message to those who want to come here and do this work We are circumscribing the ability for people to work in genetic engineering on agricultural crops We are opening a door we will be sorry we opened.¹⁶⁴

How does one evaluate these claims? Every year, representatives from biotechnology industry repeated their concern about “the chill” this

¹⁵⁹ Cregan, *supra* note 156, at fig.2 (illustrating distribution of water basins with *Zizania sp.* across Minnesota). Here the term *Zizania sp.* refers to all species of wild rice. Previously, scientists debated which species of wild rice was present in Minnesota. Older publications discuss *Zizania aquatica* as the species most commonly found in Minnesota. For the currently accepted distribution of wild rice species throughout North America, see *id.*

¹⁶⁰ Interview with Paul Bloom, Professor, Dep’t of Soil, Water, Climate, Univ. of Minn. (St. Paul, Minn.) (June 29, 2007) (on file with author).

¹⁶¹ See Letter from the Union of Concerned Scientists to the USDA (Jan. 22, 2008),

http://www.pccnaturalmarkets.com/issues/statements/ge_pharmacrops_2008_0122.html;

Interview with Rep. Moe, *supra* note 93.

¹⁶² Nelson Statement on H.F. 3915, *supra* note 114.

¹⁶³ SMITH, *supra* note 4, at 250.

¹⁶⁴ *Opposition to Legislation Before the House: Hearing on H.F. 2096*, 85th Leg., Reg. Sess. (Minn. 2007) (testimony of Rep. Michael Breach, Member, Minn. House of Reps.) (on file with author).

legislation imposes on biotechnology companies.¹⁶⁵ They repeated their concern that Minnesota would set a precedent regarding a clamp-down on important crop and other biotechnological research.¹⁶⁶ These are potent arguments.

It is critical to make distinctions in the claims of the bill's opponents versus real and potential economic, environmental, and health risks such technologies pose. To some extent, such clarification gets at the heart of the issue. How do we balance the promises of science and economic development with the known and unknown consequences? When potential risks of public trust and subsequent economic costs become real, the discussion is no longer theoretical.

E. Crop Biotechnology: Safety First, What Does that Mean?

As Representative Hamilton in 2006 stated, "GM crops have been around a long time and are very safe."¹⁶⁷ GM crops have been around for approximately 30 or so years.¹⁶⁸ We look at some specific cases, to the extent that information is available, in order to determine how the definition and questions of "safety" may be relevant to questions of protecting wild rice.¹⁶⁹

In answer to Representative Hamilton's claim, it may be most relevant to cite Norman Ellstrand, Professor of Genetics, University of California-Riverside:

The products of plant improvement are not absolutely safe, and we cannot expect transgenic crops to be absolutely safe either. Recognition of that fact suggests that creating something just because we are now able to do so is an inadequate reason for embracing a new technology. If we have advanced tools for creating novel agricultural products, we should use the advanced knowledge from ecology and population genetics as well as social sciences and humanities to make mindful choices about how to create the products that are best for humans and our environment.¹⁷⁰

¹⁶⁵ *Hearing on H.F. 2096, Before the Senate Finance Comm.*, 85th Leg., Reg. Sess. (Minn. 2007), https://www.revisor.leg.state.mn.us/revisor/pages/search_status/status_detail.php?b=House&f=SF2096&ssn=0&y=2007.

¹⁶⁶ See *supra* text accompanying note 148.

¹⁶⁷ *Hearing on H.F. 3915, Before the H. Comm. of Agriculture, Rural Economics, and Veterans Affairs*, 84th Leg., Reg. Sess. (Minn. 2006) (Statement of Rep. Rod Hamilton, Member, Minn. House of Reps.) (on file with author) [hereinafter Hamilton Statement on *H.F. 3915*].

¹⁶⁸ *Id.*

¹⁶⁹ See Ellstrand, *supra* note 158, at 1543-45.

¹⁷⁰ *Id.*

The promises of crop biotechnology are often cited from the potential contributions of pest resistance, to solving malnutrition.¹⁷¹ It seems incumbent upon researchers and lobbyists working on behalf of biotechnology companies to explain the benefits of crop biotechnology and provide responses to unanswered questions.¹⁷² No matter their institutional affiliation, researchers must be forthright about what they do not understand regarding new technologies. Given the level of controversy, public concern, and economic mishap, it appears increasingly clear that companies and researchers will be held to higher standards of accountability in order to gain public trust.¹⁷³

In 2006, Representative Hamilton cited the example of Vitamin-A-rich rice, “golden rice,” as an example of the promises of biotechnology.¹⁷⁴ Golden rice is the food that has been singled out for having the most potential as a marketable and successful genetically engineered food.¹⁷⁵ This technology, however, has not been perfected and is not yet ready for sale in the world market.¹⁷⁶ It may prove to be one possible means to addressing hunger in some parts of the world. His point, however, is that it is not possible to draw that conclusion. Yet, it is often discussed as nothing less than a “technological breakthrough . . . potentially solv[ing] an urgent and previously intractable health problem for the poor of the developing world.”¹⁷⁷ Marion Nestle, Chair of the Department of Nutrition and Food Studies at New York University, acknowledges, “Food biotechnology . . . may improve nutrition and health, but at the moment its benefits remain theoretical.”¹⁷⁸ Those who developed golden rice do not, however, address Nestle’s concern that this one innovation is not enough to make a difference in any individual’s health. “The addition of one, two [or more] nutrients to an existing food does not constitute a food-based approach The complexity of the physiological, nutritional, and cultural factors that affect Vitamin A status suggest that no single nutrient added to food can . . . effectively remedy . . . dietary deficiencies.”¹⁷⁹ Gordon Conway, of the Rockefeller Foundation, stated that “[golden rice] is a research product in need of

¹⁷¹ Ingo Potrykus, *Golden Rice and Beyond*, 125 *PLANT PHYSIOLOGY* 1157, 1157 (2001).

¹⁷² See generally SHELDON KRIMSKY, *SCIENCE IN THE PRIVATE INTEREST* (2003).

¹⁷³ See *supra* notes 154-157 and accompanying text.

¹⁷⁴ Johnston, *supra* note 67, at 8.

¹⁷⁵ See Potrykus, *supra* note 171, at 1157.

¹⁷⁶ See MARION NESTLE, EXPERT INTERVIEW TRANSCRIPT FROM REDISCOVERING BIOLOGY UNIT 13, <http://www.learner.org/courses/biology/units/gmo/experts/nestle.html> (last visited May 25, 2009).

¹⁷⁷ *Id.* at 1157.

¹⁷⁸ See NESTLE, *supra* note 176.

¹⁷⁹ DANIEL CHARLES, *LORDS OF THE HARVEST: BIOTECH, BIG MONEY, AND THE FUTURE OF FOOD* 149 (2001); Ellstrand, *supra* note 158.

considerable development.”¹⁸⁰ It is possible that such development may come.¹⁸¹ But it is premature to speak of it as a breakthrough.¹⁸²

As Ellstrand points out, it is critical to ask questions about the actual promises of any crop technology and find its relevance to other crop research.¹⁸³ Monsanto’s lobbyist in 2006 suggested there must be a good reason why “Minnesota has spent a ton of time and money” to nurture the biotechnology industry.¹⁸⁴ General promises of biotechnology are not in and of themselves problematic. But, as in the case of golden rice, it is not enough for its innovator to say, “Of course, there will be substantial equivalence, toxicology and allergenicity assessments. Careful socioeconomic and environmental impact studies will help avoid any possible risk and make sure the technology reaches the poor.”¹⁸⁵ In fact, it appears very difficult to complete toxicology and allergenicity assessments.¹⁸⁶ As per USDA, Environmental Protection Agency, and FDA regulations, in the cases of white rice and bentgrass in 2006 (as with similar cases), genetically engineered varieties must be kept separate from non-engineered varieties.¹⁸⁷ When these safeguards are breached, the economic cost of losing public trust is tremendous. In the case of white rice, the cost to the industry of European and Japanese boycotts was approximately \$1.5 billion alone.¹⁸⁸

F. Potential Risks—Who Will Take Them?

How much risk will we take? When will we know when safe is safe enough? In 2006, Representative Hamilton noted, “[T]he perception that consumers are being sold an unsafe product and that the government isn’t protecting them [can be unnerving and will damage consumer confidence and product sales] But GM products have been around a long time and they are very safe, everything from cooking oils to papayas.”¹⁸⁹

Michael Meacher, former UK Minister of the Environment, wrote that because “genes interact, one gene may trigger other unpredicted and undesired effects The random position and lack of control of the gene’s

¹⁸⁰ E-mail from Jorge E. Mayer, Project Manager, Golden Rice Research Project, to author (Oct. 17, 2006, 21:18:37) (on file with author).

¹⁸¹ See Jorge E. Mayer, Project Manager, Golden Rice Research Project, Update at the Cargill Building, University of Minnesota (Sept. 2006) (on file with author); see also E-mail from Jorge E. Mayer, *supra* note 174.

¹⁸² See *supra* notes 139-152 and accompanying text.

¹⁸³ See Ellstrand, *supra* note 158.

¹⁸⁴ Janecek Statement on *H.F. 3915*, *supra* note 1.

¹⁸⁵ Potrykus, *supra* note 171, at 1157.

¹⁸⁶ See generally SMITH, *supra* note 4.

¹⁸⁷ USDA APHIS BIOTECHNOLOGY REGULATORY SERVICES, QUESTIONS AND ANSWERS ABOUT BIOTECHNOLOGY, available at http://aphisweb.aphis.usda.gov/publications/biotechnology/content/printable_version/BRS_QA_biotechandusda.pdf.

¹⁸⁸ See Interview with Rep. Moe, *supra* note 93.

¹⁸⁹ Hamilton Statement on *H.F. 3915*, *supra* note 167.

functions could change any character of the plant and might not be evident immediately.”¹⁹⁰ He notes,

While it is often claimed that GMOs have been “rigorously” tested, all that this testing amounts to is deciding whether a GM crop is similar in terms of its composition to the non GM plant It wholly misses the point that health concerns are focused, not on known compounds, but on the effects of GM technology which are unpredictable¹⁹¹

A protein chemist working at AgrEvo, Sue MacIntosh, said, “We wish there was a test where you plug in a protein and out pops a yes or no answer [whether it is allergy-producing]. But no such test [exists] . . . short of giving it to a lot of people and seeing what happens.”¹⁹² While we do not have proof that GMOs cause allergies, we also do not have evidence that they do not.

In 2006, the market answered the question of how much risk is enough.¹⁹³ Following the revelation of unauthorized Liberty Link in United States commercial supplies, rice exports to the European Union effectively stopped. In December 2006, Russia formally announced a ban on global rice imports, citing the United States case as a reason for this decision.¹⁹⁴ On March 19, 2007, the California Rice Commission voted to support a moratorium on field-testing all genetically modified rice cultivars in California for the 2007 crop, and for future crops, until research protocol and safeguards are acceptable to the Commission.¹⁹⁵

On March 31, 2007, the United States rice industry declared it wanted the federal government to reject a plan to grow genetically modified rice in Kansas, saying the country’s growers would suffer “financial devastation” if modified crops contaminate the commercial supply.¹⁹⁶ “If Ventria’s pharmaceutical rice were to escape into the commercial rice supply, the financial devastation to the United States rice industry would be absolute,” the USA Rice Federation declared.¹⁹⁷ “There is no tolerance, either regulatory or in public perception, for a human gene-based pharmaceutical crop to end up in the world’s food supply.”¹⁹⁸ Al Montna, Chairman of the USA Rice Federation, said in March 2007 that he was “increasingly frustrated with the apparent lack of ability on the part of

¹⁹⁰ SMITH, *supra* note 4, at 250

¹⁹¹ *Id.*

¹⁹² *Id.*

¹⁹³ *Cohen, Milstein, Hausfeld & Toll Announces Six State Class Action Filed Against Bayer CropScience Over Rice Contamination*, BUSINESS WIRE, Aug. 28, 2006; *Russia Bans All Rice Imports, Cites U.S. GMO Contamination*, INSIDE U.S. TRADE 24, Dec. 22, 2006; Harry Cline, *California Rice Commission Supports GM Rice Testing Moratorium*, WESTERN FARM PRESS, Mar. 19, 2007, <http://westernfarmpress.com/rice/031907-gm-testing/index.html>.

¹⁹⁴ *Id.*

¹⁹⁵ See Philipson, *supra* note 149.

¹⁹⁶ See NESTLE, *supra* note 176.

¹⁹⁷ *Id.*

¹⁹⁸ *Id.*

private companies and federal regulators to control research and maintain accountability of the resulting products. The current approach to research, development and management in the biotechnology industry must be replaced with more conservative technologies.”¹⁹⁹ The National Farmers Union also issued a statement expressing the same concern as the USA Rice Federation regarding pharmaceutical rice.

V. SUMMARY

I am supporting this legislation because it is about wild rice and wild rice alone. It is a very unique crop. If this isn't about wild rice, it will be advertised as the camel's nose under the tent, a moratorium on GE crops broadly. If you're going to go after other crops, and say that GMOs aren't good, then you're [the bill's authors and supporters] not helping yourselves with this bill. The FDA will have some oversight and they treat GM products as not substantially different from what is on the shelves. Cutting to the chase, this bill is about the fact that in Beltrami County, [Minnesota], wild rice is unique.²⁰⁰

The problem is that legislation like this sends a message to the rest of the country. We don't want to be the only state that has legislation like this. We don't want to stick out. We don't have any idea where legislation like this will lead.²⁰¹

We have reaped the benefits of GM crops and [we do not want to send a message that suggests we are ignorant of that fact].²⁰²

The above testimony heard in 2006 exposes a contradiction. Wild rice is unique, particularly for Ojibwe sovereign nations, and also for European American Minnesotans. Yet after the summer of 2006, its cultural

¹⁹⁹ Liz Friedlander, *NFU Concerned Over GMO Rice Approval*, NATIONAL FARMERS UNION, MAY 21, 2007, available at <http://nfu.org/news/2007/05/21/nfu-concerned-over-gmo-rice-approval.html> (on file with author); Sam Hananel, *Industry Opposes Plan to Grow Genetically Modified Rice in Kansas*, ASSOCIATED PRESS ARCHIVE, Mar. 31, 2007.

²⁰⁰ Juhnke Statement on *H.F. 3815*, *supra* note 87.

²⁰¹ *A Bill for an Act Relating to Agriculture; Providing for a Wild Rice Study: Hearing on H.R. 3915 Before the H. Agriculture and Rural Development Comm.*, 84th Leg., Reg. Sess. (Minn. 2006) (statement of Rep. Gregory Davis, Chairperson, *Agriculture and Rural Development Comm.*) (on file with author); Interview with Rep. Gregory Davis, Chairperson, *Agriculture and Rural Development Comm.* in St. Paul, MN. (Aug. 18, 2006) (on file with author).

²⁰² *A Bill for an Act Relating to Agriculture; Providing for a Wild Rice Study: Hearing on H.R. 3915 Before the H. Agriculture and Rural Development Comm.*, 84th Leg., Reg. Sess. (Minn. 2006) (statement of Rep. Andy Welti, Member, Minn. House of Reps.) (on file with author).

relevance may not matter in the context of the larger debate over public trust and crop biotechnology.

Warnings preceding white rice and bentgrass came for more than a decade prior to 2006, and yet were largely ignored.²⁰³ Other states have attempted to pass legislation placing stricter regulations on genetically engineered crops. In 2006, Vermont introduced legislation, “An Act Relating to Liability Resulting from the Use of Genetically Engineered Seeds and Plant Parts”; passing in the House and Senate, it was vetoed by Vermont’s Governor.²⁰⁴ In 2007, the University of Hawaii declared that it would not take out patents on taro, a food sacred to Native Hawaiian people.²⁰⁵ Legislation imposing a ten-year moratorium on developing, testing, propagating, cultivating, growing, and raising genetically engineered taro in Hawaii was introduced in 2007, but the House Agriculture Chair refused to hear it.²⁰⁶ Legislation in California and Arkansas passed, however, giving these states the power to prohibit the introduction of GE rice; in Washington, legislation was adopted prohibiting the planting of GE canola in areas near the state’s large non-GE seed production.²⁰⁷ Additional success outside Minnesota may be a matter of time.

Far from being the “camel’s nose under the tent,” this legislation may result in Minnesota being viewed as exercising caution where caution is warranted. One might argue that legislators should be evaluated in terms of how well they examine warnings. Once warnings turn to irreversible events, the costs are undeniable. It matters not whether Monsanto, another company, or scientist, plans to genetically engineer wild rice. The issue is how well legislators analyze relevant information that potentially negatively affects plants sacred to Indian or indigenous peoples. It is equally important that legislators consider the implications of flawed crop biotechnology regulatory practices. This will not be the last case of its kind. Minnesotans, citizens of the United States, and citizens of other countries must ask themselves whether they are willing to consider the technological, scientific, cultural, and human questions that cases such as Minnesota’s demand. We do well to begin our deliberation before the occurrence of the next biotechnological mishap for which we are ill-prepared.

²⁰³ See *supra* notes 140-147 and accompanying text.

²⁰⁴ S. 18, 2005-2006 Leg., Reg. Sess. (Vt. 2005), <http://www.leg.state.vt.us/database/status/summary.cfm?Bill=S%2E0018&Session=2006>.

²⁰⁵ See Yamane, *supra* note 15.

²⁰⁶ *Id.*

²⁰⁷ See Center for Food Safety, <http://www.centerforfoodsafety.org> (last visited May 1, 2009).

